Operational Safety Instruction
Low Visibility Operations

1. Introduction

1.1 Using the Instrument Landing System (ILS), Heathrow is equipped for low visibility operations to ICAO Category 3B limits. This allows suitably equipped aircraft with specially trained crews to continue operations with meteorological visibility down to 50 metres and the cloud base at ground level. Aircraft landing and departing in Category 2 and 3 limits require that the ILS Localiser Sensitive Area (LSA) and Glidepath Sensitive Area (GSA) are protected to ensure the integrity of the ILS signal. Therefore during periods of low visibility, both aircraft and vehicle movements on the manoeuvring area are restricted to safeguard aircraft operations. Further details of Low Visibility Procedures (Category II/III Operations) are in the UK Air Pilot.

1.2 All Airside companies must ensure that staff who drive on the Airside manoeuvring area understand the meaning of the term 'Low Visibility Operations'. Staff must understand the safety implications, the associated restrictions on them, and any special procedures or precautions that must be adopted when low visibility safeguarding and low visibility procedures are in force.

1.3 OSI/09/11 is hereby cancelled.

2. Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACDM</td>
<td>Airport Collaborative Decision Making</td>
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<td>AFDM</td>
<td>Airfield Duty Manager</td>
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<td>AFRS</td>
<td>Airport Fire &amp; Rescue Service</td>
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<td>AODM</td>
<td>Aircraft Operations Duty Manager</td>
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<td>AOU</td>
<td>Aircraft Operations Unit</td>
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<td>APOC</td>
<td>Airport Operations Centre</td>
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<td>ASD</td>
<td>Airside Safety Department</td>
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3. Safety Procedure

3.1 Procedures for the Activation and Cancellation of Low Visibility Operations

3.1.1 ATC is responsible for the activation and cancellation of Low Visibility Operations.

3.1.2 Activation of Low Visibility Safeguarding

3.1.2.1 ATC will inform the following agencies when Low Visibility Safeguarding is requested;
(a) Heathrow AODM  
(b) Heathrow ASD  
(c) Heathrow APOC Operations Lead Co-ordinator  
(d) Heathrow Airport Duty Engineer  
(e) Heathrow AFRS  
(f) Metropolitan Police (Heathrow)  
(g) Appropriate sections within NATS

3.1.2.2 The Heathrow APOC Operations Lead Co-ordinator will inform other APOC stakeholders.

3.1.2.3 Heathrow ASD and Heathrow AOU will then activate the processes necessary to ‘safeguard’ the airfield. This includes:

(a) Informing other nominated Heathrow Airside departments and personnel.  
(b) Informing all airfield companies holding ‘M’ or ‘R’ category driving licenses that ‘free ranging’ on the manoeuvring area has been restricted (see 3.4 below).  
(c) Works parties being asked to vacate the manoeuvring area, at the discretion of the Heathrow AfDM.  
(d) Entering a message on ACDM stating ‘Low Visibility Safeguarding in Force’.  
(e) Carrying out a visual inspection to ensure that the runway is protected.

3.1.2.4 When Low Visibility Safeguarding is complete, the ASD will inform ATC.  
**Note:** Low Visibility Safeguarding must be in place before Low Visibility Procedures commence.

3.1.2.5 Whilst ASD implement Low Visibility Safeguarding, the ATC GMC will make the following broadcast every 5 minutes until ASD confirm that Low Visibility Safeguarding is in place:  
‘Restricted Free Ranging in force, all non-essential vehicles vacate the manoeuvring area.’

3.1.2.6 Vehicles other than those listed (see 3.5.1.1 below) must then make their way off the manoeuvring area at the earliest opportunity.

3.1.2.7 As part of the process to alert airfield users to the status of the airfield,
Heathrow Campus Security will display signs stating 'Low Visibility Operations in Force' at all control posts that give access to the airfield.

3.1.3 Activation of Low Visibility Procedures

3.1.3.1 Low Visibility Procedures are introduced by ATC when the weather conditions fall below the criteria described in section 2 of this Instruction. When declaring Low Visibility Procedures, ATC will inform the following:-

(a) Heathrow AODM
(b) Heathrow ASD
(c) Heathrow APOC Operations Lead Co-ordinator
(d) Heathrow Airport Duty Engineer
(e) Heathrow AFRS
(f) Metropolitan Police (Heathrow)
(g) Appropriate sections within NATS

3.1.3.2 The Heathrow APOC Operations Lead Co-ordinator will inform other APOC stakeholders.

3.1.3.3 Heathrow ASD and Heathrow AOU will then inform all relevant airfield companies that all remaining vehicles must vacate the manoeuvring area unless under positive ATC control (in 3.4.2).

3.1.3.4 When Low Visibility Procedures come into force, and at 10 minute intervals for 30 minutes, ATC GMC will make the following broadcast;

"Low Visibility Procedures are in force, Free Ranging is suspended."

