



UNITED KINGDOM AERONAUTICAL INFORMATION PUBLICATION

AIRAC 12/2024 - EFFECTIVE DATE: 28 Nov 2024

This Amendment contains both 'AIRAC' and 'Non-AIRAC' information. Note that any NOTAM or AIP SUP used to announce the 'Non-AIRAC' changes will remain in force until the AIRAC date.

The changes shown on this coversheet are an abbreviated overview. See AIP pages for changes in detail.

This AIRAC AMDT contains:

GEN 0.2	
GEN 0.3	
GEN 0.4	
GEN 1.5	Amendments to terms relating to 'UK airspace' and 'UK FIR'.
GEN 2.4	Republished - No change.
GEN 3.2	Paragraph 4.2.4 Amendments to terms relating to 'UK FIR'.
GEN 3.3	Paragraph 2.1.1 Amendments to terms relating to 'UK FIR'.
GEN 3.4	Section 2.2 Communications and navigational aids at UK aerodromes. Section 3.1 Radio navigation services. Section 3.2 The aeronautical mobile services. Section 4.1 Approval and licensing of aircraft radio stations.
GEN 3.5	Paragraph 2.1, 6.1.1, 6.2.1 Amendments to terms relating to 'UK airspace' and 'UK FIR'.
GEN 3.6	Paragraph 3.1.2 New SAR asset added.
ENR 1.1	Amendments to terms relating to 'UK airspace' and 'UK FIR'.
ENR 3.2	L8, L10, L15, L608, M605, P18, T418, T420, UL8, UM605 - VOR DTY radial updated. T420 - VOR BIG radial updated. N560, Y906 - VOR INS radial updated. L46, L60, L90, L602, L603, M16, M79, M604, N110, N866, P5, P7, P144, UL975, UM185, UT29, Y70 - Various route segment remarks updated to revise frequencies to FL355.
ENR 4.1	Biggin (BIG) DME - Update to the DOC due to a change to BIG VOR declination. Davenport (DTY) DME - Update to the DOC due to a change to DTY VOR declination.
ENR 4.5	NORTHAMPTON/SYWELL aerodrome beacon removed.
ENR 5.1	Contact details for Flight restriction zones (FRZ) at military aerodromes and Fleetlands heliport updated to reflect contact details within Military AIP. NORTHAMPTON/SYWELL flight restriction zones removed.
ENR 5.5	EAST FORTUNE model aircraft flying site - New entry. NORTHAMPTON/SYWELL training and unusual activity aerodrome - New entry. PORTMOAK glider site - Contact details updated.
AD 0.1	NORTHAMPTON/SYWELL (EGBK) is an unlicensed aerodrome and therefore removed from the AIP.
AD 1.3	AD 1.3 NORTHAMPTON/SYWELL entry removed.
AD 1.4	AD 1.4 NORTHAMPTON/SYWELL entry removed.
AD 1.5	AD 1.5 NORTHAMPTON/SYWELL entry removed.
AD 2.EGJA-8	AD 2 EGJA 8-1 to 8-7 Magnetic variation updated.
AD 2.EGKB	AD 2.19 Radio navigation and landing aids - VOR BIG declination setting and DOC updated. AD 2.22 Flight procedures - Standard departure routes - via ATS route network - Note 4 amended.
AD 2.EGBB	AD 2.8 Apron taxiways and check locations/position data - Apron and TWY surface strength - PCN replaced with PCR. AD 2.12 Runway physical characteristics - RWY surface strength - PCN replaced with PCR. AD 2.20 Local aerodrome regulations - Training.
AD 2.EGBB-2	AD 2 EGBB 2-1/2-2/2-3 Introduction of PCR.
AD 2.EGSC	AD 2.3 Operational hours - Remarks.
AD 2.EGFF	AD 2.4 Handling services and facilities - NorthAir contact details removed.
AD 2.EGBE	AD 2.6 Rescue and fire fighting services - RFFS category.
AD 2.EGTC	AD 2.19 Radio navigation and landing aids - VOR DTY declination setting and DOC updated.
AD 2.EGPG	AD 2.4 Handling services and facilities - Fuel and oil.
AD 2.EGPN	AD 2.11 Meteorological information provided.
AD 2.EGTU	AD 2.12 Runway physical characteristics - THR 22 displacement and Stater extension removed.
AD 2.EGTU-2	AD 2 EGTU 2-1 Starter extension removed.

AD 2.EGNX	AD 2.19 Radio navigation and landing aids - VOR DTY declination setting and DOC updated. AD 2.22 Flight procedures - Complete revision.
AD 2.EGNX-5	AD 2 EGNX 5-1 Loss of communication procedures ENR reference revised.
AD 2.EGPH	AD 2.10 Aerodrome obstacles - Crane at Dalmeny Tank farm - Remarks.
AD 2.EGLF	AD 2.8 Apron taxiways and check locations/position data - Apron and TWY surface strength - PCN replaced with PCR. AD 2.12 Runway physical characteristics - RWY and SWY surface strength - PCN replaced with PCR.
AD 2.EGLF-2	AD 2 EGLF 2-1/2-2 Introduction of PCR. Hot spot (HS1) added.
AD 2.EGBJ	AD 2.3 Operational hours - Fuelling. AD 2.4 Handling services and facilities - Aircraft handling agencies. AD 2.12 Runway physical characteristics - RWY length and threshold displacement updated. RWY 09/27 surface strength - PCN updated. Clearway, RWY strip and RESA dimensions added. AD 2.13 Declared distances - Revised.
AD 2.EGBJ-2	AD 2.20 Local aerodrome regulations - Helicopter operations - Complete revision. AD 2.21 Noise abatement procedures.
AD 2.EGBJ-2	AD 2 EGBJ 2-1 RWY 09/27 PCN. RWY length updated.
AD 2.EGPE	AD 2.19 Radio navigation and landing aids - VOR INS declination setting updated.
AD 2.EGNS	AD 2.8 Aprons, taxiways and check locations/position data - Taxiway re-designated. TWY surface strength - PCN replaced with PCR. AD 2.9 Surface movement guidance and control system and markings - TWY marking and lighting. AD 2.12 Runway physical characteristics - RWY surface strength - PCN replaced with PCR.
AD 2.EGNS-2	AD 2 EGNS 2-1/2-2 TWY, hold designators and TWY lighting revised. PCR added.
AD 2.EGNM	AD 2.9 Surface movement guidance and control system and markings - TWY restrictions updated.
AD 2.EGGP	AD 2.4 Handling service and facilities - Hangar space for visiting aircraft.
AD 2.EGGP-2	AD 2 EGGP 2-1 Republished due to revised chart specification.
AD 2.EGLC	AD 2.8 Apron taxiways and check locations/position data - Apron and TWY surface strength - PCN replaced with PCR. AD 2.12 Runway physical characteristics - RWY surface strength - PCN replaced with PCR.
AD 2.EGLC-2	AD 2.19 Radio navigation and landing aids - VOR BIG declination setting and DOC updated.
AD 2.EGKK	AD 2 EGLC 2-1/2-2 Introduction of PCR. New chart specification. AD 2.19 Radio navigation and landing aids - VOR BIG declination setting and DOC updated. AD 2.20 Local aerodrome regulations - Ground movement.
AD 2.EGKK-2	AD 2 EGKK 2-5 TWY N revised.
AD 2.EGKK-4	AD 2 EGKK 4-1 Obstacle revised.
AD 2.EGLL	AD 2.8 Apron taxiways and check locations/position data - TWY surface strength - Addition of PCR. AD 2.9 Surface movement guidance and control system and markings - Taxiway marking. AD 2.10 Aerodrome obstacles - New crane 2024072981. AD 2.12 Runway physical characteristics - RWY surface strength - PCN replaced with PCR. AD 2.19 Radio navigation and landing aids - VOR BIG declination setting and DOC updated.
AD 2.EGLL-2	AD 2 EGLL 2-1/2-4/2-5/2-6/2-7 Introduction of PCR.
AD 2.EGLL-7	AD 2 EGLL 7-1 to 7-19 Republished due to revised chart specification.
AD 2.EGGW-2	AD 2 EGGW 2-2 TP-V correction.
AD 2.EGAE	AD 2.11 Meteorological information provided - MET Office.
AD 2.EGCC	AD 2.21 Noise abatement procedures - Continuous descent approaches.
AD 2.EGNF	AD 2.2 Aerodrome geographical and administrative data - Contact details. AD 2.3 Operational hours - AD Administration. Customs and immigration. AIS Briefing office. Fuelling. AD 2.4 Handling services and facilities - Fuelling and repair facilities. AD 2.5 Passenger facilities. AD 2.10 Aerodrome obstacles - Revised. AD 2.11 Meteorological information provided - Briefing. AD 2.17 Air traffic services airspace - Airspace classification. Remarks removed. AD 2.18 Air traffic services communication facilities - Hours of operation. AD 2.20 Local aerodrome regulations - Ground movement. Warnings. Training. AD 2.21 Noise abatement procedures. AD 2.22 Flight procedures. AD 2.23 Additional information.
AD 2.EGNF-2	AD 2 EGNF 2-1 Magnetic variation. Runway headings and obstacles revised.
AD 2.EGNT	AD 2.2 Aerodrome geographical and administrative data - ARP location wording changed. AD 2.9 Surface movement guidance and control system and markings - WDI position updated. AD 2.10 Aerodrome obstacles - Revised. AD 2.12 Runway physical characteristics - OFZ added.
AD 2.EGNT-2	AD 2 EGNT 2-1/2-2 Revised due to incorporation of the latest aerodrome survey.
AD 2.EGHQ	AD 2.9 Surface movement guidance and control system and markings - Stands. AD 2.20 Local aerodrome regulations - Ground movement.
AD 2.EGTK-5	AD 2 EGTK 5-1 MSA NE sector revised.
AD 2.EGTK-8	AD 2 EGTK 8-1 to 8-4 MSA NE sector increased. Minima updated. Altitude restriction at HON D25 revised.
AD 2.EGPK-2	AD 2 EGPK 2-1/2-2 Hotspot (HS1) text revised.

AD 2.EGHI AD 2.21 Noise abatement procedures - SAM VOR radials updated due to a change to VOR declination setting.
AD 2.22 Flight procedures - Procedures for inbound aircraft - Holding procedures - SAM VOR radials updated due to a change to VOR declination setting.
AD 2.24 Charts related to an aerodrome - Chart title revised.

AD 2.EGHI-8 AD 2.EGHI 8-2/8-4/8-5/8-8/8-10 Radials/tracks revised due to a change to VOR SAM declination setting.

AD 2.EGSY-2 AD 2.EGSY-2-1 Hangar names and location revised.

AD 2.EGPO AD 2.9 Surface movement guidance and control system and markings - WDI - Editorial.
AD 2.13 Declared distances - Editorial.

AD 2.EGPU AD 2.9 Surface movement guidance and control system and markings - RWY 11 WDI added.
AD 2.12 Runway physical characteristics - PCN added for all runways. RWY 05/23 strip dimensions added and remarks updated.
AD 2.14 Approach and runway lighting - Revised.
AD 2.15 Other lighting, secondary power supply - TWY edge lighting.

AD 2.EGPU-2 AD 2.EGPU 2-1 Revised due to incorporation of the latest aerodrome survey.

AD 2.EGPC AD 2.3 Operational hours - Editorial.
AD 2.4 Handling services and facilities - Editorial.
AD 2.9 Surface movement guidance and control system and markings - WDI - Editorial.
AD 2.10 Aerodrome obstacles - Revised.
AD 2.15 Other lighting, secondary power supply - Anemometer - Editorial.
AD 2.20 Local aerodrome regulations - Airport regulations. Warnings.
AD 2.22 Flight procedures - Transponder mandatory zone access.
AD 2.23 Additional information - New.

AD 2.EGPC-2 AD 2.EGPC 2-1 Revised due to incorporation of the latest aerodrome survey.

AD 2.EGHG AD 2.9 Surface movement guidance and control system and markings - WDI lighting status updated.

AD 2.EGHG-2 AD 2.EGHG 2-1 WDI lighting status updated.

	Remove			Insert	
	Page No	Date		Page No	Date
GEN	0.2-3	31 Oct 2024	GEN	0.2-3	28 Nov 2024
	0.3-1	31 Oct 2024		0.3-1	28 Nov 2024
	0.3-2	31 Oct 2024		0.3-2	28 Nov 2024
	0.3-3	31 Oct 2024		0.3-3	28 Nov 2024
	0.4-1	31 Oct 2024		0.4-1	28 Nov 2024
	0.4-2	31 Oct 2024		0.4-2	28 Nov 2024
	0.4-3	31 Oct 2024		0.4-3	28 Nov 2024
	0.4-4	31 Oct 2024		0.4-4	28 Nov 2024
	0.4-5	31 Oct 2024		0.4-5	28 Nov 2024
	0.4-6	31 Oct 2024		0.4-6	28 Nov 2024
	0.4-7	31 Oct 2024		0.4-7	28 Nov 2024
	0.4-8	31 Oct 2024		0.4-8	28 Nov 2024
	0.4-9	31 Oct 2024		0.4-9	28 Nov 2024
	0.4-10	31 Oct 2024		0.4-10	28 Nov 2024
	0.4-11	31 Oct 2024		0.4-11	28 Nov 2024
	0.4-12	31 Oct 2024		0.4-12	28 Nov 2024
	0.4-13	31 Oct 2024		0.4-13	28 Nov 2024
	0.4-14	31 Oct 2024		0.4-14	28 Nov 2024
	0.4-15	31 Oct 2024		0.4-15	28 Nov 2024
	0.4-16	31 Oct 2024		0.4-16	28 Nov 2024
	0.4-17	31 Oct 2024		0.4-17	28 Nov 2024
	0.4-18	31 Oct 2024		0.4-18	28 Nov 2024
	1.5-1	12 Sep 2019		1.5-1	28 Nov 2024
	1.5-3	10 Oct 2019		1.5-3	28 Nov 2024
	1.5-4	27 Feb 2020		1.5-4	28 Nov 2024
	1.5-15	24 Mar 2022		1.5-15	28 Nov 2024
	1.5-16	24 Mar 2022		1.5-16	28 Nov 2024
	1.5-17	24 Mar 2022		1.5-17	28 Nov 2024
	1.5-21	24 Feb 2022		1.5-21	28 Nov 2024
	2.4-2	5 Sep 2024		2.4-2	28 Nov 2024
	2.4-3	5 Sep 2024		2.4-3	28 Nov 2024
	3.2-2	7 Oct 2021		3.2-2	28 Nov 2024
	3.3-1	25 Jan 2024		3.3-1	28 Nov 2024
3.4-1	29 Dec 2022	3.4-1	28 Nov 2024		
3.4-2	27 Jan 2022	3.4-2	28 Nov 2024		
3.4-3	27 Jan 2022	3.4-3	28 Nov 2024		
3.4-4	27 Jan 2022	3.4-4	28 Nov 2024		

	Remove			Insert	
	Page No	Date		Page No	Date
	3.4-5	12 Sep 2019		3.4-5	28 Nov 2024
	3.4-6	7 Sep 2023		3.4-6	28 Nov 2024
	3.4-7	5 Sep 2024		3.4-7	28 Nov 2024
	3.4-8	5 Sep 2024		3.4-8	28 Nov 2024
	3.4-9	5 Sep 2024		3.4-9	28 Nov 2024
	3.4-10	5 Sep 2024		3.4-10	28 Nov 2024
	3.5-1	17 Jun 2021		3.5-1	28 Nov 2024
	3.5-27	13 Jul 2023		3.5-27	28 Nov 2024
	3.6-2	1 Dec 2022		3.6-2	28 Nov 2024
	3.6-3	1 Dec 2022		3.6-3	28 Nov 2024
	3.6-4	5 Sep 2024		3.6-4	28 Nov 2024
	3.6-5	1 Dec 2022		3.6-5	28 Nov 2024
	3.6-6	1 Dec 2022		3.6-6	28 Nov 2024
	ENR 1.1-1	18 Apr 2024		ENR 1.1-1	28 Nov 2024
	1.1-2	8 Aug 2024		1.1-2	28 Nov 2024
	1.1-7	5 Sep 2024		1.1-7	28 Nov 2024
	1.1-12	5 Sep 2024		1.1-12	28 Nov 2024
	1.1-15	5 Sep 2024		1.1-15	28 Nov 2024
	1.1-19	5 Sep 2024		1.1-19	28 Nov 2024
	1.1-22	31 Oct 2024		1.1-22	28 Nov 2024
	1.1-23	31 Oct 2024		1.1-23	28 Nov 2024
	1.1-43	31 Oct 2024		1.1-43	28 Nov 2024
	1.1-44	31 Oct 2024		1.1-44	28 Nov 2024
	3.2-3	13 Jul 2023		3.2-3	28 Nov 2024
	3.2-9	7 Sep 2023		3.2-9	28 Nov 2024
	3.2-21	20 Apr 2023		3.2-21	28 Nov 2024
	3.2-22	23 Mar 2023		3.2-22	28 Nov 2024
	3.2-23	23 Mar 2023		3.2-23	28 Nov 2024
	3.2-24	20 Apr 2023		3.2-24	28 Nov 2024
	3.2-28	20 Apr 2023		3.2-28	28 Nov 2024
	3.2-40	5 Oct 2023		3.2-40	28 Nov 2024
	3.2-42	23 Mar 2023		3.2-42	28 Nov 2024
	3.2-43	20 Apr 2023		3.2-43	28 Nov 2024
3.2-68	23 Mar 2023	3.2-68	28 Nov 2024		
3.2-70	7 Sep 2023	3.2-70	28 Nov 2024		
3.2-92	20 Apr 2023	3.2-92	28 Nov 2024		
3.2-93	5 Oct 2023	3.2-93	28 Nov 2024		

Remove		Insert	
Page No	Date	Page No	Date
3.2-123	2 Nov 2023	3.2-123	28 Nov 2024
3.2-124	22 Feb 2024	3.2-124	28 Nov 2024
3.2-148	28 Dec 2023	3.2-148	28 Nov 2024
3.2-154	23 Mar 2023	3.2-154	28 Nov 2024
3.2-156	23 Mar 2023	3.2-156	28 Nov 2024
3.2-162	13 Jun 2024	3.2-162	28 Nov 2024
3.2-176	23 Mar 2023	3.2-176	28 Nov 2024
3.2-203	28 Dec 2023	3.2-203	28 Nov 2024
3.2-205	13 Jul 2023	3.2-205	28 Nov 2024
3.2-209	13 Jul 2023	3.2-209	28 Nov 2024
3.2-221	25 Jan 2024	3.2-221	28 Nov 2024
3.2-222	23 Mar 2023	3.2-222	28 Nov 2024
3.2-226	22 Feb 2024	3.2-226	28 Nov 2024
3.2-249	20 Apr 2023	3.2-249	28 Nov 2024
3.2-260	20 Apr 2023	3.2-260	28 Nov 2024
3.2-261	25 Jan 2024	3.2-261	28 Nov 2024
3.2-274	20 Apr 2023	3.2-274	28 Nov 2024
4.1-1	31 Oct 2024	4.1-1	28 Nov 2024
4.1-2	31 Oct 2024	4.1-2	28 Nov 2024
4.1-3	31 Oct 2024	4.1-3	28 Nov 2024
4.1-4	31 Oct 2024	4.1-4	28 Nov 2024
4.5-1	31 Oct 2024	4.5-1	28 Nov 2024
4.5-2	31 Oct 2024	-	-
5.1-83	31 Oct 2024	5.1-83	28 Nov 2024
5.1-84	31 Oct 2024	5.1-84	28 Nov 2024
5.1-85	31 Oct 2024	5.1-85	28 Nov 2024
5.1-87	31 Oct 2024	5.1-87	28 Nov 2024
5.1-92	31 Oct 2024	5.1-92	28 Nov 2024
5.1-93	31 Oct 2024	5.1-93	28 Nov 2024
5.1-94	31 Oct 2024	5.1-94	28 Nov 2024
5.1-95	31 Oct 2024	5.1-95	28 Nov 2024
5.1-96	31 Oct 2024	5.1-96	28 Nov 2024
5.1-97	31 Oct 2024	5.1-97	28 Nov 2024
5.1-99	31 Oct 2024	5.1-99	28 Nov 2024
5.1-100	31 Oct 2024	5.1-100	28 Nov 2024
5.1-101	31 Oct 2024	5.1-101	28 Nov 2024
5.1-106	31 Oct 2024	5.1-106	28 Nov 2024
5.1-111	31 Oct 2024	5.1-111	28 Nov 2024
5.1-112	31 Oct 2024	5.1-112	28 Nov 2024
5.1-116	31 Oct 2024	5.1-116	28 Nov 2024
5.1-117	31 Oct 2024	5.1-117	28 Nov 2024
5.1-118	31 Oct 2024	5.1-118	28 Nov 2024
5.1-119	31 Oct 2024	5.1-119	28 Nov 2024
5.1-120	31 Oct 2024	5.1-120	28 Nov 2024
5.1-121	31 Oct 2024	5.1-121	28 Nov 2024
5.1-122	31 Oct 2024	5.1-122	28 Nov 2024
5.1-123	31 Oct 2024	5.1-123	28 Nov 2024
5.1-124	31 Oct 2024	5.1-124	28 Nov 2024
5.1-125	31 Oct 2024	5.1-125	28 Nov 2024
5.1-126	31 Oct 2024	5.1-126	28 Nov 2024
5.1-127	31 Oct 2024	5.1-127	28 Nov 2024
5.1-128	31 Oct 2024	5.1-128	28 Nov 2024
5.1-129	31 Oct 2024	5.1-129	28 Nov 2024
5.1-130	31 Oct 2024	5.1-130	28 Nov 2024
5.1-131	31 Oct 2024	5.1-131	28 Nov 2024
5.1-132	31 Oct 2024	5.1-132	28 Nov 2024
5.1-133	31 Oct 2024	5.1-133	28 Nov 2024
5.1-134	31 Oct 2024	5.1-134	28 Nov 2024
5.1-135	31 Oct 2024	5.1-135	28 Nov 2024
5.1-136	31 Oct 2024	5.1-136	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
5.1-137	31 Oct 2024	5.1-137	28 Nov 2024
5.1-138	31 Oct 2024	5.1-138	28 Nov 2024
5.1-139	31 Oct 2024	5.1-139	28 Nov 2024
5.1-140	31 Oct 2024	5.1-140	28 Nov 2024
5.1-141	31 Oct 2024	5.1-141	28 Nov 2024
5.1-142	31 Oct 2024	5.1-142	28 Nov 2024
5.1-143	31 Oct 2024	5.1-143	28 Nov 2024
5.1-144	31 Oct 2024	5.1-144	28 Nov 2024
5.1-145	31 Oct 2024	5.1-145	28 Nov 2024
5.1-146	31 Oct 2024	5.1-146	28 Nov 2024
5.1-147	31 Oct 2024	5.1-147	28 Nov 2024
5.1-148	31 Oct 2024	5.1-148	28 Nov 2024
5.1-149	31 Oct 2024	5.1-149	28 Nov 2024
5.1-150	31 Oct 2024	5.1-150	28 Nov 2024
5.1-151	31 Oct 2024	5.1-151	28 Nov 2024
5.1-152	31 Oct 2024	5.1-152	28 Nov 2024
5.1-153	31 Oct 2024	5.1-153	28 Nov 2024
5.1-154	31 Oct 2024	-	-
5.5-5	5 Sep 2024	5.5-5	28 Nov 2024
5.5-6	5 Sep 2024	5.5-6	28 Nov 2024
5.5-7	5 Sep 2024	5.5-7	28 Nov 2024
5.5-8	5 Sep 2024	5.5-8	28 Nov 2024
5.5-9	5 Sep 2024	5.5-9	28 Nov 2024
5.5-10	3 Oct 2024	5.5-10	28 Nov 2024
5.5-11	5 Sep 2024	5.5-11	28 Nov 2024
5.5-12	3 Oct 2024	5.5-12	28 Nov 2024
5.5-13	3 Oct 2024	5.5-13	28 Nov 2024
5.5-14	3 Oct 2024	5.5-14	28 Nov 2024
5.5-15	3 Oct 2024	5.5-15	28 Nov 2024
5.5-16	3 Oct 2024	5.5-16	28 Nov 2024
5.5-17	3 Oct 2024	5.5-17	28 Nov 2024
5.5-18	3 Oct 2024	5.5-18	28 Nov 2024
5.5-19	5 Sep 2024	5.5-19	28 Nov 2024
-	-	5.5-20	28 Nov 2024
AD 0.1-1	25 Jan 2024	AD 0.1-1	28 Nov 2024
1.3-1	28 Dec 2023	1.3-1	28 Nov 2024
1.3-2	25 Jan 2024	1.3-2	28 Nov 2024
1.3-3	25 Jan 2024	1.3-3	28 Nov 2024
1.3-4	25 Jan 2024	1.3-4	28 Nov 2024
1.4-2	8 Aug 2024	1.4-2	28 Nov 2024
1.5-2	25 Jan 2024	1.5-2	28 Nov 2024
1.5-3	25 Jan 2024	1.5-3	28 Nov 2024
2.EGJA-8-1	10 Sep 2020	2.EGJA-8-1	28 Nov 2024
2.EGJA-8-2	18 Jul 2019	2.EGJA-8-2	28 Nov 2024
2.EGJA-8-3	10 Sep 2020	2.EGJA-8-3	28 Nov 2024
2.EGJA-8-4	18 Jul 2019	2.EGJA-8-4	28 Nov 2024
2.EGJA-8-5	10 Sep 2020	2.EGJA-8-5	28 Nov 2024
2.EGJA-8-7	10 Sep 2020	2.EGJA-8-7	28 Nov 2024
2.EGKB-9	5 Sep 2024	2.EGKB-9	28 Nov 2024
2.EGKB-12	5 Sep 2024	2.EGKB-12	28 Nov 2024
2.EGBB-2	5 Sep 2024	2.EGBB-2	28 Nov 2024
2.EGBB-3	28 Dec 2023	2.EGBB-3	28 Nov 2024
2.EGBB-4	18 Apr 2024	2.EGBB-4	28 Nov 2024
2.EGBB-5	13 Jun 2024	2.EGBB-5	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGBB-6	13 Jun 2024	2.EGBB-6	28 Nov 2024
2.EGBB-7	13 Jun 2024	2.EGBB-7	28 Nov 2024
2.EGBB-8	18 Apr 2024	2.EGBB-8	28 Nov 2024
2.EGBB-9	18 Apr 2024	2.EGBB-9	28 Nov 2024
2.EGBB-10	18 Apr 2024	2.EGBB-10	28 Nov 2024
2.EGBB-11	3 Oct 2024	2.EGBB-11	28 Nov 2024
2.EGBB-12	5 Sep 2024	2.EGBB-12	28 Nov 2024
2.EGBB-13	5 Sep 2024	2.EGBB-13	28 Nov 2024
2.EGBB-14	5 Sep 2024	2.EGBB-14	28 Nov 2024
2.EGBB-15	5 Sep 2024	2.EGBB-15	28 Nov 2024
2.EGBB-16	5 Sep 2024	2.EGBB-16	28 Nov 2024
2.EGBB-17	5 Sep 2024	2.EGBB-17	28 Nov 2024
2.EGBB-18	5 Sep 2024	2.EGBB-18	28 Nov 2024
2.EGBB-19	5 Sep 2024	2.EGBB-19	28 Nov 2024
-	-	2.EGBB-20	28 Nov 2024
2.EGBB-2-1	16 May 2024	2.EGBB-2-1	28 Nov 2024
2.EGBB-2-2	11 Jul 2024	2.EGBB-2-2	28 Nov 2024
2.EGBB-2-3	16 May 2024	2.EGBB-2-3	28 Nov 2024
2.EGSC-1	16 May 2024	2.EGSC-1	28 Nov 2024
2.EGFF-2	18 Apr 2024	2.EGFF-2	28 Nov 2024
2.EGBE-2	10 Aug 2023	2.EGBE-2	28 Nov 2024
2.EGTC-7	13 Jun 2024	2.EGTC-7	28 Nov 2024
2.EGPG-1	13 Jul 2023	2.EGPG-1	28 Nov 2024
2.EGPN-4	3 Oct 2024	2.EGPN-4	28 Nov 2024
2.EGTU-3	15 Jun 2023	2.EGTU-3	28 Nov 2024
2.EGTU-2-1	18 May 2023	2.EGTU-2-1	28 Nov 2024
2.EGNX-9	8 Aug 2024	2.EGNX-9	28 Nov 2024
2.EGNX-14	18 Apr 2024	2.EGNX-14	28 Nov 2024
2.EGNX-15	18 Apr 2024	2.EGNX-15	28 Nov 2024
2.EGNX-16	18 Apr 2024	2.EGNX-16	28 Nov 2024
2.EGNX-17	31 Oct 2024	2.EGNX-17	28 Nov 2024
2.EGNX-5-1	31 Dec 2020	2.EGNX-5-1	28 Nov 2024
2.EGPH-5	31 Oct 2024	2.EGPH-5	28 Nov 2024
2.EGLF-3	28 Dec 2023	2.EGLF-3	28 Nov 2024
2.EGLF-4	8 Aug 2024	2.EGLF-4	28 Nov 2024
2.EGLF-6	8 Aug 2024	2.EGLF-6	28 Nov 2024
2.EGLF-2-1	8 Aug 2024	2.EGLF-2-1	28 Nov 2024
2.EGLF-2-2	8 Aug 2024	2.EGLF-2-2	28 Nov 2024
2.EGBJ-1	5 Sep 2024	2.EGBJ-1	28 Nov 2024
2.EGBJ-2	5 Sep 2024	2.EGBJ-2	28 Nov 2024
2.EGBJ-3	31 Oct 2024	2.EGBJ-3	28 Nov 2024
2.EGBJ-4	31 Oct 2024	2.EGBJ-4	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGBJ-5	21 Mar 2024	2.EGBJ-5	28 Nov 2024
2.EGBJ-6	5 Sep 2024	2.EGBJ-6	28 Nov 2024
2.EGBJ-7	21 Mar 2024	2.EGBJ-7	28 Nov 2024
2.EGBJ-8	5 Sep 2024	2.EGBJ-8	28 Nov 2024
2.EGBJ-9	21 Mar 2024	2.EGBJ-9	28 Nov 2024
2.EGBJ-10	6 Oct 2022	2.EGBJ-10	28 Nov 2024
2.EGBJ-11	23 Mar 2023	2.EGBJ-11	28 Nov 2024
2.EGBJ-12	11 Aug 2022	2.EGBJ-12	28 Nov 2024
2.EGBJ-2-1	31 Oct 2024	2.EGBJ-2-1	28 Nov 2024
2.EGPE-8	11 Jul 2024	2.EGPE-8	28 Nov 2024
2.EGNS-2	18 Apr 2024	2.EGNS-2	28 Nov 2024
2.EGNS-3	18 Apr 2024	2.EGNS-3	28 Nov 2024
2.EGNS-4	11 Jul 2024	2.EGNS-4	28 Nov 2024
2.EGNS-5	11 Jul 2024	2.EGNS-5	28 Nov 2024
2.EGNS-6	11 Jul 2024	2.EGNS-6	28 Nov 2024
2.EGNS-7	11 Jul 2024	2.EGNS-7	28 Nov 2024
2.EGNS-8	11 Jul 2024	2.EGNS-8	28 Nov 2024
2.EGNS-9	11 Jul 2024	2.EGNS-9	28 Nov 2024
2.EGNS-10	11 Jul 2024	2.EGNS-10	28 Nov 2024
2.EGNS-11	11 Jul 2024	2.EGNS-11	28 Nov 2024
2.EGNS-12	11 Jul 2024	2.EGNS-12	28 Nov 2024
2.EGNS-2-1	11 Jul 2024	2.EGNS-2-1	28 Nov 2024
2.EGNS-2-2	11 Jul 2024	2.EGNS-2-2	28 Nov 2024
2.EGNM-4	31 Oct 2024	2.EGNM-4	28 Nov 2024
2.EGGP-1	31 Oct 2024	2.EGGP-1	28 Nov 2024
2.EGGP-2-1	31 Oct 2024	2.EGGP-2-1	28 Nov 2024
2.EGLC-2	5 Oct 2023	2.EGLC-2	28 Nov 2024
2.EGLC-3	3 Oct 2024	2.EGLC-3	28 Nov 2024
2.EGLC-4	3 Oct 2024	2.EGLC-4	28 Nov 2024
2.EGLC-8	3 Oct 2024	2.EGLC-8	28 Nov 2024
2.EGLC-2-1	3 Oct 2024	2.EGLC-2-1	28 Nov 2024
2.EGLC-2-2	3 Oct 2024	2.EGLC-2-2	28 Nov 2024
2.EGKK-12	31 Oct 2024	2.EGKK-12	28 Nov 2024
2.EGKK-13	31 Oct 2024	2.EGKK-13	28 Nov 2024
2.EGKK-14	3 Oct 2024	2.EGKK-14	28 Nov 2024
2.EGKK-15	3 Oct 2024	2.EGKK-15	28 Nov 2024
2.EGKK-16	3 Oct 2024	2.EGKK-16	28 Nov 2024
2.EGKK-2-5	21 Mar 2024	2.EGKK-2-5	28 Nov 2024
2.EGKK-4-1	23 Mar 2023	2.EGKK-4-1	28 Nov 2024
2.EGLL-2	28 Jan 2021	2.EGLL-2	28 Nov 2024
2.EGLL-3	18 Apr 2024	2.EGLL-3	28 Nov 2024
2.EGLL-4	13 Jun 2024	2.EGLL-4	28 Nov 2024
2.EGLL-5	13 Jun 2024	2.EGLL-5	28 Nov 2024
2.EGLL-6	31 Oct 2024	2.EGLL-6	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGLL-7	31 Oct 2024	2.EGLL-7	28 Nov 2024
2.EGLL-8	31 Oct 2024	2.EGLL-8	28 Nov 2024
2.EGLL-9	31 Oct 2024	2.EGLL-9	28 Nov 2024
2.EGLL-10	31 Oct 2024	2.EGLL-10	28 Nov 2024
2.EGLL-11	31 Oct 2024	2.EGLL-11	28 Nov 2024
2.EGLL-12	18 Apr 2024	2.EGLL-12	28 Nov 2024
2.EGLL-13	18 Apr 2024	2.EGLL-13	28 Nov 2024
2.EGLL-14	31 Oct 2024	2.EGLL-14	28 Nov 2024
2.EGLL-15	13 Jun 2024	2.EGLL-15	28 Nov 2024
2.EGLL-16	13 Jun 2024	2.EGLL-16	28 Nov 2024
2.EGLL-17	13 Jun 2024	2.EGLL-17	28 Nov 2024
2.EGLL-18	13 Jun 2024	2.EGLL-18	28 Nov 2024
2.EGLL-19	5 Sep 2024	2.EGLL-19	28 Nov 2024
2.EGLL-20	5 Sep 2024	2.EGLL-20	28 Nov 2024
2.EGLL-21	5 Sep 2024	2.EGLL-21	28 Nov 2024
2.EGLL-22	5 Sep 2024	2.EGLL-22	28 Nov 2024
2.EGLL-23	5 Sep 2024	2.EGLL-23	28 Nov 2024
2.EGLL-24	5 Sep 2024	2.EGLL-24	28 Nov 2024
2.EGLL-25	5 Sep 2024	2.EGLL-25	28 Nov 2024
2.EGLL-26	5 Sep 2024	2.EGLL-26	28 Nov 2024
2.EGLL-27	5 Sep 2024	2.EGLL-27	28 Nov 2024
2.EGLL-28	5 Sep 2024	2.EGLL-28	28 Nov 2024
2.EGLL-29	5 Sep 2024	2.EGLL-29	28 Nov 2024
2.EGLL-30	5 Sep 2024	2.EGLL-30	28 Nov 2024
2.EGLL-31	5 Sep 2024	2.EGLL-31	28 Nov 2024
2.EGLL-32	5 Sep 2024	2.EGLL-32	28 Nov 2024
2.EGLL-33	5 Sep 2024	2.EGLL-33	28 Nov 2024
2.EGLL-34	5 Sep 2024	2.EGLL-34	28 Nov 2024
2.EGLL-35	5 Sep 2024	2.EGLL-35	28 Nov 2024
2.EGLL-36	5 Sep 2024	2.EGLL-36	28 Nov 2024
2.EGLL-37	5 Sep 2024	2.EGLL-37	28 Nov 2024
2.EGLL-38	5 Sep 2024	2.EGLL-38	28 Nov 2024
2.EGLL-39	5 Sep 2024	2.EGLL-39	28 Nov 2024
2.EGLL-40	5 Sep 2024	2.EGLL-40	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGLL-41	5 Sep 2024	2.EGLL-41	28 Nov 2024
2.EGLL-42	5 Sep 2024	2.EGLL-42	28 Nov 2024
2.EGLL-43	5 Sep 2024	2.EGLL-43	28 Nov 2024
-	-	2.EGLL-44	28 Nov 2024
-	-	2.EGLL-45	28 Nov 2024
2.EGLL-2-1	13 Jun 2024	2.EGLL-2-1	28 Nov 2024
2.EGLL-2-4	13 Jun 2024	2.EGLL-2-4	28 Nov 2024
2.EGLL-2-5	13 Jun 2024	2.EGLL-2-5	28 Nov 2024
2.EGLL-2-6	13 Jun 2024	2.EGLL-2-6	28 Nov 2024
2.EGLL-2-7	13 Jun 2024	2.EGLL-2-7	28 Nov 2024
2.EGLL-7-1	29 Dec 2022	2.EGLL-7-1	28 Nov 2024
2.EGLL-7-2	29 Dec 2022	2.EGLL-7-2	28 Nov 2024
2.EGLL-7-3	29 Dec 2022	2.EGLL-7-3	28 Nov 2024
2.EGLL-7-4	16 May 2024	2.EGLL-7-4	28 Nov 2024
2.EGLL-7-5	16 May 2024	2.EGLL-7-5	28 Nov 2024
2.EGLL-7-6	15 Jun 2023	2.EGLL-7-6	28 Nov 2024
2.EGLL-7-7	16 May 2024	2.EGLL-7-7	28 Nov 2024
2.EGLL-7-8	29 Dec 2022	2.EGLL-7-8	28 Nov 2024
2.EGLL-7-9	29 Dec 2022	2.EGLL-7-9	28 Nov 2024
2.EGLL-7-10	16 May 2024	2.EGLL-7-10	28 Nov 2024
2.EGLL-7-11	16 May 2024	2.EGLL-7-11	28 Nov 2024
2.EGLL-7-12	16 May 2024	2.EGLL-7-12	28 Nov 2024
2.EGLL-7-13	23 Mar 2023	2.EGLL-7-13	28 Nov 2024
2.EGLL-7-14	23 Mar 2023	2.EGLL-7-14	28 Nov 2024
2.EGLL-7-15	23 Mar 2023	2.EGLL-7-15	28 Nov 2024
2.EGLL-7-16	23 Mar 2023	2.EGLL-7-16	28 Nov 2024
2.EGLL-7-17	23 Mar 2023	2.EGLL-7-17	28 Nov 2024
2.EGLL-7-18	23 Mar 2023	2.EGLL-7-18	28 Nov 2024
2.EGLL-7-19	23 Mar 2023	2.EGLL-7-19	28 Nov 2024
2.EGGW-2-2	3 Oct 2024	2.EGGW-2-2	28 Nov 2024
2.EGAE-4	31 Oct 2024	2.EGAE-4	28 Nov 2024
2.EGCC-20	16 May 2024	2.EGCC-20	28 Nov 2024
2.EGNF-1	15 Jun 2023	2.EGNF-1	28 Nov 2024
2.EGNF-2	14 Jul 2022	2.EGNF-2	28 Nov 2024
2.EGNF-3	7 Oct 2021	2.EGNF-3	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGNF-4	14 Jul 2022	2.EGNF-4	28 Nov 2024
2.EGNF-5	14 Jul 2022	2.EGNF-5	28 Nov 2024
2.EGNF-2-1	28 Feb 2019	2.EGNF-2-1	28 Nov 2024
2.EGNT-1	15 Jun 2023	2.EGNT-1	28 Nov 2024
2.EGNT-4	13 Jun 2024	2.EGNT-4	28 Nov 2024
2.EGNT-5	13 Jun 2024	2.EGNT-5	28 Nov 2024
2.EGNT-6	7 Sep 2023	2.EGNT-6	28 Nov 2024
2-EGNT-2-1	16 May 2024	2-EGNT-2-1	28 Nov 2024
2-EGNT-2-2	31 Oct 2024	2-EGNT-2-2	28 Nov 2024
2.EGHQ-3	31 Oct 2024	2.EGHQ-3	28 Nov 2024
2.EGHQ-4	31 Oct 2024	2.EGHQ-4	28 Nov 2024
2.EGHQ-5	31 Oct 2024	2.EGHQ-5	28 Nov 2024
2.EGHQ-6	31 Oct 2024	2.EGHQ-6	28 Nov 2024
2.EGHQ-7	31 Oct 2024	2.EGHQ-7	28 Nov 2024
2.EGHQ-8	31 Oct 2024	2.EGHQ-8	28 Nov 2024
2.EGHQ-9	31 Oct 2024	2.EGHQ-9	28 Nov 2024
2.EGHQ-10	31 Oct 2024	2.EGHQ-10	28 Nov 2024
-	-	2.EGHQ-11	28 Nov 2024
2.EGBK-1	25 Jan 2024	-	-
2.EGBK-2	10 Aug 2023	-	-
2.EGBK-3	6 Oct 2022	-	-
2.EGBK-4	6 Oct 2022	-	-
2.EGBK-5	25 Jan 2024	-	-
2.EGBK-6	10 Aug 2023	-	-
2.EGBK-7	31 Oct 2024	-	-
2.EGBK-2-1	1 Dec 2022	-	-
2.EGTK-5-1	16 May 2024	2.EGTK-5-1	28 Nov 2024
2.EGTK-8-1	3 Oct 2024	2.EGTK-8-1	28 Nov 2024
2.EGTK-8-2	3 Oct 2024	2.EGTK-8-2	28 Nov 2024
2.EGTK-8-3	3 Oct 2024	2.EGTK-8-3	28 Nov 2024
2.EGTK-8-4	3 Oct 2024	2.EGTK-8-4	28 Nov 2024
2.EGPK-2-1	3 Oct 2024	2.EGPK-2-1	28 Nov 2024
2.EGPK-2-2	3 Oct 2024	2.EGPK-2-2	28 Nov 2024
2.EGHI-11	13 Jun 2024	2.EGHI-11	28 Nov 2024
2.EGHI-12	13 Jun 2024	2.EGHI-12	28 Nov 2024
2.EGHI-14	13 Jun 2024	2.EGHI-14	28 Nov 2024
2.EGHI-8-2	15 Jun 2023	2.EGHI-8-2	28 Nov 2024
2.EGHI-8-4	15 Jun 2023	2.EGHI-8-4	28 Nov 2024
2.EGHI-8-5	15 Jun 2023	2.EGHI-8-5	28 Nov 2024

Remove		Insert	
Page No	Date	Page No	Date
2.EGHI-8-8	15 Jun 2023	2.EGHI-8-8	28 Nov 2024
2.EGHI-8-10	15 Jun 2023	2.EGHI-8-10	28 Nov 2024
2.EGSY-2-1	11 Jul 2024	2.EGSY-2-1	28 Nov 2024
2.EGPO-3	5 Oct 2023	2.EGPO-3	28 Nov 2024
2.EGPO-5	5 Oct 2023	2.EGPO-5	28 Nov 2024
2.EGPU-2	18 Apr 2024	2.EGPU-2	28 Nov 2024
2.EGPU-3	26 Jan 2023	2.EGPU-3	28 Nov 2024
2.EGPU-4	20 Apr 2023	2.EGPU-4	28 Nov 2024
2.EGPU-5	3 Oct 2024	2.EGPU-5	28 Nov 2024
2.EGPU-6	18 Apr 2024	2.EGPU-6	28 Nov 2024
2.EGPU-7	18 Apr 2024	2.EGPU-7	28 Nov 2024
2.EGPU-2-1	20 Apr 2023	2.EGPU-2-1	28 Nov 2024
2.EGPC-1	21 Mar 2024	2.EGPC-1	28 Nov 2024
2.EGPC-3	2 Nov 2023	2.EGPC-3	28 Nov 2024
2.EGPC-4	2 Nov 2023	2.EGPC-4	28 Nov 2024
2.EGPC-5	2 Nov 2023	2.EGPC-5	28 Nov 2024
2.EGPC-7	8 Aug 2024	2.EGPC-7	28 Nov 2024
2.EGPC-8	18 Apr 2024	2.EGPC-8	28 Nov 2024
2.EGPC-9	18 Apr 2024	2.EGPC-9	28 Nov 2024
2.EGPC-2-1	2 Nov 2023	2.EGPC-2-1	28 Nov 2024
2.EGHG-2	11 Jul 2024	2.EGHG-2	28 Nov 2024
2.EGHG-2-1	11 Jul 2024	2.EGHG-2-1	28 Nov 2024

Record entry of AIRAC AMDT on the page GEN 0.2-1.

The following publications have been incorporated in this AIRAC AMDT:

AIP SUP	NIL
AIC	NIL
NOTAM	A5983/24, A6063/24 C4356/24 L1894/24, L4551/24, L4552/24, L4553/24, L4554/24, L4555/24

GEN 0.2 RECORD OF AIP AMENDMENTS (continued)

NR/Year	Publication Date	Effective Date	Inserted By	Date Inserted
AIRAC 02/2022	13 Jan 2022	24 Feb 2022		
AIRAC 03/2022	10 Feb 2022	24 Mar 2022		
AIRAC 04/2022	10 Mar 2022	21 Apr 2022		
AIRAC 05/2022	07 Apr 2022	19 May 2022		
AIRAC 06/2022	05 May 2022	16 Jun 2022		
AIRAC 07/2022	02 Jun 2022	14 Jul 2022		
AIRAC 08/2022	30 Jun 2022	11 Aug 2022		
AIRAC 09/2022	28 Jul 2022	08 Sep 2022		
AIRAC 10/2022	25 Aug 2022	06 Oct 2022		
AIRAC 11/2022	22 Sep 2022	03 Nov 2022		
AIRAC 12/2022	20 Oct 2022	01 Dec 2022		
AIRAC 13/2022	17 Nov 2022	29 Dec 2022		
AIRAC 01/2023	15 Dec 2022	26 Jan 2023		
AIRAC 02/2023	12 Jan 2023	23 Feb 2023		
AIRAC 03/2023	09 Feb 2023	23 Mar 2023		
AIRAC 04/2023	09 Mar 2023	20 Apr 2023		
AIRAC 05/2023	06 Apr 2023	18 May 2023		
AIRAC 06/2023	04 May 2023	15 Jun 2023		
AIRAC 07/2023	01 Jun 2023	13 Jul 2023		
AIRAC 08/2023	29 Jun 2023	10 Aug 2023		
AIRAC 09/2023	27 Jul 2023	07 Sep 2023		
AIRAC 10/2023	24 Aug 2023	05 Oct 2023		
AIRAC 11/2023	21 Sep 2023	02 Nov 2023		
AIRAC 12/2023	19 Oct 2023	30 Nov 2023		
AIRAC 13/2023	16 Nov 2023	28 Dec 2023		
AIRAC 01/2024	14 Dec 2023	25 Jan 2024		
AIRAC 02/2024	11 Jan 2024	22 Feb 2024		
AIRAC 03/2024	08 Feb 2024	21 Mar 2024		
AIRAC 04/2024	07 Mar 2024	18 Apr 2024		
AIRAC 05/2024	04 Apr 2024	16 May 2024		
AIRAC 06/2024	02 May 2024	13 Jun 2024		
AIRAC 07/2024	30 May 2024	11 Jul 2024		
AIRAC 08/2024	27 Jun 2024	08 Aug 2024		
AIRAC 09/2024	25 Jul 2024	05 Sep 2024		
AIRAC 10/2024	22 Aug 2024	03 Oct 2024		
AIRAC 11/2024	19 Sep 2024	31 Oct 2024		
AIRAC 12/2024	17 Oct 2024	28 Nov 2024		

INTENTIONALLY BLANK

GEN 0.3 RECORD OF AIP SUPPLEMENTS

NR/Year	Subject	AIP section(s) affected	Period of validity
019/2020	EGMC - SOUTHEND AIRPORT LARS AVAILABILITY	NIL	09 APR 2020 - PERM
031/2020	EGGW - NDB (L) LUT 345.000 KHZ UNAVAILABLE UNTIL FURTHER NOTICE	NIL	27 AUG 2020 - PERM
048/2020	ABERDEEN AIRPORT RUNWAY 34 INSTRUMENT FLIGHT PROCEDURE LIMITATION	NIL	17 DEC 2020 - PERM
020/2022	SOUTHEND (EGMC): GRF RUNWAY CONDITION REPORT NOT AVAILABLE VIA ATIS	NIL	07 APR 2022 - PERM
045/2022	UK STANDARD ARRIVAL ROUTES (STARS)	NIL	28 JUL 2022 - PERM
026/2023	SECTOR DATA FOR THE UK LONDON AREA CONTROL (LAC) AND PRESTWICK	ENR	04 MAY 2023 - UFN
032/2023	SOUTHEND (EGMC) - SOUTHEND OPERATIONAL HOURS	AD	01 JUN 2023 - UFN
039/2023	BLACKPOOL AIRPORT (EGNH) - DIRECT ARRIVAL APPROACHES RWY 28 FROM VOR/DME POL NOT AVAILABLE	AD	29 JUN 2023 - UFN
043/2023	BELFAST ALDERGROVE AIRPORT (EGAA) - ATC SURVEILLANCE MINIMUM ALTITUDE CHART - MINIMUM ALT INCREASE	AD	29 JUN 2023 - UFN
064/2023	SCILLY ISLES/ST MARY'S (EGHE) - RUNWAY LIGHTING UNSERVICEABLE	AD	21 SEP 2023 - UFN
084/2023	LONDON VOR/DME (LON) - WARNING OF POTENTIAL BEARING FLUCTUATIONS BTW R030 - R075, EST UNTIL 11 OCTOBER 2024 - REPLACES SUP 048/2023	AD	14 DEC 2023 - UFN
005/2024	SOUTHEND AIRPORT (EGMC) - THE CENTRALISED DE-ICING FACILITY (CDF) CLOSURE	AD	11 JAN 2024 - UFN
006/2024	KIRKWALL AIRPORT (EGPA) - OBSTRUCTION LIGHTS U/S	AD	11 JAN 2024 - UFN
007/2024	KIRKWALL AIRPORT (EGPA) - HOLDING POINT W5 WIG-WAGS U/S	AD	11 JAN 2024 - UFN
008/2024	KIRKWALL AIRPORT (EGPA) - IRVR RWY 09/27 U/S	AD	11 JAN 2024 - UFN
010/2024	ABERDEEN INTERNATIONAL AIRPORT (EGPD) - CRANE OPERATIONS IN THE VICINITY OF THE AIRPORT - REPLACES SUP 14/2022	AD	08 FEB 2024 - UFN
011/2024	LONDON HEATHROW, LONDON GATWICK AND LONDON STANSTED AIRPORTS NOISE RESTRICTIONS NOTICE 2024 - REPLACES 061/2023 AS OF 31 MARCH 2024	AD	08 FEB 2024 - UFN
015/2024	ALDERNEY AIRPORT (EGJA) - AVGAS FUEL NOT AVAILABLE	AD	08 FEB 2024 - UFN
016/2024	UKRAINE CRISIS - AIRSPACE RESTRICTION - REPLACES SUP 031/2023	ENR	08 FEB 2024 - UFN
017/2024	DONCASTER SHEFFIELD (EGCN) - CTA/CTR/ATZ/FRZ DEACTIVATED	AD	08 FEB 2024 - UFN
022/2024	DUNDEE AIRPORT (EGPN) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT UNTIL JANUARY 2025	AD	07 MAR 2024 - UFN
023/2024	ALDERNEY AIRPORT (EGJA) - APAPI U/S	AD	07 MAR 2024 - UFN
030/2024	GUERNSEY AIRPORT (EGJB) - RWY 09/27 ILS ASSOCIATED MID POINT DME	AD	07 MAR 2024 - UFN
033/2024	ST ATHAN AIRPORT (EGSY) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	04 APR 2024 - UFN
034/2024	LONDON GATWICK AIRPORT (EGKK) - NEW TAXIWAY ECHO - REPLACES SUP 012/2024	AD	04 APR 2024 - UFN
036/2024	SOUTHAMPTON AIRPORT (EGHI) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	04 APR 2024 - UFN
038/2024	LONDON VOR/DME (LON) - WARNING OF POTENTIAL BEARING FLUCTUATIONS BTN R125 AND R160, EST UNTIL 31 AUGUST 2024	ENR, AD	04 APR 2024 - UFN
040/2024	KIRKWALL AIRPORT (EGPA) - OOH INDEMNITIES WITHDRAWN DUE TO WIP	AD	02 MAY 2024 - UFN



GEN 0.3 RECORD OF AIP SUPPLEMENTS (continued)

NR/Year	Subject	AIP section(s) affected	Period of validity
041/2024	MANCHESTER AIRPORT (EGCC) - MAJOR CONSTRUCTION WORKS 2023 - 2025 - REPLACES SUP 014/2023	AD	02 MAY 2024 - UFN
043/2024	BLACKPOOL AIRPORT (EGNH) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT UNTIL DECEMBER 2024	AD	02 MAY 2024 - UFN
044/2024	BLACKPOOL AIRPORT (EGNH) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT UNTIL JANUARY 2025	AD	02 MAY 2024 - UFN
046/2024	SOUTHAMPTON AIRPORT (EGHI) - STAND CLOSURE	AD	02 MAY 2024 - UFN
052/2024	MANCHESTER AIRPORT (EGCC) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	30 MAY 2024 - UFN
053/2024	BIGGIN HILL AIRPORT (EGKB) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	30 MAY 2024 - UFN
054/2024	ALDERNEY AIRPORT (EGJA) - JET A-1 FUEL NOT AVAILABLE	AD	30 MAY 2024 - UFN
056/2024	BOURNEMOUTH AIRPORT (EGHH) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	27 JUN 2024 - UFN
060/2024	LEEDS BRADFORD AIRPORT (EGNM) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	27 JUN 2024 - UFN
064/2024	BIRMINGHAM AIRPORT (EGBB) - WINTER MAINTENANCE CLOSURES, 04 - 30 NOVEMBER 2024	AD	25 JUL 2024 - UFN
065/2024	MANCHESTER AIRPORT (EGCC) - TAXIWAY CHARLIE CLOSURE	AD	25 JUL 2024 - UFN
066/2024	SOUTHEND AIRPORT (EGMC) - CHIMNEY OBSTRUCTION LIGHT U/S	AD	25 JUL 2024 - UFN
067/2024	NEWCASTLE AIRPORT (EGNT) - ATC OVERNIGHT CLOSURES - SUMMER 2024 - REPLACES SUP 050/2024	AD	25 JUL 2024 - UFN
069/2024	DUNDEE AIRPORT (EGPN) - HRDF UNAVAILABLE	AD	25 JUL 2024 - UFN
072/2024	SOUTHEND AIRPORT (EGMC) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	22 AUG 2024 - UFN
073/2024	BIRMINGHAM AIRPORT (EGBB) - METAL PLATE ON TWY U	AD	22 AUG 2024 - UFN
074/2024	LONDON GATWICK (EGKK) - ADDITION OF TOUCHDOWN ZONE MARKINGS ON RUNWAY 08L/26R	AD	22 AUG 2024 - UFN
075/2024	LONDON HEATHROW (EGLL) - RWY 27L/09R REHABILITATION (RESURFACING) WORKS FROM 03 APRIL 2024 - REPLACES SUP 057/2024	AD	22 AUG 2024 - UFN
077/2024	LONDON HEATHROW, LONDON GATWICK AND LONDON STANSTED AIRPORTS NOISE RESTRICTIONS NOTICE (NO. 2) 2024 - REPLACES 011/2024 AS OF 27 OCTOBER 2024	AD	19 SEP 2024 - UFN
078/2024	PAPA WESTRAY AIRPORT (EGEP) - TEMPORARY CLOSURE TO GA TRAFFIC AND WARNING TO HELICOPTER OPERATIONS	AD	19 SEP 2024 - UFN
079/2024	STRONSAY AIRPORT (EGER) - TEMPORARY CLOSURE OF AD TO ALL GA TRAFFIC AND WARNING TO HELICOPTER OPERATIONS	AD	19 SEP 2024 - UFN
080/2024	EDINBURGH AIRPORT (EGPH) - STEEL PLATE ON TAXIWAY ECHO	AD	19 SEP 2024 - UFN
081/2024	LONDON STANSTED (EGSS) - FINAL APPROACH SPEED TRIAL OF 165+/- 5 KTS UNTIL 5 DME	AD	19 SEP 2024 - UFN
082/2024	LONDON GATWICK AIRPORT (EGKK) - REMOTE HOLDING ON STANDS 64L, 64R, 65, 66L AND 66R	AD	19 SEP 2024 - UFN
083/2024	OLD BUCKENHAM AIRPORT (EGSV) - WINTER GRASS AREA CLOSURE FROM 11 NOVEMBER 2024 to 31 MARCH 2025	AD	19 SEP 2024 - UFN
084/2024	NEWCASTLE AIRPORT (EGNT) - RUNWAY REHABILITATION	AD	19 SEP 2024 - UFN
086/2024	PRESTWICK AIRPORT (EGPK) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	17 OCT 2024 - UFN

GEN 0.3 RECORD OF AIP SUPPLEMENTS (continued)

NR/Year	Subject	AIP section(s) affected	Period of validity
087/2024	EDINBURGH AIRPORT (EGPH) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	17 OCT 2024 - UFN
088/2024	GLOUCESTERSHIRE AIRPORT (EGBJ) - RADAR SERVICES NOT AVAILABLE - REPLACES SUP 025/2024	AD	17 OCT 2024 - UFN
089/2024	SWANSEA AIRPORT (EGFH) - AERODROME RE-OPENING - REPLACES SUP 053/2023	AD	17 OCT 2024 - UFN
090/2024	BIRMINGHAM AIRPORT (EGBB) - METAL PLATE ON TWY Y	AD	17 OCT 2024 - UFN
091/2024	IRISH SEA - OFFSHORE WIND TURBINE LIGHTING OUTAGES - REPLACES SUP 024/2024	ENR	17 OCT 2024 - UFN
092/2024	BELFAST CITY AIRPORT (EGAC) - PRIMARY SURVEILLANCE RADAR SERVICE UNAVAILABLE	AD	17 OCT 2024 - UFN
093/2024	TRAFFIC DISTRIBUTION RULES 1991 FOR AIRPORTS SERVING THE LONDON AREA	AD	17 OCT 2024 - UFN
094/2024	DUNDEE AIRPORT (EGPN) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT	AD	17 OCT 2024 - UFN
095/2024	EXETER AIRPORT (EGTE) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT UNTIL FEBRUARY 2025	AD	17 OCT 2024 - UFN
096/2024	EXETER AIRPORT (EGTE) - CRANE OPERATING IN THE VICINITY OF THE AIRPORT UNTIL JUNE 2025	AD	17 OCT 2024 - UFN
097/2024	LYDD AIRPORT (EGMD) - NDB LZD UNRELIABLE	AD	17 OCT 2024 - UFN

INTENTIONALLY BLANK

GEN 0.4 CHECKLIST OF AIP PAGES

The pages amended by this AIRAC are indicated by a star * and by the AIRAC effective date.

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
GEN		GEN		GEN		GEN	
0.1-1	7 Oct 2021	1.3-4	16 Jun 2022	1.7-22	7 Sep 2023	2.3-1	3 Nov 2022
0.1-2	7 Oct 2021	1.4-1	24 May 2018	1.7-23	7 Sep 2023	2.3-2	3 Nov 2022
0.1-3	28 Dec 2023	1.4-2	21 Jun 2018	1.7-24	7 Sep 2023	2.3-3	3 Nov 2022
0.1-4	28 Dec 2023	1.4-3	21 Jun 2018	1.7-25	13 Jun 2024	2.3-4	3 Nov 2022
0.2-1	24 May 2018	* 1.5-1	28 Nov 2024	1.7-26	13 Jun 2024	2.3-5	3 Nov 2022
0.2-2	27 Jan 2022	1.5-2	24 May 2018	1.7-27	13 Jun 2024	2.3-6	3 Nov 2022
* 0.2-3	28 Nov 2024	* 1.5-3	28 Nov 2024	1.7-28	13 Jun 2024	2.3-7	3 Nov 2022
* 0.3-1	28 Nov 2024	* 1.5-4	28 Nov 2024	1.7-29	13 Jun 2024	2.4-1	5 Sep 2024
* 0.3-2	28 Nov 2024	1.5-5	27 Feb 2020	1.7-30	13 Jun 2024	* 2.4-2	28 Nov 2024
* 0.3-3	28 Nov 2024	1.5-6	27 Feb 2020	1.7-31	13 Jun 2024	* 2.4-3	28 Nov 2024
* 0.4-1	28 Nov 2024	1.5-7	27 Feb 2020	1.7-32	13 Jun 2024	2.4-4	5 Sep 2024
* 0.4-2	28 Nov 2024	1.5-8	24 Mar 2022	1.7-33	13 Jun 2024	2.4-5	5 Sep 2024
* 0.4-3	28 Nov 2024	1.5-9	24 Mar 2022	1.7-34	13 Jun 2024	2.4-6	5 Sep 2024
* 0.4-4	28 Nov 2024	1.5-10	24 Mar 2022	1.7-35	13 Jun 2024	2.5-1	5 Sep 2024
* 0.4-5	28 Nov 2024	1.5-11	4 Nov 2021	1.7-36	13 Jun 2024	2.5-2	5 Sep 2024
* 0.4-6	28 Nov 2024	1.5-12	25 Feb 2021	1.7-37	13 Jun 2024	2.5-3	5 Sep 2024
* 0.4-7	28 Nov 2024	1.5-13	24 Feb 2022	1.7-38	13 Jun 2024	2.5-4	5 Sep 2024
* 0.4-8	28 Nov 2024	1.5-14	24 Mar 2022	1.7-39	13 Jun 2024	2.5-5	5 Sep 2024
* 0.4-9	28 Nov 2024	* 1.5-15	28 Nov 2024	1.7-40	13 Jun 2024	2.5-6	3 Oct 2024
* 0.4-10	28 Nov 2024	* 1.5-16	28 Nov 2024	1.7-41	13 Jun 2024	2.5-7	3 Oct 2024
* 0.4-11	28 Nov 2024	* 1.5-17	28 Nov 2024	1.7-42	13 Jun 2024	2.6-1	28 Dec 2023
* 0.4-12	28 Nov 2024	1.5-18	24 Mar 2022	1.7-43	13 Jun 2024	2.6-2	24 May 2018
* 0.4-13	28 Nov 2024	1.5-19	24 Mar 2022	1.7-44	13 Jun 2024	2.7-1	24 May 2018
* 0.4-14	28 Nov 2024	1.5-20	24 Feb 2022	1.7-45	13 Jun 2024	3.1-1	7 Sep 2023
* 0.4-15	28 Nov 2024	* 1.5-21	28 Nov 2024	1.7-46	13 Jun 2024	3.1-2	28 Dec 2023
* 0.4-16	28 Nov 2024	1.6-1	30 Dec 2021	1.7-47	13 Jun 2024	3.1-3	28 Dec 2023
* 0.4-17	28 Nov 2024	1.6-2	18 Jun 2020	1.7-48	13 Jun 2024	3.1-4	25 Jan 2024
* 0.4-18	28 Nov 2024	1.6-3	29 Dec 2022	1.7-49	13 Jun 2024	3.1-5	5 Sep 2024
0.5-1	24 May 2018	1.6-4	1 Dec 2022	1.7-50	13 Jun 2024	3.1-6	5 Sep 2024
0.6-1	23 Apr 2020	1.6-5	1 Dec 2022	1.7-51	13 Jun 2024	3.2-1	5 Sep 2024
1.1-1	2 Jan 2020	1.6-6	31 Oct 2024	1.7-52	13 Jun 2024	* 3.2-2	28 Nov 2024
1.1-2	2 Jan 2020	1.6-7	31 Oct 2024	1.7-53	13 Jun 2024	3.2-3	28 Dec 2023
1.2-1	23 Apr 2020	1.7-1	7 Sep 2023	1.7-54	13 Jun 2024	3.2-4	16 May 2024
1.2-2	29 Dec 2022	1.7-2	1 Dec 2022	1.7-55	13 Jun 2024	3.2-5	25 Jan 2024
1.2-3	21 Jun 2018	1.7-3	7 Sep 2023	1.7-56	13 Jun 2024	3.2-6	7 Sep 2023
1.2-4	21 Jun 2018	1.7-4	1 Dec 2022	1.7-57	13 Jun 2024	3.2-7	7 Sep 2023
1.2-5	2 Jan 2020	1.7-5	26 Jan 2023	1.7-58	13 Jun 2024	3.2-8	7 Oct 2021
1.2-6	19 Jul 2018	1.7-6	7 Sep 2023	1.7-59	13 Jun 2024	* 3.3-1	28 Nov 2024
1.2-7	21 Jun 2018	1.7-7	1 Dec 2022	1.7-60	13 Jun 2024	3.3-2	18 Apr 2024
1.2-8	2 Jan 2020	1.7-8	7 Sep 2023	1.7-61	13 Jun 2024	3.3-3	18 Apr 2024
1.2-9	21 Jun 2018	1.7-9	7 Sep 2023	1.7-62	13 Jun 2024	3.3-4	18 Apr 2024
1.2-10	21 Jun 2018	1.7-10	7 Sep 2023	1.7-63	13 Jun 2024	3.3-5	18 Apr 2024
1.2-11	29 Dec 2022	1.7-11	7 Sep 2023	2.1-1	21 Mar 2024	3.3-6	18 Apr 2024
1.2-12	21 Jun 2018	1.7-12	7 Sep 2023	2.1-2	26 Jan 2023	3.3-7	18 Apr 2024
1.2-13	25 Jan 2024	1.7-13	7 Sep 2023	2.2-1	2 Dec 2021	3.3-8	18 Apr 2024
1.2-14	21 Jun 2018	1.7-14	7 Sep 2023	2.2-2	18 Apr 2024	3.3-9	18 Apr 2024
1.2-15	23 Apr 2020	1.7-15	7 Sep 2023	2.2-3	18 Apr 2024	3.3-10	18 Apr 2024
1.2-16	23 Apr 2020	1.7-16	7 Sep 2023	2.2-4	18 Apr 2024	* 3.4-1	28 Nov 2024
1.2-17	23 Apr 2020	1.7-17	7 Sep 2023	2.2-5	25 Jan 2024	* 3.4-2	28 Nov 2024
1.2-18	23 Apr 2020	1.7-18	7 Sep 2023	2.2-6	31 Oct 2024	* 3.4-3	28 Nov 2024
1.3-1	21 Jun 2018	1.7-19	7 Sep 2023	2.2-7	31 Oct 2024	* 3.4-4	28 Nov 2024
1.3-2	21 Jun 2018	1.7-20	7 Sep 2023	2.2-8	18 Apr 2024	* 3.4-5	28 Nov 2024
1.3-3	16 Jun 2022	1.7-21	7 Sep 2023	2.2-9	18 Apr 2024	* 3.4-6	28 Nov 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
GEN		ENR		ENR		ENR	
* 3.4-7	28 Nov 2024	0.1-1	14 Jul 2022	1.4-3	20 May 2021	1.7-2	23 Apr 2020
* 3.4-8	28 Nov 2024	* 1.1-1	28 Nov 2024	1.4-4	23 Mar 2023	1.7-3	23 Apr 2020
* 3.4-9	28 Nov 2024	* 1.1-2	28 Nov 2024	1.4-5	20 May 2021	1.7-4	23 Apr 2020
* 3.4-10	28 Nov 2024	1.1-3	5 Sep 2024	1.4-6	19 May 2022	1.7-5	30 Jan 2020
* 3.5-1	28 Nov 2024	1.1-4	5 Sep 2024	1.4-7	19 May 2022	1.8-1	31 Oct 2024
3.5-2	17 Jun 2021	1.1-5	5 Sep 2024	1.4-8	19 May 2022	1.9-1	21 Jun 2018
3.5-3	11 Aug 2022	1.1-6	5 Sep 2024	1.4-9	19 May 2022	1.9-2	23 Apr 2020
3.5-4	17 Jun 2021	* 1.1-7	28 Nov 2024	1.4-10	19 May 2022	1.9-3	14 Jul 2022
3.5-5	11 Jul 2024	1.1-8	5 Sep 2024	1.4-11	19 May 2022	1.9-4	14 Jul 2022
3.5-6	11 Jul 2024	1.1-9	5 Sep 2024	1.4-12	8 Sep 2022	1.9-5	14 Jul 2022
3.5-7	11 Jul 2024	1.1-10	5 Sep 2024	1.4-13	8 Sep 2022	1.9-6	14 Jul 2022
3.5-8	11 Aug 2022	1.1-11	5 Sep 2024	1.5-1	10 Aug 2023	1.9-7	14 Jul 2022
3.5-9	25 Mar 2021	* 1.1-12	28 Nov 2024	1.5-2	10 Aug 2023	1.9-8	10 Sep 2020
3.5-10	25 Mar 2021	1.1-13	5 Sep 2024	1.5-3	10 Aug 2023	1.9-9	23 Apr 2020
3.5-11	4 Nov 2021	1.1-14	5 Sep 2024	1.5-4	10 Aug 2023	1.10-1	21 Jun 2018
3.5-12	4 Nov 2021	* 1.1-15	28 Nov 2024	1.6-1	16 May 2024	1.10-2	27 Jan 2022
3.5-13	11 Aug 2022	1.1-16	5 Sep 2024	1.6-2	10 Oct 2019	1.10-3	7 Oct 2021
3.5-14	11 Aug 2022	1.1-17	5 Sep 2024	1.6-3	5 Nov 2020	1.10-4	21 Jun 2018
3.5-15	11 Aug 2022	1.1-18	5 Sep 2024	1.6-4	27 Feb 2020	1.10-5	21 Jun 2018
3.5-16	4 Nov 2021	* 1.1-19	28 Nov 2024	1.6-5	27 Feb 2020	1.10-6	7 Oct 2021
3.5-17	4 Nov 2021	1.1-20	5 Sep 2024	1.6-6	3 Oct 2024	1.10-7	21 Jun 2018
3.5-18	13 Jul 2023	1.1-21	5 Sep 2024	1.6-7	1 Dec 2022	1.10-8	8 Nov 2018
3.5-19	13 Jul 2023	* 1.1-22	28 Nov 2024	1.6-8	19 May 2022	1.10-9	21 Jun 2018
3.5-20	4 Nov 2021	* 1.1-23	28 Nov 2024	1.6-9	5 Sep 2024	1.10-10	8 Nov 2018
3.5-21	4 Nov 2021	1.1-24	5 Sep 2024	1.6-10	5 Sep 2024	1.10-11	21 Jun 2018
3.5-22	4 Nov 2021	1.1-25	5 Sep 2024	1.6-11	5 Sep 2024	1.10-12	10 Sep 2020
3.5-23	4 Nov 2021	1.1-26	25 Jan 2024	1.6-12	5 Sep 2024	1.10-13	21 Jun 2018
3.5-24	4 Nov 2021	1.1-27	25 Jan 2024	1.6-13	5 Sep 2024	1.10-14	27 Jan 2022
3.5-25	4 Nov 2021	1.1-28	25 Jan 2024	1.6-14	5 Sep 2024	1.10-15	22 Feb 2024
3.5-26	13 Jul 2023	1.1-29	25 Jan 2024	1.6-15	5 Sep 2024	1.10-16	22 Feb 2024
* 3.5-27	28 Nov 2024	1.1-30	31 Oct 2024	1.6-16	5 Sep 2024	1.10-17	22 Feb 2024
3.5-28	13 Jul 2023	1.1-31	25 Jan 2024	1.6-17	5 Sep 2024	1.10-18	22 Feb 2024
3.5-29	13 Jul 2023	1.1-32	25 Jan 2024	1.6-18	5 Sep 2024	1.10-19	22 Feb 2024
3.5-30	29 Dec 2022	1.1-33	25 Jan 2024	1.6-19	5 Sep 2024	1.10-20	10 Sep 2020
3.5-31	11 Aug 2022	1.1-34	21 Mar 2024	1.6-20	5 Sep 2024	1.10-21	22 Feb 2024
3.5-32	13 Jul 2023	1.1-35	31 Oct 2024	1.6-21	5 Oct 2023	1.10-22	27 Jan 2022
3.5-33	4 Nov 2021	1.1-36	31 Oct 2024	1.6-22	31 Oct 2024	1.11-1	31 Oct 2024
3.5-34	11 Aug 2022	1.1-37	31 Oct 2024	1.6-23	3 Oct 2024	1.12-1	21 Jun 2018
3.5-35	4 Nov 2021	1.1-38	31 Oct 2024	1.6-24	5 Oct 2023	1.12-2	21 Jun 2018
3.6-1	1 Dec 2022	1.1-39	31 Oct 2024	1.6-25	25 Jan 2024	1.13-1	24 May 2018
* 3.6-2	28 Nov 2024	1.1-40	31 Oct 2024	1.6-26	25 Jan 2024	1.14-1	25 Feb 2021
* 3.6-3	28 Nov 2024	1.1-41	31 Oct 2024	1.6-27	25 Jan 2024	1.14-2	25 Feb 2021
* 3.6-4	28 Nov 2024	1.1-42	31 Oct 2024	1.6-28	22 Feb 2024	1.14-3	25 Feb 2021
* 3.6-5	28 Nov 2024	* 1.1-43	28 Nov 2024	1.6-29	22 Feb 2024	2.1-1	11 Jul 2024
* 3.6-6	28 Nov 2024	* 1.1-44	28 Nov 2024	1.6-30	25 Jan 2024	2.1-2	10 Aug 2023
3.6-7	1 Dec 2022	1.1-45	31 Oct 2024	1.6-31	25 Jan 2024	2.1-3	11 Jul 2024
3.6-8	1 Dec 2022	1.2-1	16 Jun 2022	1.6-32	25 Jan 2024	2.1-4	15 Jun 2023
3.6-9	1 Dec 2022	1.2-2	20 May 2021	1.6-33	25 Jan 2024	2.1-5	15 Jun 2023
3.6-10	1 Dec 2022	1.2-3	3 Nov 2022	1.6-34	25 Jan 2024	2.1-6	15 Jun 2023
4.1-1	24 May 2018	1.3-1	5 Oct 2023	1.6-35	25 Jan 2024	2.1-7	15 Jun 2023
4.1-2	28 Dec 2023	1.3-2	2 Dec 2021	1.6-36	25 Jan 2024	2.1-8	15 Jun 2023
4.2-1	18 Apr 2024	1.3-3	22 Feb 2024	1.6-37	25 Jan 2024	2.1-9	25 Jan 2024
4.2-2	18 Apr 2024	1.4-1	27 Jan 2022	1.6-38	25 Jan 2024	2.1-10	25 Jan 2024
4.2-3	18 Apr 2024	1.4-2	23 Mar 2023	1.7-1	23 Apr 2020	2.1-11	25 Jan 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
ENR		ENR		ENR		ENR	
2.1-12	25 Jan 2024	2.1-66	16 May 2024	2.2-1	31 Oct 2024	3.2-1	7 Sep 2023
2.1-13	3 Oct 2024	2.1-67	16 May 2024	2.2-2	3 Oct 2024	3.2-2	11 Jul 2024
2.1-14	3 Oct 2024	2.1-68	16 May 2024	2.2-3	3 Oct 2024	* 3.2-3	28 Nov 2024
2.1-15	3 Oct 2024	2.1-69	16 May 2024	2.2-4	3 Oct 2024	3.2-4	7 Sep 2023
2.1-16	3 Oct 2024	2.1-70	16 May 2024	2.2-5	5 Oct 2023	3.2-5	23 Mar 2023
2.1-17	11 Jul 2024	2.1-71	16 May 2024	2.2-6	3 Oct 2024	3.2-6	23 Mar 2023
2.1-18	11 Jul 2024	2.1-72	16 May 2024	2.2-7	10 Aug 2023	3.2-7	23 Mar 2023
2.1-19	11 Jul 2024	2.1-73	16 May 2024	2.2-8	25 Jan 2024	3.2-8	7 Sep 2023
2.1-20	11 Jul 2024	2.1-74	16 May 2024	2.2-9	10 Aug 2023	* 3.2-9	28 Nov 2024
2.1-21	11 Jul 2024	2.1-75	16 May 2024	2.2-10	10 Aug 2023	3.2-10	11 Jul 2024
2.1-22	11 Jul 2024	2.1-76	16 May 2024	2.2-11	10 Aug 2023	3.2-11	7 Sep 2023
2.1-23	11 Jul 2024	2.1-77	16 May 2024	2.2-12	10 Aug 2023	3.2-12	23 Mar 2023
2.1-24	11 Jul 2024	2.1-78	16 May 2024	2.2-13	10 Aug 2023	3.2-13	28 Dec 2023
2.1-25	11 Jul 2024	2.1-79	16 May 2024	2.2-14	3 Oct 2024	3.2-14	11 Jul 2024
2.1-26	15 Jun 2023	2.1-80	16 May 2024	2.2-15	3 Oct 2024	3.2-15	20 Apr 2023
2.1-27	16 May 2024	2.1-81	16 May 2024	2.2-16	3 Oct 2024	3.2-16	23 Mar 2023
2.1-28	16 May 2024	2.1-82	16 May 2024	2.2-17	3 Oct 2024	3.2-17	7 Sep 2023
2.1-29	16 May 2024	2.1-83	16 May 2024	2.2-18	3 Oct 2024	3.2-18	7 Sep 2023
2.1-30	16 May 2024	2.1-84	13 Jun 2024	2.2-19	3 Oct 2024	3.2-19	7 Sep 2023
2.1-31	16 May 2024	2.1-85	13 Jun 2024	2.2-20	3 Oct 2024	3.2-20	5 Oct 2023
2.1-32	16 May 2024	2.1-86	31 Oct 2024	2.2-21	3 Oct 2024	* 3.2-21	28 Nov 2024
2.1-33	16 May 2024	2.1-87	31 Oct 2024	2.2-22	3 Oct 2024	* 3.2-22	28 Nov 2024
2.1-34	16 May 2024	2.1-88	31 Oct 2024	2.2-23	3 Oct 2024	* 3.2-23	28 Nov 2024
2.1-35	16 May 2024	2.1-89	16 May 2024	2.2-24	3 Oct 2024	* 3.2-24	28 Nov 2024
2.1-36	16 May 2024	2.1-90	16 May 2024	2.2-25	3 Oct 2024	3.2-25	25 Jan 2024
2.1-37	16 May 2024	2.1-91	16 May 2024	2.2-26	3 Oct 2024	3.2-26	20 Apr 2023
2.1-38	16 May 2024	2.1-92	16 May 2024	2.2-27	3 Oct 2024	3.2-27	31 Oct 2024
2.1-39	16 May 2024	2.1-93	16 May 2024	2.2-28	3 Oct 2024	* 3.2-28	28 Nov 2024
2.1-40	16 May 2024	2.1-94	16 May 2024	2.2-29	3 Oct 2024	3.2-29	13 Jun 2024
2.1-41	16 May 2024	2.1-95	11 Jul 2024	2.2-30	3 Oct 2024	3.2-30	23 Mar 2023
2.1-42	16 May 2024	2.1-96	11 Jul 2024	2.2-31	3 Oct 2024	3.2-31	23 Mar 2023
2.1-43	16 May 2024	2.1-97	11 Jul 2024	2.2-32	3 Oct 2024	3.2-32	20 Apr 2023
2.1-44	16 May 2024	2.1-98	11 Jul 2024	2.2-33	3 Oct 2024	3.2-33	11 Jul 2024
2.1-45	16 May 2024	2.1-99	11 Jul 2024	2.2-34	3 Oct 2024	3.2-34	23 Mar 2023
2.1-46	16 May 2024	2.1-100	11 Jul 2024	2.2-35	3 Oct 2024	3.2-35	23 Mar 2023
2.1-47	16 May 2024	2.1-101	11 Jul 2024	2.2-36	3 Oct 2024	3.2-36	23 Mar 2023
2.1-48	11 Jul 2024	2.1-102	11 Jul 2024	2.2-37	3 Oct 2024	3.2-37	23 Mar 2023
2.1-49	16 May 2024	2.1-103	11 Jul 2024	2.2-38	3 Oct 2024	3.2-38	23 Mar 2023
2.1-50	16 May 2024	2.1-104	11 Jul 2024	2.2-39	3 Oct 2024	3.2-39	16 May 2024
2.1-51	16 May 2024	2.1-105	11 Jul 2024	2.2-40	3 Oct 2024	* 3.2-40	28 Nov 2024
2.1-52	16 May 2024	2.1-106	11 Jul 2024	2.2-41	3 Oct 2024	3.2-41	5 Oct 2023
2.1-53	16 May 2024	2.1-107	3 Oct 2024	2.2-42	3 Oct 2024	* 3.2-42	28 Nov 2024
2.1-54	16 May 2024	2.1-108	3 Oct 2024	2.2-43	3 Oct 2024	* 3.2-43	28 Nov 2024
2.1-55	16 May 2024	2.1-109	11 Jul 2024	2.2-44	3 Oct 2024	3.2-44	25 Jan 2024
2.1-56	16 May 2024	2.1-110	11 Jul 2024	2.2-45	3 Oct 2024	3.2-45	23 Mar 2023
2.1-57	16 May 2024	2.1-111	11 Jul 2024	2.2-46	3 Oct 2024	3.2-46	20 Apr 2023
2.1-58	16 May 2024	2.1-112	11 Jul 2024	2.2-47	3 Oct 2024	3.2-47	20 Apr 2023
2.1-59	16 May 2024	2.1-113	11 Jul 2024	2.2-48	3 Oct 2024	3.2-48	11 Jul 2024
2.1-60	16 May 2024	2.1-114	11 Jul 2024	2.2-49	3 Oct 2024	3.2-49	28 Dec 2023
2.1-61	16 May 2024	2.1-115	11 Jul 2024	2.2-50	3 Oct 2024	3.2-50	23 Mar 2023
2.1-62	16 May 2024	2.1-116	11 Jul 2024	2.2-51	3 Oct 2024	3.2-51	23 Mar 2023
2.1-63	16 May 2024	2.1-117	11 Jul 2024	2.2-52	3 Oct 2024	3.2-52	11 Jul 2024
2.1-64	16 May 2024	2.1-118	3 Oct 2024	2.2-53	3 Oct 2024	3.2-53	25 Jan 2024
2.1-65	16 May 2024	2.1-119	3 Oct 2024	3.1-1	24 Feb 2022	3.2-54	23 Mar 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
ENR		ENR		ENR		ENR	
3.2-55	28 Dec 2023	3.2-109	23 Mar 2023	3.2-163	25 Jan 2024	3.2-217	25 Jan 2024
3.2-56	5 Oct 2023	3.2-110	13 Jul 2023	3.2-164	7 Sep 2023	3.2-218	23 Mar 2023
3.2-57	20 Apr 2023	3.2-111	28 Dec 2023	3.2-165	11 Jul 2024	3.2-219	23 Mar 2023
3.2-58	7 Sep 2023	3.2-112	28 Dec 2023	3.2-166	23 Mar 2023	3.2-220	25 Jan 2024
3.2-59	28 Dec 2023	3.2-113	25 Jan 2024	3.2-167	13 Jul 2023	* 3.2-221	28 Nov 2024
3.2-60	25 Jan 2024	3.2-114	25 Jan 2024	3.2-168	23 Mar 2023	* 3.2-222	28 Nov 2024
3.2-61	20 Apr 2023	3.2-115	2 Nov 2023	3.2-169	23 Mar 2023	3.2-223	22 Feb 2024
3.2-62	31 Oct 2024	3.2-116	30 Nov 2023	3.2-170	23 Mar 2023	3.2-224	22 Feb 2024
3.2-63	7 Sep 2023	3.2-117	30 Nov 2023	3.2-171	23 Mar 2023	3.2-225	22 Feb 2024
3.2-64	7 Sep 2023	3.2-118	16 May 2024	3.2-172	31 Oct 2024	* 3.2-226	28 Nov 2024
3.2-65	20 Apr 2023	3.2-119	2 Nov 2023	3.2-173	31 Oct 2024	3.2-227	22 Feb 2024
3.2-66	23 Mar 2023	3.2-120	2 Nov 2023	3.2-174	23 Mar 2023	3.2-228	5 Oct 2023
3.2-67	23 Mar 2023	3.2-121	16 May 2024	3.2-175	7 Sep 2023	3.2-229	5 Oct 2023
* 3.2-68	28 Nov 2024	3.2-122	28 Dec 2023	* 3.2-176	28 Nov 2024	3.2-230	28 Dec 2023
3.2-69	28 Dec 2023	* 3.2-123	28 Nov 2024	3.2-177	11 Jul 2024	3.2-231	25 Jan 2024
* 3.2-70	28 Nov 2024	* 3.2-124	28 Nov 2024	3.2-178	28 Dec 2023	3.2-232	23 Mar 2023
3.2-71	14 Jul 2022	3.2-125	22 Feb 2024	3.2-179	5 Oct 2023	3.2-233	28 Dec 2023
3.2-72	20 Apr 2023	3.2-126	2 Nov 2023	3.2-180	7 Sep 2023	3.2-234	5 Oct 2023
3.2-73	8 Sep 2022	3.2-127	2 Nov 2023	3.2-181	5 Oct 2023	3.2-235	23 Mar 2023
3.2-74	23 Mar 2023	3.2-128	25 Jan 2024	3.2-182	23 Mar 2023	3.2-236	5 Oct 2023
3.2-75	7 Sep 2023	3.2-129	2 Nov 2023	3.2-183	25 Jan 2024	3.2-237	28 Dec 2023
3.2-76	23 Mar 2023	3.2-130	23 Mar 2023	3.2-184	20 Apr 2023	3.2-238	20 Apr 2023
3.2-77	23 Mar 2023	3.2-131	20 Apr 2023	3.2-185	20 Apr 2023	3.2-239	5 Oct 2023
3.2-78	23 Mar 2023	3.2-132	5 Oct 2023	3.2-186	20 Apr 2023	3.2-240	7 Sep 2023
3.2-79	5 Oct 2023	3.2-133	5 Oct 2023	3.2-187	20 Apr 2023	3.2-241	20 Apr 2023
3.2-80	5 Oct 2023	3.2-134	22 Feb 2024	3.2-188	31 Oct 2024	3.2-242	22 Feb 2024
3.2-81	13 Jul 2023	3.2-135	28 Dec 2023	3.2-189	31 Oct 2024	3.2-243	25 Jan 2024
3.2-82	23 Mar 2023	3.2-136	23 Mar 2023	3.2-190	28 Dec 2023	3.2-244	22 Feb 2024
3.2-83	7 Sep 2023	3.2-137	11 Jul 2024	3.2-191	23 Mar 2023	3.2-245	22 Feb 2024
3.2-84	23 Mar 2023	3.2-138	28 Dec 2023	3.2-192	28 Dec 2023	3.2-246	31 Oct 2024
3.2-85	20 Apr 2023	3.2-139	23 Mar 2023	3.2-193	20 Apr 2023	3.2-247	23 Mar 2023
3.2-86	28 Dec 2023	3.2-140	23 Mar 2023	3.2-194	20 Apr 2023	3.2-248	25 Jan 2024
3.2-87	2 Nov 2023	3.2-141	23 Mar 2023	3.2-195	23 Mar 2023	* 3.2-249	28 Nov 2024
3.2-88	2 Nov 2023	3.2-142	5 Oct 2023	3.2-196	23 Mar 2023	3.2-250	5 Oct 2023
3.2-89	23 Mar 2023	3.2-143	23 Mar 2023	3.2-197	23 Mar 2023	3.2-251	20 Apr 2023
3.2-90	13 Jul 2023	3.2-144	23 Mar 2023	3.2-198	7 Sep 2023	3.2-252	25 Jan 2024
3.2-91	28 Dec 2023	3.2-145	20 Apr 2023	3.2-199	23 Mar 2023	3.2-253	23 Mar 2023
* 3.2-92	28 Nov 2024	3.2-146	5 Oct 2023	3.2-200	7 Sep 2023	3.2-254	25 Jan 2024
* 3.2-93	28 Nov 2024	3.2-147	2 Nov 2023	3.2-201	13 Jul 2023	3.2-255	23 Mar 2023
3.2-94	5 Oct 2023	* 3.2-148	28 Nov 2024	3.2-202	5 Oct 2023	3.2-256	23 Mar 2023
3.2-95	5 Oct 2023	3.2-149	7 Sep 2023	* 3.2-203	28 Nov 2024	3.2-257	23 Mar 2023
3.2-96	5 Oct 2023	3.2-150	23 Mar 2023	3.2-204	5 Oct 2023	3.2-258	5 Oct 2023
3.2-97	23 Mar 2023	3.2-151	7 Sep 2023	* 3.2-205	28 Nov 2024	3.2-259	20 Apr 2023
3.2-98	20 Apr 2023	3.2-152	30 Nov 2023	3.2-206	28 Dec 2023	* 3.2-260	28 Nov 2024
3.2-99	23 Mar 2023	3.2-153	23 Mar 2023	3.2-207	7 Sep 2023	* 3.2-261	28 Nov 2024
3.2-100	23 Mar 2023	* 3.2-154	28 Nov 2024	3.2-208	23 Mar 2023	3.2-262	5 Oct 2023
3.2-101	7 Sep 2023	3.2-155	20 Apr 2023	* 3.2-209	28 Nov 2024	3.2-263	25 Jan 2024
3.2-102	23 Mar 2023	* 3.2-156	28 Nov 2024	3.2-210	23 Mar 2023	3.2-264	31 Oct 2024
3.2-103	23 Mar 2023	3.2-157	22 Feb 2024	3.2-211	7 Sep 2023	3.2-265	23 Mar 2023
3.2-104	31 Oct 2024	3.2-158	23 Mar 2023	3.2-212	7 Sep 2023	3.2-266	13 Jul 2023
3.2-105	23 Mar 2023	3.2-159	20 Apr 2023	3.2-213	25 Jan 2024	3.2-267	25 Jan 2024
3.2-106	30 Nov 2023	3.2-160	25 Jan 2024	3.2-214	20 Apr 2023	3.2-268	20 Apr 2023
3.2-107	20 Apr 2023	3.2-161	25 Jan 2024	3.2-215	23 Mar 2023	3.2-269	28 Dec 2023
3.2-108	23 Mar 2023	* 3.2-162	28 Nov 2024	3.2-216	23 Mar 2023	3.2-270	11 Jul 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
ENR		ENR		ENR		ENR	
3.2-271	5 Oct 2023	5.1-9	31 Oct 2024	5.1-63	3 Oct 2024	* 5.1-117	28 Nov 2024
3.2-272	7 Sep 2023	5.1-10	31 Oct 2024	5.1-64	3 Oct 2024	* 5.1-118	28 Nov 2024
3.2-273	23 Mar 2023	5.1-11	31 Oct 2024	5.1-65	3 Oct 2024	* 5.1-119	28 Nov 2024
* 3.2-274	28 Nov 2024	5.1-12	31 Oct 2024	5.1-66	31 Oct 2024	* 5.1-120	28 Nov 2024
3.2-275	7 Sep 2023	5.1-13	31 Oct 2024	5.1-67	31 Oct 2024	* 5.1-121	28 Nov 2024
3.2-276	31 Oct 2024	5.1-14	31 Oct 2024	5.1-68	31 Oct 2024	* 5.1-122	28 Nov 2024
3.2-277	20 Apr 2023	5.1-15	31 Oct 2024	5.1-69	31 Oct 2024	* 5.1-123	28 Nov 2024
3.2-278	25 Jan 2024	5.1-16	31 Oct 2024	5.1-70	31 Oct 2024	* 5.1-124	28 Nov 2024
3.2-279	23 Mar 2023	5.1-17	31 Oct 2024	5.1-71	31 Oct 2024	* 5.1-125	28 Nov 2024
3.2-280	5 Oct 2023	5.1-18	31 Oct 2024	5.1-72	31 Oct 2024	* 5.1-126	28 Nov 2024
3.3-1	14 Jul 2022	5.1-19	31 Oct 2024	5.1-73	31 Oct 2024	* 5.1-127	28 Nov 2024
3.3-2	14 Jul 2022	5.1-20	31 Oct 2024	5.1-74	31 Oct 2024	* 5.1-128	28 Nov 2024
3.3-3	14 Jul 2022	5.1-21	31 Oct 2024	5.1-75	31 Oct 2024	* 5.1-129	28 Nov 2024
3.4-1	14 Jul 2022	5.1-22	3 Oct 2024	5.1-76	31 Oct 2024	* 5.1-130	28 Nov 2024
3.4-2	20 Apr 2023	5.1-23	3 Oct 2024	5.1-77	31 Oct 2024	* 5.1-131	28 Nov 2024
* 4.1-1	28 Nov 2024	5.1-24	3 Oct 2024	5.1-78	31 Oct 2024	* 5.1-132	28 Nov 2024
* 4.1-2	28 Nov 2024	5.1-25	3 Oct 2024	5.1-79	31 Oct 2024	* 5.1-133	28 Nov 2024
* 4.1-3	28 Nov 2024	5.1-26	31 Oct 2024	5.1-80	31 Oct 2024	* 5.1-134	28 Nov 2024
* 4.1-4	28 Nov 2024	5.1-27	3 Oct 2024	5.1-81	31 Oct 2024	* 5.1-135	28 Nov 2024
4.1-5	31 Oct 2024	5.1-28	3 Oct 2024	5.1-82	31 Oct 2024	* 5.1-136	28 Nov 2024
4.2-1	24 May 2018	5.1-29	3 Oct 2024	* 5.1-83	28 Nov 2024	* 5.1-137	28 Nov 2024
4.3-1	18 Jun 2020	5.1-30	3 Oct 2024	* 5.1-84	28 Nov 2024	* 5.1-138	28 Nov 2024
4.4-1	30 Nov 2023	5.1-31	3 Oct 2024	* 5.1-85	28 Nov 2024	* 5.1-139	28 Nov 2024
4.4-2	22 Feb 2024	5.1-32	3 Oct 2024	5.1-86	31 Oct 2024	* 5.1-140	28 Nov 2024
4.4-3	22 Feb 2024	5.1-33	3 Oct 2024	* 5.1-87	28 Nov 2024	* 5.1-141	28 Nov 2024
4.4-4	22 Feb 2024	5.1-34	3 Oct 2024	5.1-88	31 Oct 2024	* 5.1-142	28 Nov 2024
4.4-5	22 Feb 2024	5.1-35	3 Oct 2024	5.1-89	31 Oct 2024	* 5.1-143	28 Nov 2024
4.4-6	22 Feb 2024	5.1-36	8 Aug 2024	5.1-90	31 Oct 2024	* 5.1-144	28 Nov 2024
4.4-7	22 Feb 2024	5.1-37	3 Oct 2024	5.1-91	31 Oct 2024	* 5.1-145	28 Nov 2024
4.4-8	22 Feb 2024	5.1-38	3 Oct 2024	* 5.1-92	28 Nov 2024	* 5.1-146	28 Nov 2024
4.4-9	22 Feb 2024	5.1-39	3 Oct 2024	* 5.1-93	28 Nov 2024	* 5.1-147	28 Nov 2024
4.4-10	22 Feb 2024	5.1-40	3 Oct 2024	* 5.1-94	28 Nov 2024	* 5.1-148	28 Nov 2024
4.4-11	22 Feb 2024	5.1-41	8 Aug 2024	* 5.1-95	28 Nov 2024	* 5.1-149	28 Nov 2024
4.4-12	22 Feb 2024	5.1-42	8 Aug 2024	* 5.1-96	28 Nov 2024	* 5.1-150	28 Nov 2024
4.4-13	22 Feb 2024	5.1-43	8 Aug 2024	* 5.1-97	28 Nov 2024	* 5.1-151	28 Nov 2024
4.4-14	22 Feb 2024	5.1-44	8 Aug 2024	5.1-98	31 Oct 2024	* 5.1-152	28 Nov 2024
4.4-15	22 Feb 2024	5.1-45	8 Aug 2024	* 5.1-99	28 Nov 2024	* 5.1-153	28 Nov 2024
4.4-16	22 Feb 2024	5.1-46	3 Oct 2024	* 5.1-100	28 Nov 2024	5.2-1	31 Oct 2024
4.4-17	22 Feb 2024	5.1-47	3 Oct 2024	* 5.1-101	28 Nov 2024	5.2-2	21 Mar 2024
4.4-18	22 Feb 2024	5.1-48	31 Oct 2024	5.1-102	31 Oct 2024	5.2-3	25 Jan 2024
4.4-19	22 Feb 2024	5.1-49	31 Oct 2024	5.1-103	31 Oct 2024	5.2-4	31 Oct 2024
4.4-20	22 Feb 2024	5.1-50	31 Oct 2024	5.1-104	31 Oct 2024	5.2-5	21 Mar 2024
4.4-21	22 Feb 2024	5.1-51	31 Oct 2024	5.1-105	31 Oct 2024	5.2-6	21 Mar 2024
4.4-22	22 Feb 2024	5.1-52	3 Oct 2024	* 5.1-106	28 Nov 2024	5.2-7	13 Jul 2023
4.4-23	22 Feb 2024	5.1-53	3 Oct 2024	5.1-107	31 Oct 2024	5.2-8	13 Jul 2023
* 4.5-1	28 Nov 2024	5.1-54	3 Oct 2024	5.1-108	31 Oct 2024	5.2-9	3 Oct 2024
5.1-1	31 Oct 2024	5.1-55	3 Oct 2024	5.1-109	31 Oct 2024	5.2-10	3 Oct 2024
5.1-2	31 Oct 2024	5.1-56	3 Oct 2024	5.1-110	31 Oct 2024	5.2-11	21 Mar 2024
5.1-3	31 Oct 2024	5.1-57	3 Oct 2024	* 5.1-111	28 Nov 2024	5.2-12	3 Oct 2024
5.1-4	31 Oct 2024	5.1-58	3 Oct 2024	* 5.1-112	28 Nov 2024	5.2-13	21 Mar 2024
5.1-5	31 Oct 2024	5.1-59	3 Oct 2024	5.1-113	31 Oct 2024	5.2-14	13 Jul 2023
5.1-6	31 Oct 2024	5.1-60	3 Oct 2024	5.1-114	31 Oct 2024	5.2-15	13 Jul 2023
5.1-7	31 Oct 2024	5.1-61	3 Oct 2024	5.1-115	31 Oct 2024	5.2-16	13 Jul 2023
5.1-8	3 Oct 2024	5.1-62	3 Oct 2024	* 5.1-116	28 Nov 2024	5.2-17	13 Jul 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
ENR		ENR		ENR		AD	
5.2-18	5 Sep 2024	6-11	31 Oct 2024	6-65	24 Feb 2022	* 0.1-1	28 Nov 2024
5.3-1	25 Jan 2024	6-12	23 Mar 2023	6-66	23 Mar 2023	0.1-2	7 Sep 2023
5.3-2	25 Jan 2024	6-13	23 Mar 2023	6-67	24 Feb 2022	1.1-1	2 Jan 2020
5.3-3	25 Jan 2024	6-14	22 Feb 2024	6-68	13 Jun 2024	1.1-2	10 Aug 2023
5.3-4	21 Mar 2024	6-15	16 May 2024	6-69	23 Mar 2023	1.1-3	10 Aug 2023
5.3-5	14 Jul 2022	6-16	16 May 2024	6-70	22 Feb 2024	1.1-4	10 Aug 2023
5.3-6	17 Jun 2021	6-17	16 May 2024	6-72	1 Dec 2022	1.1-5	10 Aug 2023
5.3-7	1 Dec 2022	6-18	23 Mar 2023	6-73	8 Sep 2022	1.1-6	10 Aug 2023
5.3-8	2 Nov 2023	6-19	8 Sep 2022	6-74	8 Sep 2022	1.1-7	10 Aug 2023
5.3-9	14 Jul 2022	6-20	2 Jan 2020	6-75	31 Oct 2024	1.1-8	10 Aug 2023
5.3-10	5 Oct 2023	6-21	2 Jan 2020	6-76	3 Oct 2024	1.2-1	29 Dec 2022
5.3-11	5 Oct 2023	6-22	2 Jan 2020	6-78	2 Jan 2020	1.2-2	29 Dec 2022
5.3-12	28 Dec 2023	6-23	24 Feb 2022	6-79	2 Jan 2020	1.2-3	29 Dec 2022
5.3-13	28 Dec 2023	6-24	22 Apr 2021	6-80	30 Nov 2023	1.2-4	29 Dec 2022
5.3-14	28 Dec 2023	6-25	22 Feb 2024	6-81	8 Aug 2024	* 1.3-1	28 Nov 2024
5.3-15	25 Jan 2024	6-26	22 Apr 2021	6-82	16 May 2024	* 1.3-2	28 Nov 2024
5.3-16	28 Dec 2023	6-27	28 Dec 2023	6-83	28 Dec 2023	* 1.3-3	28 Nov 2024
5.3-17	28 Dec 2023	6-28	8 Sep 2022			* 1.3-4	28 Nov 2024
5.3-18	28 Dec 2023	6-29	25 Feb 2021			1.3-5	25 Jan 2024
5.3-19	28 Dec 2023	6-30	25 Feb 2021			1.4-1	8 Aug 2024
5.3-20	31 Oct 2024	6-31	2 Jan 2020			* 1.4-2	28 Nov 2024
5.3-21	31 Oct 2024	6-32	22 Feb 2024			1.5-1	25 Jan 2024
5.4-1	7 Oct 2021	6-33	22 Feb 2024			* 1.5-2	28 Nov 2024
5.5-1	21 Mar 2024	6-34	20 Apr 2023			* 1.5-3	28 Nov 2024
5.5-2	5 Sep 2024	6-35	20 Apr 2023			2.EGPD-1	18 May 2023
5.5-3	5 Sep 2024	6-36	23 Mar 2023			2.EGPD-2	18 May 2023
5.5-4	21 Mar 2024	6-37	22 Feb 2024			2.EGPD-3	8 Aug 2024
* 5.5-5	28 Nov 2024	6-38	23 Mar 2023			2.EGPD-4	8 Aug 2024
* 5.5-6	28 Nov 2024	6-39	3 Oct 2024			2.EGPD-5	8 Aug 2024
* 5.5-7	28 Nov 2024	6-40	13 Jun 2024			2.EGPD-6	8 Aug 2024
* 5.5-8	28 Nov 2024	6-41	15 Jun 2023			2.EGPD-7	8 Aug 2024
* 5.5-9	28 Nov 2024	6-42	5 Oct 2023			2.EGPD-8	8 Aug 2024
* 5.5-10	28 Nov 2024	6-43	15 Jun 2023			2.EGPD-9	18 May 2023
* 5.5-11	28 Nov 2024	6-44	8 Sep 2022			2.EGPD-10	18 Apr 2024
* 5.5-12	28 Nov 2024	6-45	1 Dec 2022			2.EGPD-11	18 Apr 2024
* 5.5-13	28 Nov 2024	6-46	1 Dec 2022			2.EGPD-12	18 Apr 2024
* 5.5-14	28 Nov 2024	6-47	3 Dec 2020			2.EGPD-13	18 Apr 2024
* 5.5-15	28 Nov 2024	6-48	23 Mar 2023			2.EGPD-14	15 Jun 2023
* 5.5-16	28 Nov 2024	6-49	27 Jan 2022			2.EGPD-15	15 Jun 2023
* 5.5-17	28 Nov 2024	6-50	23 Mar 2023			2.EGPD-2-1	8 Aug 2024
* 5.5-18	28 Nov 2024	6-51	30 Nov 2023			2.EGPD-2-2	8 Aug 2024
* 5.5-19	28 Nov 2024	6-52	2 Jan 2020			2.EGPD-2-3	8 Aug 2024
* 5.5-20	28 Nov 2024	6-53	2 Dec 2021			2.EGPD-3-1	22 Feb 2024
5.6-1	4 Nov 2021	6-54	2 Jan 2020			2.EGPD-3-2	22 Feb 2024
5.6-2	13 Jun 2024	6-55	7 Nov 2019			2.EGPD-4-1	24 Feb 2022
6-1	20 Apr 2023	6-56	2 Jan 2020			2.EGPD-5-1	24 Feb 2022
6-2	27 Jan 2022	6-57	23 Mar 2023			2.EGPD-5-2	03 Mar 2016
6-3	27 Jan 2022	6-58	2 Jan 2020			2.EGPD-8-1	7 Sep 2023
6-5	23 Mar 2023	6-59	2 Nov 2023			2.EGPD-8-2	7 Sep 2023
6-6	2 Jan 2020	6-60	30 Nov 2023			2.EGPD-8-3	7 Sep 2023
6-7	11 Jul 2024	6-61	20 Apr 2023			2.EGPD-8-4	7 Sep 2023
6-8	11 Jul 2024	6-62	2 Jan 2020			2.EGPD-8-5	7 Sep 2023
6-9	27 Jan 2022	6-63	2 Jan 2020			2.EGPD-8-6	7 Sep 2023
6-10	27 Jan 2022	6-64	23 Mar 2023			2.EGPD-8-7	7 Sep 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGJA-1	15 Jun 2023	2.EGAA-15	18 Apr 2024	2.EGPL-8-4	18 Apr 2024	2.EGBB-6-2	16 May 2024
2.EGJA-2	25 Jan 2024	2.EGAA-16	18 Apr 2024	2.EGPL-8-5	18 Apr 2024	2.EGBB-6-3	16 May 2024
2.EGJA-3	25 Jan 2024	2.EGAA-2-1	13 Jun 2024	2.EGPL-8-6	18 Apr 2024	2.EGBB-6-4	20 Apr 2023
2.EGJA-4	8 Aug 2024	2.EGAA-2-2	13 Jun 2024	2.EGPL-8-7	18 Apr 2024	2.EGBB-6-5	20 Apr 2023
2.EGJA-5	31 Oct 2024	2.EGAA-5-1	14 Jul 2022	2.EGPL-8-8	18 Apr 2024	2.EGBB-6-6	1 Dec 2022
2.EGJA-6	31 Oct 2024	2.EGAA-8-1	5 Oct 2023	2.EGKB-1	20 Apr 2023	2.EGBB-6-7	3 Nov 2022
2.EGJA-7	25 Jan 2024	2.EGAA-8-2	5 Oct 2023	2.EGKB-2	7 Sep 2023	2.EGBB-6-8	3 Oct 2024
2.EGJA-8	8 Aug 2024	2.EGAA-8-3	5 Oct 2023	2.EGKB-3	5 Sep 2024	2.EGBB-6-9	1 Dec 2022
2.EGJA-9	26 Jan 2023	2.EGAA-8-4	5 Oct 2023	2.EGKB-4	5 Sep 2024	2.EGBB-7-1	13 Jun 2024
2.EGJA-10	25 Jan 2024	2.EGAA-8-5	5 Oct 2023	2.EGKB-5	5 Sep 2024	2.EGBB-7-2	13 Jun 2024
2.EGJA-11	14 Jul 2022	2.EGAA-8-6	5 Oct 2023	2.EGKB-6	5 Sep 2024	2.EGBB-7-3	13 Jun 2024
2.EGJA-2-1	31 Oct 2024	2.EGAA-8-7	5 Oct 2023	2.EGKB-7	5 Sep 2024	2.EGBB-7-4	13 Jun 2024
2.EGJA-5-1	18 Jul 2019	2.EGAA-8-8	5 Oct 2023	2.EGKB-8	5 Sep 2024	2.EGBB-7-5	13 Jun 2024
2.EGJA-7-1	11 Jul 2024	2.EGAA-8-9	5 Oct 2023	* 2.EGKB-9	28 Nov 2024	2.EGBB-7-6	13 Jun 2024
* 2.EGJA-8-1	28 Nov 2024	2.EGAA-8-10	5 Oct 2023	2.EGKB-10	5 Sep 2024	2.EGBB-7-7	13 Jun 2024
* 2.EGJA-8-2	28 Nov 2024	2.EGAA-8-11	5 Oct 2023	2.EGKB-11	5 Sep 2024	2.EGBB-7-8	13 Jun 2024
* 2.EGJA-8-3	28 Nov 2024	2.EGAA-8-12	5 Oct 2023	* 2.EGKB-12	28 Nov 2024	2.EGBB-7-9	13 Jun 2024
* 2.EGJA-8-4	28 Nov 2024	2.EGAA-8-13	5 Oct 2023	2.EGKB-13	5 Sep 2024	2.EGBB-7-10	13 Jun 2024
* 2.EGJA-8-5	28 Nov 2024	2.EGAA-8-14	14 Jul 2022	2.EGKB-14	5 Sep 2024	2.EGBB-7-11	13 Jun 2024
2.EGJA-8-6	10 Sep 2020	2.EGAC-1	25 Jan 2024	2.EGKB-15	5 Sep 2024	2.EGBB-8-1	11 Jul 2024
* 2.EGJA-8-7	28 Nov 2024	2.EGAC-2	6 Oct 2022	2.EGKB-2-1	5 Sep 2024	2.EGBB-8-2	11 Jul 2024
2.EGJA-8-8	10 Sep 2020	2.EGAC-3	16 May 2024	2.EGKB-5-1	21 Mar 2024	2.EGBB-8-3	11 Jul 2024
2.EGSL-1	11 Jul 2024	2.EGAC-4	16 May 2024	2.EGKB-7-1	3 Oct 2024	2.EGBB-8-4	11 Jul 2024
2.EGSL-2	11 Jul 2024	2.EGAC-5	16 May 2024	2.EGKB-7-2	3 Oct 2024	2.EGBB-8-5	11 Jul 2024
2.EGSL-3	3 Oct 2024	2.EGAC-6	11 Jul 2024	2.EGKB-8-1	5 Sep 2024	2.EGBB-8-6	11 Jul 2024
2.EGSL-4	3 Oct 2024	2.EGAC-7	16 May 2024	2.EGKB-8-2	5 Sep 2024	2.EGBB-8-7	11 Jul 2024
2.EGSL-5	14 Jul 2022	2.EGAC-8	16 May 2024	2.EGKB-8-3	13 Jul 2023	2.EGBB-8-8	11 Jul 2024
2.EGSL-6	14 Jul 2022	2.EGAC-9	16 May 2024	2.EGKB-1	25 Jan 2024	2.EGBB-8-9	11 Jul 2024
2.EGSL-2-1	3 Oct 2024	2.EGAC-10	16 May 2024	* 2.EGKB-2	28 Nov 2024	2.EGBB-8-10	11 Jul 2024
2.EGPR-1	26 Jan 2023	2.EGAC-11	16 May 2024	* 2.EGKB-3	28 Nov 2024	2.EGLK-1	31 Oct 2024
2.EGPR-2	29 Dec 2022	2.EGAC-12	16 May 2024	* 2.EGKB-4	28 Nov 2024	2.EGLK-2	31 Oct 2024
2.EGPR-3	26 Jan 2023	2.EGAC-13	16 May 2024	* 2.EGKB-5	28 Nov 2024	2.EGLK-3	31 Oct 2024
2.EGPR-4	26 Jan 2023	2.EGAC-14	16 May 2024	* 2.EGKB-6	28 Nov 2024	2.EGLK-4	31 Oct 2024
2.EGPR-5	18 May 2023	2.EGAC-2-1	22 Feb 2024	* 2.EGKB-7	28 Nov 2024	2.EGLK-5	31 Oct 2024
2.EGPR-6	31 Oct 2024	2.EGAC-2-2	15 Jun 2023	* 2.EGKB-8	28 Nov 2024	2.EGLK-6	31 Oct 2024
2.EGPR-2-1	26 Jan 2023	2.EGAC-5-1	14 Jul 2022	* 2.EGKB-9	28 Nov 2024	2.EGLK-7	31 Oct 2024
2.EGPR-8-1	3 Oct 2024	2.EGAC-8-1	16 May 2024	* 2.EGKB-10	28 Nov 2024	2.EGLK-8	31 Oct 2024
2.EGPR-8-2	3 Oct 2024	2.EGAC-8-2	5 Oct 2023	* 2.EGKB-11	28 Nov 2024	2.EGLK-9	31 Oct 2024
2.EGPR-8-3	3 Oct 2024	2.EGAC-8-3	5 Oct 2023	* 2.EGKB-12	28 Nov 2024	2.EGLK-10	31 Oct 2024
2.EGPR-8-4	3 Oct 2024	2.EGAC-8-4	16 May 2024	* 2.EGKB-13	28 Nov 2024	2.EGLK-11	31 Oct 2024
2.EGAA-1	13 Jul 2023	2.EGAC-8-5	16 May 2024	* 2.EGKB-14	28 Nov 2024	2.EGLK-12	31 Oct 2024
2.EGAA-2	13 Jul 2023	2.EGAC-8-6	5 Oct 2023	* 2.EGKB-15	28 Nov 2024	2.EGLK-2-1	31 Oct 2024
2.EGAA-3	11 Aug 2022	2.EGPL-1	3 Oct 2024	* 2.EGKB-16	28 Nov 2024	2.EGLK-2-2	31 Oct 2024
2.EGAA-4	13 Jul 2023	2.EGPL-2	14 Jul 2022	* 2.EGKB-17	28 Nov 2024	2.EGNH-1	13 Jun 2024
2.EGAA-5	13 Jul 2023	2.EGPL-3	25 Jan 2024	* 2.EGKB-18	28 Nov 2024	2.EGNH-2	13 Jun 2024
2.EGAA-6	8 Aug 2024	2.EGPL-4	26 Jan 2023	* 2.EGKB-19	28 Nov 2024	2.EGNH-3	13 Jun 2024
2.EGAA-7	7 Sep 2023	2.EGPL-5	25 Jan 2024	* 2.EGKB-20	28 Nov 2024	2.EGNH-4	13 Jun 2024
2.EGAA-8	13 Jul 2023	2.EGPL-6	18 Apr 2024	* 2.EGKB-2-1	28 Nov 2024	2.EGNH-5	13 Jun 2024
2.EGAA-9	13 Jul 2023	2.EGPL-7	18 Apr 2024	* 2.EGKB-2-2	28 Nov 2024	2.EGNH-6	13 Jun 2024
2.EGAA-10	31 Oct 2024	2.EGPL-8	18 Apr 2024	* 2.EGKB-2-3	28 Nov 2024	2.EGNH-7	5 Sep 2024
2.EGAA-11	3 Oct 2024	2.EGPL-2-1	18 Apr 2024	2.EGKB-4-1	16 May 2024	2.EGNH-8	13 Jun 2024
2.EGAA-12	3 Oct 2024	2.EGPL-8-1	18 Apr 2024	2.EGKB-4-3	16 May 2024	2.EGNH-9	13 Jun 2024
2.EGAA-13	25 Jan 2024	2.EGPL-8-2	18 Apr 2024	2.EGKB-5-1	16 Jun 2022	2.EGNH-2-1	16 May 2024
2.EGAA-14	25 Jan 2024	2.EGPL-8-3	18 Apr 2024	2.EGKB-6-1	20 Apr 2023	2.EGNH-2-2	16 May 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGNH-8-1	21 Mar 2024	2.EGGD-4-1	3 Oct 2024	2.EGEC-2	25 Jan 2024	2.EGFF-8-12	10 Aug 2023
2.EGNH-8-2	21 Mar 2024	2.EGGD-5-1	3 Oct 2024	2.EGEC-3	2 Nov 2023	2.EGFF-8-13	10 Aug 2023
2.EGNH-8-3	16 May 2024	2.EGGD-6-1	18 Apr 2024	2.EGEC-4	2 Nov 2023	2.EGFF-8-14	22 Apr 2021
2.EGNH-8-4	16 May 2024	2.EGGD-6-2	18 Apr 2024	2.EGEC-5	2 Nov 2023	2.EGFF-8-15	2 Dec 2021
2.EGNH-8-5	21 Mar 2024	2.EGGD-6-3	18 Apr 2024	2.EGEC-6	21 Mar 2024	2.EGLJ-1	15 Jun 2023
2.EGNH-8-6	21 Mar 2024	2.EGGD-7-1	16 May 2024	2.EGEC-7	31 Oct 2024	2.EGLJ-2	22 Feb 2024
2.EGNH-8-7	31 Dec 2020	2.EGGD-7-2	18 Apr 2024	2.EGEC-2-1	20 Apr 2023	2.EGLJ-3	22 Feb 2024
2.EGHH-1	13 Jul 2023	2.EGGD-7-3	16 May 2024	2.EGEC-8-1	3 Oct 2024	2.EGLJ-4	20 Apr 2023
2.EGHH-2	14 Jul 2022	2.EGGD-7-4	18 Apr 2024	2.EGEC-8-2	3 Oct 2024	2.EGLJ-5	20 Apr 2023
2.EGHH-3	11 Aug 2022	2.EGGD-7-5	18 Apr 2024	2.EGEC-8-3	3 Oct 2024	2.EGLJ-2-1	18 May 2023
2.EGHH-4	11 Jul 2024	2.EGGD-7-6	18 Apr 2024	2.EGEC-8-4	3 Oct 2024	2.EGHR-1	28 Dec 2023
2.EGHH-5	11 Jul 2024	2.EGGD-7-7	18 Apr 2024	2.EGFF-1	14 Jul 2022	2.EGHR-2	11 Jul 2024
2.EGHH-6	11 Jul 2024	2.EGGD-7-8	23 Mar 2023	* 2.EGFF-2	28 Nov 2024	2.EGHR-3	31 Oct 2024
2.EGHH-7	11 Jul 2024	2.EGGD-7-9	23 Mar 2023	2.EGFF-3	5 Sep 2024	2.EGHR-4	31 Oct 2024
2.EGHH-8	11 Jul 2024	2.EGGD-7-10	23 Mar 2023	2.EGFF-4	5 Sep 2024	2.EGHR-5	31 Oct 2024
2.EGHH-9	31 Oct 2024	2.EGGD-8-1	13 Jun 2024	2.EGFF-5	5 Sep 2024	2.EGHR-6	31 Oct 2024
2.EGHH-10	11 Jul 2024	2.EGGD-8-2	13 Jun 2024	2.EGFF-6	5 Sep 2024	2.EGHR-7	31 Oct 2024
2.EGHH-11	11 Jul 2024	2.EGGD-8-3	13 Jun 2024	2.EGFF-7	8 Aug 2024	2.EGHR-2-1	21 Mar 2024
2.EGHH-12	11 Jul 2024	2.EGGD-8-4	13 Jun 2024	2.EGFF-8	8 Aug 2024	2.EGHR-4-1	23 Feb 2023
2.EGHH-13	11 Jul 2024	2.EGGD-8-5	13 Jun 2024	2.EGFF-9	15 Jun 2023	2.EGEL-1	8 Aug 2024
2.EGHH-14	11 Jul 2024	2.EGGD-8-6	13 Jun 2024	2.EGFF-10	15 Jun 2023	2.EGEL-2	8 Aug 2024
2.EGHH-15	11 Jul 2024	2.EGGD-8-7	13 Jun 2024	2.EGFF-11	15 Jun 2023	2.EGEL-3	8 Aug 2024
2.EGHH-2-1	11 Jul 2024	2.EGGD-8-8	13 Jun 2024	2.EGFF-12	15 Jun 2023	2.EGEL-4	8 Aug 2024
2.EGHH-2-2	11 Jul 2024	2.EGGD-8-9	25 Mar 2021	2.EGFF-13	15 Jun 2023	2.EGEL-5	29 Dec 2022
2.EGHH-5-1	31 Dec 2020	2.EGCK-1	16 May 2024	2.EGFF-14	15 Jun 2023	2.EGEL-2-1	8 Aug 2024
2.EGHH-7-1	8 Aug 2024	2.EGCK-2	16 May 2024	2.EGFF-2-1	5 Sep 2024	2.EGEY-1	15 Jun 2023
2.EGHH-7-2	8 Aug 2024	2.EGCK-3	16 May 2024	2.EGFF-2-2	8 Aug 2024	2.EGEY-2	5 Sep 2024
2.EGHH-7-3	8 Aug 2024	2.EGCK-4	16 May 2024	2.EGFF-4-1	13 Jun 2024	2.EGEY-3	5 Sep 2024
2.EGHH-7-4	8 Aug 2024	2.EGCK-5	16 May 2024	2.EGFF-4-2	23 Mar 2023	2.EGEY-4	5 Sep 2024
2.EGHH-7-5	8 Aug 2024	2.EGCK-6	3 Oct 2024	2.EGFF-5-1	13 Jun 2024	2.EGEY-5	29 Dec 2022
2.EGHH-7-6	8 Aug 2024	2.EGCK-2-1	16 May 2024	2.EGFF-6-1	10 Aug 2023	2.EGEY-6	29 Dec 2022
2.EGHH-7-7	8 Aug 2024	* 2.EGSC-1	28 Nov 2024	2.EGFF-6-2	10 Aug 2023	2.EGEY-2-1	5 Sep 2024
2.EGHH-8-1	31 Dec 2020	2.EGSC-2	3 Oct 2024	2.EGFF-6-3	10 Aug 2023	2.EGHA-1	25 Jan 2024
2.EGHH-8-2	31 Dec 2020	2.EGSC-3	3 Oct 2024	2.EGFF-7-1	16 May 2024	2.EGHA-2	3 Oct 2024
2.EGHH-8-3	31 Dec 2020	2.EGSC-4	31 Oct 2024	2.EGFF-7-2	18 May 2023	2.EGHA-3	13 Jul 2023
2.EGHH-8-4	31 Dec 2020	2.EGSC-5	31 Oct 2024	2.EGFF-7-3	16 May 2024	2.EGHA-4	25 Jan 2024
2.EGHH-8-5	31 Dec 2020	2.EGSC-6	31 Oct 2024	2.EGFF-7-4	18 May 2023	2.EGHA-5	31 Oct 2024
2.EGHH-8-6	31 Dec 2020	2.EGSC-7	31 Oct 2024	2.EGFF-7-5	23 Mar 2023	2.EGHA-2-1	13 Jul 2023
2.EGGD-1	5 Oct 2023	2.EGSC-8	31 Oct 2024	2.EGFF-7-6	23 Mar 2023	2.EGHA-4-1	25 Jan 2024
2.EGGD-2	2 Nov 2023	2.EGSC-9	31 Oct 2024	2.EGFF-7-7	23 Mar 2023	2.EGBE-1	2 Nov 2023
2.EGGD-3	3 Oct 2024	2.EGSC-10	31 Oct 2024	2.EGFF-7-8	23 Mar 2023	* 2.EGBE-2	28 Nov 2024
2.EGGD-4	31 Oct 2024	2.EGSC-11	31 Oct 2024	2.EGFF-7-9	23 Mar 2023	2.EGBE-3	25 Jan 2024
2.EGGD-5	31 Oct 2024	2.EGSC-2-1	3 Oct 2024	2.EGFF-7-10	23 Mar 2023	2.EGBE-4	25 Jan 2024
2.EGGD-6	8 Aug 2024	2.EGSC-2-2	3 Oct 2024	2.EGFF-8-1	10 Aug 2023	2.EGBE-5	25 Jan 2024
2.EGGD-7	18 May 2023	2.EGSC-5-1	3 Oct 2024	2.EGFF-8-2	10 Aug 2023	2.EGBE-6	25 Jan 2024
2.EGGD-8	18 Apr 2024	2.EGSC-8-1	3 Oct 2024	2.EGFF-8-3	12 Aug 2021	2.EGBE-7	25 Jan 2024
2.EGGD-9	18 Apr 2024	2.EGSC-8-2	3 Oct 2024	2.EGFF-8-4	2 Dec 2021	2.EGBE-8	25 Jan 2024
2.EGGD-10	31 Oct 2024	2.EGSC-8-3	3 Oct 2024	2.EGFF-8-5	10 Aug 2023	2.EGBE-9	25 Jan 2024
2.EGGD-11	31 Oct 2024	2.EGSC-8-4	3 Oct 2024	2.EGFF-8-6	10 Aug 2023	2.EGBE-10	25 Jan 2024
2.EGGD-12	31 Oct 2024	2.EGSC-8-5	3 Oct 2024	2.EGFF-8-7	10 Aug 2023	2.EGBE-2-1	21 Mar 2024
2.EGGD-13	18 Apr 2024	2.EGSC-8-6	3 Oct 2024	2.EGFF-8-8	10 Aug 2023	2.EGBE-2-2	25 Jan 2024
2.EGGD-14	18 Apr 2024	2.EGSC-8-7	10 Aug 2023	2.EGFF-8-9	10 Aug 2023	2.EGTC-1	14 Jul 2022
2.EGGD-2-1	31 Oct 2024	2.EGSC-8-8	10 Aug 2023	2.EGFF-8-10	12 Aug 2021	2.EGTC-2	31 Oct 2024
2.EGGD-2-2	31 Oct 2024	2.EGEC-1	14 Jul 2022	2.EGFF-8-11	2 Dec 2021	2.EGTC-3	31 Oct 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGTC-4	31 Oct 2024	2.EGCN-2-1	29 Dec 2022	2.EGTU-5	23 Mar 2023	2.EGNX-8-4	16 May 2024
2.EGTC-5	31 Oct 2024	2.EGCN-2-2	29 Dec 2022	2.EGTU-6	23 Mar 2023	2.EGNX-8-5	16 May 2024
2.EGTC-6	13 Jun 2024	2.EGCN-2-3	1 Dec 2022	* 2.EGTU-2-1	28 Nov 2024	2.EGNX-8-6	16 May 2024
* 2.EGTC-7	28 Nov 2024	2.EGCN-4-1	22 Apr 2021	2.EGSU-1	23 Feb 2023	2.EGED-1	14 Jul 2022
2.EGTC-8	13 Jun 2024	2.EGCN-5-1	1 Dec 2022	2.EGSU-2	16 May 2024	2.EGED-2	14 Jul 2022
2.EGTC-9	13 Jun 2024	2.EGCN-6-1	8 Oct 2020	2.EGSU-3	23 Feb 2023	2.EGED-3	14 Jul 2022
2.EGTC-2-1	31 Oct 2024	2.EGCN-6-2	8 Oct 2020	2.EGSU-4	23 Feb 2023	2.EGED-4	14 Jul 2022
2.EGTC-8-1	11 Aug 2022	2.EGCN-6-3	8 Oct 2020	2.EGSU-5	23 Feb 2023	2.EGED-5	14 Jul 2022
2.EGTC-8-2	11 Aug 2022	2.EGCN-6-4	8 Oct 2020	2.EGSU-2-1	18 May 2023	2.EGED-2-1	27 Feb 2020
2.EGTC-8-3	13 Jun 2024	2.EGCN-6-5	8 Oct 2020	2.EGSR-1	14 Jul 2022	2.EGPH-1	14 Jul 2022
2.EGTC-8-4	13 Jun 2024	2.EGCN-6-6	8 Oct 2020	2.EGSR-2	13 Aug 2020	2.EGPH-2	8 Aug 2024
2.EGTC-8-5	13 Jun 2024	2.EGCN-6-7	8 Oct 2020	2.EGSR-3	14 Jul 2022	2.EGPH-3	8 Aug 2024
2.EGTC-8-6	13 Jun 2024	2.EGCN-7-1	26 Jan 2023	2.EGSR-4	14 Jul 2022	2.EGPH-4	31 Oct 2024
2.EGTC-8-7	13 Jun 2024	2.EGCN-7-2	28 Jan 2021	2.EGSR-5	14 Jul 2022	* 2.EGPH-5	28 Nov 2024
* 2.EGPG-1	28 Nov 2024	2.EGCN-7-3	6 Oct 2022	2.EGSR-2-1	3 Oct 2024	2.EGPH-6	25 Jan 2024
2.EGPG-2	18 Apr 2024	2.EGCN-7-4	8 Oct 2020	2.EGNX-1	14 Jul 2022	2.EGPH-7	25 Jan 2024
2.EGPG-3	13 Jul 2023	2.EGCN-7-5	8 Oct 2020	2.EGNX-2	18 Apr 2024	2.EGPH-8	25 Jan 2024
2.EGPG-4	13 Jul 2023	2.EGCN-7-6	8 Oct 2020	2.EGNX-3	20 Jun 2019	2.EGPH-9	25 Jan 2024
2.EGPG-5	14 Jul 2022	2.EGCN-8-1	22 Apr 2021	2.EGNX-4	18 Apr 2024	2.EGPH-10	25 Jan 2024
2.EGPG-6	14 Jul 2022	2.EGCN-8-2	11 Aug 2022	2.EGNX-5	30 Nov 2023	2.EGPH-11	25 Jan 2024
2.EGPG-2-1	10 Aug 2023	2.EGCN-8-3	22 Apr 2021	2.EGNX-6	30 Nov 2023	2.EGPH-12	25 Jan 2024
2.EGLD-1	25 Jan 2024	2.EGCN-8-4	22 Apr 2021	2.EGNX-7	30 Nov 2023	2.EGPH-13	18 Apr 2024
2.EGLD-2	23 Mar 2023	2.EGCN-8-5	2 Dec 2021	2.EGNX-8	14 Jul 2022	2.EGPH-14	18 Apr 2024
2.EGLD-3	10 Aug 2023	2.EGCN-8-6	22 Apr 2021	* 2.EGNX-9	28 Nov 2024	2.EGPH-15	25 Jan 2024
2.EGLD-4	21 Mar 2024	2.EGCN-8-7	22 Apr 2021	2.EGNX-10	8 Aug 2024	2.EGPH-16	25 Jan 2024
2.EGLD-5	23 Mar 2023	2.EGCN-8-8	22 Apr 2021	2.EGNX-11	8 Aug 2024	2.EGPH-2-1	31 Oct 2024
2.EGLD-6	25 Jan 2024	2.EGCN-8-9	22 Apr 2021	2.EGNX-12	25 Jan 2024	2.EGPH-2-2	31 Oct 2024
2.EGLD-7	23 Mar 2023	2.EGCN-8-10	2 Dec 2021	2.EGNX-13	18 Apr 2024	2.EGPH-2-3	31 Oct 2024
2.EGLD-2-1	21 Mar 2024	2.EGCN-8-11	22 Apr 2021	* 2.EGNX-14	28 Nov 2024	2.EGPH-4-1	2 Nov 2023
2.EGLD-4-1	19 May 2022	2.EGCN-8-12	22 Apr 2021	* 2.EGNX-15	28 Nov 2024	2.EGPH-5-1	25 Apr 2019
2.EGBD-1	14 Jul 2022	2.EGCN-8-13	22 Apr 2021	* 2.EGNX-16	28 Nov 2024	2.EGPH-6-1	16 May 2024
2.EGBD-2	7 Oct 2021	2.EGCN-8-14	2 Dec 2021	* 2.EGNX-17	28 Nov 2024	2.EGPH-6-2	13 Jun 2024
2.EGBD-3	7 Oct 2021	2.EGPN-1	8 Aug 2024	2.EGNX-2-1	28 Dec 2023	2.EGPH-6-3	16 May 2024
2.EGBD-4	14 Jul 2022	2.EGPN-2	25 Jan 2024	2.EGNX-2-2	11 Jul 2024	2.EGPH-7-1	13 Jun 2024
2.EGBD-5	14 Jul 2022	2.EGPN-3	25 Jan 2024	2.EGNX-2-3	28 Dec 2023	2.EGPH-7-2	13 Jun 2024
2.EGBD-2-1	21 May 2020	* 2.EGPN-4	28 Nov 2024	2.EGNX-4-1	25 Jan 2024	2.EGPH-7-3	13 Jun 2024
2.EGCN-1	15 Jun 2023	2.EGPN-5	2 Nov 2023	* 2.EGNX-5-1	28 Nov 2024	2.EGPH-7-4	13 Jun 2024
2.EGCN-2	3 Nov 2022	2.EGPN-6	8 Aug 2024	2.EGNX-6-1	22 Feb 2024	2.EGPH-7-5	13 Jun 2024
2.EGCN-3	1 Dec 2022	2.EGPN-7	8 Aug 2024	2.EGNX-6-2	22 Feb 2024	2.EGPH-7-6	13 Jun 2024
2.EGCN-4	1 Dec 2022	2.EGPN-8	10 Aug 2023	2.EGNX-6-3	21 Mar 2024	2.EGPH-7-7	13 Jun 2024
2.EGCN-5	1 Dec 2022	2.EGPN-9	31 Oct 2024	2.EGNX-7-1	16 May 2024	2.EGPH-8-1	13 Jul 2023
2.EGCN-6	1 Dec 2022	2.EGPN-2-1	14 Jul 2022	2.EGNX-7-2	16 May 2024	2.EGPH-8-2	13 Jul 2023
2.EGCN-7	3 Nov 2022	2.EGPN-4-1	28 Apr 2016	2.EGNX-7-3	16 May 2024	2.EGPH-8-3	13 Jul 2023
2.EGCN-8	3 Nov 2022	2.EGPN-8-1	18 Apr 2024	2.EGNX-7-4	16 May 2024	2.EGPH-8-4	13 Jul 2023
2.EGCN-9	18 May 2023	2.EGPN-8-2	18 Apr 2024	2.EGNX-7-5	16 May 2024	2.EGPH-8-5	13 Jul 2023
2.EGCN-10	1 Dec 2022	2.EGPN-8-3	18 Apr 2024	2.EGNX-7-6	16 May 2024	2.EGPH-8-6	13 Jul 2023
2.EGCN-11	29 Dec 2022	2.EGPN-8-4	18 Apr 2024	2.EGNX-7-7	16 May 2024	2.EGTR-1	22 Feb 2024
2.EGCN-12	1 Dec 2022	2.EGPN-8-5	18 Apr 2024	2.EGNX-7-8	16 May 2024	2.EGTR-2	3 Nov 2022
2.EGCN-13	1 Dec 2022	2.EGPN-8-6	25 Jan 2024	2.EGNX-7-9	16 May 2024	2.EGTR-3	3 Nov 2022
2.EGCN-14	23 Mar 2023	2.EGPN-8-7	25 Jan 2024	2.EGNX-7-10	13 Jun 2024	2.EGTR-4	3 Nov 2022
2.EGCN-15	1 Dec 2022	2.EGTU-1	13 Jun 2024	2.EGNX-7-11	13 Jun 2024	2.EGTR-5	23 Feb 2023
2.EGCN-16	1 Dec 2022	2.EGTU-2	15 Jun 2023	2.EGNX-8-1	16 May 2024	2.EGTR-6	14 Jul 2022
2.EGCN-17	1 Dec 2022	* 2.EGTU-3	28 Nov 2024	2.EGNX-8-2	16 May 2024	2.EGTR-2-1	23 Mar 2023
2.EGCN-18	1 Dec 2022	2.EGTU-4	23 Mar 2023	2.EGNX-8-3	16 May 2024	2.EGAB-1	15 Jun 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGAB-2	15 Jun 2023	2.EGTF-2-2	18 Apr 2024	2.EGCL-5	5 Sep 2024	* 2.EGBJ-2	28 Nov 2024
2.EGAB-3	25 Jan 2024	2.EGTF-4-1	18 Apr 2024	2.EGCL-2-1	31 Oct 2024	* 2.EGBJ-3	28 Nov 2024
2.EGAB-4	23 Feb 2023	2.EGLF-1	7 Sep 2023	2.EGPF-1	3 Oct 2024	* 2.EGBJ-4	28 Nov 2024
2.EGAB-5	5 Nov 2020	2.EGLF-2	28 Dec 2023	2.EGPF-2	11 Jul 2024	* 2.EGBJ-5	28 Nov 2024
2.EGAB-6	14 Jul 2022	* 2.EGLF-3	28 Nov 2024	2.EGPF-3	27 Jan 2022	* 2.EGBJ-6	28 Nov 2024
2.EGAB-2-1	23 Feb 2023	* 2.EGLF-4	28 Nov 2024	2.EGPF-4	3 Oct 2024	* 2.EGBJ-7	28 Nov 2024
2.EGTE-1	18 May 2023	2.EGLF-5	8 Aug 2024	2.EGPF-5	3 Oct 2024	* 2.EGBJ-8	28 Nov 2024
2.EGTE-2	13 Jun 2024	* 2.EGLF-6	28 Nov 2024	2.EGPF-6	3 Oct 2024	* 2.EGBJ-9	28 Nov 2024
2.EGTE-3	5 Oct 2023	2.EGLF-7	28 Dec 2023	2.EGPF-7	3 Oct 2024	* 2.EGBJ-10	28 Nov 2024
2.EGTE-4	18 Apr 2024	2.EGLF-8	28 Dec 2023	2.EGPF-8	3 Oct 2024	* 2.EGBJ-11	28 Nov 2024
2.EGTE-5	25 Jan 2024	2.EGLF-9	28 Dec 2023	2.EGPF-9	3 Oct 2024	* 2.EGBJ-12	28 Nov 2024
2.EGTE-6	21 Mar 2024	2.EGLF-10	28 Dec 2023	2.EGPF-10	3 Oct 2024	* 2.EGBJ-2-1	28 Nov 2024
2.EGTE-7	5 Oct 2023	2.EGLF-11	28 Dec 2023	2.EGPF-11	3 Oct 2024	2.EGBJ-5-1	16 May 2024
2.EGTE-8	5 Oct 2023	2.EGLF-12	25 Jan 2024	2.EGPF-12	3 Oct 2024	2.EGBJ-8-1	16 May 2024
2.EGTE-9	5 Oct 2023	2.EGLF-13	21 Mar 2024	2.EGPF-13	3 Oct 2024	2.EGBJ-8-2	16 May 2024
2.EGTE-10	5 Oct 2023	2.EGLF-14	28 Dec 2023	2.EGPF-14	3 Oct 2024	2.EGBJ-8-3	16 May 2024
2.EGTE-11	18 Apr 2024	2.EGLF-15	28 Dec 2023	2.EGPF-15	3 Oct 2024	2.EGBJ-8-4	16 May 2024
2.EGTE-12	21 Mar 2024	2.EGLF-16	21 Mar 2024	2.EGPF-16	3 Oct 2024	2.EGBJ-8-5	16 May 2024
2.EGTE-13	5 Oct 2023	2.EGLF-17	21 Mar 2024	2.EGPF-17	3 Oct 2024	2.EGBJ-8-6	16 May 2024
2.EGTE-14	2 Nov 2023	2.EGLF-18	21 Mar 2024	2.EGPF-2-1	3 Oct 2024	2.EGBJ-8-7	16 May 2024
2.EGTE-2-1	18 Apr 2024	2.EGLF-19	21 Mar 2024	2.EGPF-2-2	3 Oct 2024	2.EGBJ-8-8	16 May 2024
2.EGTE-2-2	18 Apr 2024	2.EGLF-20	21 Mar 2024	2.EGPF-2-3	3 Oct 2024	2.EGBJ-8-9	16 May 2024
2.EGTE-5-1	2 Nov 2023	* 2.EGLF-2-1	28 Nov 2024	2.EGPF-4-1	5 Oct 2023	2.EGBJ-8-10	15 Jul 2021
2.EGTE-8-1	2 Nov 2023	* 2.EGLF-2-2	28 Nov 2024	2.EGPF-5-1	24 Feb 2022	2.EGBJ-8-11	15 Jul 2021
2.EGTE-8-2	2 Nov 2023	2.EGLF-4-1	23 Mar 2023	2.EGPF-5-2	22 Jun 2017	2.EGJB-1	14 Jul 2022
2.EGTE-8-3	2 Nov 2023	2.EGLF-4-2	22 Feb 2024	2.EGPF-6-1	28 Dec 2023	2.EGJB-2	7 Oct 2021
2.EGTE-8-4	2 Nov 2023	2.EGLF-5-1	28 Dec 2023	2.EGPF-6-2	13 Jul 2023	2.EGJB-3	11 Jul 2024
2.EGTE-8-5	2 Nov 2023	2.EGLF-6-1	25 Jan 2024	2.EGPF-6-3	5 Oct 2023	2.EGJB-4	11 Jul 2024
2.EGTE-8-6	2 Nov 2023	2.EGLF-6-2	25 Jan 2024	2.EGPF-6-4	5 Oct 2023	2.EGJB-5	11 Jul 2024
2.EGTE-8-7	2 Nov 2023	2.EGLF-6-3	27 Jan 2022	2.EGPF-6-5	28 Dec 2023	2.EGJB-6	11 Jul 2024
2.EGTE-8-8	2 Nov 2023	2.EGLF-6-4	27 Jan 2022	2.EGPF-6-6	13 Jul 2023	2.EGJB-7	11 Jul 2024
2.EGTE-8-9	2 Nov 2023	2.EGLF-7-1	28 Dec 2023	2.EGPF-6-7	28 Dec 2023	2.EGJB-8	11 Jul 2024
2.EGTE-8-10	2 Nov 2023	2.EGLF-7-2	28 Dec 2023	2.EGPF-6-8	13 Jul 2023	2.EGJB-9	11 Jul 2024
2.EGTE-8-11	2 Nov 2023	2.EGLF-7-3	28 Dec 2023	2.EGPF-6-9	28 Dec 2023	2.EGJB-10	11 Jul 2024
2.EGTE-8-12	2 Nov 2023	2.EGLF-7-4	28 Dec 2023	2.EGPF-7-1	5 Sep 2024	2.EGJB-11	11 Jul 2024
2.EGTE-8-13	15 Jul 2021	2.EGLF-7-5	28 Dec 2023	2.EGPF-7-2	5 Sep 2024	2.EGJB-12	31 Oct 2024
2.EGTE-8-14	2 Nov 2023	2.EGLF-7-6	28 Dec 2023	2.EGPF-7-3	5 Sep 2024	2.EGJB-13	11 Jul 2024
2.EGEF-1	14 Jul 2022	2.EGLF-7-7	28 Dec 2023	2.EGPF-7-4	5 Sep 2024	2.EGJB-2-1	11 Jul 2024
2.EGEF-2	11 Jul 2024	2.EGLF-7-8	28 Dec 2023	2.EGPF-7-5	5 Sep 2024	2.EGJB-2-2	11 Jul 2024
2.EGEF-3	11 Jul 2024	2.EGLF-7-9	18 Apr 2024	2.EGPF-7-6	5 Sep 2024	2.EGJB-5-1	5 Oct 2023
2.EGEF-4	11 Jul 2024	2.EGLF-7-10	18 Apr 2024	2.EGPF-7-7	5 Sep 2024	2.EGJB-6-1	8 Aug 2024
2.EGEF-5	11 Jul 2024	2.EGLF-8-1	18 Apr 2024	2.EGPF-7-8	5 Sep 2024	2.EGJB-6-2	8 Aug 2024
2.EGEF-2-1	11 Jul 2024	2.EGLF-8-2	18 Apr 2024	2.EGPF-7-9	5 Sep 2024	2.EGJB-6-3	8 Aug 2024
2.EGTF-1	18 Apr 2024	2.EGLF-8-3	8 Aug 2024	2.EGPF-8-1	13 Jul 2023	2.EGJB-6-4	8 Aug 2024
2.EGTF-2	8 Aug 2024	2.EGLF-8-4	18 Apr 2024	2.EGPF-8-2	13 Jul 2023	2.EGJB-6-5	8 Aug 2024
2.EGTF-3	8 Aug 2024	2.EGLF-8-5	18 Apr 2024	2.EGPF-8-3	13 Jul 2023	2.EGJB-6-6	8 Aug 2024
2.EGTF-4	8 Aug 2024	2.EGLF-8-6	18 Apr 2024	2.EGPF-8-4	13 Jul 2023	2.EGJB-6-7	8 Aug 2024
2.EGTF-5	18 Apr 2024	2.EGLF-8-7	18 Apr 2024	2.EGPF-8-5	3 Oct 2024	2.EGJB-6-8	8 Aug 2024
2.EGTF-6	18 Apr 2024	2.EGLF-8-8	18 Apr 2024	2.EGPF-8-6	13 Jul 2023	2.EGJB-7-1	11 Jul 2024
2.EGTF-7	18 Apr 2024	2.EGLF-8-9	18 Apr 2024	2.EGPF-8-7	13 Jul 2023	2.EGJB-7-2	11 Jul 2024
2.EGTF-8	18 Apr 2024	2.EGCL-1	14 Jul 2022	2.EGPF-8-8	13 Jul 2023	2.EGJB-8-1	11 Jul 2024
2.EGTF-9	18 Apr 2024	2.EGCL-2	5 Sep 2024	2.EGPF-8-9	13 Jul 2023	2.EGJB-8-2	11 Jul 2024
2.EGTF-10	21 Mar 2024	2.EGCL-3	5 Sep 2024	2.EGPF-8-10	4 Nov 2021	2.EGJB-8-3	11 Jul 2024
2.EGTF-2-1	8 Aug 2024	2.EGCL-4	31 Oct 2024	* 2.EGBJ-1	28 Nov 2024	2.EGJB-8-4	11 Jul 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGJB-8-5	11 Jul 2024	2.EGNJ-8-4	11 Jul 2024	* 2.EGNS-6	28 Nov 2024	2.EGJJ-8-3	22 Apr 2021
2.EGJB-8-6	11 Jul 2024	2.EGNJ-8-5	11 Jul 2024	* 2.EGNS-7	28 Nov 2024	2.EGJJ-8-4	27 Jan 2022
2.EGJB-8-7	11 Jul 2024	2.EGNJ-8-6	16 May 2024	* 2.EGNS-8	28 Nov 2024	2.EGJJ-8-5	18 May 2023
2.EGJB-8-8	11 Jul 2024	2.EGNJ-8-7	16 May 2024	* 2.EGNS-9	28 Nov 2024	2.EGJJ-8-6	18 May 2023
2.EGJB-8-9	8 Oct 2020	2.EGNJ-8-8	11 Jul 2024	* 2.EGNS-10	28 Nov 2024	2.EGJJ-8-7	18 May 2023
2.EGJB-8-10	8 Oct 2020	2.EGNJ-8-9	17 Jun 2021	* 2.EGNS-11	28 Nov 2024	2.EGJJ-8-8	22 Apr 2021
2.EGJB-8-11	14 Jul 2022	2.EGNJ-8-10	2 Dec 2021	* 2.EGNS-12	28 Nov 2024	2.EGJJ-8-9	27 Jan 2022
2.EGJB-8-12	8 Oct 2020	2.EGPE-1	11 Jul 2024	2.EGNS-13	30 Nov 2023	2.EGJJ-8-10	18 May 2023
2.EGFE-1	8 Sep 2022	2.EGPE-2	11 Jul 2024	* 2.EGNS-2-1	28 Nov 2024	2.EGJJ-8-11	22 Apr 2021
2.EGFE-2	15 Jun 2023	2.EGPE-3	31 Oct 2024	* 2.EGNS-2-2	28 Nov 2024	2.EGJJ-8-12	8 Oct 2020
2.EGFE-3	15 Jun 2023	2.EGPE-4	31 Oct 2024	2.EGNS-5-1	5 Sep 2024	2.EGJJ-8-13	8 Oct 2020
2.EGFE-4	15 Jun 2023	2.EGPE-5	13 Jul 2023	2.EGNS-8-1	5 Sep 2024	2.EGJJ-8-14	8 Oct 2020
2.EGFE-5	10 Aug 2023	2.EGPE-6	11 Jul 2024	2.EGNS-8-2	5 Sep 2024	2.EGBP-1	14 Jul 2022
2.EGFE-6	10 Aug 2023	2.EGPE-7	11 Jul 2024	2.EGNS-8-3	5 Sep 2024	2.EGBP-2	31 Oct 2024
2.EGFE-2-1	10 Aug 2023	* 2.EGPE-8	28 Nov 2024	2.EGNS-8-4	5 Sep 2024	2.EGBP-3	31 Oct 2024
2.EGNR-1	6 Oct 2022	2.EGPE-9	11 Jul 2024	2.EGNS-8-5	5 Sep 2024	2.EGBP-4	31 Oct 2024
2.EGNR-2	21 Mar 2024	2.EGPE-10	11 Jul 2024	2.EGNS-8-6	5 Sep 2024	2.EGBP-5	31 Oct 2024
2.EGNR-3	31 Oct 2024	2.EGPE-11	11 Jul 2024	2.EGNS-8-7	5 Sep 2024	2.EGBP-6	20 Apr 2023
2.EGNR-4	31 Oct 2024	2.EGPE-2-1	10 Aug 2023	2.EGNS-8-8	5 Sep 2024	2.EGBP-7	20 Apr 2023
2.EGNR-5	31 Oct 2024	2.EGPE-2-2	11 Aug 2022	2.EGNS-8-9	5 Sep 2024	2.EGBP-8	31 Oct 2024
2.EGNR-6	31 Oct 2024	2.EGPE-5-1	8 Sep 2022	2.EGNS-8-10	5 Sep 2024	2.EGBP-2-1	31 Oct 2024
2.EGNR-7	31 Oct 2024	2.EGPE-8-1	18 May 2023	2.EGJJ-1	20 Apr 2023	2.EGBP-2-2	31 Oct 2024
2.EGNR-8	31 Oct 2024	2.EGPE-8-2	18 May 2023	2.EGJJ-2	8 Aug 2024	2.EGBP-8-1	16 May 2024
2.EGNR-9	31 Oct 2024	2.EGPE-8-3	18 May 2023	2.EGJJ-3	19 May 2022	2.EGBP-8-2	16 May 2024
2.EGNR-10	31 Oct 2024	2.EGPE-8-4	18 May 2023	2.EGJJ-4	11 Jul 2024	2.EGBP-8-3	9 Sep 2021
2.EGNR-11	31 Oct 2024	2.EGPE-8-5	18 May 2023	2.EGJJ-5	11 Jul 2024	2.EGBP-8-4	9 Sep 2021
2.EGNR-12	31 Oct 2024	2.EGPE-8-6	18 May 2023	2.EGJJ-6	11 Jul 2024	2.EGPA-1	30 Nov 2023
2.EGNR-2-1	31 Oct 2024	2.EGPE-8-7	18 May 2023	2.EGJJ-7	11 Jul 2024	2.EGPA-2	7 Sep 2023
2.EGNR-5-1	5 Oct 2023	2.EGPE-8-8	18 May 2023	2.EGJJ-8	11 Jul 2024	2.EGPA-3	7 Sep 2023
2.EGNR-8-1	5 Oct 2023	2.EGPE-8-9	18 May 2023	2.EGJJ-9	11 Jul 2024	2.EGPA-4	31 Oct 2024
2.EGNR-8-2	5 Oct 2023	2.EGPE-8-10	18 May 2023	2.EGJJ-10	8 Aug 2024	2.EGPA-5	20 May 2021
2.EGNR-8-3	5 Oct 2023	2.EGPE-8-11	18 Apr 2024	2.EGJJ-11	8 Aug 2024	2.EGPA-6	25 Jan 2024
2.EGNR-8-4	5 Oct 2023	2.EGPE-8-12	18 Apr 2024	2.EGJJ-12	8 Aug 2024	2.EGPA-7	18 May 2023
2.EGNR-8-5	5 Oct 2023	2.EGPE-8-13	18 Apr 2024	2.EGJJ-13	8 Aug 2024	2.EGPA-8	8 Aug 2024
2.EGNR-8-6	5 Oct 2023	2.EGPE-8-14	18 Apr 2024	2.EGJJ-14	8 Aug 2024	2.EGPA-9	18 Apr 2024
2.EGNR-8-7	25 Jan 2024	2.EGPE-8-15	18 May 2023	2.EGJJ-15	3 Oct 2024	2.EGPA-10	18 Apr 2024
2.EGNR-8-8	5 Oct 2023	2.EGPE-8-16	18 May 2023	2.EGJJ-16	3 Oct 2024	2.EGPA-2-1	25 Jan 2024
2.EGNJ-1	14 Jul 2022	2.EGPI-1	18 Apr 2024	2.EGJJ-2-1	11 Jul 2024	2.EGPA-8-1	25 Jan 2024
2.EGNJ-2	7 Oct 2021	2.EGPI-2	13 Jun 2024	2.EGJJ-2-2	16 May 2024	2.EGPA-8-2	25 Jan 2024
2.EGNJ-3	11 Jul 2024	2.EGPI-3	18 Apr 2024	2.EGJJ-3-1	3 Oct 2024	2.EGPA-8-3	25 Jan 2024
2.EGNJ-4	11 Jul 2024	2.EGPI-4	18 Apr 2024	2.EGJJ-5-1	26 Jan 2023	2.EGPA-8-4	25 Jan 2024
2.EGNJ-5	11 Jul 2024	2.EGPI-5	18 Apr 2024	2.EGJJ-6-1	27 Jan 2022	2.EGPA-8-5	25 Jan 2024
2.EGNJ-6	11 Jul 2024	2.EGPI-6	13 Jun 2024	2.EGJJ-6-2	11 Jul 2024	2.EGPA-8-6	25 Jan 2024
2.EGNJ-7	3 Oct 2024	2.EGPI-7	18 Apr 2024	2.EGJJ-6-3	11 Jul 2024	2.EGPA-8-7	25 Jan 2024
2.EGNJ-8	14 Jul 2022	2.EGPI-2-1	21 Mar 2024	2.EGJJ-6-4	11 Jul 2024	2.EGPA-8-8	25 Jan 2024
2.EGNJ-9	25 Jan 2024	2.EGPI-8-1	21 Mar 2024	2.EGJJ-6-5	24 Mar 2022	2.EGPA-8-9	25 Jan 2024
2.EGNJ-10	16 May 2024	2.EGPI-8-2	21 Mar 2024	2.EGJJ-6-6	25 Mar 2021	2.EGPA-8-10	25 Jan 2024
2.EGNJ-11	3 Nov 2022	2.EGPI-8-3	21 Mar 2024	2.EGJJ-7-1	11 Jul 2024	2.EGPA-8-11	25 Jan 2024
2.EGNJ-2-1	3 Oct 2024	2.EGPI-8-4	21 Mar 2024	2.EGJJ-7-2	11 Jul 2024	2.EGPA-8-12	25 Jan 2024
2.EGNJ-2-2	11 Jul 2024	2.EGNS-1	8 Aug 2024	2.EGJJ-7-3	24 Mar 2022	2.EGPA-8-13	25 Jan 2024
2.EGNJ-5-1	29 Dec 2022	* 2.EGNS-2	28 Nov 2024	2.EGJJ-7-4	11 Jul 2024	2.EGPA-8-14	25 Jan 2024
2.EGNJ-8-1	11 Jul 2024	* 2.EGNS-3	28 Nov 2024	2.EGJJ-7-5	27 Jan 2022	2.EGPA-8-15	12 Aug 2021
2.EGNJ-8-2	16 May 2024	* 2.EGNS-4	28 Nov 2024	2.EGJJ-8-1	18 May 2023	2.EGPA-8-16	2 Dec 2021
2.EGNJ-8-3	11 Jul 2024	* 2.EGNS-5	28 Nov 2024	2.EGJJ-8-2	18 May 2023	2.EGHC-1	14 Jul 2022

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGHC-2	11 Jul 2024	2.EGNM-6-1	22 Feb 2024	2.EGGP-16	31 Oct 2024	2.EGLC-6-6	29 Dec 2022
2.EGHC-3	31 Oct 2024	2.EGNM-6-2	22 Feb 2024	2.EGGP-17	31 Oct 2024	2.EGLC-6-7	29 Dec 2022
2.EGHC-4	31 Oct 2024	2.EGNM-8-1	13 Jul 2023	2.EGGP-18	31 Oct 2024	2.EGLC-6-8	29 Dec 2022
2.EGHC-5	31 Oct 2024	2.EGNM-8-2	13 Jul 2023	2.EGGP-19	31 Oct 2024	2.EGLC-7-1	5 Sep 2024
2.EGHC-6	31 Oct 2024	2.EGNM-8-3	13 Jul 2023	* 2.EGGP-2-1	28 Nov 2024	2.EGLC-7-2	5 Sep 2024
2.EGHC-7	31 Oct 2024	2.EGNM-8-4	13 Jul 2023	2.EGGP-2-2	5 Sep 2024	2.EGLC-7-3	5 Sep 2024
2.EGHC-8	31 Oct 2024	2.EGNM-8-5	13 Jul 2023	2.EGGP-4-1	21 Mar 2024	2.EGLC-7-4	5 Sep 2024
2.EGHC-9	31 Oct 2024	2.EGNM-8-6	13 Jul 2023	2.EGGP-5-1	18 May 2023	2.EGLC-7-5	5 Sep 2024
2.EGHC-10	31 Oct 2024	2.EGNM-8-7	5 Sep 2024	2.EGGP-6-1	22 Feb 2024	2.EGLC-7-6	5 Sep 2024
2.EGHC-2-1	11 Jul 2024	2.EGNM-8-8	13 Jul 2023	2.EGGP-6-2	22 Feb 2024	2.EGLC-7-7	5 Sep 2024
2.EGHC-2-2	11 Jul 2024	2.EGNM-8-9	13 Jul 2023	2.EGGP-6-3	22 Feb 2024	2.EGLC-7-8	5 Sep 2024
2.EGHC-3-1	7 Sep 2023	2.EGCM-1	30 Nov 2023	2.EGGP-6-4	25 Jan 2024	2.EGLC-7-9	5 Sep 2024
2.EGHC-8-1	22 Feb 2024	2.EGCM-2	30 Nov 2023	2.EGGP-6-5	25 Jan 2024	2.EGLC-7-10	5 Sep 2024
2.EGHC-8-2	22 Feb 2024	2.EGCM-3	10 Aug 2023	2.EGGP-7-1	23 Mar 2023	2.EGLC-7-11	5 Sep 2024
2.EGHC-8-3	22 Feb 2024	2.EGCM-4	10 Aug 2023	2.EGGP-7-2	23 Mar 2023	2.EGLC-7-12	5 Sep 2024
2.EGHC-8-4	22 Feb 2024	2.EGCM-5	10 Aug 2023	2.EGGP-7-3	16 May 2024	2.EGLC-7-13	5 Sep 2024
2.EGHC-8-5	30 Dec 2021	2.EGCM-6	31 Oct 2024	2.EGGP-7-4	23 Mar 2023	2.EGLC-7-14	5 Sep 2024
2.EGHC-8-6	30 Dec 2021	2.EGCM-7	31 Oct 2024	2.EGGP-7-5	23 Mar 2023	2.EGLC-7-15	5 Sep 2024
2.EGHC-8-7	30 Dec 2021	2.EGCM-8	31 Oct 2024	2.EGGP-7-6	23 Mar 2023	2.EGLC-7-16	5 Sep 2024
2.EGHC-8-8	30 Dec 2021	2.EGCM-2-1	7 Sep 2023	2.EGGP-7-7	23 Mar 2023	2.EGLC-7-17	28 Dec 2023
2.EGKH-1	16 May 2024	2.EGCM-8-1	28 Dec 2023	2.EGGP-8-1	15 Jun 2023	2.EGLC-7-18	28 Dec 2023
2.EGKH-2	26 Jan 2023	2.EGCM-8-2	28 Dec 2023	2.EGGP-8-2	15 Jun 2023	2.EGLC-7-19	28 Dec 2023
2.EGKH-3	14 Jul 2022	2.EGCM-8-3	10 Aug 2023	2.EGGP-8-3	17 Jun 2021	2.EGLC-8-1	3 Oct 2024
2.EGKH-4	11 Jul 2024	2.EGCM-8-4	10 Aug 2023	2.EGGP-8-4	17 Jun 2021	2.EGLC-8-2	3 Oct 2024
2.EGKH-5	14 Jul 2022	2.EGBG-1	14 Jul 2022	2.EGGP-8-5	17 Jun 2021	2.EGLC-8-3	13 Jul 2023
2.EGKH-2-1	11 Jul 2024	2.EGBG-2	14 Jul 2022	2.EGGP-8-6	17 Jun 2021	2.EGLC-8-4	3 Oct 2024
2.EGHF-1	15 Jun 2023	2.EGBG-3	14 Jul 2022	2.EGGP-8-7	18 Apr 2024	2.EGLC-8-5	3 Oct 2024
2.EGHF-2	22 Apr 2021	2.EGBG-4	14 Jul 2022	2.EGGP-8-8	17 Jun 2021	2.EGLC-8-6	13 Jul 2023
2.EGHF-3	31 Oct 2024	2.EGBG-5	18 May 2023	2.EGGP-8-9	17 Jun 2021	2.EGKK-1	13 Jun 2024
2.EGHF-4	2 Nov 2023	2.EGBG-6	14 Jul 2022	2.EGGP-8-10	17 Jun 2021	2.EGKK-2	8 Aug 2024
2.EGHF-5	25 Jan 2024	2.EGBG-2-1	25 Apr 2019	2.EGGP-8-11	17 Jun 2021	2.EGKK-3	3 Oct 2024
2.EGHF-6	13 Jun 2024	2.EGET-1	5 Sep 2024	2.EGLC-1	3 Oct 2024	2.EGKK-4	3 Oct 2024
2.EGHF-7	25 Jan 2024	2.EGET-2	5 Sep 2024	* 2.EGLC-2	28 Nov 2024	2.EGKK-5	3 Oct 2024
2.EGHF-2-1	2 Nov 2023	2.EGET-3	3 Oct 2024	* 2.EGLC-3	28 Nov 2024	2.EGKK-6	3 Oct 2024
2.EGNM-1	8 Aug 2024	2.EGET-4	3 Oct 2024	* 2.EGLC-4	28 Nov 2024	2.EGKK-7	31 Oct 2024
2.EGNM-2	8 Sep 2022	2.EGET-5	3 Oct 2024	2.EGLC-5	5 Oct 2023	2.EGKK-8	3 Oct 2024
2.EGNM-3	19 May 2022	2.EGET-6	3 Oct 2024	2.EGLC-6	5 Oct 2023	2.EGKK-9	3 Oct 2024
* 2.EGNM-4	28 Nov 2024	2.EGET-7	3 Oct 2024	2.EGLC-7	5 Oct 2023	2.EGKK-10	3 Oct 2024
2.EGNM-5	31 Oct 2024	2.EGET-2-1	3 Oct 2024	* 2.EGLC-8	28 Nov 2024	2.EGKK-11	3 Oct 2024
2.EGNM-6	31 Oct 2024	* 2.EGGP-1	28 Nov 2024	2.EGLC-9	8 Aug 2024	* 2.EGKK-12	28 Nov 2024
2.EGNM-7	13 Jul 2023	2.EGGP-2	31 Oct 2024	2.EGLC-10	31 Oct 2024	* 2.EGKK-13	28 Nov 2024
2.EGNM-8	31 Oct 2024	2.EGGP-3	23 Mar 2023	2.EGLC-11	31 Oct 2024	* 2.EGKK-14	28 Nov 2024
2.EGNM-9	13 Jul 2023	2.EGGP-4	31 Oct 2024	2.EGLC-12	8 Aug 2024	* 2.EGKK-15	28 Nov 2024
2.EGNM-10	13 Jul 2023	2.EGGP-5	31 Oct 2024	2.EGLC-13	8 Aug 2024	* 2.EGKK-16	28 Nov 2024
2.EGNM-11	11 Jul 2024	2.EGGP-6	31 Oct 2024	2.EGLC-14	30 Nov 2023	2.EGKK-17	3 Oct 2024
2.EGNM-12	11 Jul 2024	2.EGGP-7	31 Oct 2024	* 2.EGLC-2-1	28 Nov 2024	2.EGKK-18	3 Oct 2024
2.EGNM-13	11 Jul 2024	2.EGGP-8	31 Oct 2024	* 2.EGLC-2-2	28 Nov 2024	2.EGKK-19	3 Oct 2024
2.EGNM-14	11 Jul 2024	2.EGGP-9	31 Oct 2024	2.EGLC-4-1	23 Mar 2023	2.EGKK-20	3 Oct 2024
2.EGNM-15	11 Jul 2024	2.EGGP-10	15 Jun 2023	2.EGLC-5-1	21 Mar 2024	2.EGKK-21	3 Oct 2024
2.EGNM-16	11 Jul 2024	2.EGGP-11	31 Oct 2024	2.EGLC-6-1	2 Nov 2023	2.EGKK-22	3 Oct 2024
2.EGNM-17	11 Jul 2024	2.EGGP-12	31 Oct 2024	2.EGLC-6-2	29 Dec 2022	2.EGKK-23	3 Oct 2024
2.EGNM-2-1	31 Oct 2024	2.EGGP-13	31 Oct 2024	2.EGLC-6-3	2 Nov 2023	2.EGKK-24	3 Oct 2024
2.EGNM-2-2	5 Sep 2024	2.EGGP-14	31 Oct 2024	2.EGLC-6-4	2 Nov 2023	2.EGKK-25	3 Oct 2024
2.EGNM-5-1	22 Apr 2021	2.EGGP-15	31 Oct 2024	2.EGLC-6-5	29 Dec 2022	2.EGKK-26	3 Oct 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGKK-27	3 Oct 2024	2.EGKK-8-4	5 Oct 2023	* 2.EGLL-2-4	28 Nov 2024	2.EGLL-8-9	11 Jul 2024
2.EGKK-28	3 Oct 2024	2.EGKK-8-5	5 Oct 2023	* 2.EGLL-2-5	28 Nov 2024	2.EGLL-8-10	11 Jul 2024
2.EGKK-2-1	3 Oct 2024	2.EGKK-8-6	5 Oct 2023	* 2.EGLL-2-6	28 Nov 2024	2.EGLL-8-11	11 Jul 2024
2.EGKK-2-2	16 May 2024	2.EGKK-8-7	5 Oct 2023	* 2.EGLL-2-7	28 Nov 2024	2.EGLL-8-12	11 Jul 2024
2.EGKK-2-3	13 Jul 2023	2.EGKK-8-8	5 Oct 2023	2.EGLL-2-8	13 Jun 2024	2.EGLL-8-13	2 Dec 2021
2.EGKK-2-4	21 Mar 2024	2.EGKK-8-9	13 Jul 2023	2.EGLL-2-9	13 Jun 2024	2.EGGW-1	18 May 2023
* 2.EGKK-2-5	28 Nov 2024	2.EGLL-1	31 Oct 2024	2.EGLL-2-10	13 Jun 2024	2.EGGW-2	5 Sep 2024
2.EGKK-2-6	16 May 2024	* 2.EGLL-2	28 Nov 2024	2.EGLL-2-11	24 May 2018	2.EGGW-3	25 Jan 2024
* 2.EGKK-4-1	28 Nov 2024	* 2.EGLL-3	28 Nov 2024	2.EGLL-2-12	13 Sep 2018	2.EGGW-4	8 Aug 2024
2.EGKK-4-2	23 Mar 2023	* 2.EGLL-4	28 Nov 2024	2.EGLL-3-1	19 May 2022	2.EGGW-5	8 Aug 2024
2.EGKK-5-1	13 Jun 2024	* 2.EGLL-5	28 Nov 2024	2.EGLL-3-2	23 Mar 2023	2.EGGW-6	8 Aug 2024
2.EGKK-6-1	25 Jan 2024	* 2.EGLL-6	28 Nov 2024	2.EGLL-4-1	01 May 2014	2.EGGW-7	25 Jan 2024
2.EGKK-6-2	25 Jan 2024	* 2.EGLL-7	28 Nov 2024	2.EGLL-5-1	27 Jan 2022	2.EGGW-8	25 Jan 2024
2.EGKK-6-3	3 Dec 2020	* 2.EGLL-8	28 Nov 2024	2.EGLL-5-2	31 Dec 2020	2.EGGW-9	13 Jun 2024
2.EGKK-6-4	25 Jan 2024	* 2.EGLL-9	28 Nov 2024	2.EGLL-6-1	25 Jan 2024	2.EGGW-10	13 Jun 2024
2.EGKK-6-5	25 Feb 2021	* 2.EGLL-10	28 Nov 2024	2.EGLL-6-2	25 Jan 2024	2.EGGW-11	13 Jun 2024
2.EGKK-6-6	28 Dec 2023	* 2.EGLL-11	28 Nov 2024	2.EGLL-6-3	11 Jul 2024	2.EGGW-12	13 Jun 2024
2.EGKK-6-7	29 Dec 2022	* 2.EGLL-12	28 Nov 2024	2.EGLL-6-4	11 Jul 2024	2.EGGW-13	13 Jun 2024
2.EGKK-6-8	25 Jan 2024	* 2.EGLL-13	28 Nov 2024	2.EGLL-6-5	25 Jan 2024	2.EGGW-14	13 Jun 2024
2.EGKK-6-9	25 Feb 2021	* 2.EGLL-14	28 Nov 2024	2.EGLL-6-6	28 Dec 2023	2.EGGW-15	13 Jun 2024
2.EGKK-6-10	5 Oct 2023	* 2.EGLL-15	28 Nov 2024	* 2.EGLL-7-1	28 Nov 2024	2.EGGW-16	13 Jun 2024
2.EGKK-6-11	25 Feb 2021	* 2.EGLL-16	28 Nov 2024	* 2.EGLL-7-2	28 Nov 2024	2.EGGW-17	13 Jun 2024
2.EGKK-6-12	5 Oct 2023	* 2.EGLL-17	28 Nov 2024	* 2.EGLL-7-3	28 Nov 2024	2.EGGW-18	13 Jun 2024
2.EGKK-6-13	29 Dec 2022	* 2.EGLL-18	28 Nov 2024	* 2.EGLL-7-4	28 Nov 2024	2.EGGW-19	13 Jun 2024
2.EGKK-6-14	25 Jan 2024	* 2.EGLL-19	28 Nov 2024	* 2.EGLL-7-5	28 Nov 2024	2.EGGW-2-1	8 Aug 2024
2.EGKK-6-15	29 Dec 2022	* 2.EGLL-20	28 Nov 2024	* 2.EGLL-7-6	28 Nov 2024	* 2.EGGW-2-2	28 Nov 2024
2.EGKK-6-16	25 Jan 2024	* 2.EGLL-21	28 Nov 2024	* 2.EGLL-7-7	28 Nov 2024	2.EGGW-2-3	3 Oct 2024
2.EGKK-6-17	29 Dec 2022	* 2.EGLL-22	28 Nov 2024	* 2.EGLL-7-8	28 Nov 2024	2.EGGW-3-1	7 Sep 2023
2.EGKK-6-18	25 Feb 2021	* 2.EGLL-23	28 Nov 2024	* 2.EGLL-7-9	28 Nov 2024	2.EGGW-4-1	31 Oct 2024
2.EGKK-6-19	25 Feb 2021	* 2.EGLL-24	28 Nov 2024	* 2.EGLL-7-10	28 Nov 2024	2.EGGW-5-1	31 Oct 2024
2.EGKK-6-20	25 Feb 2021	* 2.EGLL-25	28 Nov 2024	* 2.EGLL-7-11	28 Nov 2024	2.EGGW-6-1	25 Jan 2024
2.EGKK-6-21	25 Feb 2021	* 2.EGLL-26	28 Nov 2024	* 2.EGLL-7-12	28 Nov 2024	2.EGGW-6-2	29 Dec 2022
2.EGKK-6-22	25 Feb 2021	* 2.EGLL-27	28 Nov 2024	* 2.EGLL-7-13	28 Nov 2024	2.EGGW-6-3	29 Dec 2022
2.EGKK-7-1	25 Jan 2024	* 2.EGLL-28	28 Nov 2024	* 2.EGLL-7-14	28 Nov 2024	2.EGGW-6-4	7 Sep 2023
2.EGKK-7-2	25 Jan 2024	* 2.EGLL-29	28 Nov 2024	* 2.EGLL-7-15	28 Nov 2024	2.EGGW-6-5	7 Sep 2023
2.EGKK-7-3	25 Jan 2024	* 2.EGLL-30	28 Nov 2024	* 2.EGLL-7-16	28 Nov 2024	2.EGGW-6-6	7 Sep 2023
2.EGKK-7-4	25 Jan 2024	* 2.EGLL-31	28 Nov 2024	* 2.EGLL-7-17	28 Nov 2024	2.EGGW-6-7	7 Sep 2023
2.EGKK-7-5	25 Jan 2024	* 2.EGLL-32	28 Nov 2024	* 2.EGLL-7-18	28 Nov 2024	2.EGGW-6-8	7 Sep 2023
2.EGKK-7-6	25 Jan 2024	* 2.EGLL-33	28 Nov 2024	* 2.EGLL-7-19	28 Nov 2024	2.EGGW-6-9	7 Sep 2023
2.EGKK-7-7	16 May 2024	* 2.EGLL-34	28 Nov 2024	2.EGLL-7-20	28 Dec 2023	2.EGGW-6-10	8 Oct 2020
2.EGKK-7-8	25 Jan 2024	* 2.EGLL-35	28 Nov 2024	2.EGLL-7-21	28 Dec 2023	2.EGGW-6-11	8 Oct 2020
2.EGKK-7-9	25 Jan 2024	* 2.EGLL-36	28 Nov 2024	2.EGLL-7-22	28 Dec 2023	2.EGGW-7-1	16 May 2024
2.EGKK-7-10	25 Jan 2024	* 2.EGLL-37	28 Nov 2024	2.EGLL-7-23	28 Dec 2023	2.EGGW-7-2	16 May 2024
2.EGKK-7-11	25 Jan 2024	* 2.EGLL-38	28 Nov 2024	2.EGLL-7-24	28 Dec 2023	2.EGGW-7-3	15 Jun 2023
2.EGKK-7-12	25 Jan 2024	* 2.EGLL-39	28 Nov 2024	2.EGLL-7-25	28 Dec 2023	2.EGGW-7-4	20 Apr 2023
2.EGKK-7-13	25 Jan 2024	* 2.EGLL-40	28 Nov 2024	2.EGLL-7-26	18 Apr 2024	2.EGGW-7-5	16 May 2024
2.EGKK-7-14	25 Jan 2024	* 2.EGLL-41	28 Nov 2024	2.EGLL-8-1	11 Jul 2024	2.EGGW-7-6	29 Dec 2022
2.EGKK-7-15	25 Jan 2024	* 2.EGLL-42	28 Nov 2024	2.EGLL-8-2	11 Jul 2024	2.EGGW-7-7	23 Mar 2023
2.EGKK-7-16	25 Jan 2024	* 2.EGLL-43	28 Nov 2024	2.EGLL-8-3	11 Jul 2024	2.EGGW-7-8	24 Feb 2022
2.EGKK-7-17	25 Jan 2024	* 2.EGLL-44	28 Nov 2024	2.EGLL-8-4	11 Jul 2024	2.EGGW-7-9	24 Feb 2022
2.EGKK-7-18	25 Jan 2024	* 2.EGLL-45	28 Nov 2024	2.EGLL-8-5	11 Jul 2024	2.EGGW-7-10	24 Feb 2022
2.EGKK-8-1	5 Oct 2023	* 2.EGLL-2-1	28 Nov 2024	2.EGLL-8-6	11 Jul 2024	2.EGGW-7-11	24 Feb 2022
2.EGKK-8-2	5 Oct 2023	2.EGLL-2-2	13 Jun 2024	2.EGLL-8-7	11 Jul 2024	2.EGGW-7-12	24 Feb 2022
2.EGKK-8-3	5 Oct 2023	2.EGLL-2-3	13 Jun 2024	2.EGLL-8-8	11 Jul 2024	2.EGGW-7-13	24 Feb 2022

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGGW-7-14	29 Dec 2022	2.EGSS-7-1	16 May 2024	2.EGMD-3	31 Oct 2024	2.EGCC-6-3	22 Feb 2024
2.EGGW-7-15	29 Dec 2022	2.EGSS-7-2	16 May 2024	2.EGMD-4	31 Oct 2024	2.EGCC-6-4	22 Feb 2024
2.EGGW-7-16	24 Feb 2022	2.EGSS-7-3	25 Jan 2024	2.EGMD-5	31 Oct 2024	2.EGCC-6-5	22 Feb 2024
2.EGGW-7-17	7 Sep 2023	2.EGSS-7-4	25 Jan 2024	2.EGMD-6	31 Oct 2024	2.EGCC-6-6	28 Dec 2023
2.EGGW-7-18	7 Sep 2023	2.EGSS-7-5	25 Jan 2024	2.EGMD-7	25 Jan 2024	2.EGCC-7-1	23 Mar 2023
2.EGGW-8-1	7 Sep 2023	2.EGSS-7-6	25 Jan 2024	2.EGMD-8	25 Jan 2024	2.EGCC-7-2	23 Mar 2023
2.EGGW-8-2	7 Sep 2023	2.EGSS-7-7	16 May 2024	2.EGMD-9	7 Sep 2023	2.EGCC-7-3	23 Mar 2023
2.EGGW-8-3	7 Sep 2023	2.EGSS-7-8	25 Jan 2024	2.EGMD-10	8 Sep 2022	2.EGCC-7-4	23 Mar 2023
2.EGGW-8-4	7 Sep 2023	2.EGSS-7-9	25 Jan 2024	2.EGMD-2-1	31 Oct 2024	2.EGCC-7-5	23 Mar 2023
2.EGGW-8-5	7 Sep 2023	2.EGSS-7-10	23 Mar 2023	2.EGMD-2-2	31 Oct 2024	2.EGCC-7-6	23 Mar 2023
2.EGGW-8-6	7 Sep 2023	2.EGSS-7-11	23 Mar 2023	2.EGMD-8-1	25 Jan 2024	2.EGCC-7-7	23 Mar 2023
2.EGGW-8-7	24 Feb 2022	2.EGSS-7-12	23 Mar 2023	2.EGMD-8-2	18 Apr 2024	2.EGCC-7-8	23 Mar 2023
2.EGSS-1	7 Sep 2023	2.EGSS-7-13	23 Mar 2023	2.EGMD-8-3	25 Jan 2024	2.EGCC-8-1	18 May 2023
2.EGSS-2	7 Oct 2021	2.EGSS-7-14	23 Mar 2023	2.EGMD-8-4	25 Jan 2024	2.EGCC-8-2	18 May 2023
2.EGSS-3	25 Jan 2024	2.EGSS-7-15	23 Mar 2023	2.EGMD-8-5	25 Jan 2024	2.EGCC-8-3	3 Oct 2024
2.EGSS-4	3 Oct 2024	2.EGSS-7-16	23 Mar 2023	2.EGMD-8-7	5 Nov 2020	2.EGCC-8-4	3 Oct 2024
2.EGSS-5	3 Oct 2024	2.EGSS-7-17	25 Jan 2024	2.EGMD-8-8	25 Jan 2024	2.EGCC-8-5	18 May 2023
2.EGSS-6	3 Oct 2024	2.EGSS-7-18	25 Jan 2024	2.EGMD-8-9	25 Jan 2024	2.EGCC-8-6	18 May 2023
2.EGSS-7	3 Oct 2024	2.EGSS-8-1	25 Jan 2024	2.EGCC-1	25 Jan 2024	2.EGCC-8-7	18 May 2023
2.EGSS-8	25 Jan 2024	2.EGSS-8-2	25 Jan 2024	2.EGCC-2	25 Jan 2024	2.EGCC-8-8	18 May 2023
2.EGSS-9	31 Oct 2024	2.EGSS-8-3	25 Jan 2024	2.EGCC-3	25 Jan 2024	2.EGCC-8-9	30 Nov 2023
2.EGSS-10	25 Jan 2024	2.EGSS-8-4	25 Jan 2024	2.EGCC-4	3 Oct 2024	2.EGCC-8-10	30 Nov 2023
2.EGSS-11	31 Oct 2024	2.EGSS-8-5	25 Jan 2024	2.EGCC-5	3 Oct 2024	2.EGCC-8-11	30 Nov 2023
2.EGSS-12	31 Oct 2024	2.EGSS-8-6	25 Jan 2024	2.EGCC-6	3 Oct 2024	2.EGCC-8-12	18 May 2023
2.EGSS-13	31 Oct 2024	2.EGSS-8-7	25 Jan 2024	2.EGCC-7	3 Oct 2024	2.EGCC-8-13	18 May 2023
2.EGSS-14	31 Oct 2024	2.EGSS-8-8	25 Jan 2024	2.EGCC-8	25 Jan 2024	2.EGCC-8-14	18 May 2023
2.EGSS-15	31 Oct 2024	2.EGSS-8-9	22 Feb 2024	2.EGCC-9	25 Jan 2024	2.EGCC-8-15	5 Nov 2020
2.EGSS-16	31 Oct 2024	2.EGSS-8-10	22 Feb 2024	2.EGCC-10	25 Jan 2024	2.EGCB-1	18 Apr 2024
2.EGSS-17	31 Oct 2024	2.EGAE-1	20 Apr 2023	2.EGCC-11	25 Jan 2024	2.EGCB-2	18 Apr 2024
2.EGSS-18	31 Oct 2024	2.EGAE-2	28 Dec 2023	2.EGCC-12	25 Jan 2024	2.EGCB-3	18 Apr 2024
2.EGSS-19	31 Oct 2024	2.EGAE-3	31 Oct 2024	2.EGCC-13	25 Jan 2024	2.EGCB-4	18 Apr 2024
2.EGSS-20	31 Oct 2024	* 2.EGAE-4	28 Nov 2024	2.EGCC-14	25 Jan 2024	2.EGCB-5	18 Apr 2024
2.EGSS-21	31 Oct 2024	2.EGAE-5	31 Oct 2024	2.EGCC-15	3 Oct 2024	2.EGCB-6	18 Apr 2024
2.EGSS-22	31 Oct 2024	2.EGAE-6	25 Jan 2024	2.EGCC-16	16 May 2024	2.EGCB-7	18 Apr 2024
2.EGSS-23	31 Oct 2024	2.EGAE-7	18 May 2023	2.EGCC-17	16 May 2024	2.EGCB-8	18 Apr 2024
2.EGSS-24	31 Oct 2024	2.EGAE-8	22 Feb 2024	2.EGCC-18	16 May 2024	2.EGCB-9	18 Apr 2024
2.EGSS-25	31 Oct 2024	2.EGAE-9	18 Apr 2024	2.EGCC-19	16 May 2024	2.EGCB-2-1	25 Jan 2024
2.EGSS-2-1	3 Oct 2024	2.EGAE-10	18 Apr 2024	* 2.EGCC-20	28 Nov 2024	2.EGCB-4-1	13 Jul 2023
2.EGSS-2-2	8 Aug 2024	2.EGAE-2-1	3 Nov 2022	2.EGCC-21	5 Sep 2024	* 2.EGNF-1	28 Nov 2024
2.EGSS-2-3	8 Aug 2024	2.EGAE-2-2	31 Oct 2024	2.EGCC-22	5 Sep 2024	* 2.EGNF-2	28 Nov 2024
2.EGSS-2-4	8 Aug 2024	2.EGAE-4-1	20 Apr 2023	2.EGCC-23	5 Sep 2024	* 2.EGNF-3	28 Nov 2024
2.EGSS-3-1	25 Jan 2024	2.EGAE-8-1	22 Feb 2024	2.EGCC-24	5 Sep 2024	* 2.EGNF-4	28 Nov 2024
2.EGSS-4-1	25 Jan 2024	2.EGAE-8-2	22 Feb 2024	2.EGCC-25	5 Sep 2024	* 2.EGNF-5	28 Nov 2024
2.EGSS-4-3	25 Jan 2024	2.EGAE-8-3	22 Feb 2024	2.EGCC-26	5 Sep 2024	* 2.EGNF-2-1	28 Nov 2024
2.EGSS-5-1	25 Jan 2024	2.EGAE-8-4	22 Feb 2024	2.EGCC-2-1	3 Oct 2024	* 2.EGNT-1	28 Nov 2024
2.EGSS-6-1	25 Jan 2024	2.EGAE-8-5	22 Feb 2024	2.EGCC-2-2	3 Oct 2024	2.EGNT-2	10 Aug 2023
2.EGSS-6-2	25 Jan 2024	2.EGAE-8-6	22 Feb 2024	2.EGCC-2-3	13 Jul 2023	2.EGNT-3	10 Aug 2023
2.EGSS-6-3	18 Apr 2024	2.EGAE-8-7	22 Feb 2024	2.EGCC-2-4	3 Oct 2024	* 2.EGNT-4	28 Nov 2024
2.EGSS-6-4	25 Jan 2024	2.EGAE-8-8	22 Feb 2024	2.EGCC-3-1	23 Mar 2023	* 2.EGNT-5	28 Nov 2024
2.EGSS-6-5	25 Jan 2024	2.EGAE-8-9	22 Feb 2024	2.EGCC-3-2	22 Feb 2024	* 2.EGNT-6	28 Nov 2024
2.EGSS-6-6	25 Jan 2024	2.EGAE-8-10	22 Feb 2024	2.EGCC-4-1	21 Mar 2024	2.EGNT-7	16 May 2024
2.EGSS-6-7	25 Jan 2024	2.EGAE-8-11	22 Feb 2024	2.EGCC-5-1	28 Dec 2023	2.EGNT-8	7 Sep 2023
2.EGSS-6-8	24 Feb 2022	2.EGMD-1	31 Oct 2024	2.EGCC-6-1	22 Feb 2024	2.EGNT-9	11 Jul 2024
2.EGSS-6-9	24 Feb 2022	2.EGMD-2	31 Oct 2024	2.EGCC-6-2	22 Feb 2024	2.EGNT-10	31 Oct 2024

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGNT-11	11 Jul 2024	2.EGAD-4	14 Jul 2022	2.EGTH-2	10 Aug 2023	2.EGPK-9	20 Apr 2023
2.EGNT-12	3 Oct 2024	2.EGAD-5	14 Jul 2022	2.EGTH-3	10 Aug 2023	2.EGPK-10	5 Oct 2023
2.EGNT-13	11 Jul 2024	2.EGAD-6	14 Jul 2022	2.EGTH-4	10 Aug 2023	2.EGPK-11	3 Oct 2024
2.EGNT-14	11 Jul 2024	2.EGAD-7	14 Jul 2022	2.EGTH-5	10 Aug 2023	2.EGPK-12	25 Jan 2024
2.EGNT-15	31 Oct 2024	2.EGAD-2-1	10 Sep 2020	2.EGTH-6	10 Aug 2023	2.EGPK-13	18 Apr 2024
2.EGNT-16	31 Oct 2024	2.EGEN-1	14 Jul 2022	2.EGTH-2-1	30 Dec 2021	2.EGPK-14	16 May 2024
* 2.EGNT-2-1	28 Nov 2024	2.EGEN-2	23 Apr 2020	2.EGTK-1	31 Oct 2024	2.EGPK-15	8 Aug 2024
* 2.EGNT-2-2	28 Nov 2024	2.EGEN-3	7 Oct 2021	2.EGTK-2	31 Oct 2024	2.EGPK-16	8 Aug 2024
2.EGNT-4-1	22 Feb 2024	2.EGEN-4	7 Oct 2021	2.EGTK-3	22 Feb 2024	* 2.EGPK-2-1	28 Nov 2024
2.EGNT-5-1	25 Jan 2024	2.EGEN-5	23 Apr 2020	2.EGTK-4	22 Feb 2024	* 2.EGPK-2-2	28 Nov 2024
2.EGNT-6-1	31 Oct 2024	2.EGEN-6	14 Jul 2022	2.EGTK-5	22 Feb 2024	2.EGPK-4-1	5 Oct 2023
2.EGNT-6-2	31 Oct 2024	2.EGEN-2-1	28 Mar 2019	2.EGTK-6	16 May 2024	2.EGPK-5-1	16 May 2024
2.EGNT-6-3	31 Oct 2024	2.EGSH-1	16 May 2024	2.EGTK-7	13 Jun 2024	2.EGPK-6-1	8 Aug 2024
2.EGNT-6-4	31 Oct 2024	2.EGSH-2	26 Jan 2023	2.EGTK-8	13 Jun 2024	2.EGPK-6-2	8 Aug 2024
2.EGNT-7-1	22 Feb 2024	2.EGSH-3	11 Jul 2024	2.EGTK-9	13 Jun 2024	2.EGPK-6-3	8 Aug 2024
2.EGNT-7-2	22 Feb 2024	2.EGSH-4	31 Oct 2024	2.EGTK-10	11 Jul 2024	2.EGPK-6-4	8 Aug 2024
2.EGNT-7-3	22 Feb 2024	2.EGSH-5	31 Oct 2024	2.EGTK-11	13 Jun 2024	2.EGPK-7-1	1 Dec 2022
2.EGNT-7-4	22 Feb 2024	2.EGSH-6	31 Oct 2024	2.EGTK-12	3 Oct 2024	2.EGPK-7-2	1 Dec 2022
2.EGNT-7-5	22 Feb 2024	2.EGSH-7	31 Oct 2024	2.EGTK-2-1	11 Jul 2024	2.EGPK-7-3	1 Dec 2022
2.EGNT-8-1	11 Jul 2024	2.EGSH-8	31 Oct 2024	2.EGTK-2-2	13 Jun 2024	2.EGPK-7-4	16 May 2024
2.EGNT-8-2	11 Jul 2024	2.EGSH-9	31 Oct 2024	2.EGTK-2-3	11 Jul 2024	2.EGPK-7-5	1 Dec 2022
2.EGNT-8-3	11 Jul 2024	2.EGSH-10	31 Oct 2024	* 2.EGTK-5-1	28 Nov 2024	2.EGPK-7-6	1 Dec 2022
2.EGNT-8-4	11 Jul 2024	2.EGSH-11	31 Oct 2024	* 2.EGTK-8-1	28 Nov 2024	2.EGPK-7-7	16 May 2024
2.EGNT-8-5	11 Jul 2024	2.EGSH-2-1	31 Oct 2024	* 2.EGTK-8-2	28 Nov 2024	2.EGPK-7-8	1 Dec 2022
2.EGNT-8-6	11 Jul 2024	2.EGSH-2-2	11 Jul 2024	* 2.EGTK-8-3	28 Nov 2024	2.EGPK-8-1	16 May 2024
2.EGNT-8-7	11 Jul 2024	2.EGSH-4-1	23 Mar 2023	* 2.EGTK-8-4	28 Nov 2024	2.EGPK-8-2	16 May 2024
2.EGNT-8-8	31 Oct 2024	2.EGSH-5-1	15 Jul 2021	2.EGEP-1	14 Jul 2022	2.EGPK-8-3	16 May 2024
2.EGNT-8-9	11 Jul 2024	2.EGSH-8-1	30 Nov 2023	2.EGEP-2	31 Dec 2020	2.EGPK-8-4	29 Dec 2022
2.EGNT-8-10	11 Jul 2024	2.EGSH-8-2	30 Nov 2023	2.EGEP-3	7 Oct 2021	2.EGPK-8-5	16 May 2024
2.EGHQ-1	16 May 2024	2.EGSH-8-3	30 Nov 2023	2.EGEP-4	7 Oct 2021	2.EGPK-8-6	16 May 2024
2.EGHQ-2	16 May 2024	2.EGSH-8-4	30 Nov 2023	2.EGEP-5	31 Dec 2020	2.EGPK-8-7	16 May 2024
* 2.EGHQ-3	28 Nov 2024	2.EGBN-1	14 Jul 2022	2.EGEP-6	14 Jul 2022	2.EGPK-8-8	16 May 2024
* 2.EGHQ-4	28 Nov 2024	2.EGBN-2	23 Apr 2020	2.EGEP-2-1	23 May 2019	2.EGPK-8-9	16 May 2024
* 2.EGHQ-5	28 Nov 2024	2.EGBN-3	14 Jul 2022	2.EGPT-1	14 Jul 2022	2.EGPK-8-10	16 May 2024
* 2.EGHQ-6	28 Nov 2024	2.EGBN-4	24 May 2018	2.EGPT-2	30 Nov 2023	2.EGPK-8-11	16 May 2024
* 2.EGHQ-7	28 Nov 2024	2.EGBN-5	18 Apr 2024	2.EGPT-3	30 Nov 2023	2.EGPK-8-12	16 May 2024
* 2.EGHQ-8	28 Nov 2024	2.EGBN-6	18 Apr 2024	2.EGPT-4	14 Jul 2022	2.EGPK-8-13	16 May 2024
* 2.EGHQ-9	28 Nov 2024	2.EGBN-2-1	2 Jan 2020	2.EGPT-5	23 Feb 2023	2.EGPK-8-14	14 Jul 2022
* 2.EGHQ-10	28 Nov 2024	2.EGEO-1	18 Apr 2024	2.EGPT-6	23 Feb 2023	2.EGPK-8-15	16 May 2024
* 2.EGHQ-11	28 Nov 2024	2.EGEO-2	15 Jun 2023	2.EGPT-2-1	30 Nov 2023	2.EGPK-8-16	14 Jul 2022
2.EGHQ-2-1	31 Oct 2024	2.EGEO-3	3 Oct 2024	2.EGSF-1	5 Sep 2024	2.EGPK-8-17	16 May 2024
2.EGHQ-2-2	16 May 2024	2.EGEO-4	3 Oct 2024	2.EGSF-2	7 Oct 2021	2.EGPK-8-18	14 Jul 2022
2.EGHQ-5-1	7 Sep 2023	2.EGEO-5	15 Jun 2023	2.EGSF-3	31 Dec 2020	2.EGKR-1	1 Dec 2022
2.EGHQ-8-1	13 Jun 2024	2.EGEO-6	18 Apr 2024	2.EGSF-4	5 Sep 2024	2.EGKR-2	1 Dec 2022
2.EGHQ-8-2	13 Jun 2024	2.EGEO-7	18 Apr 2024	2.EGSF-5	14 Jul 2022	2.EGKR-3	24 Feb 2022
2.EGHQ-8-3	13 Jun 2024	2.EGEO-2-1	3 Oct 2024	2.EGSF-2-1	5 Sep 2024	2.EGKR-4	1 Dec 2022
2.EGHQ-8-4	7 Sep 2023	2.EGSV-1	23 Feb 2023	2.EGPK-1	13 Jun 2024	2.EGKR-5	1 Dec 2022
2.EGHQ-8-5	13 Jun 2024	2.EGSV-2	11 Jul 2024	2.EGPK-2	13 Jun 2024	2.EGKR-6	1 Dec 2022
2.EGHQ-8-6	18 Apr 2024	2.EGSV-3	7 Oct 2021	2.EGPK-3	16 May 2024	2.EGKR-7	18 Apr 2024
2.EGHQ-8-7	13 Jun 2024	2.EGSV-4	11 Jul 2024	2.EGPK-4	3 Oct 2024	2.EGKR-8	18 Apr 2024
2.EGHQ-8-8	7 Sep 2023	2.EGSV-5	23 Feb 2023	2.EGPK-5	3 Oct 2024	2.EGKR-9	18 Apr 2024
2.EGAD-1	14 Jul 2022	2.EGSV-6	14 Jul 2022	2.EGPK-6	3 Oct 2024	2.EGKR-2-1	11 Jul 2024
2.EGAD-2	14 Jul 2022	2.EGSV-2-1	21 Apr 2022	2.EGPK-7	3 Oct 2024	2.EGKR-4-1	23 Mar 2023
2.EGAD-3	14 Jul 2022	2.EGTH-1	15 Jun 2023	2.EGPK-8	3 Oct 2024	2.EGNE-1	10 Aug 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGNE-2	10 Aug 2023	2.EGBS-3	5 Oct 2023	* 2.EGHI-8-2	28 Nov 2024	2.EGSY-11	11 Jul 2024
2.EGNE-3	10 Aug 2023	2.EGBS-4	13 Jun 2024	2.EGHI-8-3	10 Aug 2023	2.EGSY-12	11 Jul 2024
2.EGNE-4	5 Sep 2024	2.EGBS-5	5 Sep 2024	* 2.EGHI-8-4	28 Nov 2024	2.EGSY-13	31 Oct 2024
2.EGNE-5	10 Aug 2023	2.EGBS-6	5 Sep 2024	* 2.EGHI-8-5	28 Nov 2024	* 2.EGSY-2-1	28 Nov 2024
2.EGNE-6	10 Aug 2023	2.EGBS-2-1	5 Sep 2024	2.EGHI-8-6	6 Oct 2022	2.EGSY-4-1	20 Apr 2023
2.EGNE-7	10 Aug 2023	2.EGKA-1	14 Jul 2022	2.EGHI-8-7	6 Oct 2022	2.EGSY-5-1	13 Jun 2024
2.EGNE-2-1	10 Aug 2023	2.EGKA-2	22 Feb 2024	* 2.EGHI-8-8	28 Nov 2024	2.EGSY-8-1	12 Aug 2021
2.EGTO-1	8 Sep 2022	2.EGKA-3	22 Feb 2024	2.EGHI-8-9	6 Oct 2022	2.EGSY-8-2	12 Aug 2021
2.EGTO-2	3 Oct 2024	2.EGKA-4	31 Oct 2024	* 2.EGHI-8-10	28 Nov 2024	2.EGSG-1	14 Jul 2022
2.EGTO-3	7 Oct 2021	2.EGKA-5	16 May 2024	2.EGHI-8-11	17 Jun 2021	2.EGSG-2	31 Dec 2020
2.EGTO-4	14 Jul 2022	2.EGKA-6	16 May 2024	2.EGMC-1	31 Oct 2024	2.EGSG-3	7 Oct 2021
2.EGTO-5	13 Jul 2023	2.EGKA-7	16 May 2024	2.EGMC-2	21 Mar 2024	2.EGSG-4	14 Jul 2022
2.EGTO-6	13 Jul 2023	2.EGKA-8	8 Aug 2024	2.EGMC-3	8 Sep 2022	2.EGSG-5	7 Sep 2023
2.EGTO-2-1	12 Aug 2021	2.EGKA-9	8 Aug 2024	2.EGMC-4	8 Aug 2024	2.EGSG-6	14 Jul 2022
2.EGES-1	14 Jul 2022	2.EGKA-10	8 Aug 2024	2.EGMC-5	8 Aug 2024	2.EGSG-2-1	23 May 2019
2.EGES-2	14 Jul 2022	2.EGKA-2-1	22 Feb 2024	2.EGMC-6	8 Aug 2024	2.EGPO-1	5 Oct 2023
2.EGES-3	14 Jul 2022	2.EGKA-4-1	13 Jul 2023	2.EGMC-7	8 Aug 2024	2.EGPO-2	30 Nov 2023
2.EGES-4	7 Oct 2021	2.EGKA-8-1	16 May 2024	2.EGMC-8	8 Aug 2024	* 2.EGPO-3	28 Nov 2024
2.EGES-5	23 Apr 2020	2.EGKA-8-2	5 Nov 2020	2.EGMC-9	8 Aug 2024	2.EGPO-4	5 Oct 2023
2.EGES-6	14 Jul 2022	2.EGKA-8-3	5 Nov 2020	2.EGMC-10	8 Aug 2024	* 2.EGPO-5	28 Nov 2024
2.EGES-2-1	20 May 2021	2.EGKA-8-4	5 Nov 2020	2.EGMC-11	8 Aug 2024	2.EGPO-6	18 May 2023
2.EGCF-1	13 Jun 2024	2.EGCV-1	8 Aug 2024	2.EGMC-12	8 Aug 2024	2.EGPO-7	5 Oct 2023
2.EGCF-2	11 Aug 2022	2.EGCV-2	8 Aug 2024	2.EGMC-13	8 Aug 2024	2.EGPO-8	28 Dec 2023
2.EGCF-3	11 Aug 2022	2.EGCV-3	8 Aug 2024	2.EGMC-14	8 Aug 2024	2.EGPO-9	30 Nov 2023
2.EGCF-4	11 Aug 2022	2.EGCV-4	13 Jun 2024	2.EGMC-15	8 Aug 2024	2.EGPO-10	30 Nov 2023
2.EGCF-5	23 May 2019	2.EGCV-5	3 Oct 2024	2.EGMC-2-1	8 Aug 2024	2.EGPO-11	18 Apr 2024
2.EGCF-6	14 Jul 2022	2.EGCV-6	3 Oct 2024	2.EGMC-2-2	8 Aug 2024	2.EGPO-12	18 Apr 2024
2.EGCF-2-1	11 Aug 2022	2.EGCV-2-1	8 Aug 2024	2.EGMC-4-1	8 Sep 2022	2.EGPO-2-1	18 May 2023
2.EGHE-1	25 Jan 2024	2.EGHI-1	13 Jun 2024	2.EGMC-5-1	8 Sep 2022	2.EGPO-8-1	11 Aug 2022
2.EGHE-2	3 Oct 2024	2.EGHI-2	13 Jun 2024	2.EGMC-7-1	3 Dec 2020	2.EGPO-8-2	11 Aug 2022
2.EGHE-3	23 Feb 2023	2.EGHI-3	8 Aug 2024	2.EGMC-7-2	16 May 2024	2.EGPO-8-3	18 May 2023
2.EGHE-4	23 Feb 2023	2.EGHI-4	13 Jun 2024	2.EGMC-7-3	16 May 2024	2.EGPO-8-4	18 May 2023
2.EGHE-5	3 Oct 2024	2.EGHI-5	22 Feb 2024	2.EGMC-7-4	20 May 2021	2.EGPO-8-5	11 Aug 2022
2.EGHE-6	18 May 2023	2.EGHI-6	3 Oct 2024	2.EGMC-7-5	20 May 2021	2.EGPO-8-6	18 May 2023
2.EGHE-7	3 Oct 2024	2.EGHI-7	8 Aug 2024	2.EGMC-7-6	20 May 2021	2.EGPO-8-7	11 Aug 2022
2.EGHE-8	18 May 2023	2.EGHI-8	13 Jun 2024	2.EGMC-7-7	20 May 2021	2.EGPO-8-8	18 May 2023
2.EGHE-2-1	3 Oct 2024	2.EGHI-9	8 Aug 2024	2.EGMC-8-1	18 Apr 2024	2.EGPO-8-9	18 May 2023
2.EGHE-3-1	7 Sep 2023	2.EGHI-10	31 Oct 2024	2.EGMC-8-2	18 Apr 2024	2.EGPO-8-10	18 May 2023
2.EGHE-8-1	30 Dec 2021	* 2.EGHI-11	28 Nov 2024	2.EGMC-8-3	18 Apr 2024	2.EGER-1	14 Jul 2022
2.EGHE-8-2	30 Dec 2021	* 2.EGHI-12	28 Nov 2024	2.EGMC-8-4	18 Apr 2024	2.EGER-2	23 Apr 2020
2.EGCJ-1	10 Aug 2023	2.EGHI-13	13 Jun 2024	2.EGMC-8-5	18 Apr 2024	2.EGER-3	14 Jul 2022
2.EGCJ-2	7 Sep 2023	* 2.EGHI-14	28 Nov 2024	2.EGMC-8-6	13 Jun 2024	2.EGER-4	14 Jul 2022
2.EGCJ-3	7 Sep 2023	2.EGHI-2-1	8 Aug 2024	2.EGMC-8-7	18 Apr 2024	2.EGER-5	14 Jul 2022
2.EGCJ-4	7 Sep 2023	2.EGHI-2-2	8 Aug 2024	2.EGMC-8-8	18 Apr 2024	2.EGER-6	14 Jul 2022
2.EGCJ-5	7 Sep 2023	2.EGHI-4-1	23 Mar 2023	2.EGSY-1	16 May 2024	2.EGER-2-1	25 Apr 2019
2.EGCJ-6	7 Sep 2023	2.EGHI-5-1	23 Mar 2023	2.EGSY-2	29 Dec 2022	2.EGPB-1	15 Jun 2023
2.EGCJ-7	31 Oct 2024	2.EGHI-7-1	8 Aug 2024	2.EGSY-3	16 May 2024	2.EGPB-2	30 Nov 2023
2.EGCJ-2-1	7 Sep 2023	2.EGHI-7-2	8 Aug 2024	2.EGSY-4	16 May 2024	2.EGPB-3	28 Dec 2023
2.EGCJ-8-1	28 Dec 2023	2.EGHI-7-3	8 Aug 2024	2.EGSY-5	11 Jul 2024	2.EGPB-4	28 Dec 2023
2.EGCJ-8-2	28 Dec 2023	2.EGHI-7-4	8 Aug 2024	2.EGSY-6	11 Jul 2024	2.EGPB-5	28 Dec 2023
2.EGCJ-8-3	15 Jun 2023	2.EGHI-7-5	8 Aug 2024	2.EGSY-7	11 Jul 2024	2.EGPB-6	28 Dec 2023
2.EGCJ-8-4	15 Jun 2023	2.EGHI-7-6	8 Aug 2024	2.EGSY-8	11 Jul 2024	2.EGPB-7	15 Jun 2023
2.EGBS-1	13 Jun 2024	2.EGHI-7-7	8 Aug 2024	2.EGSY-9	3 Oct 2024	2.EGPB-8	28 Dec 2023
2.EGBS-2	27 Jan 2022	2.EGHI-8-1	6 Oct 2022	2.EGSY-10	11 Jul 2024	2.EGPB-9	15 Jun 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date	Page	Effective Date	Page	Effective Date	Page	Effective Date
AD		AD		AD		AD	
2.EGPB-10	18 Apr 2024	2.EGNV-8-5	16 May 2024	2.EGNO-4-1	21 Mar 2024	2.EGPC-8-6	10 Aug 2023
2.EGPB-11	18 Apr 2024	2.EGNV-8-6	16 May 2024	2.EGNO-5-1	21 Mar 2024	2.EGPC-8-7	10 Aug 2023
2.EGPB-2-1	28 Dec 2023	2.EGNV-8-7	21 Apr 2022	2.EGBW-1	8 Sep 2022	2.EGPC-8-8	10 Aug 2023
2.EGPB-2-2	18 May 2023	2.EGHO-1	16 May 2024	2.EGBW-2	23 Apr 2020	2.EGPC-8-9	10 Aug 2023
2.EGPB-3-1	20 Apr 2023	2.EGHO-2	18 Apr 2024	2.EGBW-3	8 Sep 2022	2.EGPC-8-10	31 Dec 2020
2.EGPB-3-2	20 Apr 2023	2.EGHO-3	30 Nov 2023	2.EGBW-4	5 Sep 2024	2.EGPC-8-11	2 Dec 2021
2.EGPB-5-1	19 May 2022	2.EGHO-4	30 Nov 2023	2.EGBW-5	11 Jul 2024	2.EGNW-1	18 Apr 2024
2.EGPB-8-1	28 Dec 2023	2.EGHO-5	8 Aug 2024	2.EGBW-6	13 Jul 2023	2.EGNW-2	9 Sep 2021
2.EGPB-8-2	2 Dec 2021	2.EGHO-6	3 Oct 2024	2.EGBW-2-1	20 May 2021	2.EGNW-3	7 Oct 2021
2.EGPB-8-3	28 Dec 2023	2.EGHO-7	16 May 2024	2.EGCW-1	18 May 2023	2.EGNW-4	14 Jul 2022
2.EGPB-8-4	2 Dec 2021	2.EGHO-2-1	5 Sep 2024	2.EGCW-2	18 May 2023	2.EGNW-5	14 Jul 2022
2.EGPB-8-5	28 Dec 2023	2.EGPU-1	5 Oct 2023	2.EGCW-3	18 May 2023	2.EGNW-2-1	9 Sep 2021
2.EGPB-8-6	28 Dec 2023	* 2.EGPU-2	28 Nov 2024	2.EGCW-4	18 May 2023	2.EGBO-1	5 Sep 2024
2.EGPB-8-7	2 Dec 2021	* 2.EGPU-3	28 Nov 2024	2.EGCW-5	18 May 2023	2.EGBO-2	5 Sep 2024
2.EGPB-8-8	28 Dec 2023	* 2.EGPU-4	28 Nov 2024	2.EGCW-6	18 May 2023	2.EGBO-3	5 Sep 2024
2.EGPB-8-9	28 Dec 2023	* 2.EGPU-5	28 Nov 2024	2.EGCW-2-1	1 Dec 2022	2.EGBO-4	5 Sep 2024
2.EGPB-8-10	28 Dec 2023	* 2.EGPU-6	28 Nov 2024	2.EGFA-1	25 Jan 2024	2.EGBO-5	5 Sep 2024
2.EGPB-8-11	28 Dec 2023	* 2.EGPU-7	28 Nov 2024	2.EGFA-2	18 May 2023	2.EGBO-6	5 Sep 2024
2.EGPB-8-12	28 Dec 2023	* 2.EGPU-2-1	28 Nov 2024	2.EGFA-3	28 Dec 2023	2.EGBO-7	5 Sep 2024
2.EGPB-8-13	20 May 2021	2.EGPU-8-1	2 Dec 2021	2.EGFA-4	18 May 2023	2.EGBO-8	5 Sep 2024
2.EGPB-8-14	2 Dec 2021	2.EGPU-8-2	2 Dec 2021	2.EGFA-5	25 Jan 2024	2.EGBO-2-1	22 Feb 2024
2.EGPB-8-15	2 Dec 2021	2.EGPU-8-3	5 Nov 2020	2.EGFA-6	25 Jan 2024	2.EGTB-1	13 Jun 2024
2.EGFH-1	1 Dec 2022	2.EGPU-8-4	2 Dec 2021	2.EGFA-2-1	15 Jun 2023	2.EGTB-2	13 Jun 2024
2.EGFH-2	16 May 2024	2.EGNL-1	18 Apr 2024	2.EGEW-1	14 Jul 2022	2.EGTB-3	13 Jun 2024
2.EGFH-3	1 Dec 2022	2.EGNL-2	31 Oct 2024	2.EGEW-2	14 Jul 2022	2.EGTB-4	13 Jun 2024
2.EGFH-4	1 Dec 2022	2.EGNL-3	31 Oct 2024	2.EGEW-3	7 Oct 2021	2.EGTB-5	29 Dec 2022
2.EGFH-5	16 May 2024	2.EGNL-4	31 Oct 2024	2.EGEW-4	14 Jul 2022	2.EGTB-6	21 Mar 2024
2.EGFH-6	16 May 2024	2.EGNL-5	31 Oct 2024	2.EGEW-5	14 Jul 2022	2.EGTB-2-1	13 Jun 2024
2.EGFH-2-1	1 Dec 2022	2.EGNL-6	31 Oct 2024	2.EGEW-6	14 Jul 2022	2.EGHG-1	11 Jul 2024
2.EGBM-1	14 Jul 2022	2.EGNL-7	31 Oct 2024	2.EGEW-2-1	13 Aug 2020	* 2.EGHG-2	28 Nov 2024
2.EGBM-2	3 Oct 2024	2.EGNL-8	31 Oct 2024	2.EGLM-1	14 Jul 2022	2.EGHG-3	11 Jul 2024
2.EGBM-3	3 Oct 2024	2.EGNL-9	31 Oct 2024	2.EGLM-2	14 Jul 2022	2.EGHG-4	11 Jul 2024
2.EGBM-4	3 Oct 2024	2.EGNL-2-1	31 Oct 2024	2.EGLM-3	16 Jun 2022	2.EGHG-5	11 Jul 2024
2.EGBM-5	3 Oct 2024	2.EGNL-8-1	2 Nov 2023	2.EGLM-4	14 Jul 2022	2.EGHG-6	11 Jul 2024
2.EGBM-6	3 Oct 2024	2.EGNL-8-2	13 Jun 2024	2.EGLM-5	9 Sep 2021	2.EGHG-7	11 Jul 2024
2.EGBM-2-1	3 Oct 2024	2.EGNL-8-3	2 Nov 2023	2.EGLM-6	14 Jul 2022	2.EGHG-8	11 Jul 2024
2.EGNV-1	21 Mar 2024	2.EGNL-8-4	2 Nov 2023	2.EGLM-2-1	16 Jun 2022	* 2.EGHG-2-1	28 Nov 2024
2.EGNV-2	21 Apr 2022	2.EGNL-8-5	2 Nov 2023	2.EGLM-4-1	02 Mar 2017	2.EGHG-8-1	11 Jul 2024
2.EGNV-3	18 Apr 2024	2.EGNL-8-6	2 Nov 2023	* 2.EGPC-1	28 Nov 2024	2.EGHG-8-2	11 Jul 2024
2.EGNV-4	18 Apr 2024	2.EGNL-8-7	21 Mar 2024	2.EGPC-2	21 Mar 2024	2.EGHG-8-3	20 Apr 2023
2.EGNV-5	18 Apr 2024	2.EGNL-8-8	8 Sep 2022	* 2.EGPC-3	28 Nov 2024	2.EGHG-8-4	11 Jul 2024
2.EGNV-6	18 Apr 2024	2.EGNO-1	3 Oct 2024	* 2.EGPC-4	28 Nov 2024	2.EGHG-8-5	11 Jul 2024
2.EGNV-7	18 Apr 2024	2.EGNO-2	3 Oct 2024	* 2.EGPC-5	28 Nov 2024	2.EGHG-8-6	20 Apr 2023
2.EGNV-8	18 Apr 2024	2.EGNO-3	3 Oct 2024	2.EGPC-6	21 Mar 2024	2.EGHG-8-7	25 Feb 2021
2.EGNV-9	18 Apr 2024	2.EGNO-4	3 Oct 2024	* 2.EGPC-7	28 Nov 2024	2.EGHG-8-8	2 Dec 2021
2.EGNV-10	18 Apr 2024	2.EGNO-5	3 Oct 2024	* 2.EGPC-8	28 Nov 2024	3.EGBC-1	16 May 2024
2.EGNV-2-1	18 Apr 2024	2.EGNO-6	3 Oct 2024	* 2.EGPC-9	28 Nov 2024	3.EGBC-2	16 May 2024
2.EGNV-2-2	18 Apr 2024	2.EGNO-7	3 Oct 2024	2.EGPC-10	23 Feb 2023	3.EGBC-3	20 Apr 2023
2.EGNV-4-1	20 Apr 2023	2.EGNO-8	3 Oct 2024	* 2.EGPC-2-1	28 Nov 2024	3.EGBC-4	20 Apr 2023
2.EGNV-5-1	3 Dec 2020	2.EGNO-9	3 Oct 2024	2.EGPC-8-1	10 Aug 2023	3.EGBC-5	20 Apr 2023
2.EGNV-8-1	16 May 2024	2.EGNO-10	3 Oct 2024	2.EGPC-8-2	10 Aug 2023	3.EGLW-1	13 Jul 2023
2.EGNV-8-2	16 May 2024	2.EGNO-11	3 Oct 2024	2.EGPC-8-3	10 Aug 2023	3.EGLW-2	2 Nov 2023
2.EGNV-8-3	16 May 2024	2.EGNO-12	3 Oct 2024	2.EGPC-8-4	10 Aug 2023	3.EGLW-3	28 Dec 2023
2.EGNV-8-4	16 May 2024	2.EGNO-2-1	3 Oct 2024	2.EGPC-8-5	10 Aug 2023	3.EGLW-4	28 Dec 2023

GEN 0.4 CHECKLIST OF AIP PAGES (continued)

Page	Effective Date
AD	
3.EGLW-5	13 Jun 2024
3.EGLW-6	28 Dec 2023
3.EGLW-7	28 Dec 2023
3.EGLW-8	28 Dec 2023
3.EGLW-9	28 Dec 2023
3.EGLW-2-1	28 Dec 2023
3.EGLW-4-1	16 Jun 2022
3.EGHK-1	11 Jul 2024
3.EGHK-2	11 Jul 2024
3.EGHK-3	14 Jul 2022
3.EGHK-4	14 Jul 2022
3.EGHK-5	11 Jul 2024
3.EGHK-6	11 Jul 2024
3.EGHK-7	4 Nov 2021
3.EGHK-2-1	8 Sep 2022
3.EGDP-1	13 Jun 2024
3.EGDP-2	30 Nov 2023
3.EGDP-3	5 Sep 2024
3.EGDP-4	5 Sep 2024
3.EGDP-5	5 Sep 2024
3.EGDP-6	5 Sep 2024
3.EGDP-7	5 Sep 2024
3.EGDP-2-1	5 Sep 2024
3.EGDP-4-1	11 Jul 2024
3.EGHT-1	5 Sep 2024
3.EGHT-2	5 Sep 2024
3.EGHT-3	5 Sep 2024
3.EGHT-4	5 Sep 2024
3.EGHT-5	5 Sep 2024
3.EGHT-2-1	5 Sep 2024

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS**1 Introduction**

- 1.1 The entry for RVSM is published in accordance with European RVSM implementation.
- 1.2 Details of other UK General and Special Equipment requirements may be added once determined.

