

WELLINGTON NEW ZEALAND

PURSUANT to Section 28 of the Civil Aviation Act 1990

MAURICE WILLIAMSON, Minister of Transport,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

This

12 day of December

by MAURICE WILLIAMSON

Minister of Transport

Civil Aviation Rules

Part 63

Flight Engineer Licences and Ratings

Docket Nr. 1139

Civil Aviation Rules Part 63

Flight Engineer Licences and Ratings

Civil Aviation Rules Part 63

RULE OBJECTIVE, EXTENT OF CONSULTATION AND COMMENCEMENT

The objective of Part 63 is to transfer the regulation of training and licensing of flight engineers into the new Civil Aviation Rules system following the model set by Part 61 for pilot licences and ratings. The rule introduces the following changes to the existing licensing regime:

- (1) introduction of lifetime licences:
- (2) introduction of biennial flight reviews:
- (3) the use of the flight engineer logbook to record aircraft type ratings:
- (4) the introduction of Human Factors into the training and examination syllabuses:
- (5) the presentation of examination syllabuses as advisory material allowing alternative means of compliance to be considered; and
- (6) the establishing of requirements for Flight Engineer Instructor and Flight Engineer Examiner Ratings.

In May 1990 the Air Transport Division of the Ministry of Transport published a notice of intention to carry out a complete review of the aviation regulatory system. This notice, in Civil Aviation Information Circular Air 3, listed the areas in which rules would be made and invited interested parties to register their wish to be part of the consultative process. The Register was identified as the Regulatory Review Consultative Group.

A draft of Part 63 was developed by the rules rewrite team in consultation with members of the consultative group. An informal draft was published and distributed on 30 September 1994 and a period of informal consultation followed. This culminated in the issue of Notice of Proposed Rulemaking under Docket 1139 on 30 August 1995.

The publication of this notice was advertised in the daily newspapers in the five main provincial centres on 31 August 1995. The notice was mailed to members of the Regulatory Review Consultative Group and to other parties, including overseas Aviation Authorities and organisations, who were considered likely to have an interest in the proposal.

A period of 30 days was allowed for comment on the proposed rule. Three written submissions were received in response to this notice. Further discussions were held with some members of the consultative group to address various aspects. These discussions and submissions were considered and where appropriate the rules were amended to take account of the matters and issues raised.

The rules as amended were then referred to and signed by the Minister of Transport.

Part 63 comes into force 28 days after notification in the Gazette.

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Subpart A — General

63.1 Applicability

This Part prescribes rules governing-

- the issue of cadet flight engineer licences, flight engineer licences, and ratings; and
- (2) the conditions under which those licences and ratings are necessary; and
- (3) the privileges and limitations of those licences and ratings.

63.3 Requirement for licence and ratings

- (a) Each person who performs the duties of a flight engineer on a New Zealand registered aircraft within New Zealand must hold—
 - a current cadet flight engineer licence or flight engineer licence issued under this Part; or
 - (2) a current foreign cadet flight engineer licence or flight engineer licence validated by the Director.
- (b) Each person who performs the duties of a flight engineer on a New Zealand registered aircraft within a foreign country must hold—
 - a current cadet flight engineer licence or flight engineer licence issued under this Part; or
 - (2) a current cadet flight engineer licence or flight engineer licence issued or validated by the country in which the aircraft is operated.
- (c) Each person who performs the duties of a flight engineer on a foreign registered aircraft within New Zealand must hold—
 - (1) a current cadet flight engineer licence or flight engineer licence issued under this Part; or
 - (2) a current foreign cadet flight engineer licence or flight engineer licence validated by the Director; or
 - (3) a current cadet flight engineer licence or flight engineer licence issued or validated by the country of aircraft registry.
- (d) Each person, other than the holder of a cadet flight engineer licence, who performs the duties of a flight engineer on a New Zealand registered aircraft, or on a foreign registered aircraft within New Zealand, must hold a type rating for that aircraft.

- (e) Each person exercising the privileges of a flight engineer instructor listed in 63.305(a) must hold a current flight engineer instructor rating issued under this Part.
- (f) Each person exercising the privileges of a flight engineer examiner listed in 63.355(a) must hold a current flight engineer examiner rating issued under this Part.

63.5 Licences and ratings

- (a) The following licences and ratings are issued under this Part:
 - (1) Cadet flight engineer licence:
 - (2) Flight engineer licence:
 - (3) Flight radiotelephone operator rating:
 - (4) Flight engineer aircraft type ratings:
 - (5) Flight engineer instructor rating:
 - (6) Flight engineer examiner rating.
- (b) Flight engineer instructor ratings and flight engineer examiner ratings shall be shown on the flight engineer licence. All other ratings shall be shown in the flight engineer logbook but may additionally be shown on the flight engineer licence.

