



WELLINGTON NEW ZEALAND

PURSUANT to Section 28 of the Civil Aviation Act 1990

I, JENNIFER MARY SHIPLEY, Minister of Transport,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

This *seventeenth* day of *February* 1997

by **JENNIFER MARY SHIPLEY**

A handwritten signature in black ink, appearing to read 'Jennifer Mary Shipley', written in a cursive style.

Minister of Transport

Civil Aviation Rules

Part 66

Aircraft Maintenance Personnel Licensing

Docket Nr. 1007

Civil Aviation Rules
Part 66

Aircraft Maintenance Personnel Licensing

RULE OBJECTIVE, EXTENT OF CONSULTATION AND COMMENCEMENT

The objective of Part 66 is to prescribe rules for the licensing of aircraft maintenance engineers in New Zealand.

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 66 was developed by the rules rewrite team in consultation with members of the consultative group. An informal draft was published and distributed in September 1993 and a period of informal consultation followed. This culminated in the issue of Notice of Proposed Rulemaking 96-1 under Docket 1007 on 31 January 1996.

The publication of this notice was advertised in the daily newspapers in the five main provincial centres on 1 February 1996. 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 60 days was allowed for comment on the proposed rule. Three hundred and ninety four submissions were received.

The submissions and verbal comments were considered and where appropriate the proposed rules amended to take account of the comments made.

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

Part 66 comes into force on 1 April 1997.

List of Rules

Subpart A — General

66.1	Applicability.....	3
66.3	Definitions	3
66.5	Licences and certificates	3
66.7	Application for licences, certificates, and ratings	3
66.9	Issue of licences, certificates and ratings.....	4
66.11	Duration of licences and certificates.....	5
66.13	Examinations	5
66.15	Cheating or other unauthorised conduct.....	6
66.17	Offences involving alcohol or drugs.....	6
66.19	Medical requirements	6

Subpart B — Aircraft Maintenance Engineer Licence

66.51	Applicability.....	7
66.53	Eligibility requirements	7
66.55	Privileges and limitations	8
66.57	Recent experience requirements	9

Subpart C — Aircraft Maintenance Engineer Ratings

66.101	Applicability.....	9
66.103	Eligibility requirements	9
66.105	Privileges.....	10

Subpart D — Certificate of Maintenance Approval

66.151	Applicability.....	10
66.153	Eligibility Requirements	10
66.155	Privileges.....	10

Subpart E — Certificate of Inspection Authorisation

66.201	Applicability.....	11
--------	--------------------	----

66.203 Eligibility Requirements 11
66.205 Privileges and limitations 12
66.207 Recent experience requirements 12

Appendix A — Transitional Arrangements

Appendix B — Group and Type Ratings

B.1 Groups 13
B.2 Types 15

Appendix C — Additional Privileges

Subpart A — General

66.1 *Applicability*

This Part prescribes rules governing—

- (1) the issue of aircraft maintenance licences, certificates, and ratings; and
- (2) the privileges and limitations of those licences, certificates, and ratings.

66.3 *Definitions*

Reserved

66.5 *Licences and certificates*

The following licences, certificates, and ratings are issued under this Part:

- (1) aircraft maintenance engineer licences in one or more of the following categories:
 - (i) aeroplane:
 - (ii) rotorcraft:
 - (iii) powerplant:
 - (iv) electrical:
 - (v) instrument:
 - (vi) radio:
 - (vii) lighter than air aircraft:
- (2) certificates of maintenance approval:
- (3) certificates of inspection authorisation:
- (4) group ratings in the groups listed in Appendix B:
- (5) aircraft and component ratings.

66.7 *Application for licences, certificates, and ratings*

(a) Each applicant for the grant of an aircraft maintenance engineer licence, additional licence category, or certificate of maintenance approval shall complete form CAA 2466/01 and submit it to the Director with a payment of the appropriate application fee prescribed by regulations made under the Act.

