

**LONDON Heathrow (LHR/EGLL)**

Elevation 83ft

**CATEGORY A**

AV brief – not required

**GENERAL**

- Heathrow has very high traffic densities.
- CAT3B on all runways and RNAV GNSS arrivals.
- There is a great deal of useful information on the Lido AOI pages.
- Crews operating adhoc/positioning/familiarisation and other non-scheduled flights should operate as per the published times on you Briefing Package. Any deviation from this (early or late) must be approved by Ops Control as fines of £2000 can be incurred without a revised arrival slot.
  - Arrival slots are a separate process from ATC clearance.
  - The LHR arrival slot is a Rwy ARR Slot NOT an on blocks time.

### Threats

#### Runway Incursion

- Departures from 09R have a history of runway incursions. Distraction, poor visual cues on the taxiway and TEAM arrivals may be contributory factors.
- Note Hot Spot 1 on the taxi chart.

#### Loss of Control

- Acquisition of the 27L Localiser at extended range can lead to false localiser capture. This is more likely late at night when arriving from LAM.

#### Mid Air Collision

- Note the lower level-off height necessary after a missed approach from 27L and requirement to climb without further clearance at LON 6D.
- High rates of climb on departure can lead to TCAS RA if your departure track crosses the OCK or BNN arrival routes. Use of lower rates of climb is recommended if appropriate.
- Crews should be prepared to carry out Radio Fail Procedures at any time.

#### Ground Collision

- Limited wingtip clearance exists on taxiways near the A1 A2 A3 holding area adjacent to 27R. A380 taxi charts are available.

### ARRIVAL

- Expect speed control in the descent. Strict adherence to 160 kts to 4 DME is expected.
- Speed control for RNAV approaches: Please note that the TBS requirement to maintain 160 kts until 4 nm from the runway threshold (**5 nm for the A380**). Unstable approaches have occurred due to crews maintaining 160 kts until 4d based on the LON DME. Crews planning an RNAV approach should brief how they will define the point at which to reduce to final approach speed.
- Reduced separation on approach can be expected with a minimum of 2.5 nm achievable between pairs of aircraft not requiring vortex separation.
- On missed approach you will be sequenced into the normal arrival stream and can expect around 40 track miles to approach.
- Do not expect priority unless you declare an emergency.
- Know when you can use a 'Land After' clearance.

#### Go-around

- "Normal" go-around: The air will be sequenced into the downwind stream. No priority will be afforded unless the crew declare a PAN. With "finals" out to 15 nm at peak times, crews should expect a vector of about 40 nm after a go-around.
- Radio failure: As contained in Lido AOI:
  - Fly to appropriate terminal holding point as detailed on STAR; hold until last acknowledged ETA plus 10min, or EAT when this has been given.

- commence descent for LDG in accordance with appropriate APCH PROC as detailed on STAR/IAC and land within 30min or later if able to land visually.

## GROUND

- Minimise runway occupancy and expect a frequency change on vacation. At night, the guidance to stand is available by ATC switching on the green taxiway centreline lights.
- Green taxiway centre-line lights and red stopbars controlled from the Tower: 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.

## De-icing

### Remote De-icing/Anti-icing Procedures at LHR

#### Engines Running Remote De-icing Procedures – A32N, B777 and B787 only

##### A350 A380 B747

Not Applicable

##### A32N B777 B787

- **JEDI ACDM Procedures.** De-icing Control will approve JEDI de-icing and initiate ACDM processes following the crew request for de-icing at -20 min. There are no other specific pilot ACDM actions for JEDI; coordination is between De-icing Control and ATC direct.
- Call Delivery when ready to push stating that you will be de-icing at JEDI. Obtain taxi clearance to JEDI.

**CAUTION:** *Use minimum power when taxiing to/from the de-icing apron to minimise the effect of jet blast damage to equipment and personnel.*

- Once on taxiway B, hold short of taxiway D and monitor the LED signboard to the left of the taxiway (approx. 10 o'clock position).