2 RVSM**2.1 Introduction**

- 2.1.1 Reduced Vertical Separation Minimum (RVSM) operations are mandated in part of the upper airspace of the United Kingdom, other European Civil Aviation Conference (ECAC) member states and some adjacent states (referred to as EUR RVSM airspace). In addition RVSM operations are in place in the majority of the world's continental and oceanic airspace. RVSM airspace in the North Atlantic (NAT) region covers the same flight levels as in the EUR RVSM area. RVSM is the generic term for a reduction in vertical separation from 2000 FT to 1000 FT that can be applied to approved operators of approved aeroplanes operating between FL 290 and FL 410 inclusive. With the exception of State aircraft, Non-RVSM Approved aircraft are not permitted to operate within the EUR RVSM airspace, including in the Scottish FIR/UIR and the London FIR/UIR, except for operators of Non-RVSM Approved aircraft wishing to transit the NAT region above RVSM airspace, that is at FL 430 or above.
- 2.1.2 The requirements for European RVSM are published in the ICAO documents **Regional Supplementary Procedures (Doc 7030 -EUR) and Procedures for Air Navigation Services Air traffic Management (PANS ATM Doc 4444) plus JAA Temporary Guidance Leaflet No. 6 Revision 1 (TGL 6)**. Detailed information on the ATS routes, associated flight level allocation and RVSM entry/exit points in the London and Scottish UIRs are published in the UK AIP.

2.2 Means of Compliance

- 2.2.1 Except for State aircraft, operators intending to conduct flights within the EUR RVSM airspace require a RVSM approval from the State in which the operator is based or from the State in which the aircraft is registered. To obtain such an RVSM approval operators shall satisfy the said State that:
- aircraft for which an approval is sought have the vertical navigation performance capability required for RVSM operations through compliance with the criteria of the RVSM minimum aviation system performance standards (MASPS);
 - they have instituted procedures in respect of continued airworthiness (maintenance and repair) practices and programmes; and
 - they have instituted operational procedures and a programme of flight crew training so that they have an in-depth knowledge of the criteria for operating in RVSM airspace and this should include both initial and recurrent training.
- 2.2.2 For UK based operators and the operators of civil aircraft registered in the UK the RVSM approval is to be obtained from the Civil Aviation Authority Safety and Airspace Regulation Group (SARG). Once obtained the RVSM approval is not restricted to a specific region. Instead it is valid globally, where RVSM procedures are applied, on the understanding that any operating procedures specific to a given region should be stated in the operations manual or appropriate crew guidance. Applications for approval should be made on Form CA4040 (RVSM Approval Application) which is available on the CAA website.
- 2.2.3 Aircraft that have received State approval for RVSM operations will be referred to as 'RVSM approved aircraft' while those aircraft that have not received such approval will be referred to as 'non-RVSM approved aircraft'. State aircraft that have not been granted RVSM approval should be granted access to RVSM airspace and ATC will apply a 2000 FT separation from other traffic.

2.3 Flight Crew Operating Practices and Procedures

- 2.3.1 All RVSM airspace is defined by ICAO as 'special qualification airspace'. Accordingly it is important that all operators provide their flight crews with a resume of any special procedures or phraseology applicable to a given RVSM operation. Holders of AOCs are required to have an 'operations manual' in which all pertinent details and procedures are specified. Non-AOC holders are required to submit to the CAA for approval RVSM operations instructions/procedures for use by flight crews.
- 2.3.2 Operations manuals should include sections on:
- Equipment Requirements and Minima;
 - Flight Planning;
 - Pre-Flight, In-Flight and Post-Flight Procedures;
 - Contingencies;
 - TCAS/ACAS Alerts;
 - R/T Phraseology;
 - Height Monitoring Requirements.

2.4 Contingencies - Applicable to all RVSM Airspace**2.4.1 General**

- 2.4.1.1 Flight crews are to report to ATC as soon as practicable any event that may affect their ability to comply with the ATC clearance,

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

examples being: severe turbulence, loss of thrust, loss of pressurisation, need to divert, uncertainty of present position, etc. If, at any time, it is not possible to notify ATC immediately that a problem has occurred and obtain a new clearance before departing from the old, comply as accurately as possible with any procedures that may be specified for the airspace, eg NAT contingency Procedures. In all cases a good lookout should be maintained and if the aeroplane is equipped with TCAS/ACAS the visual display should be used to assist in the sighting of proximate traffic.

2.4.1.2 The following equipment failures must be reported to ATC:

- a) Loss of thrust on one or more engines necessitating descent;
- b) Loss of one or more altimetry systems;
- c) Failure of all automatic altitude control systems;
- d) Failure of any other equipment that could affect the ability of the aeroplane to maintain flight as cleared.

2.4.2 **Contingencies - Applicable to Specified RVSM Airspace**

2.4.2.1 **UK and EUR RVSM Airspace** - In this RVSM airspace it is expected that all aeroplanes will be in continuous radio contact with ATC either on the assigned frequency or on the distress and emergency frequency (121.500 MHz). They will therefore be able to advise ATC of any abnormal circumstances where RVSM performance requirements cannot be met, including encounters with turbulence greater than 'moderate'. ATC will then respond and issue an appropriate revised clearance before the pilot initiates a deviation from the original clearance. It is recognised, however, that there may be some circumstances (such as emergency descent following the loss of cabin pressurisation) where deviations may have to occur with little or no prior notice to ATC. In such cases the pilot will need to obtain a revised clearance as soon as possible after the deviation.

2.4.2.2 **North Atlantic and other Oceanic or Remote RVSM Airspace (if applicable)** - For oceanic and remote area RVSM application, where continuous direct controller-pilot communication may not always be possible, a range of contingencies have been considered which allow independent action by flight crews. In general they permit crews, in exceptional circumstances, to deviate from assigned clearances by selecting flight levels and/or tracks where other aeroplanes are least likely to be encountered. During such deviations crews are required to make maximum use of aeroplane lighting and to transmit relevant information on all appropriate frequencies, including the distress and emergency frequency. Once contact with ATC has been re-established, the crew will be assisted and issued with new clearances as required. Offset track procedures may be permitted if an encounter with turbulence is considered to be due to wake vortex in accordance with PANS ATM (Section 15.2.4). Specific procedures for the NAT region are contained in Section ENR 2.2 of the UK AIP.

2.5 **TCAS/ACAS Alerts and Warnings**

2.5.1 Procedures for dealing with TCAS/ACAS Alerts and Warnings are contained in Procedures for Air Navigation Services Aircraft Operations (PANS OPS, ICAO Doc 8168), Part 3, Section 3, Chapter 3.

2.6 **RT Phraseology**

2.6.1 Phraseology associated with RVSM operations has been developed for European wide use. **All** flights must use this phraseology whilst operating, or intending to operate, between FL 290 and FL 410 inclusive in the London and Scottish UIRs.

2.6.2 Aircraft operators are reminded that, within UK airspace, when responding to ATC the pilot is to append the callsign at the end of the message and not at the beginning.

2.6.3 ATC are to use the controller-controller RVSM phraseology for co-ordination between Air Traffic Service Units (ATSUs). In the event of ATC being advised by the pilot that the aircraft is no longer capable of RVSM operations, it is particularly important that the first ATSU that is made aware of the failure generates the appropriate co-ordination, eg the pilot calls for start-up and declares 'unable RVSM due equipment' and the airport ATSU then passes this message on to the first Air Traffic Control Centre involved with the flight.

2.6.4 The detailed RVSM phraseology is contained in Section 2.10.

2.7 **UK Specific RVSM Exemptions**

2.7.1 This section details the procedure for operators of civil registered aircraft to obtain an RVSM Exemption for the flights listed in paragraph 2.7.2 below. It also details Flight Planning and ATC procedures for civil registered aircraft which have obtained an RVSM Exemption to carry out specific flights in UK RVSM airspace under the control of a military or civil ATS agency as appropriate. The Exemption procedures detailed are UK specific and applicable for flights where RVSM monitoring is required, flights for test purposes and flights in support of MOD requirements. **These procedures are not applicable for EUR RVSM in general or applicable over other HMUs in Europe.**

2.7.2 **Categories of Civil Registered Aircraft Eligible for RVSM Exemption:** The following categories of flights by civil registered Non-RVSM Approved aircraft may be granted RVSM Exemptions to enter UK RVSM airspace:

- a) Flights for the purpose of overflying the Strumble HMU for RVSM monitoring;
- b) Aircraft using GMU equipment to complete a RVSM monitoring flight;

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

- c) Flight testing, whether for the purpose of prototype testing or in association with the approval of a modification to an existing type designed aircraft (eg Trailing Cone Flights for the purpose of gaining RVSM approval);
- d) Air Tests (eg post maintenance);
- e) Special flights on behalf of the MOD;
- f) Calibration flights (eg Radio Navigation Aids).

2.7.3 Aircraft conducting an Airworthiness Flight Test for the CAA are considered RVSM exempt and no application is required. This includes CAA Continued Airworthiness Flight Tests and those flight tests associated with an initial issue of a Certificate of Airworthiness for a series of aircraft. However, operators of aircraft not holding an RVSM approval should take note of the Flight Planning requirements provided in paragraph 2.7.5.3 Note 1, and in all cases prior notification of such a flight test should be made with the appropriate ATC agency. Note: Definition of 'State' aircraft - For the purpose of EUR RVSM, only aircraft used in military, customs or police services shall qualify as 'State' aircraft and are eligible to apply 'M' in ITEM 8 of the Flight Plan.

Note: Definition of 'State' aircraft - For the purpose of EUR RVSM, only aircraft used in military, customs or police services shall qualify as 'State' aircraft and are eligible to apply 'M' in ITEM 8 of the Flight Plan.

2.7.4 RVSM Exemptions - Application Procedure

2.7.4.1 Manager Airspace Regulation, Safety and Airspace Regulation Group (SARG) is the UK Authority for issuing RVSM Exemptions to aircraft operators for flights conducting tasks detailed in paragraph 2.7.2. An application for an RVSM Exemption will be treated on an individual basis. RVSM Exemptions will only be issued for a specific period in respect of a specific aircraft, or a series of aircraft (eg in support of MOD tasks or aircraft undergoing a CAA Airworthiness Flight Check). Operators of civil registered aircraft requiring RVSM Exemptions should apply to Head of Airspace using a proforma that can be obtained from SARG Tel: 020-7453 6553. All applications (either by E-Mail, Fax or post) are to be sent to:

Post: Manager Airspace Regulation
1E,
Aviation House,
Gatwick Airport South,
West Sussex,
RH6 0YR
Phone: 020-7453 6553
Email: airspaceregulation@caa.co.uk

2.7.4.2 RVSM Exemptions will be returned to the operator by the quickest means and details copied to the relevant ACCs. It is essential that the Serial No. of the RVSM Exemption is quoted in the Remarks of the Flight Plan, otherwise entry to UK RVSM airspace will be refused.

2.7.5 Completion of Flight Plans - Additional Flight Planning Requirements

2.7.5.1 Normal flight planning requirements for RVSM operation are contained in Chapter 10 of the UK Flight Planning Guide (CAP 694). Flights operating under an exemption granted in accordance with the guidance above shall conform to the following additional flight planning requirements.

2.7.5.2 **For all flights, in Item 15** file a maximum level of FL 280 to the point where the flight wishes to enter RVSM airspace (otherwise if GAT the FPL will be rejected by DNM). Do not enter RFL details at FL 290 or above anywhere in item 15. A verbal request to ATC for flight above FL 280 will ensure the FPL is not rejected by DNM.

2.7.5.3 For all flights, in Item 18 include the RVSM Status and Exemption Serial No. in the Remarks, ie: **'STS/UK RVSM EXEMPT.....Serial No.'**

Note 1: Operators of Non-RVSM Approved aircraft are not to enter 'W' in item 10 even with this specific exemption.

Note 2: Having an RVSM Exemption does not confer any right to enter RVSM airspace as GAT unless specifically agreed by the appropriate ATC agency on the day. Any such penetration of RVSM airspace must be subject to the prevailing traffic conditions and controller workload.

2.7.5.4 **Flight Testing or CAA Airworthiness Test Flights by Non-RVSM Approved Aircraft - In Item 15**, enter route details within the area in which the flight intends to operate, eg OAT, VLN, SMG, VLN and then the return joining point for the ATS route structure to destination at a level not above FL 280. If aerodrome of departure is outside the ATS route structure insert the appropriate routing; if the final intention is to rejoin the ATS route structure, file to rejoin at the appropriate point not above FL 280. **In Item 18**, insert RVSM Status and Exemption Serial No. (if applicable) and 'RMK/Flight Testing' or 'RMK/CAA Airworthiness Flight Test' as appropriate with requested flight level in RVSM airspace.

2.7.5.5 **Overflight of the Strumble HMU by Non-RVSM Approved Aircraft** - Aircraft requiring RVSM monitoring over the Strumble HMU should flight plan via Strumble in accordance with standard routing. If flying along the ATS route structure specifically to STU only, after STU insert the required routing to destination. For flights intending to receive a service from London Radar (Military Control) for the purpose of conducting Air Tests or CAA Airworthiness Test Flights prior to overflying the Strumble HMU, or intending to fly OAT (off route) to facilitate flight over the Strumble HMU without flying along the ATS route structure, the appropriate routing

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

should be filed. In Item 18 insert 'RMK/HMU FLT' (this information will be presented to controllers on active flight progress strips).

2.7.6 Notification to Air Traffic Control

2.7.6.1 Pilots must pre-arrange handling in RVSM airspace by contacting the appropriate ACC Supervisor or Military Supervisor as appropriate on one of the following numbers:

- LACC Civil Supervisor. Tel: 01489-612420;
- Swanwick Military East Supervisor. Tel: 01489-612408;
- Swanwick Military West Supervisor. Tel: 01489-612417;
- Swanwick Military North Supervisor. Tel: 01489-612943;
- ScACC Civil Supervisor. Tel: 01292-692763.

2.7.6.2 In addition to filing the appropriate flight plan in order to ensure correct handling, pilots should also pass the relevant flight profile details to the appropriate ATC Supervisor.

2.7.6.3 Operators requiring flight over the Strumble HMU should avoid peak periods as ATC need to provide 2000 FT separation between RVSM approved and Non-RVSM approved aircraft above FL 290. If in doubt suitable timings can be arranged with the LACC Civil ATC Supervisor.

2.7.7 Air Traffic Control (ATC) Procedures for all Flights

2.7.7.1 When Non-RVSM aircraft are ready to enter RVSM airspace, the appropriate clearance is to be obtained from ATC. Note that, due to the need to provide 2000 FT separation, controllers need to co-ordinate the flight with other RVSM approved aircraft. These flights therefore create extra workload and a slight delay in receiving such clearances should be anticipated. It would therefore be helpful if pilots can provide as much notice as possible prior to requesting flight levels above FL 280.

2.7.7.2 Pilots must comply with any requirements stated in the RVSM Exemption unless otherwise instructed by ATC. Pilots are also reminded to include their Non-RVSM status (callsign: NEGATIVE RVSM) in the initial call on any frequency within RVSM airspace and subsequent frequency changes, when requesting level changes pertaining to flight levels in RVSM airspace and in all read backs to flight level clearances pertaining to flight levels in RVSM airspace.

2.7.8 Air Traffic Control (ATC) Procedures for Strumble HMU Flights

2.7.8.1 Pilots should request a suitable flight level above FL 280 from ATC well before reaching the Strumble HMU. For the best chance of successful monitoring, aircraft should fly straight and level at an ATC assigned level between FL 290 and FL 410 throughout the area depicted on the chart at Annex B. Mode A SSR code should not be changed within that area. A single pass over the HMU is sufficient for certification purposes, though some operators may request a second. Pilots of aircraft are to comply with ATC instructions at all times.

2.7.8.2 Overflight of the HMU may be delayed until the flight can be integrated with other traffic and 2000 FT separation applied. ATC will therefore issue instructions as appropriate. As a reminder to ATC that the aircraft is attempting height monitoring, the crew is to transmit 'for Strumble HMU flight' on first contact with London Control or London Radar as appropriate.

2.8 Height Monitoring Requirements

2.8.1 There is an ongoing requirement for height monitoring within the EUR and NAT RVSM airspace in order to monitor safety levels of RVSM operations. Aircraft operators are therefore required to continue participating in ongoing monitoring activities and this may involve the re-monitoring of aircraft that have previously gone through the process. Non-participation can result in the withdrawal of RVSM approval. This monitoring requirement is, in its current form, applicable for EUR RVSM operations specifically to fulfil the requirements for ongoing EUR RVSM Safety Assessments. However, activities are under way to harmonise the detailed monitoring requirements globally. **The CAA is obliged, by ICAO, to keep a database of all UK registered RVSM approved aircraft. Therefore, operators are to inform the CAA (RVSM Approvals) both when they add aircraft to their fleet and of any aircraft they intend to remove from their fleet of RVSM approved aircraft. The CAA will pass this information to the appropriate Regional Monitoring Agency (RMA). This is in addition to any requirements to comply with any Eurocontrol notification procedures.**

2.8.2 In order to have sufficient confidence in safety assessment results sufficient monitoring data is required. Due to the potential changes to altimetry performance over time, there is a limitation on the age of data that can be used for the assessments. Therefore there is a need to obtain new data and this may result in the re-monitoring of certain aircraft types and airframes. Data will be obtained through monitoring by the existing ground based Height Monitoring Units (HMUs). Since much of the data is obtained automatically, no specific action is required from operators unless they are approached by the RMA. Where such an approach is made, the operator is required to cooperate by arranging a special flight to over-fly an HMU. Lack of co-operation by an operator would be reported to the state issuing the approval and could result in the withdrawal of RVSM approval for the aircraft and/or operator in question.

2.8.3 For aircraft operator specific information, such as how many of his/her aircraft of a particular type need to be monitored and within what time frame, the operator may contact the RMA direct.

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

exemptions from the appropriate legislation for the purpose of saving life.

5.3.6 Channel Islands Control Zone

5.3.6.1 Requirements for the Channel Islands Control Zone are given at EGJJ AD 2.22, paragraph 1.

5.3.7 State Aircraft

5.3.7.1 All visiting non-compliant state aircraft require a dispensation against the AIP not to carry the required equipment as detailed at paragraph 5.3.1. All applications for dispensations to be made to:

Post: CNS Policy, Safety and Airspace Regulation Group
Aviation House
Gatwick Airport South
West Sussex
RH6 0YR

Phone: +44 (0)330-138 3373

Email: modes@caa.co.uk

Dispensations are only issued up to a maximum length of 3 months, after which time a new application will need to be submitted.

5.3.8 Flight Plans

5.3.8.1 Operators of non-equipped State aircraft communicated as per Article 8(3) and operators of aircraft not equipped in accordance with Article 5(5) of the Commission Regulation (EU) 1207/2011, or hold a valid exemption from the UK CAA, operating wholly or partially within the UK airspace shall include the indicators SUR/EUADSBX or SUR/EUEHSX or SUR/EUELSX or a combination thereof, in Item 18 of the flight plan.

5.4 Carriage of Airborne Collision Avoidance Systems (ACAS) in the Scottish FIR/UIR and the London FIR/UIR

5.4.1 The requirements for the carriage of Airborne Collision Avoidance Systems (ACAS) are contained in the UK Air Navigation Order. Traffic Alert and Collision Avoidance System (TCAS) II is accepted as a suitable ACAS system provided its installation is certificated by the State of Registry, and that its operation by flight crew is in accordance with instructions for the use of this equipment specified in their company's operations manual.

5.4.2 With the exception of those circumstances at paragraph 5.4.3, all turbine-powered aeroplanes with a maximum certificated take-off mass exceeding 5700 KG or authorised to carry more than 19 passengers, and all other aircraft equipped on a voluntary basis with ACAS II are to be fitted with, and operate, TCAS II software Version 7.1 with a Mode S transponder compliant with Annex 10 Mode S SARPs within UK Airspace.

General flight procedures relating to the operation of ACAS II equipment are detailed at ENR 1.1, paragraph 3, General Flight Procedures. This includes operation of aircraft when ACAS II is unserviceable.

5.4.3 Exemptions

5.4.3.1 A General Exemption from the requirements of the UK Air Navigation Order concerning the carriage of ACAS II has been granted for aeroplanes operating under certain conditions. Two classes of flights are affected:

- a) **Delivery Flights.** Aeroplanes newly manufactured within European Civil Aviation Conference (ECAC) member states, which are not fitted with ACAS II. These will be permitted to transit on direct flights only, out of the airspace of ECAC member states to regions where the carriage and operation of ACAS II is not required.
- b) **Maintenance Flights.** Direct flights by aeroplanes, which are not fitted with ACAS II, from outside ECAC member states, for the purpose of maintenance and engineering at facilities located within the ECAC member states.

5.4.3.2 Following notification approval of an ACAS II exemption for the flight, the aircraft operator should indicate on the Flight Plan that the flight is being operated under the provisions of the ACAS II Delivery and Maintenance Flight Exemption provisions, by inserting, in Field 18, the information:

'RMK / Delivery flight - ACAS II exemption approved', or
'RMK / Maintenance flight - ACAS II exemption approved'.

5.4.3.3 Flights operated under the provisions of these exemptions must be non-revenue flights. An ACAS II delivery or maintenance flight exemption is not available for those flights seeking only to transit through the airspace of ECAC member states.

5.4.3.4 The following conditions apply:

- a) Where agreed Regulations and Procedures exist, these shall be maintained.
- b) An ICAO compliant altitude reporting transponder must be fitted and serviceable **before** departure.

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

- c) An ACAS II exemption approval will be valid for a 3-day period from estimated departure date, and solely for the purpose for which it has been issued. If the flight is subsequently delayed beyond the maximum 3-day exemption period a fresh application must be submitted; this may take a further 3 working days to process.
- d) An ACAS II Exemption Letter issued by the ASU, must be carried on-board the aircraft.
- e) Conditions may be imposed by one or more ECAC Member States: such as operating within certain restrictive hours, or via specific routes, or at stated flight levels (for safety reasons or otherwise).
- f) The flight must be conducted along the most direct (or permissible) route to the delivery or maintenance destination airport.

Aircraft operators are to ensure compliance with the above conditions and that the exempted flight is in accordance with the operator's originally stated intentions, and that it must comply with any conditions laid down by the CAA and subsequently by the ATC authorities.

5.4.3.5 In addition, test flights are to be subject to established national regulations, procedures and authorisation. Carriage of ACAS II equipment will be addressed under the current provisions for avionics equipment required for these flights.

5.4.3.6 Operators of aeroplanes intended to be operated under the provisions of these exemptions must apply for an exemption on an individual, case-by-case basis, to the CAA at least 5 working days before a flight is due to depart for or from, or transit through, the Scottish FIR/UIR and the London FIR/UIR.

5.4.3.7 A General Exemption from the requirements of the UK Air Navigation Order concerning the carriage of ACAS II in has been granted for turbine-powered historical and ex-military aeroplanes into which it is recognized as being technically unfeasible to incorporate ACAS II. The exemption applies to aeroplanes which fall within the provisions of Annex II to the EC Regulation (EC) No. 216/2008 namely:

- a) historic non-complex aircraft for which:
 - i. initial design was established before 1 January 1955, and
 - ii. production has been stopped before 1 January 1975;
- b) aircraft having a clear historical relevance, related to:
 - i. participation in a noteworthy historic event; or
 - ii. a major step in the development of aviation; or
 - iii. a major role played in the armed forces of a Member State;
- c) aircraft that have been in the service of military forces, unless the aircraft is of a type for which a design standard has been adopted by the Agency;
- d) replicas of (a), (b) or (c).

5.4.3.8 This exemption is automatically invoked by the inclusion of '**RMK / Historic Aircraft - ACAS II exemption approved**' in Field 18 of the ICAO Flight Plan Form (CA48). No further exemption application action is required.

5.4.3.9 Owners and operators of historical and ex-military aeroplanes intended to be operated under the provisions of this exemption must seek approval for flights through the airspace of other ECAC member states from the appropriate State authorities.

5.4.3.10 Operators of aeroplanes that meet the carriage requirements at paragraph 5.4.2 but are not equipped and cannot be operated under the provisions of the General Exemptions described at paragraphs 5.4.3.1 and 5.4.3.7 must apply for exemptions on an individual, case-by-case basis to the CAA at least 5 working days before a flight is due to depart for or from, or transit through, the Scottish FIR/UIR and the London FIR/UIR.

5.4.3.11 Owners and operators of aeroplanes intended to be operated under the provisions of these exemptions must seek approval for flights through the airspace of other ECAC member states from the appropriate State authorities.

5.4.4 Departure from Air Traffic Control Clearances

5.4.4.1 The legal aspects of departure from an air traffic control clearance in compliance with a TCAS Resolution Advisory are clarified in AIC P 079/2011.

5.4.5 TCAS I

5.4.5.1 TCAS I is an airborne collision avoidance system that utilises interrogations of, and replies from, airborne radar transponders to alert pilots to close proximity traffic. Unlike TCAS II it does not generate 'Resolution Advisory' (RA) warnings. TCAS I is not intended for ICAO International implementation and standardisation and is not mandated for equipage.

5.4.6 ACAS Systems Approvals

5.4.6.1 Any ACAS system that operates by interrogating transponders using the 1030 and 1090 MHz frequencies must be approved to transmit by the National IFF/SSR Committee (NISC).

5.4.6.2 All TCAS II interrogators and certain TCAS I interrogators are covered by a series of generic NISC approvals to transmit. Operators of other TCAS I interrogators must apply to the NISC for approval on an individual basis.

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

5.4.6.3 A list of interrogators holding generic approvals, as well as the approval process for other TCAS interrogators is available in CAP 761.

5.4.7 **Further Information, Advice and Exemptions**

5.4.7.1 Further information and advice concerning the carriage and operation of ACAS II equipment (and exemptions from these) can be obtained from:

Post: Head of Airspace Regulation
Safety and Airspace Regulation Group
Aviation House
Gatwick Airport South
West Sussex
RH6 0YR

Phone: +(0)20-7453 6510

Fax: +(0)20-7453 6565

Email: airspace@caa.co.uk

5.5 **8.33 kHz Channel Spacing in the VHF Radio Communications Band**

5.5.1 Non-equipped flights which are flight planned to enter any FIR/UIR in the EUR region where no exemptions have been published, except for those applicable to UHF equipped State flights (refer to AIP/Supplement of the State covering the FIR/UIR concerned), must flight plan outside of converted airspace. Non-equipped IFR flights will be rejected from specific sectors or states. Within the Scottish FIR/UIR and the London FIR/UIR, flights must equip in accordance with GEN 1.5, paragraph 5.2.

5.6 **Use of GPS for North Sea Operations**

5.6.1 UK AOC Holders intending to use GPS for en-route navigation for North Sea flight operations are to use GPS equipment that meets or exceeds CAA Specification 22. AOC holders requiring further information should contact their assigned flight operations Inspector. Non UK AOC holders are recommended to operate to at least the CAA Specification 22 standard.

5.7 **Controller-Pilot Data Link Communication Service in UK Domestic Airspace**

5.7.1 **Introduction**

5.7.1.1 Controller-pilot data link communication (CPDLC) provides a means of communication between the controller and pilot, using data link for ATC communication. This application includes a set of clearance/information/request message elements which corresponds to the phraseologies used in the radiotelephony environment. Standard voice radiotelephony will remain the primary means of ATC communications at all times. Any failure event concerning CPDLC will lead to a reversion to voice operation.

5.7.1.2 CPDLC services are available in the Scottish FIR/UIR and the London FIR/UIR, and these are distinct from Oceanic CPDLC procedures.

5.7.1.3 CPDLC services are available from FL 285 and above and will be provided at FL 195 and above where possible within the Scottish FIR/UIR and the London FIR/UIR. The following CPDLC services are provided in this airspace:

- DLIC (data link initiation capability)
- ACL (ATC clearances and instructions)
- ACM (ATC communications management)
- AMC (ATC microphone check)

5.7.1.4 Provision of CPDLC services is based on the requirements of the Commission Regulation (EC) No. 29/2009, as amended, on data link services. The rule applies to all flights operating as general air traffic in accordance with instrument flight rules within the airspace above FL 285. A CPDLC service is provided to ATN VDL 2, FANS1/A and FANS1/A+ equipped aircraft.

5.7.1.5 Aircraft meeting the conditions as specified in Article 3(3) of Commission Regulation (EC) No. 29/2009, as amended, or as defined in Commission Implementing decision 2019/2012 are not required to be equipped with CPDLC Aeronautical Telecommunications Network (ATN) Very High Frequency Data Link Mode 2 (VDL Mode 2) capable data link systems. In order to ensure that ATS providers have information on such aircraft, this should be indicated on the filed flight plan.

5.7.1.6 Operators conducting flights wholly or partly in airspace where ATN B1 CPDLC is required but for which Commission Regulation (EC) No. 29/2009, as amended, is not applicable in accordance with Article 3(3), or which aircraft types/models are exempted by Commission Implementing Decision 2019/2012, should include the letter "Z" in item 10 and the indicator "DAT/CPDLCX" in item 18 of each flight plan. Operators that voluntarily equip their aircraft in compliance with Commission Regulation (EC) No. 29/2009, as amended, and intend to use the CPDLC capability do not need to indicate in their flight plans the status as exempted.

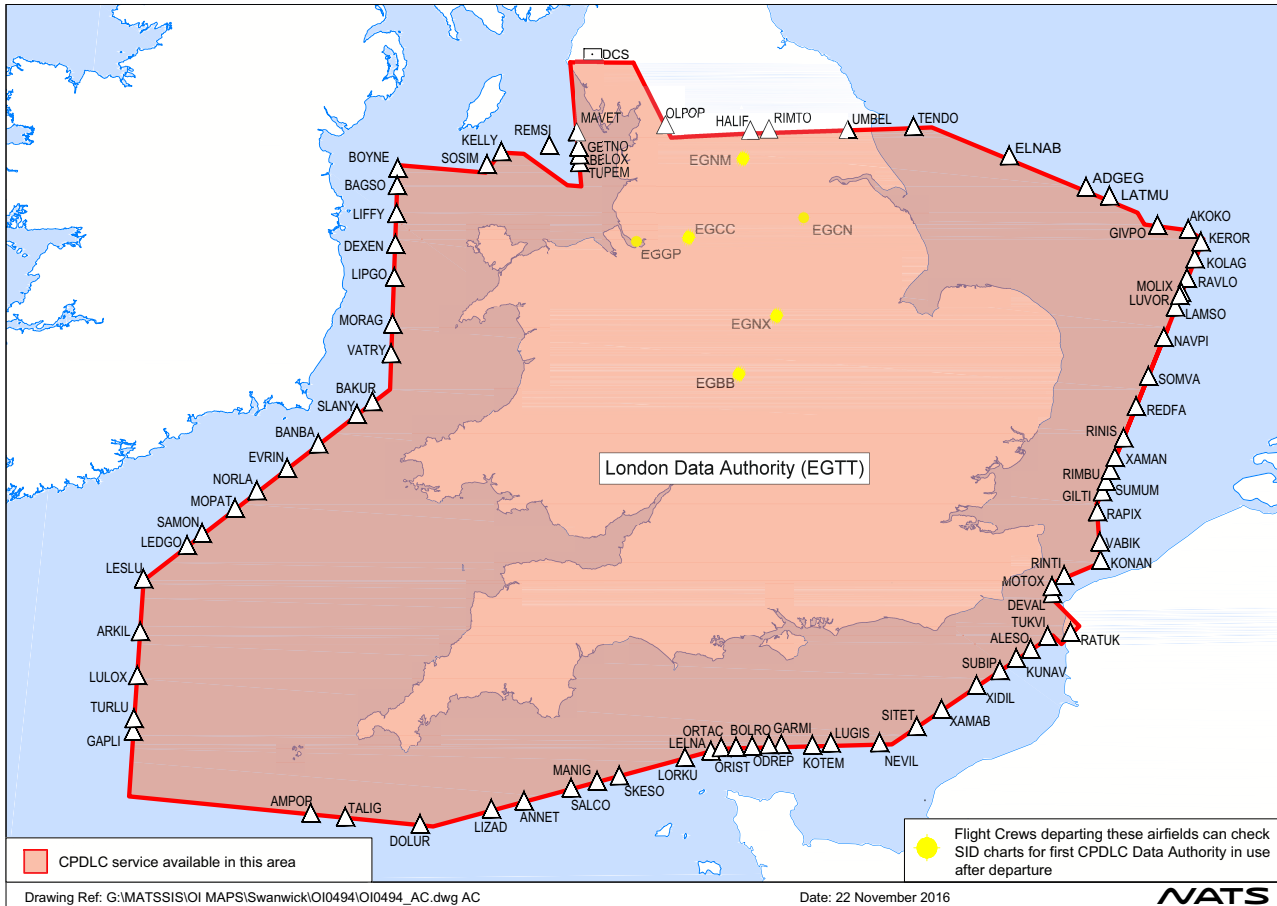
5.7.2 **Area of Applicability**

Flight Crews should refer to the map of NATS CPDLC Data Authorities (see figures below).

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)

5.7.2.1 Aircraft Transiting Airspace Where a CPDLC Service is Not Available

5.7.2.1.1 Aircraft transiting airspace below FL 285 where a CPDLC service is not available will maintain a logon, but will not receive a CPDLC service. Upon entering airspace where a logon is maintained but CPDLC is not available, the flight will be notified via CPDLC. The specific messages are detailed in the current AIC.



GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS (continued)**5.7.5 CPDLC message sets**

5.7.5.1 Currently there are two sets of messages being used:

- to support FANS 1/A equipped aircraft:
Safety and Performance Standard for Air Traffic Data Link Services in Oceanic and Remote Airspace (Oceanic SPR Standard, RTCA DO-306/EUROCAE ED-122).
- and to support ATN VDL 2 equipped aircraft:
Safety and Performance Standard for Air Traffic Data Link Services in Continental Airspace (Continental SPR Standard, RTCA DO-290/EUROCAE ED-120).

5.7.5.2 Messages supported by CPDLC in the UK are published in the corresponding AIC. |

INTENTIONALLY BLANK

GEN 2.4 LOCATION INDICATORS

† Location indicators with NO connectivity with AFS

Table GEN 2.4-1: 1. Encode

Location	Indicator
ABERDEEN/DYCE	EGPD
ABERPORTH	EGUC
ALDERNEY	EGJA
ALSCOT	EGBL
ANDREW (OIL RIG)	EGRO†
ANDREWSFIELD	EGSL
ANTARCTIC SKY-BLU	EGAT
ASCOT HELIPORT	EGLT†
ASHAIG/ISLE OF SKYE	EGE†
ASHCROFT	EGCR
BAGBY	EGNG
BARKSTON HEATH	EGYE
BARRA	EGPR
BECCLES	EGSM†
BEDFORD	EGBF
BELFAST ALDERGROVE	EGAA
BELFAST/CITY	EGAC
BEMBRIDGE	EGHJ
BENBECULA	EGPL
BENBECULA (MOD)	EGXM
BENSON	EGUB
BEVERLEY/LINLEY HILL	EGNY
BIGGIN HILL	EGKB
BIRMINGHAM	EGBB
BLACKBUSHE	EGLK
BLACKPOOL	EGNH
BODMIN	EGLA
BOSCOMBE DOWN	EGDM
BOULMER (MOD)	EGQM
BOURNEMOUTH	EGHH
BRAMPTON (MOD)	EGYB
BRIMPTON	EGLP
BRISTOL	EGGD
BRIZE NORTON	EGVN
BROOKLANDS	EGLB†
BROUGH	EGNB†
BRUCE (OIL RIG)	EGRK†
CACC MID EAST	EGIF
CACC MID WEST	EGIE
CACC NORTH EAST	EGID
CACC NORTH WEST	EGIC
CACC SCOTLAND/NORTHERN IRELAND	EGIA
CACC SOUTH EAST	EGIH
CACC SOUTH WEST	EGIG
CACC WALES	EGIB
CAERNARFON	EGCK
CAMBRIDGE	EGSC
CAMPBELTOWN	EGEC
CARDIFF	EGFF
CARDIFF/TREMORFA FORESHORE HELIPORT	EGFC†
CARLISLE	EGNC
CHALGROVE	EGLJ
CHALLOCK	EGKE†
CHANNEL ISLANDS	EGJT
CHELTENHAM HELIPORT	EGBC†

Location	Indicator
CHICHESTER/GOODWOOD	EGHR
CLACTON	EGSQ
CLAIR (OIL RIG)	EGRF†
CLEETON (OIL RIG)	EGRT†
COLERNE	EGUO
COLL	EGEL†
COLONSAY	EGEY†
COMPTON ABBAS	EGHA
CONINGSBY	EGXC
CORMORANT ALPHA (OIL RIG)	EGRG†
COSFORD	EGWC
COTTESMORE	EGXJ
COVENTRY	EGBE
CRANFIELD	EGTC
CRANWELL	EGYD
CROWFIELD	EGSO†
CULDROSE	EGDR
CULTER HELIPAD	EGEA
CUMBERNAULD	EGPG
DAMYNS HALL	EGML
DEANLAND	EGKL†
DENHAM	EGLD
DERBY	EGBD
DISHFORTH	EGXD
DONCASTER SHEFFIELD	EGCN
DONNA NOOK (MOD)	EGXS
DUNDEE	EGPN
DUNKESWELL	EGTU
DUNSFOLD	EGTD
DUXFORD	EGSU
EAGLESCOTT	EGHU†
EARLS COLNE	EGSR
EAST MIDLANDS	EGNX
EDAY	EGED†
EDINBURGH	EGPH
ELMSETT	EGST
ELSTREE	EGTR
ENNISKILLEN/ST ANGELO	EGAB
ENSTONE	EGTN
EXETER	EGTE
FAIR ISLE	EGEF
FAIRFORD	EGVA
FAIROAKS	EGTF
FARNBOROUGH	EGLF
FARTHING CORNER	EGMF
FASLANE (MOD)	EGXO
FENLAND	EGCL
FIFE	EGPJ
FOREST MOOR	EGXF
FOWLMERE	EGMA
FULL SUTTON	EGNU
FULMAR ALPHA (OIL RIG)	EGRN†
GARVIE ISLAND (MOD)	EGQC†
GATWICK CAA SRG (AVIATION HOUSE)	EGGR
GLASGOW	EGPF†



GEN 2.4 LOCATION INDICATORS (continued)

Location	Indicator
GLASGOW CITY HELIPORT	EGEG†
GLASGOW WEATHER CENTRE	EGRA
GLOUCESTERSHIRE	EGBJ
GOODWOOD RACECOURSE HELIPORT	EGKG†
GUERNSEY	EGJB
HALLEY RESEARCH STATION	EGAH
HALTON	EGWN†
HARDING (OIL RIG)	EGRL†
HAVERFORDWEST	EGFE†
HAWARDEN	EGNR
HENSTRIDGE	EGHS
HEREFORD	EGVH
HIGH WYCOMBE (MET)	EGRH
HIGH WYCOMBE (MOD)	EGUH
HM SHIPS (ALL)	EGYY
HOLBEACH (MOD)	EGYH
HONINGTON	EGXH
HQ 2 GROUP (MOD)	EGDH
HQ SPTA	EGDS
HUCKNALL	EGNA†
HUMBERSIDE	EGNJ
INVERNESS	EGPE
ISLAY	EGPI
ISLE OF MAN	EGNS
ISLE OF WIGHT/SANDOWN	EGHN
ISLEWORTH	EGLI
JERSEY	EGJJ
JERSEY MET	EGJX†
KEMBLE	EGBP
KENLEY (MOD)	EGKN†
KINLOSS	EGQK
KIRKNEWTON (MOD)	EGKT†
KIRKWALL	EGPA
LAKENHEATH	EGUL
LAND'S END	EGHC
LANGFORD LODGE	EGAL†
LASHAM	EGHL
LASHENDEN/HEADCORN	EGKH
LECONFIELD	EGXV
LEE-ON-SOLENT	EGHF
LEEDS BRADFORD	EGNM
LEEDS EAST	EGCM†
LEEDS HELIPORT	EGNP†
LEEMING	EGXE
LEICESTER	EGBG
LERWICK/TINGWALL	EGET
LEUCHARS	EGQL
LITTLE GRANSDEN	EGMJ†
LITTLE RISSINGTON	EGVL†
LIVERPOOL	EGGP
LLANBEDR	EGFD†
LONDON (CAA HQ)	EGGA
LONDON (DFT AVIATION DIRECTORATE)	EGGC
LONDON ACC (CIVIL)	EGTT
LONDON AREA	EGGO
LONDON CITY	EGLC
LONDON GATWICK	EGKK
LONDON HEATHROW	EGLL



Location	Indicator
LONDON HELIPORT	EGLW
LONDON LUTON	EGGW
LONDON STANSTED	EGSS
LONDONDERRY/EGLINTON	EGAE
LOSSIEMOUTH	EGQS
LOWESTOFT HARBOUR	EGMW†
LYDD	EGMD
LYNEHAM	EGDL
MAGNUS (OIL RIG)	EGRE†
MANCHESTER	EGCC
MANCHESTER BARTON	EGCB
MANCHESTER/WOODFORD	EGCD†
MANSTON	EGMH
MARHAM	EGYM
MARNOCK (OIL RIG)	EGRS†
MARSHLAND, WISBEACH	EGSI†
MAYPOLE	EGHB
MCA FALMOUTH	EGQF†
MERRYFIELD	EGDI†
MET OFFICE ABERDEEN	EGRQ
MET OFFICE EXETER	EGRR
MET OFFICE LONDON	EGRB†
MIDDLE WALLOP	EGVP
MILDENHALL	EGUN
MILLER (OIL RIG)	EGRM†
MOD UK AIR	EGWB
MOD UK NAVY	EGWI†
MOUNT PLEASANT	EGYP
MOUNTWISE	EGDB
MUHARRAQ (RAF)	EGYR
MUNGO (OIL RIG)	EGRP†
MURDOCH (OIL RIG)	EGRU†
NEATISHEAD (MOD)	EGUJ
NETHERAVON	EGDN
NETHERTHORPE	EGNF
NEWCASTLE	EGNT
NEWMARKET RACECOURSE	EGSW†
NEWQUAY	EGHQ
NEWTOWNARDS	EGAD
NORTH RONALDSAY	EGEN†
NORTH WEALD	EGSX
NORTHAMPTON/SYWELL	EGBK
NORTHOLT	EGWU†
NORTHOLT (AIDU)	EGVC
NORTHOLT (RN NAIC)	EGXA
NORTHWOOD (MOD)	EGWX
NORWICH	EGSH
NOTTINGHAM	EGBN
OAKSEY PARK	EGTW†
OBAN	EGEO
ODIHAM	EGVO
OLD BUCKENHAM	EGSV
OLD SARUM	EGLS
OLD WARDEN	EGTH
OXFORD	EGTK
PAPA WESTRAY	EGEP†
PEMBREY	EGFP†
PEMBRY (MOD)	EGOP†

GEN 2.4 LOCATION INDICATORS (continued)

Location	Indicator
PENZANCE HELIPORT	EGHK†
PERRANPORTH	EGTP
PERTH/SCONE	EGPT
PETERBOROUGH/CONINGTON	EGSF
PETERBOROUGH/SIBSON	EGSP
PETERHEAD/LONGSIDE HELIPORT	EGPS†
PLYMOUTH (MIL)	EGVE
POPHAM	EGHP
PORTLAND HELIPORT	EGDP†
PORTSMOUTH/FLEETLANDS	EGVF
PREDANNACK	EGDO†
PRESTWICK	EGPK
RAF MOBILES	EGWW
RAF MONA	EGOQ†
RALEIGH (MOD)	EGVR
RAVENSPURN N (OIL RIG)	EGRV†
REDHILL	EGKR
RETFORD/GAMSTON	EGNE
ROCHESTER	EGTO
ROTHERA RESEARCH STATION	EGAR
SANDAY	EGES†
SANDTOFT	EGCF
SCHIEHALLION (OIL RIG)	EGRI†
SCILLY ISLES/ST MARY'S	EGHE
SCOTTISH ACC (CIVIL)	EGPX
SEETHING	EGSJ
SHANWICK OAC	EGGX
SHAWBURY	EGOS
SHERBURN-IN-ELMET	EGCJ
SHIPDHAM	EGSA†
SHOBDON	EGBS
SHOREHAM	EGKA
SILVERSTONE HELIPORT	EGBV
SLEAP	EGCV
SOUTH CERNEY (MOD)	EGCY†
SOUTHAMPTON	EGHI
SOUTHEND	EGMC
SOUTHPORT BIRKDALE SANDS	EGCO†
SPADEADAM (MOD)	EGOM
ST ATHAN	EGSY†
STAPLEFORD	EGSG
STORNOWAY	EGPO
STRONSAY	EGER†
STRUBBY HELIPORT	EGCG
STURGATE	EGCS
SUMBURGH	EGPB
SWANSEA	EGFH
SWANTON MORLEY (MOD)	EGYX†
SWANWICK ATCC (MIL)	EGVV
SYERSTON (MOD)	EGXY
TAIN (MOD)	EGQA†
TATENHILL	EGBM
TEESSIDE INTERNATIONAL	EGNV
TERNHILL	EGOE
THORNE	EGCP†
THRUXTON	EGHO†
THURROCK	EGMT†
TILSTOCK	EGCT†

Location	Indicator
TIREE	EGPU
TOPCLIFFE	EGXZ
TRESCO HELIPORT	EGHT†
TRURO	EGHY†
TURWESTON	EGBT
UK AFTN/CIDIN CENTRE	EGGG
UK AIRPROX BOARD	EGGF
UK CACC (BLOCKED 9)	EGGT
UK MCC	EGQP
UK MOTNE CENTRE	EGGY
UK NOTAM OFFICE(NOF)	EGGN
UNST	EGPW†
UXBRIDGE	EGUU
VALLEY	EGOV
WADDINGTON	EGXW
WALNEY	EGNL
WARTON	EGNO
WATTISHAM	EGUW
WELLESBOURNE MOUNTFORD	EGBW
WELSHPOOL	EGCW
WEST FREUGH	EGOY
WEST SOLE (OIL RIG)	EGRW†
WEST WALES/ABERPORTH	EGFA†
WESTRAY	EGEW†
WHALSEY	EGEH†
WHITE WALTHAM	EGLM
WICK	EGPC
WICKENBY	EGNW
WITTERING	EGXT
WOLVERHAMPTON/HALFPENNY GREEN	EGBO
WOODVALE	EGOW
WYCOMBE AIR PARK/BOOKER	EGTB
WYTON	EGUY
YEOVIL/WESTLAND	EGHG
YEOVILTON	EGDY

Table GEN 2.4-2: 2. Decode

Indicator	Location
EGAA	BELFAST ALDERGROVE
EGAB	ENNISKILLEN/ST ANGELO
EGAC	BELFAST/CITY
EGAD	NEWTOWNARDS
EGAE	LONDONDERRY/EGLINTON
EGAH	HALLEY RESEARCH STATION
EGAL†	LANGFORD LODGE
EGAR	ROTHERA RESEARCH STATION
EGAT	ANTARCTIC SKY-BLU
EGBB	BIRMINGHAM
EGBC†	CHELTENHAM HELIPORT
EGBD	DERBY
EGBE	COVENTRY
EGBF	BEDFORD
EGBG	LEICESTER
EGBJ	GLOUCESTERSHIRE
EGBK	NORTHAMPTON/SYWELL
EGBL	ALSCOT
EGBM	TATENHILL

GEN 2.4 LOCATION INDICATORS (continued)

Indicator	Location
EGBN	NOTTINGHAM
EGBO	WOLVERHAMPTON/HALFPENNY GREEN
EGBP	KEMBLE
EGBS	SHOBDON
EGBT	TURWESTON
EGBV	SILVERSTONE HELIPORT
EGBW	WELLESBOURNE MOUNTFORD
EGCB	MANCHESTER BARTON
EGCC	MANCHESTER
EGCD†	MANCHESTER/WOODFORD
EGCF	SANDTOFT
EGCG	STRUBBY HELIPORT
EGCJ	SHERBURN-IN-ELMET
EGCK	CAERNARFON
EGCL	FENLAND
EGCM†	LEEDS EAST
EGCN	DONCASTER SHEFFIELD
EGCO†	SOUTHPORT BIRKDALE SANDS
EGCP†	THORNE
EGCR	ASHCROFT
EGCS	STURGATE
EGCT†	TILSTOCK
EGCV	SLEAP
EGCW	WELSHPOOL
EGCY†	SOUTH CERNEY (MOD)
EGDB	MOUNTWISE
EGDH	HQ 2 GROUP (MOD)
EGDI†	MERRYFIELD
EGDL	LYNEHAM
EGDM	BOSCOMBE DOWN
EGDN	NETHERAVON
EGDO†	PREDANNACK
EGDP†	PORTLAND HELIPORT
EGDR	CULDROSE
EGDS	HQ SPTA
EGDY	YEOVILTON
EGEA	CULTER HELIPAD
EGEC	CAMPBELTOWN
EGED†	EDAY
EGEF	FAIR ISLE
EGEG†	GLASGOW CITY HELIPORT
EGEH†	WHALSEY
EGEI†	ASHAIG/ISLE OF SKYE
EGEL†	COLL
EGEN†	NORTH RONALDSAY
EGEO	OBAN
EGEP†	PAPA WESTRAY
EGER†	STRONSAY
EGES†	SANDAY
EGET	LERWICK/TINGWALL
EGEW†	WESTRAY
EGEY†	COLONSAY
EGFA†	WEST WALES/ABERPORTH
EGFC†	CARDIFF/TREMORFA FORESHORE HELIPORT
EGFD†	LLANBEDR
EGFE†	HAVERFORDWEST
EGFF	CARDIFF
EGFH	SWANSEA

Indicator	Location
EGFP†	PEMBREY
EGGA	LONDON (CAA HQ)
EGGC	LONDON (DFT AVIATION DIRECTORATE)
EGGD	BRISTOL
EGGF	UK AIRPROX BOARD
EGGG	UK AFTN/CIDIN CENTRE
EGGN	UK NOTAM OFFICE(NOF)
EGGO	LONDON AREA
EGGP	LIVERPOOL
EGGR	GATWICK CAA SRG (AVIATION HOUSE)
EGGT	UK CACC (BLOCKED 9)
EGGW	LONDON LUTON
EGGX	SHANWICK OAC
EGGY	UK MOTNE CENTRE
EGHA	COMPTON ABBAS
EGHB	MAYPOLE
EGHC	LAND'S END
EGHE	SCILLY ISLES/ST MARY'S
EGHF	LEE-ON-SOLENT
EGHG	YEOVIL/WESTLAND
EGHH	BOURNEMOUTH
EGHI	SOUTHAMPTON
EGHJ	BEMBRIDGE
EGHK†	PENZANCE HELIPORT
EGHL	LASHAM
EGHN	ISLE OF WIGHT/SANDOWN
EGHO†	THRUXTON
EGHP	POPHAM
EGHQ	NEWQUAY
EGHR	CHICHESTER/GOODWOOD
EGHS	HENSTRIDGE
EGHT†	TRESCO HELIPORT
EGHU†	EAGLESCOTT
EGHY†	TRURO
EGIA	CACC SCOTLAND/NORTHERN IRELAND
EGIB	CACC WALES
EGIC	CACC NORTH WEST
EGID	CACC NORTH EAST
EGIE	CACC MID WEST
EGIF	CACC MID EAST
EGIG	CACC SOUTH WEST
EGIH	CACC SOUTH EAST
EGJA	ALDERNEY
EGJB	GUERNSEY
EGJJ	JERSEY
EGJT	CHANNEL ISLANDS
EGJX†	JERSEY MET
EGKA	SHOREHAM
EGKB	BIGGIN HILL
EGKE†	CHALLOCK
EGKG†	GOODWOOD RACECOURSE HELIPORT
EGKH	LASHENDEN/HEADCORN
EGKK	LONDON GATWICK
EGKL†	DEANLAND
EGKN†	KENLEY (MOD)
EGKR	REDHILL
EGKT†	KIRKNEWTON (MOD)
EGLA	BODMIN

GEN 3.2 AERONAUTICAL CHARTS

1 Responsible Service

1.1 General

- 1.1.1 Aeronautical Charts are produced and published by NATS Ltd on behalf of the UK Civil Aviation Authority. NATS Ltd publish a range of aeronautical charts for use by all types of civil aviation.

Post: Aeronautical Chart Section, Aeronautical Information Service (AIS), NATS Swanwick, Sopwith Way, Southampton, Hants, SO31 7AY.

Phone: 01489-887463

Fax: 01489-612490

Email: aissupervisor@nats.co.uk

1.2 Applicable ICAO Documents

- 1.2.1 The Standards, Recommended Practices and, when applicable, the procedures contained in the following ICAO documents are applied:

Annex 4 Aeronautical Charts;

Doc 8168-OPS/611 Aircraft Operations (Holding patterns, OCH and Instrument Approach Procedures diagrams);

Doc 8697 AN/889 Aeronautical Chart Manual.

- 1.2.2 Differences from ICAO Standards Recommended Practices and Procedures are given at GEN 1.7.

1.3 ICAO IAP Charts

- 1.3.1 Instrument Approach Charts (IAC) are produced and published by NATS/AIM in the UK AIP.

- 1.3.2 An Approved Procedure Design Organisation (APDO) will be contracted by the relevant sponsor to design the Instrument Flight Procedures (IFPs). The responsibility for the notification of IFPs (including IAC, for civil aerodromes) in the UK lies with the sponsor: the Aerodrome Licence Holder or ANSP.

- 1.3.3 Users are invited to forward comments or questions on all policy matters relating to the regulation and design of IFPs to:

Post: Airspace Regulation, CAA, 1 NE Aviation House, Beehive Ring Road, Crawley, West Sussex, RH6 0YR

Email: airspace@caa.co.uk

2 Maintenance of Charts

2.1 Chart Amendment and Revision

- 2.1.1 New editions of charts are published as often as resources permit with priority being given to those charts affected by major changes to aeronautical information. However, due to high production costs some charts - particularly those listed at GEN 3.2 paragraphs 5.1 and 5.2 have an edition life of at least 1 year. The publication of each new edition will replace the previous edition, which will then become obsolete. Details will be notified by AIP Amendment as appropriate. The aeronautical information validity date will be specified on each edition and topographical and hydrographical information will have been revised where necessary.

- 2.1.2 Before using any chart operationally, users must determine what aeronautical changes have taken place since its validity date and amend the chart accordingly. This will require users to consult all UK AIP amendments issued since the charts validity date. If in doubt, they should consult AIS Central Office. A list of amendments for the VFR chart series is available on the AIS web site: www.nats.aero/ais.

- 2.1.3 Amendments to the Aerodrome Obstacle Charts - ICAO - Type A and to the Chart of United Kingdom Airspace Restrictions and Hazardous Areas may be published as or when necessary, but the Chart of UK Areas of Intense Air Activity, Aerial Tactics Areas and Military Low Flying System is amended by annual re-issue.

3 Purchase Arrangements

- 3.1 The VFR charts listed at GEN 3.2 paragraphs 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6, may be obtained through NATS AAUCM and other NATS Ltd Chart Stockists listed at www.nats.aero/ais.

NATS AAUCM

Phone: 01489-444321

Email: aaucm@nats.co.uk

GEN 3.2 AERONAUTICAL CHARTS (continued)

3.2 A selection of Royal Air Force aeronautical charts and planning documents are available from:
Post: AIDU (Sales Office), Royal Air Force, Northolt, West End Road, Ruislip, Middlesex, HA4 6NG
Phone: 020-8845 2300 Ext 7209
Fax: 020-8845 2300 Ext 7510

A catalogue and price list are available on request.

3.3 A series of LORAN C Charts are published by the Hydrographic Department of the Admiralty for all areas where coverage exists (with the exception of the Mediterranean), and can be obtained from Admiralty Chart Agents.

4 Aeronautical Chart Series Available

4.1 Specifications

4.1.1 Internationally agreed standards for aeronautical charts are set down by the International Civil Aviation Organisation in Annex 4 to the convention on International Civil Aviation. In general, the charts listed below conform to these standards where they apply.

4.1.2 Co-ordinate Datum Reference = WGS 84.

4.2 General Description of CAA Aeronautical Charts

4.2.1 Aeronautical Charts ICAO Scale 1:500,000 - United Kingdom

4.2.1.1 This series, covering the United Kingdom, is constructed on a Lambert conformal conic projection and conforms with ICAO specifications for Topography, Culture and Aeronautical Information. A Chart List is at GEN 3.2 paragraph 5.1 with an Index at GEN 3.2 paragraph 6.

4.2.2 Topographical Air Charts of the United Kingdom - Scale 1:250,000

4.2.2.1 This series is constructed on a Transverse Mercator projection. The Aeronautical Information generally conforms with the series at paragraph 4.2.1, though runway patterns of both active and disused aerodromes are shown where reliable information is available. The vertical limit of the series is 5000 FT ALT. To assist users, airspace with a base of FL 55 is shown, EXCEPT where a minimum ALT in excess of 5000 FT applies. If the QNH is below 1013 hPa Controlled Airspace not shown on the charts may be below 5000 FT ALT and reference must be made to Aeronautical Chart ICAO 1:500,000 to ensure adequate vertical separation. A chart list is at GEN 3.2 paragraph 5.2 with an index at GEN 3.2 paragraph 7. Under normal conditions the revision cycle for sheets 6 and 8 is annual, while the remaining sheets will be bi-annual.

4.2.3 Procedural and Aerodrome Charts

a) Instrument Approach and Aerodrome Charts - ICAO

- i. Refer to GEN 3.2 paragraph 1.3 for information on departmental responsibilities within the CAA for Instrument Approach Charts - ICAO.
- ii. These charts are available for all aerodromes where Instrument Approach Procedures have been established and approved by the CAA. They conform to ICAO specifications, and appear in AD 2.
- iii. Separate charts for initial arrival procedures, instrument approach procedures, aerodrome charts and, where necessary, parking/docking charts, are now available for all aerodromes used by international commercial air transport listed in Sections AD 2 and AD 3 of the UK AIP. See GEN 3.2 paragraph 3.2.

b) **Aerodrome Obstacle Charts - ICAO Type 'A'**. These charts are available for most aerodromes designated for use by scheduled international air services. Where a Type 'A' Chart is not published, operators are advised to refer to the appropriate 1:50,000 Ordnance Survey Maps.

c) **Precision Approach Terrain Charts - ICAO**. These charts are designed to provide detailed terrain profile information within a defined portion of the final approach so as to enable aircraft operating agencies to assess the effect of the terrain on decision height determination by the use of radio altimeters. They are published for aerodromes with precision approach runways Categories II and III.

d) **Standard Instrument Departure, Standard Instrument Arrival, Standard Terminal Arrival Route and Noise Abatement Charts**. These charts show designated Departure and Arrival routes for all aerodromes where such procedures are established, and are suitable for operational use. They conform to ICAO specifications. See GEN 3.2 paragraph 3.2.

4.2.4 Miscellaneous Charts

a) **UK Airspace Restrictions and Hazardous Areas - 1:1,000,000**: This chart shows all UK airspace restrictions including danger areas and other areas where a potential hazard to air navigation may exist. This chart is available online from the NATS/AIS website at www.nats.aero/ais.

b) **UK Areas of Intense Air Activity, Aerial Tactics Areas and Military Low Flying System - 1:1,000,000**: This chart portrays areas of intense military air activity and elements of the military low flying system within the Scottish FIR and London FIR. This chart is available online from the NATS/AIS website at www.nats.aero/ais.

GEN 3.3 AIR TRAFFIC SERVICES**1 Responsible Service**

1.1 Responsibility for the overall administration of the Air Traffic Services in the United Kingdom is vested in the Chief Executive of the National Air Traffic Services Ltd (NATS Ltd) acting under the powers of the Secretaries of State for Transport and for Defence.

Post: Chief Executive NATS Ltd, Corporate and Technical Centre, 4000 Parkway, Whiteley, Fareham, Hants. PO15 7FL.
Phone: 01489-616001

1.2 Applicable ICAO Documents

1.2.1 The Standards, Recommended Practices and, when applicable, the procedures contained in the following ICAO documents are applied:

- Annex 2 - Rules of the Air;
- Annex 11 - Air Traffic Services;
- Doc 4444 - Procedures for Air Navigation Services - Air Traffic Management;
- Doc 7030 - Regional Supplementary Procedures;
- Doc 7754 - Air Navigation Plan - European Region;
- Doc 8755 - Air Navigation Plan - North Atlantic.

1.2.2 Differences from ICAO Standards Recommended Practices and Procedures are given at GEN 1.7.

2 Area of Responsibility**2.1 National Responsibilities**

2.1.1 Air Traffic Services, notified in the AIP, are provided for the Airspace above the UK and surrounding seas within the London and Scottish FIRs/UIRs. By arrangement with the appropriate State authorities, this responsibility has, in some areas, been delegated to the UK. In other areas, responsibility has been delegated to the appropriate State authority.

- a) Under the terms of a bi-lateral contract between the European Organisation for the safety of Air Navigation (Eurocontrol) and the UK Government, Air Traffic Services above FL 245 are provided by the London and Scottish ACCs throughout the Scottish FIR/UIR and the London FIR/UIR, and certain portions of Airspace over the Republic of Ireland and its territorial waters, but excluding a portion of the London UIR in the southwest and portions of routes over the North Sea, where arrangements for delegation of control have been made with the appropriate authorities.
- b) By agreement with the North Atlantic Provider States, Air Traffic Services are provided by Scottish ACC for the Airspace over the high seas encompassed by the boundaries of the Shanwick Oceanic Control Area, except for a portion of the Shannon Oceanic Transition Area, where arrangements for delegation of control have been made with the Irish authorities.
- c) The United Kingdom, Denmark and Norway have agreed, to transfer responsibility for providing Air Traffic Services to all aircraft at and below FL 85 in those areas of their FIRs between the FIR boundary and the Median Line (the demarcation line of National areas for sea bed natural resource exploration and exploitation), to the nation exploiting the natural resources of the area. The areas are shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraphs 1.1.1 to 1.1.3.
- d) The United Kingdom and Iceland have agreed to transfer responsibility to the UK for providing Air Traffic Services to all aircraft at and below FL 85 within a defined area of the Reykjavik FIR/OCA during the hours of operation of Sumburgh ATSU as listed at ENR 1.6, paragraph 4.5.2.2. The area is shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.1.4.
- e) The United Kingdom and Iceland have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft from the surface to FL 660 to Iceland. These areas are shown at ENR 2.2 paragraph 1.10.1 and 1.10.2.
- f) The United Kingdom and the Netherlands have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft at FL 55 and below (FL 45 and below, beneath EGD323D and EGD323E) in those areas of the London and Scottish FIRs between the FIR boundaries and the Median Line (the demarcation line of National areas for sea bed natural resource exploration and exploitation), to the Netherlands. The area is shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.2.1.
- g) The United Kingdom and Denmark have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 195 and FL 660 (inclusive) in parts of the London and Scottish FIRs/UIRs to Denmark. The area is shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.3.1.
- h) The United Kingdom and the Netherlands have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 175 and FL 245 (inclusive) in parts of the London FIR to the Netherlands. The areas are shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.4.1.
- i) The United Kingdom and the Netherlands have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 215 and FL 660 (inclusive) and between FL 55 and FL 660 (inclusive) in parts of the Amsterdam FIR to the United Kingdom. The areas are shown at ENR 2.2 paragraphs 1.5.1 and 1.5.2, 1.6.1 and 1.6.2.
- j) The United Kingdom, France and the Irish Republic have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 245 and FL 660 (inclusive) in parts of the London UIR to France and the Irish Republic. The areas are shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraphs 1.7.1 and 1.7.2.

GEN 3.3 AIR TRAFFIC SERVICES (continued)

- k) The United Kingdom and the Irish Republic have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all GAT in a part of the London FIR to the Irish Republic. These areas are shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraphs 1.8.1 and 1.8.4.
 - l) The United Kingdom and the Irish Republic have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all GAT in a part of the Shannon UIR to the United Kingdom. These areas are shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.9.1.
 - m) The United Kingdom and the Irish Republic have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft in a part of the Shannon FIR to the United Kingdom. This area is shown at ENR 2.2 paragraph 1.9.2 to 1.9.4.
 - n) The United Kingdom and France have arranged, through the exchange of a bi-lateral Letters of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 115 and FL 660 (levels vary within areas) in parts of the Paris and Reims FIRs/UIRs to the United Kingdom. The areas are shown at ENR 2.2, paragraphs 1.11.1 to 1.11.3, 1.12.1 and 1.12.2.
 - o) The United Kingdom and Jersey have arranged, through the exchange of a bi-lateral Letter of Agreement to transfer responsibility for providing Air Traffic Services to all aircraft between FL 55-FL 195, and between SFC-FL 195, in parts of the London FIR to Jersey (during the opening hours of Jersey ATC). The areas are shown at ENR 2.2.8 paragraphs 1.14.1 and 1.14.2.
 - p) The United Kingdom and the Irish Republic have arranged, through the exchange of a bi-lateral Letter of Agreement, to transfer responsibility for providing Air Traffic Services to all aircraft between FL 255 and FL 660 (inclusive) in a part of the Scottish UIR to the Irish Republic. The area is shown at ENR 2.2 (Airspace within which ATS is Delegated), paragraph 1.10.3.
- 2.1.2 Flight Information Service and Alerting Service will be provided throughout all the Airspace described above. Whenever part of the FIR or UIR has been further classified, FIS and Alerting Service will be provided by the controller giving other ATS appropriate to the airspace classification. In those parts of the FIR or UIR which have not been further classified, FIS and Alerting Service will be provided by a special Area FIS Officer operating from the appropriate ACC.
- 2.2 **Provision of Air Traffic Services (ATS)**
- 2.2.1 The provision of ATS within the United Kingdom's areas of responsibility described in paragraph 1 is shared by several organisations, both Civil and Military.
- 2.2.2 NATS Ltd provides the principal en-route (ACC/OAC) services together with aerodrome ATS at the airports listed at GEN 3.4, paragraph 2.2.2. Other en-route and aerodrome ATS are provided by civil and military organisations identified within the specific AIP entries.
- 3 Types of Service**
- 3.1 **Air Traffic Control Clearances**
- 3.1.1 Clearances are issued solely for expediting and separating air traffic and are based on known traffic conditions which affect safety in aircraft operation. Such traffic conditions include not only aircraft in the air and on the manoeuvring area over which control is being exercised, but also any vehicular traffic or other obstructions not permanently installed on the manoeuvring area in use.
- 3.1.2 If an air traffic control clearance is not suitable to the pilot-in-command of an aircraft, the flight crew may request and, if practicable, obtain an amended clearance.
- 3.1.3 The issuance of air traffic control clearances by Air Traffic Control units constitutes authority for an aircraft to proceed only in so far as known air traffic is concerned. ATC clearances do not constitute authority to violate any applicable regulations for promoting the safety of flight operations or for any other purpose; neither do clearances relieve a pilot-in-command of any responsibility whatsoever in connection with a possible violation of applicable rules and regulations.
- 3.1.4 Occasionally, instances of false or deceptive transmissions on ATC frequencies may occur. Flight crews should challenge or verify with the ATC unit concerned any instruction or clearance issued to them, which they suspect may be false or deceptive.
- 3.2 **Types of Service - Overview**
- 3.2.1 The type of air traffic service (ATS) to be provided will depend on the class of airspace within which the aircraft is flying, and the type of ATS unit, ie Area, Aerodrome, or Approach. Information on Area, Aerodrome and Approach services are contained herein.
- 3.2.2 Several other civil and military ATS units provide air traffic services which are detailed at ENR 1.1 (ARA), ENR 1.6 subsection 4.1 (LARS), ENR 1.6 subsection 4.5 (Offshore), ENR 2.2 (MATZ) and ENR 5.1 (SUACS/SUAAIS). Details of air traffic services provided within specific airspace classifications can be found at ENR 1.1 (General Rules) and ENR 1.4 (ATS Airspace Classification).
- 3.3 **Area Control Centre Air Traffic Services**
- 3.3.1 Area Control Centre (ACC) ATS within the UK FIRs encompass the provision of surveillance and non-surveillance Area Control, Alerting, and UK Flight Information Services, to traffic not under the jurisdiction of an approach or aerodrome control unit. This includes the provision of a Basic Service as defined at ENR 1.1, subsection 2 by ACC Flight Information Service Officers (FISO).

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES

1 Responsible Services

1.1 The Civil Aviation Telecommunications Services in the United Kingdom are administered by the Civil Aviation Authority.

Post: CNS and Spectrum, Civil Aviation Authority, Aviation House, Beehive Ring Road, Crawley, West Sussex, RH6 0YR
 Email: spectrum@caa.co.uk
 Phone: 033-0022 1500

1.2 Applicable ICAO Documents

1.2.1 The Standards, Recommended Practices and, when applicable, the procedures contained in the following ICAO documents are applied:

Annex 10	- Aeronautical Telecommunications;
Doc 7030	- Regional Supplementary Procedures;
Doc 7910	- Location Indicators for geographical locations;
Doc 8400	- ICAO Abbreviations and Codes;
Doc 8585	- Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.

1.2.2 Differences from ICAO Standards Recommended Practices and Procedures are given at GEN 1.7.

2 Area of Responsibility

2.1 En-route Telecommunications Services

2.1.1 All en-route telecommunications (air-interpreted navigational aids and communications) services, together with those services at aerodromes administered by Highlands and Islands Airports Ltd, except where otherwise identified in the AIP, are provided by the NATS (En Route) plc.

Post: NATS (En Route) plc, Director of Service Delivery, Corporate and Technical Centre, 4000 Parkway, Whiteley, Fareham, Hampshire. PO15 7FL.
 Phone: 07785-953265
 Fax: 01489-444015

2.2 Communications and Navigational Aids at UK Aerodromes

2.2.1 Several organisations are approved by the CAA to provide Civil Aviation Telecommunications Services at UK aerodromes.

2.2.2 The telecommunication service provider for each aerodrome can be contacted using the ATS/ATC telephone number stated at AD 2.2/AD 3.2. ↓
→

2.3 AFTN and associated Data Services

Post: NATS, Data Services, Box 25, Sopwith Way, Swanwick, Southampton, Hampshire, SO31 7AY
 Phone: Operations (H24) 01489-612790, Support (Mon-Fri) 01489-887155
 Fax: 01489-612793
 Email: dataservicessupport@nats.co.uk

2.4 Enquiries and Complaints

2.4.1 Enquiries or complaints about the performance of Civil Aviation Telecommunications Services should be referred in the first instance to the operational organisation providing the services. Urgent matters should be communicated verbally and supported by written reports.

3 Type of Service

3.1 Radio Navigation Services

3.1.1 The following types of radio aids to navigation are provided in the UK:

- a) MF Non-Directional Beacon (NDB);
 - b) VHF Direction-Finding Station (VDF);
 - c) Approach Radar (RAD);
 - d) Precision Approach Radar (PAR) at certain military aerodromes;
 - e) Instrument Landing System (ILS);
 - f) VHF Omni-directional Radio Range (VOR);
 - g) Distance Measuring Equipment (DME).
-

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

3.1.2 MF Non-directional Beacon (NDB)

- a) The range promulgated for UK NDBs is based on a daytime protection ratio between wanted and unwanted signals that limits bearing errors at that distance to ± 5 degrees or less. At ranges greater than those promulgated bearing errors will increase. Adverse propagation conditions particularly at night will also increase bearing errors.
- b) NDBs provided for use as approach aids, during the notified hours of ATS, at aerodromes for which instrument approach procedures are published in the AD section are notified in this AIP as locator beacons (L). Most locator beacons continue to transmit a usable signal outside notified hours, these signals are provided for the purposes of navigational aid only. Aerodrome NDBs not notified as locator beacons are provided for navigational use only.
- c) Details of the Maritime Radio beacons (NDB) are published by the Hydrographer of the Navy, Hydrographic Department (MOD), Taunton, Somerset TA1 2DN, and are available from Admiralty Chart Agents.

3.1.3 VHF Direction-Finding Station (VDF)

- a) VDF bearings are classified as follows:
 - Class A: accurate to within ± 2 degrees;
 - Class B: accurate to within ± 5 degrees;
 - Class C: accurate to within ± 10 degrees.
- b) VDF bearing information will only be given when conditions are satisfactory. Normally no better than Class B bearing will be available.

3.1.4 Approach Radar (RAD)

- a) The VHF communications frequencies for use with Approach Radars are listed in AD 2 item 2.18

3.1.5 Instrument Landing System (ILS)

- a) Aircraft overflying the localizer or manoeuvring on or near the runway may disturb the ILS guidance signals. ATC will apply increased separation and such other measures considered necessary to prevent interference during Category II and III operations.
- b) Such measures will also be applied at the discretion of ATS when requested by pilots wishing to use Category II and III landing procedures when meteorological conditions do not necessitate them
- c) For all civil ILS notified in AD 2 item 2.19 the Localizer usable coverage sector is $\pm 35^\circ$ about the nominal course line and the glidepath provides coverage to the minimum ICAO requirement of 10 NM unless otherwise stated. Pilots using these instrument landing systems are advised not to attempt to intercept and follow the glidepath until the aircraft is established on the Localizer centre-line. Due to the presence of false courses on some localizers operating in the UK, pilots are advised not to attempt to use any ILS facility outside $\pm 35^\circ$ of the front course line. This advice is in addition to the notes promulgated in AD 2 item 2.19 for individual ILS.
- d) Steep Angle facilities listed in the ILS entries in AD 2 item 2.19 provide a more limited coverage than that described in paragraph 1.5(c), the Localizer usable coverage sector being limited to 10 NM at $\pm 35^\circ$ and to 18 NM at $\pm 10^\circ$. The glidepath provides coverage to 8 NM.
- e) Although all MoD ILS facilities are technically classed as 'uncategorised', they are flight checked to ICAO CAT I standards. However, pilots of aircraft cleared to carry out practice auto-coupled approaches with the appropriate visual references to below CAT I limits are to note the following: Unless specifically promulgated otherwise, ILS facilities at MoD airfields are not capable of providing the required quality of beam structure to enable auto-coupled approaches to be continued below the minimum CAT I Decision Height.

3.1.6 Instrument Landing System (ILS) and Distance Measuring Equipment (DME)

- a) A DME facility at an aerodrome, which is frequency paired with the ILS, is arranged to give zero range indication with respect to the threshold of the runway with which it is associated and precise ranges will only be indicated when aircraft are in line with the runway on the approach path. As a consequence of this, if used other than in accordance with promulgated procedures indicated range should be taken as an approximate range to the aerodrome.

3.1.7 VHF Omni-directional Radio Range (VOR) and Distance Measuring Equipment (DME)

- a) The Designated Operational Coverage promulgated for UK VOR and DME together with details of any unsatisfactory conditions known to exist, are listed in AD 2 item 2.19 or at ENR 4.1.
- b) Because inaccurate bearing information may be radiated by a VOR during a changeover to the standby transmitter, no identification signal is radiated until the changeover is completed. Pilots are advised to continually monitor the identification signal throughout a VOR approach.
- c) Where a VOR and TACAN are frequency paired, but not within the co-location limit of 600 M, the last letter of the TACAN identification will be a 'Z'. Civil Pilots are advised not to make operational use of distance information provided by Military TACAN facilities promulgated as unreliable and/or transmitting a series of dots after the identification code.
- d) Where an en-route VOR or VOR/DME facility has an instrument approach procedure published in the AD section, a note in Column 7 at ENR 4.1 indicates the aerodrome so served. The hours of service as an approach aid are within the notified hours of the Air Traffic Services at the aerodrome served.



GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)**3.1.8 Aerodrome Distance Measuring Equipment (DME)**

- a) Aerodrome DME referred to in an instrument approach procedure published in the AD section is provided for use as an approach aid during the notified hours of ATS only. Most DME continue to transmit outside ATC notified hours for the purpose of navigational aid only.
- b) Aerodrome DME with their zero range off-set to occur at specific runway thresholds are identified by comments in Column 7 at AD 2 item 2.19. Any DME range indications observed when between runway thresholds should be ignored. Other aerodrome DME indicate true slant range from aircraft to DME site.

3.1.9 Radio Navigation Aids - Designated Operational Coverage

3.1.9.1 Due to the limitations in the availability of spectrum, most NDB, VOR and DME facilities operate on a shared frequency channel. Frequency planning criteria based on ICAO Standards and Recommended Practices are employed to reduce the risk of interference from other facilities operating on the same frequency (co-channel interference).

3.1.9.2 When interference occurs, it is likely to be manifested in one of the following ways:

- a) Garbled identification;
- b) Bearing/range errors;
- c) Inability to acquire the navigational signal;
- d) Acquiring the undesired signal instead of the desired one.

3.1.9.3 Under abnormal propagation conditions interference can occur. For VOR and DME this is rare in the European region. However for a NDB, such conditions occur for a number of reasons (see paragraph 3.1.11).

3.1.9.4 The attention of pilots and aircraft operators is drawn to the following:

- a) Using a VOR/DME outside the Designated Operational Coverage (DOC) can lead to errors in navigation. Such errors can be dangerous. This is particularly to be noted when using multiple DME in the RNAV configuration where it is difficult, if not impossible, to make a positive identification of the beacon being used.
- b) DOCs are published in the UK AIP AD 2 item 2.19 and ENR 4.1. Where pilot channel selection is made, it is essential that this document be consulted as part of the pre-flight briefing to determine the DOC of every radio navigation aid upon which the safety of the intended flight may depend.

3.1.10 Limitations of Non-Directional Beacons and Automatic Direction Finding Equipment

3.1.10.1 Although VHF Omni-Range facilities (VOR) have increasingly replaced Non-Directional Beacons (NDBs) in many parts of the world, NDBs are still in use as navigation and instrument approach aids and are likely to be utilised in these roles for several years to come.

3.1.10.2 The increasing use of VOR may result in pilots losing sight of the inherent limitations of the NDB and its associated airborne Automatic Direction-Finding (ADF) equipment which if used under certain conditions is capable of producing large and potentially dangerous errors.

3.1.10.3 The principal factors liable to affect NDB/ADF system performance and integrity are:

- Static Interference;
- Station Interference;
- Night Effect;
- Mountain Effect;
- Coastal Refraction;
- Absence of failure warning system.

3.1.10.3.1 Very occasionally the Authority becomes aware of other conditions in ADF/NDB systems which give rise to false indications. In all such cases notification is given to the affected aircraft and ground equipment operators.

3.1.10.3.2 **Static Interference** - All kinds of precipitation (including falling snow) and thunderstorms can cause static interference of varying intensity to ADF systems. Precipitation static reduces the effective range and accuracy of bearing information and thunderstorms can give rise to bearing errors of considerable magnitude and even to false 'overhead' indications. Indeed it is often said that in an area affected by thunderstorm activity, the ADF bearing pointer is useful only as an indication of the direction of the most active storm cell.

3.1.10.3.3 **Station Interference** - Most countries adopt measures to minimise the possibility of interference between transmissions from different stations by spacing frequencies and limiting the power outputs of those which might conflict. However, the LF and MF frequency bands remain inevitably congested and there is a risk that some interference will occasionally occur. When interference is experienced, bearing errors of varying degree will result. By day, the use of a NDB within the promulgated service range (based on daylight conditions) will normally afford protection against interference. Providing the NDB is correctly selected and identified reliable performance can usually be expected. By night, however, it is possible for skywave signals from other (more distant) transmitters to penetrate those areas considered protected during the day, thus giving rise to the possibility of two signals being received and resulting in unreliable bearing indications. Extreme care should therefore be exercised when making use of NDBs during night or twilight hours, even when well within the promulgated service range. A similar degree of care is necessary by day when close

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

to the limit of the promulgated service range. Positive identification of the callsign of the required NDB is essential and is just as important with modern incrementally-tuned crystal controlled ADF sets, as with the earlier designs since frequency references alone cannot guarantee that the required NDB is being unambiguously received. Following initial identification and when ADF indications are being followed, further checks on reception of the correct callsign and on the accuracy of tuning should also be made at frequent intervals.

- 3.1.10.3.4 **Night Effect** - At night in addition to the interference which can occur between transmissions from different stations (already described in paragraph 1.11.3.3) it is possible for the reception of a ground wave signal from an individual NDB to be contaminated by a skywave signal from the same transmission source. This will give rise to bearing errors of varying magnitude depending on the heights of the ionised layers and the polarisation of the signals on arrival at the receiver. Night effect is usually most marked during the twilight hours when skywave contamination can cause 'fading' of signal strength with resultant wandering of the ADF bearing pointer. Caution should therefore be exercised whenever fluctuations in bearing indications are observed in the circumstances described.
- 3.1.10.3.5 **Mountain Effect** - ADF systems may be subject to errors caused by the reflection and refraction of the transmitted radio waves in mountainous areas. High ground between the aircraft and the NDB may increase the errors especially at low altitude.
- 3.1.10.3.6 **Coastal Refraction** - In coastal areas the differing radio energy absorption properties of land and water result in refraction of NDB transmissions. This error, known as 'Coastal Refraction', is most marked when the transmissions cross the coastline at an oblique angle and when the NDB is located away from the coast. Such bearings should, therefore, be used with caution.
- 3.1.10.3.7 **Lack of Failure Warning System** - Because of the absence of failure warning devices on most ADF instruments, failure in any part of the system (including the NDB) may produce false indications which are not readily detectable. NDB failures in particular could adversely effect both systems of a dual ADF installation in the aircraft. Having selected and identified the NDB, monitoring the audio identification signal and the pointer behaviour is the correct method of assuring normal system operation. This will reduce the risk of a false indication being followed and applies particularly when making an approach toward the NDB, when, in the event of failure, the ADF pointer could indicate that the beacon is ahead of the aircraft even though the beacon has been passed. Particular care should be exercised when an instrument approach procedure is commenced at ADF pointer reversal, in Instrument Meteorological Conditions to below sector safety altitude where no independent cross check is available.
- 3.1.10.4 Two methods of modulation are used to transmit the Morse identification signal of a NDB. In the UK all NDB utilise Modulated Continuous Wave (N0N A2A) type of modulation but in many other countries Interrupted Continuous Wave (N0N A1A) modulation may be employed which requires the use of a Beat Frequency Oscillator (BFO) or tone generator in the ADF receiver. Pilots must therefore be aware of the type of emission to expect and to pre-select the ADF receiver controls accordingly. In the case of Interrupted Continuous Wave (N0N A1A) type emissions, the ADF bearing pointer may wander during the ident period, due to the interruptions in the carrier frequency.
- 3.1.10.5 In conclusion it has to be stressed that at the comparatively short distances, ie less than 50 nautical miles, over which NDB are most commonly used, the most potentially dangerous errors are those resulting from all types of precipitation static, thunderstorms and station interference (particularly at night). When these are experienced, the ADF system should be used only when necessary and then with extreme caution; VHF aids are much less affected and these should be used in preference wherever possible. Cross-checking on the accuracy of ADF indications by reference to other available navigational aids is not only a matter of good airmanship but also a most necessary safeguard wherever any difficulty is experienced in the reception or identification of the intended NDB.

3.2 The Aeronautical Mobile Service

3.2.1 General

- a) Facilities are provided to meet the Air/Ground communications requirements of the Air Traffic Services described in the AIP and the Emergency Services detailed at paragraph 3.2.6. These services include coverage over the greater part of the United Kingdom Flight Information Regions above 3000 FT. Some limited cover may be possible below this altitude.
- b) United Kingdom Air/Ground facilities will communicate with aircraft on frequencies within the Aeronautical Mobile (R) Service which has been allocated to the band 118 to 136.975 MHz.
- c) United Kingdom airspace utilises 8.33 kHz channel spacing in line with Assimilated Regulation (EU) No. 1079/2012. All airspace users, unless otherwise notified, in ENR 1.8, will be required to be equipped with 8.33 kHz VCS capable radios.
- d) The language to be used when communicating on the United Kingdom Aeronautical Mobile Service is English.
- e) Procedures to follow in the event of Radio failures are contained in the AD and ENR Sections.
- f) At a civil aerodrome the following words in a callsign identify an Air Traffic Control Service: TOWER, APPROACH, GROUND, ZONE, RADAR, DIRECTOR, DELIVERY.
- g) In a callsign, only the word INFORMATION is used to identify an Aerodrome Flight Information Service, Aerodrome Terminal Information Service or Area Flight Information Service.
- h) In a callsign, only the word RADIO is used to identify an aerodrome Air/Ground communication service.

3.2.2 Use of VHF R/T Channels

- a) Geographical separation between international services using the same or adjacent frequencies is determined so as to ensure as far as possible that aircraft at the limits of height and range to each service do not interfere with one another. In

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

the case of en-route sectors these limits correspond to that of the ATC sector concerned and those for international aerodrome services are appropriate a radius of 25 NM up to a height of 4000 FT (TWR) or 10000 FT (APP).

- b) Except in emergency, or unless otherwise instructed by the Air Traffic Services, pilots should observe these limits. Services other than international services are provided on frequencies which are shared between numerous ground stations and have to operate to a higher utilisation in order to satisfy the demand for frequencies. Pilots using these frequencies should assist in reducing interference by keeping communications to a minimum and by limiting the use of aircraft transmitters to the minimum height and distance from the aerodrome that are operationally necessary. In the case of TWR, AFIS and A/G facilities, communications on these frequencies should be restricted as far as possible to heights up to 1000 FT in the immediate vicinity of the aerodrome concerned and in any event within 10 NM and 3000 FT.

3.2.3 Common Channel for Helicopter Departures

- a) At locations having no ground radio facilities a VHF channel is available to assist departing helicopters.
- b) Conditions of use are:
 - i. It shall only be used at locations having no radio facilities. If another VHF assignment is valid for that location, it must be used even outside the normal operating hours;
 - ii. Transmissions shall occur only when helicopters are below 500 FT AGL;
 - iii. Helicopters approaching a site should monitor the channel. Blind transmissions are not permitted, except where Pilot Controlled Lighting is used.
- c) Departing helicopters shall state:
 - i. 'To all stations';
 - ii. The callsign of the aircraft;
 - iii. The location either by name or by reference to a readily identifiable feature;
 - iv. The direction and height of the intended departure.
- d) The channel assigned is 122.955 and shall be known as 'DEPCOM'.
- e) Where Pilot Controlled Lighting systems are used, arriving helicopters may transmit a sequence of microphone clicks to activate the ground lighting system, within 6 NM from the ground location. Pilot Controlled Lighting systems using the common channel must not transmit from the ground.

3.2.4 Common VHF Channel for Use at Aerodromes having no notified Ground Radio Channel

- a) At aerodromes having no notified ground radio facilities a VHF channel is available to assist pilots to avoid potential collisions between arriving and departing aircraft. Pilots may use this channel to broadcast their intentions for safety purposes.
- b) The channel assigned is 135.480 and is known as 'SAFETYCOM'.
- c) The conditions of use are:
 - i. SAFETYCOM shall only be used at aerodromes having no notified ground radio facility. If a VHF channel is notified for a location, that notified channel must be used even outside the notified operating hours.
 - ii. Transmissions shall be made only within a maximum range of 10 NM of the aerodrome of intended landing, and below 2000 FT above the aerodrome elevation.
 - iii. SAFETYCOM shall only be used to transmit information regarding the pilot's intentions, and there should be no response, except where the pilot of another aircraft also needs to transmit his intentions or, exceptionally, has information critical to the safety of an aircraft in a condition of distress or urgency.
 - iv. Phraseology is to comply with the requirements of CAP 413 (Radiotelephony Manual) Chapter 4 Section 6.
 - v. SAFETYCOM is not to be used for the conduct of formation flights unless landing at or taking off from an aerodrome for which no other frequency is notified and within the limits specified at sub paragraph (ii).
 - vi. Pilots operating at aerodromes without a notified channel are recommended to use SAFETYCOM, but its use is not mandatory. However, if pilots choose to use it, they must make the transmissions listed in CAP 413 as 'essential'. It must not be assumed that all other pilots in the vicinity are monitoring the channel and, as at all other times, pilots must maintain a good lookout.
 - vii. No air traffic service is associated with SAFETYCOM. Where an aerodrome lies within controlled airspace, pilots must establish contact with the responsible air traffic services unit, and obtain clearance prior to entering controlled airspace.
 - viii. Information transmitted on SAFETYCOM confers no priority or right of way. Pilots shall comply with the Rules of the Air Regulations, including the provisions in relation to avoiding aerial collisions.
- d) Unless specifically approved by the CAA, SAFETYCOM is not to be used for special events as defined in CAP 403 (Flying Displays and Special Events: A Guide to Safety and Administrative Arrangements). Channels for special events should continue to be requested through existing contacts.

3.2.5 VHF Low Level Common Frequency for use within the UK Low Flying System (UKLFS)

- a) Available for use by all aircrew, military and civilian, operating in Class G airspace at or below 2000 FT AGL in the UKLFS and should be monitored whenever possible.
- b) Pilots should use this channel to broadcast their intentions to help improve situational awareness between all aircrew operating in the same area.
- c) The channel assigned is 130.490 and shall be known as the "LL-Common Frequency".
- d) The conditions of use are:

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

- i. Pilots should make use of the LL Common Frequency only when not in receipt of a Lower Airspace Radar Service or other Air Traffic Service, or when operating outside an area where a Frequency Monitoring Code and associated ATC frequency/channel is used.
 - ii. Pilots should make blind calls. To prevent clutter the channel must not be used as a chat channel.
 - iii. Transmissions should be accurate, clear and concise.
- e) Transmission Timing:
- i. When safe and suitable.
 - ii. When entering/exiting the UKLFS.
 - iii. At turning points or significant heading changes.
 - iv. Approaching well-known and recognisable physical features.
 - v. Any time it is considered beneficial to the safety of the aircraft.
- f) Blind call Content:
- i. Call Sign.
 - ii. Aircraft type (and number, in case of formations).
 - iii. Position in relation to reference points immediately identifiable to other pilots (using cardinal or inter-cardinal directions).
 - iv. Altitude.
 - v. Heading.
 - vi. Next significant reference point.
- g) Details of the UKLFS are shown in ENR 6-20 and ENR 6-21.

Note: Whilst civil aircraft will broadcast their Altitude above sea level based on QNH, military aircraft in the UKLFS will be operating on Radar Altimeter heights and broadcasting their height Above Ground Level. Civil operators should consider their actual height above ground when assessing any potential conflict with military traffic.

3.2.6 Emergency Service

- a) An emergency communications and aid service is continuously available on 121.500 from the Distress and Diversion (D & D) section located at RAF (U) Swanwick.
- b) Operational control is exercised from RAF (U) Swanwick D & D, callsign 'LONDON CENTRE'. The service provides coverage over the greater part of the United Kingdom above 3000 FT. In addition, the stations and units listed at GEN 3.6 have the capability of providing an emergency service on 121.500. (For further details see GEN 3.6, paragraph 6.5).
- c) Pilots of aircraft in emergency and using 121.500 should broadcast the initial 'MAYDAY' or 'PAN PAN' call. The Air Traffic Controller at Swanwick will answer the call and initiate appropriate action. (For use of SSR in emergency see ENR 1.6).
- d) If the emergency is ended the pilot should inform the controlling authority of the fact and state his intentions before leaving the frequency. This will ensure that any action to alert diversion aerodromes or other assistance will be cancelled.
- e) Details of the ATSU's with Emergency Facilities are shown at GEN 3.6.

3.2.7 Emergency Satellite Voice Calls from Aircraft – See GEN 3.6.

3.2.8 Radio Communications between Aerodrome Fire Services and Aircraft during an Emergency

- a) Whenever an emergency has been declared at an aerodrome where this service is notified, aircraft may communicate direct with the Fire Service in attendance with the following conditions:
 - i. The service must be used only when the aircraft is on the ground.
 - ii. Contact with ATC, on the appropriate frequency must be maintained.

Note: This service is only available by arrangement via ATC and may only be used for the duration of the emergency. The fire service does not normally monitor this service at other times.

- b) The availability of this service is indicated in the AD section at item 2.18. It should be noted that the service provided is not an Air Traffic Service.

3.2.9 Pilot Controlled Lighting (PCL)

Pilot Controlled Lighting is used at certain aerodromes for pilots to remotely turn on Aeronautical Ground Lighting outside operating hours, normally using an existing ATS or AGCS VHF channel.

Pilots or organisations using PCL must seek agreement from the relevant aerodrome authority.

3.3 Aeronautical Fixed Services

3.3.1 In the United Kingdom the following Aeronautical Fixed Services are provided:

- a) The Operational Telephone Network for use by ATC and supporting operational services;
- b) the Administrative Telephone Network for use by authorised agencies connected with air traffic operations;
- c) the Aeronautical Fixed Telecommunications Network (AFTN), for the exchange of messages between aeronautical fixed stations within the network.

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

Note: Messages of authorised categories can be accepted at designated stations for transmission on the AFS. The rules and procedures for handling of communications on the AFS are contained in Annex 10, Vol II Chapters 3-4.

3.4 Aeronautical Broadcast Service

- a) The Aeronautical Broadcast Service provides broadcasts which contain meteorological, navigation and aerodrome information.
- b) Details of these broadcasts are listed under the name of the controlling aerodrome or Air Traffic Control Unit in the AD section at 2.18/3.17 and in GEN 3.5, paragraph 7.

4 Requirements and Conditions

4.1 Approval and Licensing of Aircraft Radio Stations

4.1.1 General

- 4.1.1.1 The Civil Aviation Authority must approve in writing the design and installation of radio equipment in aircraft and the station must be licensed by the Ofcom, Aeronautical Licensing Section before such radio equipment may be operated in an aircraft. The regulations governing the compulsory carriage of radio equipment are contained in Part III of the UK Air Navigation Order.

4.1.2 Approval and Licensing Procedure

- 4.1.2.1 Full details of the procedure governing the approval and licensing of aircraft radio stations, together with information regarding modifications to such stations, are contained in Assimilated Regulation (EU) 2018/1139 (the UK Basic Regulation) and its delegated and implementing act.

The approval of an aircraft radio station is based, among other things, upon the results of radio tests in flight; details of the associated procedures are given below.

4.1.3 Carriage of Radio and Radar Equipment

- 4.1.3.1 The requirements for the carriage of radio and radar equipment are contained in the UK Air Navigation Order and the Air Navigation (General) Regulations 1993 as amended. The main provisions are published at GEN 1.5 paragraph 5.

4.1.4 Radio Tests in Flight

- 4.1.4.1 The CAA only expects Radio Tests in flight to be carried out in exceptional circumstances.
- 4.1.4.2 Tests of VHF RTF communications equipment may be carried out with one of the Air Traffic Service Units listed below. Such tests may only be carried out on the frequency stated and when the aircraft is within the Designated Operational Coverage (DOC) of the station as described in the table below.

Air Traffic Service Unit	RTF Call sign	Channel/ Frequency (MHz)	DOC (based upon ARP unless otherwise stated)
Aberdeen/Dyce	Aberdeen Approach / Aberdeen Radar	119.055	55 NM / FL 250
Belfast Aldergrove	Aldergrove Approach / Aldergrove Radar	133.125	60 NM / FL 245
Birmingham	Birmingham Radar	123.980	40 NM / FL 200
Bournemouth	Bournemouth Approach / Bournemouth Radar	119.480	50 NM / FL 120
Cambridge	Cambridge Approach	120.965	40 NM / FL 200
Cardiff	Cardiff Approach / Cardiff Radar	125.855	50 NM / FL 190
East Midlands	East Midlands Radar	134.180	60 NM / FL 150
Edinburgh	Edinburgh Approach / Edinburgh Radar	121.205	40 NM / FL 100
Exeter	Exeter Approach / Exeter Radar	128.980	40 NM / FL 160
Glasgow	Glasgow Approach / Glasgow Radar	119.100	25 NM / FL 100
Isle of Man	Ronaldsway Approach / Ronaldsway Radar	120.855	40 NM / FL 100
Leeds Bradford	Leeds Approach / Leeds Radar	134.580	40 NM / FL 100
Liverpool	Liverpool Approach / Liverpool Radar	119.855	40 NM / FL 100
London Terminal Control	Stansted Radar	120.625	Within the operational area of Stansted Radar.
Newcastle	Newcastle Approach / Newcastle Radar	124.380	60 NM / FL 250
Norwich	Norwich Approach / Norwich Radar	119.355	40 NM / FL 70
Prestwick	Prestwick Approach / Prestwick Radar	129.450	40 NM / FL 195
Shoreham	Shoreham Approach / Shoreham Tower / Shoreham Radio	123.155	25 NM / FL 100
Southend	Southend Approach / Southend Radar	130.780	40 NM / FL 100

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

Air Traffic Service Unit	RTF Call sign	Channel/ Frequency (MHz)	DOC (based upon ARP unless otherwise stated)
Sumburgh	Sumburgh Tower	118.255	25 NM / FL 40

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

- 4.1.4.3 Please note that not all these aeronautical radio stations operate H24, for hours of operation refer to the relevant aerodrome's AIP entry.
- 4.1.4.4 Prior arrangement with these aeronautical radio stations is not required, however, when radio traffic conditions are unfavourable it may not be possible for tests to be carried out. Where possible prior arrangements with the ATSU concerned should be made.
- 4.1.4.5 Test of HF RTF communications equipment may be carried out with any ATSU that is suitably equipped, it should be noted that the UK does not have any ATSU that operate HF for this purpose.
- 4.1.4.6 Radio tests in flight of other radio equipment, including the testing of all prototype radio equipment, shall only be carried out with the prior agreement of the Safety Regulation Group of the Civil Aviation Authority.

4.1.4.7 Conditions for Tests

- 4.1.4.7.1 Except where problems are suspected to have developed during the current flight, RTF equipment tests in flight shall only be made following satisfactory ground testing.
- 4.1.4.7.2 VHF RTF test transmission may only be made with the following emission characteristics.
 - 4.1.4.7.2.1 6K80A3EJN for 25 kHz frequency assignments.
 - 4.1.4.7.2.2 5K00A3EJN for 8.33 Channel assignments.
- 4.1.4.7.3 HF RTF test transmissions may only be made, using fixed or trailing antenna, with either 2K70J3EJN or 6K00A3EJN emission characteristics as appropriate to the radio station that the communications is with.

4.1.4.8 Priority of Messages

- 4.1.4.8.1 Communications concerning safety or flight regularity will always be given priority over messages transmitted for test purposes.

4.1.4.9 Radio Test in Flight Procedure

- 4.1.4.9.1 Aircraft must meet minimum airworthiness requirements before commencing any flight for radio test in flight purposes.
- 4.1.4.9.2 Aircraft must comply with the Air Traffic Service rules applicable to the area within which they are flying.
- 4.1.4.9.3 All radio transmissions for test in flight purposes shall be of the minimum duration necessary for the test and shall not continue for more than 10 seconds. The recurrence of such transmissions shall be kept to the minimum necessary for the test.
- 4.1.4.9.4 The nature of the test transmission shall be such that it is identifiable as a test transmission and can not be confused with other communications. To achieve this the following format shall be used:

- a) 'the call sign' of the aeronautical radio station being called, followed by the words 'THIS IS';
- b) 'the aircraft identification';
- c) the words 'RADIO CHECK ON';
- d) 'the channel (or frequency (MHz))' being used for the test;
- e) 'the aircraft identification'.

- 4.1.4.9.5 The operator of the aeronautical radio station being called will assess the transmission and will advise the aircraft making the test transmission in terms of the readability scale below, together with a comment on the nature of any abnormality noted (ie excessive noise) using the following format:

- a) 'the aircraft identification' followed by the words 'THIS IS';
- b) 'the call sign' of the aeronautical radio station replying;
- c) information regarding the readability of the aircraft transmission using the words 'READABILITY x' where 'x' is a number taken from the table below that equates to the assessment of the transmission;
- d) additional concise and unambiguous information with respect to the noted abnormality may be given;
- e) 'the call sign' of the aeronautical radio station replying;
- f) for practical reasons it may be necessary for the operator of an aeronautical radio station to reply with 'THIS IS' followed by 'the call sign' of the aeronautical radio station 'STATION CALLING ON' state 'the channel (or 8.33 frequency (MHz)) UNREADABLE'

Quality	Scale
Unreadable	1
Readable now and then	2
Readable but with difficulty	3
Readable	4
Perfectly Readable	5

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES (continued)

- 4.1.4.9.6 The test transmission and reply thereto are recorded at the ATSU.
- 4.1.4.9.7 The operator of the airborne station shall complete a 'Flight Test Report' based upon the assessment information conveyed to them, this should be recorded in the aircraft maintenance records. Action should be taken to rectify any identified problems before further test or use.
- 4.2 Approval and Licensing of Ground Radio Stations**
- 4.2.1 General**
- 4.2.1.1 The Civil Aviation Authority must approve in writing the operation of a ground radio station and the station must be licensed by Ofcom under the terms of the Wireless Telegraphy Act before it may be operated.
- 4.2.2 Approval and Licensing Procedure**
- 4.2.2.1 Full details of the procedures governing the approval and licensing of ground radio stations are obtainable from:
- Post: Civil Aviation Authority, ATM Oversight Team, Aviation House, Gatwick Road, Gatwick Airport South, West Sussex RH6 0YR
Phone: 03301-382036/03301-382883
Email: Approvals.RCS@caa.co.uk
- 4.2.2.2 Full details of the procedures governing the Wireless Telegraphy Act, aeronautical licensing are obtainable from:
- Http: www.ofcom.org.uk/manage-your-licence/radiocommunication-licences/aeronautical-licensing
- 4.3 Malfunctions, Maintenance and Test Transmissions**
- 4.3.1 During periods of malfunction or maintenance of navigational aids, the promulgated identification signal is suppressed as a means of warning users that the transmission cannot be safely used for navigation purposes. The identification signal will be suppressed in one of two ways:
- by complete removal;
 - by radiating a continuous tone.
- 4.3.2 Any transmission using the identification 'TST' is radiating for test purposes only and must not be used for operational purposes.
- 4.4 Interference from High Powered Transmitters**
- 4.4.1 Pilots are advised that interference may be experienced in aircraft flying in the vicinity of high power broadcast stations. If such interference is troublesome or is experienced well beyond the vicinity of the ground transmitter, pilots are requested to report concerns to the Civil Aviation Authority.
- 4.4.2 The CAA coordinates through Ofcom to ensure that any changes or additions to the FM broadcasting service in the UK and adjacent states do not have any impact on FM immune ILS/VOR navigation and VHF communications receivers. Older receivers that do not meet the FM immune standard may suffer interference.
- 4.4.2.1 Since 1 Jan 2001, the use of FM-immune ILS/VOR navigation and VHF communications receivers is required for IFR operations within the London and Scottish FIRs. Further details of FM immunity requirements are listed in GEN 1.5.
- 4.4.3 Safety concerns can be reported to the CAA marked for the attention of 'CNS and Spectrum Team' using the details below:
- Post: Civil Aviation Authority, CNS and Spectrum Team, Aviation House, Gatwick Road, Gatwick Airport South, West Sussex RH6 0YR
Http: www.caa.co.uk/Our-work/Make-a-report-or-complaint/Report-a-safety-concern/
- Reports should include the following information:
- Frequency on which interference occurred;
 - Approximate position and height of aircraft;
 - aircraft registration letters;
 - date and time of interference;
 - description of interfering signal e.g. music, speech, language, etc.
- 4.4.4 Other sources of High Intensity Radio Transmission (HIRTA) are listed in the ENR Section. Pilots are warned that within the areas defined, interference or damage to aircraft electronic equipment may occur. Navigation information from equipment may be unreliable.
- 5 Miscellaneous**
- 5.1 To be developed.

GEN 3.5 METEOROLOGICAL SERVICES**1 Responsible Service**

- 1.1 The Civil Aviation Authority is the Meteorological Authority for the United Kingdom (UK). This authority is derived from Directions issued under section 66(1) of the Transport Act 2000 relating to the Civil Aviation Authority's performance of air navigation functions. The policy of the UK Met Authority is to discharge its responsibilities for the provision of meteorological services to UK based national and international civil aviation operations in accordance with International, European, and National requirements as may be promulgated from time to time including Regulation (EU) No 2017/373 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018, ICAO Annex 3 and CAP 746.

Post: Civil Aviation Authority, Aviation House, Beehive Ringroad, Crawley, West Sussex, RH6 0YR
Email: metauthority@caa.co.uk

- 1.2 Meteorological forecasting and climatological services for civil aviation in the United Kingdom are provided by the Met Office designated as the Meteorological Air Navigation Service Provider (ANSP) for the UK under the EU Service Provision Regulation:

Post: Hd Aviation Business, Met Office, Fitzroy Road, Exeter, EX1 3PB

Phone: 0330-135 0000 and 0370-900 0100 or outside the UK +44 (0)330-135 0000

Fax: 0330-135 0050 or outside the UK +44 (0)330-135 0050

AFS: EGRRYTYH (Administrative) or EGRRYMYX (Operations Centre)

Email: enquiries@metoffice.gov.uk

- 1.3 Applicable ICAO Documents

- 1.3.1 The Standards, Recommended Practices and, when applicable, the procedures contained in the following ICAO documents are applied:

Annex 3	- Meteorological Service for International Air Navigation;
Doc 7754	- Air Navigation Plan - EUR Region;
Doc 8400	- PANS - ICAO Abbreviations and Codes;
Doc 8755	- Air Navigation Plan - NAT Region;
Doc 8896	- Manual of Aeronautical Meteorological Practice;
Doc 9328	- Manual of Runway Visual Range Observing and Reporting Practices.

- 1.3.2 The UK Met Authority's objective is to supply operators, flight crew members, ATS units, airport management and other civil aviation users with the meteorological information necessary for the performance of their respective functions, thus contributing towards the safety, regularity and efficiency of air navigation. All ICAO Annex 3 standards and recommended practices, including ICAO definitions listed in Chapter 1 of Annex 3, are applied in the UK unless a difference has been filed with ICAO. UK differences from ICAO standards and recommended practices are listed in GEN 1.7.

2 Area of Responsibility

- 2.1 The United Kingdom provides area Meteorological Watch for the London and Scottish FIR/UIRs and for the Shanwick Oceanic FIR. The Met Office's Operations Centre, Exeter, acts as the Meteorological Watch Office (MWO) for these areas.

- 2.2 The UK operates one of the two World Area Forecast Centres (WAFC), responsible for the provision of global forecasts of significant weather and the following global grid point data; wind, temperature, humidity, tropopause height and temperature, maximum wind speed, direction and height. In the event of an interruption of the operation of a WAFC, its functions will be provided by the other WAFC. Additionally, the UK operates a Volcanic Ash Advisory Centre; further information on this service can be found at <https://www.metoffice.gov.uk/services/transport/aviation/regulated>

3 Meteorological Observations and Reports**3.1 Observing Systems and Operating Procedures**

- 3.1.1 Surface wind sensors on aerodromes are positioned to give the best practical indication of the winds which an aircraft will encounter during take-off and landing within the layer between 6 and 10 M above the runway(s). The surface wind reported for take-off and landing by ATS Units at aerodromes supporting operations by aircraft whose maximum total weight authorised is below 5700 KG is usually an instantaneous wind measurement with direction referenced to Magnetic North. However, at other designated aerodromes the wind reports for take-off and landing are averaged over the previous 2 minutes. Variations in the wind direction are given when the total variation is 60° or more and the mean speed 3 KT or more, the directional variations are expressed as the two extreme directions between which the wind has varied in the past 10 minutes. In reports for take-off, surface winds of 3 KT or less include a range of wind directions whenever possible if the total variation is 60° or more. Variations from the mean wind speed (gust and lulls) during the past 10 minutes are only reported when the variation from the mean speed has

GEN 3.5 METEOROLOGICAL SERVICES (continued)

exceeded 10 KT. Such variations are expressed as the maximum and minimum speeds attained.

- 3.1.1.1 At aerodromes which normally report surface wind averaged over the previous 2 minutes, the instantaneous wind velocity is available on request. Where an instantaneous wind velocity has been requested the word 'instant' will be inserted in the report (eg. 'G-CD Runway 34 cleared to land instant surface wind 270 7' or 'G-CD Runway 34 cleared to land instant 270 7'). An indication of the wind velocity normally reported at particular aerodromes is included in Table 3.5.3.2.
- 3.1.1.2 Surface wind measurements contained in the Meteorological Aerodrome Report, METAR and special report are referenced to True North and are averaged over the previous 10 minutes, except when during the 10 minute period there is an abrupt and sustained change in wind direction of 30° or more, with a wind speed of at least 10 KT both before and after the change, or a change in wind speed of 10 KT or more lasting more than 2 minutes. In this case only data occurring since the abrupt change will be used to obtain the mean values. METAR and special reports may give variations in wind direction if during the 10 minute period preceding the time of observation, the total variation in wind direction is 60° or more but less than 180° and the speed is 3 KT or more. The maximum speed is only given if it exceeds the mean speed by 10 KT or more. At aerodromes with wind sensors at two or more sites, METAR surface wind reports are always obtained from one designated 'aerodrome system' irrespective of the system currently in use by the ATS Unit for take-off and landing reports.
- 3.1.2 Temperature is reported in whole degrees from liquid-in-glass or electrical resistance thermometers located in a ventilated screen.
- 3.1.3 Horizontal surface visibility is assessed by human observer, assisted at some aerodromes by a visiometer. Visibility is reported in increments of 50 M up to and including 800 M and then increments of 100 M up to 5000 M and in units of kilometres for 5000 M or more.
- 3.1.3.1 Pilots are reminded that surface visibility forecast in a TAF, TREND or Area Forecast might be subject to marked deterioration caused by smoke at any time. Such deteriorations in surface visibility will be reported as they occur in routine or special aerodrome meteorological reports and forecasts might consequently be amended. It is not possible to forecast the onset or cessation of the smoke, or the precise amount of visibility deterioration. Turbulence and breathing difficulty might be encountered in the area affected by the smoke.
- 3.1.4 For aerodromes employing IRVR systems.
 - 3.1.4.1 RVR tendency abbreviations U, D or N shall be reported in METARs. When the variation of the RVR values shows an upward or downward tendency, this should be indicated by the abbreviation 'U' or 'D', respectively. In cases when actual fluctuations during the 10-minute period show no distinct tendency, this should be indicated using the abbreviation 'N'. When indications of tendency are not available, no abbreviations should be included.
 - 3.1.4.2 When the RVR is above the maximum value that can be determined by the system in use, it shall be reported using the abbreviation 'ABV' in local routine and local special reports, and when the RVR is below the minimum value that can be determined by the system in use, it shall be reported using the abbreviation 'BLW' in local routine and local special reports.

3.2 Accuracy of Meteorological Measurement or Observation

The United Nation's World Meteorological Organisation (WMO) has assessed the attainable accuracy of meteorological measurement or observation of a number of meteorological parameters, described below. However it should be noted that in most cases this exceeds the requirements for aeronautical meteorological observations specified by ICAO.

Element	Accuracy of Measurement or Observation
Mean surface wind	Direction: ± 5° Speed: ± 1 KT up to 10 KT, ± 10% above 10 KT
Variations from the mean surface wind speed	± 1 KT
Visibility	± 50 M up to 550 M ± 10 % between 600 M and 1500 M ± 20 % above 1500 M
RVR	± 10 M from 50 M to 400 M ± 25 M from 400 M to 800 M ± 10 % above 800 M
Cloud amount	± 1 okta
Cloud height	± 30 FT up to 300 FT ± 10 % above 300 FT
Air temperature and dew point temperature	± 1°C
Pressure value (QNH, QFE)	± 0.5 hPa

- 3.3 Details of UK aerodromes certified to provide METARs are listed in Table 3.5.3.2. Whilst a list of those aerodromes certified to provide local observations only is given in paragraph 3.7.
- 3.4 **Aerodrome Weather Warnings Service**
 - 3.4.1 Aerodrome Warnings will be issued at the times shown in the table below, and for the periods of validity indicated, if one or more

GEN 3.5 METEOROLOGICAL SERVICES (continued)

be included. Applicants will be advised of the time at which the information will be available and the means of delivery.

5.4 Additional Meteorological Services

5.4.1 When specialist, non-standard, aviation meteorological services additional to those given above are required (eg forecaster briefings for aerial photography, test flying, crop spraying and for outlooks for over a day ahead), they may be obtained on a repayment basis by prior arrangement with the Met Office. Enquiries should be directed to the Met Office address at paragraph 1.2, or to one of the Forecast Offices listed at Table 3.5.4.1

6 Aircraft Reports

6.1 Routine Aircraft Observations

6.1.1 Routine Observations in the Scottish FIR/UIR, the London FIR/UIR or the Shanwick Oceanic FIR are only required to be made by aircraft equipped with air ground data link.

6.2 Special Aircraft Observations

6.2.1 Special aircraft observations are required to be issued by aircraft as special air-reports in the Scottish FIR/UIR, the London FIR/UIR or the Shanwick Oceanic FIR whenever any of the following conditions are encountered or observed:

- a) moderate icing (MOD ICE) or severe icing (SEV ICE); or
- b) moderate turbulence (MOD TURB) or severe turbulence (SEV TURB); or
- c) severe mountain wave (SEV MTW); or
- d) thunderstorms with or without hail (that are obscured, embedded, widespread or in squall lines) (TSGR or TS); or
- e) if volcanic ash cloud is observed or encountered, or if pre-eruption volcanic activity or a volcanic eruption is observed to assist other Users, ATS Providers and the Volcanic Ash Advisory Centre (VAAC);

6.2.2 Special aircraft observations may be reported when other meteorological conditions are encountered which, in the opinion of the pilot-in-command, might affect the safety or markedly affect the efficiency of other aircraft operations, for example, other en-route weather phenomena specified for SIGMET messages, or adverse conditions during the climb-out or approach not previously forecast or reported to the pilot-in-command.

6.3 Turbulence and Icing Reporting Criteria

6.3.1 Turbulence (TURB)

6.3.1.1 While MOD and SEV TURB are to be reported, TURB remains an important operational factor at all levels but particularly above FL 150 therefore all pilots encountering TURB are requested to report this to the ATS Unit with whom they are in radio contact. High level turbulence (normally above FL 150 not associated with cumuliform cloud, including thunderstorms) should be reported as TURB, preceded by the appropriate intensity or preceded by Light or Moderate Chop.

Table 3.5.6.1 — TURB and other Turbulence Criteria Table		
Incidence	Occasional — less than 1/3 of the time	Intermittent — 1/3 to 2/3 Continuous — more than 2/3
Intensity	Aircraft Reaction (transport size aircraft)	Reaction Inside Aircraft
Light	Turbulence that momentarily causes slight, erratic changes in altitude and/or attitude (pitch, roll, yaw) IAS fluctuates 5 - 15 KT. (<0.5 g at the aircraft's centre of gravity) Report as ' Light Turbulence '. or; turbulence that causes slight, rapid and somewhat rhythmic bumpiness without appreciable changes in altitude or attitude. No IAS fluctuations. Report as ' Light Chop '	Occupants may feel a slight strain against seat belts or shoulder straps. Unsecured objects may be displaced slightly. Food service may be conducted and little or no difficulty is encountered in walking.
Moderate	Turbulence that is similar to Light Turbulence but of greater intensity. Changes in altitude and/or attitude occur but the aircraft remains in positive control at all times. IAS fluctuates 15 - 25 KT. (0.5-1.0g at the aircraft's centre of gravity). Report as ' Moderate Turbulence '. or; turbulence that is similar to Light Chop but of greater intensity. It causes rapid bumps or jolts without appreciable changes in altitude or attitude. IAS may fluctuate slightly. Report as ' Moderate Chop '.	Occupants feel definite strains against seat belts or shoulder straps. Unsecured objects are dislodged. Food service and walking are difficult.

GEN 3.5 METEOROLOGICAL SERVICES (continued)

Table 3.5.6.1 — TURB and other Turbulence Criteria Table		
Incidence	Occasional — less than 1/3 of the time	Intermittent — 1/3 to 2/3 Continuous — more than 2/3
Intensity	Aircraft Reaction (transport size aircraft)	Reaction Inside Aircraft
Severe	Turbulence that causes large, abrupt changes in altitude and/or attitude. Aircraft may be momentarily out of control. IAS fluctuates more than 25 KT. (> 1.0 g at the aircraft's centre of gravity). Report as ' Severe Turbulence '	Occupants are forced violently against seat belts or shoulder straps. Unsecured objects are tossed about. Food service and walking impossible.
<p>Note: Pilots should report location(s), time(s) (UTC), incidence, intensity, whether in or near clouds, altitude(s) and type of aircraft. All locations should be readily identifiable. Turbulence reports should be made on request, or in accordance with paragraph 6.2. Example:</p> <p>a) Over Pole Hill 1230 intermittent Severe Turbulence in cloud, FL 310, B747.</p> <p>b) From 50 NM north of Glasgow to 30 NM west of Heathrow 1210 to 1250, occasional Moderate Chop TURB, FL 330, MD80.</p> <p>Note: The UK does not use the term 'Extreme' in relation to turbulence.</p>		

6.3.2 **Windshear Reporting Criteria**

6.3.2.1 Pilots using navigation systems providing direct wind velocity readout should report the wind and altitude/height above and below the shear layer, and its location. Other pilots should report the loss or gain of airspeed and/or the presence of up-or-down draughts or a significant change in crosswind effect, the altitude/height and location, their phase of flight and aircraft type. Pilots not able to report windshear in these specific terms should do so in terms of its effect on the aircraft, the altitude/height and location and aircraft type, for example, 'Abrupt windshear at 500 feet QFE on finals, maximum thrust required, B747'. Pilots encountering windshear are requested to make a report even if windshear has previously been forecast or reported.

6.3.3 **Airframe Icing**

6.3.3.1 All pilots encountering unforecast icing are requested to report time, location, level, intensity, icing type* and aircraft type (see Table 3.5.6.2 below) to the ATS Unit with whom they are in radio contact. It should be noted that the following icing intensity criteria are reporting definitions; they are not necessarily the same as forecasting definitions because reporting definitions are related to aircraft type and to the ice protection equipment installed, and do not involve cloud characteristics. For similar reasons, aircraft icing certification criteria might differ from reporting and/or forecasting criteria.

Table 3.5.6.2 — Airframe Icing Intensity Criteria	
Intensity	Ice Accumulation
Trace	Ice becomes perceptible. Rate of accumulation slightly greater than rate of sublimation. It is not hazardous even though de-icing/anti-icing equipment is not utilised, unless encountered for more than one hour.
Light	The rate of accumulation might create a problem if flight in this environment exceeds one hour. Occasional use of de-icing/anti-icing equipment removes/prevents accumulation. It does not present a problem if de-icing/anti-icing equipment is used.
Moderate	The rate of accumulation is such that even short encounters become potentially hazardous and use of de-icing/anti-icing equipment, or diversion, is necessary.
Severe	The rate of accumulation is such that de-icing/anti-icing equipment fails to reduce or control the hazard. Immediate diversion is necessary.
*Rime Ice:	Rough, milky, opaque ice formed by the instantaneous freezing of small supercooled water droplets.
*Clear Ice:	A glossy, clear, or translucent ice formed by the relatively slow freezing of large supercooled water droplets.

6.3.4 **Volcanic Ash Reporting**

6.3.4.1 Whenever volcanic ash is observed or encountered, a special air-report shall be provided; additionally a post-flight report shall be made on the Volcanic Activity Reporting (Model VAR). All elements which are observed shall be recorded and indicated respectively in the appropriate places on the Model VAR. Once completed, the form should be submitted to the UK Met Office by telephone (+44 (0)330 -1354246) or email to AviationForecasters@metoffice.gov.uk and emarc@metoffice.gov.uk.

GEN 3.6 SEARCH AND RESCUE

1 Responsible Services

1.1 Responsibility for Search and Rescue (SAR) for civil aircraft within the UK Search and Rescue Region (SRR) rests with the Department for Transport (DfT). Responsibility for Aeronautical SAR Coordination is discharged by the UK Joint Rescue Centre (UK JRCC), which is staffed by specialist personnel of His Majesty's Coastguard (HMCG). SAR Helicopter Services are provided under contract to DfT by Bristow Helicopters Ltd, while fixed wing SAR Services are provided under contract to DfT by 2Excel Aviation Ltd and Reconnaissance Ventures Ltd.

1.1.1 The DfT is responsible for SAR policy for civil aviation.

Post: Department for Transport, Airports Policy Division, Great Minster House, 76 Marsham Street, London, SW1P 4DR
Phone: 020-7944 4393
Fax: 020-7944 2192

1.1.2 The Civil Aviation Authority (CAA) acts as adviser on SAR to the DfT. Queries on SAR for civil aviation, including matters arising from this section of the AIP, should be addressed to:

Post: Airspace Regulation, CAA, 1 NE Aviation House, Beehive Ring Road, Crawley, West Sussex, RH6 0YR
Email: airspace@caa.co.uk

1.1.3 SAR aviation services are managed by the Maritime and Coastguard Agency (MCA) Commercial Directorate.

Post: MCA Commercial Directorate (Aviation). Spring Place, 105 Commercial Road, Southampton, Hampshire, SO15 1EG
Phone: 023-8032-9416 or 023-8032-9486

1.1.4 Implementation of SAR services for civil aviation throughout the UK SRR is undertaken by the UK JRCC.

Post: UK JRCC, 12 Kites Croft Business Park, Fareham, Hampshire, PO14 4LW
Phone: 023-8032-9100

1.2 Applicable ICAO Documents

1.2.1 The Standards, Recommended Practices and, when applicable, the procedures contained in the following ICAO documents are applied:

Annex 2	-	Rules of the Air;
Annex 3	-	Meteorological Services for International Air Navigation;
Annex 6	-	Operation of Aircraft - Parts I, II & III;
Annex 10	-	Aeronautical Telecommunications - Volume I & II;
Annex 11	-	Air Traffic Services;
Annex 12	-	Search and Rescue;
Annex 13	-	Aircraft Accident Investigation;
Annex 15	-	Aeronautical Information Services;
Annex 17	-	Security;
Annex 18	-	The Safe Transport of Dangerous Goods by Air;
Doc 4444 ATM/501	-	Procedures for Air Navigation Services - Air Traffic Management;
Doc 7030	-	Regional Supplementary Procedures;
Doc 7754	-	Air Navigation Plan - European Region;
Doc 8755	-	Air Navigation Plan - North Atlantic;
Doc 9731	-	IAMSAR Manual.

2 Area of Responsibility

2.1 In general, aeronautical SRR boundary coincides with FIR boundary. The UK SRR comprises the London, Scottish and Shanwick FIRs but to the North and East of the UK, the boundaries with Iceland, Norway, Denmark and Germany have been modified by a series of bilateral agreements. Under these agreements, the SRR boundary no longer follow the FIR boundaries but have been aligned with the median line. The UK SRR boundary co-ordinates are given below and a chart depicting the areas of responsibility is shown after GEN 3.6, paragraph 6.12, Tables 1 and 2.

2.2 UK JRCC. The area of responsibility is enclosed by the lines joining the following points:

610000N 0300000W - 610000N 0040000W - 632833N 0004622W - 632833N 0000000E - 620000N 0000000E
620000N 0012222E - 614410N 0013329E - 612122N 0014718E - 595346N 0020430E - 591722N 0014236E
582546N 0012854E - 575416N 0015748E - 563540N 0023642E - 560510N 0031455E - 555458N 0032055E

GEN 3.6 SEARCH AND RESCUE (continued)

555004N 0032355E - 554552N 0032208E - 543715N 0025349E - 542245N 0024543E - 531803N 0030319E
 524657N 0031213E - 523715N 0031055E - 522457N 0030325E - 521721N 0025555E - 520557N 0024249E
 515857N 0023731E - 514815N 0022849E - 513000N 0020000E - 510700N 0020000E - 510000N 0012800E
 504000N 0012800E - 500000N 0001500W - 500000N 0020000W - 485000N 0080000W - 450000N 0080000W
 450000N 0300000W - 610000N 0300000W.

with the exception of the Shannon FIR which is bounded by lines joining the following points:

540000N 0150000W - 543400N 0100000W - 544500N 0090000W - 552000N 0081500W - 552500N 0072000W
 552000N 0065500W - 542500N 0081000W - 535500N 0053000W - 522000N 0053000W - 510000N 0080000W
 510000N 0150000W - 540000N 0150000W.

3 Types of Service

3.1 Locations and types of dedicated SAR facilities are listed below, and shown on the chart published after GEN 3.6, paragraph 6.12, Tables 1 and 2:

- a) HMCG helicopters, under DFT contract;
- b) MCA fixed wing aircraft, under DFT contract.

3.1.1 Specialized SAR helicopters are equipped with winch gear.

Table 3.6.3.1 State of readiness of individual SAR units		
Unit	State of Readiness	Remarks
HM Coastguard	15 min (0800-2200 local time) 45 min (2200-0800 local time)	
MCA Fixed Wing Aircraft	45 min (0800-2200) 60 min (2200-0800)	

3.1.2 In undertaking Aeronautical SAR Coordination for incidents on land or at sea, the UK JRCC works in partnership with those agencies with statutory responsibility, or primacy, for SAR Coordination respective of the environment of the incident. In responding to aeronautical incidents, the UK JRCC works in partnership with the Distress and Diversion Cell (D&D), 78 Sqn Swanwick Mil, based at NATS Swanwick. In responding to satellite emergency beacon alerts, the UK JRCC works in partnership with the UK Mission Control Centre, which is co-located with the JRCC. Through these agencies, the JRCC can call upon the following resources for assistance:

- a) HM Coastguard Coastal Rescue Teams;
- b) Royal National Lifeboat Institution vessels;
- c) MoD aircraft, vessels and personnel;
- d) Police, Fire and Ambulance services;
- e) Commercial Air Transport aircraft;
- f) Merchant and leisure vessels;
- g) Civilian Volunteer Land Rescue Teams;
- h) RAF Mountain Rescue;
- i) COSPAS/SARSAT and SAR SPOT satellite distress alerting systems;
- j) Neighbouring and International SAR Agencies;
- k) Commercial SAR Aircraft.

3.1.3 Distress Frequencies

3.1.3.1 SAR aircraft and other military aircraft carry the distress frequencies shown in table 3.6.3.2:

Table 3.6.3.2 Distress frequencies carried by SAR aircraft and other military aircraft		
Frequency	Speech Facility	Homing Facility
121.500 MHz	a) HMCG helicopters. b) MCA fixed wing aircraft. c) MoD helicopters and fixed wing aircraft. d) Commercial Air Transport aircraft.	a) HMCG helicopters. b) Some MoD helicopters and fixed wing aircraft.
243.00 MHz	a) HMCG helicopters. b) MoD helicopters and fixed wing aircraft.	a) HMCG helicopters. b) Some MoD helicopters and fixed wing aircraft.

GEN 3.6 SEARCH AND RESCUE (continued)**3.1.4 Scene of Search Frequencies**

3.1.4.1 SAR aircraft may use any of the following frequencies as a Scene of Search frequency:

	123.100 MHz	Civil;		156.300 MHz	Channel 6 VHF/FM Marine;
	282.800 MHz	NATO;	*	156.800 MHz	Channel 16 VHF/FM Marine;
*	5680 kHz	Civil/Military-Day (SAMAR 1);	*	3023 kHz	Civil/Military-Night (SAMAR 1);
*	3085 kHz	Military-Night (SAMAR 4);	*	5695 kHz	Military-Day (SAMAR 4);
			*	8364 kHz	International intercommunication.
*	Emission J3E or 6K00A3EJN				

Note: Other HF frequencies may be used as directed by the controlling JRCC.

4 SAR Agreements

4.1 As a Contracting State under the Convention on International Civil Aviation, the United Kingdom is committed to providing SAR services for international civil aviation throughout defined areas on a 24 hour basis. These areas consist of the UK overland area and adjacent sea areas to approximately midway to the European mainland to the east and to 030W over the North Atlantic, excluding the Shannon FIR (see chart published after GEN 3.6, paragraph 6.12, Tables 1 and 2).

4.1.1 The International Civil Aviation Organization's (ICAO) Regional Air Navigation Plans do not define the scale of effort which should be available but identify the required facilities by types of services which should be provided with due regard to the density of traffic and the size and passenger capacity of aircraft operating in the region.

4.1.2 As a member of NATO, a contracting State under the ICAO Convention and according to bilateral inter-RCC agreements, the United Kingdom can seek SAR assistance from the resources of other nations as necessary.

4.1.3 When the UK JRCC requests the assistance of suitable SAR aircraft from a neighbouring State RCC, it will provide all pertinent details on the scope of the assistance required. Entry and flight of the requested SAR aircraft into or over the territory of the UK for the purpose of conducting SAR operations may be conducted in accordance with the procedures and approvals granted by the State of the operator of the aircraft. If it is necessary for the requested SAR aircraft to land at a UK airfield or to make use of other facilities in the course of performing its assigned SAR task, the UK JRCC will coordinate arrangements and liaise with the appropriate organisations to facilitate the taking of such measures or actions.

5 Conditions of Availability

5.1 The availability of both British military SAR facilities is on the authority of MoD. The availability of Foreign civilian and NATO military SAR facilities is on the authority of the appropriate RCC which remains responsible for operational control of such facilities throughout the duration of the requirement (whether a Maritime RCC (MRCC) or Joint Rescue Coordination Centre (JRCC)).

6 Procedures and Signals Used**6.1 The Rescue Organisation**

6.1.1 When D&D has reason to believe that an aircraft is in a state of emergency, it will alert the JRCC who will, in turn, alert SAR units and the Police (D&D may alert the Police directly in extremis if appropriate to do so); the police will notify civilian MRT, fire, ambulance and hospital services. In addition, the JRCC may alert RAF Mountain Rescue Teams, via the MoD. Should the first report of an accident be given to the police by a member of the public, the police will alert fire and other services. The police will also advise the ACC of the rescue action being taken and give full details.

6.1.2 The JRCC will handover responsibility, or primacy, for SAR Coordination to the best placed Maritime Rescue Coordination Centre should an Aviation SAR incident become a Maritime accident. Where an Aviation SAR incident occurs across an SRR boundary, the UK JRCC will liaise with the relevant foreign RCC, confirming the individual RCC responsibilities, and primacy, for the response.

6.1.3 When the location of a civil aircraft which has crashed on land is known, and no air search is necessary, the civil ground organization (normally the police) takes responsibility for dealing with the incident. However, it is essential that both D&D and the JRCC are informed to avoid duplication of effort and for expert consideration of any SAR back-up services which could be required.

6.1.4 In the vicinity of aerodromes it is not possible to define in specific terms where the responsibility of the SAR services begins and that of the aerodrome emergency services ends with respect to potential incidents, so the closest co-operation must be maintained between these two services.

6.1.5 Direct speech circuits exist between the UK JRCC and the (D&D) cell at the 78 Sqn Swanwick Mil (Co-located at NATS Swanwick). Under normal circumstances, the quickest and most reliable means for an aerodrome to alert the JRCC is via D&D cell, but a direct

GEN 3.6 SEARCH AND RESCUE (continued)

call to the JRCC on any of its listed numbers may at times be more expedient.

6.2 Alerting

6.2.1 The alerting service is available for all aircraft which are known by the air traffic services to be operating within the UK Flight Information Regions (FIRs). The responsibility for initiating action normally rests with the Air Traffic Service Unit (ATSU) which was last in communication with the aircraft in need of SAR assistance or which receives such information from an external source.

6.2.2 If a distress signal and/or message is intercepted by their aircraft, pilots are to inform the appropriate ATSU giving all available information who are in turn to inform D&D. The UK JRCC does not maintain a listening watch on VHF.

6.2.3 Difficult Areas for SAR

6.2.3.1 Although the UK has not formally designated land or sea areas where SAR operations would be difficult, EASA regulations state that all General Aviation (GA) aircraft, should carry appropriate survival equipment, including an Emergency Locator Transmitter (ELT) or Personal Locator Beacon (PLB).

6.2.3.2 The following areas within the UK are considered to be difficult from a SAR aspect:

The Scottish Highlands; The Lake District; The Peak District of Derbyshire;	The Hebrides, Orkneys and Shetlands; The Yorkshire Moors; Exmoor;	The Pennine Range; The Welsh Mountains; Dartmoor.
---	---	---

6.2.4 For flight over the North Atlantic (NAT), International GA (IGA) pilots should pay particular attention to the varying requirements of the NAT provider states. Canada, Iceland, Denmark and Greenland have requirements more stringent than those of the UK particularly regarding the carriage of ELTs, survival equipment, communications, aircraft inspections and navigation equipment, fuel reserves and instrument ratings. IGA pilots planning trans-oceanic flight are strongly recommended to read the North Atlantic International General Aviation Operations Manual and to seek advice and guidance from the UK Aeronautical Information Service (see GEN 3.1).

6.3 Communication

6.3.1 Distress and urgency communications within the UK SRR are in accordance with standard international procedures.

6.3.2 Emergency Service

6.3.2.1 An emergency communications and aid service is continuously available on 121.500 MHz. The service covers most of the UK above 3000 FT, but in many areas reception is good below this altitude. In an emergency, pilots who have difficulty in establishing communication on the frequency in use should make use of the service on 121.500 MHz.

6.3.2.2 Executive control is exercised from D&D, callsign 'London Centre', throughout the London and Scottish FIRs/UIRs. Aerodromes capable of providing an emergency service on 121.500 MHz are listed via paragraph 6.5 below.

6.3.2.3 It is not necessary for pilots in emergency to address the initial 'MAYDAY' or 'PAN PAN' call to a specific unit. The D&D Emergency Controller at Swanwick will answer the call irrespective of the location of the transmission. If transponder fitted, in emergency select code 7700 (emergency) or 7600 (radio failure) to assist the Emergency Controller in determining your position and providing a timely response.

6.3.2.4 Pilots should be aware that the airspace west of ATS Route N864 has limited VHF Direction Finding (VDF) coverage and the Emergency Controller's ability to locate an aircraft using VDF is dependent on the aircraft's position and altitude. Furthermore, at the D&D, due to the lack of primary radar in the Southwest, non-transponding aircraft will be difficult to locate and will not receive a radar service from the D&D Emergency Controller. Response time to any incident is governed by the amount of assistance received from other ATC units and the Coastguard authorities.

6.4 Emergency Satellite Voice Calls from Aircraft

6.4.1 For aircraft flying in the London, Scottish and Shanwick FIRs/UIRs, in the event that all other means of communication have failed, dedicated satellite voice telephone numbers for the D&D section and for the Shanwick OAC have been programmed into the aeronautical Ground Earth Stations of the Inmarsat Signatories.

6.4.2 The allocated airborne numbers for use via the aircraft satellite voice equipment are as follows:

(a) Shanwick OAC	423201	To be used only in emergency situations. This facility is provided in addition to the number for routine ATS messages via Shanwick Radio (425002) and allows direct pilot/controller communication.
(b) 78, Sqn, Swanwick D&D	423202	

GEN 3.6 SEARCH AND RESCUE (continued)

- 6.4.3 It must be emphasised that these numbers are for emergency use only, when all other airborne means of communication with the appropriate ATSU have failed.
- 6.4.4 Almost instantaneous aircraft position fixing by auto-triangulation is available H24 on 121.500 MHz over most of central and southeast England above 3000 FT AMSL but down to 2000 FT AMSL in the vicinity of the London airports. Outside the coverage of the auto - triangulation system, position may be fixed by use of surveillance equipment or by investigative measures based upon last known position and when, speed, direction of travel and observable features from the aircraft which may take several minutes and multiple transmissions.
- 6.4.5 Aircraft operating in the Shanwick OCA are required to maintain a continuous watch on 121.500 MHz (see ENR 2.2 (Shanwick Oceanic Control Area (North Atlantic Region - NAT) paragraph 9). For operations over the sea, out of range of land based emergency communications, pilots, particularly IGA pilots at low altitude, should, if in difficulty, attempt to establish contact with aircraft at higher levels.
- 6.4.6 When an emergency is ended, it is important that the controlling authority is so informed and that the pilot states his intentions before leaving the frequency in use. This will ensure that SAR actions already underway are cancelled.

6.5 Units with Emergency Facilities on 121.500 MHz

- 6.5.1 In addition to the 24 hour service provided by the London ACC, there are a number of UK aerodromes that can provide a service on 121.500 MHz, including UK civil aerodromes listed in the ICAO European Air Navigation Plan, Volume I Part II (AOP) Table AOP I-1, International Aerodromes Required in the EUR Region. At Brize Norton which is the Military Emergency Diversion Aerodrome (MEDA), a 24 hour communications monitor is maintained on 121.500 MHz. The civil aerodromes listed do not routinely monitor 121.500 MHz, but this frequency can be activated as necessary to provide a clear channel for emergency traffic. This facility can be requested by direct call to the unit concerned on an in-use frequency, or, more usually, by request from an ACC.

6.5.2 Aircraft Not Equipped with Radio

- 6.5.2.1 A pilot of an aircraft not equipped with radio is advised to file a Flight Plan if he intends to fly more than 10 NM from the coast or over sparsely populated or mountainous areas as this will assist rescue action should the aircraft be reported overdue. Pilots should particularly note that Flight Plans can only be delivered to destinations which are on the AFS or linked to the AFS by the parent station scheme and that search action can only be initiated if an aircraft is reported overdue. This action is performed by the destination aerodrome ATSU, when established, but pilots intending to fly to destinations which are not on the AFS or linked to them by a parent station should advise a responsible person at their destinations of the intended flight and arrange for that person to notify the ATS authorities in the event of non-arrival.

6.6 Flight in Areas in which Search and Rescue Operations are in Progress

- 6.6.1 To avoid interference with SAR operations and to avoid unnecessary collision hazard, pilots are strongly advised not to fly near an area where SAR operations are known to be in progress. Crews of aircraft involved in the SAR operation may be performing complex manoeuvres, often in poor weather conditions, and may not be able to maintain a good lookout for itinerant aircraft.
- 6.6.2 Pilots who consider it necessary to fly in a known area of SAR operations should:
- Contact the JRCC by telephone before departure;
 - file a Flight Plan giving times of entering and leaving the area and the height to be flown, ensuring that the JRCC is included among the addressees;
 - obtain the latest information about weather conditions en-route and in the search area;
 - monitor the VHF International Distress (121.500 MHz) and the Scene of Search (123.100 MHz) frequencies when in the vicinity, but avoid transmitting on these frequencies.
- 6.6.3 Under certain circumstances, a Temporary Danger Area (TDA) may be established around the scene of an incident. This will normally be established by NOTAM. If such a measure fails to achieve its objective, Restriction of Flying (Emergency) Regulations may be invoked. These will make it an offence for an aircraft to be flown in the designated area. Such regulations will also be promulgated by NOTAM (see also ENR 1.1.5).

6.7 Action by Survivors

(See also paragraphs 8 and 10)

- 6.7.1 Basic procedures that can assist SAR operations are set out below.
- 6.7.1.1 Life Rafts

Survivors should use some or all of the following methods when search aircraft or surface craft are seen or heard:

- Fire distress flares or cartridges;
- use some object with a bright flat surface as a heliograph;
- flash torch or mobile phone;

GEN 3.6 SEARCH AND RESCUE (continued)

- d) fly anything in the form of a flag and, if possible, make the international distress signal by flying a ball, or something resembling a ball, above or below it;
- e) use the fluorescent marker to leave a trail in the sea.

6.7.1.2 Crash Landing in Isolated Area

Survivors should use some or all of the following methods to attract attention when aircraft or surface craft are heard or seen:

- a) Visual and ground signals (see paragraphs 6.10 to 6.12 and the Ground to Air Emergency Signalling Code Tables 1 and 2 following paragraph 6.12);
- b) make the aircraft as conspicuous as possible by spreading any parachutes or other material over the wings and fuselage;
- c) smoke or fire. A continuously burning fire is recommended, with material kept ready to hand to cause it to smoke at short notice. A quantity of green branches, leaves, oil or rubber from the aircraft should achieve the desired result. Three fires in the form of a triangle make a good signal especially at night.

6.8 Emergency Locator Transmitters (ELT) and Personal Locator Beacons (PLBs)

6.8.1 The COSPAS/SARSAT (C/S) system uses near-polar orbital satellites, the LEOSAR system, Geostationary satellites, the GEOSAR system, and global orbiting satellites called the MEOSAR system, to detect and localize signals from ELTs, PLBs and EPIRBs. The UK has a Local User Terminal (LUT), currently at Lee-On-Solent, that processes the satellite downlink from all three satellite constellations, and passes ELT, PLB and EPIRB locations to the UK Mission Control Centre (UKMCC) collocated at the JRCC in Fareham. These beacons operate on the 406.0 - 406.1 MHz frequency and detect transmissions across the entire globe. Location accuracy is normally better than 5 KM through the LEOSAR satellites, whereas the Geostationary satellites require position information to be included in the beacon alert transmission, achieved through a GNSS chip contained within the beacon, which can provide position accuracy to greater than 1 KM. The MEOSAR system, when at Full Operational Capability, will achieve greater location accuracy of 5 KM or less, 95% of the time, with near instantaneous alert information. This is due to the unique continuous global coverage. Position resolution (5 KM or better) via the LEOSAR system does not usually exceed 90 minutes. This is due to this system working solely on Doppler and requires at least two satellite passes, for position resolution. If the beacon has a GNSS chip within it, position detection and position information is near instantaneous, via the GEOSAR satellites.

6.8.2 Because the C/S system can detect 406 MHz beacon transmissions throughout the entire globe, and because much of the UK SRR covers an area of busy civil and military air traffic where the distress frequencies are routinely monitored, survivors should switch on an ELT without delay.

6.8.3 Valuable SAR assets can be expended searching for the source of inadvertent distress transmissions and thus delay the response to an actual emergency situation; great care should be taken to avoid inadvertent transmissions, especially during maintenance or testing of 406 MHz beacons, which is when the beacon should be placed in self-test mode. Should inadvertent transmissions occur, a report should be made immediately to the nearest MCC to where the beacon is currently located, to cancel an unnecessary SAR response. If the beacon is within the UK, contact should be made to the UKMCC on +44(0)34438-20902.

6.8.4 ELT/PLB coding and registration arrangements are provided at AIC P 053/2018.

6.9 SAR Callsigns

6.9.1 Within the UK SRR, forces engaged in SAR operations normally use callsigns assigned by the JRCC and prefixed by the root word 'RESCUE'. Fixed-wing assets use a 2 figure number, for example 'RESCUE 41'. DFT contracted SAR helicopters use the prefix 'RESCUE' plus a 3 digit numeric, for example 'RESCUE 175'.

6.10 Search and Rescue Signals

6.10.1 The SAR signals to be used are in accordance with international procedures. When signalling to surface craft, visual signals can be more effective than audio signals because of possibly high noise levels on board the surface craft.

6.10.2 Signals to Surface Craft

ENR 1 GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

1 ATS Routes and Upper Control Areas (UTA)

1.1 ATS Routes — Description

- 1.1.1 ATS Routes are predicated upon significant geographical points which may or may not coincide with the location of a radio navigation aid. These significant points are shown in column 1 of the table depicted in ENR 3. Any coincident radio navigation aid is depicted immediately underneath.
- 1.1.2 Except where stated otherwise the width of an Airway is 5 NM either side of a straight line joining each two consecutive points shown in column 1 of the table. Upper ATS Routes have no declared width but for the purposes of ATS provision are deemed to be 5 NM either side of a straight line joining each two consecutive points. The vertical extent is shown in column 3 of the table. Where lower limits of Airways are defined as Flight Levels an absolute minimum altitude of 3001 FT applies unless otherwise stated in column 3 and the minimum cruising level shown in column 5 may not always be available.
- 1.1.3 Unless otherwise stated the ATS Routes catalogued in the table in ENR 3 are designed to contain aircraft navigating to RNAV 5 (ICAO DOC 9613 - AN/937 refers). →
- 1.1.4 The ATS Route network is hereby notified for the purposes of the UK Air Navigation Order.
- 1.1.5 When an ATS Route transits a TMA, the status of the TMA takes precedence in airspace classification and conditions of use. Aircraft filed to fly on an ATS route that transits a TMA are required to be a minimum of RNAV 5 compliant.
- 1.1.6 CDR - A route which is permanently plannable during the times published in ENR 3 and may be used tactically at the discretion of ATC. Conditional routes (CDRs) are non-permanent ATS routes. They are designed to complement the permanent ATS route network and to allow flights to be planned on ATS routes, or portions thereof, that are not always available.

In the ATS route tables hereafter the CDR category is indicated under "Route availability" as "CDR" and is permanently plannable during the times published in the AIP. Due to military or other activities, the route may be closed. The unavailability is published daily in the EAUP/EUUP (European airspace use plan/European updated airspace use plan) in table "ATS Route and CDR Type 1 Closure". The EAUP/EUUP is published on the Network Portal (NOP): <https://www.public.nm.eurocontrol.int/PUBPORTAL/>. In the event of a short notice unavailability of a CDR, rerouting around an associated AMC-Manageable Area will be made on ATC instructions.

- 1.1.7 In addition to published ATS routes, specific direct (DCT) options are allowed via the RAD Appendix 4. Specified DCT routes connecting the Reykjavik/Scottish boundary points and the UK Upper ATS route network should be used when flight planning to cross 61N between 000E and 006W.

1.2 ATS Route Designators

- 1.2.1 In accordance with ICAO Annex 11, the following prefix designators are used to indicate European Regional RNAV Routes, L, M, N, P and for non Regional RNAV Routes Q, T, Y, Z. Routes designated with these prefixes are compulsory RNAV at all levels except when otherwise notified.

1.3 Free Route Airspace

- 1.3.1 Free Route Airspace (FRA) is a volume of airspace in which the ATS route structure has been removed allowing operators to flight plan any DCT route option of their choosing between specific FRA entry/exit/arrival/departure and published intermediate waypoints.

FRA lateral and vertical limits are included in ENR 2.2 and depicted at ENR 6-70.

1.4 Airspace Security Warnings by the Department for Transport

1.4.1 Introduction

- 1.4.1.1 Following the loss of a Malaysian airliner over Ukraine in July 2014, the Department for Transport (DfT), with partners including the CAA and NATS, undertook a review of the provision of security advice to UK air operators by government, seeking to enhance and streamline extant processes.

- 1.4.1.2 Security advice to UK air operators by government is issued in the form of a NOTAM to provide guidance or direction on airspace security risks. Longer term, ongoing warnings are included within the UK Aeronautical Information Publication (AIP). The DfT has developed an Airspace Security Warning Protocol that culminates in the issue of an airspace security warning as V Series NOTAM. Most of these NOTAMs will relate to potential risks to civil aircraft from surface-to-air missiles. However, the use of a NOTAM could also be for other security related threats that may arise.

1.4.2 Information

ENR 1.1 GENERAL RULES (continued)

- 1.4.2.1 The opening text of the NOTAM takes the form: "SECURITY - HAZARDOUS SITUATION [COUNTRY/IES]". The NOTAM will clearly specify the particular FIR(s) affected, and, where appropriate, give more precise details of the geographic area of concern, using coordinates, or by other means of demarcation (e.g. "...IN THE xxxx FIR, EAST OF 0310000E"). This will be followed by a brief description of the type of threat, e.g. "POTENTIAL RISK FROM ANTI-AIRCRAFT WEAPONRY".
- 1.4.2.2 Where the potential risk is from Man-Portable Air Defence Systems (MANPADS), there is likely to be a restriction on flying below 25,000 FT AGL. Where there is a potential threat from air defence systems with a greater operational ceiling, this is likely to be 'Surface to Unlimited'. In the case of a threat from missiles, it is possible to extend their effective ceiling by launching from elevated terrain. For that reason, most height restrictions stated in an airspace security risk NOTAM will be noted as 'Above Ground Level' (AGL).
- 1.4.3 **Guidance**
- 1.4.3.1 Following the information on location and threat, there will (usually) be one of 3 forms of wording employed in expressing DfT's guidance to operators:
- "UK CIVIL AIR OPERATORS ARE ADVISED TO TAKE POTENTIAL RISK INTO ACCOUNT [IN FIR NAME] / WITHIN THE TERRITORY AND AIRSPACE OF [COUNTRY]".
 - "UK CIVIL AIR OPERATORS ARE RECOMMENDED NOT TO ENTER THE [FIR NAME] / TERRITORY AND AIRSPACE OF [COUNTRY]".
 - "IN ACCORDANCE WITH DIRECTION UNDER THE AVIATION SECURITY ACT 1982 UK CIVIL AIR OPERATORS SO SERVED ARE PROHIBITED TO ENTER THE [FIR NAME] / TERRITORY AND AIRSPACE OF THE STATE OF [COUNTRY]".
- 1.4.3.2 The wording will generally follow the patterns above, but could vary as, e.g., it may not always be possible to specify the precise nature of a potential security risk to aircraft, or, the geographic area may be complex to describe.
- 1.4.3.3 DfT will review the content of the NOTAM 60 days from the date of issue, 30 days prior to its expiry. Where advice is to remain in place, a NOTAM will in most cases be moved into the AIP, however it may also be extended for a further 90 days if deemed appropriate.
- 1.4.3.4 UK civil air operators planning to operate in airspace covered by DfT NOTAMs or AIP entries are strongly encouraged to contact DfT in advanced of operating to ensure they have the latest available information to inform the air carriers own risk assessment.
- 1.4.3.5 Queries can be made to:
- Global Risk & Response Team, Aviation Security Division: +44 (0)207-082 6639, Mon-Fri 0830-1630 (0730-1530);
If urgent, out of hours the Aviation Security Duty Officer can be contacted via +44 (0)207-944 3111.
- 1.4.4 **International Co-ordination**
- 1.4.4.1 As part of the international response to the loss of the Malaysian airliner over Ukraine, the International Civil Aviation Organisation has established a website from which links are available to relevant information from any participating State source to support the assessment of risks over conflict zones. As part of the UK's contribution to this ICAO initiative, all UK NOTAMs relating to conflict zone issues will be made available on the AIS Website, to which a link will be provided from the ICAO website.
- 1.4.4.2 It is possible that other States' advice may differ from that provided by the UK. UK NOTAMs or AIP entries concerning conflict zones represent the best advice available from UK Government sources in support of airline risk assessments. Nonetheless, if operators are concerned about advice from other States that conflicts with, or does not align with, that issued by the UK they should contact DfT on the numbers provided above.

ENR 1.1 GENERAL RULES (continued)

the Airway boundary, unless specific permission to do otherwise has been given by ATC.

1.6.1.5 Flights Crossing Airways in IFR

1.6.1.5.1 Pilots wishing to cross an Airway are required to file a flight plan either before departure or when airborne, and to request crossing clearance when at least ten minutes flying time from the intended crossing point.

1.6.1.5.2 Crossing clearance should be obtained as follows: Initial call - '..... (identification) request crossing (Airway) at (position)'. When instructed by ATC the following flight details should be passed:

- a) Identification;
- b) Aircraft type;
- c) Position and heading;
- d) Level and flight conditions;
- e) Position of crossing;
- f) Requested crossing level;
- g) Estimated time of crossing.

1.6.1.5.3 Requests for joining clearance of Airways for which the Controlling Authorities are London or Scottish Control should be obtained as follows:

- a) From the ATSU with which the aircraft is already in communication; or
- b) from the appropriate FIR Controller (if different from (a)); or, if it is not possible to obtain any form of clearance using (a) or (b), then
- c) on the published frequency of the Airway Controlling Authority.

1.6.1.5.4 Unless otherwise requested by ATC, aircraft crossing Airways will remain in communication with the FIR Controller and, after obtaining clearance, will report as follows when the aircraft is estimated to be at the boundary of the Airway:

'..... (identification) - Crossing (Airway) (position) (time) at (level)'.

1.6.1.5.5 Except where otherwise authorized by ATC, aircraft are required to cross the Airway by the shortest route (normally, at right angles) and to be in level flight at the cleared flight level on entering the Airway.

1.6.1.6 Airway Crossings or Penetrations in VMC - Civil Aircraft**1.6.1.6.1 Powered Aircraft - Airway Crossings (See also ENR 1.4, paragraph 2.1, Note 2)**

1.6.1.6.1.1 Powered aircraft may cross an Airway in VMC by day without compliance with the full IFR requirements in relation to the aircraft equipment provided that the pilot holds a valid Instrument Rating and that clearance is obtained from the appropriate ACC. This clearance must be obtained by RTF (normally on the FIR frequency); the request for clearance and a crossing report should be made as shown in paragraphs 1.4.1.5.3 and 1.4.1.5.5.

1.6.1.6.2 Powered Aircraft - Other penetrations of Airways (see also ENR 1.1, paragraph 4.1 and ENR 1.4, paragraph 2.1, Note 2).

1.6.1.6.2.1 Other flights in VMC, for example photographic survey flights, may also do so without compliance with full IFR requirements, provided that:

- a) Prior arrangements are made with the appropriate ACC;
- b) specific ATC clearance is obtained for individual flights;
- c) the aircraft can communicate by RTF on the appropriate Airways frequency.

1.6.1.7 Procedures for Military Aircraft

1.6.1.7.1 These procedures apply to military aircraft in all weather conditions.

1.6.1.7.1.1 Military aircraft flying along Airways will conform to the normal Airways procedures.

1.6.1.7.1.2 Military aircraft crossing Airways will do so either:

- a) Under the control of an approved Air Traffic Control Radar Unit; or
- b) under a positive Air Traffic Control Clearance.

1.6.1.7.1.3 In an emergency, where neither a radar nor a procedural crossing can be obtained, an Airway may be crossed at an intermediate 500 FT level. The intermediate 500 FT levels referred to are flight levels of whole thousands plus 500 FT.

1.6.2 Air Traffic Advisory Routes

None are currently established by the UK.

ENR 1.1 GENERAL RULES (continued)

1.6.3 The Upper Airspace Control Area

1.6.3.1 **Rules.** The following rules apply to aircraft flying in the Upper Airspace Control Area:

A flight plan must be filed; ATC permission must be obtained before the Area is entered; a continuous RTF watch must be kept on the appropriate frequency; the flight must be conducted in accordance with ATC instructions.

1.6.3.1.1 Altimeter Setting Procedures

1.6.3.1.1.1 All aircraft flying in the Upper Airspace Control Area must use the standard altimeter setting of 1013.2 mb.

1.6.3.1.2 Cruising Levels

1.6.3.1.2.1 Cruising levels will be allocated in accordance with the semi-circular rules depicted in the Table of Cruising Levels at ENR 1.7, paragraph 6. ATC may allocate a level not appropriate to the aircraft track, e.g. to effect transition to and from Oceanic levels.

1.6.3.1.2.2 The providers of Air Traffic Services in the United Kingdom Upper Airspace may apply a reduced vertical separation minimum of 1000 FT, between FL 290 and FL 410 inclusive, in the London and Scottish UIRs between aircraft that are RVSM approved. Aircraft that are not RVSM approved will be provided with a minimum of 2000 FT separation.

1.6.3.1.3 Exemptions

1.6.3.1.3.1 By prior agreement, Research and Development flights may be exempted from some of the rules and procedures but ATC will coordinate such flights.

1.6.3.1.3.2 The above rules and procedures do not apply to gliders.

1.6.3.1.3.3 By prior agreement, civil aircraft operating on contract to the MoD, aircraft undergoing air tests, or aircraft calibrating navigation aids may be exempted from the RVSM requirements.

1.6.3.2 Co-ordination of Civil and Military Aircraft

1.6.3.2.1 NATS radars cover most of the Upper Airspace. Within this cover, procedures exist for the co-ordination of civil and known military aircraft and they receive a radar control and/or a procedural ATC Service. Outside radar cover, a procedural ATC service is provided.

1.6.3.2.2 Military aircraft are normally under the control of NATS or autonomous radar Units but outside the Mandatory Radar Service Area, they are not obliged to receive an ATC Service. In these circumstances it is not always possible for ATC to offer avoiding action because the behaviour of such aircraft is unpredictable. However, whenever practicable, ATC will pass traffic information on them to aircraft under control.

1.6.3.2.3 Due to the routine operation of high-speed military aircraft within the UIRs, civil aircraft operators should flight plan only on the published ATS Route Structure when operating outside the FRA volume as defined in ENR 2.2. When traffic conditions permit, ATC may authorize aircraft to fly more direct tracks. When planning through FRA, operators shall avoid active SUAs and associated FBZs and NPZs at their discretion unless specific routings are mandated: See ENR 1.10 Sect 3.

1.6.3.2.3.1 For individual flights within the Scottish UIR and outside the area defined for FRA operations, operators may file outside the published ATS Route Structure subject to authorisation by the Scottish ACC ATC Watch Manager (Tel: 01292-692763, Fax: 01292-692872). Authorisation for routine operations outside the published ATS Route Structure must be obtained from ATC Operational Support at Scottish ACC (Tel: 01292-692611, Fax: 01292 - 692610).

1.6.3.2.4 There is a military TACAN route system in the Upper Airspace. Some of the routes join the published Upper ATS Route Structure at certain reporting points as well as to a similar TACAN route network over the rest of Europe. See chart of the military TACAN routes at ENR 6-72.

1.6.3.3 Non-Standard Civil Flights and Unusual Aerial Activities in the UK Upper Airspace

1.6.3.3.1 Certain civil flying activities such as training and general test flying in Class C Airspace above FL 195 may require a specialized radar service that can best be provided by military ATS Units. However, it should be borne in mind that the aircraft handling capacity of military ATS Units may be committed to the Units primary tasks, and therefore, it is advisable that aircraft operators requiring a service should discuss their proposed task with the relevant ATS Unit prior to commencement of the flight.

1.6.3.3.2 Information concerning the military ATS Units may be obtained from the RAF en-route documents or from civil ATS Units.

1.6.3.3.3 The approval of an Unusual Aerial Activity (UAA) in Class C Airspace above FL 195 can often only be given after extensive co-ordination and the request should be submitted at the earliest opportunity to Airspace Regulation (Utilisation) (AR(U)), Airspace

ENR 1.1 GENERAL RULES (continued)

- 1.11.3 **Procedures for non-SSR equipped Glider Operations within Temporary Reserved Area (Gliding) (TRA (G)) in Class C Airspace between FL 195 - FL 240**
- 1.11.3.1 TRA (G) have been provided to accommodate non-SSR equipped gliders. (See ENR 5.2, ENR 6-64 and ENR 6-65).
- 1.11.3.2 Gliders equipped with SSR transponders should squawk 7006 whilst operating in the TRA (G).
- 1.11.3.3 **Glider Operations in TRA (G) between FL 195 - FL 240 must comply with the following requirements:**
- Each TRA (G) shall have a nominated gliding club(s) to manage booking arrangements with the appropriate ACC.
 - The nominated gliding club(s) will request booking of the required TRA (G) airspace 2 hours in advance on the day of operation.
 - A requested upper flight level shall be specified at the time of booking.
 - ACC civil and military supervisors shall co-ordinate booking request and agree initial access arrangements based on the prevailing and forecast GAT/OAT traffic situation.
 - A request to activate the TRA (G) shall be made only when the club(s) have positively established that access is required. No glider will enter until a positive ATC clearance has been obtained to enter the TRA (G). This may be either by telephone or RTF contact with the ACC.
 - Gliders shall monitor the appropriate gliding frequency specified in the LoA whilst operating within the TRA (G).
 - Gliders shall remain within the lateral boundaries of the TRA (G) and below the agreed upper flight level.
 - The gliding club(s) shall provide a contact telephone number to enable the parent ACC to close the TRA (G); if such a request is received the nominated gliding club(s) will direct gliders to vacate the TRA (G) as expeditiously as possible.
 - The nominated gliding club(s) will notify the ACC that TRA (G) activity is complete.
 - Additional requirements and detailed contact arrangements will be contained in a LoA between the responsible ACC and nominated gliding club.
- 1.11.4 **Procedures for non-SSR equipped Glider Operations within Temporary Reserved Area (Gliding) (TRA (G)) in Class C Airspace above FL 240**
- 1.11.4.1 All non-SSR equipped glider operations above FL 240 must be conducted in TRA (G).
- 1.11.4.2 The gliding representative will initiate a request to the appropriate area control supervisor (see paragraph 9.4.3) 2 hours in advance of the intended flight advising the intention to use the designated area and confirm the following details:
- Temporary Reserved Areas concerned (See ENR 5.2, ENR 6-66 and ENR 6-67);
 - Requested upper limit (Scottish Upper Area (North) has an upper limit of FL 270);
 - Expected time of entry into, and duration in the Upper TRA (G) (negotiated if any other priority ACC task);
 - The number of gliders and associated callsign(s);
 - Name and telephone contact number.
- 1.11.4.3 Area Control contact telephone numbers:
- For Scottish, Spadeadam, Yorkshire and Northern Ireland areas, contact Scottish ACC, Civil ATC Watch Supervisor (WS) on Tel: 01292-692763.
- For Welsh areas, contact Swanwick Military Supervisor (SMS) on Tel: 01489-612417.
- 1.11.4.4 Following notification, the Supervisor will contact the gliding representative to discuss the activity, and allocate the frequency to be employed, or, if the activity cannot be accommodated, advise the representative of the reason and negotiate a new period.
- 1.11.4.5 The glider pilot shall establish 2-way RTF contact passing FL 200 in the climb, obtain an ATC clearance to enter the TRA (G), maintain a listening watch on the frequency, and report again when passing FL 240 in descent.
- 1.11.4.6 The military controller will initiate a radio check with the glider pilot on the hour and half hour whilst the aircraft is above FL 240 to confirm continuing RTF contact. In the event of not receiving a radio check call the glider pilot will immediately attempt to re-establish 2-way contact and if unsuccessful shall descend below FL 240 within 15 minutes.
- Note:** 15 minutes after the last unsuccessful 'operations normal' radio check by the military controller the airspace above FL 240 will be deemed clear of gliders and GAT aircraft will be allowed access.
- 1.11.4.7 The glider pilot is responsible for remaining within the designated area. In addition, all gliders flying within TRA (G) above FL 240 are to be fitted with appropriate radio and navigational equipment. In the event of either of these equipments becoming unserviceable, gliders are to descend below FL 240.
- 1.11.4.8 Whilst operating within a designated area, glider pilots will be in receipt of a Flight Information Service with proximity warnings of either aircraft in emergency or Air Defence Flights, which need to transit the area. The glider pilots will be responsible for their own separation.
- 1.11.4.9 Whilst operating within a designated TRA (G) above FL 240, all position reports are to be made in relation to Airway/Upper ATS Route Reporting Points.

ENR 1.1 GENERAL RULES (continued)

- 1.11.4.10 Additional requirements and detailed contact arrangements will be contained in a LoA between the responsible ACC and nominated gliding club(s).
- 1.11.5 **Procedures for SSR equipped Glider Operations within Temporary Reserved Area (TRA) in Class C Airspace between FL 195 - FL 245**
- 1.11.5.1 Gliders equipped with RTF and SSR transponder may operate in accordance with VFR within Temporary Reserved Areas (TRA) in Class C Airspace between FL 195 and FL 245 provided that the pilot:
- Files a flight plan (when specified an abbreviated flight plan will be acceptable).
 - Obtains an ATC clearance to enter the TRA (See ENR 5.2 and ENR 6-13).
 - Monitors ATC frequency.
 - Selects SSR Code A/C as directed by ATC.
 - Whilst operating within a designated area, glider pilots will be in receipt of a Flight Information Service.
- 1.11.5.2 Detailed access requirements to TRA will be detailed in the LoA between the ACC responsible for the airspace and the nominated gliding club(s) concerned.
- 1.11.6 **Procedures for Glider Operations in Class C Airspace outside TRA and TRA (G) between FL 195 - FL 285**
- 1.11.6.1 Glider operations in Class C Airspace between FL 195 - FL 285 must comply with the following requirements:
- The flight must be conducted in accordance with ATC instructions and/or conditions specified in LoAs or specific permission.
 - A flight plan must be filed. Where specified an Abbreviated Flight Plan will be acceptable as detailed in the LoA between the ACC responsible for the airspace and the nominated gliding club(s) concerned.
 - An ATC clearance must be obtained to fly within the airspace.
 - Select SSR Code A/C as directed by ATC.
 - Maintain listening watch on the ATC frequency.
 - In the event that 2-way RTF contact is lost, pilots shall squawk 7600 and descend below controlled airspace (FL 195) as expeditiously as possible.
- 1.11.6.2 Other Gliding Activity
- 1.11.6.2.1 Gliding clubs seeking access to airspace above FL 195 to facilitate special events should contact AUS in accordance with procedures detailed at ENR 1.1, paragraph 4.1.9.

1.12 Procedures for Non-SSR Transponder equipped Glider Operations at and above FL 100 up to FL 195

- 1.12.1 Non-SSR Glider Areas have been established to accommodate non-transponder equipped glider operations at and above FL 100 up to FL 195 (See ENR 5.2 and ENR 6-63).
- 1.12.2 ATC clearance is required prior to access of that Class A, C and D Airspace lying within Non-SSR Glider Areas.
- 1.12.3 Other than that portion of airspace notified as Class A, C and D Airspace the background airspace classification of Non-SSR Glider Areas is Class G, with UK FIS provided on request, where available; and in accordance with ENR 1.1 and ENR 1.6.
- 1.12.4 The glider pilot is responsible for remaining within the designated area.

2 UK Flight Information Services

2.1 Overview

- 2.1.1 The ICAO requirements for a Flight Information and Alerting Service are met in the Scottish FIR/UIR and the London FIR/UIR through a suite of services, collectively known as the UK Flight Information Services (FIS), and are provided through the following provisions:
- To participating flights arriving at, departing from and overflying aerodromes located within Class G Airspace as listed at GEN 3.3.
 - To participating VFR flights operating within Class E Airspace, as listed at ENR 3.1.
 - To aircraft within Advisory Radio Areas as listed at ENR 1.1, paragraphs 5.2.5/6 and ENR 5.2.
 - Lower Airspace Radar Services (LARS) and Radar Service - FL 100 and above (outside CAS), as listed at ENR 1.6.
 - Area Control Centre (ACC) services, including the provision of service by ACC FISOs as detailed at GEN 3.3.
- 2.1.2 The UK FIS (Basic Service, Traffic Service, Deconfliction Service, Procedural Service) are detailed herein. Within the UK, the scope of FIS, as defined in ICAO Annex 11, is met through the provision of a Basic Service.

2.2 Service Principles

- 2.2.1 Within Class G Airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.

ENR 1.1 GENERAL RULES (continued)

- b) on reaching the limit of ATS clearance;
- c) when instructed by Air Traffic Control;
- d) when operating helicopters in the North Sea Low Level Radar Advisory and Flight Information areas of responsibility and on Helicopter Routes within the London Control Zone and London/City Control Zone (see ENR 1.6, subsection 4.5 and AD 2.EGLL 2.22, paragraph 11);
- e) when operating flights across the English Channel (see ENR 1.1, paragraph 3.7).

3.1.1.1 The initial call changing radio frequency shall contain only the aircraft identification and flight level. Any subsequent report shall contain aircraft identification, position and time except as provided for in respect of helicopter operations in the areas specified in paragraph 3.1.1 (d) above.

Note: When changing frequency between the London or Scottish Control Centres, pilots are required to state their callsign and Flight Level/Altitudes only (plus any other details when specifically instructed by ATC). When the aircraft is in level flight but cleared to another FL/ALT, both FL/ALT should be passed. **Similarly, when the aircraft is not in level flight, the pilot should state the aircraft identification followed by the FL/ALT to which it is cleared only; it is not necessary to state passing FL/ALT in these circumstances.**

3.1.1.2 Certain Reporting Points on the boundary between the London FIR/UIR and the Amsterdam FIR are designated 'Compulsory' in the Netherlands AIP. Position Reports should therefore be made at these points when in communication with Amsterdam or Maastricht Control.

3.1.2 Omit Position Report Procedure

3.1.2.1 In order to reduce RTF communication a pilot may be instructed by Air Traffic Control to omit position reports provided that the aircraft is radar identified.

3.1.3 DME Distance Reports to ATC

3.1.3.1 Pilots, when requested by ATC to report their distance from a DME facility which they do not have displayed, should retune their equipment to that DME. If, for any reason, they are unable to report their distance from the requested DME, ATC is to be informed. Pilots should not calculate the distance based on the reading from another DME.

3.2 Climb and Descent

3.2.1 Vacating (Leaving) Levels

3.2.1.1 When pilots are instructed to report leaving a level, they should advise ATC that they have left an assigned level only when the aircraft's altimeter indicates that the aircraft has actually departed from that level and is maintaining a positive rate of climb or descent in accordance with published procedures.

3.2.2 Level Restrictions

3.2.2.1 For **all** stages of flight, clearances to climb or descend cancel any previous restrictions or levels, unless they are reiterated as part of the clearance.

3.2.2.2 When a departing aircraft on a SID is required to climb directly to the cleared level without complying with the published vertical restrictions on the SID, ATC will include the word 'now' in climb instructions (e.g. Jet 347 climb now FL 120).

3.2.2.3 Maximum Rates of Climb and Descent

3.2.2.3.1 In order to ensure the credible interaction of Airborne Collision Avoidance Systems and ground based safety nets, other than aircraft in emergency and certain specific conditions for military aircraft (as detailed in Military AIP and MAA Regulatory Publication RA 3000 Series), all aircraft when operating under normal circumstances, when inside Controlled Airspace within the London and Scottish FIRs/UIRs should not operate with a climb or descent rate exceeding 8000 FT per minute. Aircraft when first approaching a cleared flight level and/or when changing flight level in Controlled Airspace should ensure that the vertical closure speed is not excessive. It is considered that, with about 1500 FT to go to a cleared level, vertical speed should be reduced to a maximum of 1500 FT per minute and ideally to between 1000 FT per minute and 500 FT per minute. Pilots should ensure that the aircraft neither undershoots nor overshoots the cleared level by more than 150 FT, manually overriding if necessary.

3.2.2.4 Minimum Rates of Climb and Descent

3.2.2.4.1 In order to ensure that controllers can accurately predict flight profiles to maintain standard vertical separation between aircraft, pilots of aircraft commencing a climb or descent in accordance with an ATC Clearance should **inform the controller** if they anticipate that their rate of climb or descent during the level change will be less than 500 FT per minute, or if at any time during such a climb or descent their vertical speed is, in fact, less than 500 FT per minute.

3.2.2.4.2 This requirement applies to both the en-route phase of flight and to terminal holding above Transition Altitude.

Note: This is not a prohibition on the use of rates of climb or descent of less than 500 FT per minute where necessary to comply with other operating requirements.

ENR 1.1 GENERAL RULES (continued)

3.2.2.5 Noise Abatement Approach Techniques

3.2.2.5.1 The use of Continuous Descent Approach (CDA) and Low Power/Low Drag Approach (LP/LD) techniques (as defined at GEN 2.2) is required, subject to compliance with ATC requirements, at certain UK Airports as detailed in the appropriate AD 2 Sections. At other locations, although not required, these techniques are considered to be 'best practice' for the reduction of noise nuisance and emissions and should be adopted by pilots whenever operationally practicable, commensurate with the ATC clearance.

3.3 Speed Control

3.3.1 Pilots shall adhere to the speed limits associated with airspace classifications and the speed restrictions notified in procedures published in AD 2. Pilots shall also adhere to the speed (IAS or Mach Number) approved or assigned by ATC and shall request ATC approval before making any changes thereto. If it is essential to make an immediate temporary change in speed (e.g. due to turbulence), ATC shall be notified as soon as possible that such a change has been made.

3.3.2 Pilots of aircraft unable to maintain the last assigned speed during any particular phase of flight (eg for aircraft performance reasons) shall inform ATC as soon as possible in order that another speed/alternative clearance can be issued.

3.3.3 At levels at or above FL 280, speed adjustments for aircraft in the cruise will be expressed in multiples of 0.01 Mach. At levels below FL 280, speed adjustments will be expressed in multiples of 10 KT based on indicated airspeed (IAS).

3.3.4 For aircraft at or above FL 280 that have been cleared to descend to levels below FL 280, speed adjustments may be based on IAS.

3.4 Radiotelephony, Radio Failure and Loss of Communication Procedures

3.4.1 General Radiotelephony Procedures

3.4.1.1 The English Language is used for all communications between aircraft and ATC in the UK.

3.4.1.2 VHF/RTF is used for all air-ground communications throughout the airspace under UK jurisdiction except that HF is also used in the Shanwick Oceanic Control Area and that UHF is also available at London Area Control (Swanwick) and at certain aerodromes (see ENR 1.6, subsection 4.5 and ENR 2.1 sections for details).

3.4.1.3 So far as possible, pilots should make use of the ICAO standard RTF phraseology in ICAO Doc. 4444, Chapter 12 when communicating with ATC. UK specific differences to ICAO phraseology are notified in GEN 1.7 section.

3.4.1.3.1 As a general principle all messages should be acknowledged by use of the aircraft callsign or 'Roger, (callsign)'.

3.4.1.3.2 Messages containing any of the following items must be read back in full:

- a) Taxi/towing instructions;
- b) Level instructions;
- c) Heading instructions;
- d) Speed instructions;
- e) Airways or route clearances;
- f) Approach clearances;
- g) Runway-in-use;
- h) Clearance to enter, land on, take-off, backtrack or cross or hold short of an active runway;
- i) SSR operating instructions;
- j) Altimeter Settings, including units when value is below 1000 hectopascals;
- k) VDF information;
- l) Frequency changes;
- m) Type of ATS surveillance service;
- n) Transition level.

3.4.1.3.3 When an estimate for a compulsory or non-compulsory reporting point, flight information boundary, or destination aerodrome is requested by an ATS unit and is in error by in excess of 2 minutes, pilots are required to provide a revised estimate to an appropriate ATS unit as soon as possible.

3.4.1.3.4 Where data link communications are used to facilitate clearance delivery, voice read-back of data link messages shall not be required unless otherwise notified by the appropriate authority.

3.4.1.4 Operations Normal

3.4.1.4.1 Pilot transmissions containing the RTF phraseology 'operations normal' are generally associated with aerial activities over mountainous or sparsely populated areas (including sea areas), where the flight receiving an ATS is required to operate within the area of responsibility of a single ATSU for prolonged periods of time. Such transmissions are made by pilots following a period of RT

ENR 1.1 GENERAL RULES (continued)**3.4.3 Actions taken by ATC**

- a) As far as is practical, ATC shall maintain separation between the aircraft experiencing the communication failure and other aircraft based on the assumption that the aircraft will operate in accordance with published radio communication failure procedures. This includes making allowance for the fact that an aircraft following an approach, whether or not it has received a landing clearance, may either land or may carry out the missed approach procedure.
- b) ATC will assume that an aircraft's receiver may be functioning and will transmit instructions for routing and other relevant information such as the EAT, weather information, altimeter settings and runway in use at destination (or alternate) aerodromes.
- c) ATC will use all means possible to monitor the flight's progress and inform other flights where necessary.
- d) ATC will attempt to re-establish communications with the pilot by monitoring standby frequencies (where available) and by contacting the aircraft operator, or handling agent or by use of ACARS/Data Link when available.
- e) ATC will co-ordinate the flight with other ATC agencies as required.
- f) If the flight re-establishes communications with an ATC unit during flight, or after the aircraft has landed, the ATC unit will relay the pilot's intentions, or that the aircraft has landed, to the ATC Unit that was providing an ATS when the communications failure occurred.
- g) If the aircraft's progress cannot be monitored by radar and there has been no other indication of the aircraft's progress, or landing, normal overdue action will commence 30 minutes after the ETA for the destination airfield.

3.5 Use of Airborne Collision Avoidance Systems (ACAS) in the Scottish FIR/UIR and the London FIR/UIR**3.5.1 General**

3.5.1.1 ACAS indications shall be used by pilots in the avoidance of potential collisions, enhancement of situational awareness, and the active search for, and visual acquisition of, conflicting traffic. The ability of ACAS to fulfil its role of assisting pilots in the avoidance of potential collisions is dependent on the correct and timely response by pilots to ACAS indications.

3.5.1.2 The Traffic Alert and Collision Avoidance System (TCAS) II is accepted by the Civil Aviation Authority (CAA) as a suitable ACAS system provided its installation is certificated by the State of Registry, and that its operation by flight crew is in accordance with appropriate operating instructions.

3.5.2 Procedures to be Established

3.5.2.1 An operator shall establish procedures to ensure that:

- a) When ACAS is installed and serviceable, it shall be used in flight in a mode that enables Resolution Advisories (RAs) to be produced unless to do so would not be appropriate for conditions existing at the time, and
- b) When undue proximity to another aircraft is detected by ACAS, the commander or the pilot to whom conduct of the flight has been delegated shall ensure that corrective action is initiated immediately to establish safe separation.
- c) The circumstances when it is appropriate to operate ACAS in the Traffic Advisory (TA)-only mode are specified in the Flight Operations Manual. This should be limited to particular in-flight failures, during take-offs or landings in limiting performance conditions (for example at high altitude airports), and locations where States have approved specific procedures permitting aircraft to operate in close proximity, only.

3.5.3 TCAS II Operating Characteristics

3.5.3.1 TCAS II will issue a TA only when another aircraft with a compatible operating transponder is close in both range and altitude. If the transponder in the potentially conflicting aircraft is providing altitude data, an RA may be issued.

3.5.3.2 TAs and RAs can be issued on the basis of 'time to closest point of approach (CPA)' or 'fixed distance' thresholds being penetrated. On most occasions, TAs and RAs will be issued on the 'time to CPA' basis, but in RVSM penetration of airspace fixed range and altitude thresholds are likely to be a more frequent cause.

Note: In cases where a vertical speed of closure causes RAs to be issued, TCAS II in the climbing/descending aircraft may advise a reduction in the climb or descent rate, whilst TCAS II in the other aircraft may advise a 'Climb' or 'Descend' RA. If the climbing/descending aircraft in this pair is diverging in range at a slow rate, the 'Climb' or 'Descend' RA issued to the Flight Crew in the other aircraft may remain displayed for several minutes, even though the former has levelled off at its cleared flight level. Although this particular circumstance is likely to be rare, even when it does occur, excessive altitude excursions need not result.

3.5.4 Operation of Aircraft When ACAS II is Unserviceable

3.5.4.1 The current TCAS II Minimum Equipment List permits TCAS II equipped aircraft to operate for up to 10 days with the equipment out of service. This position will be kept under review.

3.5.4.2 Due to the safety benefits arising from TCAS operations and the collaborative way in which it arrives at collision avoidance solutions any aeroplane with an unserviceable transponder as well as an unserviceable TCAS will not be permitted in UK airspace

ENR 1.1 GENERAL RULES (continued)

for which mandatory carriage of a transponder is required.

3.5.5 Operation of TCAS II in RVSM Airspace

3.5.5.1 Above FL 290, TAs and RAs are most likely to occur in airspace where aircraft change altitude to reduce separation from 2000 FT to 1000 FT: this airspace is described as a 'Transition Area'. Specifically:

- a) TAs can be expected when aircraft vertically separated by 1000 FT pass each other. If the speed at which they pass is low, such as when one is overtaking the other, TAs may be intermittent or they may last for long periods.
- b) RAs can be expected when the vertical speed of closure, which may be the sum of the vertical speeds of both aircraft or the vertical speed of one of the aircraft, exceeds approximately 1500 FT/min. RAs might also be issued when either aircraft experiences turbulence sufficient to cause TCAS to project the vertical separation between both aircraft to be less than 800 FT at CPA, or when a 'soft altitude hold' function in either aircraft achieves the same result.

3.5.6 Guidance for Aircraft Operators and Flight Crews

3.5.6.1 Flight Crews can reduce the likelihood of TAs and RAs occurring above FL 290 where separation is less than 2000 FT vertically and 5 NM horizontally by confining vertical speeds to less than 1500 FT/min. Desirably, the vertical speed should be between 500 and 1000 FT/min.

3.5.6.2 The TCAS II function control selector should not be moved from the 'TA/RA' or 'Normal' position upon entering RVSM Airspace. Although it is implicit that such TAs and RAs as have been described could be termed 'unnecessary', this might not always be the case. For this reason, Flight Crews would be unwise either to disable an effective collision avoidance device without sound reason, or to assume that any TA or RA issued in this airspace is other than genuine.

3.5.6.3 Flight Crews shall not manoeuvre an aircraft solely in response to a TA. TAs are intended to alert the pilot to the possibility of an RA, and to assist in visual acquisition of conflicting traffic. However, visually acquired traffic may not be the same traffic causing a TA, and visual perception of an encounter may be misleading, particularly at night.

3.5.6.4 In the event that an RA is issued, Flight Crews shall:

- a) Respond immediately and manoeuvre as indicated by the ACAS unless doing so would jeopardise the safety of the aircraft;
- b) follow the RA even if there is a conflict between that RA and an air traffic control (ATC) instruction to manoeuvre;
- c) not manoeuvre in the opposite sense or direction to that of the RA;
- d) limit RA manoeuvres to the minimum extent necessary to comply with the RA.

3.5.6.5 Flight Crews should note that:

- a) Other critical warnings such as Stall Warning, Windshear Warning and Ground Proximity Warning Systems have priority over ACAS.
- b) visually acquired traffic may not be that causing an RA, as the visual perception of an encounter may be misleading, particularly at night.
- c) ATC may not know when an ACAS system issues an RA. It is possible for ATC to issue instructions to an aircraft that are unknowingly contrary to RA instructions on that aircraft. Therefore, it is essential that ATC be notified when an ATC instruction is not being followed because it conflicts with an RA.
- d) a manoeuvre opposite to the sense of an RA may result in a reduction in vertical separation with the 'threat' aircraft and therefore must be avoided at all times; this is particularly true in the case of an ACAS-ACAS co-ordinated encounter, when the RAs complement each other in order to reduce the potential for collision. Manoeuvres, or lack of manoeuvres, that result in vertical rates opposite to the sense of an RA could result in a collision with the threat aircraft.

3.5.6.6 A pilot who has deviated from an air traffic control instruction or clearance in response to an RA shall:

- a) As soon as possible, as permitted by flight deck workload, notify the appropriate ATC unit of the RA, including the direction of any deviation from the current ATC instruction or clearance.
- b) when they are unable to comply with a clearance or instruction that conflicts with an RA, notify ATC as soon as possible consistent with flying the aircraft.
- c) promptly comply with any modified RAs.
- d) return to the terms of the ATC instruction or clearance when the conflict is resolved.
- e) after initiating a return to, or resuming the current clearance, notify ATC as soon as possible consistent with flying the aircraft.

3.5.6.6.1 Verbal reports should be made to Air Traffic Control at the first practicable moment and written reports submitted to the designated Authority as soon as possible after the flight has ended.

3.5.7 Guidance for Air Traffic Service Providers and for Air Traffic Controllers

3.5.7.1 The operation of TCAS II equipment will affect ATC operations to some extent, irrespective of the type of airspace. ATC will expect Flight Crew to react to RAs and to notify any manoeuvres initiated in response to RAs in accordance with standard practice. The Manual of Air Traffic Services Part 1, Section 1, Chapter 9 provides information on TCAS II to Air Traffic Controllers: it reiterates

ENR 1.1 GENERAL RULES (continued)

the phraseology that Flight Crews will use and the replies that Air Traffic Controllers should make.

- 3.5.7.2 It will be apparent from paragraph 3.5.5.1 that TAs will be more frequent in North Atlantic RVSM Airspace than elsewhere. Air Traffic Controllers should be aware of this and, where possible, be prepared to provide requested traffic information to Flight Crews.
- 3.5.7.3 As pilots are not required to take avoiding action on the basis of TA information alone, ATC does not expect requests for traffic information to be made unless the other aircraft cannot be seen and the pilots believe their aircraft is about to be endangered.
- 3.5.7.4 ATC expects pilots to respond immediately to an RA. Pilots are expected to restrict their RA manoeuvres to the minimum required to resolve the confliction, advise the Air Traffic Control Unit as soon as is practical thereafter and return to their original flight path as soon as it is safe to do so.
- 3.5.7.5 Pilots should be aware that any deviation from an ATC clearance has the potential to disrupt the controller's tactical plan and may result in a reduction of standard separation between aircraft other than those originally involved. It is vital that Flight Crew maintain a good look out and return to their original flight path as soon as it is safe and practical to do so.

3.6 Emergency Descents**3.6.1 General**

- 3.6.1.1 The requirement to carry out an emergency descent may be necessary to ensure the safety of an aircraft and its occupants, and can sometimes be required with little or no notice. In busy and congested airspace, sudden changes of level can lead to unexpected interactions with other aircraft in the vicinity.

3.6.2 Turning-off or Remaining on Track in UK Controlled Airspace

- 3.6.2.1 UK Controlled Airspace is complex and congested, and traffic is often oriented on ATS routes in certain directions or flows. Therefore, if able, pilots should remain on the assigned route or track whilst carrying out the emergency descent, unless to do so would endanger the aircraft.
- 3.6.2.2 If a turn away from an assigned route or track is initiated, pilots should note that they may not be aware of traffic in their proximity (especially if flying on an assigned heading); nor of aircraft below them, not on the selected frequency, or in adjacent airspace sectors. However, it is ultimately the pilot's responsibility to take the action most appropriate in the circumstances.

3.7 Diversion

- 3.7.1 Diversion is the act of flying to an aerodrome other than the planned destination with the intention of landing there.

- 3.7.2 Normally diversion is made when one of the following circumstances occurs at the planned destination:

- a) The weather is reported to be below the operating company's minima;
- b) there are obstacles on the manoeuvring area constituting a hazard to landing aircraft which cannot be cleared within a reasonable time;
- c) there is a failure of an essential ground aid which is required for the landing;
- d) there is likely to be an unacceptable delay to landing.

- 3.7.3 Diversion may be originated by either the pilot or his operating company, or exceptionally by ATC.

- 3.7.3.1 When a pilot decides to divert he should inform ATC. ATC will, if possible, advise his operating company or a nominated addressee of his diversion when this is specifically requested by the pilot.

- 3.7.3.2 An operating company proposing to divert one of its aircraft should consult ATC before any decision on diversion is passed to the pilot. The message to the pilot will be in this form:

'Company advise divert to (aerodrome). Weather at (diversion aerodrome) Reason for diversion (clearance instructions). Acknowledge'.

The pilot should either follow this advice or if he is unable to do so, give his reasons and state what he intends to do.

- 3.7.3.3 In exceptional circumstances, it may be necessary for ATC to advise a pilot to divert before being able to consult his operating company. In such a case, the company will be told as soon as possible and the message to the pilot will be in the form:

'Request divert to (aerodrome). Weather at (diversion aerodrome) Reason for diversion (clearance instructions). Acknowledge'.

If the pilot is unable to comply with this request, he should give his reasons and state his intention.

ENR 1.1 GENERAL RULES (continued)

3.8 Low Level Cross-Channel Operations - UK/France

- 3.8.1 Pilots undertaking Cross-Channel flights are reminded that a flight plan **MUST** be filed for all flights crossing FIR boundaries between the UK and France.
- 3.8.2 When filing the flight plan with the UK and French Authorities, pilots are to ensure that well defined significant points/features, at which the aircraft will cross the UK and French coast-lines, are included in Item 18 (Other Information) of the flight plan form (eg Beachy Head, Berck-sur-Mer, Lydd, Boulogne, Dover, Cap Gris Nez, etc). This is for Search and Rescue purposes but will also assist ATC.
- 3.8.3 Pilots should plan their flights, where possible, at such altitudes which would enable radio contact to be maintained with the appropriate ATC Unit whilst the aircraft is transiting the Channel. In addition, the French Authorities have requested that aircraft fly at altitudes which will keep them within Radar cover. The carriage of Secondary Surveillance Radar (SSR) equipment is recommended.
- 3.8.4 Position reports are required when crossing the coast outbound, inbound and when crossing the FIR Boundary.
- 3.8.5 Pilots undertaking Cross-Channel flights under IFR, are reminded that the normal IFR Rules will apply particularly regarding altitudes and flight levels. Pilots are also reminded that the IMC rating is not recognized by the French Authorities.
- 3.8.6 A bi-directional 'Recommended VFR Route' is established between the Solent CTA and the Channel Islands CTR routing towards the Cherbourg Peninsula (See AD 2.EGJJ-3-1) which routes through EGD036. A SUA Crossing Service and SUA Activity Information Service is available as described in ENR 5.1. All traffic using the route above 3000 FT AMSL are advised to maintain the appropriate cruising level irrespective of the flight rules being observed. Pilots flying above 3000 FT AMSL are reminded of the requirement to maintain an appropriate semi-circular level whilst within the Brest FIR.

4 Arrangements for Particular Types of Flight (Non-Standard, Non-Deviating, Unusual, Royal, Observation, Special, VFR Access to Class C Airspace Above FL 195, and Civilian Formation Flights)

4.1 Non-Standard Flights (NSFs) in Controlled Airspace

- 4.1.1 A Non-Standard Flight (NSF) in Controlled Airspace is an aerial task that may not necessarily follow published routes or notified procedures; a formation flight of civil aircraft other than for VFR transit of CTA/CTR/TMA; or flights to and from a temporary landing site for multiple short term operations. For test flights which take place within CAS and use the ATS route network, please see section 4.9.
- 4.1.1.1 Applications for NSFs within Controlled Airspace should primarily be made via the NATS Non-Standard Flight Application website (www.nats.co.uk/nsf) with the minimum 21 or 28 days notice (see paragraphs 4.1.2 and 4.1.6). If applicants are unable to utilise this website, applications may be submitted to the units listed below.
- For flights south of 5230N and within the East Midlands CTA:
Post: London Control (Swanwick)
ATC Operations, PO Box 30, NATS Ltd, Sopwith Way, Swanwick, Southampton, Hants, SO31 7AY.
Phone: 01489-444181.
01489-444182.
Email: NonStandard.FlightApplications@nats.co.uk
 - for flights north of 5230N and over Northern Ireland:
Post: Scottish AC (Prestwick)
ATC Airspace Reservation Cell, NATS Prestwick, Room F-059, Prestwick Centre, Fresson Avenue, Prestwick, Ayrshire, KA9 2GX.
Phone: 01292-692431.
Fax: 01292-692042.
Email: Reservation.Cell@nats.co.uk / PCDUTYOPS@nats.co.uk
 - for flights within 15 NM and up to 7000 FT of Manchester Airport:
Post: Manchester Airport Operations
Control Tower Building, Manchester Airport Ltd, Wythenshawe, Manchester, M90 2PL.
Phone: 0161-499 5316/5305.
Email: manchesterairport.atcops@nats.co.uk
 - for localised VFR flights above FL 195 south of 55N not requiring reserved airspace and outside of the ATS route structure:
Post: Swanwick(Mil) West Bank Supervisor
RAF(U) Swanwick, Sopwith Way, Swanwick, Southampton, Hants, SO31 7AY.
Phone: 01489-612417

ENR 1.1 GENERAL RULES (continued)

Fax: 01489-612611
Email: SwanwickMilitary-West@nats.co.uk

- e) for localised VFR flights above FL 195 north of 55N not requiring reserved airspace and outside of the ATS route structure:

Post: Swanwick(Mil) North Supervisor
RAF(U) Swanwick, Sopwith Way, Swanwick, Southampton, Hants, SO31 7AY.
Phone: 01489-612943
Fax: 01489-612611
Email: SwanwickMilitary-North@nats.co.uk

See Swanwick (Mil) Sector Dimensions chart at ENR 6-12.