- (b) Each applicant for the grant of a certificate of inspection authorisation shall complete form CAA 2466/03 and submit it to the Director with a payment of the appropriate application fee prescribed by regulations made under the Act.
- (c) Each applicant for the grant of a licence or certificate on the basis that they are the holder of a current licence or certificate issued by a foreign contracting State to the Convention shall, in addition to the requirements of paragraph (a) or (b), produce that licence or certificate to the Director.
- (d) Each applicant for the grant of an aircraft maintenance engineer licence rating shall complete form CAA 2466/02 and submit the form to the Director with a payment of the appropriate application fee prescribed by regulations made under the Act.
- (e) Forms CAA 2466/01, CAA 2466/02, and CAA 2466/03 shall require—
- (1) the name and address for service in New Zealand of the applicant; and
 - (2) such further particulars relating to the applicant as may be required by the Director as indicated on the form.

66.9 Issue of licences, certificates and ratings

- (a) An applicant is entitled to a licence, certificate, 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, speaking, and understanding the English language to enable him or her to carry out the responsibilities of the holder of that licence, certificate, or rating; and
 - (3) the applicant meets the eligibility requirements in the appropriate Subpart for the licence, certificate, or rating; and
 - (4) the granting of the certificate or licence is not contrary to the interests of aviation safety.
- (b) An applicant for the grant of a licence, certificate, or rating on the basis that they are the holder of a current licence or certificate issued by a foreign contracting State to the Convention is eligible to a licence or certificate if the Director is satisfied that—
- (1) the applicant is the holder of an acceptable licence or certificate; and
 - (2) the applicant is a fit and proper person; and

- (3) the granting of the certificate or licence is not contrary to the interests of aviation safety; and
- (4) except as provided in paragraph (c), the applicant has passed the Air Law examination and oral examination required by 66.53(a).

(c) The holder of an aircraft maintenance engineer licence issued by the competent authority of Australia is eligible to a licence or certificate issued under this Part if the holder passes an examination in New Zealand Air Law acceptable to the Director. The licence holder is not required to pass the oral examination required by 66.53(a).

66.11 Duration of licences and certificates

(a) An aircraft maintenance engineer licence 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) A certificate of maintenance approval may be granted—

- (1) for a period of up to 24 months; or
- (2) to the principal constructor of an aircraft, for a period of up to 5 years.

(c) A certificate of inspection authorisation may be granted for a period of up to 60 months.

(d) The holder of an aircraft maintenance engineer licence, certificate of approval, or certificate of inspection authorisation that has been suspended or revoked shall forthwith forward the document to the Director.

66.13 Examinations

(a) Each applicant for the grant of a licence, rating, or certificate under this Part shall—

- (1) for any examination, produce written proof of personal identity; and
- (2) for a written examination, gain at least 70% of the possible marks in order to pass; and
- (3) for an oral examination, demonstrate a thorough working knowledge of the subject being tested.

(b) A pass in a written subject is valid for the lifetime of the holder except for written passes in Air Law which are valid for 5 years.

(c) To be eligible for the oral examination required by 66.53(a)(3) an applicant must meet the written examination and experience requirements in 66.53(a)(2) and (4).

(d) An applicant who fails the oral examination required by 66.53(a)(3) 3 times shall be ineligible to reapply for that examination for a period of three months from the date of the last attempt.

66.15 *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) may be subject to all or any of the following as the Director may determine:

- (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 17, 18, and 19 of the Act.

66.17 *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.

66.19 *Medical requirements*

The holder of a licence or certificate issued under this Part shall not exercise the privileges of that licence or certificate while that person has a known medical deficiency, or increase of a known medical deficiency, that creates a risk of harm to that person or to any other person.

Subpart B — Aircraft Maintenance Engineer Licence

66.51 *Applicability*

This Subpart prescribes rules governing the grant of aircraft maintenance engineer licences and the privileges, limitations, and recent experience requirements of that licence.

