

1. GENERAL

- Arriving ACFT: Only the following designated exits will be illuminated for ACFT to vacate:
 RWY 24R via HST BD, AE or Link A,
 RWY 06L via HST JB or Link J via holding position J1 at the end of RWY.
- 1.3.1.2 ATC LVP due ceiling** (RVR 600m or greater and ceiling of 200' or less)
 - RWY 24L/24R dual RWY operation or RWY 06L single RWY operation.
 All available RWY exits associated with either RWY 24R or RWY 06L will be illuminated.
 Act may vacate at any of these exits.
 24L/24R dual RWY operation will require departing ACFT to "hold short" of RWY 24R at the following CAT III holding points as instructed, H2, G2, F2 or D2. Pilots are required to read back all ATC "hold short" instructions.
- Ground Movement Radar (GMR) is normally available to monitor pilot "RWY vacated" reports. When GMR is not available RWY LOC Sensitive Area (LSA) vacations will be assessed by receipt of a pilot report that the ACFT has passed the last alternate yellow and green centerline lights. These lights denote the extent of the ILS LSA.
- RWY 24R, Link J: Taxiing ACFT must follow the Northern lighted TWY centerline.
- Pilots will be informed of the relevant procedure that is in operation by Arrival and Departure ATIS or by RTF.
- When LVP are in force the appropriate Landing rates that can be expected are:

RVR(m)	Expected Landing Rate
Between 1000m and 600m	20
Between 600m and 400m	12
Less than 400m	10

1.4. TAXI PROCEDURES

- RWY 06L/24R has a turning circle at the Northeastern end, ABEAM Link J, for use by ACFT up to B747.
 RWY 06R/24L has two turning circles:
 - At 1820m from RWY 24L threshold for use by ACFT up to B767;
 - At 2318m from RWY 24L threshold for use by ACFT up to B747.
 All turning circles have unlit painted centerline and blue edge lighting beyond RWY edges.
 ACFT should follow the painted centerline in a clockwise direction, unless directed otherwise by ATC.
- Jet ACFT are to engage minimum power when using TWY's A, B and C due to the proximity of light ACFT ops in this area.
- TWY KC may be used as TWY for ACFT up to 198000lbs MTWA (B-757 size).

Pilots of long-wheelbase ACFT such as B777-300 and A340-600 should exercise caution when negotiating TWY curves and intersections as main-gear to pavement edge clearance may be limited.

Pilots are reminded of the need to exercise caution on wingtip clearances from other ACFT when manoeuvring in close proximity on the ground. Particular care should be taken in the RWY holding areas and at RWY crossing points.

RWY 06L/24R: The hard shoulder's outboard of the RWY side stripes have only 25% of the RWY bearing strengths and should not be used by ACFT turning on the RWY or when backtracking. The grass verges are unstrengthened and when wet unlikely to sustain loads.

ACFT using TWY L are to use minimum power. B777 ACFT are prohibited from using this TWY.

Minimum power to be used by outbound ACFT using TWY D between holding point D7 ABEAM stand 32 (Pier C).

1. GENERAL

- 1.4.1. TWYs during peak hours**
 TWY P:
 - stands 80 & 231 are closed.
 - stands 233 & 235 will be realigned.
 TWY Q (up to B747-400):
 - stands 62 & 63 are closed.
 - stand 61 only available for ACFT up to MD 11.
 Actual status of both TWYs will be promulgated via ATIS.

1.5. PARKING PROCEDURES

All stands are nose-in push-out.

1.6. OTHER INFORMATION

WARNING:
 Pilots are warned, when landing on RWY 24R in strong North Westerly winds, of the possibility of turbulence and large windshear effects.
 Flocks of up to 100 racing pigeons may be encountered flying across the airfield below 100' during the racing season, April-September. A high visibility bright lights from golf driving range 1500m/0.8NM LEFT of THR RWY 24R.

2. ARRIVAL

2.1. SPEED RESTRICTIONS

Cross SLP or 3 MIN before holding facility at 250 KT or less when at FL 140 or below.

2.2. NOISE ABATEMENT PROCEDURES

2.2.1. GENERAL

Unless otherwise authorized by ATC ACFT using the ILS shall not descend below 2000' before intercepting GS, nor thereafter fly below it. ACFT approaching without ILS or radar assistance 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 ACFT using the ILS GS.
 For visual approaches, or following a visual circuit, to RWY 24R/L the following additional limitations apply:
 - Jet ACFT shall not join the final approach at a height of less than 1760'.
 - Propeller driven ACFT whose MTWA exceeds 5700kg shall not join the final approach at a distance of less than 3NM from the landing THR and at a height of less than 1260'.
 Turbo-jet and turbo-prop ACFT approaching Manchester APF will be expected to conform low power, low drag approach procedures (refer to item 2.6.1.).

2.2.2. NIGHTTIME RESTRICTIONS

Between 2300-0600LT, visual approaches are not permitted. ACFT shall be positioned, by radar, to join the final APP at a distance of not less than 7NM from touchdown. This restriction does not apply to non jet ACFT whose MTWA is 5700kg or less.

2.2.3. CONTINUOUS DESCENT APPROACH

For ACFT to all RWYs at Manchester APF between 2200-0600LT:
 Headings and flight levels/altitudes by ATC. ACFT will be radar vectored. An estimate of track distance to touchdown will be passed with descent clearance. Further distance information will be given between descent clearance and the intercept heading to the ILS LOC. On receipt of descent clearance descend at the rate best suited to a continuous descent so as to join the GS at the appropriate height for the distance without the recourse to level flight.
 Recommended speeds:

- 210 KT during approach phase;
- 160 KT on, or shortly before the closing heading to ILS LOC;
- 160 KT when established on the ILS LOC to 4 DME.

ATC may request specific speeds for accurate spacing, comply with any speed adjustment as promptly as feasible with operational constraints. If a speed change for ACFT performance is necessary, advise ATC.

2. ARRIVAL

2.2.4. REVERSE THRUST

To minimize disturbance in areas adjacent to the APT crew are requested to avoid the use of reverse thrust after landing, consistent with the safe operation of the ACFT, especially between 2300-0700LT.

2.3. CAT II/III OPERATIONS

RWY 24R is approved for CAT II/III operations & RWY 06L for CAT II (CAT A & B ACFT only) and CAT III operations, special aircrew & a ACFT certification required.

2.4. RUNWAY OPERATIONS

2.4.1. MINIMUM RWY OCCUPANCY TIME

Pilots are reminded that rapid exits from the landing RWY enable ATC to apply minimum spacing on final approach that will achieve maximum RWY utilisation and will minimise the occurrence of "go-arounds".
 RWY 06R arrivals: All ACFT must vacate the RWY no later than VB and proceed direct to TWY V.

ACFT remaining on the RWY to vacate at VA or T will infringe the ILS LOC critical area.
 Similarly TWY S is not to be used.
 RWY 24R arrivals: TWYs F and D are not available as RWY exits.

2.4.2. USE OF RWYs FOR LANDING

2.4.2.1. "Land after" Procedure

Normally, only one ACFT is permitted to land or take-off on the RWY-in-use at any one time.
 However, when the traffic sequence is two successive landing ACFT, the second one may be allowed to land before the first one has cleared the RWY-in-use, providing:
 - The RWY is long enough;
 - it is during DAYLIGHT hours;
 - the second ACFT will be able to see the first ACFT clearly and continuously until it is clear of the RWY;
 - the second ACFT has been warned.

ATC will provide this warning by issuing the second ACFT with the instruction "Land after... (first ACFT type)" in place of the usual instruction "Cleared to land". Responsibility for ensuring adequate separation between the two ACFT rests with the pilot of the second ACFT.

2.4.2.2. Special Landing Procedures

Special landing procedures may be in force in conditions shown hereunder, when the use will be as follows:
 - When the RWY-in-use is temporarily occupied by other traffic, landing clearance will be issued to an arriving ACFT provided that at the time the ACFT crosses the THR of the RWY-in-use the following separation distances will exist:
 - Landing following departure - The departing ACFT will be airborne and at least 2000m/1.1NM from the landing THR of the RWY-in-use, or if not airborne, will be at least 2400m/1.3NM from the landing THR of the RWY-in-use.
 - Reduced separation distances as follows will be used where both the preceding and succeeding landing ACFT or both the landing and departing ACFT are propeller driven and have a maximum total weight authorized not exceeding 5700kg.
 - Landing following departure - The departing ACFT will be airborne and at least 1500m/0.8NM from the landing THR, or if not airborne, will be at least 1500m/0.8NM from the landing THR. The reduced distances do not apply to those jets which are 5700kg MTWA or less.

2. ARRIVAL

- Conditions of use:
 The procedures will be used by DAY only under following conditions:
 + When the reported meteorological conditions are equal to or better than a visibility of 6km and a ceiling of 1000'.
 + When both the preceding and succeeding ACFT are being operated in the normal manner. (Pilots are responsible for notifying ATC if they are operating their ACFT in other than the normal manner, e.g. final approach speed greater than 160 KT).
 + When the RWY is dry and free of all precipitants such that there is no evidence that the braking action may be adversely affected.
 + When the Air Controller is able to assess the separation visually.
 - When issuing a landing clearance following the application of these procedures ATC will issue the second ACFT with the following instructions:
(call sign).....after the departing.....(ACFT type) cleared to land RWY (06L or 24R).

- Conditions of use:
 The majority of stands are provided with Stand Entry Guidance by AGNIS, AGNIS with PAPA or Traffic Light Box or Mirror. Where these do not exist, a marshaller service is provided. Stands are marked by one up to three centerlines designated Left, Center and Right. Stands not associated to a pier may also be equipped with Stand Entry Guidance System.

2.5. TAXI PROCEDURES

2.5.1. STAND ENTRY GUIDANCE SYSTEMS

Most stands are equipped with AGNIS and PAPA. Exceptions are listed below:

Stand Entry Guidance	Stands
AGNIS and Mirror	1, 16, 17 (up to B737-500), 2 thru 5, 7, 9, 11 (up to B737), 14, 18 (up to A321), 15 (up to B757), 24, 25 and 28.
AGNIS/Traffic Light Box	201 thru 215. Pilots should proceed onto stand only when a GREEN traffic-light is displayed and should stop when a Red traffic-light shows.
Marshaller only	2 thru 12, 14, 15 (acft larger than A320), 1, 16, 17 (acft larger than A321), 18 (acft larger than A321), 60 thru 71, 80 thru 84, 100, 101, 216 thru 219, 231 thru 251.

2.6. OTHER INFORMATION

2.6.1. LOW POWER/LOW DRAG PROCEDURES

ACFT should descend at a rate of at least 500' per minute, ATC will advise an estimate of track distance to touchdown when clearance to descend below the transition altitude is given. Further distance information will be given between descent clearance and the instruction to turn onto the intercept heading to the ILS Localizer.
 Due to high ground east of the APT, descent below 3000' will be in accordance with chart Manchester 18-1.
 Recommended speeds:
 210 KT -240 KT intermediate approach
 160 KT -180 KT at a range of 12NM from touchdown
 160 KT from 8NM to 4NM from touchdown.
 ATC may request specific speeds for accurate spacing and pilots are requested to comply with any speed adjustments as promptly as feasible within operational constraints. If a speed change for ACFT performance reasons is necessary, advise ATC.

EGCC/MAN
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JEPPESEN
20 OCT 06 (10-1P5) EFT 26 Oct

MANCHESTER, UK
AIRPORT BRIEFING

3. DEPARTURE

3.1 START-UP, PUSH-BACK AND TAXI PROCEDURES

- Pilots that require the RWY 24L starter extension (ie take-off from intersection Tango) should notify ATC on first contact with MANCHESTER Delivery.
- Pilots are required to request permission from MANCHESTER Delivery for start-up approval and from MANCHESTER Ground for push-back approval on all stands. Start-up approval from MANCHESTER Delivery does not imply approval to push-back.
- When requesting start-up or push-back pilots should give the full call sign, type and stand number.
- ACFT must be ready in all respects to start and if necessary push-back, before calling on the appropriate frequency. Pilots should only request push-back when they are actually ready to do so.
- When requesting push-back clearance, pilots are to inform ATC if headset communication with ground crew is not established.
- Pilots are advised that delays in excess of 10 Min can be expected at the holding point during busy morning and evening periods. Sufficient time should be allowed for start, push-back and taxi to take account of such delay especially if to comply with a Calculated Take-off Time (CTOT).
- ACFT types L1011, DC10 and MD11 when departing from stands 22, 26 and 202 must push-back and tow forward to ABEAM stand 28 before starting their tail mounted engine.
- ACFT (up to BAe ATP size) parking on stands on the West Apron may self-maneuvre under guidance of marshaller. Larger types must be towed.
- ACFT using the push and park system and awaiting an Improved Approved Departure Time (ADT) are expected to be airborne within 10 Min notice.
- Pilots must maintain a continuous listening watch on MANCHESTER Delivery unless otherwise instructed by ATC. ACFT are to be pushed-back off the TWY just clear of the road and minimum power is to be used when vacating the stand.
- ACFT will not be permitted to reverse off pier-served stands under own power.
- ACFT requesting push-back must be in direct communication with the tug crew, via headset person. ACFT must inform ATC if they have no direct communication with a headset person.

3.2. SPEED RESTRICTIONS

MAX 250 KT below FL 100 unless otherwise authorized.

3.3. NOISE ABATEMENT PROCEDURES

- On departure from RWY 24L/R, pilots should take care to avoid overflying the town of Knutsford.
- Link Alpha should be used for all Jet ACFT and all large propeller driven ACFT departing from RWY06L.
- Between 0600-2330LT any ACFT may depart from links AG, AF and B subject to operational requirements by ATC/pilots.
- Between 2330-0600LT all Jet ACFT and large propeller driven ACFT shall depart from the most Westerly link available.
- After take-off operate every Jet ACFT so that it is at or above 1260' at the point nearest to the noise monitoring terminal for the relevant departure.
- After take-off or go around ACFT are to be operated so that they will not cause more than 105 PNDB between 0700-2300LT and 98 PNDB between 2300-0700LT at the relevant noise monitoring terminal.
- Jet ACFT maintain a minimum climb gradient of at least 500' per minute at power settings to ensure progressively decreasing noise levels at points on the ground under the flight path beyond the monitoring terminal.
- The noise preferential routes and procedures depicted on chart 10-4 and on Manchester SID charts are to be flown by all departing aircraft until the level defined stated below is reached:

Via	Termination preferential route
- LISTO	5000'
- from RWYs 06L/R, 24R/L	
- WAL, MONTY or NOKIN	4000'
- from RWYs 06L/R	
- from RWYs 24R/L	3000'
- POL, DESIG	
- from RWYs 06L/R, 24R/L	4000'
- HON	
- from RWYs 24R/L	5000'

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JEPPESEN
23 SEP 05 (10-1P6)

MANCHESTER, UK
AIRPORT BRIEFING

3. DEPARTURE

3.1 MINIMUM RWY OCCUPANCY TIME

- Exempted from the above are:
 - ACFT of 5700kg MTWA or less.
 - those ACFT instructed by ATC to make early turns in order to expedite traffic flow, such instructions may be issued between 0700-2300LT, to propeller ACFT of 23000kg MTWA or less and the following Jet ACFT:
 - BAe 146 (Avro RJ series), Canadair Regional Jet, Embraer EMB-135/145, and unless otherwise instructed by ATC or deviations are required in the interests of safety.
- The use of these routes is supplementary to noise abatement take-off techniques. After take-off, pilots should ensure that they are at a minimum height of 760' before commencing any turn.
- Non-standard departure instructions will not normally be issued between 2300-0700LT. Freight ACFT will not normally be issued with non-standard departure instructions at any time.

3.2 RUNWAY OPERATIONS

3.4.1. MINIMUM RWY OCCUPANCY TIME

- On receipt of line-up clearance pilots should ensure commensurate with safety and standard operating procedures, that they are able to taxi to the correct position at the hold and line up on the RWY as soon as the subject ACFT has passed on landing or, for departure, commenced its take-off roll.
- Pilots to back-track the RWY must notify ATC prior to commencement of taxi.
- Pilots requiring departure from an intermediate link must inform ATC prior to commencement of taxi.
- Whenever possible, cockpit checks should be completed prior to line up and any checks requiring completion whilst on the RWY 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.
- Pilots not able to comply with these requirements must notify ATC prior to commencement of taxi.

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 20 OCT 06 (10-1P) EFF 26 Oct

MANCHESTER, UK
 AIRPORT BRIEFING

1. GENERAL

1.1. ATIS

D-ATIS Arrival 128.17
 *D-ATIS Departure 121.97

1.2. NOISE ABATEMENT PROCEDURES

1.2.1. GENERAL

The following procedures may at any time be departed from to the extent necessary for avoiding immediate danger. Every operator of ACFT using the APT shall ensure at all times that ACFT are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the APT.

1.2.2. PREFERENTIAL RWY

RWY 24R/L shall be used for all movements when there is a head wind component and when tailwind component is not greater than 5 KT, unless otherwise required by ATC.

1.2.3. NIGHTTIME RESTRICTIONS

In the interests of noise abatement, certain restrictions are imposed on night jet flights. Operators concerned are advised to obtain details from the Airfield Duty Manager.
 RWYs 24L/06R will not normally be used between 2200-0600LT, except when RWYs 24R/06L closed for maintenance.