- 4.1.1.2 Applicants using either the website based application or any e-mail address listed above should ensure that the file sizes do not exceed 5MB. Zipped files are acceptable.
- 4.1.2 New applications or a renewal of a previously approved application shall give a minimum of **21 days** notice and include the information listed below (Any modification to a previously approved NSF application, without a change to the validity date, shall give a minimum of 10 days notice from the date of modification):
- Purpose of flight;
 - the area of operation and proposed tracks to be flown, to include graphical depiction on a suitable **aeronautical chart** plus a list of National Ordnance Survey Grid and/or WGS84 co-ordinates detailing the requested areas of operation in relation to Controlled Airspace;
 - estimated duration of aerial task;
 - operating levels;
 - aircraft type, callsign and registration letters on any aircraft likely to be used;
 - aerodrome of departure;
 - planned date of operation and requested validity period;
 - communications equipment (including transponder fit).
- 4.1.2.1 Those applications which are agreed will be allocated a non-standard flight reference number. This is only an approval in principle and prior clearance must be obtained from the appropriate ATC Watch Supervisor on the day. This is normally obtained by telephone 1 hour prior to departure. However, since many tasks are weather-dependent, some have to be abandoned after the aircraft is airborne. To overcome the particular difficulty of having to land and co-ordinate another detail by telephone, the following procedures may be adopted by pilots of those NSFs which have been previously allocated a NSF number by London Area Control (Swanwick) or London Terminal Control (Swanwick), and who wish to abandon the original task co-ordinated prior to take-off and proceed to another location.
- 4.1.2.1.1 The aircraft commander will establish RTF contact on the London FIS frequency (callsign 'London Information') appropriate to the area of the country over which the new task is required to be flown, prefixing the message with the phrase 'Non-Standard Flight Request'. The following information will then be passed to the Flight Information Service Officer (FISO):
- The Non-Standard Flight number;
 - the requested area of activity (this is essential as many NSF numbers refer to several sites);
 - ETA at site;
 - the requested Flight Level or Altitude for the task;
 - the duration of the task;
 - the aircraft callsign.
- 4.1.2.1.2 The FISO will relay these details to the appropriate ATC Unit and, in due course, will advise the pilot whether or not the NSF is approved, together with any special conditions and a contact frequency for the ATC Unit concerned. Pilots should not call for an approval directly on an operational ATC frequency. This is particularly important in the case of frequencies in use by London Terminal Control (Swanwick) or London Area Control (Swanwick).
- 4.1.2.1.3 In the case of NSFs affecting Airspace for which London Terminal Control (Swanwick) is responsible, it may sometimes be necessary for the pilot to land at a convenient aerodrome and telephone Terminal Control Senior Watch Assistant to discuss the requirements of the task in detail.
- 4.1.2.1.4 Operators are to note that in no circumstances can any discussion be entered into on any frequency in the event that permission is refused or withdrawn.
- 4.1.3 ATC clearance does not imply exemption from the requirements of the Air Navigation Order (ANO) or the Rules of the Air Regulations. Applications for flights which require exemption or written permission under the ANO are to be forwarded to:
- Post: The Civil Aviation Authority,
Flight Operations Division, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR.
- 4.1.4 Because of the nature of ATC operations (and notwithstanding the requirements of GEN 1.5, paragraph 5.3 concerning the carriage of SSR transponders), the approval of an application for a Non-Standard Flight will depend on the carriage of SSR

ENR 1.1 GENERAL RULES (continued)

transponder equipment normally with Mode C.

4.1.5 Due to the inherent difficulties of handling a formation flight in a busy traffic situation, pilots should be aware that it may not always be possible to issue an ATC clearance at the time requested.

4.1.6 **Enhanced Non-Standard Flights (ENSFs) - Entry into EGR156 (Windsor Castle)/EGR157 (Hyde Park)/EGR158 (City of London)/EGR159 (Isle of Dogs) Restricted Areas**

4.1.6.1 For those aircraft not already exempted (see individual entry for Restricted Area at ENR 5.1), ENSFs are required for flights within EGR156, EGR157, EGR158 and EGR159. Requests should be made using the NSF website (www.nats.co.uk/nsf) as detailed at paragraph 4.1.1.1 giving a minimum of 28 days notice. Any modification to a previously approved ENSF application shall give a minimum of 28 days notice from the date of modification.

4.1.6.2 ENSFs are subject to security considerations by the Metropolitan Police and may be refused on public interest grounds.

4.1.6.3 Once the security process is complete and London Terminal Control (Swanwick) provisional ATC approval in principle is granted, an 'ENSF Notification - Approval' form will be returned to the operator. Details of how to obtain a Metropolitan Police authorisation number for an ENSF and the ATC tactical approval on the day of flight are detailed on the 'ENSF Notification - Approval' form.

4.1.7 **Single-Engine Fixed Wing Aircraft Over Central London**

4.1.7.1 With the exception of the Northolt RMA and the Local Flying Areas at Denham and Brooklands (see AD 2.EGLL AD 2.22), NSF or ENSF permissions will not be granted to single-engine fixed wing aircraft requesting to operate within those parts of the London and London City Control Zones between a North-South line extending through the LON DME and a North-South line extending through the LCY NDB. In accordance with a directive from the CAA Safety and Airspace Regulation Group (SARG), applications which fall within the above criteria will be refused upon application to the NSF Coordinator due to the inability of such aircraft, in the view of the CAA, to be able to comply with SERA.3105 Minimum Heights.

4.1.8 **Unmanned Aircraft Systems (UAS)**

4.1.8.1 Any unmanned aircraft flight within a Flight Restriction Zone (FRZ) requires permission from the relevant ATSU or aerodrome operator using the appropriate process. Permission to operate within an FRZ should be obtained from the aerodrome directly, or through a suitable electronic service.

4.1.8.2 Permission to operate within the FRZ must be issued by either:

- a) The ATC Unit; or
- b) The Aerodrome Flight Information Service (AFIS), if no ATC or outside the operating hours of ATC; or
- c) The Aerodrome Operator, if there is no ATC or AFIS, or outside the operating hours of ATC or AFIS.

4.1.8.3 The FRZ consists of:

- a) A zone with the same dimensions as the notified Aerodrome Traffic Zone (ATZ); and
- b) The Runway Protection Zones (RPZ); and
- c) Any Additional zones, defined in the AIP.

All elements of the FRZ are active H24, regardless of the hours of operation of the aerodrome, or the ATZ activation.

4.1.8.4 Protected Aerodromes are those which are certified, Government, national licensed or otherwise as specifically prescribed. A list of aerodromes which are certified aerodromes and national licensed can be found within the AIP Aerodrome section (Part 3 AD 2).

A list of Government aerodromes can be found in the Military AIP.

4.1.8.5 A permission to operate within an FRZ is given conditionally upon the unmanned aircraft operation remaining entirely within the limits of the stated lateral and vertical operating area and that no safety assurance against other UAA taking place in the same area is given or implied. Compliance with the UK Air Navigation Order is required at all times.

4.1.8.6 Unmanned aircraft flights above 400 FT require a CAA authorisation, including those within an FRZ, which will also require permission from the aerodrome. A CAA authorisation to operate above 400 FT does not guarantee permission will be given by an aerodrome for the operation.

An A/G Radio service operator may not grant permission for an unmanned aircraft to operate within the FRZ.

Government aerodromes retain the right to refuse unmanned aircraft flight above 400 FT. To seek approval for any activity above 400 FT, early liaison with Government aerodromes is advised.

4.1.8.7 Operators are reminded of the applicability of the new UAS regulations, which are applicable from 31 December 2020. Further

ENR 1.1 GENERAL RULES (continued)

aerodrome obstacles is detailed in CAP 168 'Licensing of Aerodromes' and is briefly described in CAP 637 'Visual Aids Handbook'.

5.4.3 Land Based Air Navigation Obstacles

5.4.3.1 Article 225A of the Air Navigation Order 2016 mandates the requirement for the CAA to be notified of any existing or proposed en-route obstacles (permanent or temporary) which (or will) attain or exceed a height of 100 M (328 FT) AGL. Proposed changes to any existing en-route obstacles which (or will) attain or exceed a height of 100 M (328 FT) AGL must also be notified. This requirement is applicable to any building or work, including waste heaps, which attains or exceeds the above-stated height. Details of those obstacles of which the CAA has been notified are listed in ENR 5.4. In cases where a number of structures form the obstacle, the position of the highest is given. In the case of masts, the position of the centre of the mast is given (but it should be noted that the stays or guys may spread out for a considerable distance). Article 222 of the Air Navigation Order 2016 imposes mandatory lighting requirements on en-route obstacles that are 150 M (492 FT) AGL or more in height. For en-route obstacles that are less than 150 M (492 FT) AGL in height, the CAA recommends that such structures should be lit if, by virtue of their nature or location, they are considered to present a significant hazard to air navigation.

5.4.3.2 The process for notifying en-route obstacles to the CAA is detailed in AIC P 067/2021 dated 29 July 2021. Guidance is also available on the CAA website: <https://www.caa.co.uk/Commercial-industry/Airspace/Event-and-obstacle-notification/Obstacle-notification/Obstacle-notification/>

5.4.3.3 Details of un-serviceability and return to service of lights on such obstacles, when notified to UK AIS, will be promulgated by NOTAM. Land based air navigation obstacles with a height of less than 150 M are sometimes lit, but details of un-serviceability of lights on these obstacles are not normally promulgated. Obstacles listed in ENR 5.4 annotated 'FLR' in Column 2 are those that burn off high pressure gas; the flame, which may not be visible in bright sunlight, can extend for 600 FT.

5.4.3.4 Details of all land based air navigation obstacles known at the date of the chart's preparation are shown on certain Aeronautical Charts published by NATS Ltd on behalf of the CAA. These charts indicate whether or not the obstacle is normally lighted. Pilots should be aware that obstacle lighting is not necessarily located at the structure's highest point.

5.4.4 Off-shore Air Navigation Obstacles

5.4.4.1 Numerous fixed installations related to off-shore exploration of oil/gas from the Continental Shelf sea bed and a significant number of wind turbine generators and associated meteorological masts exist within the Scottish and London FIRs and the UK Exclusive Economic Zone (EEZ). A part of the UK EEZ lies within the Polaris FIR and parts of some other States' EEZs lie within the Scottish and London FIRs.

5.4.4.2 Oil and gas exploration installations vary in elevation and typically display navigation warning lights. Most of the installations are equipped with a helideck, which comes within the definition of an aerodrome. Many installations burn off high pressure gas and the flame, which may not be visible in bright sunlight, can extend for 600 FT. Pilots should be aware that even if no flame is visible there is still danger from the venting of high pressure gas. Pilots should also be aware of high intensity radio transmissions from some installations (see paragraph 5.3.2).

5.4.4.3 Wind turbines typically display a navigation warning light on the top of the supporting structure. Pilots should be aware that the rotor blades of some wind turbines rotate in excess of 200 FT above the nacelle mounted light. Where wind turbines are located together as a group, only those on the periphery are fitted with obstacle lighting.

5.4.4.4 Article 225A of the Air Navigation Order 2016 mandates the requirement for the CAA to be notified of any existing or proposed off-shore obstacle (permanent or temporary) in UK territorial waters which attains or exceeds an elevation of 100 M (328 FT) AMSL. Proposed changes to any existing off-shore obstacles in UK territorial waters which (or will) attain or exceed an elevation of 100 M (328 FT) AMSL must also be notified. Persons in charge of existing or proposed off-shore obstacles outside UK territorial waters, but within the Scottish and London FIRs and the UK EEZ within the Polaris FIR are also advised to notify the CAA in accordance with Article 225A. See paragraph 5.4.3.2 for more details of the notification process. Details of those obstacles of which the CAA has been notified which attain or exceed an elevation of 100 M (328 FT) AMSL within the Scottish and London FIRs and UK EEZ within the Polaris FIR are listed in ENR 5.4.

5.5 Aerial Sporting and Recreational Activities**5.5.1 Glider Launching Sites**

5.5.1.1 Glider launching may take place from designated sites which are regarded as aerodromes. The sites are listed at ENR 5.5. Where launching takes place within the Aerodrome Traffic Zone of an aerodrome listed within the AD section, details are also shown at AD 2 and AD 3.

5.5.1.2 Gliders may be launched by towing (T) aircraft, or by winch (W) and cable or ground tow up to a height of 2000 FT AGL. At a few sites the height of 2000 FT may be exceeded (see paragraph 5.5.3).

5.5.1.3 Sites are listed primarily to identify hazards to other airspace users and listing does not imply any right for a glider or powered

ENR 1.1 GENERAL RULES (continued)

aircraft to use the sites.

5.5.2 Hang Gliding, Paragliding and Parascending Sites

5.5.2.1 Hang Gliding and/or parascending may take place from sites which, because of the low speed characteristics of hang gliders, paragliders and parascenders and the difficulty of seeing them in certain conditions, are listed as hazards to other airspace users.

5.5.2.2 The locations of cable-launched hang/paragliding sites are listed at ENR 5.5. Foot launched activity sites are severely affected by wind speed and direction existing at the time. Although activity is usually at a peak during weekends, hang-gliding and/or parascending may take place at any time, particularly in the summer months. Airspace users should be aware that single or groups of soaring and motorised hang/para-gliders can be found flying anywhere in Class G airspace up to 15,000 FT, and are therefore not listed.

5.5.2.3 At certain sites hang gliders and/or parascenders may be launched by winch/auto-tow and cables may be carried up to 2000 FT AGL. At a few sites the height of 2000 FT may be exceeded (see paragraph 5.5.3). The cable launching of the aircraft may be encountered within the airspace contained in a circle radius 1.5 NM of the notified position of the site.

5.5.3 Cable Launching of Gliders, Hang Gliders and Parascending Parachutes

5.5.3.1 The launching of gliders, hang gliders and parascending parachutes by winch and cable or by ground tow to above 200 FT (60 M) AGL requires permission in writing under the UK Air Navigation Order from the Civil Aviation Authority.

5.5.3.2 At sites where cable launching is permitted, cables may be carried up to heights of 2000 FT AGL. At a few sites the heights of 2000 FT may be exceeded. It is a condition of the permission that when cable launching is taking place, a white ground conspicuity signal as described in SERA Appendix 1 Signals paragraph 3.2.8.1 shall be displayed.

5.5.3.3 Sites which have permission to cable launch above 200 FT AGL are listed at ENR 5.5.

5.5.4 Free-fall Parachuting Drop Zones

5.5.4.1 Intensive free-fall parachuting may be conducted up to FL 150 at any of the Drop Zones listed at ENR 5.5 and in several Danger Areas. Listing of a Drop Zone does not imply any right to a parachutist to use that Drop Zone. Some Government and licensed aerodromes where regular parachuting takes place are included in the list but parachuting may also take place during daylight hours at any Government or licensed aerodrome. Drop Zone activity information may be available from certain Air Traffic Service Units (ATSUs) but pilots are advised to assume a Drop Zone is active if no information can be obtained.

5.5.4.2 Parachuting also takes place at temporary sites, e.g. for display purposes, and will normally be notified by NOTAM as Temporary Navigation Warnings. Night parachuting may take place at any Drop Zone: Club Chief Instructors will notify in writing all forthcoming night parachuting, at least five working days in advance to Airspace Regulation (Utilisation) (AR(U)), Airspace Regulation, Aviation House, Gatwick, RH6 0YR, to allow AR(U) to take appropriate notification action.

5.5.4.3 Visual sighting of free-falling bodies is virtually impossible and the presence of an aircraft within the Drop Zone may be similarly difficult to detect from the parachutists' point of view. Parachute dropping aircraft and, on occasions, parachutists may be encountered outside the notified portion of airspace. Pilots are strongly advised to give a wide berth to all such Drop Zones where parachuting may be taking place.

5.5.4.4 Where permission is obtained for drops within Controlled Airspace, dropping aircraft are to have serviceable SSR with Mode C.

5.5.5 Microlight Flying sites

5.5.5.1 Those Microlight Flying Sites where flying is known to take place are listed at ENR 5.5 and are regarded as aerodromes. Sites are listed primarily as hazards to other airspace users and the listing does not imply any right for aircraft to use the sites. Microlight aircraft might be encountered at sites not included in the listing (See also AD Section).

5.5.6 Captive and Free Flight Manned Balloon Launch Sites

5.5.6.1 Frequent launchings by free flight and captive passenger carrying balloons take place at sites identified in ENR 5.5.

5.5.7 Kites

5.5.7.1 High flying kites may be hazardous to aircraft because of the possibility of collision with the towline. Kite flying sites are identified in ENR 5.5.

5.5.8 Training and Unusual Activity Aerodromes

5.5.8.1 Training Aerodromes - Designated Training Aerodromes are listed in ENR 5.5 and are regarded as an aerodrome. Flight Training including circuit practice is known to take place from these sites, the list and chart symbol are published to identify the hazards to other airspace users and the listing does not imply any right for an aircraft to use these aerodromes. Where training takes place

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	STAFA	525141.00N 0021434.55W	DTY R314 58.2 NM 600 FT				Intersection with P18.
(RNAV 5)		325°/145°	20.3 NM	FL 245 / FL 75	even FL 240 / FL 80	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 134.430 (Below FL 195).
△	NANTI	530814.54N 0023400.51W	WAL R127 25.5 NM 55 FT				Westbound route only btn NANTI and TADAL. Intersection with Y53.
(RNAV 5)		325°/-	3.5 NM	FL 245 / FL 75	even FL 240 / FL 200		FL 245/FL 195 Class C, FL 195/FL 75 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195).
△	UMKIL	531105.53N 0023723.06W					
(RNAV 5)		331°/-	8.1 NM	FL 245 / FL 75	even FL 240 / FL 200		FL 245/FL 195 Class C, FL 195/FL 75 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195).
△	VABKA	531808.31N 0024410.02W					
(RNAV 5)		331°/-	12.2 NM	FL 245 / FL 75	even FL 240 / FL 200		FL 245/FL 195 Class C, FL 195/FL 75 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195).
△	ASNIP	532843.09N 0025425.97W					Intersection with L28.
(RNAV 5)		328°/-	7.8 NM	FL 245 / FL 195	even FL 240 / FL 200		Class C. Scottish ACC Freq: 118.780 (All levels).
△	TADAL	533513.83N 0030135.22W					Extremity of L8. Intersection with L70.

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L9							
△	KONAN	510750.75N 0020000.00E					FIR Boundary. Intersection with (U)L607 (see AIP Belgium).
(RNAV 5)		274°/093°	24.3 NM	FL 245 / FL 75	even FL 240 / FL 80	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 134.905 (FL 135 and above); Freq: 135.325 (Below FL 135).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	DOVER DME (DVR)	510945.44N 0012132.71E				Intersection with L18.	
(RNAV 5)	281°/101°	13.2 NM	FL 245 / FL 75	even FL 240 / FL 80	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 134.905 (FL 195 and above); Freq: 120.530 (Below FL 195).	
△	UMTUM	511227.30N 0010102.78E					
(RNAV 5)	281°/101°	11.9 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 134.905 (FL 195 and above); Freq: 120.530 (Below FL 195).	
△	EMKAD	511449.88N 0004233.94E					
(RNAV 5)	281°/100°	15.1 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 134.905 (FL 195 and above); Freq: 120.530 (Below FL 195).	
△	DIKVU	511746.89N 0001901.84E					
(RNAV 5)	280°/100°	10.8 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 134.905 (FL 195 and above); Freq: 120.530 (Below FL 195).	
△	BIGGIN DME (BIG)	511951.15N 0000205.32E					
(RNAV 5)	281°/101°	8.1 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 132.165 (All Levels).	
△	GOXUL	512132.02N 0001033.49W					
(RNAV 5)	281°/101°	36.3 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 132.165 (All Levels).	
△	NORRY	512847.11N 0010724.13W					
(RNAV 5)	281°/101°	3.7 NM	FL 245 / FL 75	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 132.165 (All Levels).	
△	COMPTON VOR/DME (CPT)	512929.66N 0011310.89W				Westbound route only btn CPT and SLANY. Intersection with Q63.	
(RNAV 1)	317° -	9.6 NM	FL 245 / FL 85	even FL 240 / FL 100		FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 215 and above); Freq: 135.805 (Below FL 215 to FL 155); Freq: 134.125 (FL 155 and below).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	BROOKMANS PARK DME (BPK)	514459.05N 0000624.25W					
(RNAV 5)	305°/124°	20.2 NM	FL 460 / FL 75	even FL 430 / FL 100	odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 75 Class A. Between BPK and 10 NM before BUZAD: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.165 (Below FL 305 to FL 295); Freq: 127.105 (Below FL 295). Between 10 NM before BUZAD and BUZAD: London ACC Freq: 132.605 (FL 215 and above); Freq: 127.955 (Below FL 215 to FL 155); Freq: 129.280 (Below FL 155 to FL 115); Freq: 118.825 (Below FL 115). Between 10 NM NW of BPK and BUZAD: London ACC Freq: 132.605 (FL 215 and above); Freq: 130.925 (Below FL 215 to FL 165); Freq: 121.280 (Below FL 165 to FL 125); Freq: 119.780 (Below FL 125).	
△	BUZAD	515632.08N 0003308.21W		BNN R359 13.0 NM 558 FT			
(RNAV 5)	304°/124°	8.2 NM	FL 460 / FL 75	even FL 430 / FL 100	odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below 215 to FL 165); Freq: 130.925 (Below FL 215 to FL 165); Freq: 121.280 (Below FL 165 to FL 125); Freq: 119.780 (Below FL 125).	
△	WOBUN	520110.27N 0004400.00W		DTY R123 17.1 NM 600 FT			
(RNAV 5)	304°/124°	17.1 NM	FL 460 / FL 65	even FL 430 / FL 80	odd FL 450 / FL 70	FL 460/FL 195 Class C, FL 195/FL 65 Class A. Between WOBUN and 7 NM before DTY: London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 215); Freq: 130.925 (Below FL 215). Between 7 NM before DTY and DTY: London ACC Freq: 129.205 (FL 215 and above); Freq: 130.925 (Below FL 215).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	DAVENTRY DME (DTY)	521048.51N 0010649.64W					
(RNAV 5)	298°/117°	22.9 NM	FL 460 / 5500 FT ALT	even FL 460 / 6000 FT ALT	odd FL 450 / FL 70	FL 460/FL 195 Class C, FL 195/ALT 5500 FT Class A. London ACC Freq: 129.205 (FL 225 and above); Freq: 121.030 (Below FL 225).	
△	HONILEY VOR/DME (HON)	522124.04N 0013949.41W				Eastbound route only btn WAL and HON. Intersection with L15, L612, N859 and P155.	
(RNAV 5)	- /139°	82.0 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. Between WAL and abm Crewe: London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195). Between abm Crewe and abm Birmingham: London ACC Freq: 134.390 for traffic via L612 and N859 (FL 195 and above); Freq: 129.205 for traffic via L15 and P155 (FL 195 and above); Scottish ACC Freq: 134.430 (Below FL 195). Between abm Birmingham and HON: London ACC Freq: 134.390 for traffic via L612 and N859 (FL 195 and above); Freq: 129.205 for traffic via L15 and P155 (FL 195 and above); Freq: 130.925 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	RODOL	531417N 0015143W				Intersection with P6.	
(RNAV 5)	297°/-	16.1 NM	FL 245 / FL 195	even FL 240 / FL 200		Class C. Scottish ACC Freq: 118.780 (All Levels).	
△	MANCHESTER DME (MCT)	532125.29N 0021544.24W					
(RNAV 5)	288°/-	24.3 NM	FL 245 / FL 195	even FL 240 / FL 200		Class C. Scottish ACC Freq: 118.780 (All Levels).	
△	ASNIP	532843.09N 0025425.97W				Intersection with L8.	
(RNAV 5)	288°/108°	20.4 NM	FL 245 / FL 195	even FL 240 / FL 200	odd FL 230 / FL 210	Class C. Scottish ACC Freq: 118.780 (All Levels).	
△	AGLIL	533441.99N 0032711.30W					
(RNAV 5)	288°/108°	7.9 NM	FL 245 / FL 195	even FL 240 / FL 200	odd FL 230 / FL 210	Class C. Scottish ACC Freq: 118.780 (All Levels).	
△	PENIL	533657.47N 0033948.72W		WAL R306 23.2 NM 55 FT		Intersection with L70 and M144.	
(RNAV 5)	293°/113°	11.0 NM	FL 245 / FL 145	even FL 240 / FL 160	odd FL 230 / FL 150	Class C. Scottish ACC Freq: 133.050 (All Levels).	
△	DANDI	534103.71N 0035658.08W				Intersection with Q39.	
(RNAV 5)	293°/113°	5.2 NM	FL 245 / FL 145	even FL 240 / FL 160	odd FL 230 / FL 150	Class C. Scottish ACC Freq: 133.050 (All Levels).	
△	LELDO	534259.53N 0040507.00W				Eastbound route only btn SOSIM and LELDO.	
(RNAV 5)	- /113°	16.2 NM	FL 245 / FL 145		odd FL 230 / FL 150	Class C. Scottish ACC Freq: 133.050 (All Levels).	
△	SOSIM	534855.75N 0043030.46W				Extremity of L28.	

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L46							
△	NALAX	532859.89N 0002405.94E				Westbound route only. Extremity of L46.	
(RNAV 5)	282°/-	11.3 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ LIBSO	533129.33N 0000536.32E					
(RNAV 5)	282° / -	14.6 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△ ODNEK	533437.20N 0001813.05W					Intersection with N110.
(RNAV 5)	282° / -	21.6 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△ MITSO	533906.86N 0005337.75W					
(RNAV 5)	282° / -	19.6 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. Between MITSO and 10 NM before RIMTO: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285). Between 10 NM before RIMTO and RIMTO: London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△ RIMTO	534303.25N 0012558.78W					Intersection with UY250.
(RNAV 5)	282° / -	5.4 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△ HALIF	534406.31N 0013450.10W					
(RNAV 5)	281° / -	69.1 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285); Scottish ACC Freq: 118.780 (Below FL 285).
△ GETNO	535547.97N 0032947.06W					FRA Entry Point. Extremity of L46.

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
L60							
△	KOLAG	530236.62N 0031517.67E					Westbound route only btn KOLAG and OTBED. FIR/UIR Boundary. For continuation see AIP Netherlands.
(RNAV 5)	277° / -	27.6 NM	FL 460 / FL 175	even FL 430 / FL 180			FL 460/FL 195 Class C, FL 195/FL 175 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 245). ATS delegated to Amsterdam ACC below FL 245.
△	SOPEK	530631.88N 0023000.00E					Intersection with L989.
(RNAV 5)	277° / -	89.7 NM	FL 460 / FL 245	even FL 430 / FL 260			Class C. Between SOPEK and 0010000E: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355). Between 0010000E and OTBED: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	OTBED	531716.71N 0000154.61E					Btn OTBED and MAMUL FL 245 and above the route is westbound only, below FL 245 the route is eastbound only. Intersection with Y70.
(RNAV 5)	280°/099°	16.0 NM	FL 460 / FL 155	even FL 430 / FL 260	odd FL 230 / FL 190		FL 460/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	ENCOD	531959.32N 0002423.92W					
(RNAV 5)	279°/099°	9.1 NM	FL 460 / FL 125	even FL 430 / FL 260	odd FL 230 / FL 190		FL 460/FL 195 Class C, FL 195/FL 125 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.125 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	NISBI	532129N 0003921W				Base level change point is not at right angles to the CL of L60 and follows a perpendicular line to the CL of L603 until it reaches the southern bdry of Y70, where it then follows a perpendicular line to the CL of Y70.	
(RNAV 5)	279°/099°	9.8 NM	FL 460 / FL 105	even FL 430 / FL 260	odd FL 230 / FL 190	FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	DOPEK	532303.95N 0005531.64W		GAM R007 6.2 NM 115 FT			
(RNAV 5)	279°/099°	4.0 NM	FL 460 / FL 105	even FL 430 / FL 260	odd FL 230 / FL 190	FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	ARTIX	532342.08N 0010208.72W					
(RNAV 5)	279°/099°	6.5 NM	FL 460 / FL 105	even FL 430 / FL 260	odd FL 230 / FL 190	FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	MOGMO	532443N 0011251W				Base level change point is not at right angles to the CL of L60 and extends between 532932N 0011019W and 531954N 0011523W.	
(RNAV 5)	279°/099°	2.4 NM	FL 460 / FL 85	even FL 430 / FL 260	odd FL 230 / FL 190	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	MAMUL	532505.20N 0011648.45W		GAM R304 14.5 NM 115 FT		Intersection with L603.	
(RNAV 5)	279°/099°	9.3 NM	FL 460 / FL 85	even FL 430 / FL 260	odd FL 450 / FL 190	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
L74						
△	TOPPA	532408.99N 0033341.01E				Eastbound route only. FIR/UIR Boundary. Continues as (U)L74 (see AIP Netherlands).
(RNAV 5)		- /171°	12.2 NM	FL 460 / FL 175		odd FL 450 / FL 190 FL 460/FL 195 Class C, FL 195/FL 175 Class A. Scottish ACC Freq: 121.325 (FL 245 and above). ATS delegated to Amsterdam ACC below FL 245.
△	LARDI	533616.09N 0033057.16E				
(RNAV 5)		- /185°	34.6 NM	FL 460 / FL 195		odd FL 450 / FL 210 Class C. Scottish ACC Freq: 121.325 (All Levels).
△	SOTUN	541035.65N 0033736.65E				
(RNAV 5)		- /185°	7.8 NM	FL 460 / FL 195		odd FL 450 / FL 210 Class C. Scottish ACC Freq: 121.325 (All Levels).
△	VENAS	541819.85N 0033908.23E				Extremity of L74.
<p><u>Route Remarks:</u> See also ENR 1.1, paragraph 1.1.3.</p> <p>Due to ATC operational requirements, the cruising level allocation between VENAS and LARDI is inappropriate to the MAG Track.</p>						

Route Designator		Route Usage Notes				
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
L89						
△	KATHY	503113.59N 0012000.23W		SAM R178 26.1 NM 64 FT		Eastbound route only. Extremity of L89.
(RNAV 5)		024° / -	32.0 NM	FL 245 / FL 85		odd FL 230 / FL 90 FL 245/FL 195 Class C, FL 195/FL 85 Class A. Between KATHY and 10 NM north of KATHY London ACC Freq: 127.830 (All levels). Between 10 NM north of KATHY and 15 NM south of HAZEL London ACC Freq: 127.830 (FL 125 and above); Freq: 133.180 (Below FL 125). Between 15 NM south of HAZEL and HAZEL London ACC Freq: 127.830 (FL 175 and above); Freq: 133.180 (Below FL 175).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks	
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	HAZEL	510019.03N 0005904.06W	SAM R077 14.0 NM 64 FT				
(RNAV 5)	008° -	27.2 NM	FL 245 / FL 85	odd FL 230 / FL 90		FL 245/FL 195 Class C, FL 195/FL 85 Class A. Between HAZEL and 5 NM south of WOD London ACC Freq: 132.165 (FL 215 and above); Freq: 135.805 (Below FL 215 to FL 175); Freq: 133.180 (Below FL 175). Between 5 NM south of WOD and WOD London ACC Freq: 132.165 (FL 215 and above); Freq: 135.805 (Below FL 215 to FL 155); Freq: 129.080 (Below FL 155 to FL 135); Freq: 134.125 (Below FL 135).	
△	WOODLEY NDB (WOD)	512710.02N 0005243.68W					Extremity of L89. Intersection with M605.

Route Designator		Route Usage Notes				Remarks	
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L90							
△	DOLAS	525842.96N 0010003.43E					Extremity of L90. Intersection with L603.
(RNAV 5)	315°/135°	21.1 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	SUPEL	531340.27N 0003528.02E					
(RNAV 5)	315°/134°	25.3 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	LIBSO	533129.33N 0000536.32E					
(RNAV 5)	326°/146°	12.6 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
(RNAV 1)	068°/248°	16.0 NM	FL 245 / FL 125	odd FL 230 / FL 130	even FL 240 / FL 200	FL 245/FL 195 Class C, FL 195/FL 125 Class A. 0600-2300 (0500-2200) London ACC Freq: 134.755 (Above FL 165); Cardiff APP Freq: 125.855 (FL 165 and below). 2300-0600 (2200-0500) London ACC Freq: 134.755 (All Levels).	
△	OXCUR	515423.03N 0024906.11W				Eastbound route only btn OXCUD and FIGZI.	
(RNAV 1)	068° / -	8.6 NM	FL 245 / FL 125	odd FL 230 / FL 130		Between OXCUD and the western boundary of Cotswold CTA 15 (515448N 0024727W): FL 245/FL 195 Class C, FL 195/FL 125 Class A. 0600-2300 (0500-2200) London ACC Freq: 134.755 (Above FL 165); Cardiff APP Freq: 125.855 (FL 165 and below). 2300-0600 (2200-0500) London ACC Freq: 134.755 (All Levels). Between the western boundary of Cotswold CTA 15 (515448N 0024727W) and FIGZI: Class C. London ACC Freq: 134.755 (All Levels).	
△	FIGZI	515734.77N 0023613.57W				Extremity of L180.	
Route Remarks: TIGWE – FIGZI CDR H24. Rest of L180 Perm.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L186							
△	TURNBERRY DME (TRN)	551848.28N 0044701.91W				Westbound route only. Extremity of L186. Intersection with N562 and P600.	
(RNAV 5)	- /184°	17.0 NM	FL 255 / 6000 FT ALT		even FL 240 / FL 80	FL 255/FL 195 Class C, FL 195/Alt 6000 FT Class D. Scottish ACC Freq: 124.825 (All Levels).	
△	NORBO	553545.36N 0044543.46W		TRN R004 17.0 NM 586 FT		Extremity of L186.	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L602							
△	MIMVA	530603.21N 0031812.63E				Westbound route only btn MIMVA and OTR. FIR/UIR Boundary. For continuation see AIP Netherlands.	
(RNAV 5)		281° / -	29.7 NM	FL 460 / FL 175	even FL 430 / FL 180	FL 460/FL 195 Class C, FL 195/FL 175 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 245). ATS Delegated to Amsterdam ACC below FL 245.	
△	EMLON	531220.44N 0023000.00E				Intersection with M79.	
(RNAV 5)		281° / -	36.3 NM	FL 460 / FL 245	even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).	
△	LEGRO	531934.86N 0013045.89E					
(RNAV 5)		283° / -	41.0 NM	FL 460 / FL 245	even FL 430 / FL 260	Class C. Between LEGRO and 0010000E: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355). Between 0010000E and NALAX: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).	
△	NALAX	532859.89N 0002405.94E				Intersection with L46.	
(RNAV 5)		305° / -	22.2 NM	FL 460 / FL 245	even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).	
△	OTTRINGHAM VOR/DME (OTR)	534153.49N 0000613.61W				Intersection with L90.	
(RNAV 5)		308°/127°	32.6 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△ ERKIT	540148.85N 0004948.85W					Intersection with N110.	
(RNAV 5)	316°/135°	124.4 NM	FL 460 / FL 285	even FL 430 / FL 300	odd FL 450 / FL 290	Class C. Between ERKIT and 0020000W: Scottish ACC Freq: 126.930 (All Levels). Between 0020000W and TLA: Scottish ACC Freq: 135.855 (All Levels).	
△ TALLA VOR/DME (TLA)	552956.84N 0032110.09W					Intersection with N601 and N864. FRA Entry/Exit Point. Extremity of partition of L602.	
(RNAV)						ROUTE BREAK - THIS ATS ROUTE IS NOT CONTINUOUS.	
△ GLASGOW DME (GOW)	555213.81N 0042644.60W					Intersection with N560 and L612. Extremity of partition of L602.	
(RNAV 5)	297°/117°	13.0 NM	FL 255 / 5500 FT ALT	even FL 240 / FL 80	odd FL 250 / FL 70	FL 255/FL 195 Class C, FL 195/Alt 5500 FT Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).	
△ CLYDE	555748.43N 0044731.51W		GOW R297 13.0 NM 46 FT				
(RNAV 5)	297°/117°	12.0 NM	FL 255 / 5500 FT ALT	even FL 240 / FL 60	odd FL 250 / FL 70	FL 255/FL 195 Class C, FL 195/Alt 5500 FT Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).	
△ FYNER	560256.12N 0050655.19W		GOW R297 25.0 NM 46 FT				
(RNAV 5)	297°/117°	26.8 NM	FL 255 / 5500 FT ALT	even FL 240 / FL 60	odd FL 250 / FL 70	FL 255/FL 195 Class C, FL 195/Alt 5500 FT Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).	
△ BRUCE	561411.05N 0055028.09W					Intersection with Y958.	
(RNAV 5)	297°/116°	37.8 NM	FL 255 / FL 115	even FL 240 / FL 120	odd FL 250 / FL 130	FL 255/FL 195 Class C, FL 195/FL 115 Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).	
△ TIREE VOR/DME (TIR)	562935.57N 0065232.12W					Extremity of L602.	
<p>Route Remarks: NALAX-ERKIT CDR H24. Rest of L602 - PERM.</p> <p>The portion of L602 between GOW and TIR is for use by traffic climbing to or descending from the Shanwick OCA Boundary and the NOTA and below FL 195 is Class E and TMZ and extends 5 NM either side of the centre-line. However, within the confines of the Scottish TMA, L602 assumes the airspace classification of the Scottish TMA.</p> <p>Note: Transponder carriage and operation required within that part of L602 notified as Class E and TMZ.</p> <p>See also ENR 1.1, paragraph 1.1.3.</p>							

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
L603							
△	LAMSO	524358.43N 0025939.68E				Eastbound route only btn TENSO and LAMSO. FIR/UIR Boundary. Continues as UL603 and intersects with UP154 and UZ304 (see AIP Netherlands).	
(RNAV 5)	- /101°	7.2 NM	FL 460 / FL 175		odd FL 450 / FL 190	FL 460/FL 195 Class C, FL 195/FL 175 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 245). ATS Delegated to Amsterdam ACC below FL 245.	
△	BUKUT	524530.21N 0024801.68E					
(RNAV 5)	- /101°	11.2 NM	FL 460 / FL 175		odd FL 450 / FL 190	FL 460/FL 195 Class C, FL 195/FL 175 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 245). ATS Delegated to Amsterdam ACC below FL 245.	
△	DIBAL	524749.98N 0023000.00E					
(RNAV 5)	- /101°	1.2 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).	
△	ENITO	524804.89N 0022803.26E					
(RNAV 5)	- /100°	54.4 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).	
△	DOLAS	525842.96N 0010003.43E					
(RNAV 5)	- /107°	39.4 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	AMVEL	531102.96N 0000155.16W					
(RNAV 5)	- /107°	10.0 NM	FL 460 / FL 155		odd FL 450 / FL 170	FL 460/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△	ROGAG	531405.79N 0001745.46W				
(RNAV 5)	- /107°	5.6 NM	FL 460 / FL 155		odd FL 450 / FL 170	FL 460/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	EVKAL	531546.99N 0002637.21W				
(RNAV 5)	- /107°	9.0 NM	FL 460 / FL 125		odd FL 450 / FL 130	FL 460/FL 195 Class C, FL 195/FL 125 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	LAMIX	531828.66N 0004055.52W		GAM R080 9.7 NM 115 FT		Intersection with UT29.
(RNAV 5)	- /107°	20.1 NM	FL 460 / FL 105		odd FL 450 / FL 110	FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	EDUXO	532424N 0011301W				Base level change point is not at right angles to the CL of L603 and extends between: 531938N 0011532W and 532910N 0011030W.
(RNAV 5)	- /107°	2.4 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△	MAMUL	532505.20N 0011648.45W		GAM R304 14.5 NM 115 FT		Intersection with L60.
(RNAV 5)	- /107°	11.6 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ ELNOD (RNAV 5)	532826N 0013524W - /107°	11.3 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).
△ DESIG (RNAV 5)	533138.13N 0015333.70W - /112°	12.1 NM	POL R149 15.0 NM 1438 FT FL 460 / FL 245		odd FL 450 / FL 250	For flight planning purposes btn BELOX and DESIG, FL 250 and FL 270 are not avbl for cruising t/c. Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ TENSO (RNAV 5)	533601.89N 0021227.00W 292°/111°	48.8 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ BELOX (RNAV)	535316.37N 0032923.15W					FRA Entry/Exit Point. Extremity of partition of L603. ROUTE BREAK - THIS ATS ROUTE IS NOT CONTINUOUS.
△ ISLE OF MAN VOR/DME (IOM) (RNAV 5)	540401.12N 0044548.50W - /115°	31.0 NM	FL 255 / FL 75		odd FL 250 / FL 90	Eastbound route only btn LISBO and IOM. Extremity of partition of L603. Intersection with L10. FL 255/FL 195 Class C, FL 195/FL 75 Class D. Scottish ACC Freq: 123.775 (All Levels).
△ PEPOD (RNAV 5)	541616.31N 0053409.26W - /132°	23.8 NM	FL 255 / FL 75		odd FL 250 / FL 90	Intersection with L15. FL 255/FL 195 Class C, FL 195/FL 75 Class D. Scottish ACC Freq: 123.775 (All Levels).
△ LISBO	543130.00N 0060524.10W					Extremity of L603.

Route Remarks:
See also ENR 1.1, paragraph 1.1.3.

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
M8							
△	SUBIP	502644N 0005306E				Westbound route only. FIR Boundary. Extremity of M8.	
(RNAV 5)	286°/-	9.1 NM	FL 245 / FL 95	even FL 240 / FL 100		FL 245/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 128.430 (FL 145 and above); Freq: 135.325 (Below FL 145).	
△	ELDAX	502918.36N 0003930.42E				Intersection with N20.	
(RNAV 5)	295°/-	13.1 NM	FL 245 / FL 95	even FL 240 / FL 100		FL 245/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 135.055 (All Levels).	
△	WAFFU	503456.89N 0002059.29E				Extremity of M8. Intersection with Y8.	
Route Remarks: See also ENR 1.1, paragraph 1.1.3.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
M14							
△	GILDA	513605.68N 0003501.04E				Westbound route only. Extremity of M14.	
(RNAV 5)	318°/-	2.5 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305).	
△	FERIT	513759.23N 0003221.20E					
(RNAV 5)	318°/-	3.0 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305).	
△	WESUL	514015.29N 0002909.27E					
(RNAV 5)	318°/-	28.5 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305).	
△	STOAT	520133.22N 0000115.37W				Extremity of M14. Intersection with L613.	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
					↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
M16							
△	DOLAS	525842.96N 0010003.43E					Eastbound route only. Extremity of M16. Intersection with L603.
(RNAV 5)		- /101°	68.7 NM	FL 460 / FL 285		odd FL 450 / FL 290	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△	NAPEX	531222.64N 0005139.78W					
(RNAV 5)		- /100°	28.2 NM	FL 460 / FL 285		odd FL 450 / FL 290	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335).
△	XAPOS	531728.59N 0013751.25W					
(RNAV 5)		- /100°	23.1 NM	FL 460 / FL 285		odd FL 450 / FL 290	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335).
△	MANCHESTER DME (MCT)	532125.29N 0021544.24W					
(RNAV 5)		- /094°	31.4 NM	FL 460 / FL 285		odd FL 450 / FL 290	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335).
△	WALLASEY VOR/DME (WAL)	532330.97N 0030804.06W					Extremity of M16.

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
					↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
M17							
△	NICXI	520046.40N 0050317.78W					Westbound route only. Extremity of M17.
(RNAV 5)		334° / -	8.8 NM	FL 245 / FL 155		even FL 240 / FL 160	FL 245/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 129.380 (All Levels).
△	PEMOB	520837.77N 0050941.13W					
(RNAV 5)		335° / -	17.6 NM	FL 245 / FL 155		even FL 240 / FL 160	FL 245/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 129.380 (All Levels).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
△ LEMGU	522421.56N 0052236.38W				↓	↑
(RNAV 5)	335° / -	10.0 NM	FL 245 / FL 155	even FL 240 / FL 160	FL 245/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 129.380 (All Levels).	
△ VATRY	523316N 005300W				FIR/UIR Boundary. For continuation see AIP Ireland.	
Route Remarks: CDR H24. See also ENR 1.1, paragraph 1.1.3.						

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
M40						
△ UMBUR	512733.00N 0000708.17E				Westbound route only. Extremity of M40. →	
(RNAV 5)	- /246°	11.0 NM	FL 245 / FL 95	even FL 240 / FL 100	FL 245/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 132.605 (FL 215 and above); Freq: 127.955 (Below FL 215 to FL 175); Freq: 123.905 (Below FL 175).	
△ IPKUS	513152.43N 0002318.58E					
(RNAV 5)	- /246°	10.0 NM	FL 245 / FL 95	even FL 240 / FL 100	FL 245/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 129.605 (FL 175 and above); Freq: 123.905 (Below FL 175).	
△ NILON	513546.46N 0003803.93E					
(RNAV 5)	- /246°	4.6 NM	FL 460 / FL 95	even FL 430 / FL 100	FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 245); Freq: 129.605 (Below FL 245 to FL 175); Freq: 123.905 (Below FL 175).	
△ TERKO	513732.46N 0004448.08E					
(RNAV 5)	- /237°	8.9 NM	FL 460 / FL 95	even FL 430 / FL 100	FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 128.160 (FL 245 and above); Freq: 129.605 (Below FL 245 to FL 175); Freq: 123.905 (Below FL 175).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ SABER	514213.76N 0005658.19E		LAM R082 30.0 NM 241 FT			Intersection with L980.
(RNAV 1)	- /251°	36.8 NM	FL 460 / FL 275		even FL 430 / FL 280	Class C. London ACC Freq: 128.160 (All Levels).
△ IDESI	515351.74N 0015308.08E					Intersection with P49 and Y6.
(RNAV 1)	- /267°	16.2 NM	FL 460 / FL 85		even FL 430 / FL 100	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 128.160 (FL 245 and above); Freq: 118.480 (Below FL 245 to FL 215); Freq: 135.425 (Below FL 215).
△ RINIS	515429.66N 0021920.82E					FIR/UIR Boundary. For continuation see AIP Netherlands.
<u>Route Remarks:</u> See also ENR 1.1, paragraph 1.1.3.						

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
M79						
△ EMLON	531220.44N 0023000.00E					Westbound route only. Extremity of M79.
(RNAV 5)	301° / -	77.8 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ ROVNI	535313N 0003901E					
(RNAV 5)	300° / -	16.7 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ TENDO	540144.00N 0001446.72E					
(RNAV 5)	312° / -	91.1 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Scottish ACC Freq: 126.930 (All Levels).
△ NATEB	550218.41N 0014154.13W					Extremity of M79. Intersection with L602, N610 and UP18.
<u>Route Remarks:</u> CDR H24.						

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△	REDFA	520652.75N 0022916.81E				FIR/UIR Boundary. Extremity of M197. Intersection with L620 (see AIP Netherlands).

Route Designator		Route Usage Notes				Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	

M604

△	LYDD DME (LYD)	505958.87N 0005243.18E				Eastbound route only. Intersection with M189. Extremity of M604.
(RNAV 5)	- /149°	21.1 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 275); Freq: 134.905 (Below FL 275 to FL 195); Freq: 120.530 (Below FL 195).
△	DETLING DME (DET)	511814.41N 0003550.19E				
(RNAV 5)	012°/-	5.0 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 275); Freq: 134.905 (Below FL 275 to FL 195); Freq: 120.530 (Below FL 195).
△	FRANE	512306.00N 0003739.40E				
(RNAV 5)	013°/-	11.8 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 245); Freq: 129.605 (Below FL 245 to FL 175); Freq: 123.905 (Below FL 175).
△	SPEAR	513433.79N 0004200.57E		DET R012 16.8 NM 645 FT		
(RNAV 5)	013°/-	9.8 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 128.160 (FL 245 and above); Freq: 129.605 (Below FL 245 to FL 175); Freq: 123.905 (Below FL 175).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
△ TOVGU	514403.18N 0004537.55E					
(RNAV 5)	013° / -	5.4 NM	FL 460 / FL 85	odd FL 450 / FL 90		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245 to FL 155); Freq: 118.825 (Below FL 155).
△ DAGGA	514919.37N 0004739.00E		CLN R262 13.2 NM 100 FT			Intersection with P44.
(RNAV 5)	041° / -	1.1 NM	FL 460 / FL 105	odd FL 450 / FL 110		FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245 to FL 155); Freq: 118.825 (Below FL 155).
△ GASBA	515010.40N 0004852.85E					Intersection with M197.
(RNAV 5)	041° / -	2.2 NM	FL 460 / FL 105	odd FL 450 / FL 110		FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245 to FL 155); Freq: 121.230 (Below FL 155).
△ PAAVO	515149.03N 0005115.76E					Intersection with Q295.
(RNAV 5)	041° / -	15.1 NM	FL 460 / FL 105	odd FL 450 / FL 110		FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245 to FL 155); Freq: 121.230 (Below FL 155).
△ TEDSA	520303.10N 0010739.03E					Intersection with M183.
(RNAV 5)	036° / -	5.1 NM	FL 460 / FL 105	odd FL 450 / FL 110		FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 133.940 (FL 215 and above); Freq: 121.230 (Below FL 215).
△ LAPRA	520707.18N 0011236.45E					
(RNAV 5)	051° / -	41.6 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 133.940 (All levels).
△ LEDBO	523235.09N 0020607.51E					
(RNAV 5)	039° / -	20.5 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ ENITO	524804.89N 0022803.26E					
(RNAV 5)	025° / -	12.4 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△	BEKMO	525910.21N 0023710.22E				
(RNAV 5)		025° / -	20.2 NM	FL 460 / FL 245	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△	GIVPO	531709.77N 0025209.02E				
(RNAV 5)		025° / -	25.4 NM	FL 460 / FL 245	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	ROKAN	533947.50N 0031119.84E				
(RNAV 5)		021° / -	41.9 NM	FL 460 / FL 245	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	VENAS	541819.85N 0033908.23E				
(RNAV 5)		026° / -	37.8 NM	FL 460 / FL 245	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	LARGA	545149.54N 0040911.97E				FRA Entry Point. Extremity of M604.

Route Designator		Route Usage Notes				Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
M605						
△	XIDIL	502106.15N 0003829.37E				Eastbound route only btn SFD and XIDIL. FIR Boundary. For continuation see AIP France.
(RNAV 5)		- /140°	9.2 NM	FL 245 / FL 85	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 135.055 (All Levels).
△	HARDY	502815.75N 0002928.04E		SFD R140 22.4 NM 289 FT		
(RNAV 5)		- /140°	8.6 NM	FL 245 / FL 85	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 135.055 (All Levels).
△	WAFFU	503456.89N 0002059.29E				Intersection with M189.
(RNAV 5)		- /140°	13.8 NM	FL 245 / FL 85	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 135.055 (FL 175 and above); Freq: 133.180 (Below FL 175).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	SEAFORD VOR/DME (SFD)	504538.48N 0000718.89E					
(RNAV 5)	317°/137°	56.2 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 215 and above); Freq: 135.805 (Below FL 215 to FL 175); Freq: 133.180 (Below FL 175).	
△	WOODLEY NDB (WOD)	512710.02N 0005243.68W				Intersection with L612.	
(RNAV 5)	348°/168°	7.7 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 215 and above); Freq: 135.805 (Below FL 215 to FL 155); Freq: 129.080 (Below FL 155 to FL 135); Freq: 134.125 (Below FL 135).	
△	BENSU	513444.26N 0005508.45W				Intersection with Q70.	
(RNAV 5)	348°/168°	16.5 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 215 and above); Freq: 130.925 (Below FL 215 to FL 165); Freq: 121.280 (Below FL 165 to FL 125); Freq: 119.780 (Below FL 125).	
△	SILVA	515051.34N 0010019.40W				Intersection with Q41.	
(RNAV 5)	348°/168°	9.1 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 195 and above); Freq: 130.925 (Below FL 195).	
△	FINMA	515947.21N 0010313.34W		DTY R168 11.3 NM 600 FT		Intersection with L15.	
(RNAV 5)	348°/168°	11.3 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.165 (FL 195 and above); Freq: 130.925 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
N97							
△	ROKAN	533947.50N 0031119.84E					Extremity of N97. Intersection with M982, P1.
(RNAV 5)		296°/114°	190.4 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Between NATEB and abm BAVDO: Scottish ACC Freq: 126.930 (All Levels). Between abm BAVDO and ROKAN: Scottish ACC Freq: 121.325 (All Levels).
△	NATEB	550218.41N 0014154.13W					Intersection with N610.
(RNAV 5)		297°/116°	63.2 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 126.930 (FL 255 and above); Freq: 124.500 (Below FL 255).
△	TALLA VOR/DME (TLA)	552956.84N 0032110.09W					FRA Entry/Exit Point. Intersection with L602. Extremity of N97.
<u>Route Remarks:</u> ROKAN - NATEB CDR H24. Rest of N97 - PERM.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
N110							
△	DOLAS	525842.96N 0010003.43E					Extremity of N110. Intersection with L603.
(RNAV 5)		307°/127°	26.2 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△	ABTOS	531444.92N 0002536.29E					Intersection with Y70.
(RNAV 5)		307°/127°	32.9 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△ ODNEK	533437.20N	0001813.05W				Intersection with L46.	
(RNAV 5)	325°/145°	9.0 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).	
△ USEKA	534202.24N	0002645.13W					
(RNAV 5)	325°/145°	24.1 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).	
△ ERKIT	540148.85N	0004948.85W				Intersection with L602.	
(RNAV 5)	325°/145°	20.2 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 126.925 (FL 285 and above); Freq: 133.800 (Below FL 285).	
△ BAVDO	541819.73N	0010925.35W					
(RNAV 5)	331°/151°	41.6 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 126.925 (FL 255 and above); Freq: 124.500 (Below FL 255).	
△ UNTAL	545435.20N	0014423.27W				Intersection with UP18.	
(RNAV 5)	331°/151°	14.7 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 126.925 (FL 255 and above); Freq: 124.500 (Below FL 255).	
△ AGPED	550718.90N	0015657.15W				Intersection with Y96.	
(RNAV 5)	329°/149°	23.3 NM	FL 460 / FL 245	even FL 430 / FL 260	odd FL 450 / FL 250	Class C. Scottish ACC Freq: 126.925 (FL 255 and above); Freq: 124.500 (Below FL 255).	
△ INVON	552702.19N	0021835.87W				FRA Entry/Exit Point. Extremity of N110.	
Route Remarks: AGPED - INVON CDR H24. Rest of N110 - PERM.							

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
△ IBOLU	562310N 0030803W				↓ ↑	
(RNAV 5)	009°/189°	18.7 NM	FL 255 / FL 105	odd FL 250 / FL 110	even FL 240 / FL 120	FL 255/FL 195 Class C, FL 195/FL 105 Class A. Scottish ACC Freq: 124.500 (All Levels).
△ ASNUD	564139.00N 0030320.35W					Extremity of N864. Intersection with P600.
<p><u>Route Remarks:</u> Due to ATC operational requirements, the cruising level allocation between BHD and AVTIC, MONTY and WAL, and DCS and TLA is inappropriate to the MAG Track.</p> <p>Variable lower limit: Daily from 0700-2000 (0600-1900) between DCS and ASRUS the lower limit is FL 125.</p>						

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
N866						
△ LORKU	495618.10N 0022215.64W					Westbound route only btn DIGSU and LORKU. FIR/UIR Boundary. Extremity of N866.
(RNAV 5)	- /185°	20.5 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 129.430 (All Levels).
△ RUBMI	501645.92N 0021943.34W					
(RNAV 5)	- /198°	14.2 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 129.430 (All Levels).
△ ROKSI	503012.62N 0021251.28W					
(RNAV 5)	- /198°	10.9 NM	FL 460 / FL 165		odd FL 450 / FL 170	FL 460/FL 195 Class C, FL 195/FL 165 Class A. London ACC Freq: 129.430 (All Levels).
△ BILNI	504031.08N 0020732.56W					
(RNAV 5)	- /241°	34.1 NM	FL 460 / FL 155		odd FL 450 / FL 170	FL 460/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 129.430 (All Levels).
△ SOUTHAMPTON DME (SAM)	505718.90N 0012042.20W					Intersection with L620.
(RNAV 5)	- /224°	21.0 NM	FL 460 / FL 75		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 75 Class A. London ACC Freq: 129.430 (FL 155 and above); Freq: 134.125 (Below FL 155).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ GASGU	511223.99N 0005736.02W	SAM R043 21.0 NM 64 FT				
(RNAV 5)	- /230°	77.2 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Between DIGSU and 00025E: London ACC Freq: 133.940 (All Levels). Between 00025E and 00030W: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305). Between 00030W and GASGU: London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305).
△ DIGSU	520126N 0003805E					Intersection with P5 and P144.
(RNAV 5)	059°/239°	37.2 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 133.940 (All Levels).
△ BANEM	522008.11N 0013019.26E					
(RNAV 5)	059°/239°	25.2 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 133.940 (All Levels).
△ LEDBO	523235.09N 0020607.51E					Westbound route only btn TIPAN and LEDBO.
(RNAV 5)	- /242°	28.6 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ BUKUT	524530.21N 0024801.68E					Intersection with P7.
(RNAV 5)	- /205°	12.4 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ KUBAX	525633.93N 0025713.20E					
(RNAV 5)	- /205°	12.4 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ TOLSA	530736.89N 0030629.38E					
(RNAV 5)	- /205°	7.5 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ AKOKO	531416.24N 0031207.03E					
(RNAV 5)	- /206°	11.1 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Scottish ACC Freq: 121.325 (All Levels).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
(RNAV 5)	- /105°	9.7 NM	FL 245 / FL 75		odd FL 230 / FL 90	FL 245/FL 195 Class C; FL 195/FL 105 Class A; FL 105/FL 75 Class D. 0600-2300 (0500-2200) London ACC Freq: 134.755 (FL 165 and above); Cardiff APP Freq: 125.855 (Below FL 165). 2300-0600 (2200-0500) London ACC Freq: 134.755 (All Levels).
△	LEKCI	513440.46N 0025314.66W				
(RNAV 5)	- /123°	16.6 NM	FL 245 / FL 75		odd FL 230 / FL 90	Between BCN and the southern boundary of Cotswold CTA 12 (513634N 0025802W): FL 245/FL 195 Class C, FL 195/FL 75 Class A. Between the southern boundary of Cotswold CTA 12 (513634N 0025802W) and LEKCI: FL 245/FL 195 Class C, FL 195/FL 105 Class A, FL 105/FL 75 Class D. 0600-2300 (0500-2200) London ACC Freq: 134.755 (FL 165 and above); Cardiff APP Freq: 125.855 (Below FL 165). 2300-0600 (2200-0500) London ACC Freq: 134.755 (All Levels).
△	BRECON DME (BCN)	514331.89N 0031546.92W				Westbound route only b/n BCN and FELCA.
(RNAV 1)	301° / -	5.6 NM	FL 245 / FL 75	even FL 240 / FL 80		FL 245/FL 195 Class C, FL 195/FL 75 Class A. 0600 - 2300 (0500-2200) London ACC Freq: 134.755 (FL 165 and above); Cardiff APP Freq: 125.855 (Below FL 165). 2300 - 0600 (2200-0500) London ACC Freq: 134.755 (All Levels).
△	TIZDU	514622.64N 0032337.75W				
(RNAV 1)	300° / -	6.2 NM	FL 245 / FL 75	even FL 240 / FL 80		FL 245/FL 195 Class C, FL 195/FL 75 Class A. 0600-2300 (0500-2200) London ACC Freq: 134.755 (FL 165 and above); Cardiff APP Freq: 125.855 (Below FL 165). 2300-0600 (2200-0500) London ACC Freq: 134.755 (All Levels).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
△	FELCA	514930.86N 0033219.61W		↓	↑	Extremity of P4. Intersection with L9.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
P5						
△	DIGSU	520126N 0003805E				Extremity of P5. Intersection with N866 and UM185.
(RNAV 5)	015°/195°	20.2 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 133.940 (All Levels).
△	UMBAG	522052.37N 0004657.48E				
(RNAV 5)	013°/194°	63.4 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Between UMBAG and 5 NM north of UMBAG: London ACC Freq: 133.940 (All Levels). Between 5 NM north of UMBAG and ELNAB: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△	ELNAB	532211N 0011251E				
(RNAV 5)	014°/194°	127.4 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	GOTGO	552506.55N 0020850.44E				FRA Entry/Exit Point. Extremity of P5.
<u>Route Remarks:</u> DIGSU - GOTGO CDR H24.						

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
					↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
P6							
△	LESTA	524427.09N 0010419.42W					Westbound route only. Extremity of P6.
(RNAV 5)		316° / -	41.4 NM	FL 245 / FL 195	even FL 240 / FL 200		Class C. Between LESTA and 15 NM south of RODOL: London ACC Freq: 127.105 (All Levels). Between 15 NM south of RODOL and RODOL: Scottish ACC Freq: 118.780 (All Levels).
△	RODOL	531417N 0015143W					Extremity of partition of P6. Intersection with L28.
(RNAV)							ROUTE BREAK - THIS ROUTE IS NOT CONTINUOUS.
△	NELBO	542924.15N 0051810.39W					Westbound route only. Extremity of partition of P6.
(RNAV 5)		290° / -	5.5 NM	FL 255 / FL 55	even FL 240 / FL 60		FL 255/FL 195 Class C, FL 195/FL 55 Class D. Scottish ACC Freq: 123.775 (All Levels).
△	IPSET	543105.63N 0052708.92W					
(RNAV 5)		290° / -	28.5 NM	FL 255 / FL 55	even FL 240 / FL 60		FL 255/FL 195 Class C, FL 195/FL 55 Class D. Scottish ACC Freq: 123.775 (All Levels).
△	BELZU	543940.00N 0061348.00W					Extremity of P6.

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
					↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
P7							
△	LOGAN	514451.32N 0013642.58E		CLN R108 18.3 NM 100 FT			Westbound route only. Extremity of P7. Intersection with L980.
(RNAV 5)		- /227°	13.6 NM	FL 460 / FL 85	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 128.160 (FL 245 and above); Freq: 118.480 (Below FL 245 to FL 215); Freq: 135.425 (Below FL 215).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator	Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ IDESI	515351.74N 0015308.08E					
(RNAV 5)	- /228°	18.9 NM	FL 460 / FL 85		even FL 430 / FL 100	FL 460/FL 195 Class C, FL 195/FL 85 Class A. Between 5 NM before IDESI and IDESI: London ACC Freq: 128.160 (FL 245 and above); Freq: 118.480 (Below FL 245 to FL 215); Freq: 135.425 (Below FL 215). Between SONOG and 5 NM before IDESI: London ACC Freq: 133.940 (FL 215 and above); Freq: 135.425 (Below FL 215).
△ SONOG	520619.71N 0021610.08E				Intersection with Y4.	
(RNAV 5)	- /205°	25.0 NM	FL 460 / FL 215		even FL 430 / FL 220	Class C. London ACC Freq: 133.940 (All Levels).
△ BARM1	522841.76N 0023413.73E				Intersection with P25.	
(RNAV 5)	- /205°	18.8 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ BUKUT	524530.21N 0024801.68E				Extremity of P7.	

Route Designator	Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
P13						
△ ROLUM	541819.85N 0031831.29E				Westbound route only. Extremity of P13.	
(RNAV 5)	355° / -	39.6 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Scottish ACC Freq: 121.325 (All Levels).
△ ASKAM	545747.34N 0031349.91E				Extremity of P13. Intersection with L7 and UP59.	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
(RNAV 1)	- /171°	5.8 NM	FL 245 / FL 145		odd FL 230 / FL 150	FL 245/FL 195 Class C, FL 195/FL 145 Class A. London ACC Freq: 133.600 (All Levels).	
△ CONHA	524226.44N 0024659.26W						
(RNAV 1)	- /171°	5.5 NM	FL 245 / FL 125		odd FL 230 / FL 130	FL 245/FL 195 Class C, FL 195/FL 125 Class A. London ACC Freq: 133.600 (FL 145 and above). Scottish ACC Freq: 128.055 (Below FL 145).	
△ MIDJO	524754.42N 0024827.24W						
(RNAV 1)	- /171°	16.9 NM	FL 245 / FL 105		odd FL 230 / FL 110	FL 245/FL 195 Class C, FL 195/FL 105 Class A. Between NOKIN and 6 NM from MIDJO: Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195). Between 6 NM from MIDJO and MIDJO: London ACC Freq: 133.600 (FL 145 and above). Scottish ACC Freq: 128.055 (Below FL 145).	
△ NOKIN	530436.00N 0025258.25W						Intersection with N862 and P16.
(RNAV 5)	035°/215°	12.9 NM	FL 245 / FL 105	even FL 240 / FL 120	odd FL 230 / FL 110	FL 245/FL 195 Class C, FL 195/FL 105 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195).	
△ KUXEM	531511.07N 0024046.76W		MCT R247 16.3 NM 280 FT				
(RNAV 5)	035°/215°	15.9 NM	FL 245 / FL 105	even FL 240 / FL 120	odd FL 230 / FL 110	FL 245/FL 195 Class C, FL 195/FL 105 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 128.055 (Below FL 195).	
△ BARTN	532814.17N 0022541.11W		POL R215 20.1 NM 1438 FT				Intersection with L612 and L975.
(RNAV 5)	036°/216°	20.1 NM	FL 245 / FL 105	even FL 240 / FL 120	odd FL 230 / FL 110	FL 245/FL 195 Class C, FL 195/FL 105 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 135.715 (Below FL 195).	
△ POLE HILL VOR/DME (POL)	534437.60N 0020611.83W						Eastbound route only btn POL and OBOXA. Intersection with N601 and P18.
(RNAV 5)	015°/-	21.0 NM	FL 245 / FL 95		odd FL 230 / FL 110	FL 245/FL 195 Class C, FL 195/FL 95 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 135.715 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	IPSIR	540454N 0015657W					
(RNAV 5)	015° -	5.9 NM	FL 245 / FL 125	odd FL 230 / FL 130		FL 245/FL 195 Class C, FL 195/FL 125 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 135.715 (Below FL 195).	
△	OBOXA	541035.55N 0015420.13W					Extremity of P17.
Route Remarks: ATHAS - OXCUD CDR H24. Due to ATC operational requirements, the cruising level allocation between NOKIN and POL and between ATHAS and ZESPE is inappropriate to the MAG Track.							

Route Designator		Route Usage Notes					
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/SATVOICE number/ RCP & RSP limitations	
				↓	↑		
P18							
△	TELBA	523952.00N 0021906.97W					Extremity of P18.
(RNAV 5)	013°/194°	12.2 NM	FL 245 / FL 145	even FL 240 / FL 160	odd FL 230 / FL 150	FL 245/FL 195 Class C, FL 195/FL 145 Class A. London ACC Freq: 134.390 (FL 195 and above). Scottish ACC Freq: 134.430 (Below FL 195).	
△	STAFA	525141.00N 0021434.55W					Intersection with L8.
(RNAV 5)	006°/186°	8.9 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 134.430 (Below FL 195).	
△	UTUXA	530030.45N 0021312.52W					Intersection with N859.
(RNAV 5)	006°/186°	8.1 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 134.430 (Below FL 195).	
△	LISTO	530835.93N 0021156.54W					Intersection with L612.
(RNAV 5)	006°/186°	36.2 NM	FL 245 / FL 85	even FL 240 / FL 100	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 85 Class A. Between LISTO and abm MCT: Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 134.430 (Below FL 195). Between abm MCT and POL: Scottish ACC Freq: 118.780 (FL 195 and above); Freq: 135.715 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna				
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
P137						
△ REDFA	520652.75N 0022916.81E					Eastbound route only. UIR Boundary. Extremity of P137. Intersection with UL620 (see AIP Netherlands).
(RNAV 5)	- /098°	91.8 NM	FL 460 / FL 205		odd FL 450 / FL 210	Class C. London ACC Freq: 133.940 (All Levels).
△ SIVDA	522121.54N 0000147.01E					Extremity of P137.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna				
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
P144						
△ MATCH	514645.20N 0001500.00E		BPK R082 13.4 NM 392 FT			Eastbound route only. Extremity of P144.
(RNAV 5)	043° / -	20.5 NM	FL 460 / FL 85		odd FL 450 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. Between MATCH and 8 NM from MATCH: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 245); Freq: 124.930 (Below FL 245 to FL 155); Freq: 118.825 (Below FL 155). Between 8 NM from MATCH and DIGSU: London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245 to FL 155); Freq: 121.230 (Below FL 155).
△ DIGSU	520126N 0003805E					Intersection with M85 and N866.
(RNAV 5)	034° / -	23.6 NM	FL 460 / FL 195		odd FL 450 / FL 210	Class C. Between DIGSU and 12 NM from DIGSU: London ACC Freq: 133.940 (FL 245 and above); Freq: 124.930 (Below FL 245). Between 12 NM from DIGSU and TUZLA: London ACC Freq: 133.940 (FL 215 and above); Freq: 121.230 (Below FL 215).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ TUZLA	522040.55N 0010011.74E					
(RNAV 5)	035° -	67.6 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. Between TUZLA and 6 NM from TUZLA: London ACC Freq: 133.940 (All Levels). Between 6 NM from TUZLA and LATMU: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ LATMU	531525N 0020522E					Intersection with P48.
(RNAV 5)	035° -	121.0 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. Scottish ACC Freq: 134.775 (All Levels).
△ LARGA	545149.54N 0040911.97E					FRA Entry Point. Extremity of P144.
Route Remarks: MATCH - LARGA CDR H24.						

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
P155						
△ SOMVA	521826.00N 0023838.44E					Eastbound route only. FIR Boundary. Continues as UP155 (see AIP Netherlands).
(RNAV 5)	- /091°	28.5 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 133.940 (All Levels).
△ ABEDA	521939.63N 0015215.84E					
(RNAV 5)	- /091°	13.5 NM	FL 460 / FL 195	odd FL 450 / FL 210		Class C. London ACC Freq: 133.940 (FL 215 and above); Freq: 121.230 (Below FL 215).
△ BANEM	522008.11N 0013019.26E					
(RNAV 5)	- /091°	26.6 NM	FL 460 / FL 195	odd FL 450 / FL 210		Class C. London ACC Freq: 133.940 (FL 215 and above); Freq: 121.230 (Below FL 215).
△ UMBAG	522052.37N 0004657.48E					
(RNAV 5)	- /090°	27.7 NM	FL 460 / FL 195	odd FL 450 / FL 210		Class C. London ACC Freq: 133.940 (FL 215 and above); Freq: 124.930 (Below FL 215).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
T418							
△	UMLAT	514019.70N 0004139.32W		DTY R152 34.3 NM 600 FT		Westbound route only. Extremity of T418.	
(RNAV 5)	356°/-	20.9 NM	FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215 to FL 175); Freq: 135.800 (Below FL 175 to FL 155); Freq: 129.280 (Below FL 155 to FL 115); Freq: 118.825 (Below FL 115).	
△	WOBUN	520110.27N 0004400.00W		DTY R123 17.1 NM 600 FT			
(RNAV 5)	342°/-	14.4 NM	FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 195); Freq: 130.925 (Below FL 195).	
△	WELIN	521450.25N 0005108.41W		HON R101 30.6 NM 435 FT		Extremity of T418. Intersection with T420.	

Route Designator		Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
T420							
△	ALESO	503432.24N 0011331.50E				Westbound route only btn ALESO and WELIN. FIR/UIR Boundary. For continuation see AIP France.	
(RNAV 5)	314°/-	24.0 NM	FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 128.430 (FL 195 and above); Freq: 120.175 (Below FL 195).	
△	ROTNO	505126.07N 0004641.20E					
(RNAV 5)	314°/-	9.5 NM	FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.430 (FL 355 and above); Freq: 128.430 (Below FL 355 to FL 195); Freq: 120.175 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator	Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ ETVAX (RNAV 5)	505806.99N 314° / -	0003556.27E 8.5 NM	FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 255); Freq: 128.430 (Below FL 255 to FL 195); Freq: 120.175 (Below FL 195).
△ TIGER (RNAV 5)	510401.82N 315° / -	0002621.54E 22.0 NM	MAY R075 FL 460 / FL 95	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 95 Class A. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 255); Freq: 128.430 (Below FL 255 to FL 195); Freq: 120.175 (Below FL 195).
△ BIGGIN DME (BIG) (RNAV 5)	511951.15N 329° / -	0000205.32E 23.0 NM	FL 460 / FL 115	even FL 430 / FL 120		Intersection with L9. FL 460/FL 195 Class C, FL 195/FL 115 Class A. Between BIG and 15 NM north of BIG: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215 to FL 155); Freq: 120.530 (Below FL 155). Between 15 NM north of BIG and ULTIB: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)		MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
					↓	↑	
△	ULTIB	513935.57N 0001643.51W		BIG R328 23.0 NM 589 FT			
(RNAV 5)		329° / -	10.2 NM	FL 460 / FL 115	even FL 430 / FL 120		<p>FL 460/FL 195 Class C, FL 195/FL 115 Class A.</p> <p>Between ULTIB and 10 NM north of ULTIB: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215 to FL 155); Freq: 129.280 (Below FL 155).</p> <p>Between 10 NM north of ULTIB and 5 NM south of HEMEL: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215 to FL 155); Freq: 121.275 (Below FL 155).</p> <p>Between 5 NM south of HEMEL and HEMEL: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 130.925 (Below FL 215 to FL 155); Freq: 121.275 (Below FL 155).</p>
△	HEMEL	514820.00N 0002509.78W					
(RNAV 5)		329° / -	9.6 NM	FL 460 / FL 115	even FL 430 / FL 120		<p>FL 460/FL 195 Class C, FL 195/FL 115 Class A.</p> <p>Between HEMEL and 7 NM north of HEMEL: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 130.925 (Below FL 215 to FL 155); Freq: 121.275 (Below FL 155).</p> <p>Between 7 NM north of HEMEL and BUZAD: London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 215); Freq: 130.925 (Below FL 215 to FL 155); Freq: 121.275 (Below FL 155).</p>

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△ BUZAD	515632.08N 0003308.21W		BNN R359 13.0 NM 558 FT			Intersection with L10.	
(RNAV 5)	329° / -	13.0 NM	FL 460 / FL 115	even FL 430 / FL 120		FL 460/FL 195 Class C, FL 195/FL 115 Class A. Between BUZAD and 10 NM north of BUZAD: London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 215); Freq: 130.925 (Below FL 215 to FL 155); Freq: 121.275 (Below FL 155). Between 10 NM north of BUZAD and OLNEY: London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 195); Freq: 130.925 (Below FL 195).	
△ OLNEY	520740.22N 0004403.32W		DTY R102 14.4 NM 600 FT				
(RNAV 5)	329° / -	8.4 NM	FL 460 / FL 115	even FL 430 / FL 120		FL 460/FL 195 Class C, FL 195/FL 115 Class A. London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 195); Freq: 130.925 (Below FL 195).	
△ WELIN	521450.25N 0005108.41W		HON R101 30.6 NM 435 FT			Intersection with N57.	
(RNAV 5)	328°/148°	16.8 NM	FL 460 / FL 105	even FL 430 / FL 120	odd FL 450 / FL 110	FL 460/FL 195 Class C, FL 195/FL 105 Class A. FL 140 not available between WELIN and TNT. London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 195); Freq: 130.925 (Below FL 195).	
△ AKUPA	522911.57N 0010528.03W					Intersection with (U)Y250.	
(RNAV 5)	328°/148°	5.1 NM	FL 460 / FL 105	even FL 430 / FL 120	odd FL 450 / FL 110	FL 460/FL 195 Class C, FL 195/FL 105 Class A. FL 140 not available between WELIN and TNT. London ACC Freq: 127.880 (FL 295 and above); Freq: 127.105 (Below FL 295 to FL 195); Freq: 130.925 (Below FL 195).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	BIGGIN DME (BIG)	511951.15N 0000205.32E					
(RNAV 5)	285° / -	46.5 NM	FL 460 / FL 155	even FL 430 / FL 160		FL 460/FL 195 Class C, FL 195/ FL 155 Class A. Between BIG and 20NM from BIG: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305 to FL 215); Freq: 127.955 (Below FL 215). Between 20NM from BIG and ICTAM: London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305 to FL 215); Freq: 135.805 (Below FL 215).	
△	ICTAM	513137.37N 0010948.12W				Intersection with L179.	
(RNAV 5)	299° / -	9.9 NM	FL 460 / FL 155	even FL 430 / FL 160		FL 460/FL 195 Class C, FL 195/FL 155 Class A. London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305 to FL 215); Freq: 135.805 (Below FL 215).	
△	DIDZA	513627.71N 0012343.46W				Extremity of T421. Intersection with N14.	
Route Remarks: See also ENR 1.1, paragraph 1.1.3.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
UL8							
△	STAFA	525141.00N 0021434.55W		DTY R314 58.2 NM 600 FT		Westbound route only. Extremity of UL8.	
(RNAV 5)	325° / -	20.3 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).	
△	NANTI	530814.54N 0023400.51W		WAL R127 25.5 NM 55 FT			
(RNAV 5)	325° / -	3.5 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ UMKIL (RNAV 5)	531105.53N 331°/-	0023723.06W 8.1 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ VABKA (RNAV 5)	531808.31N 331°/-	0024410.02W 12.2 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ ASNIP (RNAV 5)	532843.09N 328°/-	0025425.97W 7.8 NM	FL 460 / FL 245	even FL 430 / FL 260		Intersection with UL28. Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ TADAL (RNAV 5)	533513.83N 327°/-	0030135.22W 10.4 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 135.580 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285).
△ BILVO	534352.26N 0031108.89W					Extremity of UL8. Intersection with UP6.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
UL9						
△ KONAN (RNAV 5)	510750.75N -/093°	0020000.00E 24.3 NM	FL 460 / FL 245		odd FL 450 / FL 250	Eastbound route only btn BIG and KONAN. UIR Boundary. Extremity of UL9. Intersection with UL607 (see AIP Belgium). Class C. London ACC Freq: 132.840 (FL 315 and above); Freq: 134.905 (Below FL 315).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	DESIG	533138.13N 0015333.70W		POL R149 15.0 NM 1438 FT		Intersection with L603 and UL70.	
(RNAV 5)	080°/261°	12.1 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	UNIGO	533340N 0013339W					
(RNAV 5)	081°/261°	9.4 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	UPTON	533513.00N 0011802.58W		GAM R325 22.3 NM 115 FT			
(RNAV 5)	081°/261°	2.2 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	ARPUB	533534N 0011428W					
(RNAV 5)	081°/261°	5.7 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	GOLES	533629.08N 0010500.37W		POL R102 37.3 NM 1438 FT		Westbound route only btn LIBSO and GOLES.	
(RNAV 5)	- /277°	15.4 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	FIZED	533444.87N 0003917.40W					
(RNAV 5)	- /277°	27.0 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
				↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
△	LIBSO	533129.33N 0000536.32E				Intersection with UT29.	
(RNAV 5)		042°/222°	29.5 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Between LIBSO and 15 NM before ROVNI: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285). Between 15 NM before ROVNI and ROVNI: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△	ROVNI	535313N 0003901E				Intersection with P39.	
(RNAV 5)		057°/238°	99.1 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	ODMOS	544526.32N 0030252.23E					
(RNAV 5)		052°/232°	38.6 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Scottish ACC Freq: 121.325 (All Levels).
△	ROPAL	550816.53N 0035642.67E				FRA Entry/Exit Point. Extremity of UL975.	
<u>Route Remarks:</u> LIBSO - ROPAL CDR H24. Rest of UL975 - PERM.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
				↓	↑	Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
UM8							
△	SUBIP	502644N 0005306E				Westbound route only. UIR Boundary. Extremity of UM8.	
(RNAV 5)		286° / -	9.1 NM	FL 460 / FL 245	even FL 430 / FL 260	Class C. London ACC Freq: 128.430 (All Levels).	
△	ELDAX	502918.36N 0003930.42E					
(RNAV 5)		295° / -	13.1 NM	FL 460 / FL 245	even FL 430 / FL 260	Class C. London ACC Freq: 135.055 (All Levels).	
△	WAFFU	503456.89N 0002059.29E				Extremity of UM8. Intersection with Y8.	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	TELTU	504839.92N 0004517.69W					
(RNAV 5)	018°/-	15.4 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 132.840 (FL 305 and above); Freq: 132.165 (Below FL 305).	
△	MIDHURST DME (MID)	510314.23N 0003730.01W					
(RNAV 5)	025°/-	12.0 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 132.840 (FL 305 and above); Freq: 132.165 (Below FL 305).	
△	MODMI	511400.99N 0002909.99W					
(RNAV 5)	018°/-	4.5 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. Between MODMI and 5 NM south of OCK: London ACC Freq: 132.840 (FL 305 and above); Freq: 132.165 (Below FL 305). Between 5 NM south of OCK and OCK: London ACC Freq: 134.460 (FL 305 and above); Freq: 132.185 (Below FL 305).	
△	OCKHAM DME (OCK)	511818.17N 0002649.86W				Intersection with Q3.	
(RNAV 5)	025°/-	25.4 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. Between OCK and 3 NM from OCK: London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305). Between 3 NM from OCK and KOBBI: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305).	
△	KOBBI	514113.77N 0000918.34W				Intersection with M197.	
(RNAV 5)	025°/-	4.2 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
				↓	↑		
△	BROOKMANS PARK DME (BPK)	514459.05N 0000624.25W					
(RNAV 5)	058°/239°	32.1 NM	FL 460 / FL 245	odd FL 450 / FL 250	even FL 430 / FL 260	Class C. Between BPK and 21 NM from BPK: London ACC Freq: 127.430 (FL 305 and above); Freq: 132.605 (Below FL 305). Between 21 NM from BPK and DIGSU: London ACC Freq: 133.940 (All Levels).	
△	DIGSU	520126N 0003805E				Westbound route only btn TIPAN and DIGSU. Intersection with N866.	
(RNAV 5)	- /220°	95.0 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Between ADGEG and 30 NM before DIGSU: London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355). Between 30 NM before DIGSU and DIGSU: London ACC Freq: 133.940 (All Levels).	
△	ADGEG	531343N 0021906E					
(RNAV 5)	- /221°	110.6 NM	FL 460 / FL 245		even FL 430 / FL 260	Class C. Scottish ACC Freq: 134.775 (All Levels).	
△	TIPAN	543554.13N 0042356.20E				FRA Exit Point. Extremity of UM185.	
Route Remarks: LUGIS - DESNA / TIPAN - DIGSU CDR H24. Due to ATC operational requirements, the cruising level allocation between LUGIS and TELTU is inappropriate to the MAG Track.							

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min			
				↓	↑		
UM189							
△	DRAKE	501234N 0000434W				Southbound route only. Tfc should plan to use eastbound levels. Extremity of UM189.	
(RNAV 5)	- /212°	11.8 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 132.840 (FL 295 and above); Freq: 135.055 (Below FL 295).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
UT29						
△	LAMIX	531828.66N 0004055.52W		GAM R080 9.7 NM 115 FT		Eastbound route only. Extremity of UT29.
(RNAV 5)	065° / -	13.1 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△	VEGUS	532400.54N 0002110.76W				
(RNAV 5)	064° / -	17.7 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285); Scottish ACC Freq: 133.800 (Below FL 285).
△	LIBSO	533129.33N 0000536.32E				Extremity of UT29. Intersection with UL975.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
UT71						
△	VAPID	511513.97N 0010242.40W				Eastbound route only. Extremity of UT71. Intersection with UN859.
(RNAV 5)	- /178°	5.8 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305).
△	TEVSI	512100.75N 0010301.26W				
(RNAV 5)	- /178°	16.0 NM	FL 460 / FL 245	odd FL 450 / FL 250		Class C. London ACC Freq: 134.460 (FL 305 and above); Freq: 132.165 (Below FL 305).
△	COWLY	513657.58N 0010353.72W				Extremity of UT71.

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
UT256						
△	DEAN CROSS DME (DCS)	544318.88N 0032026.30W				Eastbound route only. Extremity of UT256. Intersection with UL612, UN57 and UN864.
(RNAV 5)	- /135°	19.1 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. Scottish ACC Freq: 135.530 (FL 255 and above); Freq: 124.825 (Below FL 255).
△	RIPNO	545632N 0034415W				
(RNAV 5)	- /135°	17.3 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. Scottish ACC Freq: 135.530 (FL 255 and above); Freq: 124.825 (Below FL 255).
△	OSMEG	550826N 0040603W				
(RNAV 5)	- /141°	19.9 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. Scottish ACC Freq: 135.530 (FL 255 and above); Freq: 124.825 (Below FL 255).
△	ROVLA	552338.18N 0042824.96W				FRA Exit Point. Extremity of UT256.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit			Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
UY47						
△	DRAKE	501234N 0000434W				Southbound route only. Extremity of UY47. Intersection with L151.
(RNAV 5)	- /192°	14.9 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 132.840 (FL 295 and above); Freq: 135.055 (Below FL 295).
△	BENBO	502704.76N 0000036.71E				Intersection with UL612.
(RNAV 5)	- /192°	19.1 NM	FL 460 / FL 245		odd FL 450 / FL 250	Class C. London ACC Freq: 132.840 (FL 295 and above); Freq: 135.055 (Below FL 295).
△	SEAFORD VOR/DME (SFD)	504538.48N 0000718.89E				Extremity of UY47.
<u>Route Remarks:</u> Due to ATC operational requirements, the cruising level allocation for the entire route is inappropriate to the MAG Track.						

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△	MAYFIELD DME (MAY)	510101.86N 0000658.04E				Extremity of Y47.
Route Remarks: Due to ATC operational requirements, the cruising level allocation for the entire route is inappropriate to the MAG Track.						

Route Designator		Route Usage Notes					
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		Remarks	
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
Y53							
△	SAPCO	523225N 0012125W				Extremity of Y53.	
(RNAV 5)		313°/133°	18.1 NM	FL 245 / FL 75	even FL 240 / FL 80	odd FL 230 / FL 90	FL 245/FL 195 Class C, FL 195/FL 75 Class A. For flight planning purposes the portion of AWY Y53 btn SAPCO and PEDIG is for westbound flights only which are unable to route on AWY N601, exceptionally ATC may clear tfc eastbound. London ACC Freq: 127.105 (Above FL 195); Freq: 130.925 (FL 195 and below).
△	PEDIG	524447.59N 0014309.97W		WAL R127 64.2 NM 55 FT			
(RNAV 5)		309°/129°	27.2 NM	FL 245 / FL 65	even FL 240 / FL 80	odd FL 230 / FL 70	FL 245/FL 195 Class C, FL 195/FL 65 Class A. London ACC Freq: 134.390 (Above FL 195); Scottish ACC Freq: 134.430 (FL 195 and below).
△	NUGRA	530146.43N 0021813.52W		WAL R126 37.0 NM 55 FT			
(RNAV 5)		305°/125°	11.5 NM	FL 245 / FL 65	even FL 240 / FL 80	odd FL 230 / FL 70	FL 245/FL 195 Class C, FL 195/FL 65 Class A. London ACC Freq: 134.390 (Above FL 195); Scottish ACC Freq: 134.430 (FL 195 and below).
△	NANTI	530814.54N 0023400.51W		WAL R127 25.5 NM 55 FT			
(RNAV 5)		308°/128°	3.1 NM	FL 245 / 3500 FT ALT	even FL 240 / FL 60	odd FL 230 / 5000 FT ALT	FL 245/FL 195 Class C, FL 195/Alt 3500 FT Class A. Scottish ACC Freq: 118.780 (Above FL 195); Freq: 128.055 (FL 195 and below).
△	MOGTA	531008N 0023810W					
(RNAV 5)		307°/127°	8.5 NM	FL 245 / 3500 FT ALT	even FL 240 / FL 60	odd FL 230 / 5000 FT ALT	FL 245/FL 195 Class C, FL 195/Alt 3500 FT Class A. Scottish ACC Freq: 118.780 (Above FL 195); Freq: 128.055 (FL 195 and below).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△ EKLAD	531513.70N 0024928.85W	WAL R127 13.9 NM 55 FT				
(RNAV 5)	307°/127°	13.9 NM	FL 245 / 3500 FT ALT	even FL 240 / FL 60	odd FL 230 / 5000 FT ALT	FL 245/FL 195 Class C, FL 195/Alt 3500 FT Class A. Scottish ACC Freq: 118.780 (Above FL 195); Freq: 128.055 (FL 195 and below).
△ WALLASEY VOR/DME (WAL)	532330.97N 0030804.06W					Intersection with L10 and M146. Extremity of Y53.

Route Designator		Route Usage Notes				Remarks
Significant Point Name	Significant Point Coordinates	Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		IFR cruising levels max/min		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
Y70						
△ RAVLO	525501.21N 0030853.81E					Westbound route only btn RAVLO and BODSO. UIR Boundary. For continuation see AIP Netherlands.
(RNAV 5)	281° -	39.1 NM	FL 460 / FL 245	even FL 430 / FL 260		Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ BODSO	530308.25N 0020540.71E					Westbound route only FL 245 and above and bi-directional below FL 245 btn BODSO and GOLES. Intersection with L17.
(RNAV 5)	280°/100°	55.3 NM	FL 460 / FL 175	even FL 430 / FL 180	odd FL 230 / FL 190	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ SUPEL	531340.27N 0003528.02E					
(RNAV 5)	280°/100°	6.0 NM	FL 460 / FL 175	even FL 430 / FL 180	odd FL 230 / FL 190	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ ABTOS	531444.92N 0002536.29E					Intersection with N110.
(RNAV 5)	280°/100°	14.5 NM	FL 460 / FL 175	even FL 430 / FL 180	odd FL 230 / FL 190	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).
△ OTBED	531716.71N 0000154.61E					The base level change at OTBED is coincident with the western boundary of North Sea CTA 1. Intersection with L60.
(RNAV 5)	296°/116°	15.4 NM	FL 460 / FL 155	even FL 430 / FL 160	odd FL 230 / FL 170	Class C. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355).

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	VEGUS	532400.54N 0002110.76W					
(RNAV 5)	296°/115°	9.0 NM	FL 460 / FL 125	even FL 430 / FL 140	odd FL 230 / FL 130	FL 460/FL 195 Class C, FL 195/FL 125 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	SIVBU	532755N 0003444W					
(RNAV 5)	295°/115°	8.4 NM	FL 460 / FL 105	even FL 430 / FL 120	odd FL 230 / FL 110	FL 460/FL 195 Class C, FL 195/FL 105 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	GIPLO	533131N 0004723W					Base level change point is not at right angles to the CL of Y70 and extends between 533619N 0004448W and 532643N 0004958W.
(RNAV 5)	295°/115°	11.6 NM	FL 460 / FL 85	even FL 430 / FL 100	odd FL 230 / FL 90	FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 126.780 (FL 355 and above); Freq: 128.130 (Below FL 355 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285).	
△	GOLES	533629.08N 0010500.37W		POL R102 37.3 NM 1438 FT			Westbound route only btn GOLES and KOLID. Intersection with (U)L975.
(RNAV 5)	283° / -	10.1 NM	FL 460 / FL 85	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285 to FL 135). Freq: 135.715 (FL 135 and below).	
△	BATLI	533845.07N 0012136.90W					Intersection with (U)Y250.
(RNAV 5)	283° / -	27.1 NM	FL 460 / FL 85	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 133.800 (Below FL 285 to FL 135). Freq: 135.715 (FL 135 and below).	

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes				Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna		
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
△	POLE HILL VOR/DME (POL)	534437.60N 0020611.83W				Intersection with (U)N601.
(RNAV 5)	246° -	17.1 NM	FL 460 / FL 85	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285 to FL 195); Freq: 135.715 (Below FL 195).
△	CROFT	533736.89N 0023219.85W		WAL R056 25.6 NM 55 FT		Intersection with (U)P16.
(RNAV 5)	248° -	8.4 NM	FL 460 / FL 85	even FL 430 / FL 100		FL 460/FL 195 Class C, FL 195/FL 85 Class A. London ACC Freq: 132.860 (FL 335 and above); Freq: 133.705 (Below FL 335 to FL 285). Scottish ACC Freq: 118.780 (Below FL 285 to FL 195); Freq: 128.055 (Below FL 195).
△	KOLID	533425.70N 0024520.23W				Extremity of Y70. Intersection with (U)L70.

Route Remarks:

The portion of Y70 between OTBED and BATLI below FL 195 is Class A and extends 5 NM either side of the centre-line.

The portion of airspace formed by joining positions:

L975 Crossing Area

533835N 0013503W - 534007N 0011937W -
534626.98N 0011937.00W - 534308.41N 0011615.09W -
534127.82N 0010357.97W - 533059N 0010932W -
532845N 0013215W - 533835N 0013503W,
from AWY base level to an upper limit of FL 120, occasionally to FL 190 on request;

is notified for the purposes of SERA.6001(a) Classification of Airspaces in accordance with the conditions established in the Letter of Agreement (LOA) b/n the Derbyshire and Lancashire (Camphill) Gliding Club, British Gliding Association (BGA), Leeds Bradford International Airport, and Scottish ACC.

The area of Y70 bounded by the co-ordinates:
533142N 0010734W - 533119N 0010614W -
533109N 0010751W - 533142N 0010734W, has a lower limit of FL 85.

The area of Y70 bounded by the co-ordinates:
534402N 0012252W - 534134N 0010443W -
534007N 0011937W - 534402N 0012252W, has a lower limit of FL 125.

See also ENR 1.1, paragraph 1.1.3.

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator		Route Usage Notes					Remarks
Significant Point Name		Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓/↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations	
				↓	↑		
△	RISDU	573631.42N 0014823.78W					
(RNAV 5)	007°/188°	47.0 NM	FL 195 / FL 105	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
△	MONAV	582306.02N 0013811.02W					
(RNAV 5)	008°/188°	30.4 NM	FL 195 / FL 105	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
△	BEKET	585313.00N 0013120.14W					
(RNAV 5)	008°/188°	27.1 NM	FL 195 / FL 105	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
△	ERDOG	592003.14N 0012503.64W					
(RNAV 5)	008°/188°	3.0 NM	FL 195 / FL 75	odd FL 190 / FL 90	even FL 180 / FL 80	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
△	GAVEL	592300.00N 0012421.67W					
(RNAV 5)	008°/188°	7.0 NM	FL 195 / FL 75	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
△	RAVDI	592957.26N 0012242.18W					
(RNAV 5)	008°/188°	3.0 NM	FL 195 / FL 45	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Scottish ACC Freq: 134.850 (All Levels).	
▲	MOCHA	593255.50N 0012159.47W					Acft in communication with Sumburgh ATC must report OHD MOCHA unless otherwise authorized by that Unit.
(RNAV 5)	008°/188°	20.0 NM	FL 195 / FL 45	odd FL 190 / FL 110	even FL 180 / FL 120	Class E and TMZ. (See Note) Within the confines of the Sumburgh CTR/CTA, Y905 assumes the airspace classification of the Sumburgh CTR/ CTA. Scottish ACC Freq: 134.850 (All Levels).	
△	WAFIL	595243.00N 0011711.00W					Extremity of Y905.
Route Remarks:							
Although coverage of SUM VOR meets ICAO criteria, it is nevertheless deficient along the alignment of Y905 at low level in view of the distance btn SUM and PETOX. During commissioning flight inspection ICAO mnm field strength at FL 70 occurred to 90 NM and it is estimated it would occur above approximately FL 100 overhead PETOX. Therefore in line VOR navigation beyond SUM VOR 50D to PETOX may not comply with RNP 5.							
Transponder carriage and operation required.							

ENR 3.2 AREA NAVIGATION ROUTES (continued)

Route Designator	Route Usage Notes					Remarks
Significant Point Name	Significant Point Coordinates		Waypoint: IDENT of VOR/DME BRG, DIST & ELEV of DME antenna			
(RNP/RNAV Type & Accuracy)	MAG Track ↓ / ↑	Geodesic Distance	Upper limit / Lower limit	IFR cruising levels max/min		Airspace Class/ Controlling Unit/ Channel/ Logon address/ SATVOICE number/ RCP & RSP limitations
				↓	↑	
Y906						
△ RIMOL	573233.45N 0040229.55W				Extremity of Y906.	
(RNAV 5)	303°/123°	17.1 NM	FL 195 / FL 95	even FL 180 / FL 100	odd FL 190 / FL 110	Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).
△ GARVA	574118.00N 0042941.35W		INS R302 17.1 NM 42 FT			
(RNAV 5)	303°/122°	25.1 NM	FL 195 / FL 95	even FL 180 / FL 100	odd FL 190 / FL 110	Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).
△ ULLAP	575400.00N 0051009.20W					
(RNAV 5)	302°/122°	37.2 NM	FL 195 / FL 55	even FL 180 / FL 60	odd FL 190 / FL 70	Class E and TMZ. (See Note) Scottish ACC Freq: 127.275 (All Levels).
△ STORNOWAY VOR/DME (STN)	581225.02N 0061058.97W				Extremity of Y906.	
<p><u>Route Remarks:</u> Inverness Radar provide a radar service for tfc inbound to and outbound from Inverness via Y906 during the promulgated hours of Inverness Radar as published in UK AIP AD 2.EGPE AD 2.18 (and as amended by NOTAM). Outside the hours of Inverness Radar an approach procedural service is provided by Inverness Approach.</p> <p>Tfc inbound to Inverness via Y906 has a clearance limit of GARVA, descent clearance will be issued by Scottish ACC to be level by GARVA unless otherwise instructed by ATC. Scottish ACC will instruct tfc when to contact Inverness Approach or Inverness Radar (122.605 MHz), this will normally be at or before 40 NM from RIMOL.</p> <p>Transponder carriage and operation required.</p>						

ENR 4 RADIO NAVIGATION AIDS/SYSTEMS
ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE

Name of Station/ MAG Var/ VOR Declination	Ident	Frequency (Channel)	Hours of operation	Coordinates	DME Aerial Elevation	FRA Relevance	Remarks/ Usage
1.	2.	3.	4.	5.	6.	7.	8.
ABERDEEN VOR/DME 0.95°W (2022) 0.37°W (2021)	ADN	114.300 MHz 90X	H24 Hours of operation for aerodrome purposes: HO	571837.62N 0021602.09W	610 FT	IAD	FRA (A): EGPC, EGPE, EGNP, EGPT, EGQL, EGPF, EGPH, EGPG, EGPK FRA (D): EGPC, EGPE, EGNP, EGPT, EGQL APCH Aid to Aberdeen/Dyce. VOR/DME DOC: 90 NM/50,000 FT (200 NM/50,000 FT in Sector R045- 135).
BARKWAY DME 0.55°E (2022)	BKY	109Y 116.250 MHz	H24	515923.17N 0000342.87E	486 FT		No associated En-route VOR. DME DOC: 120 NM/50,000 FT.
BELFAST VOR/DME 2.16°W (2022) 2.40°W (2019)	BEL	117.200 MHz 119X	H24	543940.12N 0061347.66W	221 FT		APCH Aid to Belfast Aldergrove. On Belfast Aldergrove AD. VOR/DME DOC: 40 NM/50,000 FT (200 NM/50,000 FT in Sector R227- 347). There may be VOR bearing fluctuations in Sectors R060-110 and R140-180.
BENBECULA DME 3.17°W (2022)	BEN	86Y 113.950 MHz	H24 Hours of operation for aerodrome purposes: Refer to EGPL AD 2.3 Operational hours.	572840.57N 0072155.08W	46 FT		No associated En-route VOR. APCH Aid to Benbecula. On Benbecula AD. DME DOC: 150 NM/50,000 FT (200 NM/50,000 FT in Sector R197-002).
BERRY HEAD VOR/DME 0.52°W (2022) 0.40°W (2020)	BHD	112.050 MHz 57Y	H24	502354.96N 0032937.28W	218 FT	IAD	FRA (A): EGHH FRA (D): EGFF, EGGD VOR DOC: 85 NM/50,000 FT. DME DOC: 85 NM/50,000 FT (160 NM in Sector R210-015). Due to terrain effects significant bearing errors may occur below 3000 FT in Sector R010-025 at ranges between 14 NM and 19 NM.
BIGGIN DME 0.59°E (2022)	BIG	98X 115.100 MHz	H24	511951.15N 0000205.32E	589 FT		No associated En-route VOR. APCH Aid to Biggin Hill. On Biggin Hill AD. DME DOC: 60 NM/50,000 FT (125 NM/50,000 FT in Sector R284-044 and 100 NM/50,000 FT in Sector R044-134). Due to terrain, coverage at low level is reduced in Sector R114-219. In addition DME unlocks may occur in Sector R004-039 at ranges up to 25 NM.
BOVINGDON DME 0.36°E (2022)	BNN	84Y 113.750 MHz	H24	514334.19N 0003259.10W	558 FT		No associated En-route VOR. DME DOC: 60 NM/50,000 FT.
BRECON DME 0.59°W (2022)	BCN	121Y 117.450 MHz	H24	514331.89N 0031546.92W	1450 FT	D	FRA (D): EGTE No associated En-route VOR. DME DOC: 65 NM/50,000 FT (125 NM/50,000 FT in Sector R136-001).
BROOKMANS PARK DME 0.51°E (2022)	BPK	122X 117.500 MHz	H24	514459.05N 0000624.25W	392 FT		No associated En-route VOR. DME DOC: 40 NM/50,000 FT (80 NM/50,000 FT in Sector R285-000).

ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE (continued)

Name of Station/ MAG Var/ VOR Declination	Ident	Frequency (Channel)	Hours of operation	Coordinates	DME Aerial Elevation	FRA Relevance	Remarks/ Usage
1.	2.	3.	4.	5.	6.	7.	8.
CLACTON VOR/DME 0.93°E (2022) 1.30°E (2022)	CLN	114.550 MHz 92Y	H24	515054.50N 0010851.32E	100 FT		VOR/DME DOC: 100 NM/50,000 FT (150 NM/50,000 FT in Sector R314-044).
COMPTON VOR/DME 0.15°E (2022) 0.40°E (2021)	CPT	114.350 MHz 90Y	H24	512929.66N 0011310.89W	498 FT		VOR/DME DOC: 80 NM/50,000 FT (150 NM/50,000 FT in Sector R225- 045 and 130 NM/ 50,000 FT in Sector R045-135).
DAVENTRY DME 0.12°E (2022)	DTY	111X 116.400 MHz	H24	521048.51N 0010649.64W	600 FT		No associated En-route VOR. DME DOC: 60 NM/50,000 FT (75 NM/50,000 FT in Sector R284-344).
DEAN CROSS DME 1.02°W (2022)	DCS	99X 115.200 MHz	H24	544318.88N 0032026.30W	732 FT		No associated VOR. Any VOR indications should be ignored. DME DOC: 100 NM/50,000 FT. Due to terrain, coverage at low level is reduced in Sector R093-163.
DETLING DME 0.78°E (2022)	DET	120X 117.300 MHz	H24	511814.41N 0003550.19E	645 FT		No associated En-route VOR. DME DOC: 60 NM/50,000 FT.
DOVER DME 1.04°E (2022)	DVR	96Y 114.950 MHz	H24	510945.44N 0012132.71E	325 FT		No associated En-route VOR. DME DOC: 80 NM/50,000 FT (200 NM/50,000 FT in Sector R013-073).
DUNDONALD DME 1.65°W (2022)	DUD	101Y 115.450 MHz	H24	553331.70N 0043605.54W	506 FT		No associated En-route VOR. DME DOC: 160 NM/50,000 FT. Coverage is reduced in the sector R115-145.
GAMSTON DME 0.07°E (2022)	GAM	75X 112.800 MHz	H24	531653.28N 0005649.79W	115 FT		No associated En-route VOR. DME DOC: 80 NM/25,000 FT.
GLASGOW DME 1.63°W (2022)	GOW	101X 115.400 MHz	H24 Hours of operation for aerodrome purposes: HO	555213.81N 0042644.60W	46 FT	IAD	FRA (A): EGPI, EGPU FRA (D): EGPI, EGPV, EGPT, EGPU, EGQL No associated En-route VOR. DME DOC: 70 NM/50,000 FT (200 NM/50,000 FT in Sector R241-001). Due to terrain, coverage at low level is reduced in Sectors R346-026 and R181-201.
GOODWOOD DME 0.37°E (2022)	GWC	94Y 114.750 MHz	H24	505118.79N 0004524.25W	122 FT		No associated En-route VOR. DME DOC: 80 NM/50,000 FT. Due to terrain, coverage at low level is reduced in Sector R299-044.
GREAT DUN FELL DME 0.66°W (2022)	DUF	99Y 115.250 MHz	H24	544100.60N 0022703.66W	2803 FT		No associated En-route VOR. DME DOC: 160 NM/50,000 FT. Due to terrain, coverage at low level is reduced in Sector R300-020.
GREEN LOWTHER DME 1.27°W (2022)	GLO	33Y 109.650 MHz	H24	552324.44N 0034411.52W	2408 FT		No associated En-route VOR. DME DOC: 160 NM/50,000 FT. Coverage is reduced in the sectors R005-020 and R235-270.
HENTON NDB 0.28°E (2022)	HEN	433.500 kHz	H24	514535.07N 0004725.05W			No associated En-route navigational dependency. Range 30 NM.
HONILEY VOR/DME 0.09°W (2022) 0.60°E (2023)	HON	113.650 MHz 83Y	H24	522124.04N 0013949.41W	435 FT		VOR/DME DOC: 60 NM/50,000 FT (85 NM/50,000 FT in Sector R179- 239 and 100 NM/50,000 FT in Sector R314-001).
ISLE OF MAN VOR/DME 1.48°W (2022) 0.80°W (2022)	IOM	112.200 MHz 59X	H24	540401.12N 0044548.50W	567 FT	I	APCH Aid to Isle of Man. VOR DOC: 60 NM/50,000 FT (75 NM/50,000 FT in Sector R271-211). DME DOC: 60 NM/50,000 FT (160 NM/50,000 FT in Sector R271-211).

ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE (continued)

Name of Station/ MAG Var/ VOR Declination	Ident	Frequency (Channel)	Hours of operation	Coordinates	DME Aerial Elevation	FRA Relevance	Remarks/ Usage
1.	2.	3.	4.	5.	6.	7.	8.
JERSEY VOR/DME 0.09°E (2022) 0.65°W (2020)	JSY	112.200 MHz 59X	H24 Hours of operation for aerodrome purposes: HO	491315.98N 0020246.12W	276 FT		APCH Aid to Jersey. DOC: 60 NM/50,000 FT (40 NM/ 50,000 FT in Sector 048-183M). Due to terrain effects DME coverage is reduced in Sector R180-360 and unlocks occur. DME unlocks may occur on the 08 Approach Procedure. ENR Purpose: 491316N 0020246W
LAMBOURNE DME 0.61°E (2022)	LAM	103X 115.600 MHz	H24	513845.69N 0000906.13E	241 FT		No associated En-route VOR. DME DOC: 40 NM/50,000 FT (110 NM/50,000 FT in Sector R314-134).
LAND'S END VOR/DME 1.25°W (2022) 1.00°W (2020)	LND	114.200 MHz 89X	H24	500810.54N 0053813.06W	760 FT	IAD	FRA (A): EGHQ FRA (D): EGTE, EGHQ VOR/DME DOC: 200 NM/50,000 FT
LONDON DME 0.41°E (2022)	LON	83X	H24	512914.09N 0002759.54W	113 FT		No associated En-route VOR. DME DOC: 40 NM/50,000 FT (100 NM/50,000 FT in Sector R179-254 and 80 NM/50,000 FT in Sector R224-314). DME unlocks may occur in the Sector R179-249 at ranges greater than 50 NM.
LYDD DME 0.90°E (2022)	LYD	87Y 114.050 MHz	H24	505958.87N 0005243.18E	30 FT		No associated En-route VOR. DME DOC: 80 NM/50,000 FT (100 NM/50,000 FT in Sector R194-254).
MACHRIHANISH DME 2.05°W (2022)	MAC	107X 116.000 MHz	H24	552548.08N 0053901.49W	122 FT	IAD	FRA (A): EGAA, EGAC, EGEO, EGPF, EGPG, EGPH, EGPU, EIDL FRA (D): EGAA, EGAC, EGEO, EGPF, EGPG, EGPU, EIDL No associated En-route VOR. DME DOC: 150 NM/50,000 FT (200 NM/50,000 FT in Sector R227-347). Due to terrain, coverage at low level is reduced in Sectors R122-162, R207-237 and R347-082.
MANCHESTER DME 0.42°W (2022)	MCT	82Y 113.550 MHz	H24 Hours of operation for aerodrome purposes: HO	532125.29N 0021544.24W	280 FT		On Manchester AD. No associated En-route VOR. DME DOC: 90 NM/50,000 FT.
MAYFIELD DME 0.65°E (2022)	MAY	126X 117.900 MHz	H24	510101.86N 0000658.04E	384 FT		No associated En-route VOR. DME DOC: 40 NM/25,000 FT (60 NM/25,000 FT in Sector R104-164). Due to terrain, coverage at low level is reduced in Sector R314-039.
MIDHURST DME 0.40°E (2022)	MID	87X 114.000 MHz	H24	510314.23N 0003730.01W	233 FT		No associated En-route VOR. DME DOC: 60 NM/50,000 FT (100 NM/50,000 FT in Sector R240-000).
NEWCASTLE DME 0.42°W (2022)	NEW	89Y 114.250 MHz	H24	550218.41N 0014154.14W	287 FT		On Newcastle AD. No associated VOR. Any VOR indications should be ignored. DME DOC: 200 NM/50,000 FT. ENR Purpose: 550218N 0014154W
OCKHAM DME 0.43°E (2022)	OCK	100X 115.300 MHz	H24	511818.17N 0002649.86W	200 FT		RNAV Substitution Only. No associated En-route VOR. DME DOC: 70 NM/25,000 FT (90 NM/25,000 FT in Sector R059-089).

ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE (continued)

Name of Station/ MAG Var/ VOR Declination	Ident	Frequency (Channel)	Hours of operation	Coordinates	DME Aerial Elevation	FRA Relevance	Remarks/ Usage
1.	2.	3.	4.	5.	6.	7.	8.
OTTRINGHAM VOR/DME 0.33°E (2022) 0.10°E (2019)	OTR	113.900 MHz 86X	H24	534153.49N 0000613.61W	34 FT		VOR/DME DOC: 100 NM/60,000 FT (200 NM/60,000 FT in Sector R015- 075 and 150 NM/60,000 FT in Sector R075-135).
PERTH VOR 1.28°W (2022) 0.50°W (2023)	PTH	110.400 MHz	H24	562632.63N 0032206.96W		IAD	FRA (A): EGEO FRA (D): EGPD, EGPK, EGEO No associated En-route navigational dependency. No associated DME. Any DME indications should be ignored.
POLE HILL VOR/DME 0.41°W (2022) 0.50°E (2023)	POL	112.100 MHz 58X	H24	534437.60N 0020611.83W	1438 FT		VOR/DME DOC: 115 NM/50,000 FT (150 NM/50,000 FT in Sector R075- 015). Due to terrain, coverage at low level is reduced in Sector R280-335.
SAINT ABBS VOR/DME 0.73°W (2022) 0.20°W (2022)	SAB	112.500 MHz 72X	H24	555427.04N 0021222.81W	760 FT	IA	FRA (A): EGPF VOR DOC: 50 NM/50,000 FT (200 NM/50,000 FT in Sector R045-135 and 100 NM/50,000 FT in Sector R240-285). DME DOC: 90 NM/50,000 FT (200 NM/50,000 FT in Sector R045-135 and 100 NM/50,000 FT in Sector R240-285).
SEAFORD VOR/DME 0.67°E (2022) 1.00°E (2021)	SFD	117.000 MHz 117X	H24	504538.48N 0000718.89E	289 FT		VOR/DME DOC: 75 NM/50,000 FT (120 NM/50,000 FT in Sector R254- 299).
SOUTHAMPTON DME 0.16°E (2022)	SAM	80Y 113.350 MHz	H24 Hours of operation for aerodrome purposes: HO	505718.90N 0012042.20W	64 FT		No associated En-route VOR. DME DOC: 100 NM/50,000 FT (150 NM/50,000 FT in Sector R224-314). DME unlocks may be experienced at ranges exceeding 30 NM below 8000 FT.
STORNOWAY VOR/DME 2.79°W (2022) 2.20°W (2022)	STN	115.100 MHz 98X	H24	581225.02N 0061058.97W	299 FT	IAD	FRA (A): EGPE, EGPL, EGPU, EGEO, EGQS FRA (D): EGPE, EGPL, EGPU, EGEO APCH Aid to Stornoway. VOR/DME DOC: 105 NM/50,000 FT (200 NM/50,000 FT in Sector R167- 107). ENR Purpose: 581225N 0061059W
STRUMBLE VOR/DME 1.28°W (2022) 0.70°W (2022)	STU	113.100 MHz 78X	H24	515940.87N 0050224.70W	551 FT		VOR DOC: 85 NM/50,000 FT (200 NM/50,000 FT in Sector R211-331 and 120 NM/50,000 FT in Sector R331-016). DME DOC: 85 NM/50,000 FT (170 NM/50,000 FT in Sector R136-211, 200 NM/50,000 FT in Sector R211- 331 and 120 NM/50,000 FT in Sector R331-016).
SUMBURGH VOR/DME 0.87°W (2022) 0° (2023)	SUM	117.350 MHz 120Y	H24	595243.42N 0011711.51W	80 FT		APCH Aid to Sumburgh. On Sumburgh AD. VOR/DME DOC: 200 NM/50,000 FT. Due to terrain, coverage at low level is reduced in Sectors R140-160, R285-305 and R345-005.

ENR 4.5 AERONAUTICAL GROUND LIGHTS - EN-ROUTE

Name IDENT Coordinates	Type and intensity (1 000 Candelas)	Characteristics	Operating hours	Remarks
1	2	3	4	5
ANDREWSFIELD 515345.00N 0002706.00E	Identification Beacon	Flashing Green 'AF'.		
BLACKBUSHE 511921.72N 0005021.78W	Aerodrome Beacon	Flashing White.		
CAMBRIDGE 521220.6706N 0001057.6733E	Aerodrome Beacon	Flashing Green 'CI'. 500 M east north east of the ARP.		
CUMBERNAULD 555828N 0035817W	Aerodrome Beacon	Flashing White. Top of Visual Control Room.	Activated upon request.	
DENHAM 513511.54N 0003044.82W	Identification Beacon	Flashing Green 'DN'.		
EDAY 591132.41N 0024606.19W	Aerodrome Beacon	Flashing White.	On request.	
ELSTREE	Identification Beacon	Flashing Green 'EL'		
FAIROAKS 512101.0498N 0003347.6419W	Aerodrome Beacon	Flashing White.		
FENLAND 524430.93N 0000143.68W	Aerodrome Beacon	Flashing Green 'FE'.		
GLOUCESTERSHIRE 515331.8859N 0021004.4351W	Identification Beacon	Flashing Green 'GO'. Approx. 270 M south of midpoint Runway 09/27.	As required during AD hours.	
HAVERFORDWEST 514957.1115N 0045751.7436W	Identification Beacon	Flashing Green 'HW'.		
KEMBLE 514011.31N 0020326.56W	Aerodrome Beacon	Flashes during published hours.	When aerodrome is open.	
LAND'S END 500608.9232N 0054005.3835W	Aerodrome Beacon	Flashing White.		
LASHENDEN/HEADCORN 510917.10N 0003841.90E	Identification Beacon	Flashing Green. Beacon at centre of east end of the blister hangar.		
LONDONDERRY/EGLINTON 550223.3898N 0070921.1604W	Aerodrome Beacon	White Strobe on Control Tower.	During operational hours at night.	
LYDD 505715.76N 0005602.99E	Aerodrome Beacon	Flashing White - On terminal roof.		
NOTTINGHAM	Identification Beacon	Flashing Green 'NT'		
PETERBOROUGH/CONINGTON 522807.00N 0001435.00W	Identification Beacon	Flashing Green 'PB'.		
REDHILL 511301N 0000837W	Aerodrome Beacon	Flashing White/Green	HN	
ROCHESTER	Aerodrome Beacon	Flashing White.		
SCILLY ISLES/ST MARY'S 495451.3634N 0061741.4543W	Identification Beacon	Flashing Green 'SC' - VCR roof.		
SHOBDON 521436.97N 0025251.70W	Aerodrome Beacon	Flashing White.		
SHOREHAM 505009.69N 0001736.44W	Aerodrome Beacon	Flashing Green 'SH'.		
SOUTHAMPTON 505708.1668N 0012134.1758W	Aerodrome Beacon	Flashing White/Green.	HN during aerodrome operating hours.	
TIREE 562953.9202N 0065243.1365W	Aerodrome Beacon	Flashing White		
WARTON 534421.91N 0025250.18W	Identification Beacon	Flashing Green 'WQ'	H24	
WELLESBOURNE MOUNTFORD 521127.50N 0013706.00W	Aerodrome Beacon	Flashing White.		
WOLVERHAMPTON/ HALFPENNY GREEN 523055.92N 0021548.99W	Identification Beacon	Flashing Green 'WBA'		
WYCOMBE AIR PARK/BOOKER 513649.9061N 0004813.1090W	Identification Beacon	Flashing Green 'WP'		

INTENTIONALLY BLANK

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU002C PENZANCE RWY 26 500833N 0052646W - 500801N 0052637W - 500754N 0052744W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500749N 0053050W to 500826N 0052752W - 500833N 0052646W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the heliport operator. For contact details see AIP, Part 3 - Heliports, Section AD 3.2
EGRU003A CULDROSE A circle, 2.5 NM radius, centred at 500507N 0051515W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003B CULDROSE RWY 06 500339N 0051921W - 500408N 0051944W - 500423N 0051857W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500353N 0051837W - 500339N 0051921W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003C CULDROSE RWY 24 500650N 0051129W - 500621N 0051106W - 500609N 0051142W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500637N 0051208W - 500650N 0051129W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003D CULDROSE RWY 11 500607N 0051959W - 500637N 0051939W - 500620N 0051838W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500550N 0051858W - 500607N 0051959W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003E CULDROSE RWY 29 500408N 0051031W - 500338N 0051050W - 500355N 0051151W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500424N 0051132W - 500408N 0051031W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003F CULDROSE RWY 18 500805N 0051538W - 500806N 0051448W - 500736N 0051447W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500737N 0051537W - 500805N 0051538W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU003G CULDROSE RWY 36 500209N 0051433W - 500208N 0051524W - 500238N 0051525W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 500507N 0051515W to 500240N 0051435W - 500209N 0051433W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004A PREDANNACK A circle, 2 NM radius, centred at 500007N 0051354W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004B PREDANNACK RWY 05 495742N 0051701W - 495805N 0051736W - 495854N 0051622W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 495831N 0051546W - 495742N 0051701W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004C PREDANNACK RWY 23 500232N 0051048W - 500209N 0051012W - 500121N 0051127W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 500143N 0051203W - 500232N 0051048W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU004D PREDANNACK RWY 09 495940N 0051842W - 500013N 0051843W - 500013N 0051700W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 495940N 0051656W - 495940N 0051842W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004E PREDANNACK RWY 27 500013N 0050926W - 495941N 0050926W - 495941N 0051053W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 500013N 0051049W - 500013N 0050926W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004F PREDANNACK RWY 13 500131N 0051744W - 500157N 0051713W - 500127N 0051613W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 500100N 0051641W - 500131N 0051744W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004G PREDANNACK RWY 31 495826N 0051006W - 495800N 0051037W - 495837N 0051152W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 495902N 0051119W - 495826N 0051006W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004H PREDANNACK RWY 18 500307N 0051420W - 500308N 0051330W - 500206N 0051328W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 500206N 0051419W - 500307N 0051420W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU004I PREDANNACK RWY 36 495707N 0051321W - 495706N 0051411W - 495808N 0051413W thence anti-clockwise by the arc of a circle radius 2 NM centred on 500007N 0051354W to 495809N 0051322W - 495707N 0051321W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU005A NEWQUAY A circle, 2.5 NM radius, centred at 502627N 0045943W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU005B NEWQUAY RWY 12 502758N 0050435W - 502825N 0050409W - 502756N 0050252W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 502627N 0045943W to 502728N 0050317W - 502758N 0050435W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU005C NEWQUAY RWY 30 502501N 0045506W - 502433N 0045531W - 502457N 0045635W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 502627N 0045943W to 502525N 0045610W - 502501N 0045506W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU006A EXETER A circle, 2.5 NM radius, centred at 504403N 0032450W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU006B EXETER RWY 08 504301N 0032942W - 504332N 0032954W - 504343N 0032844W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 504403N 0032450W to 504312N 0032831W - 504301N 0032942W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU006C EXETER RWY 26 504506N 0031958W - 504434N 0031946W - 504423N 0032056W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 504403N 0032450W to 504455N 0032108W - 504506N 0031958W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU007A DUNKESWELL A circle, 2 NM radius, centred at 505136N 0031405W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU007B DUNKESWELL RWY 04 504912N 0031650W - 504933N 0031729W - 505017N 0031628W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505136N 0031405W to 504956N 0031549W - 504912N 0031650W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU007C DUNKESWELL RWY 22 505400N 0031120W - 505339N 0031042W - 505255N 0031142W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505136N 0031405W to 505316N 0031221W - 505400N 0031120W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008A MERRYFIELD A circle, 2.5 NM radius, centred at 505747N 0025620W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008B MERRYFIELD RWY 03 505506N 0025754W - 505519N 0025840W - 505540N 0025825W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 505526N 0025739W - 505506N 0025754W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008C MERRYFIELD RWY 21 510051N 0025444W - 510038N 0025357W - 505958N 0025425W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 510011N 0025512W - 510051N 0025444W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008D MERRYFIELD RWY 09 505714N 0030118W - 505746N 0030122W - 505750N 0030017W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 505718N 0030012W - 505714N 0030118W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008E MERRYFIELD RWY 27 505820N 0025122W - 505748N 0025117W - 505745N 0025223W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 505817N 0025227W - 505820N 0025122W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008F MERRYFIELD RWY 16 510036N 0025807W - 510047N 0025718W - 510015N 0025702W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 510006N 0025751W - 510036N 0025807W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU008G MERRYFIELD RWY 34 505508N 0025421W - 505458N 0025510W - 505522N 0025522W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 505747N 0025620W to 505533N 0025434W - 505508N 0025421W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU009A YEOVIL/WESTLAND 505817N 0024035W - 505804N 0023747W thence clockwise by the arc of a circle radius 2 NM centred on 505624N 0023932W to 505817N 0024035W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU009B YEOVIL/WESTLAND RWY 09 505614N 0024415W - 505646N 0024414W - 505644N 0024239W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505624N 0023932W to 505612N 0024241W - 505614N 0024415W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU009C YEOVIL/WESTLAND RWY 27 505635N 0023449W - 505602N 0023450W - 505604N 0023625W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505624N 0023932W to 505636N 0023623W - 505635N 0023449W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU010A COMPTON ABBAS A circle, 2 NM radius, centred at 505802N 0020913W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU010B COMPTON ABBAS RWY 08 505708N 0021337W - 505739N 0021349W - 505752N 0021222W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505802N 0020913W to 505720N 0021211W - 505708N 0021337W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU010C COMPTON ABBAS RWY 26 505857N 0020449W - 505825N 0020438W - 505813N 0020604W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505802N 0020913W to 505844N 0020615W - 505857N 0020449W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU011A BOURNEMOUTH A circle, 2.5 NM radius, centred at 504648N 0015033W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU011B BOURNEMOUTH RWY 08 504546N 0015508W - 504617N 0015521W - 504626N 0015427W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 504648N 0015033W to 504555N 0015414W - 504546N 0015508W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU011C BOURNEMOUTH RWY 26 504754N 0014536W - 504723N 0014523W - 504710N 0014639W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 504648N 0015033W to 504742N 0014652W - 504754N 0014536W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU012A SOUTHAMPTON A circle, 2 NM radius, centred at 505701N 0012124W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU012B SOUTHAMPTON RWY 02 505359N 0012239W - 505410N 0012327W - 505514N 0012251W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505701N 0012124W to 505504N 0012203W - 505359N 0012239W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU012C SOUTHAMPTON RWY 20 510004N 0012010W - 505953N 0011921W - 505848N 0011958W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505701N 0012124W to 505858N 0012046W - 510004N 0012010W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU013A LEE-ON-SOLENT 504810N 0010930W thence anti-clockwise by the arc of a circle radius 2 NM centred on 504857N 0011224W to 504824N 0010921W - 505049N 0011117W thence anti-clockwise by the arc of a circle radius 2 NM centred on 504857N 0011224W to 504810N 0010930W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU013B LEE-ON-SOLENT RWY 05 504641N 0011523W - 504704N 0011559W - 504744N 0011455W thence anti-clockwise by the arc of a circle radius 2 NM centred on 504857N 0011224W to 504721N 0011419W - 504641N 0011523W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU013C LEE-ON-SOLENT RWY 23 505115N 0010919W - 505052N 0010843W - 504947N 0011027W - 505017N 0011052W - 505115N 0010919W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU014A FLEETLANDS 504810N 0010929W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505007N 0011010W to 505054N 0011304W thence clockwise by the arc of a circle radius 2 NM centred on 504857N 0011224W to 505049N 0011117W - 504824N 0010921W thence clockwise by the arc of a circle radius 2 NM centred on 504857N 0011224W to 504810N 0010929W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the heliport operator. For contact details, see UK MIL AIP, Part 3 - Heliports, Section AD 3.2
EGRU015A CHICHESTER/GOODWOOD A circle, 2 NM radius, centred at 505134N 0004533W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU015B CHICHESTER/GOODWOOD RWY 06 504950N 0004906W - 505017N 0004934W - 505045N 0004826W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505018N 0004800W - 504950N 0004906W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU015C CHICHESTER/GOODWOOD RWY 24 505327N 0004155W - 505300N 0004127W - 505228N 0004244W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505254N 0004313W - 505327N 0004155W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU015D CHICHESTER/GOODWOOD RWY 10 505207N 0005003W - 505239N 0004952W - 505226N 0004824W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505155N 0004840W - 505207N 0005003W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU015E CHICHESTER/GOODWOOD RWY 28 505121N 0004059W - 505049N 0004110W - 505101N 0004231W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505133N 0004224W - 505121N 0004059W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU015F CHICHESTER/GOODWOOD RWY 14 505338N 0004857W - 505359N 0004818W - 505314N 0004717W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505253N 0004755W - 505338N 0004857W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU015G CHICHESTER/GOODWOOD RWY 32 504930N 0004212W - 504909N 0004250W - 504953N 0004350W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505134N 0004533W to 505014N 0004312W - 504930N 0004212W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016A SHOREHAM A circle, 2 NM radius, centred at 505008N 0001750W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016B SHOREHAM RWY 02 504721N 0001907W - 504733N 0001954W - 504824N 0001923W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 504812N 0001836W - 504721N 0001907W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016C SHOREHAM RWY 20 505257N 0001632W - 505245N 0001544W - 505153N 0001617W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 505204N 0001705W - 505257N 0001632W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016D SHOREHAM RWY 02G 504726N 0001901W - 504737N 0001949W - 504823N 0001920W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 504811N 0001833W - 504726N 0001901W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016E SHOREHAM RWY 20G 505257N 0001630W - 505245N 0001542W - 505152N 0001615W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 505204N 0001703W - 505257N 0001630W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016F SHOREHAM RWY 06 504834N 0002129W - 504903N 0002152W - 504924N 0002046W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 504856N 0002021W - 504834N 0002129W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016G SHOREHAM RWY 24 505136N 0001347W - 505107N 0001324W - 505041N 0001448W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 505110N 0001508W - 505136N 0001347W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU016H SHOREHAM RWY 13 505137N 0002125W - 505204N 0002056W - 505137N 0001956W thence anti-clockwise by the arc of a circle radius 2 NM centred on 505008N 0001750W to 505113N 0002029W - 505137N 0002125W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU103C SWANSEA RWY 22 513854N 0040133W - 513835N 0040052W - 513745N 0040150W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513619N 0040404W to 513804N 0040232W - 513854N 0040133W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU103D SWANSEA RWY 10 513606N 0040854W - 513638N 0040848W - 513632N 0040715W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513619N 0040404W to 513559N 0040714W - 513606N 0040854W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU103E SWANSEA RWY 28 513600N 0035931W - 513527N 0035937W - 513534N 0040106W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513619N 0040404W to 513605N 0040053W - 513600N 0035931W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU104A ST ATHAN 512532N 0032328W - 512241N 0032410W thence clockwise by the arc of a circle radius 2 NM centred on 512419N 0032600W to 512532N 0032328W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU104B ST ATHAN RWY 07 512308N 0033043W - 512339N 0033058W - 512400N 0032909W thence anti-clockwise by the arc of a circle radius 2 NM centred on 512419N 0032600W to 512329N 0032854W - 512308N 0033043W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU104C ST ATHAN RWY 25 512530N 0032116W - 512459N 0032101W - 512428N 0032344W - 512503N 0032335W - 512530N 0032116W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU105A CARDIFF 512532N 0032328W thence clockwise by the arc of a circle radius 2.5 NM centred on 512348N 0032036W to 512241N 0032410W - 512532N 0032328W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU105B CARDIFF RWY 12 512500N 0032523W - 512529N 0032500W - 512502N 0032335W - 512429N 0032344W - 512500N 0032523W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU105C CARDIFF RWY 30 512234N 0031546W - 512205N 0031610W - 512226N 0031715W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512348N 0032036W to 512255N 0031652W - 512234N 0031546W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU106A BRISTOL A circle, 2.5 NM radius, centred at 512258N 0024309W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU106B BRISTOL RWY 09 512229N 0024817W - 512302N 0024820W - 512304N 0024708W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512258N 0024309W to 512232N 0024705W - 512229N 0024817W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU106C BRISTOL RWY 27 512325N 0023807W - 512253N 0023804W - 512251N 0023910W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512258N 0024309W to 512323N 0023913W - 512325N 0023807W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU107A YEOVILTON 505817N 0024035W thence clockwise by the arc of a circle radius 2.5 NM centred on 510030N 0023844W to 505804N 0023747W - 505817N 0024035W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU107B YEOVILTON RWY 04 505754N 0024053W - 505814N 0024134W - 505832N 0024111W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510030N 0023844W to 505817N 0024035W - 505817N 0024026W - 505754N 0024053W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU107C YEOVILTON RWY 22 510310N 0023540W - 510250N 0023459W - 510210N 0023547W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510030N 0023844W to 510232N 0023626W - 510310N 0023540W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU107D YEOVILTON RWY 08 505950N 0024354W - 510022N 0024400W - 510028N 0024241W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510030N 0023844W to 505956N 0024235W - 505950N 0024354W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU107E YEOVILTON RWY 26 510110N 0023334W - 510038N 0023328W - 510032N 0023446W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510030N 0023844W to 510104N 0023452W - 510110N 0023334W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU108 PORT OF DOVER 510907N 0012206E thence clockwise by the arc of a circle radius 2.25 NM centred on 510800N 0011900E to 510656N 0011551E - 510907N 0012206E	Upper limit: 1000 FT ALT Lower limit: SFC	Flight permitted by any unmanned aircraft: operating in the service of the Port of Dover Police; operating in the service of the Kent Police; operating in the service of Kent Fire and Rescue Service; or operating with the permission of the Port of Dover Police. SI 1329/2019. Contact: Refer to Statutory Instrument.
EGRU109A GLOUCESTERSHIRE A circle, 2 NM radius, centred at 515339N 0021002W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU109B GLOUCESTERSHIRE RWY 04 515057N 0021212W - 515115N 0021255W - 515204N 0021200W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515148N 0021115W - 515057N 0021212W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU109C GLOUCESTERSHIRE RWY 22 515605N 0020732W - 515547N 0020648W - 515501N 0020740W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515521N 0020821W - 515605N 0020732W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU109D GLOUCESTERSHIRE RWY 04G 515105N 0021200W - 515123N 0021243W - 515203N 0021158W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515147N 0021112W - 515105N 0021200W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU109E GLOUCESTERSHIRE RWY 22G 515557N 0020735W - 515539N 0020652W - 515459N 0020737W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515520N 0020817W - 515557N 0020735W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU109F GLOUCESTERSHIRE RWY 09 515302N 0021455W - 515335N 0021500W - 515342N 0021316W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515310N 0021310W - 515302N 0021455W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU109G GLOUCESTERSHIRE RWY 27 515414N 0020522W - 515342N 0020517W - 515335N 0020648W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515339N 0021002W to 515408N 0020654W - 515414N 0020522W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU110A KEMBLE A circle, 2 NM radius, centred at 514005N 0020325W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU110B KEMBLE RWY 08 513918N 0020819W - 513950N 0020828W - 514001N 0020638W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514005N 0020325W to 513929N 0020629W - 513918N 0020819W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU110C KEMBLE RWY 26 514052N 0015832W - 514020N 0015823W - 514009N 0020013W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514005N 0020325W to 514041N 0020021W - 514052N 0015832W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU110D KEMBLE RWY 08G 513924N 0020746W - 513956N 0020755W - 514004N 0020638W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514005N 0020325W to 513932N 0020630W - 513924N 0020746W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU110E KEMBLE RWY 26G 514053N 0015853W - 514021N 0015844W - 514012N 0020013W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514005N 0020325W to 514044N 0020023W - 514053N 0015853W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU111A FAIRFORD A circle, 2.5 NM radius, centred at 514101N 0014724W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU111B FAIRFORD RWY 09 514037N 0015302W - 514110N 0015304W - 514112N 0015124W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 514101N 0014724W to 514039N 0015123W - 514037N 0015302W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU111C FAIRFORD RWY 27 514124N 0014146W - 514052N 0014144W - 514050N 0014324W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 514101N 0014724W to 514122N 0014325W - 514124N 0014146W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU112A NETHERAVON A circle, 2 NM radius, centred at 511453N 0014517W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU112B NETHERAVON RWY 04 511235N 0014751W - 511255N 0014830W - 511333N 0014739W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511453N 0014517W to 511312N 0014700W - 511235N 0014751W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU112C NETHERAVON RWY 22 511718N 0014235W - 511657N 0014156W - 511613N 0014255W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511453N 0014517W to 511634N 0014335W - 511718N 0014235W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU112D NETHERAVON RWY 11 511535N 0014957W - 511605N 0014941W - 511546N 0014809W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511453N 0014517W to 511515N 0014825W - 511535N 0014957W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU112E NETHERAVON RWY 29 511412N 0014038W - 511341N 0014054W - 511400N 0014226W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511453N 0014517W to 511431N 0014210W - 511412N 0014038W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113A BOSCOMBE A circle, 2.5 NM radius, centred at 510912N 0014504W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113B BOSCOMBE RWY 05 510643N 0014908W - 510707N 0014941W - 510749N 0014822W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 510724N 0014749W - 510643N 0014908W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113C BOSCOMBE RWY 23 511139N 0014103W - 511114N 0014030W - 511035N 0014145W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 511100N 0014218W - 511139N 0014103W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113D BOSCOMBE RWY 05N 510706N 0014834W - 510731N 0014907W - 510753N 0014826W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 510727N 0014754W - 510706N 0014834W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113E BOSCOMBE RWY 23N 511114N 0014202W - 511049N 0014129W - 511039N 0014149W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 511103N 0014223W - 511114N 0014202W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113F BOSCOMBE RWY 05S 510635N 0014909W - 510700N 0014941W - 510745N 0014817W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 510720N 0014743W - 510635N 0014909W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU113H BOSCOMBE RWY 17 511215N 0014526W - 511223N 0014436W - 511139N 0014419W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 511142N 0014513W - 511215N 0014526W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU113I BOSCOMBE RWY 35 510608N 0014214W - 510600N 0014304W - 510656N 0014325W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510912N 0014504W to 510713N 0014238W - 510608N 0014214W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU114A THRUXTON A circle, 2 NM radius, centred at 511240N 0013549W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Requests for permission to fly an unmanned aircraft are to be made to the Duty Operations Manager (Tel: 01264-772352 or Email: airtraffic@thruptonairport.com). Requests are to be made at least 36 hours prior to the intended commencement of a flight.
EGRU114B THRUXTON RWY 07 51117N 0013954W - 511147N 0014014W - 511209N 0013853W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511240N 0013549W to 511139N 0013833W - 51117N 0013954W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Requests for permission to fly an unmanned aircraft are to be made to the Duty Operations Manager (Tel: 01264-772352 or Email: airtraffic@thruptonairport.com). Requests are to be made at least 36 hours prior to the intended commencement of a flight.
EGRU114C THRUXTON RWY 25 511403N 0013144W - 511334N 0013124W - 511312N 0013245W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511240N 0013549W to 511342N 0013305W - 511403N 0013144W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Requests for permission to fly an unmanned aircraft are to be made to the Duty Operations Manager (Tel: 01264-772352 or Email: airtraffic@thruptonairport.com). Requests are to be made at least 36 hours prior to the intended commencement of a flight.
EGRU114D THRUXTON RWY 12 511357N 0014004W - 511424N 0013936W - 511354N 0013820W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511240N 0013549W to 511326N 0013846W - 511357N 0014004W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Requests for permission to fly an unmanned aircraft are to be made to the Duty Operations Manager (Tel: 01264-772352 or Email: airtraffic@thruptonairport.com). Requests are to be made at least 36 hours prior to the intended commencement of a flight.
EGRU114E THRUXTON RWY 30 511116N 0013150W - 511048N 0013218W - 511118N 0013331W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511240N 0013549W to 511144N 0013301W - 511116N 0013150W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Requests for permission to fly an unmanned aircraft are to be made to the Duty Operations Manager (Tel: 01264-772352 or Email: airtraffic@thruptonairport.com). Requests are to be made at least 36 hours prior to the intended commencement of a flight.
EGRU115A BRIZE NORTON A circle, 2.5 NM radius, centred at 514500N 0013459W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU115B BRIZE NORTON RWY 07 514344N 0014017W - 514415N 0014032W - 514433N 0013856W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 514500N 0013459W to 514402N 0013841W - 514344N 0014017W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU115C BRIZE NORTON RWY 25 514615N 0012940W - 514544N 0012925W - 514527N 0013101W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 514500N 0013459W to 514558N 0013116W - 514615N 0012940W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU116A MIDDLE WALLOP A circle, 2 NM radius, centred at 510828N 0013422W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU116B MIDDLE WALLOP RWY 08 510812N 0013842W - 510844N 0013847W - 510849N 0013729W thence anti-clockwise by the arc of a circle radius 2 NM centred on 510828N 0013422W to 510816N 0013731W - 510812N 0013842W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU116C MIDDLE WALLOP RWY 26 510922N 0012924W - 510849N 0012919W - 510842N 0013112W thence anti-clockwise by the arc of a circle radius 2 NM centred on 510828N 0013422W to 510914N 0013126W - 510922N 0012924W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU116D MIDDLE WALLOP RWY 17 511125N 0013520W - 511129N 0013429W - 511027N 0013418W thence anti-clockwise by the arc of a circle radius 2 NM centred on 510828N 0013422W to 511024N 0013509W - 511125N 0013520W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU116E MIDDLE WALLOP RWY 35 510530N 0013323W - 510526N 0013414W - 510628N 0013426W thence anti-clockwise by the arc of a circle radius 2 NM centred on 510828N 0013422W to 510631N 0013334W - 510530N 0013323W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU117A OXFORD A circle, 2 NM radius, centred at 515013N 0011912W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU117B OXFORD RWY 01 514710N 0011941W - 514716N 0012032W - 514819N 0012013W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515013N 0011912W to 514813N 0011922W - 514710N 0011941W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU117C OXFORD RWY 19 515316N 0011843W - 515310N 0011751W - 515207N 0011811W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515013N 0011912W to 515213N 0011902W - 515316N 0011843W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU118A BENSON A circle, 2 NM radius, centred at 513654N 0010545W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU118B BENSON RWY 01 513342N 0010601W - 513347N 0010653W - 513459N 0010637W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513654N 0010545W to 513454N 0010545W - 513342N 0010601W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU118C BENSON RWY 19 514006N 0010529W - 514001N 0010437W - 513850N 0010453W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513654N 0010545W to 513854N 0010545W - 514006N 0010529W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU119A CHALGROVE A circle, 2 NM radius, centred at 514028N 0010507W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU120A ODIHAM A circle, 2 NM radius, centred at 511403N 0005634W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU120B ODIHAM RWY 09 511356N 0010140W - 511428N 0010137W - 511425N 0005942W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511403N 0005634W to 511352N 0005944W - 511356N 0010140W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU120C ODIHAM RWY 27 511410N 0005128W - 511338N 0005130W - 511341N 0005326W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511403N 0005634W to 511414N 0005324W - 511410N 0005128W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU121A BLACKBUSHE 511738N 0005215W thence clockwise by the arc of a circle radius 2 NM centred on 511926N 0005051W to 511806N 0004829W - 511801N 0004919W - 511758N 0004954W - 511753N 0005038W - 511746N 0005120W - 511738N 0005215W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU121B BLACKBUSHE RWY 07 511815N 0005513W - 511845N 0005530W - 511904N 0005359W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511926N 0005051W to 511834N 0005343W - 511815N 0005513W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU121C BLACKBUSHE RWY 25 512038N 0004631W - 512007N 0004614W - 511949N 0004743W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511926N 0005051W to 512019N 0004800W - 512038N 0004631W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU122A WYCOMBE AIR PARK/BOOKER A circle, 2 NM radius, centred at 513642N 0004830W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU122B WYCOMBE AIR PARK/BOOKER RWY 06 513508N 0005225W - 513536N 0005249W - 513602N 0005131W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513642N 0004830W to 513533N 0005107W - 513508N 0005225W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU122C WYCOMBE AIR PARK/BOOKER RWY 24 513817N 0004434W - 513748N 0004410W - 513723N 0004529W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513642N 0004830W to 513752N 0004553W - 513817N 0004434W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU122D WYCOMBE AIR PARK/BOOKER RWY 06G 513506N 0005218W - 513535N 0005242W - 513559N 0005129W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513642N 0004830W to 513531N 0005104W - 513506N 0005218W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU122E WYCOMBE AIR PARK/BOOKER RWY 24G 513814N 0004433W - 513746N 0004408W - 513720N 0004527W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513642N 0004830W to 513749N 0004550W - 513814N 0004433W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU122G WYCOMBE AIR PARK/ BOOKER RWY 35 513351N 0004703W - 513344N 0004754W - 513443N 0004815W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513642N 0004830W to 513450N 0004724W - 513351N 0004703W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU123A FARNBOROUGH 511758N 0004954W - 511801N 0004919W - 511806N 0004829W - 511812N 0004723W - 511817N 0004705W - 511851N 0004551W - 511856N 0004537W thence clockwise by the arc of a circle radius 2.5 NM centred on 511631N 0004639W to 511758N 0004954W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU123B FARNBOROUGH RWY 06 511452N 0005042W - 511521N 0005107W - 511536N 0005021W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 511631N 0004639W to 511507N 0004957W - 511452N 0005042W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU123C FARNBOROUGH RWY 24 511811N 0004233W - 511743N 0004209W - 511727N 0004257W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 511631N 0004639W to 511755N 0004322W - 511811N 0004233W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124A WHITE WALTHAM A circle, 2 NM radius, centred at 513002N 0004629W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124B WHITE WALTHAM RWY 03 512712N 0004802W - 512727N 0004848W - 512819N 0004807W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 512807N 0004719W - 512712N 0004802W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124C WHITE WALTHAM RWY 21 513247N 0004436W - 513233N 0004349W - 513137N 0004433W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 513154N 0004518W - 513247N 0004436W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124D WHITE WALTHAM RWY 07 512831N 0005037W - 512900N 0005059W - 512926N 0004932W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 512857N 0004910W - 512831N 0005037W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124E WHITE WALTHAM RWY 25 513134N 0004222W - 513104N 0004159W - 513039N 0004326W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 513108N 0004349W - 513134N 0004222W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU124F WHITE WALTHAM RWY 11 513039N 0005100W - 513109N 0005042W - 513052N 0004925W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 513020N 0004939W - 513039N 0005100W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU124G WHITE WALTHAM RWY 29 512909N 0004152W - 512839N 0004210W - 512900N 0004345W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513002N 0004629W to 512930N 0004324W - 512909N 0004152W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU125A HALTON A circle, 2 NM radius, centred at 514732N 0004411W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU125B HALTON RWY 02 514440N 0004521W - 514451N 0004610W - 514546N 0004539W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514732N 0004411W to 514535N 0004450W - 514440N 0004521W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU125C HALTON RWY 20 515024N 0004301W - 515013N 0004212W - 514919N 0004243W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514732N 0004411W to 514930N 0004332W - 515024N 0004301W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU125D HALTON RWY 07 514615N 0004829W - 514646N 0004846W - 514705N 0004719W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514732N 0004411W to 514635N 0004701W - 514615N 0004829W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU125E HALTON RWY 25 514840N 0004002W - 514810N 0003944W - 514753N 0004101W thence anti-clockwise by the arc of a circle radius 2 NM centred on 514732N 0004411W to 514824N 0004117W - 514840N 0004002W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU126A FAIROAKS A circle, 2 NM radius, centred at 512053N 0003331W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU126B FAIROAKS RWY 06 511907N 0003712W - 511934N 0003739W - 512003N 0003626W thence anti-clockwise by the arc of a circle radius 2 NM centred on 512053N 0003331W to 511936N 0003558W - 511907N 0003712W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU126C FAIROAKS RWY 24 512239N 0002949W - 512212N 0002922W - 512142N 0003037W thence anti-clockwise by the arc of a circle radius 2 NM centred on 512053N 0003331W to 512210N 0003104W - 512239N 0002949W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU127A DENHAM A circle, 2 NM radius, centred at 513518N 0003047W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU127B DENHAM RWY 06 513336N 0003432W - 513404N 0003459W - 513431N 0003344W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513518N 0003047W to 513404N 0003317W - 513336N 0003432W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU127C DENHAM RWY 24 513700N 0002704W - 513632N 0002637W - 513605N 0002750W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513518N 0003047W to 513633N 0002816W - 513700N 0002704W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU127D DENHAM RWY 12 513623N 0003455W - 513652N 0003431W - 513629N 0003322W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513518N 0003047W to 513600N 0003347W - 513623N 0003455W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU127E DENHAM RWY 30 513416N 0002641W - 513347N 0002706W - 513409N 0002810W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513518N 0003047W to 513437N 0002746W - 513416N 0002641W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU128A LONDON HEATHROW A circle, 2.5 NM radius, centred at 512839N 0002741W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU128B LONDON HEATHROW RWY 09L 512814N 0003325W - 512902N 0003325W - 512903N 0003138W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512839N 0002741W to 512814N 0003137W - 512814N 0003325W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU128C LONDON HEATHROW RWY 27R 512905N 0002141W - 512816N 0002141W - 512816N 0002344W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512839N 0002741W to 512904N 0002344W - 512905N 0002141W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU128D LONDON HEATHROW RWY 09R 512728N 0003315W - 512817N 0003316W - 512817N 0003138W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512839N 0002741W to 512729N 0003112W - 512728N 0003315W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU128E LONDON HEATHROW RWY 27L 512819N 0002144W - 512730N 0002144W - 512730N 0002408W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 512839N 0002741W to 512819N 0002343W - 512819N 0002144W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU129A NORTHOLT A circle, 2 NM radius, centred at 513310N 0002511W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU129B NORTHOLT RWY 07 513150N 0002942W - 513221N 0003000W - 513244N 0002819W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513310N 0002511W to 513214N 0002801W - 513150N 0002942W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU129C NORTHOLT RWY 25 513430N 0002035W - 513400N 0002017W - 513335N 0002203W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513310N 0002511W to 513406N 0002221W - 513430N 0002035W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU130A LONDON LUTON A circle, 2.5 NM radius, centred at 515229N 0002206W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU130B LONDON LUTON RWY 07 515120N 0002706W - 515151N 0002720W - 515204N 0002605W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 515229N 0002206W to 515133N 0002551W - 515120N 0002706W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU130C LONDON LUTON RWY 25 515336N 0001711W - 515305N 0001657W - 515253N 0001808W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 515229N 0002206W to 515324N 0001822W - 515336N 0001711W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU131A ELSTREE A circle, 2 NM radius, centred at 513921N 0001933W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU131B ELSTREE RWY 08 513834N 0002401W - 513906N 0002410W - 513916N 0002246W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513921N 0001933W to 513844N 0002236W - 513834N 0002401W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU131C ELSTREE RWY 26 514008N 0001505W - 513936N 0001456W - 513926N 0001621W thence anti-clockwise by the arc of a circle radius 2 NM centred on 513921N 0001933W to 513958N 0001630W - 514008N 0001505W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU132A LONDON GATWICK A circle, 2.5 NM radius, centred at 510853N 0001125W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU132B LONDON GATWICK RWY 08L 510801N 0001635W - 510832N 0001646W - 510844N 0001523W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510853N 0001125W to 510812N 0001514W - 510801N 0001635W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU132C LONDON GATWICK RWY 26R 510954N 0000652W - 510922N 0000641W - 510916N 0000730W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510853N 0001125W to 510947N 0000743W - 510954N 0000652W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU132D LONDON GATWICK RWY 08R 510755N 0001630W - 510826N 0001641W - 510837N 0001522W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510853N 0001125W to 510806N 0001511W - 510755N 0001630W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU132E LONDON GATWICK RWY 26L 510953N 0000613W - 510921N 0000602W - 510909N 0000728W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 510853N 0001125W to 510941N 0000739W - 510953N 0000613W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133A REDHILL 511134N 0001048W thence clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511230N 0000511W - 511134N 0001048W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133B REDHILL RWY 07L 511150N 0001237W - 511221N 0001251W - 511235N 0001129W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511204N 0001116W - 511150N 0001237W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133C REDHILL RWY 25R 511354N 0000400W - 511323N 0000347W - 511308N 0000511W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511339N 0000526W - 511354N 0000400W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133D REDHILL RWY 07R 511146N 0001243W - 511218N 0001257W - 511233N 0001128W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511202N 0001115W - 511146N 0001243W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133E REDHILL RWY 25L 511351N 0000355W - 511320N 0000342W - 511305N 0000510W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511336N 0000524W - 511351N 0000355W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133F REDHILL RWY 18 511545N 0000848W - 511545N 0000756W - 511448N 0000758W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511447N 0000849W - 511545N 0000848W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133G REDHILL RWY 36 510959N 0000806W - 510959N 0000857W - 511153N 0000854W - 511202N 0000802W - 510959N 0000806W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133H REDHILL RWY H07 511147N 0001226W - 511218N 0001240W - 511230N 0001128W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511159N 0001113W - 511147N 0001226W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133I REDHILL RWY H25 511345N 0000415W - 511314N 0000401W - 511302N 0000510W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511333N 0000522W - 511345N 0000415W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU133J REDHILL RWY H18 511528N 0000927W - 511530N 0000836W - 511449N 0000832W thence anti-clockwise by the arc of a circle radius 2 NM centred on 511249N 0000819W to 511442N 0000923W - 511528N 0000927W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU139D ROCHESTER RWY 02R 511819N 0002902E - 511831N 0002814E - 511920N 0002844E thence anti-clockwise by the arc of a circle radius 2 NM centred on 512107N 0003010E to 511909N 0002933E - 511819N 0002902E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU139E ROCHESTER RWY 20L 512354N 0003134E - 512342N 0003222E - 512249N 0003149E thence anti-clockwise by the arc of a circle radius 2 NM centred on 512107N 0003010E to 512302N 0003102E - 512354N 0003134E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU140A LASHENDEN/HEADCORN A circle, 2 NM radius, centred at 510923N 0003840E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU140B LASHENDEN/HEADCORN RWY 10 510953N 0003359E - 511024N 0003412E - 511009N 0003544E thence anti-clockwise by the arc of a circle radius 2 NM centred on 510923N 0003840E to 510937N 0003531E - 510953N 0003359E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU140C LASHENDEN/HEADCORN RWY 28 510853N 0004319E - 510821N 0004306E - 510836N 0004136E thence anti-clockwise by the arc of a circle radius 2 NM centred on 510923N 0003840E to 510908N 0004149E - 510853N 0004319E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU141A EARLS COLNE A circle, 2 NM radius, centred at 515452N 0004057E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU141B EARLS COLNE RWY 06 515309N 0003708E - 515337N 0003642E - 515405N 0003759E thence anti-clockwise by the arc of a circle radius 2 NM centred on 515452N 0004057E to 515337N 0003826E - 515309N 0003708E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU141C EARLS COLNE RWY 24 515631N 0004450E - 515603N 0004516E - 515535N 0004358E thence anti-clockwise by the arc of a circle radius 2 NM centred on 515452N 0004057E to 515604N 0004332E - 515631N 0004450E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU142A SOUTHEND A circle, 2.5 NM radius, centred at 513413N 0004136E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU142B SOUTHEND RWY 05 513209N 0003745E - 513236N 0003714E - 513259N 0003807E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 513413N 0004136E to 513233N 0003837E - 513209N 0003745E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU142C SOUTHEND RWY 23 513615N 0004523E - 513549N 0004553E - 513527N 0004505E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 513413N 0004136E to 513554N 0004434E - 513615N 0004523E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU143A LONDON HELIPORT A circle, 2 NM radius, centred at 512812N 0001046W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the heliport operator. For contact details see AIP, Part 3 - Heliports, Section AD 3.2
EGRU145A KENLEY A circle, 2 NM radius, centred at 511821N 0000536W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU146A UPAVON A circle, 2 NM radius, centred at 511710N 0014652W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU147A WESTON ON THE GREEN A circle, 2 NM radius, centred at 515245N 0011304W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148A LITTLE RISSINGTON A circle, 2 NM radius, centred at 515202N 0014139W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148B LITTLE RISSINGTON RWY 04 514928N 0014421W - 514948N 0014502W - 515038N 0014358W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515018N 0014317W - 514928N 0014421W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148C LITTLE RISSINGTON RWY 22 515435N 0013857W - 515415N 0013816W - 515325N 0013920W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515345N 0014001W - 515435N 0013857W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148D LITTLE RISSINGTON RWY 09 515133N 0014621W - 515205N 0014626W - 515210N 0014452W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515138N 0014449W - 515133N 0014621W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148E LITTLE RISSINGTON RWY 27 515236N 0013649W - 515204N 0013645W - 515158N 0013826W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515230N 0013831W - 515236N 0013649W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148F LITTLE RISSINGTON RWY 13 515336N 0014536W - 515400N 0014501W - 515326N 0014357W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515300N 0014429W - 515336N 0014536W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU148G LITTLE RISSINGTON RWY 31 515008N 0013751W - 514943N 0013825W - 515025N 0013943W thence anti-clockwise by the arc of a circle radius 2 NM centred on 515202N 0014139W to 515048N 0013906W - 515008N 0013751W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU149 HMP ASHFIELD 512911N 0022623W - 512908N 0022602W - 512901N 0022556W - 512852N 0022556W - 512843N 0022602W - 512836N 0022619W - 512841N 0022644W - 512854N 0022652W - 512907N 0022641W - 512911N 0022623W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 405 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU204D SLEAP RWY 18 525253N 0024646W - 525253N 0024553W - 525201N 0024551W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525002N 0024618W to 525201N 0024644W - 525253N 0024646W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU204E SLEAP RWY 36 524705N 0024539W - 524704N 0024633W - 524803N 0024635W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525002N 0024618W to 524804N 0024542W - 524705N 0024539W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU205A SHAWBURY A circle, 2 NM radius, centred at 524737N 0024005W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU205B SHAWBURY RWY 05 524527N 0024325W - 524550N 0024403W - 524633N 0024252W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524737N 0024005W to 524609N 0024218W - 524527N 0024325W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU205C SHAWBURY RWY 23 525011N 0023655W - 524949N 0023617W - 524858N 0023740W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524737N 0024005W to 524919N 0023821W - 525011N 0023655W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU205D SHAWBURY RWY 18 525048N 0024032W - 525048N 0023939W - 524936N 0023938W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524737N 0024005W to 524936N 0024032W - 525048N 0024032W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU205E SHAWBURY RWY 36 524426N 0023937W - 524426N 0024031W - 524538N 0024031W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524737N 0024005W to 524538N 0023938W - 524426N 0023937W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206A TERNHILL A circle, 2 NM radius, centred at 525223N 0023156W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206B TERNHILL RWY 04 525004N 0023450W - 525026N 0023529W - 525107N 0023428W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525045N 0023348W - 525004N 0023450W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206C TERNHILL RWY 22 525443N 0022902W - 525421N 0022822W - 525340N 0022924W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525402N 0023003W - 525443N 0022902W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206D TERNHILL RWY 10 525233N 0023651W - 525305N 0023643W - 525256N 0023506W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525224N 0023514W - 525233N 0023651W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU206E TERNHILL RWY 28 525212N 0022717W - 525140N 0022725W - 525148N 0022847W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525219N 0022838W - 525212N 0022717W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206F TERNHILL RWY 17 525513N 0023310W - 525520N 0023217W - 525423N 0023159W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525418N 0023252W - 525513N 0023310W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU206G TERNHILL RWY 35 524937N 0023023W - 524931N 0023116W - 525024N 0023134W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525223N 0023156W to 525032N 0023042W - 524937N 0023023W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU207A COSFORD A circle, 2 NM radius, centred at 523826N 0021819W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU207B COSFORD RWY 06 523637N 0022215W - 523704N 0022243W - 523737N 0022118W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523826N 0021819W to 523709N 0022050W - 523637N 0022215W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU207C COSFORD RWY 24 524015N 0021423W - 523947N 0021355W - 523915N 0021519W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523826N 0021819W to 523943N 0021547W - 524015N 0021423W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU207D COSFORD RWY 06L 523639N 0022217W - 523707N 0022245W - 523739N 0022120W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523826N 0021819W to 523711N 0022053W - 523639N 0022217W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU207E COSFORD RWY 24R 524016N 0021428W - 523948N 0021359W - 523917N 0021521W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523826N 0021819W to 523944N 0021550W - 524016N 0021428W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU208A WOLVERHAMPTON/ HALFPENNY GREEN A circle, 2 NM radius, centred at 523103N 0021534W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU208B WOLVERHAMPTON/ HALFPENNY GREEN RWY 04 522840N 0021816W - 522859N 0021859W - 522945N 0021803W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523103N 0021534W to 522923N 0021724W - 522840N 0021816W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU208C WOLVERHAMPTON/ HALFPENNY GREEN RWY 22 523332N 0021326W - 523313N 0021243W - 523235N 0021329W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523103N 0021534W to 523252N 0021414W - 523332N 0021326W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU213B COVENTRY RWY 05 521952N 0013215W - 522016N 0013250W - 522042N 0013204W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522211N 0012847W to 522019N 0013128W - 521952N 0013215W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU213C COVENTRY RWY 23 522430N 0012519W - 522407N 0012443W - 522340N 0012530W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522211N 0012847W to 522404N 0012606W - 522430N 0012519W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU214A EAST MIDLANDS A circle, 2.5 NM radius, centred at 524952N 0011940W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU214B EAST MIDLANDS RWY 09 524929N 0012515W - 525002N 0012517W - 525003N 0012347W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 524952N 0011940W to 524931N 0012345W - 524929N 0012515W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU214C EAST MIDLANDS RWY 27 525014N 0011405W - 524941N 0011403W - 524940N 0011534W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 524952N 0011940W to 525012N 0011535W - 525014N 0011405W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU215A NOTTINGHAM A circle, 2 NM radius, centred at 525515N 0010448W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU215B NOTTINGHAM RWY 03 525228N 0010627W - 525244N 0010715W - 525333N 0010632W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525515N 0010448W to 525320N 0010542W - 525228N 0010627W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU215C NOTTINGHAM RWY 21 525754N 0010243W - 525738N 0010156W - 525647N 0010241W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525515N 0010448W to 525704N 0010327W - 525754N 0010243W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU215D NOTTINGHAM RWY 09 525452N 0010933W - 525524N 0010935W - 525526N 0010805W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525515N 0010448W to 525454N 0010803W - 525452N 0010933W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU215E NOTTINGHAM RWY 27 525537N 0005958W - 525505N 0005956W - 525503N 0010131W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525515N 0010448W to 525535N 0010133W - 525537N 0005958W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216A LEICESTER A circle, 2 NM radius, centred at 523628N 0010155W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU216B LEICESTER RWY 04 523354N 0010406W - 523413N 0010448W - 523454N 0010358W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523438N 0010312W - 523354N 0010406W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216C LEICESTER RWY 22 523845N 0005914W - 523826N 0005831W - 523744N 0005923W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523806N 0010002W - 523845N 0005914W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216D LEICESTER RWY 06 523417N 0010449W - 523441N 0010525W - 523513N 0010428W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523450N 0010349W - 523417N 0010449W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216E LEICESTER RWY 24 523827N 0005840W - 523803N 0005804W - 523729N 0005905W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523754N 0005938W - 523827N 0005840W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216F LEICESTER RWY 10 523631N 0010647W - 523703N 0010641W - 523657N 0010506W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523625N 0010512W - 523631N 0010647W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216G LEICESTER RWY 28 523626N 0005704W - 523554N 0005709W - 523600N 0005844W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523632N 0005838W - 523626N 0005704W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216H LEICESTER RWY 15 523841N 0010436W - 523857N 0010350W - 523818N 0010314W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523801N 0010359W - 523841N 0010436W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216I LEICESTER RWY 33 523401N 0005915W - 523345N 0010001W - 523435N 0010048W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523450N 0010001W - 523401N 0005915W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216J LEICESTER RWY 16 523837N 0010440W - 523854N 0010355W - 523817N 0010318W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523759N 0010403W - 523837N 0010440W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU216K LEICESTER RWY 34 523405N 0005906W - 523348N 0005952W - 523437N 0010040W thence anti-clockwise by the arc of a circle radius 2 NM centred on 523628N 0010155W to 523453N 0005954W - 523405N 0005906W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU218A CRANFIELD A circle, 2 NM radius, centred at 520420N 0003700W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2



ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU218B CRANFIELD RWY 03 520134N 0003915W - 520151N 0004000W - 520247N 0003903W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520420N 0003700W to 520230N 0003819W - 520134N 0003915W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU218C CRANFIELD RWY 21 520710N 0003439W - 520653N 0003355W - 520552N 0003456W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520420N 0003700W to 520609N 0003541W - 520710N 0003439W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219A BARKSTON HEATH A circle, 2 NM radius, centred at 525747N 0003337W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219B BARKSTON HEATH RWY 06 525553N 0003743W - 525620N 0003812W - 525656N 0003637W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525629N 0003608W - 525553N 0003743W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219C BARKSTON HEATH RWY 24 525943N 0002924W - 525916N 0002856W - 525837N 0003037W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525904N 0003106W - 525943N 0002924W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219D BARKSTON HEATH RWY 10 525756N 0003847W - 525827N 0003836W - 525813N 0003651W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525741N 0003655W - 525756N 0003847W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219E BARKSTON HEATH RWY 28 525709N 0002854W - 525638N 0002906W - 525651N 0003042W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525721N 0003023W - 525709N 0002854W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219F BARKSTON HEATH RWY 18 530037N 0003400W - 530038N 0003306W - 525945N 0003303W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525946N 0003356W - 530037N 0003400W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU219G BARKSTON HEATH RWY 36 525449N 0003243W - 525448N 0003337W - 525547N 0003341W thence anti-clockwise by the arc of a circle radius 2 NM centred on 525747N 0003337W to 525551N 0003247W - 525449N 0003243W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU220A WITTERING A circle, 2.5 NM radius, centred at 523647N 0002833W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU220B WITTERING RWY 07 523532N 0003349W - 523603N 0003404W - 523619N 0003235W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523647N 0002833W to 523548N 0003220W - 523532N 0003349W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU220C WITTERING RWY 25 523802N 0002317W - 523731N 0002302W - 523715N 0002431W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523647N 0002833W to 523746N 0002447W - 523802N 0002317W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU222A OLD WARDEN A circle, 2 NM radius, centred at 520512N 0001907W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU222B OLD WARDEN RWY 03 520232N 0002041W - 520245N 0002128W - 520332N 0002053W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520512N 0001907W to 520318N 0002006W - 520232N 0002041W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU222C OLD WARDEN RWY 21 520753N 0001732W - 520739N 0001645W - 520652N 0001721W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520512N 0001907W to 520706N 0001808W - 520753N 0001732W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU222D OLD WARDEN RWY 03X 520218N 0002051W - 520231N 0002139W - 520332N 0002053W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520512N 0001907W to 520318N 0002005W - 520218N 0002051W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU222E OLD WARDEN RWY 21X 520753N 0001732W - 520739N 0001645W - 520652N 0001721W thence anti-clockwise by the arc of a circle radius 2 NM centred on 520512N 0001907W to 520706N 0001808W - 520753N 0001732W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU223A PETERBOROUGH/ CONINGTON A circle, 2 NM radius, centred at 522805N 0001503W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU223B PETERBOROUGH/ CONINGTON RWY 10 522803N 0001956W - 522835N 0001952W - 522830N 0001815W thence anti-clockwise by the arc of a circle radius 2 NM centred on 522805N 0001503W to 522758N 0001819W - 522803N 0001956W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU223C PETERBOROUGH/ CONINGTON RWY 28 522808N 0001017W - 522735N 0001021W - 522740N 0001152W thence anti-clockwise by the arc of a circle radius 2 NM centred on 522805N 0001503W to 522812N 0001147W - 522808N 0001017W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU224A FENLAND A circle, 2 NM radius, centred at 524422N 0000148W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU224B FENLAND RWY 18 524711N 0000210W - 524710N 0000116W - 524620N 0000118W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524422N 0000148W to 524621N 0000211W - 524711N 0000210W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU224C FENLAND RWY 36 524130N 0000125W - 524131N 0000219W - 524224N 0000217W thence anti-clockwise by the arc of a circle radius 2 NM centred on 524422N 0000148W to 524223N 0000124W - 524130N 0000125W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU225A DUXFORD A circle, 2 NM radius, centred at 520526N 0000753E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU225B DUXFORD RWY 06L 520342N 0000358E - 520409N 0000331E - 520441N 0000453E thence anti-clockwise by the arc of a circle radius 2 NM centred on 520526N 0000753E to 520413N 0000519E - 520342N 0000358E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU225C DUXFORD RWY 24R 520716N 0001135E - 520648N 0001203E - 520619N 0001047E thence anti-clockwise by the arc of a circle radius 2 NM centred on 520526N 0000753E to 520646N 0001018E - 520716N 0001135E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU225D DUXFORD RWY 06R 520334N 0000352E - 520401N 0000325E - 520437N 0000456E thence anti-clockwise by the arc of a circle radius 2 NM centred on 520526N 0000753E to 520409N 0000524E - 520334N 0000352E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU225E DUXFORD RWY 24L 520716N 0001150E - 520648N 0001218E - 520615N 0001051E thence anti-clockwise by the arc of a circle radius 2 NM centred on 520526N 0000753E to 520642N 0001023E - 520716N 0001150E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU226A CAMBRIDGE A circle, 2.5 NM radius, centred at 521218N 0001030E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU226B CAMBRIDGE RWY 05 521006N 0000655E - 521030N 0000621E - 521055N 0000708E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 521218N 0001030E to 521030N 0000742E - 521006N 0000655E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU226C CAMBRIDGE RWY 23 521432N 0001409E - 521407N 0001442E - 521341N 0001352E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 521218N 0001030E to 521406N 0001319E - 521432N 0001409E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU227A MILDENHALL A circle, 2.5 NM radius, centred at 522143N 0002911E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU227B MILDENHALL RWY 11 522215N 0002335E - 522246N 0002348E - 522233N 0002520E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522143N 0002911E to 522201N 0002508E - 522215N 0002335E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU227C MILDENHALL RWY 29 522111N 0003446E - 522040N 0003434E - 522053N 0003302E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522143N 0002911E to 522124N 0003314E - 522111N 0003446E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU228A MARHAM A circle, 2.5 NM radius, centred at 523854N 0003302E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU228B MARHAM RWY 01 523538N 0003307E - 523543N 0003215E - 523626N 0003225E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523854N 0003302E to 523625N 0003319E - 523538N 0003307E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU228C MARHAM RWY 19 524200N 0003348E - 524156N 0003441E - 524114N 0003430E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523854N 0003302E to 524122N 0003339E - 524200N 0003348E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU228D MARHAM RWY 05 523643N 0002837E - 523710N 0002807E - 523743N 0002925E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523854N 0003302E to 523716N 0002956E - 523643N 0002837E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU228E MARHAM RWY 23 524104N 0003727E - 524038N 0003757E - 524005N 0003639E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 523854N 0003302E to 524032N 0003609E - 524104N 0003727E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU229A LAKENHEATH A circle, 2.5 NM radius, centred at 522434N 0003340E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU229B LAKENHEATH RWY 06 522224N 0002916E - 522251N 0002847E - 522323N 0003004E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522434N 0003340E to 522257N 0003034E - 522224N 0002916E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU229C LAKENHEATH RWY 24 522643N 0003803E - 522617N 0003833E - 522544N 0003716E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 522434N 0003340E to 522611N 0003646E - 522643N 0003803E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU230A WATTISHAM A circle, 2.5 NM radius, centred at 520737N 0005719E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU230B WATTISHAM RWY 05 520513N 0005340E - 520537N 0005305E - 520609N 0005402E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 520737N 0005719E to 520545N 0005438E - 520513N 0005340E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU230C WATTISHAM RWY 23 521004N 0010104E - 520940N 0010139E - 520905N 0010037E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 520737N 0005719E to 520929N 0010001E - 521004N 0010104E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231A OLD BUCKENHAM A circle, 2 NM radius, centred at 522951N 0010307E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231B OLD BUCKENHAM RWY 02 522715N 0010159E - 522726N 0010110E - 522806N 0010133E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 522755N 0010223E - 522715N 0010159E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231C OLD BUCKENHAM RWY 20 523242N 0010416E - 523231N 0010506E - 523138N 0010435E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 523149N 0010345E - 523242N 0010416E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231D OLD BUCKENHAM RWY 07 522822N 0005900E - 522851N 0005837E - 522915N 0010000E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 522846N 0010023E - 522822N 0005900E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231E OLD BUCKENHAM RWY 25 523120N 0010715E - 523051N 0010737E - 523027N 0010615E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 523057N 0010552E - 523120N 0010715E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231F OLD BUCKENHAM RWY 07L 522828N 0005916E - 522857N 0005853E - 522917N 0005959E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 522847N 0010021E - 522828N 0005916E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU231G OLD BUCKENHAM RWY 25R 523122N 0010711E - 523053N 0010734E - 523030N 0010613E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522951N 0010307E to 523059N 0010550E - 523122N 0010711E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU232A NORWICH A circle, 2.5 NM radius, centred at 524033N 0011658E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU232B NORWICH RWY 09 524015N 0011143E - 524047N 0011142E - 524048N 0011252E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 524033N 0011658E to 524015N 0011253E - 524015N 0011143E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU232C NORWICH RWY 27 524052N 0012212E - 524019N 0012213E - 524019N 0012103E thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 524033N 0011658E to 524051N 0012102E - 524052N 0012212E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU233A CHETWYND A circle, 2 NM radius, centred at 524842N 0022425W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU234A HONINGTON A circle, 2 NM radius, centred at 522036N 0004648E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU234B HONINGTON 521947N 0004055E - 522019N 0004047E - 522035N 0004332E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522036N 0004648E to 522003N 0004340E - 521947N 0004055E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU234C HONINGTON 522121N 0005151E - 522049N 0005159E - 522039N 0005004E thence anti-clockwise by the arc of a circle radius 2 NM centred on 522036N 0004648E to 522110N 0004955E - 522121N 0005151E	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU235 HMP BEDFORD 520840N 0002812W - 520836N 0002756W - 520822N 0002743W - 520804N 0002758W - 520807N 0002824W - 520815N 0002840W - 520835N 0002832W - 520840N 0002812W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 115 FT AMSL
EGRU236 HMP BIRMINGHAM 522954N 0015626W - 522952N 0015553W - 522944N 0015547W - 522925N 0015547W - 522918N 0015558W - 522917N 0015633W - 522944N 0015648W - 522954N 0015626W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 483 FT AMSL
EGRU237 HMP BURE 524549N 0012029E - 524552N 0012052E - 524537N 0012123E - 524511N 0012049E - 524532N 0012007E - 524549N 0012029E	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 77 FT AMSL
EGRU238 HMP DOVEGATE 525234N 0014708W - 525234N 0014639W - 525215N 0014608W - 525150N 0014649W - 525212N 0014724W - 525226N 0014723W - 525234N 0014708W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 243 FT AMSL
EGRU239 HMP DRAKE HALL 525309N 0021429W - 525249N 0021352W - 525224N 0021421W - 525223N 0021445W - 525241N 0021503W - 525255N 0021453W - 525309N 0021429W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 347 FT AMSL
EGRU240 HMP FEATHERSTONE/ BRINSFORD/OAKWOOD 523917N 0020718W - 523923N 0020623W - 523849N 0020555W - 523821N 0020609W - 523826N 0020658W - 523841N 0020716W - 523917N 0020718W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 393 FT AMSL
EGRU241 HMP FIVE WELLS 521728N 0004128W - 521727N 0004101W - 521710N 0004054W - 521646N 0004102W - 521645N 0004141W - 521658N 0004205W - 521714N 0004205W - 521728N 0004128W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 226 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU242 HMP FOSSE WAY 523531N 0010859W - 523528N 0010812W - 523443N 0010815W - 523439N 0010853W - 523446N 0010924W - 523531N 0010859W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 298 FT AMSL
EGRU243 HMP FOSTON HALL 525313N 0014400W - 525314N 0014325W - 525303N 0014256W - 525237N 0014314W - 525237N 0014357W - 525313N 0014400W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 223 FT AMSL
EGRU244 HMP GARTREE 523004N 0005752W - 522959N 0005714W - 522931N 0005708W - 522921N 0005801W - 522945N 0005814W - 523004N 0005752W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 398 FT AMSL
EGRU245 HMP HEWELL 521951N 0015926W - 521935N 0015833W - 521911N 0015853W - 521911N 0015919W - 521917N 0015936W - 521930N 0015948W - 521951N 0015926W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 443 FT AMSL
EGRU246 HMP HIGHPOINT 520847N 0003034E - 520845N 0003109E - 520801N 0003134E - 520749N 0003019E - 520822N 0003003E - 520847N 0003034E	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 390 FT AMSL
EGRU247 HMP LEICESTER 523755N 0010756W - 523744N 0010724W - 523728N 0010735W - 523721N 0010753W - 523730N 0010818W - 523749N 0010821W - 523755N 0010756W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 215 FT AMSL
EGRU248 HMP LITTLEHEY 521707N 0001916W - 521706N 0001824W - 521656N 0001811W - 521637N 0001817W - 521627N 0001846W - 521633N 0001920W - 521648N 0001924W - 521707N 0001916W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 173 FT AMSL
EGRU249 HMP LONG LARTIN 520649N 0015133W - 520643N 0015034W - 520609N 0015055W - 520616N 0015158W - 520649N 0015133W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 160 FT AMSL
EGRU250 HMP NORWICH 523836N 0011852E - 523838N 0011915E - 523811N 0011938E - 523801N 0011938E - 523748N 0011855E - 523753N 0011845E - 523821N 0011823E - 523836N 0011852E	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by Norwich Airport (FRZ - EGRU232A) and HMPPS. Contact online: https://www.norwichairport.co.uk/airfield-pilot-information/ HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 160 FT AMSL
EGRU251 HMP NOTTINGHAM 525921N 0010935W - 525925N 0010857W - 525856N 0010848W - 525850N 0010906W - 525848N 0010942W - 525905N 0010948W - 525915N 0010946W - 525921N 0010935W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 255 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU252 HMP PETERBOROUGH 523529N 0001553W - 523535N 0001524W - 523459N 0001501W - 523451N 0001534W - 523458N 0001559W - 523506N 0001602W - 523520N 0001602W - 523529N 0001553W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 62 FT AMSL
EGRU253 HMP RYE HILL/OLNEY 522004N 0011457W - 522005N 0011435W - 521956N 0011413W - 521948N 0011408W - 521937N 0011406W - 521925N 0011421W - 521919N 0011455W - 521920N 0011535W - 522000N 0011513W - 522004N 0011457W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 361 FT AMSL
EGRU254 HMP STAFFORD 524854N 0020734W - 524902N 0020643W - 524841N 0020635W - 524828N 0020639W - 524820N 0020720W - 524854N 0020734W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 267 FT AMSL
EGRU255 HMP STOCKEN 524512N 0003449W - 524513N 0003414W - 524450N 0003403W - 524434N 0003430W - 524429N 0003454W - 524440N 0003514W - 524449N 0003518W - 524504N 0003516W - 524512N 0003449W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 371 FT AMSL
EGRU256 HMP STOKE HEATH 525231N 0023138W - 525224N 0023119W - 525231N 0023107W - 525216N 0023045W - 525202N 0023043W - 525157N 0023052W - 525142N 0023059W - 525152N 0023157W - 525231N 0023138W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by RAF Shawbury (Ternhill FRZ - EGRU206A) and HMPPS. Contact: RAF Shawbury Station Ops 01939-250341 ext 7163 shy-ops@mod.gov.uk HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 269 FT AMSL
EGRU257 HMP SWINFEN HALL 523936N 0014816W - 523921N 0014741W - 523908N 0014741W - 523849N 0014810W - 523857N 0014834W - 523910N 0014858W - 523936N 0014816W	Upper limit: 800 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 309 FT AMSL
EGRU258 HMP WARREN HILL 520356N 0012736E - 520335N 0012812E - 520319N 0012809E - 520307N 0012727E - 520333N 0012659E - 520356N 0012736E	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 59 FT AMSL
EGRU259 HMP WAYLAND 523337N 0005103E - 523337N 0005158E - 523256N 0005158E - 523256N 0005109E - 523313N 0005056E - 523337N 0005103E	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 189 FT AMSL
EGRU260 HMP WHATTON 525709N 0005519W - 525708N 0005442W - 525710N 0005428W - 525659N 0005406W - 525634N 0005402W - 525638N 0005523W - 525709N 0005519W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 87 FT AMSL
EGRU261 HMP WHITEMOOR 523445N 0000411E - 523456N 0000509E - 523421N 0000527E - 523410N 0000430E - 523445N 0000411E	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 17 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU262 HMP WOODHILL 520113N 0004826W - 520038N 0004752W - 520021N 0004838W - 520056N 0004913W - 520113N 0004826W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 401 FT AMSL
EGRU301A VALLEY A circle, 2.5 NM radius, centred at 531453N 0043207W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU301B VALLEY RWY 01 531154N 0043228W - 531158N 0043322W - 531229N 0043316W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531453N 0043207W to 531224N 0043223W - 531154N 0043228W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU301C VALLEY RWY 19 531810N 0043213W - 531806N 0043120W - 531721N 0043128W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531453N 0043207W to 531723N 0043222W - 531810N 0043213W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU301D VALLEY RWY 13 531646N 0043630W - 531711N 0043555W - 531642N 0043459W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531453N 0043207W to 531618N 0043534W - 531646N 0043630W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU301E VALLEY RWY 31 531253N 0042730W - 531228N 0042805W - 531305N 0042916W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531453N 0043207W to 531329N 0042841W - 531253N 0042730W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU302A CAERNARFON A circle, 2 NM radius, centred at 530607N 0042015W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU302B CAERNARFON RWY 07 530455N 0042437W - 530525N 0042455W - 530543N 0042331W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530607N 0042015W to 530512N 0042313W - 530455N 0042437W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU302C CAERNARFON RWY 25 530718N 0041554W - 530648N 0041536W - 530630N 0041700W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530607N 0042015W to 530701N 0041718W - 530718N 0041554W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU303A WOODVALE A circle, 2 NM radius, centred at 533454N 0030327W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU303B WOODVALE RWY 03 533204N 0030543W - 533220N 0030630W - 533320N 0030531W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533454N 0030327W to 533304N 0030444W - 533204N 0030543W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU303C WOODVALE RWY 21 533745N 0030111W - 533728N 0030024W - 533628N 0030123W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533454N 0030327W to 533645N 0030210W - 533745N 0030111W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU303D WOODVALE RWY 08 533358N 0030816W - 533430N 0030825W - 533439N 0030647W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533454N 0030327W to 533408N 0030633W - 533358N 0030816W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU303E WOODVALE RWY 26 533526N 0025847W - 533454N 0025838W - 533446N 0030006W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533454N 0030327W to 533518N 0030010W - 533526N 0025847W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU304A BLACKPOOL A circle, 2.5 NM radius, centred at 534618N 0030143W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU304B BLACKPOOL RWY 10 534617N 0030708W - 534649N 0030704W - 534646N 0030551W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534618N 0030143W to 534613N 0030556W - 534617N 0030708W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU304C BLACKPOOL RWY 28 534618N 0025618W - 534546N 0025622W - 534549N 0025735W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534618N 0030143W to 534622N 0025730W - 534618N 0025618W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU304D BLACKPOOL RWY 13 534750N 0030625W - 534816N 0030552W - 534752N 0030459W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534618N 0030143W to 534725N 0030529W - 534750N 0030625W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU304E BLACKPOOL RWY 31 534444N 0025801W - 534418N 0025834W - 534427N 0025854W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534618N 0030143W to 534451N 0025817W - 534444N 0025801W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU305A HAWARDEN A circle, 2.5 NM radius, centred at 531041N 0025840W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU305B HAWARDEN RWY 04 530811N 0030141W - 530832N 0030222W - 530859N 0030143W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531041N 0025840W to 530838N 0030102W - 530811N 0030141W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU305C HAWARDEN RWY 22 531311N 0025538W - 531250N 0025457W - 531223N 0025537W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 531041N 0025840W to 531244N 0025618W - 531311N 0025538W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU306A WARTON A circle, 2.5 NM radius, centred at 534442N 0025300W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU306B WARTON RWY 07 534322N 0025811W - 534353N 0025828W - 534409N 0025707W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534442N 0025300W to 534339N 0025649W - 534322N 0025811W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU306C WARTON RWY 25 534602N 0024750W - 534531N 0024732W - 534515N 0024854W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 534442N 0025300W to 534545N 0024911W - 534602N 0024750W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU307A LIVERPOOL A circle, 2.5 NM radius, centred at 532001N 0025059W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU307B LIVERPOOL RWY 09 531930N 0025625W - 532002N 0025629W - 532006N 0025509W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532001N 0025059W to 531933N 0025505W - 531930N 0025625W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU307C LIVERPOOL RWY 27 532032N 0024530W - 532000N 0024526W - 531956N 0024649W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532001N 0025059W to 532029N 0024653W - 532032N 0024530W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU308A MANCHESTER A circle, 2.5 NM radius, centred at 532113N 0021630W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU308B MANCHESTER RWY 05L 531857N 0022029W - 531922N 0022103W - 531953N 0022000W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532113N 0021630W to 531928N 0021926W - 531857N 0022029W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU308C MANCHESTER RWY 23R 532335N 0021220W - 532310N 0021146W - 532235N 0021259W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532113N 0021630W to 532300N 0021333W - 532335N 0021220W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU308D MANCHESTER RWY 05R 531801N 0022151W - 531826N 0022225W - 531942N 0021948W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532113N 0021630W to 531919N 0021910W - 531801N 0022151W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309A MANCHESTER BARTON 532618N 0022327W thence clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532749N 0022008W - 532638N 0022258W - 532618N 0022327W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU309B MANCHESTER BARTON RWY 02 532531N 0022405W - 532540N 0022457W - 532626N 0022437W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532619N 0022344W - 532531N 0022405W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309C MANCHESTER BARTON RWY 20 533107N 0022234W - 533059N 0022141W - 533008N 0022204W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 533016N 0022256W - 533107N 0022234W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309D MANCHESTER BARTON RWY 08L 532741N 0022809W - 532813N 0022816W - 532820N 0022644W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532748N 0022637W - 532741N 0022809W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309E MANCHESTER BARTON RWY 26R 532856N 0021843W - 532824N 0021836W - 532817N 0022002W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532850N 0022009W - 532856N 0021843W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309F MANCHESTER BARTON RWY 08R 532740N 0022805W - 532812N 0022812W - 532819N 0022644W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532747N 0022637W - 532740N 0022805W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309G MANCHESTER BARTON RWY 26L 532855N 0021841W - 532823N 0021834W - 532816N 0022002W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532848N 0022009W - 532855N 0021841W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309H MANCHESTER BARTON RWY 14 533006N 0022654W - 533029N 0022616W - 532956N 0022518W thence anti-clockwise by the arc of a circle radius 2 NM centred on 532818N 0022323W to 532934N 0022558W - 533006N 0022654W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU309I MANCHESTER BARTON RWY 32 532635N 0021932W - 532612N 0022010W - 532708N 0022146W - 532727N 0022101W - 532635N 0021932W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU310A LEEDS BRADFORD A circle, 2.5 NM radius, centred at 535158N 0013939W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU310B LEEDS BRADFORD RWY 14 535406N 0014333W - 535428N 0014253W - 535359N 0014208W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 535158N 0013939W to 535337N 0014249W - 535406N 0014333W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU310C LEEDS BRADFORD RWY 32 534948N 0013543W - 534927N 0013624W - 534957N 0013710W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 535158N 0013939W to 535018N 0013629W - 534948N 0013543W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311A SHERBURN-IN-ELMET 534837N 0011510W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534823N 0011032W - 534837N 0011510W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311B SHERBURN-IN-ELMET RWY 01 534422N 0011301W - 534426N 0011355W - 534506N 0011346W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534504N 0011251W - 534422N 0011301W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311C SHERBURN-IN-ELMET RWY 19 535003N 0011234W - 534959N 0011140W - 534827N 0011202W - 534830N 0011257W - 535003N 0011234W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311D SHERBURN-IN-ELMET RWY 06 534533N 0011659W - 534601N 0011727W - 534627N 0011616W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534558N 0011553W - 534533N 0011659W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311E SHERBURN-IN-ELMET RWY 24 534901N 0010912W - 534834N 0010843W - 534803N 0011008W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534823N 0011032W - 534824N 0011054W - 534901N 0010912W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311F SHERBURN-IN-ELMET RWY 10 534728N 0011758W - 534759N 0011745W - 534746N 0011612W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534715N 0011625W - 534728N 0011758W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311G SHERBURN-IN-ELMET RWY 28 534640N 0010821W - 534609N 0010834W - 534620N 0010955W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534652N 0010942W - 534640N 0010821W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311H SHERBURN-IN-ELMET RWY 10G 534730N 0011755W - 534801N 0011743W - 534748N 0011611W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534717N 0011625W - 534730N 0011755W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU311I SHERBURN-IN-ELMET RWY 28G 534643N 0010818W - 534611N 0010830W - 534623N 0010953W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534654N 0010942W - 534643N 0010818W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU312A NETHERTHORPE A circle, 2 NM radius, centred at 531901N 0011146W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU312B NETHERTHORPE RWY 06 531712N 0011522W - 531739N 0011552W - 531807N 0011445W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0011146W to 531740N 0011414W - 531712N 0011522W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU312C NETHERTHORPE RWY 24 532049N 0010813W - 532022N 0010742W - 531955N 0010848W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0011146W to 532022N 0010918W - 532049N 0010813W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU312D NETHERTHORPE RWY 18 532146N 0011236W - 532149N 0011142W - 532101N 0011135W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0011146W to 532058N 0011229W - 532146N 0011236W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU312E NETHERTHORPE RWY 36 531617N 0011052W - 531614N 0011146W - 531701N 0011153W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0011146W to 531705N 0011059W - 531617N 0011052W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU313A LEEDS EAST 534837N 0011510W thence clockwise by the arc of a circle radius 2.5 NM centred on 535004N 0011144W to 534749N 0010956W thence anti-clockwise by the arc of a circle radius 2 NM centred on 534703N 0011304W to 534823N 0011032W - 534837N 0011510W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU313B LEEDS EAST RWY 06 534803N 0011546W - 534829N 0011617W - 534851N 0011525W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 535004N 0011144W to 534837N 0011510W - 534835N 0011429W - 534803N 0011546W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU313C LEEDS EAST RWY 24 535208N 0010735W - 535142N 0010703W - 535117N 0010802W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 535004N 0011144W to 535143N 0010834W - 535208N 0010735W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU314A DONCASTER SHEFFIELD A circle, 2.5 NM radius, centred at 532831N 0010015W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU314B DONCASTER SHEFFIELD RWY 02 532512N 0010132W - 532522N 0010224W - 532614N 0010156W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532831N 0010015W to 532604N 0010105W - 532512N 0010132W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU314C DONCASTER SHEFFIELD RWY 20 533150N 0005857W - 533140N 0005805W - 533048N 0005833W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 532831N 0010015W to 533058N 0005925W - 533150N 0005857W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU315A RETFORD/GAMSTON A circle, 2 NM radius, centred at 531650N 0005705W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU315B RETFORD/GAMSTON RWY 03 531359N 0005848W - 531413N 0005937W - 531509N 0005853W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531650N 0005705W to 531456N 0005804W - 531359N 0005848W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU315C RETFORD/GAMSTON RWY 21 531941N 0005522W - 531928N 0005433W - 531831N 0005517W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531650N 0005705W to 531844N 0005606W - 531941N 0005522W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316A SYERSTON A circle, 2 NM radius, centred at 530124N 0005442W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316B SYERSTON RWY 02L 525833N 0005647W - 525847N 0005735W - 525949N 0005644W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 525933N 0005557W - 525833N 0005647W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316C SYERSTON RWY 20R 530411N 0005312W - 530356N 0005223W - 530308N 0005303W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530320N 0005353W - 530411N 0005312W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316D SYERSTON RWY 02R 525834N 0005641W - 525848N 0005729W - 525948N 0005640W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 525932N 0005553W - 525834N 0005641W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316E SYERSTON RWY 20L 530411N 0005306W - 530357N 0005218W - 530307N 0005259W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530319N 0005348W - 530411N 0005306W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316F SYERSTON RWY 06 525941N 0005911W - 530010N 0005936W - 530043N 0005749W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530015N 0005724W - 525941N 0005911W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316G SYERSTON RWY 24 530305N 0005018W - 530236N 0004953W - 530204N 0005135W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530233N 0005200W - 530305N 0005018W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316H SYERSTON RWY 06L 525945N 0005907W - 530013N 0005931W - 530045N 0005750W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530016N 0005726W - 525945N 0005907W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316I SYERSTON RWY 24R 530301N 0005038W - 530232N 0005013W - 530206N 0005136W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530235N 0005201W - 530301N 0005038W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU316J SYERSTON RWY 06R 525942N 0005904W - 530010N 0005929W - 530042N 0005748W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530014N 0005723W - 525942N 0005904W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316K SYERSTON RWY 24L 530256N 0005042W - 530227N 0005017W - 530203N 0005134W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530232N 0005158W - 530256N 0005042W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316L SYERSTON RWY 11 530158N 0005936W - 530229N 0005919W - 530210N 0005745W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530139N 0005759W - 530158N 0005936W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316M SYERSTON RWY 29 530042N 0005021W - 530011N 0005038W - 530025N 0005149W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530055N 0005129W - 530042N 0005021W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316N SYERSTON RWY 11L 530201N 0005937W - 530231N 0005921W - 530212N 0005744W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530141N 0005759W - 530201N 0005937W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316O SYERSTON RWY 29R 530038N 0004954W - 530008N 0005010W - 530027N 0005147W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530057N 0005128W - 530038N 0004954W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316P SYERSTON RWY 11R 530157N 0005940W - 530228N 0005923W - 530209N 0005747W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530137N 0005800W - 530157N 0005940W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316Q SYERSTON RWY 29L 530034N 0004949W - 530003N 0005006W - 530024N 0005150W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530054N 0005130W - 530034N 0004949W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316R SYERSTON RWY 15 530357N 0005715W - 530413N 0005628W - 530319N 0005538W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530306N 0005627W - 530357N 0005715W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316S SYERSTON RWY 33 525859N 0005135W - 525843N 0005222W - 525937N 0005312W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 525955N 0005228W - 525859N 0005135W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU316T SYERSTON RWY 15L 530354N 0005709W - 530410N 0005622W - 530320N 0005534W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530307N 0005624W - 530354N 0005709W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316U SYERSTON RWY 33R 525857N 0005130W - 525841N 0005217W - 525938N 0005310W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 525957N 0005226W - 525857N 0005130W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316V SYERSTON RWY 15R 530355N 0005717W - 530411N 0005630W - 530318N 0005541W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 530305N 0005630W - 530355N 0005717W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU316W SYERSTON RWY 33L 525901N 0005141W - 525845N 0005228W - 525936N 0005315W thence anti-clockwise by the arc of a circle radius 2 NM centred on 530124N 0005442W to 525954N 0005231W - 525901N 0005141W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU317A SANDTOFT A circle, 2 NM radius, centred at 533335N 0005130W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU317B SANDTOFT RWY 05 533118N 0005438W - 533141N 0005517W - 533222N 0005409W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533335N 0005130W to 533159N 0005330W - 533118N 0005438W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU317C SANDTOFT RWY 23 533547N 0004830W - 533525N 0004751W - 533448N 0004851W thence anti-clockwise by the arc of a circle radius 2 NM centred on 533335N 0005130W to 533511N 0004930W - 533547N 0004830W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU319A WADDINGTON A circle, 2.5 NM radius, centred at 530958N 0003126W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU319B WADDINGTON RWY 02 530639N 0003308W - 530651N 0003358W - 530746N 0003322W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530958N 0003126W to 530734N 0003233W - 530639N 0003308W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU319C WADDINGTON RWY 20 531313N 0002946W - 531301N 0002856W - 531210N 0002929W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530958N 0003126W to 531222N 0003019W - 531313N 0002946W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320A CRANWELL A circle, 2.5 NM radius, centred at 530147N 0002934W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU320B CRANWELL RWY 01 525833N 0002919W - 525838N 0003012W - 525918N 0003003W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 525918N 0002909W - 525833N 0002919W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320C CRANWELL RWY 19 530445N 0002845W - 530440N 0002751W - 530406N 0002800W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530415N 0002852W - 530445N 0002845W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320D CRANWELL RWY 08 530107N 0003443W - 530139N 0003450W - 530144N 0003342W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530112N 0003335W - 530107N 0003443W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320E CRANWELL RWY 26 530227N 0002421W - 530155N 0002414W - 530150N 0002526W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530222N 0002532W - 530227N 0002421W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320F CRANWELL RWY 08N 530107N 0003416W - 530139N 0003423W - 530142N 0003342W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530110N 0003335W - 530107N 0003416W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320G CRANWELL RWY 26N 530221N 0002450W - 530149N 0002443W - 530146N 0002525W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530218N 0002531W - 530221N 0002450W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320H CRANWELL RWY 06 530100N 0003352W - 530129N 0003415W - 530139N 0003342W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530106N 0003333W - 530100N 0003352W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320I CRANWELL RWY 24 530406N 0002513W - 530337N 0002450W - 530314N 0002611W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530339N 0002648W - 530406N 0002513W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU320K CRANWELL RWY 21 530519N 0002721W - 530503N 0002635W - 530359N 0002737W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530147N 0002934W to 530411N 0002828W - 530519N 0002721W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU321A HUMBERSIDE A circle, 2.5 NM radius, centred at 533424N 0002105W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU321B HUMBERSIDE RWY 02 533119N 0002244W - 533132N 0002334W - 533213N 0002305W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 533424N 0002105W to 533201N 0002215W - 533119N 0002244W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU321C HUMBERSIDE RWY 20 533729N 0001927W - 533717N 0001836W - 533636N 0001905W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 533424N 0002105W to 533648N 0001955W - 533729N 0001927W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU321D HUMBERSIDE RWY 08 533356N 0002538W - 533428N 0002545W - 533430N 0002517W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 533424N 0002105W to 533358N 0002513W - 533356N 0002538W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU321E HUMBERSIDE RWY 26 533513N 0001609W - 533441N 0001602W - 533437N 0001655W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 533424N 0002105W to 533509N 0001705W - 533513N 0001609W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU322A WICKENBY A circle, 2 NM radius, centred at 531901N 0002056W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU322B WICKENBY RWY 03 531620N 0002232W - 531634N 0002321W - 531720N 0002245W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0002056W to 531707N 0002156W - 531620N 0002232W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU322C WICKENBY RWY 21 532142N 0001919W - 532128N 0001830W - 532041N 0001907W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0002056W to 532055N 0001955W - 532142N 0001919W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU322D WICKENBY RWY 15 532121N 0002345W - 532137N 0002258W - 532051N 0002214W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0002056W to 532035N 0002300W - 532121N 0002345W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU322E WICKENBY RWY 33 531643N 0001817W - 531627N 0001904W - 531709N 0001944W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531901N 0002056W to 531725N 0001857W - 531643N 0001817W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU323A CONINGSBY A circle, 2.5 NM radius, centred at 530535N 0000958W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU323B CONINGSBY RWY 07 530416N 0001515W - 530447N 0001532W - 530505N 0001402W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530535N 0000958W to 530434N 0001345W - 530416N 0001515W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU323C CONINGSBY RWY 25 530655N 0000441W - 530624N 0000424W - 530606N 0000555W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 530535N 0000958W to 530637N 0000611W - 530655N 0000441W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU324A MONA A circle, 2 NM radius, centred at 531533N 0042226W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU324B MONA RWY 04 531255N 0042513W - 531315N 0042556W - 531409N 0042448W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531533N 0042226W to 531349N 0042405W - 531255N 0042513W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU324C MONA RWY 22 531813N 0041938W - 531753N 0041855W - 531658N 0042005W thence anti-clockwise by the arc of a circle radius 2 NM centred on 531533N 0042226W to 531718N 0042048W - 531813N 0041938W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU325 HMP ALT COURSE 532802N 0025617W - 532801N 0025600W - 532751N 0025537W - 532734N 0025532W - 532725N 0025547W - 532726N 0025636W - 532740N 0025641W - 532753N 0025641W - 532802N 0025617W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 86 FT AMSL
EGRU326 HMP ASKHAM GRANGE 535551N 0011124W - 535552N 0011041W - 535537N 0011031W - 535520N 0011046W - 535516N 0011105W - 535520N 0011123W - 535539N 0011137W - 535551N 0011124W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 104 FT AMSL
EGRU327 HMP BERWYN 530233N 0025539W - 530210N 0025453W - 530137N 0025537W - 530159N 0025625W - 530233N 0025539W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 118 FT AMSL
EGRU328 HMP BUCKLEY HALL 533825N 0020916W - 533826N 0020823W - 533805N 0020814W - 533754N 0020816W - 533744N 0020841W - 533758N 0020909W - 533825N 0020916W	Upper limit: 1000 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 585 FT AMSL
EGRU329 HMP DONCASTER 533154N 0010840W - 533130N 0010807W - 533104N 0010843W - 533126N 0010928W - 533154N 0010840W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 55 FT AMSL
EGRU330 HMP FOREST BANK 533113N 0021811W - 533102N 0021732W - 533047N 0021730W - 533029N 0021808W - 533056N 0021847W - 533113N 0021811W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 128 FT AMSL
EGRU331 HMP FULL SUTTON 535923N 0005234W - 535920N 0005134W - 535842N 0005138W - 535845N 0005239W - 535923N 0005234W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 57 FT AMSL
EGRU332 HMP GARTH/WYMOTT 534108N 0024604W - 534108N 0024455W - 534103N 0024428W - 534023N 0024424W - 534022N 0024529W - 534033N 0024603W - 534108N 0024604W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 50 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU333 HMP HINDLEY 533127N 0023410W - 533057N 0023356W - 533048N 0023459W - 533119N 0023510W - 533127N 0023410W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 127 FT AMSL
EGRU334 HMP HULL 534518N 0001815W - 534518N 0001708W - 534458N 0001709W - 534439N 0001732W - 534439N 0001817W - 534518N 0001815W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 17 FT AMSL
EGRU335 HMP HUMBER 534633N 0003818W - 534627N 0003753W - 534605N 0003727W - 534549N 0003759W - 534550N 0003846W - 534617N 0003904W - 534633N 0003818W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 71 FT AMSL
EGRU336 HMP LEEDS 534805N 0013438W - 534758N 0013410W - 534733N 0013407W - 534727N 0013438W - 534739N 0013509W - 534801N 0013501W - 534805N 0013438W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 245 FT AMSL
EGRU337 HMP LINCOLN 531426N 0003115W - 531422N 0003038W - 531400N 0003032W - 531350N 0003046W - 531353N 0003122W - 531401N 0003132W - 531415N 0003132W - 531426N 0003115W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by Restricted Area (EGR313) Waddington and HMPPS. Contact: RAF Waddington Station Ops 01522-726532 or email: wad-stationops@mod.gov.uk HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 163 FT AMSL
EGRU338 HMP LINDHOLME/MOORLAND 533313N 0005850W - 533311N 0005732W - 533254N 0005713W - 533214N 0005733W - 533219N 0005853W - 533313N 0005850W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 29 FT AMSL
EGRU339 HMP LIVERPOOL 532740N 0025848W - 532750N 0025753W - 532742N 0025741W - 532719N 0025731W - 532706N 0025834W - 532740N 0025848W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 117 FT AMSL
EGRU340 HMP LOWDHAM GRANGE 530115N 0010219W - 530110N 0010156W - 530055N 0010149W - 530039N 0010203W - 530035N 0010234W - 530052N 0010258W - 530108N 0010247W - 530115N 0010219W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 281 FT AMSL
EGRU341 HMP MANCHESTER 533000N 0021509W - 532957N 0021446W - 532943N 0021414W - 532929N 0021413W - 532919N 0021435W - 532916N 0021448W - 532920N 0021507W - 532937N 0021520W - 533000N 0021509W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 153 FT AMSL
EGRU342 HMP MORTON HALL 531026N 0004128W - 531021N 0004043W - 530946N 0004034W - 530938N 0004054W - 530942N 0004135W - 531008N 0004144W - 531026N 0004128W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 79 FT AMSL

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU343 HMP NEW HALL 533826N 0013700W - 533826N 0013620W - 533811N 0013613W - 533753N 0013618W - 533752N 0013640W - 533800N 0013716W - 533818N 0013719W - 533826N 0013700W	Upper limit: 900 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 458 FT AMSL
EGRU344 HMP PRESTON 534606N 0024105W - 534537N 0024043W - 534525N 0024124W - 534538N 0024149W - 534555N 0024139W - 534606N 0024105W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 147 FT AMSL
EGRU345 HMP RANBY 531943N 0005946W - 531922N 0005920W - 531858N 0005925W - 531903N 0010035W - 531926N 0010034W - 531943N 0005946W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 153 FT AMSL
EGRU346 HMP RISLEY 532638N 0023135W - 532635N 0023109W - 532624N 0023059W - 532602N 0023050W - 532558N 0023204W - 532625N 0023154W - 532638N 0023135W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 126 FT AMSL
EGRU347 HMP STYAL 532043N 0021412W - 532031N 0021342W - 532010N 0021357W - 532005N 0021442W - 532019N 0021500W - 532038N 0021441W - 532043N 0021412W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by Non-Standard Flight Applications (NSF NATS) and HMPPS. NSF: Online Application: https://nsf.nats.aero/drones-and-model-aircraft/ HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 271 FT AMSL
EGRU348 HMP WAKEFIELD 534112N 0013105W - 534118N 0013027W - 534051N 0012947W - 534035N 0013042W - 534054N 0013104W - 534112N 0013105W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 117 FT AMSL
EGRU349 HMP WEALSTUN 535520N 0011957W - 535515N 0011917W - 535456N 0011909W - 535432N 0011932W - 535432N 0011955W - 535443N 0012021W - 535454N 0012018W - 535506N 0012011W - 535520N 0011957W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 104 FT AMSL
EGRU350 HMP WERRINGTON 530135N 0020538W - 530140N 0020507W - 530131N 0020450W - 530108N 0020437W - 530100N 0020530W - 530118N 0020540W - 530135N 0020538W	Upper limit: 1300 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 834 FT AMSL
EGRU351 HMP WETHERBY 535628N 0012218W - 535633N 0012138W - 535557N 0012124W - 535551N 0012229W - 535616N 0012241W - 535623N 0012221W - 535628N 0012218W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 89 FT AMSL
EGRU401A ENNISKILLEN/ST ANGELO A circle, 2 NM radius, centred at 542355N 0073907W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU401B ENNISKILLEN/ST ANGELO RWY 14 542602N 0074247W - 542623N 0074205W - 542536N 0074057W thence anti-clockwise by the arc of a circle radius 2 NM centred on 542355N 0073907W to 542515N 0074139W - 542602N 0074247W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU401C ENNISKILLEN/ST ANGELO RWY 32 542152N 0073531W - 542131N 0073613W - 542214N 0073716W thence anti-clockwise by the arc of a circle radius 2 NM centred on 542355N 0073907W to 542235N 0073634W - 542152N 0073531W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU402A BELFAST ALDERGROVE A circle, 2.5 NM radius, centred at 543927N 0061257W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU402B BELFAST ALDERGROVE RWY 07 543745N 0061808W - 543815N 0061831W - 543839N 0061702W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543927N 0061257W to 543810N 0061638W - 543745N 0061808W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU402C BELFAST ALDERGROVE RWY 25 544109N 0060745W - 544039N 0060721W - 544015N 0060852W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543927N 0061257W to 544044N 0060916W - 544109N 0060745W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU402D BELFAST ALDERGROVE RWY 17 544157N 0061536W - 544207N 0061443W - 544146N 0061431W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543927N 0061257W to 544131N 0061521W - 544157N 0061536W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU402E BELFAST ALDERGROVE RWY 35 543604N 0061119W - 543554N 0061212W - 543657N 0061247W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543927N 0061257W to 543702N 0061152W - 543604N 0061119W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU403A BELFAST/CITY A circle, 2 NM radius, centred at 543705N 0055221W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU403B BELFAST/CITY RWY 04 543421N 0055503W - 543440N 0055549W - 543537N 0055441W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543705N 0055221W to 543518N 0055355W - 543421N 0055503W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU403C BELFAST/CITY RWY 22 543951N 0054936W - 543933N 0054850W - 543833N 0055002W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543705N 0055221W to 543852N 0055047W - 543951N 0054936W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU404A NEWTOWNARDS A circle, 2 NM radius, centred at 543452N 0054131W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404B NEWTOWNARDS RWY 03 543214N 0054343W - 543231N 0054430W - 543319N 0054340W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543302N 0054253W - 543214N 0054343W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404C NEWTOWNARDS RWY 21 543727N 0053922W - 543710N 0053834W - 543625N 0053921W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543642N 0054009W - 543727N 0053922W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404D NEWTOWNARDS RWY 08 543356N 0054615W - 543428N 0054627W - 543440N 0054456W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543408N 0054443W - 543356N 0054615W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404E NEWTOWNARDS RWY 26 543545N 0053655W - 543513N 0053642W - 543502N 0053806W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543534N 0053818W - 543545N 0053655W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404F NEWTOWNARDS RWY 15 543716N 0054418W - 543733N 0054330W - 543645N 0054241W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543630N 0054331W - 543716N 0054418W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU404G NEWTOWNARDS RWY 33 543241N 0053834W - 543224N 0053922W - 543304N 0054002W thence anti-clockwise by the arc of a circle radius 2 NM centred on 543452N 0054131W to 543322N 0053916W - 543241N 0053834W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU406A WALNEY A circle, 2 NM radius, centred at 540752N 0031548W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU406B WALNEY RWY 17 541032N 0031742W - 541040N 0031649W - 540949N 0031628W thence anti-clockwise by the arc of a circle radius 2 NM centred on 540752N 0031548W to 540939N 0031720W - 541032N 0031742W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU406C WALNEY RWY 35 540454N 0031423W - 540447N 0031517W - 540552N 0031544W thence anti-clockwise by the arc of a circle radius 2 NM centred on 540752N 0031548W to 540557N 0031450W - 540454N 0031423W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU408A LEEMING A circle, 2.5 NM radius, centred at 541733N 0013207W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU408B LEEMING RWY 16 542028N 0013452W - 542041N 0013402W - 541955N 0013327W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 541733N 0013207W to 541942N 0013417W - 542028N 0013452W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU408C LEEMING RWY 34 541438N 0012923W - 541425N 0013013W - 541511N 0013048W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 541733N 0013207W to 541524N 0012958W - 541438N 0012923W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU408D LEEMING RWY 03 541517N 0013411W - 541532N 0013459W - 541539N 0013453W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 541733N 0013207W to 541521N 0013407W - 541517N 0013411W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU408E LEEMING RWY 21 542039N 0013015W - 542024N 0012927W - 541944N 0013003W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 541733N 0013207W to 541957N 0013055W - 542039N 0013015W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU409A TEESIDE INTERNATIONAL A circle, 2.5 NM radius, centred at 543033N 0012546W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU409B TEESIDE INTERNATIONAL RWY 05 542807N 0012938W - 542831N 0013016W - 542904N 0012913W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543033N 0012546W to 542840N 0012836W - 542807N 0012938W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU409C TEESIDE INTERNATIONAL RWY 23 543259N 0012153W - 543235N 0012115W - 543202N 0012219W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 543033N 0012546W to 543226N 0012256W - 543259N 0012153W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410A TOPCLIFFE A circle, 2 NM radius, centred at 541220N 0012254W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410B TOPCLIFFE RWY 02 540928N 0012421W - 540940N 0012512W - 541036N 0012434W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541024N 0012343W - 540928N 0012421W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410C TOPCLIFFE RWY 20 541524N 0012119W - 541512N 0012027W - 541405N 0012113W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541417N 0012204W - 541524N 0012119W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410D TOPCLIFFE RWY 13 541355N 0012720W - 541421N 0012647W - 541344N 0012520W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541318N 0012553W - 541355N 0012720W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU410E TOPCLIFFE RWY 31 541053N 0011838W - 541027N 0011910W - 541059N 0012024W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541125N 0011953W - 541053N 0011838W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410F TOPCLIFFE RWY 07 541107N 0012746W - 541138N 0012800W - 541155N 0012614W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541124N 0012555W - 541107N 0012746W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU410G TOPCLIFFE RWY 25 541311N 0011812W - 541240N 0011758W - 541225N 0011930W thence anti-clockwise by the arc of a circle radius 2 NM centred on 541220N 0012254W to 541257N 0011939W - 541311N 0011812W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU411A ISLE OF MAN A circle, 2.7 NM radius, centred at 540500N 0043724W	Upper limit: UNL Lower limit: SFC	Restricted airspace active H24. Small unmanned aircraft flight not permitted except with the permission of the Isle of Man CAA. Contact caa@gov.im or 01624-682358
EGRU412 ISLE OF MAN PRISON 542124N 0043154W - 542128N 0043151W - 542129N 0043150W - 542133N 0043143W - 542132N 0043141W - 542117N 0043127W - 542114N 0043143W - 542113N 0043153W - 542116N 0043201W - 542117N 0043201W - 542124N 0043154W	Upper limit: UNL Lower limit: SFC	Restricted airspace active H24. Contact caa@gov.im or 01624-682358 for further details
EGRU413 HMP DEERBOLT 543255N 0015600W - 543222N 0015541W - 543214N 0015609W - 543221N 0015700W - 543244N 0015701W - 543255N 0015600W	Upper limit: 1100 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 602 FT AMSL
EGRU414 HMP DURHAM 544641N 0013402W - 544635N 0013340W - 544614N 0013337W - 544602N 0013352W - 544609N 0013429W - 544637N 0013440W - 544641N 0013402W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 196 FT AMSL
EGRU415 HMP FRANKLAND/LOW NEWTON 544839N 0013233W - 544800N 0013221W - 544753N 0013317W - 544810N 0013351W - 544832N 0013351W - 544839N 0013233W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 208 FT AMSL
EGRU416 HMP HOLME HOUSE 543500N 0011748W - 543500N 0011715W - 543433N 0011658W - 543422N 0011718W - 543423N 0011748W - 543435N 0011809W - 543448N 0011809W - 543500N 0011748W	Upper limit: 500 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 39 FT AMSL
EGRU417 HMP LANCASTER FARMS 540337N 0024623W - 540334N 0024557W - 540325N 0024544W - 540304N 0024548W - 540255N 0024607W - 540256N 0024629W - 540309N 0024645W - 540329N 0024641W - 540337N 0024623W	Upper limit: 700 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 238 FT AMSL
EGRU501A LONDONDERRY/EGLINTON A circle, 2.5 NM radius, centred at 550234N 0070943W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU501B LONDONDERRY/EGLINTON RWY 08 550123N 0071453W - 550154N 0071509W - 550206N 0071359W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 550234N 0070943W to 550135N 0071343W - 550123N 0071453W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU501C LONDONDERRY/EGLINTON RWY 26 550345N 0070429W - 550314N 0070412W - 550301N 0070527W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 550234N 0070943W to 550332N 0070543W - 550345N 0070429W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU502A ISLAY A circle, 2 NM radius, centred at 554100N 0061535W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU502B ISLAY RWY 07 553948N 0061952W - 554018N 0062011W - 554032N 0061901W thence anti-clockwise by the arc of a circle radius 2 NM centred on 554100N 0061535W to 554002N 0061840W - 553948N 0061952W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU502C ISLAY RWY 25 554212N 0061040W - 554142N 0061021W - 554121N 0061206W thence anti-clockwise by the arc of a circle radius 2 NM centred on 554100N 0061535W to 554152N 0061224W - 554212N 0061040W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU502D ISLAY RWY 12 554220N 0062026W - 554248N 0061957W - 554215N 0061820W thence anti-clockwise by the arc of a circle radius 2 NM centred on 554100N 0061535W to 554147N 0061850W - 554220N 0062026W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU502E ISLAY RWY 30 553941N 0061044W - 553913N 0061113W - 553945N 0061249W thence anti-clockwise by the arc of a circle radius 2 NM centred on 554100N 0061535W to 554013N 0061220W - 553941N 0061044W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU503A CAMPBELTOWN A circle, 2 NM radius, centred at 552615N 0054117W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU503B CAMPBELTOWN RWY 11 552646N 0054608W - 552717N 0054552W - 552704N 0054430W thence anti-clockwise by the arc of a circle radius 2 NM centred on 552615N 0054117W to 552633N 0054446W - 552646N 0054608W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU503C CAMPBELTOWN RWY 29 552535N 0053529W - 552504N 0053544W - 552527N 0053804W thence anti-clockwise by the arc of a circle radius 2 NM centred on 552615N 0054117W to 552558N 0053749W - 552535N 0053529W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU504A PRESTWICK A circle, 2.5 NM radius, centred at 553034N 0043540W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU504B PRESTWICK RWY 02 552644N 0043643W - 552657N 0043735W - 552808N 0043640W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 553034N 0043540W to 552804N 0043541W - 552644N 0043643W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU504C PRESTWICK RWY 20 553247N 0043304W - 553234N 0043212W - 553215N 0043226W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 553034N 0043540W to 553237N 0043311W - 553247N 0043304W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU504D PRESTWICK RWY 12 553205N 0044100W - 553233N 0044030W - 553205N 0043910W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 553034N 0043540W to 553137N 0043939W - 553205N 0044100W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU504E PRESTWICK RWY 30 552858N 0043010W - 552831N 0043040W - 552903N 0043211W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 553034N 0043540W to 552930N 0043142W - 552858N 0043010W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU505A GLASGOW A circle, 2.5 NM radius, centred at 555218N 0042601W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU505B GLASGOW RWY 05 554945N 0043005W - 555009N 0043044W - 555047N 0042933W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 555218N 0042601W to 555024N 0042853W - 554945N 0043005W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU505C GLASGOW RWY 23 555444N 0042210W - 555421N 0042130W - 555349N 0042229W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 555218N 0042601W to 555412N 0042309W - 555444N 0042210W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU506A CUMBERNAULD A circle, 2 NM radius, centred at 555829N 0035832W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU506B CUMBERNAULD RWY 07 555721N 0040320W - 555752N 0040338W - 555809N 0040202W thence anti-clockwise by the arc of a circle radius 2 NM centred on 555829N 0035832W to 555738N 0040145W - 555721N 0040320W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU506C CUMBERNAULD RWY 25 555937N 0035343W - 555906N 0035325W - 555849N 0035501W thence anti-clockwise by the arc of a circle radius 2 NM centred on 555829N 0035832W to 555920N 0035518W - 555937N 0035343W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU507A EDINBURGH A circle, 2.5 NM radius, centred at 555700N 0032221W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU507B EDINBURGH RWY 06 555504N 0032705W - 555532N 0032735W - 555557N 0032623W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 555700N 0032221W to 555529N 0032553W - 555504N 0032705W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU507C EDINBURGH RWY 24 555855N 0031737W - 555827N 0031707W - 555803N 0031819W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 555700N 0032221W to 555831N 0031849W - 555855N 0031737W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU508A NEWCASTLE A circle, 2.5 NM radius, centred at 550217N 0014123W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU508B NEWCASTLE RWY 07 550040N 0014620W - 550109N 0014644W - 550129N 0014530W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 550217N 0014123W to 550059N 0014507W - 550040N 0014620W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU508C NEWCASTLE RWY 25 550353N 0013627W - 550324N 0013603W - 550304N 0013716W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 550217N 0014123W to 550334N 0013740W - 550353N 0013627W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU509A KIRKNEWTON A circle, 2 NM radius, centred at 555224N 0032355W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU510 HMP NORTHUMBERLAND 551818N 0013757W - 551756N 0013719W - 551743N 0013716W - 551716N 0013805W - 551720N 0013839W - 551737N 0013910W - 551818N 0013757W	Upper limit: 600 FT ALT Lower limit: SFC	HMP Restricted airspace active H24. Unmanned aircraft flight not permitted unless permission has been granted by HMPPS. HMPPS email: drone.RFZapplication@justice.gov.uk SI 2023/1101 Site elevation: 118 FT AMSL
EGRU601A TIREE A circle, 2 NM radius, centred at 562957N 0065209W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU601B TIREE RWY 05 562739N 0065554W - 562803N 0065634W - 562848N 0065506W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562957N 0065209W to 562824N 0065426W - 562739N 0065554W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU601C TIREE RWY 23 563213N 0064828W - 563149N 0064748W - 563106N 0064912W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562957N 0065209W to 563130N 0064952W - 563213N 0064828W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU601D TIREE RWY 11 563040N 0065734W - 563111N 0065716W - 563051N 0065522W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562957N 0065209W to 563021N 0065541W - 563040N 0065734W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU601E TIREE RWY 29 562928N 0064712W - 562857N 0064730W - 562911N 0064849W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562957N 0065209W to 562942N 0064834W - 562928N 0064712W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU602A COLL A circle, 2 NM radius, centred at 563607N 0063704W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU603A COLONSAY A circle, 2 NM radius, centred at 560327N 0061435W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU604A OBAN A circle, 2 NM radius, centred at 562749N 0052400W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU604B OBAN RWY 01 562451N 0052402W - 562454N 0052500W - 562553N 0052449W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562749N 0052400W to 562550N 0052351W - 562451N 0052402W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU604C OBAN RWY 19 563046N 0052358W - 563043N 0052300W - 562946N 0052310W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562749N 0052400W to 562949N 0052408W - 563046N 0052358W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605A PERTH/SCONE A circle, 2 NM radius, centred at 562628N 0032226W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605B PERTH/SCONE RWY 03 562346N 0032431W - 562401N 0032522W - 562451N 0032433W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562436N 0032342W - 562346N 0032431W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605C PERTH/SCONE RWY 21 562910N 0032021W - 562855N 0031930W - 562805N 0032019W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562820N 0032110W - 562910N 0032021W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605D PERTH/SCONE RWY 09 562554N 0032720W - 562627N 0032721W - 562628N 0032602W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562556N 0032554W - 562554N 0032720W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605E PERTH/SCONE RWY 27 562637N 0031711W - 562604N 0031709W - 562603N 0031855W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562635N 0031850W - 562637N 0031711W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU605F PERTH/SCONE RWY 15 562844N 0032509W - 562900N 0032418W - 562821N 0032337W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562806N 0032429W - 562844N 0032509W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU605G PERTH/SCONE RWY 33 562404N 0031904W - 562348N 0031954W - 562441N 0032050W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562628N 0032226W to 562459N 0032002W - 562404N 0031904W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU606A DUNDEE A circle, 2 NM radius, centred at 562709N 0030133W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU606B DUNDEE RWY 09 562654N 0030706W - 562726N 0030705W - 562726N 0030507W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562709N 0030133W to 562654N 0030507W - 562654N 0030706W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU606C DUNDEE RWY 27 562723N 0025600W - 562651N 0025600W - 562651N 0025759W thence anti-clockwise by the arc of a circle radius 2 NM centred on 562709N 0030133W to 562724N 0025758W - 562723N 0025600W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU607A LEUCHARS A circle, 2.5 NM radius, centred at 562230N 0025132W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU607B LEUCHARS RWY 04 561957N 0025452W - 562017N 0025539W - 562050N 0025453W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 562230N 0025132W to 562028N 0025410W - 561957N 0025452W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU607C LEUCHARS RWY 22 562509N 0024905W - 562449N 0024819W - 562428N 0024847W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 562230N 0025132W to 562445N 0024937W - 562509N 0024905W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU607D LEUCHARS RWY 08 562145N 0025723W - 562217N 0025731W - 562224N 0025601W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 562230N 0025132W to 562152N 0025553W - 562145N 0025723W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU607E LEUCHARS RWY 26 562314N 0024541W - 562242N 0024532W - 562235N 0024702W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 562230N 0025132W to 562307N 0024710W - 562314N 0024541W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701A BARRA A circle, 2 NM radius, centred at 570122N 0072635W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701B BARRA RWY 07 570009N 0073107W - 570038N 0073131W - 570058N 0073010W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570027N 0072950W - 570009N 0073107W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU701C BARRA RWY 25 570300N 0072146W - 570230N 0072122W - 570204N 0072310W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570233N 0072338W - 570300N 0072146W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701D BARRA RWY 11 570143N 0073151W - 570214N 0073140W - 570204N 0073000W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570133N 0073014W - 570143N 0073151W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701E BARRA RWY 29 570111N 0072125W - 570039N 0072136W - 570049N 0072304W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570121N 0072255W - 570111N 0072125W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701F BARRA RWY 15 570324N 0073025W - 570345N 0072940W - 570303N 0072834W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570242N 0072919W - 570324N 0073025W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU701G BARRA RWY 33 565921N 0072247W - 565900N 0072332W - 565941N 0072436W thence anti-clockwise by the arc of a circle radius 2 NM centred on 570122N 0072635W to 570002N 0072351W - 565921N 0072247W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU702A BENBECULA A circle, 2 NM radius, centred at 572850N 0072150W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU702B BENBECULA RWY 06 572652N 0072615W - 572719N 0072649W - 572756N 0072509W thence anti-clockwise by the arc of a circle radius 2 NM centred on 572850N 0072150W to 572730N 0072435W - 572652N 0072615W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU702C BENBECULA RWY 24 573054N 0071710W - 573027N 0071636W - 572944N 0071832W thence anti-clockwise by the arc of a circle radius 2 NM centred on 572850N 0072150W to 573011N 0071906W - 573054N 0071710W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU702D BENBECULA RWY 17 573147N 0072334W - 573154N 0072235W - 573049N 0072207W thence anti-clockwise by the arc of a circle radius 2 NM centred on 572850N 0072150W to 573043N 0072306W - 573147N 0072334W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU702E BENBECULA RWY 35 572601N 0072004W - 572554N 0072102W - 572651N 0072127W thence anti-clockwise by the arc of a circle radius 2 NM centred on 572850N 0072150W to 572659N 0072028W - 572601N 0072004W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU703A INVERNESS A circle, 2.5 NM radius, centred at 573233N 0040251W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU703B INVERNESS RWY 05 573017N 0040700W - 573042N 0040739W - 573108N 0040641W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 573233N 0040251W to 573044N 0040602W - 573017N 0040700W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU703C INVERNESS RWY 23 573450N 0035839W - 573426N 0035800W - 573357N 0035901W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 573233N 0040251W to 573422N 0035940W - 573450N 0035839W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU703D INVERNESS RWY 11 573320N 0040829W - 573350N 0040809W - 573337N 0040702W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 573233N 0040251W to 573307N 0040722W - 573320N 0040829W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU703E INVERNESS RWY 29 573154N 0035803W - 573124N 0035823W - 573127N 0035841W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 573233N 0040251W to 573158N 0035821W - 573154N 0035803W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU705A LOSSIEMOUTH A circle, 2.5 NM radius, centred at 574224N 0032016W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU705B LOSSIEMOUTH RWY 05 573945N 0032419W - 574007N 0032502W - 574048N 0032350W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 574224N 0032016W to 574025N 0032307W - 573945N 0032419W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU705C LOSSIEMOUTH RWY 23 574503N 0031614W - 574441N 0031530W - 574400N 0031642W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 574224N 0032016W to 574423N 0031726W - 574503N 0031614W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU705D LOSSIEMOUTH RWY 10 574228N 0032535W - 574300N 0032529W - 574258N 0032449W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 574224N 0032016W to 574225N 0032456W - 574228N 0032535W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU705E LOSSIEMOUTH RWY 28 574217N 0031343W - 574145N 0031350W - 574152N 0031543W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 574224N 0032016W to 574224N 0031537W - 574217N 0031343W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details, see UK MIL AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706A ABERDEEN/DYCE A circle, 2.5 NM radius, centred at 571209N 0021153W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706B ABERDEEN/DYCE RWY 05 571012N 0021521W - 571035N 0021602W - 571046N 0021542W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 571021N 0021503W - 571012N 0021521W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU706C ABERDEEN/DYCE RWY 23 571428N 0020830W - 571405N 0020749W - 571347N 0020824W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 571409N 0020908W - 571428N 0020830W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706D ABERDEEN/DYCE RWY 14 571403N 0021541W - 571424N 0021456W - 571410N 0021434W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 571349N 0021518W - 571403N 0021541W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706E ABERDEEN/DYCE RWY 32 571005N 0020803W - 570944N 0020848W - 571004N 0020920W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 571025N 0020835W - 571005N 0020803W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706F ABERDEEN/DYCE RWY 16 571502N 0021434W - 571514N 0021338W - 571433N 0021308W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 571421N 0021403W - 571502N 0021434W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706G ABERDEEN/DYCE RWY 34 570915N 0020914W - 570903N 0021009W - 570945N 0021039W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 570957N 0020944W - 570915N 0020914W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU706I ABERDEEN/DYCE RWY 36 570935N 0021131W - 570935N 0021231W - 570941N 0021231W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 571209N 0021153W to 570940N 0021131W - 570935N 0021131W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU801A STORNOWAY A circle, 2.5 NM radius, centred at 581256N 0061952W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by Stornoway Air Traffic Service unit. For contact details and opening hours see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU801B STORNOWAY RWY 06 581108N 0062422W - 581136N 0062453W - 581150N 0062406W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 581256N 0061952W to 581123N 0062333W - 581108N 0062422W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by Stornoway Air Traffic Service unit. For contact details and opening hours see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU801C STORNOWAY RWY 24 581434N 0061510W - 581406N 0061439W - 581351N 0061528W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 581256N 0061952W to 581420N 0061557W - 581434N 0061510W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by Stornoway Air Traffic Service unit. For contact details and opening hours see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU801D STORNOWAY RWY 18 581607N 0062059W - 581610N 0061958W - 581526N 0061949W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 581256N 0061952W to 581523N 0062050W - 581607N 0062059W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by Stornoway Air Traffic Service unit. For contact details and opening hours see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU801E STORNOWAY RWY 36 580941N 0061844W - 580938N 0061945W - 581027N 0061954W thence anti-clockwise by the arc of a circle radius 2.5 NM centred on 581256N 0061952W to 581030N 0061853W - 580941N 0061844W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by Stornoway Air Traffic Service unit. For contact details and opening hours see AIP, Part 3 - Aerodromes, Section AD 2.2.