66.53 *Eligibility requirements*

(a) To be eligible for the grant of an aircraft maintenance engineer licence, a person shall—

- (1) be at least 21 years of age; and
- (2) have passed written examinations, or their equivalents, including an examination in Air Law, that—
 - (i) are acceptable to the Director; and
 - (ii) are relevant to the duties and responsibilities of an aircraft maintenance engineer in the category of licence sought; and
- (3) have passed an oral examination covering the person's understanding and practical application of the duties and responsibilities exercised by the holder of an aircraft maintenance engineer licence; and
- (4) have satisfactorily completed one of the following:
 - (i) a traineeship in an aviation technical trade, of forty-eight months of practical aviation related experience, including formal technical training with the procedures, practices, materials, tools, machine tools, and equipment generally used in constructing, maintaining, or modifying airframes, powerplants, or avionic equipment, gained at any time; or
 - (ii) a traineeship in an appropriate non-aviation technical trade, and thirty-six months of practical aviation related experience with the procedures, practices, materials, tools, machine tools, and equipment generally used in constructing, maintaining, or modifying airframes, powerplants, or avionic equipment, gained following completion of the traineeship; or
 - (iii) a total of sixty months of practical aviation related experience with the procedures, practices, materials, tools, machine tools, and equipment generally used in

constructing, maintaining, or modifying airframes, powerplants, or avionic equipment; or

- (iv) a course of integrated training, including at least thirty-six months of supervised training and experience, conducted by the holder of an aviation training organisation certificate issued under Part 141 that authorises the conduct of such a course.

(b) For each option in paragraph (a)(4), 24 months of the experience required shall be appropriate to the category of licence sought.

(c) The holder of an aircraft maintenance engineer licence is entitled to an additional category of licence if the holder has passed the applicable examinations required by paragraph (a)(2) and has completed—

- (1) 24 months of experience appropriate to the category of licence sought; or
- (2) 12 months of experience appropriate to the category of licence sought if the applicant has exercised the privileges of a aircraft maintenance engineer licence for 10 or more years.

66.55 Privileges and limitations

(a) Subject to paragraphs (b), (c), and the requirements of 145.5, an aircraft maintenance engineer licence authorises the holder to—

- (1) perform or supervise the maintenance of an aircraft or component; and
- (2) release an aircraft or component to service after maintenance has been performed.

(b) The holder of an aircraft maintenance engineer licence shall not exercise the privileges of that licence on an aircraft or component unless that person is familiar with the aircraft or component and—

- (1) holds the applicable group or type rating specified in Appendix B for that aircraft or component; or
- (2) the privileges are additional privileges specified in Appendix C.

(c) The holder of an aircraft maintenance engineer licence shall not exercise the additional privileges specified in Appendix C that require the use of special test equipment unless the holder has evidence that they have received training on the use of that equipment.

66.57 Recent experience requirements

The holder of an aircraft maintenance engineer licence shall not exercise the privileges of the licence unless, within the immediately preceding 24 months, the holder has—

- (1) for a period of at least 6 months—
 - (i) exercised the privileges of the licence; or
 - (ii) supervised the maintenance of aircraft relevant to the ratings held in an executive capacity; or
 - (iii) performed a technical training function relevant to the ratings held in a certificated training organisation; or
 - (iv) been engaged in any combination of subparagraph (i), (ii), or (iii); or
- (2) passed an oral examination covering the person's understanding and practical application of the duties and responsibilities exercised by the holder of an aircraft maintenance engineer licence.

Subpart C — Aircraft Maintenance Engineer Ratings**66.101 Applicability**

This Subpart prescribes the rules governing aircraft maintenance engineer group ratings and aircraft maintenance engineer type ratings.

66.103 Eligibility requirements

To be eligible for the grant of an aircraft maintenance engineer group or type rating a person shall—

- (1) hold a current aircraft maintenance engineer licence; and
- (2) have completed 6 months practical experience on the type or group of aircraft or components for which the rating is sought; and
- (3) have successfully completed—
 - (i) examinations acceptable to the Director; or
 - (ii) a course of training relevant to the type of aircraft or components for which the rating is sought—
 - conducted by the holder of an aviation training organisation certificate issued under Part 141 which authorises the conduct of such a course; or

- conducted by the manufacturer of the applicable aircraft or component; or
- approved by the competent authority of a foreign Contracting state.