Jet ACFT failing to meet certification levels appropriate to Chapter 3 ACFT will not be scheduled to land or take-off from 2330-0600LT.

- OPERATIONAL RESTRICTIONS:

Between 2300-2330LT ACFT in groups QC 8 and QC 16 will not be scheduled to depart and QC 16 will not be scheduled to land.
 Between 2330-0600LT ACFT in groups QC 8 and QC 16 will not be scheduled to take-off and land except in emergency or if exempt.
 Between 0600-0700LT ACFT in groups QC 8 and QC 16 will not be scheduled to depart.

1.2.4. RUN-UP TESTS

ATC will approve idle ground engine runs. A safety man must be positioned behind the ACFT to warn road traffic.
 Permission for ground testing in excess of idle must be requested through the Airfield Duty Manager, Ext 3331, at all times. All engine test must commence in the Engine Test Bay.
 Times of operation are 0600-2300LT.

Engine testing on the open airfield will only be allowed for Chapter 2 ACFT between 0900-1700LT and for Chapter 3 ACFT between 0600-2300LT.
 Propeller driven ACFT are to be classified as Chapter 3.

1.3. LOW VISIBILITY PROCEDURES (LVP) DURING CAT II/III OPERATIONS

1.3.1. GENERAL

RWY 06L available to CAT II/III operations, CAT II operations not available for CAT C & D act due to terrain profile. RWY 24R available to CAT II/III operations. Following general restrictions apply during CAT II/III operations:

Manchester Airport operates two stages of LVP in CAT II/III operations:
 ATC LVP and ATC LVP due ceiling.

1.3.1.1. ATC LVP (RVR less than 600m)

- Reversion to a single RWY operation 24R or 06L. For any residual departures from 24L/06R, the centerline lights are spaced at 30m intervals which requires that, except where an AOC (air operator certificate) holder has less restrictive state authorised take-off minima, departures in RVR of less than 400m are not permitted.
 - Departing ACFT: ATC will require departing ACFT to use the following category III holding points:
 RWY 24R- J2.
 RWY 06L- A2.

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JEPPesen
 16 DEC 05 (10-2) EFF 22 Dec

MANCHESTER, UK
 STAR

D-ATIS
 128.17

Apt Elev
 257'

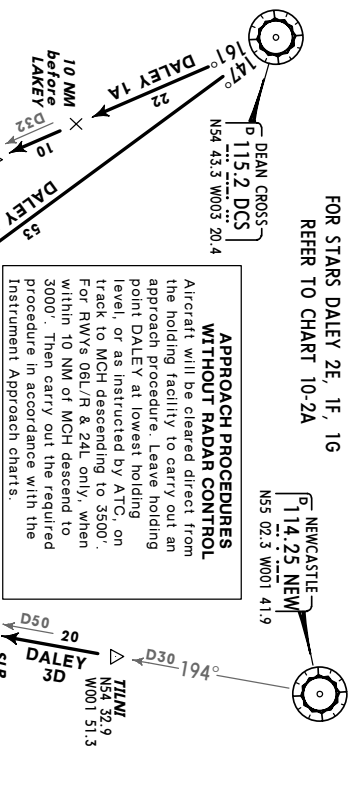
Alt Set: nPA
 Trans alt: 5000'
 Aircraft joining controlled airspace from northeast will route via SETEL.

DALEY ONE ALPHA (DALEY 1A) [DALE1A] ●
 DALEY ONE BRAVO (DALEY 1B) [DALE1B] ●
 DALEY ONE CHARLIE (DALEY 1C) [DALE1C]
 DALEY THREE DELTA (DALEY 3D) [DALE3D]

ARRIVALS

TO BE USED WHEN MCT UNSERVICEABLE
 FOR STARS DALEY 2E, 1F, 1G

REFER TO CHART 10-2A



D-ATIS	128.17	Apri Elev	257'	Alt Set: NPA	16 DEC 05	Trans level: By ATC	Trans alt: 5000'
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DALEY TWO ECHO
 (DALEY 2E) [DALEY2E]
 FOR FLIGHTS AT FL80

DALEY ONE FOXTROT
 (DALEY 1F) [DALEY1F]

DALEY ONE GOLF
 (DALEY 1G) [DALEY1G]

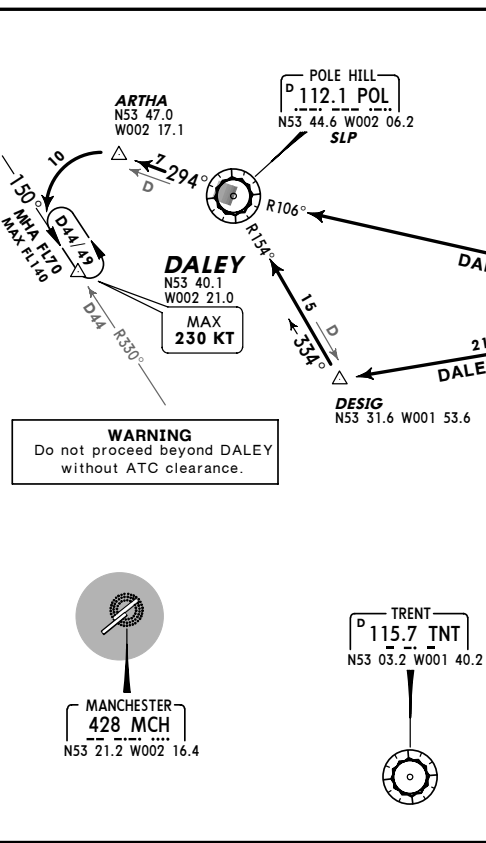
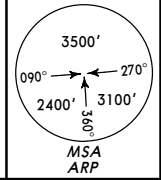
ARRIVALS
 TO BE USED WHEN
 MCT UNSERVICEABLE

APPROACH PROCEDURES WITHOUT RADAR CONTROL
 Aircraft will be cleared direct from the holding facility to carry out an approach procedure. Leave holding point DALEY at lowest holding level, or as instructed by ATC, on track to MCH descending to 3500'. For RWYs 06L/R & 24L only, when within 10 NM of MCH descend to 3000'. Then carry out the required procedure in accordance with the Instrument Approach charts.

SPEED RESTRICTION
 Cross SLP or 3 Min before holding facility at 250 KT or less when at FL140 or below.

■ SLP Speed Limit Point

DESCENT PLANNING/ATC REQUIREMENTS
 When determining top of descent point, pilots should plan for possible clearance as follows:
DALEY 1F, 1G: FL200 by GOLES, and for possible clearance to lowest holding level (FL70) by the SLP. Pilots unable to comply must notify ATC as soon as possible.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC



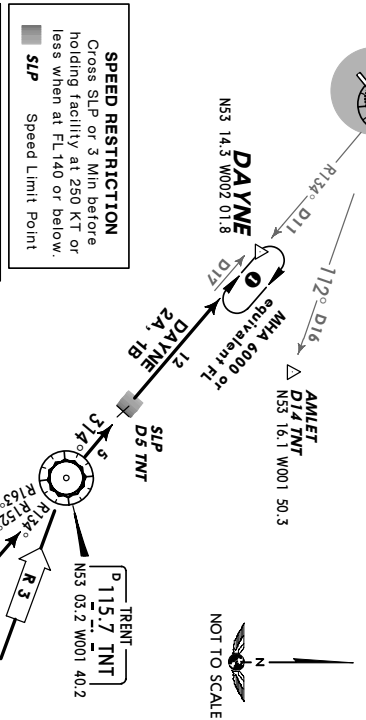
WARNING
 Do not proceed beyond DALEY without ATC clearance.



D-ATIS	128.17	Apri Elev	257'	Alt Set: NPA	16 DEC 05	Trans level: By ATC	Trans alt: 5000'
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DAYNE TWO ALFA (DAYNE 2A) [DAYN2A]
DAYNE ONE BRAVO (DAYNE 1B) [DAYN1B]
ARRIVALS

DESCENT PLANNING/ATC REQUIREMENTS
 When determining top of descent point, pilots should plan for possible clearance as follows:
FL200 by D25 TNT, and for possible clearance to lowest holding level (6000' or equivalent FL) by the SLP. Pilots unable to comply must notify ATC as soon as possible.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC

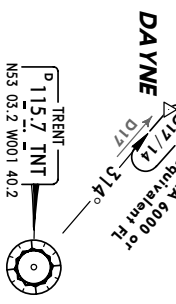


SPEED RESTRICTION
 Cross SLP or 3 Min before holding facility at 250 KT or less when at FL140 or below.

■ SLP Speed Limit Point

APPROACH PROCEDURES WITHOUT RADAR CONTROL
 Aircraft will be cleared direct from the holding facility to carry out an approach procedure. Leave holding point DAYNE at lowest holding level, or as instructed by ATC, on track to MCH or MCH descending to 3500'. For RWYs 06L/R & 24L only, when within 10 NM of MCH descend to 3000'. Then carry out the required procedure in accordance with the Instrument Approach charts.

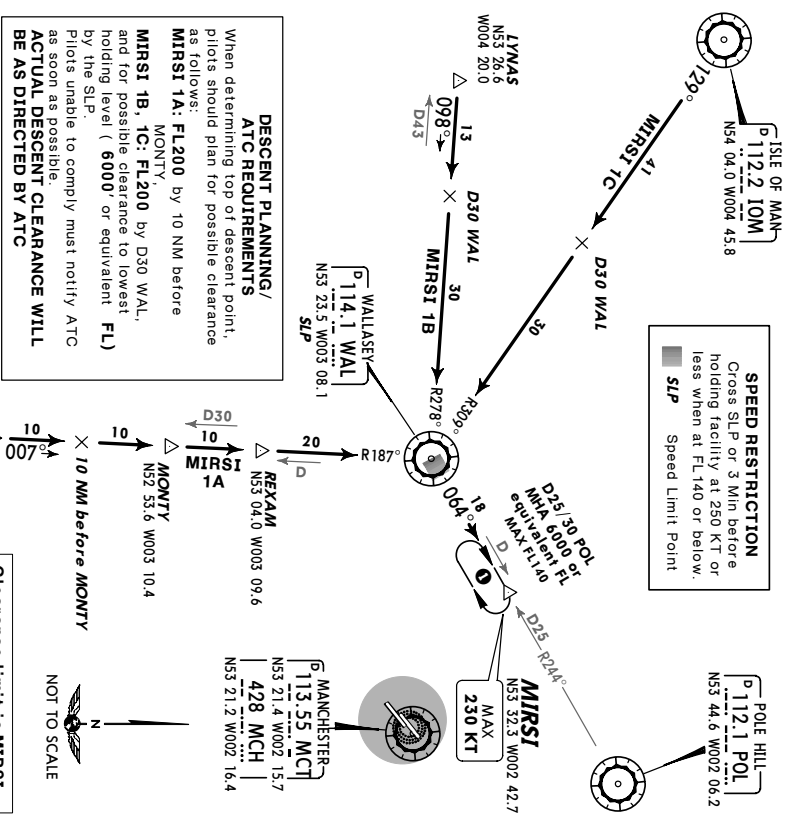
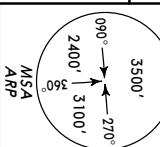
ALTERNATE HOLDING
 To be used when MCT VOR or DME u/s.



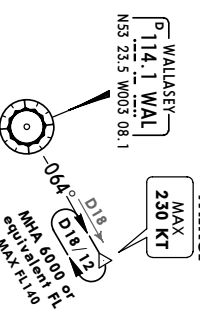
GROUND PROXIMITY WARNING SYSTEM (GPWS) NUISANCE WARNINGS
 To minimize occurrences, aircraft enroute DAYNE holding to runway 24L/R, MAX 210 KT between TNT R-300 and R-350 unless otherwise authorized by ATC.

EGCC/MAN MANCHESTER
 16 DEC 05 (10-2D) EFF 22 Dec
JEPPesen
 Alt Set: NPA Trans alt: 5000'
 D:ATIS 128.17 A:PI Elev 257' Trans level: By ATC
STAR

MIRSI ONE ALFA (MIRSI 1A) [MIRSI A]
MIRSI ONE BRAVO (MIRSI 1B) [MIRSI B]
MIRSI ONE CHARLIE (MIRSI 1C) [MIRSI C]
ARRIVALS



ALTERNATE HOLDING
 To be used when POL VOR or DME u/s.

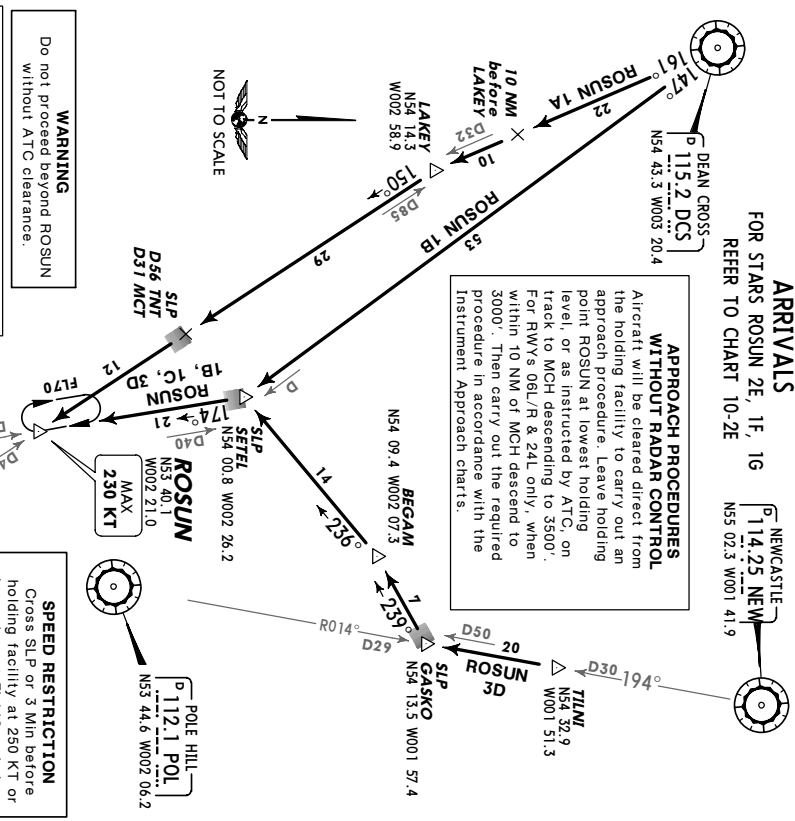
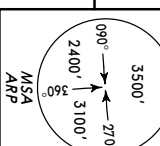


WARNING
 Do not proceed beyond MIRSI without ATC clearance.

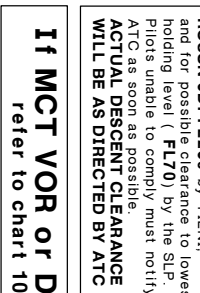
APPROACH PROCEDURES WITHOUT RADAR CONTROL
 Aircraft will be cleared direct from the holding facility to carry out an approach procedure. Leave holding point MIRSI at lowest holding level, or as instructed by ATC, on track to MCT or MCH descending to 3500'. For RWYs 06L/R & 24L only, when within 10 NM of MCT or MCH descend to 3000'. Then carry out the required procedure in accordance with the Instrument Approach charts.

EGCC/MAN MANCHESTER
 16 DEC 05 (10-2D) EFF 22 Dec
JEPPesen
 Alt Set: NPA Trans alt: 5000'
 D:ATIS 128.17 A:PI Elev 257' Trans level: By ATC
STAR

ROSUN ONE ALFA (ROSUN 1A) [ROSUN A]
ROSUN ONE BRAVO (ROSUN 1B) [ROSUN B]
ROSUN ONE CHARLIE (ROSUN 1C) [ROSUN C]
ROSUN THREE DELTA (ROSUN 3D) [ROSUN D]
ARRIVALS



ALTERNATE HOLDING
 To be used when POL VOR or DME u/s.

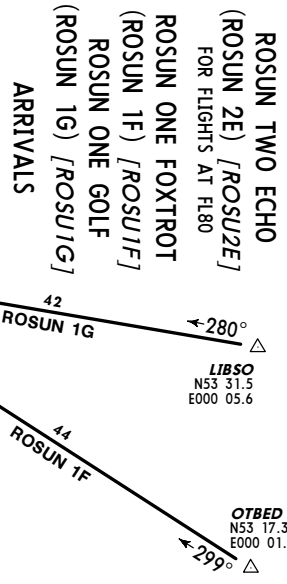


WARNING
 Do not proceed beyond ROSUN without ATC clearance.

APPROACH PROCEDURES WITHOUT RADAR CONTROL
 Aircraft will be cleared direct from the holding facility to carry out an approach procedure. Leave holding point ROSUN at lowest holding level, or as instructed by ATC, on track to MCT or MCH descending to 3500'. For RWYs 06L/R & 24L only, when within 10 NM of MCT or MCH descend to 3000'. Then carry out the required procedure in accordance with the Instrument Approach charts.

