Ground Operations

Operational Safety Instruction
Airside Cleanliness & FOD Management

21st February 2024

ASGrOps_OSI_081

Version 2.0

> 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 This Operational Safety Instruction (OSI) informs the airport community of the dangers/hazards Foreign Object Debris (FOD) presents in the airside environment. It also provides instructions on the appropriate response measures to FOD to promote airside cleanliness.

Airside cleanliness and FOD prevention is **everyone's** responsibility.

1.2 Foreign Object Debris (FOD) is an inanimate object which has no operational or aeronautical function and which has the potential to be a hazard to aircraft operations.

1.3 The list below (non-exhaustive), are typical examples of how FOD can be generated:

- Failure to properly clean areas and account for removed objects, nuts, bolts, paper, plastic, drink containers/cups/cans, rags, loose surface fragments, baggage components/tags, aircraft waste, catering equipment etc. used during the performance of any task.

- Inadequate housekeeping.

- Clean-up operations after severe weather.

- Failure to account for tools and parts.

- Failure to maintain ground support equipment, i.e. parts break off or fall off.

- Airfield works in progress/construction sites.

1.4 Everyone is responsible for ensuring the airside environment is kept in a clean condition that is free of FOD and contaminants. The most frequently found examples within the airside environment are (non-exhaustive):

Objects	Materials	Substances
Cans and bottles, Nuts and bolts, Tools, Handheld equipment,	Plastic/waste bags, Cargo straps, Wrapping material, Damaged baggage tags, Damaged equipment, Surface breakup/erosion,	Vehicle oil and fuel leaks, Excess sawdust/gravel, Jet A-1 fuel leaks and overflow,

1.5 This OSI should be read in conjunction with the following:
- ASEnv_OSI_059 Spillage and Incident Reporting Procedures
- ASEnv_OSI_058 Waste Management & Disposal including Aircraft Catering Waste
- ASENV_OSI_062 Disposal of Pollutants, Oils and Lubricants and Other Hazardous Wastes

1.6 Red bars have been added to the left-hand side of this document to draw the reader's attention to where changes or clarifications have been incorporated.

2. Definitions

Abbreviation	Description
APOC	Airport Operations Centre
FOD	Foreign Object Debris
HAL	Heathrow Airport Limited
PPE	Personal Protective Equipment
POL	Pollutants, Oils and Lubricants

3. The Dangers of FOD and Contaminations

3.1 Risk to personnel airside
FOD and contamination in the airside environment present a slip, trip, and fall hazard to all airside users, including passengers. Removing walkway obstructions, loose items and storing equipment securely all help to reduce the risk of injury. All airside colleagues must wear personal protective equipment as per ASGrOps_OSI_042 Use of Personal Protective Equipment Airside.

3.2 Risk to Vehicle/Equipment
FOD and contamination on roadways and stands can cause damage to vehicles and ground service equipment. Cosmetic damage, tyre damage (including punctures) and loss of traction/control (and the potential collateral damage to aircraft and personnel airside) are all risks that can be mitigated by effective FOD management.

3.3 Risk to Aircraft Safety

The ingestion of FOD into an aircraft engine and/or aircraft struck by FOD can cause extensive damage. This impact can vary from delays and cancellations to complete engine failure and, in extreme cases, loss of life. In addition, jet blast and prop wash can lift and accelerate small fragments of FOD (creating 'flying debris') that can damage vehicles/equipment and injure personal airside.

3.4 Adverse weather

Adverse weather and strong wind conditions increase the likelihood of FOD being spread across the airfield. In such situations, both lightweight materials (plastic bags, food packaging, etc.) and larger/heavier objects (baggage containers, unsecured equipment, etc.) pose a risk. Furthermore, vigilance from all airside users about the potential damage to infrastructure and subsequent debris is required. For more information, please refer to ASWeather_OSI_054 Adverse Weather.

3.5 Wildlife attractants

Incorrect disposal of food/drink containers and food waste in the airside environment can attract wildlife. Therefore, airside cleanliness is essential to prevent habitualisation and reduce the likelihood of wildlife strikes. For more information, please refer to ASWHM_OSI_077 Wildlife Hazards and Reporting.

4. Safety Process

4.1 All airside users are responsible for ensuring that a FOD-free environment and spillages/contaminates are reported to maintain airside cleanliness. Therefore, all companies must have staff training and procedures that reflect these responsibilities. For more information, please refer to ASGrOps_OSI_041 Minimum Induction Training for Staff Operating Airside.