66.105 Privileges

(a) A group rating authorises the holder of an aircraft maintenance engineer licence to exercise the privileges of that licence on any aircraft or component falling within the definition of the applicable group in Appendix B.

(b) Subject to the requirements in 145.5, a type rating authorises the holder of an aircraft maintenance engineer licence to exercise the privileges of that licence on the type of aircraft or component specified on the rating.

Subpart D — Certificate of Maintenance Approval

66.151 Applicability

This Subpart prescribes rules governing the issue of certificates of maintenance approval and the privileges and limitations of that certificate.

66.153 Eligibility Requirements

To be eligible for a certificate of maintenance approval a person shall—

- (1) have practical experience, acceptable to the Director, for the particular type or group of aircraft or components for which the maintenance approval is sought; and
- (2) for the particular type or group of aircraft or components for which the maintenance approval is sought—
 - (i) have successfully completed a course of training acceptable to the Director; or
 - (ii) have passed examinations, including an examination in Air Law, that are acceptable to the Director.

66.155 Privileges

(a) A certificate of maintenance approval specifies the privileges that the certificate holder may exercise.

(b) A certificate of maintenance approval may authorise any person—

- (1) who is the holder of an aircraft maintenance engineer licence, to perform maintenance on, and certify for release to service, any

- aircraft type for which the certificate holder does not have the practical experience required by 66.103(2); or
- (2) who is not the holder of an aircraft maintenance engineer licence but who satisfies the Director that they are competent, to perform or supervise—
- (i) the maintenance specified on the certificate on an aircraft or component, and certify that aircraft or component for release to service; or
 - (ii) maintenance on, and certify for release to service an aircraft issued with special category experimental airworthiness certificate issued under Part 21, Subpart H.

Subpart E — Certificate of Inspection Authorisation

66.201 *Applicability*

This Subpart prescribes rules governing the grant of certificates of inspection authorisation and the privileges and limitations of that certificate.

66.203 *Eligibility Requirements*

To be eligible for a certificate of inspection authorisation a person shall—

- (1) hold a rated aircraft maintenance engineer licence, issued under this Part, or an equivalent Australian aircraft maintenance engineer licence registered in New Zealand, in both aeroplane and powerplant categories, or in both rotorcraft and powerplant categories, and at the time of application have—
 - (i) held the licence for a period of at least 60 months; and
 - (ii) met the recent experience requirement prescribed in 66.57 for a period of at least 60 months; and
- (2) have, within the immediately preceding 24 months—
 - (i) exercised the privileges of an aircraft maintenance engineer licence; or
 - (ii) supervised, in an executive capacity, the maintenance of aircraft; and
- (3) have passed an examination in airframe overhaul that is acceptable to the Director; and

- (4) have successfully completed a course of instruction and passed a written examination on the inspection of aircraft and components for conformity with the CAR, conducted by—
 - (i) the holder of an aviation training organisation certificate issued under Part 141; or
 - (ii) the Director.

66.205 Privileges and limitations

(a) Subject to paragraph (b), a certificate of inspection authorisation entitles the holder to—

- (1) perform an annual review of aircraft maintenance in accordance with Part 43, Subpart D; and
- (2) certify conformity with the technical data listed in Appendix D to Part 21 after completion of major repairs and major modifications in accordance with Part 43, Subpart E.

(b) A person shall not exercise the privileges specified in paragraph (a) unless that person has available the equipment, facilities, and inspection data necessary to properly inspect airframes, powerplants, propellers, or any related part or component.

66.207 Recent experience requirements

The holder of a certificate of inspection authorisation shall not exercise the privileges of that certificate unless, within the preceding 12 months, the holder has—

- (1) performed 4 annual reviews of aircraft maintenance in accordance with Part 43, Subpart D; or
- (2) certified 4 aircraft or components for conformity with the data listed in Appendix D to Part 21 after completion of major repairs or major modifications; or
- (3) performed a combination of subparagraphs (1) and (2); or
- (4) successfully completed a refresher course comprising at least 8 hours instruction that is acceptable to the Director; or
- (5) successfully completed an examination acceptable to the Director.