EGCC/MAN MANCHESTER
 16 DEC 05 **(10-2E)** **EFF 22 Dec**
STAR

EGCC/MAN MANCHESTER
 28 APR 06 **(10-3)** **EFF 11 MAY**
SID



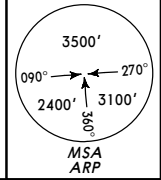
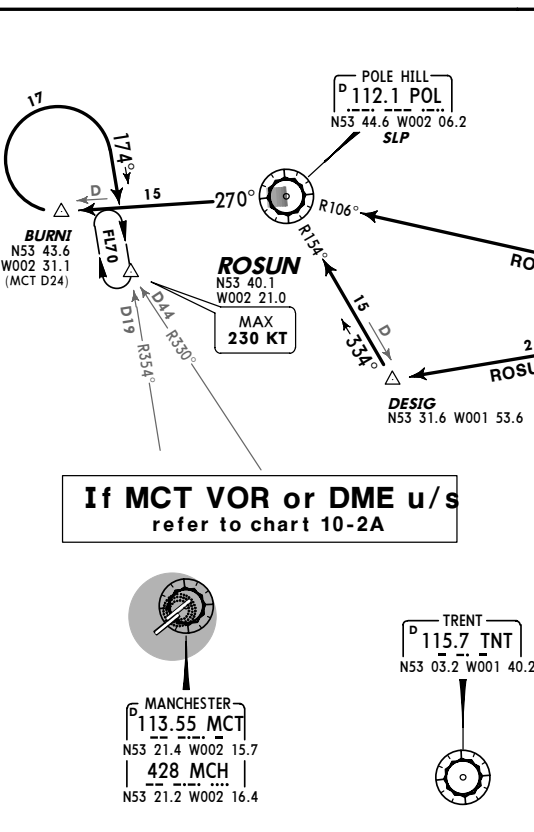
APPROACH PROCEDURES WITHOUT RADAR CONTROL
 Aircraft will be cleared direct from the holding facility to carry out an approach procedure. Leave holding point ROSUN at lowest holding level, or as instructed by ATC, on track to MCH descending to 3500'. For RWYs 06L/R & 24L only, when within 10 NM of MCH descend to 3000'. Then carry out the required procedure in accordance with the Instrument Approach charts.

WARNING
 Do not proceed beyond ROSUN without ATC clearance.

SPEED RESTRICTION
 Cross SLP or 3 Min before holding facility at 250 KT or less when at FL140 or below.
 ■ SLP Speed Limit Point

DESCENT PLANNING/ATC REQUIREMENTS
 When determining top of descent point, pilots should plan for possible clearance as follows:
ROSUN 1F, 1G: FL200 by GOLES, and for possible clearance to lowest holding level (**FL70**) by the SLP. Pilots unable to comply must notify ATC as soon as possible.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC

If MCT VOR or DME u/s refer to chart 10-2A

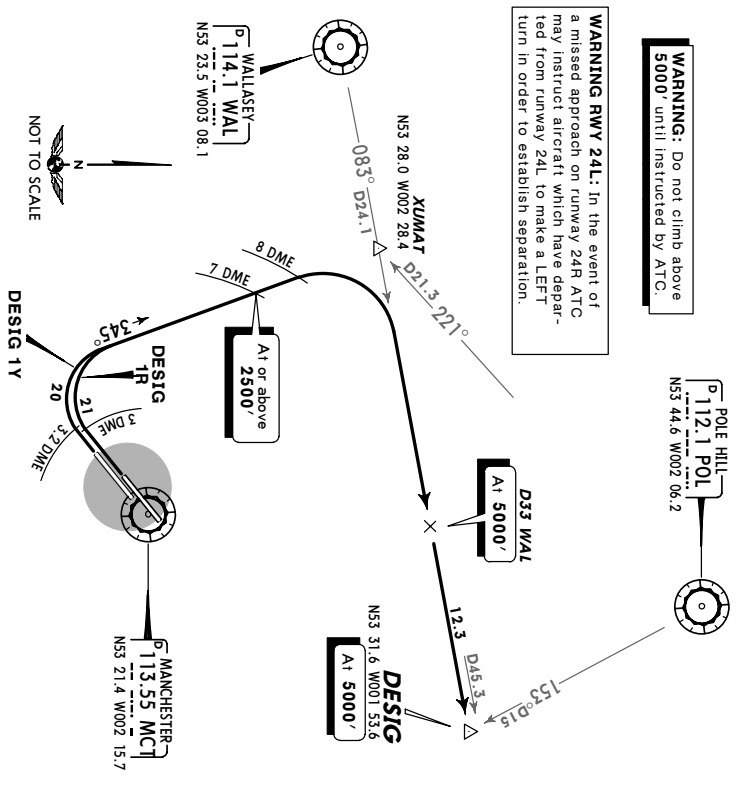


D/ATIS 128.17	Appr Elev 257'	Alt Set: MPA Trans level: By ATC	Trans alt: 5000'
MANCHESTER Control 125.95		1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 24R: EXPECT close-in obstacles.	
MANCHESTER Control 125.95		5. Rwy 24R: EXPECT close-in obstacles.	

DESIG ONE ROMEO (DESIG 1R) [DEST1R]
DESIG ONE YANKEE (DESIG 1Y) [DES11Y]
RWYS 24R/L DEPARTURES
SPEED MAX 250 KT BELOW FL 100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.



These SIDs require minimum climb gradients of

DESIG 1R
 340' per NM (5.6%) until MCT 3 DME, then 292' per NM (4.8%) up to 2500' for obstacle, ATC or airspace purposes.
DESIG 1Y
 747' per NM (12.3%) until MCT 3.2 DME, then 292' per NM (4.8%) up to 2500' for obstacle, ATC or airspace purposes.

Grnd speed-KT	75	100	150	200	250	300
747' per NM	934	1246	1868	2491	3114	3737
340' per NM	425	567	851	1134	1418	1701
292' per NM	365	486	729	972	1215	1458

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

SID	RWY	Procedure
DESIG 1R	24R	Climb straight ahead, at MCT 3 DME turn RIGHT, 345° track towards XUMAT, at MCT 8 DME turn RIGHT, intercept WAL R-083 to DESIG.
DESIG 1Y	24L	Climb straight ahead, at MCT 3.2 DME turn RIGHT, 345° track towards XUMAT, at MCT 8 DME turn RIGHT, intercept WAL R-083 to DESIG.

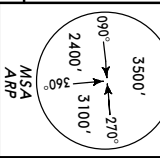
EGCC/MAN
MANCHESTER

28 APR 06 (10-3A) EFF 11 MAY

MANCHESTER, UK
SID

MANCHESTER
Control
125.95

Trans level: By ATC. Trans alt: 5000'.
1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 06L: EXPECT close-in obstacles.

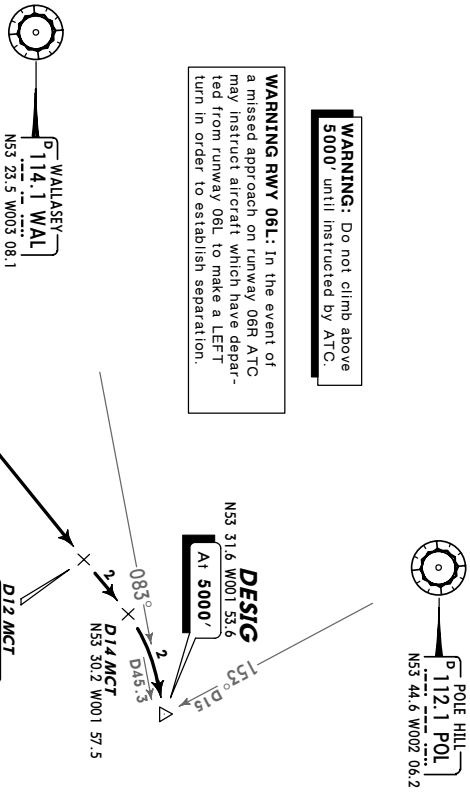


DESIG ONE SIERRA (DESIG 1S) [DESIG 1S]
DESIG ONE ZULU (DESIG 1Z) [DESIG 1Z]

RWYS 06L/R DEPARTURES
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

WARNING RWY 06L: In the event of a missed approach on runway 06R ATC may instruct aircraft which have departed from runway 06L to make a LEFT turn in order to establish separation.



These SIDs require a minimum climb gradient of 346' per NM (5.7%) up to 4000' for obstacle. ATC or airspace purposes.

Gnd speed-KT	75	100	150	200	250	300
346' per NM	433	577	866	1155	1443	1732

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

SID

ROUTING

DESIG 1S	06L	Climb straight ahead, at or above 760', but not before DER intercept. MCT R-055, at D14 MCT turn RIGHT, intercept WAL R-083 to DESIG.
DESIG 1Z	06R	Climb straight ahead, intercept MCT R-055, at D14 MCT turn RIGHT, intercept WAL R-083 to DESIG.

CHANGES: None

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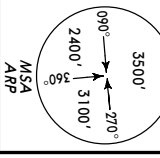
EGCC/MAN
MANCHESTER

28 APR 06 (10-3B) EFF 11 MAY

MANCHESTER, UK
SID

MANCHESTER
Control
134.42

Trans level: By ATC. Trans alt: 5000'.
1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 24R: EXPECT close-in obstacles.



HONILEY ONE ROMEO (HON 1R)
HONILEY ONE YANKEE (HON 1Y)
RWYS 24R/L DEPARTURES
JET-AIRCRAFT ONLY

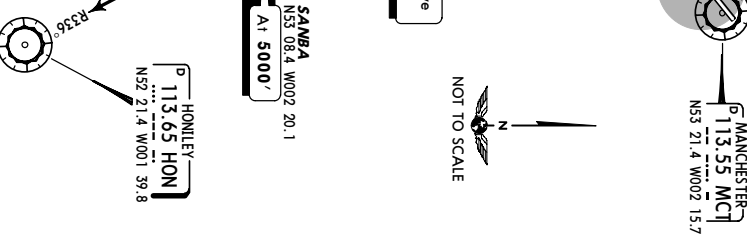
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

SPEED PROFILE
Speed profile applies to all acft following these SIDs unless cancelled by ATC.
Jet acft above 35000 KG MTOW:
- 250 KT until FL100,
- 280-290 KT between FL100 & FL260.
Jet acft below 35000 KG MTOW & all non-jet acft:
- 240-250 KT until FL260.
If unable to comply, inform ATC before obtaining departure clearance.

WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.

Non-jet acft and the following jet acft will be cleared via LISTO 1R/1Y: acft up to 35000 KG MTOW, BAe 146 (Avro RJ series), Embraer E135, E145, Bombardier CRJ1/2/7/9, BD-700 Global Express, Gulfstream 5. Pilots must ensure adherence to clearance as issued by ATC.



These SIDs require minimum climb gradients of

HON 1R	340' per NM (5.6%) until MCT 3 DME, then 280' per NM (4.6%) up to 5000' for obstacle. ATC or airspace purposes.
HON 1Y	747' per NM (12.3%) until MCT 3.2 DME, then 298' per NM (4.9%) up to 5000' for obstacle. ATC or airspace purposes.

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

SID

ROUTING

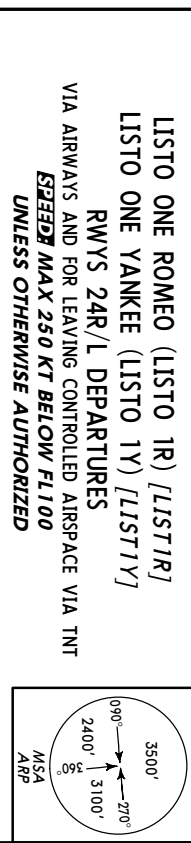
HON 1R	24R	Climb straight ahead, at MCT 3 DME turn RIGHT, 275° track, at MCT 5 DME turn LEFT to TABLY. Intercept HON R-356 inbound to HON.
HON 1Y	24L	Climb straight ahead, at MCT 3.2 DME turn RIGHT, 285° track, at MCT 5 DME turn LEFT to TABLY. Intercept HON R-356 inbound to HON.

CHANGES: Climb gradients; speed profile.

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EGCC/MAN
MANCHESTER
 28 APR 06 (10-30) **EFF 11 MAY**
JEPPesen
MANCHESTER, UK
SID

MANCHESTER Control 134.42	Appt Elev 257'	Trans alt.: 5000' 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. In order to alleviate airspace congestion and improve ATC flexibility, pilots of jet aircraft allowed to fly the LISTO SID may be offered HON 1R/1Y SID at a late stage prior to departure. Pilots unable to accept a Honley SID when offered must inform ATC. 6. Rwy 24R: EXPECT close-in obstacles.
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Available to non-jet act and the following jet act:
 act up to 35000 KG MTOW, BAe 146 (Avro RJ series); Embraer E135, E145; Bombardier CRJ1/2/7/9; BD-700 Global Express; Gulfstream 5.
Pilots must ensure adherence to clearance as issued by ATC.

SPEED PROFILE
 Speed profile applies to all act following these SIDs unless cancelled by ATC.
 Jet act above 35000 KG MTOW:
 - 250 KT until FL100.
 - 280-290 KT between FL100 & FL260.
 Jet act below 35000 KG MTOW & all non-jet act:
 - 240-250 KT until FL260.
 If unable to comply, inform ATC before obtaining departure clearance.

WARNING: Do not climb above 5000' until instructed by ATC.

Aircraft requesting cruising levels at or below **FL70** will be routed via LIC.

WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.
 These SIDs require minimum climb gradients of

LISTO 1R
 887' per NM (14.6%) until MCT 2 DME, then 365' per NM (6%) up to 5000' for obstacle, ATC or airspace purposes.
LISTO 1Y
 747' per NM (12.3%) until MCT 3.2 DME for obstacle, ATC or airspace purposes.

Gnd speed-KT	75	100	150	200	250	300
887' per NM	1109	1479	2218	2957	3696	4436
747' per NM	934	1246	1868	2491	3114	3737
365' per NM	456	608	911	1215	1519	1823

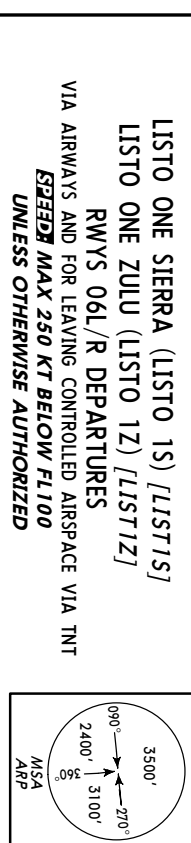
If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

SID	RWY	ROUTING
LISTO 1R	24R	Climb straight ahead, at MCT 2 DME turn LEFT, 163° track, intercept HON R-341 inbound to LISTO.
LISTO 1Y	24L	Climb straight ahead, at MCT 3.2 DME turn LEFT, 156° track, intercept HON R-341 inbound to LISTO.

EGCC/MAN
MANCHESTER
 20 OCT 06 (10-30) **EFF 26 OCT**
JEPPesen
MANCHESTER, UK
SID

MANCHESTER Control 134.42	Appt Elev 257'	Trans alt.: 5000' 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 06L: EXPECT close-in obstacles.
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WARNING: Do not climb above 5000' until instructed by ATC.

SPEED PROFILE
 Speed profile applies to all act following these SIDs unless cancelled by ATC.
 Jet act above 35000 KG MTOW:
 - 250 KT until FL100.
 - 280-290 KT between FL100 & FL260.
 Jet act below 35000 KG MTOW & all non-jet act:
 - 240-250 KT until FL260.
 If unable to comply, inform ATC before obtaining departure clearance.

Aircraft requesting cruising levels at or below **FL70** will be routed via LIC.

WARNING RWY 06L: In the event of a missed approach on runway 06R ATC may instruct aircraft which have departed from runway 06L to make a LEFT turn in order to establish separation.
 These SIDs require minimum climb gradients of

LISTO 1S
 662' per NM (10.9%) until MCT 1.2 DME, then 419' per NM (6.9%) up to 2000', then 304' per NM (5%) up to 5000' for obstacle, ATC or airspace purposes.
LISTO 1Z
 298' per NM (4.9%) until MCT 1.2 DME, then 419' per NM (6.9%) up to 2000', then 304' per NM (5%) up to 5000' for obstacle, ATC or airspace purposes.

Gnd speed-KT	75	100	150	200	250	300
662' per NM	828	1104	1656	2208	2760	3312
419' per NM	524	699	1048	1398	1747	2096
304' per NM	380	506	760	1013	1268	1519
298' per NM	372	496	744	992	1241	1489

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

SID	RWY	ROUTING
LISTO 1S	06L	Climb straight ahead, at MCT 1.2 DME turn RIGHT, 150° track, at MCT 2.7 DME turn RIGHT, intercept POL R-188 to LISTO.
LISTO 1Z	06R	Climb straight ahead, at MCT 1.2 DME turn RIGHT, intercept POL R-188 to LISTO.

