Operational Safety Instruction
Aircraft Recovery Plan

It is the responsibility of all employers to ensure that relevant OSIs are brought to the attention of their staff. However, individuals remain responsible for their own actions and those who are in any doubt should consult their Supervisor or Manager.

1. Introduction

1.1 The purpose of this Instruction is to advise Airlines and Aircraft Operators of the information requirements placed on them prior to operating at Heathrow.

1.2 These requirements are derived from ICAO Annex 14 Aerodromes, European Aviation Safety Agency Acceptable Means of Compliance and UK Civil Aviation Authority Requirements which require aerodromes to establish a plan for the removal of a disabled aircraft on or adjacent to the movement area. Heathrow does this by placing a requirement on airlines and aircraft operators to have adequate procedures in place to comply with the Airport Emergency Procedures.

1.3 This Instruction forms part of the Heathrow Airport Aerodrome Manual.

1.4 This Instruction replaces OSI/21/12 which should now be deleted.

2. Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAIB</td>
<td>Air Accidents Investigation Branch</td>
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<tr>
<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>Airfield Ops</td>
<td>Airfield Operations</td>
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<td>ICAO</td>
<td>International Civil Aviation Organisation</td>
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<tr>
<td>MPS</td>
<td>Metropolitan Police Service</td>
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<tr>
<td>PIC</td>
<td>Police Incident Commander</td>
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www.heathrow.com/airside

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3. Safety Procedure

3.1 General

3.1.1 The primary aim of an aircraft recovery plan is to ensure that, in the event of an incident or accident, the aircraft or wreckage does not constitute a danger or obstruction to the public or to air navigation, and that normal airport facilities are restored as soon as possible. The need to avoid causing further damage to the aircraft or to airport property must be observed as far as is practicable.

3.1.2 In the case of a reportable accident, within the meaning of the Civil Aviation (Investigation of Air Accidents & Incidents) Regulations 1996, the AAIB of the Department for Transport must be notified of an aircraft accident or serious incident. The cause of the accident or serious incident may take some time to determine and may extend beyond recovery of the aircraft wreckage. In this period of uncertainty, as to the cause, the responsibility for the preservation of evidence and the security of the aircraft or wreckage rests with the AAIB and the MPS. Therefore, Heathrow will not be permitted to examine, interfere or move the aircraft or wreckage until permission has been given by the AAIB and the MPS in partnership with the Coroner (where there are fatalities).

3.1.3 A cordon will be established around any crashed aircraft or wreckage by the MPS. The MPS in cooperation with the AAIB will seek to establish if any criminal offences have been committed and will require the scene to remain sterile so that recovery of evidence can take place, particularly if any injuries or deaths have occurred. The AAIB, in consultation with the MPS may give Heathrow permission to gain access to the site for the purpose of planning the recovery operation during their initial investigations.

3.1.4 The recovery of a disabled aircraft/wreckage will not be undertaken until the MPS and the AAIB in partnership with the Coroner (where there are fatalities), give permission for removal. The need for the return to normal operations may mean that significant evidence remains within the aircraft and its wreckage and therefore recovery operations will be coordinated through the AAIB and the MPS in cooperation with Heathrow, the aircraft operator, the aircraft insurers and any other organisation called to assist such as the Military Joint Aircraft Recovery and Transport Squadron.

3.1.5 The recovery of a disabled aircraft/wreckage will not be undertaken until the Aircraft Accident or Aircraft Ground Incident as defined in the Heathrow Emergency Orders has been cancelled.
3.1.6 The AAIB working with the Heathrow Airfield Ops will provide overall co-
ordination throughout the recovery operation.

3.2 Responsibilities of Airport Airline & Aircraft Operators

3.2.1 Airline/aircraft operators using the airport must have adequate facilities to
conduct their own recovery operations (including of disabled aircraft), or
contractual arrangements in place with another airline or organisation capable of
expeditiously removing their aircraft/wreckage.

Note: Details of these arrangements must be provided to Heathrow together with
24 hour emergency contact numbers for accountable persons, or those with
responsibility for the recovery operation. Airlines must inform Heathrow of any
changes to their aircraft recovery arrangements.
(See Appendix A – Airline/Aircraft Operator Arrangements for the Recovery of
Disabled Aircraft.)