63.7 Exchange of terminating licence for lifetime licence

- (a) Cadet flight engineer licences and flight engineer licences issued under the Civil Aviation Regulations 1953 are deemed to be licences issued under this Part. They may be exchanged for a new licence under this Part without any further examination or test.
- (b) Ratings held on a licence issued under the Civil Aviation Regulations 1953 carry over to a licence issued under this Part and are deemed to have been issued under this Part.

63.9 Application for licences and ratings

Each applicant for the grant of a cadet flight engineer licence, flight engineer licence, flight engineer instructor rating, or flight engineer examiner rating shall complete form CAA24061/01 and submit it to the Director with a payment of the appropriate application fee prescribed by regulations made under the Act.

63.11 Issue of licences and ratings

An applicant is entitled to a licence or rating issued by the Director under this Part if the Director is satisfied that—

- (1) the applicant is a fit and proper person; and
- (2) the applicant has sufficient ability in reading, writing, speaking, and understanding the English language to enable the applicant to adequately carry out their responsibilities as the holder of that licence or rating; and
- (3) the applicant complies with all of the eligibility requirements specified in the Subpart for that licence or rating; and
- (4) the granting of the licence or rating is not contrary to the interests of aviation safety.

63.13 Duration of licences and ratings

- (a) Except as provided in paragraph (b), a licence or rating issued under this Part shall be valid for the lifetime of the holder unless it is suspended or revoked in accordance with the Act.
- (b) The Director may, where the Director considers it necessary, issue a temporary licence or rating.

63.15 Examinations

- (a) A candidate for a written examination under this Part shall-
 - (1) produce written proof of their identity; and
 - (2) gain at least 70% of the possible marks in order to pass.
- (b) A candidate for a flight test under this Part shall-
 - (1) produce written proof of their identity; and
 - (2) have a logbook record of any required training; and
 - (3) have a logbook record of any required flight experience.

63.17 Cheating or other unauthorised conduct

- (a) During any examination under this Part, no person shall, unless authorised by the conducting officer—
 - (1) copy from another person; or
 - (2) refer to any source of information; or
 - (3) communicate in any way with anyone other than the conducting officer; or
 - (4) take an examination on behalf of anyone else; or
 - (5) remove material from the examination; or

- (6) record any examination by electronic means.
- (b) Any person who performs any of the acts specified in paragraph (a) shall be liable to all or any of the following:
 - (1) failure in that subject:
 - (2) disqualification of all or any subjects already passed:
 - (3) debarment from sitting further examinations under the Civil Aviation Rules for up to 12 months:
 - (4) suspension or revocation of any licence, certificate, or rating issued to that person under this or any other Part of the Civil Aviation Rules, in accordance with sections 18, 19, and 20 of the Act.

63.19 Flight engineer logbooks – general

- (a) Each holder of a cadet flight engineer licence or flight engineer licence shall maintain a record in ink of their flight time in a logbook acceptable to the Director. Flight time entered in a logbook that has been lost or destroyed shall only be recognised by the Director if it can be substantiated by means acceptable to the Director.
- (b) The licence holder shall enter the record of their flight time in their logbook—
 - (1) within 14 days of the completion of the flight to be recorded; or
 - (2) if the licence holder is engaged in flying away from their base, within 2 days of their return to base.
- (c) The licence holder shall keep their logbook for at least 12 months from the date of the last flight time entry recorded in it.
- (d) Before the licence holder submits their logbook to the Director for any required inspection, they shall---
 - (1) on each page, total each column of entries; and
 - (2) in the spaces provided, enter their total flight experience; and
 - (3) below the last entry, certify the correctness of the entries; and
 - (4) sign the certification.

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(e) A person performing the duties of a flight engineer on an aircraft while not complying with any applicable requirement of this Part, shall not credit that flight time for any purpose.

63.21 Flight engineer logbooks - crediting flight time

- (a) The holder of a current cadet flight engineer licence or flight engineer licence may only credit flight time for a licence or rating when the type certificate of the aircraft flown requires the carriage of a flight engineer.
- (b) The holder of a current cadet flight engineer licence shall be entitled to be credited with the total flight time during which they are carrying out the duties of a flight engineer from the engineer's flight station under the direct supervision of the holder of a flight engineer instructor rating.
- (c) The holder of a current flight engineer licence shall be entitled to be credited with the total flight time during which they are carrying out the duties of a flight engineer, flight engineer instructor, or flight engineer examiner.
- (d) The holder of a current flight engineer licence when designated as a flight crew member other than a flight engineer, flight engineer instructor, or flight engineer examiner shall be entitled to be credited with the total flight time during which they are carrying out the duties of a flight engineer from the engineer's flight station.