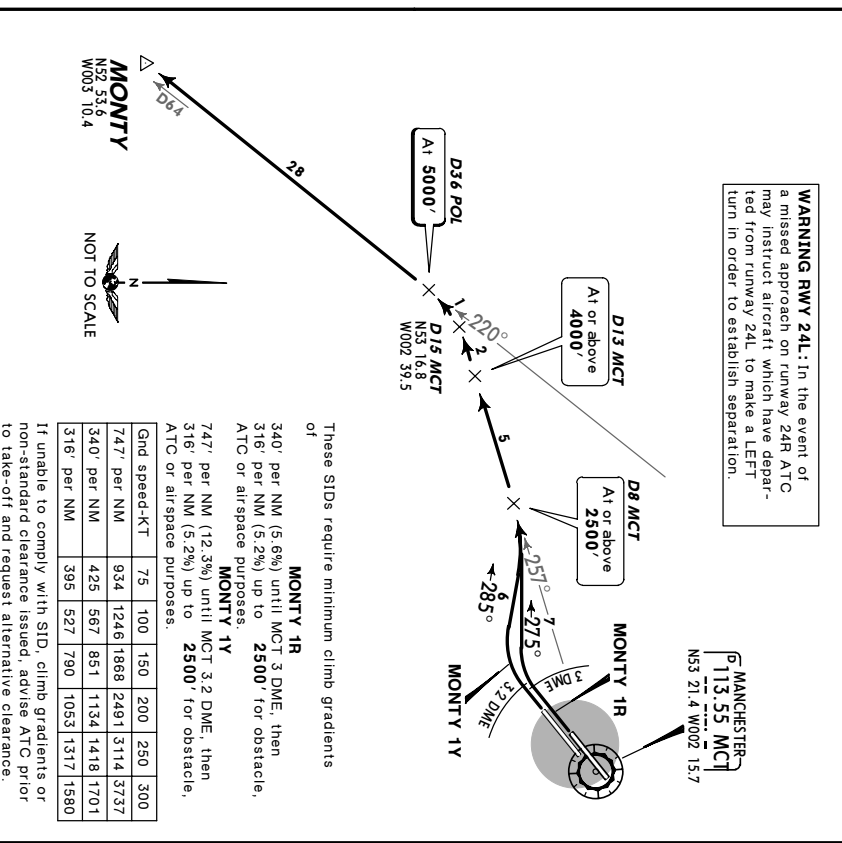
EGCC/MAN
MANCHESTER
 20 OCT 06 (10-3E) **EFF 28 Oct**
JEPPesen
MANCHESTER, UK
SID

MANCHESTER Control 128.05	Trans level: By ATC. Trans alt: 5000'. 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 24R: EXPECT close-in obstacles.	
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MONTY ONE ROMEO (MONTY 1R) [MONT1R]
MONTY ONE YANKEE (MONTY 1Y) [MONT1Y]
RWYS 24R/L DEPARTURES
 FOR AIRCRAFT LEAVING CONTROLLED AIRSPACE
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.



SID	RWY	ROUTING
MONTY 1R	24R	Climb straight ahead, at MCT 3 DME turn RIGHT, 275° track, intercept MCT R-257, at D15 MCT turn LEFT, intercept POL R-220 to MONTY.
MONTY 1Y	24L	Climb straight ahead, at MCT 3.2 DME turn RIGHT, 285° track, intercept MCT R-257, at D15 MCT turn LEFT, intercept POL R-220 to MONTY.

These SIDs require minimum climb gradients of

MONTY 1R	340' per NM (5.6%) until MCT 3 DME, then 316' per NM (5.2%) up to 2500' for obstacle, ATC or airspace purposes.
MONTY 1Y	747' per NM (12.3%) until MCT 3.2 DME, then 316' per NM (5.2%) up to 2500' for obstacle, ATC or airspace purposes.

Gnd speed-KT	75	100	150	200	250	300
747' per NM	934	1246	1868	2491	3114	3737
340' per NM	425	567	851	1134	1418	1701
316' per NM	395	527	790	1053	1317	1580

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

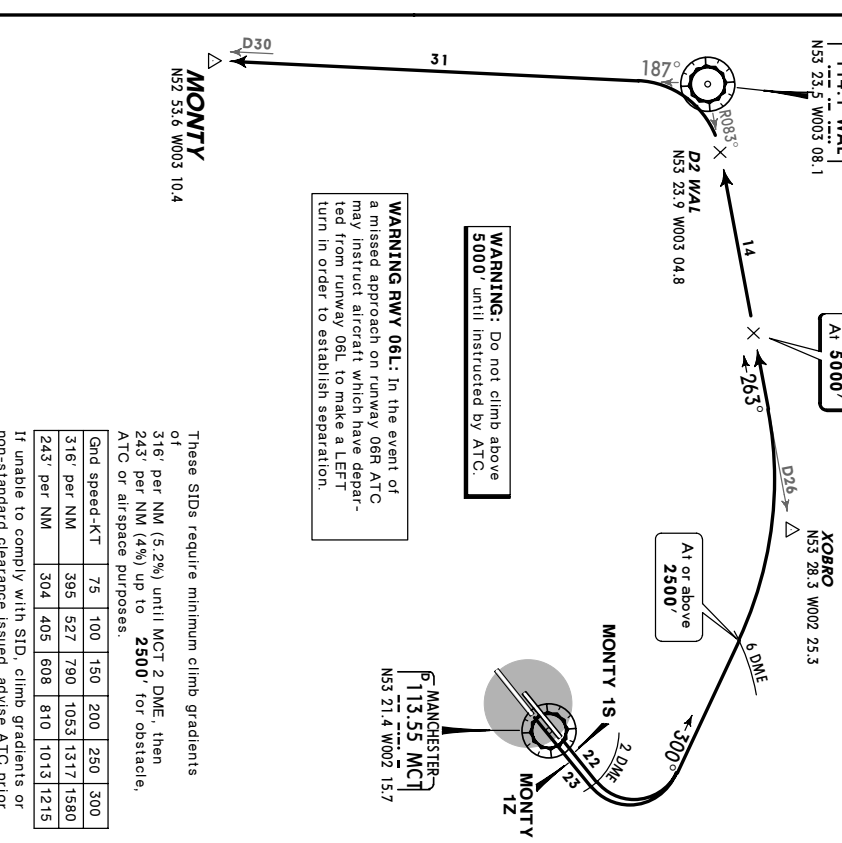
EGCC/MAN
MANCHESTER
 20 OCT 06 (10-3F) **EFF 26 Oct**
JEPPesen
MANCHESTER, UK
SID

MANCHESTER Control 128.05	Trans level: By ATC. Trans alt: 5000'. 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190). 5. Rwy 06L: EXPECT close-in obstacles.	
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MONTY ONE SIERRA (MONTY 1S) [MONT1S]
MONTY ONE ZULU (MONTY 1Z) [MONT1Z]
RWYS 06L/R DEPARTURES
 FOR AIRCRAFT LEAVING CONTROLLED AIRSPACE
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

WARNING RWY 06L: In the event of a missed approach on runway 06R ATC may instruct aircraft which have departed from runway 06L to make a LEFT turn in order to establish separation.



SID	RWY	ROUTING
MONTY 1S	06L	Climb straight ahead, at MCT 2 DME turn LEFT, 300° track towards XOBRO, intercept WAL R-083 inbound to D2 WAL, turn LEFT, intercept WAL R-187 to MONTY.
MONTY 1Z	06R	Climb straight ahead, at MCT 2 DME turn LEFT, 300° track towards XOBRO, intercept WAL R-083 inbound to D2 WAL, turn LEFT, intercept WAL R-187 to MONTY.

These SIDs require minimum climb gradients of

MONTY 1S	316' per NM (5.2%) until MCT 2 DME, then 243' per NM (4%) up to 2500' for obstacle, ATC or airspace purposes.
MONTY 1Z	243' per NM (4%) until MCT 2 DME, then 316' per NM (5.2%) up to 2500' for obstacle, ATC or airspace purposes.

Gnd speed-KT	75	100	150	200	250	300
747' per NM	395	527	790	1053	1317	1580
243' per NM	304	405	608	810	1013	1215

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

EGCC/MAN
MANCHESTER

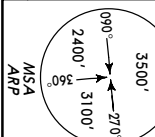
JEPPESEN
 20 OCT 06 (10-3G) Eff 28 Oct

MANCHESTER, UK
SID

MANCHESTER
 Control
 128.05

Appr Elev
 257'

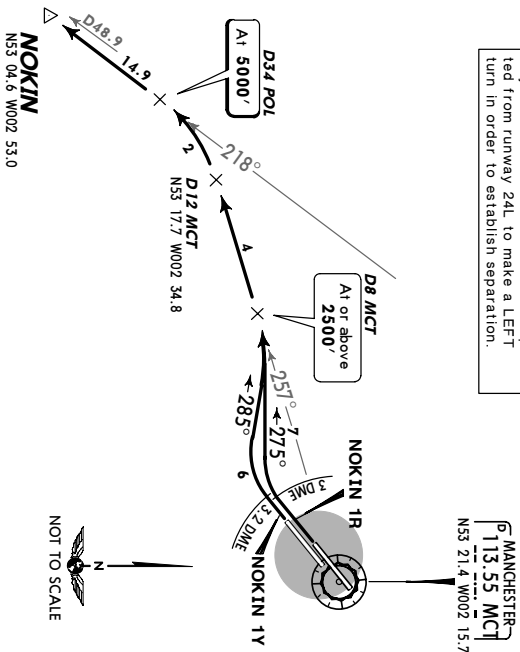
Trans level: By ATC. Trans alt: 5000'.
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190).
 5. Rwy 24R. EXPECT close-in obstacles.



NOKIN ONE ROMEO (NOKIN 1R) [NOK11R]
NOKIN ONE YANKEE (NOKIN 1Y) [NOK11Y]
RWYS 24R/L DEPARTURES
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.

WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.



Gnd speed-KT	75	100	150	200	250	300
747' per NM	934	1246	1868	2491	3114	3737
340' per NM	425	567	851	1134	1418	1701
316' per NM	395	527	790	1053	1317	1580
273' per NM	342	456	684	911	1139	1367

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

SID

RWY

NOKIN 1R

NOKIN 1Y

24L

1

ROUTING

NOKIN 1R

NOKIN 1Y

24L

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EGCC/MAN
MANCHESTER

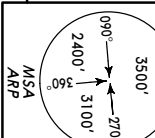
JEPPESEN
 28 APR 06 (10-3H) Eff 11 May

MANCHESTER, UK
SID

MANCHESTER
 Control
 128.05

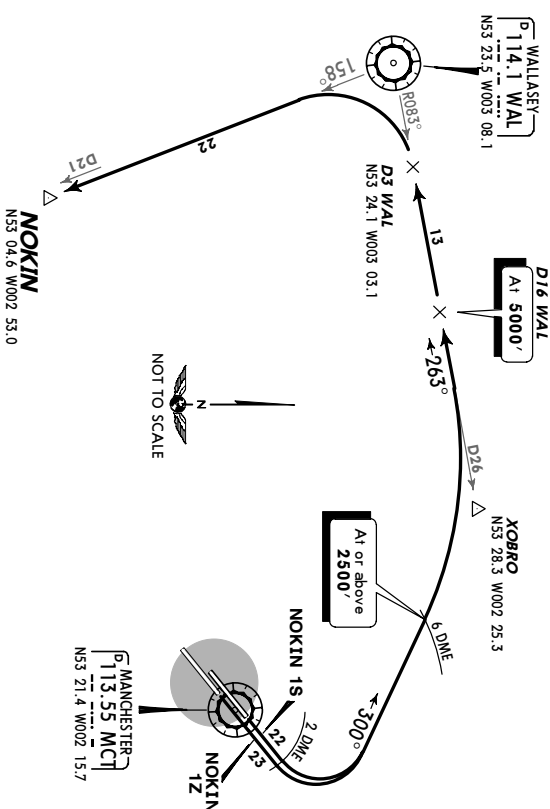
Appr Elev
 257'

Trans level: By ATC. Trans alt: 5000'.
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL190) or LONDON Control (above FL190).
 5. Rwy 06L. EXPECT close-in obstacles.



NOKIN ONE SIERRA (NOKIN 1S) [NOK11S]
NOKIN ONE ZULU (NOKIN 1Z) [NOK11Z]
RWYS 06L/R DEPARTURES
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.



Gnd speed-KT	75	100	150	200	250	300
747' per NM	934	1246	1868	2491	3114	3737
340' per NM	425	567	851	1134	1418	1701
316' per NM	395	527	790	1053	1317	1580
243' per NM	304	405	608	810	1013	1215

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

SID

RWY

NOKIN 1S

NOKIN 1Z

06R

1

ROUTING

NOKIN 1S

NOKIN 1Z

06R

1

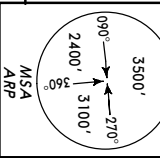
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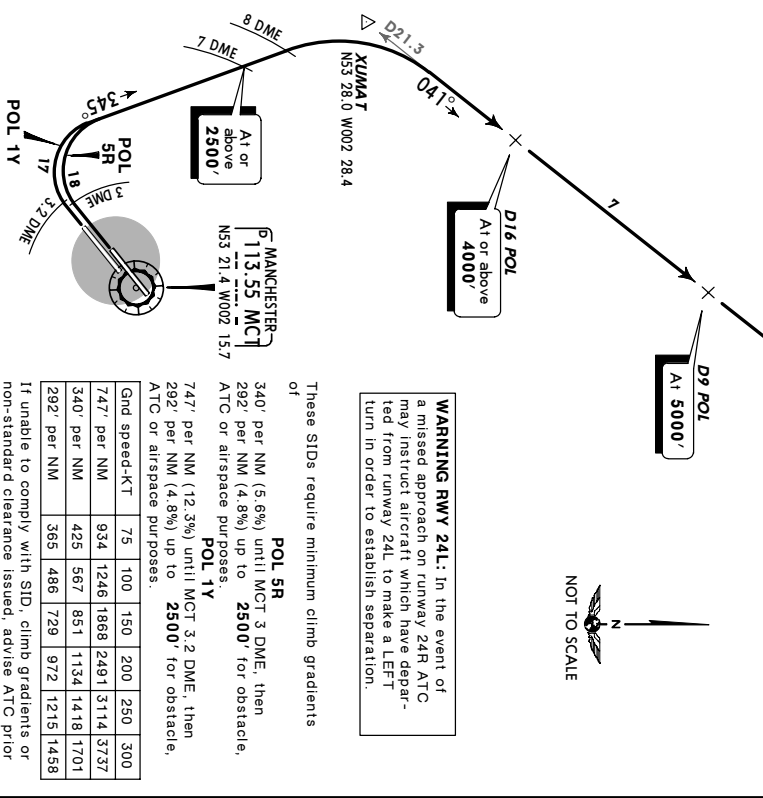
EGCC/MAN MANCHESTER **JEPPESEN** **MANCHESTER, UK**
 28 APR 06 (10-31) **EFF 11 MAY** **SID**

MANCHESTER Control 125.95
 Appl Elev 257'
 Trans level: By ATC. Trans alt: 5000'
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL270) or SCOTTISH Control (above FL270). 5. Rwy 24R: EXPECT close-in obstacles.



POLE HILL FIVE ROMEO (POL 5R)
POLE HILL ONE YANKEE (POL 1Y)
 RWYS 24R/L DEPARTURES
 VIA AIRWAYS AND FOR LEAVING
 CONTROLLED AIRSPACE
SPEED MAX 250 KT BELOW FL 100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.



WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.

These SIDs require minimum climb gradients of

	POL 5R		POL 1Y	
340' per NM (5.6%) until MCT 3 DME, then 292' per NM (4.8%) up to 2500' for obstacle, ATC or airspace purposes.				
747' per NM (12.3%) until MCT 3.2 DME, then 292' per NM (4.8%) up to 2500' for obstacle, ATC or airspace purposes.				
Gnd speed-KT	75	100	150	200
747' per NM	934	1246	1868	2491
340' per NM	425	567	851	1134
292' per NM	365	486	729	972
				1215
				1458

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

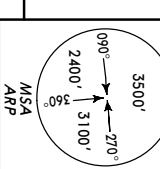
ROUTING

SID	RWY
POL 5R	24R
Climb straight ahead, at MCT 3 DME turn RIGHT, 345° track towards XUMATI, at MCT 8 DME turn RIGHT, intercept POL R-221 inbound to POL.	
POL 1Y	24L
Climb straight ahead, at MCT 3.2 DME turn RIGHT, 345° track towards XUMATI, at MCT 8 DME turn RIGHT, intercept POL R-221 inbound to POL.	

CHANGES: Climb gradients. © JEPPESEN SANDERSON, INC., 2003, 2006. ALL RIGHTS RESERVED.