3.2.2 The airline/aircraft operator, with the approval and under the control of the AAIB
and the MPS is responsible for funding the removal of the aircraft/wreckage as
quickly as possible after permission has been obtained.

3.2.3 The airline/aircraft operator, with approval from, and under the control of the AAIB
and the MPS is responsible for arranging the removal of the fuel from the
aircraft/wreckage together with arranging suitable storage of such, after
permission has been obtained. (Storage may need to be in a secure area until
the fuel is released by the AAIB and the MPS).

3.2.4 Where the airline/aircraft operator, has aircraft recovery arrangements in place
with another airline or organisation, the airline/aircraft operator remains
responsible for ensuring their appointed aircraft recovery agent liaises with the
AAIB, HAL and the MPS for the removal of the aircraft/wreckage as quickly as
possible.

3.2.5 The airline/aircraft operator is responsible for the provision of technical advice
(including that of the insurer), supervision, and any equipment, materials and
personnel, to facilitate the aircraft/wreckage removal.

3.2.6 The airline/aircraft operator or designated aircraft recovery agent is responsible
for making any arrangements with the UK Border Agency regarding the removal
of baggage and cargo.
3.2.7 The airline/aircraft operator or designated aircraft recovery agent is required to defray any charges for work involved in making good damage to Heathrow property. This includes charges to meet the cost of their recovery operation, and any charges for the use of Heathrow equipment and personnel.

3.2.8 If the airline/aircraft operator or designated aircraft recovery agent should refuse to remove a damaged aircraft/wreckage or fail or neglect to do so within a reasonable time, and the aircraft/wreckage is creating either an obstruction, an embarrassment or nuisance to Heathrow in fulfilment of its responsibilities as an Aerodrome Licensee, Heathrow will undertake independent action to remove the aircraft/wreckage. Heathrow, its servants or agents, will not accept responsibility for any loss or damage of any kind resulting from this action and the airline/aircraft operator shall be responsible for all costs incurred.

3.3 Responsibilities of Heathrow

3.3.1 The Heathrow AfDM will liaise with the AAIB and the MPS and, under their direction coordinate with all interested parties at the scene as soon as is practicable. Heathrow may invite specialist engineers of other airlines to meet as required. This group is expected to be able to offer advice and assistance on the formulation and implementation of a recovery plan.

3.3.2 Responsibility for reporting an accident that occurs at or adjacent to an aerodrome rests with the Airport Authority and therefore the AfDM will be responsible for notifying the AAIB of any reportable incidents.

3.3.3 The AfDM will liaise with the MPS Scene Commander to ensure the safeguarding (cordon – by the MPS or Heathrow) of the aircraft and any wreckage thereof, and also to ensure that unauthorised persons do not enter the area and hamper recovery operations.

3.3.4 The AfDM, in consultation with the AAIB and the MPS, will be responsible for defining the area in use for recovery operations. This will include the arrangements for personnel and equipment to proceed through Airside security to and from the area access points, and for promulgating any limitations which may exist.
3.3.5 In the event of additional resources from an outside organisation being needed for the recovery operation, Heathrow will, where possible, give advice on where this might be obtained.

3.4 Responsibilities of NATS

3.4.1 NATS Telecommunications are responsible for providing advice regarding any degradation of protected areas of radio navigational aids for aircraft, in respect of any recovery operations.

3.5 Recovery – First Actions

3.5.1 No recovery may be undertaken until the declared emergency (of the Emergency Orders) has been cancelled and the AAIB and the MPS have agreed the cancellation. Once this has occurred, the Fire Incident Commander will hand over control of the incident site to the AAIB/MPS in consultation with the AfDM. The Fire Incident Commander will advise them of all known damage to the aircraft and whether it was caused through the accident or through rescue work.

3.5.2 In the case of a reportable accident, the aircraft or wreckage will not be permitted to be moved or interfered with until the AAIB and the MPS have been consulted in partnership with the Coroner (where there are fatalities).