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU802A WICK A circle, 2 NM radius, centred at 582732N 0030535W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU802B WICK RWY 13 582909N 0031033W - 582935N 0030956W - 582856N 0030818W thence anti-clockwise by the arc of a circle radius 2 NM centred on 582732N 0030535W to 582830N 0030855W - 582909N 0031033W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU802C WICK RWY 31 582555N 0030040W - 582529N 0030117W - 582608N 0030253W thence anti-clockwise by the arc of a circle radius 2 NM centred on 582732N 0030535W to 582633N 0030216W - 582555N 0030040W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU803A KIRKWALL A circle, 2 NM radius, centred at 585729N 0025402W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by ATC. ATC must be contacted during operational hours with a minimum of 24 hours notice provided prior to the unmanned aircraft flight within the FRZ. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU803B KIRKWALL RWY 09 585704N 0025947W - 585737N 0025950W - 585740N 0025753W thence anti-clockwise by the arc of a circle radius 2 NM centred on 585729N 0025402W to 585707N 0025750W - 585704N 0025947W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by ATC. ATC must be contacted during operational hours with a minimum of 24 hours notice provided prior to the unmanned aircraft flight within the FRZ. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU803C KIRKWALL RWY 27 585753N 0024808W - 585721N 0024806W - 585718N 0025011W thence anti-clockwise by the arc of a circle radius 2 NM centred on 585729N 0025402W to 585750N 0025014W - 585753N 0024808W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by ATC. ATC must be contacted during operational hours with a minimum of 24 hours notice provided prior to the unmanned aircraft flight within the FRZ. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU803D KIRKWALL RWY 14 585932N 0025817W - 585953N 0025729W - 585907N 0025615W thence anti-clockwise by the arc of a circle radius 2 NM centred on 585729N 0025402W to 585845N 0025701W - 585932N 0025817W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by ATC. ATC must be contacted during operational hours with a minimum of 24 hours notice provided prior to the unmanned aircraft flight within the FRZ. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU803E KIRKWALL RWY 32 585530N 0025028W - 585509N 0025116W - 585544N 0025211W thence anti-clockwise by the arc of a circle radius 2 NM centred on 585729N 0025402W to 585603N 0025121W - 585530N 0025028W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by ATC. ATC must be contacted during operational hours with a minimum of 24 hours notice provided prior to the unmanned aircraft flight within the FRZ. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2.
EGRU901A TRESKO A circle, 2 NM radius, centred at 495644N 0061955W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the heliport operator. For contact details see AIP, Part 3 - Heliports, Section AD 3.2
EGRU902A SCILLY ISLES/ST MARY'S A circle, 2 NM radius, centred at 495448N 0061730W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU902B SCILLY ISLES/ST MARY'S RWY 09 495423N 0062152W - 495456N 0062155W - 495458N 0062035W thence anti-clockwise by the arc of a circle radius 2 NM centred on 495448N 0061730W to 495426N 0062033W - 495423N 0062152W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU902C SCILLY ISLES/ST MARY'S RWY 27 495513N 0061309W - 495441N 0061307W - 495438N 0061425W thence anti-clockwise by the arc of a circle radius 2 NM centred on 495448N 0061730W to 495510N 0061428W - 495513N 0061309W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU902D SCILLY ISLES/ST MARY'S RWY 14 495647N 0062042W - 495709N 0062004W - 495629N 0061911W thence anti-clockwise by the arc of a circle radius 2 NM centred on 495448N 0061730W to 495607N 0061949W - 495647N 0062042W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU902E SCILLY ISLES/ST MARY'S RWY 32 495248N 0061419W - 495227N 0061457W - 495307N 0061550W thence anti-clockwise by the arc of a circle radius 2 NM centred on 495448N 0061730W to 495328N 0061512W - 495248N 0061419W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU903A EDAY A circle, 2 NM radius, centred at 591125N 0024621W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU904A STRONSAY A circle, 2 NM radius, centred at 590919N 0023830W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU905A SANDAY A circle, 2 NM radius, centred at 591501N 0023430W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU906A NORTH RONALDSAY A circle, 2 NM radius, centred at 592203N 0022605W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU907A FAIR ISLE A circle, 2 NM radius, centred at 593205N 0013743W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908A SUMBURGH A circle, 2 NM radius, centred at 595253N 0011738W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908B SUMBURGH RWY 06 595040N 0012125W - 595106N 0012203W - 595137N 0012040W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595114N 0011952W - 595040N 0012125W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908C SUMBURGH RWY 24 595429N 0011258W - 595403N 0011220W - 595329N 0011351W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595359N 0011419W - 595429N 0011258W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908D SUMBURGH RWY 09 595217N 0012335W - 595249N 0012342W - 595256N 0012136W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595224N 0012129W - 595217N 0012335W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS (continued)

Identification and Name Lateral Limits	Upper Limit Lower Limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EGRU908E SUMBURGH RWY 27 595330N 0011140W - 595258N 0011133W - 595251N 0011340W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595323N 0011347W - 595330N 0011140W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908F SUMBURGH RWY 15 595450N 0012132W - 595509N 0012041W - 595434N 0011948W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595412N 0012037W - 595450N 0012132W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU908G SUMBURGH RWY 33 595022N 0011337W - 595003N 0011429W - 595104N 0011559W thence anti-clockwise by the arc of a circle radius 2 NM centred on 595253N 0011738W to 595122N 0011504W - 595022N 0011337W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit. ATC must be contacted during opening hours and informed of flights 24 hours in advance of operation. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU909A WESTRAY A circle, 2 NM radius, centred at 592100N 0025700W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU910A PAPA WESTRAY A circle, 2 NM radius, centred at 592103N 0025401W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. For contact details see AIP, Part 3 - Aerodromes, Section AD 2.2
EGRU911 SAXAVORD A circle, 2.7 NM radius, centred at 604906N 0004612W	Upper limit: 2000 FT AGL Lower limit: SFC	FRZ Active H24. Unmanned aircraft flight not permitted unless permission has been granted by the relevant Air Traffic Service unit or aerodrome operator. Contact: SaxaVord Range Operations, Tel: 01479-782040, email: rangeops@shetlandspacecentre.com.

Airspace Restrictions - Unmanned Aircraft Systems (UAS)

Unless otherwise stated either in the remarks section or associated SI the Navigational restrictions listed above with an identification which starts with "EGD", "EGP" or "EGR" are applicable to **both** manned **and** unmanned aircraft systems. Restrictions listed above with an identification which starts with "EGRU" are applicable to **Unmanned Aircraft Systems only**.

Unmanned Aircraft Systems (UAS) - Data File

To satisfy the requirement for the provision of a dataset of UAS Airspace Restrictions an electronic file is available by selecting the UAS Airspace Restrictions File (ENR 5.1) link from the list available on the current IAIP website (updated each AIRAC).

INTENTIONALLY BLANK

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
CURROCK HILL GLIDER SITE, NORTHUMBERLAND (W AND T) 545602N 0015043W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Northumbria Gliding Club 01207- 561286.	Freq: 125.185. Site elevation: 800 FT AMSL. Hours: HJ
DAIRY HOUSE FARM MICROLIGHT SITE 530623N 0023015W		Phone: 07831-274201.	Site elevation: 150 FT AMSL. PPR. Microlight Training 7 Days a week.
DAMYNS HALL TRAINING AERODROME 513143N 0001444E		Phone: 07496-539206. Email: tony@skymax.co.uk. Website: www.damynshall.co.uk.	Site elevation: 56 FT AMSL. Training Aerodrome. PPR. Freq: 119.555 MHz. Hours: 0900(0800)-SS.
DARLEY MOOR HANGGLIDER SITE, DERBYSHIRE (AD) A circle, 2 NM radius, centred at 525814N 0014454W	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 580 FT AMSL. Hours: HJ
DARLEY MOOR MICROLIGHT SITE, DERBS (AD) 525814N 0014454W			Site elevation: 580 FT AMSL.
DARLTON GLIDER SITE, NOTTS (W AND T) 531444N 0005132W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Darlton Gliding Club 07772-704178 (when operating).	Site elevation: 155 FT AMSL. Hours: HJ
DAVIDSTOW MOOR MICROLIGHT SITE 503815N 0043708W			Site elevation: 969 FT AMSL.
DEVILS DYKE HANGGLIDER SITE, SADDLESCOMBE FARM, W SUSSEX A circle, 2 NM radius, centred at 505233N 0001303W	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 666 FT AMSL. Hours: HJ
DREM MODEL AIRCRAFT FLYING, EAST LOTHIAN 560050N 0024738W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07770-746850.	Site elevation: 30 FT AMSL. Hours: HJ
DUNKESWELL PARACHUTE SITE, DEVON A circle, 1.5 NM radius, centred at 505151N 0031353W	Upper limit: FL150 Lower limit: SFC	Phone: 01404-891690. Exeter ATC: 01392- 367433 Ext 215. London Control (Swanwick): 01489-612420.	Activity notified on the day to Exeter ATC or London Control (Swanwick) outside hours of Exeter. Alternative contact: 129.905 MHz or 123.480 MHz. Hours: Normally during daylight hours.
DUNSFOLD UNUSUAL ACT AERODROME 510700N 0003209W		Phone: 01483-200900.	Site elevation: 172 FT AMSL. Unusual Activity.
DUNSTABLE DOWNS GLIDER SITE, BEDS (W AND T) 515200N 0003254W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: London Gliding Club 01582-663419.	Site elevation: 500 FT AMSL. Hours: HJ
EAGLESCOTT GLIDER SITE, DEVON (AD) (W AND T) 505542N 0035922W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: North Devon Gliding Club 01769- 520404.	Site elevation: 655 FT AMSL. Hours: HJ
EAGLESCOTT TRAINING AERODROME 505543N 0035922W		Phone: 01769-520404 Email: info@eaglescott- airfield.com.	Site elevation: 655 FT AMSL. Training Aerodrome.
EAST FORTUNE MICROLIGHT SITE 560003N 0024404W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: East of Scotland Microlights AD: 01620- 880332; CFI: 01875- 820102.	Site elevation: 120 FT AMSL. PPR. Hours: HJ
EAST FORTUNE, MODEL AIRCRAFT FLYING, EAST LOTHIAN 555950N 0024231W	Upper limit: 1200 FT AGL Lower limit: SFC	Phone: East Fortune Aeromodellers 07976- 252255.	Site elevation: 120 FT AMSL. Hours: SR-SS
EASTER TRAINING AERODROME 574507N 0035620W		Phone: 01862-871717.	Site elevation: 22 FT AMSL. Training Aerodrome.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
EASTERTON GLIDER SITE, NR ELGIN, GRAMPIAN (W AND T) 573508N 0031841W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Highland Gliding Club 01343-860272.	Freq: 130.290. Site elevation: 361 FT AMSL. Hours: HJ
EDGE HILL/SHENNINGTON GLIDER SITE, OXON (AD) (W AND T) 520507N 0012828W	Upper limit: 2500 FT AGL Lower limit: SFC	Phone: Edge Hill Gliding Centre Limited 07548-069341.	Freq: 129.980 MHz. Site elevation: 642 FT AMSL. Hours: HJ
EGERTON MICROLIGHT SITE 511149N 0004132E		Phone: 07751-828221.	Site elevation: 165 FT AMSL.
ENSTONE TRAINING AERODROME 515541N 0012542W		Phone: 01608-677208 Email: osf@enstoneaerodrome.co.uk.	Site elevation: 550 FT AMSL. Training Aerodrome.
ERROL PARACHUTE SITE, TAYSIDE A circle, 1.5 NM radius, centred at 562418N 0031055W	Upper limit: FL104 Lower limit: SFC	Phone: 01821-642454. Scottish Control (Prestwick): 01294-655300.	Activity notified on the day to Scottish Control (Prestwick), RAF Leuchars and Dundee ATC. Drops may be made up to, but not including, the base of the overlaying controlled airspace. Alternative contact: 129.905 MHz; Drop Zone Tel: 01738-635347. Hours: Normally during daylight hours Wed-Sun & PH.
EWE FARM MODEL AIRCRAFT FLYING, OXFORDSHIRE 513921N 0010609W	Upper limit: 1000 FT AGL Lower limit: SFC	Phone: 01865-891236.	Site elevation: 266 FT AMSL. Hours: HJ
EYRES FIELD GLIDER SITE, GALLOWES HILL, DORSET (W AND T) 504233N 0021310W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Dorset Gliding Club 01929-405599.	Freq: 132.910. Site elevation: 205 FT AMSL. Hours: HJ
FALGUNZEON GLIDER SITE, DALBEATTIE, DUMFRIES (W) 545638N 0034424W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Dumfries & District Gliding Club 01387-760601.	Freq: 129.965. Site elevation: 600 FT AMSL. Hours: HJ
FESHIEBRIDGE GLIDER SITE, HIGHLANDS (W AND T) 570613N 0035330W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Cairngorm Gliding Club 01540-651317.	Site elevation: 860 FT AMSL. Hours: HJ
FIFE AIRPORT PARACHUTE SITE, GLENROTHES, FIFE A circle, 1.5 NM radius, centred at 561100N 0031313W	Upper limit: FL130 Lower limit: SFC	Phone: 0845-189 5865 or 07885-617418. Edinburgh ATC: 0131-333 6234.	Activity must be notified to and co-ordinated with Edinburgh ATC. Alternative contact: 130.455 MHz. Hours: Sat & Sun 0900-2100 (Winter); Fri 1600-2000, Sat & Sun 0800-2000 (Summer).
FINMERE MICROLIGHT SITE 515907N 0010323W			Site elevation: 395 FT AMSL.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
FISHERWICK MICROLIGHT SITE 524024N 0014325W		Phone: 07951-635207.	Site elevation: 184 FT AMSL. PPR. Microlight training 7 days a week. Hours: 0800-SS+30 (0700-SS+30).
FOWLMERE TRAINING AERODROME 520439N 0000342E		Phone: 01763-208281 Email: dg@modair.co.uk.	Site elevation: 117 FT AMSL. Training Aerodrome.
GLASSONBY MICROLIGHT SITE (PENRITH) 544418N 0023905W		Phone: 01768-898382.	Site elevation: 600 FT AMSL.
GLIDDEN FARM MICROLIGHT SITE, PORTSMOUTH, HANTS 505603N 0010318W			Site elevation: 450 FT AMSL.
GRANDSDEN LODGE GLIDER SITE, CAMBRIDGE (AD) (W AND T) 521041N 0000653W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Cambridge Gliding Club 01767-677077.	Site elevation: 254 FT AMSL. Hours: HJ
GRAVELEY MICROLIGHT SITE 515628N 0001212W			Site elevation: 395 FT AMSL.
GRAVES PARK KITE FLYING SITE 531958N 0012811W	Upper limit: 1200 FT AGL Lower limit: SFC		Site elevation: 660 FT AMSL.
GREAT FRANSHAM HANGGLIDER SITE, NORFOLK A circle, 2 NM radius, centred at 524059N 0004855E	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 220 FT AMSL. Hours: HJ
GREAT MASSINGHAM TRAINING AERODROME 524644N 0004021E		Phone: 01485-520257.	Site elevation: 295 FT AMSL. Training Aerodrome.
GREAT OAKLEY TRAINING AERODROME 515400N 0011018E		Phone: 01255-880045 Email: tim.spurge@btconnect.co m.	Site elevation: 60 FT AMSL. Training Aerodrome.
GROVE FARM MICROLIGHT SITE 522950N 0013222E		Phone: 01502-713125.	Site elevation: 102 FT AMSL.
HALESLAND GLIDER SITE, AVON (AD) (W AND T) 511544N 0024356W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Mendip Gliding Club 01749-870312.	Freq: 129.060. Site elevation: 870 FT AMSL. Hours: HJ
HALTON GLIDER SITE (MIL), BUCKS (AD) (W AND T) 514733N 0004416W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Mil Ops 01296- 656367.	Strictly PPR. Freq: 130.425 MHz. Site elevation: 370 FT AMSL. Hours: 0900-2000 (0800- 1900) or SS+15 (Whichever is earlier).
HALWELL MICROLIGHT SITE, SOUTH DEVON 502155N 0034235W			Site elevation: 623 FT AMSL.
HARDWICKE KITE FLYING SITE 514900N 0021900W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07970-038163.	Site elevation: 94 FT AMSL. Hours: 1300-SS.
HARRINGE COURT FARM MICROLIGHT SITE 510531N 0005918E		Phone: Kent Microlight Aircraft Club 07773- 056397, 07973-479309, 07807-169226.	Site Elevation: 279 FT AMSL. Hours: HJ
HAWKSVIEW MICROLIGHT SITE 532032N 0023133W		Phone: 07860-558707.	Strictly PPR. Site elevation: 220 FT AMSL.
HENSTRIDGE TRAINING AERODROME 505930N 0022130W		Phone: 01963-364231.	Site elevation: 184 FT AMSL. Training Aerodrome.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
HIBALDSTOW PARACHUTE SITE, HUMBERSIDE A circle, 1.5 NM radius, centred at 532956N 0003048W	Upper limit: FL120 Lower limit: SFC	Phone: 01652-648837. Humberside ATC: 01652-688456.	Activity subject to permission from Humberside ATC. Drops may be made from up to FL 150 with Scottish Control (Prestwick) permission. Alternative contact: 129.925 MHz. Hours: Normally during daylight hours.
HIGH TREES FARM MICROLIGHT SITE 525115N 0015249W			Site Elevation: 420 FT AMSL.
HILL TOP FARM MICROLIGHT SITE 530530N 0002524W		Phone: 01526-268435.	Strictly PPR. Site elevation: 110 FT AMSL. Hours: HJ
HINTON-IN-THE-HEDGES GLIDER SITE, OXON (AD) (W AND T) 520145N 0011229W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Banbury Gliding Club 01295-811056.	Site elevation: 500 FT AMSL. Hours: HJ
HINTON-IN-THE-HEDGES PARACHUTE SITE, BANBURY, OXON A circle, 1.5 NM radius, centred at 520136N 0011216W	Upper limit: FL65 Lower limit: SFC	Phone: 01295-812300. Brize Norton ATC: 01993-897785.	Activity notified on the day to Brize Norton ATC. Drops may be made from up to FL 150 with London Control (Swanwick) permission. Alternative contact: 119.455 MHz (up to 3000 FT) then 129.905 MHz. Hours: Normally during daylight hours Tue-Sun & PH.
HOGHTON MICROLIGHT SITE (HIGHER BARN FARM) 534425N 0023505W			Site elevation: 329 FT AMSL.
HONINGTON GLIDER SITE (MIL), SUFFOLK (AD) (W AND T) 522036N 0004648E	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: 611 VGS 07776-226957 (Duty Supervisor Mobile).	Strictly PPR via Honington Ops. Freq: 124.105 MHz (Honington Radio). Site elevation: 174 FT AMSL. Hours: Sat, Sun & PH, SR to SS+15 (all other times by NOTAM).
HOUGHAM MICROLIGHT SITE (GLEBE FARM) 530022N 0004114W			Site elevation: 80 FT AMSL.
HUNSDON MICROLIGHT SITE 514825N 0000416E			Site elevation: 254 FT AMSL.
HUSBANDS BOSWORTH GLIDER SITE, LEICS (AD) (W AND T) 522626N 0010238W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: The Gliding Centre 01858-880521.	Site elevation: 505 FT AMSL. Hours: HJ
HUSTHWAITE MICROLIGHT SITE (BAXBY) 540925N 0011354W			Site elevation: 132 FT AMSL.
ICKENHAM MODEL AIRCRAFT FLYING, MIDDLESEX 513330N 0002553W	Upper limit: 400 FT AGL Lower limit: SFC	Phone: The Flying Fish 07770-852931.	Site elevation: 110 FT AMSL. Site lies within RAF Northolt ATZ. Hours: HJ
INCE MICROLIGHT SITE 533158N 0030139W			Site elevation: 10 FT AMSL.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
KEEVIL GLIDER SITE, WILTS (AD) (W & T) 511850N 0020643W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Bannerdown Gliding Club 01380- 870411.	Freq: 130.290. Site elevation: 200 FT AMSL. Hours: HJ
KEEVIL PARACHUTE SITE, WILTS A circle, 2 NM radius, centred at 511851N 0020637W	Upper limit: FL150 Lower limit: SFC	Phone: Opr/User - Various. Brize Norton ATC: 01993- 895521/896814/896804.	Airfield used for gliding, free- fall parachuting and heavy supply drops from military Hercules aircraft. Supply drops may take place at any time within 2 NM and below 2000 FT. Hours: Activated by NOTAM.
KENLEY GLIDER SITE (MIL), SURREY (AD) (W) 511821N 0000536W	Upper limit: 1700 FT AGL Lower limit: SFC	Airfield Duty Supervisor during notified hours: 615 VGS (weekends and PHs) 07920-782194. Surrey Hills Gliding Club (weekdays except PHs) 07477-878845. Aerodrome Operator Tel Syerston Ops: 01400- 264520, Email: SYE- 2FTS-HQ- OpsOC@mod.gov.uk.	Freq: 119.760 MHz. Site elevation: 565 FT AMSL. Note 1: Civ and Mil AGCS available during notified hours. Note 2: PNR for Military/Police aircraft. PPR for civil aircraft not available. Hours: 0830-SS+15 (0730- SS+15).
KENNEL FARM HANGGLIDER SITE, WARLINGHAM, SURREY A circle, 2 NM radius, centred at 511849N 0000229W	Upper limit: 500 FT AGL Lower limit: SFC		Site elevation: 590 FT AMSL. Hours: HJ
KERNAN MICROLIGHT SITE 542311N 0062359W		Phone: Kernan Aviation 07711-841492.	Site elevation: 65 FT AMSL.
KETTLE FIELD MODEL AIRCRAFT FLYING, HOLYWELL, NORTH WALES 531611N 0031823W	Upper limit: 1000 FT AGL Lower limit: SFC	Phone: Delyn Model Flying Club 07940-351819.	Site elevation: 620 FT AMSL. Hours: SR-SS.
KEYSLEY DOWN MODEL AIRCRAFT FLYING, WILTSHIRE 510717N 0021048W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07962-013388.	Site elevation: 650 FT AMSL. Hours: HJ
KILLYKERGAN PARACHUTE SITE, CO LONDONDERRY A circle, 1.5 NM radius, centred at 550103N 0063951W	Upper limit: FL150 Lower limit: SFC	Phone: 028-2955 8609. Londonderry/Eglinton ATC: 028-7181 1099. Scottish Control (Prestwick): 01294- 655300.	Activity notified on the day to Londonderry/Eglinton ATC or Scottish Control (Prestwick) outside hours of Londonderry/ Eglinton. Area overlaps Movenis drop Zone. Alternative contact: 129.905 MHz. Hours: Normally during daylight hours.
KINGS FARM MICROLIGHT SITE, RUTLAND 523702N 0003611W			Site elevation: 210 FT AMSL. Hours: HJ
KIRKBRIDE MICROLIGHT SITE 545256N 0031220W			Site elevation: 38 FT AMSL.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
KIRKNEWTON GLIDER SITE (MIL), LOTHIAN (AD) (W) 555234N 0032400W	Upper limit: 3000 FT AGL Lower limit: SFC	Airfield Duty Supervisor during notified hours: 07920-782209. Aerodrome Operator Tel Syerston Ops: 01400- 264520, Email: SYE- 2FTS-HQ- OpsOC@mod.gov.uk.	Freq: 121.205 MHz (Edinburgh APP); 124.100 MHz (VGS). Site elevation: 652 FT AMSL. Note 1: PNR for Military aircraft. PPR for civil aircraft not available. Note 2: Site located within Edinburgh CTZ. Hours: Fri-Sun, & PHs, 0830- SS+15 (0730-SS+15).
KIRTON-IN-LINDSEY GLIDER SITE, LINGS (AD) (W AND T) 532745N 0003436W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Trent Valley Gliding Club 01652- 648777.	Site elevation: 203 FT AMSL. Hours: HJ
LANGAR PARACHUTE SITE, NOTTS A circle, 1.5 NM radius, centred at 525338N 0005416W	Upper limit: FL150 Lower limit: SFC	Phone: 01949-860878. East Midlands Airport ATC: 01332-852852 Ext 2232. London Control (Swanwick) 01489- 612420.	Activity notified on the day to East Midlands Airport EGNX and London Control (Swanwick). Langar parachuting contact: 129.905 MHz. Alternative contact: East Midlands Radar 134.180 MHz or London Information 124.600 MHz. Hours: Normally during daylight hours.
LASHAM GLIDER SITE, ALTON, HANTS (AD) (W AND T) 511112N 0010155W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Lasham Gliding Society 01256-381322.	Site elevation: 618 FT AMSL. Hours: HJ
LASHENDEN/HEADCORN PARACHUTE SITE, KENT A circle, 1.5 NM radius, centred at 510925N 0003902E	Upper limit: 3500 FT ALT Lower limit: SFC	Phone: 01622-890862. London Control (Swanwick): 023-8040 1110.	Activity notified on the day to Headcorn Radio on 122.210 MHz or London Control (Swanwick). Drops may be made from up to FL 150 with London Control (Swanwick) permission. Hours: Normally during daylight hours.
LIMERSTONE DOWN HANGGLIDER SITE, ISLE OF WIGHT A circle, 2 NM radius, centred at 503902N 0012220W	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 550 FT AMSL. Hours: HJ
LINTON MICROLIGHT SITE (NR MAIDSTONE) 511217N 0003042E			Site elevation: 70 FT AMSL.
LITTLE RISSINGTON GLIDER SITE (MIL), GLOS (AD) (W AND T) 515202N 0014139W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: RAF 2 FTS 01400- 264526. Ops 637 VGS 01451-810078, 07786- 504892 (Mobile).	Strictly PPR. Freq: 120.775 MHz (Rissington Radio). Site elevation: 722 FT AMSL. Hours: SR to SS+15 Fri, Sat, Sun & PH or as notified by NOTAM.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
LLANBEDR PARACHUTE SITE, GWYNEDD (AD) A circle, 1.5 NM radius, centred at 524817N 0040738W	Upper limit: FL150 Lower limit: SFC	Phone: 07703-532064. RAF Valley 01407-762241 Ext 7404. London Control (Swanwick): 01489- 612420.	Activity notified on the day to RAF Valley or London Control (Swanwick) outside hours of Llanbedr. Alternative contact: 118.930 MHz Llanbedr or 125.230 Valley Radar or 124.750 MHz London Information. Hours: Normally during daylight hours.
LLANBEDR TRAINING AERODROME 524817N 0040738W		Phone: 01341-771771.	Site elevation: 30 FT AMSL. Training Aerodrome.
LLANTISILIO GLIDER SITE, LLANDEGLA NR WREXHAM (W) 530239N 0031315W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: North Wales Gliding Club.	Freq: 133.565. Site elevation: 1120 FT AMSL. Hours: HJ
LLEWENI PARC GLIDER SITE, DENBIGH, CLWYD (W AND T) 531239N 0032312W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Denbigh Gliding Club 01745-812062.	Freq: 129.060. Site elevation: 200 FT AMSL. Hours: HJ
LONDON COLNEY MICROLIGHT SITE 514220N 0001629W		Phone: Hertfordshire Microlight Club.	Site elevation: 295 FT AMSL.
LONDON COLNEY MODEL AIRCRAFT FLYING, HERTFORDSHIRE 514259N 0001541W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07710-924721.	Site elevation: 270 FT AMSL. Hours: HJ
LONG MYND GLIDER SITE, SALOP (W AND T) 523108N 0025233W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Midland Gliding Club 01588-650206.	Freq: 123.815. Site elevation: 1411 FT AMSL. Hours: HJ
LONG SUTTON MICROLIGHT SITE 524642N 0000536E		Phone: 01406-366678/ 07850-542907.	Site Elevation: 10 FT AMSL. PPR by telephone. Hours: SR-30 to SS+30.
LONGSIDE TRAINING AERODROME 573056N 0015230W		Phone: 07814-875556 Email: operations@buchanaerocl ub.co.uk.	Site elevation: 120 FT AMSL. Training Aerodrome.
LYVEDEN GLIDER SITE, NORTHANTS (W) 522758N 0003430W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Welland Gliding Club 01832-205237.	Site elevation: 279 FT AMSL. Hours: HJ
MANTON MICROLIGHT SITE 512543N 0014627W			Site elevation: 610 FT AMSL.
MARHAM GLIDER SITE, NORFOLK (AD) (W AND T) 523854N 0003302E	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Fenland Gliding Club 01760-337261 Ext 7247.	Site elevation: 75 FT AMSL. Hours: HJ
MARSH BENHAM BALLOON LAUNCH SITE 512310N 0013852W			Frequent launchings of manned balloons take place at or near Marsh Benham, Newbury, Berks (several sites in or around Newbury).
MAYTHORN MODEL AIRCRAFT FLYING, W YORKSHIRE 533251N 0014226W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07973-755472.	Site elevation: 1050 FT AMSL. Hours: 1000-1800 (0900- 1700)
MEMBURY TRAINING AERODROME 512830N 0013330W		Phone: 01488-71774.	Site elevation: 667 FT AMSL. Training Aerodrome.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
MENDLESHAM HANGGLIDER SITE, SUFFOLK A circle, 2 NM radius, centred at 521342N 0010729E	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 221 FT AMSL. Hours: HJ
METFIELD HANGGLIDER SITE, SUFFOLK A circle, 2 NM radius, centred at 522151N 0012330E	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 182 FT AMSL. Hours: HJ Sat, Sun, PH & after 1700 (1600) Mon-Fri.
MIDDLE BRIDGE MODEL AIRCRAFT FLYING, EAST SUSSEX 505022N 0002153E	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07850-843917.	Site elevation: 10 FT AMSL. Hours: HJ
MIDDLE WALLOP GLIDER SITE, HANTS (AD) (W AND T) 510858N 0013413W	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 297 FT AMSL. Hours: Weekends and Public Holidays SR-30 to SS+30.
MIDDLETON SANDS MICROLIGHT SITE 535952N 0025346W			Site elevation: 17 FT AMSL.
MILFIELD GLIDER SITE, NORTHUMBERLAND (T) 553514N 0020510W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Borders Gliding Club 01668-216284.	Freq: 124.965. Site elevation: 150 FT AMSL. Hours: HJ
MILSON MICROLIGHT SITE 522141N 0023245W			Site elevation: 500 FT AMSL.
MONTROSE MICROLIGHT SITE 564351N 0022704W			Site elevation: 25 FT AMSL.
MOVENIS MICROLIGHT SITE (MCMASTERS FARM) 545915N 0063853W			Site elevation: 180 FT AMSL.
MOVENIS PARACHUTE SITE, CO LONDONDERRY A circle, 1.5 NM radius, centred at 545915N 0063853W	Upper limit: FL150 Lower limit: SFC	Phone: 028-2955 8609. Londonderry/Eglinton ATC: 028-7181 1099. Scottish Control (Prestwick): 01294-655300.	Activity notified on the day to Londonderry/Eglinton ATC or Scottish Control (Prestwick) outside hours of Londonderry/Eglinton. Alternative contact: 129.905 MHz. Hours: Normally during daylight hours.
NAPTON MODEL AIRCRAFT FLYING, WARWICKSHIRE 521434N 0012038W	Upper limit: 1200 FT AGL Lower limit: SFC	Phone: 07901-986949.	Site elevation: 50 FT AMSL. Hours: HJ Fri and Sun

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
NETHERAVON PARACHUTE SITE, WILTS A circle, 1.5 NM radius, centred at 511423N 0014615W	Upper limit: FL150 Lower limit: SFC	Phone: 01980-628289. Salisbury Operations: 01980-674710/674730.	Activity notified on the day to Salisbury Operations. Channel: 122.755 (Initial contact: 'Salisbury Information'); Freq: 128.300 MHz (Parachute Site Contact: 'Netheravon DZ') Hours of applicability for Rule 11: Police/SAR/Air Ambulance are approved to transit the ATZ without ATS provision. They should call Netheravon Information 128.300 MHz (When ATZ open) or Netheravon DZ 128.300 MHz when para activity is taking place. Refer to Salisbury Plain Training Area (SPTA) Air Ops procedures for transits and entry into SPTA Danger Areas & Low Level Routing. Hours: Normally during daylight hours.
NEWTON PEVERIL MICROLIGHT SITE 504738N 0020603W			Site elevation: 9 FT AMSL.
NORTH HILL GLIDER SITE, DEVON (W AND T) 505107N 0031639W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Devon & Somerset Gliding Club 01404-841386.	Site elevation: 921 FT AMSL. Hours: HJ
NORTH LUFFENHAM HANGGLIDER SITE, RUTLAND (AD) (W) A circle, 2 NM radius, centred at 523758N 0003629W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Rutland Airsports.	Site elevation: 350 FT AMSL. Hours: Wed, Fri 1200-SS+30 (1100-SS+30); Sun 1000-SS+30 (0900-SS+30).
NORTH WEALD (TRAINING UNUSUAL ACT AERODROME) 514318N 0000915E		Phone: 01992-564200. Tower: 01992-524740.	Freq: 123.530 MHz. Site elevation: 321 FT AMSL. Training and Unusual Activity Aerodrome. Occasional opposite direction circuits being used by warbirds aircraft including run and breaks.
NORTH WEALD AD MODEL AIRCRAFT FLYING, ESSEX 514323N 0000936E	Upper limit: 500 FT AGL Lower limit: SFC	Phone: 01992-564200.	Site elevation: 250 FT AMSL. Hours: HJ
NORTHAMPTON (SYWELL) UNUSUAL ACT AERODROME 521822N 0004732W		Phone: 01604-801620 (Administration), 01604-801630 (A/G).	Freq: 122.705 MHz. Site elevation: 424 FT AMSL. Unusual Activity. Training and Unusual Activity Aerodrome. Intensive helicopter and fixed-wing training, aerobatics, warbird testing, and PAX flights, including run-and-break manoeuvres.
NORTHAM MICROLIGHT SITE 510016N 0003718E		Phone: Witherenden Flying Club 01580-712773 : Website: www.witherenden.co.uk.	Site Elevation: 60 FT AMSL. PPR.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
NYMPFIELD GLIDER SITE, GLOS (W AND T) 514251N 0021701W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Bristol & Gloucester Gliding Club 01453-860342.	Freq: 129.980 MHz. Site elevation: 700 FT AMSL. Hours: HJ
OAKSEY PARK TRAINING AERODROME 513757N 0020055W		Phone: 01666-577130 Email: oakseyairfield@supanet.c om.	Site elevation: 250 FT AMSL. Training Aerodrome.
OBAN/NORTH CONNELL GLIDER SITE, STRATHCLYDE (AD) (W AND T) 562740N 0052410W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Connel Gliding Club 01631-710428.	Site elevation: 20 FT AMSL. Hours: HJ
ODIHAM GLIDER SITE (MIL), HANTS (AD) (W AND T) 511405N 0005657W	Upper limit: 2500 FT AGL Lower limit: SFC	Phone: Kestrel Gliding Club 07796-908168.	Strictly PPR. Freq: 119.225 MHz. Site elevation: 405 FT AMSL. Hours: SR to SS+15.
OLD SARUM PARACHUTE SITE, WILTS A circle, 1.5 NM radius, centred at 510556N 0014703W	Upper limit: FL150 Lower limit: SFC	Phone: 01722-567863. London Control (Swanwick): 01489- 612420.	Activity notified on the day to London Control (Swanwick). Alternative contact: 129.905 MHz. Hours: Normally during daylight hours.
OTHERTON MICROLIGHT SITE 524231N 0020541W			Site elevation: 340 FT AMSL.
OVER FARM MICROLIGHT SITE, GLOUCESTER 515239N 0021657W		Phone: 07831-237353.	Strictly PPR. Site elevation: 47 FT AMSL. Hours: HJ
OXTON MICROLIGHT SITE 530241N 0010006W			Site elevation: 273 FT AMSL.
PACKINGTON MICROLIGHT SITE 524258N 0012817W			Site elevation: 320 FT AMSL.
PARHAM GLIDER SITE, W SUSSEX (W AND T) 505532N 0002828W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Southdown Gliding Club 01903-746706.	Freq: 124.965. Site elevation: 110 FT AMSL. Hours: HJ
PARK HALL MICROLIGHT SITE 525859N 0012215W		Phone: Ram Air Microlights 07974-466923.	Site elevation: 377 FT AMSL.
PENRHOS MODEL AIRCRAFT FLYING, GWYNEDD 525220N 0042836W	Upper limit: 1000 FT AGL Lower limit: SFC	Phone: 01758-701404.	Site elevation: 70 FT AMSL. Hours: HJ
PERRANPORTH GLIDER SITE, CORNWALL (AD) (W AND T) 501947N 0051039W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Perranporth Flying Club 01872-552266.	Site elevation: 330 FT AMSL. Freq: 119.755 MHz. Hours: HJ
PERRANPORTH PARACHUTE SITE, CORNWALL A circle, 1.5 NM radius, centred at 501954N 0051039W	Upper limit: FL150 Lower limit: SFC	Phone: 07885-628772 or 01872-552266.	Activity must be notified on the day to Newquay ATC (133.405 MHz (Tel: 01637- 861300)) and Culdrose ATC. Hours: Normally during daylight hours.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
PETERBOROUGH/SIBSON PARACHUTE SITE, CAMBS A circle, 1.5 NM radius, centred at 523329N 0002349W	Upper limit: FL150 Lower limit: SFC	Phone: 01832-280490. Marham ATC: 01760-337261 Ext: 4949. London Control (Swanwick): 023-8040 1102.	Activity notified on the day to Marham ATC during weekdays or London Control (Swanwick) outside hours of Marham. Alternative contact: 129.905 MHz or 120.330 MHz. Hours: Normally during daylight hours.
PETERLEE PARACHUTE SITE, CO DURHAM A circle, 1.5 NM radius, centred at 544556N 0012243W	Upper limit: FL150 Lower limit: SFC	Phone: 0191-517 1234. Newcastle ATC: 0191-286 0966.	Activity notified on the day to Newcastle ATC. Alternative contact: 129.905 MHz. Hours: Normally during daylight hours.
PILLING SANDS MICROLIGHT SITE 535631N 0025608W			Site elevation: 17 FT AMSL.
PLAISTOWS MICROLIGHT SITE (CHISWELL GREEN) 514341N 0002247W			Site elevation: 395 FT AMSL.
POCKLINGTON GLIDER SITE, EAST YORKSHIRE (AD) (W AND T) 535541N 0004751W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Wolds Gliding Club 01759-303579.	Freq: 122.915. Site elevation: 87 FT AMSL. Hours: HJ
POPHAM TRAINING AERODROME 511140N 0011410W		Phone: 01256-397733 Email: pophamairfield@btconnect.com.	Site elevation: 550 FT AMSL. Training Aerodrome.
PORTMOAK GLIDER SITE, TAYSIDE (AD) (W AND T) 561121N 0031945W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Scottish Gliding Centre 01592-840543. Email: office@scottishglidingcentre.co.uk.	Freq: 122.915. Site elevation: 360 FT AMSL. Hours: HJ
POUND GREEN MICROLIGHT SITE, WORCS 522414N 0022115W			Site elevation: 360 FT AMSL.
PREDANNACK GLIDER SITE (MIL), CORNWALL (AD) (W) 500007N 0051351W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: 626 VGS 01326-241197, 07776-227318 (Mobile). Mil Ops (Culdrose) 01326-552415.	Strictly PPR. Channel: 134.055 (Culdrose APP); Freq: 124.100 MHz (VGS). Site elevation: 299 FT AMSL. Hours: SR to SS+15 Fri, Sat, Sun & PH or as notified by NOTAM.
RATTLEDEN GLIDER SITE, SUFFOLK (AD) (W AND T) 521001N 0005216E	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Rattlesden Gliding Club 01449-737789.	Freq: 130.290. Site elevation: 305 FT AMSL. Hours: HJ
RECTORY FARM MICROLIGHT SITE, NEWARK 530510N 0005055W		Phone: 07885-460270.	Site Elevation: 40 FT AMSL. Hours: 0800 (0700) to SS+30 (Summer) / SR-30 to SS+30 (Winter). Strictly PPR.
RHIGOS GLIDER SITE, POWYS (AD) (W AND T) 514434N 0033505W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Vale of Neath Gliding Club.	Site elevation: 780 FT AMSL. Hours: HJ
RIDGEWELL GLIDER SITE, ESSEX (AD) (W AND T) 520253N 0003330E	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Essex Gliding Club 01440-785103.	Freq: 132.910. Site elevation: 273 FT AMSL. Hours: HJ

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
RINGMER GLIDER SITE, KITSONS FIELD, SUSSEX (W AND T) 505423N 0000618E	Upper limit: 2500 FT AGL Lower limit: SFC	Phone: East Sussex Gliding Club 01825- 840347.	Freq: 129.965. Site elevation: 72 FT AMSL. Hours: HJ
RITTON BANK MODEL AIRCRAFT FLYING, NORTHUMBERLAND 551445N 0015246W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07986-010743/ 07719-383674.	Site elevation: 760 FT AMSL. Hours: HJ
RIVAR HILL GLIDER SITE, WILTS (W) 512038N 0013235W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Shalbourne Soaring Society 01264- 731204.	Site elevation: 730 FT AMSL. Hours: HJ
ROGART MICROLIGHT SITE (ROVIE FARM) 575926N 0041019W			Site elevation: 33 FT AMSL.
ROSSALL FIELD MICROLIGHT SITE (COCKERHAM) 535603N 0025038W		Phone: Ribble Valley Microlight Club.	Site elevation: 15 FT AMSL.
SACKVILLE LODGE GLIDER SITE, RISELY, BEDS (W) 521551N 0002905W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Sackville Gliding Club 01234-708877.	Site elevation: 250 FT AMSL. Hours: HJ
SALTBY GLIDER SITE, LINCS (AD) (W AND T) 524947N 0004245W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Buckminster Gliding Club 01476- 860385.	Freq: 129.965. Site elevation: 480 FT AMSL. Hours: HJ
SANDHAYS MODEL AIRCRAFT FLYING, LINCOLNSHIRE 532533N 0002754W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07740-165167.	Site elevation: 20 FT AMSL. Hours: HJ
SANDHILL FARM GLIDER SITE, WILTS (W AND T) 513614N 0014030W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Vale of White Horse Gliding Club 01793- 783685.	Freq: 129.980 MHz. Site elevation: 350 FT AMSL. Hours: HJ
SANDOWN / ISLE OF WIGHT TRAINING AERODROME 503910N 0011055W		Phone: 01983-716926 Email: tower@eghn.org.uk.	Site elevation: 55 FT AMSL. Training Aerodrome.
SANDY MICROLIGHT SITE, BEDS 520744N 0001835W			Site elevation: 80 FT AMSL.
SEETHING TRAINING AERODROME 523040N 0012501E		Phone: 01508-550453 Email: seethingairfield@seething- airfield.com.	Site elevation: 130 FT AMSL. Training Aerodrome.
SEIGHFORD GLIDER SITE, STAFFS (AD) (W AND T) 524940N 0021212W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Staffordshire Gliding Club 01785- 282575.	Freq: 132.910. Site elevation: 321 FT AMSL. Hours: HJ
SEWSTERN MODEL AIRCRAFT FLYING, LEICESTERSHIRE 524650N 0004242W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 0116-244 0028/ 07778-287350.	Site elevation: 450 FT AMSL. Hours: HJ
SHACKLEWELL LODGE / EMPINGHAM TRAINING AERODROME 523900N 0003400W		Phone: 07801-585480.	Site elevation: 300 FT AMSL. Training Aerodrome.
SHAWBURY GLIDER SITE (MIL) SHROPSHIRE (AD) (T) 524737N 0024004W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Shawbury Gliders 07384-724985.	Strictly PPR. Channel: 133.155. Site elevation: 249 FT AMSL. Hours: SR to SS+15.
SHOBDON GLIDER SITE, HEREFORD (AD) (T) 521429N 0025253W		Phone: Herefordshire Gliding Club 01568- 708908.	Site elevation: 328 FT AMSL. Hours: HJ
SKEGNESS TRAINING AERODROME 531024N 0002000E		Phone: 07714-899600.	Site elevation: 10 FT AMSL. Training Aerodrome.
SKELLING FARM GLIDER SITE, CUMBRIA (W) 544152N 0023506W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Eden Soaring Society 07849-979575.	Site elevation: 610 FT AMSL. Hours: HJ

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
SLEAP GLIDER SITE, SALOP (AD) (T) 525002N 0024618W			Site elevation: 275 FT AMSL. Hours: HJ
SNITTERFIELD GLIDER SITE, WARWICKS (AD) (W) 521406N 0014310W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Stratford on Avon Gliding Club 01789- 731095.	Freq: 125.185. Site elevation: 375 FT AMSL. Hours: HJ
SOUTH CERNEY HANGGLIDER SITE, GLOS (AD) A circle, 2 NM radius, centred at 514115N 0015515W	Upper limit: 2000 FT AGL Lower limit: SFC		Site elevation: 360 FT AMSL. Hours: HJ
SOUTH CERNEY PARACHUTE SITE, GLOS A circle, 1.5 NM radius, centred at 514114N 0015519W	Upper limit: FL150 Lower limit: SFC	Phone: 01285-868259. Brize Norton ATC: 01993- 897878.	Activity notified on the day to Brize Norton ATC. (All drops subject to permission from Brize Norton NATC prior to take-off). Alternative contact: 129.905 MHz. Hours: Normally during daylight hours.
SPANHOE TRAINING AERODROME 523357N 0003620W		Phone: 01780-450205.	Site elevation: 335 FT AMSL. Training Aerodrome.
ST MICHAELS MICROLIGHT SITE 535106N 0024735W			Site elevation: 30 FT AMSL.
STOKE MICROLIGHT SITE (ISLE OF GRAIN), KENT 512702N 0003814E			Site elevation: 10 FT AMSL.
STRATHALLAN PARACHUTE SITE, TAYSIDE A circle, 1.5 NM radius, centred at 561930N 0034455W	Upper limit: 5000 FT ALT Lower limit: SFC	Phone: 01764-662572. Scottish Control (Prestwick): 01294- 655300.	Activity notified on the day to Scottish Control (Prestwick). Drops may be made from above ALT 5000 FT with Scottish Control (Prestwick) permission. Alternative contact: 129.905 MHz. Hours: Normally during daylight hours Sat, Sun & PH. Also open Fri during Summer months.
STRATHAVEN MICROLIGHT SITE 554049N 0040654W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: The Scottish Flying Club 0797-9971301.	PPR for 1st visit. Microlight training 7 days a week. Freq: 135.475 MHz. Site elevation: 847 FT AMSL. Hours: HJ
STRUBBY GLIDER SITE, LINCS (AD) (W AND T) 531836N 0001034E	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Lincolnshire Gliding Club 01507- 450698.	Site elevation: 47 FT AMSL. Hours: HJ
STURGATE TRAINING AERODROME 532252N 0004107W		Phone: 01427-838280 Mon-Fri; 01427-838305 Sat-Sun.	Site elevation: 58 FT AMSL. Training Aerodrome.
SUTTON BANK GLIDER SITE, N YORKS (W AND T) 541338N 0011249W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Yorkshire Gliding Club 01845-597237.	Freq: 118.665. Site elevation: 920 FT AMSL. Hours: HJ
SUTTON MEADOWS MICROLIGHT SITE 522306N 0000336E			Site elevation: 3 FT AMSL.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
SWANSEA PARACHUTE SITE, SOUTH WALES A circle, 1.5 NM radius, centred at 513618N 0040405W	Upper limit: FL150 Lower limit: SFC	Phone: 01792-204063. Swansea Radio: 01792-208182/712564. London Control (Swanwick): 01489-612420.	Activity notified on the day to Cardiff ATC or London Control (Swanwick) outside hours of Cardiff. Alternative contact: 129.905 MHz (Swansea Drop Zone). Hours: Normally during daylight hours.
SWANTON MORLEY MICROLIGHT SITE 524405N 0005743E			Site elevation: 118 FT AMSL.
SYERSTON GLIDER SITE (MIL), NOTTS (AD) (W AND T) 530124N 0005442W	Upper limit: 3000 FT AGL Lower limit: SFC	: Mon-Fri: RAF CGS Phone: 01400-264526, 07802-331879 (Mobile). Sat, Sun & PH: 644 VGS Phone: 01400-264533, 07976-683218 (Mobile).	Strictly PPR. Freq: 128.525 MHz. Site elevation: 231 FT AMSL. Hours: SR to SS+15.
TALGARTH GLIDER SITE, POWYS (T) 515848N 0031215W		Phone: Black Mountain Gliding Club 01874-711463.	Freq: 122.915. Site elevation: 970 FT AMSL. Hours: HJ
TARSAN LANE MICROLIGHT SITE 542729N 0062616W		Phone: Victor Carmichael 07747-806029.	Site elevation: 40 FT AMSL.
TERNHILL GLIDER SITE (MIL), SHROPSHIRE (AD) (W AND T) 525227N 0023201W	Upper limit: 2000 FT AGL	Phone: 632 VGS 01630-698329, 07776-227346 (Mobile). Mil Ops (Shawbury) 01939-250351 Ext 7227.	Strictly PPR. Freq: 120.775 MHz (Shawbury); 122.100 MHz (VGS). Site elevation: 272 FT AMSL. Hours: SR to SS+15.
THE PARK GLIDER SITE, KINGSTON DEVERILL, WILTS (W) 510742N 0021445W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Bath, Wilts & North Dorset Gliding Club 01985-844095.	Freq: 133.565. Site elevation: 697 FT AMSL. Hours: HJ
THORNEY ISLAND MICROLIGHT SITE 504848N 0005538W			Site elevation: 3 FT AMSL.
THORNHILL MICROLIGHT SITE 560856N 0041109W			Site elevation: 45 FT AMSL.
TIBENHAM GLIDER SITE, NORFOLK (AD) (W AND T) 522724N 0010915E	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Norfolk Gliding Club 01379-677207.	Freq: 133.565. Site elevation: 186 FT AMSL. Hours: HJ
TILSTOCK PARACHUTE SITE, SHROPSHIRE A circle, 1.5 NM radius, centred at 525551N 0023905W	Upper limit: FL85 Lower limit: SFC	Phone: Prestwick Centre, Ops Supervisor: 01294-655300 and Shawbury ATC Watch Supervisor: 01939-250351 (ext 7232).	Activity notified on the day to Prestwick Centre, Ops Supervisor and Shawbury ATC (weekdays). Tilstock DZ contact: 118.100 MHz. Alternative contact: Shawbury Zone: 133.155 (weekdays). Drops may be made up to FL150 with Scottish Control (Prestwick) permission. Hours: Normally during daylight hours daily 0800-2000 (0700-1900); and other times as notified.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
TOPCLIFFE GLIDER SITE (MIL), N YORKS (AD) (W AND T) 541220N 0012254W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: 645 VGS 01845-595345, 07776-227349 (Mobile). Mil Ops (Syerston) 01400-264520.	Strictly PPR. Freq: 121.450 MHz (Topcliffe Radio). Site elevation: 91 FT AMSL. Hours: SR to SS+15.
TURWESTON TRAINING AERODROME 520227N 0010551W		Phone: 01280-705400.	Site elevation: 438 FT AMSL. Training Aerodrome. Hours: Mon-Fri 0800-2000 (0700-1900), Sat 0900-1800 (0800-1700), Sun 1000-1800 (0900-1700).
UPAVON GLIDER SITE (MIL), WILTS (AD) (W AND T) 511710N 0014652W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Airfield Manager 01980-615381. Salisbury Plain Ops 01980-674710. 622 VGS 01980-618082; 07974-369674 (Mobile).	Strictly PPR. Channel: 122.755 (Initial Contact 'Salisbury Information'); Freq: 124.100 MHz (Aerodrome Frequency 'Upavon Radio'). Site elevation: 575 FT AMSL. Remarks: Fixed wing aircraft and helicopter movements can take place at any time within H24. Within EGD128. Hours: SR-SS+30.
UPWOOD GLIDER SITE, CAMBS (AD) (W) 522612N 0000836W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Nene Valley Gliding Club 0860-693479.	Site elevation: 75 FT AMSL. Hours: HJ
USK GLIDER SITE, GWENT (W AND T) 514306N 0025101W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: S.Wales Gliding Club 01291-690536.	Freq: 129.980 MHz. Site elevation: 80 FT AMSL. Hours: HJ
WARBOYS MODEL AIRCRAFT FLYING, CAMBRIDGESHIRE 522407N 0000619W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07586-292737/ 07941-149109.	Site elevation: 80 FT AMSL. Hours: HJ
WATER EATON MICROLIGHT SITE 513826N 0014705W			Site elevation: 270 FT AMSL.
WATTISHAM GLIDER SITE, SUFFOLK (AD) (W AND T) 520739N 0005722E	Upper limit: 3000 FT AGL Lower limit: SFC		Site elevation: 284 FT AMSL. Hours: HJ
WAVERTON MICROLIGHT SITE 531004N 0024718W			Site elevation: 115 FT AMSL.
WEST CALDER MODEL AIRCRAFT FLYING, SOUTH LANARKSHIRE 554821N 0033530W	Upper limit: 1200 FT AGL Lower limit: SFC	Phone: West Calder Aircraft Model Club 07761-645644.	Site elevation: 960 FT AMSL. Hours: HJ
WESTEND FARM MICROLIGHT SITE 513540N 0022503W		Phone: 07956-064035.	Strictly PPR. Freq: 129.830 MHz. Site elevation: 240 FT AMSL. Hours: 0900-SS+30 (0800-SS+30).
WESTON-ON-THE-GREEN GLIDER SITE, OXON (AD) (W) 515249N 0011311W	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Oxford Gliding Club 01865-521042.	Freq: 129.980 MHz. Site elevation: 282 FT AMSL. Hours: HJ

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES (continued)

Designation Lateral limits	Vertical Limits	Operator/User Tel No	Remarks Activity times
1	2	3	4
WESTON-ON-THE-GREEN PARACHUTE SITE, OXFORD A circle, 2 NM radius, centred at 515246N 0011320W	Upper limit: FL85 Lower limit: SFC	Phone: 01869-343343. Brize Norton ATC: 01993-897878.	Activity notified on the day to Brize Norton ATC. Drops may be made from up to FL 135 with London Control (Swanwick) permission. Alternative contact: 133.650 MHz. Hours: Normally during daylight hours. Night parachuting frequent.
WESTONZOYLAND MICROLIGHT SITE 510628N 0025453W			Site elevation: 30 FT AMSL.
WILDEN MODEL AIRCRAFT FLYING, BEDFORDSHIRE 521126N 0002447W	Upper limit: 1200 FT AGL Lower limit: SFC	Phone: 01462-851515 Ext 4717.	Site elevation: 210 FT AMSL. Hours: HJ
WINGLAND MICROLIGHT SITE 524851N 0000647E			Site elevation: 10 FT AMSL.
WINTERTON MODEL AIRCRAFT FLYING, LINCOLNSHIRE 533941N 0003337W	Upper limit: 1500 FT AGL Lower limit: SFC	Phone: 07939-226911.	Site elevation: 10 FT AMSL. Hours: HJ
WOMBLETON MICROLIGHT SITE (PICKERING) 541401N 0005808W		Phone: Swift Technology Group 01751-432356/ 07770-482902.	Strictly PPR. Site elevation: 120 FT AMSL.
WOODBIDGE MODEL AIRCRAFT FLYING, SUFFOLK 520500N 0012300E	Upper limit: 1000 FT AGL Lower limit: SFC	Phone: 07909-974117.	Site elevation: 100 FT AMSL. Hours: HJ Sat, Sun and PH
WOODVALE GLIDER SITE (MIL), MERSEY (AD) (W AND T) 533454N 0030327W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Airfield Duty Supervisor 07866-995297 (during notified hours).	Freqs: 121.000 MHz (Woodvale Radio); 119.750 MHz (Woodvale Tower). Site elevation: 37 FT AMSL. Note 1: Gliding may take place when ATZ is inactive. Hours: Sat-Sun & PH, SR- SS+15.
WORMINGFORD GLIDER SITE, ESSEX (AD) (W AND T) 515630N 0004723E	Upper limit: 3000 FT AGL Lower limit: SFC	Phone: Essex & Suffolk Gliding Club 01206- 242596.	Freq: 123.815. Site elevation: 236 FT AMSL. Hours: HJ
WYCOMBE AIR PARK GLIDER SITE, BUCKS (AD) (T) 513642N 0004830W		Phone: Booker Gliding Club 01494-442501.	Site elevation: 520 FT AMSL. Hours: HJ
WYTON (MIL) TRAINING AERODROME 522120N 0000706W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Airfield Manager (Mil) 95371 7554 / 7608, (Civ) 01480-452451 Ext 7554 / 7608. Sat - Sun: Flying Club 01480-452451 Ext 8733. Email: WYT- AirfieldOps@mod.uk.	Site elevation: 128 FT AMSL. Training Aerodrome Strictly PPR. Freq: 134.050 MHz (Wyton Ops). Hours: SR+30 to SS-30 or as notified by NOTAM.
YATESBURY MICROLIGHT SITE 512602N 0015405W			Site elevation: 525 FT AMSL.
YEOVILTON GLIDER SITE, SOMERSET (AD) (W AND T) 510034N 0023820W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: Heron Gliding Club.	Site elevation: 75 FT AMSL. Hours: HJ
YORK/RUFFORTH GLIDER SITE, N YORKS (AD) (W AND T) 535651N 0011116W	Upper limit: 2000 FT AGL Lower limit: SFC	Phone: York Gliding Centre 01904-738694.	Freq: 123.815. Site elevation: 65 FT AMSL. Hours: HJ

PART 3 AERODROMES (AD)

AD 0

When applicable the following chapters are left blank: AD 0.2, AD 0.3, AD 0.4, AD 0.5, AD 0.6

AD 0.1 TABLE OF CONTENTS TO PART 3

AD 1 Aerodromes/Heliports - Introduction	AD 1.1-1
AD 1.1 AERODROME/HELIPORT AVAILABILITY AND CONDITIONS OF USE	AD 1.1-1
AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN.....	AD 1.2-1
AD 1.3 INDEX TO AERODROMES AND HELIPORTS	AD 1.3-1
AD 1.4 GROUPING OF AERODROMES/HELIPORTS	AD 1.4-1
AD 1.5 STATUS OF CERTIFICATION OF AERODROMES	AD 1.5-1

AD 2 Aerodromes

ABERDEEN/DYCE	EGPD
ALDERNEY	EGJA
ANDREWSFIELD	EGSL
BARRA	EGPR
BELFAST ALDERGROVE	EGAA
BELFAST/CITY	EGAC
BENBECULA	EGPL
BIGGIN HILL	EGKB
BIRMINGHAM	EGBB
BLACKBUSHE	EGLK
BLACKPOOL	EGNH
BOURNEMOUTH	EGHH
BRISTOL	EGGD
CAERNARFON	EGCK
CAMBRIDGE	EGSC
CAMPBELTOWN	EGEC
CARDIFF	EGFF
CHALGROVE	EGLJ
CHICHESTER/GOODWOOD	EGHR
COLL	EGEL
COLONSAY	EGEY
COMPTON ABBAS	EGHA
COVENTRY	EGBE
CRANFIELD	EGTC
CUMBERNAULD	EGPG
DENHAM	EGLD
DERBY	EGBD
DONCASTER SHEFFIELD	EGCN
DUNDEE	EGPN
DUNKESWELL	EGTU
DUXFORD	EGSU
EARLS COLNE	EGSR
EAST MIDLANDS	EGNX
EDAY	EGED
EDINBURGH	EGPH
ELSTREE	EGTR
ENNISKILLEN/ST ANGELO	EGAB
EXETER	EGTE
FAIR ISLE	EGEF
FAIROAKS	EGTF
FARNBOROUGH	EGLF
FENLAND	EGCL

GLASGOW	EGPF
GLOUCESTERSHIRE	EGBJ
GUERNSEY	EGJB
HAVERFORDWEST	EGFE
HAWARDEN	EGNR
HUMBERSIDE	EGNJ
INVERNESS	EGPE
ISLAY	EGPI
ISLE OF MAN	EGNS
JERSEY	EGJJ
KEMBLE	EGBP
KIRKWALL	EGPA
LAND'S END	EGHC
LASHENDEN/HEADCORN	EGKH
LEE-ON-SOLENT	EGHF
LEEDS BRADFORD	EGNM
LEEDS EAST	EGCM
LEICESTER	EGBG
LERWICK/TINGWALL	EGET
LIVERPOOL	EGGP
LONDON CITY	EGLC
LONDON GATWICK	EGKK
LONDON HEATHROW	EGLL
LONDON LUTON	EGGW
LONDON STANSTED	EGSS
LONDONDERRY/EGLINTON	EGAE
LYDD	EGMD
MANCHESTER	EGCC
MANCHESTER BARTON	EGCB
NETHERTHORPE	EGNF
NEWCASTLE	EGNT
NEWQUAY	EGHQ
NEWTOWNARDS	EGAD
NORTH RONALDSAY	EGEN
NORWICH	EGSH
NOTTINGHAM	EGBN
OBAN	EGEO
OLD BUCKENHAM	EGSV
OLD WARDEN	EGTH
OXFORD/KIDLINGTON	EGTK
PAPA WESTRAY	EGEP
PERTH/SCONE	EGPT

PETERBOROUGH/ CONINGTON	EGSF
PRESTWICK	EGPK
REDHILL	EGKR
RETFORD/GAMSTON	EGNE
ROCHESTER	EGTO
SANDAY	EGES
SANDTOFT	EGCF
SCILLY ISLES/ST MARYS	EGHE
SHERBURN-IN-ELMET	EGCJ
SHOBDON	EGBS
SHOREHAM	EGKA
SLEAP	EGCV
SOUTHAMPTON	EGHI
SOUTHEND	EGMC
ST ATHAN	EGSY
STAPLEFORD	EGSG
STORNOWAY	EGPO
STRONSAY	EGER
SUMBURGH	EGPB
SWANSEA	EGFH
TATENHILL	EGBM
TEESSIDE INTERNATIONAL	EGNV
THRUXTON	EGHO
TIREE	EGPU
WALNEY	EGNL
WARTON	EGNO
WELLESBOURNE MOUNTFORD	EGBW
WELSHPOOL	EGCW
WEST WALES/ABERPORTH	EGFA
WESTRAY	EGEW
WHITE WALTHAM	EGLM
WICK	EGPC
WICKENBY	EGNW
WOLVERHAMPTON/ HALFPENNY GREEN	EGBO
WYCOMBE AIR PARK/ BOOKER	EGTB
YEOVIL/WESTLAND	EGHG



AD 0.1 TABLE OF CONTENTS TO PART 3 (continued)

The following information is listed for each individual aerodrome:

- AD 2.1 Aerodrome location indicator and name
- AD 2.2 Aerodrome geographical and administrative data
- AD 2.3 Operational hours
- AD 2.4 Handling services and facilities
- AD 2.5 Passenger facilities
- AD 2.6 Rescue and fire fighting services
- AD 2.7 Seasonal availability - clearing
- AD 2.8 Aprons, taxiways and check locations/positions data
- AD 2.9 Surface movement guidance and control system and markings
- AD 2.10 Aerodrome obstacles
- AD 2.11 Meteorological information provided
- AD 2.12 Runway physical characteristics
- AD 2.13 Declared distances
- AD 2.14 Approach and runway lighting
- AD 2.15 Other lighting, secondary power supply
- AD 2.16 Helicopter landing area
- AD 2.17 Air traffic services airspace
- AD 2.18 Air traffic services communication facilities
- AD 2.19 Radio navigation and landing aids
- AD 2.20 Local aerodrome regulations
- AD 2.21 Noise abatement procedures
- AD 2.22 Flight procedures
- AD 2.23 Additional information
- AD 2.24 Charts related to an aerodrome
- AD 2.25 Visual segment surface (VSS) penetration

AD 3 Heliports

CHELTENHAM HELIPORT	EGBC
PORTLAND HELIPORT	EGDP

LONDON HELIPORT	EGLW
TRESCO HELIPORT	EGHT

PENZANCE HELIPORT	EGHK
-------------------	------

The following information is listed for each individual heliport:

- AD 3.1 Heliport location indicator and name
- AD 3.2 Heliport geographical and administrative data
- AD 3.3 Operational hours
- AD 3.4 Handling services and facilities
- AD 3.5 Passenger facilities
- AD 3.6 Rescue and fire fighting services
- AD 3.7 Seasonal availability - clearing
- AD 3.8 Aprons, taxiways and check locations/positions data
- AD 3.9 Markings and markers
- AD 3.10 Heliport obstacles
- AD 3.11 Meteorological information provided
- AD 3.12 Heliport data
- AD 3.13 Declared distances
- AD 3.14 Approach and FATO lighting
- AD 3.15 Other lighting, secondary power supply
- AD 3.16 Air traffic services airspace
- AD 3.17 Air traffic services communication facilities
- AD 3.18 Radio navigation and landing aids
- AD 3.19 Local heliport regulations
- AD 3.20 Noise abatement procedures
- AD 3.21 Flight procedures
- AD 3.22 Additional information
- AD 3.23 Charts related to a heliport

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

Aerodrome/Heliport name Location Indicator	Type of traffic permitted to use the aerodrome/heliport			Reference to AD section and remarks	
	International/National (INTL/NTL)	IFR/VFR	Scheduled (S) Non-scheduled (NS) Private (P)		
1	2	3	4	5	
Aerodrome					
ABERDEEN/DYCE	EGPD	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPD page AD 2.EGPD-1
ALDERNEY	EGJA	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGJA page AD 2.EGJA-1
ANDREWSFIELD	EGSL	INTL-NTL	VFR	P	AD 2 - EGSL page AD 2.EGSL-1
BARRA	EGPR	NTL	IFR/VFR	P	AD 2 - EGPR page AD 2.EGPR-1
BELFAST ALDERGROVE	EGAA	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGAA page AD 2.EGAA-1
BELFAST/CITY	EGAC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGAC page AD 2.EGAC-1
BLACKBUSHE	EGLK	INTL-NTL	IFR/VFR	P	AD 2 - EGLK page AD 2.EGLK-1
BRISTOL	EGGD	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGGD page AD 2.EGGD-1
CAMPBELTOWN	ESEC	NTL	IFR/VFR	P	AD 2 - ESEC page AD 2.ESEC-1
CHALGROVE	EGLJ	NTL	IFR/VFR	P	AD 2 - EGLJ page AD 2.EGLJ-1
COLL	EDEL	NTL	VFR	S, P	AD 2 - EDEL page AD 2.EDEL-1
COLONSAY	EGEY	NTL	VFR	S, P	AD 2 - EGEY page AD 2.EGEY-1
COMPTON ABBAS	EGHA	INTL-NTL	VFR	P	AD 2 - EGHA page AD 2.EGHA-1
COVENTRY	EGBE	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGBE page AD 2.EGBE-1
CRANFIELD	EGTC	INTL-NTL	IFR/VFR	P	AD 2 - EGTC page AD 2.EGTC-1
CUMBERNAULD	EGPG	INTL-NTL	VFR	P	AD 2 - EGPG page AD 2.EGPG-1
DENHAM	EGLD	INTL-NTL	VFR	P	AD 2 - EGLD page AD 2.EGLD-1
DERBY	EGBD	NTL	VFR	P	AD 2 - EGBD page AD 2.EGBD-1
DUNDEE	EGPN	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPN page AD 2.EGPN-1
DUNKESWELL	EGTU	INTL-NTL	VFR	P	AD 2 - EGTU page AD 2.EGTU-1
DUXFORD	EGSU	INTL-NTL	VFR	P	AD 2 - EGSU page AD 2.EGSU-1
EARLS COLNE	EGSR	INTL-NTL	VFR	P	AD 2 - EGSR page AD 2.EGSR-1
EAST MIDLANDS	EGNX	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNX page AD 2.EGNX-1
EDINBURGH	EGPH	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPH page AD 2.EGPH-1
ELSTREE	EGTR	INTL-NTL	VFR	P	AD 2 - EGTR page AD 2.EGTR-1
EXETER	EGTE	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGTE page AD 2.EGTE-1
FAIR ISLE	EGEF	NTL	VFR	P	AD 2 - EGEF page AD 2.EGEF-1
FAIROAKS	EGTF	INTL-NTL	VFR	P	AD 2 - EGTF page AD 2.EGTF-1
FARNBOROUGH	EGLF	INTL-NTL	IFR/VFR	NS, P	AD 2 - EGLF page AD 2.EGLF-1
FENLAND	EGCL	INTL-NTL	VFR	P	AD 2 - EGCL page AD 2.EGCL-1
GUERNSEY	EGJB	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGJB page AD 2.EGJB-1
ISLAY	EGPI	NTL	IFR/VFR	S, NS, P	AD 2 - EGPI page AD 2.EGPI-1
ISLE OF MAN	EGNS	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNS page AD 2.EGNS-1
JERSEY	EGJJ	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGJJ page AD 2.EGJJ-1
LAND'S END	EGHC	INTL-NTL	IFR/VFR	P	AD 2 - EGHC page AD 2.EGHC-1
LASHENDEN/HEADCORN	EGKH	INTL-NTL	VFR	P	AD 2 - EGKH page AD 2.EGKH-1
LEE-ON-SOLENT	EGHF	INTL-NTL	VFR	NS, P	AD 2 - EGHF page AD 2.EGHF-1
LEICESTER	EGBG	INTL-NTL	VFR	P	AD 2 - EGBG page AD 2.EGBG-1
LERWICK/TINGWALL	EGET	NTL	VFR	P	AD 2 - EGET page AD 2.EGET-1
LONDON LUTON	EGGW	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGGW page AD 2.EGGW-1
LONDONDERRY/EGLINTON	EGAE	INTL-NTL	IFR/VFR	P	AD 2 - EGAE page AD 2.EGAE-1
MANCHESTER BARTON	EGCB	INTL-NTL	VFR	P	AD 2 - EGCB page AD 2.EGCB-1
NETHERTHORPE	EGNF	INTL-NTL	VFR	P	AD 2 - EGNF page AD 2.EGNF-1
NEWCASTLE	EGNT	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNT page AD 2.EGNT-1
NEWQUAY	EGHQ	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGHQ page AD 2.EGHQ-1
NEWTOWNARDS	EGAD	INTL-NTL	VFR	P	AD 2 - EGAD page AD 2.EGAD-1
NORTH RONALDSAY	EGEN	NTL	VFR	P	AD 2 - EGEN page AD 2.EGEN-1
NORWICH	EGSH	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGSH page AD 2.EGSH-1
OLD BUCKENHAM	EGSV	INTL-NTL	VFR	P	AD 2 - EGSV page AD 2.EGSV-1
OLD WARDEN	EGTH	NTL	VFR	P	AD 2 - EGTH page AD 2.EGTH-1
PERTH/SCONE	EGPT	INTL-NTL	VFR	P	AD 2 - EGPT page AD 2.EGPT-1

AD 1.3 INDEX TO AERODROMES AND HELIPORTS (continued)

Aerodrome/Heliport name Location Indicator		Type of traffic permitted to use the aerodrome/heliport			Reference to AD section and remarks
		International/National (INTL/NTL)	IFR/VFR	Scheduled (S) Non-scheduled (NS) Private (P)	
1		2	3	4	5
PETERBOROUGH/CONINGTON	EGSF	INTL-NTL	VFR	P	AD 2 - EGSF page AD 2.EGSF-1
RETTFORD/GAMSTON	EGNE	INTL-NTL	VFR	P	AD 2 - EGNE page AD 2.EGNE-1
ROCHESTER	EGTO	INTL-NTL	VFR	P	AD 2 - EGTO page AD 2.EGTO-1
SANDTOFT	EGCF	INTL-NTL	VFR	P	AD 2 - EGCF page AD 2.EGCF-1
SCILLY ISLES/ST MARY'S	EGHE	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGHE page AD 2.EGHE-1
SHOBDON	EGBS	INTL-NTL	VFR	P	AD 2 - EGBS page AD 2.EGBS-1
SLEAP	EGCV	INTL-NTL	VFR	P	AD 2 - EGCV page AD 2.EGCV-1
SOUTHAMPTON	EGHI	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGHI page AD 2.EGHI-1
SOUTHEND	EGMC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGMC page AD 2.EGMC-1
ST ATHAN	EGSY	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGSY page AD 2.EGSY-1
STAPLEFORD	EGSG	INTL-NTL	VFR	P	AD 2 - EGSG page AD 2.EGSG-1
STORNOWAY	EGPO	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPO page AD 2.EGPO-1
SWANSEA	EGFH	INTL-NTL	VFR	S, NS, P	AD 2 - EGFH page AD 2.EGFH-1
TATENHILL	EGBM	INTL-NTL	VFR	P	AD 2 - EGBM page AD 2.EGBM-1
TIREE	EGPU	NTL	IFR/VFR	S, NS, P	AD 2 - EGPU page AD 2.EGPU-1
WALNEY	EGNL	NTL	IFR/VFR	P	AD 2 - EGNL page AD 2.EGNL-1
WARTON	EGNO	INTL-NTL	IFR/VFR	P	AD 2 - EGNO page AD 2.EGNO-1
WELLESBOURNE MOUNTFORD	EGBW	INTL-NTL	VFR	P	AD 2 - EGBW page AD 2.EGBW-1
WELSHPOOL	EGCW	INTL-NTL	VFR	P	AD 2 - EGCW page AD 2.EGCW-1
WEST WALES/ABERPORTH	EGFA	NTL	VFR	P	AD 2 - EGFA page AD 2.EGFA-1
WHITE WALTHAM	EGLM	INTL-NTL	VFR	S, NS, P	AD 2 - EGLM page AD 2.EGLM-1
WICK	EGPC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPC page AD 2.EGPC-1
WICKENBY	EGNW	NTL	VFR	P	AD 2 - EGNW page AD 2.EGNW-1
WYCOMBE AIR PARK/BOOKER	EGTB	INTL-NTL	VFR	P	AD 2 - EGTB page AD 2.EGTB-1
YEOVIL/WESTLAND	EGHG	INTL-NTL	IFR/VFR	P	AD 2 - EGHG page AD 2.EGHG-1
Aerodrome with helicopter landing area					
BENBECULA	EGPL	NTL	IFR/VFR	S, NS, P	AD 2 - EGPL page AD 2.EGPL-1
BIGGIN HILL	EGKB	INTL-NTL	IFR/VFR	P	AD 2 - EGKB page AD 2.EGKB-1
BIRMINGHAM	EGBB	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGBB page AD 2.EGBB-1
BLACKPOOL	EGNH	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNH page AD 2.EGNH-1
BOURNEMOUTH	EGHH	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGHH page AD 2.EGHH-1
CAERNARFON	EGCK	INTL-NTL	VFR	P	AD 2 - EGCK page AD 2.EGCK-1
CAMBRIDGE	EGSC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGSC page AD 2.EGSC-1
CARDIFF	EGFF	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGFF page AD 2.EGFF-1
CHICHESTER/GOODWOOD	EGHR	INTL-NTL	VFR	P	AD 2 - EGHR page AD 2.EGHR-1
DONCASTER SHEFFIELD	EGCN	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGCN page AD 2.EGCN-1
EDAY	EGED	NTL	VFR	P	AD 2 - EGED page AD 2.EGED-1
ENNISKILLEN/ST ANGELO	EGAB	NTL	VFR	P	AD 2 - EGAB page AD 2.EGAB-1
GLASGOW	EGPF	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPF page AD 2.EGPF-1
GLOUCESTERSHIRE	EGBJ	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGBJ page AD 2.EGBJ-1
HAVERFORDWEST	EGFE	INTL-NTL	VFR	P	AD 2 - EGFE page AD 2.EGFE-1
HAWARDEN	EGNR	INTL-NTL	IFR/VFR	P	AD 2 - EGNR page AD 2.EGNR-1
HUMBERSIDE	EGNJ	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNJ page AD 2.EGNJ-1
INVERNESS	EGPE	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPE page AD 2.EGPE-1
KEMBLE	EGBP	NTL	IFR/VFR	NS, P	AD 2 - EGBP page AD 2.EGBP-1
KIRKWALL	EGPA	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPA page AD 2.EGPA-1
LEEDS BRADFORD	EGNM	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNM page AD 2.EGNM-1
LEEDS EAST	EGCM	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGCM page AD 2.EGCM-1
LIVERPOOL	EGGP	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGGP page AD 2.EGGP-1
LONDON CITY	EGLC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGLC page AD 2.EGLC-1
LONDON GATWICK	EGKK	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGKK page AD 2.EGKK-1
LONDON HEATHROW	EGLL	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGLL page AD 2.EGLL-1
LONDON STANSTED	EGSS	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGSS page AD 2.EGSS-1

AD 1.3 INDEX TO AERODROMES AND HELIPORTS (continued)

Aerodrome/Heliport name Location Indicator		Type of traffic permitted to use the aerodrome/heliport			Reference to AD section and remarks
		International/National (INTL/NTL)	IFR/VFR	Scheduled (S) Non-scheduled (NS) Private (P)	
1		2	3	4	5
LYDD	EGMD	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGMD page AD 2.EGMD-1
MANCHESTER	EGCC	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGCC page AD 2.EGCC-1
NOTTINGHAM	EGBN	INTL-NTL	VFR	P	AD 2 - EGBN page AD 2.EGBN-1
OBAN	EGEO	INTL-NTL	VFR	P	AD 2 - EGEO page AD 2.EGEO-1
OXFORD	EGTK	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGTK page AD 2.EGTK-1
PAPA WESTRAY	EGEP	NTL	VFR	P	AD 2 - EGEP page AD 2.EGEP-1
PRESTWICK	EGPK	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPK page AD 2.EGPK-1
REDHILL	EGKR	INTL-NTL	VFR	S, NS, P	AD 2 - EGKR page AD 2.EGKR-1
SANDAY	EGES	NTL	VFR	P	AD 2 - EGES page AD 2.EGES-1
SHERBURN-IN-ELMET	EGCJ	INTL-NTL	IFR/VFR	P	AD 2 - EGCJ page AD 2.EGCJ-1
SHOREHAM	EGKA	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGKA page AD 2.EGKA-1
STRONSAY	EGER	NTL	VFR	P	AD 2 - EGER page AD 2.EGER-1
SUMBURGH	EGPB	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGPB page AD 2.EGPB-1
TEESSIDE INTERNATIONAL	EGNV	INTL-NTL	IFR/VFR	S, NS, P	AD 2 - EGNV page AD 2.EGNV-1
THRUXTON	EGHO	INTL-NTL	VFR	P	AD 2 - EGHO page AD 2.EGHO-1
WESTRAY	EGEW	NTL	VFR	P	AD 2 - EGEW page AD 2.EGEW-1
WOLVERHAMPTON/HALFPENNY GREEN	EGBO	INTL-NTL	IFR/VFR	P	AD 2 - EGBO page AD 2.EGBO-1
Heliport					
CHELTENHAM HELIPORT	EGBC	NTL	VFR	P	AD 3 - EGBC page AD 3.EGBC-1
LONDON HELIPORT	EGLW	INTL-NTL	VFR	P	AD 3 - EGLW page AD 3.EGLW-1
PENZANCE HELIPORT	EGHK	INTL-NTL	VFR	P	AD 3 - EGHK page AD 3.EGHK-1
PORTLAND HELIPORT	EGDP	INTL-NTL	VFR	P	AD 3 - EGDP page AD 3.EGDP-1
TRESCO HELIPORT	EGHT	NTL	VFR	P	AD 3 - EGHT page AD 3.EGHT-1

AD 1.3 INDEX TO AERODROMES AND HELIPORTS (continued)

**AERODROMES LISTED WITHIN THE AD SECTION
OF THE UNITED KINGDOM AIP**



AERO INFO DATE 24 SEP 24

AD 1.3-4

FOR THE LATEST CHANGES IN INFORMATION THIS CHART SHOULD BE CHECKED AGAINST THE AD 2 AND AD 3 SECTIONS OF THE UK AIP

AD 1.4 GROUPING OF AERODROMES/HELIPORTS

1 Aerodrome Categorisation

- 1.1 Responsible Authority
- 1.1.1 The Civil Aviation Authority, through its Safety and Airspace Regulation Group (SARG), Manager Aerodromes and ATM, is responsible for the general surveillance of all licensed and certificated civil aerodromes in the United Kingdom. Enquiries relating to aerodromes and licensing/certification should be made to Aerodromes Sub-Department Tel: 01293-573419. See GEN 1.1 for address.
- 1.2 Licence Types
- 1.2.1 In the United Kingdom there are two types of civil aerodrome licence, namely Public Use Licence and Ordinary Licence.
- 1.2.2 Aerodromes or Heliports operated in accordance with a Public Use Licence must have their hours of availability notified in the UK AIP and the aerodrome/heliport must be available to all operators on certain equal terms and conditions. However, this does not necessarily mean that the aerodrome is available to all flights without limitation. Aircraft operators must check and comply with the requirements and conditions of use indicated at AD 2 or AD 3.
- 1.2.3 Aerodromes or Heliports operated in accordance with an Ordinary Licence may accept flights operated by the holder of the licence or by those specifically authorised by that licence holder. This normally means that prior permission is required for most flights but it does not exclude the possibility of scheduled or non-scheduled public transport flights being arranged after the formal agreement of the licence holder.
- 1.2.4 The annotations within column 4 of the table at AD 1.3 reflect the aerodrome/heliport licence type and must be interpreted in conjunction with the above descriptions and with the conditions of use indicated at AD 2 and AD 3.
- 1.3 Government Aerodromes
- 1.3.1 Detailed descriptions of Government aerodromes are not listed in the UK AIP.
- 1.3.2 Several Government aerodromes accept civil traffic subject to prior approval. These aerodromes are listed at AD 1.3 and detailed information about them is published in the UK Military documentation which is available to civil pilots on application to the RAF AIDU at Northolt (see GEN 3.2.3 for address and contact details).
- 1.3.3 Refer to AD 1.1 subsection 2 for general conditions of use.
- 1.4 Unlicensed Aerodromes/Heliports
- 1.4.1 Unlicensed Aerodromes/Heliports are not published in the UK AIP, except as detailed in Paragraph 1.4.2 below, however NOTAM may be issued notifying safety related changes affecting the operating conditions at any unlicensed Aerodrome/Heliport.
- 1.4.2 Where the CAA has approved a helicopter Point-in Space procedure (PinS) to an unlicensed Aerodrome or Heliport the unlicensed Aerodrome/Heliport will be published in the UK AIP AD 2 or AD 3. All PinS procedures are for use by CAA approved operators only, but details are published in the AIP to make airspace users aware of the presence of a PinS procedure and to assist users in taking appropriate mitigating actions in the vicinity of a PinS.
- 1.4.3 For further details regarding PinS refer to CAA Publication CAP2520 - Policy and Guidance for the implementation of Point-in-Space Helicopter Operations in the UK.
- 1.5 Aerodromes/Heliports published in the UK AIP that DO NOT operate under the conditions of IFR or SVFR are considered outside of the scope of Regulation (EU) 73/2010 (ADQ) and are listed here:

Designator	Name
EGSL	ANDREWSFIELD
EGLK	BLACKBUSHE
EGCK	CAERNARFON
EGLJ	CHALGROVE
EGBC	CHELTENHAM HELIPORT
EGHR	CHICHESTER/GOODWOOD
EGEL	COLL
EGEY	COLONSAY
EGHA	COMPTON ABBAS
EGBE	COVENTRY
EGPG	CUMBERNAULD
EGLD	DENHAM
EGBD	DERBY

AD 1.4 GROUPING OF AERODROMES/HELIPORTS (continued)

Designator	Name
EGTU	DUNKESWELL
EGSU	DUXFORD
EGSR	EARLS COLNE
EGED	EDAY
EGTR	ELSTREE
EGAB	ENNISKILLEN/ST ANGELO
EGEF	FAIR ISLE
EGTF	FAIROAKS
EGCL	FENLAND
EGFE	HAVERFORDWEST
EGBP	KEMBLE
EGKH	LASHENDEN/HEADCORN
EGCM	LEEDS EAST
EGHF	LEE-ON-SOLENT
EGBG	LEICESTER
EGET	LERWICK/TINGWALL
EGLW	LONDON HELIPORT
EGCB	MANCHESTER BARTON
EGNF	NETHERTHORPE
EGAD	NEWTOWNARDS
EGEN	NORTH RONALDSAY
EGBN	NOTTINGHAM
EGEO	OBAN
EGSV	OLD BUCKENHAM
EGTH	OLD WARDEN
EGEP	PAPA WESTRAY
EGHK	PENZANCE HELIPORT
EGPT	PERTH/SCONE
EGSF	PETERBOROUGH/CONINGTON
EGKR	REDHILL
EGNE	RETFORD/GAMSTON
EGTO	ROCHESTER
EGES	SANDAY
EGCF	SANDTOFT
EGCJ	SHERBURN-IN-ELMET
EGBS	SHOBDON
EGCV	SLEAP
EGSG	STAPLEFORD
EGER	STRONSAY
EGFH	SWANSEA
EGBM	TATENHILL
EGHO	THRUXTON
EGHT	TRESCO HELIPORT
EGBW	WELLESBOURNE MOUNTFORD
EGCW	WELSHPOOL
EGFA	WEST WALES/ABERPORTH
EGEW	WESTRAY
EGLM	WHITE WALTHAM
EGNW	WICKENBY
EGBO	WOLVERHAMPTON/HALFPENNY GREEN
EGTB	WYCOMBE AIR PARK/BOOKER



AD 1.5 STATUS OF CERTIFICATION OF AERODROMES

Aerodrome name and ICAO Location indicator	Date of certification	Validity of certification	RMK
1	2	3	4
ABERDEEN/DYCE	EGPD	2014-07-31	Valid until: Unlimited
ALDERNEY	EGJA		
ANDREWSFIELD	EGSL	1993-10-22	Valid until: Unlimited
BARRA	EGPR	2009-02-26	Valid until: Unlimited
BELFAST ALDERGROVE	EGAA	2015-03-26	Valid until: Unlimited
BELFAST/CITY	EGAC	2015-09-04	Valid until: Unlimited
BENBECULA	EGPL	2016-09-26	Valid until: Unlimited
BIGGIN HILL	EGKB	2016-09-26	Valid until: Unlimited
BIRMINGHAM	EGBB	2016-06-29	Valid until: Unlimited
BLACKBUSHE	EGLK	2015-01-16	Valid until: Unlimited
BLACKPOOL	EGNH	2014-12-12	Valid until: Unlimited
BOURNEMOUTH	EGHH	2015-03-26	Valid until: Unlimited
BRISTOL	EGGD	2014-07-28	Valid until: Unlimited
CAERNARFON	EGCK	2016-12-06	Valid until: Unlimited
CAMBRIDGE	EGSC	2017-03-09	Valid until: Unlimited
CAMPBELTOWN	EGEC	2017-11-01	Valid until: Unlimited
CARDIFF	EGFF	2016-08-30	Valid until: Unlimited
CHALGROVE	EGLJ	2015-04-15	Valid until: Unlimited
CHICHESTER/GOODWOOD	EGHR	2000-10-10	Valid until: Unlimited
COLL	EGEL	2008-06-05	Valid until: Unlimited
COLONSAY	EGEY	2008-06-05	Valid until: Unlimited
COMPTON ABBAS	EGHA	2009-04-01	Valid until: Unlimited
COVENTRY	EGBE	2016-12-05	Valid until: Unlimited
CRANFIELD	EGTC	2015-12-21	Valid until: Unlimited
CUMBERNAULD	EGPG	1997-11-03	Valid until: Unlimited
DENHAM	EGLD	1988-06-24	Valid until: Unlimited
DERBY	EGBD	1995-11-03	Valid until: Unlimited
DONCASTER SHEFFIELD	EGCN	2016-09-14	Valid until: Unlimited
DUNDEE	EGPN	2017-12-14	Valid until: Unlimited
DUNKESWELL	EGTU	1983-05-11	Valid until: Unlimited
DUXFORD	EGSU	2016-04-12	Valid until: Unlimited
EARLS COLNE	EGSR	2005-10-26	Valid until: Unlimited
EAST MIDLANDS	EGNX	2016-02-01	Valid until: Unlimited
EDAY	EGED	1983-11-16	Valid until: Unlimited
EDINBURGH	EGPH	2014-12-19	Valid until: Unlimited
ELSTREE	EGTR	1996-10-24	Valid until: Unlimited
ENNISKILLEN/ST ANGELO	EGAB	2013-03-07	Valid until: Unlimited
EXETER	EGTE	2015-07-01	Valid until: Unlimited
FAIR ISLE	EGEF	2008-12-04	Valid until: Unlimited
FAIROAKS	EGTF	2015-02-11	Valid until: Unlimited
FARNBOROUGH	EGLF	2017-07-03	Valid until: Unlimited
FENLAND	EGCL	2001-05-25	Valid until: Unlimited
GLASGOW	EGPF	2016-02-29	Valid until: Unlimited
GLOUCESTERSHIRE	EGBJ	2018-11-22	Valid until: Unlimited
GUERNSEY	EGJB		
HAVERFORDWEST	EGFE	2000-11-21	Valid until: Unlimited
HAWARDEN	EGNR	2016-01-06	Valid until: Unlimited
HUMBERSIDE	EGNJ	2016-01-15	Valid until: Unlimited
INVERNESS	EGPE	2015-06-02	Valid until: Unlimited
ISLAY	EGPI	2017-11-01	Valid until: Unlimited
ISLE OF MAN	EGNS		
JERSEY	EGJJ		
KEMBLE	EGBP	2015-01-09	Valid until: Unlimited
KIRKWALL	EGPA	2017-11-01	Valid until: Unlimited
LAND'S END	EGHC	2014-06-26	Valid until: Unlimited

AD 1.5 STATUS OF CERTIFICATION OF AERODROMES (continued)

Aerodrome name and ICAO Location indicator	Date of certification	Validity of certification	RMK
1	2	3	4
LASHENDEN/HEADCORN	EGKH	2005-12-12	Valid until: Unlimited
LEE-ON-SOLENT	EGHF	2017-02-20	Valid until: Unlimited
LEEDS BRADFORD	EGNM	2016-11-07	Valid until: Unlimited
LEEDS EAST	EGCM	2017-04-28	Valid until: Unlimited
LEICESTER	EBG	2010-12-14	Valid until: Unlimited
LERWICK/TINGWALL	EGET	2014-03-17	Valid until: Unlimited
LIVERPOOL	EGGP	2015-11-25	Valid until: Unlimited
LONDON CITY	EGLC	2016-02-22	Valid until: Unlimited
LONDON GATWICK	EGKK	2014-10-10	Valid until: Unlimited
LONDON HEATHROW	EGLL	2016-04-06	Valid until: Unlimited
LONDON LUTON	EGGW	2016-05-24	Valid until: Unlimited
LONDON STANSTED	EGSS	2016-03-18	Valid until: Unlimited
LONDONDERRY/EGLINTON	EGAE	2016-09-23	Valid until: Unlimited
LYDD	EGMD	2008-03-10	Valid until: Unlimited
MANCHESTER	EGCC	2015-03-02	Valid until: Unlimited
MANCHESTER BARTON	EGCB	2009-07-16	Valid until: Unlimited
NETHERTHORPE	EGNF	2009-10-23	Valid until: Unlimited
NEWCASTLE	EGNT	2015-01-27	Valid until: Unlimited
NEWQUAY	EGHQ	2015-09-14	Valid until: Unlimited
NEWTOWNARDS	EGAD	2001-12-21	Valid until: Unlimited
NORTH RONALDSAY	EGEN	2012-11-13	Valid until: Unlimited
NORWICH	EGSH	2014-09-24	Valid until: Unlimited
NOTTINGHAM	EGBN	2014-10-10	Valid until: Unlimited
OBAN	EGEO	2008-06-05	Valid until: Unlimited
OLD BUCKENHAM	EGSV	2013-11-18	Valid until: Unlimited
OLD WARDEN	EGTH	2019-05-01	Valid until: 2020-04-30
OXFORD	EGTK	2016-04-29	Valid until: Unlimited
PAPA WESTRAY	EGEP	1983-11-16	Valid until: Unlimited
PERTH/SCONE	EGPT	2000-01-21	Valid until: Unlimited
PETERBOROUGH/CONINGTON	EGSF	2012-08-22	Valid until: Unlimited
PRESTWICK	EGPK	2014-11-03	Valid until: Unlimited
REDHILL	EGKR	1988-04-14	Valid until: Unlimited
RETFORD/GAMSTON	EGNE	1995-08-09	Valid until: Unlimited
ROCHESTER	EGTO	2012-12-05	Valid until: Unlimited
SANDAY	EGES	1983-11-16	Valid until: Unlimited
SANDTOFT	EGCF	2015-11-18	Valid until: Unlimited
SCILLY ISLES/ST MARY'S	EGHE	1993-02-12	Valid until: Unlimited
SHERBURN-IN-ELMET	EGCJ	2003-02-13	Valid until: Unlimited
SHOBDON	EGBS	1993-03-18	Valid until: Unlimited
SHOREHAM	EGKA	2014-09-10	Valid until: Unlimited
SLEAP	EGCV	2009-10-23	Valid until: Unlimited
SOUTHAMPTON	EGHI	2014-08-27	Valid until: Unlimited
SOUTHEND	EGMC	2016-06-13	Valid until: Unlimited
ST ATHAN	EGSY	2019-03-27	Valid until: Unlimited
STAPLEFORD	EGSG	1982-06-25	Valid until: Unlimited
STORNOWAY	EGPO	2017-11-01	Valid until: Unlimited
STRONSAY	EGER	1983-11-16	Valid until: Unlimited
SUMBURGH	EGPB	2017-11-01	Valid until: Unlimited
SWANSEA	EGFH	2007-03-05	Valid until: Unlimited
TATENHILL	EGBM	2009-06-17	Valid until: Unlimited
TEESSIDE INTERNATIONAL	EGNV	2015-11-25	Valid until: Unlimited
THRUXTON	EGHO	2011-11-03	Valid until: Unlimited
TIREE	EGPU	2017-11-01	Valid until: Unlimited
WALNEY	EGNL	2006-01-13	Valid until: Unlimited
WARTON	EGNO	2013-01-23	Valid until: Unlimited

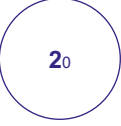
AD 1.5 STATUS OF CERTIFICATION OF AERODROMES (continued)

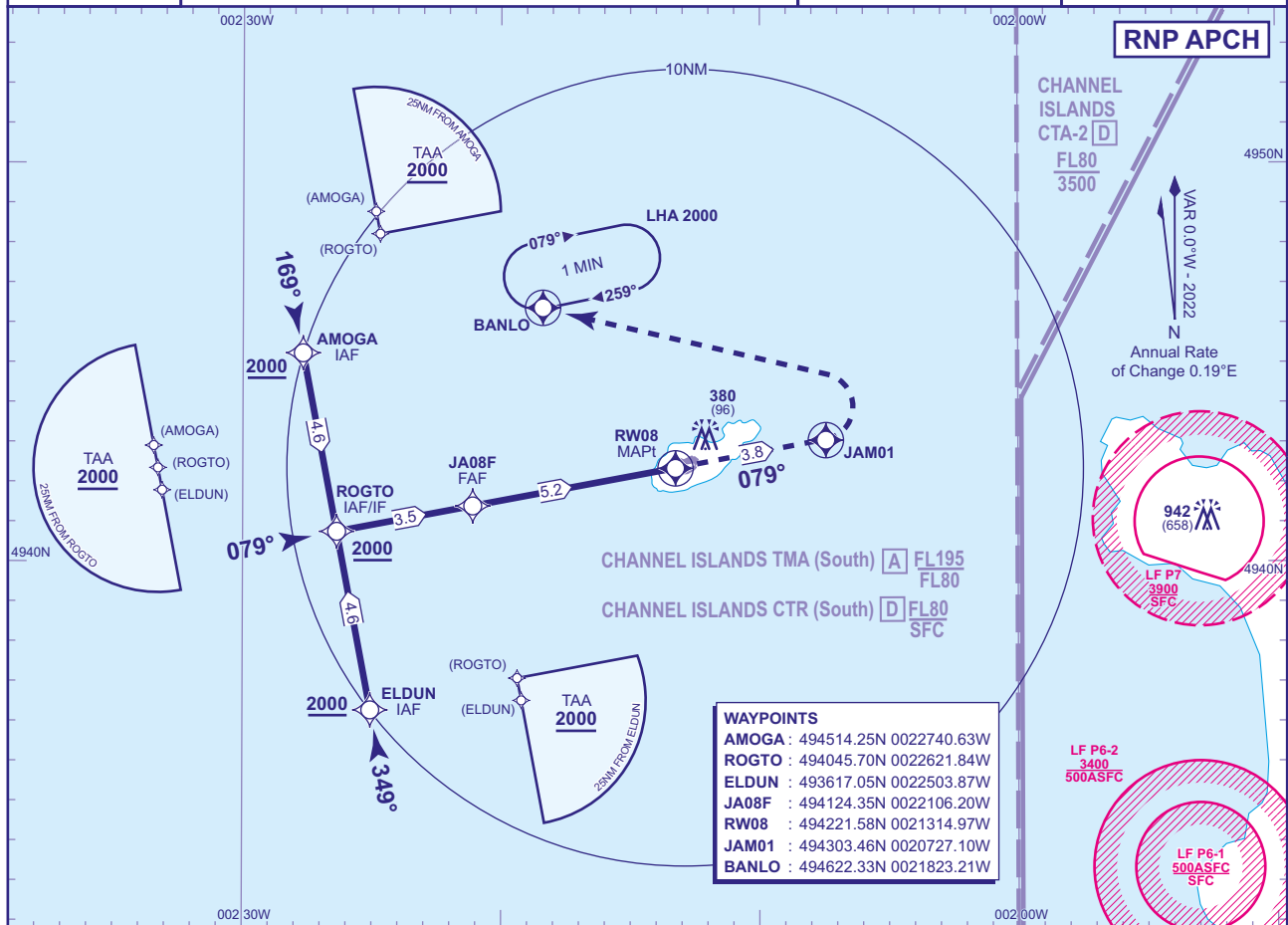
Aerodrome name and ICAO Location indicator	Date of certification	Validity of certification	RMK
1	2	3	4
WELLESBOURNE MOUNTFORD EGBW	1988-02-24		Valid until: Unlimited
WELSHPOOL EG CW	2007-11-23		Valid until: Unlimited
WEST WALES/ABERPORTH EGFA	2017-10-24		Valid until: Unlimited
WESTRAY EGEW	1983-11-16		Valid until: Unlimited
WHITE WALTHAM EGLM	1996-03-01		Valid until: Unlimited
WICK EGPC	2016-01-12		Valid until: Unlimited
WICKENBY EGNW	2015-09-24		Valid until: Unlimited
WOLVERHAMPTON/HALFPENNY GREEN EGBO	2009-04-01		Valid until: Unlimited
WYCOMBE AIR PARK/BOOKER EGTB	1984-05-18		Valid until: Unlimited
YEOVIL/WESTLAND EGHG	2017-01-06		Valid until: Unlimited

INTENTIONALLY BLANK

INSTRUMENT APPROACH CHART - ICAO

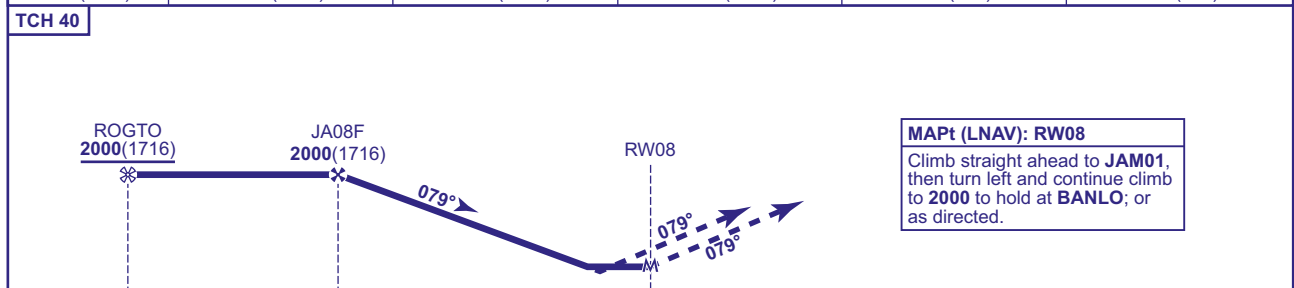
ALDERNEY RNP RWY 08
(ACFT CAT A,B)

 <p>MSA 25NM ARP</p>	APP 128.655	GUERNSEY APPROACH	AD ELEVATION 290	EGNOS CH 45014 E08A
	TWR 125.355	ALDERNEY TOWER	THR ELEVATION 284	
	130.505	ALDERNEY GROUND	OBSTACLE ELEVATION 942 AMSL (658) (ABOVE THR)	TRANSITION ALTITUDE 5000
			BEARINGS ARE MAGNETIC	



RECOMMENDED PROFILE LPV - VERTICAL PATH ANGLE 3.0° (LNAV 5.2%), 320FT/NM

NM to RW08	5	4	3	2	1
ALT(HGT)	1940(1656)	1620(1336)	1290(1006)	970(686)	650(366)



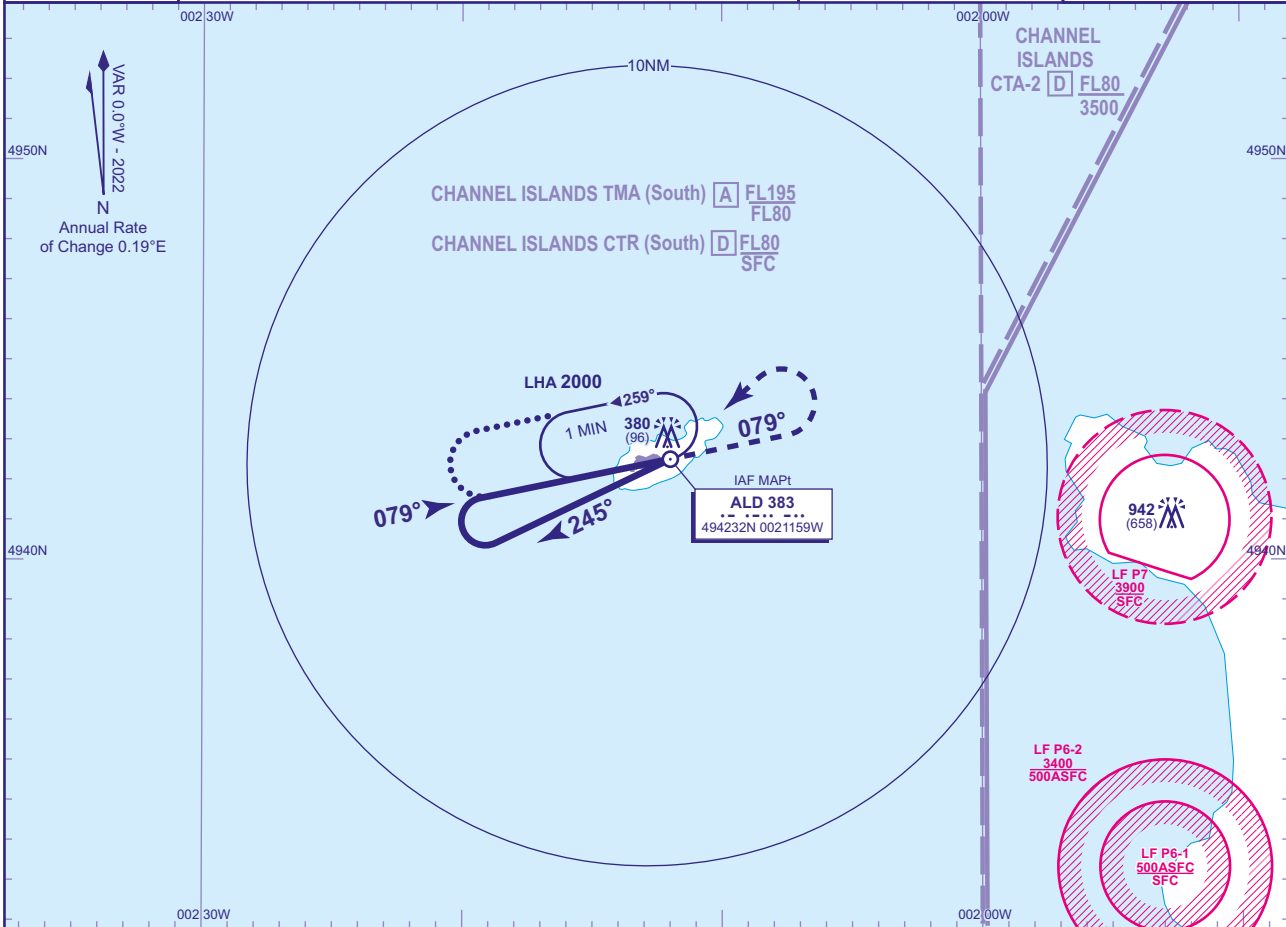
Aircraft Category	A	B	Rate of descent						
OCA (OCH)	LPV	590(306)	590(306)	G/S KT	160	140	120	100	80
	LNAV	630(346)	630(346)	FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	690(400)	790(500)						

CHANGE (12/24): MAG VAR AND ANNUAL RATE OF CHANGE. MAG TRACKS.

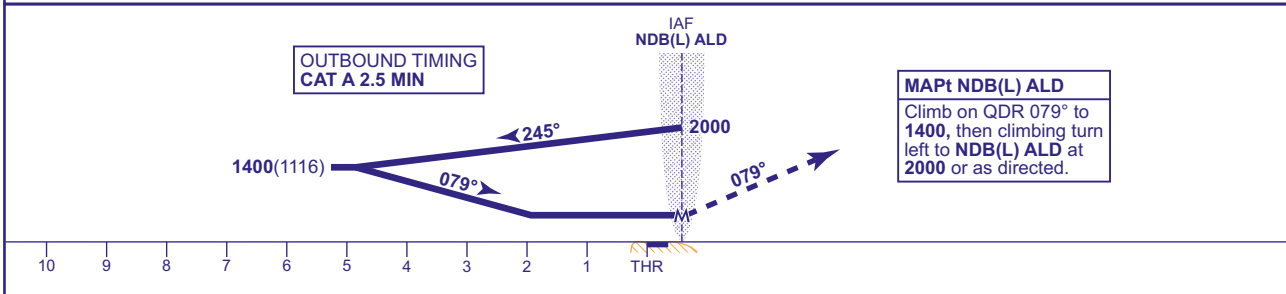
INSTRUMENT APPROACH CHART - ICAO

ALDERNEY
NDB(L)
RWY 08
(ACFT CAT A)

<p>MSA 25NM NDB(L) ALD</p>	APP 128.655	GUERNSEY APPROACH	AD ELEVATION 290
	TWR 125.355	ALDERNEY TOWER	THR ELEVATION 284
	130.505	ALDERNEY GROUND	OBSTACLE ELEVATION 942 AMSL (658) (ABOVE THR)
			BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 5000



RECOMMENDED PROFILE Gradient 5.24%, 318FT/NM



Aircraft Category	A	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH) Procedure	680(396)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL) Total Area	690(400)							

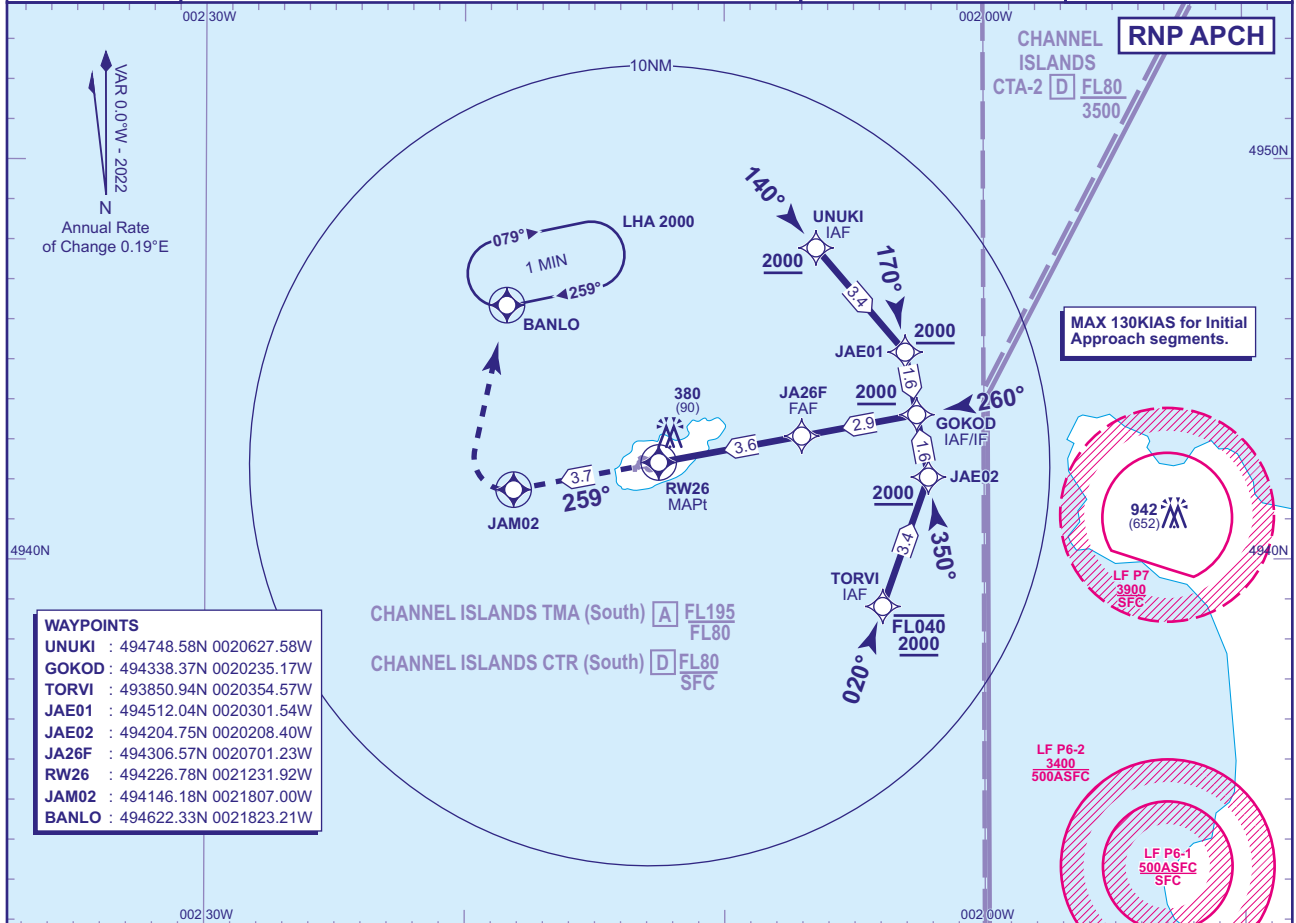
ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Extend outbound leg of hold to 2.5MIN descending to 1400(1116). Turn left onto FAT, and when established descend to MDA.

CHANGE (12/24): MAG VAR AND ANNUAL RATE OF CHANGE. MAG TRACKS. NOTE REMOVED.

INSTRUMENT APPROACH CHART - ICAO

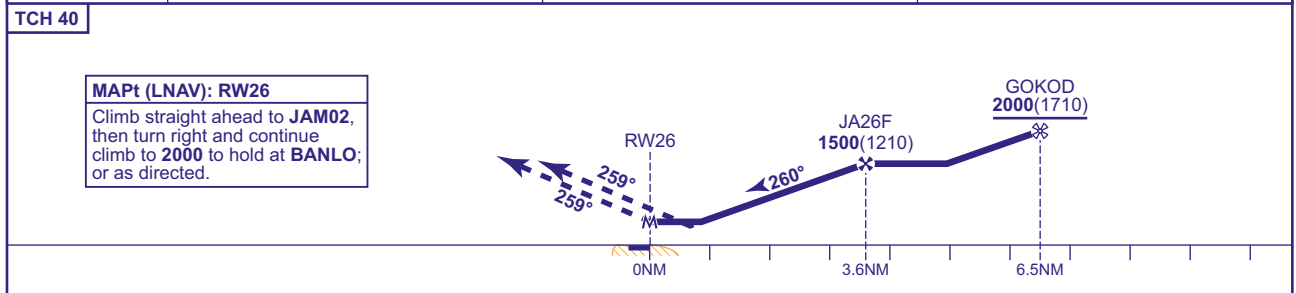
ALDERNEY RNP RWY 26
(ACFT CAT A,B)

<p>MSA 25NM ARP</p>	APP 128.655	GUERNSEY APPROACH	AD ELEVATION 290	EGNOS CH 46392 E26A TRANSITION ALTITUDE 5000
	TWR 125.355	ALDERNEY TOWER	THR ELEVATION 290	
	130.505	ALDERNEY GROUND	OBSTACLE ELEVATION 942 AMSL (652) (ABOVE THR)	
			BEARINGS ARE MAGNETIC	



RECOMMENDED PROFILE LPV - VERTICAL PATH ANGLE 3.0° (LNAV 5.2%), 320FT/NM

NM to RW26	3	2	1
ALT(HGT)	1300(1010)	980(690)	650(360)



Aircraft Category		Rate of descent						
		A	B	G/S KT	FT/MIN			
OCA (OCH)	LPV	590(300)	590(300)	160	140	120	100	80
	LNAV	630(340)	630(340)	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	690(400)	790(500)					

NOTES

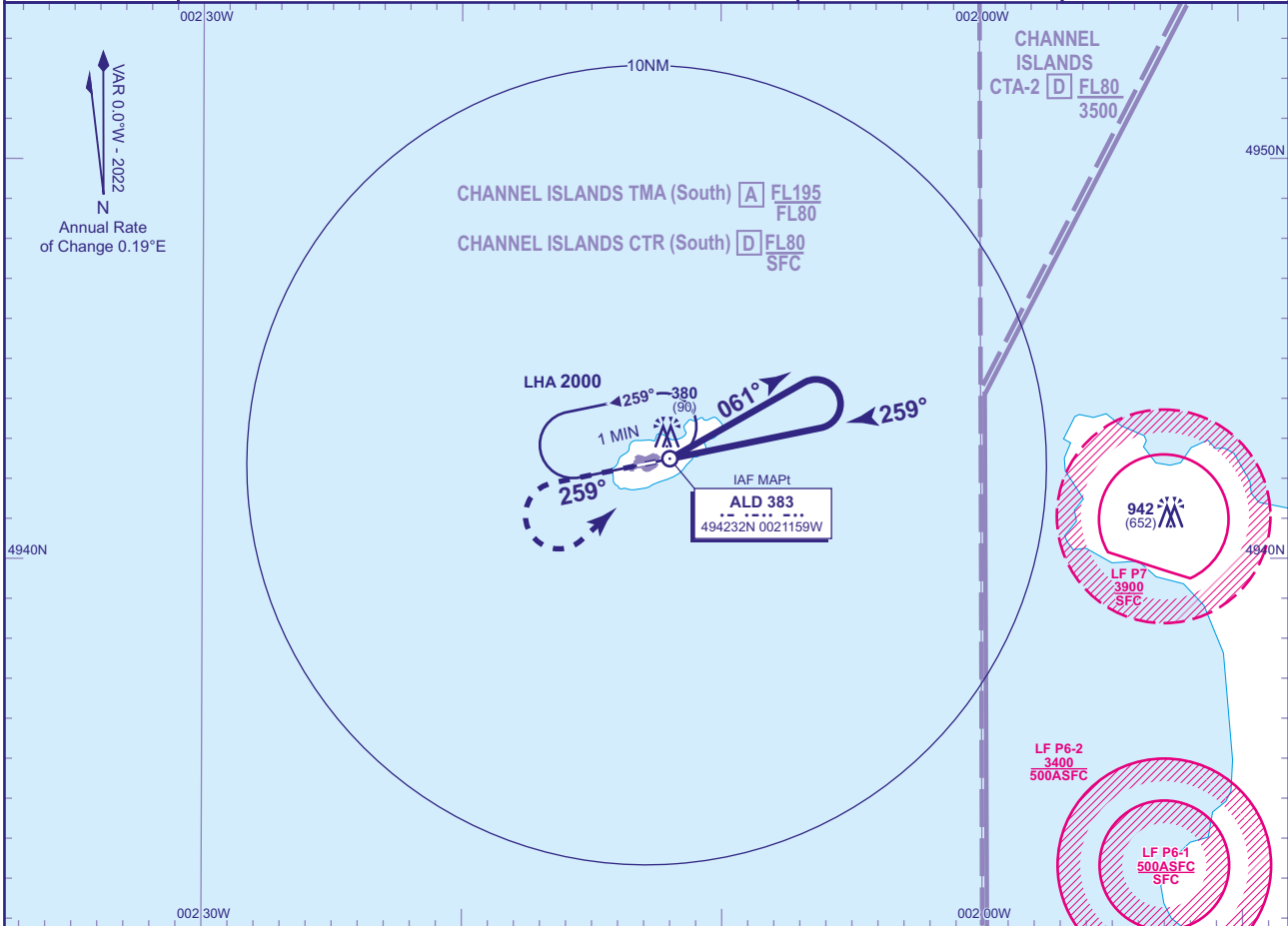
- Caution - eastern extremes of procedure are close to the boundary of control zone and prohibited and restricted areas.
- From the hold pilots should expect to route direct from the outbound leg of the hold to UNUKI.

CHANGE (12/24): MAG VAR AND ANNUAL RATE OF CHANGE. MAG TRACKS.

INSTRUMENT APPROACH CHART - ICAO

ALDERNEY
NDB(L)
RWY 26
(ACFT CAT A)

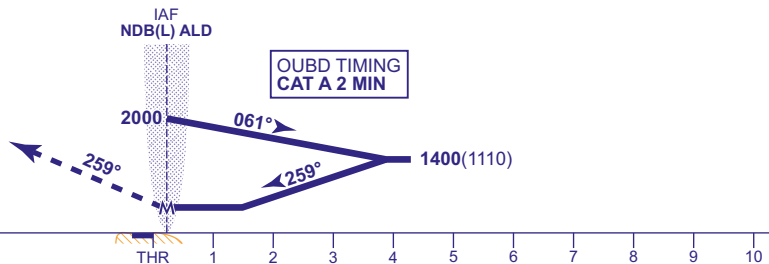
	APP 128.655	GUERNSEY APPROACH	AD ELEVATION 290
	TWR 125.355	ALDERNEY TOWER	THR ELEVATION 290
	130.505	ALDERNEY GROUND	OBSTACLE ELEVATION 942 AMSL (652) (ABOVE THR)
			BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 5000



RECOMMENDED PROFILE Gradient 5.24%, 318FT/NM

MAPt NDB(L) ALD
Climb on QDR 259° to 1400, then climbing turn left to return to NDB(L) ALD at 2000 or as directed.

OUBD TIMING
CAT A 2 MIN



Aircraft Category		A	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	680(390)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	690(400)							

CHANGE (12/24): MAG VAR AND ANNUAL RATE OF CHANGE. MAG TRACKS. NOTE REMOVED.

Instrument Approach Procedure Coding Tables

Alderney RNP RWY 08 - Instrument Approach Procedure via AMOGA

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R08L	001	IF	AMOGA	N	-	-	2000	-	494514.25N 0022740.63W	IAF GUR R019/D19.8
R08L	002	TF	ROGTO	N	169° (169.22°)	LEFT	2000	-	494045.70N 0022621.84W	IF 8.7NM
R08L	003	TF	JA08F	N	079° (079.28°)	-	2000	-	494124.35N 0022106.20W	FAF 5.2NM
R08L	004	TF	RW08	Y	079° (079.35°)	-	-	-	494221.58N 0021314.97W	MAPt
R08L	005	TF	JAM01	Y	079° (079.45°)	LEFT	-	-	494303.46N 0020727.10W	-
R08L	006	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

Alderney RNP RWY 08 - Instrument Approach Procedure via ROGTO

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R08C	001	IF	ROGTO	N	-	-	2000	-	494045.70N 0022621.84W	IAF GUR R027/D15.9
R08C	002	TF	JA08F	N	079° (079.28°)	-	2000	-	494124.35N 0022106.20W	FAF 5.2NM
R08C	003	TF	RW08	Y	079° (079.35°)	-	-	-	494221.58N 0021314.97W	MAPt
R08C	004	TF	JAM01	Y	079° (079.45°)	LEFT	-	-	494303.46N 0020727.10W	-
R08C	005	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

Alderney RNP RWY 08 - Instrument Approach Procedure via ELDUN

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R08R	001	IF	ELDUN	N	-	-	2000	-	493617.05N 0022503.87W	IAF GUR R039/D12.4
R08R	002	TF	ROGTO	N	349° (349.34°)	RIGHT	2000	-	494045.70N 0022621.84W	IF 8.7NM
R08R	003	TF	JA08F	N	079° (079.28°)	-	2000	-	494124.35N 0022106.20W	FAF 5.2NM
R08R	004	TF	RW08	Y	079° (079.35°)	-	-	-	494221.58N 0021314.97W	MAPt
R08R	005	TF	JAM01	Y	079° (079.45°)	-	-	-	494303.46N 0020727.10W	-
R08R	006	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

SBAS FAS Data Block Coding Data

Alderney RNP RWY 08

Input Data	
Parameters	Values
Operation Type	0
SBAS Provider	1
Airport Identifier	EGJA
Runway	08
Runway Direction	0
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E08A
LTP/FTP Latitude	494221.5800N
LTP/FTP Longitude	0021314.9710W
LTP/FTP Ellipsoidal Height (metres)	134.7
FPAP Latitude	494231.6140N
Delta FPAP Latitude (seconds)	10.0340
FPAP Longitude	0021151.8010W
Delta FPAP Longitude (seconds)	83.1700
Threshold Crossing Height	40
TCH Units Selector	0
Glidepath Angle (degrees)	3
Course Width (metres)	105
Length Offset (metres)	824
HAL	40
VAL	50

Output Data	
Data Block	10 01 0A 07 05 08 00 00 01 38 30 05 18 DD 54 15 4A 03 0C FF 43 19 64 4E 00 C4 89 02 90 01 2C 01 64 67 C8 FA BA 52 CF 4F
Calculated CRC Value	BA52CF4F

Instrument Approach Procedure Coding Tables

Alderney RNP RWY 26 - Instrument Approach Procedure via UNUKI

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R26R	001	IF	UNUKI	N	-	-	2000	130	494748.58N 0020627.58W	IAF GUR R045/R29.0
R26R	002	TF	JAE01	N	140° (139.53°)	RIGHT	2000	130	494512.04N 0020301.54W	8.15NM
R26R	003	TF	GOKOD	N	170° (169.66°)	RIGHT	2000	130	494338.37N 0020235.17W	IF 6.56NM
R26R	004	TF	JA26F	N	260° (259.58°)	-	1500	-	494306.57N 0020701.23W	FAF 3.6NM
R26R	005	TF	RW26	Y	260° (259.52°)	-	-	-	494226.78N 0021231.92W	MAPt
R26R	006	TF	JAM02	Y	259° (259.45°)	RIGHT	-	-	494146.18N 0021807.00W	-
R26R	007	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

Alderney RNP RWY 26 - Instrument Approach Procedure via GOKOD

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R26C	001	IF	GOKOD	N	-	-	2000	130	494338.37N 0020235.17W	IF GUR R054/D28.0
R26C	002	TF	JA26F	N	260° (259.58°)	-	1500	-	494306.57N 0020701.23W	FAF 3.6NM
R26C	003	TF	RW26	Y	260° (259.52°)	-	-	-	494226.78N 0021231.92W	MAPt
R26C	004	TF	JAM02	Y	259° (259.45°)	RIGHT	-	-	494146.18N 0021807.00W	-
R26C	005	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

Alderney RNP RWY 26 - Instrument Approach Procedure via TORVI

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R26L	001	IF	TORVI	N	-	-	FL040 2000	130	493850.94N 0020354.57W	IAF GUR R062/D24.5
R26L	002	TF	JAE02	N	020° (019.56°)	LEFT	2000	130	494204.75N 0020208.40W	8.15NM
R26L	003	TF	GOKOD	N	350° (349.50°)	LEFT	2000	130	494338.37N 0020235.17W	IF 6.56NM
R26L	004	TF	JA26F	N	260° (259.58°)	-	1500	-	494306.57N 0020701.23W	FAF 3.6NM
R26L	005	TF	RW26	Y	260° (259.52°)	-	-	-	494226.78N 0021231.92W	MAPt
R26L	006	TF	JAM02	Y	259° (259.45°)	RIGHT	-	-	494146.18N 0021807.00W	-
R26L	007	DF	BANLO	Y	-	-	2000	-	494622.33N 0021823.21W	HOLD

SBAS FAS Data Block Coding Data

Alderney RNP RWY 26

Input Data	
Parameters	Values
Operation Type	0
SBAS Provider	1
Airport Identifier	EGJA
Runway	26
Runway Direction	0
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E26A
LTP/FTP Latitude	494226.7760N
LTP/FTP Longitude	0021231.9220W
LTP/FTP Ellipsoidal Height (metres)	136.4
FPAP Latitude	494216.7335N
Delta FPAP Latitude (seconds)	-10.0425
FPAP Longitude	0021355.0875W
Delta FPAP Longitude (seconds)	-83.1655
Threshold Crossing Height	40
TCH Units Selector	0
Glidepath Angle (degrees)	3
Course Width (metres)	105
Length Offset (metres)	824
HAL	40
VAL	50

Output Data	
Data Block	10 01 0A 07 05 1A 00 00 01 36 32 05 B0 05 55 15 9C 53 0D FF 54 19 8B B1 FF 45 76 FD 90 01 2C 01 64 67 C8 FA 23 84 2F D8
Calculated CRC Value	23842FD8

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/DME	IBGH	30Y 109.350 MHz	Mon-Fri 0630-2300 (0530- 2200); Sat, Sun and PH 0800-2200 (0700- 2100).	512013.28N 0000206.10E	570 FT	(RWY 21) On AD. DME freq paired with ILS I-BGH. Zero range is indicated at THR of Runway 21. DOC 25 NM/25000 FT.
VOR/DME 0.59°E (2022) 1.10°E (2024)	BIG	98X 115.100 MHz	H24 Hours of operation for aerodrome purposes: Mon-Fri 0630-2300 (0530- 2200); Sat, Sun and PH 0800-2200 (0700- 2100).	511951.15N 0000205.32E	589 FT	VOR DOC: 20 NM/50,000 FT (30 NM/ 50,000 FT in Sector R259-074 and 60 NM/50,000 FT in Sector R314-344). DME DOC: 60 NM/50,000 FT (125 NM/50,000 FT in Sector R284-044 and 100 NM/50,000 FT in Sector R044-134). Due to terrain, coverage at low level is reduced in Sector R114- 219. In addition DME unlocks may occur in Sector R004-039 at ranges up to 25 NM.
VOR/DME 0.78°E (2022) 1.20°E (2023)	DET	120X 117.300 MHz	H24 Hours of operation for aerodrome purposes: Mon-Fri 0630-2300 (0530- 2200); Sat, Sun and PH 0800-2200 (0700- 2100).	511814.41N 0003550.19E	645 FT	VOR DOC: 20 NM/50,000 FT (35 NM/ 50,000 FT in Sector R289-029 and 45 NM/50,000 FT in Sector R249-289). DME DOC: 60 NM/50,000 FT.

EGKB AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Not available to aircraft unable to communicate with ATC.
- b) Aerobatic manoeuvres and low flypasts are prohibited unless prior approval has been given by the aerodrome operator.
- c) Microlight flying is prohibited at this airport.
- d) Prior to use of this aerodrome, the terms and conditions are to be obtained from the aerodrome operator.
- e) All international flights must provide a completed GAR (General Aviation Report) prior to arrival.
- f) Biggin Hill Airport is PPR for all aircraft movements. PPR can be obtained directly by use of the booking form at www.bigginhillairport.com (General Aviation Tab) or at www.Bigginbooking.com. The booking form should be submitted a minimum of 30 minutes prior to ETD or ETA. The filing of a Flight Plan (FPL) complies with the requirement to obtain PPR.
- g) All personnel must wear hi-visibility personal protective equipment whilst operating on the aprons.
- h) Biggin Hill Airport does not permit cost sharing flights advertised through online "flight sharing" platforms. Flights suspected to be operated under this premise may be subject to operational restrictions and are expressly prohibited by the airport authority.
- i) Winter Operations - Biggin Hill Airport adheres to a clean aircraft policy with regards to de-icing/anti-icing of aircraft.
- j) Drone (UAV) operators requesting to operate within the Biggin Hill FRZ must gain permission through the Biggin Hill Airport Drone Authorisation portal: (<http://drones.bigginhillairport.com>).

2 GROUND MOVEMENT

- a) Caution reduced wing tip clearance between taxiing and parked aircraft on Main Apron. Marshalling guidance provided.
- b) Aircraft taxiing from any ramp/apron must use minimum power until established on the taxiway centre-line. When calling for start, ramp position must be passed to ATC.
- c) Due to the number of personnel and vehicles operating on the Main Apron, pilots are to operate at minimum taxiing speed when approaching or transiting this area.

5 Sep 2024

3 CAT II/III OPERATIONS

Not applicable

4 WARNINGS

- a) The only visual signals are light signals.
- b) Windshear and turbulence may be experienced on short final for Runway 03 when the wind is from the northwest.
- c) Pilots of departing aircraft are warned of the presence of other aircraft joining the visual circuit from the 'Deadside'. The joining aircraft will fly across the mid point of the runway in use at altitude of 1584 FT (1000 FT AAL) at 90° to the runway heading before turning left/right onto the downwind leg. Pilots of high performance fast climbing aircraft should be particularly alert.
- d) Obstacle marking and lighting: Control Tower, VOR/DME site, hangars and anemometer east of Runway 03 threshold. ILS glidepath and localizer sites, anemometer mast and Northern Terminal Hangar.
- e) Aircraft under tow at night may not be displaying nav/anti-collision lights.
- f) Sections of Taxiway Foxtrot exceed the maximum longitudinal slope requirements and therefore the sight distance requirements as per CAP 168, Chapter 3.
- g) A section of the taxiway graded area to the north of Taxiway Foxtrot has an up slope of 5.8%.

5 HELICOPTER OPERATIONS

- a) In order to avoid noise sensitive areas surrounding the aerodrome, helicopters must conform to normal fixed-wing joining, departure and circuit procedures unless otherwise instructed by ATC.
- b) Pilots of helicopters should take particular note of a noise sensitive area on the northern aerodrome boundary prohibiting close right-base approaches for Runway 21 or direct departures to the north from Runway 03.

6 USE OF RUNWAYS

- a) The width at both ends of Runway 03/21, is twice that delineated by the associated edge lights due to extra pavement at one side. Since runway centre-line lighting is not installed, pilots should ensure that they are correctly lined up, especially if take-off is at night or when the runway is contaminated or in low visibility.
- b) Except where a public transport operator has a lower State authorised take-off minima, the Aerodrome Authority cannot approve departures in RVR conditions of less than 400 M.

7 TRAINING

- a) Use of the aerodrome for training is subject to the following:
 - i. The aerodrome is not available for circuit and instrument approach training by non-Biggin Hill based aircraft of less than 3000 KG MTWA.
 - ii. The number of aircraft in the visual circuit will be determined by ATC, subject to the prevailing weather conditions and other commercial or corporate traffic.
 - iii. The aerodrome is not available to Student Pilots unless accompanied by an appropriately qualified pilot.
 - iv. A booking system exists for instrument training. The filing of a flight plan does not constitute a booking. Contact Biggin Hill ATC on +44 (0)1959-578522 for all instrument training bookings.
 - v. Circuit Training may be suspended during periods of high traffic density.

EGKB AD 2.21 NOISE ABATEMENT PROCEDURES

1 GENERAL

- a) Every operator of aircraft using the airport shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in the area surrounding the airport.
- b) Only those aircraft meeting ICAO Chapter 3 criteria or better will be accepted. Contact Flight Operations on +44 (0)1959-578500.
- c) Pilots are requested to avoid the use of reverse thrust or reverse pitch above idle power settings on landing, consistent with the safe operation of the aircraft.
- d) Due to the close proximity of residential areas, ground running of engines or Auxiliary Power Units (APU) shall be kept to a minimum consistent with operational requirements. At no time shall APUs be run for more than 30 minutes without Aerodrome Operator consent.
- e) The use of the Noise Preferential Routings is supplementary to the noise abatement take-off techniques published by specific aircraft manufacturers.
- f) The Noise Preferential Routings may at any time be departed from to the extent necessary for avoiding immediate danger.

2 NOISE ABATEMENT PROCEDURES - IFR DEPARTURES

- a) **Runway 21/03 IFR Departures**
 - i. London Biggin Hill Airport is located close to densely populated and largely residential areas. In order to support operating hours that include night time aircraft operations, compliance with NPRs is required and is enforced by a Noise Monitoring and Track Keeping System (NMTKS).

- ii. Aircraft failing to comply with NPRs and/or noise limits may be subject to additional charges as set out in the London Biggin Hill Airport Schedule of Fees and Charges. As with other London airports, frequent or repeated noise and/or track violations may result in a permanent exclusion from the airport.
- iii. Calibrated Noise Monitors are located approximately 1 KM from the threshold of each runway and lie directly under the approach and departure path. Additionally, a mobile noise monitor may be positioned anywhere from time to time deemed appropriate by the airport operator. Nominal departure track limits are programmed into the NMTKS along with minimum heights set at two points in the standard departure route.

b) Runway 21 Departures

- i. On departure speed should be restricted to V₂+25 KIAS and in any case no more than 185 KIAS, in accordance with the Standard Departure Route (SDR), until passing over BIG eastbound in order to achieve the best practical angle of climb whilst keeping thrust to the minimum required for an expeditious departure.
- ii. Following rotation, runway track should be maintained accurately.
- iii. On crossing the upwind end of Runway 21, an immediate right turn should be commenced to track 220° M in order to avoid residential housing located at Norheads Farm. In accordance with the SDR, a right turn should be commenced promptly at BIG 1 DME in order to route back over the airfield on track towards DET. Speed in excess of 185 KIAS will result in a radius of turn which exceeds the designated track limits and may therefore result in a track violation. In strong south/southwesterly winds, particular attention should be given to radius of turn.
- iv. In order to safely maintain the relatively low speed mandated by this procedure and dependent upon aircraft type, consideration should be given to delaying flap retraction until passing BIG outbound at or above 2100 FT AMSL in order to ensure a sufficiently tight radius of turn is achievable.
- v. The procedure is designed to prevent unnecessary overflight of the built up areas lying to the north of the airport. Pilots should pay particular attention to avoiding overflight of these areas. Achieving the correct radius of turn is therefore essential.
- vi. Additionally, an altitude limit violation will occur if the noise monitor at Norheads Farm is overflown below 1000 FT AMSL (400 FT AAL) or the BIG is overflown below 2100 FT AMSL.

c) Runway 03 Departures

- i. On departure speed should be restricted to V₂+25 KIAS and in any case no more than 185 KIAS until at or above 2100 FT AMSL in order to achieve the best practical angle of climb whilst keeping thrust to the minimum required whilst at low level.
- ii. Following rotation, runway track should be maintained accurately. Upon reaching BIG 1 DME aircraft should commence an immediate right turn to DET in accordance with the Standard Departure Route (SDR).
- iii. In order to safely maintain the relatively low speeds required by this procedure and dependent upon aircraft type, consideration should be given to delaying flap retraction until at or above 2100 FT AMSL in order to ensure a sufficiently tight radius of turn is achieved.
- iv. The procedure is designed to prevent unnecessary overflight of the built up areas lying to the north of the airport. Pilots should pay particular attention to avoiding overflight of these areas. Excessive speed on departure or a failure to commence a right turn immediately upon reaching BIG 1 DME will likely result in a track violation.
- v. Additionally, a limit violation will occur if the noise monitor at Milking Lane Farm is overflown below 1000 FT AMSL (400 FT AAL) or 2100 FT AMSL is not achieved after 5 track miles.

d) General Exclusion

Pilots should note that none of these provisions will apply in any emergency. Commanders must place the safety of their aircraft ahead of published NPR requirements.

3 VFR NOISE ABATEMENT PROCEDURES

- a) London Biggin Hill Airport is located close to densely populated and largely residential areas. In order to support extended operating hours that include night time aircraft operations, compliance with NPRs is required and is enforced by a Noise Monitoring and Track Keeping System (NMTKS).
- b) Aircraft failing to comply with NPRs and/or noise limits may be subject to additional charges as set out in the London Biggin Hill Airport Schedule of Fees and Charges. As with other London airports, frequent or repeated noise and/or track violations may result in a permanent exclusion from the airport.
- c) Calibrated Noise Monitors are located approximately 1 KM from the threshold of each runway and lie directly under the approach and departure path. Additionally, a mobile noise monitor may be positioned anywhere from time to time deemed appropriate by the airport operator. Nominal 'no fly' zones over Keston, Downe, Farnborough and Orpington are programmed into the NMTKS along with minimum heights set at each noise monitor.

d) Runway 21 Departures

- i. All aircraft departing Runway 21 VFR are required to turn right, after passing the aerodrome boundary, to make good a track of 220° M:
 - 1. aircraft departing to the west via Kenley should continue to 1 NM, before turning right and setting course, avoiding the villages of Woldingham and Warlingham;
 - 2. aircraft departing to the east or northeast via Sevenoaks or Swanley should continue to 2 NM before turning left and tracking to the southeast, remaining south and east of Tatsfield Village. A useful visual reference for the turn is to remain south of the Tatsfield golf course;
 - 3. once an aircraft has left the ATZ, it should not re-enter the ATZ without the appropriate ATC clearance. Aircraft intending to route to via Swanley should ensure that they arrange their flight in order to avoid the eastern limits of the ATZ whilst tracking northeast. **CAUTION** – there may be numerous aircraft joining from the east.

28 Nov 2024

e) **Runway 03 Departures**

- i. Aircraft departing Runway 03 are required to climb straight ahead until 1NM:
 1. aircraft departing to the west via Kenley to make a left turn en-route to leave the ATZ
 2. aircraft departing east or southeast via Sevenoaks or northeast via Swanley, to leave the ATZ en-route. **CAUTION** – there may be numerous VFR aircraft joining from the east;
 3. aircraft departing to the north, continue en-route but avoiding overflight of the Noise Sensitive Areas of Orpington and Chelsfield. Expect an early frequency change to the next agency, due to the close proximity of London Heathrow and London City CTAs;
 4. all pilots must in all cases avoid overflight of the residential areas to the north and east especially Keston, Farnborough, Orpington and Downe.

f) **Visual Circuits**

- i. All circuits at London Biggin Hill Airport are conducted to the west of the aerodrome (Right Hand - Runway 21, Left Hand - Runway 03). Overflight of the following Noise Sensitive Areas should be avoided, unless necessary to fulfil an ATC instruction such as to extend downwind for spacing, Keston Village The Leavesdon Estate and Leaves Green. Aircraft unable to comply with these requirements should not plan to make use of London Biggin Hill Airport.
- ii. Aircraft joining the visual circuit from the east or southeast should avoid overflight of the Noise Sensitive Areas of Downe Village and Biggin Hill Village.

g) **Noise Sensitive Areas**

- i. The NMTKS will track all aircraft arriving at and departing from London Biggin Hill Airport. Aircraft entering a Noise Sensitive Area will automatically become the subject of a track violation report which will be considered by the airport Noise Abatement and Safety Review Board (SANARB) for consideration of a penalty charge. All penalty charges levied are donated to local good causes. In the case of repeated violations of wither noise or track limits, permanent exclusion from the airport may result.

EGKB AD 2.22 FLIGHT PROCEDURES**1 CIRCUIT PROCEDURES**

- a) Aircraft taking off, 'going around' or making 'touch and go' landings are to remain at or below 500 FT QFE until the upwind end of the runway in use has been passed, when a left or right turn (as appropriate) should be initiated. Aircraft joining the circuit for landing are to fly across the mid-point of the runway in use at 1000 FT QFE at 90° to the runway heading, a left or right turn (as appropriate) should be made onto the downwind leg.
- b) Variable circuits - LH on Runway 03, RH on Runway 21. Circuit heights are 1000 FT QFE (1600 FT QNH) at all times.

2 STANDARD DEPARTURE ROUTES - VIA ATS ROUTE NETWORK

Departure to	Designator	Via	Route
North	Brookmans Park 2 (BPK 2)	L10/N601	DET - N601 - BPK
Northeast	DAGGA 2 (Note 5)	M604	DET - M604 - DAGGA
Southeast	Dover 2 (DVR 2)	L9/L10/Q70	DET - L6 - DVR/DET - Q70 - VABIK
South & southwest	Lydd 2 (LYD 2)	M189	DET - LYD
West	SAXBI 2	N27	DET - N601 - BPK - SAXBI

Note 1: Departures from Runway 21, follow Noise Abatement Procedure turning right to pass overhead BIG VOR at 2400 FT ALT.

Note 2: Departures from Runway 03, after noise abatement, turn right to intercept DET VOR RDL 275° to DET.

Note 3: When established on DET VOR RDL 275°, not above 2500 FT ALT until 9 DME DET, then to 4 DME DET at 4000 FT ALT.

Note 4: For positioning flights to London Luton/London Stansted, follow BPK 2 SDR to DET then join DET 2A, at altitude as directed by ATC. |

Note 5: Cross DET VOR/DME fix 017°/7 NM at 5000 FT ALT.

3 OUTBOUND IFR TRAFFIC OUTSIDE CONTROLLED AIRSPACE

IFR traffic departing from Biggin Hill will be co-ordinated with 'Thames Director'.

Note 1: Caution -Kenley Aerodrome and associated glider flying.

Note 2: IFR Training Flights intending to utilize the services of 'Thames Director' are to obtain prior approval from Biggin Hill ATC, Tel: 01959-578525.

EGBB — BIRMINGHAM**EGBB AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGBB — BIRMINGHAM

EGBB AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 522714N Long: 0014453W Centre point of Runway intersection with Taxiways Lima/Tango.
2	Direction and distance from city	5.5 NM ESE of Birmingham.
3	Elevation / Reference temperature / Mean Low Temperature	339 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	162 FT
5	Magnetic Variation / Annual Change	0.13°W (2022) / 0.20°E
6	AD Administration Address Telephone AFS E-mail address	BIRMINGHAM AIRPORT. Birmingham Airport, Birmingham B26 3QJ. 0871-222 0072 (General Enquiries) 07890-423014 (Airfield Duty Manager) 0121-767 1260 (ATC ATIS) 0121-767 1210 (ATC Watch Manager) EGBBYDYX ADM@birminghamairport.co.uk (Airfield Duty Manager)
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	All calls to ATC will be recorded.

EGBB AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	H24
12	Remarks	Refer to NOTAM/AIP Supplements.

EGBB AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Dedicated cargo aircraft handling agents and transit sheds available.
2	Fuel and oil types	AVTUR JET A-1. 100, W80 and W100.
3	Fuelling facilities/capacity	Fuel delivery by bowser.
4	De-icing facilities	By arrangement with handling agents.
5	Hangar space for visiting aircraft	Yes, by arrangement with XLR Executive Jet Centres.
6	Repair facilities for visiting aircraft	Maintenance and repair by arrangement.
7	Remarks	Ground handling mandatory for all aircraft. Aircraft handling agencies are: Blue City: Tel: 0121-782 9300; Email: handling@bluecityaviation.co.uk Signature: Tel: 0121-782 1999; Email: bhx@signatureflight.co.uk Swissport: Tel: 0121-767 7772; Email: bhx.ops@swissport.com XLR Executive Jet Centres: Tel: 0121-663 1450; Email: jetcentre@xlrbermingham.com

EGBB AD 2.5 PASSENGER FACILITIES

1	Hotels	Available on site.
2	Restaurants	Available on site.
3	Transportation	Buses, taxis, trains and hire cars. Nearest railway station, Birmingham International.
4	Medical facilities	First aid treatment & emergency service response.
5	Bank and Post Office	Bureau de Change & Post Office on site.
6	Tourist Office	
7	Remarks	

EGBB AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A9 RFF Category 10 aircraft accepted under remission.
2	Rescue equipment	Details available on request from aerodrome.
3	Capability for removal of disabled aircraft	Airlines must have a confirmed contract for aircraft recovery. Aircraft recovery arrangements must be submitted to Birmingham Airport Limited. Tel: 07890-423014 (Airfield Duty Manager). E-mail: ADM@birminghamairport.co.uk.
4	Remarks	

EGBB AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical - Chemical de-icing.
2	Clearance priorities	Standard. See AD 2.1.2.
3	Remarks	ATC snow state and clearance programme. Snow Control 0121-767 7152.

EGBB AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	<p>STAND 501 Surface: Concrete PCR 788/R/C/W/U</p> <p>STAND 502 Surface: Concrete PCR 808/R/B/W/U</p> <p>STAND 503 Surface: Concrete PCR 808/R/B/W/U</p> <p>STAND 504 Surface: Concrete PCR 788/R/C/W/U</p> <p>STAND 504R Surface: Concrete PCR 1270/R/B/W/T</p> <p>STAND 601 Surface: Concrete PCR 850/R/B/W/T</p> <p>STAND 77 Surface: Concrete PCR 1590/R/A/W/T</p> <p>STANDS 1 TO 10 Surface: Concrete PCR 650/R/B/W/T</p> <p>STANDS 11 TO 16 Surface: Concrete PCR 643/R/A/W/U</p> <p>STANDS 20 TO 25 Surface: Concrete PCR 1110/R/B/W/T</p> <p>STANDS 40 TO 42 Surface: Concrete PCR 1004/R/A/W/U</p> <p>STANDS 54 TO 57 Surface: Concrete PCR 1170/R/B/W/T</p> <p>STANDS 58 TO 60 Surface: Concrete PCR 710/R/B/W/T</p> <p>STANDS 70 TO 76 Surface: Concrete PCR 1440/R/B/W/T</p> <p>STANDS 80 TO 84 Surface: Concrete PCR 1170/R/B/W/T</p> <p>STANDS 85 TO 86 Surface: Concrete PCR 930/R/A/W/T</p>
2	Taxiway width, surface and strength	<p>Taxiway A: 23 M Surface: Asphalt PCR 2710/F/D/X/T</p> <p>Taxiway AL: 23 M Surface: Asphalt PCR 1220/R/B/W/T</p>

28 Nov 2024

		<p>Taxiway B: 23 M Surface: Asphalt PCR 800/R/B/W/T</p> <p>Taxiway C: 23 M Surface: Concrete and asphalt PCR 780/R/B/W/T</p> <p>Taxiway D: 23 M Surface: Concrete and asphalt PCR 1100/R/B/W/T</p> <p>Taxiway E: 23 M Surface: Concrete and asphalt PCR 1370/R/B/X/T</p> <p>Taxiway F: 23 M Surface: Concrete PCR 784/R/A/W/U</p> <p>Taxiway G: 18 M Surface: Asphalt PCR 560/F/C/X/T</p> <p>Taxiway H: 23 M Surface: Concrete PCR 784/R/A/W/U</p> <p>Taxiway J: 23 M Surface: Asphalt PCR 1470/F/D/X/T</p> <p>Taxiway L: 45 M Surface: Asphalt PCR 1500/F/D/X/T</p> <p>Taxiway S: 23 M Surface: Asphalt PCR 1980/R/B/W/T</p> <p>Taxiway T: 23 M Surface: Concrete PCR 1080/R/C/W/T</p> <p>Taxiway U: 23 M Surface: Concrete PCR 1004/R/B/W/U</p> <p>Taxiway V: 23 M Surface: Asphalt PCR 3780/F/B/X/T</p> <p>Taxiway W: 23 M Surface: Asphalt PCR 2120/F/A/X/T</p> <p>Taxiway Y: 23 M Surface: Concrete PCR 750/R/B/W/T</p>
3	Altimeter checkpoint location and elevation	Terminal Apron 325 FT Elmdon GA Aprons 325 FT
4	VOR checkpoints	
5	INS checkpoints	See Ground Movement/Parking/Docking Chart.
6	Remarks	

EGBB AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	<p>Taxiing guidance signs: Taxi-holding position; Guide lines at apron.</p> <p>Terminal Apron (Stands 1-86). All aircraft stands are laid out for nose-in/push-back; nose-wheel guidelines are provided and marshalling assistance is available, if required, on request through ATC GMC.</p> <p>Stands 1-4 have directional information provided by Safedock Docking Guidance System.</p> <p>Stands 8C, 12 and 13 have directional information provided by marshaller instruction.</p> <p>Stands 15, 16, 40, 41C, 42C, 54R, 54C, 54L, 55R, 55C, 55L, 56R, 56C, 57R, 57C and 58 have directional information provided by a Safedock Docking Guidance System and are provided with an apron drive airbridge.</p> <p>Stands 41R, 41L, 42R, 42L, 56L, 57L and 59 have directional information provided by Safedock Docking Guidance System.</p> <p>Stands 5-7, 8L, 10-13, 20-25, 60, 70-77, 80-82, 83L, 83C, 83R, 84L, 84C, 84R, 85L, 85C, 85R, 86L, 86C and 86R will be under marshaller instructions.</p> <p>All Stands except 75-77 are fitted with a fixed electrical ground power unit.</p> <p>Pilots must not enter an aircraft stand unless SEG (Stand Entry Guidance) is activated and the correct aircraft type is displayed, or Birmingham Airport Limited marshaller has signalled clearance to proceed. In the event of there being no activated SEG displayed upon approach to the stand, flight crews must hold position on the taxiway and advise GMC of the non-activation of the SEG. Aircrew must not attempt to self-park in the SEG is not activated.</p> <p>Aircrew are to note that all SEG systems are activated by their ground handling agent. The activation of SEG systems should indicate that a safety check of the stands has been made by the handling agent prior to the arrival of the aircraft.</p> <p>Elmdon Apron (Stands 501-506) will be under marshaller instructions. Pilots of light aircraft not using the full stand facilities should await marshaller instructions before proceeding onto the stands to park.</p>
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 15/33: Designation, runway edge, threshold, centre-line, TDZ.</p> <p>Taxiway light(s): Green centre-line lighting (15 M spacing) plus blue edge on curves and red stop bars. No green centre-line on Taxiway J and Taxiway L.</p>
3	Stop bars and runway guard lights (if any)	<p>No stop bar at J1. Stop bars at runway entrance points are in operation H24.</p>
4	Other runway protection measures	
5	Remarks	<p>WDI RWY 15 THR (LGTD): 522730.26N 0014520.61W. WDI Midpoint (LGTD): 522652.90N 0014437.40W. WDI RWY 33 THR (LGTD): 522705.56N 0014452.33W.</p>

EGBB AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBB1365) 33/TAKE-OFF	HOPPER	522828.00N 0014621.68W	389 FT	52 FT	No	
(EGBB1439) 33/TAKE-OFF	TREE	522825.25N 0014601.20W	373 FT	53 FT	No	
(EGBB1417) 33/TAKE-OFF	TREE	522824.04N 0014605.51W	375 FT	50 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBB1485) 33/TAKE-OFF	GANTRY	522818.37N 0014555.10W	354 FT	31 FT	No	
(EGBB1410) 33/TAKE-OFF	TREE	522815.61N 0014607.11W	364 FT	60 FT	No	
(EGBB1596) 15/APPROACH	POST	522813.00N 0014545.67W	356 FT	59 FT	Yes	
(EGBB1634) 15/APPROACH	GANTRY	522812.08N 0014542.09W	352 FT	31 FT	No	
(EGBB1492) 33/TAKE-OFF	TREE	522811.75N 0014554.40W	342 FT	46 FT	No	
(EGBB1441) 15/APPROACH 33/ TAKE-OFF	TREE	522808.47N 0014600.62W	355 FT	57 FT	No	
(EGBB1577) 33/TAKE-OFF	LAMP POST	522808.23N 0014547.45W	326 FT	26 FT	No	
(EGBB1624) 15/APPROACH	TREE	522807.67N 0014543.63W	353 FT	52 FT	No	
(EGBB1460) 33/TAKE-OFF	TREE	522807.42N 0014558.00W	349 FT	44 FT	No	
(EGBB1571) 33/TAKE-OFF	HEDGE	522803.77N 0014547.90W	320 FT	11 FT	No	
(EGBB1647) 15/APPROACH	TREE	522802.75N 0014537.47W	340 FT	51 FT	No	
(EGBB1512) 33/TAKE-OFF	FENCE	522802.16N 0014551.14W	319 FT	9 FT	No	
(EGBB1482) 15/APPROACH	TREE	522801.33N 0014555.44W	349 FT	36 FT	No	
(EGBB1458) 15/APPROACH	TREE	522800.97N 0014558.46W	367 FT	53 FT	No	
(EGBB1629) 33/TAKE-OFF	LLZ	522800.70N 0014543.32W	316 FT	8 FT	Yes	
(EGBB1615) 33/TAKE-OFF	FFM	522800.24N 0014544.45W	313 FT	7 FT	No	
(EGBB1600) 33/TAKE-OFF	LLZ	522759.75N 0014545.60W	316 FT	9 FT	Yes	
(EGBB1480) 15/APPROACH	TREE	522758.54N 0014555.69W	357 FT	46 FT	No	
(EGBB1535) 15/APPROACH	TREE	522755.41N 0014549.80W	345 FT	49 FT	No	
(EGBB2067) 15/TAKE-OFF	LLZ MON	522633.39N 0014407.91W	344 FT	13 FT	No	
(EGBB2333) 33/APPROACH	TREE	522622.45N 0014338.66W	405 FT	47 FT	No	
33/APPROACH 15/TAKE-OFF	CONSTRUCTI ON EQUIPMENT	522620N 0014401W	383 FT	26 FT	No	
(EGBB2104) 33/APPROACH	TREE	522620.38N 0014403.89W	386 FT	48 FT	No	
(EGBB2239) 15/TAKE-OFF	BUSH	522619.68N 0014349.41W	382 FT	27 FT	No	
(EGBB2335) 33/APPROACH	TREE	522619.47N 0014338.51W	426 FT	60 FT	No	
(EGBB2350) 33/APPROACH	TREE	522618.78N 0014336.57W	417 FT	46 FT	No	
(EGBB2174) 33/APPROACH	TREE	522614.44N 0014358.14W	405 FT	55 FT	No	
(EGBB2332) 15/TAKE-OFF	TREE	522614.01N 0014339.46W	402 FT	30 FT	No	
(EGBB2345) 15/TAKE-OFF	TREE	522610.65N 0014337.38W	414 FT	43 FT	No	
(EGBB2295) 15/TAKE-OFF	TREE	522604.71N 0014342.75W	414 FT	42 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBB2308) 33/APPROACH	TREE	522555.18N 0014341.85W	451 FT	88 FT	No	
(EGBB2347) 15/TAKE-OFF	TREE	522555.10N 0014337.10W	428 FT	70 FT	No	
(EGBB2478) 15/TAKE-OFF	PYLON	522545.63N 0014254.69W	477 FT	142 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBB1090)	BUILDING	522854.46N 0014818.90W	528 FT	155 FT	No	
(EGBB2688)	UK29306514F CRANE	522850.73N 0015425.02W	980 FT	525 FT	No	
	CRANE	522850.54N 0015424.87W	1009 FT	555 FT	Yes	Northwest of Birmingham Airport. End estimated January 2025.
(EGBB2046)	AERIAL	522844.85N 0014411.83W	453 FT	131 FT	No	
(EGBB2471)	PYLON	522835.76N 0014258.70W	486 FT	150 FT	No	
(EGBB1097)	SPIRE	522828.31N 0014810.28W	555 FT	159 FT	No	
(EGBB2638)	UK28540753F CRANE	522821.16N 0015256.84W	1015 FT	638 FT	Yes Solid Red	
(EGBB2595)	TREE	522820.45N 0014733.96W	467 FT	73 FT	No	
(EGBB1052)	BUILDING	522744.37N 0014859.78W	577 FT	150 FT	No	
(EGBB2602)	PYLON	522741.06N 0014229.79W	515 FT	188 FT	No	
(EGBB1098)	TREE	522734.72N 0014809.41W	497 FT	75 FT	No	
(EGBB1034)	CHIMNEY	522733.75N 0015035.65W	644 FT	267 FT	No	
(EGBB1708)	RADOME	522717.34N 0014522.87W	443 FT	125 FT	No	
(EGBB2621)	UK28490886F CRANE	522708.96N 0015627.08W	876 FT	378 FT	Yes Solid Red	
(EGBB2226)	BUILDING	522703.02N 0014350.71W	447 FT	108 FT	No	
(EGBB1927)	ATC AERIAL	522649.81N 0014453.21W	492 FT	130 FT	No	
(EGBB2225)	AERIAL	522648.42N 0014350.82W	483 FT	116 FT	Yes Solid Red	
(EGBB2492)	PYLON	522648.36N 0014240.79W	483 FT	173 FT	Yes Solid Red	
(EGBB1058)	BUILDING	522643.55N 0014853.17W	516 FT	99 FT	No	
(EGBB1557)	TREE	522632.84N 0014548.92W	508 FT	106 FT	No	
(EGBB1700)	MAST	522622.57N 0014524.00W	498 FT	118 FT	No	
(EGBB2486)	PYLON	522622.02N 0014246.61W	488 FT	152 FT	No	
(EGBB2390)	WEATHER V	522621.54N 0014328.85W	487 FT	115 FT	Yes Solid Red	
(EGBB1155)	TREE	522604.52N 0014725.57W	508 FT	113 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBB1361)	MAST	522533.51N 0014624.70W	580 FT	177 FT	Yes Solid Red	
(EGBB2317)	PYLON	522518.42N 0014341.27W	483 FT	89 FT	No	
(EGBB1968)	TREE	522509.01N 0014443.21W	519 FT	95 FT	No	
(EGBB1042)	BUILDING	522456.14N 0014948.29W	638 FT	156 FT	No	
(EGBB1320)	SPIRE	522440.99N 0014633.28W	619 FT	191 FT	No	
(EGBB2459)	PYLON	522421.06N 0014305.76W	545 FT	151 FT	No	

EGBB AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE EXETER 24 Hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing/Telephone. ATIS Tel: 0121-767 1260.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs and METARs. English
7	Charts and other information available for briefing or consultation	F214, F215, GAMET available via Met Office Aviation Briefing Service, www.metoffice.gov.uk/aviation .
8	Supplementary equipment available for providing information	Standby systems. ATIS number available: 0121-767 1260.
9	ATS units provided with information	BIRMINGHAM
10	Additional information (limitation of service, etc.)	Unverified AUTO METARs may be published in night periods.

EGBB AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
15	145.81°	3052 x 45 M	RWY surface: Asphalt, Grooved PCR 1550/R/C/W/T	522748.52N 0014531.43W 162.1 FT	THR 303.4 FT TDZ 313.1 FT	
33	325.82°	3052 x 45 M	RWY surface: Asphalt, Grooved PCR 1550/R/C/W/T	522646.58N 0014422.56W 161.9 FT	THR 327.9 FT TDZ 327.9 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	60 x 150 M	3124 x 280 M				RWY 15 Threshold displaced by 291 M. Runway 15/33 has shoulders 7.5 M each side of the runway giving a total paved width of 60 M.

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	193 x 150 M	3124 x 280 M				RWY 33 Threshold displaced by 447 M. Runway 15/33 has shoulders 7.5 M each side of the runway giving a total paved width of 60 M.

EGBB AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
15	3004 M	3064 M	3004 M	2581 M	
33	3004 M	3197 M	3004 M	2450 M	
15	2447 M	2508 M	2447 M		Take-off from intersection with Taxiway B.
15	1444 M	1504 M	1444 M		Take-off from intersection with Taxiway L.
15	1220 M	1280 M	1220 M		Take-off from intersection with Taxiway G.
33	2552 M	2745 M	2552 M		Take-off from intersection with Taxiway E.
33	2182 M	2375 M	2182 M		Take-off from intersection with Taxiway C.
33	2093 M	2286 M	2093 M		Take-off from intersection with Taxiway F.
33	1769 M	1962 M	1769 M		Take-off from intersection with Taxiway G.
33	1560 M	1752 M	1560 M		Take-off from intersection with Taxiway L.

EGBB AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
15	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. 914 M Light intensity high	Light intensity high Uni-directional Green wingbars	PAPI Left/3° 60 FT 406 M	900 M	Colour coded 15 M spacing Light intensity high	Variable intensity bi-directional Flush fitting Light intensity high	Red		
33	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. 914 M Light intensity high	Light intensity high Uni-directional Green wingbars	PAPI Left/3° 59 FT 370 M	900 M	Colour coded 15 M spacing Light intensity high	Variable intensity bi-directional Flush fitting Light intensity high	Red		

EGBB AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: Runway 15: 522653.35N 0014438.28W (LGTD); Runway 33: 522736.27N 0014525.44W (LGTD).
3	TWY edge and centre line lighting	

28 Nov 2024

4	Secondary power supply/switch-over time	Yes/1 second.
5	Remarks	

EGBB AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO, geoid undulation	
2	TLOF and/or FATO elevation	
3	TLOF and FATO area dimensions, surface, strength, marking, lighting	
4	True BRG of FATO	
5	Declared distance available	
6	APP and FATO lighting	
7	RMK	Helicopters to approach using active runway and land as instructed by ATC.

EGBB AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
BIRMINGHAM CTR 523507N 0014154W - 522626N 0013203W thence clockwise by the arc of a circle radius 8 NM centred on 522722N 0014502W to 521933N 0014740W - 522835N 0015758W thence clockwise by the arc of a circle radius 8 NM centred on 522722N 0014502W to 523507N 0014154W	Upper limit: 4500 FT ALT Lower limit: SFC	D	BIRMINGHAM RADAR English	6000 FT		Birmingham ATC is the Controlling Authority for that part of the Daventry Control Area which overlies the Birmingham CTR and CTA up to and including FL 80.
BIRMINGHAM ATZ A circle, 2.5 NM radius, centred at 522722N 0014502W on longest notified runway (15/33)	Upper limit: 2000 FT AGL Lower limit: SFC	D	BIRMINGHAM RADAR English	6000 FT		Birmingham ATC is the Controlling Authority for that part of the Daventry Control Area which overlies the Birmingham CTR and CTA up to and including FL 80.

EGBB AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	BIRMINGHAM DIRECTOR	131.005 MHz DOC 40 NM/ 20,000 FT			As Directed by ATC	ATZ hours coincident with Approach hours. In the event of a radar failure, the BIRMINGHAM APPROACH callsign should be used on Channel 123.980 or 131.005.
	BIRMINGHAM RADAR	123.980 MHz DOC 40 NM/ 20,000 FT			H24	
		131.330 MHz DOC 40 NM/ 20,000 FT			As Directed by ATC	
TWR	BIRMINGHAM DELIVERY	121.930 MHz DOC A/C on the ground			H24	GMC outside operating hours use freq 118.305 MHz Departing aircraft are to make initial contact with BIRMINGHAM DELIVERY on 121.930 MHz.

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
	BIRMINGHAM GROUND	121.805 MHz DOC A/C on the ground			O/R	
	BIRMINGHAM TOWER	118.305 MHz DOC 25 NM/ 4000 FT			H24	
ATIS	BIRMINGHAM INFORMATION	136.030 MHz DOC 60 NM/ 20,000 FT			H24	Also available by telephone: 0121-767 1260
OTHER	BIRMINGHAM FIRE	121.600 MHz Non-ATS frequency.				Available when Fire vehicle attending aircraft on the ground in an emergency.
OTHER	BIRMINGHAM EMERGENCY	121.500 MHz DOC 25 NM/ 4000 FT			H24	

EGBB AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ III 0.13°W (2022)	IBIR	110.100 MHz	HO	522631.38N 0014405.69W		(RWY 15) False Capture may be experienced when approaching from the north.
ILS/GP	IBIR	334.400 MHz	HO	522736.73N 0014527.97W		3° ILS Ref Datum Hgt 55 FT.
ILS/LLZ III 0.14°W (2022)	IBM	110.100 MHz	HO	522800.17N 0014544.39W		(RWY 33)
ILS/GP	IBM	334.400 MHz	HO	522652.36N 0014437.95W		3° ILS Ref Datum Hgt 54 FT.
DME	IBM	38X 110.100 MHz	HO	522713.83N 0014506.29W	357 FT	(RWY 33) On AD. Freq paired with ILS I-BM and I-BIR. Zero range indicated at THR of Runway 15 and 33.
DME	IBIR	38X 110.100 MHz	HO	522713.83N 0014506.29W	357 FT	(RWY 15) On AD. Freq paired with ILS I-BM and I-BIR. Zero range indicated at THR of Runway 15 and 33.
NDB (L) 0.13°W (2022)	BHX	406.000 kHz	H24	522716.37N 0014508.59W		On AD. Range 25 NM.

EGBB AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Unless by prior agreement aircraft arriving or departing on international flights must clear Customs on Stands 1-86.
- b) Slots for all commercial air transport movements must be cleared with Airport Co-ordination Ltd: SITA: LONACXH; e-mail: lonacxh@acl-uk.org; Tel: 020-8634 0636, Fax: 020-8564 0691.
- c) Operators are required to have made arrangements for ground handling prior to arrival. Unless in an emergency, inbound diversions will only be accepted subject to stand availability. However operators should note that off-loading and aircraft turnaround may be subject to significant delays.
- d) The wearing of high visibility clothing by all employed on the apron including flight crew and attendants is mandatory. It is the responsibility of the aircraft captain to ensure passengers are escorted by aircrew or ground staff at all times when on foot in external areas of the Aerodrome.
- e) Aircraft not able to communicate with ATC by radio will not be accepted.
- f) Fixed Electrical Ground Power (FEGP) must be used whenever available and serviceable. Use of aircraft Auxiliary Power Units (APUs), and diesel Ground Power Units is subject to strict controls as set out in published airport regulations. APUs should be shut down as soon as practicable following arrival and not restarted until 30 minutes prior to departure.

28 Nov 2024

- g) It is a requirement that every airline using Birmingham Airport must have local orders compatible with Birmingham Emergency Orders. Airlines, General Aviation operators and Flying clubs should also note that it is their responsibility to recover disabled aircraft and aircraft wreckage. They must have appropriate arrangements in place, and confirmed in writing to Birmingham Airport, before commencing flying operations into the aerodrome. Birmingham Airport will act as coordinating body throughout the recovery operation and has only limited equipment which may be used to assist in the recovery of aircraft.
- h) Birmingham operates a standard taxi time of 15 minutes. Operators must ensure all flight plans filed include a taxi time of 15 minutes.

2 GROUND MOVEMENT

- a) Clearance Delivery
 - i. ATC Clearances may be obtained by Voice RTF or Datalink Departure Clearance Service (DCL). Pilots should not request their clearance or SID information earlier than EOBT-15 minutes.
 - ii. Voice RTF
 - 1. Pilots of departing aircraft are to call Birmingham Delivery on 121.930 MHz for ATC clearance stating aircraft type, stand number and code letter of latest ATIS received. All operators are to report ready for start with Birmingham Delivery and then proceed as directed by ATC.
 - iii. Data link Departure Clearance (DCL)
 - 1. Pre-departure clearance by datalink is available at Birmingham for suitably equipped aircraft. Details of the DCL service may be obtained from ATC Operations on +44 (0)121-767 1235.
 - 2. DCL service is available from EOBT -15 minutes.
 - 3. DCL Clearances will not be issued if requested earlier than EOBT -15 minutes. If requested early, a standby message will be delivered and the clearance will automatically be delivered at EOBT -15 minutes.
 - 4. Successful clearances must be ACCEPTED within 10 minutes of receipt or a 'revert to voice' message will be received.
 - 5. If any data errors are detected by the system a 'revert to voice' message will be received.
 - 6. If the attempt to obtain a clearance is unsuccessful the aircraft should revert to voice RTF.
 - 7. Departing aircraft must report their aircraft type, stand number and code letter of latest ATIS received. All operators are to report ready for start with Birmingham Delivery and then proceed as directed by ATC.
 - b) Birmingham Airport is equipped with an Advanced Surface Movement Radar utilising Mode-S.
 - i. Aircraft operators intending to use Birmingham Airport shall ensure that Mode-S transponders are able to operate when the aircraft is on the ground.
 - ii. Flight crew shall:
 - 1. Select AUTO mode and the assigned Mode-A code.
 - 2. If AUTO mode is not available Select ON (e.g. XPNDR) and assigned Mode-A code:
 - (aa) From the request for push back or taxi whichever is earlier;
 - (bb) After landing, continuously, until the aircraft is fully parked on stand.
 - 3. When fully parked on stand select STBY.
 - iii. Whenever the aircraft is capable of reporting Aircraft Identification (i.e. call sign used in flight), the Aircraft's Identification should also be entered from the request for push back or taxi whichever is earlier (through the FMS or the Transponder Control Panel). Flight Crew must use the ICAO defined format for entry of the Aircraft Identification.
 - iv. To ensure that the performance of systems based on SSR frequencies (including airborne TCAS units and SSR radars) is not compromised; TCAS should not be selected before approaching the holding point. It should then be deselected after vacating the runway.
- Aircraft taxiing without flight plan should select Mode A code 2000.
- c) All operators requesting tow are to contact Birmingham Ground on 121.805 MHz.
 - d) Taxiing with engine(s) shut down: The Airport Company will, where possible, facilitate operators wishing to taxi to or from the terminal with less than all engines running. Operators that would like to undertake taxiing with less than all engines operating should in the first instance contact the Airfield Operations Manager, with details of the particular aircraft types involved and likely schedule times.
 - e) Elmdon Apron:
 - i. Marshalling is mandatory for all aircraft parking on the Elmdon Apron;
 - ii. Pilots are advised that parking on the Elmdon apron is under marshaller guidance only. Care should be exercised due to the proximity of other aircraft when manoeuvring. Code E aircraft will be provided with follow-me guidance when entering Taxiway Foxtrot due to reduced main gear wheel to paved edge clearance on the bend.
 - iii. pilots are reminded of the need to maintain unobstructed access to the hangars at all times.
 - f) Due to restrictions, Taxiways Tango, Uniform and Stands 81-86 inclusive may not be used during the period Mon-Sat 2300-0700 (2200-0600), Sun 2300-0800 (2200-0700); except in extenuating circumstances as defined in the night flying policy.
 - g) Aircraft commanders are asked to use minimum power settings when manoeuvring.
 - h) Self-manoeuving on Terminal Apron Stands is prohibited at all times unless approved by Airfield Operations.
 - i) Taxiway Restrictions:

- i. Follow ATC instructions to vacate the runway and taxi to stand. No aircraft is to proceed beyond C2 / E2 / S3 (Runway 15 Arrivals) or A6 (Runway 33 Arrivals) without clearance from ATC.
- j) A380 Aircraft Operations:
 - i. Operators of A380 aircraft may designate Birmingham as a nominated diversionary aerodrome subject to prior agreement with the Head of Airfield Operations Tel +44 (0)121-767 7384 and assessment of facilities at Birmingham by the Airline. The use of Birmingham as an alternate for A380 operations is also subject to UK CAA approval on an individual airline basis.
 - ii. Maximum of 3 A380s can be handled at any time (subject to stand availability).
 - iii. Follow-me may be requested via ATC if required.
 - iv. Departing aircraft must use the CAT III runway holds at all times, irrespective of weather conditions.
 - v. Diverting A380 aircraft will be provided with RFF Category 9 in accordance with UK CAA CAP 168 Chapter 8.

3 CAT II/III OPERATIONS

- a) Runways 15 and 33, subject to serviceability of the required facilities, are suitable for Category II/III operations by operators whose minima have been accepted by the Civil Aviation Authority.
- b) During Category II/III operations, special ATC procedures (ATC Low Visibility Procedures) will be applied. Pilots will be informed by ATIS broadcast or by RTF when these procedures are in operation.
- c) Departing aircraft: ATC will require departing aircraft to use the Category II/III holding points located at A2, AL1 and S2 and the Category I/II/III holding points located at E1 and F1 as appropriate.

Arriving aircraft: Pilots should delay the call 'Runway vacated' until the aircraft is clear of the amber and green coded section of the taxiway lead-off lights.

- d) Arriving aircraft should note that all appropriate runway exits are illuminated. Pilots should select the first convenient exit unless advised by ATC

4 WARNINGS

- a) Taxiway Delta between D4 and D5 is restricted to aircraft with a maximum wingspan of 42 M. Aircraft with a wingspan exceeding 42 M will be routed via Taxiway E.
- b) Pilots of long-wheelbase aircraft such as B777-300 should exercise caution when negotiating taxiway curves and intersections as main-gear to pavement edge clearance may be limited.
- c) Due to runway orientation relative to prevailing winds, pilots should anticipate crosswinds and may experience building induced turbulence and wind shear on aerodrome in strong winds.
- d) Pilots are warned that there is a possibility of Pigeons crossing the runway up to 100 FT AGL. Bird dispersal including the use of pyrotechnics in operation H24.
- e) Pilots are warned that unauthorised ground based laser lights have been directed towards aircraft in the vicinity of the airfield. All incidents should be reported immediately via the Tower to the Airport Authority.
- f) Operators should note that Birmingham Airport is unable to accept A340-600 aircraft due to limitation on taxiway curves.
- g) Aircraft requiring to back-track along the runway must be capable of turning within the runway width of 46 M.
- h) Visual/light signals from ATC are not available.
- i) The Alpha Loop taxiway adjacent to the Runway 15 threshold is authorised for use by aircraft of Code A-C inclusive only.
- j) Pilots are warned that when the runway surface condition is broadcast as wet, standing water could be encountered on the runway edge between Taxiways Foxtrot and Bravo.
- k) Airlines should be aware of the increased risk of insect nesting during the spring and summer months. During this time, the use of pitot tube covers should be considered.
- l) Pilots may experience localiser deviations due to Code D and above aircraft vacating at the end of the runway.

5 HELICOPTER OPERATIONS

- a) Helicopters to arrive and depart as instructed by ATC. All helicopters should expect to land on and depart from the main runway.

6 USE OF RUNWAYS

- a) Preferential Runway.

Runway 33 will be selected as the preferred runway for departures and arrivals when the runway surface is dry and the mean surface wind speed as displayed from Runway 33 anemometer site is 5 KT or less. Aircraft requiring the use of Runway 15 must advise ATC and state that is for operational reasons.

7 TRAINING

- a) Use of the aerodrome for training purposes is subject to the approval of Birmingham Airport Limited and the following conditions:
 - i. Training aircraft must climb straight ahead to 1000 FT QFE before turning, unless otherwise instructed by ATC;
 - ii. Aircraft above 5700 KG MTWA taking off from Runway 15 must climb straight ahead to 1.5 NM DME I BIR or 500 FT QFE whichever is later then turn as instructed by ATC;
 - iii. Training flights are restricted to commercial based operators (Easyjet, Jet2, Ryanair and TUI), NPAS, Air Ambulance (Helimed) and RAF Brize Norton only;
 - iv. Jet aircraft above 5700 KG require prior approval; contact: 0121-767 1210.

28 Nov 2024

b) Circuits

- i. Circuits by jet aircraft of more than 5700 KG MTWA on training flights will be carried out at 2500 FT QNH. Descent below this altitude should not take place until abeam the airfield on the downwind leg usually:

Runway 33 – right hand circuits;

Runway 15 – left hand circuits.

- ii. Direction may be varied for environmental reasons.

c) Procedural Instrument Training

- i. All procedural instrument training for non-turbo-jet aircraft of 5700 KG or less will require approval from ATC and is subject to prevailing traffic.

8 ROUND ROBIN FLIGHTS

- a) Operators wishing to undertake round robin flights are required to contact ATC on 0121-767 1235 prior to requesting flight clearance to confirm that the intended flight routing matches the flight plan submitted. Operators wishing to undertake round robin flights who do not comply with this requirement will not receive flight clearance and pushback until the routing has been confirmed.

EGBB AD 2.21 NOISE ABATEMENT PROCEDURES**1 NOISE**

- a) Noise Preferential Routeings and Procedures - all aircraft inbound or outbound from this aerodrome are required to conform to the following procedures; notwithstanding that these may at any time be departed from to the extent necessary for avoiding immediate danger.

2 GENERAL

- a) Every operator of aircraft using the aerodrome shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the aerodrome.
- b) Unless on radar vectors, aircraft shall avoid the congested areas of Hampton-in-Arden and Balsall Common to the southeast of the aerodrome and Dorridge, Knowle and Hockley Heath to the southwest of the aerodrome.

3 TAKE-OFF AND MISSED APPROACHES

- a) Every jet aircraft using the aerodrome shall, after take-off or 'go-around' attain as soon as safety permits, a rate of climb of at least 500 FT per minute at power settings which will ensure progressively decreasing noise levels at points under the flight path.

4 ILS APPROACHES

- a) Unless otherwise instructed by ATC, aircraft using the ILS in IMC or VMC shall not descend below 2000 FT QNH before intercepting the glidepath nor fly below the glidepath thereafter. An aircraft approaching without assistance from ILS or radar shall follow a descent path which will not result in its being at any time lower than the approach path which would be followed by an aircraft using the ILS glidepath.

5 CONTINUOUS DESCENT APPROACHES

- a) Turbo-jet and turbo-prop aircraft are expected to apply continuous descent, low power, low drag approach techniques at all times.
- b) Subject to ATC instructions, inbound aircraft are to maintain as high an altitude as practical and adopt a low power, low drag, continuous descent approach profile. ATC will provide estimated track distance to touchdown to allow pilots to descend at a rate they judge best suited to achieve continuous descent without using more power or drag than necessary. The object will be to join the glidepath at the appropriate height for the distance without level flight.
- c) To facilitate these techniques aircraft should be flown no faster than 250 KT from the Speed Limiting Points and below FL 100 and 250 KT-210 KT during the intermediate approach phase. Thereafter speed should be managed so as to achieve a continuous descent using as little power or drag as possible. ATC may impose speed control if required for separation purposes. ATC will impose a speed of 180 KT or less inside 10 DME I-BM/I-BIR.
- d) CDAs will commence from ALT 6000 FT QNH.
- e) ATC will provide regular range checks. Pilots who require additional track mileage to facilitate a successful CDA should inform ATC as soon as the requirement is apparent.

6 VISUAL CIRCUITS APPROACHES – GENERAL**a) Propeller driven aircraft MTWA 5700 KG or less**

- i. For aircraft in this category, the minimum height for joining the final approach track shall be 1000 FT QFE for all approaches.

- b) All aircraft except those excluded in paragraph 6 a

- i. All aircraft carrying out visual circuits/approaches to Runways 33 and 15 shall not, unless instructed by ATC, descend below 2500 FT QNH (2175 FT QFE) on the downwind legs until they are abeam the aerodrome, after which a continuous rate is to be maintained.
- ii. Aircraft must not join the final approach track to any runway at a height of less than 1825 FT QNH (1500 FT QFE), except when carrying out a right hand visual circuit to Runway 33 when the minimum height for joining the final approach track will be 1225 FT QNH (900 FT QFE).
- iii. To minimise noise disturbance to congested urban areas adjacent to the aerodrome, base turns to visual circuits to Runway 15 and 33 are shown in the map at AD 2-EGBB-4-1. These should be flown whenever possible.
- iv. To minimise disturbance in areas adjacent to the aerodrome, captains are requested to avoid the use of reverse thrust after landing, consistent with safe operation of the aircraft, especially between 2300-0700 (2200-0600).

7 NOISE PREFERENTIAL ROUTINGS

a) The Noise Preferential Routings given below are compatible with ATC requirements and shall apply in both VMC and IMC. The tracks are to be flown by all departing jet aircraft and by all other aircraft with a maximum certified weight exceeding 5700 KG unless otherwise instructed by ATC or unless deviations are required in the interests of safety. The use of the route is supplementary to noise abatement take-off techniques. After take-off, pilots should ensure that they are at a minimum height of 500 FT QFE before initiating any turn. The obligations of NPRs for Runway 33 cease when the aircraft is at an altitude of 3000 FT or above. The obligations of NPRs for Runway 15 northbound departures cease when the aircraft is at an altitude of 3000 FT or above. The obligations of NPRs for Runway 15 southbound departures (including COWLY, CPT, DTY) cease when the aircraft is at an altitude of 4000 FT or above.

- i. Take-off – Runway 15:

Climb straight ahead to 1.5 NM DME I BIR or 500 FT QFE whichever is later then:

Take-off Runway	Routing	Procedure
15	Left turn to a track of less than 060°	Turn left as instructed by ATC
	Left turn to a track of 060° or greater	At 2 DME I-BIR turn left as instructed by ATC
	Right turn out (non-MOSUN/LUXTO)	At 4 DME I-BIR turn right as instructed by ATC
	MOSUN/LUXTO	At 2 DME I-BIR track 165° to 4 DME I-BIR
	Unable RNAV	At 2 DME I-BIR track 165° to 4 DME I-BIR

- ii. Take-off – Runway 15 Aerodrome DME Out of Service:

Climb straight ahead to 4.5 NM DME HON or 500 FT QFE whichever is later then:

Take-off Runway	Routing	Procedure
15	Left turn to a track of less than 060°	Turn left as instructed by ATC
	Left turn to a track of 060° or greater	At 1.5 DME HON turn left as instructed by ATC
	Right turn out (non-MOSUN/LUXTO)	At 1.5 DME HON turn right as instructed by ATC
	MOSUN/LUXTO	Track 165° to 2 DME HON
	Unable RNAV	Track 165° to 2 DME HON

- iii. Take-off – Runway 33:

Climb straight ahead to 2 NM DME I BM or 500 FT QFE whichever is later. Then either

Take-off Runway	Routing	Procedure
33	Left or right turn out°	At 2 NM DME I BM turn as instructed by ATC

- iv. Take-off – Runway 33 Aerodrome DME out of service:

Climb straight ahead to 9 NM DME HON or 500 FT QFE whichever is later. Then either:

Take-off Runway	Routing	Procedure
33	Left or right turn out	At 9 NM DME HON turn as instructed by ATC

Note 1: Directions of turn onto course shall be such that as far as possible the surrounding built-up areas will be avoided.

b) Except in emergency and for safety reasons no aircraft movements or activities involving the running of aircraft engines shall take place on or along the first 100 M of Runway 15, Taxiway A or Taxiway B north of Hold A6 between the hours of 2300-0700 (2200-0600), unless the aircraft landed at the Airport before 2300 (2200) and is proceeding to the aprons. Pilots should note that in such circumstances Runway 15 TORA/ASDA/TODA will be reduced by 150 M.

8 AUXILIARY POWER UNITS (APU)

a) Except for stands not equipped with a serviceable Fixed Electrical Ground Power Unit, APU must be shut down immediately on arrival on stand and not restarted more than 30 minutes prior to departure without permission from the aerodrome operator.