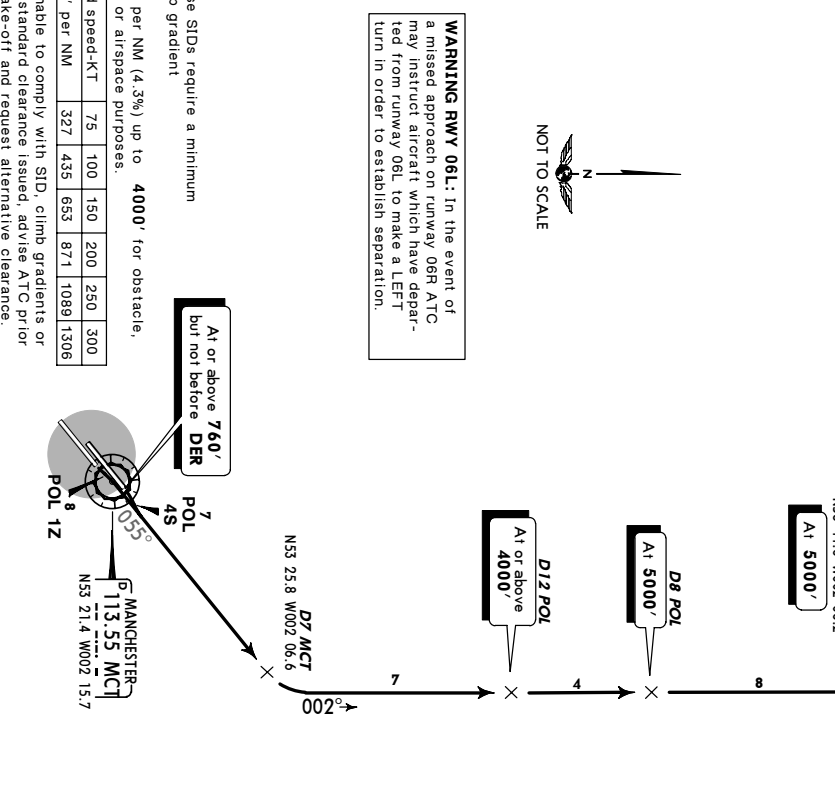
EGCC/MAN MANCHESTER **JEPPESEN** **MANCHESTER, UK**
 28 APR 06 (10-3K) **EFF 11 MAY** **SID**

MANCHESTER Control 125.95
 Appl Elev 257'
 Trans level: By ATC. Trans alt: 5000'
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL270) or SCOTTISH Control (above FL270). 5. Rwy 06L: EXPECT close-in obstacles.



POLE HILL FOUR SIERRA (POL 4S)
POLE HILL ONE ZULU (POL 1Z)
 RWYS 06L/R DEPARTURES
 VIA AIRWAYS AND FOR LEAVING CONTROLLED AIRSPACE
SPEED MAX 250 KT BELOW FL 100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.



WARNING RWY 06L: In the event of a missed approach on runway 06R ATC may instruct aircraft which have departed from runway 06L to make a LEFT turn in order to establish separation.

These SIDs require a minimum climb gradient of

	POL 4S		POL 1Z	
261' per NM (4.3%) up to 4000' for obstacle, ATC or airspace purposes.				
Gnd speed-KT	75	100	150	200
261' per NM	327	435	653	871
				1089
				1306

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

SID	RWY
POL 4S	06L
Climb straight ahead, at or above 760', but not before DER intercept POL R-055, at D7 MCT turn LEFT, intercept POL R-182 inbound to POL.	
POL 1Z	06R
Climb straight ahead, intercept MCT R-055, at D7 MCT turn LEFT, intercept POL R-182 inbound to POL.	

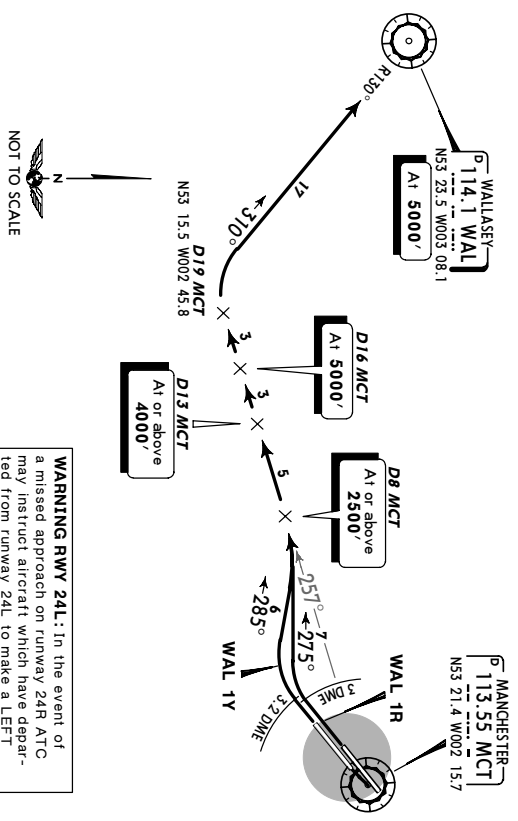
CHANGES: Climb gradients. © JEPPESEN SANDERSON, INC., 2003, 2006. ALL RIGHTS RESERVED.

EGCC/MAN MANCHESTER **JEPPESEN** **MANCHESTER, UK**
 28 APR 06 **(10-3L)** **EFF 11 MAY** **SID**

MANCHESTER Control 128.05
 Apt Elev 257'
 Trans level: By ATC. Trans alt: 5000'.
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL240) or LONDON Control/SCOTTISH Control (above FL240). 5. Rwy 24R: EXPECT close-in obstacles.

WALLASEY ONE ROMEO (WAL 1R)
WALLASEY ONE YANKEE (WAL 1Y)
 RWYS 24R/L DEPARTURES
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.



WARNING RWY 24L: In the event of a missed approach on runway 24R ATC may instruct aircraft which have departed from runway 24L to make a LEFT turn in order to establish separation.

These SIDs require minimum climb gradients of

WAL 1R	75	100	150	200	250	300
340' per NM (5.6%) until MCT 3 DME, then 316' per NM (5.2%) up to 2500', then 207' per NM (3.4%) up to 5000' for obstacle, ATC or airspace purposes.	934	1248	1868	2491	3114	3737
WAL 1Y	425	567	851	1134	1418	1701
747' per NM (12.3%) until MCT 3.2 DME, then 316' per NM (5.2%) up to 2500', then 207' per NM (3.4%) up to 5000' for obstacle, ATC or airspace purposes.	395	527	790	1053	1317	1580
WAL 1Y	258	344	516	689	861	1033

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

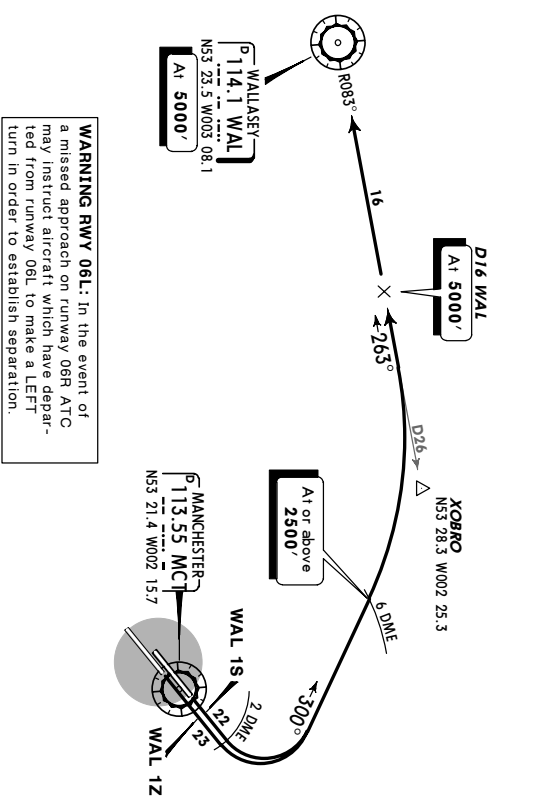
SID	RWY	Climb straight ahead, at MCT 3 DME turn RIGHT, 275° track, intercept MCT R-257, at D19 MCT turn RIGHT, intercept WAL R-130 inbound to WAL.
WAL 1R	24R	Climb straight ahead, at MCT 3 DME turn RIGHT, 275° track, intercept MCT R-257, at D19 MCT turn RIGHT, intercept WAL R-130 inbound to WAL.
WAL 1Y	24L	Climb straight ahead, at MCT 3.2 DME turn RIGHT, 285° track, intercept MCT R-257, at D19 MCT turn RIGHT, intercept WAL R-130 inbound to WAL.

EGCC/MAN MANCHESTER **JEPPESEN** **MANCHESTER, UK**
 28 APR 06 **(10-3M)** **EFF 11 MAY** **SID**

MANCHESTER Control 128.05
 Apt Elev 257'
 Trans level: By ATC. Trans alt: 5000'.
 1. When instructed contact MANCHESTER Control after take-off. 2. SIDs include noise preferential routes (refer to 10-4). 3. No turns below 760'. 4. Cruising levels will be allocated enroute by MANCHESTER Control (at or below FL240) or LONDON Control/SCOTTISH Control (above FL240). 5. Rwy 06L: EXPECT close-in obstacles.

WALLASEY ONE SIERRA (WAL 1S)
WALLASEY ONE ZULU (WAL 1Z)
 RWYS 06L/R DEPARTURES
SPEED MAX 250 KT BELOW FL100
UNLESS OTHERWISE AUTHORIZED

WARNING: Do not climb above 5000' until instructed by ATC.



WARNING RWY 06L: In the event of a missed approach on runway 06R ATC may instruct aircraft which have departed from runway 06L to make a LEFT turn in order to establish separation.

These SIDs require minimum climb gradients of

WAL 1S	75	100	150	200	250	300
316' per NM (5.2%) until MCT 2 DME, then 243' per NM (4%) up to 2500' for obstacle, ATC or airspace purposes.	934	1248	1868	2491	3114	3737
WAL 1Z	405	608	810	1013	1215	

If unable to comply with SID, climb gradients or non-standard clearance issued, advise ATC prior to take-off and request alternative clearance.

ROUTING

SID	RWY	Climb straight ahead, at MCT 2 DME turn LEFT, 300° track towards XOBRO, intercept WAL R-083 inbound to WAL.
WAL 1S	06L	Climb straight ahead, at MCT 2 DME turn LEFT, 300° track towards XOBRO, intercept WAL R-083 inbound to WAL.
WAL 1Z	06R	Climb straight ahead, at MCT 2 DME turn LEFT, 300° track towards XOBRO, intercept WAL R-083 inbound to WAL.

EGCC/MAN

Apt Elev 257'

N53 21.2 W002 16.5

JEPPesen

10-9 20 OCT 06

Eff 26 Oct

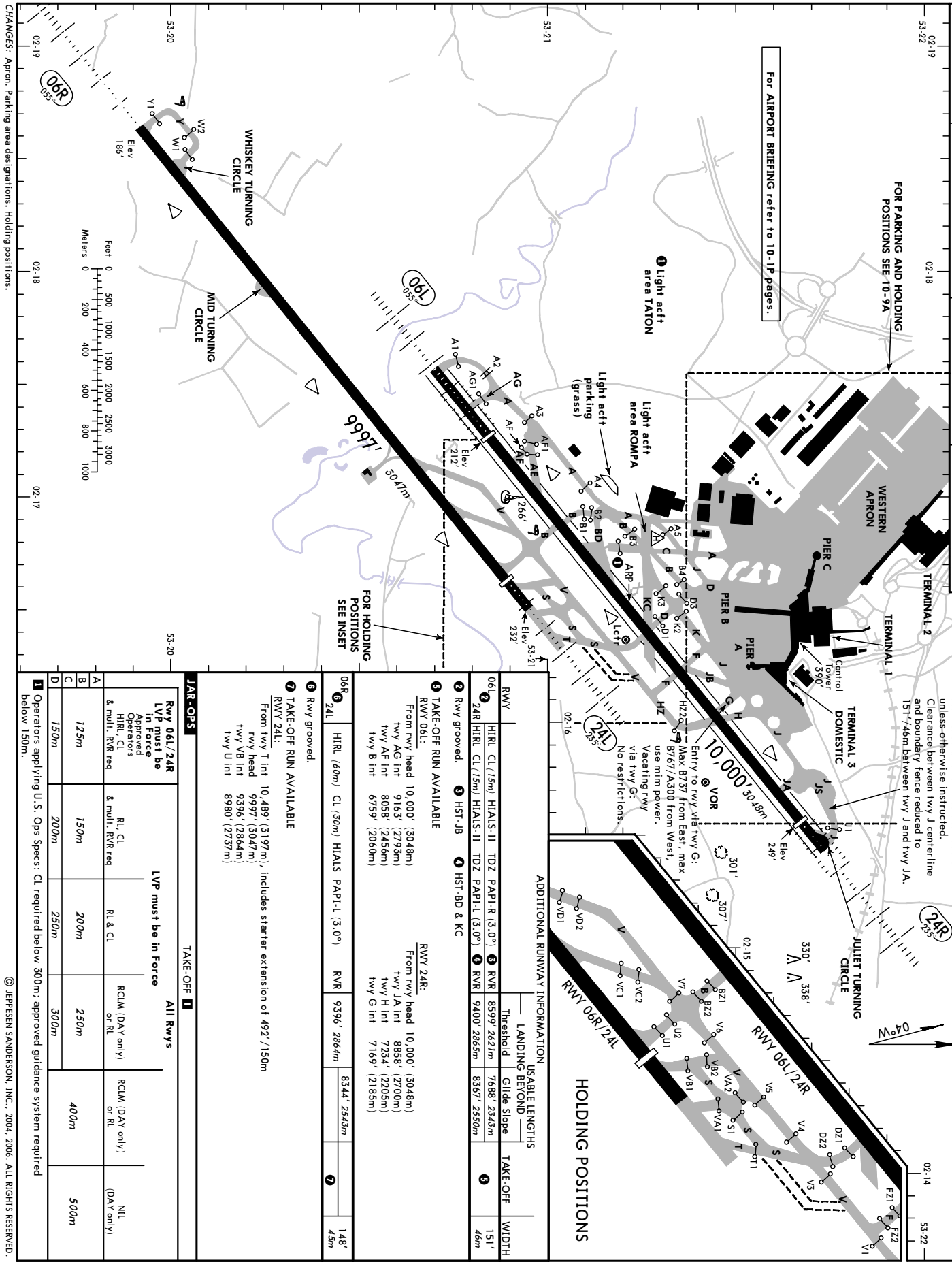
MANCHESTER, UK

MANCHESTER

*D-ATIS Departure	*MANCHESTER Delivery (CPI)	*Ground	Tower
121.97	121.7	121.85 121.7	118.62 119.4

FOR PARKING AND HOLDING POSITIONS SEE 10-9A

For AIRPORT BRIEFING refer to 10-1P pages.



ADDITIONAL RUNWAY INFORMATION

Runway	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	Threshold	Landing Beyond	Glide Slope	Take-Off	Width
06L/24R	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	8597' 2627m	7688' 2343m		5	151' 46m
06R/24L	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	9400' 2865m	8367' 2550m		5	

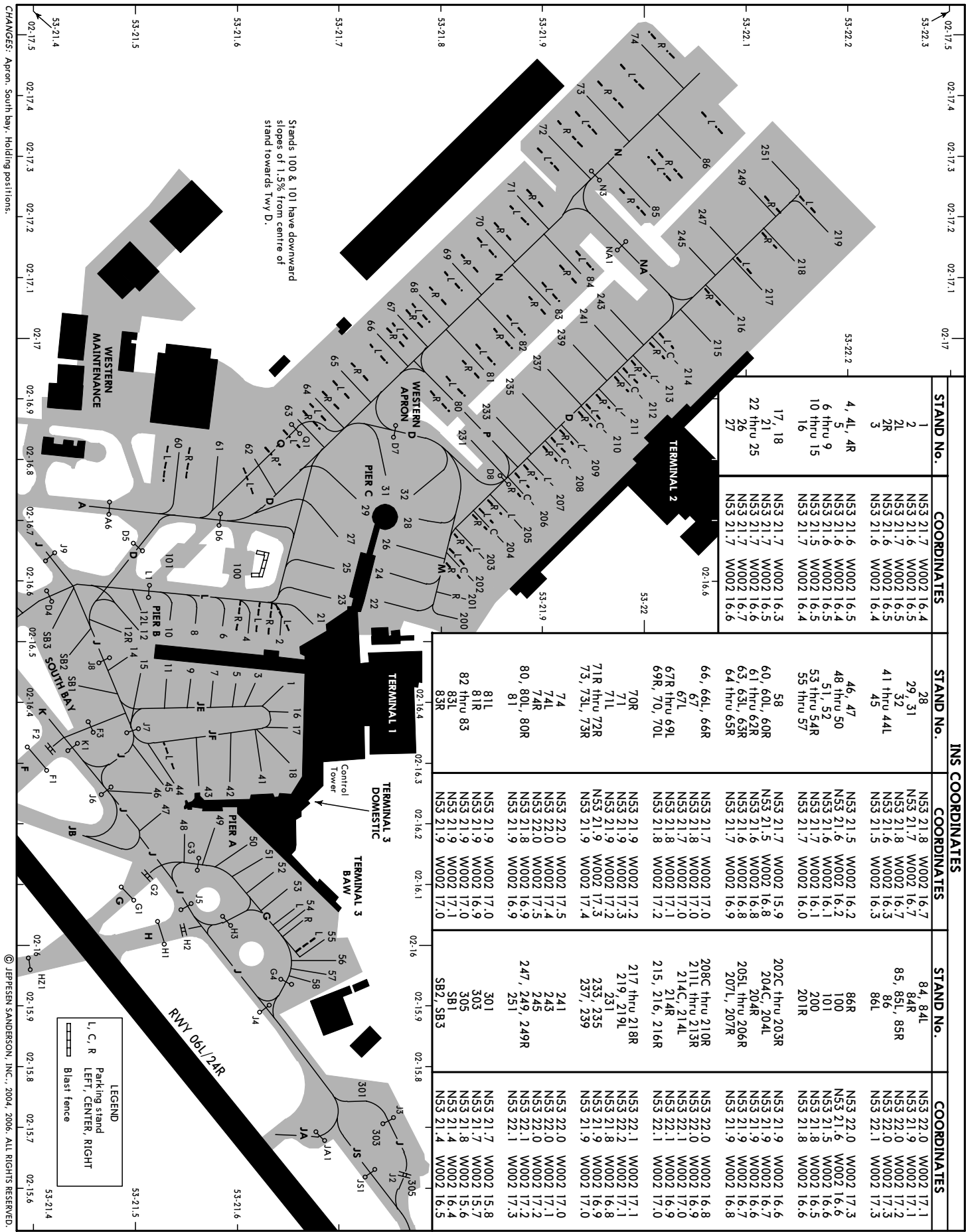
Runway	HIRL	CL (30m)	HIALS	PAP1-L (3.0°)	RVR	Threshold	Landing Beyond	Glide Slope	Take-Off	Width
06R/24L	HIRL (60m)	CL (30m)	HIALS	PAP1-L (3.0°)	RVR	9396' 2864m	8344' 2545m		7	148' 45m

- 1 TAKE-OFF RUN AVAILABLE
- 2 Rwy grooved.
- 3 TAKE-OFF RUN AVAILABLE
- 4 Rwy grooved.
- 5 TAKE-OFF RUN AVAILABLE
- 6 Rwy grooved.
- 7 TAKE-OFF RUN AVAILABLE
- 8 Rwy grooved.