3.5.3 To ensure any investigation is not hampered, the wreckage should immediately be placed under the guard of the Police (or Heathrow if appropriate) to stop unauthorised removal.

3.5.4 Removal of wreckage prior to the AAIB investigation may be required in order to alleviate any immediate danger or obstruction to the public, air navigation or other transport. It will only be removed on the authority of the AAIB. The AfDM will request authority from the AAIB and will notify the AAIB of the removal as soon as possible. The Heathrow AfDM will ensure that every effort is made to mark and photograph the position of components before removal.

3.5.5 The AfDM will record all action taken and (in consultation with the AAIB and/or the MPS) arrange the following:-

3.5.5.1 The cordonning off of the site to prevent unauthorised access.

3.5.5.2 Access to the site for authorised personnel, ensuring personal health
and safety is taken into account. Any authorisation will be given by the Heathrow AfDM in consultation with the AFRS/PIC/London Fire Brigade.

**Note:** It is crucial that a focal point for a joint AFRS/Airfield Operations approach is identified and maintained throughout the incident.

### 3.5.5.3 The promulgation of changes to facilities as a result of the incident and/or the recovery operation.

### 3.6 The Recovery Operation

**3.6.1** The AfDM will convene the meeting outlined in 3.3.1 and agree the broad plan of action.

**3.6.2** At the on-site meeting the following factors are likely to be considered:

1. **3.6.2.1** AAIB and MPS requirements for the preservation of evidence during the move of the aircraft.

2. **3.6.2.2** The agreed location to recover the aircraft to, and an appropriate route through the airport.

3. **3.6.2.3** Confirmation that the aircraft/wreckage is electrically safe (i.e. the aircraft batteries have been removed or earthed and electrical services in the area isolated). Confirmation that the aircraft oxygen system has been isolated.

4. **3.6.2.4** Any residue of liquid fuel is neutralised to prevent contamination and/or ignition during the recovery operation.

5. **3.6.2.5** The damage to the aircraft and how the recovery operation should be attempted.

6. **3.6.2.6** If the aircraft is raised, whether it would be possible to tow it on its own landing gear.

7. **3.6.2.7** The firmness, condition and slope of the site and how it to effect the most practical method of lifting the aircraft, if required.

8. **3.6.2.8** The lifting equipment (e.g. inflatable bags, slings, hawsers, jacks etc.)
that may be required on the advice and decision of aircraft technical experts.

3.6.2.9 The moving equipment that may be required.

3.6.2.10 The need for temporary load bearing access roads for:-

(a) Facilitating de-fuelling  
(b) The movement of baggage and freight vehicles  
(c) The movement of cranes and other recovery vehicles  
(d) The movement of the aircraft onto firm ground

3.6.2.11 Consideration of the effect on the centre of gravity, of structural damage to the aircraft, and also any measures taken to lighten it.

3.6.2.12 Possible requirements to reduce the height of wreckage (e.g. removal of the tail-fin) - if only to remove an obstruction to other aircraft operations.

3.6.2.13 Provision of support to avoid uncontrolled and sudden movement during lifting operations.

3.6.2.14 Safety precautions to safeguard personnel during lifting and all other stages of the operation.

3.6.2.15 Timing the removal of the aircraft away from the scene to minimise disruption of normal traffic arrangements.

3.6.2.16 Consideration of the potential for hazards associated with fire and impact damaged materials, including Polymer Composites, and the appropriate control measures required for the personnel involved.

3.6.2.17 Consideration that the aircraft/wreckage being moved may be required to be forensically examined offsite. It therefore should be handled appropriately to best preserve evidence including such things as fingerprints and DNA.

3.6.2.18 Consideration of the requirements of the AAIB for particular items to be preserved intact for examination, after they have been moved from the site.
3.7  Post Event Discussion

3.7.1  At a suitable date after completion of the recovery operation, the Head of Airside will convene a meeting of all interested parties to consider what lessons may be learned from it. Photographs, the video record and log of events will, if possible, be made available for discussion. (It is critical that all parties involved in an incident attend this meeting).