63.23 Medical requirements

- (a) The holder of a cadet flight engineer licence or flight engineer licence issued under this Part shall not exercise the privileges of that licence unless that person—
 - (1) holds a current Class 1 medical certificate issued under Part 67; and
 - (2) complies with all medical endorsements on that medical certificate.
- (b) The holder of a cadet flight engineer licence or flight engineer licence issued under this Part shall not exercise the privileges of that licence—
 - (1) while that person has a known medical deficiency, or increase of a known medical deficiency, that would make that person unable to meet the medical standards for their medical certificate; or
 - (2) after—
 - (i) any medical procedure which involves that person being subjected to general anaesthesia; or
 - (ii) other major surgery; or
 - (iii) in the case of pregnancy, the end of the second trimester, or after delivery or termination—

until that person is assessed fit by an Aviation Medical Assessor.

- (c) Each person who exercises the privileges of a cadet flight engineer licence or flight engineer licence issued under this Part shall, on demand by the Director, any employee of the Authority duly authorised by the Director, or any sworn member of the Police—
 - (1) produce a current Class 1 medical certificate issued under Part 67; and
 - (2) on further demand by any such person, surrender such medical certificate to that person.

63.25 Biennial flight review

- (a) The holder of a flight engineer licence issued under this Part shall not exercise the privileges of that licence for more than two years from the date of the flight test required by 63.153(6), unless they have successfully completed a biennial flight review, within the immediately preceding 2 years, and a record to that effect in the form required by paragraph (c) has been endorsed in the holder's log book.
- (b) The biennial flight review required by paragraph (a) shall be conducted by the holder of a flight engineer instructor rating and shall consist of—
 - (1) a review of the current general operating rules applicable to the use of the flight engineer licence, with particular emphasis upon applicable changes introduced within the immediately preceding 2 year period; and
 - (2) flight instruction to review those procedures and tasks applicable to the use of the flight engineer licence. A flight simulator may be used for all or part of such instruction.
- (c) When the flight engineer instructor is satisfied that a biennial flight review has been successfully completed, the instructor shall enter in the flight engineer's logbook the name, number of licence and rating, and signature of the instructor; and date of completion of the biennial flight review under the following statement:

This is to certify that [name of flight engineer] has successfully completed a Biennial Flight Review in accordance with the requirements of Civil Aviation Rule Part 63.

(d) The holder of a flight engineer licence issued under this Part, who does not meet the requirements of this rule, may exercise the privileges of the cadet flight engineer licence.

63.27 Examination for continued fitness or proficiency

- (a) The holder of a licence or rating issued under this Part shall, when required by the Director and within such period as the Director may determine, undergo a medical or other examination or test to demonstrate their continued fitness or proficiency in the capacity for which the licence or rating is held.
- (b) Any medical or other examination or test required by the Director under paragraph (a) shall consist of such part or parts of the medical or other examination or test required by this Part as the Director may determine.
- (c) A person who undergoes a medical or other examination or test under paragraph (a) and who fails to comply with the requirements prescribed for the grant of the licence or rating held, shall not exercise the privileges of that licence or rating.

63.29 Offences involving alcohol or drugs

A conviction for any offence relating to alcohol or drugs, including a refusal to submit to any lawful test for alcohol or drugs, shall be relevant for determining whether a person is or remains fit and proper to hold a licence. Such conviction may result in a refusal to grant a licence, or suspension or revocation of the licence.

Subpart B — Cadet Flight Engineer Licences

63.51 Applicability

This Subpart prescribes rules governing the issue of cadet flight engineer licences and the privileges and limitations of those licences.

63.53 Eligibility requirements

To be eligible for a cadet flight engineer licence a person shall—

- (1) be at least 18 years of age; and
- (2) hold a current Class 1 medical certificate issued under Part 67.

63.55 Privileges and limitations

A cadet flight engineer licence authorises the holder to perform the duties of a flight engineer, while under the direct supervision of the holder of a current flight engineer instructor rating, for the purpose of obtaining practical experience in the duties of a flight engineer to—

- (1) qualify for the issue of a flight engineer licence or rating; or
- (2) regain currency of a flight engineer licence.

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Subpart C — Reserved

Subpart D — Flight Engineer Licences

63.151 Applicability

This Subpart prescribes rules governing the issue of flight engineer licences and the privileges and limitations of those licences.