**CAUTION:** *Do not contact JEDI on VHF (if applicable) until prompted by the LED signboard; or taxi across D until cleared by the JEDI Supervisor.*

- When prompted by the LED signboard, contact the assigned JEDI Supervisor on appropriate pad frequency (expect **JEDI South 121.665** or **JEDI Delta 121.735**). Continue to monitor Ground on 121.850 on another radio.
- When approved, taxi into the appropriate pad. Stop with flight deck abeam the pad LED signboard and set breaks to park. Turk off taxi and wing lights.
- Configure aircraft for de-icing.

**CAUTION:** *Do not configure for de-icing whilst taxiing. However, it can increase pad throughput if you can configure for de-icing in the queue.*

- Confirm 'Breaks set to park, engines running, ready for de-icing'.
- The JEDI Supervisor will park his/her vehicle in front of the aircraft, visible to the crew, until the de-icing is complete and the pad area is clear.
- During spraying, the JEDI Supervisor will pass the anti-icing code.
- As soon as spraying is complete, the JEDI Supervisor will call "De-icing is complete, now performing a visual inspection, hold position".
- There will be a separate, final call to confirm when all ground equipment is clear and it is safe to move forward.
- When approved, taxi clear of pad without reconfiguring aircraft air systems (except for B747) and stop at appropriate hold (short of D2 for JEDI Delta, short of Echo for JEDI South).
- Set brakes to park.
- Reconfigure aircraft air systems as per fleet-specific OM B.
- If taxiing for departure in active winter precipitation or freezing fog, or if taxi route is contaminated select flaps as close to the take-off point as possible, allowing sufficient time to complete the procedure and checklist.
- Call ATC Ground for taxi when ready.

#### ALL

- Mototok pushback device in use at T5A.
- On initial contact with the crew, the headset operator will state if they are using a wireless headset. If using a wireless headset the operative will state the aircraft registration of the aircraft they are talking to. Crews are to cross check this information to confirm the headset is paired to the correct aircraft prior to push back.
- To ensure an expeditious flow at Heathrow, crews are requested that when given a clearance limit to a specific hold point/link the aircraft should manoeuvre to this point to be level with the relevant marker boards for the hold point. The nose of the aircraft should not be positioned past this point until cleared by ATC.

**A380**

- Reduced 'taxiway centre-line to object clearance' of 49 m applies on Twy Echo between Bravo and Link 36 and on Twy Whiskey between Twy Sierra and Link 42.
- Reduced clearance of 47.5 m to an airside road to the East of Twy Alpha at MORRA.
- **Pilots are to ensure that the aircraft remain on the Twy centre-line at all times.**
- RET N6 on Runway 27L tightens-up, and care must be taken to ensure the right wing gear does not clip the grass when vacating onto Taxiway Alpha.
- Twy M is a Code E designated Twy, however, it may be used for towing A380, providing that the uncontrolled vehicle crossings are closed.
- The table below shows the historical data for the percentage of flights when the time between vacating the runway and parking the aircraft was greater than 7 minutes. An opportunity therefore existed to shut down engines 1 & 4 (or 2 & 3).

**Considerations:**

1. Whilst taxiing, lookout and monitoring are of prime importance. The risk of GCOL must always be addressed;
2. The time period of 7 minutes assumes a 5 minute engine cool-down period and also allows a buffer of 2 minutes to park the aircraft.

**Note:**                    **Shutting engines down whilst parking the aircraft could cause unnecessary distraction and is inadvisable;**

3. Ground testing has shown that there is no perceptible difference in manoeuvrability dependent on whether engines 2 & 3 or 1 & 4 are shut down.