3.8  Enquiries

3.8.1  Any questions on this Instruction should be directed to the Heathrow AfDM on 020 8745 7373 or ext. 657373.

4.  References

ICAO Annex 14 Aerodromes
EASA Acceptable Means of Compliance
UK CAA Requirements
Heathrow Airport Aerodrome Manual
Appendix A – Disabled Aircraft Removal

Airline / Aircraft Operator Arrangements for the Recovery of Disabled Aircraft

Introduction

It is essential that Heathrow maintains up to date records regarding airline call-out and aircraft recovery arrangements.

General

With the aim of minimizing disruption to all airport users, it is essential that an aircraft which becomes immobilized on the airfield, particularly on the runways, is recovered as quickly as possible. The responsibilities for the recovery of an immobilized aircraft are described in the ICAO Airport Services Manual document, Part 5, Removal of Disabled Aircraft:

It is vital that all operators using or intending to use Heathrow have a contract or memorandum of understanding with the company or body capable of removing any of their aircraft types if it becomes immobilized. IATA and ICAO support this view which is also endorsed by the Executive Committee of the Airline Operators’ Committee (AOC).

Airlines / Aircraft Operators using Heathrow Airport are required to complete the attached Appendix B questionnaire and return it to the address on the form by post or fax or email. A further questionnaire must be completed and sent to HAL whenever changes occur to their aircraft recovery arrangements.

Appendix B – Disabled Aircraft Removal - Questionnaire
## To be completed by Airlines / Aircraft Operators using Heathrow Airport

<table>
<thead>
<tr>
<th><strong>Airline / Aircraft Operator</strong></th>
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<tbody>
<tr>
<td>Please include airport address and contact details</td>
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<table>
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<tr>
<th><strong>Appointed Removal Agent</strong></th>
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<tr>
<td>Confirm agent capable of removing a disabled aircraft at Heathrow</td>
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<thead>
<tr>
<th><strong>Type of Removal Agreement</strong></th>
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<tbody>
<tr>
<td>1. Contract</td>
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<tr>
<td>2. Memorandum of Understanding</td>
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<tr>
<td>3. Other (please specify)</td>
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<tr>
<th><strong>Date agreement made</strong></th>
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<tr>
<th><strong>Date agreement expires</strong></th>
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<table>
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<tr>
<th><strong>Emergency Contact Details</strong></th>
<th>Name:</th>
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<tbody>
<tr>
<td>Please provide contact details of person to be contacted in the event of an emergency at Heathrow (24 hour coverage required)</td>
<td>Work Contact:</td>
</tr>
<tr>
<td></td>
<td>Home Contact:</td>
</tr>
<tr>
<td></td>
<td>Mobile Contact:</td>
</tr>
</tbody>
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<thead>
<tr>
<th><strong>Authorised Person</strong></th>
<th>Name:</th>
</tr>
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<tbody>
<tr>
<td>Please provide details of company representative that is empowered to complete form of indemnity (24 hour coverage required)</td>
<td>Work Contact:</td>
</tr>
<tr>
<td></td>
<td>Home Contact:</td>
</tr>
<tr>
<td></td>
<td>Mobile Contact:</td>
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<tr>
<th><strong>Equipment and Staff</strong></th>
<th>Name:</th>
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<tbody>
<tr>
<td>Please provide details of any equipment by the company and which is readily available at Heathrow to be used in a disabled aircraft removal. Please also provide details of staff trained and competent to use this equipment.</td>
<td>Work Contact:</td>
</tr>
<tr>
<td></td>
<td>Email Address:</td>
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<td></td>
<td>Mobile Contact:</td>
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<thead>
<tr>
<th><strong>Form completed by:</strong></th>
<th>Name:</th>
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<tbody>
<tr>
<td>Position in Company:</td>
<td>Work Contact:</td>
</tr>
<tr>
<td>Email Address:</td>
<td>Mobile Contact:</td>
</tr>
</tbody>
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Please return completed questionnaire to:

**Nigel Houlton**, Airfield Duty Manager, Airside Safety Department, Airside Operations Facility, Building 16887, Heathrow Airport Ltd. Email: nigel_houlton@heathrow.com