4.2 Green FOD bins are located around the airside areas and at the head of each stand, as shown below:

These bins are for **FOD disposal only** and not for generic, catering, POL or hazardous waste. Waste generated during the turnround process must be disposed of by operating companies via their own waste providers.

4.3 If a FOD bin is full or damaged, contact HAL Airfield Operations on 020 8745 6024.

Contact Airfield Operations in the following situations:
- Item of FOD is seen in an area to which that person is not permitted access.
- FOD is not safe to handle (incorrect PPE, dangerous location, etc.).
- FOD that cannot fit inside the FOD bin.
- A surface defect/breakup is identified to have the potential to generate FOD.
- FOD poses an immediate risk to aircraft safety, and the situation cannot be resolved without the assistance of Airfield Operations.

4.4 FOD fences are installed across the airfield to help prevent the spread of FOD on the manoeuvring area and runway safeguarded areas (as shown). Contact Airfield Operations if a FOD fence is damaged or objects are trapped in a FOD fence.

4.5 HAL mandates that every airline/handling agent has operating procedures in place which ensure that pre-arrival and post-departure FOD checks of the aircraft stand are conducted. For more information, please refer to ASGrOps_OSI_021 Aircraft Arrival Procedure on Stand and ASGrOps_OSI_023 Aircraft Departure Procedures Off Stand.

4.6 Any safety management shortfalls or close calls (e.g. fuel spills, trips, slips) are reported through HAL reporting systems. For details, please refer to ASSMS_OSI_067 Airside Incident and Accident Reporting and ASSMS_OSI_065 Mandatory Occurrence Reporting.

4.7 If an item of FOD is suspected of having come from an aircraft part, contact Airfield Operations immediately. Provide the following details as a minimum:
- The approximate location
- Description of item
- Details of the suspected aircraft (airline, type, registration, etc.)
- Contact details of the person making the call.

Do not touch or move the item until a member of Airfield Operations arrives, as it may be used as evidence in further investigations.

4.8 All vehicles must be inspected to ensure that anything carried in or on the vehicle and all doors/trailers are secured. All vehicles must be maintained in a serviceable condition. For further information, please refer to ASDRVE_OSI_005 Vehicles and Equipment Airside - Operation.

4.9 If a vehicle or piece of equipment is leaking any substances, then it must **not** be moved and a call to APOC must be made immediately on 020 8759 1212 or 222 if using a HAL

extension. Airfield Operations may attend the location to prevent spreading the spillage across other areas of the airfield and, more importantly, contaminating aircraft equipment (tyres). The appropriate spillage response and alerting process is detailed in ASEnv_OSI_059 Spillage and Incident Reporting Procedures.

4.10 In certain situations, and at Airfield Operations' discretion, the stand can be cleaned with the aircraft in situ to minimise the operational delay. The appropriate spillage response and alerting process is detailed in ASEnv_OSI_059 Spillage and Incident Reporting Procedures.

4.11 Periodically, unoccupied stands may be withdrawn from service for routine cleaning by Airfield Operations. However, this **does not** remove the responsibility of ground personnel to conduct stand inspections before aircraft arrival and post-departure as per Section 4.5.

4.12 Companies may be required to remove equipment from stands and equipment parking areas to facilitate routine and/or ah-doc cleaning. Airfield Operations may also request that the aircraft be towed off the stand.

5. Enquires

Any enquires relating to this instruction should contact HAL Airside Operations on 020 8745 6024 or email airside@heathrow.com.

6. References

IATA Ground Operations Manual Edition 12
IATA Airport Handling Manual Edition 43
ASGrOps_OSI_041 Minimum Induction Training for Staff Operating Airside

ASGrOps_OSI_042 Use of Personal Protective Equipment Airside

ASDRVE_OSI_005 Vehicles and Equipment Airside – Operation

ASGrOps_OSI_021 Aircraft Arrival Procedure on Stand

ASGrOps_OSI_023 Aircraft Departure Procedures Off Stand

ASWHM_OSI_077 Wildlife Hazards and Reporting
ASWeather_OSI_054 Adverse Weather

ASEnv_OSI_059 Spillage and Incident Reporting Procedures

ASEnv_OSI_058 Waste Management & Disposal including Aircraft Catering Waste
ASEnv_OSI_062 Disposal of Pollutants, Oils and Lubricants and other Hazardous Wastes
ASSMS_OSI_067 Airside Incident and Accident Reporting
ASSMS_OSI_065 Mandatory Occurrence Reporting

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Document History

Revision	Description of Change	Date
v1.0	**Initial version**	**7th June 2018**
v2.0	**Full document review and updates to procedures, including new sections about the Dangers of FOD & Contaminations and Safety process.**	**21st February 2024**