Runway	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	Threshold	Landing Beyond	Glide Slope	Take-Off	Width
06L/24R	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	8597' 2627m	7688' 2343m		5	151' 46m
06R/24L	HIRL	CL (15m)	HIALS-II	TDZ	PAP1-L (3.0°)	RVR	9400' 2865m	8367' 2550m		5	

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Notice: After 7.12.2006 0901Z this chart should not be used without first checking JeppView or NOTAMs.

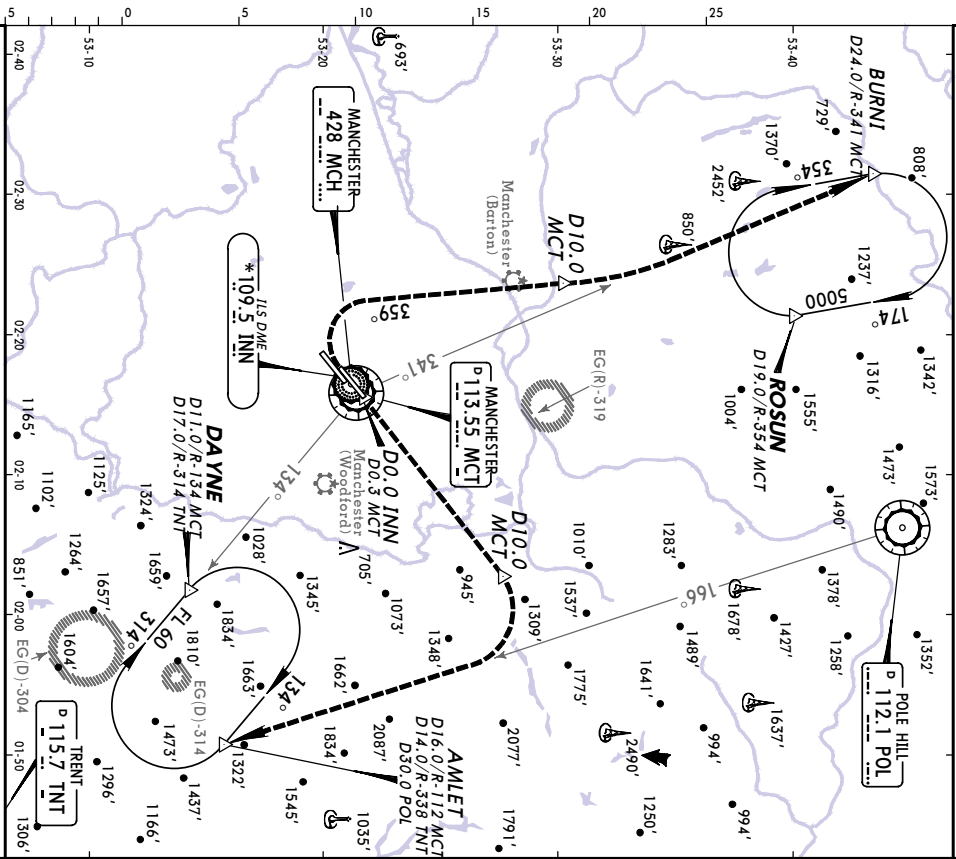


EGCC/MAN
MANCHESTER

JEPPesen
3 JUN 05 (11-01)

MANCHESTER UK
Rwy 06L/24R

PROCEDURES TO BE USED IN THE EVENT OF RADIO FAILURE FOLLOWING A MISSED APPROACH



MISSED APCH:

Rwy 06L: Climb STRAIGHT AHEAD to 3500'. At D10.0 MCT turn RIGHT climbing to FL 60 to intercept and follow R-166 POL to AMLET to enter DAYNE holding.

Act unable to reach 3500' at D10.0 MCT, climbing turn LEFT at D10.0 MCT until reaching 3500', before proceeding to DAYNE holding as detailed above.

Rwy 24R: Climb to 3500'. STRAIGHT AHEAD until passing 750' or D0.0 INN (D0.3 MCT) inbound, whichever is the later, then turn RIGHT onto track 359°. At D10.0 MCT turn direct to BURNLEY (D24.0/R-341 MCT) climbing to 5000' to enter ROSUN holding.

Act unable to reach 3500' before D10.0 MCT, commence climbing turn LEFT at D10.0 MCT to 3500'. At or above 3500' continue LEFT turn and proceed direct to BURNLEY.

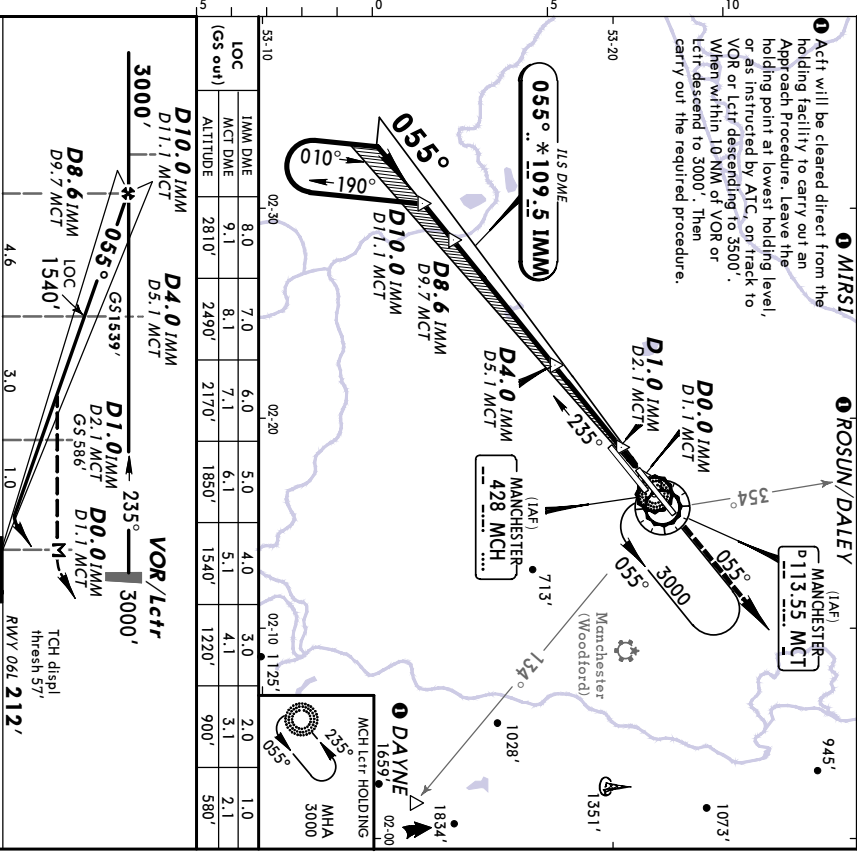
EGGC/MAN MANCHESTER
 13 JAN 06 **(1-1)** **EFT 19 JAN**
MANCHESTER, UK
 ILS DME Rwy 06L

D-ATIS Arrival	MANCHESTER Radar (APP)	MANCHESTER Tower	*Ground
128.17	135.0	118.62	119.4
121.85	121.7		
LOC	Final	GS	ILS
IMM	Apch Crs	D4.0 IMM	DA(H)
*109.5	055°	1539' (1327')	412' (200')
			Rwy Elev 257'
			Rwy 212'

MISSED APCH: Climb STRAIGHT AHEAD to 3500', then as directed.
 In case of complete radio failure see 11-011.

Alt Set: Hpa Rwy Elev: 8 Hpa Trans level: By ATC Trans alt: 5000'

1. ILS DME reads zero at rwy 06L displaced threshold.
 2. WARNING: RA fluctuations may occur due to Bollin Valley.



LOC	IMM DME	8.0	7.0	6.0	5.0	4.0	3.0	2.0	1.0
(GS out)	MCT DME	9.1	8.1	7.1	6.1	5.1	4.1	3.1	2.1
	ALTITUDE	2810'	2490'	2170'	1850'	1540'	1220'	900'	580'

Grnd speed-Kts	70	90	100	120	140	160			
ILS GS 3.00% or	377	484	538	646	753	861			
LOC Descent Gradient 5.2%									
MAP at D0.0 IMM/D1.1 MCT									

JAR OPS

DA(H)	412' (200')								
MDA(H)	620' (408')								

CIRCLE-TOLAND

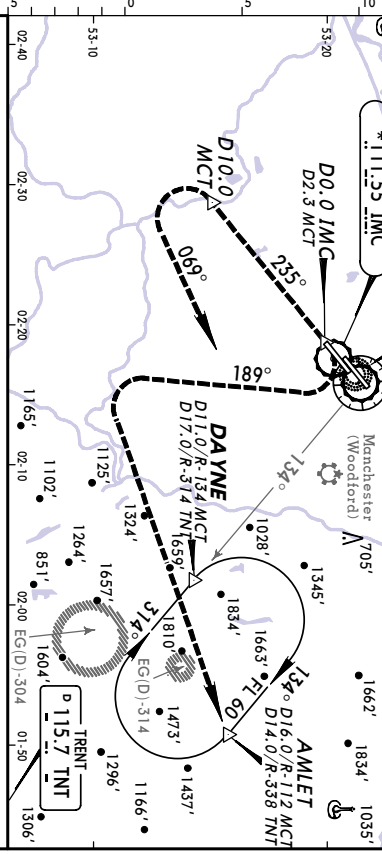
Full	ALS out	ALS out	ALS out	ALS out	ALS out	ALS out	ALS out	ALS out	ALS out
A	RVR 550m	RVR 1000m	RVR 1000m	RVR 1000m	RVR 1500m	RVR 1500m	RVR 1800m	RVR 1800m	RVR 2000m
B	RVR 550m	RVR 1000m	RVR 1000m	RVR 1000m	RVR 1500m	RVR 1500m	RVR 1800m	RVR 1800m	RVR 2000m
C	RVR 550m	RVR 1000m	RVR 1000m	RVR 1000m	RVR 1500m	RVR 1500m	RVR 1800m	RVR 1800m	RVR 2000m
D	RVR 550m	RVR 1000m	RVR 1000m	RVR 1000m	RVR 1500m	RVR 1500m	RVR 1800m	RVR 1800m	RVR 2000m

HEADS-UP

Head	Head	Head	Head	Head	Head	Head	Head	Head	Head
Kts	Kts	Kts	Kts	Kts	Kts	Kts	Kts	Kts	Kts
750' (493')	750' (493')	750' (493')	750' (493')	750' (493')	750' (493')	750' (493')	750' (493')	750' (493')	750' (493')
1500m	1500m	1500m	1500m	1500m	1500m	1500m	1500m	1500m	1500m
2400m	2400m	2400m	2400m	2400m	2400m	2400m	2400m	2400m	2400m
3600m	3600m	3600m	3600m	3600m	3600m	3600m	3600m	3600m	3600m

EGGC/MAN MANCHESTER
 3 JUN 05 **(11-01A)**
MANCHESTER, UK
 Rwy 06R/24L

PROCEDURES TO BE USED IN THE EVENT OF RADIO FAILURE FOLLOWING A MISSED APPROACH



MISSED APCH:
 Rwy 06R: Climb to 3500'. **ILS & LOC:** STRAIGHT AHEAD to 700' or D0.0 IMM (D2.3 MCT) inbound, whichever is the later. **(VOR DME:** STRAIGHT AHEAD to 700'), then turn RIGHT onto track 189° climbing to FL 60. When established on track 189° and above 3500' turn LEFT direct to AMLET to join DAYNE holding.

Rwy 24L: Climb STRAIGHT AHEAD to 3500'. At D10.0 MCT turn LEFT onto track 069° continue climbing to FL 60 to enter DAYNE holding.

Acti unable to reach 3500' before D10.0 MCT, climbing turn LEFT at D10.0 MCT until reaching 3500', before proceeding to DAYNE holding as detailed above.

EGCC/MAN
MANCHESTER

13 JAN 06
EFT 19 JAN

JEPPRESEN CAT A & B
CAT II ILS DME Rwy 06L
MANCHESTER, UK

D-ATIS Arrival MANCHESTER Radar (APP)

MANCHESTER Tower

*Ground

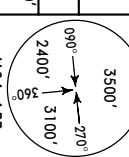
LOC	128.17	135.0	118.62	119.4	121.85	121.7
-----	--------	-------	--------	-------	--------	-------

Final	1539	1539	312	312	3100	3100
Appch Crs	055°	055°	055°	055°	055°	055°

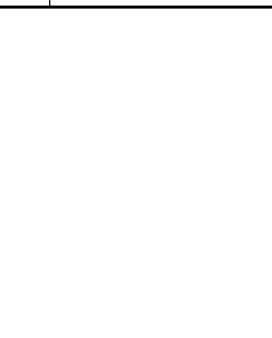
GS	D4.0 IMM	CAT II ILS	RA 107'	Appt Elev	257'
DA(H)	312'(100')	DA(H)	312'(100')	RWY	212'

MISSED APCH: Climb STRAIGHT AHEAD to 3500', then as directed.

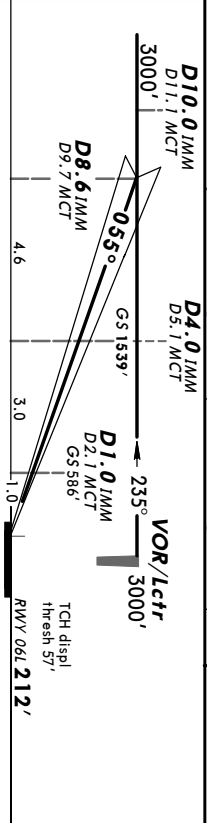
Alt Set: RPA Rwy Elev: 8 hpa
Special Aircrew & Act Certification Required. 2. ILS DME reads zero at rwy 06L.
1. Special Aircrew & Act Certification Required. 2. ILS DME reads zero at rwy 06L.
3. WARNING: RA fluctuations may occur due to Bollin Valley.



The Bollin Valley causes radio altimeters to show a height increase just below a height of 200' above the rwy threshold. This disturbance lasts for approx 2 seconds. Thereafter the radio altimeter stabilizes. Operators should ensure that pilots are aware of the increase in radio altimeter height indications, just below 200' above the rwy threshold, and it is advisable to consider using a "50 ft above" call instead of the normal "100 ft above" call. Prior to operational use a minimum of four practice approaches to CAT II DH in better than CAT I conditions required.



Act will be cleared direct from the holding facility to carry out an Approach Procedure. Leave the holding point at lowest holding level, or as instructed by ATC, on track to VOR or Ltr descending to 3500'. When within 10 NM of VOR or Ltr descend to 3000'. Then carry out the required procedure.



Grnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00° or	377	484	538	646	753	861
LOC Descent Gradient 5.2%	377	484	538	646	753	861
MAP at DA.0 ILM/D2.3 MCT						

JAR-OPS	AB	RA 107'	DA(H) 312'(100')	CD
STR-AUT	RA 107'	RA 107'	RA 107'	RA 107'
STR-INT	RA 107'	RA 107'	RA 107'	RA 107'
STR-EXT	RA 107'	RA 107'	RA 107'	RA 107'

Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

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EGCC/MAN
MANCHESTER

13 JAN 06
EFT 19 JAN

JEPPRESEN
MANCHESTER, UK
ILS DME Rwy 06R

D-ATIS Arrival MANCHESTER Radar (APP)

MANCHESTER Tower

*Ground

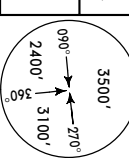
LOC	128.17	135.0	118.62	119.4	121.85	121.7
-----	--------	-------	--------	-------	--------	-------

Final	1513	1513	386	386	3100	3100
Appch Crs	055°	055°	055°	055°	055°	055°

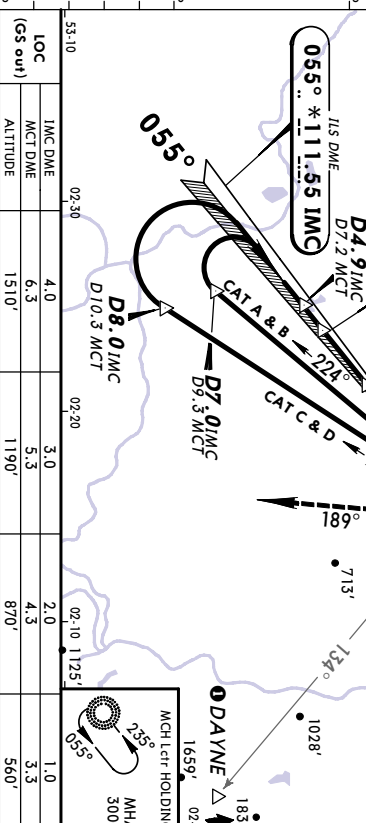
GS	D4.0 IMC	ILS	RA 107'	Appt Elev	257'
DA(H)	312'(100')	DA(H)	386'(200')	RWY	186'

MISSED APCH: Climb to 3500', STRAIGHT AHEAD to 700' or D0.0 IMC (D2.3 MCT) inbound whichever is the later, then turn RIGHT onto track 189', then as directed. In case of complete radio failure see 11-01A.