Landing Runway	% Flights with Taxi-in time > 7 min
09L	98%
09R	99%
27L	41%
27R	26%

ALL

**DEPARTURE**

- Crews should pass information of aircraft type and latest ATIS information letter received, only once, whether inbound or outbound, i.e.:
  - On departure when requesting start up clearance with GMP (Ground Movement Planning)
  - When inbound on first contact with Heathrow Director.
- Be aware pushback from 335 into G cul-de-sac need to push abeam stand 331 to ensure aircraft is straight and start up does not cause blast safety issues on any stand.
- CDM data is shown on Stand Entry Guidance System, which counts down to your Estimated Off Blocks Time (EOBT).
- During low vis crews call TWR for start-up only when FULLY ready to start. Aircraft departing via CPT/AWY L9 expect a non standard departure instruction when using RWYs 09L/09R. Aircraft on this departure will not be issued a DCL when using Rwy 09L/09R REVERT TO VOICE.
- If you are not ready for departure by LOKKI/LOAN, PLUTO/TITAN, or HORKA/OSTER advice ATC.
- Conditional clearances are in use.
- Minimise runway occupancy commensurate with pax comfort and a safe operation.

A32N

**Intersection Planning**

- FLEX should be maximised whenever possible when deciding upon the planned intersection for departure.
- BAW Airbus and LHR ATC have agreed default intersection planb to use A3/N2E/N11/A13. ATC will give a minimum notice of: 1 min for default intersection, 3 mins for change of intersection or 5 mins if OET.
- ATC may offer a reduced notice intersection in the following cases:
  - When departing North bound
  - First wave departures
  - With a tight CTOT
  - T3 departures using 09R
- In order to gain this tactical advantage, it may be prudent to plan on a shorter intersection for departure whilst still attempting to maximise FLEX.
- To assist ATC in keeping R/T to a minimum, when requesting the ACARS PDC, consider adding a line in the free text section for the planned intersection e.g. 'Able NB8'.



**B777 B787****Fleet Specific Advice to Improve Track-Keeping on Westerly DET/MAXIT SIDs at LHR**

To ensure that the FMS creates an accurate LNAV turn, the following fleet specific advice is offered:

- **B777 and B787** – Enter a 210/6000 restriction on the VNAV Climb page (LSK 4L). Cancel the restriction, if needed, once established on the course after the initial turn. Speed intervention will not replot the FMC LNAV profile, so the aircraft will merely reduce the commanded bank angle. Do not introduce speed constraints on the LEGS page, because there is a risk that altitude constraints could be compromised.

**B747****Fleet Specific Advice to Improve Track-Keeping on Westerly DET/MAXIT SIDs at LHR**

To ensure that the FMS creates an accurate LNAV turn, the following fleet specific advice is offered:

- **B747** - Enter a 210/6000 restriction on the VNAV Climb page (LSK 4L). Cancel the restriction, if needed, once established on the course after the initial turn. Speed intervention will not replot the FMC LNAV profile, so the aircraft will merely reduce the commanded bank angle. Do not introduce speed constraints on the LEGS page, because there is a risk that altitude constraints could be compromised. Continue to use the FCOM noise abatement procedure for LHR departures as detailed in FCOM SP.NAP. This is critical as B747 LHR noise performance relies on BOTH correct. FMC LNAV plotting and utilisation of FCOM noise abatement procedures.

**A350 A380****Fleet Specific Advice to Improve Track-Keeping on Westerly DET/MAXIT SIDs at LHR**

To ensure that the FMS creates an accurate LNAV turn, the following fleet specific advice is offered:

- **A380/A350** – It is recommended to fly 'S'-speed with Flaps 1 + F until the initial turn onto a south-easterly track is complete. To pre-program the FMS, check the predicted value of 'S'-speed on the FMS/Perf/T.O. page and then either:
  1. Use the PRESEL field on the FMS PERF/CLB page to fly a selected speed after passing Aa and return to managed speed once the turn is complete; or
  2. Insert 'S'-speed as a climb speed constraint at an appropriate intercept waypoint via the F-PLAN page.

## OPERATIONAL INFORMATION

<b>Handling Agent</b>	BA
<b>Handling Agent VHF</b>	Short haul Ops 131.805 Long haul Ops 131.905 T5 HMC 131.785
<b>Potable Water</b>	Uplift Permitted