Appendix A — Transitional Arrangements

- (a) Examination credits for the Type I (major) aircraft maintenance engineer licence subjects are acceptable to the Director for the purposes of 66.203(3) and 145.60(d)(1)(ii).
- (b) For the purposes of the Civil Aviation Rules, a current Type II (minor) aircraft maintenance engineer licence issued under the Civil Aviation Regulations 1953 shall be deemed an aircraft maintenance engineer licence issued under this Part in the corresponding category of licence and may be exchanged without further examination or test.
- (c) For the purposes of the Civil Aviation Rules, a group or type rating held on a licence issued under the Civil Aviation Regulations 1953 shall carry over to a licence issued under this Part and is deemed to have been issued under this Part.

Appendix B — Group and Type Ratings

B.1 Groups

Ratings may be issued in the following Groups:

(a) Aeroplane

Group 1: Metal stressed skin unpressurised aeroplanes with fixed landing gear not exceeding 5700 kg:

Group 2: Metal stressed skin unpressurised aeroplanes other than Group 1:

Group 3: Aeroplanes with principally wooden or tubular structure, fabric covered:

Group 4: Aeroplanes constructed principally of fibre reinforced plastic (FRP) or similar material:

(b) Rotorcraft

Group 1: Piston engined rotorcraft:

Group 2: Turbine engined rotorcraft:

(c) Powerplant

Group 1: Normally aspirated piston engines:

Group 2: Turbocharged, supercharged, or radial piston engines:

(d) Electrical

Group 1: Electrical systems in pressurised aeroplanes with an MCTOW of 5700 kg or less and unpressurised aircraft which have as their primary source of power:

- (i) DC generators; or
- (ii) Starter generators; or
- (iii) Alternators with self-contained rectifiers:

Group 2: Electrical systems which have as their primary source of power:

- (i) DC generators, or starter generators, and have frequency wild alternators installed for secondary services; or
- (ii) constant frequency AC from alternators driven by constant speed drive units:

(e) Instrument

Group 1: General aircraft instrument systems; basic flight instrument systems; oxygen systems, cabin pressurisation and air conditioning systems other than those fitted to pressurised aeroplanes with an MCTOW of 5700 kg or more:

Group 2: Autoflight and navigation systems including air data computer systems, servo driven instruments, remote gyro systems including remote reading compasses, automatic flight control systems and inertial navigation systems other than those fitted to pressurised aeroplanes with an MCTOW of 5700 kg or more:

(f) Radio

Group 1: Airborne communication systems including VHF, HF, CVR, audio and ELT:

Group 2: Airborne navigation systems including ADF, VOR, ILS, VLF, Omega, marker beacon, GPS and GNSS:

Group 3: Airborne primary and secondary radar including weather radar, doppler, radio altimeter, DME, transponder, and TCAS:

(g) Lighter than air aircraft

Group 1: Hot air free balloons and hot air airships in their entirety:

Group 2: Gas filled airships and their components excluding the engine and propeller or fan, or both.

B.2 Types

Ratings for the following aircraft or components shall be issued by the Director as type ratings for the individual aircraft or component types:

(a) **Aeroplane**

Pressurised aeroplanes:

(b) **Rotorcraft**

Rotorcraft that the Director considers are not included in the Rotorcraft Group 1 or 2 rating:

(c) **Powerplant**

Turbine power plants:

(d) **Electrical**

Electrical systems and equipment installed in pressurised aeroplanes with an MCTOW of more than 5700 kg:

(e) **Instrument**

Integrated flight systems installed in pressurised aeroplanes with an MCTOW of more than 5700 kg:

(f) **Radio**

Complete radio installations installed in pressurised aeroplanes with an MCTOW of more than 5700 kg:

(g) **Components**

Overhaul and maintenance of aircraft or components listed in 145.5(b).