Alt Set: RPA Rwy Elev: 7 hpa
Special Aircrew & Act Certification Required. 2. ILS DME reads zero at rwy 06R threshold.
1. Special Aircrew & Act Certification Required. 2. ILS DME reads zero at rwy 06R threshold.
3. WARNING: RA fluctuations may occur due to Bollin Valley.



Act will be cleared direct from the holding facility to carry out an Approach Procedure. Leave the holding point at lowest holding level, or as instructed by ATC, on track to VOR or Ltr descending to 3500'. When within 10 NM of VOR or Ltr descend to 3000'. Then carry out the required procedure.



Grnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00° or	377	484	538	646	753	861
LOC Descent Gradient 5.2%	377	484	538	646	753	861
MAP at DA.0 ILM/D2.3 MCT						

JAR-OPS	AB	RA 107'	DA(H) 386'(200')	CD
STR-AUT	RA 107'	RA 107'	RA 107'	RA 107'
STR-INT	RA 107'	RA 107'	RA 107'	RA 107'
STR-EXT	RA 107'	RA 107'	RA 107'	RA 107'

Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

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EGCC/MAN
MANCHESTER

JEPPRESEN
13 JAN 06 **(1-3)** **EFF 19 Jan**

MANCHESTER, UK
IIS DME Rwy 24R

EGCC/MAN
MANCHESTER

JEPPRESEN
13 JAN 06 **(1-3A)** **EFF 19 Jan**

MANCHESTER, UK
CAT II IIS DME Rwy 24R

LOC	128.17	MANCHESTER Radar (APP)	135.0	MANCHESTER Tower	118.62	119.4	121.85	121.7
D-ATIS Arrival								*Ground
Final	235°	Apch Crs	2860 (2611')	GS	D8.0 INN	449' (200')	DA(H)	ApI Elev 257'
INN	*109.5				D8.0 INN	2860 (2611')		Rwy Elev 257'
								Rwy 249'

LOC	128.17	MANCHESTER Radar (APP)	135.0	MANCHESTER Tower	118.62	119.4	121.85	121.7
D-ATIS Arrival								*Ground
Final	235°	Apch Crs	2860 (2611')	GS	D8.0 INN	449' (200')	RA/DA(H)	ApI Elev 257'
INN	*109.5				D8.0 INN	2860 (2611')	Refer to Minimums	Rwy 249'
								Rwy 249'

Trans level: By ATC
Trans alt: 5000'

Procedure turn restricted to MAX 185 KT.

MIRSI (Mansfield) 1073'

MANCHESTER (Barton) 945'

MANCHESTER (IAF) 113.55 MCT

MANCHESTER (IAF) 428 MCH

MANCHESTER (IAF) 235° *109.5 INN

D8.0 INN D8.3 MCT

D12.0 INN D12.3 MCT

D10.0 INN D10.3 MCT

D4.0 INN D4.3 MCT

D1.0 INN D1.3 MCT

D0.0 INN D0.3 MCT

EG(R)-319 1010'

1537'

1775'

1908'

1348'

2047'

1073'

774'

1309'

3500'

190°

270°

3100'

2400'

MSA ARP

Trans level: By ATC
Trans alt: 5000'

Procedure turn restricted to MAX 185 KT.

MIRSI (Mansfield) 1073'

MANCHESTER (Barton) 945'

MANCHESTER (IAF) 113.55 MCT

MANCHESTER (IAF) 428 MCH

MANCHESTER (IAF) 235° *109.5 INN

D8.0 INN D8.3 MCT

D12.0 INN D12.3 MCT

D10.0 INN D10.3 MCT

D4.0 INN D4.3 MCT

D1.0 INN D1.3 MCT

D0.0 INN D0.3 MCT

EG(R)-319 1010'

1537'

1775'

1908'

1348'

2047'

1073'

774'

1309'

3500'

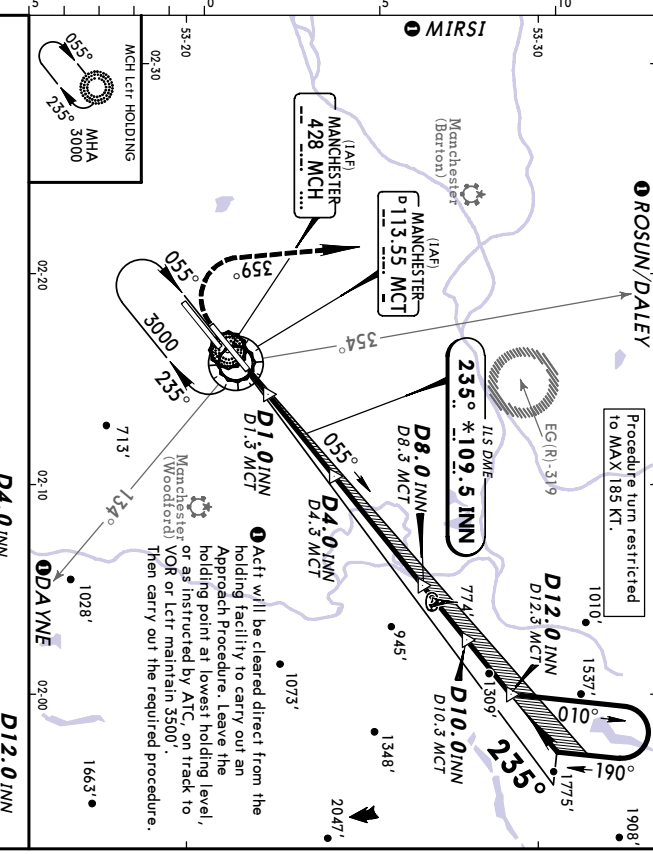
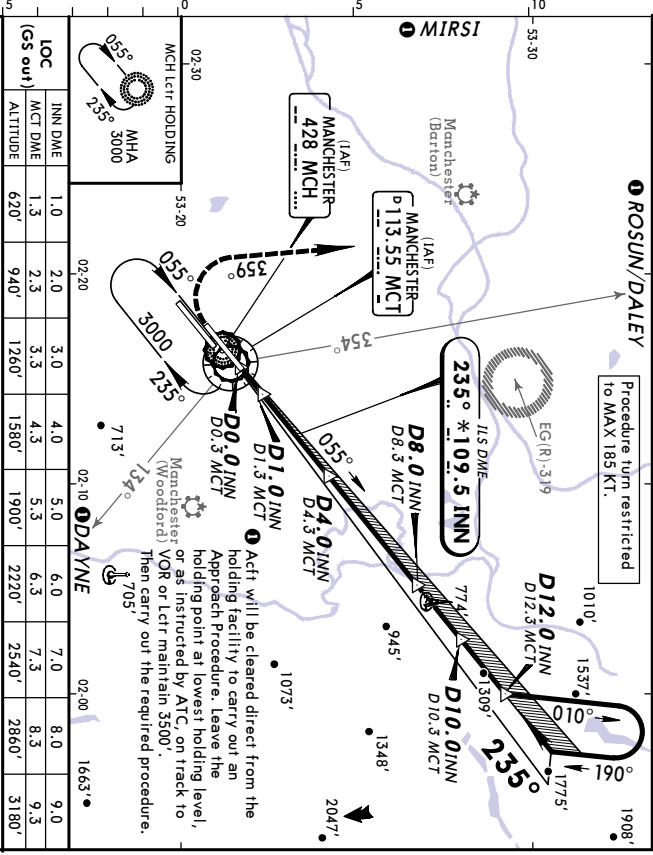
190°

270°

3100'

2400'

MSA ARP



LOC	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
INN DME	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3	9.3
MCT DME	620'	940'	1260'	1580'	1900'	2220'	2540'	2860'	3180'
ALTITUDE									

LOC	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
INN DME	1.3	2.3	3.3	4.3	5.3	6.3	7.3	8.3	9.3
MCT DME	620'	940'	1260'	1580'	1900'	2220'	2540'	2860'	3180'
ALTITUDE									

EGCC/MAN MANCHESTER
JEPPERSEN
 13 JAN 06 (13-1) **ET 19 Jan**
MANCHESTER, UK
VOR DME Rwy 06L

D-ATIS Arrival	MANCHESTER Radar (APP)	MANCHESTER Tower	*Ground
128.17	135.0	118.62	119.4
121.85	121.7		

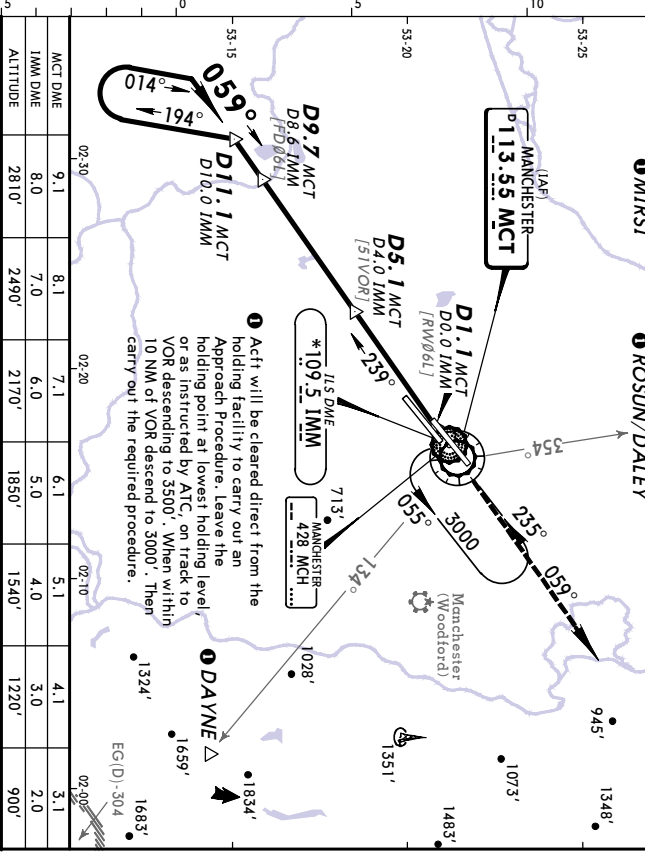
VOR 128.17 **Final** **Appch Crs** 059° **Minimum Alt** 135.0 (2788') **MDA(H)** 640' (428') **Appt Elev** 257' **Rwy** 212'

MISSED APCH: Climb STRAIGHT AHEAD to 3500', then as directed.
 In case of complete radio failure see 11-01.

Alt Set: hpa Rwy Elev: 8 hpa Trans level: By ATC Trans alt: 5000'

1. ILS DME reads zero at rwy 06L displaced threshold.
2. Final approach track offset 4° from runway centerline.

MSA ARP



Gnd speed-Kts	70	90	100	120	140	160	HIAS-II	3500'	
	372	478	531	637	743	849	PAP1		
Descent gradient	5.24% or (3.00°)								
Descent angle	3.00°								
MAP at D1.1 MCT/D0.0 IMM									
JAR-OPS STRAIGHT-IN LANDING Rwy 06L									
MDA(H) 640' (428')									
ALS out									
A	RVR 900m	RVR 1500m						750' (493')	1500m
B	RVR 1000m	RVR 1800m						760' (503')	1600m
C	RVR 1400m	RVR 2000m						1110' (853')	2400m
D	RVR 1400m	RVR 2000m						1110' (853')	3600m
CIRCLE-TOLAND									
HIAS-I									
PAP1									
RT									

EGCC/MAN MANCHESTER
JEPPERSEN
 13 JAN 06 (13-2) **ET 19 Jan**
MANCHESTER, UK
VOR DME Rwy 06R

D-ATIS Arrival	MANCHESTER Radar (APP)	MANCHESTER Tower	*Ground
128.17	135.0	118.62	119.4
121.85	121.7		

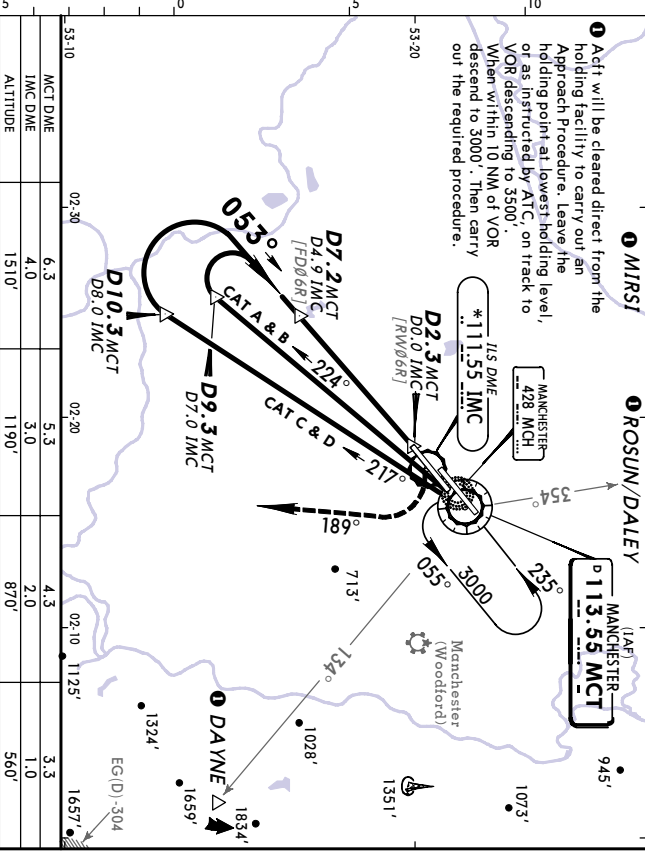
VOR 128.17 **Final** **Appch Crs** 053° **Minimum Alt** 135.0 (2788') **MDA(H)** 600' (414') **Appt Elev** 257' **Rwy** 186'

MISSED APCH: Climb to 3500', STRAIGHT AHEAD to 700', then turn RIGHT onto track 189°, then as directed.
 In case of complete radio failure see 11-01A.

Alt Set: hpa Rwy Elev: 7 hpa Trans level: By ATC Trans alt: 5000'

1. ILS DME reads zero at rwy 06R threshold.
2. Final apch track offset 2° from rwy centerline.

MSA ARP



Gnd speed-Kts	70	90	100	120	140	160	HIAS-II	3500'	
	372	478	531	638	744	850	PAP1		
Descent gradient	5.24% or (3.00°)								
Descent angle	3.00°								
MAP at D2.3 MCT/D0.0 IMM									
JAR-OPS STRAIGHT-IN LANDING Rwy 06R									
MDA(H) 600' (414')									
ALS out									
A	RVR 900m	RVR 1500m						750' (493')	1500m
B	RVR 1000m	RVR 1800m						760' (503')	1600m
C	RVR 1400m	RVR 2000m						1110' (853')	2400m
D	RVR 1400m	RVR 2000m						1110' (853')	3600m
CIRCLE-TOLAND									
HIAS-I									
PAP1									
RT									

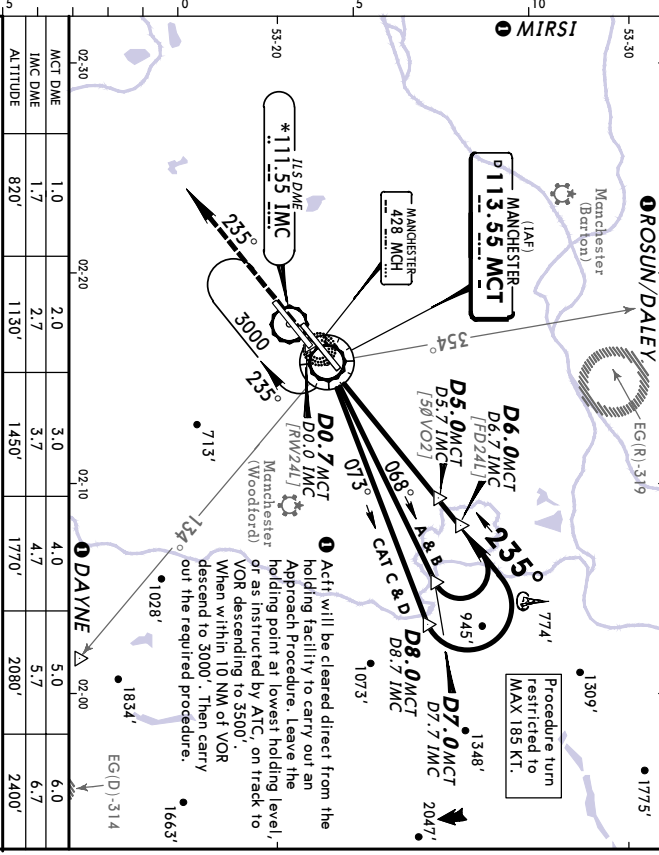
EGCC/MAN MANCHESTER
MANCHESTER, UK
 4 AUG 06 (13-3)
VOR DME Rwy 24L

D-ATIS Arrival	MANCHESTER Radar (APP)	MANCHESTER Tower	*Ground	
128.17	135.0	118.62	119.4	121.85 121.7
VOR MCT	Final	Minimum Alt (CONDITIONAL)	MDA(H)	Apri Elev 257'
113.55	235°	Profile	660' (433')	Rwy 227'

MISSED APCH: Climb STRAIGHT AHEAD to 3500', then as directed. In case of complete radio failure see 11-01A.

