

Foreign Object Debris Policy

Airside Operational Instructions (AOI) 39

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❖ **AMENDMENTS**

This document will be subject to a routine review, over a period not exceeding 36 months. The latest version will be included in the annual reissue of the Aerodrome Manual; interim reviews are carried out as deemed necessary.

Only operational related amendments will prompt the issue of a new Version; pertinent amendments being highlighted in **green** text & indicated by a **green** bar in the right margin. Indication of any amendment of an administrative nature will be listed below.

❖ **REVIEW / AMENDMENT HISTORY**

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1. INTRODUCTION

1.1 PURPOSE

This AOI highlights the risks associated with Foreign Object Debris (FOD); and advises the control measures, responsibilities and requirements for the effective management of FOD on and in the vicinity of the operational areas of the Airport.

2. FOD RISK

2.1 TYPES OF FOD

FOD typically falls into two main categories:-

- FOD on the Runway consists largely of aircraft parts; typically, small metal panels or metallic honeycomb structures and tools, torches and equipment, including wheel chocks
- FOD on Taxiways and Aprons is usually associated with vehicles and smaller items associated with passenger baggage, catering and cargo handling equipment, or is from adjacent works sites

2.2 AWARENESS

It is important to keep the Runway, Taxiways and Aprons clear of loose stones or other objects and debris that could cause damage to aircraft or engines; or impair the operation of aircraft systems.

Turbine engines are extremely susceptible to damage as a result of foreign object ingestion. Propellers, aircraft skin and tyres have all been damaged as a result of loose stones or debris becoming dislodged by jet blast, slipstream or tyre action.

Serious accidents have resulted from tyres being punctured by a metal object on a runway. Grit used on icy runways has led to control surface jamming; wet tar ingestion has led to engine failure.

At all times, debris on the Movement Area of an aerodrome is a potential hazard to aircraft safety. An aborted take-off brought about by an engine failure or a wheel / tyre failure is particularly likely to result in debris being left on the Runway.

3. RESPONSIBILITY

3.1 PREVENTION

The prevention of FOD-related incidents is an essential responsibility of all Airport operators and users.

All personnel involved in operations on the Aerodrome Movement Area, maintenance hangars and aircraft turn rounds have equal responsibility to ensure that their particular operation does not give rise to FOD. Likewise, every member of staff should act when they detect FOD; either by removing it, should that be safe so to do; or reporting it immediately to the Airport authority.

3.2 AIRPORT OPERATORS

Aerodrome and aircraft operators, maintenance and ground handling organisations should include FOD prevention in their induction and continuation training programmes, for all Airside maintenance and hangar staff. Specific procedures for the elimination of the risk of FOD should be implemented and working practices that pose a high risk of FOD should be reviewed regularly.

Responsibility for the safe condition of vehicles / equipment, inspection regime, servicing and maintenance and the rectification of defects and the maintenance of the safety inspection records lies with the operator.

3.3 WASTE DISPOSAL

The widespread use of polythene bags and sheets on Aprons is another potential source of damage to engines through ingestion. Suitably covered receptacles for such litter should be provided in sufficient numbers by Airport based companies. Similar receptacles should also be provided on all vehicles, which use the Movement Area on a routine basis.

4. FOD INCIDENTS

4.1 REPORTING

All Airport based companies / flight crews are required to immediately report to ATC, any incident during taxi, take-off or landing, which might result in a part of the aircraft's structure becoming detached and left behind on the Runway or Taxiways.

Ground engineering staff are required to collaborate by reporting to ATC, minor damage to aircraft, which may have left debris on the Runway or have been caused by FOD. Failure to make these reports to ATC could mean that debris remains on the Runway or Taxiways for longer than would otherwise be the case and thus, particularly at night, constitute an avoidable hazard to other aircraft taking off and landing.

4.2 FOLLOW-UP ACTION

Whenever debris is reported on the Movement Area, a take-off is abandoned due to engine, tyre or wheel failure; or whenever an incident occurs that is likely to result in debris being left in a hazardous position, the relevant Runway, Taxiway or Apron is to be inspected / swept and any debris removed before any other aircraft is allowed to use it.

5. MANAGEMENT

5.1 INSPECTIONS

The Airport follows a robust schedule of Aerodrome inspections, maintenance activities and matters arising from such; these actions are formally documented and records maintained for future reference. Each inspection has a reporting mechanism to ensure the appropriate actions are taken.

Reports include details of:-

- The Task(s)
- Any Remedial Action(s) necessary or taken
- The person / Agency responsible for undertaking the task and/or further action
- The proposed Timescale by which it should be completed

Inspections are carried out in accordance with a daily, monthly and 6-monthly regime. Full details are contained in AOI 02; Movement Area Inspection and Reporting.

5.2 SWEEPING

The Airport follows a robust sweeping schedule of all Aerodrome surfaces, to minimise the risk of FOD and provide the best level of assurance that all areas are maintained FOD free. These actions are formally documented and records maintained for future reference.

Each sweeping operation has a reporting mechanism to ensure that appropriate actions are taken, in the event of additional surface remedial works being required.