Appendix C — Additional Privileges

(a) The holder of a licence in category aeroplane or category rotorcraft may perform or supervise, and certify release to service the following maintenance, if rated on the applicable aircraft type:

- (1) the applicable inspections required by Part 91, Subpart G or Part 135, Subpart G of Group 1 electrical and instrument systems and Group 1, 2, and 3 radio systems; and
- (2) replacement, adjustment, and function testing of electrical and instrument components and systems performed within the aircraft

(excluding compass systems) except where special test equipment is required; and

- (3) maintenance of electrical storage batteries; and
- (4) minor maintenance and installation of VHF and HF radio systems in VFR aircraft; and
- (5) replacement of line replaceable units; and
- (6) compass systems limited to the compensation of direct and remote reading compasses, and component changes in direct reading compass systems.

(b) The holder of a licence in category powerplant may perform or supervise, and certify for release to service the following maintenance:

- (1) functional checks and testing of engine instruments provided no special testing equipment is required; and
- (2) replacement, adjustment and functional testing of components and systems associated with the engine provided no special test equipment is required; and
- (3) replacement of avionic line replaceable units associated with the powerplant.

(c) The holder of a licence in category electrical, instrument, or radio may perform or supervise, and certify for release to service the following maintenance:

- (1) the applicable inspections required by Part 91, Subpart G or Part 135, Subpart G of Group 1 electrical and instrument, and Group 1,2, and 3 radio systems; and
- (2) replacement, adjustment, and function testing of electrical and instrument components and systems (excluding compass systems) performed within the aircraft except where special test equipment is required; and
- (3) maintenance of electrical storage batteries; and
- (4) minor maintenance and installation of VHF and HF radio systems in VFR aircraft; and
- (5) replacement of line replaceable units.

(d) The holder of a licence in category lighter than air aircraft may perform or supervise, and certify for release to service the following maintenance:

- (1) routine inspections required by Part 91, Subpart G or Part 135, Subpart G; and
- (2) replacement, adjustment, and function testing of electrical and instrument components and systems (excluding compass systems) except where special test equipment is required; and
- (3) repair and minor replacement of interwiring and instrument plumbing; and
- (4) installation of VHF and HF radio systems; and
- (5) compensation and component changing of direct reading compasses.

CONSULTATION DETAILS

(This statement does not form part of the rules contained in Part 66.
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 Civil Aviation Authority (CAA) (formerly the Air Transport Division of the Ministry of Transport) commenced a complete review of all existing civil aviation legislation. The existing legislation that is still appropriate is being rewritten into the new *Rules* format. New legislation is being generated where necessary for the areas not presently covered.

Considerable research was carried out to determine the format for the new legislation. It was decided that the legislative framework should incorporate the advantages of the regulatory system of the Federal Aviation Administration (FAA) of United States of America and the system being developed by the European Joint Aviation Authorities and published as Joint Aviation Requirements (JAR).

The new rules are structured in a manner similar to the Federal Aviation Regulations (FAR) of the FAA, and aim to achieve maximum harmonisation whilst allowing for national variations. Close co-operation is also being maintained with the Civil Aviation Safety Authority of Australia to ensure maximum harmonisation with their regulatory code.

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

Accompanying most Parts will be at least one associated Advisory Circular (AC) which will expand, in an informative way, specific requirements of the Part and acceptable means of compliance. For instance an AC may contain examples of acceptable practices or procedures which would meet the requirements of a particular rule.

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

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 set standards for, and monitor performance of, aviation participants

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

Section 12 of the Civil Aviation Act 1990 requires participants in the aviation system to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices. Section 28 of the Act allows the Minister to make ordinary rules.

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 96-1 under Docket Number 1007 on 31 January 1996. This Notice proposed the introduction of Civil Aviation Rules Part 66 to provide a regulatory safety boundary for Aircraft Maintenance Engineer Licensing

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.