Trans level: By ATC
 Trans alt: 5000'

MSA ARP



MCT DME	1.0	2.0	3.0	4.0	5.0	6.0
INN DME	1.7	2.7	3.7	4.7	5.7	6.7
ALTITUDE	820'	1130'	1450'	1770'	2080'	2400'

Grnd speed-Kts	70	90	100	120	140	160
Descent gradient 5.24% or Descent angle [3.00°]	372	478	531	637	743	849
MAP at D0.7 MCT/D0.0 IMC	[3.00°]					

JAR OPS STRAIGHT-IN LANDING Rwy 24L

MDA(H)	660' (433')
ALS out	
Max Kts	100
MDA(H)	750' (493')
VIS	1500m

CIRCLE-TO-LAND

A	RVR 900m	RVR 1500m	135	760' (503')	1600m
B	RVR 1000m		180	1110' (853')	2400m
C	RVR 1400m		205	1110' (853')	3600m

PANS OPS 4

CHANGES: None

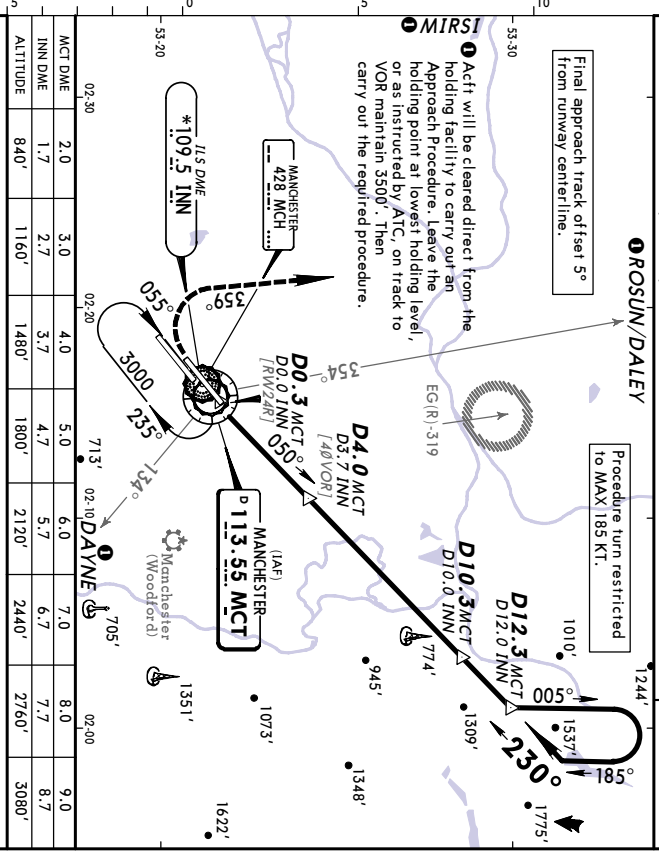
EGCC/MAN MANCHESTER
MANCHESTER, UK
 4 AUG 06 (13-4)
VOR DME Rwy 24R

D-ATIS Arrival	MANCHESTER Radar (APP)	MANCHESTER Tower	*Ground	
128.17	135.0	118.62	119.4	121.85 121.7
VOR MCT	Final	Minimum Alt (CONDITIONAL)	MDA(H)	Apri Elev 257'
113.55	230°	Profile	640' (391')	Rwy 249'

MISSED APCH: Climb to 3500', STRAIGHT AHEAD until passing 750' or D0.3 MCT (D0.0 INN) inbound, whichever is the later, then turn RIGHT onto track 359°, then as directed. In case of complete radio failure see 11-01.

Trans level: By ATC
 Trans alt: 5000'

MSA ARP



MCT DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
INN DME	1.7	2.7	3.7	4.7	5.7	6.7	7.7	8.7
ALTITUDE	840'	1160'	1480'	1800'	2120'	2440'	2760'	3080'

Grnd speed-Kts	70	90	100	120	140	160
Descent gradient 5.24% or Descent angle [3.00°]	372	478	532	638	744	851
MAP at D0.3 MCT/D0.0 INN	[3.00°]					

JAR OPS STRAIGHT-IN LANDING Rwy 24R

MDA(H)	640' (391')
ALS out	
Max Kts	100
MDA(H)	750' (493')
VIS	1500m

CIRCLE-TO-LAND

A	RVR 900m	RVR 1500m	135	760' (503')	1600m
B	RVR 1000m		180	1110' (853')	2400m
C	RVR 1400m		205	1110' (853')	3600m

PANS OPS 4

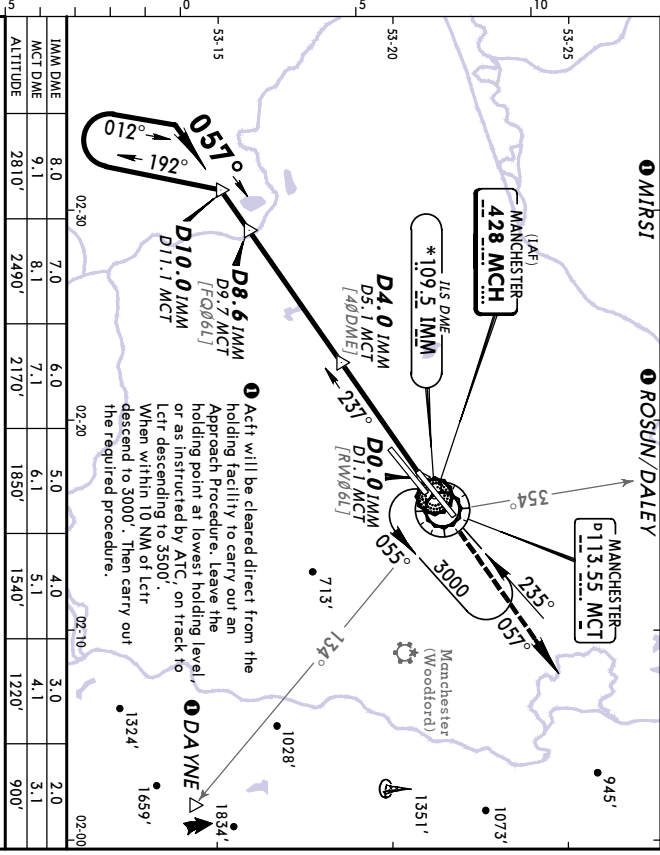
CHANGES: None

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 4 AUG 06 (16-1)
MANCHESTER, UK
 NDB DME Rwy 06L

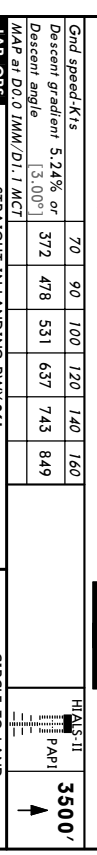
D-ATIS Arrival		MANCHESTER Radar (APP)		MANCHESTER Tower		*Ground	
128.17	135.0	118.62	119.4	121.85	121.7		
Lctr MCH	Final	Minimum Alt	MDA(H)	Appt Elev	257'	MISA ARR	
428	057°	D8.6 IMM	640' (428')	Rwy	212'		
		Apch Crs	3000' (2788')				

MISSED APCH: Climb STRAIGHT AHEAD to 3500', then as directed.
 In case of complete radio failure see 11-01.
 Alt Set: hPa Rwy Elev: 8 hPa Trans level: By ATC
 1. ILS DME reads zero at rwy 06L displaced threshold.
 2. Final approach track offset 2° from runway centerline.



Actf will be cleared direct from the holding facility to carry out an Approach Procedure. Leave the holding point at lowest holding level, or as instructed by ATC, on track to Lctr descending to 3500'. When within 10 NM of Lctr descend to 3000'. Then carry out the required procedure.

IMM DME	8.0	7.0	6.0	5.0	4.0	3.0	2.0
MCT DME	9.1	8.1	7.1	6.1	5.1	4.1	3.1
ALTITUDE	2810'	2490'	2170'	1850'	1540'	1220'	900'

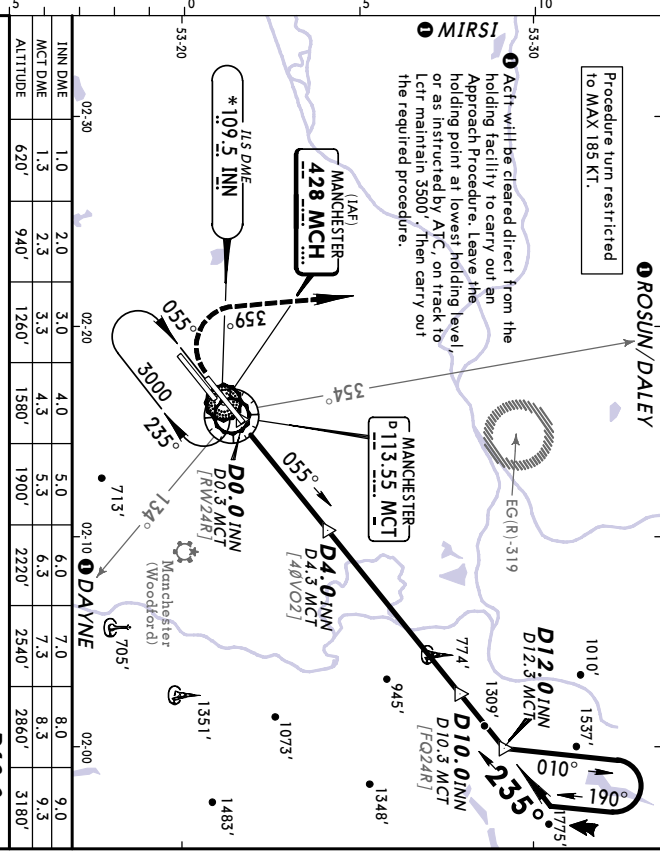


Grnd speed-Kts	70	90	100	120	140	160	HIALS-II 3500'	
	Descent gradient 5.2% or Descent angle [3.00°]	372	478	531	637	849		PAPI
MAP at D0.0 IMM/D1.1 MCT								
JAR-OPS STRAIGHT-IN LANDING Rwy 06L								
CIRCLE-TO-LAND								
MDA(H) 640' (428')								
ALS out								
A	RVR 900m	RVR 1500m					Max Kts 100	MDA(H) 750' (493')
B	RVR 1000m	RVR 1800m					135	760' (503')
C	RVR 1400m	RVR 2000m					180	1110' (853')
D	RVR 1400m	RVR 2000m					205	1110' (853')

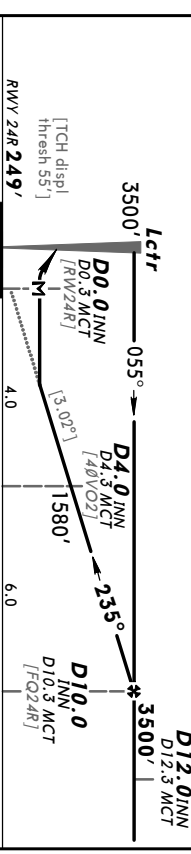
EGGC/MAN MANCHESTER
JEPPESEN
 4 AUG 06 (16-2)
MANCHESTER, UK
 NDB DME Rwy 24R

D-ATIS Arrival		MANCHESTER Radar (APP)		MANCHESTER Tower		*Ground	
128.17	135.0	118.62	119.4	121.85	121.7		
Lctr MCH	Final	Minimum Alt	MDA(H)	Appt Elev	257'	MISA ARR	
428	235°	D10.0 INN	640' (325')	Rwy	249'		
		Apch Crs	3500' (3251')				

MISSED APCH: Climb to 3500', STRAIGHT AHEAD until passing 750' or D0.0 INN (D0.3 MCT) inbound, whichever is the later, then turn RIGHT onto track 359°, then as directed.
 In case of complete radio failure see 11-01.
 Alt Set: hPa Rwy Elev: 9 hPa Trans level: By ATC
 ILS DME reads zero at rwy 24R displaced threshold.

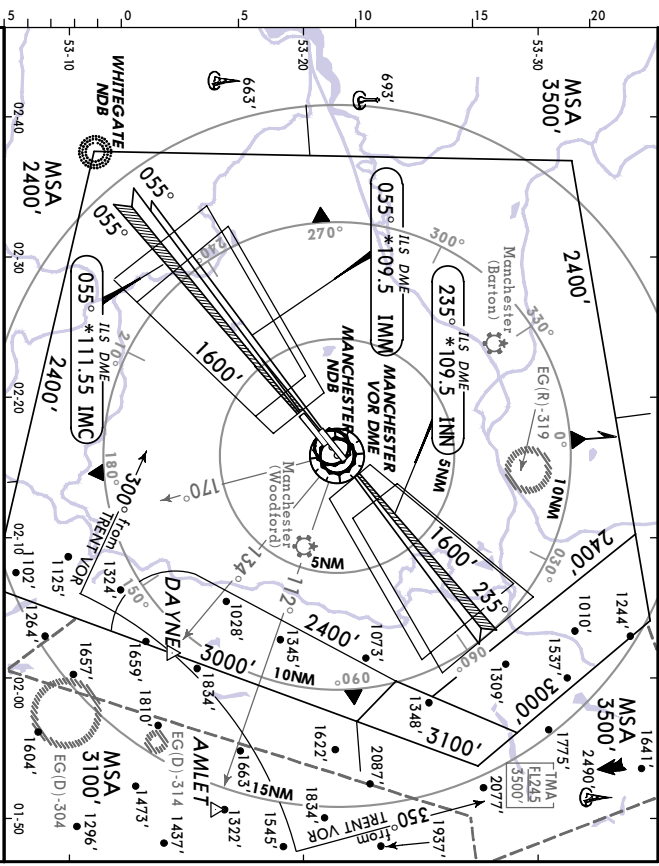


Actf will be cleared direct from the holding facility to carry out an Approach Procedure. Leave the holding point at lowest holding level, or as instructed by ATC, on track to Lctr maintain 3500'. Then carry out the required procedure.



Grnd speed-Kts	70	90	100	120	140	160	HIALS-II 3500'	
	Descent gradient 5.26% or Descent angle [3.02°]	374	481	534	641	855		PAPI
MAP at D0.0 INN/D0.3 MCT								
JAR-OPS STRAIGHT-IN LANDING Rwy 24R								
CIRCLE-TO-LAND								
MDA(H) 640' (391')								
ALS out								
A	RVR 900m	RVR 1500m					Max Kts 100	MDA(H) 750' (493')
B	RVR 1000m	RVR 1800m					135	760' (503')
C	RVR 1400m	RVR 2000m					180	1110' (853')
D	RVR 1400m	RVR 2000m					205	1110' (853')

EGCC/MAN MANCHESTER
 11 JUL 03 (8-1)
 MANCHESTER, UK
 RADAR VECTORING AREA



Within the Radar Vectoring Area the minimum initial altitude to be allocated by the radar controller is 2400', except that portion within the eastern sectors where the minimum altitude is 3000' or 3100'. Subsequent descent to 1600' may be given within the Approach Areas when on 40° leg or on final approach.

Rwy 24L/R: All traffic inbound to MANCHESTER from the South and Southeast at FL 140 or below should be flown at 210 KT 1A5 or less when North of an arc drawn 17 DME from Trent VOR in sector 300° to 350° unless otherwise authorized by ATC.

Act entering MANCHESTER TMA from controlled airspace will be cleared initially to not less than 3500', except act entering airspace between TMA boundary and boundary of Radar Vectoring Area between the extended center-line rwy 24L/R and Manchester VOR DME R-170 will be cleared initially to not less than 4000'. ATC will not clear aircraft for descent below 3500', or 4000' as appropriate, until within the Radar Vectoring Area.

LOSS OF COMMUNICATION PROCEDURE

PROCE-DURE	INITIAL APPROACH	INTERMEDIATE AND FINAL APPROACH
ALL RWYS	Continue visually or by means of an appropriate final approach aid. If not possible proceed to DAUNE holding via AMLET or ROSUN holding via BURNI at FL60 or at last assigned level if higher, as appropriate to the final approach chart.	Continue visually or by means of an appropriate final approach aid. If not possible follow the Missed Approach Procedure to DAUNE holding via AMLET or ROSUN holding via BURNI, as appropriate to the final approach chart.

In cases where the act returns to the holding fixpoint's the procedures to be adopted are the Missed Approach Radio Failure Procedures on charts 10-10 and 10-10A.