63.153 Eligibility requirements

To be eligible for a flight engineer licence a person shall-

- (1) hold a current cadet flight engineer licence; and
- (2) be at least 21 years of age; and
- (3) have logged at least 100 hours total time in the performance of the duties of a flight engineer. At least 50 hours of the total time shall be flight time. Up to 50 hours of the total time may be gained on flight simulators during flight engineer training courses conducted by—
 - (i) the manufacturer of aircraft, the type certificate of which requires the carriage of flight engineers; or
 - (ii) the holder of an air operator certificate issued under Part 119, where the certificate authorises the holder to conduct that training; or
 - (iii) the holder of an aviation training organisation certificate issued under Part 141, where the certificate authorises the holder to conduct that training; and
- (4) hold a flight radiotelephone operator rating; and
- (5) have passed written examinations, or their equivalents, that are acceptable to the Director and are relevant to the duties of a flight engineer, in the following subject areas:
 - (i) Air law: rules and regulations relevant to the holder of a flight engineer licence; rules and regulations governing the operation of civil aircraft pertinent to the duties of a flight engineer:
 - (ii) Theory of flight and flight operations: fundamentals of aerodynamics; effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations; use and practical application of

performance data including procedures for cruise control; principles of maintenance, procedures for the maintenance of airworthiness, defect reporting, pre-flight inspections, precautionary procedures for fuelling and use of external power; installed equipment and cabin systems: normal, abnormal and emergency procedures: operational procedures for carriage of freight and dangerous goods:

- Aircraft engineering: principles of powerplants, gas turbines (iii) and piston engines; characteristics of fuels, fuel systems including fuel control; lubricants and lubrication systems; afterburners and injection systems, function and operation of engine ignition and starter systems; principle of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine airframes, flight controls, structures, wheel performance: assemblies, brakes and anti-skid units, corrosion and fatigue life; identification of structural damage and defects; ice and rain protection systems; pressurisation and air-conditioning systems, oxygen systems; hydraulic and pneumatic systems; electrical theory, AC and DC electric systems, aircraft wiring systems, bonding and screening; principles of operation of instruments, compasses, auto-pilots, radio communication radio and radar navigation aids, equipment. management systems, displays and avionics; limitations of appropriate aircraft; fire protection, detection, suppression and extinguishing systems; use and serviceability checks of equipment and systems of appropriate aircraft:
- (iv) Human factors: human performance and limitations relevant to the flight engineer; and
- (6) have satisfactorily completed a flight test that is acceptable to the Director by demonstrating to the holder of a flight engineer examiner rating the ability to perform competently the following procedures as are relevant to the duties of the flight engineer:
 - (i) Normal procedures: pre-flight inspections; fuelling procedures, fuel management; inspection of maintenance documents; normal flight deck procedures during all phases of flight; crew co-ordination and procedures in case of crew incapacitation; and defect reporting:
 - (ii) Abnormal and alternate procedures: recognition of abnormal functioning of aircraft systems; and use of abnormal and alternate procedures:

- (iii) Emergency procedures: recognition of emergency conditions; and use of appropriate emergency procedures; and
- (7) have demonstrated during the flight test required by paragraph (6) the ability to—
 - (i) use aircraft systems within the aircraft's capabilities and limitations; and
 - (ii) exercise good judgement and airmanship; and
 - (iii) apply aeronautical knowledge; and
 - (iv) perform all the duties as part of an integrated crew in a manner such that the successful outcome is never in doubt;
 - (v) communicate effectively with the other flight crew members.

63.155 Privileges

A flight engineer licence authorises the holder to-

- (1) exercise any of the privileges of the cadet flight engineer licence; and
- (2) perform flight engineer duties in aircraft for which they hold a type rating.

63.157 Recent experience requirements

- (a) The holder of a flight engineer licence shall not exercise the privileges of that licence in any aircraft type unless within the immediately preceding 90 days they have, while performing the duties of a flight engineer
 - (1) logged not less than 10 hours total time, of which up to 5 hours may be gained on flight simulators; and
 - (2) completed at least two flights in the aircraft type.
- (b) Where the privileges of a flight engineer licence issued under this Part have not been exercised for 5 years or more, the licence holder shall pass the flight test required by 63.153(6) before the privileges of that licence may be exercised again.

Subpart E - Flight Radiotelephone Operator Ratings

63.201 Applicability

This Subpart prescribes rules governing the issue of flight radiotelephone operator ratings and the privileges and limitations of those ratings.