28 Nov 2024

- b) Except in an emergency, no aircraft activities involving the running of APU's shall take place on the aprons between the hours of 2300-0600 (2200-0500), unless such activities are necessary in the case of an aircraft which has landed at the aerodrome before 2330 (2230).

9 NIGHT NOISE RESTRICTIONS/ALLOCATIONS

- a) Birmingham Airport operates a noise policy restricting the operation of certain types of aircraft during the night period of 2330-0600 (2230-0500). Full details are available from Airport Co-ordination Limited or the Airfield Duty Manager.
- b) Aircraft with a noise classification of 93 EPNdB or more are not permitted to be scheduled during the night period. Aircraft with a noise classification of 93 EPNdB or more may be permitted to operate in exceptional circumstances subject to prior approval by the Airfield Duty Manager.
- c) All movements recording a level above 83 dB(A) Lmax on departure at the noise monitors located 6.5 KM from 'start of roll' during the night period will be subject to a runway surcharge.
- d) Records of night infringements are available on request from the Birmingham Airport Sustainability Team.

10 RESTRICTIONS

- a) Restrictions are imposed on the ground running of engines in the interests of noise abatement and operators are advised to contact the Airfield Duty Manager (0121-767 7139).

11 NOISE ABATEMENT PROCEDURES FOR HELICOPTERS

- a) To minimise noise disturbance to urban areas adjacent to the airport, helicopters should, except in the case of an emergency, avoid overflying the noise sensitive area at less than 500 FT AAL. This area extends between 230° and 290° from the Western end of stand 506, to a distance of 0.5 NM

EGBB AD 2.22 FLIGHT PROCEDURES

1 RADIO COMMUNICATION FAILURE PROCEDURES

In the event of complete radio failure in an aircraft the pilot is to adopt the appropriate procedures notified at ENR 1.1.3, with the exception described below.

- a) Inbound Aircraft
- i. When complete communications failure occurs in the aircraft before ETA, or before EAT when this has been received and acknowledged, the aircraft will:
 1. fly to the appropriate holding point (GROVE or CHASE);
 2. hold at the last assigned level until the last acknowledged ETA plus 10 minutes or EAT when this has been given;
 3. descend to the lowest whole flight level which gives at least 1000 FT separation from the Transition Altitude. When level transit from the appropriate holding point (GROVE or CHASE) to the BHX holding point;
 4. when established in the BHX hold commence descent for landing in accordance with the approach procedure for the runway-in-use and effect a landing within 30 minutes (or later if able to approach and land visually).
 - ii. If complete radio communications failure occurs after an aircraft has reported to ATC on reaching the holding point, the aircraft will:
 1. hold at the last assigned level at GROVE or CHASE until:

(aa) ATA over the holding point plus 10 minutes or 10 minutes after the last acknowledged communication with ATC, whichever is the later; or

(bb) EAT when this has been received and acknowledged;
 2. descend to the lowest whole flight level which gives at least 1000 FT separation from the Transition Altitude. When level transit from the appropriate holding point (GROVE or CHASE) to the BHX holding point;
 3. when established in the BHX hold commence descent for landing in accordance with the approach procedure for the runway-in-use and effect a landing within 30 minutes (or later if able to approach and land visually).
 - iii. When complete radio communication failure occurs during intermediate or final approach under radar control the procedures to be followed are detailed at AD 2-EGBB-5-1.
 - iv. When complete radio communication failure occurs in the aircraft following a missed approach the aircraft will:
 1. fly the appropriate missed approach procedure to BHX NDB(L);
 2. complete at least one holding pattern at 2500 FT;
 3. then commence descent for landing in accordance with the approach procedure for the runway-in-use and effect a landing within 30 minutes (or later if able to approach and land visually)
 - v. The routes and levels to be used when leaving the Zone or Holding Area in accordance with the procedures given at ENR 1.1.3 are shown in the table below:

Position at time of decision	Route
BHX NDB(L) GROVE CEDAR CHASE MAPLE	Track 270°T at last assigned altitude

- b) Outbound Aircraft
 - i. Aircraft departing under radar control from Birmingham may be instructed by the radar controller, via aerodrome control, to maintain specific headings.
 - ii. If, after having been instructed to maintain a specific heading after take-off, a pilot experiences radio failure, he shall climb on the assigned heading to the first altitude detailed in the clearance, maintain this heading and altitude for two minutes, and then proceed in accordance with the published radio failure procedures.

2 PROCEDURE FOR INBOUND/OUTBOUND AIRCRAFT VIA MOSUN/LUXTO

a) Birmingham-MOSUN Procedures

The Birmingham-MOSUN Procedure is only available to turbo-prop aircraft joining or leaving MOSUN FL 160 or below between Mon-Fri 0900-1700 (0800-1600) excluding public holidays.

- b) Operators intending their aircraft to make use of the MOSUN procedure on departure must ensure that the following addresses are added to the flight plan:

EGWDZQZX and EGFFZPZX and EGTTFZC

Significant delays may be encountered in the event that these addresses are omitted.

c) MOSUN Departure Clearances

When Runway 15 is in use, aircraft departing towards MOSUN will be instructed to follow the MOSUN 15 procedure. For example: "Callsign, MOSUN 15 procedure, squawk XXXX".

- i. MOSUN 15 Procedure - Runway 15

At 2 DME, turn right to track 165 to 4 DME, then turn right cleared to leave controlled airspace on track MOSUN, climb to altitude 6000 FT.

When Runway 33 is in use, aircraft departing towards MOSUN will be issued with the BRUMI 1M SID.

- ii. BRUMI 1M Departure - Runway 33

The BRUMI 1M SID is available to turbo prop aircraft joining at MOSUN FL 160 or below between the hours specified in paragraph 2a.

- d) During the hours when N92 is available:

When Runway 33 is in use, aircraft filing via N92 will receive an BRUMI 1M departure.

When Runway 15 is in use, aircraft departing to join N92 at LUXTO will be instructed to follow the LUXTO 15 procedure. For example:

"Callsign, LUXTO 15 procedure, squawk XXXX"

- i. LUXTO 15 procedure – Runway 15

At 2 DME, turn right to track 165 to 4 DME, then turn right direct LUXTO, climb to altitude 6000 FT.

3 PROCEDURE FOR INBOUND AIRCRAFT

a) Standard Terminal Arrival Routes (STARs)

- i. Standard Arrival routes for aircraft inbound from the airways system will be routed via the Standard Terminal Arrival Routes (STARs) detailed at AD 2-EGBB-7 charts.
- ii. Where STARs are designated as RNAV1 Only, Non-RNAV 1 aircraft should file the via the existing route structure as featured in the SRD. Aircraft should not proceed beyond CHASE or GROVE without ATC clearance.

b) Clearance to enter the CTR/CTA

- i. Aircraft flying the Airways System will be cleared into the CTR/CTA without having to request a specific entry clearance.
- ii. Aircraft wishing to enter the CTR/CTA from the London FIR must obtain clearance from Birmingham Radar Control before entering Controlled Airspace.

28 Nov 2024

c) **Holding.** Holding patterns are as follows:

Birmingham NDB(L) BHX	Holding axis 147° MAG, turning right at the facility. (Lowest holding ALT 2500 FT) (See Note) .
GROVE	Holding fix HON VOR/DME 284°/10 NM on an axis of 104° MAG turning right at the fix. Lowest holding level FL 70. Speed limit 210 KT.
CEDAR	Holding axis 147° MAG, turning right at the fix. (Lowest holding ALT 2500 FT) (See Note) .
CHASE	Holding fix HON VOR/DME 330°/18 NM on an axis of 150° MAG turning right at the fix. Lowest holding level 5000 FT (See Note) . Speed limit 210 KT.
MAPLE	Holding axis 327° MAG, turning left at the fix. (Lowest holding ALT 2500 FT) (See Note) .

Note: Aircraft holding at the above facilities may be required to do so above the upper limit of the Birmingham CTA, and within the Daventry CTA.

d) **Missed Approaches**

- i. Loss of Radio Communications – The Birmingham Standard Missed Approach Procedures are detailed within the associated Instrument Flight Procedure Charts. The following procedures shall apply in the event of executing a missed approach with loss of radio communications:

Landing direction	Procedure
Runway 15	Climb ahead to 1000 FT (QNH). Turn right onto track 166° MAG to 2500 FT or I BIR DME 4, whichever is the later, then turn left to NDB(L) BHX.
Runway 33	Climb ahead to 2500 FT (QNH) or I BM DME 2, whichever is the later. Then procedure turn right to NDB(L) BHX.

- ii. Non-Radar Procedures – The Birmingham Standard Missed Approach Procedures are detailed within the associated Instrument Flight Procedure Charts. The following procedures shall apply in the event of executing a missed approach during non-radar operations.

Landing direction	Procedure
Runway 15	Climb ahead to 1000 FT (QNH). Turn right onto track 166° MAG to 3000 FT or I BIR DME 4, whichever is the later, then turn left to NDB(L) BHX.
Runway 33	Climb ahead to 3000 FT (QNH) or I BM DME 2, whichever is the later. Then procedure turn right to NDB(L) BHX.

e) **Speed Control**

- i. Pilots should typically expect the following speed restrictions to be enforced:
220 KT from the holding facility during intermediate approach phase;
180 KT on base leg/closing heading to the ILS;
180-160 KT when first established on the ILS;
160 KT between 7 and 4 DME
- ii. These speeds are mandatory for applying standardised CDA approaches, optimizing departure flow and for ATC separation purposes. In the event of a new (non-speed related) ATC Clearance being issued (eg an instruction to descend on ILS), pilots are not absolved from a requirement to maintain a previously allocated speed. All speed restrictions are to be flown as accurately as possible. Aircraft unable to conform to these speeds should inform ATC and state what speeds will be used. In the interests of accurate spacing, pilots are requested to comply with speed adjustments as promptly as feasible within their own operational constraints, advising ATC if circumstances necessitate a change of speed for aircraft performance reasons.

4 PROCEDURES FOR OUTBOUND AIRCRAFT

- a) After departure, aircraft shall remain on the Tower frequency until instructed.
- b) Departure Speed Restriction: In order to optimise the departure flow and assist in the separation between successive departing aircraft a speed limit of 250 KT IAS below FL 100 is applicable until removed by ATC. ATC may remove the speed restriction by using the phrase No ATC Speed Restriction. Pilots are reminded that this phrase does not relieve the pilot of the responsibility to adhere to the ground track of the Noise Preferential Route, which may require a speed/power limitation.
- c) If for any reason pilots are unable to comply with the 250 KT IAS speed restriction the pilot should immediately advise ATC and state the minimum speed acceptable. If a pilot anticipates before departure that they will be unable to comply with the speed restriction, they should inform ATC when requesting start-up clearance, stating the minimum speed acceptable. In this case the pilot will be informed before take-off of any higher speed limitation.
- d) Pilots of departing VFR flights should expect departure via one of the following 4 designated VRPs closest to the required departure track, not above altitude 2000 FT:
- M42 Junction 10 (Tamworth);
 - M6 Junction 3 (Bedworth);
 - M40/M42 Interchange;
 - Frankley Reservoirs.

Pilots should state requested VRP on first contact with ATC.

5 SPECIAL VFR FLIGHT

- a) Special VFR clearances for flights within the Birmingham CTR may be requested and will be given whenever traffic conditions permit. These flights are subject to the general conditions laid down for Special VFR flights.
- b) Aircraft may be given a radar service whilst within the CTR if, due to the traffic situation, ATC considers it advisable. It will remain the responsibility of the pilot to remain at all times in flight conditions which will enable him to determine his flight path and to keep clear of obstacles, and to ensure that he is able to comply with the requirements of SERA.3105 Minimum Heights, SERA.5010 Special VFR in control zones and ENR 1.2 paragraph 1.3(l). Pilots must inform the Radar Controller if compliance with the above entails a change of heading or height.
- c) Clearance to make Special VFR flights below 1500 FT ALT will not be given in the sector of the Birmingham CTR enclosed by the bearings 240°T and 360°T.

6 VISUAL REFERENCE POINTS (VRP)

- a) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

7 FREQUENCY MONITORING CODE (FMC)

- a) Pilots operating in the vicinity of, but intending to remain outside Birmingham controlled airspace, clear of Coventry within the area defined by straight lines joining successively the following points and maintaining a listening watch only on Birmingham Radar frequency, 123.980 MHz, are encouraged to select SSR code 0010.

524800N 0015216W - 524216N 0021343W -

523130N 0021145W - 520515N 0014622W -

521600N 0011000W - 523440N 0013300W -

524800N 0015216W.

- b) Selection of 0010 does not imply the receipt of an ATC service. Aircraft displaying the code are not expected to contact ATC under normal circumstances, remain responsible for their own navigation, separation, terrain clearance and are expected to remain clear of the controlled airspace at all times.
- c) Whilst squawking 0010 pilots should be aware that Birmingham Radar may make blind transmissions in order to ascertain a particular aircraft's intentions/route.
- d) When a pilot ceases to maintain a listening watch, code 0010 shall be deselected.

EGBB AD 2.23 ADDITIONAL INFORMATION

Not Applicable.

EGBB AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGBB-2-1

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING CHART - ICAO

AD 2.EGBB-2-2

A380 GROUND MOVEMENT - ICAO

AD 2.EGBB-2-3

VISUAL CIRCUIT RWY 15/33 - RECOMMENDED TURNS TO BASE LEG

AD 2.EGBB-4-1

CONTROL ZONE and CONTROL AREA CHART - VRPS

AD 2.EGBB-4-3

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGBB-5-1

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 15 DTY 2Y - ICAO

AD 2.EGBB-6-1

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 15 COWLY 2Y - ICAO

AD 2.EGBB-6-2

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 15 CPT 2Y - ICAO

AD 2.EGBB-6-3

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 15/33 LUVUM 1Y 1M - ICAO

AD 2.EGBB-6-4

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 33 ADMEX 1M UNGAP 1M - ICAO

AD 2.EGBB-6-5

RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) RWY 33 BRUMI 1M - ICAO

28 Nov 2024

AD 2.EGBB-6-6

STANDARD INSTRUMENT DEPARTURE CODING TABLES RWY 15 DTY 2Y COWLY 2Y

AD 2.EGBB-6-7

STANDARD INSTRUMENT DEPARTURE CODING TABLES RWY 15 CPT 2Y LUVUM 1Y

AD 2.EGBB-6-8

STANDARD INSTRUMENT DEPARTURE CODING TABLES RWY 33 LUVUM 1M ADMEX 1M UNGAP 1M BRUMI 1M

AD 2.EGBB-6-9

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) FIGZI 1B - ICAO

AD 2.EGBB-7-1

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) MAKUX 2B - ICAO

AD 2.EGBB-7-2

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) HEMEL 1B SILVA 1B - ICAO

AD 2.EGBB-7-3

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) DOLOP 1B MALUD 1B AMPIT 1B WAL 1B - ICAO

AD 2.EGBB-7-4

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) BEGAM 1B CROFT 1B LIBSO 1B VEGUS 1B - ICAO

AD 2.EGBB-7-5

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) POL 1B - ICAO

AD 2.EGBB-7-6

STANDARD INSTRUMENT ARRIVAL CODING TABLES FIGZI 1B MAKUX 2B HEMEL 1B SILVA 1B

AD 2.EGBB-7-7

STANDARD INSTRUMENT ARRIVAL CODING TABLES DOLOP 1B MALUD 1B AMPIT 1B WAL 1B

AD 2.EGBB-7-8

STANDARD INSTRUMENT ARRIVAL CODING TABLES BEGAM 1B CROFT 1B LIBSO 1B

AD 2.EGBB-7-9

STANDARD INSTRUMENT ARRIVAL CODING TABLES VEGUS 1B POL 1B

AD 2.EGBB-7-10

RNAV HOLD CODING TABLES GROVE CHASE

AD 2.EGBB-7-11

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 15 - ICAO

AD 2.EGBB-8-1

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 15 - ICAO

AD 2.EGBB-8-2

INSTRUMENT APPROACH CHART RNP RWY 15 - ICAO

AD 2.EGBB-8-3

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 15 - ICAO

AD 2.EGBB-8-4

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 33 - ICAO

AD 2.EGBB-8-5

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 33 - ICAO

AD 2.EGBB-8-6

INSTRUMENT APPROACH CHART RNP RWY 33 - ICAO

AD 2.EGBB-8-7

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 33 - ICAO

AD 2.EGBB-8-8

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 15

AD 2.EGBB-8-9

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 33

AD 2.EGBB-8-10

EGBB AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

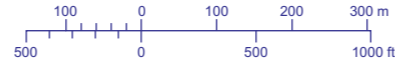
AERODROME CHART - ICAO

ARP 522714N 0014453W

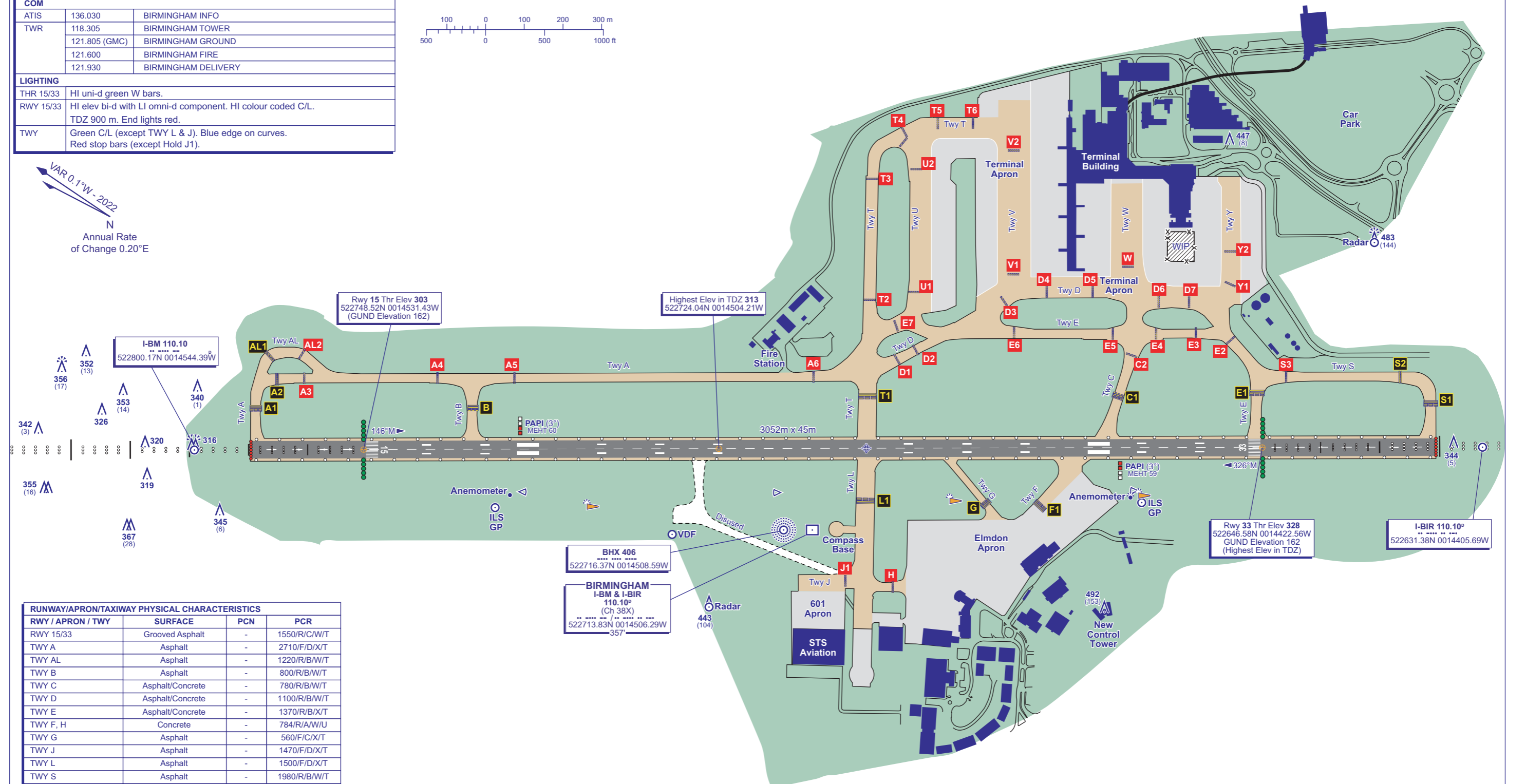
AD ELEV 339FT

BIRMINGHAM EGBB

COM		
ATIS	136.030	BIRMINGHAM INFO
TWR	118.305	BIRMINGHAM TOWER
	121.805 (GMC)	BIRMINGHAM GROUND
	121.600	BIRMINGHAM FIRE
	121.930	BIRMINGHAM DELIVERY
LIGHTING		
THR 15/33	HI uni-d green W bars.	
RWY 15/33	HI elev bi-d with LI omni-d component. HI colour coded C/L. TDZ 900 m. End lights red.	
TWY	Green C/L (except TWY L & J). Blue edge on curves. Red stop bars (except Hold J1).	



VAR 0.1°W - 2022
Annual Rate of Change 0.20°E



RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS			
RWY / APRON / TWY	SURFACE	PCN	PCR
RWY 15/33	Grooved Asphalt	-	1550/R/C/W/T
TWY A	Asphalt	-	2710/F/D/X/T
TWY AL	Asphalt	-	1220/R/B/W/T
TWY B	Asphalt	-	800/R/B/W/T
TWY C	Asphalt/Concrete	-	780/R/B/W/T
TWY D	Asphalt/Concrete	-	1100/R/B/W/T
TWY E	Asphalt/Concrete	-	1370/R/B/X/T
TWY F, H	Concrete	-	784/R/A/W/U
TWY G	Asphalt	-	560/F/C/X/T
TWY J	Asphalt	-	1470/F/D/X/T
TWY L	Asphalt	-	1500/F/D/X/T
TWY S	Asphalt	-	1980/R/B/W/T
TWY T	Concrete	-	1080/R/C/W/T
TWY U	Concrete	-	1004/R/B/W/U
TWY V	Asphalt	-	3780/F/B/X/T
TWY W	Asphalt	-	2120/F/A/X/T
TWY Y	Concrete	-	750/R/B/W/T
Terminal Apron	See AD 2-EGBB-2-2		
Elmdon Apron			
601 Apron			

BHX 406
522716.37N 0014508.59W

BIRMINGHAM I-BM & I-BIR 110.10°
(Ch 38X)
522713.83N 0014506.29W
357

Rwy 33 Thr Elev 328
522646.58N 0014422.56W
GUND Elevation 162
(Highest Elev in TDZ)

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.

BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET

ELEVATIONS IN FEET AMSL	492 (153)
HEIGHTS IN FEET ABOVE AD	

CHANGE (12/24): PCR TABLE.

AERO INFO DATE 18 SEP 24

AD 2-EGBB-2-1

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING CHART - ICAO

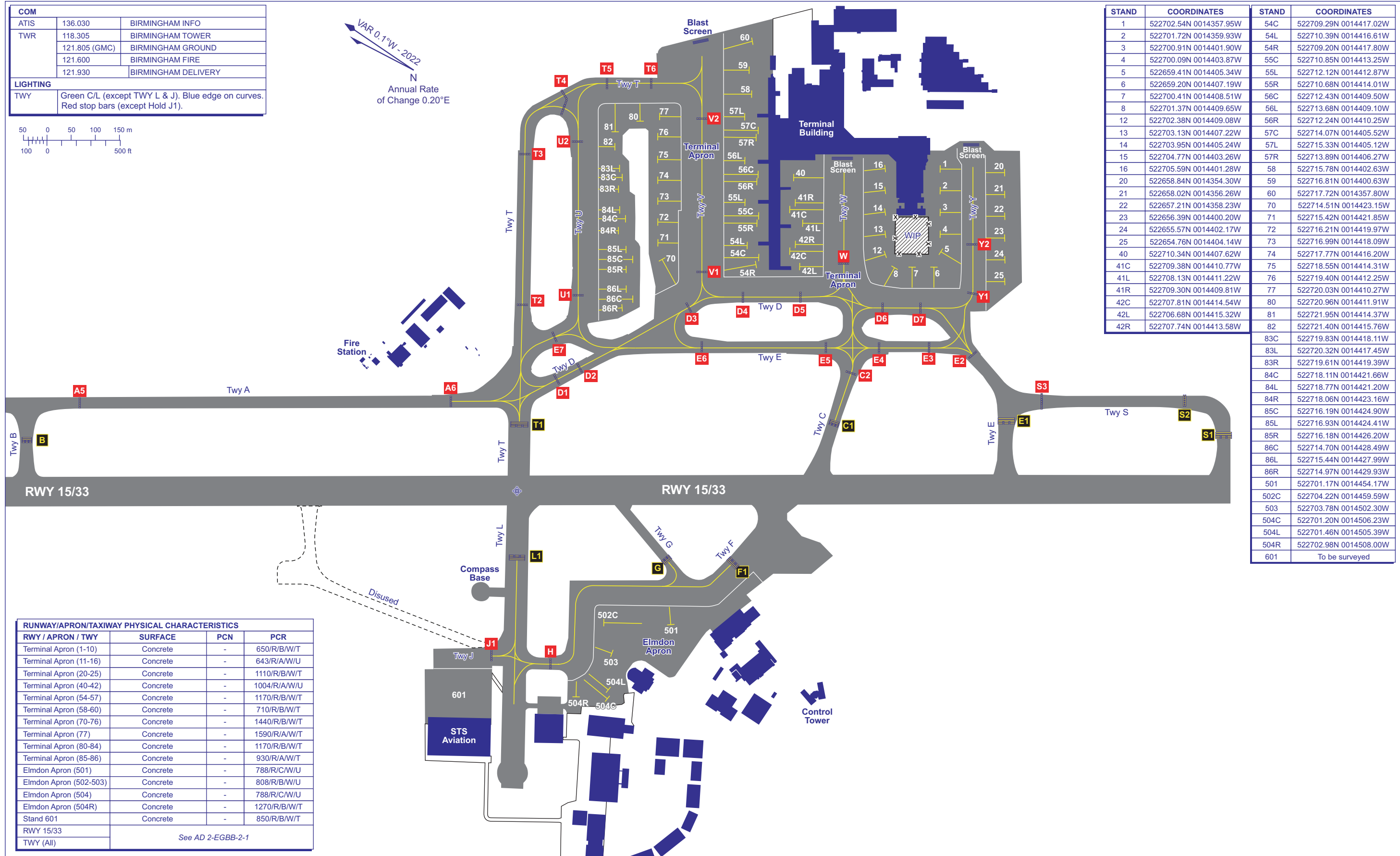
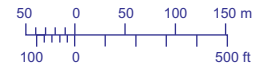
ARP 522714N 0014453W

AD ELEV 339FT

**BIRMINGHAM
EGBB**

COM		
ATIS	136.030	BIRMINGHAM INFO
TWR	118.305	BIRMINGHAM TOWER
	121.805 (GMC)	BIRMINGHAM GROUND
	121.600	BIRMINGHAM FIRE
	121.930	BIRMINGHAM DELIVERY
LIGHTING		
TWY	Green C/L (except TWY L & J). Blue edge on curves. Red stop bars (except Hold J1).	

VAR 0.1°W - 2022
N
Annual Rate of Change 0.20°E



STAND	COORDINATES	STAND	COORDINATES
1	522702.54N 0014357.95W	54C	522709.29N 0014417.02W
2	522701.72N 0014359.93W	54L	522710.39N 0014416.61W
3	522700.91N 0014401.90W	54R	522709.20N 0014417.80W
4	522700.09N 0014403.87W	55C	522710.85N 0014413.25W
5	522659.41N 0014405.34W	55L	522712.12N 0014412.87W
6	522659.20N 0014407.19W	55R	522710.68N 0014414.01W
7	522700.41N 0014408.51W	56C	522712.43N 0014409.50W
8	522701.37N 0014409.65W	56L	522713.68N 0014409.10W
12	522702.38N 0014409.08W	56R	522712.24N 0014410.25W
13	522703.13N 0014407.22W	57C	522714.07N 0014405.52W
14	522703.95N 0014405.24W	57L	522715.33N 0014405.12W
15	522704.77N 0014403.26W	57R	522713.89N 0014406.27W
16	522705.59N 0014401.28W	58	522715.78N 0014402.63W
20	522658.84N 0014354.30W	59	522716.81N 0014400.63W
21	522658.02N 0014356.26W	60	522717.72N 0014357.80W
22	522657.21N 0014358.23W	70	522714.51N 0014423.15W
23	522656.39N 0014400.20W	71	522715.42N 0014421.85W
24	522655.57N 0014402.17W	72	522716.21N 0014419.97W
25	522654.76N 0014404.14W	73	522716.99N 0014418.09W
40	522710.34N 0014407.62W	74	522717.77N 0014416.20W
41C	522709.38N 0014410.77W	75	522718.55N 0014414.31W
41L	522708.13N 0014411.22W	76	522719.40N 0014412.25W
41R	522709.30N 0014409.81W	77	522720.03N 0014410.27W
42C	522707.81N 0014414.54W	80	522720.96N 0014411.91W
42L	522706.68N 0014415.32W	81	522721.95N 0014414.37W
42R	522707.74N 0014413.58W	82	522721.40N 0014415.76W
		83C	522719.83N 0014418.11W
		83L	522720.32N 0014417.45W
		83R	522719.61N 0014419.39W
		84C	522718.11N 0014421.66W
		84L	522718.77N 0014421.20W
		84R	522718.06N 0014423.16W
		85C	522716.19N 0014424.90W
		85L	522716.93N 0014424.41W
		85R	522716.18N 0014426.20W
		86C	522714.70N 0014428.49W
		86L	522715.44N 0014427.99W
		86R	522714.97N 0014429.93W
		501	522701.17N 0014454.17W
		502C	522704.22N 0014459.59W
		503	522703.78N 0014502.30W
		504C	522701.20N 0014506.23W
		504L	522701.46N 0014505.39W
		504R	522702.98N 0014508.00W
		601	To be surveyed

RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS			
RWY / APRON / TWY	SURFACE	PCN	PCR
Terminal Apron (1-10)	Concrete	-	650/R/B/W/T
Terminal Apron (11-16)	Concrete	-	643/R/A/W/U
Terminal Apron (20-25)	Concrete	-	1110/R/B/W/T
Terminal Apron (40-42)	Concrete	-	1004/R/A/W/U
Terminal Apron (54-57)	Concrete	-	1170/R/B/W/T
Terminal Apron (58-60)	Concrete	-	710/R/B/W/T
Terminal Apron (70-76)	Concrete	-	1440/R/B/W/T
Terminal Apron (77)	Concrete	-	1590/R/A/W/T
Terminal Apron (80-84)	Concrete	-	1170/R/B/W/T
Terminal Apron (85-86)	Concrete	-	930/R/A/W/T
Elmdon Apron (501)	Concrete	-	788/R/C/W/U
Elmdon Apron (502-503)	Concrete	-	808/R/B/W/U
Elmdon Apron (504)	Concrete	-	788/R/C/W/U
Elmdon Apron (504R)	Concrete	-	1270/R/B/W/T
Stand 601	Concrete	-	850/R/B/W/T
RWY 15/33	See AD 2-EGBB-2-1		
TWY (All)	See AD 2-EGBB-2-1		

CHANGE (12/24): PCR TABLE.

AERO INFO DATE 12 SEP 24

AD 2-EGBB-2-2

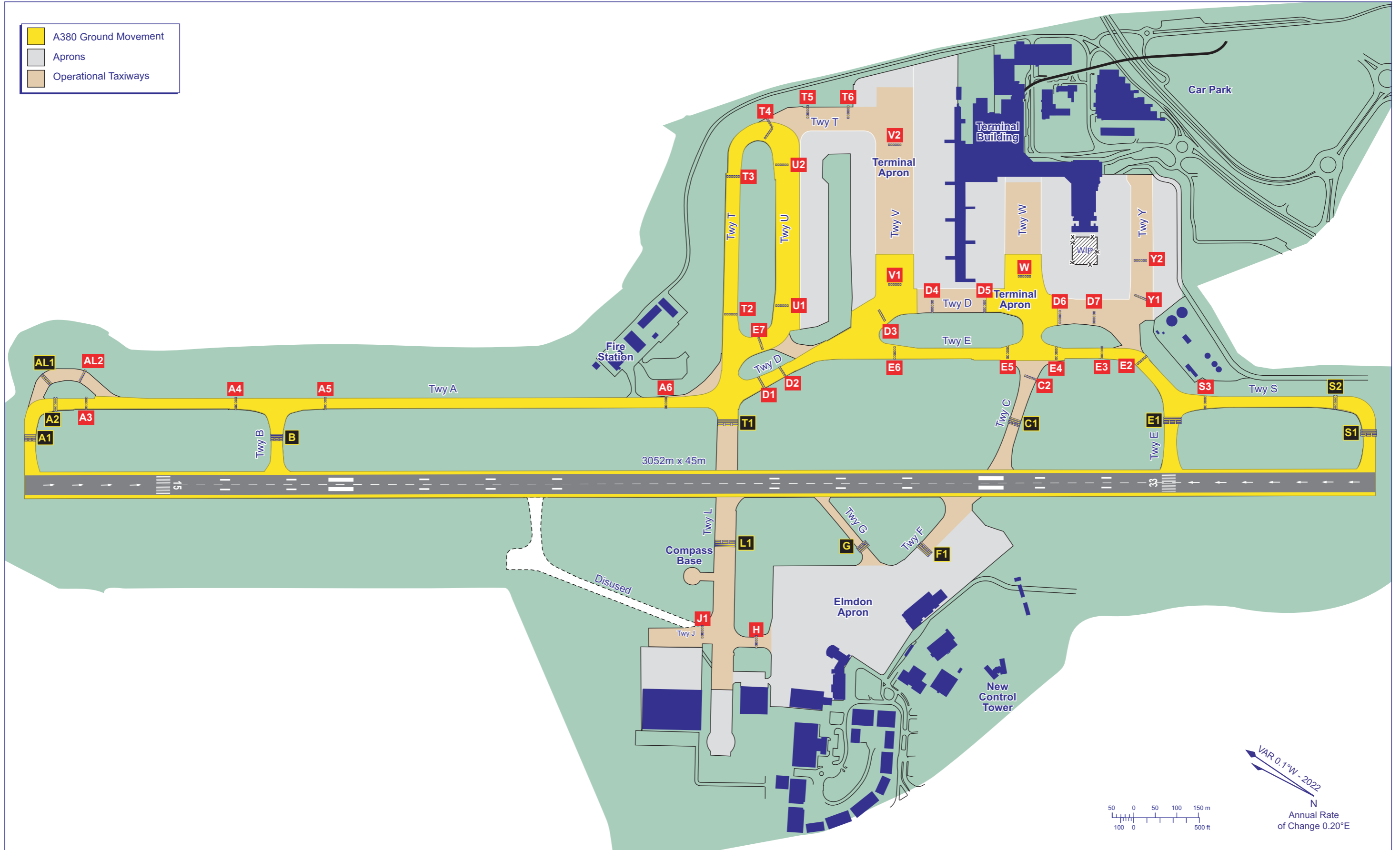
AERODROME CHART
A380 GROUND MOVEMENT - ICAO

ARP 522714N 0014453W

AD ELEV 339FT

BIRMINGHAM
EGBB

- A380 Ground Movement
- Aprons
- Operational Taxiways



CHANGE (12/24): EDITORIAL.

AERO INFO DATE 17 SEP 24

AD 2.EGBB-2-3

INTENTIONALLY BLANK

EGSC — CAMBRIDGE**EGSC AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGSC — CAMBRIDGE

EGSC AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 521218N Long: 0001030E Centre of Runway 05/23 Asphalt.
2	Direction and distance from city	1.5 NM E of Cambridge.
3	Elevation / Reference temperature / Mean Low Temperature	48 FT / 19 °C / -
4	Geoid undulation at AD ELEV PSN	151 FT
5	Magnetic Variation / Annual Change	0.57°E (2022) / 0.20°E
6	AD Administration Address Telephone Telefax E-mail address Web address	CAMBRIDGE CITY AIRPORT The Airport, Cambridge CB5 8RX. 01223-373213 (ATC) 01223-373717 (GA) 01223-295631 (ATIS) 01223-373535 (Airport Operations) 01223-373214 (Cambridge Jet Centre/FBO) 01223-373502 (ATC) 01223-373259 (Airport Operations) airport.dutymanager@cambridgeairport.com www.cambridgeairport.com
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGSC AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Fri 0800-1800 (0700-1700); see remarks.
2	Customs and immigration	As AD hours. 24 hours prior notice required. See item 12.
3	Health and sanitation	
4	AIS Briefing Office	As AD hours. By arrangement with FBO.
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD hours, and by arrangement. See also AD 2.18.
8	Fuelling	As AD hours.
9	Handling	FBO (Mandatory handling over 2.7 tonnes and commercial flights) as AD hours. Cambridge Aeroclub: (General Aviation Under 2.7 tonnes) 0830-1800 (0730-1700).
10	Security	By arrangement with FBO.
11	De-icing	As AD hours.
12	Remarks	Cambridge is not an approved port of entry under the Immigration Act 1971, but clearance for flights originating outside the Common Travel Area can usually be arranged, subject to prior notification. A completed General Aviation Report form must be submitted at least 24 hours before arrival using the UK Border Force online application system. ATS Mon-Fri hours as above, Sat & Sun No ATS, Local flying only, No visiting aircraft. Aerodrome is strictly PPR; visiting aircraft 24 hour prior notification required. Contact Air Traffic Control either by: Email: ATC.admin@cambridgeairport.com Web: www.cambridgeairport.com Phone: 01223-373213.

EGSC AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	No cargo processing facilities available.
2	Fuel and oil types	JET A1 AL48 (with anti-ice additive), AVGAS 100LL. Other oils and fluids available by arrangement.
3	Fuelling facilities/capacity	JET A1 AL48 and AVGAS Bowser service.
4	De-icing facilities	Mobile de-icer, Kilfrost ABC-K and Type II.
5	Hangar space for visiting aircraft	By arrangement up to CL605.
6	Repair facilities for visiting aircraft	
7	Remarks	<p>Mandatory handling for all aircraft except leisure flights under 2.7 tonnes MTOW.</p> <p>Executive handling services available from Cambridge Jet Centre, Tel: 01223-373214, e-mail: fbo@cambridgeairport.com. Company frequency C/S Marshall Cambridge 131.780</p> <p>Handling for visiting light General Aviation aircraft under 2.7 tonnes is only mandatory outside of the Cambridge Aeroclub opening hours.</p> <p>All training flights contact Cambridge ATC, Tel: 01223-373213, e-mail: atc.admin@cambridgeairport.com</p> <p>All none maintenance military flights over 2.7 tonnes contact FBO.</p> <p>All landing/handling/parking fees charged according to aircraft MTOW (tonnes).</p> <p>Other charges according to services provided. GPU, toilet service, aircraft de-icing, potable water, steps up to Airbus 320.</p>

EGSC AD 2.5 PASSENGER FACILITIES

1	Hotels	In Cambridge, 3 miles.
2	Restaurants	
3	Transportation	Regular bus to City centre, taxis on request with handling agent. Nearest railway station; Cambridge 3 miles.
4	Medical facilities	Yes. Company first aid. Hospital 3 miles.
5	Bank and Post Office	Banks in Cambridge.
6	Tourist Office	Cambridge 3 miles.
7	Remarks	

EGSC AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	<p>RFF Category A4 Higher Category (up to Category 8) may be available with 24 hours prior notification.</p> <p>The RFF category provided for all-cargo, mail, ferry, training, test, positioning and end-of-life aircraft operations may be reduced in accordance with EASA AMC2 ADR.OPS.B.010(a)(2) (c) Table 2, and subject to prior agreement with the aircraft operator.</p>
2	Rescue equipment	Equipment information available on application.
3	Capability for removal of disabled aircraft	In the event of an incident, light aircraft may be removed using airport resources, provided an indemnity form is signed. Large aircraft may be removed using external resources in conjunction with aircraft operator. Any recovery costs incurred will be charged. Contact Airport Operations for details on 01223-373535.
4	Remarks	

EGSC AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Rotary brushes and ploughs.
2	Clearance priorities	Runway 05/23, Taxiway C.

EGFF — CARDIFF

EGFF AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGFF — CARDIFF

EGFF AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 512348N Long: 0032036W Mid point of Runway 12/30
2	Direction and distance from city	8.5 NM SW of Cardiff.
3	Elevation / Reference temperature / Mean Low Temperature	220 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	169 FT
5	Magnetic Variation / Annual Change	0.58°W (2022) / 0.20°E
6	AD Administration Address Telephone E-mail address Web address	CARDIFF INTERNATIONAL AIRPORT LTD. Cardiff International Airport, Rhoose, Barry, South Glamorgan CF62 3BD. 01446-711111 (Cardiff Airport Ltd) 01446-712562 (ATC) info@cwl.aero (CWL Aero) cardiffatc@nats.co.uk (ATC) www.cwl.aero
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Telephone calls to NATS Ltd operational areas may be recorded.

EGFF AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	H24 See also AD 2.18.
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	H24
12	Remarks	

EGFF AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Forklifts, pallet trucks, cargo loader 12.5 tonnes capacity suitable for loading up to Boeing 747 main deck. One lower lobe cargo loader 5 tonnes capacity. 2 Cargo loaders.
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL W80, W100.
3	Fuelling facilities/capacity	
4	De-icing facilities	Upon request with Swissport.
5	Hangar space for visiting aircraft	Limited.
6	Repair facilities for visiting aircraft	Limited.

7	Remarks	<p>Fuel AVTUR JET-A1 is available by arrangement with Swissport, Tel: 07388-943688. Fuel AVGAS is available from Global Trek Aviation, Tel: 01446-712699.</p> <p>Handling for all aircraft is mandatory: Aeros Flying Club: Tel: 01446-710000.</p> <p>Swissport (Commercial): Tel: 01446-712592.</p> <p>Signature (Executive GA and Cargo): 01446-712637.</p> <p>Global Trek Aviation (Executive, GA, Military and Cargo): 01446-712699.</p> <p>All departing aircraft are required to file a full or abbreviated flight plan electronically prior to departure. The addresses should be as per ENR 1.11.</p>
---	---------	---

EGFF AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotel 0.5 miles from the airport.
2	Restaurants	Licensed buffet and cafeteria in the terminal.
3	Transportation	Buses: Shuttle bus to the nearest railway station, Rhose (Cardiff International Airport) 2 miles. Bus service into Cardiff every 20 minutes (every 30 minutes: 1 November until 31 March). Taxis and car hire.
4	Medical facilities	Limited first aid treatment.
5	Bank and Post Office	Bureau de Change. ATM Machine.
6	Tourist Office	Terminal Building.
7	Remarks	

EGFF AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A7 Category 8 and 9 available on request. 2 hour notice required.
2	Rescue equipment	
3	Capability for removal of disabled aircraft	Light aircraft can be removed using airport resources. Large aircraft can be removed using outside sources in conjunction with the aircraft operator.
4	Remarks	

EGFF AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical, chemical de-icing, chemical anti-icing.
2	Clearance priorities	Standard. See AD 1.2.2.
3	Remarks	Anti-iced with KC Potassium acetate fluid.

EGFF AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	<p>SOUTH MAINTENANCE AREA (SOUTH OF HOLD G) Surface: Asphalt PCN 19/F/A/W/T</p> <p>SOUTH MAINTENANCE AREA (WEST OF HOLD H) Surface: Asphalt PCN 15/F/A/W/T</p> <p>TERMINAL AREA Surface: Concrete PCN 50/R/A/W/T</p>
2	Taxiway width, surface and strength	Taxiway ALPHA: 23 M Surface: Asphalt PCN 50/F/A/W/T

EGBE — COVENTRY**EGBE AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGBE — COVENTRY

EGBE AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 522211N Long: 0012847W Mid point of Runway 05/23.
2	Direction and distance from city	3 NM SSE of Coventry.
3	Elevation / Reference temperature / Mean Low Temperature	267 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	160 FT
5	Magnetic Variation / Annual Change	0.03°W (2022) / 0.20°E
6	AD Administration Address Telephone AFS E-mail address Web address	COVENTRY AIRPORT LTD Control Tower, Coventry Airport, Rowley Road, Coventry, CV3 4FR, England. 02476-308600 (Administration) 02476-511738 (ATS) 02476-308601 (Handling) 07904-639092 (Handling - Mobile) EGBEZTX enquiries@coventryairport.co.uk www.coventryairport.co.uk
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	TA: Beneath the Birmingham CTA. Telephone calls to ATS are recorded.

EGBE AD 2.3 OPERATIONAL HOURS

1	AD Administration	Tue-Sat 0900-1700 (0800-1600); Sun-Mon closed. Helimed traffic only 0830-0900 (0730-0800). All movements strictly PPR via www.coventryairport.co.uk , alternatively telephone ATS: 02476-511738. All UAS requests to be sent to: safeguarding@coventryairport.co.uk . Other times by out of hours indemnity permission or by arrangement with AD authority, unless AD closed by NOTAM due adverse weather.
2	Customs and immigration	On request.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	See item AD 2.18.
8	Fuelling	As AD hours.
9	Handling	Coventry Airport Limited: As AD hours.
10	Security	H24
11	De-icing	
12	Remarks	

EGBE AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL
3	Fuelling facilities/capacity	AVTUR JET A-1 - 2 bowzers, total storage 23,000 LT. Overground tanks 52,000 LT total storage. AVGAS 100LL - Fixed pump on West Apron. 25,000 LT total storage. 1 Bowser, total storage 5,000 LT.
4	De-icing facilities	
5	Hangar space for visiting aircraft	Available on request from aerodrome administration.
6	Repair facilities for visiting aircraft	Yes.

7	Remarks	<p>Oxygen and related servicing by arrangement.</p> <p>To assist with aircraft parking planning, compulsory handling and PPR is required for all non-based aircraft with a maximum AUW of 3000 KG and above. Operators are to request aircraft handling through the following handling agent:</p> <p>Coventry Airport Ltd. Tel: 02476-308601; e-mail: handling@coventryairport.co.uk</p>
---	---------	--

EGBE AD 2.5 PASSENGER FACILITIES

1	Hotels	In the vicinity (1 mile).
2	Restaurants	The Oak, Baginton. 1/8 mile.
3	Transportation	Buses, Taxis. Nearest railway station, Coventry 2.7 miles.
4	Medical facilities	First aid available from the Airport Fire Service.
5	Bank and Post Office	Styvechale Post Office, Baginton Rd. 2.4 miles.
6	Tourist Office	Coventry Tourist Information Office, Jordan Well, Coventry. 4 miles.
7	Remarks	

EGBE AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	<p>RFF Category A1 RFF Category 1 Tue-Sat RFF Category 2 available on request. RFF Category 3 accepted under remission.</p>
2	Rescue equipment	1 x RFF Category 2 vehicle.
3	Capability for removal of disabled aircraft	Limited, up to 12,000 KG MTWA.
4	Remarks	

EGBE AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	
2	Clearance priorities	
3	Remarks	Latest information from ATS Tel: 02476-511738.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/DME	ICR	26X 108.900 MHz	Mon-Fri 0830-1900 (0730- 1800); Sat, Sun & PH 0900-1800 (0800- 1700).	520424.52N 0003702.87W	364 FT	(RWY 21) On AD. DME freq paired with ILS I-CR. Zero range is indicated at THR of Runway 21.
VOR/DME 0.12°E (2022) 0.80°E (2024)	DTY	111X 116.400 MHz	H24	521048.51N 0010649.64W	600 FT	VOR DOC: 45 NM/50,000 FT (55 NM/ 50,000 FT in Sector R009-089). DME DOC: 60 NM/50,000 FT (75 NM/ 50,000 FT in Sector R284-344).

EGTC AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use of this airport is subject to the published schedule of fees, charges and conditions, copies of which are available from Airport Administration.
- b) Cranfield is strictly PPR and does not accept diversions or nominations as a flight plan alternate aerodrome without approval from the Aerodrome Authority via atc@cranfield.ac.uk, 01234-750005 (2699 KG MTOW and below) or airporthandling@cranfield.ac.uk, 01234-758114 (2700 KG MTOW and above).
All aircraft 2699 KG MTOW and below are required to request PPR from ATC via telephone 01234-750005 or email atc@cranfield.ac.uk. All aircraft 2700 KG MTOW and above and NOT conducting circuit or instrument training are required to request PPR via airporthandling@cranfield.ac.uk.
- c) Permission to use the airport, either to land or depart, may be withdrawn without notice. Withdrawal of permission may occur due to prevailing weather conditions, if it is considered that the requirements of the airport's Safety Management System cannot be met.
- d) The carriage of Dangerous Goods, as specified by The Air Navigation (Dangerous Goods) Regulations 2002, is prohibited unless written approval has been issued by the Airport Director.
- e) All aircraft with the intention to depart or to taxi for engineering purposes are required to obtain start approval from ATC before starting engines.
- f) Use of the airport by non-radio equipped aircraft **is not** permitted.
- g) Use of the airport by training flights is subject to compliance with the requirements set out below.
- h) While airside, each aircraft commander is responsible for the safety of his passengers and other crew members. Passengers are at all times to be escorted by the aircraft commander or a crew member who is known to be competent to ensure both his/her and the passengers safety. The wearing of high visibility clothing is required.
- i) Aircraft commanders or crew members, as applicable, are responsible for ensuring that a total ban on smoking while airside is observed.

2 GROUND MOVEMENT

- a) Extreme caution is necessary on paved and unpaved apron areas where surface markings may not always be available to ensure obstacle clearance from parked aircraft.
- b) Due to limited parking space, aircraft may infringe taxiway strips. ATC will advise aircraft of appropriate taxiing routes.
- c) Operators wishing to drive vehicles on the airport will be required to provide evidence of £10m airside driving liability insurance.
- d) Within Apron 2, parking areas are marked by single white line boxes. Aircraft should park wholly within these areas unless advised by ATC. Aircraft may be required to shut down and push back into position if they cannot be safely manoeuvred under their own power, but will not be permitted to stop for long periods outside of the parking area as to do so may hinder RFFS vehicles. Caution should be exercised as apron edges are bounded by gravelled French drains.
- e) Aircraft of a wingspan larger than 18 M may be accommodated on Apron 2 with caution by using wing-walkers, marshallers, or other methods of assurance.

3 CAT II/III OPERATIONS

Not applicable.

4 WARNINGS

- a) Intensive instrument flying in all weather conditions takes place within 20 NM radius up to the lower limit of controlled airspace. Flight crews are strongly advised to contact Cranfield Approach in order to establish and communicate an accurate reflection of the traffic situation to all relevant participants of a service. Non-airways instrument traffic inbound to Cranfield are strongly advised to contact Cranfield Approach no later than 10 minutes flying time away.
- b) Due to drainage ditches, all fixed-wing aircraft entering/exiting the grass via Taxiway Alpha are to use the concrete entry/exit points.
- c) In the event of aerodrome electrical supply failure, aerodrome ground lighting **will not** be available for up to 15 seconds.

13 Jun 2024

- d) Pilots are advised to exercise caution as this aerodrome has a deer hazard, particularly during the periods of dawn and dusk/official night, although patrols are mounted whenever the presence of deer is known or anticipated. Pilots are requested to report the location of any animals on the aerodrome to ATC.
- e) Air Crew are advised that runway edge lighting does not conform to CAP 168 Chapter 6 Paragraph 6.56 specifically that runway edge lights should be located along the edges of the area declared for use as the runway. Current lights lay outside of this area by approximately 3 M. Pilots are to land as close to the centre-line as practicable. The edge of the useable runway area is delineated by white lines in accordance with CAP 168 Chapter 7.
- f) Occasional helicopter activity at Helimech Helipad (520152N 0003653W).
- g) Runway surface features a water ingestion area, known as the 'splash pit', approx 610 M from the RWY 21 threshold in the vicinity of the C intersection. This area is liable to collecting water and may become icy in freezing conditions. Standard runway surface conditions will be reported. However, be advised that any reported contamination may be concentrated in this area.
- h) Local flying training may be concentrated in the area northwest of the airfield between SFC and base of controlled airspace.
- i) UAS are routinely operated within the FRZ (Flight Restriction Zone), but outside the CFZ (Critical Flight Zone), up to a height of 400 FT. UAS operating inside the CFZ, or above a height of 400 FT will be individually notified via NOTAM.

5 HELICOPTER OPERATIONS

- a) All helicopters should expect to join via published VRPs and operate to/from the main runway, integrating with fixed-wing traffic when required.

6 USE OF RUNWAYS

Not applicable

7 TRAINING

- a) PPR is required for all operators, visitors, instrument training and circuit training. Slot times are allocated and must be adhered to.
- b) Issue of training/test approvals is conditional upon such flights not causing delays to other aircraft. In exceptional circumstances training/test approvals may be withdrawn without prior notice by ATC.
- c) **Opposite Direction Runway Operations - Lack of Positive Clearance** - Training aircraft carrying out instrument approaches to Runway 21 whilst Runway 03 is in use should go around and fly directly over Runway 21/03 not below 1000 FT AGL (1400 FT ALT) if no positive clearance is received.

EGTC AD 2.21 NOISE ABATEMENT PROCEDURES

- a) In order that least possible noise disturbance is caused in areas surrounding the airport, aircraft operators should ensure that at all times their aircraft conform to the noise abatement techniques laid down for that type of aircraft.

EGTC AD 2.22 FLIGHT PROCEDURES

1 INSTRUMENT APPROACH PROCEDURES

- a) Instrument Approach Procedures (IAP) for this aerodrome are established outside controlled airspace. See ENR 1.5.
- b) Glider and other airspace activity which is not known to Cranfield ATC takes place beneath the London TMA in VMC and IMC.

2 CIRCUIT HEIGHTS

- a) Day - Fixed-wing 1000 FT QFE. Night - 1200 FT QFE.

Note: No dead-side available due to circuits operating in both directions.

3 RUNWAY VISUAL RANGE

- a) No RVR, only MET visibility reported.

4 IFR DEPARTURES

- a) IFR Departures intending to enter Controlled Airspace should flight plan to join in accordance with the Standard Route Document.

5 VISUAL REFERENCE POINTS (VRP)

- a) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

EGPG — CUMBERNAULD

EGPG AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGPG — CUMBERNAULD

EGPG AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 555829N Long: 0035832W Mid point of Runway 07/25.
2	Direction and distance from city	11.5 NM NE of Glasgow City.
3	Elevation / Reference temperature / Mean Low Temperature	348 FT / 16 °C / -
4	Geoid undulation at AD ELEV PSN	176 FT
5	Magnetic Variation / Annual Change	1.46°W (2022) / 0.22°E
6	AD Administration Address Telephone E-mail address Web address	CORMACK AIRCRAFT SERVICES LTD. Cumbernauld Aerodrome, 2/6 Duncan McIntosh Road, Wardpark North, Cumbernauld, G68 0HH. 01236-722100 (Aerodrome) 01236-722822 (ATS) ops@cumbernauldairport.org www.cumbernauldairport.org
7	Type of Traffic permitted (IFR/VFR)	VFR
8	Remarks	

EGPG AD 2.3 OPERATIONAL HOURS

1	AD Administration	0900-1700 (0800-1600). Extension to opening hours available on request. Outside aerodrome opening hours, the airport operates unlicensed.
2	Customs and immigration	Certificate of Agreement with Border Force, use online G.A.R. form.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD Hours. See AD 2.18
8	Fuelling	H24 Self-Service.
9	Handling	As AD Hours.
10	Security	
11	De-icing	
12	Remarks	This aerodrome is PPR.

EGPG AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	
2	Fuel and oil types	AVTUR JET A-1 (F34), AVGAS 100LL. Fluid 41 (hydraulic), W80, W100, S80, S100, 15W50, Aeroshell 560.
3	Fuelling facilities/capacity	Self-service AVGAS 100LL pump, AVTUR Jet A-1 pump and high pressure Jet A-1 pump on request.
4	De-icing facilities	
5	Hangar space for visiting aircraft	By arrangement.
6	Repair facilities for visiting aircraft	On request.
7	Remarks	

EGPG AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels available in the vicinity.
2	Restaurants	Call Ops on 01236-722822 for status on airport cafe and local restaurants.

18 Apr 2024

3	Transportation	Taxi and Car hire available on request. Nearest railway station Cumbernauld, Croy.
4	Medical facilities	Limited first aid treatment.
5	Bank and Post Office	Cumbernauld village.
6	Tourist Office	
7	Remarks	

EGPG AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A1 RFF Category 2 aircraft may be accepted under remission.
2	Rescue equipment	
3	Capability for removal of disabled aircraft	
4	Remarks	

EGPG AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	
2	Clearance priorities	Standard. See AD 1.2.2.
3	Remarks	Aerodrome unlicensed while runway surface is contaminated.

EGPG AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	A Surface: Asphalt B Surface: Concrete C Surface: Asphalt
2	Taxiway width, surface and strength	Taxiway A: 7 M Surface: Asphalt Taxiway B: 10 M Surface: Asphalt Taxiway C: 10 M Surface: Asphalt
3	Altimeter checkpoint location and elevation	Taxiway/Holding Point C: 350 FT
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	

EGPG AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	
2	Runway and taxiway markings and lighting	Runway marking aid(s): 07/25: Runway designators and centre-line markings. Taxiway marking aid(s): Taxiway centre-line and holding point markings. Blue reflective taxiway edge markers.
3	Stop bars and runway guard lights (if any)	Stop bars on taxiways.
4	Other runway protection measures	
5	Remarks	WDI: 555832.63N 0035826.82W (LGTD).

		Taxiway D: 10.5 M Surface: Macadam PCN 12/F/C/Y/T
		Taxiway E: 10.5 M Surface: Macadam PCN 12/F/C/Y/T
3	Altimeter checkpoint location and elevation	Stand 1: 14 FT - Stand 2: 13 FT
4	VOR checkpoints	
5	INS checkpoints	See Aerodrome Chart.
6	Remarks	Pedestrian access between the airport terminal complex and the Western apron (located on the north side of Taxiway C) is by means of a marked footpath which can be found located to the rear of the parking area. Aircrew are reminded that access to and from this area is not permitted via the active taxiways.

EGPN AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Stands 1 and 2 marked for self manoeuvring with marshallers assistance. Stand 1 has two power back/push back stands for Fairchild Dornier 328 aircraft or fuselage length less than 23 M by arrangement.
2	Runway and taxiway markings and lighting	Runway marking aid(s): 09/27: Runway designators, centre-line and threshold markings on both runways. Runway light(s): Runway guard lights at Holding Point A and B.
3	Stop bars and runway guard lights (if any)	
4	Other runway protection measures	
5	Remarks	Two windsleeves (LGTD): 562705.59N 0030212.56W; 562705.65N 0030100.14W.

EGPN AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPN14630) 09/APPROACH 27/ TAKE-OFF	TREE	562736.71N 0031207.25W	672 FT	86 FT	No	
(EGPN14589) 09/APPROACH 27/ TAKE-OFF	TREE	562735.58N 0031204.97W	667 FT	73 FT	No	
(EGPN14002) 09/APPROACH 27/ TAKE-OFF	HV PYLON	562732.55N 0030742.99W	310 FT	139 FT	No	
(EGPN14900) 27/APPROACH 09/ TAKE-OFF	BUILDING CHIMNEY	562714.40N 0025937.32W	105 FT	53 FT	No	
(EGPN9201) 27/APPROACH 09/ TAKE-OFF	WINDSLEEVE	562705.65N 0030100.14W	38 FT	25 FT	Yes Red	
(EGPN14692) 27/APPROACH 09/ TAKE-OFF	TREE	562648.07N 0025418.80W	429 FT	64 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPN6095)	HV PYLON	562926.85N 0030344.99W	595 FT	95 FT	No	
(EGPN14966)	TOWER	562821.96N 0030012.17W	579 FT	273 FT	Yes Red	
(EGPN14873)	MAST	562812.95N 0025922.11W	662 FT	97 FT	Yes Red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPN14952)	WATER_TOWER	562804.71N 0030136.84W	451 FT	85 FT	No	
(EGPN15036)	TREE	562754.45N 0030039.89W	537 FT	72 FT	No	
(EGPN15237)	BUILDING	562753.72N 0030045.28W	519 FT	40 FT	No	
(EGPN15378)	INDUSTRIAL CHIMNEY	562745.42N 0030202.95W	377 FT	175 FT	No	
(EGPN14928)	BUILDING	562730.14N 0025901.96W	242 FT	119 FT	No	
(EGPN14926)	BUILDING	562727.33N 0025911.88W	222 FT	95 FT	No	
(EGPN14919)	CHURCH SPIRE	562722.73N 0025943.63W	235 FT	128 FT	No	

EGPN AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE ABERDEEN
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE ABERDEEN 9 hours.
4	Trend forecast Interval of issuance	TAFs, METARs. TAFs 3 hours. METARs 30 minutes.
5	Briefing/consultation provided	Self briefing.
6	Flight documentation Language(s) used	On request. English.
7	Charts and other information available for briefing or consultation	F214 (UK Spot wind forecast chart), F215 (UK Low-level forecast chart) and GAMET.
8	Supplementary equipment available for providing information	
9	ATS units provided with information	DUNDEE
10	Additional information (limitation of service, etc.)	METAR information available by ATIS on Telephone: 01382-662222.

EGPN AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
09	090.52°	1400 x 30 M	RWY surface: Asphalt, Grooved PCN 30/F/C/Y/T	562708.89N 0030213.85W 169.3 FT	THR 17.0 FT	
27	270.54°	1400 x 30 M	RWY surface: Asphalt, Grooved PCN 30/F/C/Y/T	562708.47N 0030052.10W 169.3 FT	THR 13.7 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
						RWY 09 Strip Dimensions: 1520 x 140 M.
						RWY 27 Strip Dimensions: 1520 x 80 M.

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGTU1082)	MAST	505105.33N 0031412.33W	999 FT	165 FT	Yes Solid Red	
(EGTU1117)	WATER TOWER	505044.38N 0031351.06W	973 FT	87 FT	No	
(EGTU1112)	TREE	505038.74N 0031352.81W	952 FT	63 FT	No	

EGTU AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

INTENTIONALLY BLANK

EGTU AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
04	041.12°	967 x 45 M	RWY surface: Asphalt	505124.05N 0031421.53W 168.0 FT	THR 838.7 FT	
22	221.13°	967 x 45 M	RWY surface: Asphalt	505147.63N 0031349.00W 168.0 FT	THR 826.2 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
		1087 x 101 M				RWY 04
		1087 x 101 M				RWY 22

EGTU AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
04	967 M	967 M	967 M	967 M	
22	967 M	967 M	967 M	967 M	

EGTU AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
04		Light intensity low Green wingbars				Light intensity low	Red wingbars Light intensity low		
22		Light intensity low Green wingbars				Light intensity low	Red wingbars Light intensity low		

EGTU AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: 505151.53N 0031338.30W (unlit).
3	TWY edge and centre line lighting	
4	Secondary power supply/switch-over time	
5	Remarks	

EGTU AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGTU AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
DUNKESWELL ATZ A circle, 2 NM radius, centred at 505136N 0031405W on longest notified runway (04/22)	Upper limit: 2000 FT AGL Lower limit: SFC	G	DUNKESWELL RADIO English			

EGTU AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
OTHER	DUNKESWELL RADIO	123.480 MHz A/G frequency.			0830-1700 (0730-1700) and by arrangement.	ATZ hours coincident with A/G hours, but not by arrangement.

EGTU AD 2.19 RADIO NAVIGATION AND LANDING AIDS

INTENTIONALLY BLANK

**AERODROME
CHART - ICAO**

ARP 505136N 0031405W

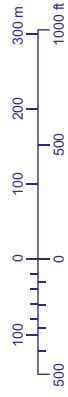
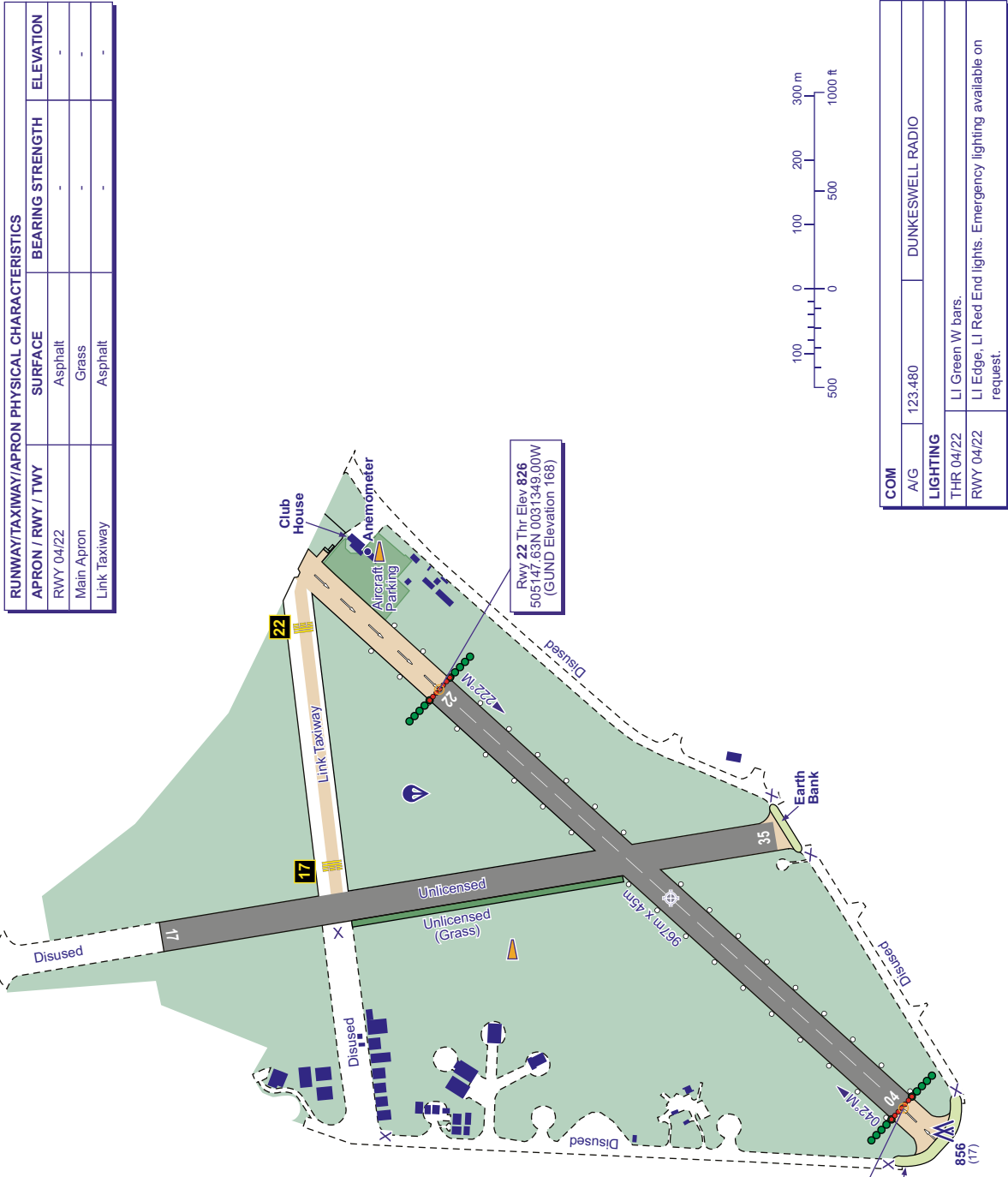
AD ELEV 839FT

**DUNKESWELL
EGTU**

<p>GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.</p>	
<p>BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET</p>	
ELEVATIONS IN FEET AMSL	839



Annual Rate
of Change 0.20°E



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 04/22	Asphalt	-	-
Main Apron	Grass	-	-
Link Taxiway	Asphalt	-	-

COM		
A/G	123.480	DUNKESWELL RADIO
LIGHTING	LI Green W bars.	
THR 04/22	LI Edge, LI Red End lights. Emergency lighting available on request.	
RWY 04/22		

Rwy 04 Thr Elev 839
505124.05N 0031421.53W
(GUND Elevation 168)

Rwy 22 Thr Elev 826
505147.63N 0031349.00W
(GUND Elevation 168)

CHANGE (12/24): STARTER EXTENSION REMOVED.

INTENTIONALLY BLANK

EGNX AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 0.01°W (2022)	IEMW	109.350 MHz	H24	524953.30N 0011807.40W		(RWY 09)
ILS/GP	IEMW	331.850 MHz	H24	524954.61N 0012031.10W		3° ILS Ref Datum Hgt 56 FT.
ILS/LLZ III 0.03°W (2022)	IEME	109.350 MHz	H24	524949.74N 0012122.96W		(RWY 27)
ILS/GP	IEME	331.850 MHz	H24	524956.50N 0011847.13W		3° ILS Ref Datum Hgt 54 FT.
VOR/DME 0.09°W (2022) 0.60°E (2023)	HON	83Y 113.650 MHz	H24	522124.04N 0013949.41W	435 FT	VOR/DME DOC: 60 NM/50,000 FT (85 NM/50,000 FT in Sector R179-239 and 100 NM/50,000 FT in Sector R314-001).
VOR/DME 0.41°W (2022) 0.50°E (2023)	POL	58X 112.100 MHz	H24	534437.60N 0020611.83W	1438 FT	VOR/DME DOC: 115 NM/50,000 FT (150 NM/50,000 FT in Sector R075-015). Due to terrain, coverage at low level is reduced in Sector R280-335.
NDB (L) 0.02°E (2022)	EME	353.500 kHz	H24	524957.69N 0011140.43W		Range 20 NM.
NDB (L) 0.07°W (2022)	EMW	393.000 kHz	H24	524943.19N 0012715.98W		Range 10 NM.
ILS/DME	IEMW	30Y 109.350 MHz	H24	524957.99N 0011940.24W	322 FT	(RWY 09) On AD. Freq paired with ILS I-EMW and I-EME. Zero range indicated at THR of Runway 09 and 27.
ILS/DME	IEME	30Y 109.350 MHz	H24	524957.99N 0011940.24W	322 FT	(RWY 27) On AD. Freq paired with ILS I-EMW and I-EME. Zero range indicated at THR of Runway 09 and 27.
VOR/DME 0.12°E (2022) 0.80°E (2024)	DTY	111X 116.400 MHz	H24	521048.51N 0010649.64W	600 FT	VOR DOC: 45 NM/50,000 FT (55 NM/50,000 FT in Sector R009-089). DME DOC: 60 NM/50,000 FT (75 NM/50,000 FT in Sector R284-344).
VOR/DME 0.17°W (2022) 0.10°E (2021)	TNT	104X 115.700 MHz	H24	530314.23N 0014011.90W	994 FT	VOR DOC: 20 NM/50,000 FT (40 NM/50,000 FT in Sector R100°-205°). DME DOC: 80 NM/50,000 FT (100 NM/50,000 FT in Sector R300°-000°).

EGNX AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use by aircraft not able to communicate with ATC by radio is subject to prior permission.
- b) Use governed by regulations applicable to East Midlands CTR.
- c) Jet aircraft failing to meet certification levels appropriate to Chapter 3 will not be permitted to land or take-off between 2300-0700 (2200-0600) except in special circumstances. Dispensation to do so within strict guidelines must be sought from ATC.
- d) Use of East Midlands Airport is subject to Standard Conditions of Use, which can be requested from the Finance Section. Tel: +44(0)1332-852975 or by e-mail: finance@eastmidlandsairport.com.
- e) All flights, except General Aviation and military flights, are subject to the prior approval of the Managing Director, East Midlands Airport Ltd and prior notification to Airport Co-ordination Ltd, who act as an agent for the Airport. Requests for ad-hoc slot allocations should be made to ACL during working hours Mon - Fri 0830-1700 by e-mail: lonacxh@acl-uk.org; or Tel: +44(0)161-493 1850, Fax: +44(0)161-493 1853, or at all other times to Airfield Operations: +44(0)1332-852 973. OCS account holders can add, change and cancel slots at any time on the online co-ordination portal: <https://www.online-coordination.com/default.aspx?AspxAutoDetectCookieSupport=1>.
- f) All visiting aircraft must pre-book a designated handling agent prior to landing at EMA.

8 Aug 2024

- g) Planned Diversion Procedure - All operators are advised that before filing East Midlands as an alternate, they are required to have made arrangements for ground handling and maintenance; this arrangement is subject to the agreement of the Airport Management. Nothing in this procedure shall however prevent an aircraft that has declared an emergency from landing.

2 GROUND MOVEMENT

- a) Stand allocation will be by the Airport Authority.
- b) Aircraft must be pushed back from parking stands unless operating from a self-maneuvring stand (as detailed in AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS). Powerback manoeuvres are not permitted.
- c) The ramp is a 24 hour mandatory high visibility clothing area. All flight crews are to wear high visibility clothing for all ramp activities (including aircraft walkrounds).
- d) The operators of all aircraft using the aprons, all of which are within the Critical Area as defined by the requirements of the Aviation Security Act 1982 as amended by the Aviation and Maritime Security Act 1990, shall designate a handling agent in advance of any inbound flight.
- e) Parking on the aprons is strictly PPR. Within the apron areas only, crew and passenger transport may, subject to availability and payment, be provided by the handling agents.

The apron area to the south west of the Mike Taxiway is not available for aircraft parking except:

- i. On the aprons outside all hangars with the permission of the company occupying the hangar concerned;
- ii. On the area bounded by white lines on the south west side of the apron and with the permission of Donair Limited.

Aircraft operators parking on any part of this area without permission will be in contravention of the Airport Byelaws relating to East Midlands Airport made under the Civil Aviation Act 1982.

- f) Due to turn constraints, aircraft with a wingspan in excess of 45 M must exercise caution when using Taxiways Mike and Sierra. Taxiways Mike and Sierra are not available for MD-11 and aircraft larger than Code D.
- g) All aircraft with a wing span in excess of 45 M must exercise caution when using the Taxiway Mike intersections with the runway and Taxiway Alpha due to taxiway width constraints.
- h) When using Runway 27, Taxiway Sierra is normally used for departures. Landing traffic should not plan to vacate the runway at Taxiway Sierra without first requesting permission from ATC.
- i) Aircraft up to max Beech King Air (B200) only can use code B Taxilane MA. Aircraft up to max B757-200W only can use code D Taxilane CA.
- j) Stand 31 is self-maneuvring for aircraft up to JS41 dimensions.
- k) During taxiing, pilots should be expected to encounter a wide range of differing aircraft types and sizes which may be difficult to visually acquire during periods of poor visibility or at night. Aircrew remain responsible for wingtip separation and, if in any doubt, should stop, hold position and request marshaller assistance. Pilots should exercise caution when taxiing on Alpha in the vicinity of runway intersections Hotel, Mike, Sierra and Whiskey due to the possible presence of other aircraft holding at these intersections for departure.
- l) Taxilane T is closed during the period 1 November to 31 March annually.
- m) Code E/F aircraft parking on Stand 83 Wide require the use of an oversteering operation whilst manoeuvring via Victor on arrival or departure. Extreme caution is to be used whilst conducting this operation. Code E/F operators requiring Stand 83 Wide for parking will be required to gain an approval from the Aerodrome Operator, this request is to be made via email to cargo@eastmidlandsairport.com.
- n) All departing 747 operations on the East and West aprons are to use minimum break away power when first moving away. Additionally, due to jet blast, all arriving and departing 747s shall use the minimum thrust necessary when taxiing in the East and West aprons.
- o) Taxiway Charlie east of Stand 20 is restricted to Code C operations.

3 CAT II/IIIB OPERATIONS

- a) Runway 27, subject to serviceability of the facility, is suitable for Category II/IIIB operations by operators whose minima have been accepted by the Civil Aviation Authority.
- b) During Category II/IIIB operations, special ATC procedures (Low Visibility Procedures) will be applied. Pilots will be informed by ATIS broadcast or by RTF when these procedures are in operation.
- c) Holding Points Sierra 1 and 2, Whiskey 1 and 2, Mike 1 and 2 and Hotel 1 and 2 are closed when Low Visibility Procedures are in force.
- d) All Runway 27 departures will be via Holding Point Alpha 2 only, and all landing aircraft must only vacate the runway via Holding Point Golf 2.
- e) Low Visibility Procedures Runway 09
- i. During periods of low visibility, to protect departing aircraft, 'Low Visibility Procedures' may be in force. Arriving aircraft are limited to CAT I or LTS CAT I approaches only. Pilots will be informed via ATIS broadcast or by RTF when these procedures are in operation.
 - ii. During Low Visibility Procedures all departures will be via Holding Point Golf 2 only and all landing aircraft must vacate via Holding Point Alpha 2.
- f) When visibility drops below 300 M, Airfield Operations 'lead vehicles' are available on request.

4 WARNINGS

- a) Interference causing large fluctuations to the heading indications of magnetic compasses may be experienced by aircraft in the vicinity of holding point Whiskey One and on the runway, north of Whiskey One. All pilots are advised to carry out any pre take-off check of Direction Indicator against magnetic compass in areas other than those mentioned above.
- b) Grass Cutting:

Consequent upon the implementation of the long grass programme relating to the control of birds, the following will be introduced:

- viii. All turbo-jet, turbo-fan aircraft and aircraft in excess of a gross weight of 17000 KG, departing 'Southbound' from Runway 09 shall, as soon as practical after passing the end of the runway, track 096° MAG to 2.0 NM before turning right in accordance with the departure SID or issued clearance.

4 TAKE-OFF PROCEDURES. RUNWAY 27 BETWEEN THE HOURS OF 2200-0700 (2100-0600)

- a) All departures should be from Whiskey. Runway length from a beam Whiskey is 2463 M; full length take-off is available on request for operational performance reasons, or for ATC requirements, only. When full length is requested, aircraft may be held at A3 prior to entering Runway 27 at A1.

5 PREFERRED RUNWAY USAGE

- a) During light wind conditions aircraft may be required to use either runway subject to a maximum tailwind of 5 KT.

6 ILS APPROACHES

- a) When using the ILS in IMC or VMC, aircraft shall not descend below 2000 FT QNH before intercepting the glidepath, nor thereafter fly below it. Aircraft approaching without assistance from the ILS or radar shall not at any time follow a descent path lower than that which would result from an approach using guidance from the ILS.

7 CONTINUOUS DESCENT APPROACHES

- a) Turbo-jet and turbo-prop aircraft are expected to apply continuous descent, low power, low drag approach techniques at all times.
b) Subject to ATC instructions, inbound aircraft are to maintain as high an altitude as practical and adopt a low power, low drag, continuous descent approach profile. ATC will provide estimated track distance to touchdown to allow pilots to descend at a rate they judge best suited to achieve continuous descent without using more power or drag than necessary. The object will be to join the glidepath at the appropriate height for the distance without level flight.
c) To facilitate these techniques aircraft should be flown no faster than 250 KT from the Speed Limiting Points and below FL100 and 250 KT-210 KT during the intermediate approach phase. Thereafter speed should be managed so as to achieve a continuous descent using as little power or drag as possible. ATC may impose speed control if required for separation purposes.
d) ATC will provide regular range checks. Pilots who require additional track mileage to facilitate a successful CDA should inform ATC as soon as the requirement is apparent.

8 REVERSE THRUST

- a) Pilots are requested to avoid the use of reverse thrust or reverse pitch above idle power settings on landing, consistent with the safe operation of the aircraft between the hours of 2200-0700 (2100-0600).

9 VISUAL CIRCUITS

- a) Large aircraft and all turbo-jet and turbo-fan aircraft, when carrying out circuits, shall be flown at an altitude of at least 2000 FT QNH and turns onto the crosswind leg must not be initiated until after passing the up-wind end of the runway.
b) Pilots shall avoid making their final turn on approach to Runway 27 over the village of Kegworth. All circuits to the south of the aerodrome must keep clear and south of the village of Diseworth, all circuits to the north of the aerodrome must keep clear and north of the village of Castle Donington.
c) Pilots shall avoid direct over flight of the villages of Aston and Weston-on-Trent 2 NM to the northwest of the aerodrome.

10 TRAINING FLIGHTS

- a) Training requires the prior approval of ATC. Permission will only be given for such flights between 0800-1200 (0700-1100) and 1400-1800 (1300-1700). Training will only be permitted by based operators, regular users of the airport or non-jet aircraft below 5700 KG MTOW. Training on Saturdays, Sundays and UK Public Holidays will not be permitted except by non-jet aircraft below 5700 KG MTOW.

11 ENGINE RUNNING

- a) Engine running of aircraft will not be approved between 2300-0600 (2200-0500), unless an aircraft is urgently required to provide an operational service. For further information contact the Duty Airfield Operations Supervisor on Tel: 01332-852925.

12 AUXILIARY POWER UNITS (APU)S

- a) Use of APU shall be limited as much as possible.
b) APU may be used:
i. 5 minutes after 'On Blocks';
ii. 30 minutes before Estimated Time of Departure (ETD).

Except for operational extensions approved by the Duty Airfield Operations Supervisor on Tel: 01332-852925.

13 OPERATION RESTRICTIONS

- a) Any aircraft which has a quota count of 16, 8 or 4 may not take off or land during the night period 2300-0700 (2200-0600).

28 Nov 2024

- b) An aircraft may not take off or be scheduled to land during the night period where the operator of that aircraft has not provided (prior to its take-off or prior to its scheduled landing time as appropriate) sufficient information to enable the airport authority to verify its noise classification and thereby its quota count.

14 NIGHT NOISE LIMITS

- a) Aircraft departing between 2300-0700 (2200-0600) are required to operate within a maximum noise limit (measured at a distance of 6.5 KM from start of roll). The maximum noise limits are defined as follows.

Definition	Limit (dB(A))
Aircraft with a QC of 8 or 16	See paragraph 13
Aircraft with a MTOW of 300 tonnes or greater	92
Aircraft with a MTOW greater than 100 tonnes but less than 300 tonnes	87
Aircraft with a MTOW of 100 tonnes or less	81

QC = quota count (as defined in the UK AIP Supplement)

Aircraft that exceed a maximum noise limit will be subject to a penalty of £750 sterling for an infringement of 1 decibel or less and an additional penalty of £150 sterling for each decibel thereafter.

EGNX AD 2.22 FLIGHT PROCEDURES

1 PROCEDURES FOR INBOUND AIRCRAFT

- a) Standard Arrival Routes (STARs).
- Standard Arrival routes for aircraft inbound from the UK ATS Route Network will be routed via the Standard Terminal Arrival Routes (STARs) detailed at AD 2-EGNX-7-1 to 7-4.
 - Where STARs are designated as RNAV1 Only, Non-RNAV 1 aircraft shall file the via the existing route structure as featured in the Standard Route Document (SRD). Aircraft should not proceed beyond ROKUP or PIGOT without ATC clearance.
- b) Aircraft inbound from the UK ATS Route Network will be cleared into the CTR/CTA without having to request a specific entry clearance.
- c) Initial Approach Procedures for aircraft to proceed from holding area PIGOT and ROKUP are detailed at AD 2-EGNX-7-10 to 7-11.
- d) Inbound Procedure other than on the UK ATS Route Network.
- Aircraft wishing to enter the East Midlands CTR/CTA direct from the London Flight Information Region are required to obtain permission at least 10 minutes before reaching the Zone or Area boundary, when they will be advised of the route to be followed consistent with the current traffic situation.
- e) Holding patterns are as follows:

Midlands NDB(L) EME	Holding axis 270° M inbound, turning left, maximum holding speed 210 KT, minimum holding level, 3000 FT ALT.
Midlands NDB EMW	Holding axis 090° M inbound, turning right, maximum holding speed 210 KT, minimum holding level, 3000 FT ALT.
PIGOT	Terminal Holding Fix is established at PIGOT as detailed on the appropriate STAR charts.
ROKUP	Terminal Holding Fix is established at ROKUP as detailed on the appropriate STAR charts.

- f) Minimum Runway Occupancy Requirements
- Landing aircraft are reminded that prompt exit from the runway will enable ATC to apply minimum spacing on final approach and will minimise the risk of 'go-arounds'. Pilots of landing aircraft are therefore requested to vacate the runway via the first available taxiway corresponding to operational requirements or as directed by ATC.
 - With the exception of MD11 and Code E and above aircraft, the preferred exit after landing on Runway 27 is Mike. Pilots shall only attempt to vacate at Sierra when they have obtained permission from East Midlands Tower during final approach.
 - After landing on Runway 09, unless there is reasonable assurance of slowing in time to vacate at Sierra, landing aircraft are requested to keep their speed up and vacate the runway via Whiskey. During Runway 09 operations, permission to vacate at Sierra does not need to be obtained from ATC prior to landing.
 - Pilots are reminded that taxiways Sierra and Mike are unsuitable for MD11 and Code E and above aircraft.
- g) Approach with Radar Control
- Aircraft will be radar vectored for an intermediate approach profile that should allow a low power/low drag continuous descent approach to be carried out. To achieve this profile, pilots should plan to be at FL 100 and 250 KT by 35 NM from touchdown, reducing to 250 KT-220 KT by 6000 FT ALT 20 NM from touchdown. Estimated track distance will be given to allow pilots to descend

at a rate they judge best suited to achieve continuous descent without using more power or drag than necessary. The object will be to join the glidepath at the appropriate height for the distance without level flight.

- ii. For planning purposes, 35 NM from touchdown equates approximately to the following positions:.

Runway	From the South	From the North
09	28 NM N of DTY 17 NM DME from I-EMW	VEGAR 26 NM DME from I-EMW
27	VELAG 28 NM DME from I-EME	Abeam TNT 16 NM DME from I-EME

h) Approach without Radar Control

- i. When traffic is not being sequenced by Surveillance Radar, aircraft will be cleared from the holding facility to carry out the approach procedure appropriate to the runway-in-use, as detailed at AD 2-EGNX 7-10 to 7-11.

2 PROCEDURES FOR OUTBOUND AIRCRAFT

- a) Standard Instrument Departure Procedures are detailed at AD 2-EGNX-6-1 to AD 2-EGNX-6-3.
- b) Departure Speed Restriction: In order to optimise the departure flow and assist in the separation between successive departing aircraft, a speed limit of 250 KT IAS below FL 100 is applicable until removed by ATC. ATC may remove the speed restriction by using the phrase 'No ATC Speed Restriction'. Pilots are reminded that this phrase does not relieve the pilot of the responsibility to adhere to the ground track of the Noise Preferential Route, which may require a speed/power limitation.
- c) If for any reason pilots are unable to comply with the 250 KT IAS speed restriction the pilot should immediately advise ATC and state the minimum speed acceptable. If a pilot anticipates before departure that they will be unable to comply with the speed restriction, they should inform ATC when requesting start-up clearance, stating the minimum speed acceptable. In this case the pilot will be informed before take-off of any higher speed limitation.
- d) After departure aircraft must not change frequency until instructed.

3 RADIO COMMUNICATIONS FAILURE PROCEDURE

- a) In the event of complete radio communication failure in an aircraft, the pilot will adopt the appropriate procedure notified at ENR 1.1 para 3.4.
- b) Initial Approach: as per Loss of Communications on chart AD 2.EGNX-5-1.
- c) Intermediate/Final Approach: as per Loss of Communications on chart AD 2.EGNX-5-1.
- d) The route to be used when leaving the CTR/CTA in accordance with this procedure is as follows:

Position at time of decision	Route
NDB EME or NDB EMW	Track 350°MAG at 3000 FT ALT

4 VFR AND SPECIAL VFR FLIGHT

- a) Pilots inbound to East Midlands under VFR will be instructed to report at one of the VRPs, where they will either be given a route to follow or will be identified by radar and directed into the approach sequence. If inbound aircraft are not being radar directed and direct routings are, for traffic reasons, not available, to expedite arrival, the route to follow offered to pilots after reporting at a VRP will be:

VRP	Route
Church Broughton (Disused AD) Trowell (M1 Service Area) Bottesford (Disused AD)	Via Long Eaton Entry Lane
Melton Mowbray (Disused AD) M1 Junction 22 (Markfield) M42 Junction 11 (Measham)	Via Shepshed Entry Lane

- b) Clearances may be requested for Special VFR flights within the CTR and will be given whenever the traffic situation permits. These flights are subject to the general conditions laid down at ENR 1.2.

Note: Pilots holding a Private Pilots Licence (Aeroplanes) are reminded of the visibility requirements for Special VFR flights laid down in Schedule 7 of the Air Navigation Order 2009 and in the related notification at ENR 1-4-6, note 4, paragraph d.

- c) Aircraft may be given a radar service whilst within the Zone if, due to the traffic situation, ATC considers it advisable. It will remain the responsibility of the pilot to remain at all times in flight conditions which will enable him to determine his flight path and to keep clear of obstacles, and to ensure that he is able to comply with SERA.3105 Minimum Heights, SERA.5010 Special VFR in control zones and ENR 1.2 paragraph 1.3(l). Pilots must inform the Radar Controller if compliance with the above entails a change of heading or height.

5 VISUAL REFERENCE POINTS (VRP)

- a) Church Broughton (Disused AD), M1 Junction 22 (Markfield) and M42 Junction 11 (Measham) - all below 2500 FT ALT.
- b) Pilots routeing via Bottesford (Disused AD) should avoid overflying the area around Langar aerodrome, which is designated as an area of intense parachuting activity.
- c) Pilots routeing via Melton Mowbray (Disused AD) are advised of the proximity of the TV mast at Waltham on the Wold as it has a high elevation – See ENR 5.4 dataset for up to date details of ICAO AREA 1 Obstacles.

28 Nov 2024

- d) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

6 FREQUENCY MONITORING CODE (FMC)

- a) Pilots operating in the vicinity of, but intending to remain outside East Midlands Controlled Airspace within the area defined by straight lines joining successively the following points and maintaining a listening watch only on East Midlands Radar frequency, 134.180 MHz, are encouraged to select SSR code 4572.

530412N 0015647W - 524800N 0015216W -
 523440N 0013300W - 522846N 0012550W -
 523452N 0002500W - 525320N 0002420W -
 530850N 0004047W - 530818N 0013320W -
 530412N 0015647W.

- b) Selection of code 4572 does not imply receipt of an ATC service. Pilots of aircraft displaying the code are not expected to contact ATC under normal circumstances, remain responsible for their own navigation, separation, terrain clearance and are expected to remain clear of controlled airspace.
- c) Whilst squawking 4572, pilots should be aware that East Midlands Radar may make blind transmissions in order to ascertain a particular aircraft's intentions/route.

- d) When a pilot ceases to maintain a listening watch, code 4572 shall be deselected.

7 ENTRY/EXIT LANES

- a) Conditions of Use

- i. To permit aircraft to operate to and from East Midlands Aerodrome in IMC but not under IFR the following entry/exit lanes have been established for use, under the conditions stated, as follows:

1. A lane 3 NM wide, known as the LONG EATON Lane, with centre-line the M1 Motorway, extending from the point where the Motorway crosses the northern boundary of the CTR (Junction 25), southwards to a point at which it crosses the extended centre-line of Runway 09/27.
2. A lane 3 NM wide, known as the SHEPSHED Lane, with centre-line the M1 Motorway, extending from the point where the Motorway crosses the southern boundary of the CTR (Motorway Junction 23), northwards to a point at which it crosses the extended centre-line of Runway 09/27.

- ii. Use of the lanes is subject to SVFR clearance being obtained from East Midlands ATC;
- iii. Aircraft using the lanes must remain clear of cloud and in sight of the surface, not above 2000 FT (QNH);
- iv. An aircraft using a lane shall keep the centre-line on its left, unless otherwise instructed by ATC for separation purposes;
- v. Pilots of aircraft are responsible for maintaining adequate clearance from the ground or other obstacles

- b) In order to expedite the arrival and departure of light aircraft in VMC use of these lanes by such aircraft operating under VFR is also recommended. Use of the lanes for this purpose, irrespective of prevailing weather conditions, remains subject to clearance being obtained from ATC.

EGNX AD 2.23 ADDITIONAL INFORMATION

Not applicable

EGNX AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGNX-2-1

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING CHART - ICAO

AD 2.EGNX-2-2

AERODROME CHART A380/AN225 GROUND MOVEMENT - ICAO

AD 2.EGNX-2-3

CONTROL ZONE and CONTROL AREA CHART - ENTRY/EXIT LANES and VRPS

AD 2.EGNX-4-1

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGNX-5-1

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - DAVENTRY - ICAO

AD 2.EGNX-6-1

STANDARD DEPARTURE CHART - INSTRUMENT (SID) TRENT - ICAO
AD 2.EGNX-6-2

STANDARD DEPARTURE CHART - INSTRUMENT (SID) POLE HILL - ICAO
AD 2.EGNX-6-3

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) AMPIT 2E DOLOP 1E MAKUX 1E MALUD 1E WAL 2E - ICAO
AD 2.EGNX-7-1

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) BEGAM 1E CROFT 1E LIBSO 1E VEGUS 1E - ICAO
AD 2.EGNX-7-2

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) POL 1E - ICAO
AD 2.EGNX-7-3

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) DTY 1E HEMEL 1E - ICAO
AD 2.EGNX-7-4

STANDARD INSTRUMENT ARRIVAL CODING TABLES AMPIT 2E DOLOP 1E MAKUX 1E
AD 2.EGNX-7-5

STANDARD INSTRUMENT ARRIVAL CODING TABLES MALUD 1E WAL 2E BEGAM 1E
AD 2.EGNX-7-6

STANDARD INSTRUMENT ARRIVAL CODING TABLES CROFT 1E LIBSO 1E VEGUS 1E
AD 2.EGNX-7-7

STANDARD INSTRUMENT ARRIVAL CODING TABLES POL 1E DTY 1E HEMEL 1E
AD 2.EGNX-7-8

RNAV HOLD CODING TABLES ROKUP PIGOT
AD 2.EGNX-7-9

INITIAL APPROACH PROCEDURES ILS/DME RWY 09 Without Radar Control via PIGOT/ROKUP
AD 2.EGNX-7-10

INITIAL APPROACH PROCEDURES ILS/DME RWY 27 Without Radar Control via PIGOT/ROKUP
AD 2.EGNX-7-11

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 09 - ICAO
AD 2.EGNX-8-1

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 09 - ICAO
AD 2.EGNX-8-2

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 09 - ICAO
AD 2.EGNX-8-3

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 27 - ICAO
AD 2.EGNX-8-4

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 27 - ICAO
AD 2.EGNX-8-5

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 27 - ICAO
AD 2.EGNX-8-6

EGNX AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

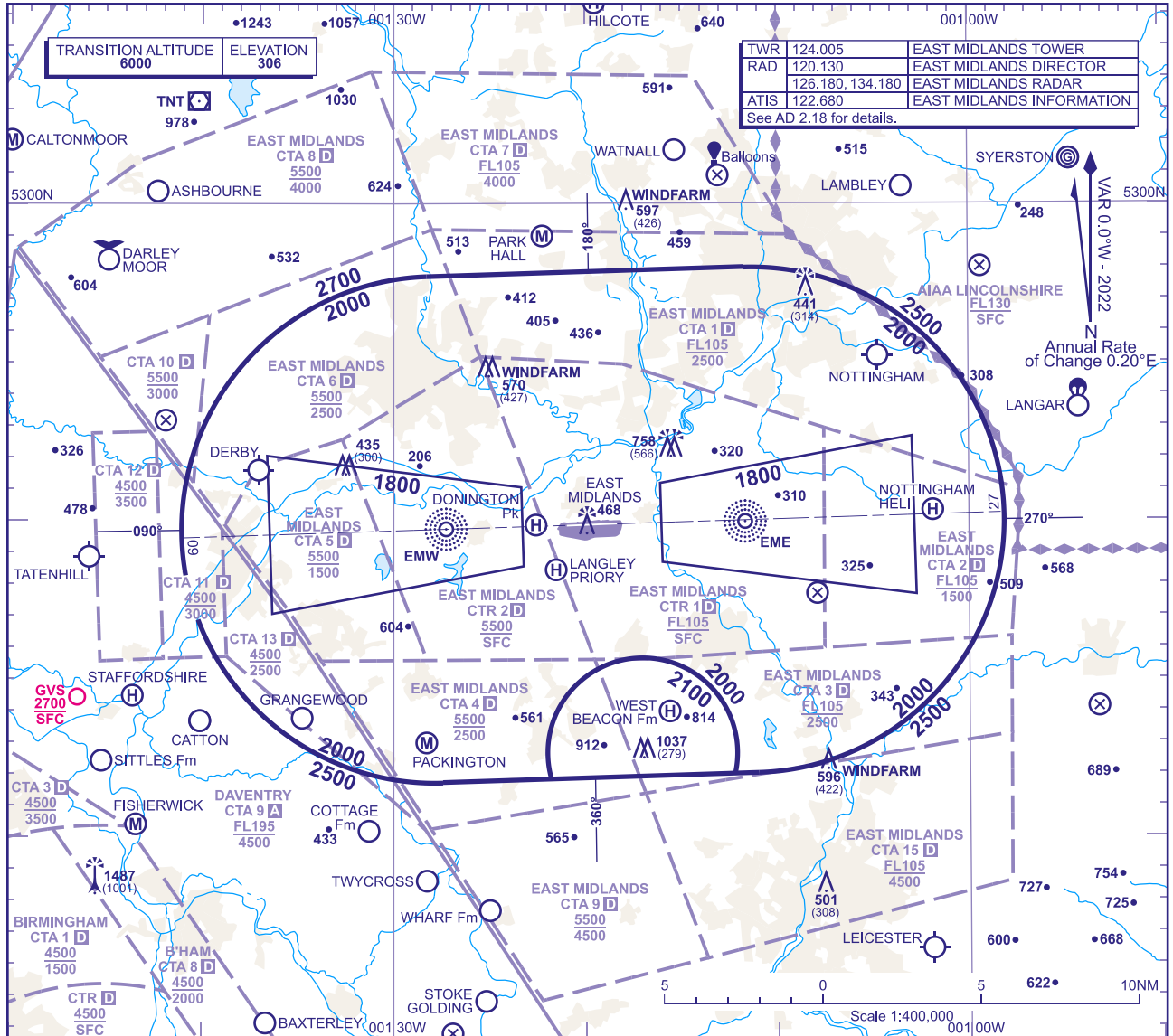
Not applicable

INTENTIONALLY BLANK

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ELEVATIONS IN FEET AMSL 1501
HEIGHTS IN FEET AGL (1001)

EAST MIDLANDS



MINIMUM INITIAL ALTITUDE
Within the ATC Surveillance Minimum Altitude area the minimum initial altitude to be allocated by the approach surveillance controller is:

- 2000** in the sector defined by the lateral limits: 525742N 0012817W - 525800N 0011144W thence clockwise by an arc of a circle radius 8NM centred on 5255000N 0011121W to 524201N 0011059W - 524143N 0012726W thence clockwise by an arc of a circle radius 8NM centred on 524942N 0012751W to 525742N 0012817W, except;
- 2100** in the sector defined by the lateral limits: 524150N 0012147W thence clockwise by an arc of a circle radius 3NM centred on 524239N 0011703W to 524200N 0011214W - 524150N 0012147W.

OUTSIDE THE DESIGNATED ATC SURVEILLANCE MINIMUM ALTITUDE AREA
The minimum altitude to be allocated by the approach surveillance controller will be either the Minimum Sector Altitude, or **1000** above any fixed obstacles:

- within 5NM of the aircraft*, and
- within the sector 15NM ahead of and within 20° either side of the aircraft's track*.

*When the aircraft is within 15NM of the radar antennae, the 5NM in a) and the 15NM in b) may be reduced to 3NM and 10NM respectively.

LOSS OF COMMUNICATION PROCEDURES
Initial Approach
Continue visually or by means of an appropriate approved final approach aid. If not possible proceed at **3000**, or last assigned level if higher to **NDB(L) EMW** for RWY 09 approaches or **NDB(L) EME** for RWY 27 approaches†.

Intermediate and Final Approach
Continue visually or by means of an appropriate final approach aid. If not possible follow the Missed Approach Procedure to **NDB(L) EMW** for RWY 09 approaches or **NDB(L) EME** for RWY 27 approaches†.

† In all cases where the aircraft returns to the holding facility the procedure to be adopted is the Radio Failure Procedure detailed at ENR 1.1.3.4.

GENERAL INFORMATION

- Levels shown are based on QNH.
- Only significant obstacles and dominant spot heights are shown.
- The minimum levels shown within the ATC Surveillance Minimum Altitude Area are in conformance with the Standard European Rules of the Air - SERA.5015.
- Minimum Sector Altitudes are based on obstacles and spot heights within 25NM of the Aerodrome Reference Point.
- Controlled airspace with a base in excess of **5000** or FL55, as appropriate, is not shown.
- The ATC Surveillance service is provided by Primary and/or Secondary Radar equipment.
- This chart may only be used for cross-checking of altitudes assigned when in receipt of an ATC Surveillance service.**
- When vectoring an aircraft within the Final Approach Vectoring Area descent clearance below the SMAA to the FAVA altitude may only be Issued if the aircraft is either established on the final approach track or on an Intercept of 40° or less, and in the case of Instrument approaches other than SRA is cleared to Intercept the final approach track.**
- Detailed description of FIR, UIR, CTA and TMA see ENR 2.1.
- Detailed description of ATS airspace organized at the aerodrome see AD 2.17.

CHANGE (12/24): LOSS OF COMMUNICATION PROCEDURES ENR REFERENCE REVISED.
AERO INFO DATE 11 SEP 24

INTENTIONALLY BLANK

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPH18543)	BRIDGE TOWER	555949.07N 0032414.85W	522 FT	529 FT	Yes Red	
TAYLOR WIMPEY CRANE	CRANE	555851N 0032257W	265 FT	99 FT	Yes Steady Red	North of Airfield at Queensferry.
DALMENY TANK FARM	CRANE	555836N 0032218W	326 FT	164 FT	Yes Red	End estimated June 2025.
MAYBURY ROAD CRANE	CRANE	555729N 0031901W	254 FT	131 FT	Yes Red	Maybury Road area. End estimated June 2025.
BARRATT WEST CRAIGS	CRANE	555651N 0031915W	362 FT	164 FT	Yes Red	Craigs Road Edinburgh. End estimated July 2026.
WEST CRAIGS	CRANE	555650.7N 0031906.7W	332 FT	126 FT	Yes Steady Red	End estimated June 2026.
	CRANE	555648N 0031911W	309 FT	118 FT	Yes Red	Craigs Road Edinburgh. End estimated November 2027.
CALA TURNHOUSE ROAD	CRANE	555640N 0031936W	298 FT	131 FT	Yes Red	Turnhouse Road. End estimated December 2027.

EGPH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE ABERDEEN
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE ABERDEEN 24 hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self-briefing/Telephone.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs and METARs. English.
7	Charts and other information available for briefing or consultation	
8	Supplementary equipment available for providing information	
9	ATS units provided with information	EDINBURGH
10	Additional information (limitation of service, etc.)	

EGPH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
06	058.85°	2558 x 45 M	RWY surface: Asphalt, Grooved PCN 68/R/B/W/T	555641.99N 0032313.90W 173.5 FT	THR 110.1 FT TDZ 110.1 FT	
24	238.88°	2558 x 45 M	RWY surface: Asphalt, Grooved PCN 68/R/B/W/T	555717.66N 0032128.66W 173.4 FT	THR 99.8 FT TDZ 100.0 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
60 x 45 M	60 x 150 M	2798 x 280 M				RWY 06 Runway 06 threshold is inset 214 M. Paved shoulders extend 8 M beyond each side of runway.
60 x 45 M	448 x 150 M	2798 x 280 M				RWY 24 Runway 24 threshold is inset 211 M. Paved shoulders extend 8 M beyond each side of runway.

EGPH AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
06	2556 M	2616 M	2616 M	2344 M	
24	2554 M	3002 M	2614 M	2347 M	
06	1891 M	1951 M	1951 M		Take-off from intersection with Hold Bravo 1. Information signage in place adjacent to Hold Bravo 1.
24	1891 M	2339 M	1951 M		Take-off from intersection with Hold Charlie 1. Information signage in place adjacent to Hold Charlie 1.

EGPH AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
06	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. First barrette of ALS removed. 870 M Light intensity high	Green Light intensity high With green wingbars	PAPI Left/3° 56 FT 425 M	White Light intensity high 870 M	Colour coded centre-line 15 M spacing	Bi-directional edge 46 M gauge	Red	60 M beyond runway end lights Red	
24	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. 914 M Light intensity high	Green Light intensity high With green wingbars	PAPI Left/3° 59 FT 380 M	White Light intensity high 900 M	Colour coded centre-line 15 M spacing	Bi-directional edge 46 M gauge	Red	60 M beyond runway end lights Red	

EGLF AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

<p>1</p>	<p>Apron surface and strength</p>	<p>BRAVO APRON Surface: Concrete PCR 524/R/B/X/U</p> <p>EAST APRON Surface: Concrete PCR 310/R/C/W/U</p> <p>JULIET APRON Surface: Concrete PCR 524/R/B/X/U</p> <p>NORTH APRON Surface: Concrete PCR 556/R/D/X/U</p> <p>SOUTH ONE APRON Surface: Asphalt PCR 132/F/D/W/U</p> <p>SOUTH TWO APRON Surface: Concrete PCR 317/R/D/X/U</p> <p>WEST ONE APRON Surface: Concrete PCR 556/R/D/X/U</p> <p>WEST THREE APRON Surface: Concrete PCR 317/R/D/X/U</p> <p>WEST TWO APRON Surface: Concrete PCR 317/R/D/X/U</p>
<p>2</p>	<p>Taxiway width, surface and strength</p>	<p>Taxiway ALPHA: 15 M Surface: Concrete and asphalt PCR 448/F/C/W/U</p> <p>Taxiway BRAVO: 15 M Surface: Asphalt PCR 507/F/D/W/U</p> <p>Taxiway C NORTH OF 06/24: 15 M Surface: Asphalt PCR 507/F/D/W/U</p> <p>Taxiway DELTA: 15 M Surface: Asphalt PCR 507/F/D/W/U</p> <p>Taxiway ECHO: 15 M Surface: Asphalt PCR 507/F/D/W/U</p> <p>Taxiway FOXTROT: 15 M Surface: Asphalt PCR 507/F/D/W/U</p> <p>Taxiway JULIET: 15 M Surface: Concrete PCR 524/R/B/X/U</p> <p>Taxiway WHISKEY: 15 M Surface: Asphalt PCR 132/F/D/W/U</p>

		Taxiway YANKEE: 15 M Surface: Asphalt PCR 326/F/D/W/U Taxiway ZULU: 15 M Surface: Asphalt PCR 326/F/D/W/U
3	Altimeter checkpoint location and elevation	North Apron - 213 FT East Apron - 224 FT South Apron One - 224 FT South Apron Two - 221 FT West One Apron - 212 FT West Two Apron - 217 FT West Three Apron - 217 FT Bravo Apron - 207 FT Juliet Apron - 211 FT
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	Portion of disused taxiway between Taxiway Zulu and South 1 Apron (as shown on AIP AD 2-EGLF-2-1) may be promulgated as available by NOTAM. This would be an extension of existing Taxiway Yankee.

EGLF AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	
2	Runway and taxiway markings and lighting	Runway marking aid(s): 06/24: Runway designation, displaced landing thresholds, runway centre-line, runway edge, abbreviated touchdown zone, aiming point. Continuous yellow lines mark the runway entry/exit routes. 06 starter extension has a turn pad marking suitable for aircraft up to and including BBJ2 size. Runway light(s): Threshold – HI green, Runway edge – HI colour coded red (pre threshold)/ white/yellow (caution zone), Stop End – HI red. Taxiway light(s): Runway guard lights (permanently in operation) at all taxiway/runway intersections, colour coded green/yellow centre-line lights within ILS sensitive area at A1, B1, F3, W and Y. Green centre-line lights on taxiways Alpha, Bravo, Delta, Juliet, West 1 and North Aprons. Blue edge lights on remaining taxiways including Bravo between B3 and B4.
3	Stop bars and runway guard lights (if any)	At all holding points
4	Other runway protection measures	
5	Remarks	Wind direction indicators (LGTD): 511650.89N 0004558.68W; 511630.41N 0004701.85W.

EGLF AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLF16842) 24/APPROACH 06/ TAKE-OFF	TREE	511747.34N 0004246.13W	433 FT	68 FT	No	
(EGLF15659) 24/APPROACH	BUILDING OBS LIGHT	511705.83N 0004524.27W	323 FT	98 FT	Yes Red	
(EGLF17418) 24/APPROACH 06/ TAKE-OFF	TREE	511702.42N 0004449.87W	329 FT	72 FT	No	
(EGLF15635) 24/APPROACH 06/ TAKE-OFF	FLAGPOLE	511655.59N 0004512.58W	296 FT	45 FT	No	
(EGLF15626) 24/APPROACH	WINDSLEEVE	511650.89N 0004558.68W	243 FT	27 FT	Yes Red	
(EGLF14396) 06/APPROACH 24/ TAKE-OFF	TREE	511611.14N 0004751.61W	292 FT	45 FT	No	
(EGLF14405) 06/APPROACH 24/ TAKE-OFF	TREE	511610.84N 0004803.04W	310 FT	54 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLF17498) 06/APPROACH	TREE	511607.56N 0004736.16W	282 FT	29 FT	No	
(EGLF15095) 06/APPROACH 24/ TAKE-OFF	TREE	511605.28N 0004810.94W	322 FT	32 FT	No	
(EGLF13694) 06/APPROACH 24/ TAKE-OFF	TREE	511604.47N 0004748.77W	288 FT	15 FT	No	
(EGLF15087) 06/APPROACH 24/ TAKE-OFF	TREE	511604.16N 0004801.22W	306 FT	21 FT	No	
(EGLF16671) 06/APPROACH 24/ TAKE-OFF	TREE	511603.97N 0004802.04W	307 FT	23 FT	No	
(EGLF17532) 06/APPROACH 24/ TAKE-OFF	TREE	511600.02N 0004801.99W	316 FT	27 FT	No	
(EGLF17537) 06/APPROACH 24/ TAKE-OFF	TREE	511559.95N 0004757.70W	308 FT	20 FT	No	
(EGLF16007) 06/APPROACH	TREE	511557.57N 0004914.49W	409 FT	86 FT	No	
(EGLF15907) 06/APPROACH	TREE	511555.32N 0004754.28W	339 FT	33 FT	No	
(EGLF15885) 06/APPROACH 24/ TAKE-OFF	TREE	511552.85N 0004912.99W	397 FT	77 FT	No	
(EGLF16012) 06/APPROACH 24/ TAKE-OFF	TREE	511549.34N 0004914.84W	400 FT	81 FT	No	
(EGLF15905) 06/APPROACH 24/ TAKE-OFF	TREE	511547.07N 0004825.73W	355 FT	35 FT	No	
(EGLF14379) 06/APPROACH	TREE	511540.90N 0004824.88W	407 FT	66 FT	No	
(EGLF16092) 06/APPROACH 24/ TAKE-OFF	BUILDING FLAGPOLE	511536.43N 0004909.29W	406 FT	34 FT	No	
(EGLF16035) 06/APPROACH 24/ TAKE-OFF	TREE	511515.09N 0004933.52W	459 FT	71 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLF16883)	MAST	512124.67N 0004321.30W	765 FT	350 FT	Yes Red	
(EGLF16882)	MAST	511909.94N 0004656.23W	443 FT	110 FT	No	
(EGLF16170)	BUILDING	511749.74N 0004458.41W	420 FT	123 FT	No	
(EGLF16384)	CLOCKTOWER	511513.58N 0004528.95W	473 FT	117 FT	No	
(EGLF16133)	TREE	511503.94N 0004903.71W	575 FT	135 FT	No	
(EGLF16130)	TREE	511457.63N 0004824.20W	518 FT	86 FT	No	
(EGLF15911)	MAST	511445.51N 0004920.32W	686 FT	135 FT	Yes Red	
(EGLF16767)	TREE	511428.54N 0004818.69W	662 FT	79 FT	No	
(EGLF16560)	MAST	511411.51N 0004900.85W	716 FT	107 FT	Yes Red	
(EGLF16558)	WATERTOWER MAST	511408.89N 0004853.76W	722 FT	116 FT	No	
(EGLF16565)	MAST	511403.59N 0004914.57W	770 FT	179 FT	No	

EGLF AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE HEATHROW
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE HEATHROW 9 hours
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing.
6	Flight documentation Language(s) used	Charts. Abbreviated plain language text. TAFs/METARs. English
7	Charts and other information available for briefing or consultation	AIRMET Southern Region; METFORM 215 (via Farnborough Airport Ops).
8	Supplementary equipment available for providing information	Briefing terminal in Farnborough Airport Ops (not accessible via ATC).
9	ATS units provided with information	FARNBOROUGH
10	Additional information (limitation of service, etc.)	MET information not available outside aerodrome operating hours. ATIS 128.405 Aerodrome hours only.

EGLF AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
06	062.02°	2440 x 45 M	RWY surface: Concrete and asphalt, Other preparation PCR 448/F/C/W/U SWY surface: Concrete and asphalt PCR 448/F/C/W/U	511622.19N 0004706.76W 151.0 FT	THR 224.6 FT TDZ 224.6 FT	
24	242.03°	2440 x 45 M	RWY surface: Concrete and asphalt, Other preparation PCR 448/F/C/W/U SWY surface: Concrete and asphalt PCR 448/F/C/W/U	511641.36N 0004609.22W 151.0 FT	THR 218.6 FT TDZ 218.6 FT	

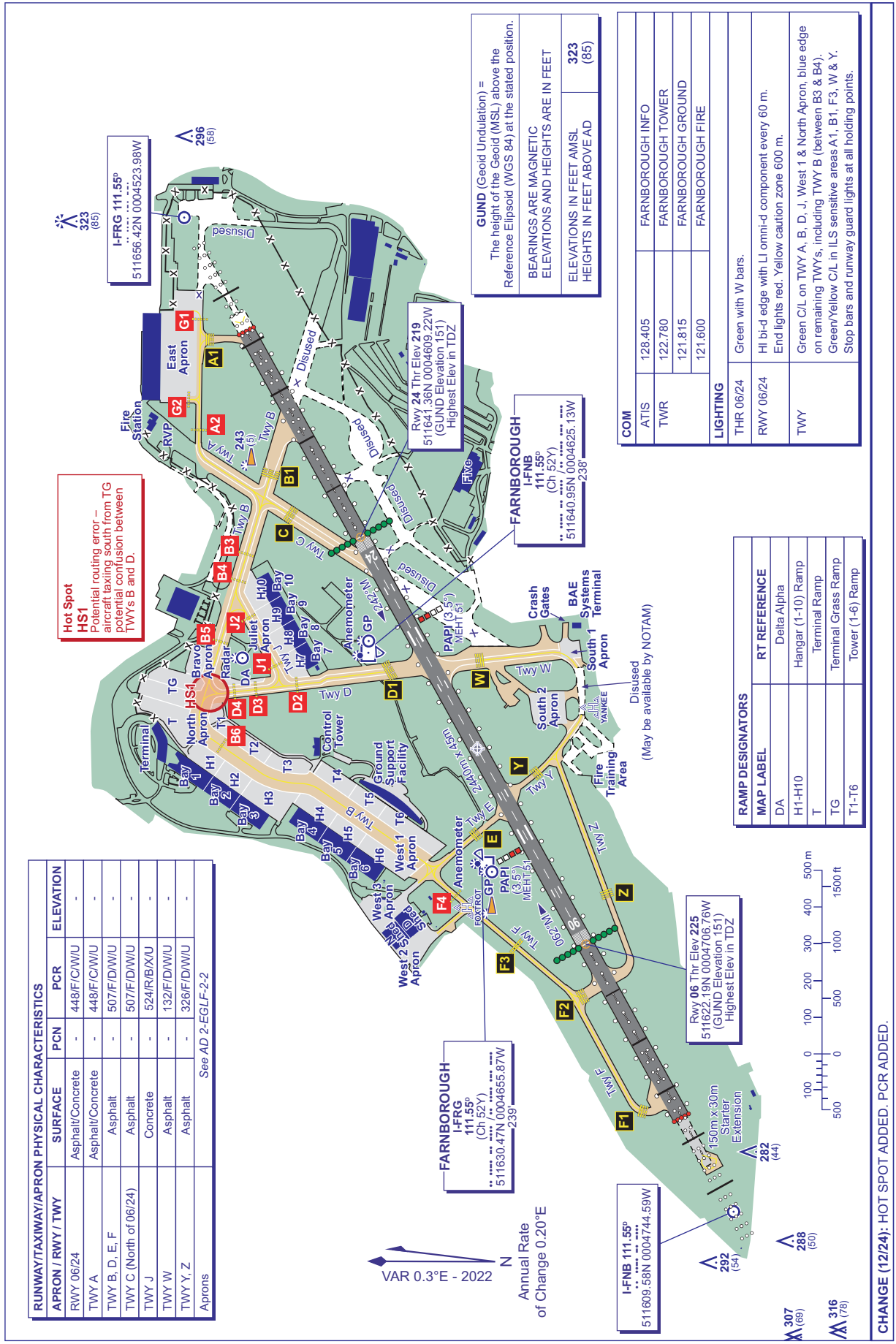
SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
590 x 45 M	60 x 150 M	2560 x 280 M				RWY 06 Threshold displaced by 540 M. Runway 06 has a starter extension of 150 x 30 M. The turning circle at the extremity of the starter extension has a radius of 20 M.
377 x 45 M	60 x 150 M	2560 x 280 M				RWY 24 Threshold displaced by 640 M. Stopways Take-off only.

AERODROME
CHART - ICAO

ARP 511633.1N 0004639W

AD ELEV 238FT

FARNBOROUGH
EGLF



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	PCN	ELEVATION
RWY 06/24	Asphalt/Concrete	-	448/F/C/WU
TWY A	Asphalt/Concrete	-	448/F/C/WU
TWY B, D, E, F	Asphalt	-	507/F/D/WU
TWY C (North of 06/24)	Asphalt	-	507/F/D/WU
TWY J	Concrete	-	524/R/B/XU
TWY W	Asphalt	-	132/F/D/WU
TWY Y, Z	Asphalt	-	326/F/D/WU
Aprons			
See AD 2-EGLF-2-2			

GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.
BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL 323 HEIGHTS IN FEET ABOVE AD (85)

COM	FARNBOROUGH INFO
ATIS	128.405
TWR	122.780
	121.815
	121.600
LIGHTING	
THR 06/24	Green with W bars.
RWY 06/24	HI bi-d edge with LI omni-d component every 60 m. End lights red. Yellow caution zone 600 m.
TWY	Green C/L on TWY A, B, D, J, West 1 & North Apron, blue edge on remaining TWYs, including TWY B (between B3 & B4). Green/Yellow C/L in ILS sensitive areas A1, B1, F3, W & Y. Stop bars and runway guard lights at all holding points.

RAMP DESIGNATORS	
MAP LABEL	RT REFERENCE
DA	Delta Alpha
H1-H10	Hangar (1-10) Ramp
T	Terminal Ramp
TG	Terminal Grass Ramp
T1-T6	Tower (1-6) Ramp

AERO INFO DATE 05 SEP 24

AD 2-EGLF-2-1

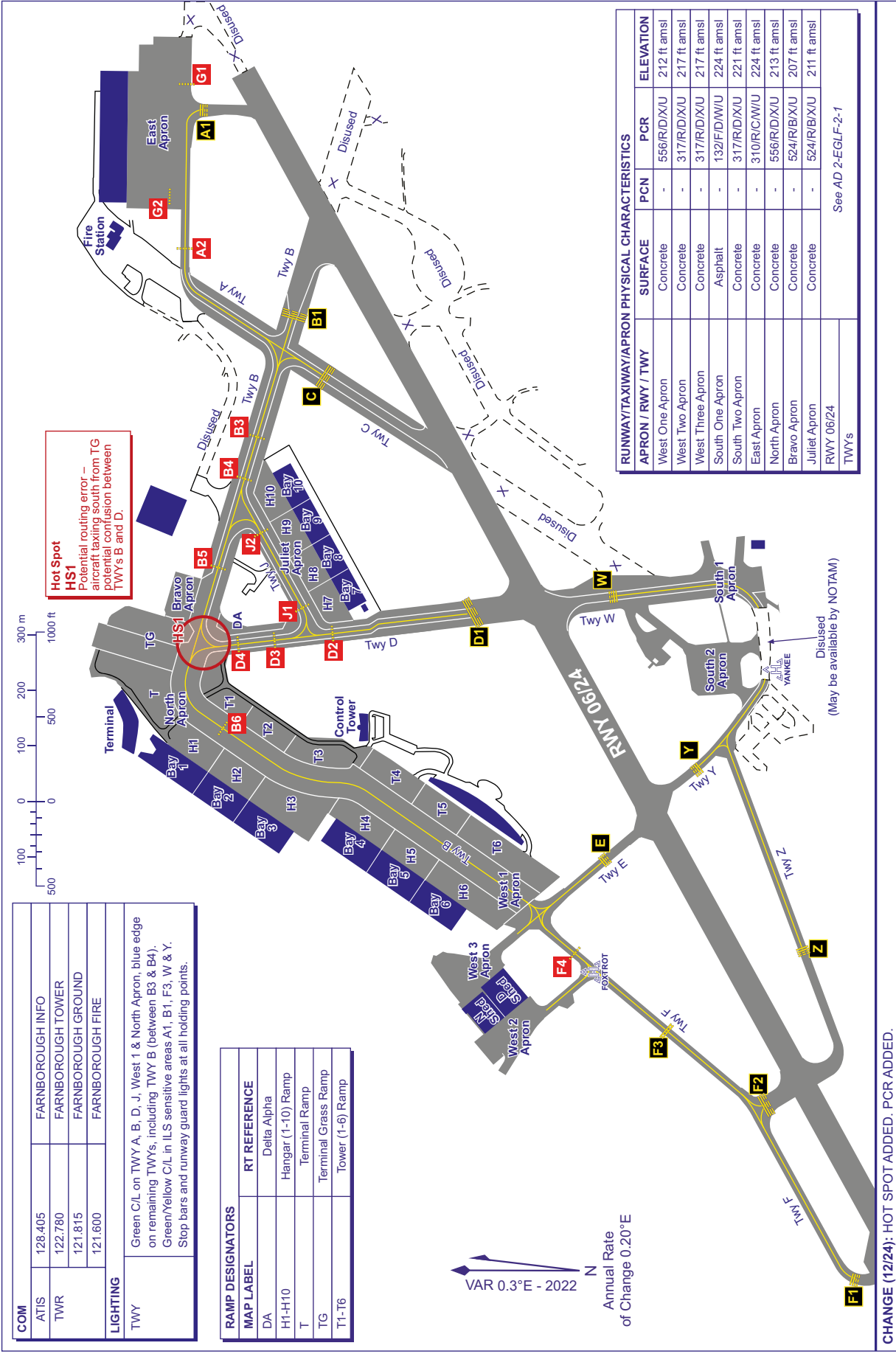
CHANGE (12/24): HOT SPOT ADDED. PCR ADDED.

**AIRCRAFT PARKING/DOCKING
CHART - ICAO**

ARP 511631N 0004639W

AD ELEV 238FT

**FARNBOROUGH
EGLF**



CHANGE (12/24): HOT SPOT ADDED. PCR ADDED.

EGBJ — GLOUCESTERSHIRE

EGBJ AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGBJ — GLOUCESTERSHIRE

EGBJ AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 515339N Long: 0021002W Midpoint of Runway 09/27.
2	Direction and distance from city	3.5 NM W of Cheltenham
3	Elevation / Reference temperature / Mean Low Temperature	101 FT / 19 °C / -
4	Geoid undulation at AD ELEV PSN	161 FT
5	Magnetic Variation / Annual Change	0.22°W (2022) / 0.20°E
6	AD Administration Address Telephone E-mail address Web address	GLOUCESTERSHIRE AIRPORT LTD. Gloucestershire Aerodrome, Cheltenham, Gloucestershire GL51, 6SR. 01452-857700 Ext 223 (Ops/ATC) briefing@gloucestershireairport.co.uk (Ops) www.gloucestershireairport.co.uk
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	GA Agreement aerodrome. Refer to GEN 1.2 for notification requirements. Designated aerodrome for Special Branch purposes.

EGBJ AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830); and by arrangement.
2	Customs and immigration	As AD hours
3	Health and sanitation	
4	AIS Briefing Office	As AD hours. Self briefing.
5	ATS Reporting Office (ARO)	As AD hours. Located in Terminal building, no access to Control Tower.
6	MET Briefing Office	As AD hours. Self briefing.
7	ATS	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830); and by arrangement. See also AD 2.18.
8	Fuelling	As AD hours. Assisted fuelling available upon opening and until 15 minutes prior to closing. No rotors running refuels available during official night hours.
9	Handling	As AD hours.
10	Security	During public transport operations and by arrangement.
11	De-icing	
12	Remarks	Aerodrome is PPR. Commanders shall book in with operations on Tel: 01452-857700 Ext 223. Certain flights not requiring Licensed facilities may operate H24 strictly by prior arrangement.

EGBJ AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Limited. 1mt Forklift. Further facilities by arrangement.
2	Fuel and oil types	AVTUR JET A-1 (All JET-A1 Pre mixed with AL48), AVGAS 100LL Aviation greases., W80, W100, 100, S80, Multigrade, Turbine oils
3	Fuelling facilities/capacity	Jet A-1 Mobile bowzers 127,000 LT. AVGAS fixed installation 52,000 LT.
4	De-icing facilities	
5	Hangar space for visiting aircraft	By arrangement.
6	Repair facilities for visiting aircraft	Full up to 5700 KG AUW Rotary and fixed-wing.

7	Remarks	Mandatory handling may be applicable, see aerodrome scale of charges for further information. Aircraft handling agencies are: Weston Aviation: 01452-933698; gloucestershire@westonaviation.com. Gloucestershire Airport Operations: 01452-857700; briefing@gloucestershireairport.co.uk. The Little Jet Company: 01452-857606; info@thelittlejetcompany.com. Flight Partner: 01452-856222; ops@flightpartner.co.uk.
---	---------	--

EGBJ AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in vicinity.
2	Restaurants	On AD.
3	Transportation	Taxis, Car hire, Buses. Nearest station Cheltenham 2.5 NM.
4	Medical facilities	Limited First Aid.
5	Bank and Post Office	Within 1.5 NM vicinity of AD.
6	Tourist Office	Local information available in Terminal. Nearest office Cheltenham 2.5 NM.
7	Remarks	Accommodation and transportation arrangements can be made via Handling Agent or Aerodrome Ops.

EGBJ AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A3 Category 4 and 5 available on request.
2	Rescue equipment	1 x MFV plus 1 x TACR 3. Hydraulic cutting equipment.
3	Capability for removal of disabled aircraft	Limited. Details from Aerodrome Authority.
4	Remarks	Flights operating for the public transport of passengers or otherwise requiring the use of a licensed aerodrome, will automatically be provided with the appropriate RFFS Category. A minimum quantity of 5250 L of water and 586 L of concentrate Level C foam is deployable.

EGBJ AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical.
2	Clearance priorities	Standard. See AD 1.2.2.
3	Remarks	No method of braking action assessment available.

EGBJ AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	A Surface: Asphalt PCN 16/F/B/W/U B Surface: Asphalt C Surface: Asphalt
2	Taxiway width, surface and strength	Taxiway A: 11 M Surface: Asphalt PCN 16/F/B/W/U Taxiway B: 14 M Surface: Asphalt Taxiway C: 14 M Surface: Asphalt Taxiway D: 18 M Surface: Asphalt

		<p>Taxiway E: 15 M Surface: Asphalt</p> <p>Taxiway G: 8 M Surface: Asphalt</p> <p>Taxiway H: 10 M Surface: Asphalt</p> <p>Taxiway J: 8 M Surface: Asphalt Taxiway J is 10.5 M then narrows to 8 M after 150 M.</p> <p>Taxiway K: 18 M Surface: Asphalt</p> <p>Taxiway R: 10 M Surface: Grass</p>
3	Altimeter checkpoint location and elevation	
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	Reinforced grass apron west of Apron A suitable for aircraft up to 2300 KG MTWA.

EGBJ AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Stands 1 and 2 have Self manoeuvring markings. AVGAS helicopter refuelling point and hard standing parking marked with circled 'H'.
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 04/22: Runway designation, threshold, centre-line and edge markings. Runway intersections marked. 04G/22G: Runway designation and Corner Markings. 09/27: Runway designation, threshold, centre-line and edge markings. Runway intersections marked.</p> <p>Taxiway marking aid(s): All taxiways yellow centre-line. See AD 2.20 paragraph 2.</p>
3	Stop bars and runway guard lights (if any)	Runway guard lights at A1, A2, A3, C1, D1, E2 & G1.
4	Other runway protection measures	
5	Remarks	WDI (LGTD): 515334.78N 0021001.19W, 515330.48N 0020939.52W. Compass swing area marked at Taxiway D and Taxiway G. Helicopter parking as directed by ATC and with a marshaller if available.

EGBJ AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBJ11869) 27/APPROACH	TREE	515508.05N 0020029.20W	1125 FT	60 FT	No	
(EGBJ10484) 22/APPROACH 04/ TAKE-OFF	TREE	515355.00N 0020918.97W	159 FT	74 FT	No	
(EGBJ7173) 22/APPROACH 04/ TAKE-OFF	BUILDING	515351.67N 0020932.13W	127 FT	19 FT	No	
(EGBJ9644) 22/APPROACH 04/ TAKE-OFF	TREE	515351.17N 0020930.85W	129 FT	19 FT	No	
(EGBJ12673) 22/APPROACH 04/ TAKE-OFF	MOBILE OBST	515349.56N 0020928.40W	125 FT	16 FT	No	
(EGBJ12672) 22/APPROACH 04/ TAKE-OFF	MOBILE OBST	515348.84N 0020927.09W	125 FT	17 FT	No	
(EGBJ11696) 09/TAKE-OFF	CHURCH SPIRE WV	515347.20N 0020620.30W	351 FT	155 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBJ10473) 27/APPROACH 09/ TAKE-OFF	TREE	515346.89N 0020923.88W	136 FT	33 FT	No	
(EGBJ10758) 27/APPROACH 09/ TAKE-OFF	TREE	515344.78N 0020920.66W	131 FT	24 FT	No	
(EGBJ10757) 27/APPROACH 09/ TAKE-OFF	TREE	515344.52N 0020921.72W	133 FT	25 FT	No	
(EGBJ10464) 27/APPROACH 09/ TAKE-OFF	TREE	515344.20N 0020914.79W	137 FT	39 FT	No	
(EGBJ10769) 27/APPROACH 09/ TAKE-OFF	TREE	515343.45N 0020917.31W	139 FT	33 FT	No	
(EGBJ10768) 27/APPROACH 09/ TAKE-OFF	TREE	515342.76N 0020920.22W	133 FT	22 FT	No	
(EGBJ11660) 27/APPROACH 09/ TAKE-OFF	TREE	515342.66N 0020914.49W	138 FT	37 FT	No	
(EGBJ10763) 27/APPROACH 09/ TAKE-OFF	BUSH	515342.43N 0020921.78W	126 FT	14 FT	No	
(EGBJ10779) 27/APPROACH 09/ TAKE-OFF	TREE	515340.97N 0020917.32W	139 FT	30 FT	No	
(EGBJ10778) 27/APPROACH 09/ TAKE-OFF	TREE	515340.95N 0020918.60W	139 FT	27 FT	No	
(EGBJ10987) 09/APPROACH 27/ TAKE-OFF	TREE	515338.60N 0021101.88W	137 FT	61 FT	No	
(EGBJ11237) 09/APPROACH 27/ TAKE-OFF	TREE	515338.19N 0021054.42W	125 FT	57 FT	No	
(EGBJ10985) 09/APPROACH 27/ TAKE-OFF	TREE	515337.58N 0021102.53W	136 FT	60 FT	No	
(EGBJ11416) 09/TAKE-OFF	CRANE JIB	515337.42N 0020748.20W	237 FT	98 FT	Yes Red	
(EGBJ10052) 09/APPROACH 27/ TAKE-OFF	TREE	515337.32N 0021053.77W	110 FT	41 FT	No	
(EGBJ10983) 09/APPROACH 27/ TAKE-OFF	TREE	515336.84N 0021058.61W	123 FT	47 FT	No	
(EGBJ10049) 09/APPROACH 27/ TAKE-OFF	TREE	515336.79N 0021053.40W	112 FT	42 FT	No	
(EGBJ10982) 09/APPROACH 27/ TAKE-OFF	TREE	515336.55N 0021100.57W	138 FT	61 FT	No	
(EGBJ10047) 09/APPROACH 27/ TAKE-OFF	TREE	515336.42N 0021053.25W	107 FT	35 FT	No	
(EGBJ10978) 09/APPROACH 27/ TAKE-OFF	TREE	515335.89N 0021059.62W	138 FT	60 FT	No	
(EGBJ7762) 09/APPROACH 27/ TAKE-OFF	AERIAL	515334.02N 0021050.88W	97 FT	24 FT	No	
(EGBJ10957) 09/APPROACH 27/ TAKE-OFF	TREE	515333.15N 0021042.87W	105 FT	44 FT	No	
(EGBJ10970) 09/APPROACH 27/ TAKE-OFF	TREE	515333.10N 0021106.26W	140 FT	63 FT	No	
(EGBJ11194) 09/APPROACH 27/ TAKE-OFF	TREE	515332.07N 0021107.59W	145 FT	68 FT	No	
(EGBJ10962) 09/APPROACH 27/ TAKE-OFF	TREE	515331.14N 0021058.93W	141 FT	65 FT	No	
(EGBJ11824) 27/APPROACH	HV PYLON	515327.73N 0020035.15W	993 FT	156 FT	No	
09 APPROACH/27 TAKE-OFF	CRANE	515326.78N 0021226.03W	149 FT	98 FT	Yes Red	Innsworth Lane. End estimated March 2026.
(EGBJ10876) 04/APPROACH 22/ TAKE-OFF	TREE	515315.95N 0021010.88W	116 FT	46 FT	No	
(EGBJ10855) 04/APPROACH 22/ TAKE-OFF	TREE	515314.50N 0021008.83W	113 FT	40 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGBJ12020)	TREE	515550.22N 0020153.07W	791 FT	99 FT	No	
(EGBJ12023)	TREE	515547.06N 0020147.39W	857 FT	85 FT	No	
(EGBJ11775)	MAST	515205.96N 0021025.06W	580 FT	105 FT	Yes Red	

EGBJ AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE EXETER 9 hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing/telephone.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English.
7	Charts and other information available for briefing or consultation	Form 214/215/415 TAF/METAR AIRMET. Internet access.
8	Supplementary equipment available for providing information	
9	ATS units provided with information	
10	Additional information (limitation of service, etc.)	Routine observations made at H+20 and H+50 during AD hours. Observations may occasionally be 'Unofficial'.

EGBJ AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
04	034.65°	980 x 23 M	RWY surface: Asphalt	515319.00N 0021005.29W 161.0 FT	THR 82.6 FT	
22	214.66°	980 x 23 M	RWY surface: Asphalt	515342.81N 0020938.69W 161.0 FT	THR 86.1 FT	
04G	034.77°	305 x 19 M	RWY surface: Grass	515327.07N 0020952.05W 161.0 FT	THR 87.3 FT	
22G	214.78°	305 x 19 M	RWY surface: Grass	515335.17N 0020942.96W 161.0 FT	THR 89.2 FT	
09	083.75°	1432 x 30 M	RWY surface: Asphalt, Grooved PCN 20/F/C/X/T	515336.29N 0021037.48W 161.0 FT	THR 73.5 FT	
27	263.77°	1432 x 30 M	RWY surface: Asphalt, Grooved PCN 20/F/C/X/T	515340.21N 0020939.54W 161.0 FT	THR 87.4 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	111 x 80 M	1166 x 80 M				RWY 04 Landing threshold displaced by 3 M.
	93 x 80 M	1166 x 80 M				RWY 22 Landing threshold displaced by 89 M.
						RWY 04G
						RWY 22G
	40 x 140 M	1394 x 280 M	90 x 74 M -			RWY 09 Landing threshold displaced by 33 M.
	2 x 140 M	1394 x 280 M	90 x 74 M -			RWY 27 Landing threshold displaced by 286 M.

EGBJ AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
09	1271 M	1311 M	1271 M	1241 M	Runway 09 LDA ends 160 M before end of paved surface due to RESA provision.
27	1317 M	1319 M	1317 M	1147 M	
09	1163 M	1165 M	1163 M		Take-off from intersection with Hold A1/A2/A3.
09	1154 M	1194 M	1154 M		Take-off from intersection with Hold C1/C2/C3.
04	980 M	1091 M	1046 M	980 M	
22	980 M	1073 M	980 M	891 M	
04G	305 M	305 M	305 M	305 M	04 (Grass)
22G	305 M	305 M	305 M	305 M	22 (Grass)

EGBJ AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
04			APAPI Left/4.5° 20 FT 115 M						
22			APAPI Left/3.5° 23 FT 115 M						
09	Basic. Centre-line lighting 30 M spacing. 230 M Light intensity high	Green Light intensity high Wingbar	PAPI Left/3° 46 FT 264 M			Elev bi-directional 1431 M 59 M spacing White with yellow caution zone Light intensity high	Red		

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
27	Intermediate. Centre-line lighting 30 M spacing with two crossbars. 312 M Light intensity high	Green Light intensity high Wingbar	PAPI Left/3.5° 43 FT 214 M			Elev bi-directional 1431m 59 M spacing White with yellow caution zone Light intensity high	Red		

EGBJ AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	IBN: 515331.89N 0021004.44W Flashing Green 'GO'. Approx. 270 M south of midpoint Runway 09/27. As required during AD hours.
2	LDI location and lighting Anemometer location and lighting	Anemometer: 515329.41N 0021007.82W (LGTD).
3	TWY edge and centre line lighting	CL: Taxiway A green centre-line lighting, Taxiway A, B and C reflective blue studs, Taxiway Echo - blue lin-laners. EDGE: All south side runway intersections and Hold A2/A3 area blue edge lighting and reflective markers.
4	Secondary power supply/switch-over time	Max. 10 seconds.
5	Remarks	Apron floodlighting.

EGBJ AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO, geoid undulation	
2	TLOF and/or FATO elevation	
3	TLOF and FATO area dimensions, surface, strength, marking, lighting	
4	True BRG of FATO	
5	Declared distance available	
6	APP and FATO lighting	
7	RMK	Three grass Helicopter training areas; Heli Northeast, Northwest and Southwest are established. An additional aiming point is provided at Heli South, adjacent to Taxiway J. Refer to aerodrome chart. Helicopter Holding points 'Y' and 'X' established north and south of Runway 27 threshold. Helicopter procedures detailed at AD 2.20 Section 5.

EGBJ AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
GLOUCESTERSHIRE ATZ A circle, 2 NM radius, centred at 515339N 0021002W on longest notified runway (09/27)	Upper limit: 2000 FT AGL Lower limit: SFC	G	GLOSTER APPROACH English	3000 FT		

EGBJ AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Call sign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	GLOSTER APPROACH	128.555 MHz DOC 25 NM/ 7,000 FT.			Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	ATZ hours coincident with Approach hours. See AD 2.20 para 4(j) Warnings. VDF 515331.51N 0020938.70W On AD. Bearing accuracy no better than Class B.
TWR	GLOSTER TOWER	122.905 MHz DOC 10 NM/ 3,000 FT. May occasionally be combined with APP. Refer to ATIS.			Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	
RADAR	GLOSTER RADAR	120.980 MHz DOC 25 NM/ 10,000 FT. Not continuously monitored during aerodrome hours.			As Directed by ATC	Radar services (Primary only) within 25 NM below FL 80, availability subject to manning. Use of 'Radar' suffix denotes availability only. Provision of a specific radar service is not implied. VDF 515331.51N 0020938.70W On AD. Bearing accuracy no better than Class B.
		128.555 MHz DOC 25 NM/ 7,000 FT.			Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	
ATIS	GLOSTER INFORMATION	127.480 MHz DOC 60 NM/ 20,000 FT.			Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	
OTHER	FIRE	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGBJ AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 0.22°W (2022)	IGOS	109.950 MHz	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	515335.64N 0021047.01W		(RWY 27)
ILS/GP	IGOS	333.650 MHz	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	515341.99N 0020952.21W		3.5° ILS Ref Datum Hgt 40 FT.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DME	IGOS	36Y 109.950 MHz	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	515331.89N 0021004.54W	111 FT	(RWY 27) On AD. Zero range is indicated at THR of Runway 27. DME range on Runway 27 approach is limited to 20 NM at 1400 FT. DOC 25 NM/25000 FT.
NDB (L) 0.22°W (2022)	GST	331.000 kHz	Mon-Fri 0830-1930 (0730-1830); Sat, Sun 0900-1800 (0800-1830).	515331.03N 0021004.45W		On AD. Range 25 NM. Radiates as an NDB out of approach hours. Interference may occur within 5 NM of Droitwich. Some ADF equipment may exhibit occasional bearing fluctuations during the approach to Runway 27.

EGBJ AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) The use of the aerodrome is subject to Airport Terms and Conditions of Use, Byelaws and Code of Practice, copies available from Admin department.
- b) PPR from ATC for non-radio traffic, circuits and instrument training.
- c) All pilots not filing flight plans are required to book-out at Flight Briefing or by telephone to ATC, stating estimated elapsed flight time, fuel endurance and POB.
- d) Requests for extensions to AD hours are to be made as soon as reasonably practicable to Operations.
- e) The use of the aerodrome outside published hours is subject to authorisation from Aerodrome Operator.
- f) PPE (high visibility jackets) must be worn by all pilots and personnel airside.

2 GROUND MOVEMENT

- a) Centre-line markings on taxi-lanes within Maintenance Area provide guidance only. Area shared by parked aircraft, uncontrolled authorised vehicles and pedestrians. Licensing and obstacle clearance criteria relating to taxiways not necessarily met. Marshalling assistance available on request.
- b) Stands 1 and 2 Self-manoeuvring markings for aircraft with a wingspan up to 24 M. Self-manoeuvring GA parking on western side of Apron A for aircraft with a wingspan up to 15 M. Marshalling assistance available on request.
- c) Aircraft commanders are requested to use minimum power settings when manoeuvring on Stands 1 and 2.
- d) Helicopter parking on west side of Apron A and on grass spots southwest of Control Tower. Stand 1 not available to helicopters unable to ground taxi.
- e) During Low Visibility Procedures, runway access/egress via A2 or A3 only. All other taxiways closed.
- f) Power checks to be completed at holding points. Aircraft should position as close as possible to holding points.
- g) Fixed wing aircraft should not taxi within three rotor diameters of rotors running helicopters.

3 CAT II/III OPERATIONS

Not applicable

4 WARNINGS

- a) Turbulence may be encountered overflying industrial area on final approach Runway 22 and when crossing airfield perimeter on final Runway 27.
- b) Runway 04/22 prone to standing water after prolonged rain. Runway state available from ATC. Runway may not be available for turbine engined departures.
- c) Bird hazard. Flocks of gulls may be encountered crossing airfield approaches particularly at dawn and dusk.
- d) A public road runs through the undershoot of Runway 22 and 27. Pilots should not approach below the PAPI glidepath.
- e) To avoid possible jet efflux, pilots should avoid overflight of the engine test bed located approx. 300 M B3 Hold.
- f) Extensive Instrument training takes place throughout AD hours in IMC and VMC. Pilots intending to transit via GST below 5000 FT AMSL or in the vicinity of IAPs bounded by the co-ordinates: 515156.76N 0023430.78W (KUPET) - 515658.92N 0023005.91W (UVNOP) - 515942.11N 0015429.46W (LAPKU) - 514946.46N 0015243.99W (REKLO) - 514739.45N 0022823.06W (SOSAB), are advised to contact Gloucester Approach.
- g) Glider and hang glider activity takes place along the Cotswold hills to the east and south of the aerodrome without notification to ATC.
- h) Runway 09/27 undulates from its western end for approximately 400 M. From the 09 end, the runway slopes down to a trough at 156 M, then rises to a peak at 264 M with the next trough at 384 M. Overall and local longitudinal slopes are compliant; however, the rate of change of subsequent slope changes exceeds CAP168 requirements by 0.05% & 0.08%.
- i) Certain flights may operate outside AD/ATS/ATZ hours, making blind transmissions on 128.555 MHz.

28 Nov 2024

- j) Public road runs adjacent to eastern airfield perimeter, penetrating Approach surfaces for Runways 22 and 27 and Take-off Climb surfaces for Runways 04 and 09. Co-ordinates relate to that portion of road closest to runway centre-lines, elevations relate to maximum penetration.
- k) Pylons and HT cables run from bearing 127°-181° MAG and 214°-275° MAG penetrating inner horizontal surface. Co-ordinates relate to position and elevation of greatest penetration.
- l) Road traffic control system in operation, activated by ATC. Mobile obstacle (vehicles) above 2.5 M stopped during non-training precision approaches when visibility less than 5000 M and on request for 09 departures.

5 HELICOPTER OPERATIONS

- a) Helicopters communicating with Gloster Air Traffic Control should prefix each transmission of their call sign with the word "Helicopter" e.g. "Helicopter G-AB (or Helicopter AB) downwind", "Gloster Tower, Helicopter 123B, on the tower apron request start-up", "Gloster Approach, Helicopter GABCD inbound".
- b) Helicopters capable of doing so should ground taxi rather than air taxi when operating on aprons and in areas where aircraft are parked or holding. Helicopters should ground taxi onto manoeuvring area before lifting. When air taxiing is unavoidable, helicopters should avoid taxiing within three rotor diameters of other aircraft. This distance should be considered as a minimum and should be increased for larger helicopters.
- c) There are three grass Helicopter Training Areas (Heli Northeast, Heli Northwest and Heli Southwest). An additional aiming point is provided at Heli South to the west of Taxiway J. Helicopter pilots operating in any of the Helicopter Training Areas must exercise extreme caution and remain clear of navigational aids, meteorological equipment and other obstacles as advised by ATC and remain outside of all runway strips.
- d) Helicopter circuits operate parallel to and inside fixed wing circuits up to a maximum of 750 FT QFE, approaching and departing from the helicopter training areas as follows:

Fixed-wing	Rotary
Runway 09/27	Heli Northwest & Northeast
Runway 04/22	Heli Southwest & Northwest

- i. Helicopters may also be instructed to depart or approach to Runways. Arrivals from the south will normally approach to Heli South.
 - ii. Heli Northwest and Heli Northeast are referred to generically as 'Heli North'. Approach Control will normally issue joining instructions to 'Heli North', Tower may then specify a particular training/landing area, subject to traffic and/or runway in use.
- e) In order to reduce RT loading and avoid conflict between rotary and fixed-wing circuits, standardised phraseology and procedures are established for helicopter operations. The standardised phrases are assigned the following meanings:
- i. **'Standard Helicopter Departure North'**: Lift and remain clear of fixed-wing active runways. After lifting, depart the ATZ promptly to the north not above height 750 FT QFE (subject to runway crossing clearance if required and remaining clear of fixed wing final approach and climb out). Please note that fixed wing and helicopter circuits may be active and opposite direction helicopter traffic may be joining. Any requirements to deviate from this standard departure must be advised to ATC.
 - ii. **'Standard Helicopter Departure South'**: Lift and remain clear of fixed-wing active runways. After lifting, depart the ATZ promptly to the south/southwest not above height 750 FT QFE (subject to runway crossing clearance if required and remaining clear of fixed wing final approach and climb out). Please note that fixed wing and helicopter circuits may be active and opposite direction helicopter traffic may be joining. Any requirements to deviate from this standard departure must be advised to ATC.
 - iii. **'Standard Helicopter Arrival North'**: Enter the ATZ from the north not above 750 FT QFE towards Heli North, remaining clear of fixed wing final approach and climb out tracks. Please note that fixed wing and helicopter circuits may be active and opposite direction helicopter traffic may be departing. Any requirements to deviate from this standard arrival must be advised to ATC.
 - iv. **'Standard Helicopter Arrival South'**: Enter the ATZ from the south/southwest not above 750 FT QFE towards Heli South or Heli Southwest (as directed), remaining clear of fixed wing final approach and climb outtracks. Please note that fixed wing and helicopter circuits may be active and opposite direction helicopter traffic may be departing. Any requirements to deviate from this standard arrival must be advised to ATC.
 - v. **'Standard Helicopter Circuits'**: Lift and remain clear of fixed wing active runways. Fly circuits not above height 750 FT QFE in same direction as notified fixed wing circuit. Circuits to depart from and arrive at the most upwind available heli-spot. When downwind helicopters shall report their position (e.g. "Helicopter-AA downwind"). Each time a helicopter lifts (including lifting each time into circuit) they shall report lifting (e.g. "Helicopter-AA lifting"). These broadcasts may not be acknowledged by ATC. Helicopters to maintain a listening watch on ADC frequency as traffic information and instructions may frequently be given. Helicopters to advise ATC when circuit detail is complete.
- f) Larger helicopters and those types able to ground taxi may be integrated into the fixed-wing circuit.
 - g) Helicopters are required to comply with noise abatement procedures as detailed in AD 2.21.
 - h) The grass-crete surface at Heli Spots 1 and 3 may not be suitable for R22 or similar skid-equipped helicopters. These aircraft should park on the grass immediately west of the relevant spot.
 - i) Helicopters requiring AVGAS are required to alight at the circled 'H' west of the refuelling point. Ground handling or repositioning may be required for parking. At no time shall student pilots maintain control of a helicopter when in the vicinity of the fuel pumps. Control shall be taken by Instructors when routing to, from or in the vicinity of the fuel pumps.
 - j) Helicopters requiring to cross Runway 04/22 and 09/27 will be instructed to air taxi to Hold Y or X to await onward clearance. Cross at right angles to the centre-line.
 - k) Runway Strips and ILS critical areas marked by mown grass. Helicopters must not infringe runway strips during approach or manoeuvring without ATC clearance.
 - l) Jet A1 refuel normally takes place at 'Spot 2' and 'Spot 5'. Access to and egress from Spot 2 should be via the quadrant delineated by the cut grass lines only. Similarly, when fixed wing aircraft are at the AVGAS pumps or Hold A2, access and egress from Spot 5 should be via the mown quadrants only, which requires a positive Runway 09/27 entry and associated ATC clearances.

6 USE OF RUNWAYS

- a) Crossing/multiple runway operations may take place. Pilots must follow ATC taxi instructions and vacate all runways as expeditiously as possible.

7 TRAINING

- a) PPR from ATC for Instrument Training, 01452-857700 x 229.
- b) An Instrument training 'slot' booking system operates throughout AD hours. 30-minute slots are issued on the hour and at H+30. In order to avoid delay or curtailment, pilots should adhere to their pre-booked times. ATC are to be advised of any cancellation. Additional training may be accepted on an ad-hoc basis, subject to traffic.
- c) Engine failure after take-off training not permitted on Runway 22. EFATO exercises from Runways 04 and 09 must only commence after passing M5 motorway and, on Runway 27, after passing Imjin Barracks.

EGBJ AD 2.21 NOISE ABATEMENT PROCEDURES

Operators of all aircraft using the aerodrome shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in the areas surrounding the aerodrome. A medium density residential conurbation is situated to the east, south and southwest of the aerodrome. Whenever possible, pilots should avoid overflight of these areas, other villages, hamlets and residential areas in the vicinity of the aerodrome. A Code of Practice is established to minimise environmental disturbance, copies available on request. The following procedures may be departed from only to the extent necessary for avoiding immediate danger and for complying with ATC instructions.

- a) Jet departures Runway 09 - Climb straight ahead through 1400 FT QNH before turning.
- b) Departures Runway 22 - No left turns permitted until passing Chosen Hill (1.2 DME).
- c) Departures Runway 27 - On passing the upwind end of the runway (and not before) all departing non-jet aircraft are to execute a 30° right turn. Non-jet aircraft wishing to turn left will then track not less than 294 MAG, until passing 600 FT QFE (or 700 FT QNH) before turning left. Avoid overflight of the village and church. Jet aircraft are to climb straight ahead through 1400 FT QNH before executing any turn. Aircraft unable to comply with 30° turn after take-off should advise ATC and climb straight ahead through 1400 FT QNH.
- d) Departures Runway 04 - No left turns before Staverton Village (1.1 DME).

EGBJ AD 2.22 FLIGHT PROCEDURES

1 PROCEDURES FOR INBOUND AIRCRAFT

- a) **IFR Arrivals:** Arriving flights are to establish communications with ATC at least 10 minutes prior to ETA at NDB(L) GST.
- b) **VFR Arrivals:** Arriving VFR flights are to establish communications with ATC at least 5 minutes prior to ETA for overhead and at not less than 5 DME. Fixed wing aircraft will normally be instructed to make a Standard Overhead Join. Pilots wishing to join for downwind, base leg or straight-in approaches should request 'Direct Join' on initial contact. Direct joins may be issued with a vertical restriction e.g. not below 1500 FT QFE, to facilitate circuit integration. Such a restriction does not absolve pilots from the requirement to remain in VMC at all times. Inbound flights should avoid Instrument Approach let-down areas and departure climb-outs at all times.

2 PROCEDURES FOR OUTBOUND AIRCRAFT

- a) To provide improved ATC handling of outbound flights via the ATS Route network from Gloucestershire Airport, the following Standard Departure Routes have been established in conjunction with relevant agencies. Full details published in Standard Route Document. Non-compliant FPL may be changed to the routes shown in the table below.

Departure to	Via	Route	Remarks
East	L607	BADIM - DCT - BUCFA - L607	Departures will normally be transferred to 'Bristol Radar' once deconflicted from known traffic.
South/Southwest	N92	BCN - DCT - EXMOR - N92	Departures will normally be transferred to 'Cardiff Radar' once deconflicted from known traffic.
West	L9	BCN - P4 - FELCA - L9	Departures will normally be transferred to 'Cardiff Radar' once deconflicted from known traffic.
Northwest	N864	KISWO - N864	Departures will normally be transferred to 'Western Radar' once deconflicted from known traffic.
North	P18	STAFA	Departures will normally be transferred to 'Western Radar' once deconflicted from known traffic.

- b) Aircraft carrying out IR Training and Examination flights at Bristol, Cardiff and Exeter are required to route BADIM - DCT - ICCIN.
- c) Upon first contact with ATC, pilots should acknowledge receipt of current ATIS code and state altimeter setting in use.
- d) All IFR departures joining controlled airspace must request start up clearance.
- e) After departure, all turns will conform with the direction of the circuit for the departure runway (promulgated on ATIS) unless approval from ATC has been granted.

28 Nov 2024

3 CIRCUIT PROCEDURES

- a) Fixed-wing circuit height 1000 FT QFE. Rotary circuit height not above 750 FT QFE. Runway 04 and 09 LH circuit, Runway 22 and 27 RH circuit. Direction may be varied by ATC.

4 INSTRUMENT APPROACHES

- a) Instrument Approach Procedures (IAP) for this aerodrome are established outside controlled airspace. See ENR 1.5.
b) Undulation of the glide path will occur beyond 6 NM. Auto coupled approaches should not be carried out before 6 NM.

EGBJ AD 2.23 ADDITIONAL INFORMATION

Not applicable

EGBJ AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGBJ-2-1

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGBJ-5-1

INSTRUMENT APPROACH CHART SRA RTR 0.5 NM/2 NM RWY 09 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-1

INSTRUMENT APPROACH CHART RNP RWY 09 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-2

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 09 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-3

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 27 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-4

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 27 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-5

INSTRUMENT APPROACH CHART SRA RTR 0.5NM/2NM RWY 27 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-6

INSTRUMENT APPROACH CHART RNP RWY 27 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-7

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 27 (CAT A,B,C) - ICAO

AD 2.EGBJ-8-8

INSTRUMENT APPROACH CHART NDB(L) AERODROME (CAT A,B,C) - ICAO

AD 2.EGBJ-8-9

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 09

AD 2.EGBJ-8-10

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 27

AD 2.EGBJ-8-11

EGBJ AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

AERODROME CHART - ICAO

ARP 515339N 0021002W

AD ELEV 101FT

GLOUCESTERSHIRE EGBJ

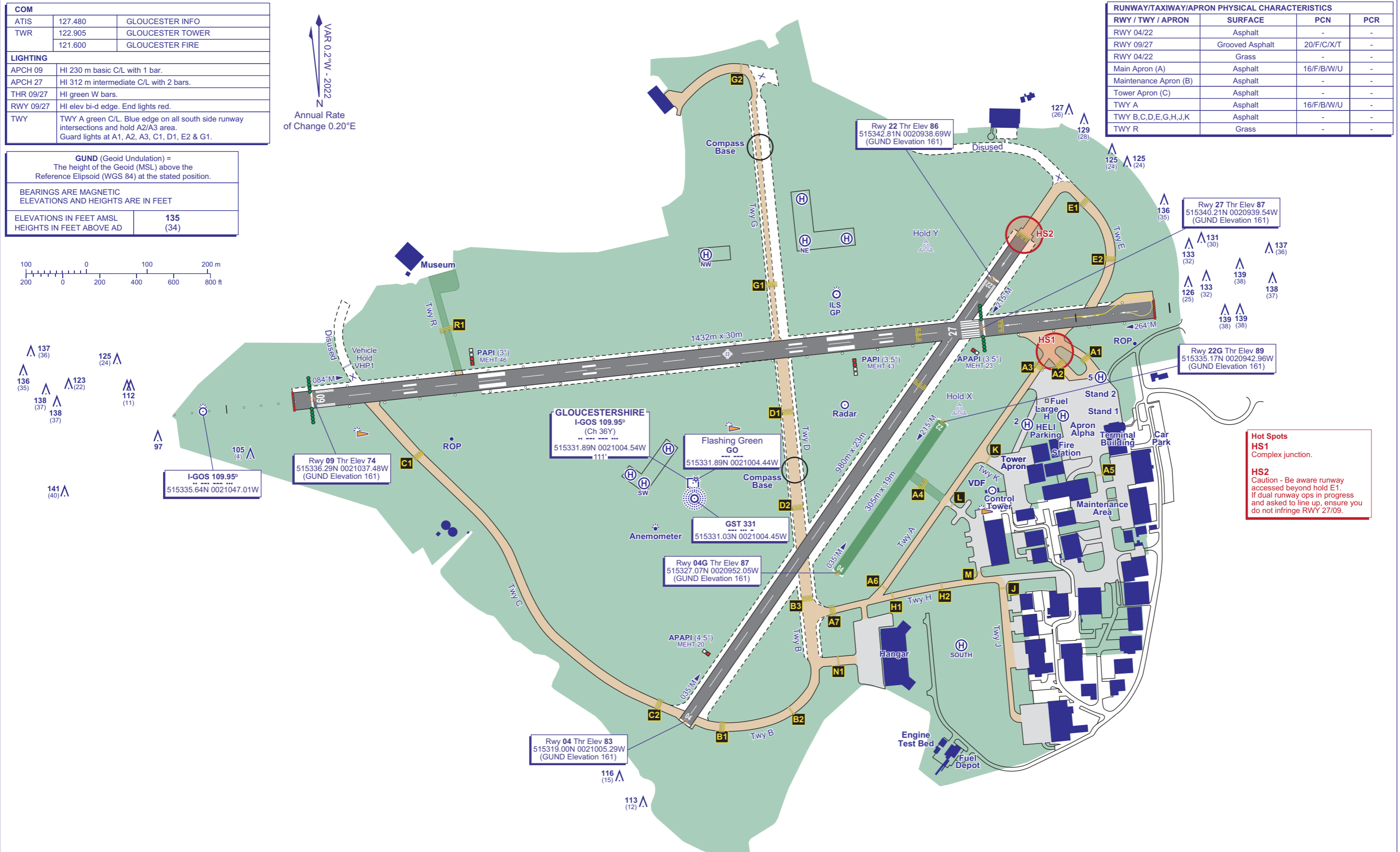
COM		
ATIS	127.480	GLOUCESTER INFO
TWR	122.905	GLOUCESTER TOWER
	121.600	GLOUCESTER FIRE
LIGHTING		
APCH 09	HI 230 m basic C/L with 1 bar.	
APCH 27	HI 312 m intermediate C/L with 2 bars.	
THR 09/27	HI green W bars.	
RWY 09/27	HI elev bi-d edge. End lights red.	
TWY	TWY A green C/L. Blue edge on all south side runway intersections and hold A2/A3 area. Guard lights at A1, A2, A3, C1, D1, E2 & G1.	

VAR 0.2°W - 2022
Annual Rate of Change 0.20°E

GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.	
BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET	
ELEVATIONS IN FEET AMSL	135 (34)
HEIGHTS IN FEET ABOVE AD	(34)



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / TWY / APRON	SURFACE	PCN	PCR
RWY 04/22	Asphalt	-	-
RWY 09/27	Grooved Asphalt	20/F/C/X/T	-
RWY 04/22	Grass	-	-
Main Apron (A)	Asphalt	16/F/B/W/U	-
Maintenance Apron (B)	Asphalt	-	-
Tower Apron (C)	Asphalt	-	-
TWY A	Asphalt	16/F/B/W/U	-
TWY B,C,D,E,G,H,J,K	Asphalt	-	-
TWY R	Grass	-	-



Hot Spots
HS1
Complex junction.
HS2
Caution - Be aware runway accessed beyond hold E1. If dual runway ops in progress and asked to line up, ensure you do not infringe RWY 27/09.

CHANGE (12/24): RWY 09/27 PCN. RWY DIMENSIONS.

AERO INFO DATE 25 SEP 24

AD 2-EGBJ-2-1

INTENTIONALLY BLANK

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
RADAR	INVERNESS RADAR	122.605 MHz DOC 40 NM/ 15,000 FT.			Mon 0615-2230 (0515-2130); Tue-Sat 0630-2230 (0530-2130); Sun 0625-2230 (0525-2130).	Combined TWR and APP service is provided on 122.605 MHz during hours when Radar is unavailable or otherwise directed by ATC. VDF 573226.14N 0040249.88W Northwest of ATC.
ATIS	INVERNESS INFORMATION	109.200 MHz Broadcast on Inverness VOR.			H24	Unverified outside hours of approach.
OTHER	INVERNESS FIRE CHIEF	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGPE AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 1.73°W (2022)	ILN	108.500 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573303.37N 0040145.09W		(RWY 05)
ILS/GP	ILN	329.900 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573218.21N 0040311.71W		3° ILS Ref Datum Hgt 50 FT. Pilots may not receive full fly-up indications when below glidepath and right of centre-line.
ILS/LLZ I 1.74°W (2022)	IDX	108.500 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573208.43N 0040344.52W		(RWY 23)
ILS/GP	IDX	329.900 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573242.93N 0040217.51W		3° ILS Ref Datum Hgt 50 FT.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME 1.74°W (2022) 1.00°W (2024)	INS	29X 109.200 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573233.49N 0040227.99W	42 FT	VOR DOC: 40 NM/25000 FT. Due to terrain, VOR coverage at low level is reduced in Sector R141-181. DME co-located and freq paired with VOR and unmonitored outside Inverness ATC hours of operation. The DME may unlock on R305 when aircraft are at ranges in excess of 34 NM and below 5500 FT.
NDB 1.74°W (2022)	IVR	328.000 kHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573229.43N 0040245.48W		Normally radiates H24. Range 25 NM.
ILS/DME	IDX	22X 108.500 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573230.47N 0040246.46W	43 FT	(RWY 23) DME freq paired with ILS I-LN and I-DX. Zero range is indicated at THR of Runway 05 and 23.
ILS/DME	ILN	22X 108.500 MHz	H24 Available for approach and landing outside the hours of ATC with airport approval.	573230.47N 0040246.46W	43 FT	(RWY 05) DME freq paired with ILS I-LN and I-DX. Zero range is indicated at THR of Runway 05 and 23.

EGPE AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) All operators, international flights (including executive and private General Aviation) regardless of MAUW, must make prior arrangements with a handling agent for ground handling of all flights.
- b) Inverness Airport is strictly PPR outside published hours. Requests should be made to Inverness Apron Operations Tel: +44 (0)1667-464307, Mobile: +44 (0)7917-071144 or e-mail: invernessapronoperations@hial.co.uk.
- c) Smoking airside is strictly prohibited.
- d) Use of Inverness aerodrome is subject to standard Terms and Conditions of Use, which can be requested from the aerodrome.
- e) Due to restricted parking availability all aircraft should be left in a towable condition wherever practicable. Signage indicating that aircraft are ready for tow should be displayed in a prominent position or, where no signage is available, handling agents informed of the aircraft state.
- f) In order to comply with airport regulations, all persons entering airside areas on foot are required to wear high visibility clothing, appropriate PPEs and be in possession/display an appropriate and valid HIAL ID pass.
- g) All aircraft using Inverness Aerodrome or its facilities are required to have third party liability insurance cover. Proof of this insurance should be available for inspection at any time whilst the aircraft is on the aerodrome.

2 GROUND MOVEMENT

- a) The taxiway between the north end of the south apron and threshold Runway 11 is available for use only by aircraft with a wingspan up to but not including 36 M.
- b) To permit crossing of Taxiway Echo through the North Apron by non-radio equipped vehicles, two crossings are installed, indicated by black/white checked edges. One, at the north end, leads to the GA Terminal, Landing Fee Office and Flight Plan Centre, the other to AFS and the Terminal Building. These crossings are not available during Stage 2 LVP operations, ATC will advise. In addition a pedestrian

EGNS — ISLE OF MAN**EGNS AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGNS — ISLE OF MAN

EGNS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 540500N Long: 0043724W Centre of Runway 08/26.
2	Direction and distance from city	6 NM SW of Douglas.
3	Elevation / Reference temperature / Mean Low Temperature	53 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	180 FT
5	Magnetic Variation / Annual Change	1.42°W (2022) / 0.21°E
6	AD Administration Address Telephone Telefax AFS	THE ISLE OF MAN DEP OF INFRASTRUCTURE AIRPORTS DIVISION Isle of Man Airport, Ballasalla, Isle of Man IM9 2AS. 01624-821600 (Airport Administration) 01624-827546 (ATC) 01624-821641 (MET Office). 01624-648110 (Customs and Immigration). 01624-821611 (Airport Authority) 01624-821646 (MET Office) 01624-821722 (ATC) 01624-661650 (Customs and Immigration) EGNSYDYX
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGNS AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Sat 0615-2045 (0515-1945); Sun 0700-2045 (0600-1945); and by arrangement.
2	Customs and immigration	As AD hours. Prior notice required by 1600 (1500) on previous day.
3	Health and sanitation	As ATS hours.
4	AIS Briefing Office	Flight Plans can be telephoned to 01624-827548
5	ATS Reporting Office (ARO)	None
6	MET Briefing Office	As ATS hours.
7	ATS	Mon-Sat 0600-2045 (0500-1945); Sun 0645-2045 (0545-1945). See also AD 2.18.
8	Fuelling	0630-2030 (0530-1930).
9	Handling	As ATS hours.
10	Security	H24
11	De-icing	Limited, on request from Handling Agents.
12	Remarks	Hours subject to seasonal and operational extensions - promulgated by NOTAM.

EGNS AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Limited. Contact Airport Administration.
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL W80, W100.
3	Fuelling facilities/capacity	Mobile AVGAS 4500 lts. Mobile AVTUR 18, 300 lts. No anti-icing agent available.
4	De-icing facilities	Limited, on request from Handling Agents.
5	Hangar space for visiting aircraft	None
6	Repair facilities for visiting aircraft	Limited.

7	Remarks	<p>Refuelling facilities available during published hours of opening from Avflight Ltd, Tel: 01624-827928.</p> <p>Handling is mandatory for all arriving aircraft. Arrangements should be confirmed in advance with one of the following handling agents:</p> <p>Menzies Aviation Ltd, Tel: 01624-825780; Fax: 01624-825822; Frequency: 129.750 MHz.</p> <p>The Private Jet Company Ltd, Tel: 01624-824555; Email: ops@privatejetco.im.</p> <p>3 Legs Aviation Services Ltd, Tel: 07555-135443; Email: info@3legsaviationservices.com.</p> <p>Information on charges may be obtained from each nominated handling agent.</p>
---	---------	--

EGNS AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotel information via www.visitisleofman.com .
2	Restaurants	Buffet and bar at Airport.
3	Transportation	Buses, taxis and car hire.
4	Medical facilities	Limited first aid treatment. Hospital at Douglas, 6 NM.
5	Bank and Post Office	Cash dispenser and Postal collection at airport.
6	Tourist Office	Isle of Man Tourist Information Centre.
7	Remarks	

EGNS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	<p>RFF Category A6 RFF Category 7 available with 48 hours prior notice.</p> <p>Operational hours as AD hours. Outside these times and by arrangement, reduced RFF category may be provided for specific flights.</p>
2	Rescue equipment	To ICAO Standards.
3	Capability for removal of disabled aircraft	Limited.
4	Remarks	

EGNS AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	2 Snow ploughs, 2 de-icing rigs.
2	Clearance priorities	As determined by aerodrome authority.
3	Remarks	Latest SNOTAM information from ATC, GRF data available from ATC. Tel: 01624-827546

EGNS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	<p>APRON Surface: Concrete and asphalt PCN 32/F/A/X/U</p>
2	Taxiway width, surface and strength	<p>Taxiway A (A2 TO 21): 18 M Surface: Asphalt PCR 495/F/D/W/T</p> <p>Taxiway A (A2 TO 26): 18 M Surface: Asphalt PCR 500/F/D/W/T</p> <p>Taxiway B APRON TO 08: 18 M Surface: Asphalt PCR 357/F/D/W/T</p>

		<p>Taxiway C APRON TO 08/26: 27 M Surface: Asphalt PCR 500/F/D/W/T</p> <p>Taxiway D (26 TO 03): 11 M Surface: Asphalt PCR 340/F/D/W/T</p> <p>Taxiway E APRON TO 21: 18 M Surface: Asphalt PCR 340/F/D/W/T</p> <p>Taxiway F APRON TO 08/26: 27 M Surface: Asphalt PCR 500/F/D/W/T</p> <p>Taxiway J (08 TO 03): 18 M Surface: Asphalt PCR 340/F/D/W/T</p> <p>Taxiway K: 18 M Surface: Asphalt PCR 327/F/D/W/T</p> <p>Taxiway L (08 TO L4): 18 M Surface: Asphalt PCR 500/F/D/W/T</p> <p>Taxiway L (L4 TO 21): 18 M Surface: Asphalt PCR 495/F/D/W/T</p>
3	Altimeter checkpoint location and elevation	Apron 58 FT
4	VOR checkpoints	
5	INS checkpoints	See Aircraft Parking/Docking Chart
6	Remarks	

EGNS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	All stands are marked nose-in/push-back except Stand 3. All stands with the exception of Stands 7 and 8 have numbered identification boards at the head of the stand.
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 03/21: EASA markings. Runway designation, threshold, aiming point, touch down point, centre-line, edge line, displaced threshold on Runway 03. 08/26: CAP 168 markings. Runway designation, threshold, aiming point, touch down point, centre-line, edge line on 08/26, displaced thresholds on Runways 08, 26. Touch Down Zone on Runway 26 and 08 are non standard - Runway 08 last two pairs omitted, Runway 26 last pair omitted.</p> <p>Taxiway marking aid(s): Centre-line marking and lighting on Taxiways A, B, C, E, F, J, K and L.</p> <p>Taxiway light(s): Taxiways A, B, C, E, F, J, K and L have green centre-line lighting with blue edge lighting at bends and runway turn-offs, illuminated or reflective signs and stop-bars.</p>
3	Stop bars and runway guard lights (if any)	Stop bars associated with all runway holding points for 03/21 and 08/26, supplemented by blocking stop bars either side of the main runway intersection. Stop bars in use during all operational hours.
4	Other runway protection measures	
5	Remarks	Wind Direction Indicators: (W) 540451.39N 0043754.02W (LGTD); (E) 540505.88N 0043710.70W (LGTD).

EGNS AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGNS1178) 21/APPROACH 03/ TAKE-OFF	TREES	540616.76N 0043626.90W	256 FT	75 FT	No	
(EGNS1159) 21/APPROACH 03/ TAKE-OFF	OBSTRUCTION LIGHT	540540.67N 0043701.34W	152 FT	5 FT	Yes Red	
(EGNS1088) 08/APPROACH 26/ TAKE-OFF	HOUSE AERIAL	540456.49N 0043827.26W	82 FT	38 FT	No	
(EGNS1103) 08/APPROACH 26/ TAKE-OFF	OBSTRUCTION LIGHT	540448.24N 0043821.30W	80 FT	44 FT	Yes Red	
(EGNS1058) 08/APPROACH 26/ TAKE-OFF	TREES	540446.60N 0043836.92W	87 FT	53 FT	No	
(EGNS1005) 08/APPROACH 26/ TAKE-OFF	DVOR L C	540401.09N 0044548.58W	573 FT	33 FT	No	
(EGNS1008) 08/APPROACH 26/ TAKE-OFF	AERIAL	540359.15N 0044544.07W	569 FT	46 FT	Yes Red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGNS1035)	GROUND LEVEL	540858.13N 0044009.49W	1587 FT	0 FT	No	
(EGNS1198)	GROUND LEVEL	540852.94N 0043413.17W	732 FT	0 FT	No	
(EGNS1209)	MAST	540826.20N 0042934.92W	750 FT	260 FT	Yes Red	
(EGNS1298)	TREES	540817.30N 0043410.58W	527 FT	46 FT	No	
(EGNS1017)	GROUND LEVEL	540813.56N 0044310.07W	1461 FT	9 FT	No	
(EGNS1283)	HOUSE APEX	540605.92N 0043706.45W	197 FT	26 FT	No	
(EGNS1172)	SENSOR A1R2	540512.30N 0043639.04W	47 FT	3 FT	No	
(EGNS1254)	SIGN	540510.49N 0043733.19W	51 FT	3 FT	No	
(EGNS1151)	ANTENNA S5	540452.96N 0043710.12W	56 FT	34 FT	No	
(EGNS1152)	RADAR	540452.80N 0043710.09W	74 FT	53 FT	Yes Red	
(EGNS1127)	WINDSOCK	540451.39N 0043754.02W	50 FT	25 FT	Yes Red	
(EGNS1120)	FLAGPOLE	540444.42N 0043806.08W	149 FT	117 FT	Yes Red	

EGNS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	ISLE OF MAN OFFICE
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	ISLE OF MAN OFFICE 9 hours.
4	Trend forecast Interval of issuance	TREND 30 minutes.
5	Briefing/consultation provided	Forecaster available H24.

6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English.
7	Charts and other information available for briefing or consultation	Low Level Weather and Spot Wind Charts for British Isles and near Continent. MET Satellite and Weather Radar images and sequences.
8	Supplementary equipment available for providing information	Cloud satellite receiver.
9	ATS units provided with information	ISLE OF MAN
10	Additional information (limitation of service, etc.)	METARs issued half hourly during aerodrome operating hours but hourly when the aerodrome is closed.

EGNS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
03	027.96°	1199 x 46 M	RWY surface: Asphalt PCR 548/F/D/W/T	540442.70N 0043751.73W 180.5 FT	THR 23.8 FT	
21	207.97°	1199 x 46 M	RWY surface: Asphalt PCR 548/F/D/W/T	540514.26N 0043723.23W 180.5 FT	THR 52.8 FT	
08	077.94°	2110 x 46 M	RWY surface: Asphalt PCR 554/F/D/W/T	540454.97N 0043804.49W 180.5 FT	THR 30.1 FT TDZ 32.6 FT	
26	257.96°	2110 x 46 M	RWY surface: Asphalt PCR 554/F/D/W/T	540505.25N 0043642.55W 180.4 FT	THR 33.4 FT TDZ 33.4 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
		1225 x 140 M	120 x 140 M -			RWY 03 Threshold displaced by 95 M.
	94 x 150 M	1225 x 140 M	120 x 140 M -			RWY 21
	938 x 150 M	1796 x 280 M	240 x 150 M -			RWY 08 Threshold displaced by 291 M.
	148 x 150 M	1796 x 280 M	240 x 150 M -			RWY 26 Threshold displaced by 296 M.

EGNS AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
08	1877 M	2815 M	1877 M	1586 M	
26	1909 M	2057 M	1909 M	1613 M	
08	1496 M	2243 M	1496 M		Take-off from intersection of Taxiway Bravo
26	1469 M	1617 M	1469 M		Take-off from intersection of Taxiway Kilo
03	1199 M	1199 M	1199 M	1105 M	
21	1105 M	1199 M	1105 M	1105 M	

EGNS AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
03		Green Light intensity high With green wingbars	PAPI Left/3° 42 FT 250 M			HI bi-directional with LI omnidirectional component 60 M spacing White	Red Light intensity high		
21	Centre-line with one crossbar with HI unidirectional component co-located with LI red omnidirectional component. 427 M Light intensity high	Green Light intensity high With green wingbars	PAPI Right/ 3.5° 42 FT 250 M High ground to the left of approach to Runway 21. Pilots should establish on runway centre-line before descending on the PAPI signal.			HI bi-directional with LI omnidirectional component 60 M spacing White	Red Light intensity high		
08	Coded centre-line with four crossbars. 700 M Light intensity high	Green Light intensity high With green wingbars	PAPI Left/3.5° 54 FT 265 M		Coded centre-line 30 M spacing Light intensity high	HI bi-directional with LI omnidirectional component 60 M spacing White	Red Light intensity high		EDGE: Yellow caution zone lights.
26	Coded centre-line with three crossbars. 360 M Light intensity high	Green Light intensity high With green wingbars	PAPI Left/3° 45 FT 340 M		Coded centre-line 30 M spacing Light intensity high	HI bi-directional with LI omnidirectional component 60 M spacing White	Red Light intensity high		EDGE: Yellow caution zone lights.

EGNS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: 540507.25N 0043754.29W (LGTD).
3	TWY edge and centre line lighting	
4	Secondary power supply/switch-over time	Yes. 8 seconds in power failure, 1 second in Low Visibility Operations.
5	Remarks	Apron floodlighting. Obstacle lighting.

EGNS AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGNS AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
ISLE OF MAN CTR 541417N 0042643W - 541056N 0045159W thence anti-clockwise by the arc of a circle radius 8.5 NM centred on 540240N 0044845W to 540304N 0050309W - 540139N 0050641W - 535411N 0044824W - 535743N 0042028W thence anti-clockwise by the arc of a circle radius 8.5 NM centred on 540600N 0042335W to 540233N 0041024W - 541306N 0041540W thence anti-clockwise by the arc of a circle radius 8.5 NM centred on 540600N 0042335W to 541417N 0042643W	Upper limit: FL105 Lower limit: SFC	D	RONALDSWAY APPROACH English	3000 FT		
ISLE OF MAN ATZ A circle, 2 NM radius, centred at 540500N 0043726W on longest notified runway (08/ 26)	Upper limit: 2000 FT AGL Lower limit: SFC	D	RONALDSWAY APPROACH English	3000 FT		

EGNS AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	RONALDSWAY APPROACH	135.905 MHz Also CTR channel. DOC 50 NM/ 16,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945); and by arrangement.	ATZ hours coincident with Approach hours. In the event of failure of remote transmitters/receivers, coverage to the north of the airfield may be degraded and ATC services reduced accordingly.
TWR	RONALDSWAY TOWER	119.005 MHz DOC 25 NM/ 8,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945); and by arrangement.	
RADAR	RONALDSWAY RADAR	120.855 MHz As directed by ATC. DOC 50 NM/ 16,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945).	In the event of failure of remote transmitters/receivers, coverage to the north of the airfield may be degraded and ATC services reduced accordingly.
		125.305 MHz As directed by ATC. DOC 25 NM/ 10,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945).	
		135.905 MHz DOC 50 NM/ 16,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945).	

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
ATIS	RONALDSWAY INFORMATION	123.880 MHz DOC 60 NM/ 20,000 FT.			Mon-Sat 0600-2045 (0500-1945); Sun 0645- 2045 (0545-1945).	
OTHER	RONALDSWAY FIRE	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	
OTHER	ISLE OF MAN EMERGENCY	121.500 MHz Emergency Frequency			O/R	

EGNS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 1.42°W (2022)	IRH	111.150 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540457.61N 0043711.84W		(RWY 08) Off-set 3.75° from Runway centre- line. 120 M south of Runway 08/26 centre-line and 953 M from Runway 08 THR. Normally radiates H24 when selected.
ILS/GP	IRH	331.550 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540453.42N 0043747.84W		3.5° ILS Ref Datum Hgt 53 FT. Normally radiates H24 when selected.
ILS/LLZ I 1.43°W (2022)	IRY	111.150 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540452.22N 0043826.45W		(RWY 26) 1931 M from THR 26. Normally radiates H24 when selected.
ILS/GP	IRY	331.550 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540459.64N 0043659.31W		3° ILS Ref Datum Hgt 53 FT. Normally radiates H24 when selected.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME 1.48°W (2022) 0.80°W (2022)	IOM	59X 112.200 MHz	H24 Hours of operation for aerodrome purposes: Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540401.12N 0044548.50W	567 FT	APCH Aid to Isle of Man. VOR DOC: 60 NM/50,000 FT (75 NM/ 50,000 FT in Sector R271°-211°). DME DOC: 60 NM/50,000 FT (160 NM/50,000 FT in Sector R271°-211°).
DME	IRY	48Y 111.150 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540451.62N 0043722.10W	38 FT	(RWY 26) DME freq paired with ILS I-RH and I- RY. Zero range is indicated at THR of Runway 08 and 26.
DME	IRH	48Y 111.150 MHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540451.62N 0043722.10W	38 FT	(RWY 08) DME freq paired with ILS I-RH and I- RY. Zero range is indicated at THR of Runway 08 and 26.
NDB (L) 1.42°W (2022)	RWY	359.000 kHz	Mon-Sat 0600-2045 (0500- 1945); Sun 0645-2045 (0545- 1945); and by arrangemen t.	540451.90N 0043722.40W		On AD. Range 20 NM. Normally radiates H24.

EGNS AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use governed by regulations applicable to the Isle of Man CTR.
- b) Non-radio aircraft are strictly **PPR** through ATC.
- c) Instrument training is subject to prior permission from ATC.
- d) Under the terms of the Anti-Terrorism and Crime Act 2003, pilots and passengers of private or charter aircraft who have come from or are going to the British Isles, must when requested to do so, make themselves available to be spoken to by an examining officer. In relation to all such flights, the pilot must fully complete a General Aviation Report. Further details can be found here:- General Aviation website:- <https://www.gov.im/categories/tax-vat-and-your-money/customs-and-excise/general-aviation/>.
- e) Outside published hours of availability, use of the airport is subject to prior permission from the Airport Duty Manager.
- f) All parking areas within the critical part of the aerodrome are designated as Customs Area. It shall be the responsibility of the commander of any aircraft that is required to be subjected to Customs inspection to inform ATC at the earliest opportunity.
- g) High visibility clothing must be worn on the aprons and manoeuvring area at all times. Health and Safety requirements in respect of ear protection must be observed and are the responsibility of the individuals concerned.

2 GROUND MOVEMENT

- a) Due to physical constraints of the apron design, pilots must follow the ground markings at all times.
- b) Apron floodlighting is 7 M from the pavement edge and CCTV masts are 4 M from the pavement edge on the west apron. Pilots of aircraft should exercise caution in respect of wing tip clearance. The services of a marshaller are available on request.
- c) Class 2 compass calibration base on Runway 21 is only suitable for aircraft with magnetic sensors which are at least five feet above ground. Use governed by prior permission through ATC.
- d) Movement to/from Area W at night via D1 only.
- e) No taxi lane is available between the east and west aprons. Taxiing through stands 7 & 8 / 8 & 7 is prohibited unless specifically authorised.

3 CAT II/III OPERATIONS

- a) Isle of Man Airport is not equipped with CAT II/III procedures, however Low Visibility Procedures are used to protect CAT I operations.

4 WARNINGS

- a) Except for light signals ground signals shall not be displayed.
- b) Increased bird activity due to coastal location. Bird scaring including the use of pyrotechnics, lethal control and lasers used regularly on the aerodrome.
- c) A known windshear hazard exists on short final for Runway 08 when the wind is from the southeast and pilots should adopt appropriate operating procedures. During strong wind conditions, turbulence may be expected on the approach to, or climb out from, any runway.
- d) Take-off and landing will be restricted to paved surfaces only.
- e) Pilots of helicopters should note the presence of a 10 M anemometer mast in the Met square adjacent to the apron area and exercise due caution when manoeuvring prior to arrival or departure.
- f) The presence of high ground to the north of Runway 08/26 centre-line may trigger GPWS alerts if aircraft adopt high rate of descent and/or fast speed profiles in this sector.
- g) Holding position D1 is situated close to the exit from area Whiskey and coincident with the start of the 26 ILS GP critical area. Pilots should exercise extreme caution in observing and complying with holding position D1 to ensure they do not infringe Runway 26 and the GP critical area.
- h) Runway 21 - CAUTION - Departing crew should be aware that kite surfing in the vicinity of the climb out is possible during daylight hours.
- i) Holding position A9 is situated close to the exit of Area Victor. Pilots should exercise caution in observing and complying with holding position A9 to ensure they do not infringe Runway 08.

5 HELICOPTER OPERATIONS

- a) Helicopters are to arrive and depart using the runways as no specified helicopter landing areas are defined.

6 USE OF RUNWAYS

- a) Simulated engine failures are not permitted on departure from Runway 26.
- b) Pilots should not descend below the indicated PAPI glide path whilst landing on any runway, and the following conditions should be noted:
 - i. Due to the presence of high ground to the left of the approach for Runway 21, pilots must establish on the runway centre-line before descending on the PAPI glide path.
 - ii. Due to the presence of an uncontrolled public road in the vicinity of the undershoot area of Runway 03, approaches to this runway are not permitted if the PAPIs are out of service.
 - iii. The noise abatement procedures as detailed at AD 2.21 should be followed.

7 TRAINING

- a) All training flights require approval from ATC.

EGNS AD 2.21 NOISE ABATEMENT PROCEDURES

- a) Pilots of aircraft using the airport shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the airport, particularly near Castletown and Ballasalla.
- b) All propeller driven aircraft must climb straight ahead to 500 FT and must have passed the airport boundary before commencing any turn.
- c) All jet aircraft must climb straight ahead to 1000 FT before commencing any turn.
- d) All departing aircraft from Runway 26 shall track the extended centre-line until a range of 3 NM or less from IOM DME before commencing any turn. Aircraft unable to receive DME shall climb straight ahead for 2 minutes from commencement of their take off run before commencing any turn. This procedure may only be departed from when authorised by ATC.
- e) When approaching to land on any Runway all aircraft shall intercept the extended runway centre-line at a minimum range of 2 NM and shall not descend below the PAPI indicated approach.
- f) Any of these procedures may be departed from to the extent necessary for the avoidance of immediate danger.

EGNS AD 2.22 FLIGHT PROCEDURES

1 FLIGHTS WITHIN ISLE OF MAN CTR AND CTA

- a) Isle of Man Airspace is subject to Isle of Man Civil Aviation Legislation, details of which are notified at GEN 1-6-6. Pilots requiring Exemptions or Permissions under the Air Navigation Order, Rules of the Air Regulations 2015 or Standardised European Rules of the Air, should contact the Isle of Man Director of Civil Aviation on 01624-682374.
- b) All flights regardless of weather conditions, are required to obtain a clearance from ATC prior to entering the CTR/CTA.
- c) All IFR flights within the Isle of Man CTR/CTA must fulfil the requirements for Class D Airspace appropriate to existing weather conditions.
- d) Special VFR clearances within the CTR/CTA, in IMC or at night, may be issued subject to traffic conditions and limitations by ATC.
- e) As extensions to airport hours are frequent, pilots intending to transit the Isle of Man CTR/CTA outside airport published hours are strongly advised to contact Ronaldsway Approach before entering the CTR/CTA.
- f) In the event of failure of remote transmitters/receivers, radio communications to the north of the aerodrome below 3000 FT may be restricted and ATC services reduced accordingly. Pilots should ensure that they do not enter the CTR/CTA without ATC clearance. In the event of difficulty in establishing communication, a Flight Information Service may be available from Scottish Information on frequency 119.875 MHz.
- g) Pilots may, upon request, be cleared to self-position directly to final approach for the ILS/DME approach to Runway 08 or Runway 26. Pilots are warned that, in order to maintain adequate terrain clearance, descent will not be issued below 3200 FT QNH if arriving from the north-east sector or in any event below 3000 FT QNH until established on the localiser. Pilots are responsible for arranging their flight to intercept the localiser and glidepath at an appropriate range.

2 PROCEDURES FOR INBOUND AIRCRAFT

- a) Standard Routes

Approach from	Via	Route
N	Direct	MIKEL
NE	DCS	IOM
NW	L10	SLYDA
SE	L10	KELLY
	M146	LUSOD (See note)
SW	Y911	IOM
E	Direct	VANIN

Note: If inbound traffic via M146 is required to hold it will hold at KELLY as per details in the Table below.

- b) Holding. Holding patterns are as follows:

Isle of Man VOR IOM	Holding axis 079° MAG, turning right at the facility.
KELLY	Holding fix IOM VOR/DME 125°/17 NM on an axis of 305° MAG, turning left at the facility, limiting DME IOM D22.
Ronaldsway NDB RWY 08	Holding axis 259° MAG, turning left at the facility.
Ronaldsway NDB RWY 26	Holding axis 079° MAG, turning right at the facility.
VANIN (535907N 0040221W)	Holding fix IOM VOR/DME 101°/26 NM on an axis of 281° MAG, turning right at the facility, limiting DME IOM D31.

Note: Holding may also take place at SLYDA in accordance with the en-route holding procedure described at ENR 3-6-1-1.

3 PROCEDURES FOR OUTBOUND AIRCRAFT

- a) Standard Routes.

Departing to	Via	Route
N	Direct	MIKEL/SLYDA
NE	Direct	DCS
E	Direct	VANIN
SE	KELLY	L10
	TIMIS	Q39
SW	IOM	Y911
NW	IOM	L10‡

‡ Unless otherwise instructed by ATC, aircraft on the appropriate routes must establish on track by MIKEL/SLYDA.

4 RADIO COMMUNICATIONS FAILURE PROCEDURES

- a) In the event of complete communication failure in an aircraft, the pilot will adopt the appropriate procedures notified at ENR 1.1.3 paragraph 4.2.2 to 4.2.4 inclusive, with the following exceptions:
- i. When complete communication failure occurs in an aircraft before ETA or before EAT, when this has been received and acknowledged, the aircraft will:
 1. fly to the RWY NDB holding point;
 2. hold at the last assigned level until the last acknowledged ETA plus 10 minutes or EAT when this has been received and acknowledged; or, if radio failure occurs after an aircraft has reported over the runway NDB, hold at the last assigned level until ATA plus 10 minutes, or 10 minutes after the last acknowledged communications with ATC whichever is the later;
 3. then commence descent for landing in accordance with the procedures notified at ENR 1.1.3, paragraph 4.2.2 to 4.2.4 and effect a landing within 30 minutes (or later if able to approach and land visually).
 - b) Aircraft that are instructed by ATC to hold at IOM, or KELLY, will in the event of complete communication failure:
 - i. when an Onward Clearance Time has been received and acknowledged, leave IOM, or KELLY at that time at the last assigned level and proceed to the RWY NDB, then carry out the procedures above;
 - ii. when 'Delay Not Determined' has been transmitted by ATC, the aircraft should not attempt to land at Isle of Man aerodrome and should divert to the alternate destination specified in the current flight plan or other suitable airfield.

5 VISUAL REFERENCE POINTS (VRP)

- a) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

EGNS AD 2.23 ADDITIONAL INFORMATION

Not applicable

EGNS AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGNS-2-1

AIRCRAFT PARKING/DOCKING CHART - ICAO

AD 2.EGNS-2-2

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGNS-5-1

INSTRUMENT APPROACH CHART SRA RTR 2 NM RWY 03 - ICAO

AD 2.EGNS-8-1

INSTRUMENT APPROACH CHART OFF-SET ILS/DME RWY 08 - ICAO

AD 2.EGNS-8-2

INSTRUMENT APPROACH CHART OFF-SET LOC/DME RWY 08 - ICAO

AD 2.EGNS-8-3

INSTRUMENT APPROACH CHART SRA RTR 2 NM RWY 08 - ICAO

AD 2.EGNS-8-4

INSTRUMENT APPROACH CHART VOR/DME RWY 08 - ICAO

AD 2.EGNS-8-5

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 08 - ICAO

AD 2.EGNS-8-6

INSTRUMENT APPROACH CHART ILS/DME RWY 26 - ICAO

AD 2.EGNS-8-7

INSTRUMENT APPROACH CHART LOC/DME RWY 26 - ICAO

AD 2.EGNS-8-8

INSTRUMENT APPROACH CHART SRA RTR 2 NM RWY 26 - ICAO

AD 2.EGNS-8-9

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 26 - ICAO

AD 2.EGNS-8-10

AERODROME CHART - ICAO

ARP 540500N 0043724W

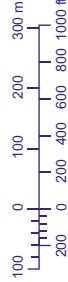
AD ELEV 53FT

ISLE OF MAN EGNS

LIGHTING	
APCH 08	HI 700 m coded C/L with 4 bars.
APCH 26	HI 360 m coded C/L with 3 bars.
APCH 21	HI 427 m uni-d C/L with 1 bar with LI red omni-d component.
THR 03/21	HI green with green W bars.
THR 08/26	HI green with green W bars.
RWY 03/21	HI bi-d edge with LI omni-d component. End lights red.
RWY 08/26	HI C/L, HI bi-d edge with LI omni-d component (last 600 m yellow caution). End lights red.
TWY	Green C/L TWY A, B, C, E, F, J, K, L. Blue edge at bends and RWY turn-offs. Stop bars at all runway holds, supplemented by blocking stop bars either side of the main runway intersection.

COM	RONALDSWAY INFO
ATIS	123.880
TWR	119.005
	RONALDSWAY FIRE
	121.600

GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.	
BEARINGS ARE MAGNETIC	
ELEVATIONS AND HEIGHTS ARE IN FEET	
ELEVATIONS IN FEET AMSL	149
HEIGHTS IN FEET ABOVE AD	(97)



Radar

Rwy 21 Thr Elev 53
540514.26N 0043723.23W
GUND Elevation 181

Rwy 08 Thr Elev 30
540454.97N 0043804.49W
(GUND Elevation 181)

VAR 1.4°W - 2022
Annual Rate of Change 0.21°E

I-RY 111.15°
540452.22N 0043826.45W

Highest Elev in TDZ 33
540458.39N 0043737.24W

Hot Spots
HS1 Hold D1 has a sharp turn from area Whiskey.
HS2 Kitesurfing activity in RWY 03 Approach and RWY 21 Take Off area.



RWY / APRON / TWY	SURFACE	PCN	PCR
RWY 03/21	Asphalt	-	548 F/D/W/T
RWY 08/26	Asphalt	-	554 F/D/W/T
TWY A (A2 to RWY 26)	Asphalt	-	500 F/D/W/T
TWY A (A2 to RWY 21)	Asphalt	-	495 F/D/W/T
TWY B (APRON to RWY 08)	Asphalt	-	357 F/D/W/T
TWY C (APRON to RWY 08/26)	Asphalt	-	500 F/D/W/T
TWY D (RWY 26 to RWY 03)	Asphalt	-	340 F/D/W/T
TWY E (APRON to RWY 21)	Asphalt	-	340 F/D/W/T
TWY F (APRON to RWY 08/26)	Asphalt	-	500 F/D/W/T
TWY J (RWY 03 to RWY 08)	Asphalt	-	340 F/D/W/T
TWY K	Asphalt	-	327 F/D/W/T
TWY L (RWY 08 to L4)	Asphalt	-	500 F/D/W/T
TWY L (L4 to RWY 21)	Asphalt	-	495 F/D/W/T
APRON	Asphalt	-	495 F/D/W/T

See AD 2-EGNS-2-2

CHANGE (12/24): TWY DESIGNATORS. HOLD DESIGNATORS. HOLD LIGHTING REVISED. TWY LIGHTING REVISED. PCN/PCR VALUES REVISED.

ISLE OF MAN
EGNS

AD ELEV 53FT

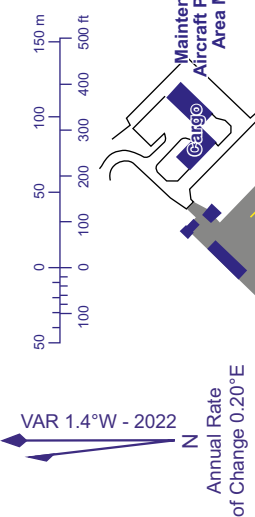
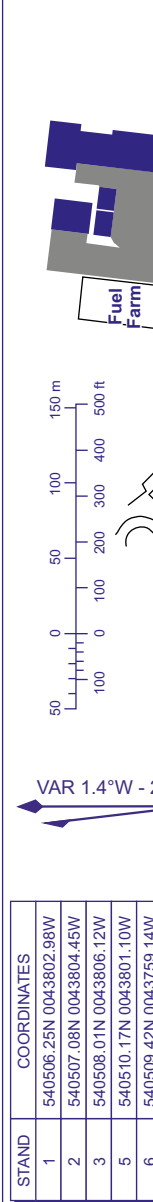
ARP 540500N 0043724W

AIRCRAFT PARKING/DOCKING
CHART - ICAO

STAND	COORDINATES
1	540506.25N 0043802.98W
2	540507.08N 0043804.45W
3	540508.01N 0043806.12W
5	540510.17N 0043801.10W
6	540509.42N 0043759.14W
7	540508.51N 0043757.51W
8	540509.48N 0043756.12W
9	540510.47N 0043757.88W
10	540511.55N 0043759.35W
11	540512.42N 0043800.90W
12	540515.04N 0043756.22W
13	540514.15N 0043754.63W
14	540513.25N 0043753.04W

AERO INFO DATE 20 SEP 24

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / APRON / TWY	SURFACE	PCN	PCR
APRON	Asphalt/Concrete	32/F/A/X/U	-
RWYs	See AD 2.EGNS-2-1		
TWYs			



COM		
ATIS	123.880	RONALDSWAY INFO
TWR	119.005	RONALDSWAY TOWER
	121.600	RONALDSWAY FIRE
LIGHTING		
TWY		Green C/L TWY A, B, C, E, F, J, K, L. Blue edge at bends and RWY turn-offs. Stop bars at all runway holds, supplemented by blocking stop bars either side of the main runway intersection.

CHANGE (12/24): TWY DESIGNATORS: HOLD DESIGNATORS: TWY LIGHTING REVISED: PCN/PCR VALUES REVISED.

AD 2-EGNS-2-2

EGNM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	APRON Surface: Concrete PCN 61/R/A/W/T
2	Taxiway width, surface and strength	<p>Taxiway A B-C: 38 M Surface: Concrete PCN 61/R/A/W/T</p> <p>Taxiway A C-D3: 45 M Surface: Concrete PCN 61/R/A/W/T</p> <p>Taxiway A D3-EAST END: 40 M Surface: Concrete PCN 61/R/A/W/T</p> <p>Taxiway A RWY-B: 38 M Surface: Concrete PCN 41/R/A/W/T</p> <p>Taxiway D: 23 M Surface: Concrete PCN 59/R/D/X/T</p> <p>Taxiway E: 23 M Surface: Concrete PCN 51/R/B/W/T</p> <p>Taxiway F: 13.5 M Surface: Asphalt PCN 32/F/A/W/U</p> <p>Taxiway G: 10.5 M Surface: Asphalt PCN 32/F/A/W/U</p> <p>Taxiway L: 23 M Surface: Concrete PCN 59/F/D/X/T</p> <p>Taxiway LINK B: 25 M Surface: Concrete PCN 41/R/A/W/T</p> <p>Taxiway LINK C: 35 M Surface: Concrete PCN 61/R/A/W/T</p> <p>Taxiway M: 23 M Surface: Asphalt PCN 32/F/A/W/T</p> <p>Taxiway N N3-N4: 23 M Surface: Concrete PCN 61/R/A/W/T</p> <p>Taxiway N RWY-N3: 23 M Surface: Asphalt PCN 32/F/A/W/T</p>
3	Altimeter checkpoint location and elevation	Apron 662 FT (At Stand 1)
4	VOR checkpoints	
5	INS checkpoints	As stand coordinates, see AD 2-EGNM-2-2.
6	Remarks	Attitude and Heading Reference System (AHRS) alignment issues possible on Multiflight East Apron as a result of shielding from the hangars causing GPS signal tracking failure. If affected, recommended action is to relocate aircraft to a different position away from the hangar. Always contact ATC prior to start and taxi.

EGNM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Stands 1 to 21C are marked for nose-in guidance with marshaller. Stands 15 to 18R are MARS (Multi Access Ramp System) stands.
2	Runway and taxiway markings and lighting	Runway marking aid(s): 14/32: Runway designation, runway centre-line, runway threshold, fixed distance and touchdown and zone markings. Runway side stripes. 32 Turning 'D' is not equipped with centre-line taxiway lights. Pilots to exercise caution when manoeuvring.
3	Stop bars and runway guard lights (if any)	Stop Bars located at Holding Points A1, B, C, D1, D2, D3, E1, E2, F1, L1, N1, N2 and N3. Stop Bars at Runway Holding Points (A1, B, D1, E1, E2, F1, L1, N1) are in operation H24.
4	Other runway protection measures	
5	Remarks	Taxiway Alpha restricted to aircraft of wingspan not exceeding 36 M. Taxiway November between November 3 and November 4 restricted to aircraft of wingspan not exceeding 41.5 M. Taxiway Delta restricted to aircraft of wingspan not exceeding 61 M. Taxiway Foxtrot south of the junction with Taxiway Golf is restricted to aircraft of wingspan not exceeding 18.5 M. Through traffic between Taxiways Foxtrot and Golf is restricted to aircraft of wingspan not exceeding 18.5 M. Taxiways Foxtrot and Mike not available at night. LGTD WDI - 535140.92N 0013921.61W, 535214.26N 0013955.54W.

EGNM AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGNM1270) 14/APPROACH 32/ TAKE-OFF	TREE	535337.11N 0014151.09W	936 FT	22 FT	No	
(EGNM1183) 14/APPROACH 32/ TAKE-OFF	TREE	535336.63N 0014204.64W	932 FT	64 FT	No	
(EGNM1269) 14/APPROACH 32/ TAKE-OFF	BUILDING	535336.33N 0014149.36W	931 FT	11 FT	No	
(EGNM1190) 14/APPROACH 32/ TAKE-OFF	WALL	535336.26N 0014143.20W	914 FT	5 FT	No	
(EGNM4425) 14/APPROACH 32/ TAKE-OFF	TREE	535335.18N 0014151.82W	949 FT	33 FT	No	
(EGNM1266) 14/APPROACH 32/ TAKE-OFF	OBS BEACON	535334.51N 0014151.86W	935 FT	24 FT	No	
(EGNM4434) 14/APPROACH 32/ TAKE-OFF	UTILITY POLE	535326.88N 0014201.45W	884 FT	48 FT	No	
(EGNM4762) 14/APPROACH 32/ TAKE-OFF	UTILITY POLE	535326.44N 0014150.35W	888 FT	49 FT	No	
(EGNM4421) 14/APPROACH 32/ TAKE-OFF	UTILITY POLE	535326.18N 0014139.90W	877 FT	55 FT	No	
(EGNM4420) 14/APPROACH 32/ TAKE-OFF	UTILITY POLE	535325.98N 0014133.45W	870 FT	47 FT	No	
(EGNM4419) 14/APPROACH	UTILITY POLE	535325.70N 0014124.86W	866 FT	52 FT	No	
(EGNM3936) 14/APPROACH 32/ TAKE-OFF	TREE	535323.48N 0014126.39W	852 FT	48 FT	No	
(EGNM1350) 32/TAKE-OFF	EP	535322.63N 0014202.23W	851 FT	35 FT	No	

EGGP — LIVERPOOL**EGGP AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGGP — LIVERPOOL

EGGP AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 532001N Long: 0025059W Centre of Runway 09/27.
2	Direction and distance from city	6.5 NM SE of Liverpool.
3	Elevation / Reference temperature / Mean Low Temperature	81 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	171 FT
5	Magnetic Variation / Annual Change	0.64°W (2022) / 0.21°E
6	AD Administration Address Telephone SITA E-mail address Web address	LIVERPOOL AIRPORT LIMITED Liverpool (John Lennon) Airport , Liverpool L24 1YD. 0151-907 1541 (1542) (ATC) 0151-907 1551 (Airport Operations Centre/PPR) LPLAPXH airportcontrol@liverpoolairport.com (Airport Operations Centre/PPR) www.liverpoolairport.com
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGGP AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24 (Self Briefing via AIS Internet site www.nats.aero/ais).
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24 (Self Briefing via MET Office Internet site www.metoffice.gov.uk).
7	ATS	H24
8	Fuelling	H24
9	Handling	H24 On request via handling agent.
10	Security	H24 Central search 0400-2200 (0300-2100), on request via handling agent outside these times. Airfield 24 HR.
11	De-icing	H24
12	Remarks	

EGGP AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Normal. By arrangement. Nearest railway siding: Garston 2.1 NM.
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL Oils by arrangement with resident operators.
3	Fuelling facilities/capacity	Approximately 500,000 LT AVTUR and AVGAS
4	De-icing facilities	H24. Centralised de-icing is available subject to prior arrangement with the Airport Authority. Request should be made via handling agent.
5	Hangar space for visiting aircraft	Available by prior arrangement through: Airport Operations Centre; Tel: 0151-907 1551; Ravenair/Liverpool Aviation Services; Tel: 0151-486 6161, Fax: 0151-486 5151, Email: ops@ravenair.co.uk .
6	Repair facilities for visiting aircraft	Major and Minor, by arrangement.

