

## EGLL AD 2.22 FLIGHT PROCEDURES (continued)

AMDT 10/2014 18 Sep 2014

### 3 Approach Procedures with Radar Control

- (a) When arriving traffic is being sequenced under radar direction, that part of the approach between the holding fix and the Final Approach track will be flown under direction from the Radar Controller. Once the aircraft is under the jurisdiction of 'Heathrow Director' changes of heading or Flight Level/altitude will be made only on instructions from the Radar Controller except in the case of Radio Communications Failure in the aircraft or at the ATS Unit
- (b) The procedures are designed to maximise runway capacity and to minimise noise disturbance in the areas overflow during the approach. Aircraft commanders are requested to conform to low power, low drag operating techniques to the maximum extent practicable.
- (c) Detailed Procedures
  - (i) Headings and flight levels at which to leave the holding facility will be passed by ATC. Radar vectors will be given and descent clearance will include an estimate of the track distance to touchdown. Further distance information will be given between initial descent and the intercept heading onto the ILS/MLS.
  - (ii) **Descent profile:** On receipt of descent clearance the pilot should descend at the rate he judges will be best suited to the achievement of continuous descent, the objective being to join the glide path at the appropriate height for the distance without recourse to level flight.

*Note: Pilots of suitably equipped aircraft may monitor their route against the approach procedures without radar control in order to better judge their descent profile against distance to touchdown. However, if doing so pilots are reminded of the need to comply with the instructions of the radar controller at all times.*
  - (iii) **Speed Control:** Adherence to speeds assigned by ATC is mandatory. Pilots should typically expect the following speed restrictions to be enforced: 220 kt from the holding facility during the initial approach phase; 180 kt on base leg/closing heading to final approach; between 180 kt and 160 kt when established on final approach and thereafter 160 kt to 4 DME. These speeds are applied for ATC separation purposes. In the event of a new (nonspeed related) ATC instruction being issued (eg an instruction to descend on ILS) pilots shall continue to maintain the previously allocated speed. All speed restrictions are to be flown as accurately as possible. Aircraft unable to conform to these speeds must inform ATC and state what speeds can be used. In the interests of accurate spacing, pilots are requested to comply with speed adjustments as promptly as is feasible within their own operational constraints. Pilots should advise ATC if circumstances necessitate a change of speed for aircraft performance reasons.
  - (iv) **Final Approach:** Time Based Separation minima are in use for wake turbulence separation in place of UK fixed distance based rules. No special crew procedures apply, and the importance of speed control adherence as described in paragraph (iii) above remains.
  - (v) **Transfer to Tower:** Pilots are to report their callsign, distance from touchdown, type of approach and runway to which they are making their approach, on transfer to Heathrow Tower, (for example, ABC123, 7 miles, ILS, Runway 27L).
  - (vi) **Runway Occupancy:** The spacing provided between aircraft will be designed to achieve maximum runway utilisation within the parameters of safe separation minima (including wake turbulence separation) and runway occupancy. It is important to the validity of the separation provided, and to the achievement of optimum runway capacity, that runway occupancy time is kept to a minimum consistent with the prevailing conditions.
  - (vii) **Missed Approach:** Missed Approach procedures are detailed on the appropriate Instrument Approach Charts. Special procedures are also detailed for use in the event of a Radio Communications Failure following Missed Approach
- (d) Radar Failure: In the event of radar failure, new instructions will be issued to each aircraft under radar control and the procedures detailed in paragraph 5 will be brought into use.
- (e) Radio Communications Failure at the ATC Unit: If radio communications fails at the ATC Unit when under radar control, pilots are to contact 'Heathrow Tower' on 118.700 MHz for new instructions.

## **EGLL AD 2.23 ADDITIONAL INFORMATION**

### **1 Mode S Barometric Pressure Setting Data**

- 1.1 London Terminal Control has the ability to downlink Mode S Barometric Pressure Setting (BPS) data. Therefore, if the downlinked pressure data is at variance with the BPS expected by Air Traffic Control, pilots can expect additional challenge. When Air Traffic Control pass a reminder of the appropriate BPS, it is anticipated that the aircrew will cross check the altimeter settings and confirm set.

### **2 Time Based Separation (TBS) for Final Approach**

- 2.1 Time Based Separation minima are in permanent use for wake turbulence separation in place of UK fixed distance based minima for wake turbulence. This change has been made on the basis of an extensive data collection campaign of measured wake vortex behaviour over a number of years at Heathrow. A system of using real time aircraft data to derive Met conditions has been proven using operational data.
- 2.2 When in stronger headwind conditions, a moderate reduction in separation distances from lead and follower aircraft may be observed in comparison to distance based wake turbulence minima. For further details, please refer to AIC P 001/2015
- 2.3 During TBS operations, RNAV (GNSS) final approach requests maybe refused by Heathrow Director to ensure runway efficiency is maintained.