63.203 Eligibility requirements

To be eligible for a flight radiotelephone operator rating issued under this Part a person shall—

- (1) hold a current cadet flight engineer licence; and
- (2) have passed a written examination, or its equivalent, which is acceptable to the Director, in aeronautical radiotelephone practices and procedures; and
- (3) have demonstrated to the holder of a flight engineer instructor rating or flight instructor rating
 - correct manipulation and adjustment of the controls of an aeronautical radiotelephone transceiver; and
 - (ii) the ability to transmit and receive spoken messages competently and in accordance with the procedures listed in the NZAIP.

63.205 Issue

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(a) When the holder of a flight engineer instructor rating or flight instructor rating is satisfied that the requirements of 63.203 for a flight radiotelephone operator rating have been complied with, the instructor shall issue the rating by entering in the flight engineer's logbook the name, number of licence and rating, and signature of the instructor; and date of issue of the rating, under the following statement:

This is to certify that [name of flight engineer] has satisfied the requirements of Civil Aviation Rules Part 63 for a flight radiotelephone operator rating.

(b) Upon application to the Director and payment of the applicable fee, the holder of a flight radiotelephone operator rating may, in addition, have the rating endorsed on their cadet flight engineer licence or flight engineer licence.

63.207 Privileges and limitations

A flight radiotelephone operator rating authorises the holder to operate, in accordance with the Radiocommunications (Radio) Regulations 1993, the radiotelephone of any aircraft, aeronautical station, or mobile surface station

that operates on frequencies allocated to the aeronautical mobile service where the transmitter —

- (1) requires only the use of simple external controls; and
- (2) automatically maintains the stability of the radiated frequencies.

Subpart F — Aircraft Type Ratings

63.251 Applicability

This Subpart prescribes rules governing the issue of flight engineer aircraft type ratings and the privileges of those ratings.

63.253 Eligibility requirements

To be eligible for an aircraft type rating a person shall-

- (1) hold a current flight engineer licence; and
- (2) have logged at least 8 hours flight time as a cadet flight engineer on that aircraft type; and
- (3) have satisfactorily completed a course of flight engineer aircraft type-rating training for that aircraft, including passing a written examination in the normal, abnormal, and emergency procedures for the operation of the aircraft's systems, and in the aircraft's performance and weight and balance, conducted by—
 - (i) the manufacturer of that aircraft; or
 - (ii) the holder of an air operator certificate issued under Part 119, where the certificate authorises the holder to conduct that training; or
 - (iii) the holder of an aviation training organisation certificate issued under Part 141, where the certificate authorises the holder to conduct that training; and
- (4) have demonstrated to the holder of a flight engineer instructor rating the ability to perform competently all normal, abnormal, and emergency procedures appropriate to the aircraft type for which the rating is required. A flight simulator may be used for demonstrating the abnormal and emergency procedures.

63.255 Issue

(a) When the holder of a flight engineer instructor rating is satisfied that the requirements of 63.253 for a flight engineer aircraft type rating have been met,

the instructor shall issue the type rating by entering in the flight engineer's logbook the aircraft type; the name, number of licence and rating, and signature of the instructor; and date of issue of the type rating, under the following statement:

This is to certify that [name of flight engineer] has satisfied the requirements of Civil Aviation Rules Part 63 for a flight engineer aircraft type rating for the aircraft type specified below.

(b) Upon application to the Director and payment of the applicable fee, the holder of a flight engineer aircraft type rating may, in addition, have their type ratings endorsed on their flight engineer licence.

63.257 Privileges

A flight engineer aircraft type rating authorises the holder to exercise the privileges of their flight engineer licence on—

- (1) the aircraft type to which the rating applies; or
- (2) any variant of that aircraft type that has no significant differences in performance, systems, or procedures.

Subpart G — Flight Engineer Instructor Ratings

63.301 Applicability

This Subpart prescribes rules governing the issue of flight engineer instructor ratings and the privileges and limitations of those ratings.

63.303 Eligibility requirements

To be eligible for a flight engineer instructor rating a person shall—

- (1) hold a current flight engineer licence; and
- have logged at least 700 hours flight time in the performance of the duties of a flight engineer; and
- (3) have satisfactorily completed a course in the theory and practice of instruction; and
- (4) have demonstrated to the holder of a flight engineer examiner rating the ability to give flight engineer instruction in all normal, abnormal, and emergency flight situations by passing an oral examination and a flight test that are acceptable to the Director. A flight simulator may be used for all or part of such flight test.