7	Remarks	<p>Oxygen and related servicing: By arrangement with resident operators.</p> <p>Fuel supplied by:</p> <p>Ravenair/Liverpool Aviation Services Ltd. Payment by cash, cheque or credit card. Tel: 0151-486 6161; Fax: 0151-486 5151; Website: www.liverpoolhandling.co.uk.</p> <p>Menzies Aviation. Payment by cash, cheque, carnet, 3rd party cards by prior arrangement or credit card. Tel: 0151-486 7084, Fax: 0151-486 7720. Stone ballast will not be accepted.</p> <p>PPR and ground handling are mandatory for all visiting aircraft. PPR requests must be made via a handling agent and to airportcontrol@liverpoolairport.com.</p> <p>Handling agencies are:</p> <p>Ravenair/Liverpool Aviation Services Ltd. Tel: 0151-486 6161; Fax: 0151-486 5151; Website: www.liverpoolhandling.co.uk; Channel: 131.755 Callsign: LAS Liverpool.</p> <p>Swissport: Tel: 0151-486 5421, Fax: 0151-448 1427, SITA: LPLKXHX Frequency: 130.600 MHz Callsign: Swissport Liverpool.</p> <p>Wynne Aviation Services Ltd: Tel: 0151-486 1919, Mobile: 0796-492 1223, Email: info@wynneaviation.co.uk, Website: www.wynneaviation.co.uk.</p> <p>XLR Executive Jet Centres: Tel: 0151-317 9325, Mobile: 0797-383 7355, Email: jetcentre@xlrliverpool.com.</p>
---	---------	---

EGGP AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotel within 50 M of Terminal and other hotels in the vicinity.
2	Restaurants	Yes.
3	Transportation	Buses, taxis and car hire. Railway stations at Liverpool South Parkway (1.7 NM), Runcorn (4.5 NM) and Liverpool Lime Street (6.5 NM).
4	Medical facilities	Full Medical Response H24 - First aid only. Defibrillators available.
5	Bank and Post Office	ATMs and Bureau de Change in terminal.
6	Tourist Office	
7	Remarks	

EGGP AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A7 RFF Category 8 and 9 available on request by prior notice.
2	Rescue equipment	<p>Fire Category 7 - 1 x Command vehicle 4x4 Nissan Navarro, 1 x Oshkosh Striker 6x6 Major Foam Tender (12,000 litres water, 1680 litres foam, 227 KG Dry Powder & 10 KG Co2), 1 x Cobra 6x6 Major Foam Tender (10,000 litres water, 1300 litres foam, 200 KG Dry Powder & 10 KG Co2).</p> <p>Spare – 2 x Cobra 6x6 Major Foam Tender (22,000 litres water, 3000 litres foam, 400 KG Dry Powder & 10 KG Co2).</p>
3	Capability for removal of disabled aircraft	<p>Aircraft recovery services, including towing, removal, and necessary repairs, are available upon request for operators. In the event of an aircraft becoming disabled on the airfield, LJLA will coordinate specialised external support to promptly facilitate the movement of the aircraft.</p> <p>Contact: Tel: 0151-907 1551 (Airport Operations Centre).</p>
4	Remarks	

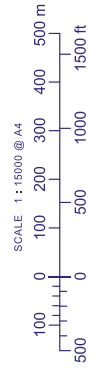
AERODROME CHART - ICAO

ARP 532001N 0025059W

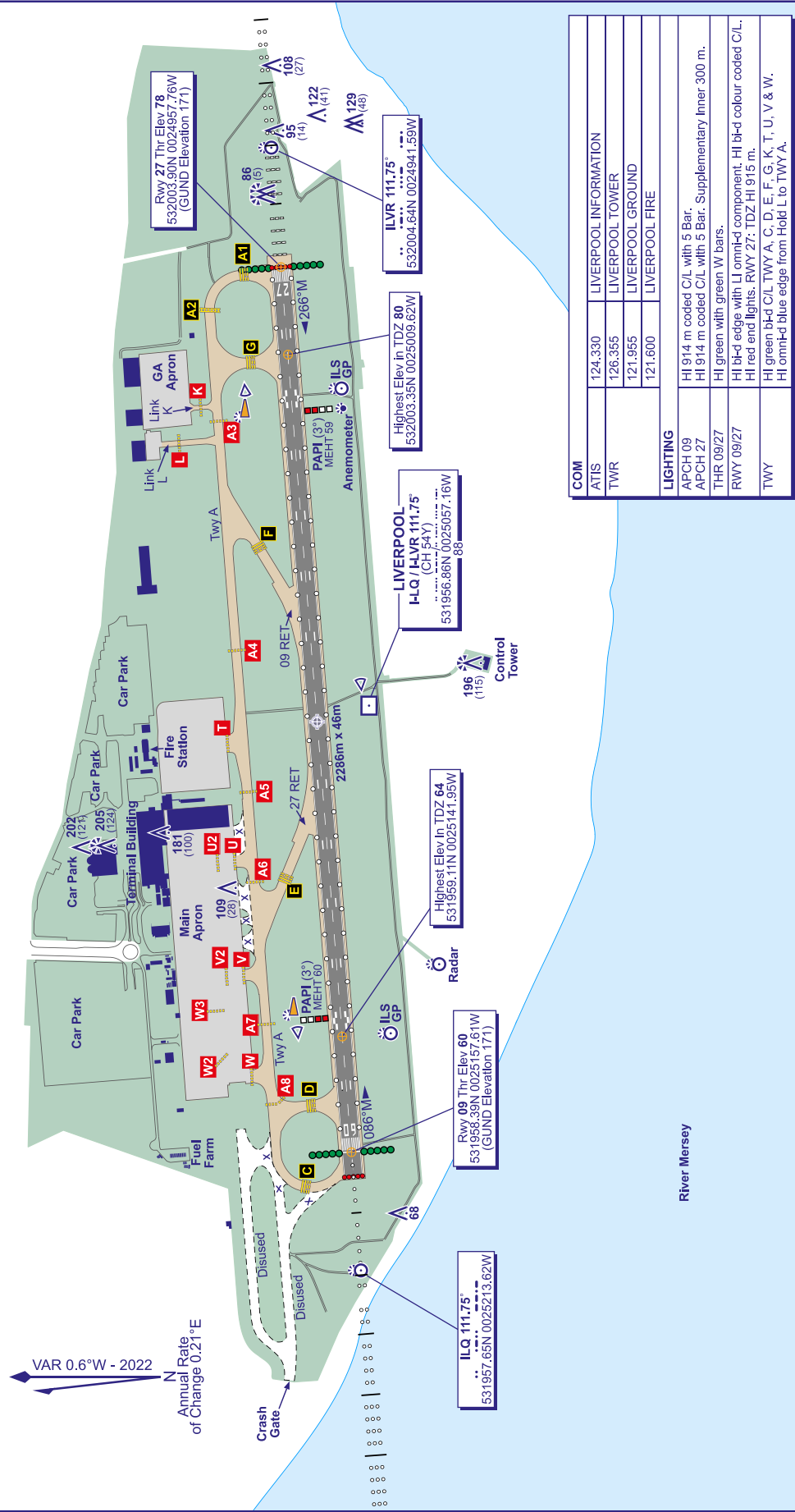
AD ELEV 81 ft

LIVERPOOL
EGGP

<p>GUND (Geoid Undulation) = The height of the geoid (MSL) above the reference ellipsoid (WGS 84) at the stated position.</p>	
BEARINGS ARE MAGNETIC	196
ELEVATIONS ARE IN FEET	(115)
HEIGHTS IN FEET ABOVE AD	



APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 09/27	Grooved Asphalt	77/F/C/W/T	-
Main Apron	Concrete	92/R/B/W/T	-
TWYs A, C, D, E, F, G, L	Asphalt	77/F/C/W/T	-
Link K	Asphalt	Max. Weight 5700kg	-



COM	LIVERPOOL INFORMATION
ATIS	124.330
TWR	126.355
	121.955
	121.600
LIGHTING	
APCH 09	HI 914 m coded C/L with 5 Bar.
APCH 27	HI 914 m coded C/L with 5 Bar. Supplementary Inner 300 m.
THR 09/27	HI green with green W bars.
RWY 09/27	HI bi-d edge with LI omni-d component. HI bi-d colour coded C/L. HI red end lights. RWY 27: TDZ HI 915 m.
TWY	HI green bi-d C/L TWY A, C, D, E, F, G, K, T, U, V & W. HI omni-d blue edge from hold L to TWY A.

AERO INFO DATE 09 SEP 24

AD 2-EGGP-2-1

CHANGE (12/24); NEW SPECIFICATION.

**AIRCRAFT PARKING/DOCKING
CHART - ICAO**

ARP 532001N 0025059W

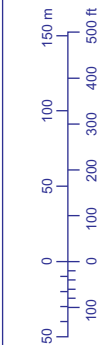
AD ELEV 81FT

**LIVERPOOL
EGGP**

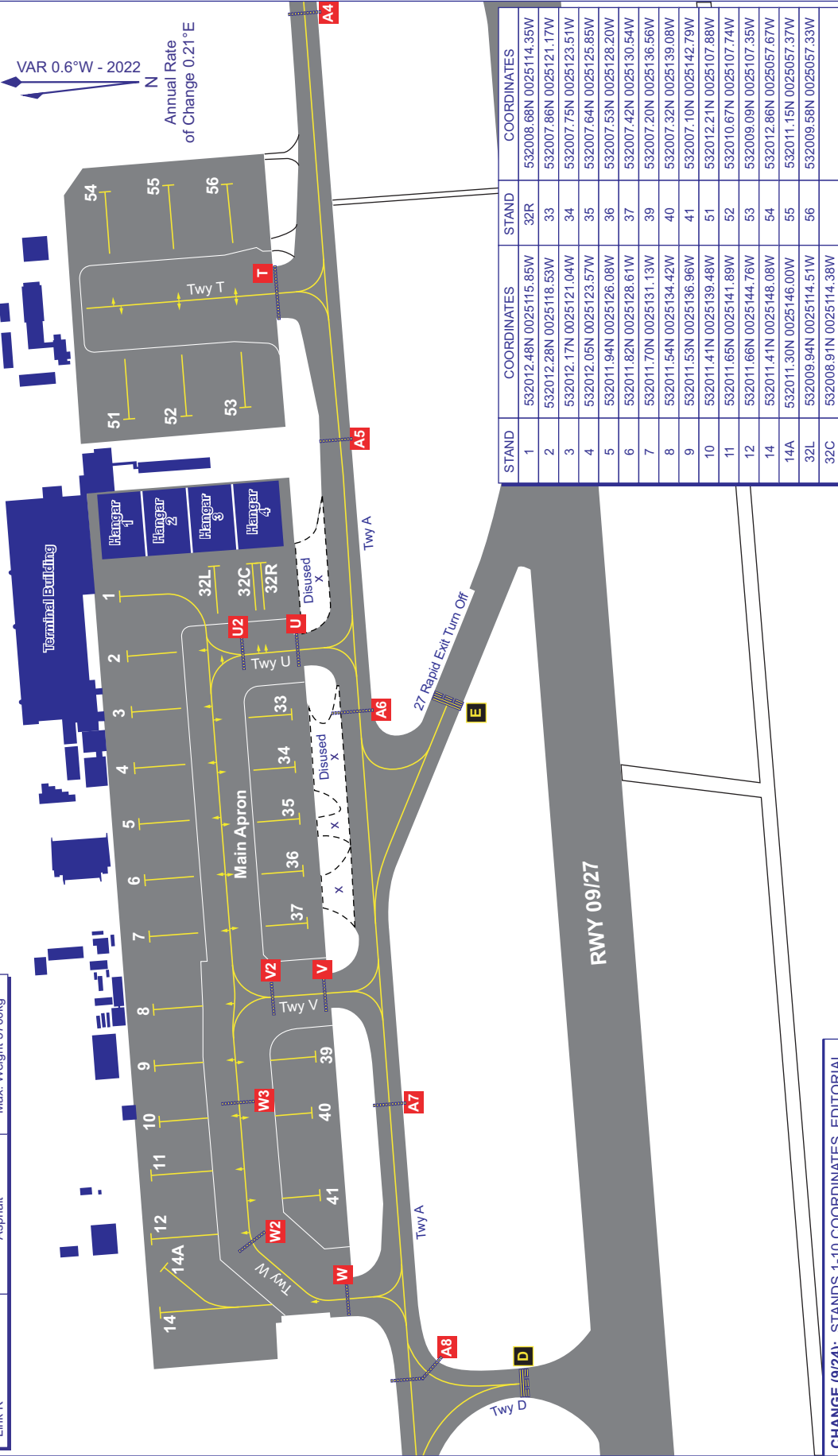
RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS	
APRON / RWY / TWY	BEARING STRENGTH
RWY 09/27	77/F/C/W/T
Main Apron	92/R/B/W/T
Taxiway A,C,D,E,F,G,L	77/F/C/W/T
Link K	Asphalt
	Max. Weight 5700kg

AERO INFO DATE 18 JUN 24

COM	
ATIS	LIVERPOOL INFO
TWR	LIVERPOOL TOWER
	LIVERPOOL GROUND
	LIVERPOOL FIRE



VAR 0.6°W - 2022
Annual Rate of Change 0.21°E



STAND	COORDINATES	STAND	COORDINATES
1	532012.48N 0025115.85W	32R	532008.68N 0025114.35W
2	532012.28N 0025118.53W	33	532007.86N 0025121.17W
3	532012.17N 0025121.04W	34	532007.75N 0025123.51W
4	532012.05N 0025123.57W	35	532007.64N 0025125.85W
5	532011.94N 0025126.08W	36	532007.53N 0025128.20W
6	532011.82N 0025128.61W	37	532007.42N 0025130.54W
7	532011.70N 0025131.13W	39	532007.20N 0025136.56W
8	532011.54N 0025134.42W	40	532007.32N 0025139.08W
9	532011.53N 0025136.96W	41	532007.10N 0025142.79W
10	532011.41N 0025139.48W	51	532012.21N 0025107.88W
11	532011.65N 0025141.89W	52	532010.67N 0025107.74W
12	532011.66N 0025144.76W	53	532009.09N 0025107.35W
14	532011.41N 0025148.08W	54	532012.86N 0025067.67W
14A	532011.30N 0025146.00W	55	532011.15N 0025067.37W
32L	532009.94N 0025114.51W	56	532009.58N 0025067.33W
32C	532008.91N 0025114.38W		

CHANGE (9/24): STANDS 1-10 COORDINATES. EDITORIAL.

AD 2-EGGP-2-2

EGLC — LONDON CITY

EGLC AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGLC — LONDON CITY

EGLC AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 513019N Long: 0000319E Mid point of Runway 09/27.
2	Direction and distance from city	6 NM E of City of London.
3	Elevation / Reference temperature / Mean Low Temperature	20 FT / 20 °C / -
4	Geoid undulation at AD ELEV PSN	149 FT
5	Magnetic Variation / Annual Change	0.59°E (2022) / 0.19°E
6	AD Administration Address Telephone Telefax	LONDON CITY AIRPORT LTD Royal Docks, Silvertown, London E16 2PX. 01489-571177 (ATC) 020-7646 0000 (Administration) 020-7511 1040 (Administration) 020-7511 0248 (Ops/FBU)
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	All telephone calls to ATC are recorded.

EGLC AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Fri 0630-2200 (0530-2100); Sat 0630-1230 (0530-1130); Sun 1230-2200 (1130-2100); PH 0900-2200 (0800-2100).
2	Customs and immigration	Mon-Fri 0630-2230 (0530-2130); Sat 0630-1330 (0530-1230); Sun and PH 0900-2300 (0800-2200). Prior notice required by 1400 (1300) on previous day.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	As aerodrome hours.
7	ATS	As aerodrome hours. See also AD 2.18.
8	Fuelling	As aerodrome hours.
9	Handling	As aerodrome hours.
10	Security	As aerodrome hours.
11	De-icing	As aerodrome hours.
12	Remarks	Aerodrome Hours are maximum permitted for scheduling purposes. No static customs presence, contact Waterloo International Terminal: 020-7919 6710.

EGLC AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	
2	Fuel and oil types	AVTUR JET A-1
3	Fuelling facilities/capacity	Road Tanker up to 37,500 LT.
4	De-icing facilities	Available via handling agent.
5	Hangar space for visiting aircraft	None.
6	Repair facilities for visiting aircraft	Available by arrangement.
7	Remarks	A nominated handling agent is mandatory for all visiting aircraft. Handling for corporate and General Aviation by arrangement with London City Airport Jet Centre, Tel: 020-7646 0400; Fax: 020-7646 0450; SITA: LCYGAXH

EGLC AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in the vicinity
2	Restaurants	Restaurant, buffet bar.
3	Transportation	Trains, buses, taxis, hire cars. Nearest railway station: London City Airport (Docklands Light Railway).
4	Medical facilities	Limited first aid treatment.
5	Bank and Post Office	Bureau de Change.
6	Tourist Office	
7	Remarks	

EGLC AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A6
2	Rescue equipment	Water borne rescue equipment as per Aerodrome Manual.
3	Capability for removal of disabled aircraft	Limited facilities available
4	Remarks	RFFS available throughout aerodrome operating hours.

EGLC AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical, Chemical de-icing.
2	Clearance priorities	Standard
3	Remarks	

EGLC AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	EAST APRON Surface: Concrete MAIN APRON (STAND 10) Surface: Concrete PCR 387/R/C/Y/U MAIN APRON (STANDS 3-9) Surface: Concrete PCR 285/R/C/Y/U
2	Taxiway width, surface and strength	Taxiway TANGO (BTN A-D): 15 M Surface: Concrete PCR 440/R/B/W/T Taxiway TANGO (BTN D-E): 22 M Surface: Concrete Taxiway TANGO (BTN E-M): 18 M Surface: Concrete Taxiway TANGO (BTN T1-A): 16 M Surface: Concrete PCR 285/R/C/Y/U
3	Altimeter checkpoint location and elevation	Apron 17 FT
4	VOR checkpoints	
5	INS checkpoints	See Aircraft Parking/Docking Chart.
6	Remarks	

EGLC AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Self-manoeuvring stand marking (with marshalling assistance).
---	---	---

2	Runway and taxiway markings and lighting	Runway marking aid(s): 09/27: Runway threshold. Runway designators. Aiming point and TDZ markings. Taxiway marking aid(s): Yellow centre-line. Enhanced taxiway centre-line markings in place on all taxiways. Taxiway light(s): Green centre-line lights with amber Intermediate Hold Point lighting.
3	Stop bars and runway guard lights (if any)	Red stop bars and co-located runway guard lights on access taxiways.
4	Other runway protection measures	
5	Remarks	Taxiway: Apron and access taxiways green centre-line lights augmented with blue edge lights on curves. Selectable lead-on lights. Blue edge lights on edges of runway turning areas and apron. WDI (LGTD): 513020.59N 0000338.46E; 513021.74N 0000301.74E.

EGLC AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(TC2 GALLIONS 3B) 27/APPROACH 09/TAKE-OFF	CRANE	513027.14N 0000443.86E	244 FT	222 FT	Yes Red	End estimated December 2024.
(EGLC5562) 09/APPROACH 27/ TAKE-OFF	BRIDGE TOWER	513023.39N 0000223.63E	77 FT	62 FT	No	
(EGLC1677) 09/APPROACH 27/ TAKE-OFF	BUILDING	513020.32N 0000101.22W	703 FT	680 FT	Yes Red	
(EGLC6407) 09/APPROACH 27/ TAKE-OFF	BUILDING UNDER DEMOLITION	513019.99N 0000152.23E	94 FT	80 FT	No	
(EGLC2064) 09/APPROACH 27/ TAKE-OFF	BUILDING	513019.58N 0000049.73W	528 FT	515 FT	No	
(EGLC1198) 09/APPROACH 27/ TAKE-OFF	BUILDING	513019.38N 0000152.00E	170 FT	151 FT	No	
(EGLC1073) 09/APPROACH 27/ TAKE-OFF	BUILDING	513019.16N 0000149.65E	178 FT	161 FT	No	
(EGLC1100) 09/APPROACH 27/ TAKE-OFF	CANARY WHARF TOWER	513017.79N 0000110.16W	806 FT	775 FT	Yes Red	
(EGLC3043) 09/APPROACH 27/ TAKE-OFF	BUILDING	513016.08N 0000511.20W	1015 FT	1002 FT	Yes Red	
(EGLC1676) 09/APPROACH 27/ TAKE-OFF	BUILDING	513013.43N 0000103.45W	692 FT	661 FT	Yes Red	
(EGLC2107) 09/APPROACH 27/ TAKE-OFF	BUILDING	513011.57N 0000112.65W	524 FT	501 FT	No	
09/APPROACH	CRANE	513007.00N 0000043.00W	640 FT	634 FT	Yes Red	Wood Wharf.

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
	CRANE	513043.10N 0000132.15E	292 FT	287 FT	Yes Steady red	Canning town. End estimated July 2025.
(EGLC3261)	MARINE RADAR	513028.07N 0000446.02E	239 FT	222 FT	No	
(EGLC5502)	ATC TOWER	513014.46N 0000300.35E	68 FT	51 FT	Yes Red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLC5170)	REMOTE TOWER AERIAL	513010.47N 0000320.07E	192 FT	174 FT	Yes Red	
	CRANE	513003.6N 0000122.0W	776 FT	768 FT	Yes	Consort Place.
	CRANE	513003.0N 0000122.6W	590 FT	581 FT	Yes	Consort Place.
(EGLC5501)	INDUSTRIAL CHIMNEY	513000.81N 0000252.87E	307 FT	294 FT	Yes Red	
(EGLC1020)	INDUSTRIAL CHIMNEY	513000.65N 0000254.16E	307 FT	296 FT	Yes Red	
	CRANE	512944.0N 0000036.0E	496 FT	481 FT	Yes Red	Greenwich Peninsula. End estimated September 2025.
	CRANE	512929.64N 0000253.39E	314 FT	293 FT	Yes Red	Woodhill.
	CRANE	512922.0N 0000406.0E	344 FT	302 FT	Yes Red	Woolwich. End estimated January 2025.
(EGLC6273)	MAST	512806.22N 0000356.48E	569 FT	154 FT	Yes Red	

EGLC AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE HEATHROW
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE HEATHROW 9 hours
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing/telephone.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English
7	Charts and other information available for briefing or consultation	
8	Supplementary equipment available for providing information	Automated recording telephone: +44 (0)207-511 9482.
9	ATS units provided with information	LONDON CITY
10	Additional information (limitation of service, etc.)	RVR 25-1500 M.

EGLC AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
09	092.87°	1508 x 30 M	RWY surface: Asphalt, Grooved PCR 318/F/C/W/U	513020.06N 0000239.58E 149.2 FT	THR 19.4 FT TDZ 19.5 FT	
27	272.89°	1508 x 30 M	RWY surface: Asphalt, Grooved PCR 318/F/C/W/U	513017.60N 0000357.68E 149.1 FT	THR 20.0 FT TDZ 20.0 FT	

EGLC AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
LONDON/CITY CTR 513445N 0001108W - 513409N 0000826E thence clockwise by the arc of a circle radius 5 NM centred on 513019N 0000319E to 512610N 0000747E - 512640N 0000811W thence anti-clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 513445N 0001108W	Upper limit: 2500 FT ALT Lower limit: SFC	D	HEATHROW RADAR English	6000 FT		H24. To operate UAS above 400 FT AGL within this area, UAS operators are required to notify NATS via the NATS Non- Standard Flight (NSF) Portal. UAS operators are required to notify NATS at least 14 days before the date of each activity.
LONDON/CITY ATZ A circle, 2 NM radius, centred at 513019N 0000319E on longest notified runway (09/ 27)	Upper limit: 2000 FT AGL Lower limit: SFC	D	HEATHROW RADAR English	6000 FT		H24.

EGLC AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	THAMES DIRECTOR	132.700 MHz Also used by Biggin Hill traffic.			0600-2300 (0500-2200).	
TWR	CITY GROUND	121.830 MHz DOC 2 NM/ GND.			As directed by ATC	Aircraft that are not equipped for 8.33 kHz frequencies cannot operate at this aerodrome.
	CITY TOWER	118.080 MHz DOC 25 NM/ 4,000 FT.			Mon-Fri 0630-2230 (0530- 2130); Sat 0630-1230 (0530-1130); Sun 1230- 2230 (1130-2130); PH 0900-2230 (0800-2130). Hours are maximum consult latest NOTAM. See AD 2.3, item 12.	
		129.455 MHz DOC 25 NM/ 4,000 FT.			As directed by ATC	
RADAR	HEATHROW RADAR	125.625 MHz			H24	
	THAMES DIRECTOR	128.025 MHz			As directed by ATC	
		132.700 MHz			0600-2300 (0500-2200).	
		133.455 MHz			As directed by ATC	
ATIS	CITY INFORMATION	136.355 MHz If unavailable call Tower on 118.080 MHz. Thames Director will advise. DOC 60 NM/ 20,000 FT.			Mon-Fri 0630-2230 (0530- 2130); Sat 0630-1230 (0530-1130); Sun 1230- 2230 (1130-2100); PH 0900-2230 (0800-2100).	
OTHER	CITY FIRE	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGLC AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 0.59°E (2022)	ILST	111.150 MHz	HO	513017.44N 0000403.03E		(RWY 09) Due to terrain, localizer front course coverage is restricted to 10 NM and to Sector 30° right to 35° left of the centre-line.
ILS/GP	ILST	331.550 MHz	HO	513021.77N 0000246.08E		5.5° ILS Ref Datum Hgt 35 FT. Pilots may not receive full fly up right of runway centre-line beyond 6.5 NM.
ILS/LLZ I 0.58°E (2022)	ILSR	111.150 MHz	HO	513020.30N 0000231.79E		(RWY 27) Not to be used outside 30° left of centre-line. Pilots may not receive full fly right between 20° and 15° left of centre-line when beyond 6 NM. Localiser not to be used beyond 17 NM.
ILS/GP	ILSR	331.550 MHz	HO	513019.72N 0000351.26E		5.5° ILS Ref Datum Hgt 35 FT.
VOR/DME 0.41°E (2022) 0.80°E (2023)	LON	83X 113.600 MHz	H24	512914.09N 0002759.54W	113 FT	VOR DOC: 20 NM/50,000 FT (10 NM/50,000 FT in Sector R094-164, 35 NM/50,000 FT in Sector R064-094 and 40 NM/50,000 FT in Sector R254-289). There may be VOR bearing fluctuations in Sector R359-089. DME DOC: 40 NM/50,000 FT (100 NM/50,000 FT in Sector R179-254 and 80 NM/50,000 FT in Sector R224-314). DME unlocks may occur in the Sector R179-249 at ranges greater than 50 NM.
DME	ILST	48Y 111.150 MHz	HO	513022.05N 0000246.56E	42 FT	(RWY 09) On AD. DME freq paired with ILS I-LST. Zero ranged to THR of Runway 09.
DME	ILSR	48Y 111.150 MHz	HO	513020.02N 0000351.11E	40 FT	(RWY 27) On AD. DME freq paired with ILS I-LSR. Zero ranged to THR of Runway 27.
NDB 0.59°E (2022)	LCY	322.000 kHz	H24	513015.66N 0000403.01E		On AD. Range 10 NM.
VOR/DME 0.59°E (2022) 1.10°E (2024)	BIG	98X 115.100 MHz	H24	511951.15N 0000205.32E	589 FT	VOR DOC: 20 NM/50,000 FT (30 NM/50,000 FT in Sector R259-074 and 60 NM/50,000 FT in Sector R314-344). DME DOC: 60 NM/50,000 FT (125 NM/50,000 FT in Sector R284-044 and 100 NM/50,000 FT in Sector R044-134). Due to terrain, coverage at low level is reduced in Sector R114-219. In addition DME unlocks may occur in Sector R004-039 at ranges up to 25 NM.

EGLC AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) No aeroplane registered in the United Kingdom shall use the aerodrome unless there is contained in its Flight Manual data and procedures for approach path angles of 5.5° or steeper and no other aeroplane shall use the aerodrome unless it has data and procedures

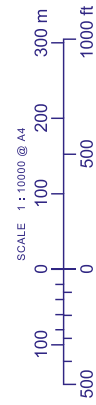
**LONDON CITY
EGLC**

AD ELEV 20 ft

ARP 513019N 0000319E

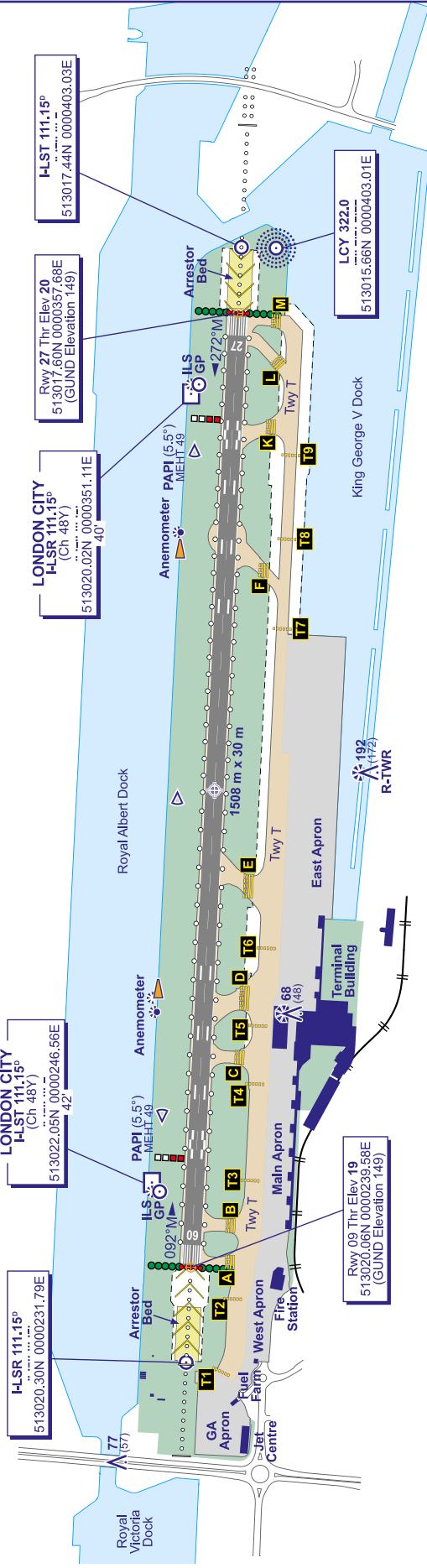
**RODROME
ART - ICAO**

GND (Geoid Undulation) =
The height of the geoid (MSL) above the
reference ellipsoid (WGS 84) at the stated position.
CHARINGS ARE MAGNETIC
ELEVATIONS ARE IN FEET
HEIGHTS IN FEET ABOVE AD



RUNWAY/TAXIWAY/APRON	SURFACE	PCN	PCR	ELEVATION
RWY 09/27	Grooved Asphalt	-	318/F/CW/U	-
TWY T (Between T1-A)	Concrete	-	285/R/CY/U	-
TWY T (Between A-D)	Concrete	-	440/R/B/W/T	-
TWY T (Between Twy D-M)	Concrete	-	-	-
Main Apron	-	-	-	-
East Apron	-	-	-	-

See AD 2.EGLC-2-2



COM	CITY INFORMATION
ATIS	136.355
TWR	118.060 121.830 (GMC) 129.455 (as directed by ATC) 121.600 CITY FIRE
LIGHTING	
APCH 09	HI 297 m C/L with 2 Bar.
APCH 27	HI 397 m C/L with 1 Bar.
THR 09	HI elev green with HI green W Bar.
THR 27	HI flush green with HI green W Bar.
RWY 09	HI coded C/L, HI TDZ 477 m. HI bl-d edge (last 480 m yellow), End lights Red. Blue edge on turning area.
RWY 27	HI coded C/L, HI TDZ 475 m. HI bl-d edge (last 480 m yellow), End lights Red. Blue edge on turning area.
TWY	C/L green, Edge blue on curves, Intermediate holds amber. Stop Bars red and co-located with RWY guard lights at access TWYs.

307 (287)

VAR 0.6°E - 2022
Annual Rate
Change 0.19°E

**LONDON CITY
EGLC**

AD ELEV 20FT

ARP 513019N 0000319E

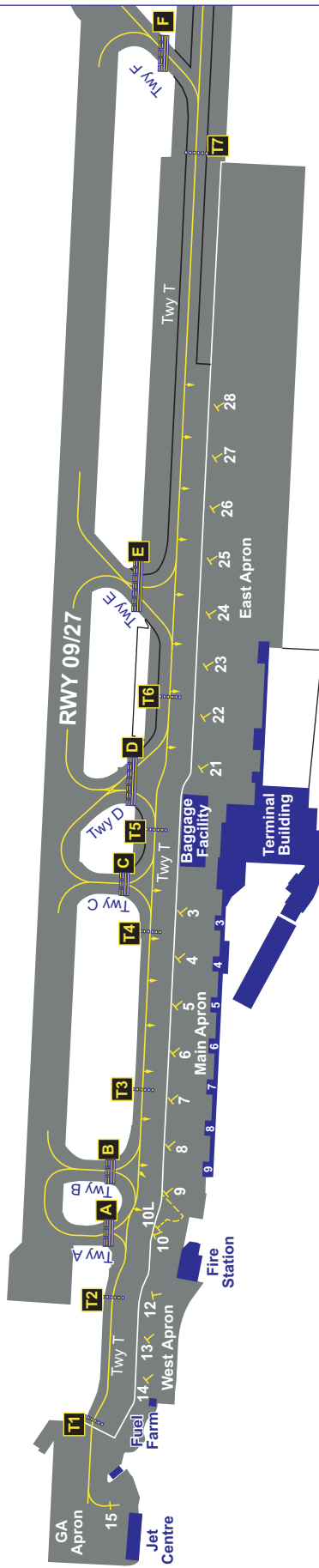
**AIRCRAFT PARKING/DOCKING
CHART - ICAO**

COM	136.355	CITY INFORMATION
ATIS	118.080	CITY TOWER
TWR	121.830 (GMC)	CITY GROUND
	129.455	(as directed by ATC)
	121.600	CITY FIRE



Annual Rate
of Change 0.19°E

STAND	COORDINATES	STAND	COORDINATES
3	513015.89N 0000255.30E	26	513014.93N 0000314.68E
4	513015.99N 0000253.08E	27	513014.85N 0000317.13E
5	513016.06N 0000250.83E	28	513014.78N 0000319.59E
6	513016.13N 0000248.58E		
7	513016.20N 0000246.32E		
8	513016.27N 0000244.07E		
9	513016.34N 0000241.82E		
10	513016.66N 0000239.60E		
10L	To be surveyed		



R-TWR

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS				
APRON / RWY / TWY	SURFACE	PCN	PCR	ELEVATION
Main Apron (3-9)	Concrete	-	285/R/C/Y/U	17 ft amsl
Main Apron (10)	Concrete	-	387/R/C/Y/U	-
East Apron	Concrete	-	-	-
RWY 09/27				
TWY (All)				See AD 2-EGLC-2-1

CHANGE (12/24): PCR VALUES.

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
	GATWICK GROUND	121.805 MHz Ground Movement Control. DOC 5 NM/ GND.			0530-2300 (0400-2300)	
	GATWICK TOWER	121.500 MHz Emergency frequency O/R.			H24	
		124.230 MHz DOC 25 NM/ 10,000 FT.			H24	
		134.230 MHz When instructed by ATC. DOC 40 NM/ 15,000 FT.			H24	
ATIS	GATWICK INFORMATION	136.525 MHz DOC 60 NM/ 20,000 FT.			H24	
OTHER	GATWICK FIRE	121.600 MHz Non-ATS Frequency			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGKK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ III 0.54°E (2022)	IGG	110.900 MHz	HO	510906.95N 0000946.07W		(RWY 08R)
ILS/GP	IGG	330.800 MHz	HO	510842.61N 0001207.56W		3° ILS Ref Datum Hgt 51 FT.
ILS/LLZ III 0.53°E (2022)	IWW	110.900 MHz	HO	510841.14N 0001253.32W		(RWY 26L)
ILS/GP	IWW	330.800 MHz	HO	510855.49N 0001032.98W		3° ILS Ref Datum Hgt 51 FT.
VOR/DME 0.43°E (2022) 0.60°E (2022)	OCK	100X 115.300 MHz	H24	511818.17N 0002649.86W	200 FT	RNAV Substitution Only. VOR DOC: 25 NM/25,000 FT and 35 NM/25,000 FT in the sector 114° to 289°. DME DOC: 70 NM/25,000 FT (90 NM/25,000 FT in Sector R059°-089°).
VOR/DME 0.41°E (2022) 0.80°E (2023)	LON	83X 113.600 MHz	H24	512914.09N 0002759.54W	113 FT	VOR DOC: 20 NM/50,000 FT (10 NM/50,000 FT in Sector R094-164, 35 NM/50,000 FT in Sector R064-094 and 40 NM/50,000 FT in Sector R254-289). There may be VOR bearing fluctuations in Sector R359-089. DME DOC: 40 NM/50,000 FT (100 NM/50,000 FT in Sector R179-254 and 80 NM/50,000 FT in Sector R224-314). DME unlocks may occur in the Sector R179-249 at ranges greater than 50 NM.
VOR/DME 1.04°E (2022) 1.70°E (2022)	DVR	96Y 114.950 MHz	H24	510945.44N 0012132.71E	325 FT	VOR DOC: 60 NM/50,000 FT. DME DOC: 80 NM/50,000 FT (200 NM/50,000 FT in Sector R013°-073°).

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME 0.16°E (2022) 0.80°E (2024)	SAM	80Y 113.350 MHz	H24 Hours of operation for aerodrome purposes: HO	505718.90N 0012042.20W	64 FT	VOR DOC: 20 NM/50,000 FT (35 NM/ 50,000 FT in Sector R249-084 and 40 NM/50,000 FT in Sector R359-034). DME DOC: 100 NM/50,000 FT (150 NM/50,000 FT in Sector R224-314). On R202 VOR flag alarms and DME unlocks may be experienced at ranges exceeding 30 NM below 8000 FT.
VOR/DME 0.37°E (2022) 0.80°E (2023)	GWC	94Y 114.750 MHz	H24	505118.79N 0004524.25W	122 FT	VOR DOC: 20 NM/50,000 FT and 55 NM/50,000 FT in the sector 304° to 134°. DME DOC: 80 NM/50,000 FT. Due to terrain, coverage at low level is reduced in Sector R299°-044°.
DME	IGG	46X 110.900 MHz	HO	510849.96N 0001120.43W	212 FT	(RWY 08R) On AD. DME freq paired with ILS I-GG and I- WW. Zero range is indicated at THR of Runway 08R and 26L.
DME	IWW	46X 110.900 MHz	HO	510849.96N 0001120.43W	212 FT	(RWY 26L) On AD. DME freq paired with ILS I-GG and I- WW. Zero range is indicated at THR of Runway 08R and 26L.
VOR/DME 0.59°E (2022) 1.10°E (2024)	BIG	98X 115.100 MHz	H24	511951.15N 0000205.32E	589 FT	VOR DOC: 20 NM/50,000 FT (30 NM/ 50,000 FT in Sector R259-074 and 60 NM/50,000 FT in Sector R314-344). DME DOC: 60 NM/50,000 FT (125 NM/50,000 FT in Sector R284-044 and 100 NM/50,000 FT in Sector R044-134). Due to terrain, coverage at low level is reduced in Sector R114- 219. In addition DME unlocks may occur in Sector R004-039 at ranges up to 25 NM.
VOR/DME 0.61°E (2022) 0.70°E (2022)	LAM	103X 115.600 MHz	H24	513845.69N 0000906.13E	241 FT	VOR DOC: 30 NM/50,000 FT (40 NM/ 50,000 FT in Sectors R064°-099°, R139°-174° and R249°-289°). DME DOC: 40 NM/50,000 FT (110 NM/ 50,000 FT in Sector R314°-134°).
VOR/DME 0.78°E (2022) 1.20°E (2023)	DET	120X 117.300 MHz	H24	511814.41N 0003550.19E	645 FT	VOR DOC: 20 NM/50,000 FT (35 NM/ 50,000 FT in Sector R289-029 and 45 NM/50,000 FT in Sector R249-289). DME DOC: 60 NM/50,000 FT.
VOR/DME 0.40°E (2022) 0.30°E (2019)	MID	87X 114.000 MHz	H24	510314.23N 0003730.01W	233 FT	VOR DOC: 20 NM/50,000 FT (35 NM/ 50,000 FT in Sector R355°-165°). DME DOC: 60 NM/50,000 FT (100 NM/50,000 FT in Sector R240°-000°).
VOR/DME 0.65°E (2022) 0.90°E (2021)	MAY	126X 117.900 MHz	H24	510101.86N 0000658.04E	384 FT	VOR DOC: 20 NM/25,000 FT (30 NM/ 25,000 FT in Sector R259-329 and 35 NM/25,000 FT in the Sector R059- 094). DME DOC: 40 NM/25,000 FT (60 NM/ 25,000 FT in Sector R104-164). Due to terrain, coverage at low level is reduced in Sector R314-039.

EGKK AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use governed by regulations applicable to Gatwick CTR.
- b) Departing aircraft are to call Gatwick Delivery for clearance 15 minutes before start up to allow for departure data to be processed. If Delivery is closed, the ATIS will state which frequency to contact for clearance and start.

- c) Aircraft requiring to depart from Hold Mike 1 must advise Gatwick Delivery before start up.
- d) Surface wind data is available for both ends of the duty runway. Normally, only the Touchdown surface wind will be passed. Stop end surface wind information is available on request.
- e) All flights operating at London Gatwick Airport are subject to prior approval of the Chief Executive Officer, Gatwick Airport Ltd (GAL), and require a slot allocated by Airport Coordination Ltd (ACL).
- f) Flights for aerobatic, recreational, commemorative, charity and record breaking purposes will not be permitted to use the airport, except with the prior approval of the Chief Executive Officer.
- g) Planned Diversion Procedure – Airline and other operators are advised that before selecting Gatwick as an alternate, prior arrangements for ground handling should have been agreed with one of the nominated handling agents.
- h) The use of this airport for training purposes is prohibited. The deliberate simulation of engine failure is not permitted whilst on approach to or departure from the airport.
- i) This Airport may be used by Executive and Private Aircraft (General Aviation) subject to the following conditions:
 - i. Requests for ad-hoc slot allocations should be made to ACL during working hours 0830-1700 (0730-1600) Monday to Friday (excluding public holidays) by e-mail: lonacxh@acl-uk.org; or Tel: 0208-564 0605, or at all other times to GAL Flow Planning Tel: 01293-503089/221 or e-mail: flow.planners@gatwickairport.com (or to their nominated handling agent who will obtain prior permission from Airport Coordination Ltd or GAL Flow Planning). Online Coordination System (OCS) account holders can add, change and cancel slots at any time on the online coordination portal: <https://www.online-coordination.com/>.

Prior permission for General Aviation operators should be requested not more than 10 days and preferably not less than 24 hours before intended movement. The following details must be notified for each flight:

1. Aircraft type, registration and operator;
2. Point of origin and destination;
3. Date/time of ETA and ETD Gatwick;
4. Nominated handling agent. (Mandatory for both domestic and international flights).

Due to increasing demand for runway slots, particularly at peak times of the day, General Aviation operators are advised that their requested slot time may not be available. In this case, the available runway slot times nearest to those requested will be offered by Airport Co-ordination Ltd. It is emphasised that runway slots are required for both arrivals at and departures from Gatwick. No runway slot is valid unless identified by a reference number in the form of a letter and five digits. The filing of a flight plan does not confer permission to use Gatwick Airport. Runway slots are required in addition to ATC slots. ATC clearance to approach/land or taxi/take-off does not imply the existence of a valid runway slot.

- ii. General Aviation Terminal opening hours are: 0500-2300 (0400-2200). Hours by appointment only: 2300-0500 (2200-0400).
- iii. All international passengers arriving on private and executive aircraft requiring HM Customs clearance, must proceed with their handling agent to the South Terminal.
- iv. All commanders of private and executive aircraft arriving or departing on an international flight must obtain HM Customs clearance via their handling agent from the Customs Report Office in Atlantic House.
- v. General Aviation Terminal – Meteorological Information.
There are no comprehensive meteorological facilities at the General Aviation Terminal. Pilots requiring meteorological information must either self-brief or arrange for their Handling Agent to collect the information on their behalf.
- j) Fixed-wing and rotary aircraft using London Gatwick Airport do so in accordance with the Gatwick Conditions of Use document. A copy of the document is available on the London Gatwick Airport website: www.gatwickairport.com/company/about-us/regulation.html
- k) Nothing in the paragraphs above shall, however, prevent an aircraft that has declared an emergency from landing.
- l) Fixed Electrical Ground Power must be used when available. Use of aircraft Auxiliary Power Units (APUs) and Ground Power Units (GPUs) are strictly controlled to minimise environmental impact. APUs must be shut down after arrival and only restarted before departure according to the timescales described in detail in published Gatwick Airport Directives and Notices, a summary of which is detailed below. Regular audits take place to ensure compliance with the regulations. Dispensation to use GPUs must be requested from GAL Airfield Operations Tel: +44(0)1293 503090.

	APU may be started before Scheduled Off Blocks Time (SOBT)	APU must be shutdown after arrival on stand within
Narrow Body Aircraft (Code A, B & C)	No more than 15 minutes prior to SOBT. Or not more than 30 minutes prior to SOBT when the FEGP has not been upgraded to provide enough power to support the FMS.	10 minutes
Wide Body Aircraft (Code D, E & F)	No more than 50 minutes prior to SOBT Or not more than 90 mins prior to SOBT when the FEGP has not been upgraded to provide enough power to support the FMS.	10 minutes

† Exceptions to these restrictions are:

Note 1: When an aircraft is scheduled to be towed off to another location the APU may be restarted for safety reasons not in excess of 10 minutes prior to the planned movement.

Note 2: When the planned towing movement as specified under 1 is delayed due ATC, then the APU may be left running.

28 Nov 2024

Note 3: When the external air temperature is below 5°C or above 25°C as stated on the ATIS, then the APU restriction for Narrow body aircraft is extended to 40 minutes before SOBT.

Note 4: When the external air temperature is below 5°C or above 25°C as stated on the ATIS, then the APU restriction for Wide body aircraft is extended to 75 minutes before SOBT.

Note 5: At certain times of the year during periods of extreme high temperatures, further exemptions may be requested from GAL Airfield Operations in accordance with Gatwick Airport Directives and Notices.

2 GROUND MOVEMENT

a) General

- i. Ground Movement Control (GMC) is in continuous operation and all surface movement of aircraft, vehicles and personnel on the Manoeuvring Area is subject to ATC authority.
- ii. Directions issued by ATC should be followed specifically. RTF transmissions must be brief, concise and kept to the minimum number.
- iii. Within the Manoeuvring Area, pilots will be cleared to proceed under general direction from GMC and they are reminded of the extreme importance of maintaining a careful lookout at all times. ATC instructions will normally specify the taxi route to be followed. Three Hot Spots (HS) where heightened attention is necessary are included on charts AD EGKK-2.
 1. HS1 Foxtrot Romeo RET: When exiting Runway 26L at FR aircraft do not have to call for clearance to cross Runway 26R onto Taxiway Juliet.
 2. HS2 Delta RET: Possible routing error - traffic vacating Runway 08R at Delta be aware of potential confusion between Taxiways Romeo and Quebec.
 3. HS3 Taxiway Juliet: Potential Routing error - pilots taxiing eastbound on Taxiway Juliet be aware the taxiway deviates to the north at this point.
- iv. Departing aircraft on first contact with Gatwick ATC must state aircraft type, stand number and the code letter of the latest ATIS received and maintain a listening watch on the appropriate frequency.
- v. **It is the aircraft Commander's responsibility not to accept an ATC clearance into an area not approved for his type of aircraft.**
- vi. Pilots of departing aircraft are reminded to contact Gatwick Delivery for clearance 15 minutes before start up to allow for departure data to be processed.
- vii. Pre-departure clearance by datalink is available for suitably equipped aircraft. Pilots requesting pre-departure clearance by datalink must when entering the stand number ensure that:
 1. Stand designators are entered as appropriate (eg. 141L, 562, 34R);
 2. Ensure the stand number is entered with at least 2 figures (eg. 05).
- viii. Taxiway Mike is available as an entry point to Runway 26L. Taxiway Mike can not be used as an exit point from Runway 08R.
- ix. Flight crew are reminded of the extreme importance of maintaining a careful lookout at all times and are at all times responsible for wing tip clearance. The taxiway lighting system is an aid to pilots when operating on the manoeuvring area during darkness or in poor visibility. Notwithstanding the taxiway lighting system, pilots continue to remain responsible for wing tip clearance.
- x. The taxiway system is designed for Cockpit Over Centreline (COCL) techniques however Judgemental Oversteer may be used at crews' discretion.

b) Gatwick Airport is equipped with an advanced surface movement radar utilising Mode-S.

- i. Aircraft operators intending to use London Gatwick Airport should ensure that Mode-S transponders are able to operate when the aircraft is on the ground.
- ii. Flight crew should select XPNDR or the equivalent according to specific installation, AUTO if available (OFF or STDBY should not be used), and the assigned Mode-A code.
 1. From the request for push back or taxi, whichever is earlier;
 2. After landing, continuously until the aircraft is fully parked on stand.
- iii. After parking the Mode-A code 2000 must be set before selecting OFF or STDBY.
- iv. Flight crew of aircraft equipped with Mode-S having an aircraft identification feature should also set the aircraft identification. This setting is the aircraft identification specified in Item 7 of the ICAO ATC Flight Plan. The aircraft identification should be entered from the request for pushback or taxi, whichever is earlier, through the FMS or the Transponder Control Panel.

c) Aprons

- i. Before the Aircraft Commander calls for pushback, they must confirm the ground crew are ready to push via the headset operator to ensure the tug driver is in the tug and listening for communications between ATC and the flight deck. **If the Aircraft Commander is not in two-way headset communication with the tug crew, they must inform the Ground Movement Planner (GMP) when reporting ready for start.** The tug driver must listen to the exchange between the aircraft crew and ATC so that the tug crew have a full understanding of the detail of the ATC approval. If the tug driver has not heard the pushback instruction they must not push the aircraft. Request and clearance will be issued between the flight crew and ATC only. On receipt of pushback instruction, the flight crew shall report the instruction verbatim to the ground crew. Any clarification required from the tug driver shall, in the first instance, be directed to the flight crew. If further clarity is required then the tug driver should contact ATC.
- ii. The Manoeuvring Area is equipped with the following forms of taxiway guidance:

1. Yellow painted taxiway centre-lines;
 2. Yellow painted holding position lines at the approach to runways;
 3. Green taxiway centre-line lights and red stop bars controlled from the Tower;
 4. An illuminated red stop bar means **STOP**. Aircraft must not proceed until the stop bar is extinguished or ATC permission is received;
 5. Runway Guard Lights are installed at all runway/taxiway intersections, comprising alternating flashing amber standard low level dual traffic lights, operating H24;
 6. Taxiway Unavailable Bars (TUBS) comprising of a line of red stop lights spaced at approximately 3 M centres across the full width of the mouth of each exit taxiway adjacent to Runway 08R/26L and running parallel to the runway centreline. TUBS are installed at Alpha, Bravo, Bravo Romeo, Charlie, Charlie Romeo, Delta, Echo Romeo, Foxtrot Romeo, Golf, Golf Romeo, Hotel and Juliet, to prevent incursions onto taxiways which are unavailable due to operational issues such as Work in Progress.
- iii. Pilots are to use the minimum power necessary when manoeuvring on the taxiway system. This is of particular importance when manoeuvring in apron cul-de-sacs, where jet blast can affect adjacent stands.
- iv. Cross Bleed Starts - if informed by an aircraft that a cross bleed start is required, ATC must consider the blast effect and utilise a non-standard push back if required. Aircraft must be aligned with the taxiway centreline before commencing the cross bleed start.
- v. Pilots pushing from Stand 12 are reminded not to start engines until the aircraft has been pulled forward abeam Stand 12, due to jet blast on the neighbouring airside road.
- vi. After pushback from Stand 38 aircraft will be stopped off the taxiway centreline prior to being disconnected. When approved to taxi pilots should follow the broken yellow centreline back onto Taxiway Lima.
- vii. In any circumstances where the flight deck need to exceed ground idle or breakaway power, GAL Airfield Operations will require prior notification and authorisation via ATC.
- viii. In the event of a mis-routeing, or the need to execute an unorthodox manoeuvre the flight deck must request revised instructions from ATC. This may require the attendance of a GAL Airfield Operations Leader Vehicle or assistance of an aircraft tug for the manoeuvre to be completed safely.
- ix. Some operators may choose to taxi without all aircraft engines running. This type of operation has the potential to increase blast, especially when starting to move or negotiating tight turns. Operators must have assessed the jet blast risks before carrying out this reduced engine taxi procedure.
- x. Engines must not be run above ground idle during push-back.
- xi. Aircraft are not authorised to power back off stands under their own power.
- d) Ground movement of large aircraft - Code D (Wingspan between 36 M < 52 M)
- i. The following routes are not available for Code D aircraft:
 1. Taxiway Alpha November East of Taxiway Mike;
 2. Taxiway Juliet East of Taxiway November;
 3. Taxiway Victor East of Taxiway Whiskey;
 4. Taxiway Whiskey;
 5. Taxiway Zulu between Taxiway November and Taxiway Whiskey.
- e) Ground movement of large aircraft - Code E (Wingspan between 52 M < 65 M)
- i. The following routes are not available for Code E aircraft:
 1. Taxiway Alpha November East of Taxiway Mike;
 2. Taxiway Juliet East of Taxiway November;
 3. Taxiway Victor East of Taxiway Whiskey;
 4. Taxiway Whiskey;
 5. Taxiway Zulu between Taxiway November and Taxiway Whiskey;
 - ii. The following restrictions apply:
 1. Taxiway Lima between Taxiways Quebec and Sierra has a substandard but positive physical obstacle clearance (minimum of 42.5 M) due to the proximity of the adjacent road;
 2. Taxiway Lima East of Stand 36 is not available for Code E aircraft with a wingspan in excess of 61 M due to the proximity of the adjacent blast barrier;
 3. Taxiway Yankee from Whiskey 1 Hold to Yankee 3 Hold is not available for Code E aircraft with a wingspan in excess of 61 M due to the proximity of the adjacent road.
- f) Ground movement of large aircraft - Code F (Wingspan between 65 M < 80 M)
- i. Taxiway routes available to Code F aircraft are shown on Aerodrome Chart AD 2-EGKK-2-5, marked in yellow. There is a substandard but positive physical obstacle clearance (minimum of 47.5 M) on Taxiway Juliet between Taxiways Sierra and Tango.
- g) Remote De-icing – Aircraft Engines Running
- i. There are two identified locations (de-icer pads) to enable remote de-icing of aircraft with engines running. They are managed and coordinated by the GAL de-icing service provider for airlines which have had Risk Assessments and Method Statements signed off by GAL. There is an agreed process in place for the operation of these pads.
 - ii. The two locations are uniquely identified as DA 43 and DA Sierra. Both will have resource to coordinate the operations and communicate with pilots and de-ice rig operatives. An electronic signage board will be provided for visual communications.

1. **DA 43**
Located on Stand 43 and can accommodate Code C aircraft only. The holding point for this pad is Stand 41. Aircraft will taxi to this location as directed by ATC.
2. **DA Sierra**
Located on Taxiway Sierra abeam Stands 170/171. Aircraft will be directed by ATC to hold on Taxiway Lima north of Taxiway Sierra prior to entering DA Sierra.

h) Use of Stands 41, 42 and 43

- i. Stands 41 and 43 are dual purpose and can be operated either as drive through stands with the facility to hold taxiing aircraft or as nose in aircraft parking stands.
 1. When operated as a drive through stand, aircraft should stop at the positions indicated by the painted yellow stop arrows and await instructions from ATC. Access is available via Taxiways Kilo or Lima.
 2. When operating in aircraft parking stand mode, barriers will be deployed between Stands 41 and 43 and Taxiway Lima to safeguard the stands. Aircraft may only enter Stands 41E, 41, 41W, 43E, 43 and 43W via Taxiway Kilo and must be parked by a GAL Marshaller. In exceptional circumstances should an aircraft be required to taxi off Stand 41E, 41, 41W, 43E, 43 or 43W under its own power via Taxiway Lima, GAL Airfield Operations will require prior notification and authorisation via ATC.
- ii. Stand 42 is only available as a nose in aircraft parking stand. Aircraft can self-park utilising the SEG system. Access is via Taxiway Kilo.

i) Remote Holding Procedures

- i. Gatwick has remote holding capacity to maintain flow of aircraft by releasing occupied stands and pushback crews. ATC will endeavour to offer remote hold to applicable flights subject to availability. Applicable flights are those with CTOT or other delays in excess of 10 minutes.
- ii. Holding capacity is provided via pushback onto Stands 132 and 133 and either pushback/push and taxi/ push and tow onto drive through Stands 41 and 43 (when available).
- iii. The use of the East and West centrelines on Stands 41 and 43 is dependent on aircraft size. Eastern centrelines are painted orange and Western centrelines are painted blue. When entering East and West remote holding from Taxiway Lima, aircraft should enter 41 or 43 centreline and then follow the East or West centreline as requested by ATC. Aircraft stop positions are indicated by painted orange or blue stop arrows as appropriate.
- iv. When approaching Stand 41E from the east along Taxiway Kilo, flight crews are to use judgemental oversteer when entering stand to ensure suitable main undercarriage clearance of the adjacent grass area.
- v. Additionally, subject to availability and traffic loading, tactical holding may be utilised on taxiways at the discretion of the Ground Controller.
- vi. Remote holding is also available on Stands 141R, 142R, 143L, 144L, 171L, 173, 175L, 230L, 231L, 232L and 233L. Aircraft will be marshalled onto these stands. Pilots must not enter the stands until a marshaller is present. Access to Stand 173 is via 173L lead in arrow. Pilots should exit Stands 141R, 142R, 143L, 144L, 171L, 173, 175L, 230L, 231L, 232L and 233L by turning directly towards the taxiway centre-line.
- vii. Default positioning to remote hold is push and taxi, unless otherwise directed by ATC (e.g. pushback or push and tow).

j) Airport-Collaborative Decision Making (A-CDM)

i. Definitions of Commonly Used A-CDM Terms:

1. **Target Off-Blocks Time (TOBT)** - The time an aircraft is expected to be ready to leave the stand (agreed by Ground Handling Agent and flight deck) in the case of normal operations, or ready for on stand de-icing to commence (where appropriate), in the case of winter operations. This must be updated to an accuracy of +/- 5 minutes by GHA. Accurate and stable TOBTs enhance operations on the ground as they provide all airport partners with a clear picture of the intentions of aircraft on the ground.
2. **Actual Start Request Time (ASRT)** - The time an aircraft actually calls ready to Tower. Start requests will only be accepted if an aircraft is A-CDM compliant, meaning TOBT has not expired (which happens at TOBT + 5 minutes) and there are no other data issues with the flight plan.
3. **Target Start Approval Time (TSAT)** - The time that ATC expect to give start approval, which is based on TOBT, CTOT, other traffic using the runway, any constraints to runway/airspace capacity, and taxi time. Use of TSAT should reduce queuing times at the runway hold, while maintaining a high runway utilisation.
4. **Target Take-Off Time (TTOT)** - The time that an aircraft is expected to take off. TTOT is a target – the requirement for an aircraft to be airborne within a time window only applies to flights with a CTOT. Most aircraft will take off within +/- 5 minutes of TTOT, but this time is not accurate enough to be relied upon for starting the second engine after single engine taxi.
5. **Calculated Take-Off Time (CTOT)** - Assigned by Eurocontrol's Network Manager Operations Centre (NMOC) when flow restrictions are in place. The standard slot tolerance window requires aircraft to depart within -5 to +10 minutes of its CTOT (as existing requirement).

ii. Flight Deck shall comply with the following A-CDM procedure:

1. Ensure the flight is ready to push at TOBT +/- 5 minutes: ground activities completed, doors closed, push-back tug connected, cockpit ready for start-up.
2. Maintain regular communication with the TCO/GHA who are responsible for updating the TOBT.
3. If a delay to TOBT +5 or a departure earlier than TOBT -5, is identified notify the GHA immediately and ensure TOBT is updated before contacting ATC.

AERODROME CHART CODE F AIRCRAFT GROUND MOVEMENT - ICAO

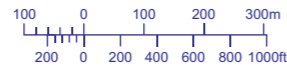
ARP 510853N 0001125W

AD ELEV 203FT

LONDON GATWICK EGKK

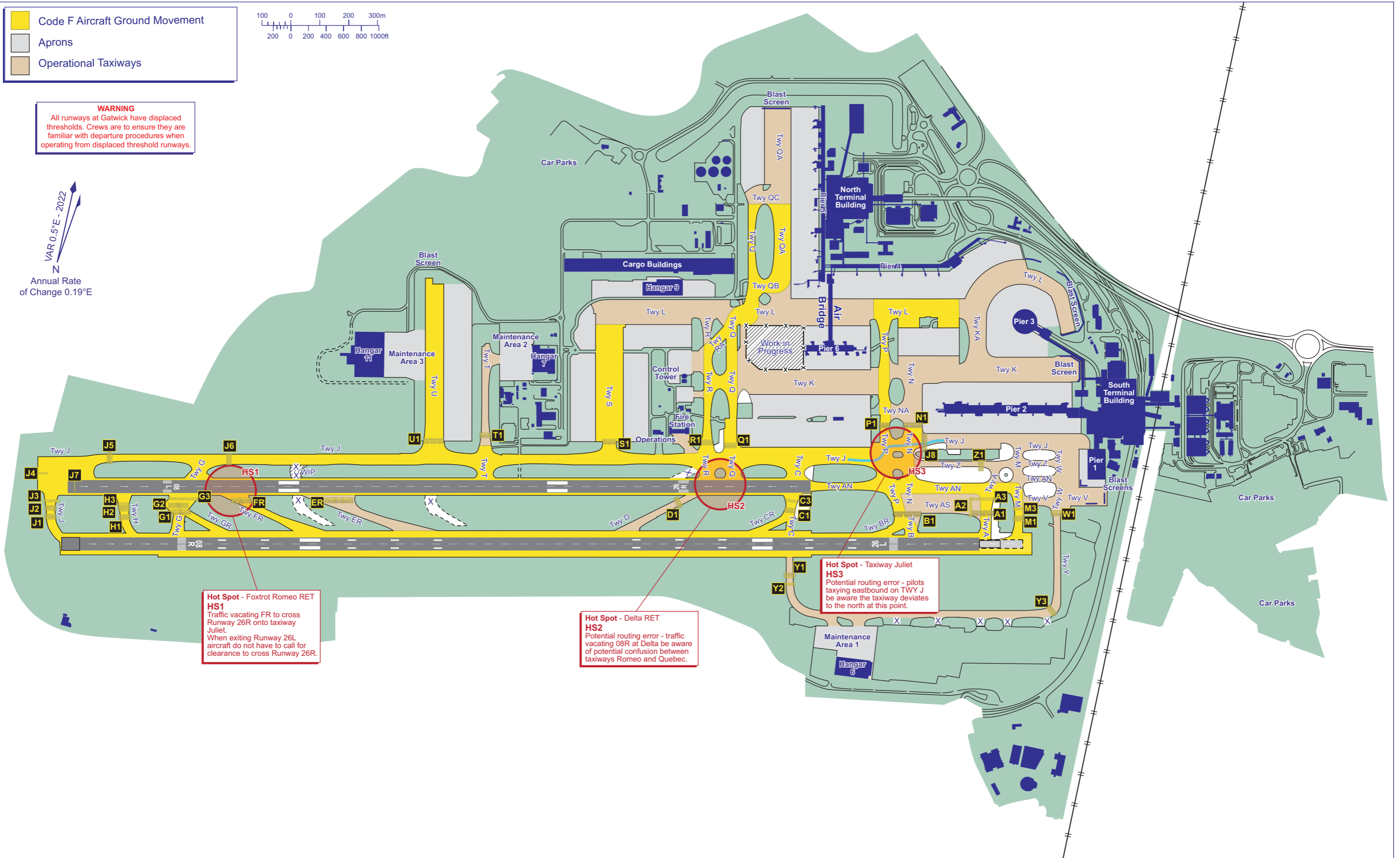
Code F Aircraft Ground Movement

- Code F Aircraft Ground Movement
- Aprons
- Operational Taxiways



WARNING
All runways at Gatwick have displaced thresholds. Crews are to ensure they are familiar with departure procedures when operating from displaced threshold runways.

VAR 0.5°E - 2022
Annual Rate of Change 0.19°E



Hot Spot - Foxtrot Romeo RET HS1
Traffic vacating FR to cross Runway 26R onto taxiway Juliet.
When exiting Runway 26L aircraft do not have to call for clearance to cross Runway 26R.

Hot Spot - Delta RET HS2
Potential routing error - traffic vacating 08R at Delta be aware of potential confusion between taxiways Romeo and Quebec.

Hot Spot - Taxiway Juliet HS3
Potential routing error - pilots taxiing eastbound on TWY J be aware the taxiway deviates to the north at this point.

CHANGE (12/24): TWY N REVISED.

AERO INFO DATE 04 SEP 24

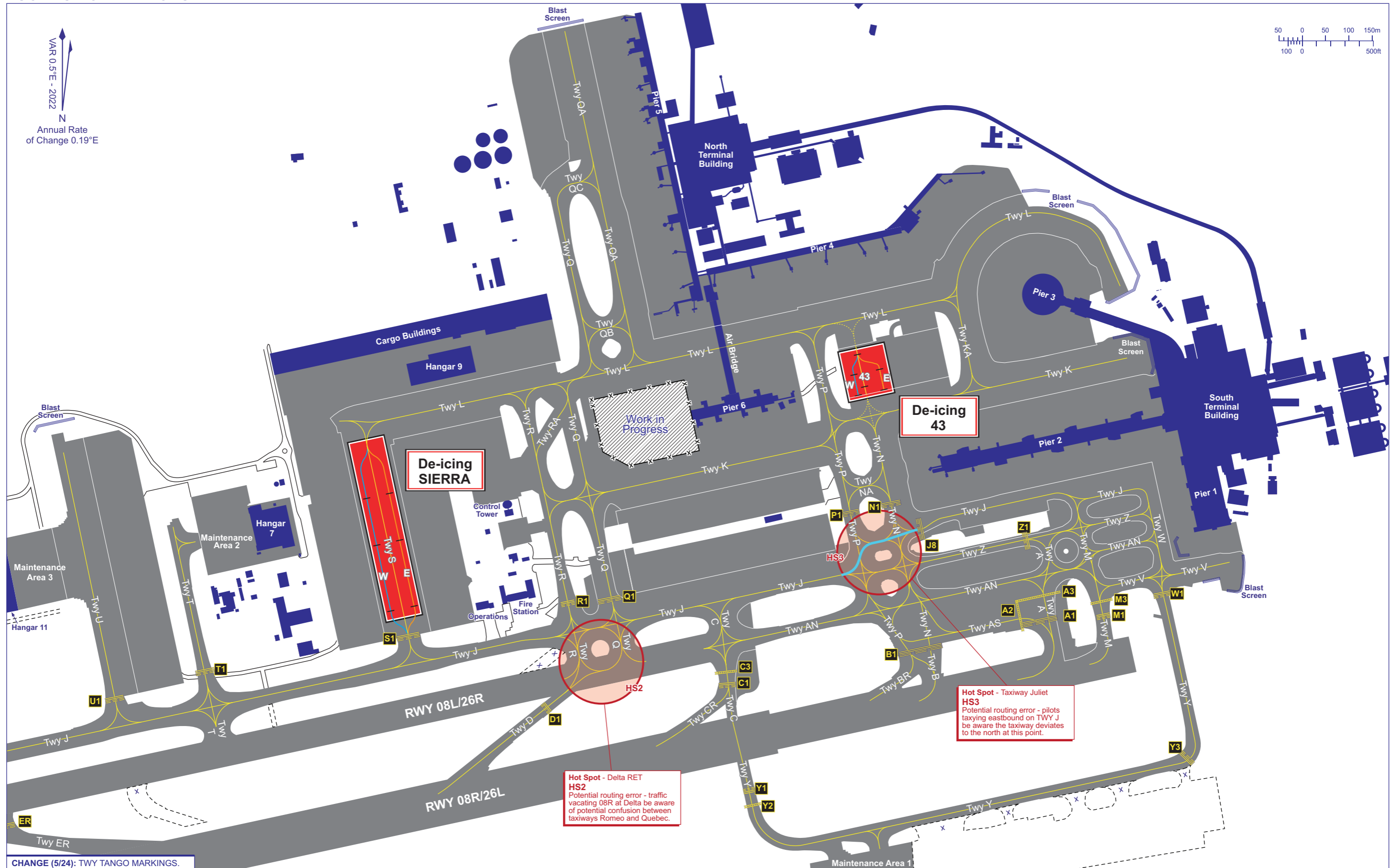
AD 2.EGKK-2-5

AIRCRAFT GROUND MOVEMENT - REMOTE DE-ICING AREAS
LOCATION CHART - ICAO

ARP 510853N 0001125W

AD ELEV 203FT

LONDON GATWICK
EGKK



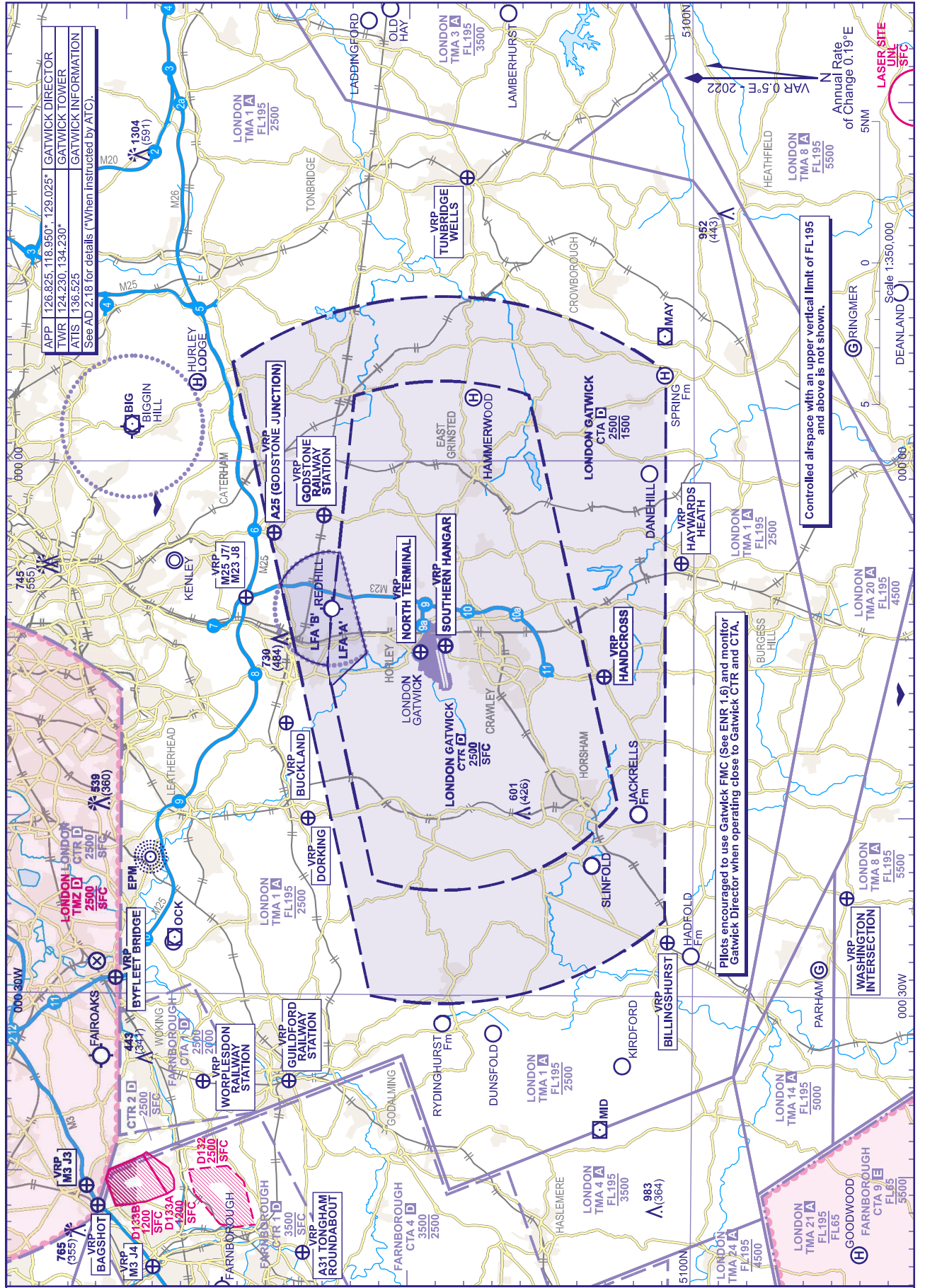
CHANGE (5/24): TWY TANGO MARKINGS.

AERO INFO DATE 26 FEB 24

AD 2-EGKK-2-6

CONTROL ZONE AND CONTROL AREA CHART

LONDON GATWICK

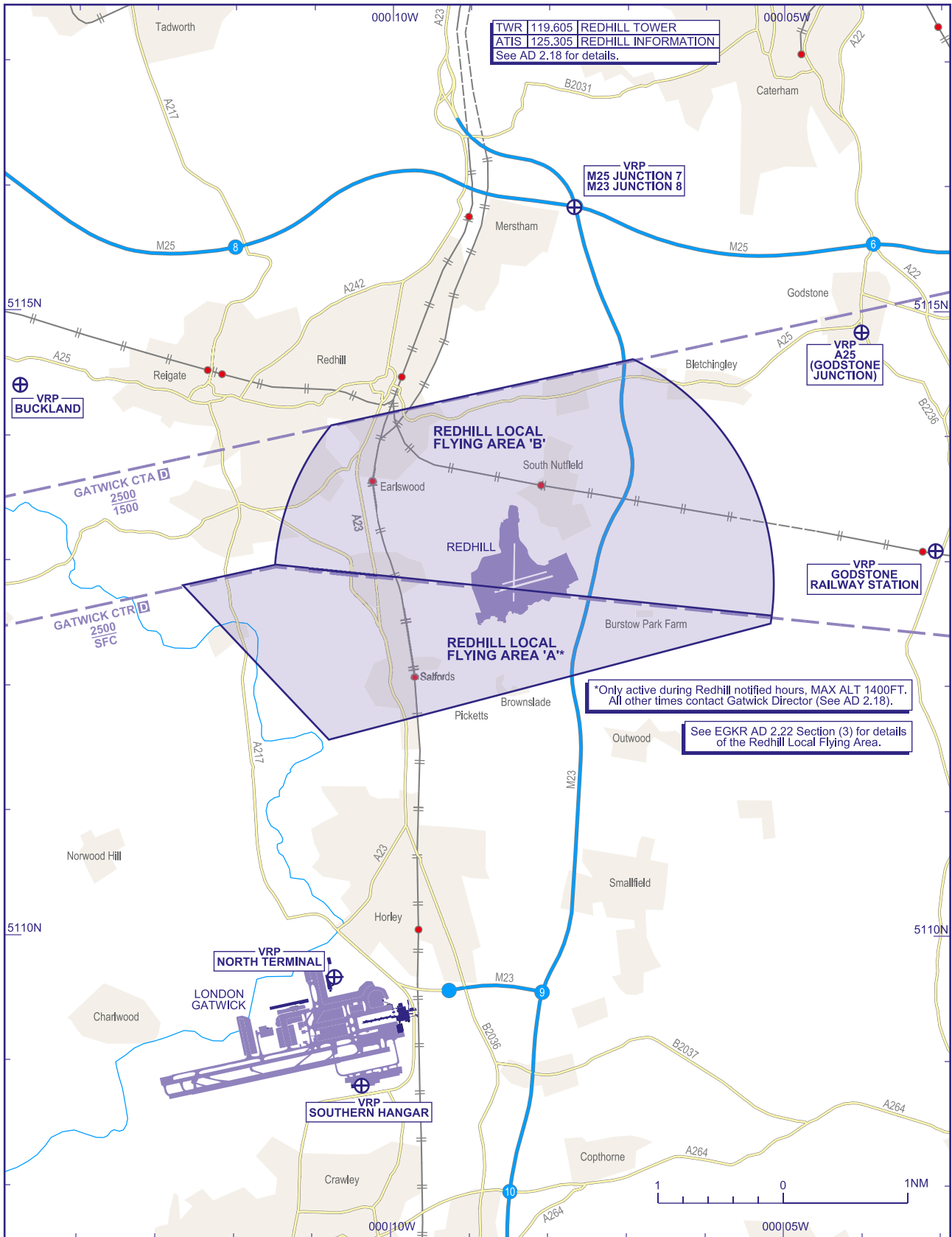


CHANGE (12/24): OBSTACLES REVISED.
AERO INFO DATE 10 SEP 24

AD 2.EGKK-4-1

REDHILL LOCAL FLYING AREA

LONDON GATWICK



CHANGE (3/23): VRPs UPDATED.
AERO INFO DATE 20 DEC 22

AD 2-EGKK-4-2

EGLL — LONDON HEATHROW

EGLL AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGLL — LONDON HEATHROW

EGLL AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 512839N Long: 0002741W Mid point of Runway 09L/27R
2	Direction and distance from city	12 NM W of London.
3	Elevation / Reference temperature / Mean Low Temperature	83 FT / 20 °C / -
4	Geoid undulation at AD ELEV PSN	151 FT
5	Magnetic Variation / Annual Change	0.41°E (2022) / 0.20°E
6	AD Administration Address Telephone Telefax Telex	HEATHROW AIRPORT LIMITED The Compass Centre, Nelson Road, Heathrow Airport, Hounslow, TW2 2GW. 08700-000123 (HAL) 020-8750 2636 (NATS Ltd) 020-8745 4290 (HAL) 934892 (HAL)
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Telephone calls to NATS Ltd operational areas may be recorded. Types of traffic permitted: IFR/VFR/SVFR.

EGLL AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	
7	ATS	H24 See also AD 2.18.
8	Fuelling	H24 Refer to AD 2.20 item 1.
9	Handling	H24 Refer to AD 2.20 item 1.
10	Security	H24 Refer to AD 2.20 item 1.
11	De-icing	H24 Refer to AD 2.20 item 1.
12	Remarks	

EGLL AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Full.
2	Fuel and oil types	AVTUR JET A-1 Oils: Various by arrangement with fuel companies.
3	Fuelling facilities/capacity	Hydrant refuelling. Very limited bowser capacity.
4	De-icing facilities	By arrangement with handling agent.
5	Hangar space for visiting aircraft	By arrangement with BA or Virgin Atlantic.
6	Repair facilities for visiting aircraft	Maintenance and repair (by arrangement).
7	Remarks	

EGLL AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in vicinity.
2	Restaurants	Restaurant, buffet and bar.
3	Transportation	Underground and Express to Central London, Buses, Coaches, taxis and car hire.
4	Medical facilities	Occupational Health Department. Tel: 020-8745 7211/7047/7048.
5	Bank and Post Office	Post Office Second Floor, Departures Building, Terminal 3.
6	Tourist Office	
7	Remarks	

EGLL AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A10
2	Rescue equipment	
3	Capability for removal of disabled aircraft	By arrangement with nominated recovery company.
4	Remarks	

EGLL AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical, Chemical de-icing, Sanding/Gritting.
2	Clearance priorities	Standard. See AD 1.2.2.
3	Remarks	Braking action by ASFT and Grip Tester. Runways (09L/27R & 09R/27L) De-iced/Anti-iced with Ethylene glycol. Latest information from: Airfield Duty Manager (AfDM).

EGLL AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	APRON Surface: Concrete except Stand 357, which has block paving.
2	Taxiway width, surface and strength	Taxiway A EAST: 25 M Surface: Concrete and asphalt PCR 980/R/A/W/T Taxiway A NORTH: 25 M Surface: Concrete and asphalt PCR 820/R/A/W/T Taxiway A SOUTH: 25 M Surface: Concrete and asphalt PCR 820/R/A/W/T Taxiway A WEST: 23 M Surface: Concrete PCR 1440/R/D/W/T Taxiway B EAST: 25 M Surface: Concrete and asphalt PCR 980/R/A/W/T Taxiway B NORTH: 25 M Surface: Concrete and asphalt PCR 920/R/A/W/T Taxiway B SOUTH: 25 M Surface: Concrete and asphalt PCR 820/R/A/W/T

		<p>Taxiway B WEST: 23 M Surface: Concrete PCR 1440/R/D/W/T</p> <p>Taxiway C: 25 M Surface: Concrete PCR 1400/R/D/W/T</p> <p>Taxiway D: 25 M Surface: Concrete PCR 1400/R/D/W/T</p> <p>Taxiway E: 23 M Surface: Concrete PCR 880/R/A/W/T</p> <p>Taxiway F: 23 M Surface: Concrete PCR 840/R/A/W/T</p> <p>Taxiway G: 23 M Surface: Asphalt PCR 840/R/A/W/T</p> <p>Taxiway H: 23 M Surface: Concrete PCR 1020/R/A/W/T</p> <p>Taxiway K: 25 M Surface: Concrete PCR 1020/R/A/W/T</p> <p>Taxiway L: 25 M Surface: Concrete PCR 960/R/A/W/T</p> <p>Taxiway LINK 22: 25 M Surface: Concrete and asphalt PCR 787/R/A/W/U</p> <p>Taxiway LINK 23: 25 M Surface: Concrete and asphalt PCR 1020/R/A/W/T</p> <p>Taxiway LINK 28: 25 M Surface: Concrete PCR 980/R/A/W/T</p> <p>Taxiway LINK 42: 23 M Surface: Concrete PCR 787/R/A/W/U</p> <p>Taxiway LINK 43: 25 M Surface: Asphalt PCR 787/R/A/W/U</p> <p>Taxiway LINK 44: 23 M Surface: Asphalt PCR 787/R/A/W/U</p> <p>Taxiway LINK 56: 25 M Surface: Concrete PCR 1480/R/D/W/T</p> <p>Taxiway LINK 57: 25 M Surface: Concrete PCR 1480/R/D/W/T</p> <p>Taxiway M: 23 M Surface: Concrete and asphalt PCR 1260/R/B/W/T</p>
--	--	--

		<p>Taxiway R: 23 M Surface: Concrete PCR 736/R/A/W/U</p> <p>Taxiway S: 23 M Surface: Concrete and asphalt PCR 787/R/A/W/U</p> <p>Taxiway T: 25 M Surface: Concrete PCR 980/R/A/W/T</p> <p>Taxiway V: 23 M Surface: Asphalt PCR 1020/R/A/W/T</p> <p>Taxiway W: 23 M Surface: Concrete and asphalt PCR 787/R/A/W/U</p> <p>Taxiway Y: 18 M Surface: Concrete PCR 706/R/D/W/T</p> <p>Taxiway Z: 23 M Surface: Concrete PCR 527/R/A/W/U</p>
3	Altimeter checkpoint location and elevation	Central Area 77 FT - Southern helicopter pad 75 FT - Cargo Centre Southside 76 FT.
4	VOR checkpoints	
5	INS checkpoints	See Aircraft/Parking Docking Charts
6	Remarks	

EGLL AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	<p>Nose in parking is in operation throughout the airport.</p> <p>Heathrow Airport operates a variety of stand types and configurations such as Standard apron/stand, Multiple Aircraft Ramp System (MARS) and Multi Choice Apron (MCA).</p> <p>Standard Apron/stands will have a single yellow centre-line. Each stand will have an individual stand number.</p> <p>MARS stands consist of a main centre-line painted yellow and will have two subsidiary centre-lines either side of the main centre-line. These subsidiary centre-lines are painted yellow/white and are given the designation of the stand number with 'L' (Left) and 'R' (Right) added.</p> <p>Multi Choice Aprons use multiple centre-lines to allow the operation of a variety of different combinations of parked aircraft. The airline operative will select the assigned stand Advanced Visual Docking Guidance System (A-VDGS) to allow the aircraft to park, or a marshaller shall assist with the aircraft parking. Each stand will have an individual stand number.</p> <p>Illuminated stand number indicators are provided on most stands.</p> <p>The majority of stands are equipped with A-VDGS. A marshalling service will be provided for the minority of the remaining stands that do not have A-VDGS fitted. Flight crew must not attempt to self-park if the A-VDGS is not activated or calibrated for their aircraft type.</p> <p>In the event of there being no activated A-VDGS displayed upon approach to the stand, flight crews must:</p> <ul style="list-style-type: none"> - Hold position on the taxiway centre-line. - Inform Ground Movement Control (GMC) they are awaiting stand entry guidance. - Contact company to arrange activation. <p>Note: GMC may request aircraft to 'report parked' – this is not an instruction to self-park.</p> <p>In the event of a failure of the A-VDGS during parking, flight crews must:</p> <ul style="list-style-type: none"> - Inform Ground Movement Control (GMC) of a stand entry guidance failure. - Contact company to arrange a marshaller.
---	---	---

2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 09L/27R: Full ICAO runway designation, threshold, centre-line, aiming point and touchdown zone. Lead-offs from the runway are marked by a continuous yellow line from the centreline of the runway. 09R/27L: Full ICAO runway designation, threshold, centre-line, aiming point and touchdown zone. Lead-offs from the runway are marked by a continuous yellow line from the centreline of the runway.</p> <p>Runway light(s): Threshold - HI green lights. Edge - HI white lights. Centreline - HI colour coded white/red lights. Touchdown zone - HI white lights. Stop end - HI red lights. Colour coded amber/green lights indicate the runway turn-offs routes to the CAT III stop bars.</p> <p>Taxiway marking aid(s): Yellow centre-line.</p>
3	Stop bars and runway guard lights (if any)	Illuminated red stop bars are provided where appropriate.
4	Other runway protection measures	
5	Remarks	Tug Crews, when towing aircraft under the guidance of a marshaller, must not park on stand unless guided to do so by the use of daylight-fluorescent wands, marshalling bats, marshalling gloves. Illuminated wands shall be used at night or in low visibility. LGTD WDI are located at the following positions: 512749.74N 0002838.40W, 512750.27N 0002631.90W, 512843.08N 0002622.52W & 512835.38N 0002848.27W.

EGLL AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLL22221) 27R/APPROACH	TREE	512846.58N 0002530.73W	114 FT	33 FT	No	
(EGLL22559) 27L/TAKE-OFF	TREE	512845.81N 0002950.49W	120 FT	44 FT	No	
(EGLL21952) 09L/APPROACH	TREE	512845.62N 0002933.28W	122 FT	46 FT	No	
(EGLL16680) 27R/TAKE-OFF	TREE	512845.34N 0002935.96W	119 FT	44 FT	No	Close in Obstacle
(EGLL18361) 09L/APPROACH	TREE	512845.26N 0002935.98W	126 FT	51 FT	No	
(EGLL16678) 27R/TAKE-OFF	TREE	512845.13N 0002936.08W	113 FT	38 FT	No	Close in Obstacle
(EGLL15398) 27R/TAKE-OFF	TREE	512845.11N 0002933.63W	110 FT	34 FT	No	Close in Obstacle
(EGLL15418) 27R/TAKE-OFF	TREE	512844.93N 0002930.10W	109 FT	34 FT	No	Close in Obstacle
(EGLL9577) 27R/TAKE-OFF	CCTV	512844.87N 0002928.96W	103 FT	26 FT	No	Close in Obstacle
(EGLL3138) 27R/TAKE-OFF	FENCE	512844.82N 0002928.78W	101 FT	24 FT	No	Close in Obstacle
(EGLL18288) 09L/APPROACH	TREE	512844.67N 0002947.84W	132 FT	56 FT	No	
(EGLL9587) 27R/TAKE-OFF	FENCE	512844.57N 0002929.01W	102 FT	25 FT	No	Close in Obstacle
(EGLL16605) 27R/TAKE-OFF	TREE	512844.47N 0002947.97W	129 FT	53 FT	No	Close in Obstacle
(EGLL17543) 27R/TAKE-OFF	TREE	512844.42N 0002936.62W	112 FT	36 FT	No	Close in Obstacle
(EGLL15483) 27R/TAKE-OFF	STREETLIGHT	512844.41N 0002925.31W	97 FT	27 FT	No	Close in Obstacle
(EGLL9586) 27R/TAKE-OFF	FENCE	512844.28N 0002929.27W	102 FT	27 FT	No	Close in Obstacle
(EGLL15481) 27R/TAKE-OFF	STREETLIGHT	512844.28N 0002926.33W	98 FT	28 FT	No	Close in Obstacle

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLL15479) 27R/TAKE-OFF	STREETLIGHT	512844.15N 0002927.35W	98 FT	28 FT	No	Close in Obstacle
(EGLL15477) 27R/TAKE-OFF	STREETLIGHT	512844.04N 0002928.35W	98 FT	26 FT	No	Close in Obstacle
(EGLL9585) 27R/TAKE-OFF	FENCE	512843.78N 0002929.72W	103 FT	31 FT	No	Close in Obstacle
(EGLL5179) 27R/TAKE-OFF	FENCE	512843.74N 0002929.94W	104 FT	30 FT	No	Close in Obstacle
(EGLL9584) 27R/TAKE-OFF	FENCE	512843.54N 0002929.95W	103 FT	24 FT	No	Close in Obstacle
(EGLL9583) 27R/TAKE-OFF	FENCE	512843.39N 0002930.09W	102 FT	23 FT	No	Close in Obstacle
(EGLL18249) 27R/TAKE-OFF	TREE	512843.28N 0002951.32W	127 FT	51 FT	No	
(EGLL9576) 27R/TAKE-OFF	CCTV	512842.87N 0002930.56W	103 FT	22 FT	No	Close in Obstacle
(EGLL5180) 27R/TAKE-OFF	CCTV	512842.84N 0002930.52W	103 FT	23 FT	No	Close in Obstacle
(EGLL3155) 27R/TAKE-OFF	LAMP POST	512842.60N 0002937.48W	98 FT	21 FT	No	
(EGLL18198) 27R/TAKE-OFF	TREE	512839.88N 0002950.37W	117 FT	41 FT	No	
(EGLL21824) 27R/TAKE-OFF	TREE	512839.79N 0002950.74W	119 FT	46 FT	No	
(EGLL18165) 27R/TAKE-OFF	TREE	512837.13N 0002953.05W	124 FT	49 FT	No	
(EGLL22527) 27R/TAKE-OFF	TREE	512837.04N 0002944.68W	109 FT	34 FT	No	
(EGLL11221) 27R/APPROACH	TANK NETTING	512834.56N 0002542.13W	98 FT	18 FT	No	
(EGLL13700) 27R/APPROACH	LAMP POST	512834.34N 0002543.40W	97 FT	17 FT	No	
(EGLL9629) 27R/TAKE-OFF	LAMP POST	512832.37N 0002932.07W	106 FT	17 FT	No	Close in Obstacle
(EGLL9623) 27R/TAKE-OFF	LAMP POST	512832.34N 0002934.28W	111 FT	25 FT	No	Close in Obstacle
(EGLL9625) 27R/TAKE-OFF	LAMP POST	512832.32N 0002933.04W	108 FT	22 FT	No	Close in Obstacle
(EGLL2970) 27R/TAKE-OFF	FENCE	512832.13N 0002935.34W	109 FT	25 FT	No	Close in Obstacle
(EGLL9674) 27R/TAKE-OFF	FENCE	512832.07N 0002935.17W	109 FT	25 FT	No	Close in Obstacle
(EGLL3035) 27R/TAKE-OFF	ROAD SIGN	512831.89N 0002937.58W	115 FT	30 FT	No	Close in Obstacle
(EGLL5363) 27R/TAKE-OFF	SIGN	512831.78N 0002937.31W	115 FT	26 FT	No	Close in Obstacle
(EGLL5277) 27R/TAKE-OFF	TREE	512830.97N 0002940.02W	123 FT	27 FT	No	Close in Obstacle
(EGLL13680) 09R/APPROACH	LAMP POST	512759.65N 0002921.16W	105 FT	26 FT	No	
(EGLL17090) 27L/APPROACH	BUILDING VENT	512759.18N 0002515.02W	134 FT	59 FT	No	
(EGLL21758) 27L/APPROACH	BLDG SAT DISH	512759.18N 0002516.24W	135 FT	60 FT	No	
(EGLL18845) 27L/TAKE-OFF	TREE	512757.08N 0002933.88W	109 FT	35 FT	No	
(EGLL2424) 27L/TAKE-OFF	FLOODLIGHT	512756.68N 0002923.92W	98 FT	22 FT	No	
(EGLL18839) 27L/TAKE-OFF	TREE	512756.34N 0002932.14W	102 FT	31 FT	No	
(EGLL22652) 27L/TAKE-OFF	TREE	512754.87N 0002935.35W	109 FT	37 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLL18809) 27L/TAKE-OFF	TREE	512754.26N 0002932.99W	103 FT	32 FT	No	
(EGLL18810) 27L/TAKE-OFF	TREE	512754.21N 0002934.45W	103 FT	31 FT	No	
(EGLL18983) 09R/TAKE-OFF	TREE	512750.41N 0002537.91W	109 FT	30 FT	No	
(EGLL18755) 27L/TAKE-OFF	TREE	512750.12N 0002932.86W	102 FT	31 FT	No	
(EGLL16991) 27L/APPROACH	TREE	512748.96N 0002544.25W	110 FT	32 FT	No	
(EGLL21679) 09R/TAKE-OFF	TREE	512748.77N 0002529.26W	119 FT	42 FT	No	
(EGLL21681) 27L/APPROACH	TREE	512748.53N 0002530.45W	121 FT	43 FT	No	
(EGLL21726) 27L/APPROACH	TREE	512748.46N 0002548.61W	103 FT	25 FT	No	
(EGLL17680) 27L/TAKE-OFF	TREE	512746.68N 0002918.13W	105 FT	29 FT	No	Close in Obstacle
(EGLL13259) 27L/TAKE-OFF	STREETLIGHT	512746.59N 0002919.81W	106 FT	32 FT	No	Close in Obstacle
(EGLL17965) 09R/TAKE-OFF	TREE	512746.13N 0002543.63W	124 FT	45 FT	No	Close in Obstacle
(EGLL22636) 09R/APPROACH	TREE	512743.72N 0002957.62W	157 FT	90 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGLL6032)	SPIRE	513427.08N 0002015.52W	557 FT	151 FT	No	
(EGLL5997)	AERIAL	513133.05N 0002742.07W	299 FT	171 FT	No	
(EGLL5884)	AERIAL	513107.77N 0002443.09W	282 FT	168 FT	No	
2021012731	CRANE	513101N 0001552W	571 FT	469 FT	Yes 2000 candelas static red	
(EGLL13728)	BUILDING	513044.76N 0001839.95W	340 FT	239 FT	No	
2023062049	CRANE	513039N 0002422W	404 FT	299 FT	Yes Steady red	Avondale Drive, Hayes, UB3 3PW. End estimated December 2025.
20230525104	CRANE	513035N 0002339W	320 FT	230 FT	Yes Steady red	Beaconsfield Road, Hayes, UB4 0SL. End estimated May 2025.
2024072458	CRANE	513028N 0002246W	417 FT	309 FT	Yes Steady red	Southall Beaconsfield Road
202204228	CRANES	513028.00N 0002325.00W	328 FT	223 FT	Yes Red	Southall Area. See AD 2.20 Warnings.
2023032017	CRANE	513025N 0002231W	469 FT	364 FT	Yes Steady red	Park Avenue, Southall, UB3 1AD.
2023102344	CRANE	513023N 0002531W	396 FT	288 FT	Yes Steady red	Clayton Road. End estimated August 2024.
2023062044	CRANE	513021N 0002503W	399 FT	294 FT	Yes Steady Red	Austin Road, Hayes UB3 3DN. End estimated December 2025.
2024021538	CRANE	513020N 0002238W	537 FT	431 FT	Yes Steady red	Merrick Place, Merrick Road, Southall, London, UB2 4AU.

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
201909164	CRANE	513020.29N 0004145.62W	442 FT		Yes Steady red	
2022032227	CRANE	513019.00N 0002543.00W	378 FT	271 FT	Yes Steady Red	One Vinyl Square, Hayes.
2023061617	CRANE	513018N 0002640W	226 FT	148 FT	Yes Steady red	14 Prologis Park, Hayes, West Drayton, UB7 9FN. End estimated June 2025.
(EGLL6072)	PYLON	513013.13N 0002955.78W	258 FT	169 FT	No	
20240305156	CRANE	513008N 0002437W	343 FT	236 FT	Yes Steady red	Union Park, North Hyde Gardens.
202105166 - TC7	CRANE	513008N 0002458W	470 FT	369 FT	Yes 2000 Candelas Static Red	
20240117129	CRANE	513008N 0002440W	410 FT	302 FT	Yes Steady red	Union Park Crane 1, North Hyde Gardens UB3 4DG.
2024011012	CRANE	513008N 0002440W	318 FT	213 FT	Yes Steady red	Project Union Phase 1, North Hyde Gardens, Hayes, UB3 4QQ.
202212299	CRANE	513007N 0002436W	237 FT	138 FT	Yes Steady red	Union Park, 15 North Hyde Gardens, Hayes, UB3 4QQ.
202103082	CRANE	513007.00N 0002804.00W	322 FT	230 FT	Yes Steady red	
2022022449	CRANE	513006.00N 0002459.00W	456 FT	342 FT	Yes Steady red	
2024062726	CRANE	513005N 0002507W	421 FT	317 FT	Yes Steady Red	Nestle Avenue, Hayes, UB3 4SA (Charles Edward Site).
202105163	CRANE	513003N 0002455W	228 FT	130 FT	Yes Steady red	
C10/18/22	CRANE	513003.71N 0002449.60W	324 FT		Yes Steady red	
2023081646	CRANE	513001N 0002402W	226 FT	121 FT	Yes Steady red	Industrial Park, 149 Brent Road, Southall, UB2 5FB.
(EGLL8178)	CRANE	512926.91N 0001810.43W	345 FT	305 FT	No	
(EGLL5638)	CHIMNEY	512908.51N 0003018.05W	320 FT	244 FT	Yes Red	
(EGLL6506)	FLAG POLE	512902.42N 0003615.51W	354 FT	187 FT	No	
2023051249	CRANE	512848N 0002550W	112 FT	26 FT	Yes Steady red	Avis Budget, Northrop Road, Heathrow, TW6 2QA.
2024041232	CRANE	512830N 0002939W	136 FT	33 FT	Yes Steady red	Terminal 5 Welcome Roundabout, Heathrow Airport.
2022110381	CRANE	512829N 0002203W	336 FT	253 FT	Yes Steady red	Lampton Road, Hounslow.
202407053	CRANE	512829N 0002938W	139 FT	39 FT	Yes Steady red	Heathrow Terminal 5, Wayfarer Road, TW6 2GD. Will only operate when Northern Runway (09L/ 27R) is closed.
202110115	CRANE	512827N 0002159W	327 FT	252 FT	Yes Red	
2019080181	CRANE	512817.68N 0002309.12W	330 FT		Yes Steady red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
2024021458	CRANE	512816N 0002700W	261 FT	180 FT	Yes Steady red	Heathrow Airport, Central Terminal Area. Deconstruction of modular building adjacent to Terminal 1 & Terminal 2A. Crane is height restricted during operational hours.
2024072981	CRANE	512815N 0002654W	237 FT	158 FT	Yes Steady red	Heathrow Airport Terminal 2, demolition of adjacent building to Terminal 1.
2023062850	CRANE	512811N 0002704W	213 FT	131 FT	Yes Steady Red	Terminal 2A, Heathrow Airport.
2023050340	CRANE	512752N 0002300W	302 FT	226 FT	Yes Steady red	379-389 Staines Road, Hounslow, TW4 5AP.
2024041221	CRANE	512750N 0002513W	182 FT	105 FT	Yes Steady red	Crane will operate only when 09R/27L is closed. Radius Park, St. Anthony's Way, Feltham.
(EGLL3659)	RADAR AERIAL	512737.69N 0002622.62W	220 FT	142 FT	No	
(EGLL18982)	MAST LIGHTNING CONDUCTOR	512732.14N 0002514.14W	227 FT	150 FT	Yes Red	
(EGLL6192)	PYLON	512730.18N 0003221.32W	227 FT	170 FT	No	
(EGLL19369)	BUILDING	512656.87N 0002425.02W	216 FT	147 FT	No	
(EGLL6429)	PYLON	512652.26N 0003137.32W	225 FT	170 FT	No	
(EGLL6896)	CHURCH	512649.92N 0002431.67W	235 FT	166 FT	No	
2022021746	CRANE	512630.00N 0002455.00W	226 FT	167 FT	Yes Steady red	
(EGLL19459)	TREE	512626.15N 0003447.73W	374 FT	98 FT	No	
(EGLL19466)	TREE	512624.41N 0003524.21W	385 FT	122 FT	No	
(EGLL19452)	TREE	512617.94N 0003446.51W	370 FT	109 FT	No	
2023031646	CRANE	512610N 0003032W	438 FT	392 FT	Yes Steady red	Former Renshaw, Industrial Estate, Staines-upon-Thames, TW18 4UQ.
2020012282	CRANE	512609.97N 0003018.92W	421 FT		Yes Steady red	
2023030292	CRANE	512559N 0003039W	379 FT	334 FT	Yes Steady red	Elmsleigh Road, Staines, TW18 4QW.

EGLL AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE HEATHROW 30 Hours
4	Trend forecast Interval of issuance	TREND. 30 Minutes.
5	Briefing/consultation provided	Self briefing/telephone.

6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English
7	Charts and other information available for briefing or consultation	
8	Supplementary equipment available for providing information	
9	ATS units provided with information	LONDON HEATHROW
10	Additional information (limitation of service, etc.)	

EGLL AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
09L	089.67°	3901 x 50 M	RWY surface: Asphalt, Grooved PCR 1020/R/A/W/T	512839.00N 0002905.97W 150.9 FT	THR 78.6 FT TDZ 81.3 FT	
27R	269.71°	3901 x 50 M	RWY surface: Asphalt, Grooved PCR 1020/R/A/W/T	512839.63N 0002559.82W 150.7 FT	THR 78.1 FT TDZ 79.3 FT	
09R	089.68°	3658 x 50 M	RWY surface: Asphalt, Grooved PCR 820/R/A/W/T	512753.25N 0002856.33W 150.8 FT	THR 75.3 FT TDZ 76.3 FT	
27L	269.72°	3658 x 50 M	RWY surface: Asphalt, Grooved PCR 820/R/A/W/T	512753.82N 0002602.76W 150.6 FT	THR 76.8 FT TDZ 77.8 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
		4021 x 280 M				RWY 09L Northern runway shoulders between A1 and A11 are 20.5 M and between A11 and A13 are 12.5 M.
	78 x 150 M	4021 x 280 M				RWY 27R Northern runway shoulders between A1 and A11 are 20.5 M and between A11 and A13 are 12.5 M.
		3778 x 280 M				RWY 09R Southern runway shoulders between N1 and N7 are 20.5 M and between N7 and N11 are 12.5 M.
		3778 x 280 M				RWY 27L Southern runway shoulders between N1 and N7 are 20.5 M and between N7 and N11 are 12.5 M.

EGLL AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
09L	3901 M	3901 M	3901 M	3592 M	LDA: 09L landing threshold is displaced by 309 M.
27R	3882 M	3960 M	3882 M	3882 M	
09L	3362 M	3362 M	3362 M		Take-off from intersection with A12
09L	2838 M	2838 M	2838 M		Take-off from intersection with A11
09L	2661 M	2661 M	2661 M		Take-off from intersection with A10W

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
09L	2354 M	2354 M	2354 M		Take-off from intersection with A10E
09L	1992 M	1992 M	1992 M		Take-off from intersection with A9W
09L	1789 M	1789 M	1789 M		Take-off from intersection with A9E
27R	3539 M	3617 M	3539 M		Take-off from intersection with A4
27R	3136 M	3214 M	3136 M		Take-off from intersection with A5
27R	2862 M	2940 M	2862 M		Take-off from intersection with A6
27R	2617 M	2695 M	2617 M		Take-off from intersection with A7
27R	2414 M	2492 M	2414 M		Take-off from intersection with A8
27R	2142 M	2220 M	2142 M		Take-off from intersection with A9E
27R	1947 M	2025 M	1947 M		Take-off from intersection with A9W
09R	3658 M	3658 M	3658 M	3350 M	LDA: 09R landing threshold is displaced by 308 M
27L	3658 M	3658 M	3658 M	3658 M	
09R	3528 M	3528 M	3528 M		Take-off from intersection with N10
09R	3351 M	3351 M	3351 M		Take-off from intersection with N8
09R	2853 M	2853 M	2853 M		Take-off from intersection with S7
09R	2852 M	2852 M	2852 M		Take-off from intersection with N7
09R	2325 M	2325 M	2325 M		Take-off from intersection with N6
09R	2244 M	2244 M	2244 M		Take-off from intersection with S6
09R	1704 M	1704 M	1704 M		Take-off from intersection with N5W
27L	3536 M	3536 M	3536 M		Take-off from intersection with N2E
27L	3380 M	3380 M	3380 M		Take-off from intersection with N2W
27L	3224 M	3224 M	3224 M		Take-off from intersection with N3
27L	3212 M	3212 M	3212 M		Take-off from intersection with S3
27L	2702 M	2702 M	2702 M		Take-off from intersection with N4E
27L	2606 M	2606 M	2606 M		Take-off from intersection with S4W
27L	2589 M	2589 M	2589 M		Take-off from intersection with S4E
27L	2441 M	2441 M	2441 M		Take-off from intersection with N4W
27L	2222 M	2222 M	2222 M		Take-off from intersection with S5E
27L	2091 M	2091 M	2091 M		Take-off from intersection with N5E
27L	2081 M	2081 M	2081 M		Take-off from intersection with S5W

EGLL AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
09L	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. 860 M Light intensity high	Green Light intensity high With HI wingbars	PAPI /3° 66 FT 417 M	900 M	Bi-directional colour coded 15 M spacing 3901 M length Light intensity high	Bi-directional 60 M spacing 3901 M length White Light intensity high	Red		EDGE: On full length departures, the first 300 M of edge lights are red due to displaced threshold.
27R	Coded centre-line with five crossbars. Supplementarily lighting inner 300 M. 905 M Light intensity high	Green Light intensity high With HI wingbars	PAPI /3° 73 FT 469 M	901 M	Bi-directional colour coded 15 M spacing 3884 M length Light intensity high	Bi-directional 60 M spacing 3884 M length White Light intensity high	Red		

RWY	Approach lighting Type/Length/Intensity	Threshold lighting Colour/Wing bars	VASIS/MEHT/PAPI/PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/Spacing/Colour/Intensity	Runway edge lighting Length/Spacing/Colour/Intensity	Runway end lighting Colour/Wing bars	Stopway lighting Length/Colour	Remarks
1	2	3	4	5	6	7	8	9	10
09R	Coded centre-line with five crossbars. Supplementary lighting inner 300 M. 939 M Light intensity high	Green Light intensity high With HI wingbars	PAPI /3° 65 FT 420 M	899 M	Bi-directional colour coded 15 M spacing 3660 M length Light intensity high	Bi-directional 60 M spacing 3660 M length White Light intensity high	Red		EDGE: On full length departures, the first 300 M of edge lights are red due to displaced threshold.
27L	Coded centre-line with five crossbars. Supplementary lighting inner 300 M. 922 M Light intensity high	Green Light intensity high With HI wingbars	PAPI /3° 65 FT 420 M	901 M	Bi-directional colour coded 15 M spacing 3660 M length Light intensity high	Bi-directional 60 M spacing 3660 M length White Light intensity high	Red		

EGLL AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: 09L: 512842.70N 0002848.27W (LGTD) - 27R: 512843.28N 0002619.54W (LGTD) - 09R: 512749.15N 0002839.36W (LGTD) - 27L: 512749.69N 0002621.49W (LGTD).
3	TWY edge and centre line lighting	CL: Green centre-line lights with selective switching on all taxiway routes.
4	Secondary power supply/switch-over time	Yes - CAT I/II/III. 1 second.
5	Remarks	Apron floodlighting. Obstacle lighting.

EGLL AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO, geoid undulation	TLOF: 512744.27N 0002704.97W
2	TLOF and/or FATO elevation	TLOF: 75.4 FT
3	TLOF and FATO area dimensions, surface, strength, marking, lighting	TLOF: 18 M sided triangular aiming point.
4	True BRG of FATO	FATO: DIR 27: 269.48°
5	Declared distance available	
6	APP and FATO lighting	FATO: DIR 27: Lighting: Aiming point No approach lighting. Helicopter aiming point is lit with 6 heliport low intensity omni-directional inset white lights.
7	RMK	Refer to AD 2.20 paragraph 5 for Helicopter Operations at Heathrow and AD 2-EGLL-4-1 for the Helicopter Crossing Operations chart. Refer to AD 2.22 paragraph 10 for VFR/Special VFR helicopter flights in the London CTR and paragraph 12 for Helicopter Routes in the London CTR.

EGLL AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
LONDON CTR 513611N 0004133W - 513611N 0001253W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 512013N 0001255W - 512013N 0003800W - 512103N 0004236W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 513611N 0004133W	Upper limit: 2500 FT ALT Lower limit: SFC	D	HEATHROW RADAR English	6000 FT		See EGLL AD2.22, Flight Procedures, item 8 for details of Local Flying Areas. Hours: See AD 2.18. To operate UAS above 400 FT AGL within this area, UAS operators are required to notify NATS via the NATS Non- Standard Flight (NSF) Portal. UAS operators are required to notify NATS at least 14 days before the date of each activity.
LONDON CTR TMZ 513611N 0004133W following the line of latitude to - 513611N 0001253W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 512013N 0001255W following the line of latitude to - 512013N 0003800W - 512103N 0004236W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 513611N 0004133W	Upper limit: 2500 FT ALT Lower limit: SFC	D	HEATHROW RADAR English	6000 FT		Procedures applicable to flights within the Transponder Mandatory Zone are detailed in GEN 1.5 paragraph 5.3 and EGLL AD 2.22.
LONDON HEATHROW ATZ A circle, 2.5 NM radius, centred at 512839N 0002741W on longest notified runway (09L/27R)	Upper limit: 2000 FT AGL Lower limit: SFC	D	HEATHROW RADAR English	6000 FT		

EGLL AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	HEATHROW DIRECTOR	119.730 MHz			H24	ATZ hours coincident with Approach hours.
		120.400 MHz When instructed by ATC.			H24	
		121.500 MHz Emergency frequency O/R.			H24	
		127.525 MHz When instructed by ATC.			H24	
		134.980 MHz When instructed by ATC.			H24	
TWR	HEATHROW DELIVERY	121.980 MHz Ground Movement Planning Departing aircraft are to make initial call to 'Heathrow Delivery' on this frequency.			H24	Non 833 KHz equipped aircraft should refer to AD 2.20 Local Aerodrome Regulation, 2.Ground Movement, e) Start Up Procedure, for further information.
	HEATHROW GROUND	121.705 MHz DOC 5 NM/ GND. Ground Movement Control.			As directed by ATC	
		121.855 MHz DOC 5 NM/ GND. Ground Movement Control.			As directed by ATC	
		121.905 MHz DOC 5 NM/ GND. Ground Movement Control.			As directed by ATC	
	HEATHROW TOWER	118.505 MHz DOC 25 NM/ 4,000 FT.			H24	
		118.705 MHz DOC 25 NM/ 4,000 FT.			H24	
		121.500 MHz Emergency frequency O/R.			H24	
		124.475 MHz When instructed by ATC.			H24	

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
RADAR	HEATHROW RADAR	121.500 MHz Emergency frequency O/R.			H24	Outside the hours 0700-2030 (0600-1930) 125.625 MHz will be monitored by Thames Director: 0600-0700 (0500-0600) and 2030-2230 (1930-2130) or Heathrow Director: 2230-0600 (2130-0500).
		125.625 MHz VFR and Special VFR flights in the London CTR and the London City CTR/CTA. DOC 60 NM/ 20,000 FT.			H24	
		127.525 MHz When instructed by ATC.			H24	
ATIS	HEATHROW INFORMATION	113.750 MHz DOC 60 NM/ 20,000 FT. Broadcast on Bovingdon VOR.			H24	
		117.000 MHz DOC 70 NM/ 20,000 FT. Broadcast on Seaford VOR.			H24	
		128.080 MHz DOC 60 NM/ 20,000 FT.			H24	
ATIS DEP	HEATHROW INFORMATION	121.935 MHz DOC 5 NM/ GND.			H24	Non 833 KHz equipped aircraft should refer to AD 2.20 Local Aerodrome Regulation, 2.Ground Movement, e) Start Up Procedure, for further information.
OTHER	HEATHROW FIRE	121.600 MHz When instructed by ATC. Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGLL AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ III 0.43°E (2022)	IAA	110.300 MHz	HO	512839.71N 0002537.06W		(RWY 09L) Particular care should be exercised in selecting the appropriate ILS facility as more than one ILS will normally be radiating.
ILS/GP	IAA	335.000 MHz	HO	512843.50N 0002850.43W		(RWY 09L) 3° ILS Ref Datum Hgt 51 FT. Certified for extended range to 15 NM. Not for use below 2200 FT at this range.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ III 0.43°E (2022)	IBB	109.500 MHz	HO	512753.89N 0002541.63W		(RWY 09R) Particular care should be exercised in selecting the appropriate ILS facility as more than one ILS will normally be radiating.
ILS/GP	IBB	332.600 MHz	HO	512748.97N 0002840.54W		(RWY 09R) 3° ILS Ref Datum Hgt 50 FT. Certified for extended range to 15 NM. Not for use below 2200 FT at this range.
ILS/LLZ III 0.41°E (2022)	ILL	109.500 MHz	HO	512753.14N 0002928.20W		(RWY 27L) False Capture may be experienced when approaching from the north and south. Particular care should be exercised in selecting the appropriate ILS facility as more than one ILS will normally be radiating.
ILS/GP	ILL	332.600 MHz	HO	512749.47N 0002620.00W		(RWY 27L) 3° ILS Ref Datum Hgt 56 FT. Certified for extended range to 15 NM. Not for use below 2200 FT at this range.
ILS/LLZ III 0.40°E (2022)	IRR	110.300 MHz	HO	512838.88N 0002937.39W		(RWY 27R) Particular care should be exercised in selecting the appropriate ILS facility as more than one ILS will normally be radiating.
ILS/GP	IRR	335.000 MHz	HO	512843.83N 0002617.50W		(RWY 27R) 3° ILS Ref Datum Hgt 58 FT. Certified for extended range to 15 NM. Not for use below 2200 FT at this range.
VOR/DME 0.43°E (2022) 0.60°E (2022)	OCK	100X 115.300 MHz	H24	511818.17N 0002649.86W	200 FT	RNAV Substitution Only. VOR DOC: 25 NM/25,000 FT and 35 NM/25,000 FT in the sector 114° to 289°. DME DOC: 70 NM/25,000 FT (90 NM/25,000 FT in Sector R059°-089°).
VOR/DME 0.41°E (2022) 0.80°E (2023)	LON	83X 113.600 MHz	H24	512914.09N 0002759.54W	113 FT	VOR DOC: 20 NM/50,000 FT (10 NM/50,000 FT in Sector R094-164, 35 NM/50,000 FT in Sector R064-094 and 40 NM/50,000 FT in Sector R254-289). There may be VOR bearing fluctuations in Sector R359-089. DME DOC: 40 NM/50,000 FT (100 NM/50,000 FT in Sector R179-254 and 80 NM/50,000 FT in Sector R224-314). DME unlocks may occur in the Sector R179-249 at ranges greater than 50 NM.
NDB 0.21°E (2022)	WCO	335.000 kHz	H24	515110.51N 0005744.67W		Range 30 NM.
NDB 0.27°E (2022)	WOD	352.000 kHz	H24	512710.02N 0005243.68W		Range 25 NM.
VOR/DME 0.16°E (2022) 0.80°E (2024)	SAM	80Y 113.350 MHz	H24 Hours of operation for aerodrome purposes: HO	505718.90N 0012042.20W	64 FT	VOR DOC: 20 NM/50,000 FT (35 NM/50,000 FT in Sector R249-084 and 40 NM/50,000 FT in Sector R359-034). DME DOC: 100 NM/50,000 FT (150 NM/50,000 FT in Sector R224-314). On R202 VOR flag alarms and DME unlocks may be experienced at ranges exceeding 30 NM below 8000 FT.

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
NDB 0.34°E (2022)	BUR	421.000 kHz	HO	513108.44N 0004037.89W		DOC: 15 NM except for Sector 340-020 where DOC is 30 NM
NDB 0.38°E (2022)	CHT	277.000 kHz	HO	513723.32N 0003106.87W		Range 25 NM.
NDB 0.46°E (2022)	EPM	316.000 kHz	HO	511910.43N 0002219.12W		Range 25 NM.
ILS/DME	IBB	32X 109.500 MHz	HO	512749.74N 0002730.90W	93 FT	(RWY 09R) On AD. DME freq paired with ILS I-BB and I-LL. Zero range is indicated at THR of Runway 09R and 27L.
ILS/DME	ILL	32X 109.500 MHz	HO	512749.74N 0002730.90W	93 FT	(RWY 27L) On AD. DME freq paired with ILS I-BB and I-LL. Zero range is indicated at THR of Runway 09R and 27L.
ILS/DME	IRR	40X 110.300 MHz	HO	512843.84N 0002732.51W	99 FT	(RWY 27R) On AD. DME freq paired with ILS I-AA and I-RR. Zero range is indicated at THR of Runway 09L and 27R.
ILS/DME	IAA	40X 110.300 MHz	HO	512843.84N 0002732.51W	99 FT	(RWY 09L) On AD. DME freq paired with ILS I-AA and I-RR. Zero range is indicated at THR of Runway 09L and 27R.
VOR/DME 0.59°E (2022) 1.10°E (2024)	BIG	98X 115.100 MHz	H24	511951.15N 0000205.32E	589 FT	VOR DOC: 20 NM/50,000 FT (30 NM/50,000 FT in Sector R259-074 and 60 NM/50,000 FT in Sector R314-344). DME DOC: 60 NM/50,000 FT (125 NM/50,000 FT in Sector R284-044 and 100 NM/50,000 FT in Sector R044-134). Due to terrain, coverage at low level is reduced in Sector R114-219. In addition DME unlocks may occur in Sector R004-039 at ranges up to 25 NM.
VOR/DME 0.61°E (2022) 0.70°E (2022)	LAM	103X 115.600 MHz	H24	513845.69N 0000906.13E	241 FT	VOR DOC: 30 NM/50,000 FT (40 NM/50,000 FT in Sectors R064°-099°, R139°-174° and R249°-289°). DME DOC: 40 NM/50,000 FT (110 NM/50,000 FT in Sector R314°-134°).
VOR/DME 0.78°E (2022) 1.20°E (2023)	DET	120X 117.300 MHz	H24	511814.41N 0003550.19E	645 FT	VOR DOC: 20 NM/50,000 FT (35 NM/50,000 FT in Sector R289-029 and 45 NM/50,000 FT in Sector R249-289). DME DOC: 60 NM/50,000 FT.
VOR/DME 0.40°E (2022) 0.30°E (2019)	MID	87X 114.000 MHz	H24	510314.23N 0003730.01W	233 FT	VOR DOC: 20 NM/50,000 FT (35 NM/50,000 FT in Sector R355°-165°). DME DOC: 60 NM/50,000 FT (100 NM/50,000 FT in Sector R240°-000°).
VOR/DME 0.65°E (2022) 0.90°E (2021)	MAY	126X 117.900 MHz	H24	510101.86N 0000658.04E	384 FT	VOR DOC: 20 NM/25,000 FT (30 NM/25,000 FT in Sector R259-329 and 35 NM/25,000 FT in the Sector R059-094). DME DOC: 40 NM/25,000 FT (60 NM/25,000 FT in Sector R104-164). Due to terrain, coverage at low level is reduced in Sector R314-039.
VOR/DME 0.36°E (2022) 0.70°E (2023)	BNN	84Y 113.750 MHz	H24	514334.19N 0003259.10W	558 FT	VOR DOC: 20 NM/50,000 FT (30 NM/50,000 FT in Sector R329°-084° and 40 NM/50,000 FT in Sector R084°-119°). DME DOC: 60 NM/50,000 FT.

EGLL AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use governed by regulations applicable to the London CTR.
- b) The following conditions and procedures apply to single-engined and light twin-engined aircraft not fully equipped with radio apparatus (including ILS receiver) as specified at GEN 1.5 but carrying at least the VHF RTF frequencies to permit communication with London (Heathrow) Airport Approach/Director/Radar, Tower and Ground Movement Control:
 - i. The flight must be made on a VFR or Special VFR clearance under the weather conditions and along the routes specified in the EGLL AD 2.22, paragraph 12.
 - ii. The first VHF RTF communication with Approach Control must include the words 'Customs required' if the flight is an international one.
- c) An operator which has not operated a scheduled service or a series charter service from Heathrow prior to 1 November 1992 shall only be permitted to commence a scheduled service or a series charter service from Heathrow to a destination which was not served from the airport by any operator in the twelve months prior to 1 November 1992 if any jet aircraft to be used meets the requirements ICAO Annex 16, Chapter 3.
- d) When applying for permission to commence a service falling within the terms of this Condition, documents attesting that jet aircraft comply with Chapter 3 Noise certification standards must be produced. If these documents are not produced the aircraft will be regarded as a non Chapter 3 aircraft.
- e) All flights are at all times subject to PPR within the terms of the Heathrow Rule 1 Traffic Distribution Rules 1991. The filing of a flight plan with NATS or receipt of an ATC clearance does not constitute permission to use London Heathrow.
- f) Availability: H24, subject to the approval of the Director of Operations, Heathrow Airport Ltd, and the acceptance of the flight by the coordinator (Airport Co-ordination Ltd). For the purposes of this paragraph, Scheduled Flights shall mean: commercial passenger flights; commercial all-cargo flights; positioning flights to operate a planned commercial service or to undergo essential maintenance; ambulance flights; other non-commercial flights operated in support of commercial operations including but, not limited to, air tests, training flights, technical stops. Subject to paragraph (g), the airport may not be used by aircraft other than those engaged on Scheduled Flights unless:
 - i. prior written permission and a clearance number for each flight is obtained from the Director of Operations, Heathrow Airport Limited; and
 - ii. a slot has been obtained in advance of each movement from the airport co-ordinator.

Applications for prior permission must be made in writing not more than 10 days and not less than 24 hours before the proposed flight to the Director of Operations, The Compass Centre, Nelson Road, Heathrow Airport, Tel: 020-8757 4470. Once permission has been granted to an operator for a particular operation, permission will be deemed granted on subsequent occasions provided there is no material difference in the type of operation (in such cases a further application for prior permission must be made as above) and provided that the Director of Operations shall not have revoked the permission, which he shall be able to do in his absolute discretion.

Applications for a slot must be made not less than 24 hours before the proposed flight, and should be addressed to the Manager, Airport Co-ordination LTD, by Tel: 020-8564 0613, Fax: 020-8564 0690, available during office hours; or by email: LONACXH@acl-uk.org.

Both applications must include the following information.

- i. Aircraft owner/operator;
- ii. Aircraft type and registration;
- iii. Origin and/or destination;
- iv. ETA and ETD;
- v. Number of passengers;
- vi. A handling agent (Airline Operator or Handling Agent based at Heathrow) is a requirement for all flights including general aviation and helicopter movements;
- vii. Purpose of flight.

Use is also subject to limitations imposed by Night Noise Restrictions (see current supplements).

- g) For the purposes of this paragraph (g), 'General or Business Aviation' shall mean any air traffic not falling into any of the following categories:
 - i. Scheduled Flights (as defined in paragraph (f));
 - ii. Air-Taxi Services which shall mean: non-scheduled air transport operations for hire or reward in the case of passenger air transport operations where the seating capacity of the aircraft used exceeds 10;
 - iii. Official Flights which shall mean: any traffic engaged on the King's flight or on flights operated primarily for the purpose of the transport of Government Ministers or visiting Heads of State or dignitaries from abroad.

Operators of General or Business Aviation aircraft may not operate at any time unless:

- i. they obtain prior written permission to do so from the Director of Operations, Heathrow Airport Limited; and
- ii. they obtain a slot in advance of each movement also from the airport co-ordinator; and
- iii. irrelevant of their time of arrival and departure, they operate the movement (departure and arrival) to the approved slot time.

Those who fail to comply with (g) (i), (ii), or (iii), are liable to be prohibited from operating thereafter, unless the Director of Operations, Heathrow Airport Limited is satisfied that the movement amounted to an emergency or other circumstances beyond the control of the operator or the commander of the aircraft.

Applications for prior permission must be made in writing not more than 10 days and not less than 24 hours before the proposed flight to the Director of Operations, The Compass Centre, Nelson Road, Heathrow Airport, Tel: 020-8757 4470. Once permission has been granted to an operator for a particular operation, permission will be deemed granted on subsequent occasions provided there is no material difference in the type of operation (in such cases a further application for prior permission must be made as above) and provided that the Director of Operations shall not have revoked the permission, which he shall be able to do in his absolute discretion.

Applications for a slot must be made not less than 24 hours before the proposed flight, and should be addressed to the Manager, Airport Co-ordination LTD, by Tel: 020-8564 0613, Fax: 020-8564 0690, available during office hours; or by email: LONACXH@acl-uk.org.

- i. Aircraft owner/operator;
- ii. Aircraft type and registration;
- iii. Origin and/or destination;
- iv. ETA and ETD;
- v. Number of passengers;
- vi. A handling agent (Airline Operator or Handling Agent based at Heathrow) is a requirement for all flights including general aviation and helicopter movements;
- vii. Purpose of flight.

Flights for recreational, commemorative, charity and record breaking purposes, light twin engined private aircraft and all light single engined aircraft will not be permitted to use the airport. 'Light aircraft' shall be defined as any aircraft that has a maximum gross take-off weight of 12,500 lb (5,670 KG) or less.

- h) Diversion Procedure – Airline and other operators are requested to resist filing London Heathrow as an alternate. However, where this is unavoidable, they are required to have made arrangements for ground handling with an airline from the appropriate terminal. It should be noted that during the night, ground handling facilities are very limited without prior arrangement. Nothing in this procedure shall, however, prevent an aircraft that has declared an emergency from landing.
- i) The operation of the Antonov An225 is subject to prior approval of the Airside Operations AfDM, Tel: 0208-745 7373.
- j) Fixed-wing and rotary aircraft using London Heathrow Airport do so in accordance with the Heathrow Conditions of Use document. A copy of the document is available at www.heathrowairport.com.
- k) In order to provide a stable and deliverable schedule during times of disruption Heathrow Airport Ltd, in agreement with the AOC and Airline Operators (AOs), has developed the following mechanisms to assist with both short term and longer-term disruption. These interventions aim to minimise the impact of disruption to passengers and the local community, whilst providing participating airlines with the ability to pre-tactically cancel flights in advance of expected disruption and thus minimise the risk of tactical cancellations. Interventions are managed on behalf of Heathrow Airport by the Aircraft Operations Duty Manager (AODM). The AODM is available H24 via tel +44(0)208-757 3501.
 - i. Level One intervention – tactical tools and methodologies used to minimise the impact of short term capacity issues. These are applied under BAU conditions;
 - ii. Level Two intervention – When inclement weather is forecast the AODM, in conjunction with ATC, will assess the risk to the normal operations of the airfield. If disruption is expected the AODM will convene a conference call with the top 23 airlines (in terms of ATMs) where it may be agreed that airlines are required to make a pre-tactical reduction in their schedules. Heathrow may also decide not to accept diversions during a period of disruption, and ad-hoc slots may be suspended. All outcomes will be communicated via NOTAM. Airport Coordination Limited (ACL) is responsible for monitoring the utilisation of slots and applying the “use it or lose it” (80:20) rule as required under the European Union Regulation 95/93 amended by 794/2004. ACL will review each activation of the Demand v Capacity process on a case by case basis. ACL will look favourably on those air carriers that comply with the request by the airport to cancel in advance of predicted disruption following the issuing of a NOTAM and will provide alleviation for 80:20. ACL will review cancellations that occur in the same way it would for any other disruption, which may lead to further alleviations.
 - iii. Level Three intervention – if inclement weather is forecast for a more prolonged period (generally in excess of 24 hours) or if the airport has experience a loss of critical resource, systems or infrastructure and disruption is expected to last for greater than 24 hours the Head of Operations would instigate Heathrow Airport Demand and Capacity Balancing (HADACAB). A conference call is held with the top 50 airlines (in terms of ATMs) and under the Terms and Conditions of use of Heathrow a schedule reduction is mandated. Such reductions are also considered for 80:20 alleviation. Generally, a Level Three Intervention is preceded by a Level Two intervention.
 - iv. Level Four intervention – in the event of the loss of a significant asset or processing agent (including staff) resulting in disruption that is expected to last for a prolonged period (such as loss of terminal, loss of runway) then the Head of Operations would instigate Heathrow Airport Demand and Capacity Balancing (HADACAB). A conference call is held with all airlines and under the Terms and Conditions of use of Heathrow a schedule reduction is mandated. Such reductions are also considered for 80:20 alleviation. A Level Four intervention may not necessarily be preceded by a Level Two or Three intervention.

2 GROUND MOVEMENT

a) General

- i. Ground Movement Control (GMC) is in continuous operation and all surface movement of aircraft, vehicles and personnel on the Manoeuvring Area is subject to ATC authority. Some vehicles are permitted to operate on taxiways without being under positive control from ATC. These vehicles are said to be 'free ranging' and must give way to aircraft at all times, maintaining a listening watch on the relevant GMC frequency.

28 Nov 2024

- ii. Directions issued by ATC should be followed specifically. RTF transmissions must be brief, concise and kept to the minimum number.
- iii. Within the Movement Area, pilots will be cleared to and from the aircraft stands under general direction from GMC. Pilots are reminded of the extreme importance of maintaining a careful lookout at all times.
- iv. Pilots are to use the minimum power necessary when manoeuvring on the taxiway system. This is of particular importance when manoeuvring in the apron cul-de-sacs, where jet blast can affect adjacent stands.
- v. Flight crew are reminded of the extreme importance of maintaining a careful lookout at all times and are at all times responsible for wing tip clearance. The taxiway lighting system is an aid to pilots when they are operating on the manoeuvring area during darkness or in poor visibility. Notwithstanding the taxiway lighting system, pilots continue to remain responsible for wing tip clearance.
- vi. In promulgated holding areas, ATC may require aircraft to pass each other. Avoidance of other aircraft is the responsibility of the flight crew involved. If doubt exists as to whether other aircraft can be safely overtaken, aircraft must stop, advise ATC, and request ATC for alternative instructions.
- vii. Heathrow Airport is equipped with an advanced surface movement radar utilising Mode-S.

1. Aircraft operators intending to use London Heathrow Airport should ensure that Mode S transponders are able to operate when the aircraft is on the ground.
2. Flight crew should select XPDR, or equivalent, AUTO if available, and the assigned code:
 - a) From the request to push back or taxi, whichever is earlier;
 - b) After landing, continuously until the aircraft is parked on stand.

After parking the Mode A code 2000 must be set before selecting OFF or STDBY.

3. Flight crew of aircraft equipped with Mode S having an aircraft identification feature should also set the aircraft identification. This setting is the aircraft identification specified in Item 7 of the ICAO ATC Flight Plan. The aircraft identification should be entered from the request for push back or taxi, whichever is earlier, through the FMS or the Transponder Control Panel.
- viii. Pilots are required to inform Heathrow Delivery if the aircraft livery conflicts with the aircraft callsign.
 - ix. For the safety of ground personnel, flight crews are requested not to flash or illuminate nose gear lights whilst on stand without prior warning to ground crew.

b) Manoeuvring Area

- i. The manoeuvring area designation system is illustrated on page AD 2-EGLL-2-1. The taxiway designation system uses alphabetical letters to identify main taxiways. Stub taxiways that connect main taxiways are designated as 'Link'. The runway holding areas have named reporting points. Entrance/exits for the runways have alpha/numeric designations'.
- ii. The Manoeuvring Area is equipped with the following forms of taxiway guidance:

1. Yellow painted taxiway centre-lines;
2. Yellow painted holding position lines at the approach to runways;
3. Yellow painted special holding position lines related to runway protection in CAT III/IIII;
4. Green taxiway centre-line lights and red stopbars controlled from the Tower;

(aa) During the hours of darkness or reduced visibility. Aircraft may be requested to 'follow the greens', in addition to being given a verbal clearance limit. This means aircraft should follow the green centre-line lights, until either the verbal clearance limit or a red stop bar is reached. Aircraft should not proceed past a verbal clearance limit without ATC approval, even if no red stop bar exists.

(bb) During daylight hours red stop bar lights will be illuminated at each runway entry point. Aircraft must not proceed past until the stop bar is extinguished and ATC permission is received. No green centre-line lights are provided during daylight hours.

5. An illuminated red stopbar means STOP. Aircraft must not proceed until the stopbar is extinguished and ATC permission is received;
 6. Runway Guard Lights: Pairs of alternately flashing ground mounted yellow lights at each side of the taxiways, where they connect with a runway, operate H24.
- iii. Ground movement of large aircraft:
 1. A380 aircraft – taxiway routes available to the A380 are shown on chart AD 2-EGLL-2-3, marked in yellow. In addition, B747-800 aircraft are permitted to use taxiway Sierra west of S6 and Link 41. Reduced 'taxiway centre-line to object clearance' of 49 M applies on the following taxiways: Bravo between Foxtrot and Link 11; Echo between Bravo and Link 36; Whiskey between Sierra and Tango; Sierra between SY6 and Tango. Reduced clearance of 47.5 M to an airside road to the east of Taxiway Alpha at MORRA. Pilots are to ensure that aircraft remain on the taxiway centre-line at all times, it is recommended that judgemental steering is used at all times when manoeuvring on the taxiways. Pilots are to use minimum power when manoeuvring in Terminal 4.
 2. Pilots of Code E aircraft must exercise caution when using Taxiway Sierra between Reporting Point SY6 and Taxiway Z as wing tip clearances to the south are minimal.
 3. All B747/400 aircraft on Taxiway Zulu must be under tow.
 4. A340-600 and B777-300 aircraft - it is recommended that flight crews use judgemental steering at all times when manoeuvring on the taxiways. These aircraft are not permitted to use the following route; Eastbound on Taxiway Sierra at NESSY - turning right onto Link 41 to face west and vice-versa.

- 5. Pilots of B747, B777, B787, A340, A350 and Code F aircraft are not permitted to route north on Taxiway Tango turning left on Taxiway Sierra facing west under power.
- iv. Code E taxiway-taxiway separation of 80 M is not met as follows: Taxiways Alpha-Bravo between Hotel and AY5.
- v. Code E taxiway to stand, or taxiway to object separation of 43.5 M is not met to the east of Taxiway Foxtrot between F1 and Taxiway Golf (42.5 - 43 M), and to the south of Taxiway Sierra between SY6 and Taxiway Z (37 M).
- vi. Code F taxiway to stand, or taxiway to object separation of 51 M is not met to the south of Taxiway Bravo (N) between stands 336 and 357 (49 M).
- vii. Taxiway Yankee between HANLI and Taxiway Alpha is restricted to aircraft with a maximum size of Code C.
- viii. Link 56 restricted to aircraft with a maximum size Code D.

c) **Engine Ground Running**

Accountability for the control of ground noise at Heathrow rests with Heathrow Airport Limited (HAL). Various restrictions regarding aircraft operations are related to the planning conditions (as amended) for Terminals 4 and 5. In addition, the running of Auxiliary Power Units is controlled.

i. **Operations at Terminal 4**

- 1. **Stands 401-403 and 429-432**, except in an emergency, **between 2330 (2230) and 0600 (0500)**; no use of aircraft engines shall be permitted to, from or onto these stands;
- 2. **Taxiway route 'S' east of 'V' apron or through 'Link 41' to S1 and reverse**. Aircraft are prohibited from accessing and departing from the terminal site by taxiing on the route above between 2330 (2230) and 0600 (0500) except in an emergency or as a consequence of essential maintenance work on the alternative access routes.

ii. **Operations at Terminal 5**

Between 2330 (2230) and 0600 (0500):

- 1. Aircraft arriving at Terminal 5 and those scheduled to depart in that period, will use stands closest to the centre of the site in preference to outer stands;
- 2. Taxiing operations to the north and south of the T5 application site will be restricted to inner taxiways only, except in an emergency or for the maintenance of the runway and taxiway system.

iii. **Hierarchy of power sources**

The following hierarchy of power sources must be followed:

- 1. FEGP - to be used whenever supplied and serviceable;
- 2. GPU - only to be used when FEGP is not supplied or the unit is unserviceable;
- 3. APU - only to be used when neither FEGP nor GPU is supplied or both units are unserviceable.

iv. **Auxiliary Power Units (APU) procedures**

- 1. APU must be shut down at the earliest opportunity on arrival on stand.
- 2. APUs are not permitted to be used between 2330-0600 (2230-0500) on:

Cargo Area stands 601-609 and 611-616;

Stands 401-403 and 429-432, except in an emergency.

- 3. No APU is to be left running unless either a qualified person is in attendance or the APU has both an auto-shut down and auto-extinguishing facility.

v. Restrictions on the use of APUs are:

	Before Estimated Time of Departure - start	Arrival terminating operation - shut down
Narrow Body Aircraft	No more than 15 minutes †	10 minutes after arrival on stand †
Wide Body Aircraft (B747, B767, B777, B787, MD11, A300, A310, A330, A340)	No more than 30 minutes †	10 minutes after arrival on stand †
A380	No more than 60 minutes †	15 minutes after arrival on stand †

† Exemptions to these restrictions are:

- 1. When the aircraft is scheduled to be towed, the APU may be started if no other external power source is available but no earlier than 10 minutes prior to the planned movement.
- 2. When the planned towing movement as specified under 1 is delayed due ATC, then the APU may be left running.
- 3. Where no fourth FEGP plug is available on stand, A380 aircraft are permitted to use a GPU to support FEGP usage.

28 Nov 2024

4. If the ambient cabin temperature is too high and the PCA (Pre-conditioned Air) is unable to bring the temperature to a desired value after an extended period of use, or the PCA cannot be used/is not available, such as during a strong wind warning (as promulgated through AOP (Airport Operations Plan) and the Airport Community Apps). APU may be used 30 minutes before ETD for Narrow-bodied Aircraft.
 5. If the ambient cabin temperature is too high and the PCA is unable to bring the temperature to a desired value after an extended period of use, or the PCA cannot be used/is not available, such as during a strong wind warning (as promulgated through AOP and the Airport Community Apps). APU may be used 55 minutes before ETD for Wide-bodied Aircraft (Except for A380).
 6. If the ambient cabin temperature is too high and the PCA is unable to bring the temperature to a desired value after an extended period of use, or the PCA cannot be used/is not available, such as during a strong wind warning (as promulgated through AOP and the Airport Community Apps). APU may be used 90 minutes before ETD for A380.
- vi. If an Airline wishes to make use of the Engine Ground Run pens they should contact British Airways maintenance control on 020-8513 0880. Requests will only be accepted when there is spare capacity.

d) **Runway Crossing Procedure (Runway 09R/27L)**

- i. Aircraft and vehicles which are required to cross active runways will be issued instructions by the Ground Movement Controller, which will include a holding point as a clearance limit, at which the aircraft or vehicle will be required to hold short of the active runway.
- ii. When reaching the clearance limit specified in the taxiing instructions, the aircraft or vehicle will be instructed to change frequency to that of the Air Controller of the appropriate runway.
- iii. After crossing the runway and having reported 'runway vacated' with the Air Controller, the aircraft or vehicle will be instructed to revert to the GMC frequency for further clearance. In the absence of further clearance pilots should turn onto the first available taxiway and come to a stop.

e) **Start-up Procedures**

i. General

1. ATC are responsible for clearance delivery as a separate function from Ground Movement Control (GMC). **Pushback approval must be obtained from GMC.** Pilots who wish to start engines on stand must request permission from GMC. Pushback approval includes permission to start engines during pushback.
2. Pilots are to report their aircraft type, stand number, QNH and the identification letter of the received ATIS information on first contact with 'Heathrow Delivery'.
3. All jet aircraft are to advise ATC if, for any reason, they are unable to accelerate after noise abatement procedures to 250 KT.
4. Any jet aircraft with a minimum clean speed of greater than 250 KT must inform Heathrow Delivery.
5. All non 833 KHz equipped aircraft should contact ATC on the published number to obtain ATC clearance and weather information.
6. In Terminal 5 only (T5A, T5B, T5C and T5D Stands 501-596) and for use by British Airways ONLY, new Ramp Information Display System (RIDS) screens are situated in proximity to the head of stand area. The information provided on each screen will be unique to the flight on stand at any given time and will provide turnaround status information to the flight crew. Note the installation of these new screens will take place in a phased approach during 2024.

ii. **Airport - Collaborative Decision Making (A-CDM)**

1. TOBT/TSAT

(aa) Pilots should take note of the **TSAT** which they receive from their AO/GH or ATC and comply with it;

(bb) **If TOBT or TSAT** can no longer be met, at any time, then TOBT must be updated by AO/GH;

(cc) Pilot should ensure that the flight is ready to depart at **TOBT (window of -5 to +5 minutes)**.

2. Start Request - Heathrow Delivery

(aa) Pilot should report ready to Heathrow Delivery at **TOBT (window of -5 to +5 minutes)**;

(bb) ATC will then **approve start** or in the case of a delay will **advise the TSAT**;

(i) Pilots to monitor the frequency from this point, as TSAT can improve up to TOBT;

(ii) Start approval will be issued, based on TSAT and the prevailing traffic situation;

(iii) Pilots will be informed of an ATC delay to TSAT in excess of 5 minutes.

(cc) If at **TOBT + 5 minutes** ATC have not received a start up request the aircraft may lose its position in the sequence.

(i) ATC will advise the pilot that a new TOBT is required;

(ii) Once the new TOBT is entered the flight will be re-sequenced according to a new TOBT, with a subsequent delay;

(iii) The aircraft will not be allowed to depart until a valid TOBT is entered and revised TSAT given and complied with.

3. Pushback Request - Heathrow Ground

(aa) Pushback/Start clearance must be requested from Ground no later than 5 minutes after being transferred from Delivery;

(bb) If unable to meet this constraint, the aircraft will not be allowed to pushback. A valid TOBT must then be issued by the AO/GH and ATC will then issue a revised TSAT.

4. Remote Holding Request

(aa) If an eligible AO is aware of a CTOT and wishes to take the delay on a taxiway rather than on the stand, then they should contact the Tower Supervisor by telephone to arrange it;

(bb) In this instance, the TSAT will be adjusted to allow the aircraft to be transferred to GMC earlier for the remote hold.

5. Aircraft De-icing Requirements.

(aa) Annually, Heathrow publishes an Aircraft De-icing Plan (HADIP). All airline operators should ensure that they have read and understood this document. A copy of the plan can be downloaded from www.heathrow.com/airside.

(bb) During periods of high demand for de-icing, Heathrow activates the A-CDM 'Winter Module' which includes aircraft de-icing rig allocation capability.

(cc) In order to request de-icing, pilots should follow their company's standard procedure. In accordance with Heathrow's de-icing plan, operators will enter the requirement for de-icing into A-CDM, which will ensure that de-icing resources are allocated appropriately. If the aircraft is to be de-iced remotely, operating companies will pass this information to pilots prior to push. Remote de-icing facility locations are shown on chart AD 2-EGLL-2-8.

(dd) When doors are closed and ready to commence de-icing on gate, pilots must call Heathrow Delivery stating "Ready for de-icing". This call must be made at +/- 5 minutes from TOBT.

(ee) Once de-icing on the gate is complete, pilots should call Heathrow Delivery again, stating 'De-icing complete, ready to push and start'.

(ff) Pilots who have been allocated a remote de-icing area should contact Heathrow Delivery, stating 'Ready to push and start for remote de-icing'.

iii. Clearance Delivery

1. ATC departure clearances may be obtained by Voice RTF or Data link Departure Clearance Service (DCL) (via SITA or ARINC (623)).

2. Voice RTF

(aa) Between 0630 (0530) and 1400 (1300) and between 1500 (1400) and 2200 (2100), pilots may call for ATC clearance up to 15 minutes prior to being fully ready to push-back.

3. Datalink Departure Clearance Service (DCL) (via SITA or ARINC (623))

(aa) The DCL service is available from EOBT -25 until EOBT +15 minutes.

(bb) DCL Clearances will not be issued if requested later than EOBT +15 minute. Successful clearances must be ACCEPTED within 5 minutes of receipt or a 'Revert to voice' message will be received.

(cc) If any data errors are detected by the system or the controller a 'revert to voice' message will be received.

(dd) If the attempt to obtain a clearance is unsuccessful the aircraft should revert to voice RTF.

(ee) Further details of the DCL service may be obtained from ATC operations on + 44 (0)208-750 2621.

(ff) Regardless of clearance source, departing aircraft must report their aircraft type, stand number, QNH and the identification letter of the received ATIS information to 'Heathrow Delivery' when fully ready for pushback and start.

(gg) In strong crosswind conditions (crosswind component above 35 knots), pilots are requested to advise Ground Movement Planning, on start-up, of their aircraft crosswind limitations. This is to enable better tactical planning at the Runway Holding point and a more efficient departure rate. In those conditions, this requirement will be confirmed through ATIS broadcast and NOTAM (if sufficient time allows).

iv. RVR below 400 M

When the RVR is below 400 M pilots are not to request start-up clearance until the reported RVR is equal to or greater than the appropriate value in the following table:

AIRCRAFT TAKE-OFF MINIMA	MINIMUM RVR FOR START-UP CLEARANCE
350 Metres RVR	300 Metres RVR
300 Metres RVR	250 Metres RVR
250 Metres RVR	200 Metres RVR
200 Metres RVR	150 Metres RVR
150 Metres RVR	150 Metres RVR
100 Metres RVR	100 Metres RVR
75 Metres RVR	75 Metres RVR

It is emphasised that these measures will apply only when the reported RVR is below 400 M and the co-operation of all pilots is sought in maintaining the safety level in low minima operations.

- v. During busy periods (normally following disruption), aircraft that are fully ready may be transferred to 'Heathrow Planning' prior to GMC. The 'Planning' controller will determine the order that start approvals are issued and will issue expected start times accordingly. Pushback approval must be obtained from GMC.

f) **Push-back procedure**

- i. Following push-back from cul-de-sac stands, all aircraft must be pulled forward to a minimum of 100 M from the blast screen (indicated by a painted mark on the taxiway centre-line) before disconnecting the tug. Due to exhaust fume ingestion within the buildings at the ends of each cul-de-sac, engine start-up must be delayed until the aircraft has reached the 100 M point. Pilots should be aware that, in order to maximise capacity within the Kilo (S) Cul-de-sac, push-back clearances provided by ATC may include reference to a numbered 'Tug Release Point' TRP 1, TRP 2 or TRP 3, which should be passed to ground crew along with the clearance. Ground handlers will understand these clearances and perform the push accordingly.
- ii. Before flight crew calls for push-back they must ensure that the tug driver is in the tug, ready to push, and able to listen to the communication with ATC.
- iii. Flight crews should only illuminate aircraft anti-collision lights following engine start or push back clearance from ATC.

g) **Departures – Minimum Runway Occupancy Time**

- i. On receipt of line-up clearance pilots should ensure, commensurate with safety and standard operating procedures, that they are able to taxi into the correct position at the hold and line up on the runway as soon as the preceding aircraft has commenced its take-off roll.
- ii. Pilots in receipt of a conditional line up clearance on a preceding departing aircraft (for example; '**ABC123 behind the departing Sky Train A330, line up Runway 27L behind**') should remain behind the subject aircraft but may cross the runway holding point (subject to there being no illuminated red stop bar) and enter the runway upon receipt of the clearance. There is no requirement for the subject aircraft to have commenced its take-off roll before entering the runway. **Pilots must be aware that there may be a blast hazard as the aircraft on the runway applies power.**

Pilots in receipt of a conditional line up clearance on a preceding arriving aircraft (for example; '**ABC123, behind the landing Sky Train A330, line up Runway 27L behind**') may cross the runway holding point (subject to there being no illuminated red stop bar) as soon as the landing aircraft has passed the runway entry point.

Pilots are advised that there is an increased risk of Runway Incursions when holding at N11 and NB11. Pilots may mistakenly believe that when on reaching the front of the queue, they have been given permission to line up in turn. Pilots are to be extra vigilant as to whether they have received a line-up clearance from ATC and seek confirmation where there is doubt.

- iii. Pilots who require to back-track the runway (including line up from N2W onto Runway 27L) must notify ATC prior to arrival at the holding point.
- iv. Whenever possible, cockpit checks should be completed prior to line up and any checks requiring completion whilst on the runway should be kept to the minimum required. Pilots should ensure that they are able to commence the take-off roll immediately take-off clearance is issued.
- v. Pilots not able to comply with these requirements should notify ATC as soon as possible once transferred to Heathrow Tower Departures Frequency.

h) **Intersection Departures**

- i. Runway 27R; A4; Runway 27L, N3 and S3, Runway 09R; N8 and N10 are **NOT**, for the purposes of wake turbulence, considered by ATC to be intersection departures.
- ii. Pilots in receipt of a conditional line up clearance holding at an intersection (for example; '**ABC123, behind the departing Sky Train from the full length, line up Runway 27L via NB3 behind**') should remain behind the runway holding point until the subject aircraft has passed the intersection at which they are holding.

i) **Reduced Engine Taxi**

- i. Whenever operationally and safely feasible, all aircraft are requested to shut down as many engines as possible while taxiing and holding on the ground, **EXCEPT** in the following circumstances:
 - aa. By any aircraft that is required to cross an active arrival runway;

bb. By any aircraft exiting T and turning west onto S, Link 44 and Link 42 due to jet blast;

cc. By B777 variants in G and H due to jet blast;

- ii. Pilots who intend to execute Reduced Engine Taxi on departure **MUST** report their intention to Heathrow Delivery on first contact by data link or if not possible by RT. This is essential for safety and operational reasons.

In the apron areas minimum engine power shall be used as far as possible, and use of reverse thrust for manoeuvring to and from a stand is not permitted.

- iii. Any aircraft with a CTOT should plan Reduced Engine Taxi to be ready for departure at CTOT - 5 minutes. This is essential for ATC sequencing.

3 CAT II/III OPERATIONS

- a) Runways 09R, 09L, 27R and 27L, subject to serviceability of the required facilities, are suitable for Category II and III operations.
- b) During Category II and III operations, special ATC procedures (ATC Low Visibility Procedures) will be applied. Pilots will be informed when these procedures are in operation by Arrival and Departure ATIS or by RTF. ATC Low Visibility Procedures will only be applied when the RVR is less than 600 M.
- c) The ILS on the departure runway will be turned off when the IRVR is greater than 250 M. Pilots requiring the ILS for departure when the IRVR is in the range 275 M to 550 M must inform Heathrow Delivery.
- d) Arriving Aircraft: Surface Movement Guidance and Control System (A-SMGCS) is normally available and all runway exits will then be illuminated. Pilots should select the first convenient exit.
- e) Pilots are to delay the call 'runway vacated' until the aircraft has completely passed the end of the green/yellow colour coded taxiway centre-line lights.
- f) When Low Visibility Procedures are in force a much reduced landing rate can be expected due to the requirement for increased spacing between arriving aircraft. In addition to the prevailing weather conditions, such factors as equipment serviceability may also have an effect on actual landing rates. For information and planning purposes, the approximate landing rates that can be expected are:

IRVR (M)	Expected landing Rate
Between 1000 and 600	34
Between 600 and 150	24
Less than 150	Less than 20

4 WARNINGS

- a) Pilots are warned, when landing on Runway 27R in strong southerly/south westerly winds, of the possibility of building-induced turbulence and large windshear effects.
- b) Similarly, Runway 27L arrivals may be affected by winds with a strong Northerly component. Building-induced turbulence may be experienced at the mid sections of each runway from winds with a strong Southerly, or strong Northerly component.
- c) Electricity pylons running on a line NE/SW and 2.6 NM W from ARP at 182 FT AAL/262 FT AMSL.
- d) Paramotor activity at Elm Farm, within the London CTR. Activity is restricted to 1000 FT AMSL within a circle of radius of 0.75 NM centred on 512151.00N 0001929.00W.
- e) Model aircraft club activity within Heathrow FRZ. Activity is restricted to 475 FT AMSL within a radius of 0.16 NM centred on 512915.5N 0002459.79W.
- f) Model aircraft club activity within Heathrow FRZ. Activity is restricted to 292 FT AMSL. The area of operation of the Small Unmanned Aircraft (SUAs) will be contained in a semi-circle of radius 0.157 NM radiating to the north, with the straight-line end points being located at 512923.9N 0002657.3W and 512922.5N 0002645.1W.
- g) Cranes operating within an area bounded by co-ordinates:
513026N 0002321W - 513028N 0002327W - 513027N 0002329W - 513029N 0002328W.
Maximum elevation restricted to 328 FT AMSL. Height 223 FT AGL. Cranes will have obstruction lighting.

5 HELICOPTER OPERATIONS

- a) General
- i. Normal Flight Priority (defined in CAP 493 Manual of Air Traffic Services) helicopter arrivals, departures and overflights of Heathrow are only permitted on a VFR clearance provided that the Heathrow reported visibility is 5 KM or greater and the reported cloud ceiling 1500 FT or greater.
- ii. Special VFR helicopter overflights, along with arrivals and departures via H9 south of Heathrow, are permitted provided that the Heathrow reported visibility is 2 KM or greater and cloud ceiling 600 FT or greater. SVFR helicopter overflights, arrivals and departures are normally restricted to High Flight Priority (A-E) helicopters.
- iii. Helicopter operations at Heathrow commence and terminate at Sipson to the north and Bedfont or Feltham to the south. Helicopters must hold at these points unless instructed otherwise by ATC. See chart AD 2-EGLL-4-1.
- iv. Whilst holding at Sipson or Feltham, helicopters are separated for both ATC and wake turbulence purposes from fixed wing aircraft landing on, departing from, or executing missed approaches to all runways.
- v. When the meteorological conditions exist for VFR flight (detailed in (i)), helicopters approaching the airfield from the south will be held at Bedfont. These helicopters will be separated for wake turbulence but pilots must remain in visual contact with aircraft on approach to 27L. Pilots are warned that missed approach aircraft will turn left at 1000 FT AAL.
- vi. When the meteorological conditions do not exist for VFR flight (detailed in (i)), helicopters may require IFR separation and will be held at Feltham to the south. Integration of this traffic will require an increased gap in the IFR arrival stream and the helicopter may incur a significant delay.

28 Nov 2024

- vii. Helicopters are not to cross Heathrow below altitude 800 FT.
- viii. There are occasions when the departure runway is required for landing traffic. This will also incur extra delay as the helicopter crossing procedures cannot be carried out with aircraft inbound to both runways simultaneously.

b) Crossing procedures Runways 27L/R

- i. Helicopters will normally be instructed to cross the departure runway to the east of the threshold. See chart AD 2-EGLL-4-1.
- ii. When a suitable gap in the landing stream exists, ATC will pass traffic information on a fixed-wing landing aircraft and issue a crossing clearance behind. The helicopter will cross in the gap after the subject aircraft as close to the threshold as practicable and as expeditiously as possible. Once clear of the runway, route to the east of the departure runway and resume the route to Sipson/Bedfont as appropriate to hold, unless otherwise instructed by ATC.
- iii. Where the departure runway is crossed first, holding prior to crossing the landing runway will be permitted between the two main runways. For aircraft in a holding pattern, this operation must take place between the departure threshold and a line drawn east-west through the southern edge of the Virgin hangar. Chart AD 2-EGLL-4-1 refers. (The hangar has Virgin on all sides and is to the east of the fire training ground where the green 'aircraft' is sited). No helicopter is to cross this line until a clearance to cross the landing stream is received. Having crossed the landing runway route to Sipson/Bedfont as appropriate to hold, unless otherwise instructed by ATC.
- iv. In the event of a loss of communication, see paragraph e.

c) Crossing procedures Runways 09L/R

- i. The northbound route for helicopters is: Bedfont-Stanwell-West of Terminal 5-Longford-Sipson. See chart AD 2-EGLL-4-1.
- ii. If there is inbound traffic to 09R, helicopters will be instructed by ATC to route Bedfont-Stanwell. The pilot will be instructed to hold at Stanwell and will wait for a suitable gap in the approach. If there is no 09R inbounds, helicopters will be routed Bedfont-Stanwell-hold West of Terminal 5. This operation is to take place between the departure threshold and a line drawn east-west through the mid-point of Terminal 5 main building. Chart AD 2-EGLL-4-1 refers. No helicopter is to cross this line until a clearance to cross the 09L landing stream is received. When a suitable gap in the 09L landing stream exists, ATC will pass traffic information on a fixed-wing aircraft and issue a crossing clearance behind. The helicopter will cross in the gap as close to the runway threshold as possible. Once clear of the landing stream, route Longford-Sipson to hold, unless otherwise instructed by ATC.
- iii. The southbound route for helicopters is: Sipson-Longford-West of Terminal 5-Stanwell-Bedfont. See chart AD 2-EGLL-4-1.
- iv. Helicopters will be instructed by ATC to route Sipson-Longford to hold. When a suitable gap in the 09L landing stream exists, ATC will pass traffic information on a fixed-wing landing aircraft and issue a crossing clearance behind. The helicopter will cross in the gap as close to the runway threshold as possible (this may be before Longford) and as expeditiously as possible. Once south of the runway the helicopter will route to the west of Terminal 5 and re-join the route; West of Terminal 5-Stanwell-Bedfont (and must remain west of 09R). If there is inbound traffic on the approach of 09R no clearance will be issued beyond Longford. On completion of the route, hold at Bedfont unless instructed otherwise by ATC.
- v. Longford and Stanwell are separated for both wake vortex and ATC visual separations only. Whilst helicopters are transiting between Bedfont and Sipson and vice versa, traffic information will be passed to fixed-wing aircraft for the relevant runway.
- vi. In the event of a loss of communication, see paragraph e.

d) Landing and Departing Procedures.

- i. All helicopters to and from Heathrow are subject to **PPR**.
- ii. Inbound and outbound helicopters will routinely use the helicopter aiming point (HAP). Procedures to/from the HAP are visual to/from Bedfont. If prevailing weather conditions do not permit this, see Paragraph a (ii), Feltham will be used and standard separation will apply.
- iii. If inbound from/outbound to the north, the helicopter will be instructed by ATC to cross both runways from/to Bedfont or Feltham, see paragraphs b or c.
- iv. When instructed to route to the HAP from Bedfont or Feltham, or vice versa, remain south of 27L/09R at all times.
- v. A 4 minute wake vortex separation exists for all helicopter movements to/from the HAP subsequent to any A380 departures to/from 27L/09R.
- vi. The helicopter aiming point is located on the taxiway area east of Link 43. It is marked with an 18 M sided triangle with a conventional 'H'. This aiming point is lit and available for use throughout operational hours. The take-off and climb surface has been protected to 8% to the east and west of the aiming point (see Chart AD 2-EGLL-4-1). Pilots are advised of the presence of a radar tower located on grass area 170 M east of the aiming point. Tower height 31 FT AAL/107 FT AMSL.
- vii. Caution must be exercised when using this aiming point which is on a live taxiway.
- viii. Helicopters alighting at the aiming point will ground or air-taxi to the parking areas as directed by ATC.

e) Loss of Communications Procedures

- i. If no onward clearance has been received before reaching, or when holding at, Sipson or Bedfont, **reverse track and leave the CTR** via: H2-H10-Cookham if approaching **Sipson** or H9 if approaching **Bedfont**.
Do not attempt to cross London Heathrow Airport.
- ii. For helicopters overflying or landing at London Heathrow Airport.

1. Between Sipson and Bedfont:

aa if the landing runway has already been crossed, cross the departure runway downwind of the threshold, exercising extreme caution with regard to possible landing traffic; **and leave the CTR via H2-H10-Cookham or H9** to the south as appropriate.

bb if the departure runway has been crossed, with instructions given to hold at the Virgin hangar or West of Terminal 5 to, **reverse track** and to cross the departure runway downwind of the threshold, exercising extreme caution with regard to the possibility of landing traffic; and **leave the CTR via H2-H10-Cookham or H9** to the south as appropriate.

2. If landing at London Heathrow Airport by day or night, and having crossed the runways, if necessary as detailed above:

aa **Proceed to hold at Bedfont;**

bb **Wait for the Helicopter Aiming Point to illuminate;**

cc **Land with caution and await Leader vehicle escort.**

Note: the selection of squawk 7600 will alert Air Traffic Control to your RTF failure.

6 USE OF RUNWAYS

a) Preferential Runway System

- i. In weather conditions when the tail wind component is no greater than 5 KT on the main Runway 27R and 27L, these runways will normally be used in preference to Runways 09R and 09L, provided the runway(s) surface is dry.
- ii. Pilots who ask for permission to use the runway into wind when, in accordance with these procedures, Runway 27R or 27L are in use, should understand that their arrival or departure may be delayed.

b) Runway Vacation Guidelines

i. Arrivals – Minimum Runway Occupancy Time

Pilots are reminded that rapid exit from the landing runway enables ATC to apply minimum spacing on final approach, thereby achieving maximum runway utilisation and minimising the occurrence of missed approaches. All arrivals are to ensure that they are fully vacated before stopping.

- ii. **Aircraft lands but cannot contact Heathrow Ground due to RTF congestion:** In this case the pilot should completely vacate the landing runway and taxi into the first taxiway available. The pilot should then hold position until contact with GMC can be established.

- iii. A380 pilots are advised that the preferred exits for vacating are as follows:

09L – A6; 09R – S4E and N4E; 27L – S6 and N6; 27R – A10E. Pilots of A380s requiring to vacate beyond these exits should inform Heathrow Approach before leaving the hold.

A380s vacating beyond the following exits will infringe the Localiser Critical Area:

09L - A5; 09R - S4E and N4E; 27L - S6 and N7; 27R - A11. Vacating beyond these exits will increase the likelihood of the following aircraft having to break off its approach.

c) Aircraft Separation

i. Departures - Wake Turbulence Separation

Wake turbulence separations are applied in accordance with the RECAT-EU departure separations. The separations applied are described in EUROCONTROL document 'RECAT-EU European Wake Turbulence Categorisation and Separation Minima on Approach and Departure'. On departure, when in receipt of line up clearance, the pilot must inform ATC if greater wake turbulence separation than the minimum specified will be required behind the preceding aircraft. Failure to do so may result in additional delay.

- ii. In certain weather conditions 2.5 NM spacing may be applied on final approach. The conditions when this spacing may be utilised are:

1. Visibility and cloud ceiling equal to or better than 10 KM and 1500 FT with a minimum recommended headwind component of approximately 10 KT.
2. Runway Condition Code is 5 or 6.
3. When aircraft involved in the procedure are being operated normally. It is the pilot's responsibility to inform ATC if they are operating their aircraft other than in the normal manner.
4. Speed on final approach and 2.5 NM spacing from preceding traffic must be stabilised by 8 NM.

7 TRAINING

Not applicable

EGLL AD 2.21 NOISE ABATEMENT PROCEDURES

Notice under Section 78(1) of the Civil Aviation Act 1982

28 Nov 2024

Whereas:

(1) By virtue of the Civil Aviation (Designation of Aerodromes) Order 1981 (a) Heathrow Airport – London is a designated aerodrome for the purpose of Section 78 of the Civil Aviation Act 1982 (b);

(2) the requirements specified in this notice appear to the Secretary of State to be appropriate for the purpose of limiting, or of mitigating the effect of, noise and vibration connected with the taking off or, as the case may be, landing of aircraft at Heathrow Airport – London;

Now, therefore, the Secretary of State, in exercise of the powers conferred on him by Section 78 (1) and (12) of the Civil Aviation Act 1982, by this notice published in the manner prescribed by the Civil Aviation (Notices) Regulations 1978 (c), hereby provides as follows:

1 This notice may be cited as the Heathrow Airport – London (Noise Abatement Requirements) Notice 2010 and shall come into operation on 1 July 2010.

2. The Heathrow Airport – London (Noise Abatement Requirements) Notice 2004 (d) is hereby revoked.

3 It shall be the duty of every person who is the operator of any aircraft which is to take off or land at Heathrow Airport – London to secure that, after the aircraft takes off or, as the case may be, before it lands at the aerodrome the following requirements are complied with:

1. After take-off the aircraft shall be operated in such a way that it is at a height of not less than 1000 FT AAL at 6.5 KM from start of roll as measured along the departure track of that aircraft.

2. The sites of the noise monitoring terminals relating to Heathrow Airport – London are:

Description	OS Co-ordinates	Elevation above aerodrome	Latitude	Longitude
Site 6: Thames Water, Wraysbury	TQ 0204 7510	-6 M	*512756N	0003157W
Site 19 (A): Colnbrook	TQ 0263 7700	-4 M	*512857N	0003124W
Site 18 (B): Poyle	TQ 0278 7647	-4 M	*512840N	0003117W
Site 17 (C): Horton	TQ 0219 7566	-6 M	*512814N	0003148W
Site 15 (D): Coppermill	TQ 0197 7477	-7 M	*512745N	0003201W
Site 14 (E): Wraysbury Reservoir (South)	TQ 0169 7409	-7 M	*512724N	0003216W
Site 11 (F): Hounslow West	TQ 1151 7606	-3 M	*512821N	0002345W
Site 12 (G): Hounslow Cavalry Barracks	TQ 1166 7560	-3 M	*512806N	0002338W
Site 10 (H): Hounslow Heath	TQ 1163 7495	-3 M	*512745N	0002340W
Site 13 (I): East Feltham	TQ 1164 7398	-4 M	*512714N	0002341W
Site 20 (J): Hounslow Cavalry Barracks North	TQ 1172 7577	-3 M	*512812N	0002334W
Site 21 (K): Hounslow Heath Golf Course	TQ 1148 7462	-4 M	512735N	0002348W

3. Subject to sub-paragraphs (5) and (6) below, any aircraft shall, after take-off, be operated in such a way that it will not cause more than 94 dBA L_{max} by day (from 0700 to 2300 hours local time) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2) above.

4. Subject to sub-paragraphs (5) and (6) below, any aircraft shall, after take-off, be operated in such a way that it will not cause more than 89 dBA L_{max} by night (from 2300 to 0700 hours local time) **and** that it will not cause more than 87 dBA L_{max} during the night quota period (from 2330 to 0600 hours local time) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2) above.

5. The limits specified in sub-paragraphs (3) and (4) above shall be adjusted in accordance with the following table in respect of any noise monitoring terminal at any of the sites referred to in the table in sub-paragraph (2) above to take account of the location of that terminal and its ground elevation relative to the aerodrome elevation.

Description	Adjustment dBA
Site 6	minus 0.3
Site 19 (A)	plus 2.3
Site 18 (B)	plus 4.8
Site 17 (C)	minus 0.3
Site 15 (D)	minus 0.6
Site 14 (E)	minus 1.0
Site 11 (F)	plus 0.9
Site 12 (G)	minus 0.1
Site 10 (H)	plus 1.2
Site 13 (I)	minus 0.3
Site 20 (J)	minus 0.2
Site 21 (K)	plus 1.7

6. For the purpose of determining an infringement of the limits specified in sub-paragraphs (3) and (4) above, if the aircraft was required to take-off with a tailwind, an amount of up to 2 dB of the noise recorded at the noise monitor should be disregarded. The amount to be disregarded shall be:

- 0.4 dB for a tailwind of up to 1 KT
- 0.8 dB for a tailwind exceeding 1 KT but not exceeding 2 KT
- 1.2 dB for a tailwind exceeding 2 KT but not exceeding 3 KT
- 1.6 dB for a tailwind exceeding 3 KT but not exceeding 4 KT
- 2.0 dB for a tailwind exceeding 4 KT.

For this purpose, tailwind is to be calculated from the wind data measured in the on-airfield anemometers and wind vanes according to the formula:

$$(\text{windspeed} \times \cosine(\text{runway heading minus wind direction})) \times -1.$$

7. Where the aircraft is a jet aircraft, after passing the point referred to in sub-paragraph (1) above, it shall maintain a gradient of climb of not less than 4% to an altitude of not less than 4000 FT. The aircraft shall be operated in such a way that progressively reducing noise levels at points on the ground under the flight path beyond that point are achieved.

8. After the aircraft takes off from any runway specified in the first column of the following table, the aircraft shall follow the Noise Preferential Routing Procedure specified in the third column of the table which relates to the ATC clearance previously given to the aircraft and specified in the second column of the table, whether flying in IMC or VMC:

- a) Provided that nothing in this sub-paragraph (8) shall apply:
- to any propeller driven aircraft whose MTWA does not exceed 5700 KG; or
 - during the period between 0600 and 2330 hours (local time), any propeller driven aircraft whose MTWA does not exceed 17000 KG or any Dash 7 aircraft.

Take-off Runway	ATC Clearance	Procedure	Take-off Runway	ATC Clearance	Procedure
27R	Via Compton	Straight ahead to intercept LON VOR R255 until LON D7, then turn right onto NDB WOD QDM 268°, then to CPT VOR.	27L	Via Compton	Straight ahead to intercept LON VOR R255 until LON D7, then turn right onto NDB WOD QDM 268°, then to CPT VOR.
	Via MAXIT	Straight ahead to intercept LON VOR R255. At LON D5 turn left onto BUR NDB QDR 161°. At LON D12 turn right onto MID VOR R011 and continue to MAXIT.		Via MAXIT	Straight ahead to intercept LON VOR R239. At LON D5.5 turn left onto BUR NDB QDR 161°. At LON D12 turn right onto MID VOR R011 and continue to MAXIT.
	Via Brookmans Park	Climb straight ahead to be established on BUR NDB QDM 297° by LON D4. At LON D6 turn right onto CHT NDB QDM 053°. At CHT NDB turn right onto BPK VOR R243 to BPK VOR.		Via Brookmans Park	Climb straight ahead to be established on BUR NDB QDM 297° by LON D3. At LON D6 turn right onto CHT NDB QDM 053°. At CHT NDB turn right onto BPK VOR R243 to BPK VOR.
	Via UMLAT	Climb straight ahead to be established on BUR NDB QDM 297° by LON D4. At LON D7 turn right onto BUR NDB QDR 356° (MID VOR R356), Continue to UMLAT.		Via UMLAT	Climb straight ahead to be established on BUR NDB QDM 297° by LON D3. At LON D7 turn right onto BUR NDB QDR 356° (MID VOR R356), Continue to UMLAT.
	Via Detling	Straight ahead to LON D2, then turn left onto NDB EPM QDM 136°, to EPM NDB, then continue on DET VOR R271 to DET VOR.		Via Detling	Straight ahead to I-LL D1, then turn left onto NDB EPM QDM 136°, to EPM NDB, then continue to DET VOR R271 to DET VOR.
	Via GOGSI	Straight ahead to intercept LON VOR R255 until LON D7, then turn right onto WOD NDB QDM 268°. Turn left at LON D13 to intercept SAM VOR R032, then to GOGSI.		Via GOGSI	Straight ahead to intercept LON VOR R255 until LON D7, then turn right onto WOD NDB QDM 268°. Turn left at LON D13 to intercept SAM VOR R032, then to GOGSI.
09L	Via Compton	Straight ahead to LON D1.5, then turn right onto NDB WOD QDM 281°, continue to CPT VOR.	09R	Via Compton	Straight ahead to LON D2, then turn right onto NDB WOD QDM 281°, continue to CPT VOR.
	Via MODMI	Straight ahead to LON D1.5, then turn right onto LON VOR R124 until LON D3.5, then turn right onto MID VOR R026, continue to MODMI.		Via MODMI	Straight ahead to LON D2, then turn right onto LON VOR R124 until LON D3.5, then turn right onto MID VOR R026, continue to MODMI.

Take-off Runway	ATC Clearance	Procedure	Take-off Runway	ATC Clearance	Procedure
	Via Brookmans Park	Climb straight ahead to LON D1.5, then turn left onto track 050° to intercept LON VOR R070. Cross LON D10 and turn left onto BPK VOR R196, continue to BAPAG then BPK VOR.		Via Brookmans Park	Climb straight ahead to LON D2, then turn left onto track 050° to intercept LON VOR R070. Cross LON D10 and turn left onto BPK VOR R196, continue to BAPAG then BPK VOR.
	Via ULTIB	Climb straight ahead to LON D1.5, then turn left onto track 050° to intercept LON VOR R070, cross LON D10 and turn left onto BIG VOR R329. Continue to ULTIB.		Via ULTIB	Climb straight ahead to LON D2, then turn left onto track 050° to intercept LON VOR R070, cross LON D10 and turn left onto BIG VOR R329. Continue to ULTIB.
	Via Detling	Straight ahead to LON D1.5, then turn right onto track 121°. At LON D4 turn left to establish on DET VOR R283 by DET D34. Continue to DET VOR.		Via Detling	Straight ahead to LON D2, then turn right onto track 120°. At LON D4 turn left to establish on DET VOR R283 by DET D34. Continue to DET VOR.
	Via GASGU	Straight ahead to LON D1.5, then turn right onto LON VOR R124 until LON D5, then turn right onto OCK VOR R041. At OCK VOR turn right onto OCK VOR R253 to GASGU.		Via GASGU	Straight ahead to LON D2, then turn right onto LON VOR R124 until LON D5, then turn right onto OCK VOR R041. At OCK VOR turn right onto OCK VOR R253 to GASGU.

9. Where the aircraft is approaching the aerodrome to land it shall commensurate with its ATC clearance minimise noise disturbance by the use of continuous descent and low power, low drag operating procedures (referred to in Detailed Procedures for descent clearance in AD 2 paragraphs 3 and 4). Where the use of these procedures is not practicable, the aircraft shall maintain as high an altitude as possible. In addition, when descending on initial approach, including the closing heading, and on intermediate and final approach, thrust reductions should be achieved where possible by maintaining a 'clean' aircraft configuration and by landing with reduced flap, provided that in all the circumstances of the flight this is consistent with safe operation of the aircraft.

10. Subject to sub-paragraph (11) below:

- a) Between 0600 and 2330 hours (local time) where the aircraft is approaching Runway 27 (L or R) and is using the ILS in IMC or VMC it shall not descend on the glidepath below an altitude of 2500 FT (Heathrow QNH) before being established on the localizer, nor thereafter fly below the glidepath. An aircraft approaching without assistance from the ILS shall follow a descent path which will not result in its being at any time lower than the approach path that would be followed by an aircraft using the ILS glidepath, and shall follow a track to intercept the extended runway centre-line at or above 2500 FT.
- b) Between 2330 and 0600 hours (local time) where the aircraft is approaching runway 27 (L or R) and is using the ILS in IMC or VMC it shall not descend on the glidepath below an altitude of 3000 FT (Heathrow QNH) before being established on the localizer at not less than 10 NM from touchdown, nor thereafter fly below the glidepath. An aircraft approaching without assistance from the ILS shall follow a descent path which will not result in its being at any time lower than the approach path that would be followed by an aircraft using the ILS glidepath, and shall follow a track to intercept the extended runway centre-line at or above 3000 FT.
- c) Between 0700 and 2300 hours (local time) where the aircraft is approaching Runway 09 (L or R) and is using the ILS in IMC or VMC it shall not descend on the glidepath below an altitude of 2500 FT (Heathrow QNH) before being established on the localizer, nor thereafter fly below the glidepath. An aircraft approaching without assistance from the ILS shall follow a descent path which will not result in its being at any time lower than the approach path that would be followed by an aircraft using the ILS glidepath, and shall follow a track to intercept the extended runway centre-line at or above 2500 FT.
- d) Between 2300 and 0700 hours (local time) where the aircraft is approaching Runway 09 (L or R) and is using the ILS in IMC or VMC it shall not descend on the glidepath below an altitude of 3000 FT (Heathrow QNH) before being established on the localizer at not less than 10 NM from touchdown, nor thereafter fly below the glidepath. An aircraft approaching without assistance from the ILS shall follow a descent path which will not result in its being at any time lower than the approach path that would be followed by an aircraft using the ILS glidepath, and shall follow a track to intercept the extended runway centre-line at or above 3000 FT.

11. Nothing in sub-paragraph (10) above shall apply to any propeller driven aircraft whose MTWA does not exceed 5,700 KG.

12. Without prejudice to the provisions of sub-paragraphs (1) - (11) above, the aircraft shall at all times be operated in a manner which is calculated to cause the least disturbance practicable in areas surrounding the aerodrome.

13. The requirements set out in sub-paragraphs (1) - (12) above may at any time be departed from to the extent necessary for avoiding immediate danger or for complying with the instructions of an Air Traffic Control Unit.

4 In this notice, except where the context otherwise requires:

'local time' means, during any period of summer time, the time fixed by or under the Summer Time Act 1972 (e), and outside that period, Universal Co-ordinated Time;

'dBA' means a decibel unit of sound level measured on the A-weighted scale, which incorporates a frequency dependent weighting approximating the characteristics of human hearing;

'Lmax' means the highest instantaneous sound level recorded (with the noise monitoring terminal set at the slow meter setting);

other abbreviations used are defined in GEN 2-2 of the United Kingdom Aeronautical Information Publication (Air Pilot).

7 April 2010

J Hotchkiss
Divisional Manager
Aviation Environmental Division
Department for Transport

- a) S.I. 1981/651.
- b) 1982 c.16.
- c) S.I. 1978/1303.
- d) The Heathrow Airport – London (Noise Abatement Requirements) Notice 2004 signed by G Pendlebury on 24 March 2004.
- e) 1972 c.6.

Notes

(These notes are not part of the notice)

1. The Noise Preferential Routeing Procedures specified in the above notice are compatible with normal ATC requirements. The use of the routeings specified above is supplementary to noise abatement take-off techniques as used by piston-engined, turbo-prop, turbo-jet and turbo-fan aircraft.
2. The attention of operators is drawn to the provisions of Section 78 (2) of the Civil Aviation Act 1982, under which if it appears to the Secretary of State that any of the requirements in this notice have not been complied with as respects any aircraft, he may direct the manager of the aerodrome to withhold facilities for using the aerodrome from the operator of the aircraft. However, the Secretary of State accepts that occasional and exceptional breaches of the noise limits, or of the height requirement, would not be expected to lead to sanctions under Section 78 (2). Such breaches would, however, run the risk of financial penalties.
3. Noise from ground running of aircraft engines is controlled in accordance with instructions issued by Heathrow Airport Limited.
4. In the interests of noise abatement, certain restrictions are imposed on the operation of training flights at this aerodrome. Operators concerned are advised to obtain details from Heathrow Airport Limited.
5. To minimise disturbance in areas adjacent to the aerodrome, commanders of aircraft are requested to avoid the use of reverse thrust after landing, consistent with the safe operation of the aircraft, between 2330 and 0600 hours (local time).
6. Full details concerning the maximum number of occasions and the types of aircraft which are permitted to take off or land at night during specified periods at this aerodrome are promulgated by Supplement.
7. For monitoring purposes, a descent will be deemed to have been continuous provided that no segment of level flight longer than 2.5 NM occurs below 6800 FT QNH and 'level flight' is interpreted as any segment of flight having a height change of not more than 50 FT over a track distance of 2 NM or more, as recorded in the airport Noise and track-keeping system.
8. For monitoring purposes, a departure will be deemed to have complied with the Noise Preferential Routeing (NPR) if, in the portion of flight below the appropriate vectoring altitude (see note 9 below), it is properly recorded by the airport's noise and track-keeping (NTK) system as having flown wholly within the Lateral Swathe (LS). The LS is defined from the centre-line of the relevant route coded in the NTK system, based upon a map accredited for this purpose by the Department for Transport, by the closer to the route centre-line depicted on the map of (a) a pair of lines either side, each diverging at an angle of 10° from a point on the runway centre-line 2000 M from start-of-roll; and (b) a pair of parallel lines representing a distance of 1.5 KM either side of the route centre-line. For avoidance of doubt, the depicted route and LS may include curved sections representing turns.
9. Aircraft which have attained an altitude of 4000 FT (Heathrow QNH) may be directed by air traffic controllers onto a different heading and commanders complying with any such direction will not by reason of so complying be deemed to have departed from the Noise Preferential Routeing.

EGLL AD 2.22 FLIGHT PROCEDURES

1 ARRIVAL ROUTES

- a) Standard Arrival Routes (STARs) for aircraft inbound via the ATS Route System are detailed at AD 2-EGLL-7-1 to 7-14.
- b) Aircraft inbound other than via the ATS Route System:
 - i. Aircraft inbound to London Heathrow Airport direct from the London FIR will be required to use the procedures for flights via the ATS Routes System.
 - ii. Aircraft departing from aerodromes outside the geographical boundary of the London TMA will normally be required to route via one of the Terminal Holding Points detailed in paragraph 2 (b).
 - iii. Pilots of aircraft departing from an aerodrome less than 10 minutes flying time from the London CTR boundary are to contact the LTCC Group Supervisor Airports on 02380-401106 before departure.

28 Nov 2024

- c) Aircraft positioning from other London Airports:
 - i. Aircraft positioning from London Gatwick Airport will be cleared via BIG VOR as detailed in AD 2-EGKK-6-2.
 - ii. Aircraft positioning from London Luton Airport will be cleared via BNN VOR as detailed in AD 2-EGGW-1-14 paragraph 5.

2 HOLDING

- a) Terminal Holding Fixes are established at Lambourne (LAM), Biggin (BIG), Bovingdon (BNN) & Ockham (OCK) DMEs as detailed on the appropriate STAR charts. Aircrew are not required to state time and level when entering/reaching the holding fix.
- b) Holding patterns for use following a missed approach are established as follows:

Holding Point	Holding Procedures
CHT NDB	Holding axis 293° M inbound, turning left, Maximum holding speed 220 KT, Holding level 3000 FT ALT
EPM NDB	Holding axis 274° M inbound, turning left, Maximum holding speed 220 KT, Holding level 3000 FT ALT

- c) From the holding patterns, aircraft will normally be directed by the Radar Controller, as detailed in paragraph 3 below, to a position from which a straight-in final approach can be made. When traffic conditions permit, suitably equipped and approved aircraft will be permitted to carry out P-RNAV approach procedures as detailed in paragraph 4 below. Exceptionally, when circumstances necessitate, pilots may be instructed to carry out the Approach procedures without Radar Control as detailed in paragraph 5 below. Pilots are reminded of the Continuous Descent Approach noise abatement requirements detailed in AD 2.21.

3 APPROACH PROCEDURES WITH RADAR CONTROL

- a) When arriving traffic is being sequenced under radar direction, that part of the approach between the holding fix and the Final Approach track will be flown under direction from the Radar Controller. Once the aircraft is under the jurisdiction of 'Heathrow Director' changes of heading or Flight Level/altitude will be made only on instructions from the Radar Controller except in the case of Radio Communications Failure in the aircraft or at the ATS Unit.
- b) The procedures are designed to maximise runway capacity and to minimise noise disturbance in the areas overflown during the approach. Aircraft commanders are requested to conform to low power, low drag operating techniques to the maximum extent practicable.
- c) Detailed Procedures

- i. Headings and flight levels at which to leave the holding facility will be passed by ATC. Radar vectors will be given and descent clearance will include an estimate of the track distance to touchdown. Further distance information will be given between initial descent and the intercept heading onto the ILS.
- ii. **Descent profile:** On receipt of descent clearance the pilot should descend at the rate he judges will be best suited to the achievement of continuous descent, the objective being to join the glide path at the appropriate height for the distance without recourse to level flight.

Note: Pilots of suitably equipped aircraft may monitor their route against the approach procedures without radar control in order to better judge their descent profile against distance to touchdown. However, if doing so pilots are reminded of the need to comply with the instructions of the radar controller at all times.

- iii. **Speed Control:** Adherence to speeds assigned by ATC is mandatory. Pilots should typically expect the following speed restrictions to be enforced: 220 KT from the holding facility during the initial approach phase; 180 KT on base leg/closing heading to final approach; between 180 KT and 160 KT when established on final approach and thereafter 160 KT to 4 DME. These speeds are applied for ATC separation purposes. In the event of a new (non speed related) ATC instruction being issued (eg an instruction to descend on ILS) pilots shall continue to maintain the previously allocated speed. All speed restrictions are to be flown as accurately as possible. Aircraft unable to conform to these speeds must inform ATC and state what speeds can be used. In the interests of accurate spacing, pilots are requested to comply with speed adjustments as promptly as is feasible within their own operational constraints. Pilots should advise ATC if circumstances necessitate a change of speed for aircraft performance reasons.
- iv. **Final Approach:** Enhanced Time Based Separation minima are in use for wake turbulence separation in place of UK fixed distance based rules. These are based on European Wake Vortex Re-categorisation (RECAT-EU) minima, and include reduced separation in medium and strong headwind conditions. No special crew procedures apply, and the importance of speed control adherence as described in paragraph (iii) above remains.
- v. **Transfer to Tower:** Pilots are to report their callsign, distance from touchdown, type of approach and runway to which they are making their approach, on transfer to Heathrow Tower, (for example, ABC123, 7 miles, ILS, Runway 27L).
- vi. **Runway Occupancy:** The spacing provided between aircraft will be designed to achieve maximum runway utilisation within the parameters of safe separation minima (including wake turbulence separation) and runway occupancy. It is important to the validity of the separation provided, and to the achievement of optimum runway capacity, that runway occupancy time is kept to a minimum consistent with the prevailing conditions.
- vii. **Missed Approach:** Missed Approach procedures are detailed on the appropriate Instrument Approach Charts. Special procedures are also detailed for use in the event of a Radio Communications Failure following Missed Approach
- d) Radar Failure: In the event of radar failure, new instructions will be issued to each aircraft under radar control and the procedures detailed in paragraph 5 will be brought into use.
- e) Radio Communications Failure at the ATC Unit: If radio communications fails at the ATC Unit when under radar control, pilots are to contact 'Heathrow Tower' on 118.705 MHz for new instructions.

4 APPROACH PROCEDURES WITHOUT RADAR CONTROL

- a) Exceptionally, when traffic is not being sequenced by radar direction, aircraft will be cleared from the holding facility to carry out the appropriate Initial Approach Procedure without Radar Control as detailed on the Charts at AD 2-EGLL-7-15 and AD 2-EGLL-7-21.

- b) The procedures are profiled to be compatible with a Continuous Descent Approach vertical profile and assume aircraft can maintain a descent gradient of approximately 320 FT per NM (3° descent angle).
- c) The procedures are, as far as is practicable using conventional navigation means, laterally and vertically profiled and incorporate speed control to approximate the nominal flight profiles used by aircraft when under radar direction. They may therefore assist pilots of suitably equipped aircraft to monitor their position and assist in the achievement of the Continuous Descent Approach noise abatement requirement when under radar direction.

5 LOSS OF COMMUNICATIONS PROCEDURES (ARRIVING AIRCRAFT)

- a) In the event of a complete radio communications failure in an aircraft the pilot is to adopt the appropriate procedures detailed at ENR 1.1.3 except as detailed below.
- b) When complete radio communications failure occurs in the aircraft before ETA, or before EAT when this has been received and acknowledged the aircraft will:
 - i. fly to the appropriate terminal holding point as detailed in the STAR;
 - ii. hold until the last acknowledged ETA plus 10 minutes, or EAT when this has been given;
 - iii. then commence descent for landing in accordance with the appropriate initial approach procedures without radar control as detailed at AD 2-EGLL-7 and appropriate instrument approach procedure detailed in AD 2-EGLL-8 and;
 - iv. land within 30 minutes (or later if able to approach and land visually).
- c) If complete radio communications failure in the aircraft occurs after the aircraft has reported to ATC on reaching the holding point the aircraft will:
 - i. maintain the last assigned holding level at the terminal holding point until:
 - 1. ATA over the holding point plus 10 minutes or 10 minutes after the last acknowledged communications with ATC, whichever is the later; or
 - 2. EAT when this has been received and acknowledged.
 - ii. then commence descent for landing in accordance with the appropriate initial approach procedures without radar control as detailed at AD 2-EGLL-7 and appropriate instrument approach procedure detailed in AD 2-EGLL-8 and;
 - iii. land within 30 minutes (or later if able to approach and land visually).
- d) If complete radio communications failure in the aircraft occurs during initial approach under radar direction, the procedures to be followed are detailed on the Chart at AD 2-EGLL-5-1.
- e) If complete radio communications failure in the aircraft occurs following a missed approach the aircraft will:
 - i. fly to the appropriate missed approach holding point at 3000 FT ALT;
 - ii. complete at least one holding pattern;
 - iii. then commence an approach for landing in accordance with the appropriate initial approach procedures without radar control as detailed at AD 2-EGLL-7.

6 LOSS OF COMMUNICATIONS PROCEDURES (DEPARTING AIRCRAFT)

- a) Outbound traffic operating on UMLAT 1F 1G: If a clearance to climb or re-routing instructions have not been given, comply with the route and altitude limitations detailed in the allocated Standard Instrument Departure Procedure detailed at AD 2-EGLL-6-4, then route via T418 to WOBUN; at WOBUN, commence climb to flight planned level.
- b) Outbound traffic operating on MAXIT 1F 1G: If a clearance to climb or re-routing instructions have not been given, comply with the route and altitude limitations detailed in the allocated Standard Instrument Departure Procedure detailed at AD 2-EGLL-6-2.
- c) Outbound traffic operating on MODMI 1J 1K: If a clearance to climb or re-routing instructions have not been given, comply with the route and altitude limitations detailed in the allocated Standard Instrument Departure Procedure detailed at AD 2-EGLL-6-2.
- d) All outbound traffic except those operating in accordance with items a, b and c above: Comply with the route and altitude limitations detailed in the allocated Standard Instrument Departure Procedures listed on the relevant chart contained in AD 2-EGLL or ATC clearance issued. After this adopt the appropriate procedures as notified in ENR 1.1, Section 3.4.

7 DEPARTURE PROCEDURES

- a) Standard Instrument Departure (SID) procedures for aircraft departing from London Heathrow Airport are detailed at AD 2-EGLL-6-1 to 6-7 and incorporate the Noise Preferential Routes (NPRs) detailed in AD 2.21.
- b) Departure Speed Restriction: In order to optimise the departure flow and assist in the separation between successive departing aircraft a speed limit of 250 KT IAS below FL 100 is applicable until removed by ATC. ATC may remove the speed restriction by using the phrase 'No ATC Speed Restriction'. **Pilots are reminded that this phrase does not relieve the pilot of the responsibility to adhere to the ground track of the Noise Preferential Route, which may require a speed/power limitation.**
- c) If for any reason pilots are unable to comply with the 250 KT IAS speed restriction the pilot should immediately advise ATC and state the minimum speed acceptable. If a pilot anticipates before departure that they will be unable to comply with the speed restriction, they should inform ATC when requesting start-up clearance, stating the minimum speed acceptable. In this case the pilot will be informed before take-off of any higher speed limitation.
- d) Flight crew of aircraft unable to meet SID climb restrictions must inform Heathrow Delivery via voice prior to pushback. Restrictions/delays may apply.

28 Nov 2024

8 VFR AND SPECIAL VFR CLEARANCE IN THE LONDON CTR

- a) VFR and Special VFR clearances for flights within the London CTR may be requested and will be given whenever traffic conditions permit. These flights are subject to the general conditions laid down for VFR and Special VFR flights detailed at ENR 1.2 and will normally be given only to aircraft which carry RTF including the appropriate frequencies listed in EGLL AD 2.18.
- b) The use of VFR and Special VFR clearances is intended for the following types of flight:
- i. Light aircraft that wish to proceed to or from an aerodrome/landing site within the CTR or to transit the CTR;
 - ii. Aircraft using the local flying areas and the access lanes notified for Brooklands, Denham, Fairoaks and White Waltham and complying with the published procedures will be considered as complying with a VFR clearance;
 - iii. Aircraft carrying out non-standard flights, such as photographic survey flights, which may require penetration of the London CTR in VMC.
- c) Weather minima for aircraft arriving, departing or helicopter crossing at Heathrow is as follows;

Type of Operation	Visibility Restriction	Cloud Restriction
VFR arrival/departure/heli crossing	5 KM or more	Cloud Ceiling 1500 FT or greater
SVFR arrival/departure/heli crossing	2 KM or more	Cloud Ceiling 600 FT or greater

Note: SVFR helicopter crossings should normally be restricted to High Flight Priority (A-E) helicopters.

- d) Access to the Inner Area of the London CTR (see paragraph 11 and AD-2-EGLL-3-2) requires PPR by telephone on the day at least 60 minutes in advance. Prior notification of Inner Area flights, other VFR or Special VFR flights and general enquiries about flights in the London CTR may be made via the London Terminal Control Senior Watch Assistant, Tel: 02380-401110.
- e) Pilots who wish to depart Heathrow on a VFR or Special VFR clearance should pass brief details of their flight to Heathrow ATC, by telephone 020-8750 2578, and not to ATC by RTF.
- f) Non-scheduled arrival flights by single-engined and light twin-engined fixed wing aircraft which are unable to accept an IFR clearance will be cleared to London Heathrow on a VFR or Special VFR clearance, at an altitude below 2500 FT (London Heathrow QNH) subject to the weather minima in (c). If the weather observations at London Heathrow are below either of these minima, clearance to enter the London CTR will not be granted.
- g) It will remain the responsibility of the pilot to remain at all times in flight conditions which will enable him to determine his flight path and to keep clear of obstacles, and to ensure that he is able to comply with SERA.3105 Minimum Heights unless otherwise permitted by the CAA. Pilots must inform the Radar Controller if compliance with the above entails a change of heading or height.
- h) VFR and Special VFR flights may be subject to delay when parts of the route are outside radar cover or when they cannot be fitted readily into gaps in the IFR traffic flow. Pilots should therefore always ensure that they have adequate fuel reserves and are able to divert to another aerodrome if necessary.

9 LOCAL FLYING ARRANGEMENTS AND SPECIAL ACCESS LANES FOR BROOKLANDS, DENHAM, FAIROAKS, LONDON HELIPORT, RAF NORTHOLT AND WHITE WALTHAM AERODROMES.

- a) Flights within the Local Flying Areas (LFA) of aerodromes within, or adjacent to, the London CTR, may be made subject to certain conditions. Details of those for Denham, Fairoaks, London Heliport and White Waltham appear in the relevant AD sections, RAF Northolt can be found in the Military AIP. An additional local flying area is established for the unlicensed aerodrome at Brooklands and is detailed below.
- b) Brooklands
- i. Within a local flying area of 1 NM radius, centred on position 512103N 0002812W, but excluding that part to the east of the B374 road and a line bearing 180°T from the A245/B374 road junction and excluding the area south of the southern boundary of the London CTR, VFR flights may take place, subject to prior permission obtained from Brooklands Museum Trust Ltd.
 1. Aircraft to remain below cloud with the surface in sight;
 2. Maximum Altitude: 1500 FT QNH;
 3. Prior permission **must** be obtained from Brooklands Museum Trust Ltd.

Note 1: Pilots of aircraft flying in the local flying area are responsible for providing their own separation from other aircraft operating in the relevant airspace.

Note 2: In addition to paragraph (b), VFR flights must also comply with the VMC minima for Class D airspace detailed at ENR 1.2.

Note 3: Aircraft unable to operate VFR may operate Special VFR, subject to approval from Heathrow Radar, within the LFA subject to the conditions in paragraph (b) and the requirements for Special VFR flights detailed at ENR 1.2.

Note 4: The carriage of a Mode S Transponder within the LFA is encouraged, however there is currently no requirement for aircraft operating in the Brooklands LFA to comply with the requirements of the London CTR Mode S Transponder Mandatory Zone (TMZ). Pilots of suitably equipped aircraft shall utilise the transponder to the maximum serviceable extent with altitude information selected when fitted.

10 VFR AND SPECIAL VFR HELICOPTER FLIGHTS IN THE LONDON CTR AND LONDON CITY CTR

- a) General Arrangements

- i. VFR and Special VFR helicopter flying in the London CTR is mostly constrained to flights at or below specified altitudes along defined routes, although off route clearances can normally be accommodated subject to ATC workload and other operational reasons which the pilot may not be aware of. These routes have been selected to avoid built up areas as much as possible. Details of the major landmarks on these routes, the altitudes and reporting points are listed at paragraph 12 and are illustrated at AD 2-EGLL-3-2. The precise routes are overprinted on the 1:50 000 chart entitled – Helicopter Routes in the London CTR & London City CTR. This chart may be obtained from NATS Ltd Chart Stockists - see www.nats.aero/ais for details.
- ii. All VFR and Special VFR helicopter flying in the London CTR is subject to ATC clearance, except for the Local Flying Areas of Brooklands, Denham, Fairoaks and White Waltham where VFR flights may operate subject to agreed conditions which appear in the relevant AD sections.
- iii. The following routes are not available to single-engined helicopters at night: H7, H9 (Hayes to Gutteridge) and H10 (Gutteridge to Kew Bridge).
- iv. Pilots are reminded of the Restricted Areas within the London and London City CTRs as detailed in ENR 5.1.
 1. EGR107
 2. EGR156, EGR157, EGR158, EGR159
 3. EGR160 – The Specified Area.

b) Procedures for flight along Helicopter Routes

- i. Special VFR flights along Helicopter Routes in the London CTR and London City CTR are not to be operated unless helicopters can remain in a flight visibility of at least 1 KM. VFR flights shall operate in accordance with SERA 5001 or notified ORS4. Weather minima for crossing, taking-off from, or landing at London Heathrow are detailed at AD 2.20 paragraph 5.
- ii. VFR and Special VFR helicopters must remain clear of cloud with the surface in sight.
- iii. Altimeter setting will be London Heathrow QNH.
- iv. Maximum route altitudes are shown in column 4 and 7 at paragraph 12. ATC will refer to these altitudes as 'Standard Operating Altitudes' when issuing clearances. Pilots may fly at altitudes below the maximum route altitude except for between Hanger Lane and Chiswick Bridge on H10 where the maximum published altitude must be flown accurately when operating SVFR. ATC may restrict aircraft to altitudes below the published route maximum as necessary to provide separation from other aircraft. Pilots may request alternative operating altitudes which may be approved subject to ATC considering other operational conditions.
- v. Pilots should fly the precise routes as depicted on the 1: 50 000 Map entitled Helicopter Routes in the London CTR & London City CTR. 'Corner cutting' is to be avoided. In order to obtain sufficient lateral separation from opposite direction traffic, pilots may temporarily deviate as required.
- vi. When flying along the River Thames within the Specified Area (EGR160), pilots should normally fly over that part of the river bed lying between high water marks, but not so near the banks as to become a nuisance on account of noise. When deviating from the river, in accordance with paragraph (v) above, single-engined helicopters must at all times be able to return to the river in the event of engine failure, in order to alight clear of the Specified Area.
- vii. For the purposes of SERA.3105 Minimum Heights and SERA.5005(f) an aircraft operated on the notified helicopter routes is permitted to fly below 1000 FT above the highest obstacle within a radius of 600 M but no closer than 500 FT to any person, vessel, vehicle or structure.

c) Noise

- i. On all notified helicopter routes, in order to minimize noise nuisance, pilots should maintain the maximum altitude compatible with their ATC clearance and with the prevailing cloud conditions.
- ii. Pilots are requested wherever possible to avoid overflying hospitals, palaces, schools and prisons.

d) Air Traffic Control Clearance

- i. Pilots must obtain a VFR or Special VFR clearance from Heathrow Radar (125.625 MHz). Heathrow Radar provides a service to transit aircraft operating in the London CTR and London City CTR/CTA. Pilots are requested to contact Heathrow Radar a minimum of three minutes before reaching the Zone Boundary, giving details of call sign, aircraft type, route, ETA at the CTR boundary, entry point and destination.
- ii. ATC Clearances do not absolve the pilot of their responsibility to comply with the Rules of the Air and they should notify ATC if unable to accept a clearance.

e) Holding

- i. VFR and Special VFR helicopters, particularly those using London Heathrow or the routes close to it, may be required to hold at any of the locations on the route, shown in column 1 at paragraph 12 and on the illustration at AD 2-EGLL-3-2 except on that portion of H4 that lies between Vauxhall and Westminster Bridges.

f) Communications

- i. Helicopters using London Heliport via the Local Flying Area or any other routes that traverse the London Heliport ATZ, must be able to communicate with the Heliport (Battersea Tower 134.280 MHz).
- ii. Helicopters flying along the routes in the London CTR and London City CTR must be able to communicate with Heathrow Radar. In the case of H9 and H10, aircraft must also be able to communicate with Northolt Approach Control (126.450 MHz), this also includes those aircraft operating off the helicopter routes within or in the vicinity of the Northolt RMA.
- iii. Helicopters using London Heathrow must also be able to communicate with Heathrow Tower.

g) Loss of Communications Procedures

28 Nov 2024

- i. In the event of a communications failure in a helicopter operating in accordance with these procedures, the pilot is to adopt the procedure detailed at ENR 1.1 except as described below.
 - ii. If a VFR or Special VFR clearance has been received to transit the CTR along a Helicopter Route continue the flight in accordance with the clearance.
 - iii. Where an intermediate clearance limit has been given (or clearance issued for only a part of the requested transit), proceed to the specified clearance limit and hold for 3 minutes. Then proceed via the requested Helicopter Route at the published maximum altitude for the Route.
 - iv. If no onward clearance has been received before reaching, or when holding at, Sipson or Bedfont, **reverse track and leave the CTR** via H2-H10-Cookham if approaching **Sipson**, or **H9 if approaching Bedfont. Do not attempt to cross London Heathrow Airport.**
 - v. For helicopters overflying or landing at London Heathrow Airport, see EGLL AD 2.20 paragraph 5.
- h) Separation between Special VFR helicopters
- i. Separation may be agreed between Special VFR helicopters on the Helicopter Routes, on the basis that pilots of helicopters will be asked by ATC to maintain visual separation from other helicopter traffic, provided that:
 1. the visibility at London Heathrow is 5 KM or more and the helicopters can operate clear of cloud and in sight of the surface and remain in a flight visibility of at least 5 KM;
 2. there is agreement between the helicopter pilots concerned;
 3. the current route structure, the altitudes applicable and communication procedures are adhered to;
 4. appropriate traffic information is passed to the helicopter pilots. (Normally for this purpose it will only be necessary for ATC to pass general traffic information eg..... 'Two helicopters westbound along H10 at 1000 FT in the vicinity of Perivale - acknowledge.')
 - ii. If a pilot refuses or considers that the conditions are such that he is unable to maintain visual separation, he will be provided with the Special VFR separation requirements currently in force.