3.1.3.5 Vehicles other than those operated by Heathrow Airside Operations must then make their way off the manoeuvring area immediately.

3.2 Use of Runway Holding Points

3.2.1 Cat I runway holding points will be used by ATC until visibility drops below 1100m IRVR or 300ft cloud base, when Cat II/III holding points will be used.

3.2.2 Drivers eligible to drive on taxiways adjacent to the runways in low visibility operations (Heathrow Airside Operations) must ensure that during low visibility safeguarding they are cognisant of the possibility that ATC will switch between the
Cat I and Cat II/III holds when visibility reaches the required limit. Drivers should avoid operating between the Cat I and Cat II/III holding positions (including in grass areas) unless absolutely necessary.

3.2.3 ATC will inform ASD of their intention to switch between Cat I and Cat II/III holding points.

3.3 Cancellation of Low Visibility Operations

3.3.1 ATC will cancel Low Visibility Procedures when weather conditions improve on those in section 2 of this Instruction and advise those referred to in 3.1.3 ASD will reverse the actions carried out in 3.1.3.

  Note: The airfield may remain reverted to Low Visibility Safeguarding although Low Visibility Procedures are cancelled. ATC will inform ASD by telephone whether safeguarding remains in force, and if so, whether Cat I or Cat II/III holding points will be in use.

3.3.2 ATC will request that ASD cancel Low Visibility Safeguarding when weather conditions improve above those stated in section 2 of this Instruction ASD will reverse the actions carried out in 3.1.2.

3.4 Responsibilities of Airside Companies

3.4.1 All Airside companies are to ensure that Airside staff are trained to understand the requirements of Low Visibility Operations and that appropriate information is contained within Company Instructions/Manuals.

3.4.2 Those companies that have approval to free range on the manoeuvring area are to record/log the activation of Low Visibility Safeguarding/Procedures, and ensure auditable processes are in place to communicate this information to appropriate staff. All operators are responsible for ensuring that all staff on duty that potentially could drive on the manoeuvring area are informed of the airfield status with respect to low visibility.

3.5 Restrictions Imposed Airside in Low Visibility Conditions

3.5.1 Low Visibility Safeguarding

3.5.1.1 When Low Visibility Safeguarding is in force, ‘free ranging’ is suspended
with the exception of those listed below. All other vehicles must vacate the manoeuvring area unless carrying out essential operational tasks and are under direct ATC control.

3.5.1.2 Vehicles able to drive on the manoeuvring area during Low Visibility Safeguarding;

(a) Heathrow Airside Operations
   (i) The list of Heathrow vehicles approved to drive on the manoeuvring area during Low Visibility Operations will be maintained by the Heathrow Aerodrome Safety & Assurance Team
(b) Heathrow AFRS
(c) Airline/Ground Handlers Aircraft Tugs

3.5.1.3 Heathrow AFRS and Aircraft Tugs are restricted to the inner taxiways (as shown in Appendix A) during Low Visibility Safeguarding.

3.5.1.4 Contractors, engineering and survey teams will be withdrawn from the manoeuvring area when Low Visibility Safeguarding is implemented unless the Heathrow AfDM gives permission to remain.

3.5.1.5 The Terminal 4 Tug Road is no longer required to be closed when Low Visibility Safeguarding is in force. However, restricted free-ranging for tugs (inner taxiways only) precludes all vehicles except Heathrow Airside Operations from using the tug road during Low Visibility Safeguarding. Drivers are reminded to pay attention to signage positioned on the tug road.

3.5.1.6 Uncontrolled crossings must not be used in visibility of less than 150 metres. As a general guide, a driver must not use an uncontrolled crossing if, when stationary at the double white lines, the buildings beyond the other side of the crossing cannot be seen clearly. When necessary, an ASD Leader vehicle will be provided at key uncontrolled crossings. Crossings without the required visibility but not manned by a Leader vehicle will be closed by the ASD using barriers.

3.5.2 Low Visibility Procedures

3.5.2.1 When Low Visibility Procedures are in force, further restrictions on ‘free ranging’ are imposed. All remaining vehicles (AFRS and aircraft tugs), with the exception of specified Heathrow Airside Operations vehicles, must vacate the
manoeuvring area unless carrying out essential operational tasks and under direct ATC control.

3.5.2.2 The continued operation of Airside Operations vehicles will be kept under review by the Heathrow AfDM.

3.6 Enquiries

3.6.1 Any questions concerning this Instruction should be addressed to the Heathrow AfDM; Telephone 020 8745 7373.

4. References
ICAO Category 3B limits
UK Air Pilot, Section AD 2-EGLL,
Appendix A

Visibility 600m – 1000m, cloud ceiling <300ft.

Free ranging suspended, with the exception of Heathrow Airside Operations, the Heathrow AFRS and airline/handlers aircraft tugs. The AFRS are restricted to areas marked in blue unless they are responding to an emergency under blue lights. Aircraft tugs restricted to areas marked in blue.