

Aerodrome Pavement Strength – Overload Operations

**Issue 1
8 January 2009**

Effective: on issue

GENERAL

Overseas Territories Aviation Circulars (OTACs) are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

This Overseas Territories Aviation Circular provides guidance to aerodrome operators on establishing criteria to regulate the use of a pavement by an aircraft with an ACN higher than the PCN reported for that pavement.

RELATED REQUIREMENTS

This Circular relates to OTAR Part 139.

CHANGE INFORMATION

First issue.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Manager PQS, Air Safety Support International, to the appropriate Director or Director-General of Civil Aviation or to any office of ASSI.

1 Introduction

- 1.1 OTAR Part 139.G.23(g) states that criteria shall be established to regulate the use of a pavement by an aircraft with an ACN higher than the PCN reported for that pavement in accordance with paragraph 139.G.23(b) and 139.G.23(c).
- 1.2 This OTAC draws the attention to some information that can be used by aerodrome operators to aid in establishing such criteria.

2 Overload operation

- 2.1 ICAO Annex 14 Volume 1, Attachment A para 19 contains some information on the ACN/PCN system including guidelines for overload operation.
- 2.2 However, the ICAO Doc 9157-AN/901 Part 3, Aerodrome Design Manual, Part 3 Pavements, contains far more information on the subject, including background explanation as well as an insight in how several states have approached the subject.
- 2.3 While the occasional marginal overload operation should not result in catastrophic damage, overload operations can affect the usable lifetime of a pavement. Significant overload operations may severely affect the lifetime of the pavement, and damage can occur, particularly with very new or already very worn pavements. Other issues like frost or thaw might also influence the question.

3 Summary

The information contained in these documents should be used as basis for aerodrome operators to establish their system for control of overload operations and the necessary correlation with the aerodrome pavement maintenance programme.

4 References

ICAO Annex 14 Vol 1, Aerodrome Design and Operation.

ICAO Doc 9157-AN/901 Part 3, Aerodrome Design Manual, Part 3 Pavements.