11 INNER AREA OF THE LONDON CTR

- a) The Inner Area of the London CTR is that part of the London CTR from surface to altitude 2500 FT contained within the area enclosed by: BUR NDB – Iver RP – Helicopter Route H10 – Barnes RP – Helicopter Route H3 – Thorpe RP – Ascot Heliport – BUR NDB.
- b) With the exception of those aircraft categories listed below, all VFR and Special VFR aircraft requesting to enter the Inner Area of the London CTR are subject to Prior Permission Required (PPR) from London Terminal Control, via the Senior Watch Assistant on 02380-401110:
 - i. Flight Priority Category A, B, C, D, E traffic who shall follow their own notification procedures where appropriate;
 - ii. Aircraft subject to an Airspace Coordination Notice (ACN) who shall follow the notification process detailed within the ACN;
 - iii. Aircraft subject to a Non-Standard Flight (NSF) who shall follow the notification process detailed within the NSF;
 - iv. Helicopters that remain on the published helicopter routes without landing or departing inside the Inner Area;

All other VFR and Special VFR aircraft are required to obtain PPR (by telephone) to enter the Inner Area of the London CTR on the same day at least 60 minutes before entry clearance is required. Approved aircraft will be given a PPR approval code to quote over the radio when requesting entry clearance from controllers.
- c) Due to the intense Heathrow IFR operations and very high ATC workload within the Inner Area of the London CTR during the hours 0430-2300 local time, it is unlikely that aircraft will receive approval to operate inside the Inner Area within these times, unless there is a specific task that can only be completed within that airspace, e.g. helicopters accessing private landing sites.
- d) The following procedures have been established to ensure safe integration with IFR traffic, avoid excessive airborne holding, and reduce delays to both Heathrow movements and helicopter operators wishing to use landing sites within the Inner Area of London CTR.
 - i. Inbound
 1. Contact the London Terminal Control Senior Watch Assistant (02380-401110) on the day of operation at least 60 minutes prior to the estimated time of arrival;
 2. Provide the name, latitude and longitude of the landing site, the requested routing, the estimated time of arrival and a contact telephone number;
 3. Heathrow Tower Supervisor and Heathrow Radar will be consulted to determine the route that the pilot can expect (subject to the Heathrow runway configuration, meteorological conditions and the likelihood of being able to utilise reduced separation in the vicinity of the aerodrome);
 4. If the safe integration of the inbound flight will cause delay to Heathrow traffic it will be subject to the equivalent Heathrow delay. The pilot will be contacted by telephone and advised the route that can be expected and, if appropriate, an amended ETA incorporating the Heathrow inbound delay;
 5. The pilot must arrange the flight to arrive at the site within 10 minutes of the approved ETA. Failure to adhere to this time window may result in further delay or, in extreme circumstances, refusal of clearance. Upon establishing two-way communications the helicopter will be cleared to the landing site as soon as practicable commensurate with the safe integration with IFR traffic.
 - ii. Outbound
 1. Prior to departing the site contact LTC SWA at least 60 minutes in advance of the estimated time of departure from the site to provide the name, latitude and longitude of the site, requested routing, planned ETD and a contact telephone number;

2. If the outbound flight will cause delay to Heathrow traffic it will be subject to the equivalent Heathrow delay. The pilot will be contacted by telephone and advised the route that can be expected and, if appropriate, an amended ETD incorporating the Heathrow outbound delay;
3. Within 10 minutes of the approved ETD, the pilot must contact ATC on the ground. If two way contact with ATC cannot be established on the ground either directly or via relay from other aircraft, the pilot must remain on the ground and contact London Terminal Control Group Supervisor Airports (02380-401106) to agree an exact departure time and initial altitude with the controllers concerned in order that safe integration with IFR traffic can be ensured.

Note: If the intention is to be on the ground for less than 60 minutes, both the inbound and outbound arrangements may be agreed during the initial contact with LTC SWA.

12 HELICOPTER ROUTES IN THE LONDON CTR AND LONDON CITY CTR

a) Abbreviations:

H — Holding Point

▲ — Compulsory Reporting Point

△ — On Request Reporting Point

Map references are to the 1: 50 000 Ordnance Survey Map of Great Britain

- b) The precise routes which must be adhered to are portrayed on the 1: 50 000 Map entitled Helicopter Routes in the London CTR & London City CTR. An indication of the routes network is shown on the illustration at AD 2-EGLL-3-2.
- c) Pilots are required to be at or below the lower altitudes on arrival at the reporting point at which the lower altitude applies.
- d) On all notified helicopter routes within the London CTR and London City CTR and for the purposes of SERA.3105 Minimum Heights and SERA.5005(f) Visual Flight Rules an aircraft operated on the notified helicopter routes is permitted to fly below 1000 FT above the highest obstacle within a radius of 600 M but no closer than 500 FT to any person, vessel, vehicle or structure.
- e) In support of (d) suggested minimum altitudes detailed in column 5 at paragraph 12 are given for aircraft operating on the centreline of the routes, however pilots remain responsible for obstacle clearance and are encouraged to operate as high an altitude allowable on the routes, subject to any overriding ATC Clearance. Those minimum altitudes detailed in column 5 at paragraph 12 are based on the VFR Obstacles List produced by AIS and should be used for guidance only as they do not take into account the surrounding ground elevation nor new/temporary obstacles not captured within the Obstacle List. Pilots operating on H4 should be cognisant that when operating outside of the high water marks greater minimum altitudes than those listed in column 5 at paragraph 12 may be required to ensure compliance with the 500 FT rule.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H2							
△ Iver	TQ 035 826 513157N 0003031W	Delaford Park	1000 FT	700 FT	H	1000 FT	
△ West Drayton	TQ 052 784 512939N 0002909W	M4 Motorway Crossing of River Colne (1.25 NM west of Airport Spur)					
▲ Airport Spur	TQ 075 786 512944N 0002715W	Junction of M4 Motorway and Motorway Spur to London Heathrow			H		Note 1

Note 1: Unless otherwise cleared by ATC, pilots are not to fly south of the M4 between West Drayton and Airport Spur.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H3							
▲ Bagshot	SU 908 619 512057N 0004157W	Intersection of London Control Zone/M3 Motorway	2000 FT	850 FT	H	1500 FT	Note 1
△ M3 Junction 3	SU 919 626 512121.06N 0004050.40W	M3 Motorway Junction 3 (VRP)		750 FT			
△ Barrowhills	SU 990 662 512312.42N 0003440.56W	Kitsmead Lane Bridge over M3	1500 FT	700 FT			
△ Thorpe	TQ 018 679 512402N 0003216W	M3 Motorway south of Thorpe Green (M25 intersection)			H		

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H3							
				600 FT		1000 FT	
△ Chertsey	TQ 059 668 512327.17N 0002845.36W	Chertsey Road roundabout	1200 FT	550 FT			
▲ Sunbury Lock	TQ 112 683 512409N 0002416W	Midway between Sunbury Lock and the middle of Knight reservoir			H		Note 1
△ Richmond	TQ 184 725 512622.45N 0001749.84W	Golf Course at western edge of Richmond Park	1500 FT	650 FT			
△ Roehampton	TQ 215 746 512728.04N 0001506.76W	Golf course east of Roehampton Gate, H7/ H3 join		600 FT	Note 1		
▲ Barnes	TQ 234 765 512827N 0001325W	River Thames at Barn Elms Park and Craven Cottage Football Ground		1000 FT	Note 2		
▲ London Heliport	TQ 266 762 512812N 0001046W	London Heliport			H	Note 1 Note 2	

Note 1: When Heathrow Runways 09L/09R are in use, the Route H3 between Sunbury Lock and Roehampton is not available to Special VFR helicopters. These closures do not apply to Flight Priority Category A, B & C helicopters (defined in CAP 493 Manual of Air Traffic Services). Delays may be experienced for VFR helicopters due to slow climbing departures from Heathrow. Helicopter pilots are recommended to obtain Heathrow runway information on the ATIS frequency 128.080 MHz before contacting Heathrow Radar on 125.625 MHz, or London Heliport on 134.280 MHz.

Note 2: Caution - large number of tall structures above 500 FT lie within 600 M of the high water marks of the River Thames. Pilots are reminded that aircraft operated on the notified helicopter routes are not permitted to fly closer than 500 FT to any person, vessel, vehicle or structure.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H4							
▲ Isle-of-Dogs	TQ 381 781 512902N 0000042W	Specified Area Boundary crossing River Thames - north abeam Cutty Sark	2000 FT	1000 FT		1500 FT	Note 2 Note 5
△ London Bridge	TQ 330 805 513027N 0000504W	London Bridge (road bridge)			Note 3 Note 4		
▲ Vauxhall Bridge	TQ 302 782 512915N 0000736W	CTR Boundary crossing River Thames					
▲ Chelsea Bridge	TQ 286 778 512902N 0000900W	Chelsea Road Bridge	1500 FT				
▲ London Heliport	TQ 266 762 512812N 0001046W	London Heliport			H		Note 1 Note 5

Note 1: There are no Holding Points on H4 east of London Heliport. The nearest Holding Point is at Greenwich Marshes, outside the 'Specified Area' (EGR160).

Note 2: Cable car crosses River Thames at 513009N 0000042E approximately 1 NM east/downstream of Isle of Dogs. Supporting towers (289 FT and 285 FT AMSL) equipped with aviation warning lights; cable between towers unlit.

Note 3: Ferris Wheel: The London Eye Ferris Wheel (464 FT AMSL) lies within the boundary of H4 at Jubilee Gardens (513012N 0000711W) between London Bridge and Vauxhall Bridge.

Note 4: No helicopters to hold on that portion of H4 that lies between Vauxhall and Westminster Bridges. This does not apply to traffic operating under Flight Priority Category A or B.

Note 5: Caution - large number of tall structures above 500 FT lie within 600 M of the high water marks of the River Thames. Pilots are reminded that aircraft operated on the notified helicopter routes are not permitted to fly closer than 500 FT to any person, vessel, vehicle or structure.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H5							
▲ Northwood	TQ 071 906 513612N 0002719W	Zone Boundary midway between Harefield and Northwood	2000 FT	800 FT	H	1500 FT	Note 1
△ Uxbridge Common	TQ 062 855 513332N 0002813W	Roundabout on A40 road north of Uxbridge Common			H		

Note 1: Pilots may be required to communicate with Northolt Approach (126.450 MHz).

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H7							
▲ Banstead	TQ 243 614 512014N 0001301W	Golf course northwest of town	2000 FT	800 FT	H	1500 FT	
△ Morden	TQ 229 672 512327N 0001407W	Cemetery northeast of Gas Works		650 FT			
△ Caesar's Camp	TQ 220 711 512532N 0001446W	Golf course southwest corner of Wimbledon Common			H	1000 FT	
△ Roehampton	TQ 215 746 512728.04N 0001506.76W	Golf course east of Roehampton Gate, H7/H3 join	1500 FT	600 FT			
▲ Barnes	TQ 234 765 512827N 0001325W	River Thames at Barn Elms Park and Craven Cottage Football Ground		1000 FT			Note 1
▲ London Heliport	TQ 266 762 512812N 0001046W	London Heliport			H		Note 1

Note 1: Caution - large number of tall structures above 500 FT lie within 600 M of the high water marks of the River Thames. Pilots are reminded that aircraft operated on the notified helicopter routes are not permitted to fly closer than 500 FT to any person, vessel, vehicle or structure.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H9							
▲ Oxshott West	TQ 101 609 512014N 0002512W	Intersection of London Control Zone/A3 Trunk Road - north abeam large supermarket	2000 FT	700 FT	H	1500 FT	Note 4
△ Esher Common	TQ 136 621 512051N 0002210W	A3 Trunk Road West of A3/A244 intersection	1500 FT				
OR							
▲ Oxshott East	TQ 160 611 512014N 0002006W	Prince's Coverts			H		Note 4

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H9							
			2000 FT	700 FT		1500 FT	
△ Arbrook	TQ 149 624 512058N 0002100W	Intersection of A3 Trunk Road / Railway Line					
△ Esher Common	TQ 136 621 512051N 0002210W	A3 Trunk Road West of A3/A244 intersection	1500 FT				
THEN							
△ Hersham	TQ 121 654 512236.71N 0002323.38W	Railway Station	1200 FT			1000 FT	
▲ Sunbury Lock	TQ 112 683 512409N 0002416W	Midway between Sunbury Lock and the middle of Knight reservoir	800 FT	600 FT	H	800 FT	
△ Feltham	TQ 095 726 512630N 0002533W	Open space south of Railway Line			H		
△ Bedfont	TQ 088 745 512732N 0002610W	East of Terminal Four, South of the A30			H		Note 3 Note 4
HEATHROW CROSSING							Note 5
△ Sipson	TQ 076 772 512900N 0002706W	Hotel Complex northeast of the junction Motorway Spur and Main Road A4 at north perimeter of London Heathrow	1000 FT		H	1000 FT	
▲ Airport Spur	TQ 075 786 512944N 0002715W	Junction of M4 Motorway and Motorway Spur to London Heathrow		650 FT	H		Note 1
△ Hayes	TQ 082 804 513042N 0002636W	Stockley Park Business Centre	2000 FT	700 FT	H	1500 FT	
△ Gutteridge	TQ 097 845 513254N 0002507W	A40, south of Northolt Aerodrome Runway Intersection		800 FT	H		Note 2
▲ Northwood	TQ 071 906 513612N 0002719W	Zone Boundary midway between Harefield and Northwood			H		

Note 1: Between Northwood and Airport Spur, pilots may be required to communicate with Northolt Approach (126.450 MHz).

Note 2: The holding manoeuvre is to be carried out to the south of the Northolt Aerodrome Boundary.

Note 3: Helicopters will be held at Bedfont during daylight hours when the reported weather conditions are equal to or better than 5 KM visibility and 1500 FT reported cloud ceiling and will be held at Feltham at all other times.

Note 4: Due to environmental restrictions, H9 south of London Heathrow Airport is not normally available to SVFR helicopter traffic between 2100-0800 (2000-0700) when London Heathrow Runways 09L/09R are in use.

Note 5: Refer to EGLL AD 2.20 LOCAL AERODROME REGULATIONS - 5 Helicopter Operations.

Warning: Runway 27L missed approach procedure requires a left turn at 1000 FT AAL. Pilots holding at Bedfont must remain in visual contact with aircraft on final approach to Runway 27L.

Significant Points	National Grid & Lat/Long	Description of Reference	Maximum Altitude VFR	Suggested Minimum Altitude	Holding Point	Maximum Altitude SVFR	Remarks
1	2	3	4	5	6	7	8
H10							
		CTR Boundary		600 FT			
▲ Cookham	SU 898 857 513345N 0004222W	Bridge over River Thames north of Cookham	2000 FT	800 FT	H	1500 FT	
△ Pumpkin Hill	SU 943 845 513310.04N 0003831.21W	Golf Course west of Farnham Common					
△ Stoke Poges	SU 990 835 513233.01N 0003423.36W	War memorial in Stoke Poges Village					
△ Iver	TQ 035 826 513157N 0003031W	Delaford Park		H	Note 2		
△ Uxbridge Common	TQ 062 855 513332N 0002813W	Roundabout on A40 road north of Uxbridge Common	1500 FT	700 FT	H		
△ Gutteridge	TQ 097 845 513254N 0002507W	A40, south of Northolt Aerodrome Runway Intersection				H	Note 3 Note 4
△ Target	TQ 125 839 513234.71N 0002240.08W	Target Roundabout A40		650 FT		1200 FT	
△ Hanger Lane	TQ 184 826 513149.24N 0001737.66W	Hanger Lane Junction Station			1200 FT		
△ Brentford	TQ 186 791 512951N 0001731W	Gunnersbury Park north of Chiswick Fly-over	1200 FT	800 FT	H	800 FT	Note 1
△ Kew Bridge	TQ 190 778 512914N 0001716W	Bridge across River Thames at northeast corner of Gardens and Common	1000 FT		H		Note 1 Note 4
△ Chiswick Bridge	TQ 202 763 512822.96N 0001611.64W	Chiswick Bridge			700 FT		
△ Hammersmith Bridge	TQ 229 781 512918.39N 0001349.01W	Hammersmith Bridge	1500 FT	550 FT		1000 FT	
▲ Barnes	TQ 234 765 512827N 0001325W	River Thames at Barn Elms Park and Craven Cottage Football Ground			1000 FT		
▲ London Heliport	TQ 266 762 512812N 0001046W	London Heliport			H		Note 6

Note 1: Between Hanger Lane and Chiswick Bridge, pilots must fly at the published maximum altitude when operating SVFR.

Note 2: Between Iver and Hanger Lane, pilots may be required to communicate with Northolt Approach (126.450 MHz).

Note 3: The holding manoeuvre is to be carried out to the south of the Northolt Aerodrome Boundary.

Note 4: When Heathrow Runways 09L/09R are in use, Route H10 between Gutteridge and Kew Bridge is subject to delays due to slow climbing departures from Heathrow.

Helicopter pilots are recommended to obtain Heathrow runway information on the ATIS frequency 128.080 MHz before contacting Heathrow Radar on 125.625 MHz, or London Heliport on 134.280 MHz.

Note 5: Between Target and Brentford the route alignment turns from the A40 to the A406 at the Hanger Lane intersection (Hanger Lane). Pilots should ensure correct visual identification of the turn point due to the interaction with Heathrow Runway 27R final approach track.

28 Nov 2024

Note 6: Caution - large number of tall structures above 500 FT lie within 600 M of the high water marks of the River Thames. Pilots are reminded that aircraft operated on the notified helicopter routes are not permitted to fly closer than 500 FT to any person, vessel, vehicle or structure.

13 VISUAL REFERENCE POINTS (VRP)

- a) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

Note: Refer also to VRPs in use at London City.

14 LONDON CTR TRANSPONDER MANDATORY ZONE (TMZ)

- a) The London CTR is notified as a Mode S Elementary Transponder Mandatory Zone (TMZ) as detailed at GEN 1.5, paragraph 5.3.
- b) The London CTR TMZ has the same vertical and lateral dimensions as the London CTR, see EGLL AD 2.17.
- c) TMZ exceptions are detailed in GEN 1.5 paragraph 5.3.4, AD-2 EGLD, AD-2 EGTf, AD-2 EGLM and for Brooklands see EGLL AD 2.22 paragraph 9.

15 FREQUENCY MONITORING CODE (FMC)

- a) Pilots operating in the vicinity of, but intending to remain outside the London CTR within the area defined by straight lines joining successively the following points and maintaining a listening watch only on Thames Director frequency, 132.700 MHz, are encouraged to select SSR code 0012.

513630N 0001545E - 514111N 0001345W -
514027N 0003627W - 514015N 0005348W -
513444N 0005508W - 512335N 0005516W -
511422N 0003506W - 511957N 0001917E -
513630N 0001545E.

- b) Selection of 0012 does not imply the receipt of an ATC service. Pilots of aircraft displaying the code are not expected to contact ATC under normal circumstances, remain responsible for their own navigation, separation, terrain clearance and are expected to remain clear of the London CTR at all times.
- c) Whilst squawking 0012, pilots should be aware that Thames Director may make blind transmissions in order to ascertain a particular aircraft's intentions/route.
- d) When a pilot ceases to maintain a listening watch, code 0012 shall be deselected.

EGLL AD 2.23 ADDITIONAL INFORMATION

1 MODE S BAROMETRIC PRESSURE SETTING DATA

- a) London Terminal Control has the ability to downlink Mode S Barometric Pressure Setting (BPS) data. Therefore, if the downlinked pressure data is at variance with the BPS expected by Air Traffic Control, pilots can expect additional challenge. When Air Traffic Control pass a reminder of the appropriate BPS, it is anticipated that the aircrew will cross check the altimeter settings and confirm set.

2 TIME BASED SEPARATION (TBS) FOR FINAL APPROACH

- a) Enhanced Time Based Separation minima are in permanent use for wake turbulence separation in place of UK fixed distance based minima for wake turbulence. These are based on European Wake Vortex Re-categorisation (RECAT-EU) minima, and include reduced separation in medium and strong headwind conditions. This change has been made on the basis of an extensive data collection campaign of measured wake vortex behaviour over a number of years at Heathrow and monitoring of operational use of Time Based Separation since 2015. A system of using real time aircraft data to derive MET conditions has been proven using operational data.
- b) When in stronger headwind conditions, a moderate reduction in separation distances from lead and follower aircraft may be observed in comparison to RECAT-EU distance based wake turbulence minima. For further details, please refer to the AIC Pink (P) Wake Turbulence at www.nats.aero/ais.
- c) During TBS operations, RNAV (GNSS) final approach requests may be refused by Heathrow Director to ensure runway efficiency is maintained.

3 AERODROME SAFETY REPORTING

- a) Aircraft operators are required to share with Heathrow any occurrence reports for reportable incidents which occur on the ground at Heathrow, or during the initial (take-off) or final (approach and landing) phases of flight to or from Heathrow.
- b) Copies of Air Safety Reports or Mandatory Occurrence Reports filed by aircraft operators must be sent to the Aerodrome Safety and Assurance team at airside_safety@heathrow.com. Heathrow also encourages voluntary safety reports and observations as these may help to improve safety. Any such reports or observations should also be sent to the aforementioned address.

EGLL AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGLL-2-1

AIRCRAFT GROUND MOVEMENT/ALL TAXIWAYS CHART - ICAO

AD 2.EGLL-2-2

AERODROME CHART A380 GROUND MOVEMENT - ICAO

AD 2.EGLL-2-3

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 5 CHART - ICAO

AD 2.EGLL-2-4

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 4 CHART - ICAO

AD 2.EGLL-2-5

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 3 CHART - ICAO

AD 2.EGLL-2-6

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 1 and 2 CHART - ICAO

AD 2.EGLL-2-7

AIRCRAFT GROUND MOVEMENT/REMOTE DE-ICING AREAS LOCATION CHART - ICAO

AD 2.EGLL-2-8

GROUND MOVEMENT CHART - HOLDING AREAS for RUNWAY 27R - ICAO

AD 2.EGLL-2-9

GROUND MOVEMENT CHART - HOLDING AREAS for RUNWAY 27L - ICAO

AD 2.EGLL-2-10

GROUND MOVEMENT CHART - HOLDING AREAS for RUNWAY 09L - ICAO

AD 2.EGLL-2-11

GROUND MOVEMENT CHART - HOLDING AREAS for RUNWAY 09R - ICAO

AD 2.EGLL-2-12

LONDON CTR LOCAL FLYING AND ENTRY/EXIT PROCEDURES

AD 2.EGLL-3-1

HELICOPTER ROUTES in the LONDON CTR and LONDON/CITY CTR

AD 2.EGLL-3-2

HELICOPTER CROSSING OPERATIONS

AD 2.EGLL-4-1

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGLL-5-1

ATC SURVEILLANCE MINIMUM ALTITUDE CHART TEXT

AD 2.EGLL-5-2

STANDARD DEPARTURE CHART - INSTRUMENT (SID) COMPTON 3F 3G 5J 4K - ICAO

AD 2.EGLL-6-1

STANDARD DEPARTURE CHART - INSTRUMENT (SID) MAXIT 1F 1G MODMI 1J 1K - ICAO

AD 2.EGLL-6-2

STANDARD DEPARTURE CHART - INSTRUMENT (SID) BROOKMANS PARK 7F 7G 6J 5K - ICAO

AD 2.EGLL-6-3

STANDARD DEPARTURE CHART - INSTRUMENT (SID) UMLAT 1F 1G ULTIB 1J 1K - ICAO

AD 2.EGLL-6-4

STANDARD DEPARTURE CHART - INSTRUMENT (SID) DET 2F 2G 1J 1K - ICAO

AD 2.EGLL-6-5

STANDARD DEPARTURE CHART - INSTRUMENT (SID) GOGSI 2F 2G GASGU 2J 2K (RNAV SUBSTITUTION ONLY) - ICAO

AD 2.EGLL-6-6

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) OTMET 1H ROXOG 1H - ICAO

AD 2.EGLL-7-1

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) ALESO 1H LAM 1X TANET 1Z - ICAO

AD 2.EGLL-7-2

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) OCK 1Z - ICAO

AD 2.EGLL-7-3

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) NUGRA 1H LAM 1Z - ICAO

AD 2.EGLL-7-4

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) HON 1H - ICAO

AD 2.EGLL-7-5

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) BARM1 1H LOGAN 2H - ICAO

AD 2.EGLL-7-6

28 Nov 2024

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) TOBID 1X - ICAO

AD 2.EGLL-7-7

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) HAZEL 1H - ICAO

AD 2.EGLL-7-8

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) BIG 1Z LAM 1Y - ICAO

AD 2.EGLL-7-9

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) FITBO 1H - ICAO

AD 2.EGLL-7-10

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) SIRIC 1H - ICAO

AD 2.EGLL-7-11

RNAV1 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) SIRIC 1Z - ICAO

AD 2.EGLL-7-12

STANDARD INSTRUMENT ARRIVAL CODING TABLES OTMET 1H ROXOG 1H ALESO 1H LAM 1X

AD 2.EGLL-7-13

STANDARD INSTRUMENT ARRIVAL CODING TABLES TANET 1Z OCK 1Z NUGRA 1H LAM 1Z

AD 2.EGLL-7-14

STANDARD INSTRUMENT ARRIVAL CODING TABLES HON 1H BARM 1H LOGAN 2H TOBID 1X

AD 2.EGLL-7-15

STANDARD INSTRUMENT ARRIVAL CODING TABLES HAZEL 1H BIG 1Z LAM 1Y FITBO 1H

AD 2.EGLL-7-16

STANDARD INSTRUMENT ARRIVAL CODING TABLES SIRIC 1H SIRIC 1Z

AD 2.EGLL-7-17

RNAV HOLD CODING TABLES BIG BNN BRASO FITBO HON LAM LOGAN

AD 2.EGLL-7-18

RNAV HOLD CODING TABLES OCK OCTIZ SABER TIGER WCO

AD 2.EGLL-7-19

INITIAL APPROACH PROCEDURES ILS RWY 09L/R via BIG and OCK (RNAV SUBSTITUTION ONLY)

AD 2.EGLL-7-20

INITIAL APPROACH PROCEDURES ILS RWY 09L/R Without Radar Control via BNN and LAM

AD 2.EGLL-7-21

INITIAL APPROACH PROCEDURES ILS RWY 27L/R Without Radar Control via BIG

AD 2.EGLL-7-22

INITIAL APPROACH PROCEDURES ILS RWY 27L/R via OCK (RNAV SUBSTITUTION ONLY)

AD 2.EGLL-7-23

INITIAL APPROACH PROCEDURES ILS RWY 27L/R Without Radar Control via BNN and LAM

AD 2.EGLL-7-24

INITIAL APPROACH PROCEDURES ILS RWY 09L/R via CHT and EPM (RNAV SUBSTITUTION ONLY)

AD 2.EGLL-7-25

INITIAL APPROACH PROCEDURES ILS RWY 27L/R via CHT and EPM (RNAV SUBSTITUTION ONLY)

AD 2.EGLL-7-26

INSTRUMENT APPROACH CHART ILS/DME I-AA RWY 09L - ICAO

AD 2.EGLL-8-1

INSTRUMENT APPROACH CHART LOC/DME I-AA RWY 09L - ICAO

AD 2.EGLL-8-2

INSTRUMENT APPROACH CHART RNP RWY 09L - ICAO

AD 2.EGLL-8-3

INSTRUMENT APPROACH CHART ILS/DME I-BB RWY 09R - ICAO

AD 2.EGLL-8-4

INSTRUMENT APPROACH CHART LOC/DME I-BB RWY 09R - ICAO

AD 2.EGLL-8-5

INSTRUMENT APPROACH CHART RNP RWY 09R - ICAO

AD 2.EGLL-8-6

INSTRUMENT APPROACH CHART ILS/DME I-LL RWY 27L - ICAO

AD 2.EGLL-8-7

INSTRUMENT APPROACH CHART LOC/DME I-LL RWY 27L - ICAO

AD 2.EGLL-8-8

INSTRUMENT APPROACH CHART RNP RWY 27L - ICAO

AD 2.EGLL-8-9

INSTRUMENT APPROACH CHART ILS/DME I-RR RWY 27R - ICAO

AD 2.EGLL-8-10

INSTRUMENT APPROACH CHART LOC/DME I-RR RWY 27R - ICAO

AD 2.EGLL-8-11

INSTRUMENT APPROACH CHART RNP RWY 27R - ICAO

AD 2.EGLL-8-12

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 09L/R and 27L/R

AD 2.EGLL-8-13

EGLL AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

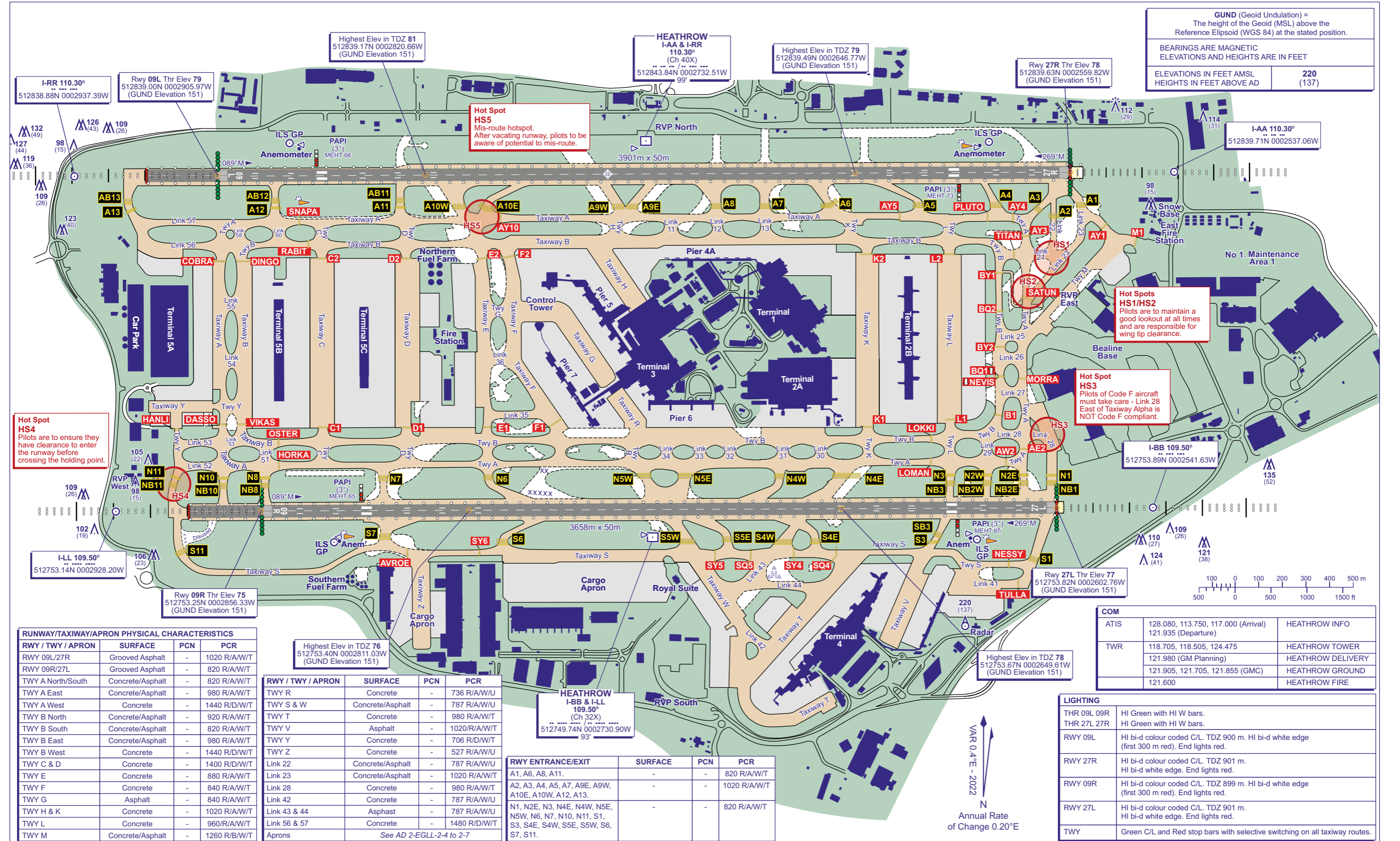
INTENTIONALLY BLANK

AERODROME
CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.

BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET

ELEVATIONS IN FEET AMSL	220
HEIGHTS IN FEET ABOVE AD	(137)

I-RR 110.30°
512838.88N 0002937.39W

Rwy 09L Thr Elev 79
512839.00N 0002905.97W
(GUND Elevation 151)

HIGHTEST ELEV IN TDZ 81
512839.17N 0002820.66W
(GUND Elevation 151)

HEATHROW
I-AA & I-RR
110.30°
(Ch 40X)
512843.84N 0002732.51W
99°

Highest Elev in TDZ 79
512839.49N 0002646.77W
(GUND Elevation 151)

Rwy 27R Thr Elev 78
512839.63N 0002559.82W
(GUND Elevation 151)

I-AA 110.30°
512839.71N 0002537.06W

Hot Spot
HS4
Pilots are to ensure they
have clearance to enter
the runway before
crossing the holding point.

Hot Spot
HS5
Mis-route hotspot.
After vacating runway,
pilots to be aware of
potential to mis-route.

Hot Spots
HS1/HS2
Pilots are to maintain a
good lookout at all times
and are responsible for
wing tip clearance.

Hot Spot
HS3
Pilots of Code F aircraft
must take care - Link 28
East of Taxiway Alpha is
NOT Code F compliant.

I-LL 109.50°
512753.14N 0002928.20W

Rwy 09R Thr Elev 75
512753.25N 0002856.33W
(GUND Elevation 151)

Highest Elev in TDZ 76
512753.40N 0002811.03W
(GUND Elevation 151)

HEATHROW
I-BB & I-LL
109.50°
(Ch 32X)
512749.74N 0002730.90W
93°

Highest Elev in TDZ 78
512753.67N 0002649.61W
(GUND Elevation 151)

COM	Frequency	Info
ATIS	128.080, 113.750, 117.000 (Arrival) 121.935 (Departure)	HEATHROW INFO
TWR	118.705, 118.505, 124.475 121.980 (GM Planning) 121.905, 121.705, 121.855 (GMC)	HEATHROW TOWER HEATHROW DELIVERY HEATHROW GROUND
	121.600	HEATHROW FIRE

RWY / TWY / APRON	SURFACE	PCN	PCR
RWY 09L/27R	Grooved Asphalt	-	1020 R/A/W/T
RWY 09R/27L	Grooved Asphalt	-	820 R/A/W/T
TWY A North/South	Concrete/Asphalt	-	820 R/A/W/T
TWY A East	Concrete/Asphalt	-	980 R/A/W/T
TWY A West	Concrete	-	1440 R/D/W/T
TWY B North	Concrete/Asphalt	-	920 R/A/W/T
TWY B South	Concrete/Asphalt	-	820 R/A/W/T
TWY B East	Concrete/Asphalt	-	980 R/A/W/T
TWY B West	Concrete	-	1440 R/D/W/T
TWY C & D	Concrete	-	1400 R/D/W/T
TWY E	Concrete	-	880 R/A/W/T
TWY F	Concrete	-	840 R/A/W/T
TWY G	Asphalt	-	840 R/A/W/T
TWY H & K	Concrete	-	1020 R/A/W/T
TWY L	Concrete	-	960 R/A/W/T
TWY M	Concrete/Asphalt	-	1260 R/B/W/T

RWY / TWY / APRON	SURFACE	PCN	PCR
TWY R	Concrete	-	736 R/A/W/U
TWY S & W	Concrete/Asphalt	-	787 R/A/W/U
TWY T	Concrete	-	980 R/A/W/T
TWY V	Asphalt	-	1020 R/A/W/T
TWY Y	Concrete	-	706 R/D/W/T
TWY Z	Concrete	-	527 R/A/W/U
Link 22	Concrete/Asphalt	-	787 R/A/W/U
Link 23	Concrete/Asphalt	-	1020 R/A/W/T
Link 28	Concrete	-	980 R/A/W/T
Link 42	Concrete	-	787 R/A/W/U
Link 43 & 44	Asphalt	-	787 R/A/W/U
Link 56 & 57	Concrete	-	1480 R/D/W/T
Aprons	See AD 2-EGLL-2-4 to 2-7		

RWY ENTRANCE/EXIT	SURFACE	PCN	PCR
A1, A6, A8, A11.	-	-	820 R/A/W/T
A2, A3, A4, A5, A7, A9E, A9W, A10E, A10W, A12, A13.	-	-	1020 R/A/W/T
N1, N2E, N3, N4E, N4W, N5E, N5W, N6, N7, N10, N11, S1, S3, S4E, S4W, S5E, S5W, S6, S7, S11.	-	-	820 R/A/W/T

Lighting	Description
THR 09L 09R	HI Green with HI W bars.
THR 27L 27R	HI Green with HI W bars.
RWY 09L	HI bi-d colour coded C/L. TDZ 900 m. HI bi-d white edge (first 300 m red). End lights red.
RWY 27R	HI bi-d colour coded C/L. TDZ 901 m. HI bi-d white edge. End lights red.
RWY 09R	HI bi-d colour coded C/L. TDZ 899 m. HI bi-d white edge (first 300 m red). End lights red.
RWY 27L	HI bi-d colour coded C/L. TDZ 901 m. HI bi-d white edge. End lights red.
TWY	Green C/L and Red stop bars with selective switching on all taxiway routes.

CHANGE (12/24): PCR VALUES ADDED.

AERO INFO DATE 24 SEP 24

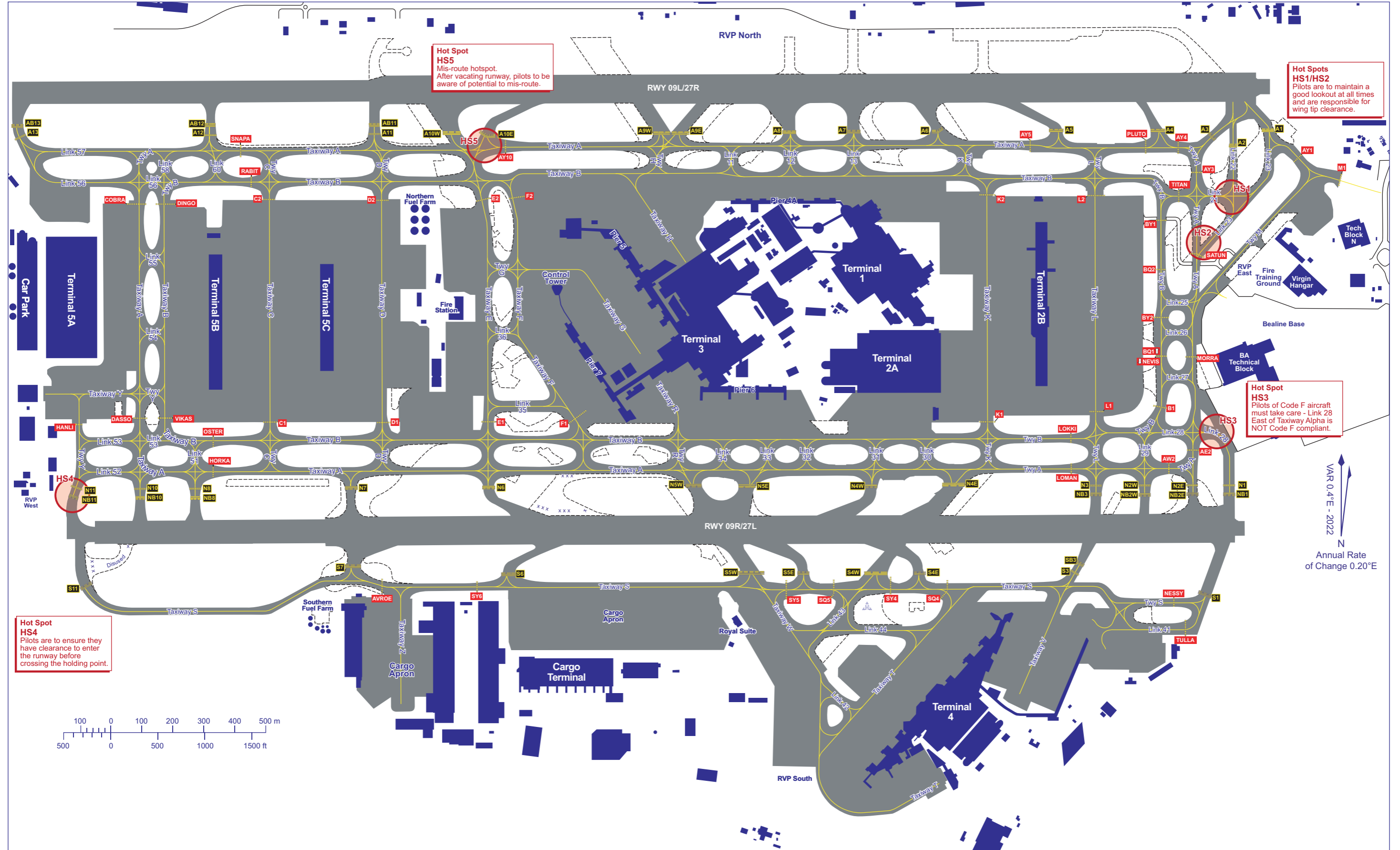
AD 2-EGLL-2-1

AIRCRAFT GROUND MOVEMENT/ALL TAXIWAYS CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW EGLL



CHANGE (6/24): DISUSED EDITORIAL.

AERO INFO DATE 05 APR 24

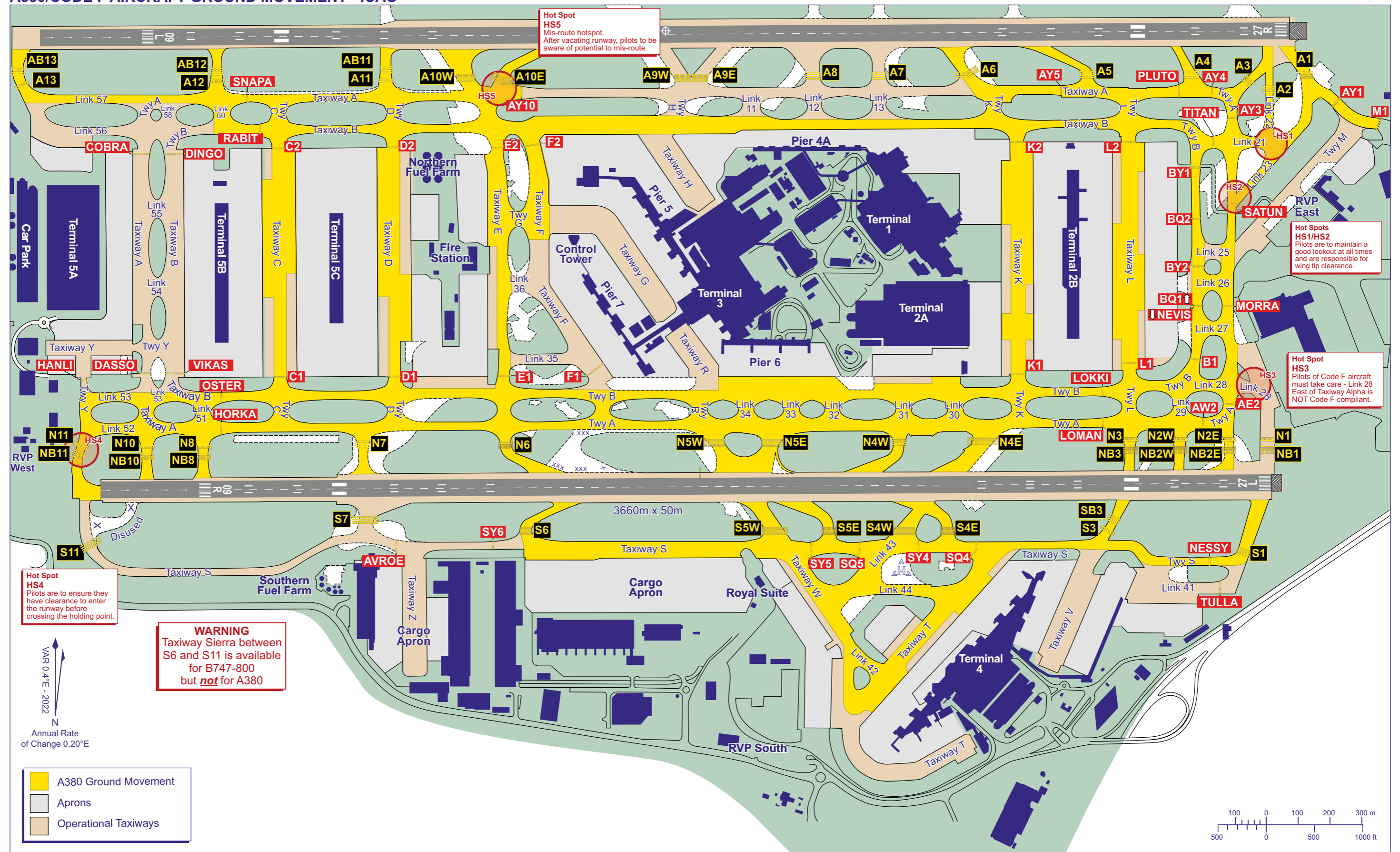
AD 2-EGLL-2-2

AERODROME CHART
A380/CODE F AIRCRAFT GROUND MOVEMENT - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



Hot Spot HS5
Mis-route hotspot. After vacating runway, pilots to be aware of potential to mis-route.

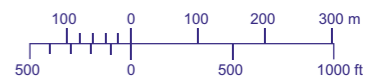
Hot Spots HS1/HS2
Pilots are to maintain a good lookout at all times and are responsible for wing tip clearance.

Hot Spot HS3
Pilots of Code F aircraft must take care - Link 28 East of Taxiway Alpha is NOT Code F compliant.

Hot Spot HS4
Pilots are to ensure they have clearance to enter the runway before crossing the holding point.

WARNING
Taxiway Sierra between S6 and S11 is available for B747-800 but **not** for A380

- A380 Ground Movement
- Aprons
- Operational Taxiways



CHANGE (6/24): DISUSED EDITORIAL.

AERO INFO DATE 05 APR 24

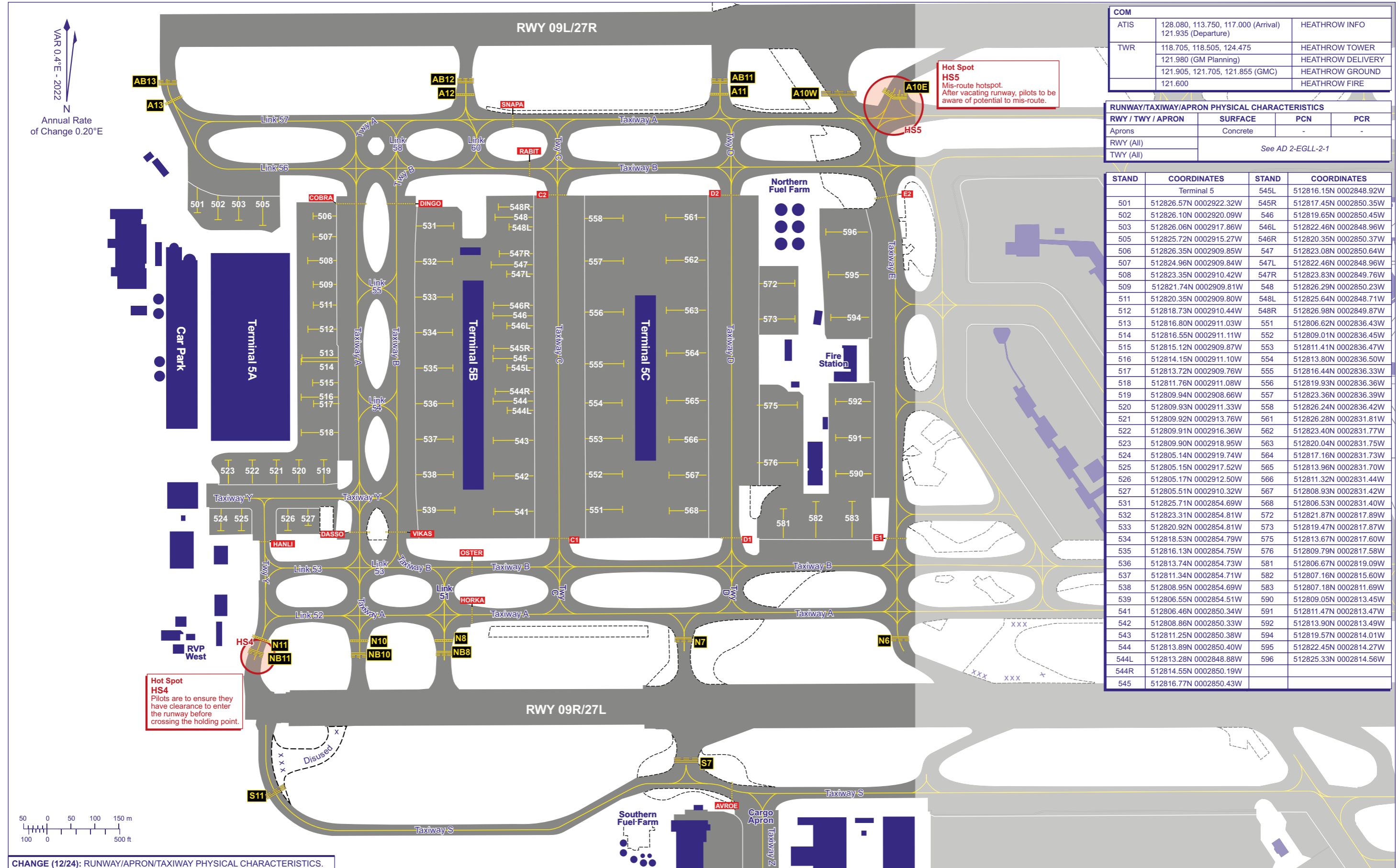
AD 2-EGLL-2-3

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 5
CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



COM		
ATIS	128.080, 113.750, 117.000 (Arrival) 121.935 (Departure)	HEATHROW INFO
TWR	118.705, 118.505, 124.475 121.980 (GM Planning) 121.905, 121.705, 121.855 (GMC) 121.600	HEATHROW TOWER HEATHROW DELIVERY HEATHROW GROUND HEATHROW FIRE

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / TWY / APRON	SURFACE	PCN	PCR
Aprons	Concrete	-	-
RWY (All)	See AD 2-EGLL-2-1		
TWY (All)	See AD 2-EGLL-2-1		

STAND	COORDINATES	STAND	COORDINATES
	Terminal 5	545L	512816.15N 0002848.92W
501	512826.57N 0002922.32W	545R	512817.45N 0002850.35W
502	512826.10N 0002920.09W	546	512819.65N 0002850.45W
503	512826.06N 0002917.86W	546L	512822.46N 0002848.96W
505	512825.72N 0002915.27W	546R	512820.35N 0002850.37W
506	512826.35N 0002909.85W	547	512823.08N 0002850.64W
507	512824.96N 0002909.84W	547L	512822.46N 0002848.96W
508	512823.35N 0002910.42W	547R	512823.83N 0002849.76W
509	512821.74N 0002909.81W	548	512826.29N 0002850.23W
511	512820.35N 0002909.80W	548L	512825.64N 0002848.71W
512	512818.73N 0002910.44W	548R	512826.98N 0002849.87W
513	512816.80N 0002911.03W	551	512806.62N 0002836.43W
514	512816.55N 0002911.11W	552	512809.01N 0002836.45W
515	512815.12N 0002909.87W	553	512811.41N 0002836.47W
516	512814.15N 0002911.10W	554	512813.80N 0002836.50W
517	512813.72N 0002909.76W	555	512816.44N 0002836.33W
518	512811.76N 0002911.08W	556	512819.93N 0002836.36W
519	512809.94N 0002908.66W	557	512823.36N 0002836.39W
520	512809.93N 0002911.33W	558	512826.24N 0002836.42W
521	512809.92N 0002913.76W	561	512826.28N 0002831.81W
522	512809.91N 0002916.36W	562	512823.40N 0002831.77W
523	512809.90N 0002918.95W	563	512820.04N 0002831.75W
524	512805.14N 0002919.74W	564	512817.16N 0002831.73W
525	512805.15N 0002917.52W	565	512813.96N 0002831.70W
526	512805.17N 0002912.50W	566	512811.32N 0002831.44W
527	512805.51N 0002910.32W	567	512808.93N 0002831.42W
531	512825.71N 0002854.69W	568	512806.53N 0002831.40W
532	512823.31N 0002854.81W	572	512821.87N 0002817.89W
533	512820.92N 0002854.81W	573	512819.47N 0002817.87W
534	512818.53N 0002854.79W	575	512813.67N 0002817.60W
535	512816.13N 0002854.75W	576	512809.79N 0002817.58W
536	512813.74N 0002854.73W	581	512806.67N 0002819.09W
537	512811.34N 0002854.71W	582	512807.16N 0002815.60W
538	512808.95N 0002854.69W	583	512807.18N 0002811.69W
539	512806.55N 0002854.51W	590	512809.05N 0002813.45W
541	512806.46N 0002850.34W	591	512811.47N 0002813.47W
542	512808.86N 0002850.33W	592	512813.90N 0002813.49W
543	512811.25N 0002850.38W	594	512819.57N 0002814.01W
544	512813.89N 0002850.40W	595	512822.45N 0002814.27W
544L	512813.28N 0002848.88W	596	512825.33N 0002814.56W
544R	512814.55N 0002850.19W		
545	512816.77N 0002850.43W		

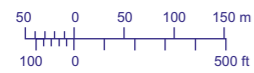
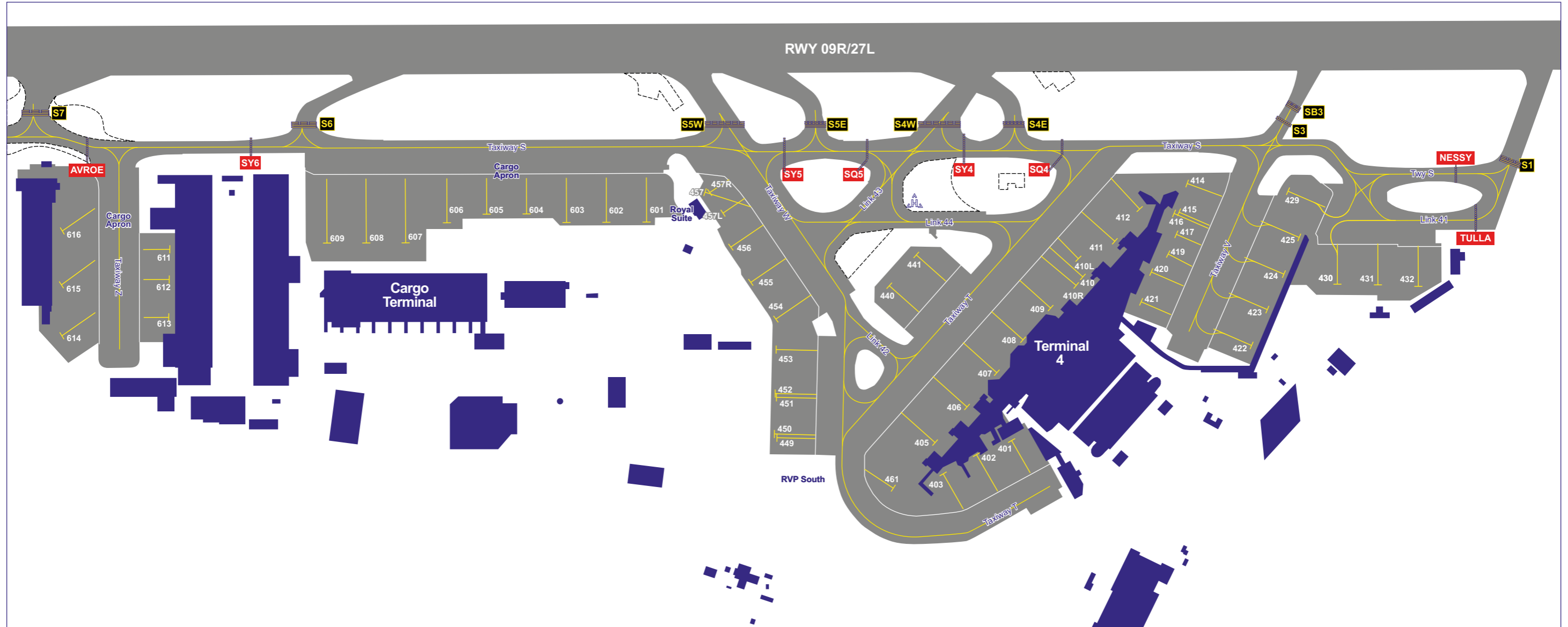
CHANGE (12/24): RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS.
AERO INFO DATE 24 SEP 24

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 4
CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



STAND	COORDINATES	STAND	COORDINATES	STAND	COORDINATES	STAND	COORDINATES
	Terminal 4	420	512740.15N 0002642.20W	456	512741.62N 0002722.64W		Royal Suite/VIP
401	512730.01N 0002655.61W	421	512738.36N 0002643.17W	458	512745.69N 0002723.92W	457	512744.92N 0002725.11W
402	512729.16N 0002658.98W	422	512735.74N 0002632.54W	461	512727.15N 0002706.98W	457L	512743.67N 0002723.40W
403	512728.01N 0002702.19W	423	512737.90N 0002631.03W		Cargo Apron	457R	512744.90N 0002724.67W
405	512729.89N 0002702.97W	424	512740.03N 0002629.44W	601	512743.12N 0002730.74W		
406	512732.03N 0002659.91W	425	512742.24N 0002627.97W	602	512743.11N 0002734.60W	Hel aim pt	512744.27N 0002704.97W
407	512734.09N 0002657.04W	429	512745.02N 0002629.06W	603	512743.09N 0002738.43W		
408	512736.07N 0002654.52W	430	512739.43N 0002624.30W	604	512743.60N 0002742.27W		
409	512737.98N 0002651.87W	431	512739.39N 0002620.41W	605	512743.58N 0002746.11W		
410	512739.85N 0002648.78W	432	512739.31N 0002616.52W	606	512743.06N 0002749.93W		
410L	512740.95N 0002649.21W	440	512739.37N 0002707.48W	607	512741.85N 0002753.90W		
410R	512739.34N 0002649.41W	441	512741.19N 0002704.87W	608	512741.84N 0002757.68W		
411	512742.00N 0002645.70W	449	512730.17N 0002718.18W	609	512741.83N 0002801.46W		
412	512743.94N 0002643.33W	450	512730.39N 0002718.42W	611	512741.44N 0002816.57W		
414	512745.47N 0002638.75W	451	512732.60N 0002718.22W	612	512739.63N 0002816.63W		
415	512743.75N 0002639.52W	452	512732.82N 0002718.35W	613	512737.36N 0002816.67W		
416	512743.67N 0002640.01W	453	512735.47N 0002718.26W	614	512736.24N 0002826.93W		
417	512742.42N 0002639.79W	454	512737.30N 0002718.30W	615	512739.30N 0002827.00W		
419	512741.23N 0002640.56W	455	512739.50N 0002720.71W	616	512742.54N 0002826.93W		

COM		
ATIS	128.080, 113.750, 117.000 (Arrival) 121.935 (Departure)	HEATHROW INFO
TWR	118.705, 118.505, 124.475 121.980 (GM Planning) 121.905, 121.705, 121.855 (GMC)	HEATHROW TOWER HEATHROW DELIVERY HEATHROW GROUND
	121.600	HEATHROW FIRE

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / TWY / APRON	SURFACE	PCN	PCR
Aprons	Concrete	-	-
RWY (All)	See AD 2-EGLL-2-1		
TWY (All)	See AD 2-EGLL-2-1		

CHANGE (12/24): RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS.

AERO INFO DATE 24 SEP 24

AD 2-EGLL-2-5

**AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 3
CHART - ICAO**

ARP 512839N 0002741W

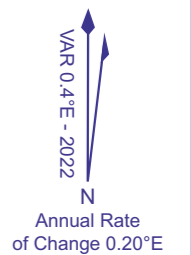
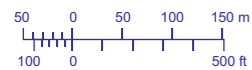
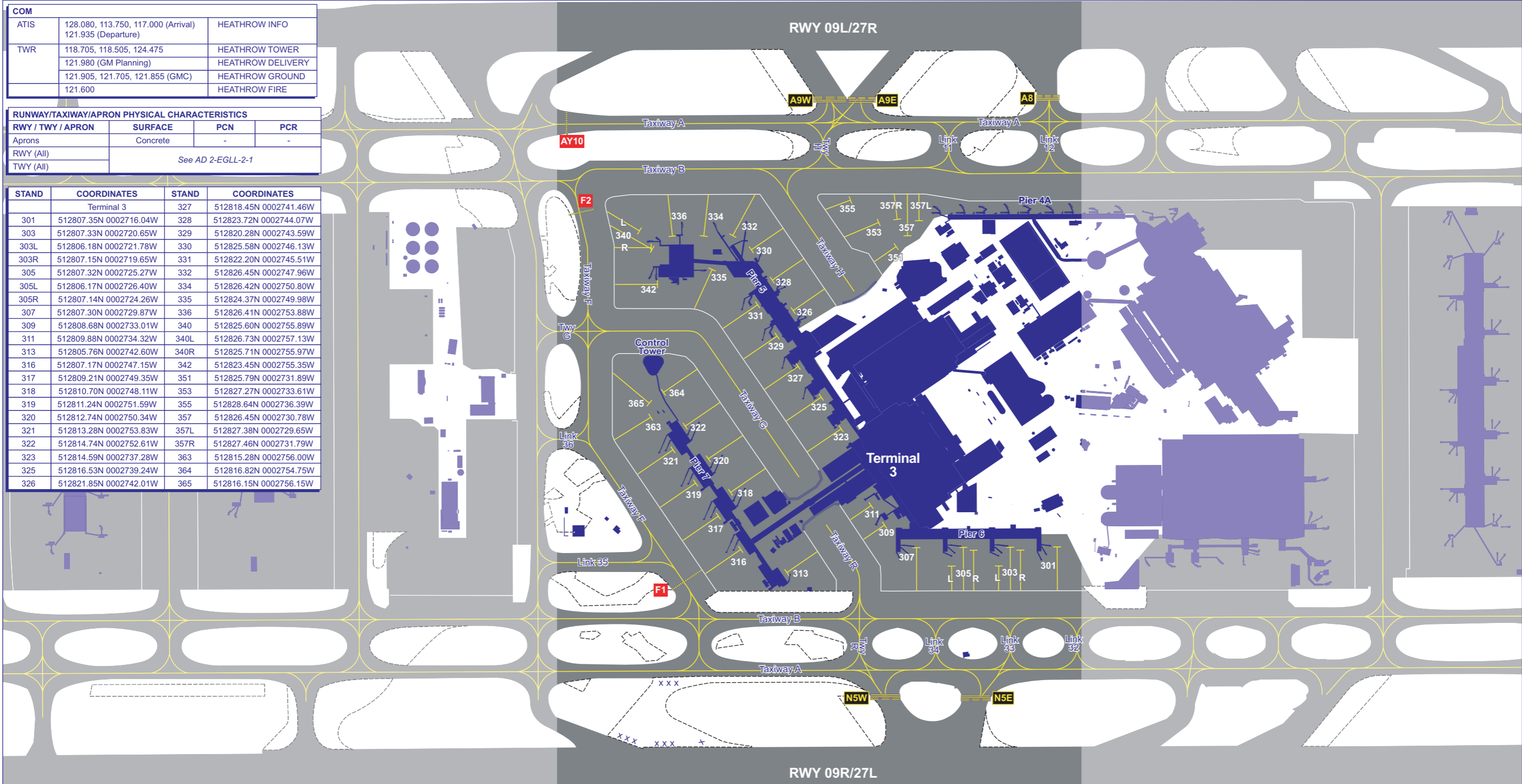
AD ELEV 83FT

**LONDON HEATHROW
EGLL**

COM		
ATIS	128.080, 113.750, 117.000 (Arrival) 121.935 (Departure)	HEATHROW INFO
TWR	118.705, 118.505, 124.475 121.980 (GM Planning) 121.905, 121.705, 121.855 (GMC) 121.600	HEATHROW TOWER HEATHROW DELIVERY HEATHROW GROUND HEATHROW FIRE

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / TWY / APRON	SURFACE	PCN	PCR
Aprons	Concrete	-	-
RWY (All)	See AD 2-EGLL-2-1		
TWY (All)	See AD 2-EGLL-2-1		

STAND	COORDINATES	STAND	COORDINATES
	Terminal 3		
301	512807.35N 0002716.04W	327	512818.45N 0002741.46W
303	512807.33N 0002720.65W	329	512820.28N 0002743.59W
303L	512806.18N 0002721.78W	330	512825.58N 0002746.13W
303R	512807.15N 0002719.65W	331	512822.20N 0002745.51W
305	512807.32N 0002725.27W	332	512826.45N 0002747.96W
305L	512806.17N 0002726.40W	334	512826.42N 0002750.80W
305R	512807.14N 0002724.26W	335	512824.37N 0002749.98W
307	512807.30N 0002729.87W	336	512826.41N 0002753.88W
309	512808.68N 0002733.01W	340	512825.60N 0002755.89W
311	512809.88N 0002734.32W	340L	512826.73N 0002757.13W
313	512805.76N 0002742.60W	340R	512825.71N 0002755.97W
316	512807.17N 0002747.15W	342	512823.45N 0002755.35W
317	512809.21N 0002749.35W	351	512825.79N 0002731.89W
318	512810.70N 0002748.11W	353	512827.27N 0002733.61W
319	512811.24N 0002751.59W	355	512828.64N 0002736.39W
320	512812.74N 0002750.34W	357	512826.45N 0002730.78W
321	512813.28N 0002753.83W	357L	512827.38N 0002729.65W
322	512814.74N 0002752.61W	357R	512827.46N 0002731.79W
323	512814.59N 0002737.28W	363	512815.28N 0002756.00W
325	512816.53N 0002739.24W	364	512816.82N 0002754.75W
326	512821.85N 0002742.01W	365	512816.15N 0002756.15W



CHANGE (12/24): RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS.

AERO INFO DATE 24 SEP 24

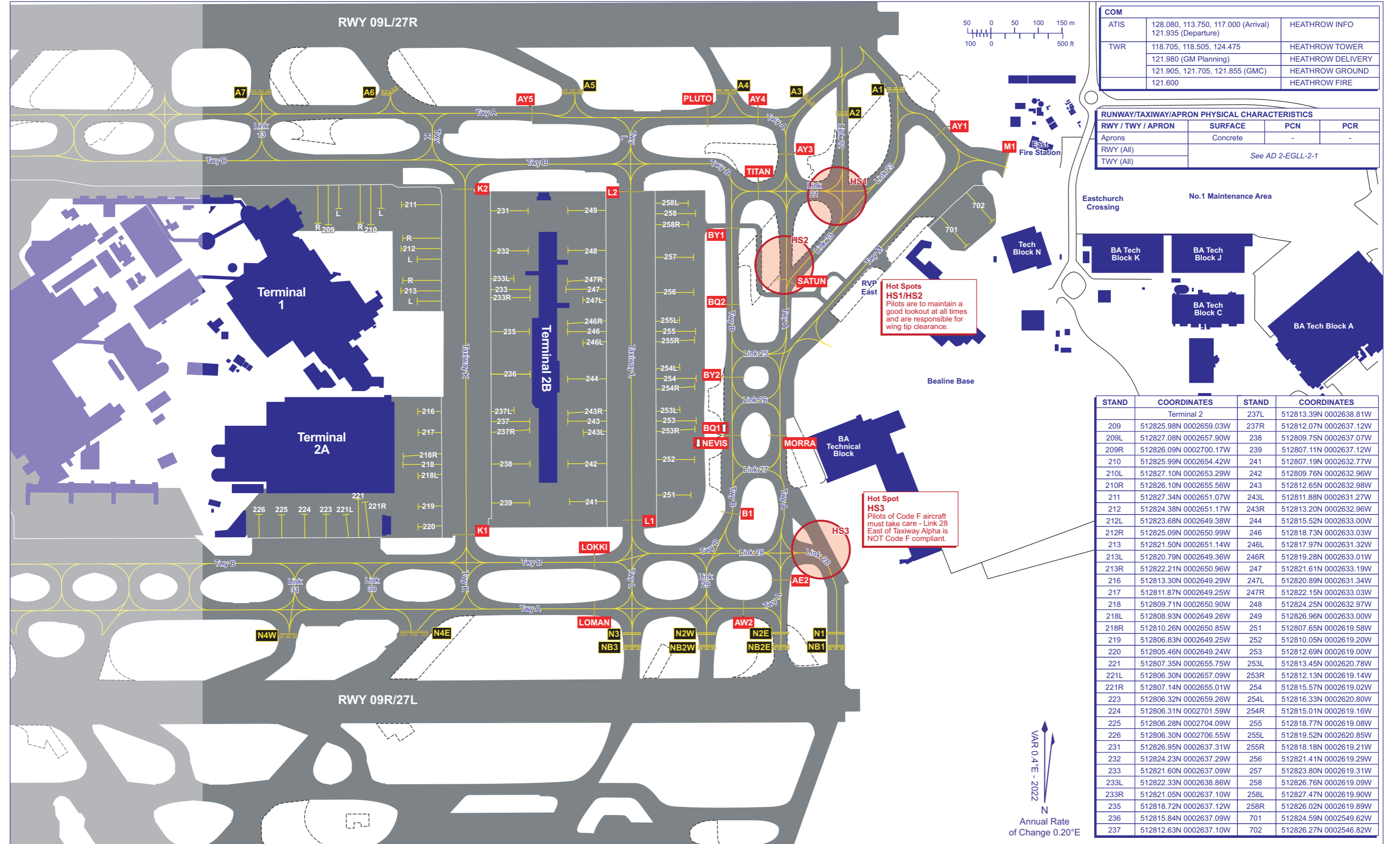
AD 2-EGLL-2-6

AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING - TERMINAL 1 & 2
CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



COM		
ATIS	128.080, 113.750, 117.000 (Arrival) 121.935 (Departure)	HEATHROW INFO
TWR	118.705, 118.505, 124.475	HEATHROW TOWER
	121.980 (GM Planning)	HEATHROW DELIVERY
	121.905, 121.705, 121.855 (GMC)	HEATHROW GROUND
	121.600	HEATHROW FIRE

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
RWY / TWY / APRON	SURFACE	PCN	PCR
Aprons	Concrete	-	-
RWY (All)	See AD 2-EGLL-2-1		
TWY (All)	See AD 2-EGLL-2-1		

STAND	COORDINATES	STAND	COORDINATES
	Terminal 2	237L	512813.39N 0002638.81W
209	512825.98N 0002659.03W	237R	512812.07N 0002637.12W
209L	512827.08N 0002657.90W	238	512809.75N 0002637.07W
209R	512826.09N 0002700.17W	239	512807.11N 0002637.12W
210	512825.99N 0002654.42W	241	512807.19N 0002632.77W
210L	512827.10N 0002653.29W	242	512809.76N 0002632.96W
210R	512826.10N 0002655.56W	243	512812.65N 0002632.98W
211	512827.34N 0002651.07W	243L	512811.88N 0002631.27W
212	512824.38N 0002651.17W	243R	512813.20N 0002632.96W
212L	512823.68N 0002649.38W	244	512815.52N 0002633.00W
212R	512825.09N 0002650.99W	246	512818.73N 0002633.03W
213	512821.50N 0002651.14W	246L	512817.97N 0002631.32W
213L	512820.79N 0002649.36W	246R	512819.28N 0002633.01W
213R	512822.21N 0002650.96W	247	512821.61N 0002633.19W
216	512813.30N 0002649.29W	247L	512820.89N 0002631.34W
217	512811.87N 0002649.25W	247R	512822.15N 0002633.03W
218	512809.71N 0002650.90W	248	512824.25N 0002632.97W
218L	512808.93N 0002649.26W	249	512826.96N 0002633.00W
218R	512810.26N 0002650.85W	251	512807.65N 0002619.58W
219	512806.83N 0002649.25W	252	512810.05N 0002619.20W
220	512805.46N 0002649.24W	253	512812.69N 0002619.00W
221	512807.35N 0002655.75W	253L	512813.45N 0002620.78W
221L	512806.30N 0002657.09W	253R	512812.13N 0002619.14W
221R	512807.14N 0002655.01W	254	512815.57N 0002619.02W
223	512806.32N 0002659.26W	254L	512816.33N 0002620.80W
224	512806.31N 0002701.59W	254R	512815.01N 0002619.16W
225	512806.28N 0002704.09W	255	512818.77N 0002619.08W
226	512806.30N 0002706.55W	255L	512819.52N 0002620.85W
231	512826.95N 0002637.31W	255R	512818.18N 0002619.21W
232	512824.23N 0002637.29W	256	512821.41N 0002619.29W
233	512821.60N 0002637.09W	257	512823.80N 0002619.31W
233L	512822.33N 0002638.86W	258	512826.76N 0002619.09W
233R	512821.05N 0002637.10W	258L	512827.47N 0002619.90W
235	512818.72N 0002637.12W	258R	512826.02N 0002619.89W
236	512815.84N 0002637.09W	701	512824.59N 0002549.62W
237	512812.63N 0002637.10W	702	512826.27N 0002546.82W

CHANGE (12/24): RUNWAY/APRON/TAXIWAY PHYSICAL CHARACTERISTICS.

AERO INFO DATE 24 SEP 24

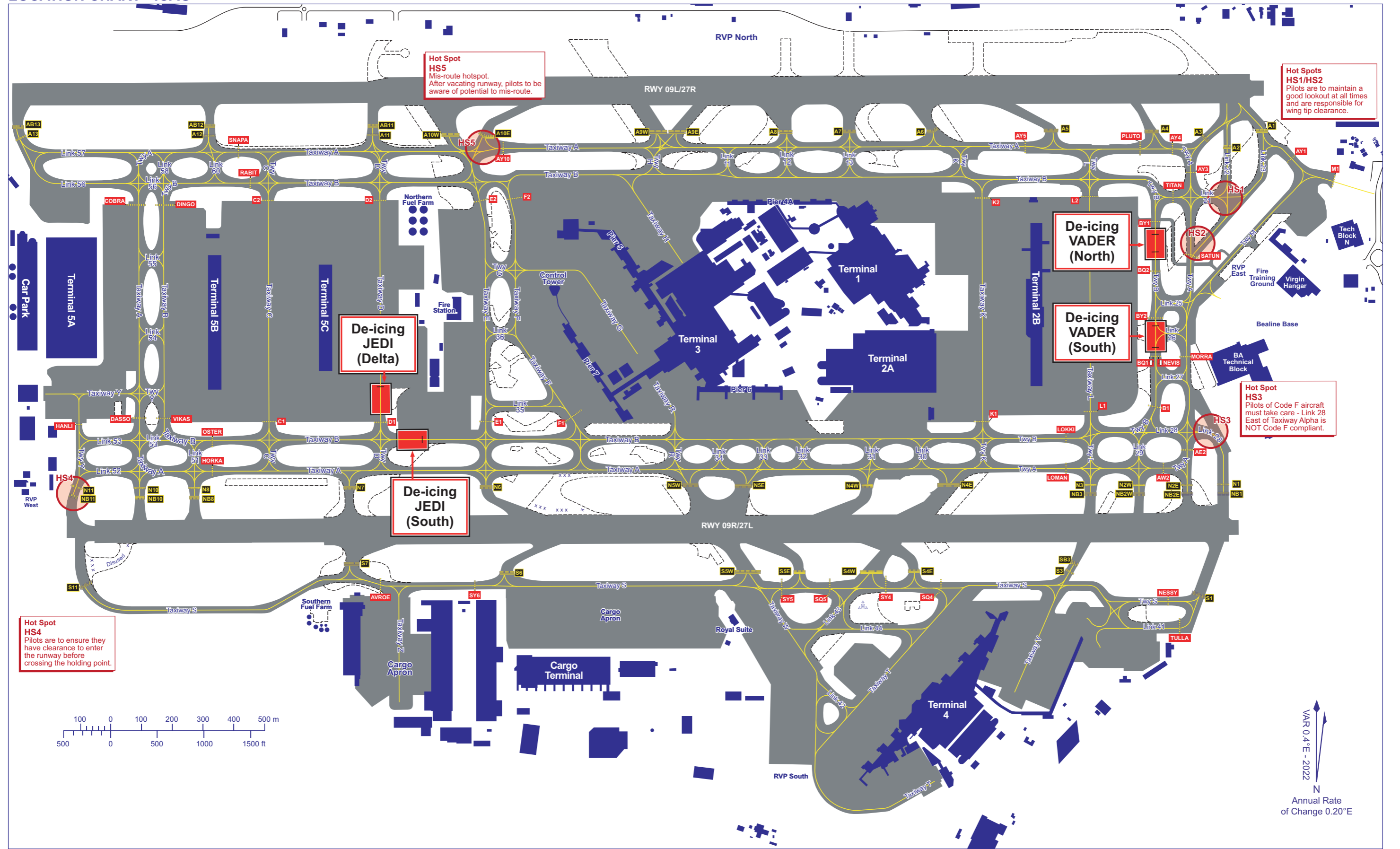
AD 2-EGLL-2-7

AIRCRAFT GROUND MOVEMENT - REMOTE DE-ICING AREAS
LOCATION CHART - ICAO

ARP 512839N 0002741W

AD ELEV 83FT

LONDON HEATHROW
EGLL



CHANGE (6/24): DISUSED EDITORIAL.

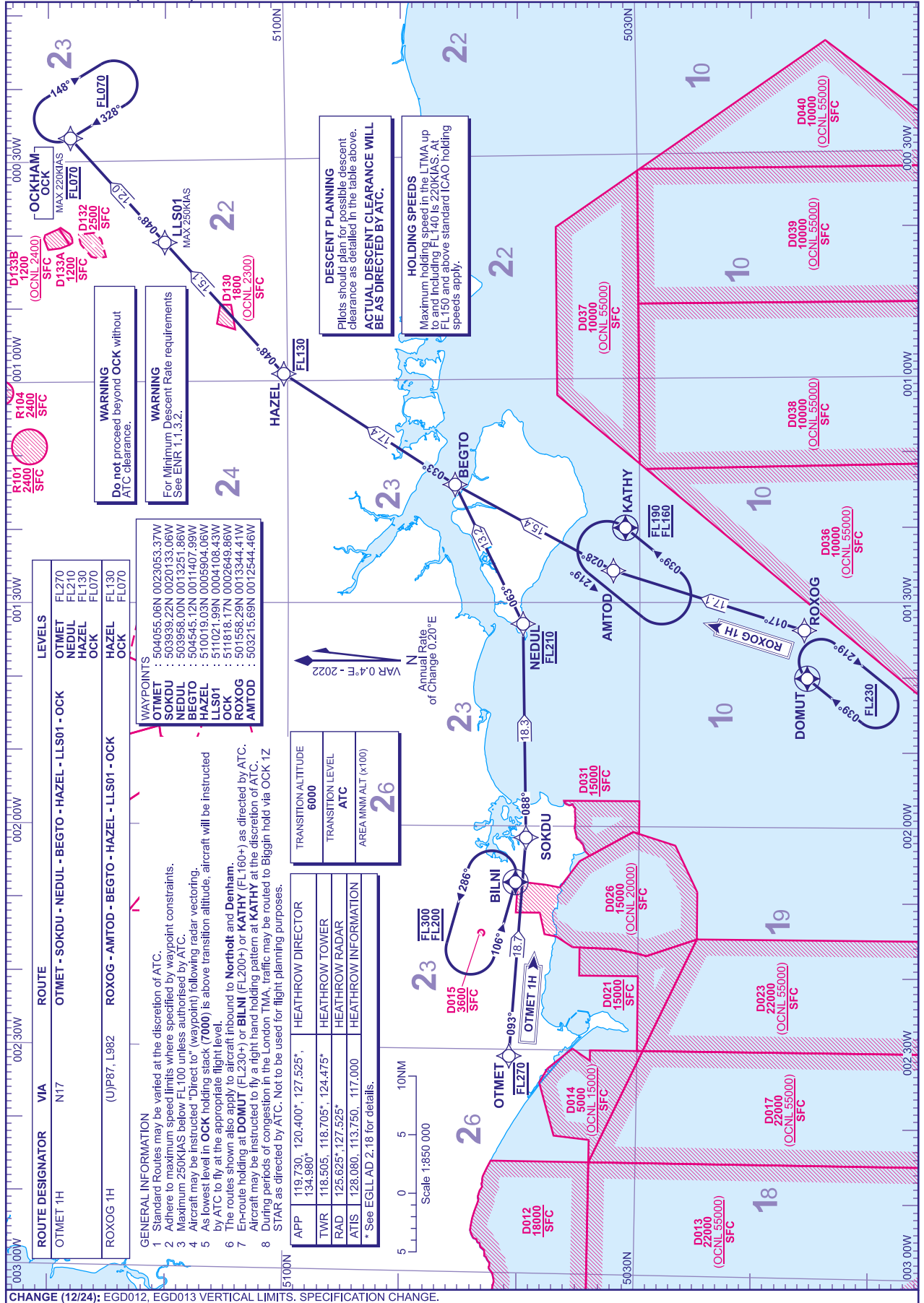
AERO INFO DATE 09 APR 24

AD 2-EGLL-2-8

RNAV1 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

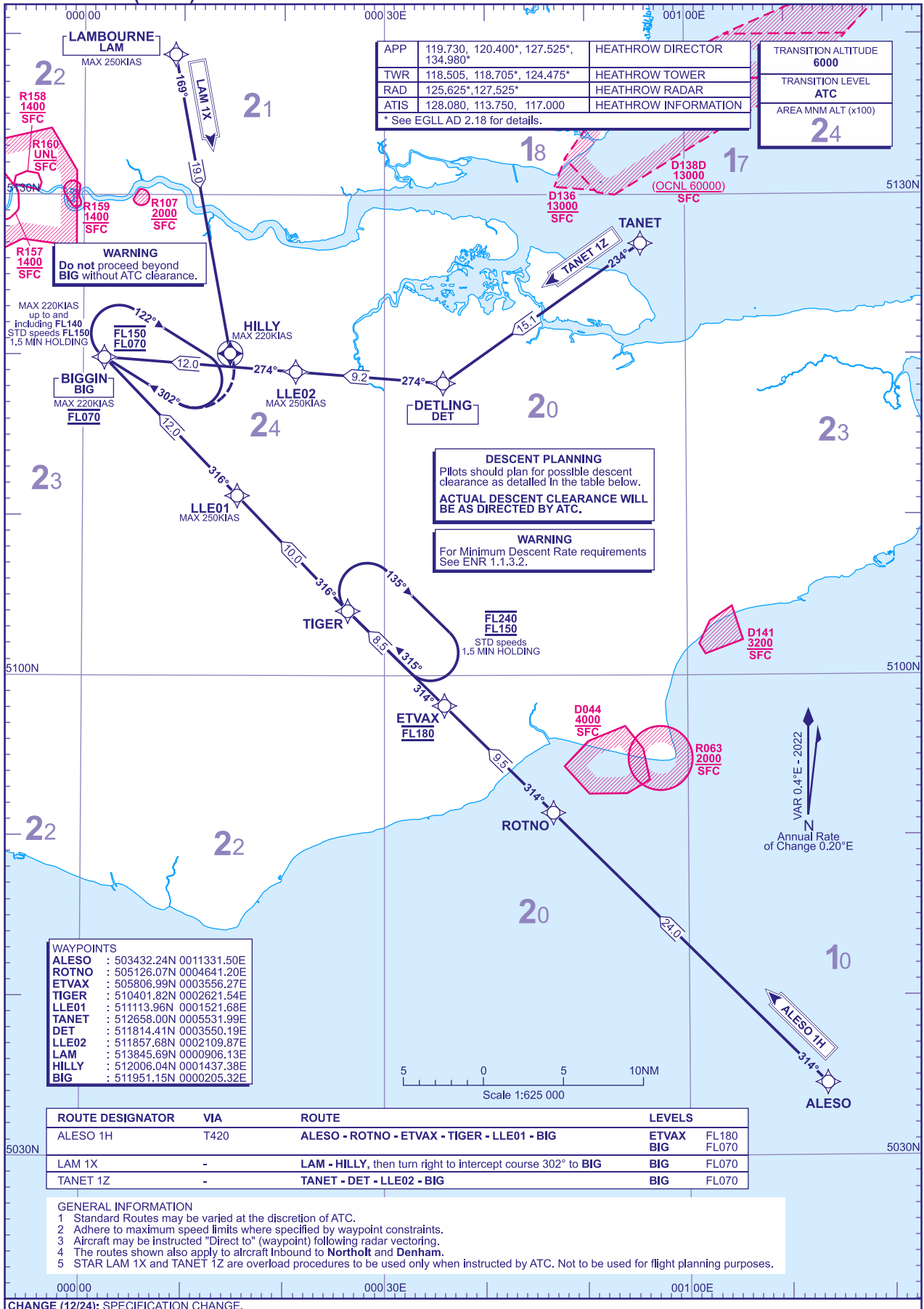
LONDON HEATHROW
OTMET 1H ROXOG 1H



**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

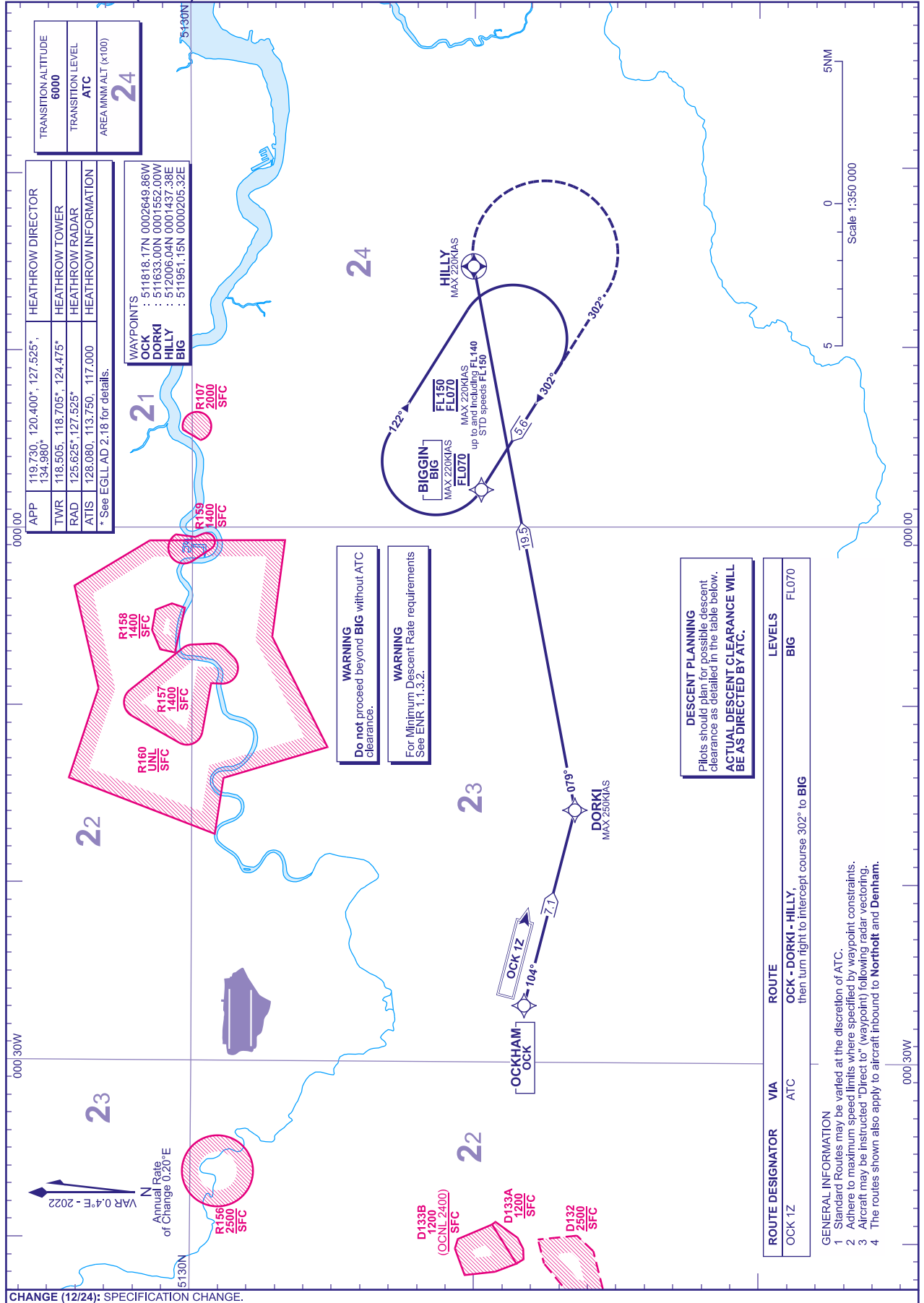
**LONDON HEATHROW
ALESO 1H LAM 1X TANET 1Z**



**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
OCK 1Z**



CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 30 AUG 24

AD 2-EGLL-7-3

TRANSITION ALTITUDE	6000
TRANSITION LEVEL	ATC
AREA MNM ALT (x100)	24

HEATHROW DIRECTOR	HEATHROW TOWER
HEATHROW RADAR	HEATHROW INFORMATION
APP 119.730, 120.400*, 127.525*, 134.960	TWR 118.505, 118.705*, 124.475*
RAD 125.625*, 127.525*	ATIS 128.080, 113.750, 117.000

WAYPOINTS	HEATHROW DIRECTOR
OCK : 511818.17N 0002649.86W	HEATHROW TOWER
HILLY : 511633.00N 0001552.00W	HEATHROW RADAR
BIG : 512006.04N 0001437.98E	HEATHROW INFORMATION
	ATIS

WARNING
Do not proceed beyond BIG without ATC clearance.

WARNING
For Minimum Descent Rate requirements See ENR 1.1.3.2.

DESCENT PLANNING
Pilots should plan for possible descent clearance as detailed in the table below.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC.

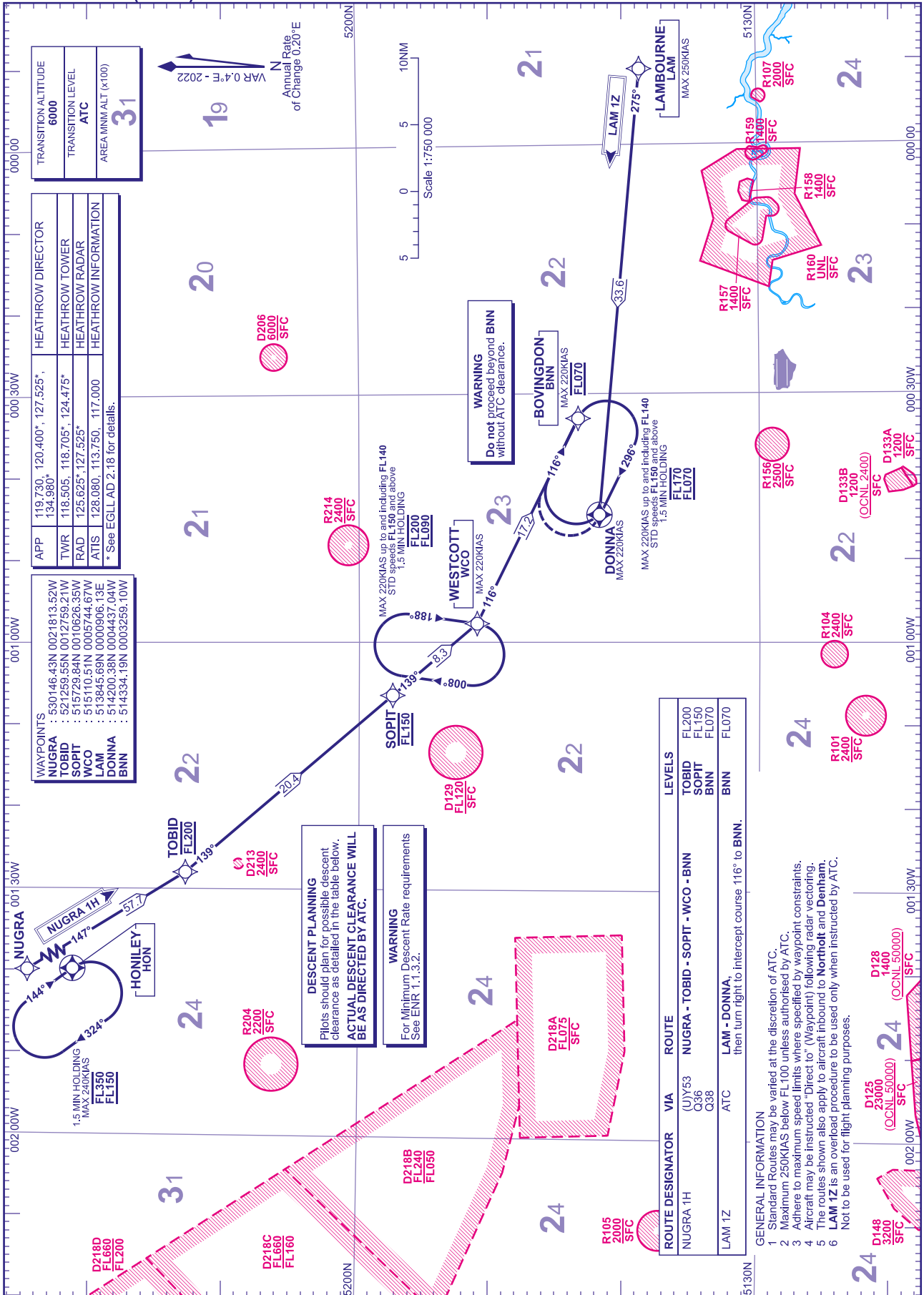
ROUTE DESIGNATOR	VIA	ROUTE	LEVELS
OCK 1Z	ATC	OCK - DORKI - HILLY, then turn right to intercept course 302° to BIG	BIG FL070

- GENERAL INFORMATION**
- Standard Routes may be varied at the discretion of ATC.
 - Adhere to maximum speed limits where specified by waypoint constraints.
 - Aircraft may be instructed "Direct to" (waypoint) following radar vectoring.
 - The routes shown also apply to aircraft inbound to Northolt and Denham.

**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
NUGRA 1H LAM 1Z**

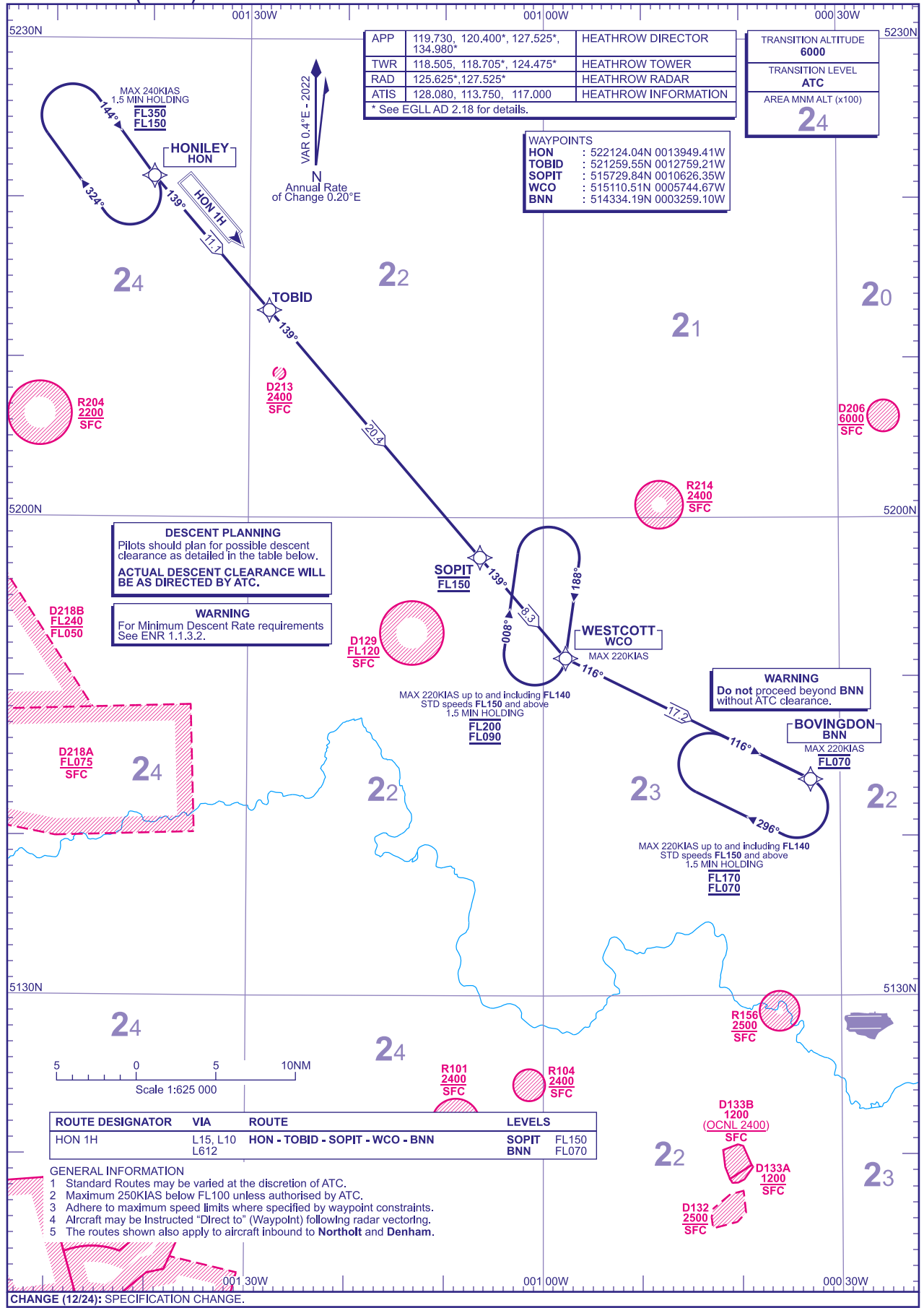


CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 02 SEP 24

**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
HON 1H**



APP	119.730, 120.400*, 127.525*, 134.980*	HEATHROW DIRECTOR
TWR	118.505, 118.705*, 124.475*	HEATHROW TOWER
RAD	125.625*, 127.525*	HEATHROW RADAR
ATIS	128.080, 113.750, 117.000	HEATHROW INFORMATION

* See EGLL AD 2.18 for details.

TRANSITION ALTITUDE	6000
TRANSITION LEVEL	ATC
AREA MNM ALT (x100)	24

WAYPOINTS	
HON	: 522124.04N 0013949.41W
TOBID	: 521259.55N 0012759.21W
SOPIT	: 515729.84N 0010626.35W
WCO	: 515110.51N 0005744.67W
BNN	: 514334.19N 0003259.10W

DESCENT PLANNING
Pilots should plan for possible descent clearance as detailed in the table below.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC.

WARNING
For Minimum Descent Rate requirements See ENR 1.1.3.2.

WARNING
Do not proceed beyond BNN without ATC clearance.

ROUTE DESIGNATOR	VIA	ROUTE	LEVELS
HON 1H	L15, L10 L612	HON - TOBID - SOPIT - WCO - BNN	SOPIT FL150 BNN FL070

- GENERAL INFORMATION**
- Standard Routes may be varied at the discretion of ATC.
 - Maximum 250KIAS below FL100 unless authorised by ATC.
 - Adhere to maximum speed limits where specified by waypoint constraints.
 - Aircraft may be Instructed "Direct to" (Waypoint) following radar vectoring.
 - The routes shown also apply to aircraft inbound to Northolt and Denham.

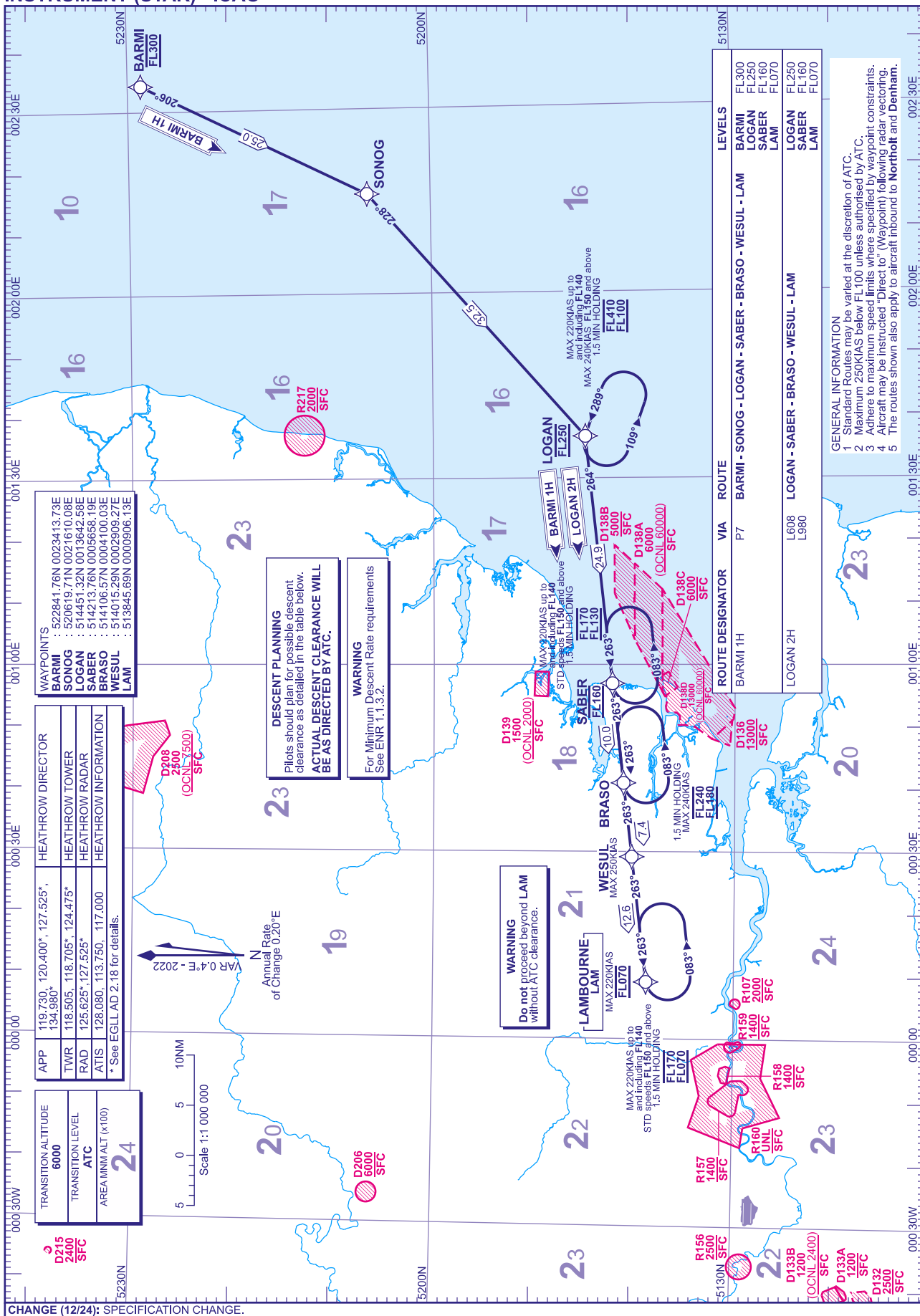
CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 03 SEP 24

AD 2-EGLL-7-5

**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
BARM1 1H LOGAN 2H**

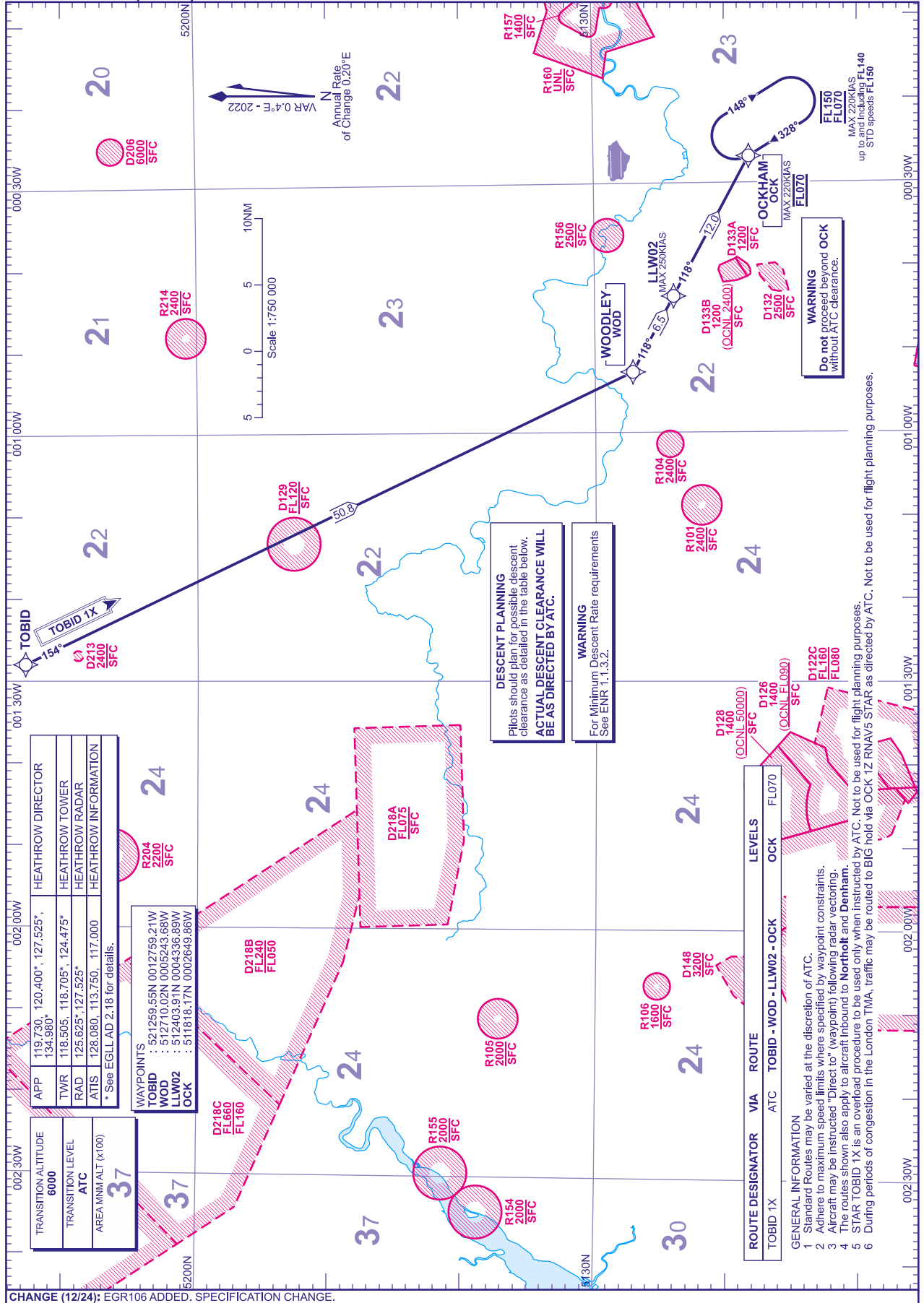


CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 04 SEP 24

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

DISTANCES IN NAUTICAL MILES TRACKS ARE MAGNETIC ALTITUDES AND ELEVATIONS ARE IN FEET

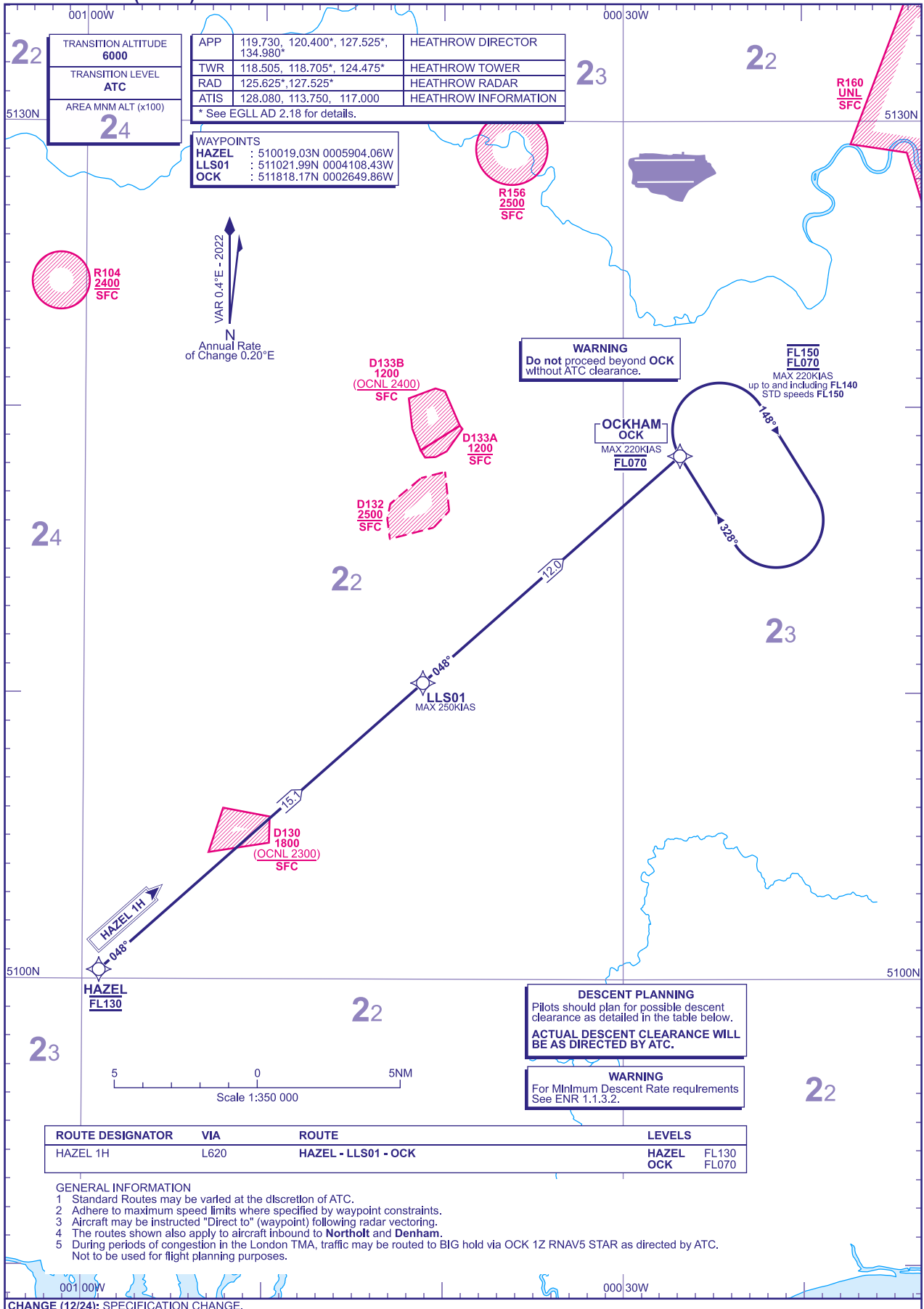
LONDON HEATHROW TOBID 1X



**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

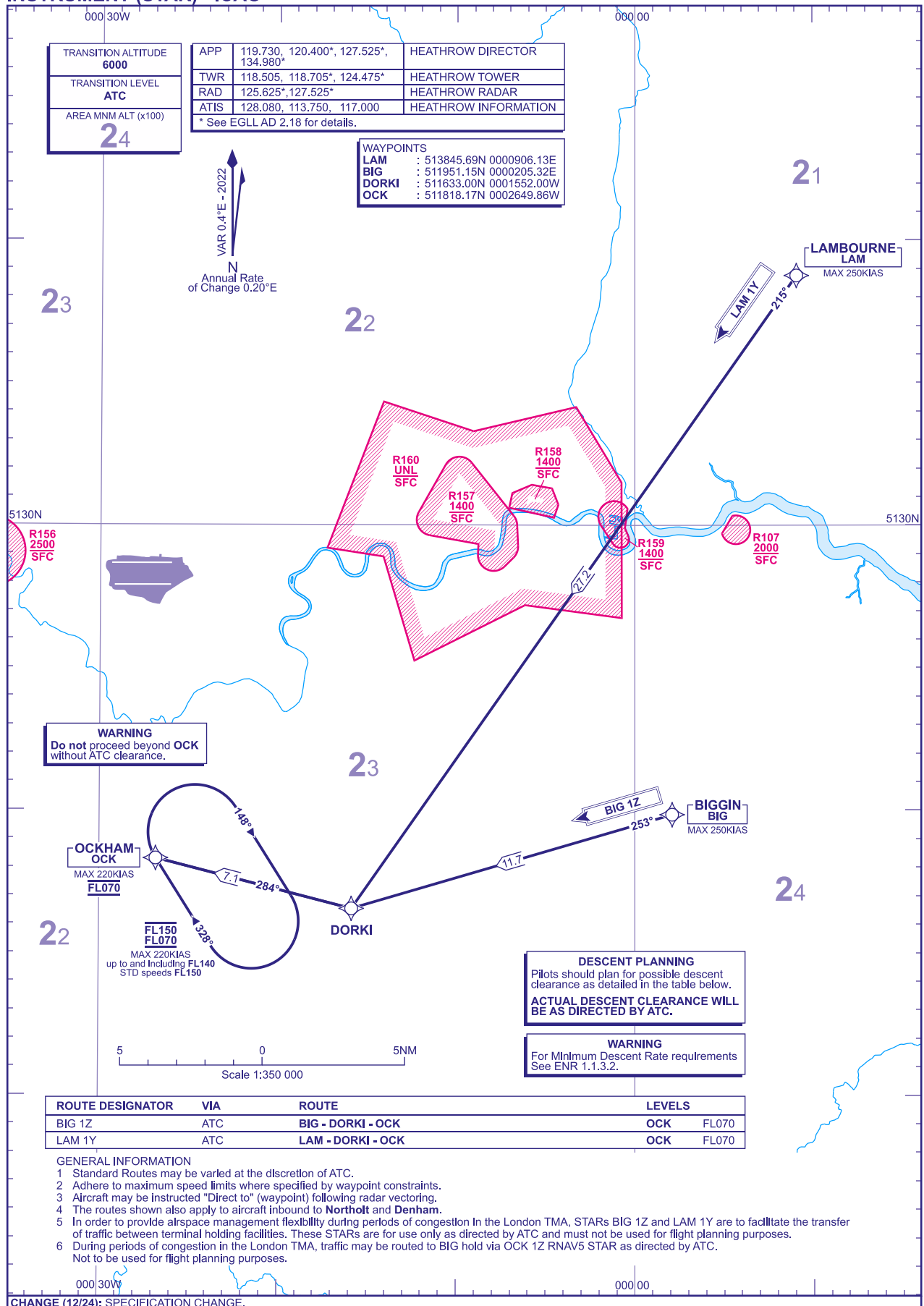
**LONDON HEATHROW
HAZEL 1H**



**RNAV5 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

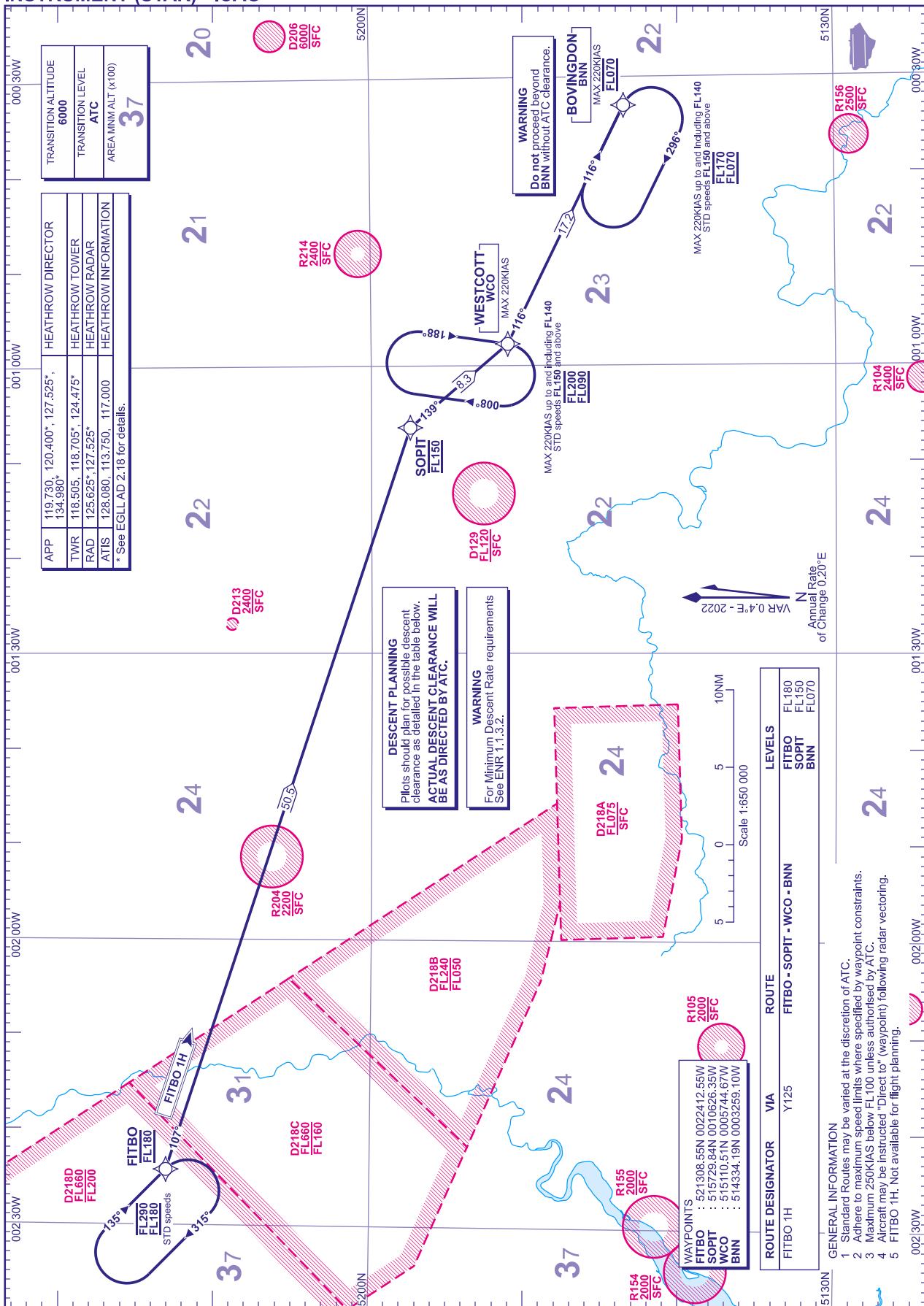
**LONDON HEATHROW
BIG 1Z LAM 1Y**



**RNAV1 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
FITBO 1H**



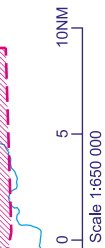
TRANSITION ALTITUDE	6000
TRANSITION LEVEL	ATC
AREA MIM ALT (x100)	37

APP	119.730, 120.400*, 127.525*	HEATHROW DIRECTOR
TWR	118.505, 118.705*, 124.475*	HEATHROW TOWER
RAD	125.625*, 127.525*	HEATHROW RADAR
ATIS	128.080, 113.750, 117.000	HEATHROW INFORMATION

* See EGLL AD 2.18 for details.

DESCENT PLANNING
Pilots should plan for possible descent clearance as detailed in the table below.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC.

WARNING
For Minimum Descent Rate requirements See ENR 1.1.3.2.



ROUTE DESIGNATOR	VIA	ROUTE	LEVELS
FITBO 1H	Y125	FITBO - SOPIT - WCO - BNN	FL180 FL150 FL070

WAYPOINTS	521308.55N 0022412.55W
FITBO	515729.84N 0010626.35W
SOPIT	515110.51N 0005744.67W
WCO	514334.19N 0003259.10W
BNN	

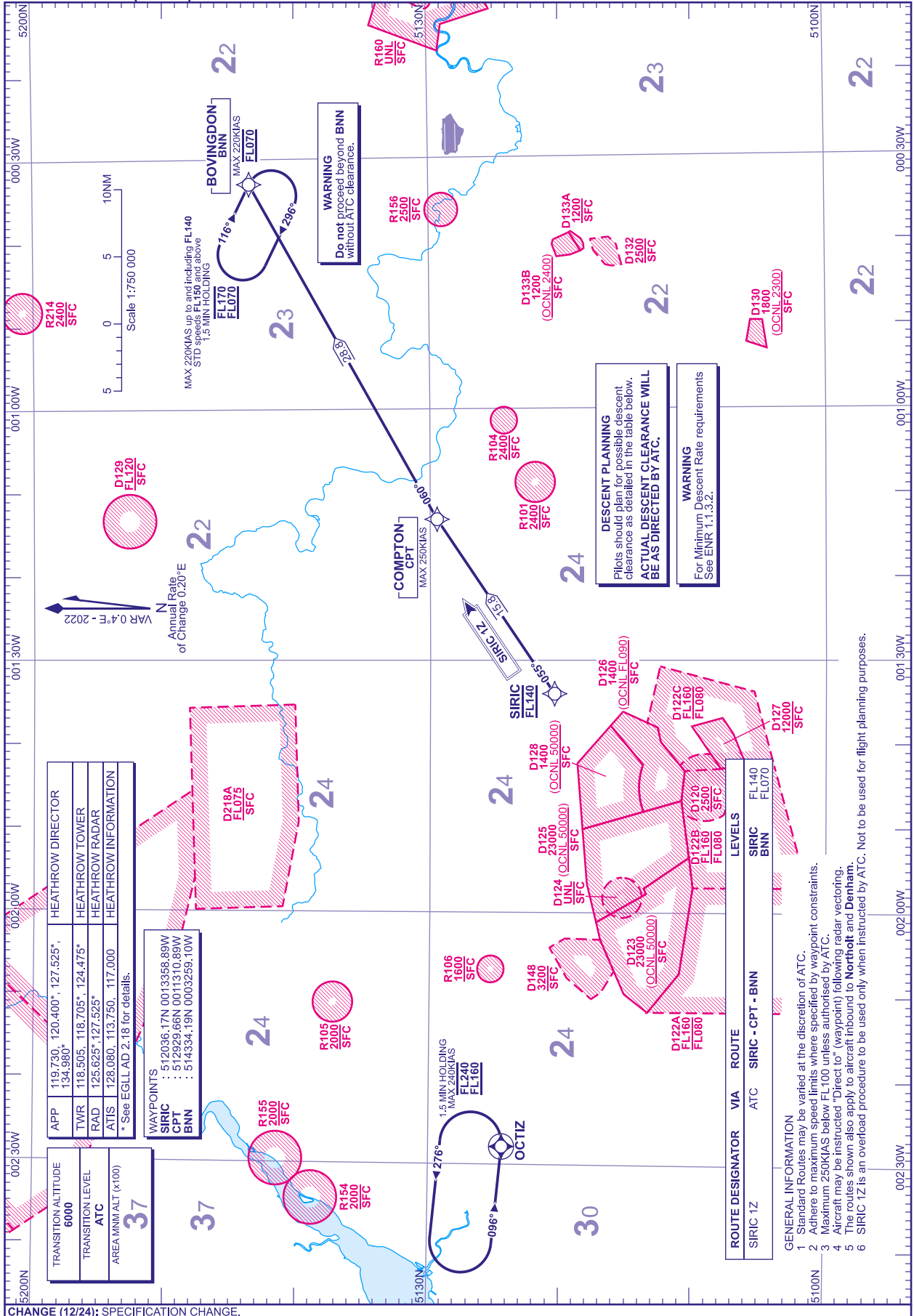
- GENERAL INFORMATION**
- Standard Routes may be varied at the discretion of ATC.
 - Adhere to maximum speed limits where specified by waypoint constraints.
 - Maximum 250KIAS below FL100 unless authorised by ATC.
 - Aircraft may be instructed "Direct to" (waypoint) following radar vectoring.
 - FITBO 1H. Not available for flight planning.

CHANGE (12/24): EGR104 ADDED. SPECIFICATION CHANGE.
AERO INFO DATE 12 SEP 24

**RNAV1 (DME/DME or GNSS)
STANDARD ARRIVAL CHART -
INSTRUMENT (STAR) - ICAO**

DISTANCES IN NAUTICAL MILES
TRACKS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

**LONDON HEATHROW
SIRIC 1Z**



CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 16 SEP 24

Standard Instrument Arrival Coding Tables

LONDON HEATHROW OTMET 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
OTMET1H	001	IF	OTMET	504055.06N 0023053.37W	N	-	-	-	-	FL270	-	RNAV1
OTMET1H	002	TF	SOKDU	503939.22N 0020133.06W	N	093° (093.7°)	0.4	18.7	LEFT	-	-	RNAV1
OTMET1H	003	TF	NEDUL	503958.00N 0013251.86W	N	088° (088.8°)	0.4	18.3	LEFT	FL210	-	RNAV1
OTMET1H	004	TF	BEGTO	504545.12N 0011407.99W	N	063° (063.9°)	0.4	13.2	LEFT	-	-	RNAV1
OTMET1H	005	TF	HAZEL	510019.03N 0005904.06W	N	033° (033.1°)	0.4	17.4	RIGHT	FL130	-	RNAV1
OTMET1H	006	TF	LLS01	511021.99N 0004108.43W	N	048° (048.2°)	0.4	15.1	-	-	-250	RNAV1
OTMET1H	007	TF	OCK	511818.17N 0002649.86W	N	048° (048.4°)	0.4	12.0	-	FL070	-220	RNAV1

LONDON HEATHROW ROXOG 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
ROXOG1H	001	IF	ROXOG	501558.29N 0013344.41W	N	-	-	-	-	-	-	RNAV1
ROXOG1H	002	TF	AMTOD	503215.69N 0012544.46W	N	017° (017.4°)	0.4	17.1	RIGHT	-	-	RNAV1
ROXOG1H	003	TF	BEGTO	504545.12N 0011407.99W	N	028° (028.6°)	0.4	15.4	RIGHT	-	-	RNAV1
ROXOG1H	004	TF	HAZEL	510019.03N 0005904.06W	N	033° (033.1°)	0.4	17.4	RIGHT	FL130	-	RNAV1
ROXOG1H	005	TF	LLS01	511021.99N 0004108.43W	N	048° (048.2°)	0.4	15.1	-	-	-250	RNAV1
ROXOG1H	006	TF	OCK	511818.17N 0002649.86W	N	048° (048.4°)	0.4	12.0	-	FL070	-220	RNAV1

LONDON HEATHROW ALESO 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
ALESO1H	001	IF	ALESO	503432.24N 0011331.50E	N	-	-	-	-	-	-	RNAV5
ALESO1H	002	TF	ROTNO	505126.07N 0004641.20E	N	315° (314.9°)	0.4	24.0	-	-	-	RNAV5
ALESO1H	003	TF	ETVAX	505806.99N 0003556.27E	N	314° (314.6°)	0.4	9.5	-	FL180	-	RNAV5
ALESO1H	004	TF	TIGER	510401.82N 0002621.54E	N	314° (314.4°)	0.4	8.5	-	-	-	RNAV5
ALESO1H	005	TF	LLE01	511113.96N 0001521.68E	N	316° (316.2°)	0.4	10.0	-	-	-250	RNAV5
ALESO1H	006	TF	BIG	511951.15N 0000205.32E	N	316° (316.1°)	0.4	12.0	-	FL070	-220	RNAV5

LONDON HEATHROW LAM 1X

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LAM1X	001	IF	LAM	513845.69N 0000906.13E	N	-	-	-	-	-	-250	RNAV5
LAM1X	002	TF	HILLY	512006.04N 0001437.38E	Y	169° (169.5°)	0.4	19.0	RIGHT	-	-220	RNAV5
LAM1X	003	CF	BIG	511951.15N 0000205.32E	N	302° (302.3°)	0.4	-	-	FL070	-220	RNAV5

CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 23 SEP 24

AD 2-EGLL-7-13

Standard Instrument Arrival Coding Tables

LONDON HEATHROW TANET 1Z

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
TANET1Z	001	IF	TANET	512658.00N 0005531.99E	N	-	-	-	-	-	-	RNAV5
TANET1Z	002	TF	DET	511814.41N 0003550.19E	N	234° (234.8°)	0.4	15.1	RIGHT	-	-	RNAV5
TANET1Z	003	TF	LLE02	511857.68N 0002109.87E	N	274° (274.6°)	0.4	9.2	-	-	-250	RNAV5
TANET1Z	004	TF	BIG	511951.15N 0000205.32E	N	274° (274.4°)	0.4	12.0	-	FL070	-220	RNAV5

LONDON HEATHROW OCK 1Z

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
OCK1Z	001	IF	OCK	511818.17N 0002649.86W	N	-	-	-	-	-	-	RNAV5
OCK1Z	002	TF	DORKI	511633.00N 0001552.00W	N	104° (104.2°)	0.4	7.1	LEFT	-	-250	RNAV5
OCK1Z	003	TF	HILLY	512006.04N 0001437.38E	Y	079° (079.3°)	0.4	19.5	RIGHT	-	-220	RNAV5
OCK1Z	004	CF	BIG	511951.15N 0000205.32E	N	302° (302.3°)	0.4	-	-	FL070	-220	RNAV5

LONDON HEATHROW NUGRA 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
NUGRA1H	001	IF	NUGRA	530146.43N 0021813.52W	N	-	-	-	-	-	-	RNAV5
NUGRA1H	002	TF	TOBID	521259.55N 0012759.21W	N	147° (147.6°)	0.4	57.7	LEFT	FL200	-	RNAV5
NUGRA1H	003	TF	SOPIT	515729.84N 0010626.35W	N	139° (139.3°)	0.4	20.4	-	FL150	-	RNAV5
NUGRA1H	004	TF	WCO	515110.51N 0005744.67W	N	139° (139.6°)	0.4	8.3	LEFT	-	-220	RNAV5
NUGRA1H	005	TF	BNN	514334.19N 0003259.10W	N	116° (116.2°)	0.4	17.2	-	FL070	-220	RNAV5

LONDON HEATHROW LAM 1Z

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LAM1Z	001	IF	LAM	513845.69N 0000906.13E	N	-	-	-	-	-	-250	RNAV5
LAM1Z	002	TF	DONNA	514200.38N 0004437.04W	Y	275° (275.9°)	0.4	33.6	RIGHT	-	-220	RNAV5
LAM1Z	003	CF	BNN	514334.19N 0003259.10W	N	116° (116.5°)	0.4	-	-	FL070	-220	RNAV5

Standard Instrument Arrival Coding Tables

LONDON HEATHROW HON 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
HON1H	001	IF	HON	522124.04N 0013949.41W	N	-	-	-	-	-	-	RNAV5
HON1H	002	TF	TOBID	521259.55N 0012759.21W	N	139° (139.1°)	0.4	11.1	-	-	-	RNAV5
HON1H	003	TF	SOPIT	515729.84N 0010626.35W	N	139° (139.3°)	0.4	20.4	-	FL150	-	RNAV5
HON1H	004	TF	WCO	515110.51N 0005744.67W	N	139° (139.6°)	0.4	8.3	LEFT	-	-220	RNAV5
HON1H	005	TF	BNN	514334.19N 0003259.10W	N	116° (116.2°)	0.4	17.2	-	FL070	-220	RNAV5

LONDON HEATHROW BARM1 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
BARM1H	001	IF	BARM1	522841.76N 0023413.73E	N	-	-	-	-	FL300	-	RNAV5
BARM1H	002	TF	SONOG	520619.71N 0021610.08E	N	206° (206.5°)	0.4	25.0	RIGHT	-	-	RNAV5
BARM1H	003	TF	LOGAN	514451.32N 0013642.58E	N	228° (228.9°)	0.4	32.5	RIGHT	FL250	-	RNAV5
BARM1H	004	TF	SABER	514213.76N 0005658.19E	N	264° (264.2°)	0.4	24.9	-	FL160	-	RNAV5
BARM1H	005	TF	BRASO	514106.57N 0004100.03E	N	263° (263.7°)	0.4	10.0	-	-	-	RNAV5
BARM1H	006	TF	WESUL	514015.29N 0002909.27E	N	263° (263.5°)	0.4	7.4	-	-	-250	RNAV5
BARM1H	007	TF	LAM	513845.69N 0000906.13E	N	263° (263.3°)	0.4	12.6	-	FL070	-220	RNAV5

LONDON HEATHROW LOGAN 2H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LOGAN2H	001	IF	LOGAN	514451.32N 0013642.58E	N	-	-	-	-	FL250	-	RNAV5
LOGAN2H	002	TF	SABER	514213.76N 0005658.19E	N	264° (264.2°)	0.4	24.9	-	FL160	-	RNAV5
LOGAN2H	003	TF	BRASO	514106.57N 0004100.03E	N	263° (263.7°)	0.4	10.0	-	-	-	RNAV5
LOGAN2H	004	TF	WESUL	514015.29N 0002909.27E	N	263° (263.5°)	0.4	7.4	-	-	-250	RNAV5
LOGAN2H	005	TF	LAM	513845.69N 0000906.13E	N	263° (263.3°)	0.4	12.6	-	FL070	-220	RNAV5

LONDON HEATHROW TOBID 1X

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
TOBID1X	001	IF	TOBID	521259.55N 0012759.21W	N	-	-	-	-	-	-	RNAV5
TOBID1X	002	TF	WOD	512710.02N 0005243.68W	N	154° (154.3°)	0.4	50.8	LEFT	-	-	RNAV5
TOBID1X	003	TF	LLW02	512403.91N 0004336.89W	N	118° (118.5°)	0.4	6.5	-	-	-250	RNAV5
TOBID1X	004	TF	OCK	511818.17N 0002649.86W	N	118° (118.6°)	0.4	12.0	-	FL070	-220	RNAV5

CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 18 SEP 24

AD 2-EGLL-7-15

Standard Instrument Arrival Coding Tables

LONDON HEATHROW HAZEL 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
HAZEL1H	001	IF	HAZEL	510019.03N 0005904.06W	N	-	-	-	-	FL130	-	RNAV5
HAZEL1H	002	TF	LLS01	511021.99N 0004108.43W	N	048° (048.2°)	0.4	15.1	-	-	-250	RNAV5
HAZEL1H	003	TF	OCK	511818.17N 0002649.86W	N	048° (048.4°)	0.4	12.0	-	FL070	-220	RNAV5

LONDON HEATHROW BIG 1Z

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
BIG1Z	001	IF	BIG	511951.15N 0000205.32E	N	-	-	-	-	-	-250	RNAV5
BIG1Z	002	TF	DORKI	511633.00N 0001552.00W	N	253° (253.8°)	0.4	11.7	RIGHT	-	-	RNAV5
BIG1Z	003	TF	OCK	511818.17N 0002649.86W	N	284° (284.4°)	0.4	7.1	-	FL070	-220	RNAV5

LONDON HEATHROW LAM 1Y

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LAM1Y	001	IF	LAM	513845.69N 0000906.13E	N	-	-	-	-	-	-250	RNAV5
LAM1Y	002	TF	DORKI	511633.00N 0001552.00W	N	215° (215.2°)	0.4	27.2	RIGHT	-	-	RNAV5
LAM1Y	003	TF	OCK	511818.17N 0002649.86W	N	284° (284.4°)	0.4	7.1	-	FL070	-220	RNAV5

LONDON HEATHROW FITBO 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
FITBO1H	001	IF	FITBO	521308.55N 0022412.55W	N	-	-	-	-	FL180	-	RNAV1
FITBO1H	002	TF	SOPIT	515729.84N 0010626.35W	N	107° (107.6°)	0.4	50.5	RIGHT	FL150	-	RNAV1
FITBO1H	003	TF	WCO	515110.51N 0005744.67W	N	139° (139.6°)	0.4	8.3	LEFT	-	-220	RNAV1
FITBO1H	004	TF	BNN	514334.19N 0003259.10W	N	116° (116.2°)	0.4	17.2	-	FL070	-220	RNAV1

Standard Instrument Arrival Coding Tables

LONDON HEATHROW SIRIC 1H

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
SIRIC1H	001	IF	SIRIC	512036.17N 0013358.89W	N	-	-	-	-	FL140	-	RNAV1
SIRIC1H	002	TF	NIGIT	511846.96N 0011014.71W	N	096° (096.8°)	0.4	15.0	LEFT	-	-	RNAV1
SIRIC1H	003	TF	LLW03	511832.83N 0004556.94W	N	090° (090.7°)	0.4	15.2	-	-	-250	RNAV1
SIRIC1H	004	TF	OCK	511818.17N 0002649.86W	N	091° (091.0°)	0.4	12.0	-	FL070	-220	RNAV1

LONDON HEATHROW SIRIC 1Z

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
SIRIC1Z	001	IF	SIRIC	512036.17N 0013358.89W	N	-	-	-	-	FL140	-	RNAV1
SIRIC1Z	002	TF	CPT	512929.66N 0011310.89W	N	055° (055.5°)	0.4	15.8	-	-	-250	RNAV1
SIRIC1Z	003	TF	BNN	514334.19N 0003259.10W	N	060° (060.4°)	0.4	28.8	-	FL070	-220	RNAV1

RNAV Hold Coding Tables

LONDON HEATHROW BIG Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
BIG	-	-	BIG	511951.15N 0000205.32E	Y	302° (302.3°)	0.4	1 MIN up to FL140. 1.5MIN FL150.	RIGHT	-FL150 +FL070	-220*	RNAV5

*up to and including FL140
STD speeds FL150

LONDON HEATHROW BNN Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
BNN	-	-	BNN	514334.19N 0003259.10W	Y	116° (116.5°)	0.4	1 MIN up to FL140. 1.5MIN FL150+.	RIGHT	-FL170 +FL070	-220*	RNAV1/ RNAV5

*up to and including FL140
STD speeds FL150 and above

LONDON HEATHROW BRASO Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
BRASO	-	-	BRASO	514106.57N 0004100.03E	Y	263° (263.0°)	0.4	1.5 MIN	LEFT	-FL240 +FL180	-240	RNAV5

LONDON HEATHROW FITBO Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
FITBO	-	-	FITBO	521308.55N 0022412.55W	Y	135° (135.5°)	0.4	1.5 MIN	RIGHT	-FL290 +FL180	-	RNAV1

LONDON HEATHROW HON Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
HON	-	-	HON	522124.04N 0013949.41W	Y	144° (144.8°)	0.4	1.5 MIN	RIGHT	-FL350 +FL150	-240	RNAV5

LONDON HEATHROW LAM Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LAM	-	-	LAM	513845.69N 0000906.13E	Y	263° (263.0°)	0.4	1 MIN up to FL140. 1.5MIN FL150+.	LEFT	-FL170 +FL070	-220*	RNAV5

*up to and including FL140
STD speeds FL150 and above

LONDON HEATHROW LOGAN Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
LOGAN	-	-	LOGAN	514451.32N 0013642.58E	Y	289° (289.5°)	0.4	1 MIN up to FL140. 1.5MIN FL150+.	LEFT	-FL410 +FL100	-220*	RNAV5

*up to and including FL140
MAX 240KIAS FL150 and above

CHANGE (12/24): SPECIFICATION CHANGE.
AERO INFO DATE 23 SEP 24

AD 2-EGLL-7-18

RNAV Hold Coding Tables

LONDON HEATHROW OCK Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
OCK	-	-	OCK	511818.17N 0002649.86W	Y	328° (328.5°)	0.4	1MIN up to FL140. 1.5MIN FL150.	RIGHT	-FL150 +FL070	-220*	RNAV1/ RNAV5

*up to and including FL140
STD speeds FL150

LONDON HEATHROW OCTIZ Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
OCTIZ	-	-	OCTIZ	512425.86N 0022753.73W	Y	096° (096.1°)	0.4	1.5MIN	LEFT	-FL240 +FL160	-240	RNAV1

LONDON HEATHROW SABER Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
SABER	-	-	SABER	514213.76N 0005658.19E	Y	263° (263.0°)	0.4	1MIN up to FL140. 1.5MIN FL150+.	LEFT	-FL170 +FL130	-220*	RNAV5

*up to and including FL140
STD speeds FL150 and above

LONDON HEATHROW TIGER Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
TIGER	-	-	TIGER	510401.82N 0002621.54E	Y	315° (315.9°)	0.4	1.5MIN	RIGHT	-FL240 +FL150	-	RNAV5

LONDON HEATHROW WCO Hold

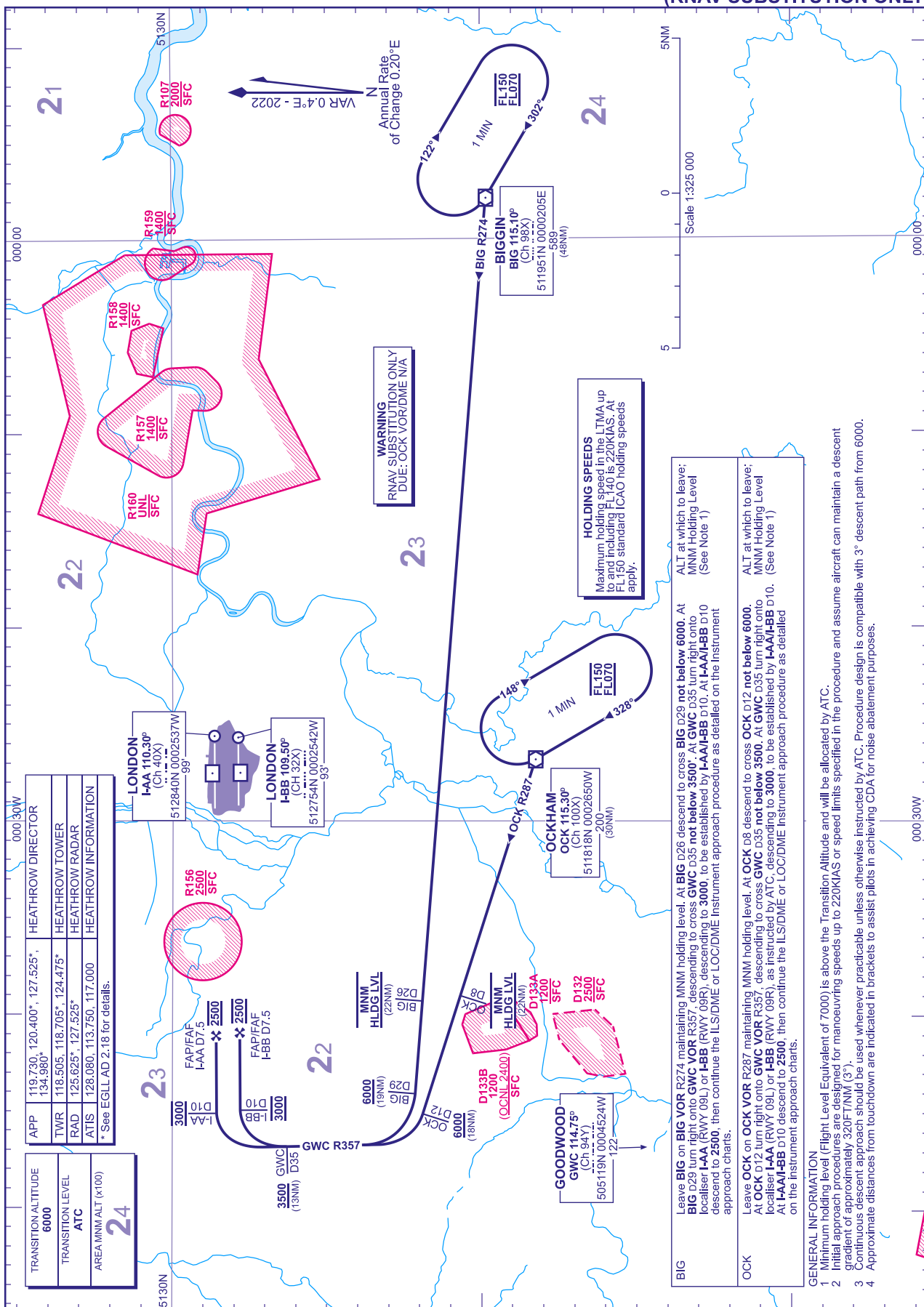
Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
WCO	-	-	WCO	515110.51N 0005744.67W	Y	188° (188.4°)	0.4	1MIN up to FL140. 1.5MIN FL150+.	RIGHT	-FL200 +FL090	-220*	RNAV1/ RNAV5

*up to and including FL140
STD speeds FL150 and above

**INITIAL APPROACH PROCEDURES
ILS RWY 09L/R**

DISTANCES IN NAUTICAL MILES
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ALTITUDES AND ELEVATIONS IN FEET

**LONDON HEATHROW
via BIG and OCK
(RNAV SUBSTITUTION ONLY)**



CHANGE (13/23): RNAV SUBSTITUTION ONLY PROCEDURE. HOLDS.
AERO INFO DATE 17 OCT 23

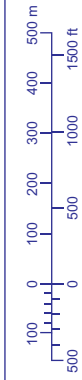
LONDON LUTON
EGGW

AD ELEV 527FT

ARP 515229N 0002206W

AERODROME
CHART - ICAO

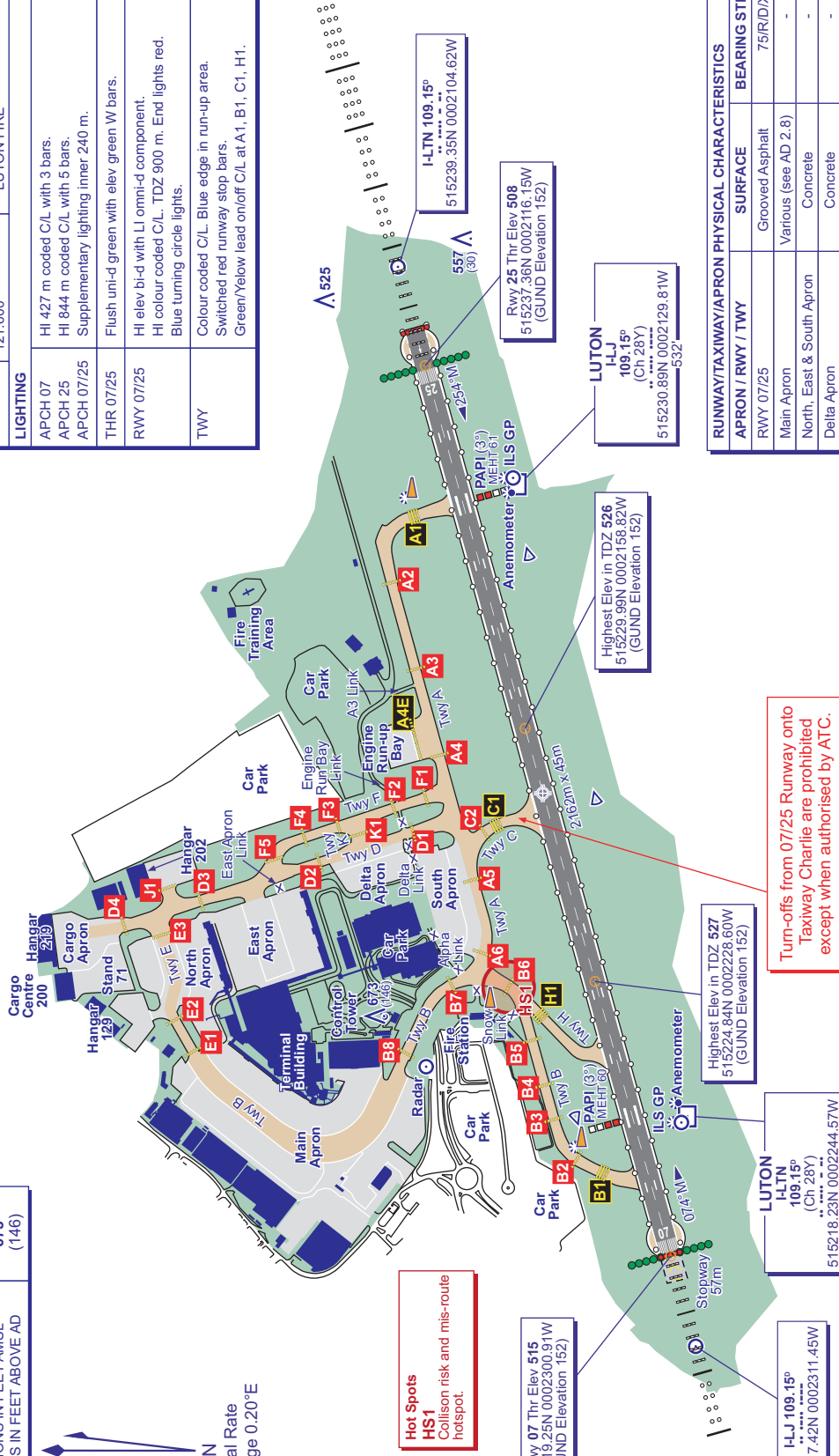
COM		LUTON INFO	
ATIS	120.580	LUTON TOWER	
TWR	132.555	LUTON GROUND	
	121.755 (GMC)	LUTON DELIVERY	
	121.885	LUTON FIRE	
	121.600		
LIGHTING			
APCH 07	HI 427 m coded C/L with 3 bars.		
APCH 25	HI 844 m coded C/L with 5 bars.		
APCH 07/25	Supplementary lighting inner 240 m.		
THR 07/25	Flush uni-d green with elev green W bars.		
RWY 07/25	HI elev bi-d with LI omni-d component. HI colour coded C/L. TDZ 900 m. End lights red. Blue turning circle lights.		
TWY	Colour coded C/L. Blue edge in run-up area. Switched red runway stop bars. Green/Yellow lead on/off C/L at A1, B1, C1, H1.		



GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.
BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL
673
(146)
HEIGHTS IN FEET ABOVE AD

VAR 0.4°E - 2022

Annual Rate
of Change 0.20°E



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
APRON / RWY / TWY	SURFACE	BEARING STRENGTH
RWY 07/25	Grooved Asphalt	75/IR/D/XT
Main Apron	Various (see AD 2.8)	-
North, East & South Apron	Concrete	-
Delta Apron	Concrete	-
Cargo Apron	Concrete/Asphalt	-
TWY A, B, C, D, F, H, K	Asphalt	-
TWY E	Concrete	-

CHANGE (8/24): AIMING POINT MARKERS, ANEMOMETERS & GP ANTENNAS LIT. AD BOUNDARY, OBSTACLE LIT. EDITORIAL.

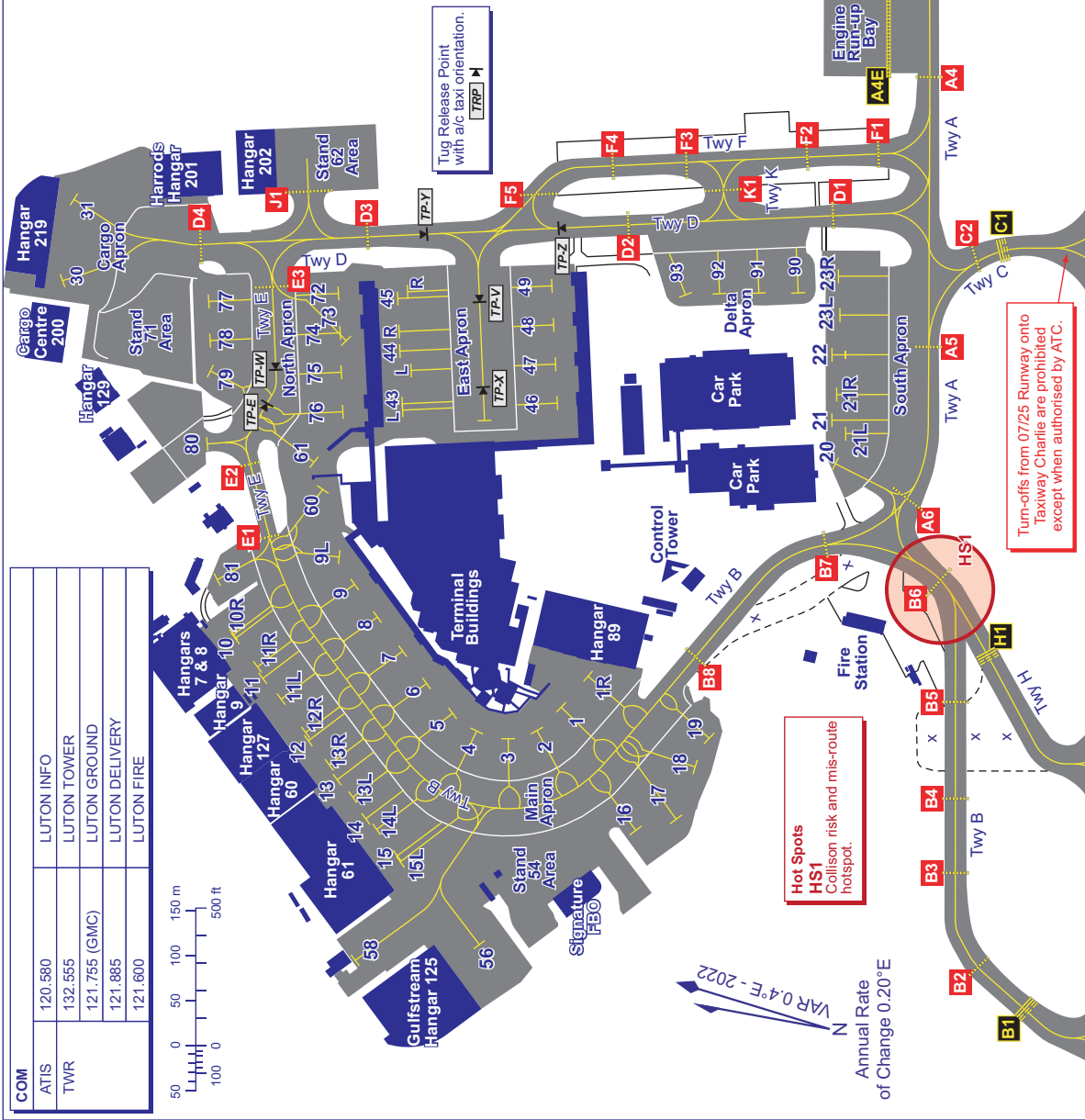
AIRCRAFT PARKING/DOCKING
CHART - ICAO

ARP 515229N 0002206W

AD ELEV 527FT

LONDON LUTON
EGGW

COM	120.680	LUTON INFO
ATIS	132.555	LUTON TOWER
TWR	121.755 (GMC)	LUTON GROUND
	121.885	LUTON DELIVERY
	121.600	LUTON FIRE



Hot Spots
HS1
Collision risk and mis-route
hotspot.

Turn-offs from 07/25 Runway onto
Taxiway Charlie are prohibited
except when authorised by ATC.

VAR 0.4° E - 2022
Annual Rate
of Change 0.20° E

AERO INFO DATE 03 SEP 24

AD 2-EGGW-2-2

STAND	COORDINATES	STAND	COORDINATES
1	515242.66N 0002241.91W	23L	515237.08N 0002216.39W
1R	515242.05N 0002239.81W	23R	515237.56N 0002214.30W
2	515243.26N 0002243.55W	30	515303.47N 0002226.31W
3	515244.15N 0002244.43W	31	515303.85N 0002221.68W
4	515245.28N 0002244.49W	43	515250.89N 0002227.86W
5	515246.26N 0002243.90W	43L	515250.77N 0002228.17W
6	515247.42N 0002242.67W	44	515251.46N 0002225.03W
7	515248.53N 0002241.28W	44L	515250.91N 0002225.91W
8	515249.70N 0002238.81W	44R	515251.63N 0002223.95W
9	515250.78N 0002238.38W	45	515252.04N 0002222.19W
9L	515251.55N 0002237.12W	45R	515251.77N 0002217.68W
10	515254.28N 0002243.13W	46	515245.66N 0002225.46W
10R	515254.38N 0002242.94W	47	515246.08N 0002223.35W
11	515252.98N 0002244.89W	48	515246.51N 0002221.25W
11L	515252.17N 0002245.74W	49	515246.94N 0002219.14W
11R	515253.27N 0002244.34W	56	515243.18N 0002256.08W
12	515250.86N 0002247.59W	58	515247.21N 0002258.82W
12R	515251.03N 0002247.18W	60	515252.72N 0002233.73W
13	515249.52N 0002249.27W	61	515253.29N 0002232.35W
13L	515248.83N 0002249.98W	72	515254.10N 0002222.81W
13R	515249.93N 0002248.58W	73	515253.40N 0002225.23W
14	515248.19N 0002250.96W	74	515253.67N 0002224.92W
14L	515247.72N 0002251.37W	75	515253.25N 0002227.03W
15	515246.78N 0002252.49W	76	515252.81N 0002229.14W
15L	515246.62N 0002252.77W	77	515258.38N 0002225.22W
16	515238.95N 0002247.43W	78	515257.95N 0002227.33W
17	515237.71N 0002246.19W	79	515257.65N 0002228.97W
18	515237.54N 0002243.08W	80	515257.00N 0002232.94W
19	515237.37N 0002241.31W	81	515255.44N 0002240.20W
20	515235.72N 0002224.51W	90	515238.60N 0002215.69W
21	515236.25N 0002222.15W	91	515239.89N 0002216.44W
21L	515235.66N 0002222.67W	92	515241.21N 0002217.07W
21R	515236.34N 0002220.67W	93	515242.39N 0002217.61W
22	515236.86N 0002218.60W		

RUNWAY/TAXIWAY/APRON	PHYSICAL CHARACTERISTICS	BEARING	STRENGTH
RWY 07/25	Grooved Asphalt	75/R/D/X/T	-
Main Apron	Various (see AD 2.8)	-	-
North, East & South Apron	Concrete	-	-
Delta Apron	Concrete	-	-
Carigo Apron	Concrete/Asphalt	-	-
TWY A, B, C, D, F, H, K	Asphalt	-	-
TWY E	Concrete	-	-

CHANGE (12/24): TP-V CORRECTION.

EGAE AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	<p>Surface marking of taxi route across apron.</p> <p>Stands 1-4: Nose-in parking with pushback.</p> <p>Stand 4A: Westerly facing with self-maneuvering off stand using minimal power.</p> <p>Marshalling is provided for all docking/parking guidance system of aircraft stands.</p> <p>A marshaller is present at the head of the stand or stopping position.</p> <p>This procedure allows a foreign object check to take place and ensures that aircraft are correctly parked and the taxiways not obstructed.</p>
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s):</p> <p>08/26: Displaced threshold markings on Runway 08. Runway designators and centre-line markings, edge lines. TDZ markings and aiming point markings on Runway 08/26. Yellow lead-off/on lines to all runways.</p> <p>Runway guard lights positioned at Holding Points B, D, E and G and at the disused Runway 02/20 intersection with Runway 08/26.</p>
3	Stop bars and runway guard lights (if any)	At B, D and E holding points.
4	Other runway protection measures	
5	Remarks	Wind direction indicators (LGTD) - 550236.78N 0070904.09W and 550225.02N 0071011.67W.

EGAE AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGAE5609) 08/APPROACH 26/ TAKE-OFF	CHIMNEY	550226.65N 0071059.25W	55 FT	28 FT	No	
(EGAE5509) 08/APPROACH 26/ TAKE-OFF	HOUSE	550220.75N 0071117.81W	60 FT	30 FT	No	
(EGAE5559) 08/APPROACH 26/ TAKE-OFF	CHIMNEY	550213.85N 0071055.92W	55 FT	27 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGAE10221)	HV PYLON	550251.87N 0071516.11W	317 FT	302 FT	No	
(EGAE10222)	HV PYLON	550238.28N 0071503.86W	317 FT	301 FT	No	
(EGAE5670)	WATER TANK	550237.34N 0070854.56W	18 FT	9 FT	No	
(EGAE4941)	OBS LIGHT	550223.45N 0071007.85W	49 FT	25 FT	Yes Red	
(EGAE10586)	MAST	550106.55N 0070831.68W	644 FT	50 FT	No	

EGAE AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE EXETER 9 hours
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing.
6	Flight documentation Language(s) used	Charts, abbreviated plain language text. TAFs and METARs. English.
7	Charts and other information available for briefing or consultation	ASXX. 215 Low Level SIG WX. 214 Spot Winds. Warnings
8	Supplementary equipment available for providing information	INTERNET. AFTN.
9	ATS units provided with information	CODA OPERATIONS LTD (ANSP)
10	Additional information (limitation of service, etc.)	Surface wind data (2 minute average) is available for both ends of the runway. Normally, only touchdown surface wind will be passed. Stop end surface wind and instantaneous surface wind available on request for both ends.

EGAE AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
08	073.12°	1969 x 45 M	RWY surface: Asphalt, Grooved PCN 58/F/B/W/T	550225.20N 0071031.54W 187.8 FT	THR 21.0 FT TDZ 21.0 FT	
26	253.14°	1969 x 45 M	RWY surface: Asphalt, Grooved PCN 58/F/B/W/T	550242.87N 0070850.06W 187.8 FT	THR 10.5 FT TDZ 10.7 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	966 x 150 M	2089 x 300 M	125 x 90 M -			RWY 08 Threshold displaced by 85 M. OFZ: Yes.
	298 x 150 M	2089 x 300 M	238 x 210 M 89 x 90 M			RWY 26 OFZ: Yes.

EGAE AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
08	1932 M	2898 M	1932 M	1847 M	
26	1969 M	2267 M	1969 M	1969 M	
08	1510 M	2265 M	1510 M		Take-off from intersection with Taxiway Echo.
08	1260 M	1890 M	1260 M		Take-off from intersection with Taxiway Delta.
08	804 M	1206 M	804 M		Take-off from intersection with Taxiway Bravo.

Take-off Runway	ATC Clearance	Procedure	NPR Termination	Take-off Runway	ATC Clearance	Procedure	NPR Termination
23R	Via LISTO †	At MCT DME 2 turn left onto track 161° MAG to establish on HON VOR R337.	5000 FT	23L	Via LISTO †	At MCT DME 3.2 turn left onto track 154° MAG to establish on HON VOR R337.	5000 FT
	Via EKLAD or KUXEM	At MCT DME 3 turn right onto track 273° MAG to intercept MCT VOR R253.	3000 FT		Via EKLAD or KUXEM	At MCT DME 3.2 turn right onto track 284° MAG to intercept MCT VOR R253.	3000 FT
	Via Pole Hill VOR	At MCT DME 3 turn right onto track 343° MAG towards XUMAT. At MCT DME 8 turn right onto POL VOR R218.	4000 FT		Via Pole Hill VOR	At MCT DME 3.2 turn right onto track 343° MAG towards XUMAT. At MCT DME 8 turn right onto POL VOR R218.	4000 FT
	Via SONEX	At MCT DME 3 turn right onto track 343° MAG towards XUMAT. At MCT DME 8 turn right onto WAL VOR R079.	4000 FT		Via SONEX	At MCT DME 3.2 turn right onto track 343° MAG towards XUMAT. At MCT DME 8 turn right onto WAL VOR R079.	4000 FT
	Via SANBA	At MCT DME 3 turn right onto track 273° MAG. At MCT DME 5 turn left to TABLY to intercept HON VOR R332.	5000 FT		Via SANBA	At MCT DME 3.2 turn right onto track 283° MAG. At MCT DME 5 turn left to TABLY to intercept HON VOR R332.	5000 FT

† LISTO SIDs only available to:

(aa) Non-Jet aircraft; and

(bb) The following jet aircraft.

All aircraft up to 35,000 KG MTOW, plus Bae 146 (Avro RJ series), Embraer E135, E145, Bombardier CRJ1, CRJ2, CRJ7, CRJ9, BD700 Global Express and Gulfstream 5.

- iv. Unless otherwise required by ATC, Runway 23R/23L shall be used for all movements when there is a head wind component and when a tail wind component is not greater than 5 KT on either runway or at 2000 FT.
- v. Link Alpha should be used for all jet aircraft and all large propeller-driven aircraft departing from Runway 05L. However, between the hours 0600-2330 (0500-2230) any aircraft may depart from Links AG, AF and B subject to operational requirements by ATC/pilots. Between the hours 2330-0600 (2230-0500), all jet aircraft and large propeller-driven aircraft shall depart from the most westerly link available.
- vi. Every aircraft using the airport shall, after take-off be operated in the quietest possible manner, aircraft exceeding the following noise levels will be subject to an initial penalty as detailed in the airport conditions of use.

Period (local time)	Max level dB(A)
0600 to 0700	82
0700 to 2300	90
2300 to 2330	82
2330 to 0600	81

3 AIRCRAFT NOISE QUOTA SYSTEM

Manchester Airport operates and manages a Night Noise Quota System, which is based on the CAA Supplement to the UK AIP, pertaining to the Airport Noise Restrictions Notice for London Heathrow, London Gatwick and London Stansted. The quota count value for the take-off and landing by individual aircraft types is shown in the Annexe to the above-mentioned Supplement.

4 NIGHT FLIGHTS

- a) In the interests of noise abatement, certain restrictions are imposed on night jet flights at this airport; operators concerned are advised to obtain details from the Airfield Operations Duty Manager.
- b) Non-standard departure instructions will not normally be issued between 2300-0700 (2200-0600).
- c) Night Jet Restrictions/Allocations
 - i. Runway 23L/05R will not normally be used between 2200-0600 (2100-0500) except when Runway 23R/05L is closed for maintenance.

28 Nov 2024

- ii. Manchester Airport operates a night Jet Policy restricting operations of certain types of aircraft during the periods of 2300-0700 (2200-0600).
- iii. The penalty scheme will be administered by a panel set up under the auspices of the Scheduling Committee which includes members of the Airlines Operators Committee and the Airport Authority.
- iv. Records of night infringements for this purpose will be available to the co-ordinators at the IATA scheduling conferences for summer seasons.
- v. Between the hours of 2300-0700 (2200-0600), visual approaches will not be permitted. Aircraft shall be positioned, by radar, to join the final approach at a distance of not less than 7 NM from touchdown. This restriction does not apply to non-jet aircraft whose MTWA is 5700 KG or below.

d) Scheduling Restrictions

- i. Between 2330-0559 (2230-0459) QC4 aircraft will not be scheduled to depart.

e) Operational Restrictions

- i. Between 2300-0659 (2200-0559) QC16 and QC8 aircraft will not be allowed to arrive or depart, except in case of emergency or where exempt.

- f) Manchester Airport has strict limits on the numbers of aircraft movements each operational season between the hours of 2330-0600 (2230-0500). To maintain compliance within these limits any arriving aircraft with a scheduled time of 0615 (0515) or later will not be allowed to land until after 0600 (0500), and as such will be subject to airborne holding until a landing time can be achieved of after 0600 (0500).

Departing aircraft with a scheduled time of 0555 (0455) will not be permitted to take-off before 0600 (0500).

5 CONTINUOUS DESCENT APPROACHES

Jet and turbo-prop aircraft approaching Manchester Airport are expected to minimise noise disturbance by the use of low power, low drag continuous descent approach procedures. For monitoring purposes, a descent will be deemed to have been continuous provided that no segment of level flight longer than 2.5 NM occurs below 6000 FT QNH and 'level flight' is interpreted as any segment of flight having a height change of not more than 50 FT over a track distance of 2 NM or more, as recorded in the airport noise and track-keeping system.

6 ENGINE TESTING

ATC will approve idle ground engine runs. A safety man must be positioned behind the aircraft to warn road traffic. Engine testing above ground idle is subject to the permission of the Airfield Operations Duty Manager and maybe subject to operational restrictions. For further information, please contact the Airport Authority. All engine tests above idle must commence in the Engine Test Bay. Times of operation are 0600-2200 (0500-2100) Monday to Friday and 0730-2200 (0630-2100) Saturday and Sunday. Engine testing on the open airfield will only be allowed for Chapter 3 aircraft between Mon-Fri 0900-1700 (0800-1600); Sat-Sun 0730-2200 (0630-2100). Chapter 4 and 14 aircraft 0600-2200 (0500-2100). Propeller driven aircraft are to be classified as Chapter 3.

7 TRAINING FLIGHTS

Training flights by all aircraft shall be subject to the approval of the Airfield Operations Duty Manager.

EGCC AD 2.22 FLIGHT PROCEDURES

1 RADIO COMMUNICATIONS FAILURE PROCEDURE

- a) In the event of complete communication failure in an aircraft, the pilot will adopt the appropriate procedures notified at ENR 1.1, Section 3.4.

Note: No visual signals available at Manchester.

2 PROCEDURES FOR INBOUND AIRCRAFT

a) **Standard Terminal Arrival Routes (STARs)**

- i. Standard Arrival routes for aircraft inbound from the airways system will be routed via the Standard Terminal Arrival Routes (STARs) detailed at AD 2-EGCC-7 charts and summarized below.
- ii. Where STARs are designated as RNAV1 Only, Non-RNAV 1 aircraft should file the via the existing route structure as featured in the SRD. Non-RNAV1 aircraft should not proceed beyond DAYNE / ROSUN or MIRSI (as appropriate) without ATC clearance.

b) **Clearance to enter the CTR**

- i. Aircraft flying the Airways System will be cleared into the CTR without having to request a specific entry clearance.
- ii. Aircraft wishing to enter the CTR or TMA under IFR direct from the London FIR must observe the normal procedure for joining Airways at one of the following Reporting Points:

EGNF — NETHERTHORPE

EGNF AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGNF — NETHERTHORPE

EGNF AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 531901N Long: 0011146W Mid Point of Runway 06/24
2	Direction and distance from city	2 NM W by N of Worksop.
3	Elevation / Reference temperature / Mean Low Temperature	248 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	-
5	Magnetic Variation / Annual Change	0.03°W (2022) / 0.20°E
6	AD Administration Address Telephone E-mail address Web address	SHEFFIELD AERO CLUB. Netherthorpe Aerodrome, Thorpe Salvin, Worksop, Nottinghamshire, S80 3JQ 01909-475233 info@sheffieldaeroclub.net https://www.sheffieldaeroclub.net
7	Type of Traffic permitted (IFR/VFR)	VFR
8	Remarks	

EGNF AD 2.3 OPERATIONAL HOURS

1	AD Administration	Tue-Sun 0900-1700 (0800-1600) or SS whichever is the earlier; Mon by arrangement only.
2	Customs and immigration	General Aviation Report (GAR) form submission to National Co-ordination Unit (NCU) is required in advance to notify HMRC Border Force and Police. https://www.submit-general-aviation-report.service.gov.uk .
3	Health and sanitation	
4	AIS Briefing Office	Self-briefing in Control Office.
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD Hours. See also AD 2.18
8	Fuelling	Self-service as AD hours. See also AD 2.18.
9	Handling	
10	Security	
11	De-icing	
12	Remarks	This aerodrome is strictly PPR by telephone.

EGNF AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	
2	Fuel and oil types	AVGAS 100LL.
3	Fuelling facilities/capacity	Self-service, payment by credit card machine.
4	De-icing facilities	
5	Hangar space for visiting aircraft	
6	Repair facilities for visiting aircraft	On airfield licenced engineering facility, Dukeries Aviation Ltd; Tel: 01909-600231.
7	Remarks	

EGNF AD 2.5 PASSENGER FACILITIES

1	Hotels	Travelodge 4 miles from airfield.
2	Restaurants	Café on airfield.
3	Transportation	Taxi services available.
4	Medical facilities	Basic first aid trained Initial Emergency Response personnel on site.

5	Bank and Post Office	
6	Tourist Office	
7	Remarks	

EGNF AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category Special.
2	Rescue equipment	
3	Capability for removal of disabled aircraft	
4	Remarks	

EGNF AD 2.7 SEASONAL AVAILABILITY - CLEARING

INTENTIONALLY BLANK

EGNF AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

INTENTIONALLY BLANK

EGNF AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

INTENTIONALLY BLANK

EGNF AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas					
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height	Obstruction Lighting Type/ Colour	Remarks
1	2	3	4	5	6
(EGNF1593) 18/APPROACH 36/ TAKE-OFF	TREE	531924.28N 0011151.72W	346 FT	No	
(EGNF1637) 24/APPROACH 06/ TAKE-OFF	TREE	531909.28N 0011130.80W	277 FT	No	
(EGNF1546) 06/APPROACH 24/ TAKE-OFF	TREE	531857.16N 0011158.82W	279 FT	No	
(EGNF1320) 06/APPROACH 24/ TAKE-OFF	ROAD 4 8M	531854.49N 0011204.00W	276 FT	No	
(EGNF1325) 06/APPROACH 24/ TAKE-OFF	ROAD 4 8M	531854.02N 0011159.41W	270 FT	No	
(EGNF1330) 36/APPROACH 18/ TAKE-OFF	ROAD 4 8M	531853.62N 0011144.70W	255 FT	No	

In circling area and at aerodrome					
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height	Obstruction Lighting Type/ Colour	Remarks
1	2	3	4	5	6
INTENTIONALLY BLANK					

EGNF AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	
---	-----------------------	--

2	Hours of service MET Office outside hour	
3	Office responsible for TAF preparation Periods of validity	
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self-briefing in Control Office.
6	Flight documentation Language(s) used	
7	Charts and other information available for briefing or consultation	
8	Supplementary equipment available for providing information	
9	ATS units provided with information	
10	Additional information (limitation of service, etc.)	

EGNF AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
06	055.40°	553 x 36 M	RWY surface: Grass	531857.45N 0011154.83W	THR 248.1 FT	
24	235.41°	553 x 36 M	RWY surface: Grass	531903.60N 0011139.94W	THR 223.6 FT	
18	174.80°	382 x 18 M	RWY surface: Grass	531906.08N 0011144.75W	THR 224.5 FT	
36	354.80°	382 x 18 M	RWY surface: Grass	531856.73N 0011143.33W	THR 233.7 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
						RWY 06 Threshold displaced by 92 M.
						RWY 24 Threshold displaced by 120 M.
						RWY 18 Threshold displaced by 25 M.
						RWY 36 Threshold displaced by 73 M.

EGNF AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
06	467 M	467 M	533 M	401 M	
24	441 M	441 M	536 M	430 M	
18	318 M	318 M	380 M	353 M	
36	361 M	361 M	378 M	308 M	

EGNF AD 2.14 APPROACH AND RUNWAY LIGHTING

INTENTIONALLY BLANK

EGNF AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

INTENTIONALLY BLANK

EGNF AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGNF AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
NETHERTHORPE ATZ A circle, 2 NM radius, centred at 531901N 0011146W on longest notified runway (06/24)	Upper limit: 2000 FT AGL Lower limit: SFC	G	NETHERTHORPE RADIO English	5000 FT		

EGNF AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
OTHER	NETHERTHORPE RADIO	123.280 MHz A/G frequency.			Tue-Sun 0900-1700 (0800-1600) or SS whichever is the earlier; Mon by arrangement only.	ATZ hours coincident with A/G hours.

EGNF AD 2.19 RADIO NAVIGATION AND LANDING AIDS

INTENTIONALLY BLANK

EGNF AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Aerodrome is not available for public transport passenger flights required to use a licensed aerodrome.
- b) PPR is strictly by telephone and may be refused to certain aircraft types. Inexperienced pilots are to phone for advice before arriving at Netherthorpe and are to contact a member of staff for a short briefing before departure.

2 GROUND MOVEMENT

- a) Aircraft should not be left on the refuelling stand.

3 CAT II/III OPERATIONS

Not applicable

4 WARNINGS

- a) Aircraft based at Netherthorpe operate outside published operating hours.
- b) At the weekend, when Runway 06/24 is in use, aircraft may be parked at the southern end of Runway 18/36.
- c) In calm wind conditions arrivals may be on Runway 24 and departures from Runway 06.
- d) Runways 06, 24 and 36 have displaced thresholds due to the proximity of public roads. Any pilot whose approach would result in being below 20 FT crossing the road must initiate an immediate missed approach.

- e) Overrun on Runways 18 and 36. Only 29 M of overrun strip are available on Runways 18 and 36 beyond the end of ASDA and LDA.
- f) Runways 18 and 36 Obstruction free Approach Surface Slopes are based on threshold and not strip end.
- g) Runways 06 and 24 Obstruction free Approach Surface Slopes are based on threshold and not strip end.
- h) Telegraph poles 27 FT AGL on the northern boundary.
- i) Farm and trees 39 FT AGL on the northeast boundary.
- j) Hangar 20 FT AGL on the eastern boundary.
- k) Farm 30 FT AGL on the southern boundary.
- l) Road traffic immediately adjacent to the eastern and southern boundaries.
- m) Trees 45 FT AGL on the northwest boundary.
- n) Overhead power line up to 35 FT AAL runs northeast/southwest 0.24 NM and north-north-west.
- o) Three wind turbines on the northwest boundary up to 734 FT AMSL (322 FT AGL).

5 HELICOPTER OPERATIONS

Not applicable

6 USE OF RUNWAYS

Not applicable

7 TRAINING

- a) 3 Counties Flying School (01909-600231) operates a Designated Training Organisation for ab-initio training.

EGNF AD 2.21 NOISE ABATEMENT PROCEDURES

- a) Avoid over-flying local villages.

EGNF AD 2.22 FLIGHT PROCEDURES

- a) PPR is required by phone 01909-475233.
- b) Join circuits from the overhead at 1800 FT QFE where possible.
- c) Circuit height is 800 FT QFE for fixed wing powered aircraft.
- d) Circuit directions: Runways 06 and 36 - RH; Runways 18 and 24 - LH.

EGNF AD 2.23 ADDITIONAL INFORMATION

- a) Flights arranged through cost sharing platforms are not permitted at Netherthorpe.

EGNF AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGNF-2-1

EGNF AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

INTENTIONALLY BLANK

**AERODROME
CHART - ICAO**

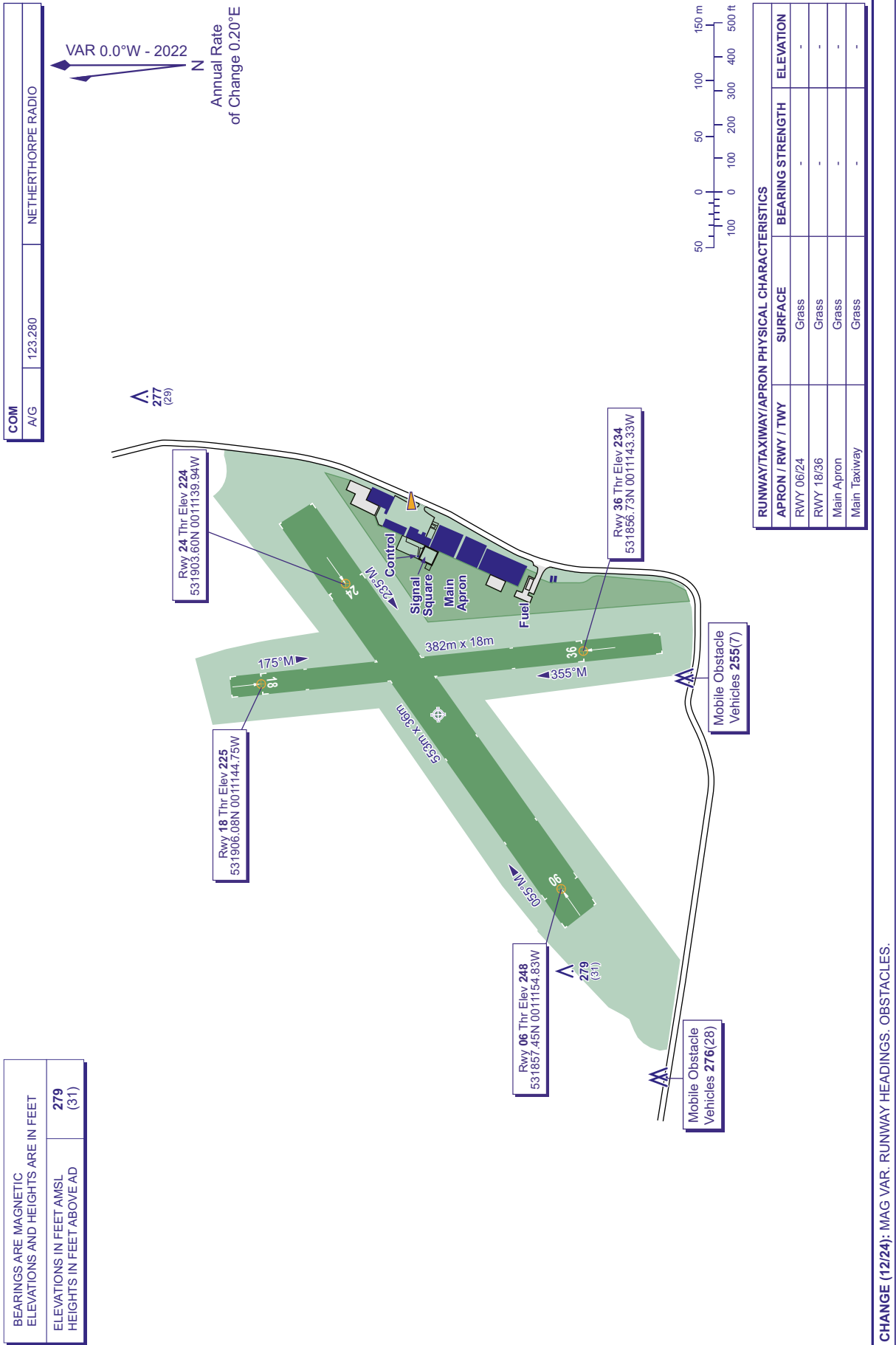
ARP 531901N 0011146W

AD ELEV 248FT

**NETHERTHORPE
EGNF**

BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET	279 (31)
ELEVATIONS IN FEET AMSL HEIGHTS IN FEET ABOVE AD	

AERO INFO DATE 20 SEP 24



CHANGE (12/24): MAG VAR. RUNWAY HEADINGS. OBSTACLES.

AD 2-EGNF-2-1

INTENTIONALLY BLANK

EGNT — NEWCASTLE**EGNT AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGNT — NEWCASTLE

EGNT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 550217N Long: 0014123W Midpoint of Runway 07/25.
2	Direction and distance from city	5 NM NW of Newcastle-upon-Tyne.
3	Elevation / Reference temperature / Mean Low Temperature	266 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	162 FT
5	Magnetic Variation / Annual Change	0.42°W (2022) / 0.21°E
6	AD Administration Address Telephone E-mail address	NEWCASTLE INTERNATIONAL AIRPORT LIMITED. Newcastle Airport, Woolsington, Newcastle-Upon-Tyne NE13 8BZ. 0191-214 3255 (Airport Authority) 0871-882 1121 (Airport Authority) 0191-214 8130 (ATC) enquiries@newcastleinternational.co.uk (Airport Authority) ATSMangementteam@newcastleinternational.co.uk (ATC)
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGNT AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24 Christmas day by arrangement.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	H24 See also AD 2.18.
8	Fuelling	Samson: 0800-1900 (0700-1800) and by arrangement. Swissport Fuelling: H24.
9	Handling	Swissport: H24 Samson: 0800-1900 (0700-1800) and by arrangement.
10	Security	H24
11	De-icing	H24
12	Remarks	This aerodrome is PPR.

EGNT AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	Normal. Nearest railway siding: Newcastle 5.2 NM.
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL 80, 2050 plus various turbine oils, W80,W100
3	Fuelling facilities/capacity	Max 33 Litres/Second.
4	De-icing facilities	Available by arrangement with handling agent.
5	Hangar space for visiting aircraft	Limited.
6	Repair facilities for visiting aircraft	Maintenance and repair (by arrangement).

7	Remarks	<p>AVGAS 100LL, AVTUR JET A-1 (without FS11 additive) and oil grades are available from Samson Jet Centre, Tel: 0191-286 4156 or 0191-214 4111.</p> <p>All aircraft handled by Samson must be fuelled by Samson. Out of hours surcharge.</p> <p>All operators must make prior arrangements with a handling agent for ground handling of all flights.</p> <p>AVTUR JET A-1 available from Swissport Fuelling Ltd, Tel: 0191-214 4562; Fax: 0191-214 4561. Samson Jet Centre for GA apron only.</p> <p>Handling on the main apron is provided by: Swissport, Tel: 0191-271 2225.</p> <p>The General Aviation Centre on the South side is operated by Samson Jet Centre. Samson Jet Centre: frequency 131.405 MHz, callsign 'Samson Operations'; Tel: 0191-286 4156; 0191-214 5916 (out of hours); e-mail: ops@samsonaviation.com</p> <p>Visiting aircraft must comprehensively brief before departure.</p>
---	---------	--

EGNT AD 2.5 PASSENGER FACILITIES

1	Hotels	Available.
2	Restaurants	Restaurants available.
3	Transportation	Buses and Taxis, Hire Cars. Train link to Newcastle Central station. Nearest railway station: Terminal
4	Medical facilities	First aid only. Defibrillators available.
5	Bank and Post Office	ATMs and Bureau de Change within the terminal building.
6	Tourist Office	
7	Remarks	

EGNT AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A7 RFF Category 8 and 9 available for scheduled movements and on request.
2	Rescue equipment	Details available on request.
3	Capability for removal of disabled aircraft	By arrangement with nominated recovery company. Light aircraft removal possible if required.
4	Remarks	

EGNT AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical, Chemical de-icing.
2	Clearance priorities	Standard. See AD 1.2.2.
3	Remarks	Latest Snow State information Tel: 0191-214 8130 (ATC). Snow Clearance Programme Tel: 0191-214 3344 (RFFS).

EGNT AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	<p>GA APRON Surface: Asphalt PCN 15/F/C/Y/T</p> <p>GOLF APRON Surface: Concrete PCN 65/R/B/W/T</p> <p>MAIN APRON Surface: Asphalt PCN 73/F/C/W/T</p>
---	----------------------------	--

2	Taxiway width, surface and strength	<p>Taxiway A: 23 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway B: 23 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway C: 23 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway D: 23 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway E: 15 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway F: 23 M Surface: Asphalt PCN 73/F/C/W/T</p> <p>Taxiway G: 23 M Surface: Asphalt PCN 22/F/C/W/T</p>
3	Altimeter checkpoint location and elevation	Apron 258 FT
4	VOR checkpoints	
5	INS checkpoints	AD 2-EGNT-2-2 AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING CHART.
6	Remarks	

EGNT AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	<p>Stands 1-25, 30, 31 and 60-62 are designed for nose-in/push-back operations.</p> <p>Stands 50-54 are self-maneuvring, although aircraft must be marshalled on to stand.</p> <p>Stands 13-25, 31, 50-54 and 60-62 aircraft must be marshalled on to stand.</p> <p>Stands 1-12 and 30 are equipped with stand entry guidance systems. Aircrew should note that stand entry guidance systems are activated by their ground handling agent. Pilots must not enter an aircraft stand unless the stand entry guidance has been activated and the correct aircraft type is displayed, or alternatively an ATC instruction has been passed for marshalled on to stand.</p> <p>Airbridge available stands 3, 9/30 and 10.</p> <p>Stand 25 has an additional centre-line designated Left and Right.</p> <p>Stands 8, 13, 17 and 19 have additional markings for supplementary parking, as directed by ATC aircraft must be marshalled.</p> <p>Supplementary parking positions 30 and 31: Stand 30 is a parking position diagonally across Stand 9 for B747, A330-300 and B777-300 aircraft, and Stand 31 is a parking position diagonally across Stand 1 for B737-700 or A319 aircraft.</p>
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 07/25: Designation, runway edge, displaced threshold, centre-line and touchdown zone.</p> <p>Taxiway marking aid(s): Yellow centre-line paint marking, intermediate taxi-holding positions and runway taxi-holding positions.</p>

		Taxiway light(s): Combination of blue edge lights and switchable green centre-line (spacing 7.5 M for CAT III routes (A and D), 15 M for other routes). Illuminated holding point signs, illuminated taxi signs.
3	Stop bars and runway guard lights (if any)	Stop bars and runway guard lights at runway entrance points are in operation H24.
4	Other runway protection measures	
5	Remarks	Some obstacle marking. Illuminated wind direction indicators. Pilot attention is drawn to the use of additional paint markings at specified runway entrance and exit points. These markings are provided as an additional measure to raise situational awareness and to reduce the runway incursion risk. All Ground Movement is under ATC Control. X 2 WDI: 550234.34N 0014033.84W (LGTD) and 550207.44N 0014219.87W.

EGNT AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGNT9612) 25/APPROACH 07/ TAKE-OFF	EP	550241.44N 0013935.13W	297 FT	57 FT	No	
(EGNT11734) 07/TAKE-OFF	TREE	550241.28N 0013939.89W	292 FT	54 FT	No	
(EGNT11844) 25/TAKE-OFF	TREE SMALL	550200.40N 0014232.72W	277 FT	14 FT	No	
(EGNT11806) 07/APPROACH 25/ TAKE-OFF	TREE	550155.62N 0014231.02W	297 FT	19 FT	No	
(EGNT9878) 07/APPROACH 25/ TAKE-OFF	TREE	550146.44N 0014254.02W	326 FT	28 FT	No	
(EGNT11146) 07/APPROACH 25/ TAKE-OFF	TREE	550129.96N 0014402.97W	400 FT	59 FT	No	
(EGNT11165) 07/APPROACH 25/ TAKE-OFF	TREE	550125.57N 0014525.27W	491 FT	47 FT	No	
(EGNT11225) 07/APPROACH 25/ TAKE-OFF	TREE	550114.93N 0014555.06W	541 FT	77 FT	No	
(EGNT11134) 07/APPROACH 25/ TAKE-OFF	TREE	550114.89N 0014437.88W	437 FT	42 FT	No	
(EGNT11132) 07/APPROACH 25/ TAKE-OFF	TREE	550114.66N 0014441.85W	447 FT	46 FT	No	
(EGNT10560) 07/APPROACH 25/ TAKE-OFF	HV PYLON	550033.65N 0014813.93W	640 FT	205 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGNT10504)	WIND TURBINE	550613.29N 0013725.33W	626 FT	412 FT	Yes Red	
(EGNT10501)	WIND TURBINE	550605.21N 0013728.14W	626 FT	412 FT	Yes Red	
(EGNT10541)	MAST	550517.50N 0015347.67W	744 FT	99 FT	No	
(EGNT9500)	WIND TURBINE	550457.47N 0015233.46W	713 FT	147 FT	No	
(EGNT9632)	WIND TURBINE	550349.20N 0015202.15W	563 FT	110 FT	No	
(EGNT11298)	ATC AERIAL	550229.77N 0014138.43W	388 FT	151 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
	CRANE	550215N 0013910W	292 FT	66 FT	Yes Red	
(EGNT9623)	FLOODLIGHT	550205.50N 0013642.28W	387 FT	170 FT	No	
(EGNT10560) 07/APPROACH 25/ TAKE-OFF	HV PYLON	550033.65N 0014813.93W	640 FT	205 FT	No	
(EGNT10585)	HV PYLON	550026.33N 0014241.38W	446 FT	119 FT	No	
(EGNT10579)	HV PYLON	550013.41N 0014310.74W	497 FT	156 FT	No	
(EGNT10926)	TREE	550006.28N 0014015.63W	449 FT	56 FT	No	
(EGNT10864)	TREE	545946.33N 0014217.08W	490 FT	67 FT	No	
(EGNT10867)	BUILDING AERIAL	545935.12N 0014205.99W	522 FT	145 FT	No	
(EGNT10566)	MAST	545550.50N 0014858.88W	1000 FT	158 FT	No	
(EGNT10565)	MAST	545550.01N 0014902.00W	998 FT	159 FT	No	
(EGNT10578)	MAST	545452.51N 0014154.18W	883 FT	139 FT	Yes Red	

EGNT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE EXETER 24 Hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self-briefing/telephone.
6	Flight documentation Language(s) used	TAFs/METARs English
7	Charts and other information available for briefing or consultation	Available on the Met Office website, www.metoffice.gov.uk/aviation .
8	Supplementary equipment available for providing information	Newcastle ATIS available on telephone number 0191-214 3401.
9	ATS units provided with information	NEWCASTLE
10	Additional information (limitation of service, etc.)	Current weather on ATIS.

EGNT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
07	065.19°	2330 x 45 M	RWY surface: Asphalt PCN 65/F/B/W/T SWY surface: Asphalt PCN 65/F/B/W/T	550202.35N 0014216.68W 162.5 FT	THR 263.3 FT TDZ 263.3 FT	RWY 07 0.35% down RWY 25 0.35% up
25	245.21°	2330 x 45 M	RWY surface: Asphalt PCN 65/F/B/W/T	550230.46N 0014030.76W 162.4 FT	THR 238.6 FT TDZ 243.1 FT	RWY 07 0.35% down RWY 25 0.35% up

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
14 x 45 M	75 x 180 M	2396 x 280 M	150 x 90 M -			<p>RWY 07</p> <p>Ends of runways available for take-off.</p> <p>Threshold displaced by 121 M.</p> <p>Runway grooved for its full length.</p> <p>The downslope gradient over the first 400 M of LDA, Runway 07 is 0.57%.</p> <p>OFZ: Yes.</p>
	124 x 180 M	2396 x 280 M	90 x 92 M -			<p>RWY 25</p> <p>Threshold displaced by 138 M.</p> <p>Ends of runways available for take-off.</p> <p>Runway grooved for its full length.</p> <p>50 M before 25 threshold, a small turning D is available for use by aircraft back tracking Runway 25. Use with caution at night.</p> <p>OFZ: Yes.</p>

EGNT AD 2.13 DECLARED DISTANCES

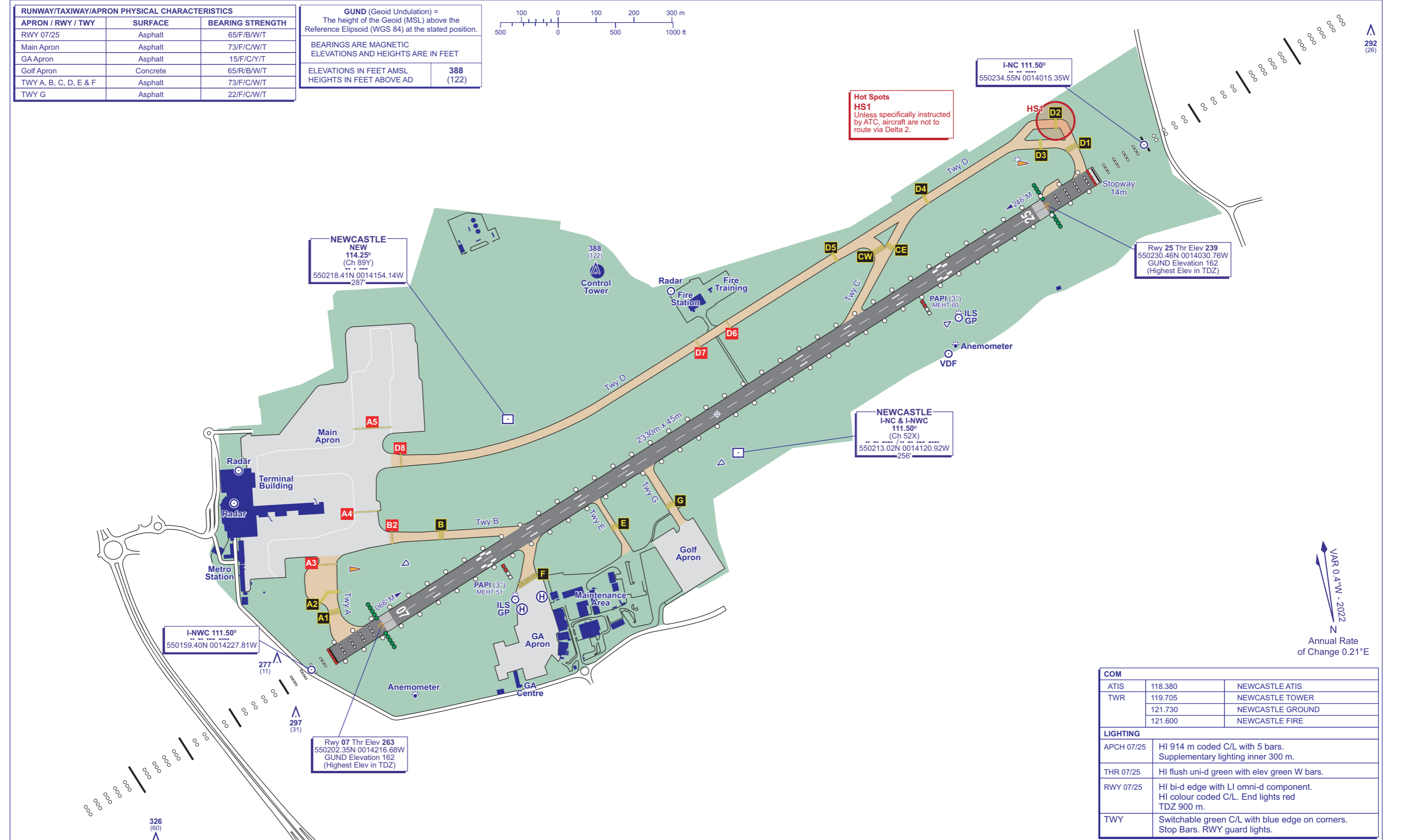
Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
07	2330 M	2405 M	2344 M	2209 M	
25	2262 M	2386 M	2262 M	2124 M	
07	1799 M	1874 M	1812 M		Take-off from intersection with Taxiway B - 0.26%D.
07	1773 M	1848 M	1786 M		Take-off from intersection with Taxiway F - 0.26%D.
07	1559 M	1634 M	1573 M		Take-off from intersection with Taxiway E - 0.25%D.
07	1407 M	1482 M	1421 M		Take-off from intersection with Taxiway G - 0.23%D.
25	1548 M	1672 M	1548 M		Take-off from intersection with Taxiway C - 0.63%U.
25	877 M	1001 M	877 M		Take-off from intersection with Taxiway G - 0.49%U.
25	717 M	840 M	717 M		Take-off from intersection with Taxiway E - 0.58%U.

AERODROME CHART - ICAO

ARP 550217N 0014123W

AD ELEV 266FT

NEWCASTLE EGNT



CHANGE (12/24): HOTSPOTS, OBSTACLES.

AERO INFO DATE 12 SEP 24

AD 2.EGNT-2-1

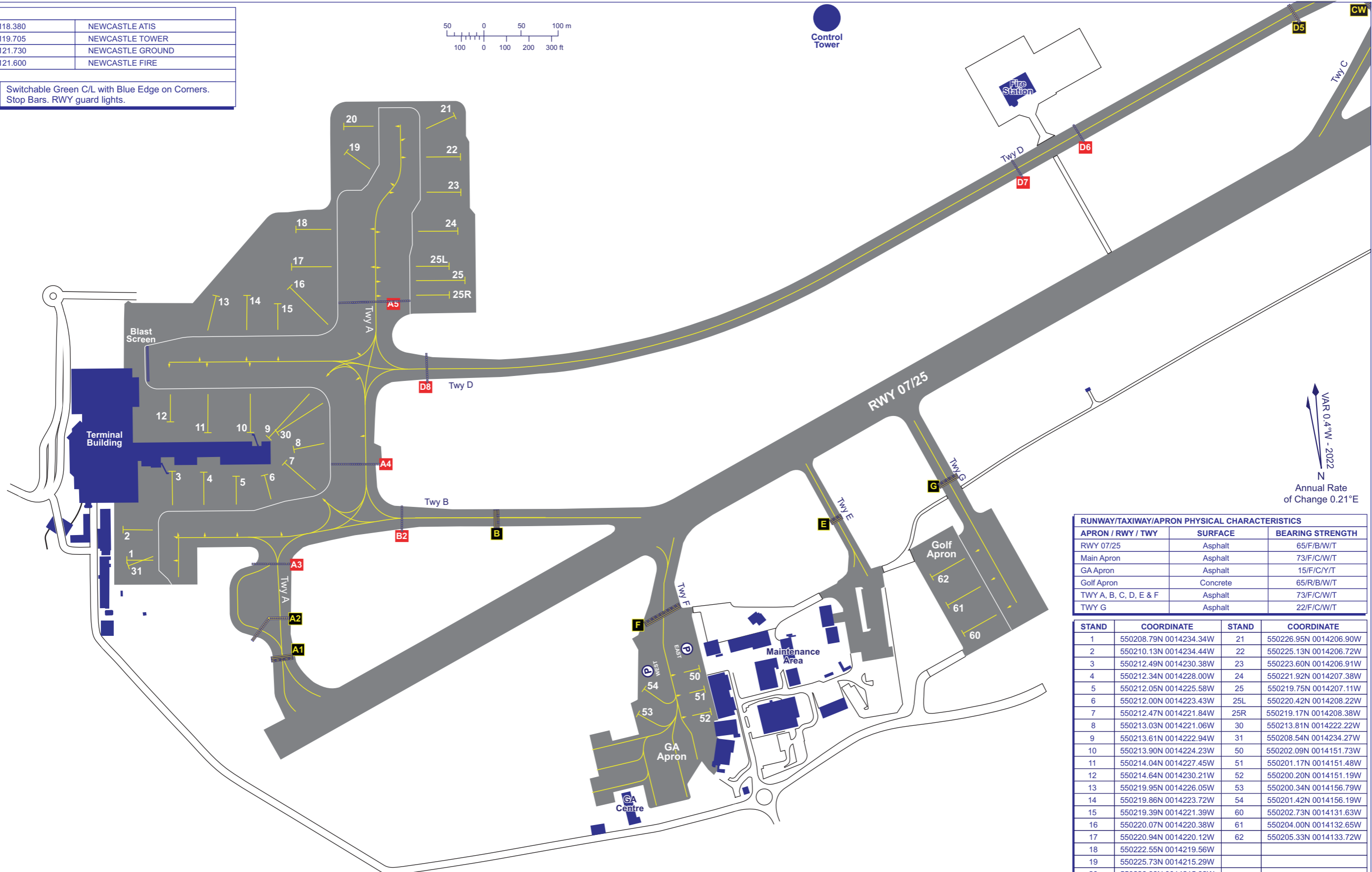
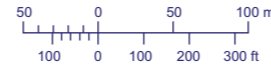
AIRCRAFT GROUND MOVEMENT/PARKING/DOCKING CHART - ICAO

ARP 550217N 0014123W

AD ELEV 266FT

NEWCASTLE EGNT

COM		
ATIS	118.380	NEWCASTLE ATIS
TWR	119.705	NEWCASTLE TOWER
	121.730	NEWCASTLE GROUND
	121.600	NEWCASTLE FIRE
LIGHTING		
TWY	Switchable Green C/L with Blue Edge on Corners. Stop Bars. RWY guard lights.	



VAR 0.4°W - 2022
N
Annual Rate of Change 0.21°E

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
APRON / RWY / TWY	SURFACE	BEARING STRENGTH
RWY 07/25	Asphalt	65/F/B/W/T
Main Apron	Asphalt	73/F/C/W/T
GA Apron	Asphalt	15/F/C/Y/T
Golf Apron	Concrete	65/R/B/W/T
TWY A, B, C, D, E & F	Asphalt	73/F/C/W/T
TWY G	Asphalt	22/F/C/W/T

STAND	COORDINATE	STAND	COORDINATE
1	550208.79N 0014234.34W	21	550226.95N 0014206.90W
2	550210.13N 0014234.44W	22	550225.13N 0014206.72W
3	550212.49N 0014230.38W	23	550223.60N 0014206.91W
4	550212.34N 0014228.00W	24	550221.92N 0014207.38W
5	550212.05N 0014225.58W	25	550219.75N 0014207.11W
6	550212.00N 0014223.43W	25L	550220.42N 0014208.22W
7	550212.47N 0014221.84W	25R	550219.17N 0014208.38W
8	550213.03N 0014221.06W	30	550213.81N 0014222.22W
9	550213.61N 0014222.94W	31	550208.54N 0014234.27W
10	550213.90N 0014224.23W	50	550202.09N 0014151.73W
11	550214.04N 0014227.45W	51	550201.17N 0014151.48W
12	550214.64N 0014230.21W	52	550200.20N 0014151.19W
13	550219.95N 0014226.05W	53	550200.34N 0014156.79W
14	550219.86N 0014223.72W	54	550201.42N 0014156.19W
15	550219.39N 0014221.39W	60	550202.73N 0014131.63W
16	550220.07N 0014220.38W	61	550204.00N 0014132.65W
17	550220.94N 0014220.12W	62	550205.33N 0014133.72W
18	550222.55N 0014219.56W		
19	550225.73N 0014215.29W		
20	550226.86N 0014215.32W		

CHANGE (12/24): HOT SPOTS REMOVED. EDITORIAL.