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63.305 Privileges and limitations

- (a) Subject to paragraph (b), the holder of a flight engineer instructor rating is authorised to—
 - (1) exercise all the privileges of the flight engineer licence; and
 - (2) conduct technical and flight instruction for the holders of cadet flight engineer licences and flight engineer licences; and
 - conduct flight simulator instruction for the holders of cadet flight engineer licences and flight engineer licences; and
 - supervise the holders of cadet flight engineer licences performing flight engineer duties; and
 - (5) assess for, and issue to the holders of cadet flight engineer licences and flight engineer licences, flight radiotelephony ratings; and
 - assess for, and issue to the holders of flight engineer licences, flight engineer aircraft type ratings; and
 - (7) conduct biennial flight reviews for holders of flight engineer licences.
- (b) To exercise the privileges of a flight engineer instructor rating the holder shall—
 - hold a current flight engineer licence with a type rating for the aircraft in use; and
 - (2) exercise those privileges within an organisation operating under-
 - an air operator certificate issued under Part 119, where the certificate authorises the holder to conduct flight engineer training and assessment; or
 - (ii) an aviation training organisation certificate issued under Part 141, where the certificate authorises the holder to conduct flight engineer training and assessment; and
 - (3) within the immediately preceding 13 months, have demonstrated to the holder of a flight engineer examiner rating the ability to give flight engineer instruction, in all normal, abnormal, and emergency flight situations, by passing an oral examination and a flight test based on practical demonstration of the privileges of the rating. A flight simulator may be used for all or part of such flight test.

Subpart H — Flight Engineer Examiner Ratings

63.351 Applicability

This Subpart prescribes rules governing the issue of flight engineer examiner ratings and the privileges and limitations of those ratings.

63.353 Eligibility requirements

To be eligible for a flight engineer examiner rating a person shall-

- (1) hold a current flight engineer instructor rating; and
- (2) have logged at least 1250 hours flight time in the performance of the duties of a flight engineer; and
- (3) have logged at least 750 hours total time exercising the privileges of a flight engineer instructor. At least 250 hours of the total time shall be flight time. Up to 500 hours of the total time may be gained on flight simulators; and
- (4) have demonstrated to a Civil Aviation Authority flight testing officer the ability to perform competently the duties of a flight engineer examiner.

63.355 Privileges and limitations

- (a) Subject to paragraph (b), the holder of a flight engineer examiner rating is authorised to—
 - (1) exercise all the privileges of the flight engineer instructor rating; and
 - (2) conduct flight tests for the issue of flight engineer licences; and
 - (3) conduct flight tests for the issue or continued currency of flight engineer instructor ratings.
- (b) To exercise the privileges of a flight engineer examiner rating the holder shall—
 - hold a current flight engineer licence with a type rating for the aircraft in use; and
 - (2) conduct the flight tests within an organisation operating under-
 - (i) an air operator certificate issued under Part 119, where the certificate authorises the holder to conduct flight engineer training and assessment; or

- (ii) an aviation training organisation certificate issued under Part 141, where the certificate authorises the holder to conduct flight engineer training and assessment; and
- (3) within the immediately preceding 13 months, have demonstrated to a Civil Aviation Authority flight testing officer the ability to perform competently the duties of a flight engineer examiner.

CONSULTATION DETAILS

(This statement does not form part of the rules contained in Part 63. It provides details of the consultation undertaken in making the rules.)

Background to the Rules

In April 1988 the Swedavia - McGregor Report on civil aviation regulation in New Zealand was completed. Following the recommendations contained in that report, the Air Transport Division of the Ministry of Transport commenced a complete review and rewrite of all existing civil aviation legislation and where necessary initiated new legislation for the areas not previously covered.

Considerable research was carried out to determine the format for the new legislation. It was decided that the most suitable legislative framework should incorporate the advantages of the system being developed by the European Joint Aviation Authorities and published as Joint Aviation Requirements (JAR), and of the Federal Aviation Administration (FAA) of the United States of America. The JAR are structured in a manner similar to the FAA's Federal Aviation Regulations (FAR) and aim to achieve maximum harmonisation while allowing for national variations.

New Zealand's revised legislation will be published as Civil Aviation Rules (CAR) divided into Parts. Each Part will convey a series of individual rules which relate to a particular aviation activity.

Accompanying each Part of the CAR will be at least one associated Advisory Circular (AC) which will expand, in an informative way, specific requirements of the CAR and describe an acceptable means of compliance. For example, an AC may contain the minimum acceptable practice or standard which would be necessary to meet a rule.

The CAR numbering system is based on the FAR system. As a general principle the subject matter of a Part will be the same or similar to the FAR although the title may differ to suit New Zealand terminology. Where a CAR does not readily equate with a FAR number code, a number has been selected that does not conflict with any existing FAR Part.

The FAR has been used as the starting point for the development of many CAR but there are likely to be significant differences in the content of the rule. Changes have been made to conform to New Zealand legal practices and terminology.

