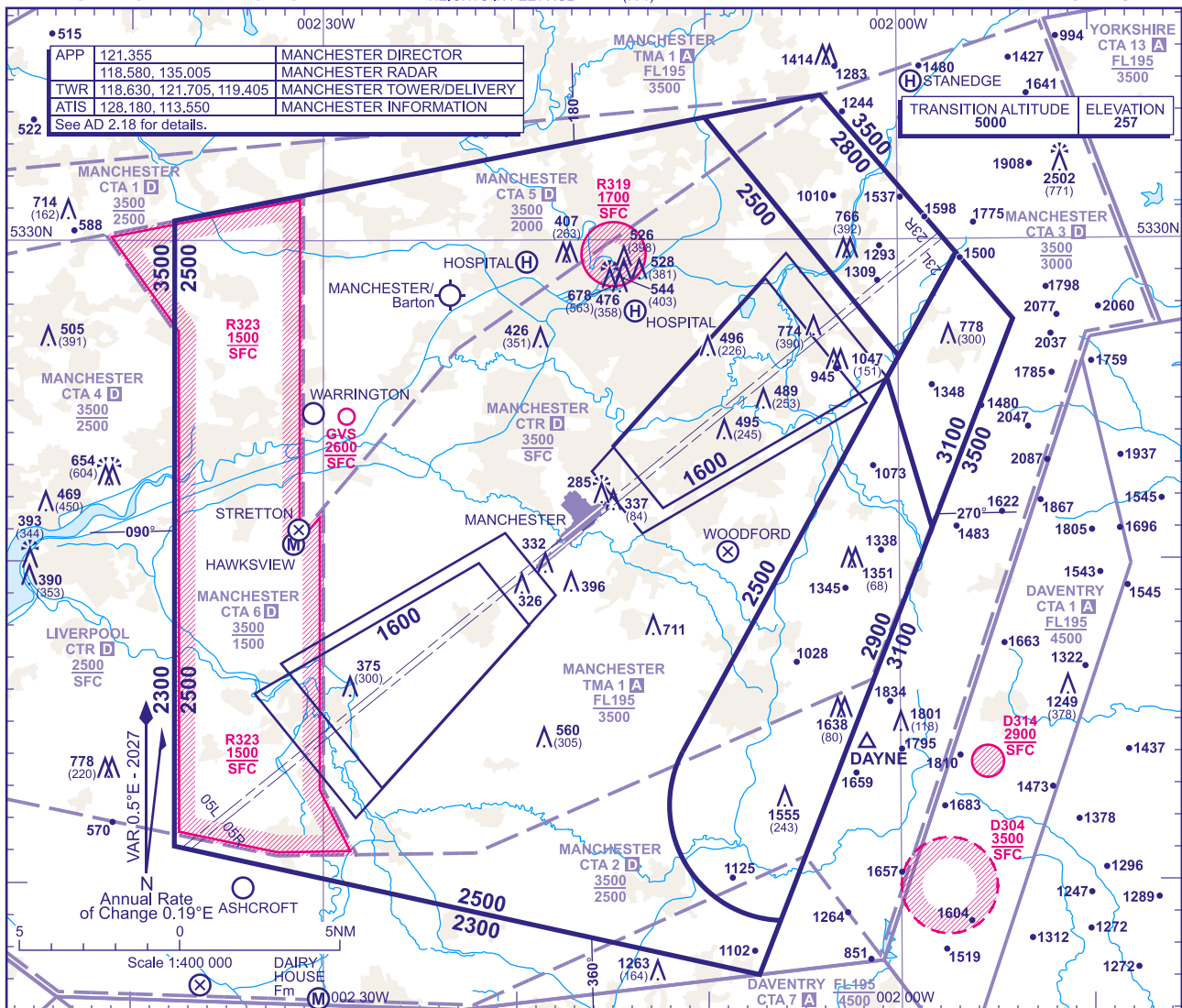


ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO

BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ELEVATIONS IN FEET AMSL 2502
HEIGHTS IN FEET AGL (771)

MANCHESTER



MINIMUM INITIAL ALTITUDE
Within the ATC Surveillance Minimum Altitude area the minimum initial altitude to be allocated by the approach surveillance controller is:
a) **2500** in the sector defined by the lateral limits; 533037N 0023746W - 533349N 0021004W - 532621N 0015958W - 531403N 0021120W - thence anti-clockwise by an arc of a circle radius 3.6NM centred on 531222.49N 0020602.21W to 530847N 0020617W - 530706N 0020723W - 531108N 0023744W - 533037N 0023746W.
b) **2800** in the sector defined by the lateral limits; 533349N 0021004W - 533430N 0020400W - 532934N 0015657W - 532621N 0015958W - 533349N 0021004W.
c) **2900** in the sector defined by the lateral limits; 532541N 0020035W - 532100N 0015817W - 530847N 0020617W thence clockwise by an arc of a circle radius 3.6NM centred on 531222.49N 0020602.21W to 531403N 0021120W - 532541N 0020035W.
d) **3100** in the sector defined by the lateral limits; 532541N 0020035W - 532934N 0015657W - 532730N 0015400W - 532100N 0015817W - 532541N 0020035W.

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:
a) within 5NM of the aircraft*, and
b) 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
In the event of radio communication failure flight crews should plan to land on the landing runway last acknowledged from Manchester Radar or as promulgated by ATIS. If this is not possible, flight crews should plan to land on runway 23R/05L. Should runway 23R/05L not be available, this will be indicated by means of ATC extinguishing the approach lights for 23R/05L and illuminating the approach lights for landing on runway 23L/05R. 'Blind' ATC communications will also be transmitted.

Initial Approach
Proceed at **FL70**, or last assigned level if higher, to **DAYNE**, **MIRSI** or **ROSUN**, hold as appropriate and then continue visually or by means of an appropriate final approach aid. If this is not possible, from the hold route direct and self-position to a 10D/12D Final as appropriate, complying with all published MSAs.†
Intermediate and Final Approach
Continue visually or by means of an appropriate final approach aid and land.
If landing is not possible, follow the Missed Approach Procedure to **DAYNE** or **ROSUN** hold climbing to **FL70**. From **DAYNE/ROSUN** proceed direct to a 10D/12D Final as appropriate, complying with all published MSAs.†
†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
1. Levels shown are based on QNH.
2. Only significant obstacles and dominant spot heights are shown.
3. The minimum levels shown within the ATC Surveillance Minimum Altitude Area are in conformance with the Standard European Rules of the Air - SERA.5015.
4. Minimum Sector Altitudes are based on obstacles and spot heights within 25NM of the Aerodrome Reference Point.
5. Controlled airspace with a base in excess of **5000** or **FL55**, as appropriate, is not shown.
6. This chart may only be used for cross-checking of altitudes assigned when in receipt of an ATC Surveillance service.
7. 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 is cleared to Intercept the final approach track.
8. Detailed description of FIR, UIR, CTA and TMA see ENR 2.1.
9. Detailed description of ATS airspace organized at the aerodrome see AD 2.17.