



Ground Operations

Operational Safety Instruction

Airside Cleanliness & FOD Management

7th June 2018

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v1.0

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** Foreign Object Debris', abbreviated to FOD, is a potential source of catastrophic damage to aircraft - particularly engines. FOD can also be a tripping or slipping hazard resulting in injury to personnel and passengers.
- 1.2** The purpose of this instruction is to ensure that all airport personnel understand the dangers to flight safety that foreign objects debris presents, and the measures that must be taken to reduce the hazard.
- 1.3** Items of FOD most frequently found on the airside areas are plastic bags, empty oil cans, used security tags, drink cans or bottles, nuts and bolts, tools, baggage tags and abandoned equipment. A CAA study has shown that it is not only items arising from aircraft turnarounds that generate FOD. Tools and other items associated with engineering and servicing of aircraft have been left in wheel bays and other ledges, including engine cowlings, where they can subsequently fall out and create a hazard.
- 1.4** OSI_001 Stand Cleaning and OSI_002 Foreign Object Debris on the Airside Areas are hereby cancelled as this OSI replaces them.

2. Definitions

Abbreviation	Description
ASD	Airside Safety Department
CAA	Civil Aviation Authority
FOD	Foreign Object Debris



3. Safety Procedure

- 3.1** A fundamental element of the safety effort is to maintain the airside areas in a clean condition that is free of debris.
- 3.2** Items of debris can cause damage to various parts of an aircraft, including tyres, engines and the airframe. Such damage can have severe consequences for flight safety.
- 3.3** FOD ingestion into an aircraft engine can cause damage leading to engine failure, which can be particularly critical during the take-off phase. In extreme cases FOD can lead to loss of aircraft and life. At a less severe level, FOD damage can cause flight delays, cancellations and increased maintenance.
- 3.4** When strong wind conditions are experienced, the first problems encountered are of light FOD being carried across the airfield, causing engine ingestion threats to aircraft on stands, taxiways and runways. Plastic bags and sheeting are problems. As wind speeds rise, baggage containers, unsecured equipment, large debris (mostly from the aprons) can be blown across the Movement Area causing a damage hazard to aircraft in all areas. There is also a risk of personal injury and damage to vehicles and equipment from 'flying' debris.
- 3.5** Slips and trips may be caused by a variety of obstructions, loose items and defects in walkways, stairs and other areas. Loose items include FOD, as well as improperly stowed cables which can also cause people to trip over. Slips can also be caused by spillages.

4. Responsibilities

- 4.1** It is the responsibility of all airside users to take adequate measures to ensure the safety of aircraft, vehicles and persons using the airside areas.
- 4.2** It is the direct responsibility of all airlines, handling agents, fuelling companies, cleaning companies, catering companies, engineering operatives / contractors and all other users of the aerodrome to ensure that a FOD-free environment is maintained. All companies must have staff training and procedures that reflect these responsibilities.



- 4.3** Every individual member of staff working airside has a responsibility to ensure that the risk of damage to aircraft from FOD is minimised. Heathrow Airport provides FOD bins at the head of each stand and compactors strategically located around the airside areas.
- 4.4** Vehicles and equipment airside should be maintained in a clean and serviceable condition, not only for reasons of safe vehicle operation but also to minimise the leakage of fluids and depositing of FOD from these vehicles.
- 4.5** Any item of FOD found by a staff member during their work should be removed and placed in the FOD bins or compactors provided.
- 4.6** Any item of FOD seen in an area to which that person is not permitted access, or is too big to handle, must be reported to the Airside Safety Department (ASD) on 020 8745 6024/6459.
- 4.7** It is essential that each Airline/Handling Agent has operating procedures in place which ensure that FOD checks of the aircraft stand are made prior to the arrival of the aircraft and after the aircraft has pushed back.

5. Vehicles on the Manoeuvring Area

- 5.1** Before proceeding from one part of the airport to another via a route that crosses the movement area, all vehicles must be inspected to ensure that anything carried in or on the vehicle is secured. All doors and tail or side boards must be securely shut and no part of the vehicle or trailer is loose and likely to become detached.

6. Spillages

- 6.1** All spillages must be reported to the Airside Safety Department, who will ensure that an appropriate clean-up operation is carried out.
- 6.2** If a vehicle or piece of equipment is leaking a chemical substance then it should not be moved, and ASD must be called to attend the location in order to prevent spreading the spillage across other areas of the airfield.



7. Routine Airside Cleaning

- 7.1** Stands may be withdrawn from service at times for routine cleaning.
- 7.2** Additionally, when weather permits, 'deep cleaning' of stands is undertaken using a schedule which includes all stands and equipment areas.
- 7.3** It may be necessary to undertake the ad-hoc cleaning of small areas, when considered necessary for safety reasons by the Airside Safety Department (ASD). When such cleaning is in progress on a stand it will be unserviceable and not available for aircraft parking. The stand will be checked by ASD prior to any aircraft entering the stand after cleaning is completed. This does not, however, remove the responsibility of ground personnel to carry out stand inspections prior to aircraft arrival and post departure.
- 7.4** In the event that a spillage occurs – fuel, oil, effluent, decant etc. – while an aircraft is parked on stand, a decision may be undertaken to clean the stand with the aircraft in situ.
- 7.5** Companies will be required by the ASD to remove equipment from stands and equipment parking areas to enable cleaning to be carried out. ASD may also request that the aircraft be towed off stand to facilitate cleaning. Prompt compliance with these requirements increases the amount of cleaning achieved and thus enhances safety. Vehicles and equipment which are not removed upon request may be subject to an Airside Occurrence Notice and charges levied for additional cleaning.

8. References

9. Enquires

- 9.1** Any enquires relating to this instruction should contact the Airside Safety Department on 020 8745 7373.