The objective of the new rules system is to strike a balance of responsibility between the State authority and those who provide services and exercise privileges in the civil aviation system. This balance must enable the State authority to maintain continuing regulatory control and supervision while

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providing the maximum flexibility for participants to develop their own means of compliance.

Section 7 of the Civil Aviation Act 1990 (the Act) provides for the requirement to hold an aviation document for carrying out particular civil aviation activities. Section 12 of the Act requires the holders of such documents to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices.

Notice of Proposed Rule Making

To provide public notice of, and opportunity for comment on the proposed new rules, the Authority, issued Notice of Proposed Rule Making 95-4 under Docket Number 1139 on 30 August 1995. This Notice proposed the introduction of Civil Aviation Rules Part 63 to provide a regulatory safety boundary for Flight Engineer Licences and Ratings

Supplementary Information

All comments made on the Notice of Proposed Rule Making are available in the rules docket for examination by interested persons. A report summarising each substantive contact with the Civil Aviation Authority contact person concerning this rule making has been filed in the docket. It should be noted that the references to Rule numbers given below relate to the NPRM draft, and that the corresponding Rules may be numbered differently in the Final Rule.

Availability of the Document

Any person may view a copy of these rules at Aviation House, 1 Market Grove, Lower Hutt. Copies may be obtained from Publishing Solutions Ltd, PO Box 983, Wellington 6015, Telephone 0800 800 359.

Summary of Comments on Docket Number 1139 NPRM

1. General comments

- 1.1 NZ Association of Marine, Aviation and Power Engineers commented "with respect to the NPRM, we consider it pretty much right on the mark."
- **1.2** Rural Aviation (1963) commented they "cannot see anything contained in the NPRM which appears to be out of line with the comparable requirements of Part 61."
- 1.3 Air New Zealand commented "throughout Part 63 where reference is made to flight tests, we assume that this means either in the aircraft or in the simulator as appropriate."

Civil Aviation Authority reply is that the requirements have been developed to make clear where there is a simulator option.

1.4 Air New Zealand commented that "with the introduction of Examiner and Instructor ratings we would like to have clarified the situation with Simulator Instructors who currently operate on Approvals only."

Civil Aviation Authority reply is that this situation applies to approved type rating courses which in the future will be controlled by Part 141 or the equivalent under operational rule Parts. Simulator instructors instructing on those courses will therefore have to comply with Part 141 requirements, not Part 63.

1.5 NZ Association of Marine, Aviation and Power Engineers ask if in the summary of comments on page 8 of the NPRM; AC 63.23.1 should have read AC 63.21; and CASO 12 Pt 1 2.6.16 should have read 2.6.6.

Civil Aviation Authority agrees these were misprints but neither affects either the NPRM draft nor the final rule.

1.6 NZ Association of Marine, Aviation and Power Engineers asks for clarification that flight engineers will continue to be eligible for Class 1 medical certificates on the basis of Class 2 visual standards.

Civil Aviation Authority confirm that the medical procedures provide for the issue of Class 1 medical certificates, endorsed for flight engineer use only, on the basis of Class 2 visual standards.

1.7 NZ Association of Marine, Aviation and Power Engineers commented various parts of the rule require "clarification of the term "flight" as in flight instruction, flight situation, and flight test."

Civil Aviation Authority has made these clarifications.

2. Specific Comments on the NPRM

2.1 63.9 Application for Licences and Ratings

NZ Association of Marine, Aviation and Power Engineers commented that they would like the opportunity to view the application form CAA 24063/01.

Civil Aviation Authority has decided that the application form for flight engineers will now be the same form CAA 24961/01 as for pilots and has shown this as requested.

2.2 63.25 Biennial Flight Review

NZ Association of Marine, Aviation and Power Engineers ask that appropriate use can be made of a flight simulators for Biennial Flight Reviews.

Civil Aviation Authority has amended the Rule to allow this.

2.3 63.29 Offences involving Alcohol or Drugs

NZ Association of Marine, Aviation and Power Engineers commented in a full submission that "we still remain uneasy with the concept of this Part giving rise to the suspension or cancellation of licence or refusal to grant a licence or rating for <u>any</u> alcohol or drug related offence."

Civil Aviation Authority reply is that although this provision gives the Civil Aviation Authority the right to take this action, it is not mandatory and must be in accordance with the provisions of the Act.

2.4 63.103 Flight Engineer Licences Eligibility Requirements

NZ Association of Marine, Aviation and Power Engineers ask if an applicant for a flight engineer licence must hold a cadet flight engineer licence.

Civil Aviation Authority reply is that this requirement was effectively already there but has now been specifically listed.