AERO INFO DATE 12 SEP 24

AD 2-EGNT-2-2

		<p>Taxiway CHARLIE SOUTH: 23 M Surface: Asphalt PCN 36/F/B/W/T PCN Value relevant South of Twy ALPHA.</p> <p>Taxiway DELTA W OF ECHO: 23 M Surface: Asphalt PCN 104/F/B/W/T</p> <p>Taxiway ECHO: 23 M Surface: Asphalt PCN 23/F/C/X/T</p> <p>Taxiway GOLF: 40 M Surface: Asphalt PCN 26/F/B/W/T</p> <p>Taxiway HOTEL: 18 M Surface: Asphalt PCN 117/F/A/W/T</p>
3	Altimeter checkpoint location and elevation	Alpha Apron 363 FT
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	

EGHQ AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	<p>Aircraft classed as higher than Code C parking on ECHO Apron are to shut down on the ECHO taxiway and be towed to parking position under ground crew guidance.</p> <p>Aircraft parking stands 18-19 are to follow marshaller guidance.</p> <p>Aircraft parking Alpha Apron stands 20-24 are to follow marshaller guidance.</p> <p>All engine starts and aircraft manoeuvring on Alpha Apron require ground crew guidance.</p> <p>Light aircraft are to be allocated parking by ATC.</p> <p>Marshaller guidance on the General Aviation Parking Area may not be available.</p>
2	Runway and taxiway markings and lighting	<p>Runway marking aid(s): 12/30: Runway designation, runway centre-line, runway threshold, fixed distance and touchdown and zone markings. Runway side stripes. Threshold turn-pad centre-line and edge markings with blue edge lights.</p> <p>Taxiway light(s): Green centre-line lighting. Yellow/Green lead-on/lead-off lights at runway intersection with taxiways A, B, C, E, G and H, lead-on lights switched with stopbars. Taxiways D and H fitted with catseye markers and reflective signs in addition to centre-line lights.</p>
3	Stop bars and runway guard lights (if any)	<p>Stop bars at A2, A3, B2, C2, D4, E2, G1 and H1. Also vehicle crossing V(North) and V(South). Runway guard lights at A1, A4, B1, C1, D4, E1, G1 and H1.</p>
4	Other runway protection measures	
5	Remarks	WDI (LGTD) - 502623.94N 0045946.34W; 502611.95N 0045914.45W; 502641.48N 0050032.84W.

EGHQ AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGHQ4386) 12/APPROACH 30/ TAKE-OFF	FENCE	502651.99N 0050058.49W	314 FT	8 FT	No	
EGHQ5502) 30/APPROACH 12/ TAKE-OFF	TREE	502606.74N 0045831.89W	426 FT	37 FT	No	
(EGHQ4278) 30/APPROACH 12/ TAKE-OFF	TREE	502606.49N 0045833.76W	417 FT	27 FT	No	
(EGHQ4843) 30/APPROACH 12/ TAKE-OFF	TREE	502605.70N 0045825.84W	430 FT	43 FT	No	
(EGHQ2907) 30/APPROACH 12/ TAKE-OFF	LLZ 30 FFM	502600.97N 0045834.82W	413 FT	23 FT	No	
(EGHQ2139) 30/APPROACH 12/ TAKE-OFF	PYLON	502318.00N 0044852.26W	926 FT	86 FT	No	
(EGHQ2138) 30/APPROACH 12/ TAKE-OFF	PYLON	502311.29N 0044839.89W	1030 FT	116 FT	No	
(EGHQ5095) 30/APPROACH 12/ TAKE-OFF	MAST	502255.54N 0044934.64W	1286 FT	304 FT	Yes Red	
(EGHQ4337) 30/APPROACH 12/ TAKE-OFF	WIND TURBINE	502236.95N 0044820.35W	1105 FT	245 FT	No	
30/APPROACH 12/TAKE-OFF	CLAY SPOIL	502221.03N 0044913.95W	1094 FT		No	
(EGHQ5098) 30/APPROACH 12/ TAKE-OFF	MAST	502210.22N 0044929.37W	1193 FT	105 FT	Yes Red	
(EGHQ4673) 30/APPROACH 12/ TAKE-OFF	WIND TURBINE	502136.36N 0044949.30W	970 FT	256 FT	No	
(EGHQ4333) 30/APPROACH 12/ TAKE-OFF	WIND TURBINE	502125.80N 0044844.00W	1083 FT	202 FT	Yes Red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGHQ4358)	WIND TURBINE	502853.76N 0045148.00W	978 FT	325 FT	No	
(EGHQ5545)	MAST LC	502828.20N 0045956.35W	530 FT	218 FT	Yes Red	
(EGHQ3815)	WIND TURBINE	502804.14N 0050036.29W	402 FT	112 FT	Yes Red	
(EGHQ4327)	WIND TURBINE	502747.14N 0045723.98W	830 FT	327 FT	Yes Red	
(EGHQ4329)	WIND TURBINE	502745.98N 0045738.70W	842 FT	328 FT	Yes Red	
(EGHQ3816)	WIND TURBINE	502734.02N 0045616.69W	605 FT	111 FT	No	
(EGHQ4365)	WIND TURBINE	502659.73N 0045543.64W	480 FT	73 FT	No	
(EGHQ2319)	MAST	502647.57N 0045611.04W	464 FT	60 FT	No	
(EGHQ4204)	WIND TURBINE	502525.88N 0044902.79W	837 FT	322 FT	Yes Red	
(EGHQ5085)	MAST	502405.65N 0045908.88W	458 FT	60 FT	Yes Red	
	CLAY SPOIL	502317.30N 0045043.70W	908 FT		No	
(EGHQ2103)	PYLON	502314.95N 0045534.70W	823 FT	160 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
	CLAY SPOIL	502301.47N 0044936.47W	1045 FT		No	
(EGHQ4341)	CHIMNEY	502242.52N 0045331.58W	870 FT	391 FT	Yes Red	
(EGHQ3867)	WIND TURBINE	502058.83N 0050145.58W	789 FT	331 FT	Yes Red	

EGHQ AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE EXETER
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE EXETER 9 hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing/internet.
6	Flight documentation Language(s) used	Charts abbreviated plain language text TAFs/METARs. English.
7	Charts and other information available for briefing or consultation	www.metoffice.gov.uk
8	Supplementary equipment available for providing information	
9	ATS units provided with information	
10	Additional information (limitation of service, etc.)	ATIS available by telephone 01637-861320

EGHQ AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
12	120.51°	2744 x 45 M	RWY surface: Concrete. Grooved Asphalt. PCN 62/F/B/W/T	502649.34N 0050043.25W 173.6 FT	THR 306.5 FT TDZ 333.2 FT	
30	300.54°	2744 x 45 M	RWY surface: Concrete. Grooved Asphalt. PCN 62/F/B/W/T	502609.17N 0045856.56W 173.4 FT	THR 385.3 FT TDZ 385.3 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	300 x 150 M	2804 x 280 M				RWY 12 There are 22 M asphalt shoulders both sides of the marked runway edges. At the thresholds these shoulders form part of the marked turn pads.
	300 x 150 M	2804 x 280 M				RWY 30 Landing threshold displaced by 300 M. There are 22 M asphalt shoulders both sides of the marked runway edges. At the thresholds these shoulders form part of the marked turn pads.

EGHQ AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
12	2637 M	2937 M	2637 M	2637 M	TORA and LDA end 107 M before physical end of pavement for RESA provision.
30	2744 M	3044 M	2744 M	2444 M	
12	1964 M	2264 M	1964 M		Take-off from Intersection with Taxiway Hotel.
12	1940 M	2240 M	1940 M		Take-off from Intersection with Taxiway Bravo 1.
12	1823 M	2123 M	1823 M		Take-off from Intersection with Taxiway Golf.
12	1272 M	1572 M	1272 M		Take-off from Intersection with Taxiway Charlie 1.
12	1247 M	1547 M	1247 M		Take-off from Intersection with Taxiway Echo 1.
30	1441 M	1741 M	1441 M		Take-off from Intersection with Taxiway Echo 1.
30	1417 M	1717 M	1417 M		Take-off from Intersection with Taxiway Charlie 1.
30	873 M	1173 M	873 M		Take-off from Intersection with Taxiway Golf.
30	726 M	1026 M	726 M		Take-off from Intersection with Taxiway Bravo 1.
30	693 M	993 M	693 M		Take-off from Intersection with Taxiway Hotel.

EGHQ AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
12	Centre-line with five crossbars. 817 M Light intensity high	Green Light intensity high Uni-directional with HI green wingbars	PAPI Left/3° 58 FT 313 M		Full length 15 M spacing Colour coded Light intensity high	Elev HI bi-directional colour coded with LI omnidirectional component 60 M spacing	Elev uni-directional Light intensity high		
30	Coded centre-line with five crossbars. Supplementarily lighting inner 275 M. 847 M Light intensity high	Green Light intensity high Uni-directional with HI green elev wingbars	PAPI Left/3° 51 FT 384 M	900 M	Full length 15 M spacing Colour coded Light intensity high	Elev HI bi-directional colour coded with LI omnidirectional component 60 M spacing	Elev uni-directional Light intensity high		

EGHQ AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: LGTD - Runway 12: 502646.48N 0050023.69W; Runway 12/30 (midpoint): 502634.99N 0045951.92W; Runway 30: 502611.76N 0045917.72W.
3	TWY edge and centre line lighting	CL: Green, and green and amber centre-line lighting, 15 M spacing, on Taxiways A, B, C and E. 30 M spacing on Taxiways D, G and H. EDGE: Blue edge lighting on apron.

4	Secondary power supply/switch-over time	Yes/1 second.
5	Remarks	Floodlighting Alpha and Echo Aprons. GA Apron floodlighting by prior arrangement.

EGHQ AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGHQ AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
NEWQUAY ATZ A circle, 2.5 NM radius, centred at 502627N 0045943W on longest notified runway (12/30)	Upper limit: 2000 FT AGL Lower limit: SFC	G	NEWQUAY APPROACH English	3000 FT		

EGHQ AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	NEWQUAY APPROACH	133.405 MHz DOC 60 NM/ 20,000 FT.			Mon-Fri 0645-2100 (0545-2000); Sat 0645-2000 (0545-1900); Sun 0730-2100 (0630-2000). All other times by arrangement.	ATZ hours coincident with Approach hours.
TWR	NEWQUAY GROUND	121.955 MHz			Only when directed by ATC or by prior arrangement.	
	NEWQUAY TOWER	134.380 MHz DOC 40 NM/ 10,000 FT.			Mon-Fri 0645-2100 (0545-2000); Sat 0645-2000 (0545-1900); Sun 0730-2100 (0630-2000). All other times by arrangement.	
RADAR	NEWQUAY RADAR	127.930 MHz DOC 60 NM/ 20,000 FT.			Only when directed by ATC or by prior arrangement.	
ATIS	NEWQUAY INFORMATION	127.405 MHz DOC 60 NM/ 24,500 FT.			As directed by ATC and by arrangement.	
OTHER	NEWQUAY EMERGENCY	121.500 MHz Emergency frequency.			O/R Not continuously monitored.	
OTHER	NEWQUAY FIRE	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGHQ AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS/LLZ I 1.05°W (2022)	INEW	110.500 MHz	HO	502601.05N 0045835.04W		(RWY 12) ILS not to be used without clearance from Newquay ATC.
ILS/GP	INEW	329.600 MHz	HO	502648.14N 0050028.11W		3° ILS Ref Datum Hgt 58 FT.
ILS/LLZ III 1.06°W (2022)	INWQ	110.500 MHz	HO	502658.38N 0050107.29W		(RWY 30) ILS not to be used without clearance from Newquay ATC.
ILS/GP	INWQ	329.600 MHz	HO	502610.55N 0045914.18W		3° ILS Ref Datum Hgt 51 FT.
NDB (L) 1.05°W (2022)	NQY	347.000 kHz	HO	502633.16N 0045948.03W		Range 50 NM.
ILS/DME	INEW	42X 110.500 MHz	HO	502632.30N 0045947.01W	365 FT	(RWY 12) On AD. Frequency paired with ILS I-NEW and I-NWQ. Zero range indicated at THR of Runway 12 and 30. DOC 25 NM/10,000 FT. DME error of up to 0.5 NM may occur in the sector 065-075M at or below 3000 FT to range 15 NM.
ILS/DME	INWQ	42X 110.500 MHz	HO	502632.30N 0045947.01W	365 FT	(RWY 30) On AD. Frequency paired with ILS I-NEW and I-NWQ. Zero range indicated at THR of Runway 12 and 30. DOC 25 NM/10,000 FT. DME error of up to 0.5 NM may occur in the sector 065-075M at or below 3000 FT to range 15 NM. On final approach RWY 30, DME not usable below 3000 FT outside 19 NM.

EGHQ AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) All persons on the manoeuvring and apron areas at Newquay Airport must wear high visibility clothing at all times. Passengers not wearing high visibility clothing must be escorted by personnel wearing the required clothing.

2 GROUND MOVEMENT

- a) General Aviation light aircraft 3000 KG MTOW or less, not requiring executive handling will self position on the General Aviation parking area southeast of the control tower. Parking at night will be under ground crew guidance.
- b) All aircraft parking on Stands 18-24 and Echo Apron are to follow ground crew guidance.
- c) All engine starts and aircraft manoeuvring on Alpha Apron require ground crew guidance.
- d) Due to slopes on Echo Apron aircraft Code D and above must shut down on the apron taxi track and be towed to a parking position. Other aircraft will be directed to a parking position by ground crew guidance.
- e) All aircraft parked on Echo must be chocked before the crew leave the aircraft.
- f) Unless otherwise instructed by ATC: Pilots entering the Golf Apron are to follow the left hand fork. Pilots leaving the Golf Apron are to route via G1.

3 CAT II/III OPERATIONS

- a) Runway 30 is suitable for Category II/IIIb operations by operators whose minima have been accepted by the Civil Aviation Authority.
- b) During Category II/IIIb operations, special ATC procedures (Low Visibility Procedures (LVP)) will be applied. Pilots will be informed when these procedures are in operation by RTF and/or ATIS automatic broadcast.

- c) Category II/III Holding Points are A2, B2, C2, A3 and E2 only. Red stopbars and amber/green coded centre-line lights are switched on for runway protection and guidance.
- d) Special procedures will be applied to aircraft taxiing via D4, G1 and H1.

4 WARNINGS

- a) Light aircraft should be aware of the elevated runway edge lights and PAPI for Runway 12/30.
- b) Pilots are advised that bird concentrations may be present in agricultural areas on approaches to runways. Deterrent measures within the airport boundary are carried out by a Bird Control Unit and pilots may be requested by ATC to delay departure or arrival if bird concentrations within the BCU's area of control prove difficult to disperse.
- c) Pilots are warned of the possibility of terrain induced turbulence and wind shear effects when landing on Runway 12 or 30.
- d) From its junction with Taxiway Charlie to 650 M short of holding point Alpha 3, Taxiway Alpha exceeds the required transverse and longitudinal slopes. Advisory warning signs are positioned at the beginning and end of the up and down slope. Pilots are to exercise caution in this area especially in conditions of surface contamination or when following other aircraft.
- e) Aircraft on instrument approach to Runway 30 or climb out from Runway 12 may experience a smell of burning due to a waste incinerator to the south of the FAT.
- f) Overall runway longitudinal slope 1.17%. Maximum variation 1.3% located 1200 M from start of Rwy 30 TORA.
- g) Runway 30 sight distance 841 M from runway end or 541 M from 30 threshold.
- h) Taxiway Delta from Echo to Runway 30 threshold not suitable for use by aircraft.
- i) Due to 24 hour SAR helicopter operations ILS I-NWQ and ILS I-NEW are not to be used without positive clearance from Newquay ATC.
- j) Instrument approaches to Runway 12 require approximately 20 NM flight over water. Pilots of single engine aircraft are advised to carry appropriate safety equipment.

5 HELICOPTER OPERATIONS

- a) Light helicopters may operate direct to their indicated landing position. The route to the landing position MUST avoid overflying the Terminal, terminal car parks, Carnanton House and RAF St Mawgan domestic site.
- b) Helicopters are not to cross the runway or enter the runway strip (150 M either side of runway centre-line), without positive ATC clearance.
- c) Heavy helicopters (SK61, Puma/Tiger etc) will be integrated into the fixed wing circuit and approach to the runway. After landing heavy helicopters may request ground or air taxi subject to landing gear fitted via the taxiways to their parking position.
- d) Marked helicopter landing spots are for use by authorised operators only, unless specifically directed by ATC.

6 USE OF RUNWAYS

Not applicable

7 TRAINING

- a) Training by jet aircraft or aircraft of more than 17,000 KG MTOW not accepted on UK Public Holidays.
- b) Military training approach requests to be directed to Weston Aviation, Tel: 01637-860551. For other military operation requests contact Newquay Operations, Tel: 01637-861055.

EGHQ AD 2.21 NOISE ABATEMENT PROCEDURES

a) Departures

- i. Runway 30: Aircraft less than 5700 kg MTOW: Climb straight ahead until above 1000 ft aal before turning on track. Avoid overflying Newquay Town or any built up area as much as possible. Instructions for an earlier turn may be given by ATC if traffic or weather conditions dictate.

Aircraft 5700 kg or more: Climb straight ahead until above 2000 ft agl or across the coast before turning on track.

- ii. Runway 12: Aircraft less than 5700 kg MTOW: Climb straight ahead until above 1000 ft aal before turning on track. Avoid overflying Newquay Town or any built up area as much as possible. Instructions for an earlier turn may be given by ATC if traffic or weather conditions dictate.

Aircraft 5700 kg or more: Climb straight ahead until above 2000 ft aal.

b) Arrivals

- i. Jet aircraft must not join the final approach track to either runway at a height of less than 1500 ft agl, except that jet aircraft carrying out visual circuit training may descend from 1500 ft agl on base leg and join the final approach track not less than 1000 ft aal.
- ii. Propeller driven aircraft of more than 5700 kg MTOW must not join the final approach track to any runway at a height of less than 1000 ft aal.
- iii. Unless otherwise instructed by ATC, aircraft using the ILS in IMC or VMC shall not descend below the height specified above before intercepting the glide path nor thereafter fly below it. Aircraft approaching without assistance from ILS or radar shall follow a descent path which will not result in it being at any time lower than the approach path which would be followed by an aircraft using the ILS glidepath.

EGHQ AD 2.22 FLIGHT PROCEDURES

1 INSTRUMENT APPROACH PROCEDURES

- a) Instrument Approach Procedures (IAP) for this aerodrome are established outside controlled airspace. See ENR 1.5.

2 PROCEDURES FOR INBOUND AIRCRAFT

- a) Recommended routes from the Airways System. Aircraft above FL 100 are recommended to contact Western Radar.

Approach from	Via	Route
Northeast	N92	EXMOR - NQY
East	L620	DAWLY - NQY
Southeast	N864	BHD - NQY
West		LND - NQY
Southwest		DCT - NQY

- b) Inbound aircraft from other than Airways System

- i. Aircraft inbound to Newquay from the London FIR may route direct towards the aerodrome. To avoid any commercial traffic it is recommended that an initial call be made 10 minutes before ETA, or at least 10 NM from the aerodrome
- ii. Traffic inbound from Bodmin, Truro and Perranporth aerodromes are to call before setting heading towards Newquay.
- iii. Inbound aircraft to contact Newquay Approach on 133.405 MHz unless otherwise instructed.

3 RADIO COMMUNICATIONS FAILURE

- a) In the event of complete radio communications failure in an aircraft the pilot will adopt the appropriate procedure notified at ENR 1.1 paragraph 3.4.

EGHQ AD 2.23 ADDITIONAL INFORMATION

Not applicable

EGHQ AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGHQ-2-1

AIRCRAFT PARKING/DOCKING CHART - ICAO

AD 2.EGHQ-2-2

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGHQ-5-1

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 12 - ICAO

AD 2.EGHQ-8-1

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 12 - ICAO

AD 2.EGHQ-8-2

INSTRUMENT APPROACH CHART SRA RTR 2 NM RWY 12 - ICAO

AD 2.EGHQ-8-3

INSTRUMENT APPROACH CHART NDB (L)/DME RWY 12 - ICAO

AD 2.EGHQ-8-4

INSTRUMENT APPROACH CHART ILS/DME/NDB(L) RWY 30 - ICAO

AD 2.EGHQ-8-5

INSTRUMENT APPROACH CHART LOC/DME/NDB(L) RWY 30 - ICAO

AD 2.EGHQ-8-6

INSTRUMENT APPROACH CHART SRA RTR 2 NM RWY 30 - ICAO

AD 2.EGHQ-8-7

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 30 - ICAO

AD 2.EGHQ-8-8

EGHQ AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

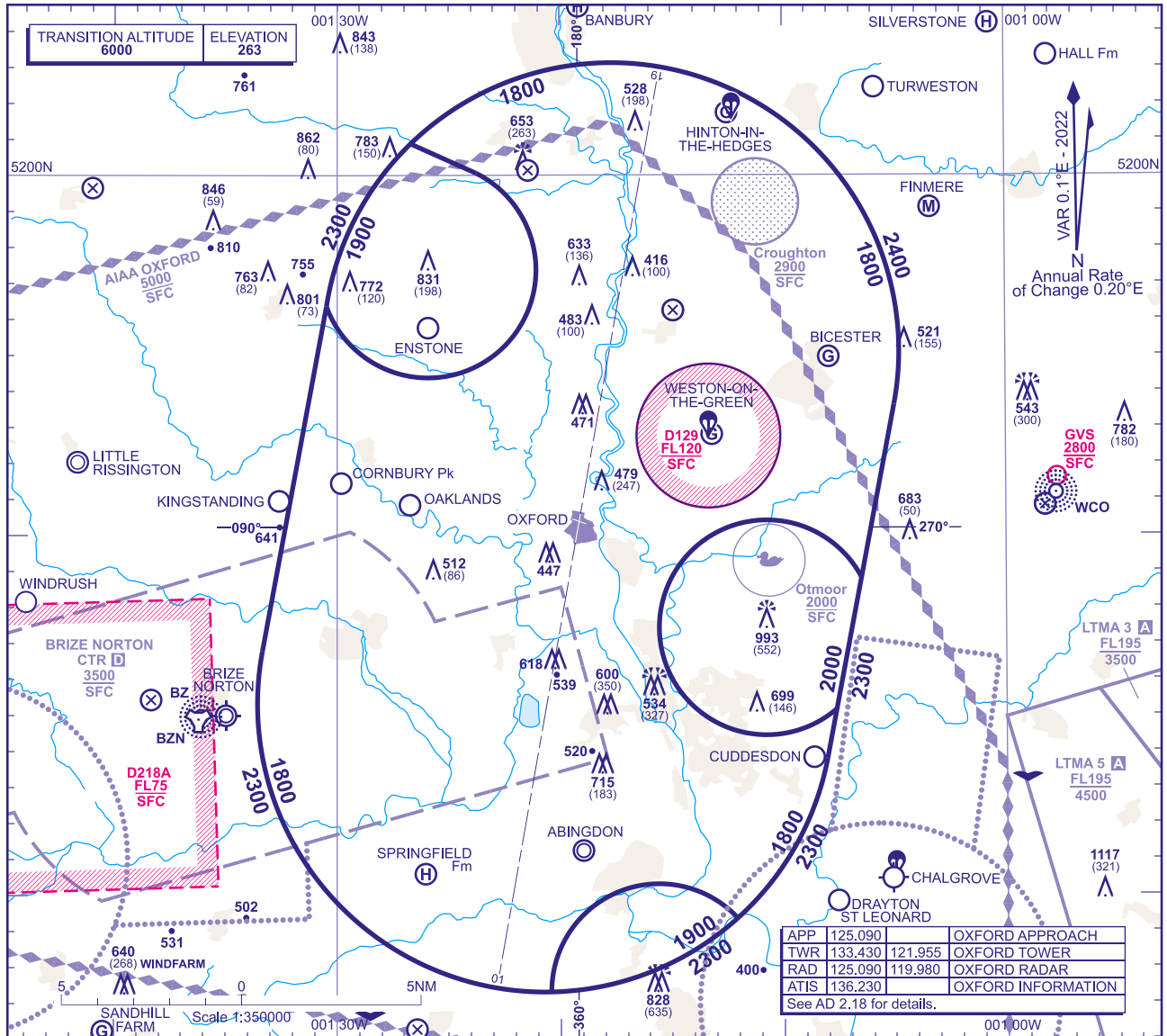
Not applicable

INTENTIONALLY BLANK

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ELEVATIONS IN FEET AMSL 1358
HEIGHTS IN FEET AGL (800)

OXFORD



MINIMUM INITIAL ALTITUDE

Within the ATC Surveillance Minimum Altitude area the minimum initial altitude to be allocated by the approach surveillance controller is:

- 1800** in the sector defined by the lateral limits; 520053N 0012642W thence clockwise by an arc of a circle radius 8NM centred on 515508N 0011742W to 515338N 0010500W - 514850N 0010630W thence anticlockwise by an arc of a circle radius 3NM centred on 514726N 0011045W to 514509N 0010738W - 514349N 0010803W thence clockwise by an arc of a circle radius 8NM centred on 514519N 0012041W to 513922N 0011205W thence anticlockwise by an arc of a circle radius 3NM centred on 513720N 0011537W to 513720N 0012025W thence clockwise by an arc of a circle radius 8NM centred on 514519N 0012041W to 514647N 0013321W - 515622N 0013029W thence anticlockwise by an arc of a circle radius 3NM centred on 515723N 0012555W to 520004N 0012344W - 520053N 0012642W.
- 2000** in the sector defined by the lateral limits; 514850N 0010630W - 514509N 0010738W thence clockwise by an arc of a circle radius 3NM centred on 514726N 0011045W to 514850N 0010630W.
- 1900** in the sector defined by the lateral limits; 513720N 0012025W thence clockwise by an arc of a circle radius 3NM centred on 513720N 0011537W to 513922N 0011205W thence clockwise by an arc of a circle radius 8NM centred on 514519N 0012041W to 513720N 0012025W.
- 1900** in the sector defined by the lateral limits; 520053N 0012642W - 520004N 0012344W thence clockwise by an arc of a circle radius 3NM centred on 515723N 0012555W to 515622N 0013029W - 515636N 0013024W thence clockwise by an arc of a circle radius 8NM centred on 515508N 0011742W to 520053N 0012642W.

OUTSIDE THE DESIGNATED ATC SURVEILLANCE MINIMUM ALTITUDE AREA

The minimum altitude to be allocated by the approach surveillance controller will be either the Minimum Sector Altitude, or **1000** above any fixed obstacles:

- within 5NM of the aircraft*, and
- within the sector 15NM ahead of and within 20° either side of the aircraft's track*.

LOSS OF COMMUNICATION PROCEDURES

Initial Approach Continue visually or by means of an appropriate approved final approach aid. If not possible proceed at **2200**, or last assigned level if higher, to **NDB(L)DME OXT**.
Intermediate and Final Approach Continue visually or by means of an appropriate final approach aid. If not possible follow the Missed Approach Procedure to **NDB(L)DME OXT**.
 † In all cases where the aircraft returns to the holding facility the procedure to be adopted is the Radio Failure Procedure detailed at ENR 1.1.3.4.

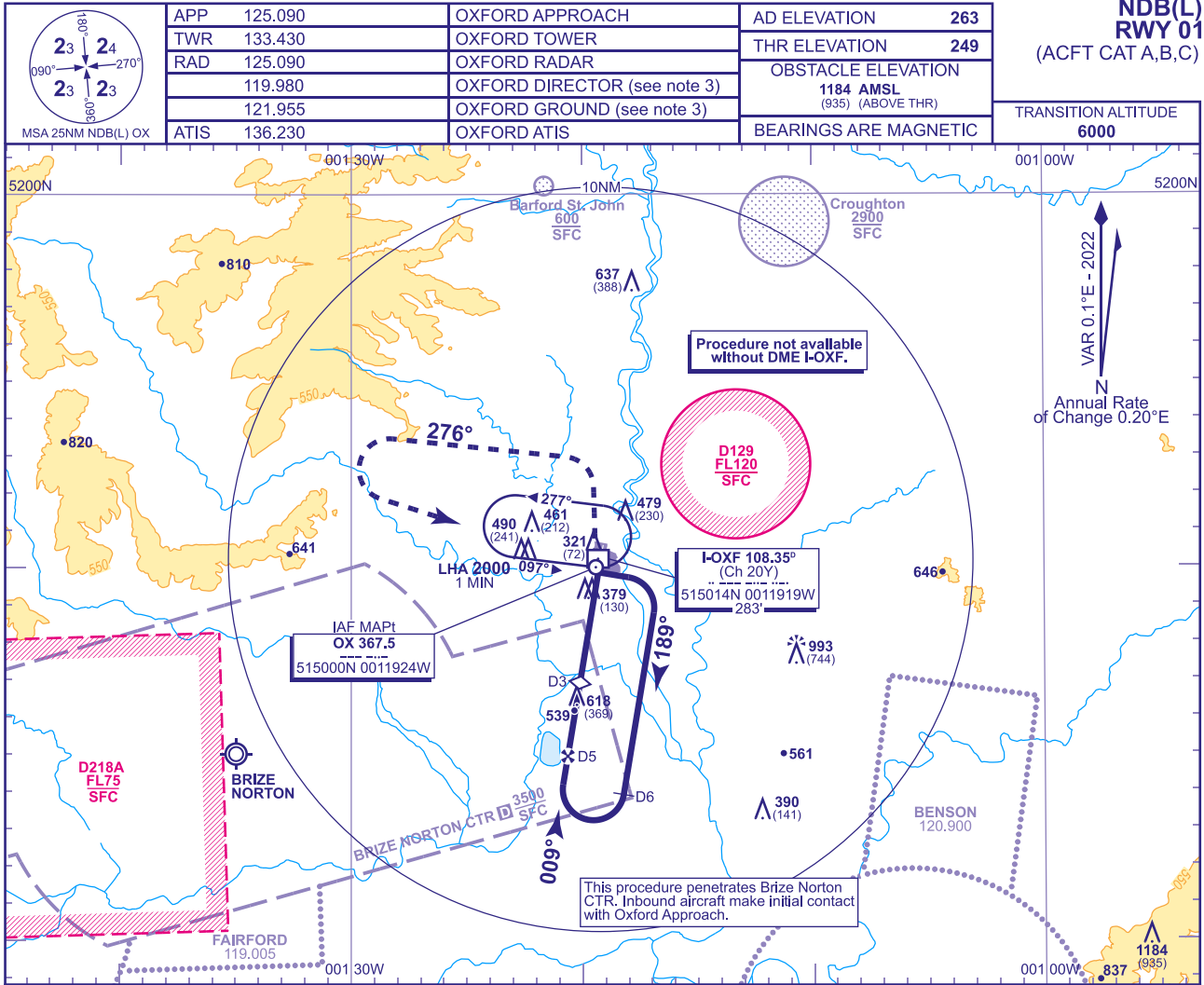
GENERAL INFORMATION

- Levels shown are based on QNH.
- Only significant obstacles and dominant spot heights are shown.
- The minimum levels shown within the ATC Surveillance Minimum Altitude Area are in conformance with the Standard European Rules of the Air - SERA.5015.
- Minimum Sector Altitudes are based on obstacles and spot heights within 25NM of OX NDB.
- Controlled airspace with a base in excess of **5000** or **FL55**, as appropriate, is not shown.
- This chart should only be used for the cross-checking of assigned altitudes whilst in receipt of an ATC Surveillance service.**

INTENTIONALLY BLANK

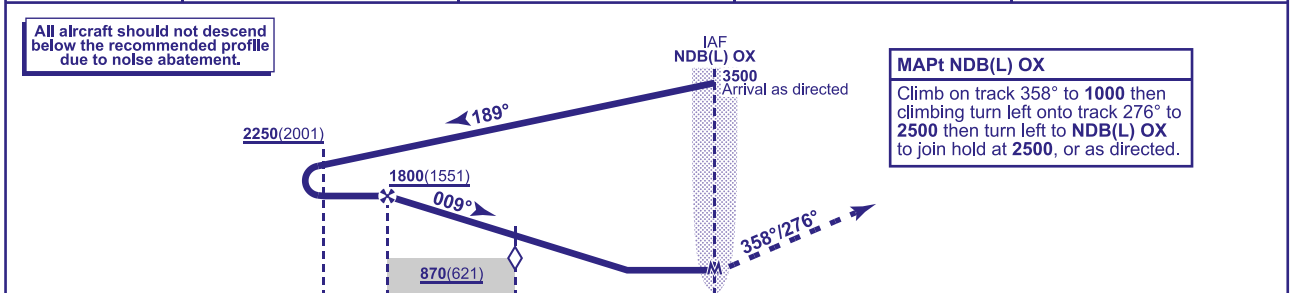
INSTRUMENT APPROACH CHART - ICAO

OXFORD
NDB(L)
RWY 01
(ACFT CAT A,B,C)



RECOMMENDED PROFILE Gradient 4.94%, 300FT/NM

DME I-OXF	5	4	3(SDF)	2
ALT(HGT)	1800(1551)	1480(1231)	1180(931)	880(631)



Aircraft Category		A	B	C	Rate of descent G/S KT FT/MIN	160	140	120	100	80
OCA (OCH)	Procedure	700(451)	700(451)	700(451)		800	700	600	500	400
	VM(C)OCA (OCH AAL)	Total Area	800(537)	800(537)		1100(837)				

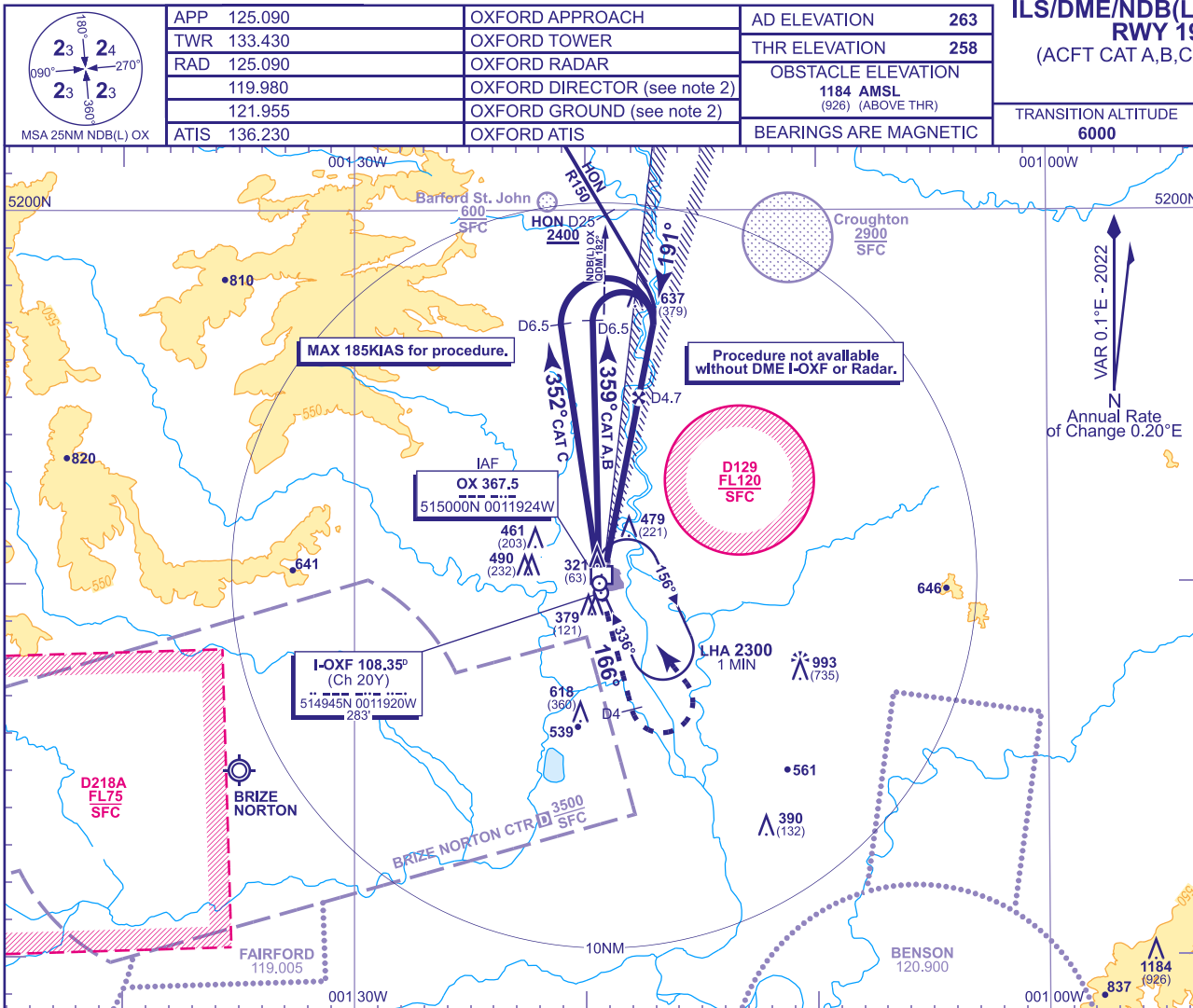
NOTE 1 Aircraft will normally be required to hold not lower than 3500 or equivalent FL.
2 Entry into racetrack procedure restricted to Sector 3 entry from inbound leg (097°M) of holding pattern.
3 Only when directed by ATC

WARNING 1 The established NDB hold is impacted by EGD129 activity. ATC Oxford will co-ordinate the use of the hold in association with the instrument procedures with regard to promulgated activity in EGD129.

CHANGE (12/24): OCA(OCH) INCREASE. NE MSA INCREASE.
AERO INFO DATE 09 SEP 24

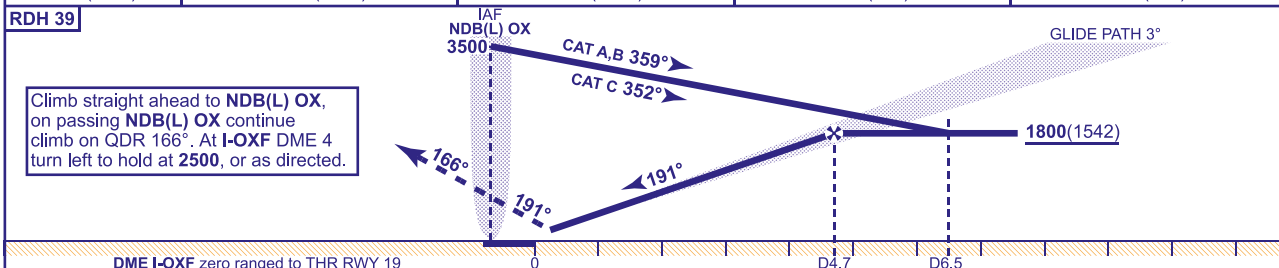
INSTRUMENT APPROACH CHART - ICAO

OXFORD ILS/DME/NDB(L) RWY 19
(ACFT CAT A,B,C)



RECOMMENDED PROFILE GLIDE PATH 3°, 320FT/NM

DME I-OXF	4	3	2	1
ALT(HGT)	1580(1322)	1260(1002)	940(682)	620(362)



DME I-OXF zero ranged to THR RWY 19				Rate of descent					
Aircraft Category	A	B	C	G/S KT	160	140	120	100	80
OCA (OCH) Procedure	563(305)	573(315)	583(325)	FT/MIN	850	750	640	530	430
VM(C)OCA (OCH AAL) Total Area	800(537)	800(537)	1100(837)						

DIRECT ARRIVAL VIA VOR HON R150
Intercept and follow VOR HON R150 **not below MSA**. At lead NDB(L) OX QDM 182° (HON DME 25) turn right to establish on localiser. When established descend to cross FAP (I-OXF DME 4.7) at 1800(1542), then continue as for main procedure.

- NOTE**
- 1 Aircraft will normally be required to hold not lower than 3500 or equivalent FL.
 - 2 Only when directed by ATC.
 - 3 ILS/DME is available without NDB if aircraft is radar vectored to final approach.
 - 4 **AIRCRAFT UNABLE TO RECEIVE DME I-OXF.** Advise ATC and continue as for normal procedure. Radar ranges will be provided at D6.5 outbound and at D5 inbound.

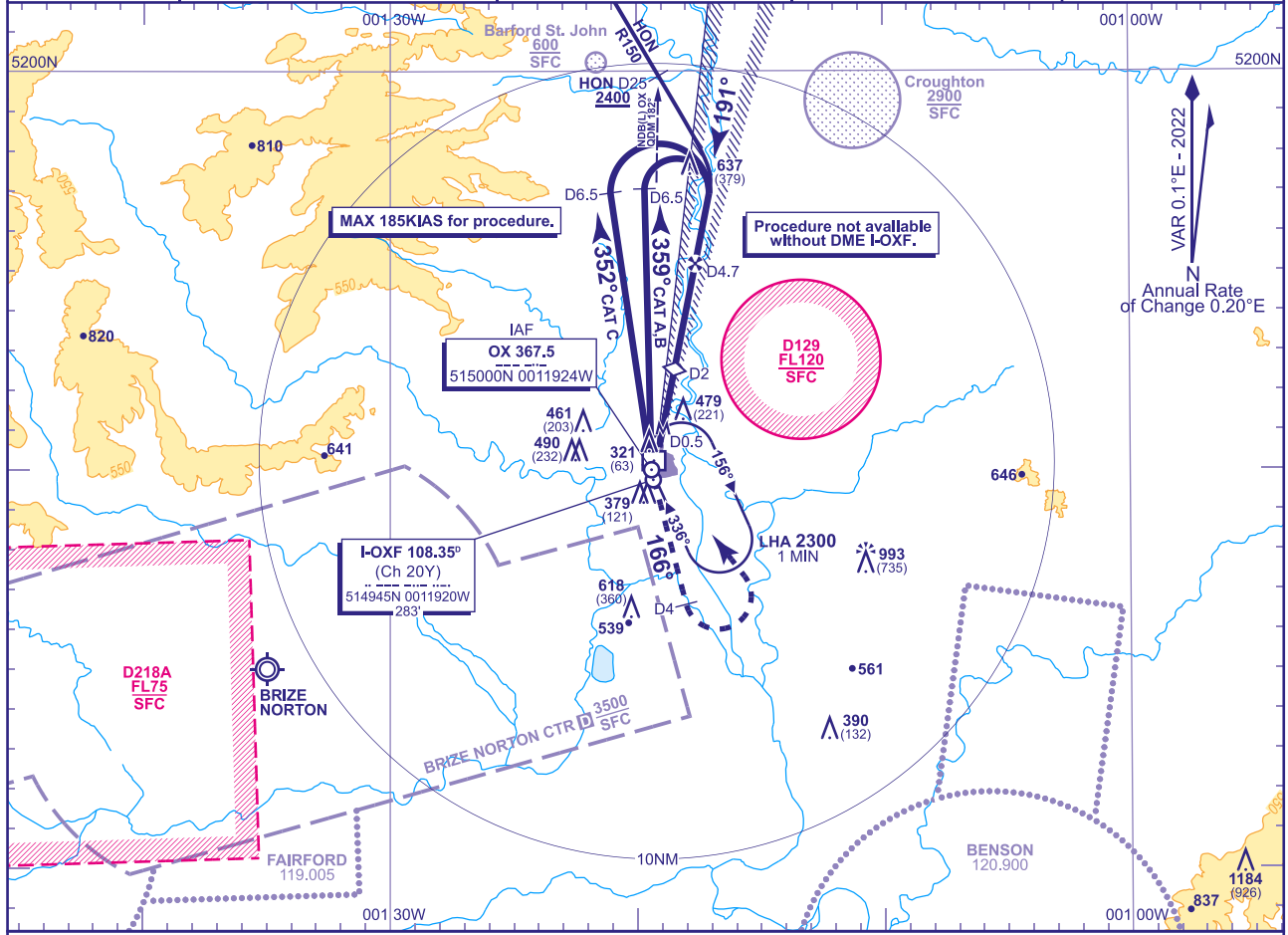
- WARNING**
- 1 The established NDB hold is impacted by EGD129 activity. ATC Oxford will co-ordinate the use of the hold in association with the instrument procedures with regard to promulgated activity in EGD129.
 - 2 Auto-coupled approaches are not approved.
 - 3 Pilots may experience glidepath fluctuations within I-OXF DME 1.

CHANGE (12/24): OCA(OCH) INCREASE. HON D25 ALTITUDE RESTRICTION. NE MSA INCREASE.
AERO INFO DATE 09 SEP 24

INSTRUMENT APPROACH CHART - ICAO

OXFORD
LOC/DME/NDB(L)
RWY 19
(ACFT CAT A,B,C)

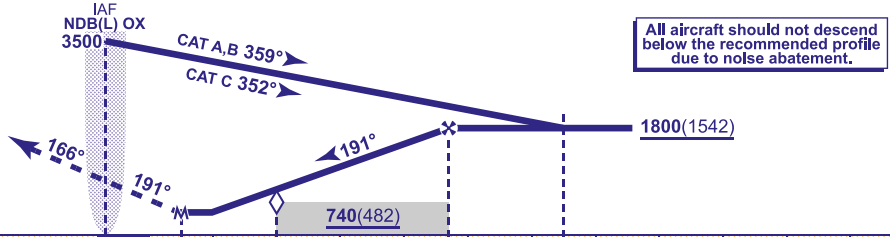
APP 125.090	OXFORD APPROACH	AD ELEVATION 263
TWR 133.430	OXFORD TOWER	THR ELEVATION 258
RAD 125.090	OXFORD RADAR	OBSTACLE ELEVATION 1184 AMSL (926) (ABOVE THR)
119.980	OXFORD DIRECTOR (see note 2)	TRANSITION ALTITUDE 6000
121.955	OXFORD GROUND (see note 2)	BEARINGS ARE MAGNETIC
ATIS 136.230	OXFORD ATIS	



RECOMMENDED PROFILE Gradient 5.2%, 320FT/NM

DME I-OXF	4	3	2 (SDF)
ALT (HGT)	1580(1322)	1260(1002)	940(682)

MAPt I-OXF DME 0.5
Climb straight ahead to NDB(L) OX, on passing NDB(L) OX continue climb on QDR 166°. At I-OXF DME 4 turn left to hold at 2500, or as directed.



All aircraft should not descend below the recommended profile due to noise abatement.

DME I-OXF zero ranged to THR RWY 19				
Aircraft Category	A	B	C	
OCA (OCH) Procedure	610(352)	610(352)	610(352)	Rate of descent
VM(C)OCA (OCH AAL) Total Area	800(537)	800(537)	1100(837)	G/S KT FT/MIN
				160 140 120 100 80
				850 750 640 530 430

DIRECT ARRIVAL VIA VOR HON R150
Intercept and follow VOR HON R150 **not below MSA**. At lead NDB(L) OX QDM 182° (HON DME 25) turn right to establish on localiser. When established descend to cross FAF (I-OXF DME 4.7) at 1800(1542), then continue as for main procedure.

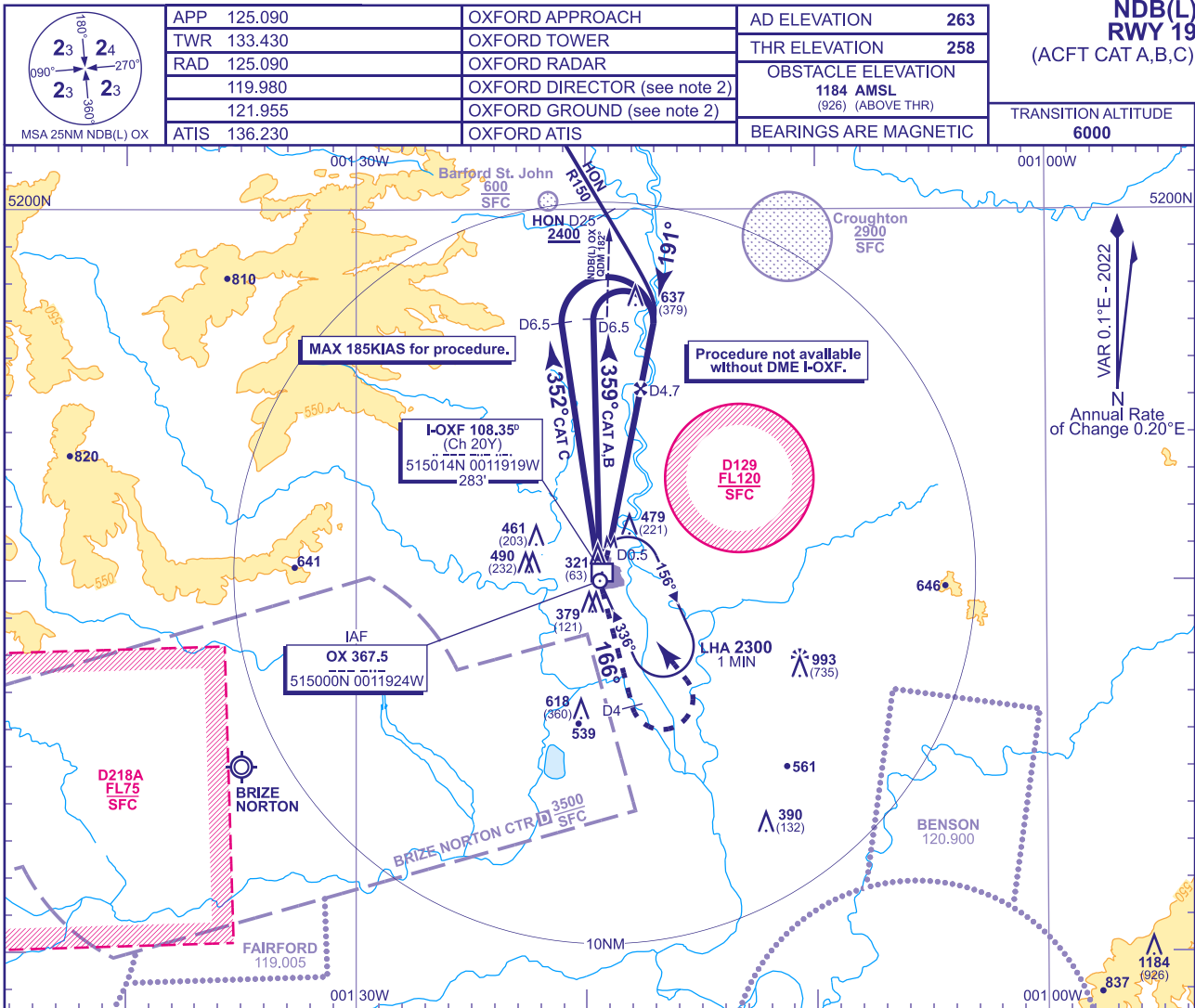
NOTE 1 Aircraft will normally be required to hold not lower than 3500 or equivalent FL.
NOTE 2 Only when directed by ATC.

WARNING The established NDB hold is impacted by EGD129 activity. ATC Oxford will co-ordinate the use of the hold in association with the instrument procedures with regard to promulgated activity in EGD129.

CHANGE (12/24): OCA(OCH) INCREASE, HON D25 ALTITUDE RESTRICTION, NE MSA INCREASE.
AERO INFO DATE 09 SEP 24

INSTRUMENT APPROACH CHART - ICAO

**OXFORD
NDB(L)
RWY 19**
(ACFT CAT A,B,C)

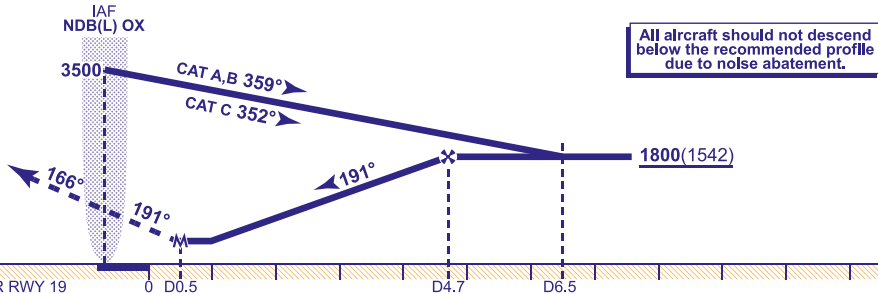


APP 125.090	OXFORD APPROACH	AD ELEVATION	263
TWR 133.430	OXFORD TOWER	THR ELEVATION	258
RAD 125.090	OXFORD RADAR	OBSTACLE ELEVATION	1184 AMSL (926) (ABOVE THR)
119.980	OXFORD DIRECTOR (see note 2)	BEARINGS ARE MAGNETIC	
121.955	OXFORD GROUND (see note 2)	TRANSITION ALTITUDE	6000
ATIS 136.230	OXFORD ATIS		

RECOMMENDED PROFILE Gradient 5.2%, 320FT/NM

DME I-OXF	4	3	2 (SDF)
ALT(HGT)	1580(1322)	1260(1002)	940(682)

MAPt I-OXF DME 0.5
Climb straight ahead to NDB(L) OX, on passing NDB(L) OX continue climb on QDR 166°. At I-OXF DME 4 turn left to NDB(L) OX climbing as necessary to hold at 2500, or as directed.



DME I-OXF zero ranged to THR RWY 19					Rate of descent					
Aircraft Category	A	B	C		G/S KT	160	140	120	100	80
OCA (OCH) Procedure	750(492)	750(492)	750(492)		FT/MIN	850	750	640	530	430
VM(C)OCA (OCH AAL) Total Area	800(537)	800(537)	1100(837)							

DIRECT ARRIVAL VIA VOR HON R150
Intercept and follow VOR HON R150 **not below MSA**. At lead NDB(L) OX QDM 182° (HON DME 25) turn right to establish on extended FAT (NDB(L) OX QDM 191°). When established descend to cross FAF (I-OXF DME 4.7) at 1800(1542), then continue as for main procedure.

- NOTE**
- Aircraft will normally be required to hold not lower than 3500 or equivalent FL.
 - Only when directed by ATC.

WARNING The established NDB hold is impacted by EGD129 activity. ATC Oxford will co-ordinate the use of the hold in association with the instrument procedures with regard to promulgated activity in EGD129.

CHANGE (12/24): OCA(OCH) INCREASE. HON D25 ALTITUDE RESTRICTION. SDF/MOCA REMOVED. NE MSA INCREASE.
AERO INFO DATE 09 SEP 24

**AERODROME
CHART - ICAO**

ARP 553034N 0043540W

AD ELEV 65FT

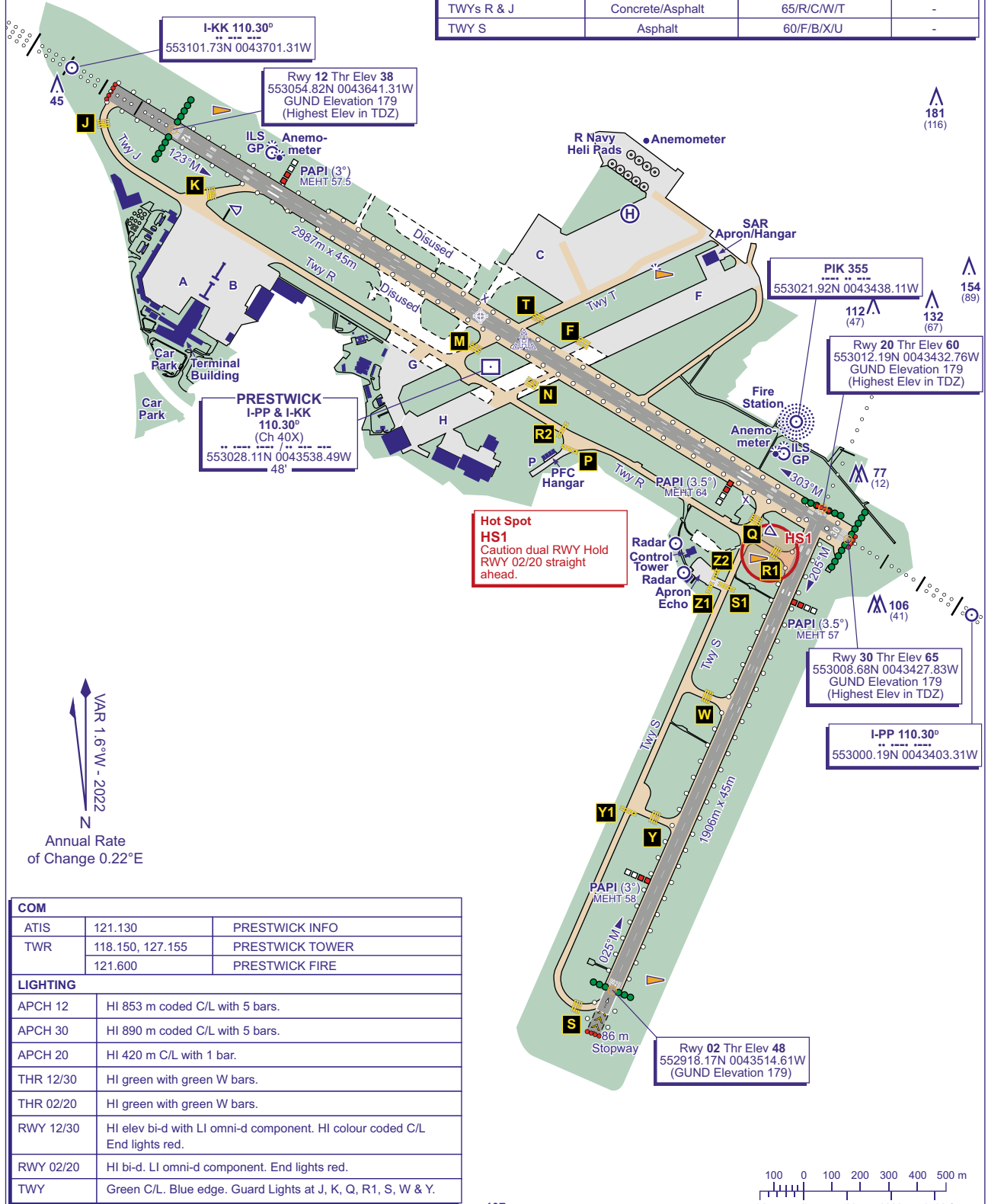
**PRESTWICK
EGPK**

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.

BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET

ELEVATIONS IN FEET AMSL	181
HEIGHTS IN FEET ABOVE AD	(116)

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 12/30	Concrete/Asphalt	90/R/C/W/T	-
RWY 02/20	Asphalt	60/F/C/X/U	-
Aprons A & B	Concrete/Asphalt	100/R/C/W/T	30 ft amsl
Aprons C, F & H	Concrete/Asphalt	50/R/A/X/U	-
Aprons G	Concrete/Asphalt	30/R/B/X/U	-
TWYs R & J	Concrete/Asphalt	65/R/C/W/T	-
TWY S	Asphalt	60/F/B/X/U	-



COM		
ATIS	121.130	PRESTWICK INFO
TWR	118.150, 127.155	PRESTWICK TOWER
	121.600	PRESTWICK FIRE
LIGHTING		
APCH 12	HI 853 m coded C/L with 5 bars.	
APCH 30	HI 890 m coded C/L with 5 bars.	
APCH 20	HI 420 m C/L with 1 bar.	
THR 12/30	HI green with green W bars.	
THR 02/20	HI green with green W bars.	
RWY 12/30	HI elev bi-d with LI omni-d component. HI colour coded C/L End lights red.	
RWY 02/20	HI bi-d. LI omni-d component. End lights red.	
TWY	Green C/L. Blue edge. Guard Lights at J, K, Q, R1, S, W & Y.	

CHANGE (12/24): HOT SPOT TEXT REVISED.

AERO INFO DATE 05 SEP 24

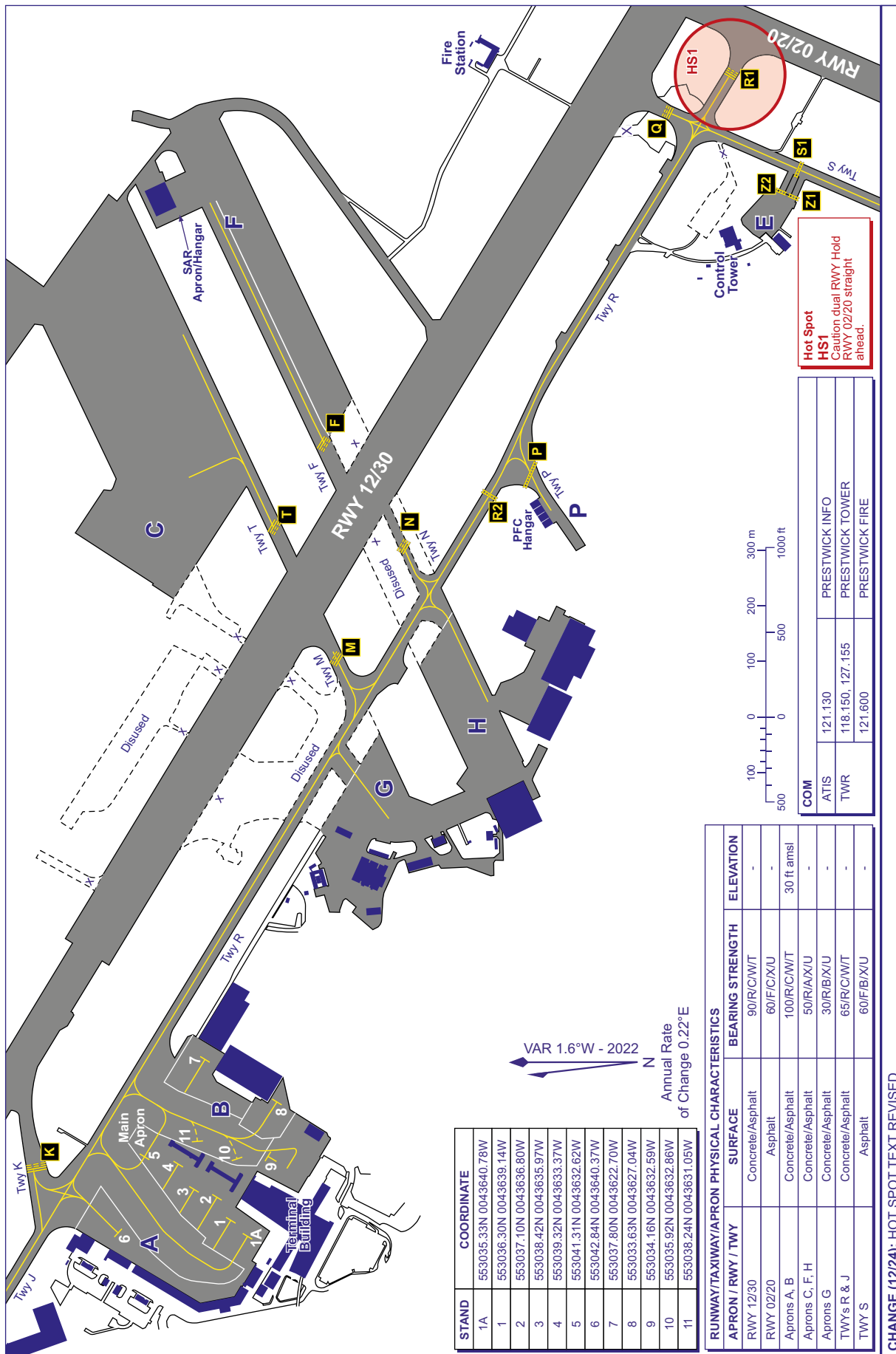
AD 2-EGPK-2-1

PRESTWICK
EGPK

AD ELEV 65FT

ARP 553034N 0043540W

AIRCRAFT PARKING/DOCKING
CHART - ICAO

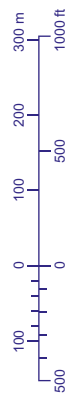


STAND	COORDINATE
1A	553035.33N 0043640.78W
1	553036.30N 0043639.14W
2	553037.10N 0043636.80W
3	553038.42N 0043635.97W
4	553039.32N 0043633.37W
5	553041.31N 0043632.62W
6	553042.84N 0043640.37W
7	553037.80N 0043622.70W
8	553033.63N 0043627.04W
9	553034.16N 0043632.59W
10	553035.92N 0043632.86W
11	553038.24N 0043631.05W

VAR 1.6°W - 2022

Annual Rate
of Change 0.22°E

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 12/30	Concrete/Asphalt	90/R/C/W/T	-
RWY 02/20	Asphalt	60/F/C/X/U	-
Aprons A, B	Concrete/Asphalt	100/R/C/W/T	30 ft amsl
Aprons C, F, H	Concrete/Asphalt	50/R/A/X/U	-
Aprons G	Concrete/Asphalt	30/R/B/X/U	-
TWY's R & J	Concrete/Asphalt	65/R/C/W/T	-
TWY S	Asphalt	60/F/B/X/U	-



Hot Spot
HS1
Caution dual RWY Hold
RWY 02/20 straight
ahead.

COM	PRESTWICK INFO	PRESTWICK TOWER	PRESTWICK FIRE
ATIS	121.130	118.150, 127.155	121.600
TWR			

CHANGE (12/24): HOT SPOT TEXT REVISED.

AERO INFO DATE 05 SEP 24

AD 2-EGPK-2-2

5 HELICOPTER OPERATIONS

- a) All helicopters must land and take-off on the runway.

6 USE OF RUNWAYS

Not applicable

7 TRAINING

- a) Use of the aerodrome by training flights is subject to approval from Airside Operations, Tel: 023-80627075.
- b) Training flights by helicopters may be permitted. All enquiries to Airport Duty Manager on 023-80627113.

EGHI AD 2.21 NOISE ABATEMENT PROCEDURES

- a) Operators of all aircraft arriving or departing from the aerodrome are required to conform to the following procedures, as applicable, notwithstanding that at any time they may be departed from to the extent necessary for avoiding immediate danger or for compliance with instructions from ATC.
- b) In order that the least possible noise disturbance is caused in areas surrounding the aerodrome, aircraft operators should ensure that at all times their aircraft conform to the noise abatement techniques laid down for that type of aircraft.
- c) Arrivals
Following procedures apply to:
 - i. All turbo jet aircraft;
 - ii. all aircraft with a MTOW of 5700 KG or greater;
 1. Aircraft flying an ILS approach should at no time descend below 1744 FT AMSL, 1700 FT AGL before intercepting the glide path.
 2. Aircraft flying an instrument approach other than ILS, or those aircraft flying a visual approach, should not intercept the appropriate final approach track at a range less than 5 DME SAM, except that aircraft flying a visual approach via the downwind leg should not intercept final approach at less than 2 DME SAM for RWY 20 or 4 DME SAM for RWY 02.
 3. Aircraft flying a visual approach should intercept the final approach track at a level not less than that equivalent to a 3° glide path at the intercept range. Final approach should be flown at not less than a nominal 3° glide path.
 4. With the exception of the minimum ILS intercept level, nothing herein shall apply to an aircraft authorised by ATC to fly a circling instrument approach procedure.
- d) Except as required during normal aircraft operations when flight is immediately intended, or as part of an after landing engine shutdown routine, engine ground running by aircraft is subject to strict control and is prohibited at certain times. Requests for approval must be made to the Airport Duty Manager, Tel: 023-80627113
- e) The operation of aircraft auxiliary power units or ground power units should be kept to a minimum consistent with safety.
- f) Noise Abatement Procedures (NAP) specified herein are applicable to:
 - i. All turbo jet aircraft;
 - ii. all aircraft with a MTOW of 5700 KG or greater;

Take-off Runway	NAP
02	Climb straight ahead until 2.5 DME SAM If VOR SAM is unserviceable, climb straight ahead until 2.5 DME ISN
20	As soon as possible after passing 500 FT ALT, turn right to intercept VOR SAM RDL 215. Maintain RDL 215 until 2000 FT ALT. If VOR SAM is unserviceable, as soon as possible after passing 500 FT ALT, turn right to maintain a track 216 MAG until 2000 FT ALT

- g) The NAP specified in (f) may be varied by ATC except for aircraft that do not conform to the provisions of ICAO Annex 16, Vol 1, Chapter 3. If an ATC clearance requires a departure heading other than that specified in (f), the ATC specified heading supersedes that required by the appropriate NAP.

EGHI AD 2.22 FLIGHT PROCEDURES

1 CIRCUITS

- a) Unless flying a circling approach procedure, circuits shall normally be flown during daylight hours by propeller driven aircraft and helicopters at 1000 FT ALT and turbojet aircraft at 1500 FT ALT. All circuits flown at night shall be flown at 1500 FT ALT.

2 PROCEDURES FOR INBOUND AIRCRAFT

- a) Standard Inbound Routes

Full routeings are published in the UK Standard Route Document (SRD). Aircraft inbound to Southampton from the ATS Route network will be routed on the designated Standard Arrival Routes. The Standard Arrival Routes are published in AD 2-EGHI-7-1/4.

- b) Holding Procedures

Holding patterns are as follows:

Main Stacks	Holding
Southampton NDB(L) EAS (Lowest level 2000 FT ALT)	Holding axis 017° MAG turning right at the facility.
Southampton VOR SAM (Lowest level 2000 FT ALT)	Holding axis 029° MAG turning right at the facility.
SIERRA (Lowest level 2000 FT ALT)	Holding fix SAM VOR/DME RDL 209°/D8 on an axis of 029° MAG, Turning right at fix, limiting DME SAM D11.
NOVEMBER (Lowest level 2000 FT ALT)	Holding fix SAM VOR/DME RDL 002°/D7.2 on an axis of 182° MAG, Turning left at fix, limiting DME SAM D11.
NEDUL (Lowest level 4000 FT ALT)	Holding fix SAM VOR/DME 204°/19 NM limiting DME SAM D24 on an axis of 024° MAG, turning right at the fix.

3 PROCEDURES FOR OUTBOUND AIRCRAFT

- a) The initial departures routes are shown below – full routeings are published in the UK Standard Route Document (SRD). These routes may be varied at the discretion of ATC (e.g. to offer more direct routeing when the traffic situation permits). **Pilots must adhere to the Noise Abatement Procedures (NAP) detailed in EGGI AD 2.21 before turning onto the specified route.**

*: see also UK Standard Route Document

Departing to	Runway	Via	Route*
North	02, 20	Q41	Q41 - NORRY (Note 1)
Northwest	02, 20	Y321/N14/Q63	Y321 - NUBRI - N14 - HEKXA/Y321 - NUBRI - DCT - KENET (Note 1)
East	02, 20	GWC	GWC
South	02, 20	Q41/Z171	NEDUL - Q41/Z171 (Note 2)
West (Note 3)	02, 20	FIR	As directed by ATC

Note 1: Right turn from end of NAP Runway 20.

Note 2: Left turn from end of NAP Runway 02.

Note 3: There is no contiguous Controlled Airspace to the west of the Solent CTA. Departing aircraft intending to join the ATS Route network will leave controlled airspace at the Solent CTA boundary. Unless prior arrangements have been made by the aircraft operator with another ATS provider, the aircraft commander is responsible for obtaining a service outside controlled airspace.

4 RADIO COMMUNICATIONS FAILURE PROCEDURES

- a) In the event of complete radio communication failure in an aircraft, the pilot will adopt the appropriate procedure notified at ENR 1.1 paragraph 3.4.
- b) The routes to be used when leaving the CTR in accordance with the procedures at ENR 1.1 paragraph 3.4 are shown in the table below; the route to be followed is dependent on the position of the aircraft at the time the decision to leave the Airspace is made.

Position at time of decision	Route
Southampton VOR/DME SAM	Track 295°(T)
Southampton NDB(L) EAS	Track 295°(T)

5 FLIGHTS ENGAGED IN INSTRUMENT ROUTE TRAINING - FLOW MANAGEMENT REQUIREMENTS

- a) See EGHH AD 2.22, paragraph 4.

6 VISUAL REFERENCE POINTS (VRP)

- a) VFR traffic requesting transit of the Southampton CTR routing west-east or east-west can expect clearance subject to traffic as follows:

West Route:	Bishops Waltham VRP - Southampton VOR VRP - Romsey VRP;
East Route:	Romsey VRP - Southampton VOR VRP - Bishops Waltham VRP.

Transit will be subject to ATC clearance.

- b) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

7 FREQUENCY MONITORING CODE (FMC)

- a) Pilots operating in the vicinity of, but intending to remain outside Southampton CTR/Solent CTA, within the area defined by straight lines joining successively the following points and maintaining a listening watch only on Solent Radar frequency, 120.230 MHz, are encouraged to select SSR code 7011.

504541N 0011735W - 505302N 0005800W -
505836N 0005856W - 510648N 0010232W -
511031N 0012021W - 510128N 0013420W -
505442N 0013925W - 504229N 0013301W -
504541N 0011735W.

- b) Selection of 7011 does not imply the receipt of an ATC service. Aircraft displaying the code are not expected to contact ATC under normal circumstances, remain responsible for their own navigation, separation, terrain clearance and are expected to remain clear of the Southampton CTR/Solent CTA at all times.
- c) Whilst squawking 7011 pilots should be aware that Solent Radar may make blind transmissions in order to ascertain a particular aircraft's intentions/route.
- d) When a pilot ceases to maintain a listening watch, code 7011 shall be deselected.

EGHI AD 2.23 ADDITIONAL INFORMATION

- a) Solent/Southampton Radar and Southampton Tower may be provided as a combined function. Periods when active will be notified by ATIS. SRA not available.

EGHI AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGHI-2-1

AIRCRAFT PARKING/DOCKING CHART - ICAO

AD 2.EGHI-2-2

CONTROL ZONE and CONTROL AREA CHART

AD 2.EGHI-4-1

ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

AD 2.EGHI-5-1

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) BUGUP 1S CPT 1S UMBUR 2S - ICAO

AD 2.EGHI-7-1

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) COWLY 1S - ICAO

AD 2.EGHI-7-2

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) ELDAX 1S - ICAO

AD 2.EGHI-7-3

RNAV5 (DME/DME or GNSS) STANDARD ARRIVAL CHART - INSTRUMENT (STAR) THRED 1S - ICAO

AD 2.EGHI-7-4

STANDARD INSTRUMENT ARRIVAL CODING TABLES - BUGUP 1S CPT 1S UMBUR 2S COWLY 1S

28 Nov 2024

AD 2.EGHI-7-5

STANDARD INSTRUMENT ARRIVAL CODING TABLES ELDAX 1S THRED 1S

AD 2.EGHI-7-6

RNAV HOLD CODING TABLES NEDUL PEPIS RUDMO SAM

AD 2.EGHI-7-7

INSTRUMENT APPROACH CHART RNP RWY 02 (CAT A,B,C) - ICAO

AD 2.EGHI-8-1

INSTRUMENT APPROACH CHART VOR/DME RWY 02 (CAT A,B,C) - ICAO

AD 2.EGHI-8-2

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 02 (CAT A,B,C) - ICAO

AD 2.EGHI-8-3

INSTRUMENT APPROACH CHART (IAF VOR SAM) ILS/DME RWY 20 (CAT A,B,C) - ICAO

AD 2.EGHI-8-4

INSTRUMENT APPROACH CHART (IAF VOR SAM) LOC/DME RWY 20 (CAT A,B,C) - ICAO

AD 2.EGHI-8-5

INSTRUMENT APPROACH CHART (IAF NDB(L) EAS) ILS/DME RWY 20 (CAT A,B,C) - ICAO

AD 2.EGHI-8-6

INSTRUMENT APPROACH CHART (IAF NDB(L) EAS) LOC/DME RWY 20 (CAT A,B,C) - ICAO

AD 2.EGHI-8-7

INSTRUMENT APPROACH CHART VOR/DME RWY 20 (CAT A,B) - ICAO

AD 2.EGHI-8-8

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 20 (CAT A,B,C) - ICAO

AD 2.EGHI-8-9

INSTRUMENT APPROACH CHART VOR/DME 181° TO AERODROME (CAT C) - ICAO

AD 2.EGHI-8-10

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 02

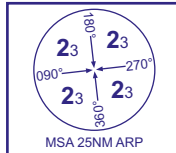
AD 2.EGHI-8-11

EGHI AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

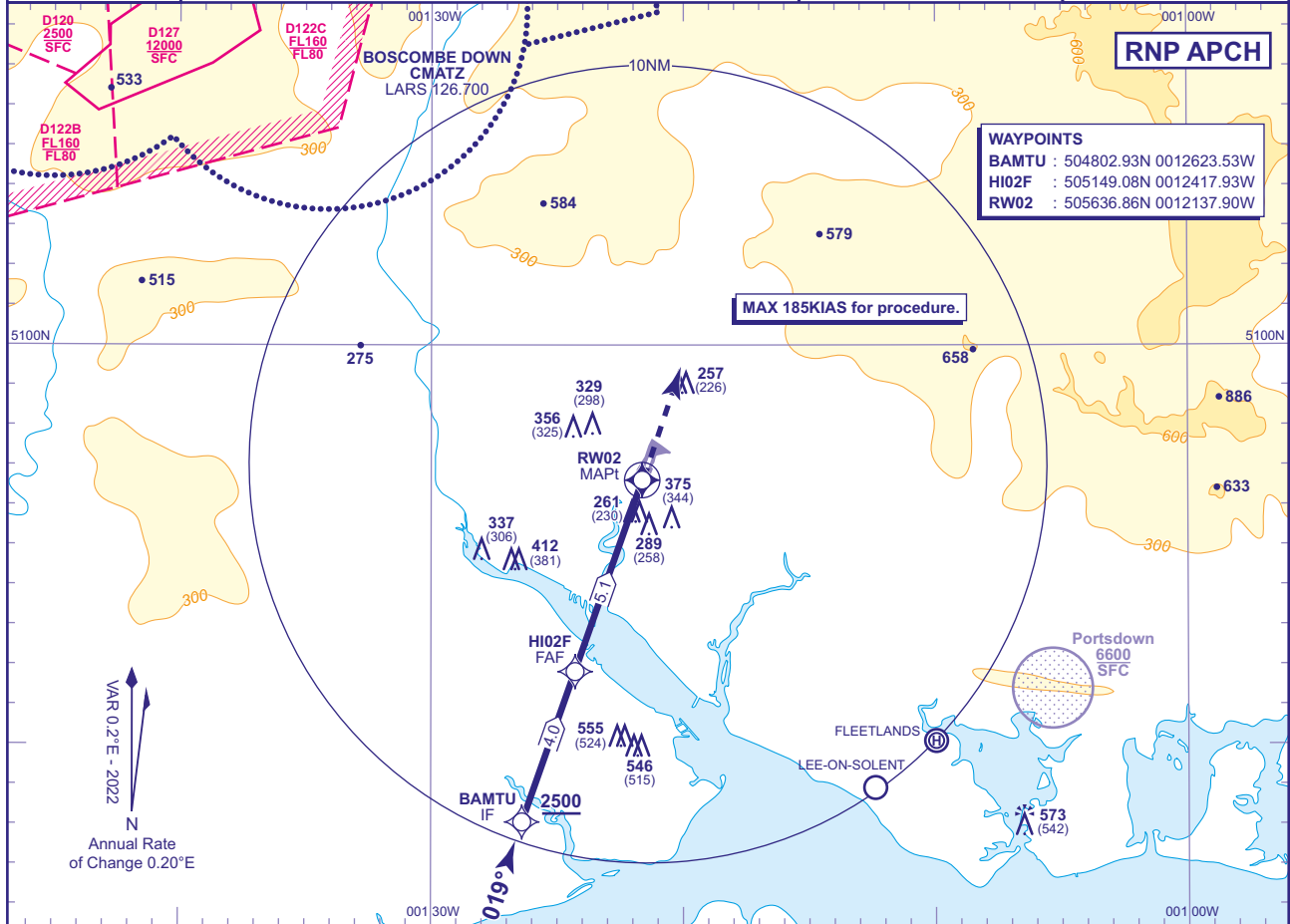
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON RNP
RWY 02
(ACFT CAT A,B,C)



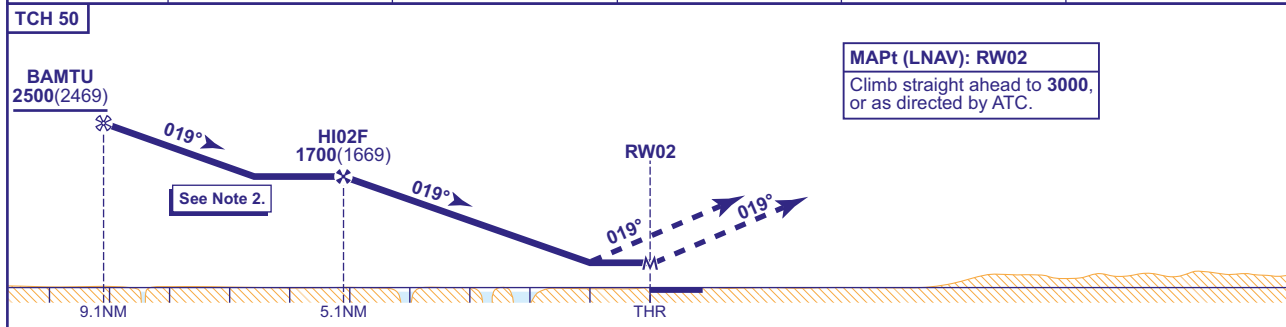
APP	120.230	SOLENT RADAR	AD ELEVATION	44
	122.730	SOUTHAMPTON RADAR	THR ELEVATION	31
TWR	118.205	SOUTHAMPTON TOWER	OBSTACLE ELEVATION	648 AMSL (617) (ABOVE THR)
ATIS	130.880	SOUTHAMPTON INFORMATION	BEARINGS ARE MAGNETIC	

MIN TEMP	-10°C
TRANSITION ALTITUDE	6000 (see note 1)



RECOMMENDED PROFILE VNAV VPA 3.0° (LNAV 5.24%), 318FT/NM

NM to RW02	5	4	3	2	1
ALT(HGT)	1670(1639)	1350(1319)	1030(999)	720(689)	400(369)



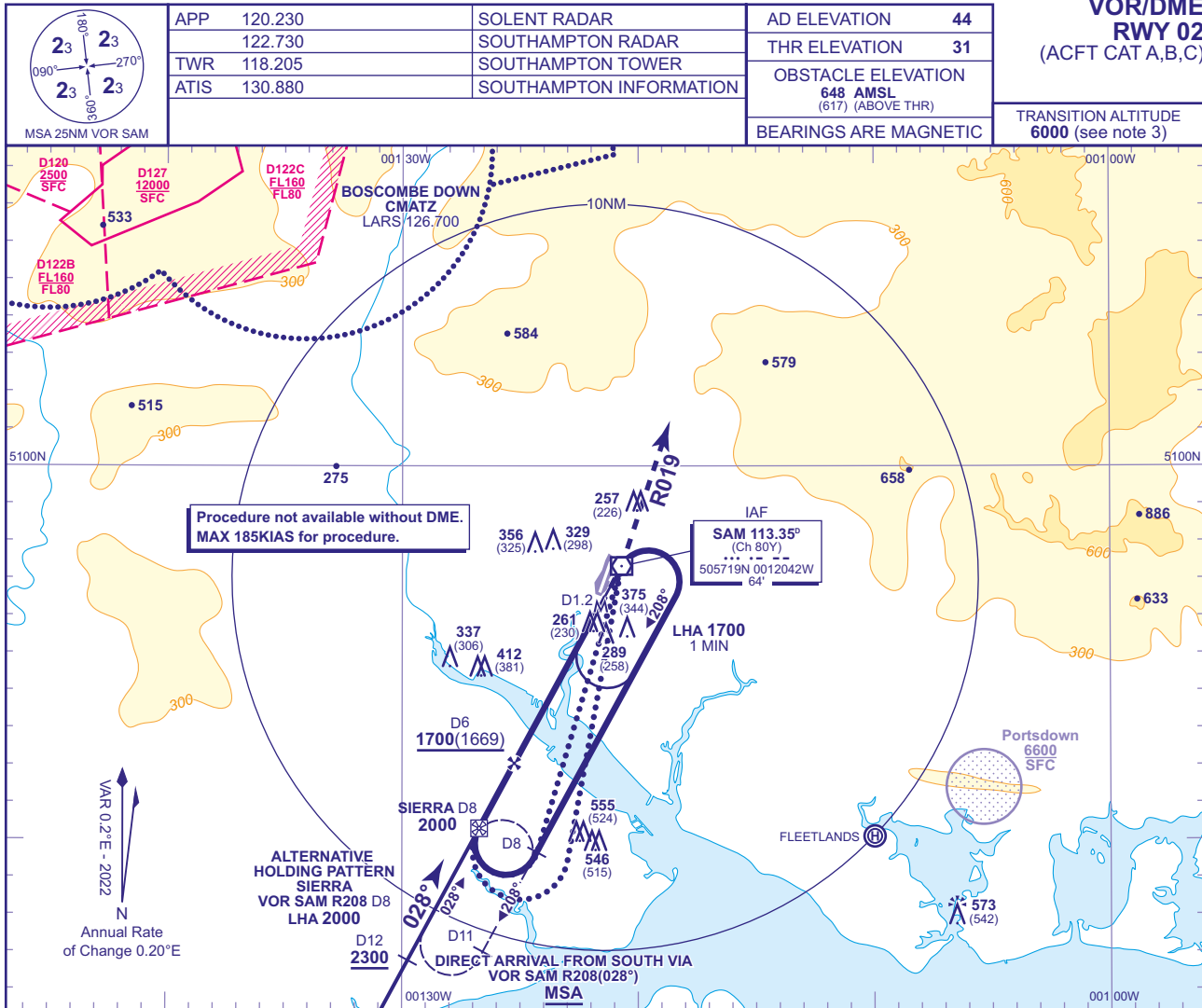
Aircraft Category		A	B	C	Rate of descent	G/S KT	160	140	120	100	80
		OCA (OCH)	LNAV/VNAV	510(479)		510(479)	510(479)	FT/MIN	850	740	640
VM(C)OCA (OCH AAL)	Total Area	680(636)	700(656)	890(846)							

NOTE 1 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.
NOTE 2 A 3° vertical profile from BAMTU to the FAF (HI02F) is recommended. An excessive rate of descent may result in leaving controlled airspace.

CHANGE (10/22): OBSTACLES REVISED.

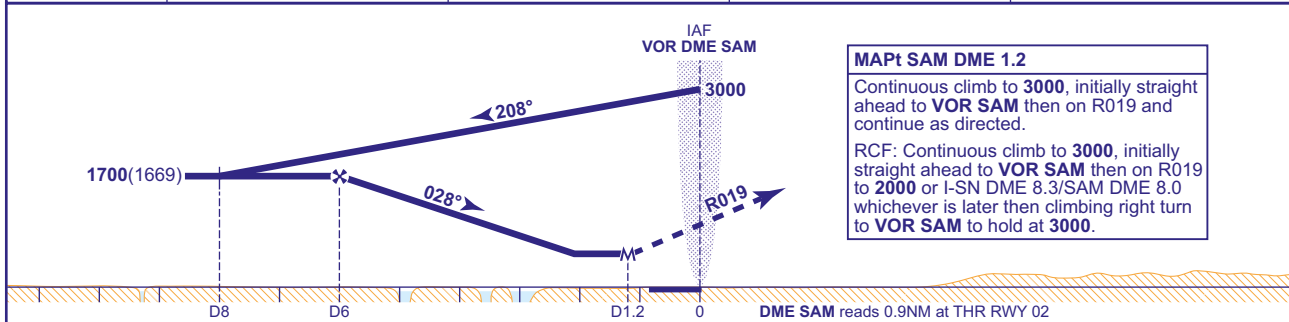
INSTRUMENT APPROACH CHART - ICAO

**SOUTHAMPTON
VOR/DME
RWY 02
(ACFT CAT A,B,C)**



RECOMMENDED PROFILE Gradient 5.24%, 318FT/NM

DME SAM	6	5	4	3
ALT(HGT)	1700(1669)	1380(1349)	1060(1029)	740(709)



Aircraft Category		A	B	C	Rate of descent	G/S KT	160	140	120	100	80
						FT/MIN	850	740	640	530	420
OCA (OCH) Procedure		570(539)	570(539)	570(539)							
VM(C)OCA (OCH AAL) Total Area		680(636)	700(656)	890(846)							

ALTERNATIVE BASE TURN PROCEDURE
Arrival to VOR DME SAM (IAF) at 3000 fly outbound on R197 (CAT A,B); R191 (CAT C) descending to 1700(1669). At SAM DME D8 base turn right onto extended FAT. When established continue as for main procedure.

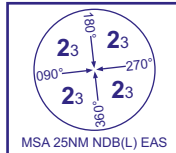
ALTERNATIVE PROCEDURE FROM HOLDING PATTERN SIERRA
From holding fix SIERRA inbound (VOR SAM R208 DME 8) at 2000, descend to cross FAF (SAM DME D6) not below 1700(1669), then continue as for main procedure.

- NOTE 1** FAT is offset 10° from RWY C/L and intercepts the extended RWY C/L 1.0NM before the THR.
2 Aircraft will normally be required to hold not lower than 2000.
3 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (12/24): VOR SAM RECALIBRATED. RADIALS/TRACKS REVISED.

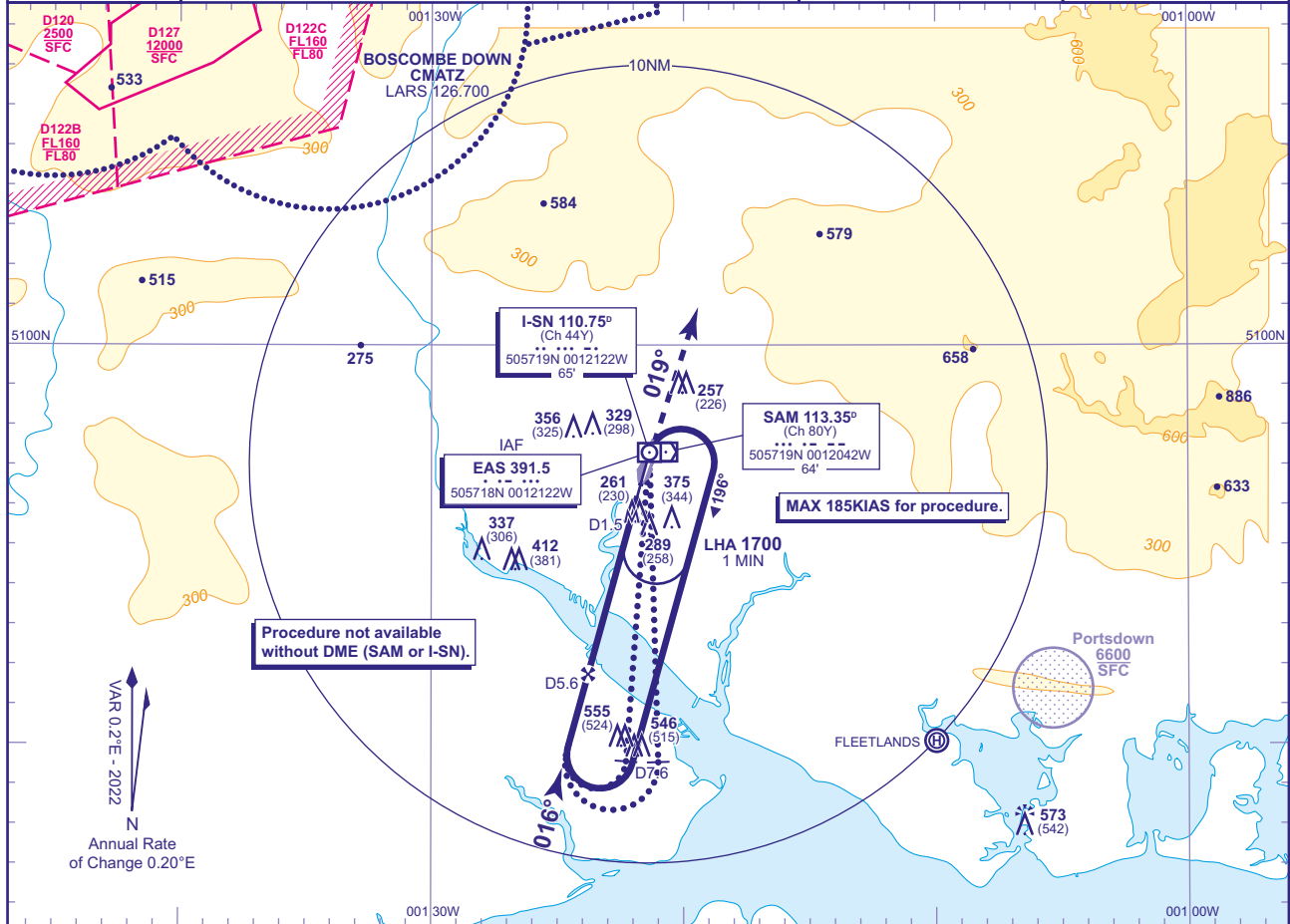
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
NDB(L)/DME
RWY 02
(ACFT CAT A,B,C)

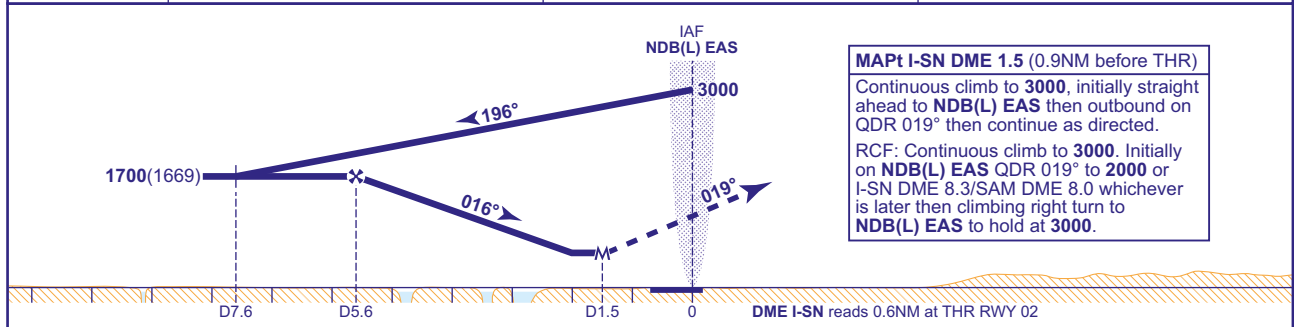


APP	120.230	SOLENT RADAR	AD ELEVATION	44
	122.730	SOUTHAMPTON RADAR	THR ELEVATION	31
TWR	118.205	SOUTHAMPTON TOWER	OBSTACLE ELEVATION	648 AMSL (617) (ABOVE THR)
ATIS	130.880	SOUTHAMPTON INFORMATION	BEARINGS ARE MAGNETIC	

TRANSITION ALTITUDE
6000 (see note 4)



DME I-SN	5	4	3
ALT(HGT)	1510(1479)	1190(1159)	870(839)



Aircraft Category	A	B	C	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH) Procedure	570(539)	570(539)	570(539)	FT/MIN	860	750	640	530	430	
VM(C)OCA (OCH AAL) Total Area	680(636)	700(656)	890(846)							

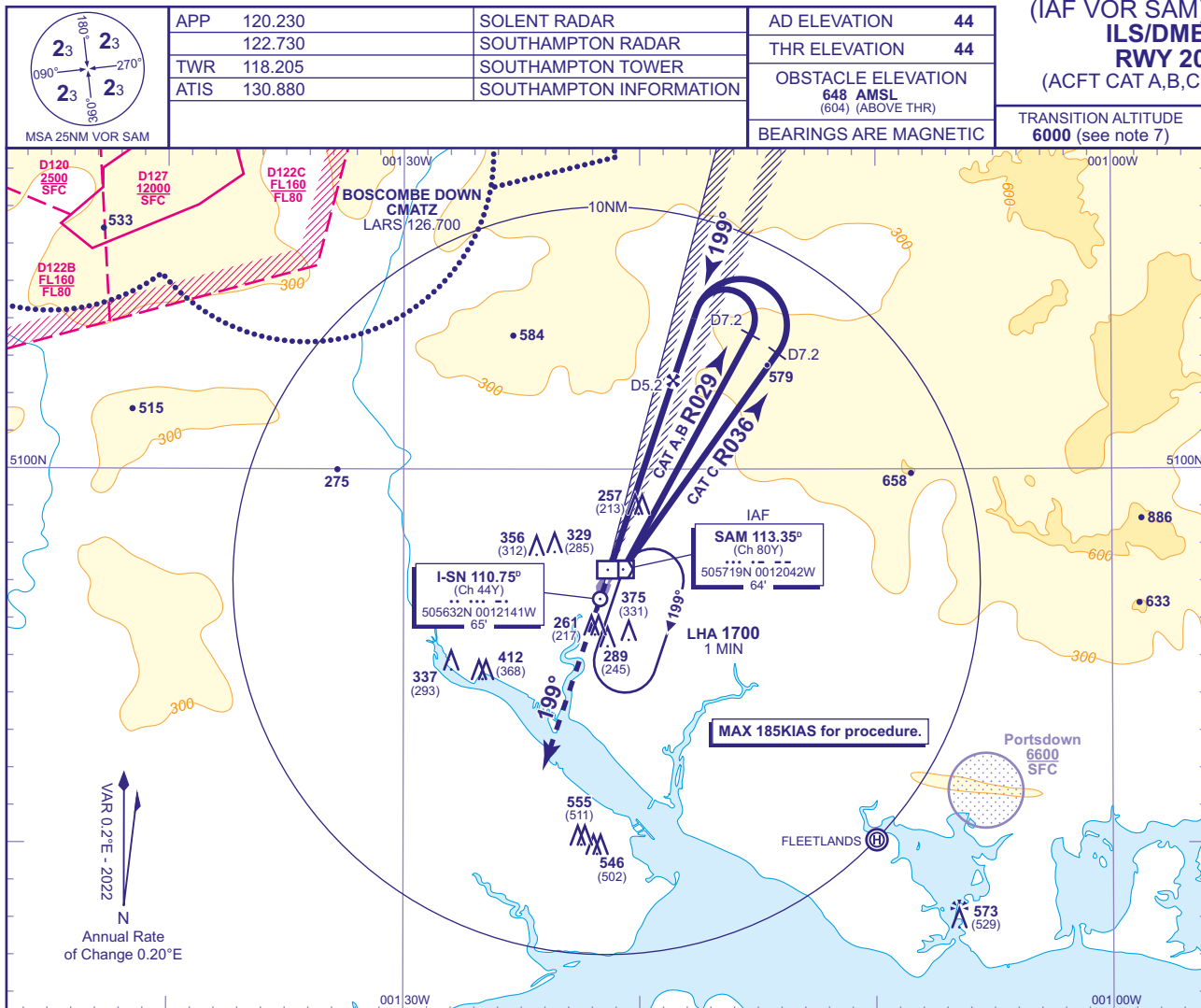
ALTERNATIVE BASE TURN PROCEDURE
Arrival to NDB(L) EAS (IAF) at 3000 fly outbound on QDR 185° (CAT A,B); QDR 179° (CAT C) descending to 1700(1669). At I-SN DME D7.6 base turn right onto extended FAT, when established continue as for main procedure.

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
2 FAT is offset 3° from RWY CL and intersects 0.5NM (I-SN DME 1.1) before THR.
3 Aircraft will normally be required to hold not lower than 2000.
4 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (8/23): DME NOTE ADDED.

INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
(IAF VOR SAM)
ILS/DME
RWY 20
(ACFT CAT A,B,C)

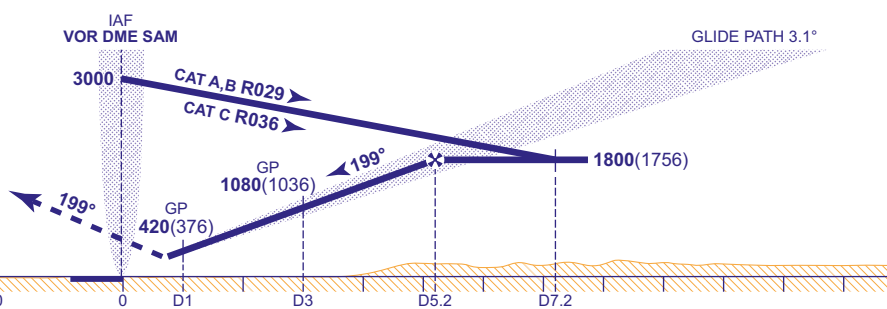


RECOMMENDED PROFILE GLIDE PATH 3.1°, 330FT/NM

DME I-SN	5	4	3	2	1
ALT(HGT)	1740(1696)	1410(1366)	1080(1036)	750(706)	420(376)

RDH 51

Continuous climb to 3000, initially straight ahead then as directed.
RCF: Continuous climb to 3000. Initially straight ahead to 2000 or I-SN DME 7.7 (SAM DME 8) whichever is later then climbing right turn to VOR SAM to hold at 3000.



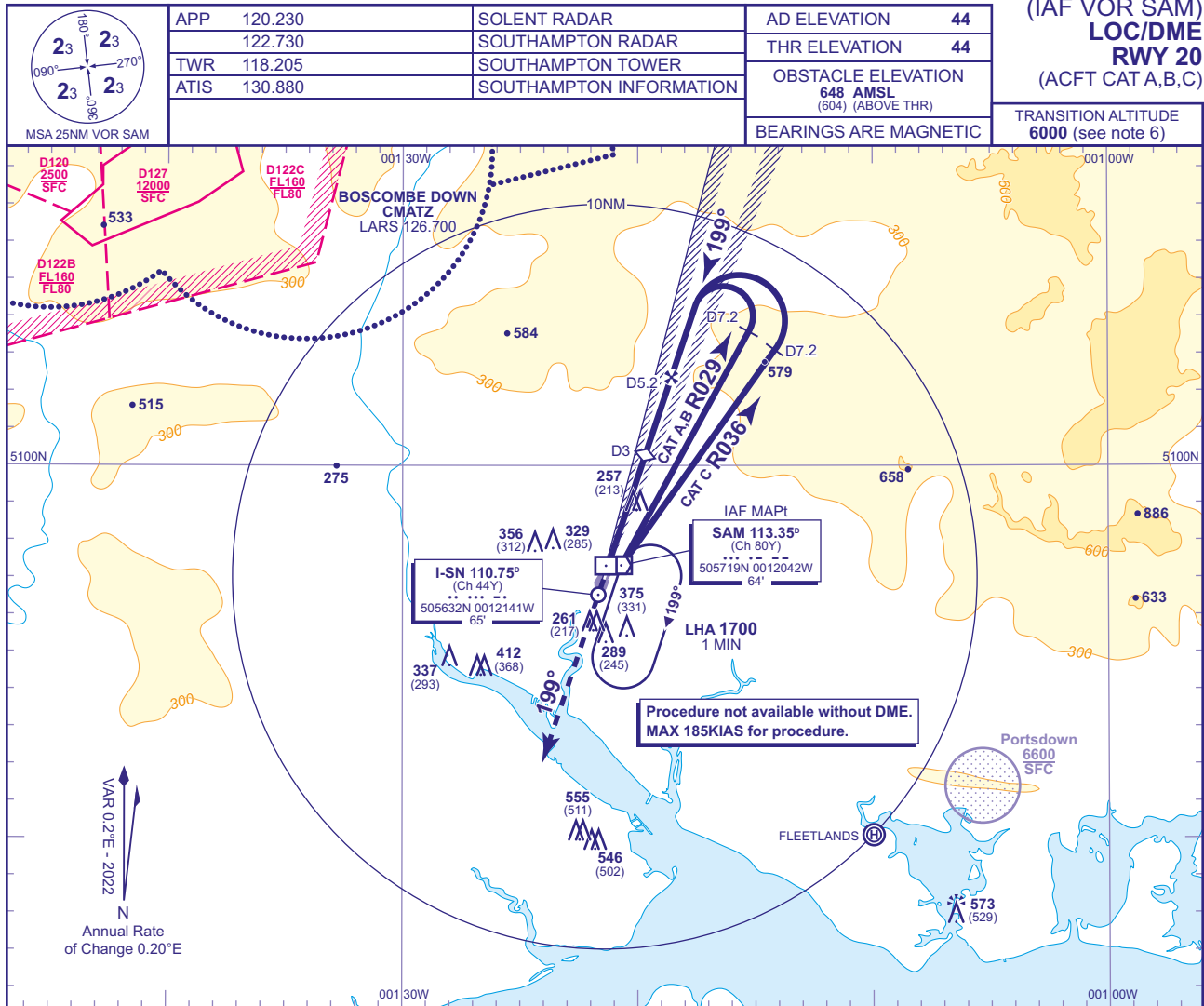
Aircraft Category	A	B	C	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	CAT I	219(175)	226(182)	237(193)	FT/MIN	880	770	660	550	440
VM(C)OCA (OCH AAL)	Total Area	680(636)	700(656)	890(846)						

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
2 DME SAM is situated 0.3NM east of THR RWY 20.
3 DME SAM may be substituted for DME I-SN if required. There are no changes to DME distances when DME SAM is used.
4 In the event of DME being unavailable, radar ranges will be given at 7NM outbound and at the FAP.
5 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the LOC may not be provided a period of level flight immediately prior to GP intercept. GP intercept will normally be at 2500.
6 Aircraft will normally be required to hold not lower than 2000.
7 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (12/24): VOR SAM RECALIBRATED. RADIALS/TRACKS REVISED.

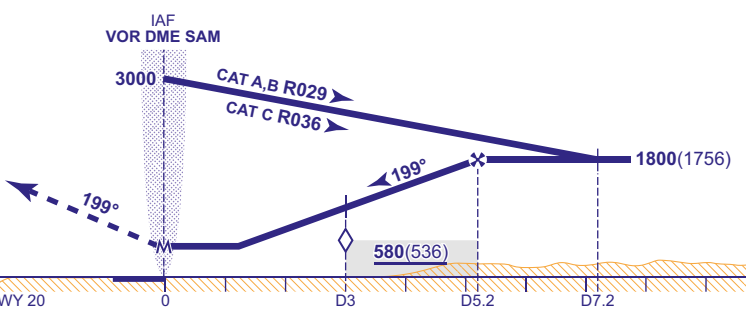
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
(IAF VOR SAM)
LOC/DME
RWY 20
(ACFT CAT A,B,C)



RECOMMENDED PROFILE Gradient 5.4%, 330FT/NM				
DME I-SN	5	4	3 (SDF)	2
ALT(HGT)	1740(1696)	1410(1366)	1080(1036)	750(706)

MAPt VOR SAM
Continuous climb to 3000, initially straight ahead then as directed.
RCF: Continuous climb to 3000. Initially straight ahead to 2000 or I-SN DME 7.7 (SAM DME 8) whichever is later then climbing right turn to VOR SAM to hold at 3000.



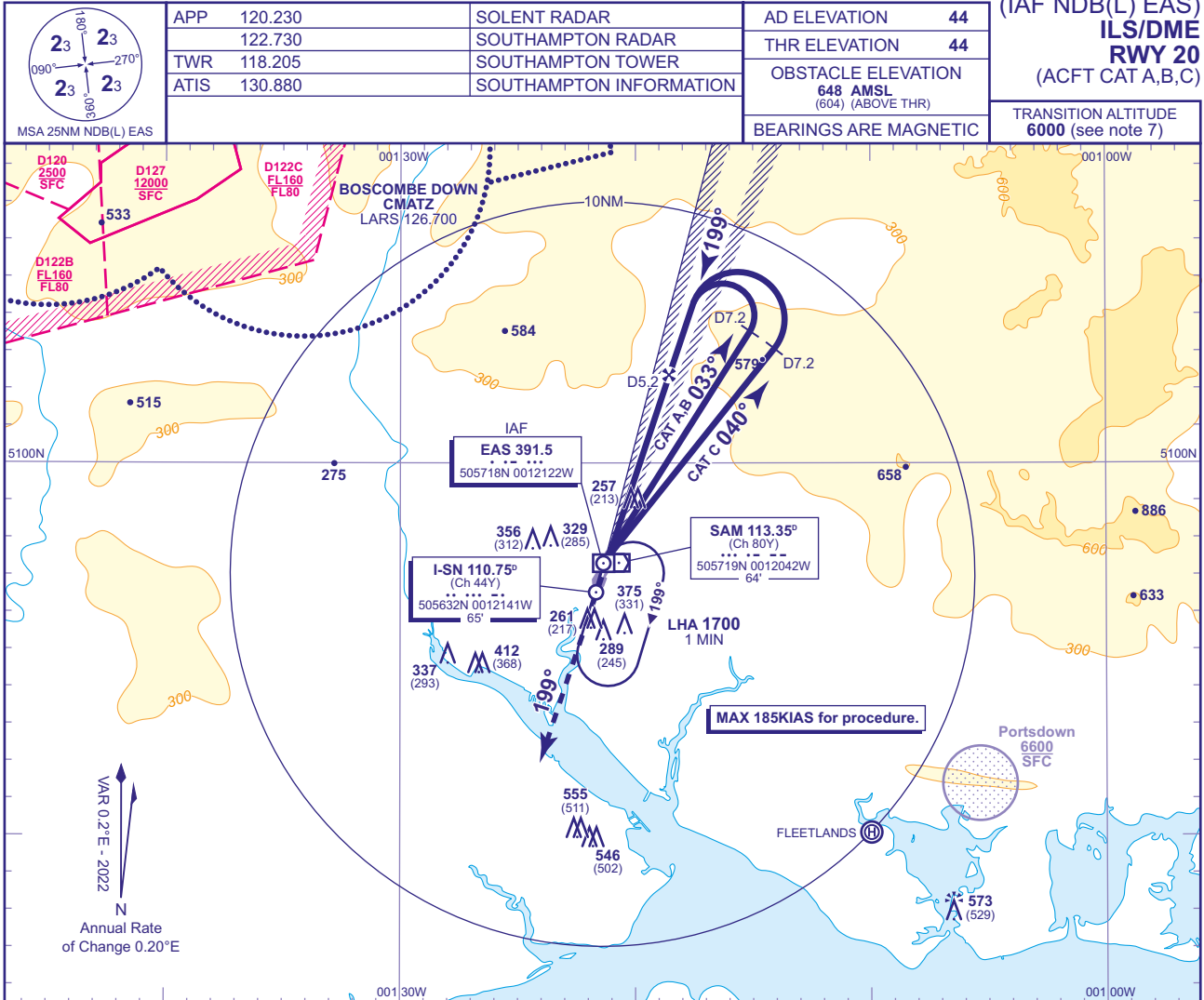
DME I-SN zero ranged to THR RWY 20				
Aircraft Category	A	B	C	
OCA (OCH) Procedure	510(466)	510(466)	510(466)	Rate of descent
VM(C)OCA (OCH AAL) Total Area	680(636)	700(656)	890(846)	G/S KT
				160 140 120 100 80
				FT/MIN
				880 770 660 550 440

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
2 DME SAM is situated 0.3NM east of THR RWY 20.
3 DME SAM may be substituted for DME I-SN if required. There are no changes to DME distances when DME SAM is used.
4 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the LOC may not be provided a period of level flight immediately prior to crossing the FAF.
5 Aircraft will normally be required to hold not lower than 2000.
6 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (12/24): VOR SAM RECALIBRATED. RADIALS/TRACKS REVISED.

INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
(IAF NDB(L) EAS)
ILS/DME
RWY 20
(ACFT CAT A,B,C)

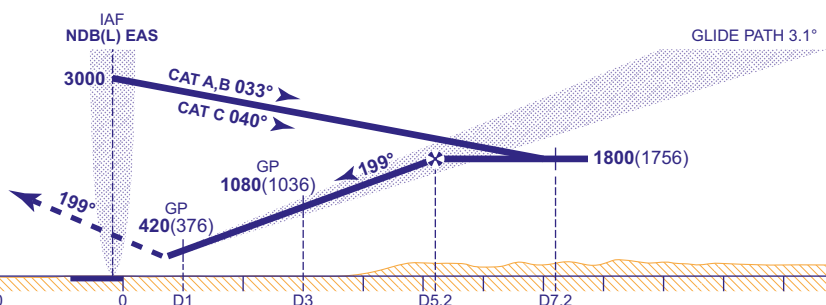


RECOMMENDED PROFILE GLIDE PATH 3.1°, 330FT/NM

DME I-SN	5	4	3	2	1
ALT(HGT)	1740(1696)	1410(1366)	1080(1036)	750(706)	420(376)

RDH 51

Continuous climb to 3000, initially straight ahead then as directed.
RCF: Continuous climb to 3000. Initially straight ahead to 2000 or DME I-SN 7.7 (SAM DME 8) whichever is later then climbing right turn to NDB(L) EAS to hold at 3000.



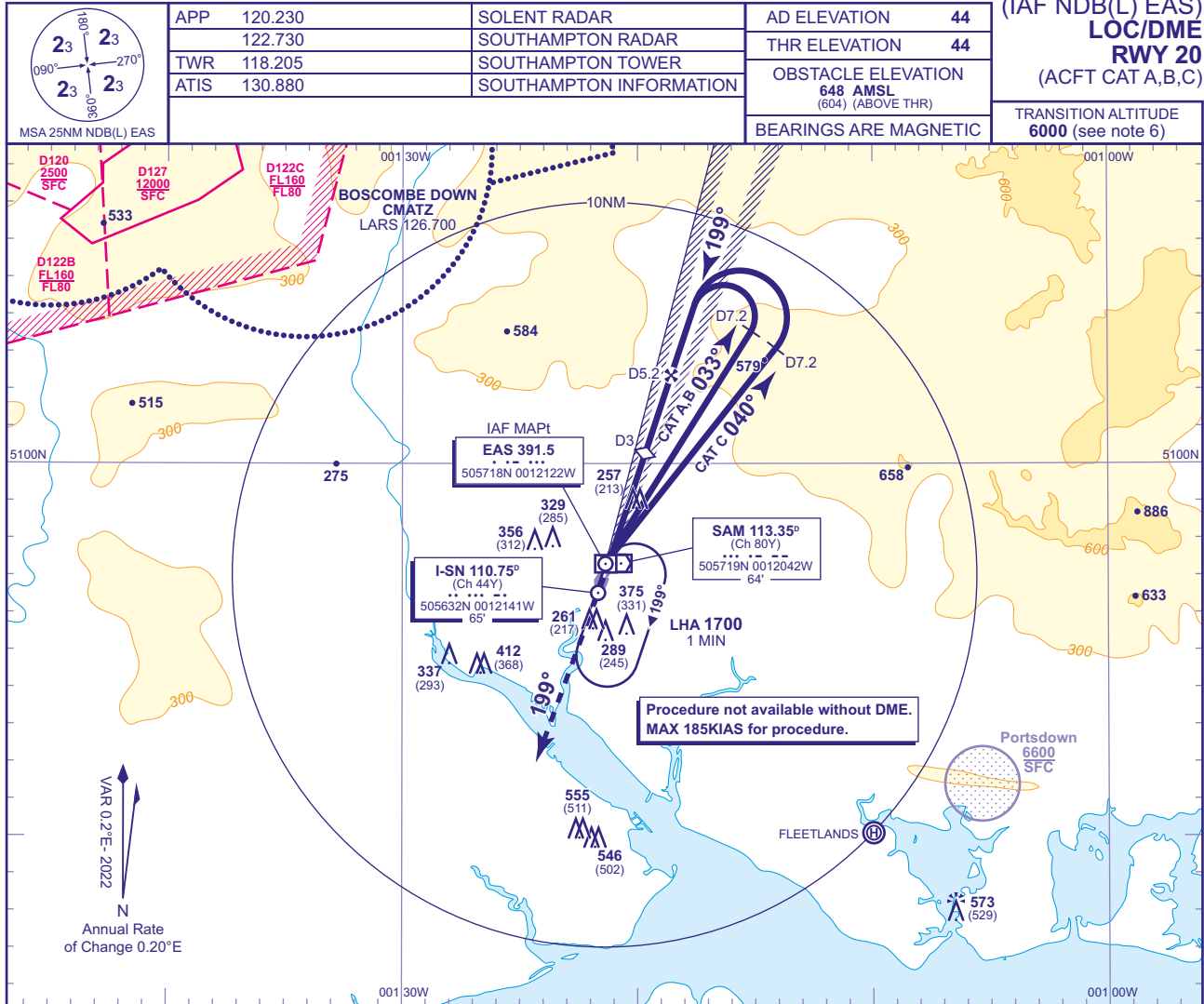
Aircraft Category	A	B	C	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	CAT I	219(175)	226(182)	237(193)	FT/MIN	880	770	660	550	440
VM(C)OCA (OCH AAL)	Total Area	680(636)	700(656)	890(846)						

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
2 DME SAM is situated 0.3NM east of THR RWY 20.
3 DME SAM may be substituted for DME I-SN if required. There are no changes to DME distances when DME SAM is used.
4 In the event of DME being unavailable, radar ranges will be given at 7NM outbound and at the FAP.
5 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the LOC may not be provided a period of level flight immediately prior to GP intercept. GP intercept will normally be at 2500.
6 Aircraft will normally be required to hold not lower than 2000.
7 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (10/22): OBSTACLES REVISED.

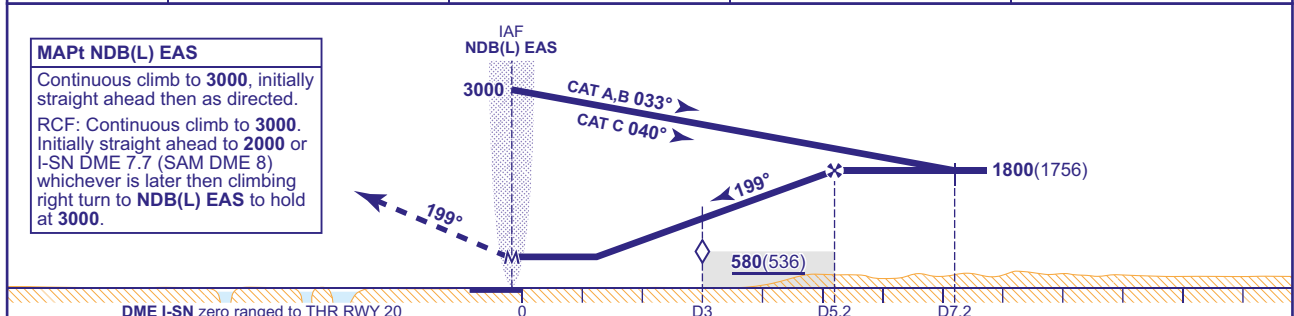
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
(IAF NDB(L) EAS)
LOC/DME
RWY 20
(ACFT CAT A,B,C)



RECOMMENDED PROFILE Gradient 5.41%, 330FT/NM

DME I-SN	5	4	3 (SDF)	2
ALT(HGT)	1740(1696)	1410(1366)	1080(1036)	750(706)



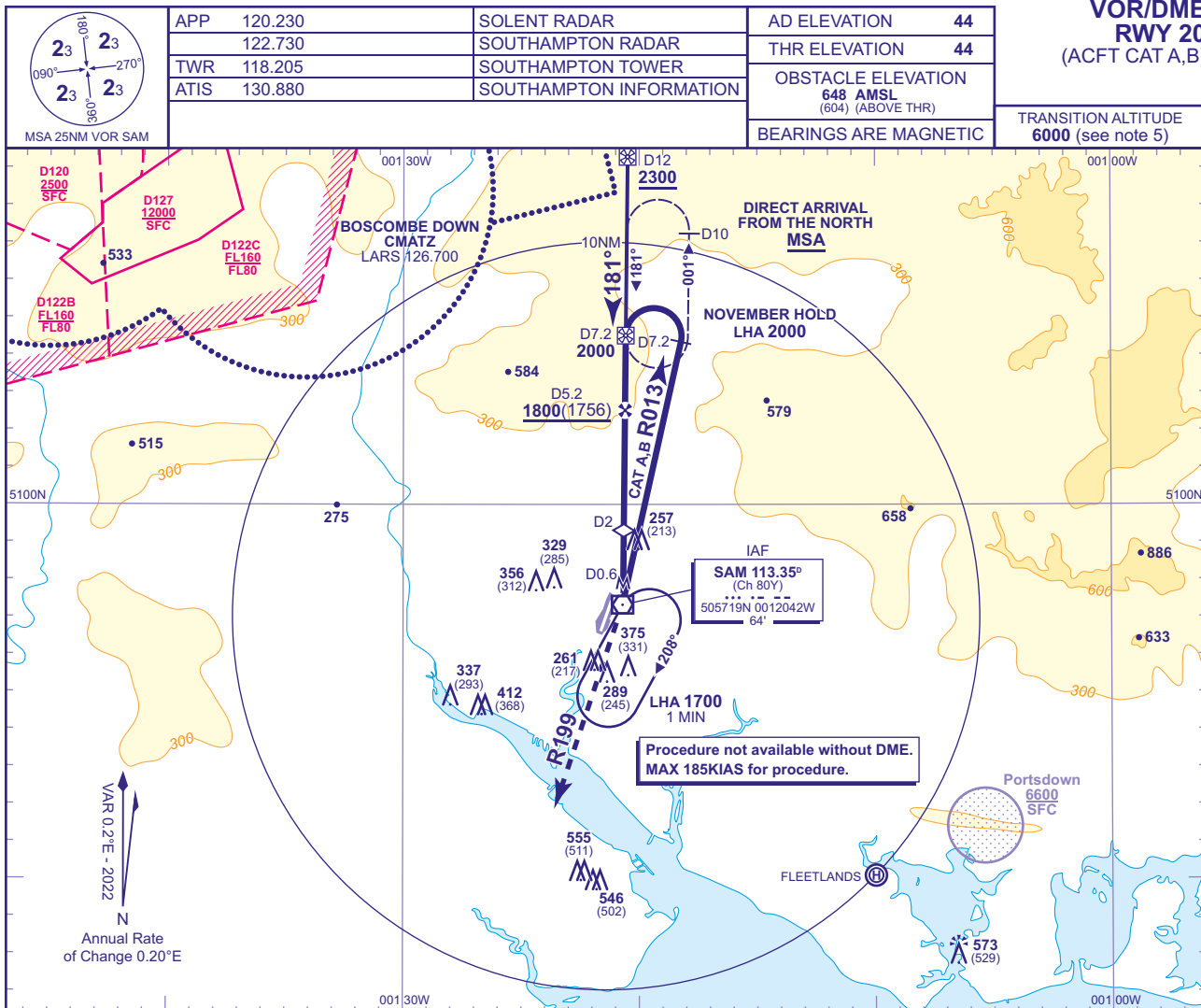
Aircraft Category	A	B	C	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH) Procedure	510(466)	510(466)	510(466)		FT/MIN	880	770	660	550	440
VM(C)OCA (OCH AAL) Total Area	680(636)	700(656)	890(846)							

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
2 DME SAM is situated 0.3NM east of THR RWY 20.
3 DME SAM may be substituted for DME I-SN if required. There are no changes to DME distances when DME SAM is used.
4 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the LOC may not be provided a period of level flight immediately prior to crossing the FAF.
5 Aircraft will normally be required to hold not lower than 2000.
6 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (10/22): OBSTACLES REVISED.

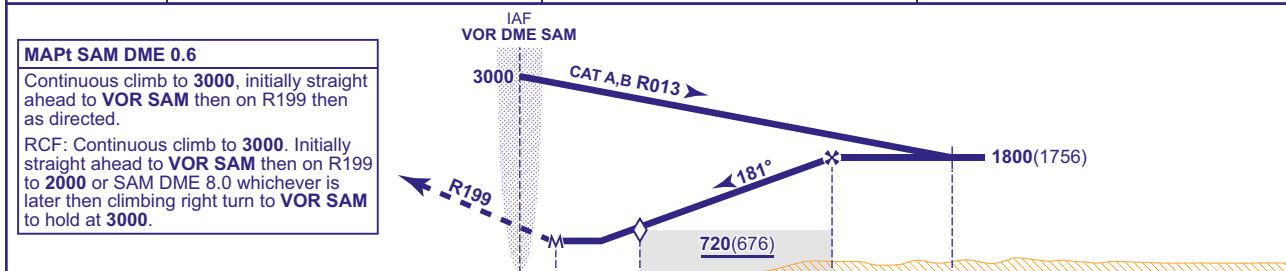
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
VOR/DME
RWY 20
(ACFT CAT A,B)



RECOMMENDED PROFILE Gradient 5.40%, 328FT/NM

DME SAM	4	3	2 (SDF)
ALT(HGT)	1410(1366)	1080(1036)	750(706)



DME SAM is situated 0.3NM east of THR RWY 20

Aircraft Category	Procedure	A		B		Rate of descent	G/S									
		FT	M	FT	M		KT	FT/MIN	FT/MIN	FT/MIN	FT/MIN					
OCA (OCH)		560	(516)	560	(516)		160	140	120	100	80	860	750	640	540	430
VM(C)OCA (OCH AAL)	Total Area	680	(636)	700	(656)											

ALTERNATIVE PROCEDURE FROM HOLDING PATTERN NOVEMBER
From holding fix/IAF inbound (NOVEMBER VOR SAM R001 DME 7.2) at 2000, descend to cross FAF (SAM DME 5.2), not below 1800(1756), then continue as for main procedure.

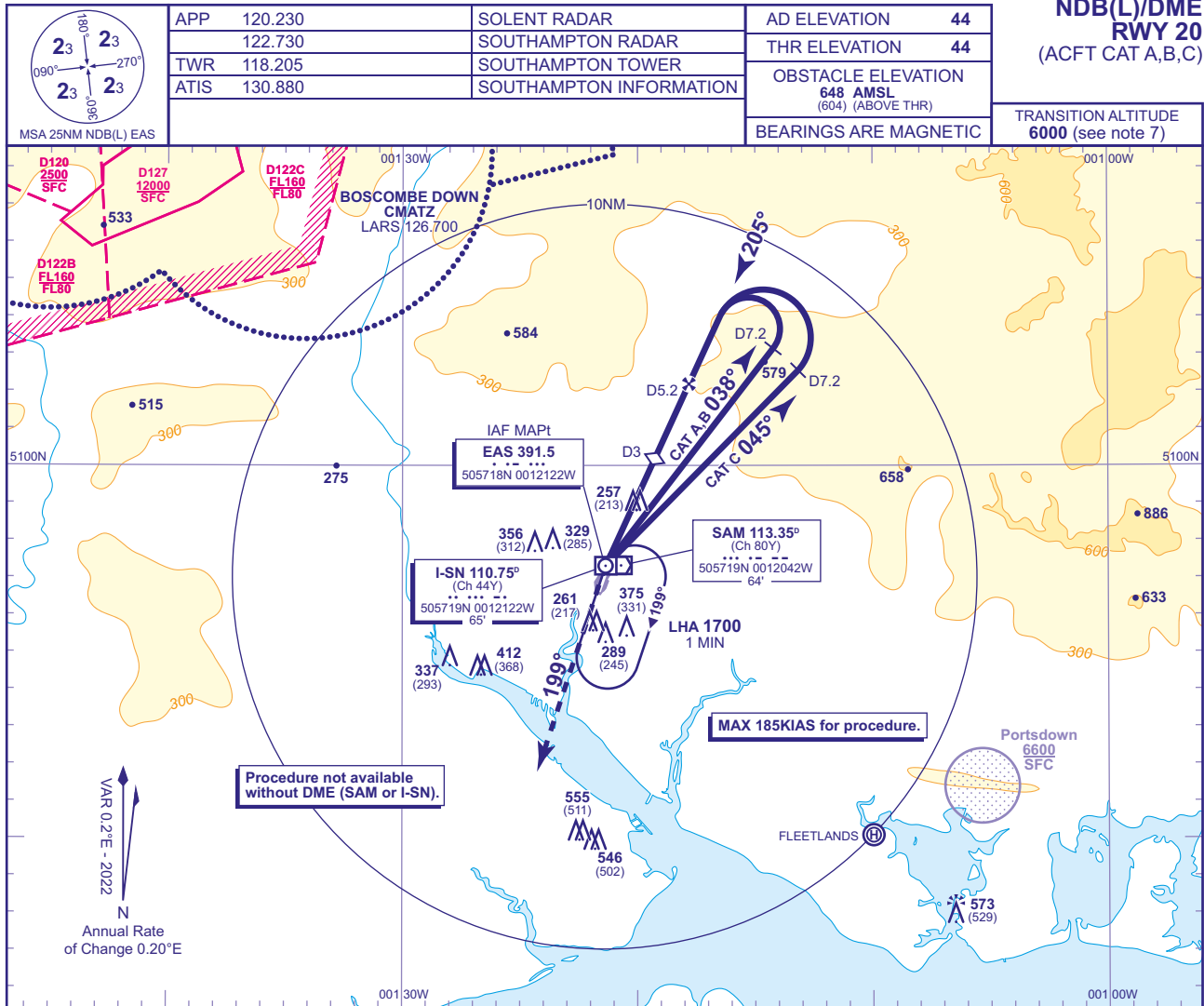
ALTERNATIVE VOR DME HOLDING PATTERN NOVEMBER
Inbound 181° to holding fix (VOR SAM R001 DME 7.2) turning left at fix. Limiting outbound distance DME 10.

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
NOTE 2 FAT offset 18° from RWY CL and intersects RWY CL nominally 1.0NM before THR (nominally SAM DME 1.0).
NOTE 3 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the FAT may not be provided a period of level flight immediately prior to crossing the FAF.
NOTE 4 Aircraft will normally be required to hold not lower than 2000.
NOTE 5 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (12/24): VOR SAM RECALIBRATED. RADIALS/TRACKS REVISED.

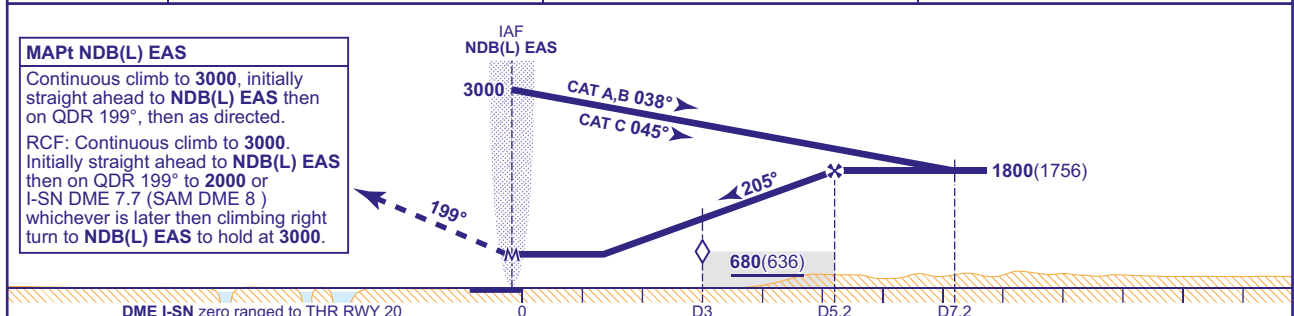
INSTRUMENT APPROACH CHART - ICAO

SOUTHAMPTON
NDB(L)/DME
RWY 20
(ACFT CAT A,B,C)



RECOMMENDED PROFILE Gradient 5.41%, 328FT/NM

DME I-SN	4	3 (SDF)	2
ALT(HGT)	1410(1366)	1080(1036)	750(706)



MAPt NDB(L) EAS		Continuous climb to 3000 , initially straight ahead to NDB(L) EAS then on QDR 199°, then as directed.		RCF: Continuous climb to 3000 . Initially straight ahead to NDB(L) EAS then on QDR 199° to 2000 or I-SN DME 7.7 (SAM DME 8) whichever is later then climbing right turn to NDB(L) EAS to hold at 3000 .						
Aircraft Category	A	B	C	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	560(516)	560(516)		560(516)	FT/MIN	880	770	660	550
VM(C)OCA (OCH AAL)	Total Area	680(636)	700(656)	890(846)						

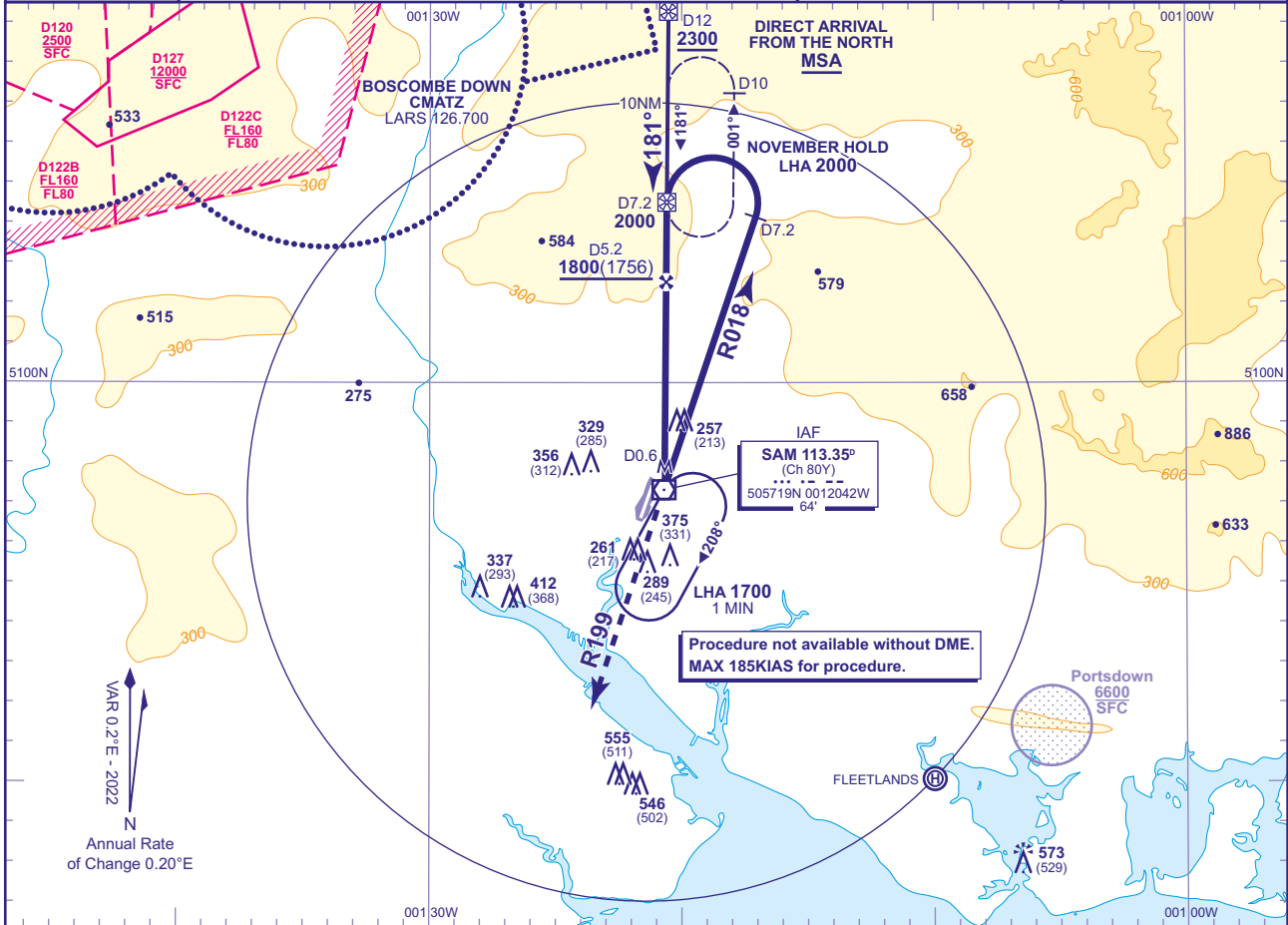
- NOTE 1** Lowest altitude to commence procedure from hold is **2000**.
2 FAT offset 6° from RWY CL and intersects CL 0.8NM (I-SN DME 0.8) before THR.
3 DME SAM is situated 0.3NM east of THR RWY 20.
4 DME SAM may be substituted for DME I-SN if required. There are no changes to DME distances when DME SAM is used.
5 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the FAT may not be provided a period of level flight immediately prior to crossing the FAT.
6 Aircraft will normally be required to hold not lower than **2000**.
7 Outside the Solent CTA notified hours of operation the Transition Altitude is **3000**.

CHANGE (10/22): OBSTACLES REVISED.

INSTRUMENT APPROACH CHART - ICAO

**SOUTHAMPTON
VOR/DME 181°
TO AERODROME
(ACFT CAT C)**

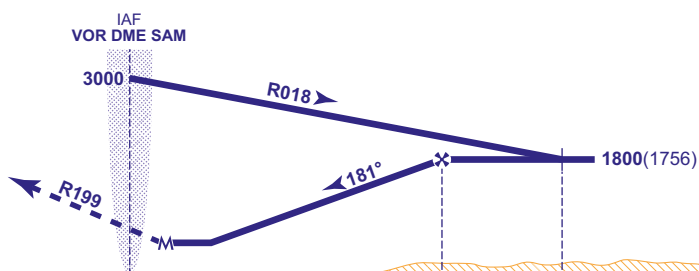
	APP 120.230	SOLENT RADAR	AD ELEVATION 44
	122.730	SOUTHAMPTON RADAR	
	TWR 118.205	SOUTHAMPTON TOWER	OBSTACLE ELEVATION 648 AMSL (604) (ABOVE AD)
	ATIS 130.880	SOUTHAMPTON INFORMATION	BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 6000 (see note 4)



RECOMMENDED PROFILE Gradient 5.40%, 328FT/NM

DME SAM	4	3
ALT(HGT)	1410(1366)	1080(1036)

MAPt SAM DME 0.6
Continuous climb to 3000, initially straight ahead to VOR SAM then R199 then as directed.
RCF: Continuous climb to 3000. Initially straight ahead to VOR SAM then on VOR SAM R199 to 2000 or SAM DME 8.0 whichever is later then climbing right turn to VOR SAM to hold at 3000.



DME SAM is situated 0.3NM east of THR RWY 20

Aircraft Category	C	Rate of descent	G/S KT	160	140	120	100	80
			FT/MIN	860	750	640	540	430
OCA (OCH) Procedure	890(846)							
VM(C)OCA (OCH AAL) Total Area	890(846)							

ALTERNATIVE PROCEDURE FROM HOLDING PATTERN NOVEMBER
From holding fix/IAF inbound (NOVEMBER VOR SAM R001 DME 7.2) at 2000, descend to cross FAF (SAM DME 5.2), not below 1800(1756), then continue as for main procedure.

ALTERNATIVE VOR DME HOLDING PATTERN NOVEMBER
Inbound 181° to holding fix (VOR SAM R001 DME 7.2) turning left at fix. Limiting outbound distance DME 10.

- NOTE 1** Lowest altitude to commence procedure from hold is 2000.
NOTE 2 Due to controlled airspace constraints, aircraft may temporarily leave controlled airspace in the base turn. Aircraft being radar vectored to the FAT may not be provided a period of level flight immediately prior to crossing the FAF.
NOTE 3 Aircraft will normally be required to hold not lower than 2000.
NOTE 4 Outside the Solent CTA notified hours of operation the Transition Altitude is 3000.

CHANGE (12/24): VOR SAM RECALIBRATED. RADIALS/TRACKS REVISED. CHART TITLE REVISED.

St. ATHAN
EGSY

AD ELEV 164FT

ARP 512417N 0032609W

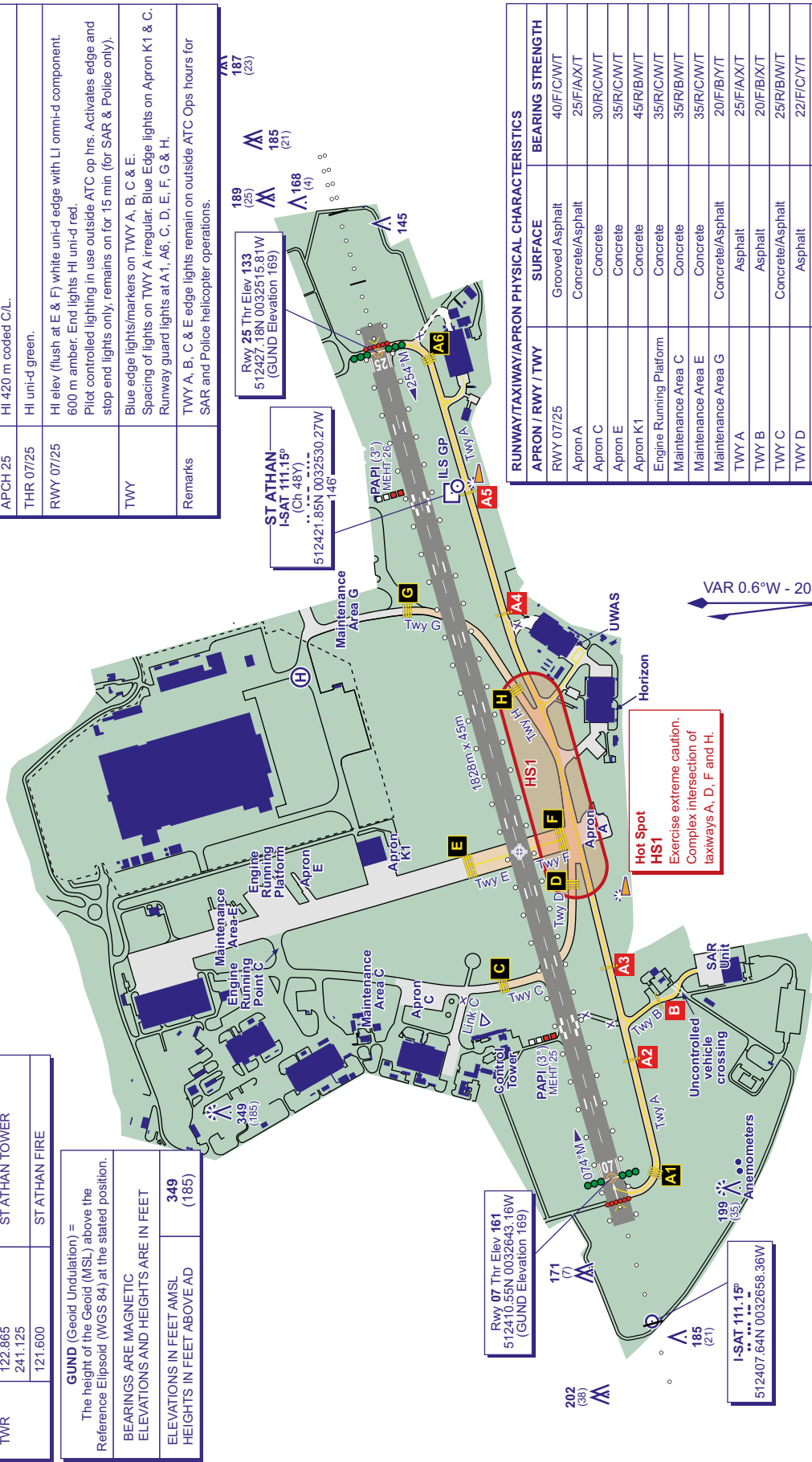
AERODROME
CHART - ICAO

LIGHTING	
APCH 07	HI 430 m coded C/L.
APCH 25	HI 420 m coded C/L.
THR 07/25	HI uni-d green.
RWY 07/25	HI elev (flush at E & F) white uni-d edge with LI omni-d component. 600 m amber. End lights HI uni-d red. Pilot controlled lighting in use outside ATC ops hrs. Activates edge and stop end lights only, remains on for 15 min (for SAR & Police only).
TWY	Blue edge lights/markers on TWY A, B, C & E. Spacing of lights on TWY A irregular. Blue Edge lights on Apron K1 & C. Runway guard lights at A1, A6, C, D, E, F, G & H.
Remarks	TWY A, B, C & E edge lights remain on outside ATC Ops hours for SAR and Police helicopter operations.

COM	ST ATHAN INFORMATION
ATIS	130.560
TWR	122.865
	241.125
	121.600

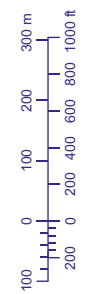
GUND (Geoid Undulation) =	
The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.	
BEARINGS ARE MAGNETIC	
ELEVATIONS IN FEET AMSL	349 (185)
HEIGHTS IN FEET ABOVE AD	

AERO INFO DATE 04 SEP 24



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
APRON / RWY / TWY	SURFACE	BEARING STRENGTH
RWY 07/25	Grooved Asphalt	40F/CW/T
Apron A	Concrete/Asphalt	25F/AX/T
Apron C	Concrete	30R/CW/T
Apron E	Concrete	35R/CW/T
Apron K1	Concrete	45R/BW/T
Engine Running Platform	Concrete	35R/CW/T
Maintenance Area C	Concrete	35R/CW/T
Maintenance Area E	Concrete	35R/CW/T
Maintenance Area G	Concrete/Asphalt	20F/BY/T
TWY A	Asphalt	25F/AX/T
TWY B	Asphalt	20F/BX/T
TWY C	Concrete/Asphalt	25R/BW/T
TWY D	Asphalt	22F/CY/T
TWY E	Asphalt	35F/CX/T
TWY F	Asphalt	25F/AX/T
TWY G	Concrete/Asphalt	20F/BY/T
TWY H	Asphalt	28F/CY/T

VAR 0.6° W - 2022
Annual Rate of Change 0.20° E



CHANGE (12/24): UWAS, HORIZON LOCATIONS.

AD 2-EGSY-2-1

INTENTIONALLY BLANK

EGPO AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Marshalling provided for all stands.
2	Runway and taxiway markings and lighting	Runway marking aid(s): 06/24: Runway designators and centre-line markings. Yellow lead on/off lines to all runways. 18/36: Runway designators and centre-line markings. Edge lines, TDZ markings on Runway 18/36. Yellow lead on/off lines to all runways. Taxiway marking aid(s): Yellow centre-line markings. Taxi holding point markings.
3	Stop bars and runway guard lights (if any)	A1, B1, C1, F1
4	Other runway protection measures	
5	Remarks	3 WDI's: 581229.70N 0061954.02W (LGTD) - 581320.23N 0061949.69W (LGTD) - 581257.70N 0061939.77W (LGTD).

EGPO AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPO7336) 18/APPROACH 36/ TAKE-OFF	LLZ HUT	581332.61N 0062002.52W	27 FT	9 FT	Yes Red	
(EGPO8006) 18/APPROACH 36/ TAKE-OFF	LLZ 36 OBS	581332.44N 0061958.05W	25 FT	9 FT	Yes Red	
(EGPO8007) 18/APPROACH 36/ TAKE-OFF	LLZ 36 OBS	581332.37N 0061959.42W	25 FT	9 FT	Yes Red	
(EGPO8005) 18/APPROACH 36/ TAKE-OFF	LLZ 36	581332.33N 0061958.03W	25 FT	7 FT	No	
(EGPO8008) 18/APPROACH 36/ TAKE-OFF	LLZ 36	581332.26N 0061959.40W	25 FT	7 FT	No	
(EGPO7598) 24/TAKE-OFF	TREE	581233.47N 0062100.19W	126 FT	36 FT	No	
(EGPO8017) 36/APPROACH 18/ TAKE-OFF	APPROACH LT	581215.87N 0061944.19W	17 FT	2 FT	No	
(EGPO8026) 36/APPROACH 18/ TAKE-OFF	NFM 18	581215.56N 0061944.12W	18 FT	4 FT	No	
(EGPO8003) 36/APPROACH 18/ TAKE-OFF	LLZ 18	581213.31N 0061943.01W	27 FT	10 FT	No	
(EGPO8000) 36/APPROACH 18/ TAKE-OFF	LLZ 18	581213.24N 0061944.38W	27 FT	10 FT	No	
(EGPO8002) 36/APPROACH 18/ TAKE-OFF	LLZ 18 OBS	581213.20N 0061942.99W	27 FT	11 FT	Yes Red	
(EGPO8001) 36/APPROACH 18/ TAKE-OFF	LLZ 18 OBS	581213.13N 0061944.36W	27 FT	11 FT	Yes Red	
(EGPO8023) 36/APPROACH 18/ TAKE-OFF	LLZ HUT	581212.64N 0061947.43W	32 FT	7 FT	Yes	
(EGPO7127) 36/APPROACH 18/ TAKE-OFF	MOBILE OBST	581212.41N 0061941.44W	32 FT	16 FT	No	
(EGPO7126) 36/APPROACH 18/ TAKE-OFF	MOBILE OBST	581212.34N 0061942.69W	34 FT	16 FT	No	
(EGPO7125) 36/APPROACH 18/ TAKE-OFF	MOBILE OBST	581212.26N 0061943.98W	38 FT	16 FT	No	
(EGPO7124) 36/APPROACH 18/ TAKE-OFF	MOBILE OBST	581212.18N 0061945.34W	41 FT	16 FT	No	
(EGPO7123) 36/APPROACH 18/ TAKE-OFF	MOBILE OBST	581212.11N 0061946.53W	44 FT	16 FT	No	
(EGPO1136) 36/APPROACH 18/ TAKE-OFF	POWER POLE	581155.29N 0061947.00W	78 FT	27 FT	No	

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPO1152) 36/APPROACH 18/ TAKE-OFF	BUILDING	581154.21N 0061954.11W	77 FT	25 FT	No	
(EGPO1146) 36/APPROACH 18/ TAKE-OFF	BUILDING	581154.00N 0061948.79W	72 FT	20 FT	No	
(EGPO3076) 36/APPROACH 18/ TAKE-OFF	TELEPHONE POLE	581153.31N 0061953.84W	82 FT	25 FT	No	
(EGPO3078) 36/APPROACH 18/ TAKE-OFF	TELEPHONE POLE	581153.29N 0061942.85W	66 FT	28 FT	No	
(EGPO7558) 36/APPROACH 18/ TAKE-OFF	TREE	581153.25N 0061944.42W	65 FT	25 FT	No	
(EGPO7563) 36/APPROACH 18/ TAKE-OFF	TREE	581153.07N 0061952.77W	74 FT	15 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPO1928)	WIND TURBINE	581955.29N 0061354.18W	596 FT	253 FT	No	
(EGPO7930)	TREE	581449.13N 0062022.73W	151 FT	64 FT	No	
(EGPO3066)	WIND TURBINE	581440.19N 0062412.04W	409 FT	132 FT	No	
(EGPO1528)	MAST	581422.92N 0062348.98W	317 FT	49 FT	No	
(EGPO3104)	WIND TURBINE	581357.32N 0063035.55W	967 FT	388 FT	Yes Red	
(EGPO1904)	WIND TURBINE	581357.24N 0063055.84W	857 FT	386 FT	Yes Red	
(EGPO7776)	BUILDING FLAGPOLE	581318.85N 0062401.20W	331 FT	100 FT	No	
(EGPO8012)	NDB SAY	581255.72N 0061944.69W	46 FT	35 FT	Yes Red	
(EGPO8010)	DME STW SOY	581254.56N 0061944.77W	28 FT	16 FT	Yes Red	
(EGPO3030)	TXRX MAST	581251.64N 0061931.70W	55 FT	42 FT	Yes Red	
(EGPO8069)	WIND TURBINE	581239.23N 0062931.89W	995 FT	657 FT	No	
(EGPO7743)	TREE	581237.75N 0062353.15W	229 FT	121 FT	No	
(EGPO7770)	TREE	581211.69N 0062351.41W	259 FT	61 FT	No	
(EGPO3032)	WIND TURBINE	581129.68N 0061608.16W	221 FT	71 FT	Yes Red	

EGPO AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE ABERDEEN
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE ABERDEEN 9 hours
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self briefing provided by ATS.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English

7	Charts and other information available for briefing or consultation	Available on request from ATC.
8	Supplementary equipment available for providing information	Tel: ATIS (01851-707444 – H24).
9	ATS units provided with information	STORNOWAY
10	Additional information (limitation of service, etc.)	Outside aerodrome hours unverified automatic observations via ATIS on the telephone (see item 8).

EGPO AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
06	059.87°	1000 x 23 M	RWY surface: Asphalt PCN 9/F/B/Y/U	581242.81N 0062012.82W 184.4 FT	THR 25.6 FT	
24	239.88°	1000 x 23 M	RWY surface: Asphalt PCN 9/F/B/Y/U	581259.02N 0061919.88W 184.4 FT	THR 21.3 FT	
18	174.27°	2088 x 45 M	RWY surface: Asphalt, Grooved PCN 47/F/A/W/T	581327.77N 0061957.85W 184.3 FT	THR 16.3 FT	
36	354.28°	2088 x 45 M	RWY surface: Asphalt, Grooved PCN 47/F/A/W/T	581220.65N 0061945.10W 184.4 FT	THR 15.2 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	150 x 80 M	1120 x 80 M				RWY 06
	150 x 80 M	1120 x 80 M				RWY 24
	142 x 150 M	2208 x 280 M				RWY 18 The 120 M of asphalt north of Runway 18 threshold is unfit for use by aircraft.
	141 x 140 M	2208 x 280 M				RWY 36 The 120 M of asphalt south of Runway 36 threshold is unfit for use by aircraft.

EGPO AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
18	2088 M	2230 M	2088 M	2088 M	
36	2088 M	2229 M	2088 M	2088 M	
18	1829 M	1972 M	1829 M		Take-off from Intersection with A1.
18	923 M	1065 M	923 M		Take-off from Intersection with RWY 06/24.
36	1715 M	1856 M	1715 M		Take-off from Intersection with C1.
36	1189 M	1330 M	1189 M		Take-off from Intersection with RWY 06/24.
06	1000 M	1150 M	1000 M	1000 M	
24	1000 M	1150 M	1000 M	1000 M	

EGPO AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
06		Green Light intensity low Portable electric green wingbars. Portable LI electric lights are available for use on Runway 06/24 as edge, threshold wingbar and stop end lighting. Minimum 30 minutes prior notification required in order to deploy lighting.	APAPI Left/4° 25 FT 134.5 M			Portable electric gauge 24 M Light intensity low	Portable electric Red Light intensity low		
24		Green Light intensity low Portable electric green wingbars. Portable LI electric lights are available for use on Runway 06/24 as edge, threshold wingbar and stop end lighting. Minimum 30 minutes prior notification required in order to deploy lighting.	APAPI Left/3.5° 20 FT 135.5 M			Portable electric gauge 24 M Light intensity low	Portable electric Red Light intensity low		
18	Centre-line with one crossbar. 150 M Light intensity high	Light intensity high Green wingbars	PAPI Left/3° 64 FT 396 M			Uni bi-directional with omni-directional component. Gauge 54 M. White with final 600 M yellow. Light intensity high	Red		

EGPU — TIREE

EGPU AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGPU — TIREE

EGPU AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 562957N Long: 0065209W Mid point of Runway 05/23.
2	Direction and distance from city	2.5 NM NNE Balemartine.
3	Elevation / Reference temperature / Mean Low Temperature	38 FT / 14 °C / -
4	Geoid undulation at AD ELEV PSN	186 FT
5	Magnetic Variation / Annual Change	2.76°W (2022) / 0.23°E
6	AD Administration Address Telephone Telefax	HIAL Tiree Aerodrome, Isle of Tiree, Argyll, PA77 6UW. 01879-220456 01879-220714
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGPU AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Thu 0930-1815 (0830-1715); Fri 0930-1145 (0830-1045), 1600-1815 (1500-1715); Sat 0930-1515 (0830-1415); Sun 1415-1530 (1315-1430) and by arrangement with AD operator (HIAL).
2	Customs and immigration	
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD hours. See also AD 2.18
8	Fuelling	Not applicable.
9	Handling	By arrangement with HIAL
10	Security	
11	De-icing	
12	Remarks	This aerodrome is strictly PPR and arrival/departure times may be allocated.

EGPU AD 2.4 HANDLING SERVICES AND FACILITIES

INTENTIONALLY BLANK

EGPU AD 2.5 PASSENGER FACILITIES

1	Hotels	
2	Restaurants	
3	Transportation	
4	Medical facilities	Limited first aid available.
5	Bank and Post Office	
6	Tourist Office	
7	Remarks	Disabled passenger handling and wheelchair facilities available during AD hours.

EGPU AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category A2 RFF Category 3 accepted under remission. RFF Category 4 by PPR arrangement.
2	Rescue equipment	
3	Capability for removal of disabled aircraft	Limited
4	Remarks	

EGPU AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical, chemical de-icing.
2	Clearance priorities	R/W's, Taxiway, Apron, Airport Domestic Area.
3	Remarks	Latest Information from: 01879-220456.

EGPU AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	MAIN APRON Surface: Asphalt
2	Taxiway width, surface and strength	Taxiway A: 13 M Surface: Asphalt
3	Altimeter checkpoint location and elevation	Apron 34 FT
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	

EGPU AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	
2	Runway and taxiway markings and lighting	Runway marking aid(s): 05/23: Runway designators and centre-line markings.
3	Stop bars and runway guard lights (if any)	A, B1.
4	Other runway protection measures	
5	Remarks	WDIs (LGTD) - Runway 05: 562949.25N 0065230.58W; Runway 23: 563006.24N 0065158.04W; Runway 11: 563007.34N 0065227.00W.

EGPU AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPU9552) 05/APPROACH 23/ TAKE-OFF	BUILDING	562933.43N 0065259.60W	59 FT	16 FT	No	
(EGPU9551) 05/APPROACH 23/ TAKE-OFF	BUILDING	562933.36N 0065259.54W	59 FT	16 FT	No	
(EGPU9549) 05/APPROACH 23/ TAKE-OFF	BUILDING CHIMNEY	562933.23N 0065259.53W	61 FT	18 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPU1207)	BUILDING	563028.46N 0064917.76W	133 FT	16 FT	No	
(EGPU9509)	MAST	563013.94N 0065751.48W	444 FT	101 FT	No	
(EGPU9181)	MAST	562959.61N 0064825.43W	137 FT	110 FT	No	
(EGPU9500)	RADOME	562719.85N 0065522.85W	539 FT	81 FT	No	

EGPU AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE ABERDEEN
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE ABERDEEN 9 Hours
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	
6	Flight documentation Language(s) used	TAF/METAR English
7	Charts and other information available for briefing or consultation	Available on request from ATS.
8	Supplementary equipment available for providing information	
9	ATS units provided with information	TIREE
10	Additional information (limitation of service, etc.)	

EGPU AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
05	047.10°	1481 x 30 M	RWY surface: Asphalt, Grooved PCN 5	562940.96N 0065240.33W 186.5 FT	THR 30.5 FT	
23	227.11°	1481 x 30 M	RWY surface: Asphalt, Grooved PCN 5	563010.89N 0065142.10W 186.4 FT	THR 19.7 FT	
11	107.06°	799 x 19 M	RWY surface: Asphalt PCN 6	563007.76N 0065245.47W 186.5 FT	THR 38.1 FT	
29	287.07°	799 x 19 M	RWY surface: Asphalt PCN 6	563000.09N 0065200.30W 186.5 FT	THR 24.6 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	69 x 150 M	1531 x 280 M				RWY 05
	71 x 150 M	1531 x 280 M				RWY 23 Threshold displaced by 120 M to provide 1:50 over boundary fence.
		859 x 60 M				RWY 11

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
		859 x 60 M				RWY 29

EGPU AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
05	1411 M	1481 M	1411 M	1411 M	
23	1410 M	1481 M	1481 M	1361 M	
11	799 M	799 M	799 M	799 M	
29	799 M	799 M	799 M	799 M	

EGPU AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
05		Green Light intensity low	APAPI Left/3°			60 M spacing bi-directional with omni-directional component. White Light intensity low	Red Light intensity low		
23		Green Light intensity low	APAPI Left/3°			60 M spacing bi-directional with omni-directional component. White Light intensity low	Red Light intensity low		
11		Green Light intensity low	APAPI Right/3°			60 M spacing bi-directional with omni-directional component. White Light intensity low	Red Light intensity low		
29		Green Light intensity low	APAPI Right/3°			60 M spacing bi-directional with omni-directional component. White Light intensity low	Red Light intensity low		

EGPU AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 562953.92N 0065243.14W Flashing White
---	--	---

2	LDI location and lighting Anemometer location and lighting	Anemometer: Taxiway A Mast: 563001.47N 0065241.07W (LGTD); Runway 23 Mast: 563013.00N 0065147.43W (LGTD); Runway 05 Mast: 562945.20N 0065241.49W (LGTD).
3	TWY edge and centre line lighting	EDGE: Taxiway A blue edge.
4	Secondary power supply/switch-over time	Standby Generator/22 seconds.
5	Remarks	Obstacle light on VCR.

EGPU AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGPU AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
TIREE ATZ A circle, 2 NM radius, centred at 562957N 0065209W on longest notified runway (05/23)	Upper limit: 2000 FT AGL Lower limit: SFC	G	TIREE INFORMATION English	3000 FT		

EGPU AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
AFIS	TIREE INFORMATION	122.705 MHz DOC 25 NM/ 6000 FT			Mon-Thu 0930-1815 (0830-1715); Fri 0930-1145 (0830-1045), 1600-1815 (1500-1715); Sat 0930-1515 (0830-1415); Sun 1415-1530 (1315-1430) and by arrangement with AD operator (HIAL).	ATZ hours coincident with AFIS hours, but not by arrangement.

EGPU AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME 2.76°W (2022) 1.70°W (2024)	TIR	124X 117.700 MHz	H24	562935.57N 0065232.12W	55 FT	VOR/DME DOC: 90 NM/50,000 FT (200 NM/50,000 FT in Sector R227-317).

EGPU AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Runway departure restriction for aircraft requiring the use of a licensed aerodrome:
 - i. **Runways 05/23 and 11/29.** Except where an AOC holder has a less restrictive State authorised take-off minima, departures when the reported MET visibility is 800 M or less are not permitted.
- b) Use of Tiree aerodrome is subject to standard Terms and Conditions of Use, which can be requested from the aerodrome.

28 Nov 2024

2 GROUND MOVEMENT

Not applicable

3 CAT II/III OPERATIONS

Not applicable

4 WARNINGS

- a) No ground signals except light signals.
- b) All taxiways are closed except between the threshold of Runway 11, the parking apron, south of Runway 11/29. Unserviceable sections of Runway are fenced off and marked with white crosses.
- c) Grass areas are soft and unsafe. Poor load bearing characteristics may be found on the runway/taxiway strips and the area adjacent to the apron. Only marked taxiway to be used.
- d) Large flocks of geese are prevalent in the vicinity of the aerodrome between October and March.
- e) Windsurfing and kite surfing may take place on beaches near the aerodrome.
- f) Paramotor activity by non-radio aircraft takes place occasionally throughout the year on the Isle of Tiree.
- g) Wind Turbine, 563208N 0064528W, 4.4 NM/59°T from ARP, 262 FT AGL.

5 HELICOPTER OPERATIONS

Not applicable

6 USE OF RUNWAYS

Not applicable

7 TRAINING

Not applicable

EGPU AD 2.21 NOISE ABATEMENT PROCEDURES

Not applicable

EGPU AD 2.22 FLIGHT PROCEDURES**1 VISUAL REFERENCE POINTS (VRP)**

- a) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

EGPU AD 2.23 ADDITIONAL INFORMATION

Not applicable

EGPU AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGPU-2-1

INSTRUMENT APPROACH CHART RNP RWY 05 (CAT A,B) - ICAO

AD 2.EGPU-8-1

INSTRUMENT APPROACH CHART RNP RWY 23 (CAT A,B) - ICAO

AD 2.EGPU-8-2

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 05

AD 2.EGPU-8-3

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 23

AD 2.EGPU-8-4

EGPU AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Not applicable

INTENTIONALLY BLANK

**AERODROME
CHART - ICAO**

ARP 562957N 0065209W

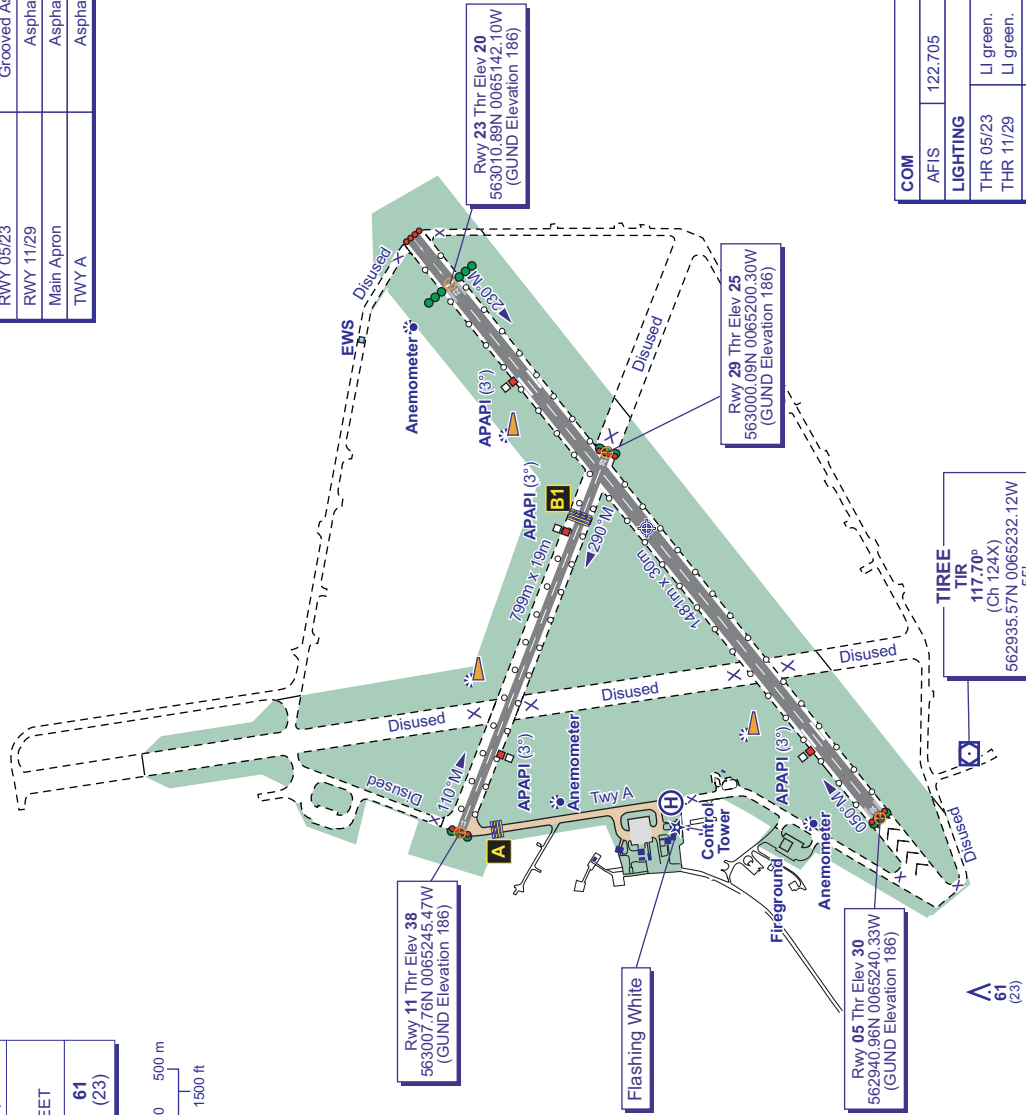
AD ELEV 38FT

**TIREE
EGPU**

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.
**BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL
HEIGHTS IN FEET ABOVE AD** **61
(23)**



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 05/23	Grooved Asphalt	-	-
RWY 11/29	Asphalt	-	-
Main Apron	Asphalt	-	34 ft amsl
TWY A	Asphalt	-	-



COM		TIREE INFORMATION	
AFIS	122.705		
LIGHTING			
THR 05/23	LI green.		
THR 11/29	LI green.		
RWY 05/23	Edge LI bi-d with omni-d component.	LI end lights red.	
RWY 11/29	Edge LI bi-d with omni-d component.	LI end lights red.	
TWY	TWY A edge blue.		

**TIREE
TIR**
117.70°
(Ch 124X)
562935.57N 0065232.12W
55

**61
(23)**

CHANGE (12/24): RWY LIGHTING. RWY 11/29 APAPI ADDED. RWY 05/23 APAPI MODIFIED. WINDSLEEVE ADDED. EDITORIAL.

INTENTIONALLY BLANK

EGPC — WICK**EGPC AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EGPC — WICK

EGPC AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 582732N Long: 0030535W Mid point of Runway 13/31.
2	Direction and distance from city	1 NM N of Wick.
3	Elevation / Reference temperature / Mean Low Temperature	126 FT / 14 °C / -
4	Geoid undulation at AD ELEV PSN	167 FT
5	Magnetic Variation / Annual Change	1.47°W (2022) / 0.23°E
6	AD Administration Address Telephone Telefax	HIAL Wick Aerodrome, Wick, Caithness, KW1 4QP. 01955-602215 (Administration) 01955-607583 (ATC) 01955-607579 (SATCO) 01955-607596 (ATIS) 01955-604750 (ATC) 01955-605946 (Administration)
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGPC AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Fri 0800-2000 (0700-1900); Sun 1400-1600 (1300-1500); and by arrangement with AD Operator (HIAL).
2	Customs and immigration	By arrangement with HIAL or Far North Aviation.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD hours. See also AD 2.18
8	Fuelling	H24 by arrangement with Far North Aviation.
9	Handling	H24 by arrangement with Far North Aviation.
10	Security	As AD hours.
11	De-icing	Operational hours.
12	Remarks	This aerodrome is PPR.

EGPC AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	By arrangement with Far North Aviation. Nearest railway siding: Wick.
2	Fuel and oil types	AVTUR JET A-1, AVGAS 100LL Oil: All grades
3	Fuelling facilities/capacity	Stored overground in tanks and bowsers. Delivered by bowser.
4	De-icing facilities	By arrangement with Far North Aviation.
5	Hangar space for visiting aircraft	50,000 sq FT.
6	Repair facilities for visiting aircraft	By arrangement with Far North Aviation.

7	Remarks	<p>Fuelling/Handling via Far North Aviation by Tel: 01955-602201, Fax: 01955-602203 or RTF (131.560 MHz callsign 'Far Nor').</p> <p>Helicopter rotors running refuelling available by arrangements with HIAL and Far North Aviation.</p> <p>Oxygen, nitrogen and related servicing available from Far North Aviation.</p> <p>Survival suits, lifejackets and dinghies available from Far North Aviation.</p>
---	---------	--

EGPC AD 2.5 PASSENGER FACILITIES

1	Hotels	Wick and surrounding area.
2	Restaurants	Vending machines in terminal.
3	Transportation	Car Hire and taxis available.
4	Medical facilities	First Aid.
5	Bank and Post Office	Wick.
6	Tourist Office	Wick.
7	Remarks	Aviramp, stair climber and wheelchairs available for passengers with reduced mobility.

EGPC AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	<p>RFF Category A4</p> <p>RFF Category 4 Mon-Fri, Sun.</p> <p>RFF Category 5 accepted under remission.</p> <p>RFF Category 6 by prior arrangement.</p>
2	Rescue equipment	Off road trailer unit for 1000 M response.
3	Capability for removal of disabled aircraft	Limited.
4	Remarks	

EGPC AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	Mechanical. Chemical de-icing/anti-icing. Surfaces de-iced/anti-iced with KAC/EG and/or NAAC.
2	Clearance priorities	Runway 13/31, Taxiways, Apron, Airport domestic area.
3	Remarks	Latest information from ATC, Tel: 01955-602215, Ext 583.

EGPC AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	<p>MAIN APRON Surface: Concrete and asphalt PCN 25/R/B/W/T</p> <p>NORTH APRON Surface: Asphalt PCN 20/F/B/W/T</p> <p>SOUTH APRON Surface: Asphalt PCN 10/F/C/X/T</p>
2	Taxiway width, surface and strength	<p>Taxiway APRON-HOLD C: 14 M Surface: Asphalt PCN 14/F/C/X/T LOOP TAXIWAY</p> <p>Taxiway APRON-HOLD E: 14 M Surface: Asphalt PCN 14/F/C/X/T LOOP TAXIWAY</p>
		<p>Taxiway HOLD E-HOLD E1: 10.5 M Surface: Asphalt PCN 10/F/C/X/T LOOP TAXIWAY</p>

		Taxiway NORTH: 14 M Surface: Asphalt PCN 10/F/C/X/T HOLD D TO HOLD D1 BEFORE NORTH APRON
3	Altimeter checkpoint location and elevation	Apron 118 FT
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	

EGPC AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	
2	Runway and taxiway markings and lighting	Runway marking aid(s): 13/31: TDZ markings, Runway designation, centre-line and threshold markings. Runway light(s): 13/31: HI edge, threshold wingbar and stopend lighting. Taxiway marking aid(s): Yellow centre-line.
3	Stop bars and runway guard lights (if any)	
4	Other runway protection measures	
5	Remarks	WDIs (LGTD): 582739.89N 0030543.69W; 582722.71N 0030526.06W.

EGPC AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPC7607) 13/APPROACH 31/ TAKE-OFF	TREE	582747.87N 0030636.39W	134 FT	36 FT	No	
(EGPC7448) 13/APPROACH 31/ TAKE-OFF	WDI	582739.89N 0030543.69W	153 FT	25 FT	Yes Red	
(EGPC7050) 13/APPROACH 31/ TAKE-OFF	ANEMOMETER	582735.72N 0030556.92W	157 FT	36 FT	Yes Red	
(EGPC7458) 31/APPROACH 13/ TAKE-OFF	WDI	582722.71N 0030526.06W	146 FT	26 FT	Yes Red	
(EGPC7059) 31/APPROACH 13/ TAKE-OFF	ANEMOMETER	582716.85N 0030508.88W	150 FT	36 FT	Yes Red	
(EGPC7018) 31/APPROACH 13/ TAKE-OFF	VDF	582714.31N 0030503.46W	131 FT	19 FT	Yes Red	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPC7049)	WINDTURBINE	582927.78N 0030939.56W	189 FT	89 FT	No	
(EGPC6081)	LIGHT HOUSE	582844.50N 0030303.17W	199 FT	71 FT	No	
(EGPC6086)	TELEGRAPH POLE	582817.97N 0030421.97W	180 FT	37 FT	No	
(EGPC6085)	POLE	582815.78N 0030424.65W	176 FT	33 FT	No	
(EGPC6084)	BUILDING	582815.70N 0030423.54W	178 FT	35 FT	No	
(EGPC1314)	TELEGRAPH POLE	582803.73N 0030922.36W	225 FT	31 FT	No	

In circling area and at aerodrome						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGPC7028)	TREE	582710.84N 0030504.20W	144 FT	33 FT	No	
(EGPC7042)	WINDTURBINE	582620.94N 0031430.49W	567 FT	334 FT	No	
(EGPC7292)	SILO	582614.25N 0030730.44W	200 FT	66 FT	No	
(EGPC7298)	FLOODLIGHT	582614.02N 0030732.26W	196 FT	50 FT	No	
(EGPC7004)	WINDTURBINE	582612.63N 0031154.21W	505 FT	327 FT	No	
(EGPC7039)	WINDTURBINE	582610.95N 0031413.45W	575 FT	330 FT	No	
(EGPC7005)	WINDTURBINE	582606.78N 0031222.95W	513 FT	329 FT	No	
(EGPC7284)	MAST	582601.77N 0030511.25W	208 FT	106 FT	Yes Red	
(EGPC7301)	TREE	582547.20N 0030710.31W	233 FT	65 FT	No	
(EGPC7307)	WIND TURBINE	582507.42N 0030713.60W	285 FT	119 FT	Yes	
(EGPC7279)	MAST	582337.91N 0030727.53W	636 FT	399 FT	Yes Red	

EGPC AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	MET OFFICE ABERDEEN
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation Periods of validity	MET OFFICE ABERDEEN 9 hours.
4	Trend forecast Interval of issuance	
5	Briefing/consultation provided	Self-briefing/Telephone provided by Far North Aviation or ATC.
6	Flight documentation Language(s) used	Charts abbreviated plain language text. TAFs/METARs. English.
7	Charts and other information available for briefing or consultation	Available on request from ATC.
8	Supplementary equipment available for providing information	Fax. ATIS on 01955-607596 (H24).
9	ATS units provided with information	WICK
10	Additional information (limitation of service, etc.)	Outside aerodrome hours unverified automatic observation via ATIS on telephone number above.

EGPC AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY Number	True bearing	Dimensions of RWY	Surface of RWY/ SWY/ Strength (PCN)	THR co-ordinates/ THR Geoid undulation	THR elevation/ Highest elevation of TDZ of precision APP RWY	Slope of RWY/ SWY
1	2	3	4	5	6	7
13	126.97°	1831 x 45 M	RWY surface: Asphalt, Grooved PCN 20/F/B/W/T	582744.52N 0030607.61W 167.3 FT	THR 113.5 FT TDZ 124.5 FT	
31	306.98°	1831 x 45 M	RWY surface: Asphalt, Grooved PCN 20/F/B/W/T	582719.63N 0030504.53W 167.3 FT	THR 114.3 FT TDZ 125.5 FT	

SWY Dimensions	Clearway Dimensions	Strip Dimensions	RESA Dimensions, Overshoot / Undershoot	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
	150 x 150 M	1749 x 280 M				RWY 13 Threshold displaced by 247 M. Due to the runway profile, the end of the Runway 13 LDA is not visible, from an eye height of 3 M, until 480 M from the start of the LDA; ie 920 M prior to the end of the LDA.
	150 x 150 M	1749 x 280 M				RWY 31 Threshold displaced by 304 M. Due to the runway profile, the end of the Runway 31 LDA is not visible, from an eye height of 3 M, until 725 M from the start of the LDA; ie 673 M prior to the end of the LDA.

EGPC AD 2.13 DECLARED DISTANCES

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
13	1746 M	1896 M	1746 M	1409 M	
31	1714 M	1864 M	1714 M	1410 M	
31	1339 M	1489 M	1339 M		Take-off from intersection with Taxiway C.
31	1087 M	1237 M	1087 M		Take-off from intersection with Taxiway F.

EGPC AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY	Approach lighting Type/ Length/ Intensity	Threshold lighting Colour/Wing bars	VASIS/ MEHT/ PAPI/ PAPI Dist from THR	TDZ, lighting Length	Runway Centre Line lighting Length/ Spacing/ Colour/ Intensity	Runway edge lighting Length/ Spacing/ Colour/ Intensity	Runway end lighting Colour/ Wing bars	Stopway lighting Length/ Colour	Remarks
1	2	3	4	5	6	7	8	9	10
13	Centre-line with two crossbars. 330 M Light intensity high	Light intensity high Green wingbars	PAPI Left/3° 25 FT 120 M			HI elev bi-directional with LI omni-directional component	Red	Red	
31	Centre-line with two crossbars. 390 M Light intensity high	Light intensity high Green wingbars	PAPI Left/3° 25 FT 138 M			HI elev bi-directional with LI omni-directional component	Red	Red	

EGPC AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	
2	LDI location and lighting Anemometer location and lighting	Anemometer: 582735.72N 0030556.92W (LGTD); 582716.85N 0030508.88W (LGTD) and 582718.19N 0030538.56W (LGTD).

3	TWY edge and centre line lighting	CL: Green centre-line reflectors on loop from Main Apron to Hangar and North Taxiway. EDGE: Blue taxiway edge lights from Main Apron to Runway 13/31. Blue edge reflectors on all other taxiways.
4	Secondary power supply/switch-over time	Yes/15 seconds.
5	Remarks	Apron floodlights. Obstacle lighting.

EGPC AD 2.16 HELICOPTER LANDING AREA

INTENTIONALLY BLANK

EGPC AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Designation and lateral limits	Vertical Limits	Airspace Class	ATS unit callsign/ language	Transition Altitude	Hours of applicability	Remarks
1	2	3	4	5	6	7
WICK ATZ A circle, 2 NM radius, centred at 582732N 0030535W on longest notified runway (13/31)	Upper limit: 2000 FT AGL Lower limit: SFC	G	WICK APPROACH English	3000 FT		

EGPC AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Callsign	Channel(s)	SATVOICE number(s)	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
APP	WICK APPROACH	119.705 MHz			Mon-Fri 0800-2000 (0700-1900); Sun 1400-1600 (1300-1500); and by arrangement with AD Operator (HIAL).	ATZ hours coincident with Approach hours. VDF 582714.31N 0030503.46W.
TWR	WICK TOWER	119.705 MHz DOC 40 NM/ 15,000 FT			Mon-Fri 0800-2000 (0700-1900); Sun 1400-1600 (1300-1500); and by arrangement with AD Operator (HIAL).	VDF 582714.31N 0030503.46W.
AFIS	WICK INFORMATION	119.705 MHz			By arrangement outside hours of ATC. Normally, only available for SAR and Ambulance flights and aircraft in emergency	Due to AFISO training and maintenance of currency, AFISO phraseology may be in use during ATC published hours, with ATC in attendance. ATC service will remain available at all times. Pilots will be advised of periods of AFISO training, normally via ATIS.
ATIS	WICK INFORMATION	113.600 MHz Freq shared with VOR WIK.			Mon-Fri 0800-2000 (0700-1900); Sun 1400-1600 (1300-1500); and by arrangement with AD Operator (HIAL).	
OTHER	WICK FIRE CHIEF	121.600 MHz Non-ATS frequency.			Available when Fire vehicle attending aircraft on the ground in an emergency.	

EGPC AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid CAT of ILS/MLS MAG Var/ VOR Declination	Ident	Frequency	Hours of Operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME 1.47°W (2022) 0.80°W (2022)	WIK	83X 113.600 MHz	Mon-Fri 0800-2000 (0700- 1900); Sun 1400-1600 (1300- 1500); and by arrangemen t with AD Operator (HIAL).	582731.74N 0030601.34W	145 FT	VOR/DME DOC: 100 NM/50,000 FT (160 NM/50,000 FT in Sector R331- 001). Available for approach and landing purposes only during the hours of APP.
NDB (L) 1.46°W (2022)	WCK	344.000 kHz	Mon-Fri 0800-2000 (0700- 1900); Sun 1400-1600 (1300- 1500); and by arrangemen t with AD Operator (HIAL).	582648.11N 0030347.23W		Normally radiates H24. Range 30 NM. Available for approach and landing purposes only during the hours of APP.

EGPC AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

- a) Use of this airport by aircraft not able to communicate with ATC by radio is strictly PPR.
- b) Aircraft that do not require the use of a licensed aerodrome and that wish to operate outwith the notified aerodrome hours of operation must comply with Highlands and Islands Airport Ltd Out of Hours Indemnity Scheme. During periods when the aerodrome is snow closed to facilitate snow clearing and/or de-icing operations out of hours indemnities are suspended and no flights may operate. Details of the scheme and an application form can be obtained at: <https://www.hial.co.uk/general-aviation-7/general-aviation-4> or from HIAL Business Support Team, Tel: 01667-462445; Fax: 01667-464208.
- c) Use of Wick aerodrome is subject to standard Terms and Conditions of Use, which can be requested from the aerodrome.
- d) High visibility clothing must be worn airside at all times.

2 GROUND MOVEMENT

- a) During periods of aircraft congestion on the apron, marshalling will be provided by HIAL.
- b) Start-up requests are mandatory on all aprons.
- c) Pilots must request and follow ATC taxi instructions.

3 CAT II/III OPERATIONS

Not applicable.

4 WARNINGS

- a) Except for light signals, ground signals are not displayed.
- b) Pilots are advised to exercise caution as this aerodrome has a deer hazard, particularly during the periods of dawn and dusk, although patrols are mounted whenever the presence of deer is known or anticipated. Pilots are requested to report the location of any animals on the aerodrome to ATC.
- c) In Winter months there is increased bird activity in the vicinity of the aerodrome due to over wintering geese.
- d) Grass areas are soft and unsafe. Poor load bearing characteristics may be found on the runway/taxiway strips and the area adjacent to the apron. Only marked taxiway to be used.
- e) Loop Taxiway from Runway 13/31 through hold C, B & A, and North Taxiway through hold D and D1, is restricted to aircraft with an outer main gear wheel span not exceeding 8 M. Loop Taxiway through hold E and E1 is restricted to aircraft with an outer main gear wheel span not exceeding 6 M.

5 HELICOPTER OPERATIONS

- a) Rotors running refuelling is available if Far North Aviation are provided with a copy of the Helicopter Operators written instructions regarding the aircraft, the required safety measures and the emergency procedures to be followed. All passengers must disembark before refuelling commences, unless in exceptional circumstances at the discretion of the aircraft commander.

6 USE OF RUNWAYS

- a) Runway departure restriction for aircraft requiring the use of a licensed aerodrome:
 - i. **Runway 13/31.** Except where an AOC holder has a less restrictive State authorised take-off minima, departures when the reported MET visibility is 400 M or less are not permitted.
- b) Arriving aircraft on Runway 31 are required to backtrack and exit via Hold C. Pilots should commence backtrack as soon as practicable and successive inbound aircraft will be informed by ATC if required.
- c) Departing aircraft are required to backtrack Runways 13 and 31 via Hold C. Backtracking should be as expeditious as possible. Pilots must inform ATC prior to entering the runway if they are aware that they will not be ready for departure on line up. Clearances or departure instructions will be issued during taxi.

7 TRAINING

- a) The use of the airport for training purposes is subject to prior arrangement with ATC, Tel: 01955-602215, Ext 583.

EGPC AD 2.21 NOISE ABATEMENT PROCEDURES

Not applicable.

EGPC AD 2.22 FLIGHT PROCEDURES

1 INSTRUMENT APPROACH PROCEDURES

- a) Instrument Approach Procedures (IAP) for this aerodrome are established outside controlled airspace. See ENR 1.5.

2 NORTH ATLANTIC DEPARTURES

- a) Due to the proximity of the Shanwick Oceanic boundary to Wick, pilots must consider timescales for submitting an 'RCL'. Refer to ENR 2.2, paragraph 3.8.2 for details.

3 RADIO COMMUNICATION FAILURE PROCEDURES

- a) The pilot of a VFR flight experiencing communications failure should join overhead at 2000 FT and descend into the circuit pattern for the runway-in-use watching for light signals from the Tower all the while. Should a light signal not be forthcoming on turning onto final approach, the pilot should level off at not below 400 FT and fly parallel to the runway, and adjacent to the Tower, to attract attention.

4 CIRCUITS

- a) Circuit Height: 1000 FT AAL unless directed by ATC.
- b) Circuit Directions: Runway 13 - LH; Runway 31 - RH.
- c) Joining instructions as directed by ATC.

5 VISUAL REFERENCE POINTS (VRP)

- a) Castletown (Disused AD) and Loch Watten lack conspicuity at night and are unsuitable.
- b) Castletown (Disused AD) is close to the let-down pattern for Runway 13, the direct arrival to Runway 13, the missed approach procedure for Runway 31, and helicopters on HMRIs X-RAY and YANKEE.
- c) Loch Watten is close to the let-down pattern for Runway 13 and missed approach Runway 31.
- d) Details of VRPs are available in the consolidated 'Visual Reference Points List' published on the 'Digital Dataset' page of the NATS AIS website, www.nats.aero/ais.

6 UK FLIGHT INFORMATION SERVICES

- a) During notified ATC hours of service:
 - i. A procedural ATS will be routinely applied to IFR flights. Pilots will be expected to accept levels, radials, tracks and/or time allocations that may require flight in IMC, to achieve planned deconfliction minima from other aircraft being provided with a procedural ATS;

- ii. Pilots must use conventional navigation aids when receiving a procedural ATS that includes deconfliction from other traffic, and not use FMS overlays for the purpose;
- iii. A basic ATS will be applied to VFR flights. Agreements may be requested which restrict aircraft to a specific level, level band, heading, route, or operating area for the purposes of co-ordination and/or to facilitate the safe use of airspace;
- iv. A pilot may request another ATS if considered more appropriate.

b) Outside notified ATC hours of service:

- i. A basic ATS will be applied to SAR and ambulance flights by an AFISO.

7 TRANSITION LEVEL

- a) Pilots of inbound IFR aircraft shall acknowledge receipt of the Transition Level on first contact with Wick ATSU. The Transition Level will be broadcast on ATIS.

8 TRANSPONDER MANDATORY ZONE ACCESS

- a) Pilots are reminded of the proximity of the Moray Firth Transponder Mandatory Zone and of the pilot's responsibility to remain clear of airspace for which they are not suitably equipped to enter. Many of the approaches to Runway 31 and most arrivals from the south east will enter the Moray Firth TMZ; as such pilots must state if they are not equipped to enter a TMZ to the relevant controlling agency.
- b) Suitably equipped aircraft may access the Moray Firth TMZ without ATS approval although such traffic is strongly recommended to afford itself of an ATS from either Wick, Lossiemouth or Scottish Control.
- c) The pilot of an aircraft that wishes to operate in the Moray Firth TMZ without serviceable transponder equipment as defined in GEN 1.5 para 5.3 may be granted access to the TMZ subject to specific ATC approval. This approval may be obtained with prior notice from Wick ATC or from Lossiemouth Departures. Pilots of departing aircraft from Wick AD without a serviceable transponder must notify Wick ATC of their transponder status on start.

EGPC AD 2.23 ADDITIONAL INFORMATION

- a) Aircraft operators are responsible for the searching of any aircraft parked either overnight or within the demarcated area prior to departure.

EGPC AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO

AD 2.EGPC-2-1

INSTRUMENT APPROACH CHART RNP RWY 13 (CAT A,B,C) - ICAO

AD 2.EGPC-8-1

INSTRUMENT APPROACH CHART VOR/DME RWY 13 - ICAO

AD 2.EGPC-8-2

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 13 - ICAO

AD 2.EGPC-8-3

INSTRUMENT APPROACH CHART DIRECT ARRIVALS TO VOR/NDB(L) RWY 13 - ICAO

AD 2.EGPC-8-4

INSTRUMENT APPROACH CHART RNP RWY 31 (CAT A,B,C) - ICAO

AD 2.EGPC-8-5

INSTRUMENT APPROACH CHART VOR/DME RWY 31 - ICAO

AD 2.EGPC-8-6

INSTRUMENT APPROACH CHART DIRECT ARRIVALS TO VOR/DME RWY 31 - ICAO

AD 2.EGPC-8-7

INSTRUMENT APPROACH CHART NDB(L)/DME RWY 31 - ICAO

AD 2.EGPC-8-8

INSTRUMENT APPROACH CHART DIRECT ARRIVALS to NDB(L)/DME RWY 31 - ICAO

AD 2.EGPC-8-9

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 13

AD 2.EGPC-8-10

INSTRUMENT APPROACH PROCEDURE CODING TABLES - RNP RWY 31

AD 2.EGPC-8-11

EGPC AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

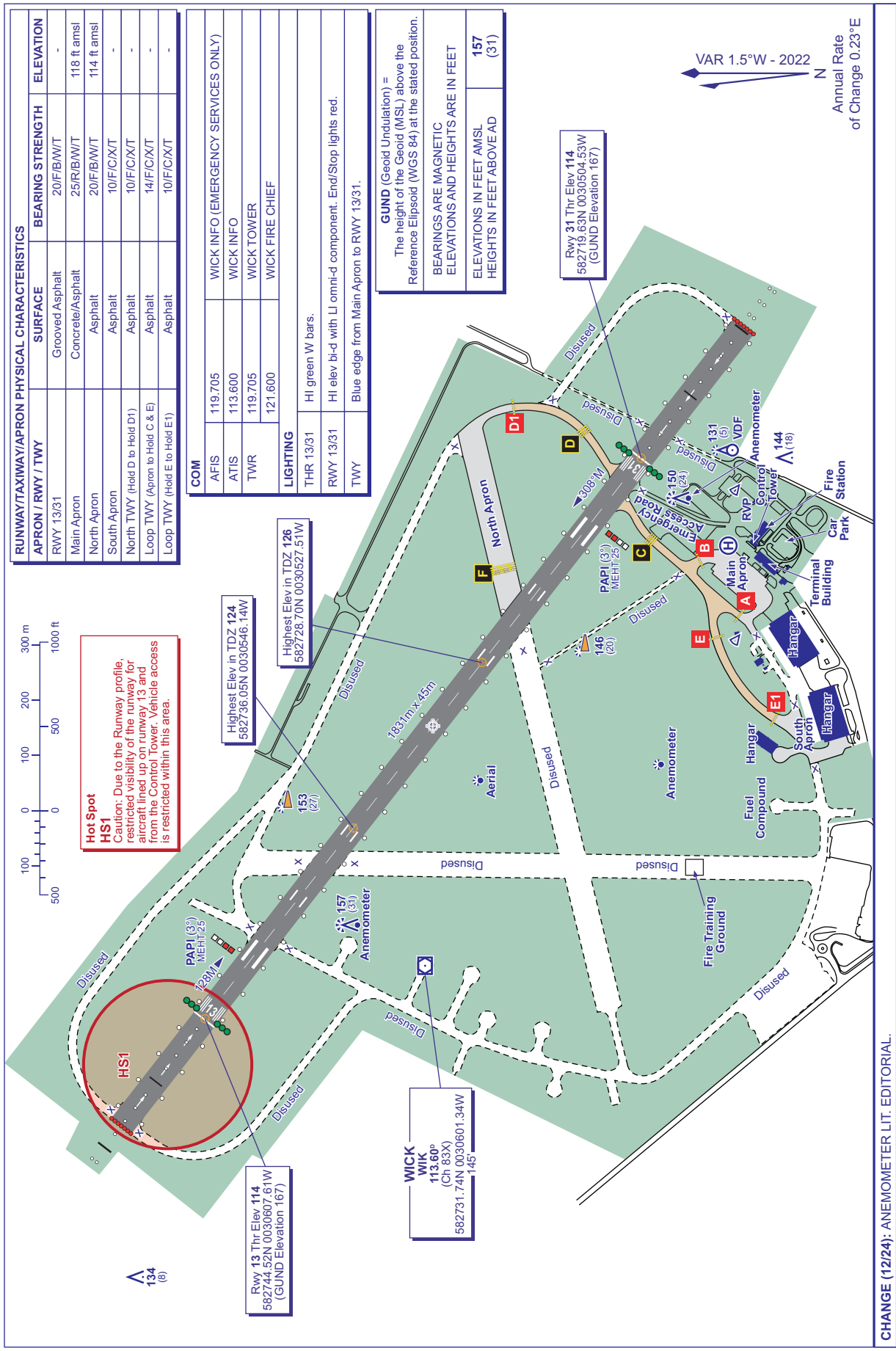
Not applicable

WICK
EGPC

AD ELEV 126FT

ARP 582732N 0030535W

AERODROME
CHART - ICAO



RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 13/31	Grooved Asphalt	20F/B/W/T	-
Main Apron	Concrete/Asphalt	25F/B/W/T	118 ft amsl
North Apron	Asphalt	20F/B/W/T	114 ft amsl
South Apron	Asphalt	10F/C/X/T	-
North TWY (Hold D to Hold D1)	Asphalt	10F/C/X/T	-
Loop TWY (Apron to Hold C & E)	Asphalt	14F/C/X/T	-
Loop TWY (Hold E to Hold E1)	Asphalt	10F/C/X/T	-

COM	
AFIS	119.705 WICK INFO (EMERGENCY SERVICES ONLY)
ATIS	113.600 WICK INFO
TWR	119.705 WICK TOWER
	121.600 WICK FIRE CHIEF
LIGHTING	
THR 13/31	HI green W bars.
RWY 13/31	HI elev bid with LI omni-d component. End/Stop lights red.
TWY	Blue edge from Main Apron to RWY 13/31.

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.

BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET

ELEVATIONS IN FEET AMSL **157**
HEIGHTS IN FEET ABOVE AD **(31)**

Hot Spot HS1
Caution: Due to the Runway profile, restricted visibility of the runway for aircraft lined up on runway 13 and from the Control Tower, vehicle access is restricted within this area.

Highest Elev in TDZ 124
582736.05N 0030546.14W

Highest Elev in TDZ 126
582728.70N 0030527.51W

WICK
WIK
113.60°
(Ch 83X)
582731.74N 0030601.34W
145

Rwy 31 Thr Elev 114
582719.63N 0030504.53W
(GUND Elevation 167)

CHANGE (12/24): ANEMOMETER LIT. EDITORIAL.

INTENTIONALLY BLANK

EGHG — YEOVIL/WESTLAND

EGHG AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EGHG — YEOVIL/WESTLAND

EGHG AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	Lat: 505624N Long: 0023932W Mid point of Runway 09/27.
2	Direction and distance from city	1 NM W of Yeovil.
3	Elevation / Reference temperature / Mean Low Temperature	202 FT / 18 °C / -
4	Geoid undulation at AD ELEV PSN	163 FT
5	Magnetic Variation / Annual Change	0.29°W (2022) / 0.20°E
6	AD Administration Address Telephone	LEONARDO UK LTD Yeovil Aerodrome, Lysander Road, Yeovil, Somerset, BA20 2YB. 01935-475222
7	Type of Traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	

EGHG AD 2.3 OPERATIONAL HOURS

1	AD Administration	Mon-Thu 0900-1630 (0800-1530), Fri 0900-1530 (0800-1430); except PH.
2	Customs and immigration	By arrangement.
3	Health and sanitation	
4	AIS Briefing Office	
5	ATS Reporting Office (ARO)	
6	MET Briefing Office	
7	ATS	As AD hours. See also AD 2.18
8	Fuelling	By arrangement.
9	Handling	
10	Security	
11	De-icing	
12	Remarks	This aerodrome is PPR. Available H24 for ambulance/medical and Police helicopters not required to use a licensed aerodrome.

EGHG AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	
2	Fuel and oil types	AVTUR JET A-1
3	Fuelling facilities/capacity	
4	De-icing facilities	
5	Hangar space for visiting aircraft	
6	Repair facilities for visiting aircraft	
7	Remarks	

EGHG AD 2.5 PASSENGER FACILITIES

INTENTIONALLY BLANK

EGHG AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting services	RFF Category H3
2	Rescue equipment	
3	Capability for removal of disabled aircraft	
4	Remarks	

EGHG AD 2.7 SEASONAL AVAILABILITY - CLEARING

INTENTIONALLY BLANK

EGHG AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	APRON Surface: Asphalt and grass Surface: Asphalt/Concrete/Grass
2	Taxiway width, surface and strength	
3	Altimeter checkpoint location and elevation	
4	VOR checkpoints	
5	INS checkpoints	
6	Remarks	

EGHG AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	
2	Runway and taxiway markings and lighting	
3	Stop bars and runway guard lights (if any)	
4	Other runway protection measures	
5	Remarks	Wind direction indicators: 505619.46N 0023954.83W; 505626.30N 0023905.49W (LGTD).

EGHG AD 2.10 AERODROME OBSTACLES

In Approach/Take-off areas						
Obstacle ID/ Designation	Obstacle Type	Obstacle Position	Elevation/Height		Obstruction Lighting Type/ Colour	Remarks
1	2	3	4		5	6
(EGHG1071) 09/APPROACH	TREE	505629.10N 0024020.34W	242 FT	36 FT	No	
(EGHG1068) 09/APPROACH	TREE	505628.73N 0024022.02W	250 FT	49 FT	No	
(EGHG1109) 09/APPROACH	LAMP POST	505628.12N 0024010.89W	220 FT	16 FT	No	
(EGHG1096) 09/APPROACH	SIGN	505628.04N 0024011.55W	222 FT	17 FT	No	
(EGHG1112) 09/APPROACH	FENCE	505628.00N 0024010.84W	215 FT	12 FT	No	
(EGHG1054) 09/APPROACH 27/ TAKE-OFF	TREE	505627.47N 0024041.86W	288 FT	91 FT	No	
(EGHG1110) 09/APPROACH	GATE	505627.43N 0024010.88W	214 FT	11 FT	No	
(EGHG1115) 27/TAKE-OFF	FENCE	505625.97N 0024010.78W	208 FT	10 FT	No	
(EGHG1119) 27/TAKE-OFF	FENCE	505625.11N 0024010.60W	205 FT	10 FT	No	

**AERODROME
CHART - ICAO**

ARP 505624N 0023932W

AD ELEV 202FT

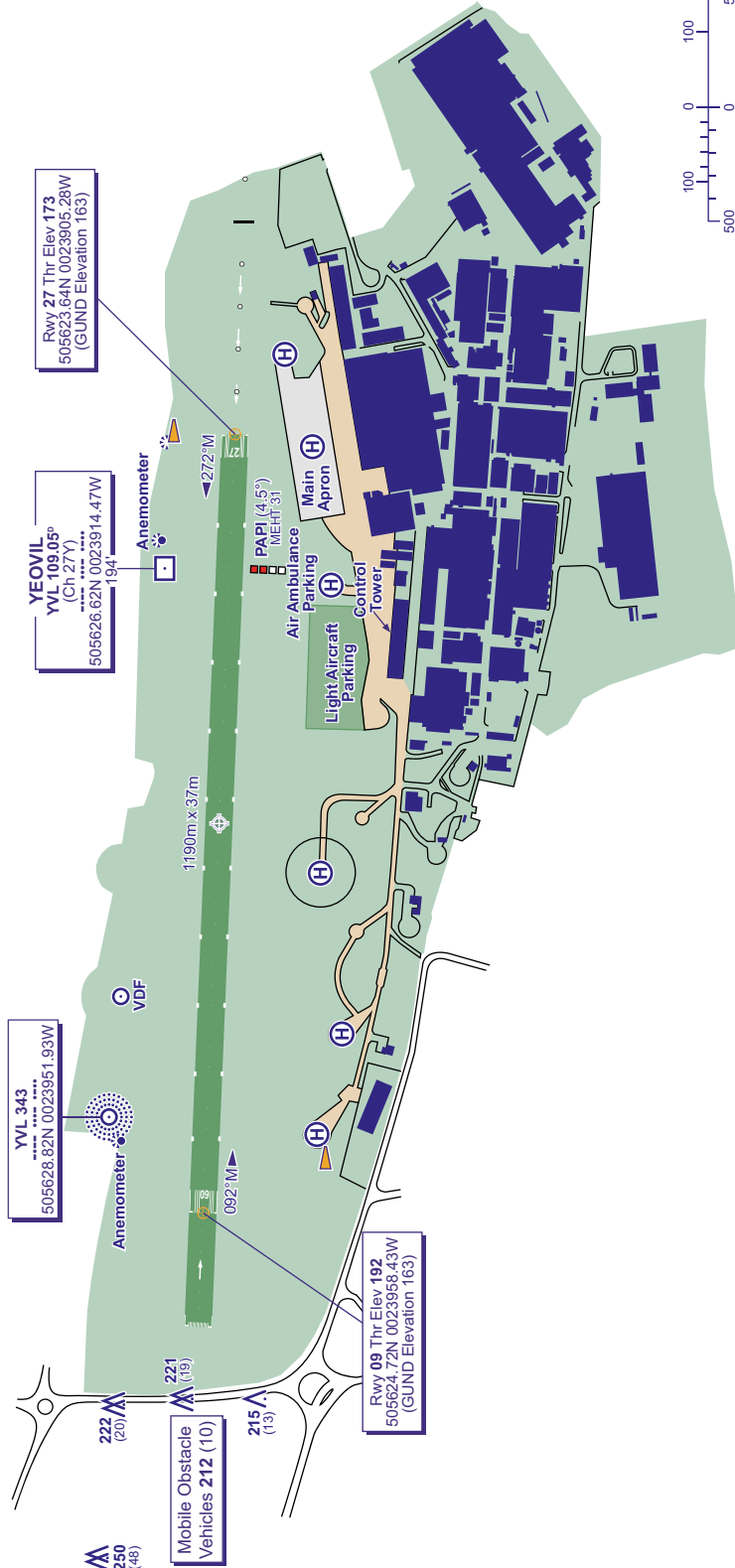
**YEOVIL/WESTLAND
EGHG**

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the
Reference Ellipsoid (WGS 84) at the stated position.
**BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL 250
HEIGHTS IN FEET ABOVE AD (48)**

AERO INFO DATE 04 SEP 24

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON / RWY / TWY	SURFACE	BEARING STRENGTH	ELEVATION
RWY 09/27	Grass	-	-
Apron	Asphalt/Concrete/Grass	-	-

VAR 0.3°W - 2022
N
Annual Rate
of Change 0.20°E



COM	
TWR	125.405 WESTLAND TOWER
LIGHTING	
APCH 27	HI simple approach lighting.
RWY 27	LI portable edge (by arrangement).
	Helicopter apron edge.

CHANGE (12/24): WINDSLEEVE LIT.

AD 2-EGHG-2-1

INTENTIONALLY BLANK