



PURSUANT to Section 28 of the Civil Aviation Act 1990

I, Dr MICHAEL CULLEN, Acting Minister of Transport,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

This 29th day of May 2006

by

A handwritten signature in black ink, appearing to read 'Michael Cullen', written over a horizontal line.

Hon Dr MICHAEL CULLEN
Acting Minister of Transport

Civil Aviation Rules

Part 125, Amendment 9

Air Operations-Medium Aeroplanes

Docket 6/CAR/4

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Rule objective

The objective of Amendment 9 to Part 125 is to urgently update the technical requirements for the engine health and usage monitoring system (**HUMS**) that is required to be fitted to aeroplanes that are used for single engine instrument flight rules (**SEIFR**) passenger operations.

Extent of consultation

Various rules in Part 125 prescribe operating and technical requirements if a single engine aeroplane is to be operated under instrument flight rules carrying passengers. A rule development project under Docket 4/CAR/7 is currently reviewing all the rules in Part 125 that relate to SEIFR passenger operations. This review is being carried out in consultation with the technical units within the CAA, the aviation industry, single engine aeroplane manufacturers, HUMS equipment manufacturers, and other regulatory authorities (JAA & FAA). The final rule amendments from this rule development project will not come into force until late 2006.

Meanwhile applications from 2 air operator certificate holders to conduct SEIFR passenger operations in accordance with Part 125 have revealed that the technical requirements prescribed in Appendix B.8 for HUMS cannot be fully complied with. It was therefore appropriate to update the technical requirements for HUMS ahead of the other proposed rule amendments for SEIFR passenger operations.

A Notice of Proposed Rulemaking, NPRM 06-01, containing the proposed update of the technical requirements for HUMS (Appendix B.8) was issued for public consultation under Docket 6/CAR/4 on 30 March 2006. The basis for this update of the HUMS requirements prescribed in Appendix B.8 has been the consultation that has been undertaken as part of Docket 4/CAR/7 for the overall review of the rules for SEIFR passenger operations.

The publication of NPRM 06-01 was notified in the Gazette on 30 March 2006 and advertised in the daily newspapers in the five main provincial centres on 26 March 2006 and 1 April 2006. The NPRM was published on the CAA web site and mailed to 27 identified stakeholders including representative organisations who were

considered likely to have an interest in the proposal. Notification was also given to the aviation community in the 2 March 2006 Civil Aviation Rules Register Information Leaflet (**CARRIL**) and by a special CARRIL edition on 30 March 2006.

A period of 19 days was allowed for comment on the proposed rule.

Summary of submissions

No written submissions and one verbal response was received on the NPRM. The verbal response was to request information on when the proposals would come into force. Only editorial change for clarity was made to the proposals as published.

The rule as amended was referred to and then signed by the Minister for Transport Safety.

Examination of submissions

No submissions were received for this NPRM. The docket file may be examined by application to the Docket Clerk at the Civil Aviation Authority between 8:30 am and 4:30 pm on weekdays, except statutory holidays.

Insertion of Amendments

The amendments to the rules in this Part are reflected by the revocation of Part 125 Appendix B.8 and the insertion of the amended appendix.

Effective date of rule

Amendment 9 to Part 125 comes into force on 29 June 2006.

Availability of rules

Civil Aviation Rules are available from–

CAA web site: <http://www.caa.govt.nz/>

Freephone: 0800 GET RULES (0800 438 785)

Part 125 Air operations —Medium Aeroplanes

Rule B.8 in Appendix B is revoked and the following new rule is substituted:

B.8—HUMS

- (a) A HUMS must electronically record—
- (1) the period of time that the engine is running at operating RPM; and
 - (2) engine parameter data for those engine parameters that are critical to engine performance and condition, as recommended by the engine manufacturer or other appropriate organisation acceptable to the Director; and

[Note: An appropriate organisation in this application would be one that has design and maintenance knowledge of the engine type concerned.]

- (3) the engine running time during any HUMS sensing device failure; and
 - (4) every exceedance of the operating limit associated with each of the parameters recorded under paragraph (a)(2); and
 - (5) as far as practicable, any occurrence of tampering with any component of the HUMS.
- (b) A HUMS must—
- (1) have sufficient electronic memory to record all the data and occurrences required under paragraph (a) between maintenance checks; and
 - (2) store data in a manner that enables trends over time to be electronically established for the engine parameters recorded under paragraph (a)(2); and
 - (3) include a cockpit caution indication of—

- (i) any exceedance of the tolerances on the parameters recorded under paragraph (a)(2); and
 - (ii) as far as practicable, a HUMS failure including tampering; and
- (4) comply with the environmental conditions specified in RTCA Inc. document number RTCA/DO-160C; and
 - (5) comply with the software conditions specified in RTCA Inc. document number RTCA/DO-178B; and
 - (6) be capable of downloading its data to a separate ground based data storage unit.

Consultation Details

(This statement does not form part of the rules contained in Part 125. It provides details of the consultation undertaken in making the rules.)

A Notice of Proposed Rulemaking, NPRM 06-01 Single Engine IFR Passenger Operations Health and Usage Monitoring Systems Update of Technical Requirements, containing the proposed rules was issued for public consultation under Docket 6/CAR/4 on 30 March 2006.

No submissions on the NPRM were received.