

Issued: 11 April 2014

## **Aircraft Loading Errors and the Reporting of Related Occurrences**

**This Information Notice contains information that is for guidance and/or awareness.**

Recipients are asked to ensure that this Information Notice is copied to all members of their staff who may have an interest in the information (including any 'in-house' or contracted maintenance organisations and relevant outside contractors).

| <b>Applicability:</b>                 |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| <b>Aerodromes:</b>                    | All Aerodrome Operators that conduct related ground handling activities |
| <b>Air Traffic:</b>                   | Not primarily affected                                                  |
| <b>Airspace:</b>                      | Not primarily affected                                                  |
| <b>Airworthiness:</b>                 | Not primarily affected                                                  |
| <b>Flight Operations:</b>             | All Aeroplane AOC Holders                                               |
| <b>Licensed/Unlicensed Personnel:</b> | All Ground Handling Personnel                                           |

### **1 Introduction**

- 1.1 This Information Notice has been published to provide a further reminder to operators and ground handling personnel that aircraft loading errors remain a major hazard to flight safety.
- 1.2 Over recent years, there have been numerous accidents and incidents when control of aircraft was either lost or compromised, sometimes with fatal consequences. Continual review of these accidents and incidents has identified the prevalent types of error, their likely causes and recommended risk mitigation considerations as detailed below.
- 1.3 It has been noted that the reporting of aircraft loading error related occurrences, from industry to the CAA, has been inconsistent. It was subsequently established that further guidance to assist with the reporting, assessment and analysis of related incidents may be required in order to establish trends and determine the areas of required focus.
- 1.4 This Information Notice supersedes FODCOM 20/2010.

### **2 Types of Loading Errors**

#### **2.1 Overview**

- 2.1.1 Incident reports continue to identify that loading errors mostly fall within two categories:
  - 1) load not correctly secured; and
  - 2) discrepancy between mass and balance documentation and actual load.

Incidents of this nature have the potential to compromise the safe operation of the aircraft.

## 2.2 Load Not Correctly Secured

- 2.2.1 The most common type of loading error is when traffic load, predominantly containerised, has not been correctly secured by the restraint equipment and is, in numerous instances, able to migrate during flight.
- 2.2.2 A significant number of these events concerned the inadequate securing of dangerous goods, both loose loaded and within Unit Load Devices (ULDs).
- 2.2.3 As the transportation of Electric Mobility Aids by air has become more common, the reporting of related incidents has also increased.
- 2.2.4 The majority of unsecured load incidents were only discovered on arrival at destination, although sometimes flight crews had been alerted by unusual sounds from the hold.
- 2.2.5 Occasionally, defective restraint equipment was a causal factor. In such cases, either these deficiencies were not reported to the appropriate personnel to instigate repairs or the equipment had not been routinely inspected.

**Note:** Restraint equipment refers to nets, straps, locks and ULDs used to carry traffic load.

## 2.3 Discrepancy Between Mass and Balance Documentation and Actual Load

- 2.3.1 Incident reports continue to record discrepancies between the documented masses and/or distributions of traffic load and the actual loaded masses and/or distributions. Either the aircraft were not loaded in accordance with the issued loading instructions, or the documentation produced did not reflect the actual load.
- 2.3.2 In others, changes to the load and/or distribution were not recorded or communicated to the dispatcher or flight crew.
- 2.3.3 Occasionally, traffic load that had not been accounted for on the loading documentation had remained on the aircraft for several sectors before being discovered.
- 2.3.4 In all such incidents, the aircraft departed with a mass and/or balance condition different to the flight crew's expectations.
- 2.3.5 There have also been occasions when traffic load was not correctly loaded in accordance with the regulatory, the manufacturer's and/or the operator's requirements; such as non-compliance with the requirements for the carriage of dangerous goods, exceedance of structural limitations or non-compliance with aircraft certification criteria.

**Note:** Traffic load refers to passengers, baggage, cargo, catering, spares and ballast.

## 3 Other Loading Error Related Considerations

- 3.1 Operators should also be aware of the following:

### a) Standard/Notional Baggage Masses

By noting the number and mass of 'heavy' baggage being loaded, ramp inspections have revealed that, on more than one occasion, an aircraft was potentially up to 1,000 kg heavier than documented. It was apparent that although the mass and balance calculations had been completed using standard masses, a significant number of bags were in excess of the allowable values.