2.5 63.107 Flight Engineer Licence Recent Experience Requirements

Air New Zealand wish to add to the recent experience requirements that "when 90 days has been exceeded half of the required flight time may be carried out in an approved flight simulator under supervision."

NZ Association of Marine, Aviation and Power Engineers ask if "flight" includes simulator time and contends that some of this flight time should be accreditable to simulator time.

Civil Aviation Authority has amended the recent experience requirements, in response to the two comments, to allow up to half the requirement to be gained in flight simulators.

2.6 63.203 Aircraft Type Ratings Eligibility Requirements

Air New Zealand wished to change the flight time requirements for type ratings from 8 hours to 6 hours and presented a supporting case for this.

Civil Aviation Authority has discussed this with the submitter and it has been agreed to leave the requirement as it is.

2.7 63.253 Flight Engineer Instructor Ratings Eligibility Requirements

NZ Association of Marine, Aviation and Power Engineers ask that abnormal procedures be added to the flight test.

Civil Aviation Authority has made this amendment.

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NZ Association of Marine, Aviation and Power Engineers ask that the flight test allow appropriate use of flight simulators.

Civil Aviation Authority have amended the rule to allow this.

2.8 63.255 Flight Engineer Instructor Rating Privileges and Limitations

NZ Association of Marine, Aviation and Power Engineers asks "does the "issue" of a type rating mean that the instructor can "conduct" the appropriate tests for the issue of a type rating?"

Civil Aviation Authority have amended the wording to include "assess" to clarify that the instructors' privileges do include this.

NZ Association of Marine, Aviation and Power Engineers ask that abnormal procedures be added to the flight test.

Civil Aviation Authority has made this amendment.

NZ Association of Marine, Aviation and Power Engineers ask that the flight test allow appropriate use of flight simulators.

Civil Aviation Authority have amended the rule to allow this.

2.9 63.303 Flight Engineer Examiner Ratings Eligibility Requirements

Air New Zealand commented "a Civil Aviation Authority FTO must be competent to be able to assess the ability to perform the duties of a Flight Engineer examiner" and suggest replacing "Civil Aviation Authority FTO" with "an appropriately approved Flight Engineer examiner" or "ensure that FTO has suitable competencies in the technical subjects."

Civil Aviation Authority reply is that the task of the FTO is to assess the applicant's ability as an examiner, not as a flight engineer.

2.10 63.305 Flight Engineer Examiner Ratings Privileges and Limitations.

Air New Zealand ask if the term "ratings" in (a)(2) should be "licence and type ratings".

NZ Association of Marine, Aviation and Power Engineers also ask if the word "rating" should be "licence".

Civil Aviation Authority reply to the above two comments is that the term has been changed to "licences". The ratings are already authorised under the instructor rating.

NZ Association of Marine, Aviation and Power Engineers ask that the flight test allow appropriate use of flight simulators.

Civil Aviation Authority have amended the rule to allow this.

Air New Zealand again commented in (b) that "no Civil Aviation Authority Flight Testing Officers are currently competent to assess the ability to perform the duties of a Flight Engineer examiner. We suggest replace "Civil Aviation Authority FTO" with "an appropriately approved Flight Engineer Examiner" or qualify Flight Testing Officers as Flight Engineer examiners."

Civil Aviation Authority reply is again that the task of the Civil Aviation Authority FTO is to assess the applicant's ongoing ability as an examiner, not as a flight engineer. It is the flight engineer examiner who requires the highest level of flight engineer technical competency.

Transitional arrangements

Under rule 63.7 cadet flight engineer licences and flight engineer licences issued before the date Part 63 comes into force are deemed to be licences issued under that Part. They may be exchanged for a new licence under Part 63 without any further examination or test.

Ratings held on a licence issued before the date Part 63 comes into force carry over to a licence issued under Part 63 and are deemed to have been issued under that Part.

Regulatory Evaluation

The following action will occur at the time of commencement of this Part:

Civil Aviation Regulations 1953

- Revocation of regulations 243 and 244.
- Amendments to regulations 53(1), 228, 232, and 235.

Civil Aviation Rules — none

New Zealand Civil Airworthiness Requirements - none

Civil Aviation Safety Orders— Revocation of CASO 12, Parts 13, 14, and 18; and CASO 16

Aeronautical Information Circular - None

Conclusion

The Authority concludes from this consultation that the majority of the aviation industry participants favour the direction of the new rules. Specific issues that were identified in the comments received from the consultative group have

been addressed. The rules also meet New Zealand's international obligations under the applicable ICAO Annex. The comments and all the background material used in developing the rules are held on the docket file and are available for public scrutiny. Persons wishing to view the docket file should call at Aviation House, 1 Market Grove, Lower Hutt and ask for docket file 1139.