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 1007 NPRM

1. General comments on the NPRM

From the 394 submissions received, four general issues, and nineteen specific issues were raised. These are discussed as follows:

1.1 Retention of the Type I Licence

Three submissions were received supporting the removal of the Type I licence however the balance of the submissions indicated opposition to the proposal. The opposition was based on a desire to retain a state issued document for major maintenance which is transportable between maintenance organisations.

CAA response: The CAA has elected to discontinue the Type I licence as it is clear that ICAO is processing an amendment which will have the same effect. Part 66 will permit the recording of a new rating on the licence which will appear on the document as group seven in each category. This rating will record the applicants qualification by way of examination and experience but will not provide certification privileges. This new rating will cover the NZCAR Section L

Type 1 licence rating coverage except those areas which have been transferred to other rating groups. The transfer has occurred as the new basic licence extends the privileges of the licence holder to cover some privileges previously covered by the Type I licence.

1.2 Large Aircraft Ratings

Most commenters expressed concern that large aircraft ratings must remain available on the licence and a significant number went further suggesting that CAA should prevent the issue of company authorisations and ensure that licence ratings be the only method of achieving certification privileges.

CAA response: The NPRM, at Appendix B, advised that ratings for these aircraft and their components would be issued by the Director as type ratings. This has been retained in the final rule and qualification requirements for the ratings will appear in advisory circular material. CAA does not support the prevention of company authorisations for maintenance carried out under Part 145. It is clear that Part 145 organisations are responsible for the release to service of aircraft and aircraft components maintained under their certificate and it is appropriate that certification privileges are provided by Part 145 company authorisations. Licence ratings for large aircraft maintained under Part 145 will not provide certification privileges, although the rating may be used by an organisation, along with other requirements, as the basis for a company authorisation. The printing of large aircraft ratings on the Part 66 licence is intended to provide the engineer with a transportable qualification.

1.3 Lines of Responsibility

Many commenters suggested that the removal of the Type I licence and the use of company authorisations would undermine the direct line of accountability of the Licensed Aircraft Maintenance Engineer to the Director.

CAA response: The responsibility for maintenance performed under a Part 145 certificate lies with the certificate holder. It is clear that the prime responsibility of the certifying engineer is to the Part 145 certificate holder who is in turn responsible to the Director for ensuring that the organisation meets the regulatory requirements. Any engineer has the right to report safety related occurrences to the Director, but it is emphasised that the primary responsibility of certifying staff within a Part 145 organisation is to the certificate holder.

1.4 International Harmonisation

Most commenters expressed a wish to achieve closer international harmonisation in respect of the licence. Many felt that the removal of the Type I licence would have an adverse effect in this area.

CAA response: In March 1996 ICAO advised of its intention to amend Annex 1 on the AME licence. The amendment removes the ICAO Type I licence and

introduces the single level licence similar to Part 66. There has been ongoing work within the JAA to achieve harmonisation however progress is slow and difficulty has been experienced reaching agreement with some JAA member countries. The Singapore Civil Aviation Authority, which follows the JAA system, has indicated an interest in studying the New Zealand Part 66 before they complete their own rule part. The FAA has also advised delays in progressing their Part 66. The lack of foreign final rules in this area has presented problems in respect of proposed harmonisation, however the amendment to the ICAO Annex 1 results in a very similar licence to Part 66 which should assist harmonisation efforts in the future.

Although not published in the NPRM, the final Rule 66.203 permits an Australian aircraft maintenance engineer licence holder who has registered in New Zealand to become eligible for a certificate of inspection authorisation subject to meeting the examination and experience requirements. This amendment is the result of the Trans Tasman Mutual Recognition Agreement which provides a registration process that will allow the certification of New Zealand aircraft by appropriately rated Australian aircraft maintenance engineer licence holders and vice versa. It has been accepted by both countries that this will lead to a greater level of harmonisation in the near future.

CAA comment: The CAA believes the Part 66 licence fits well with the proposed amended ICAO licence and that the recording of large aeroplane and the group seven overhaul ratings on the licence will provide engineers with a transportable qualification document. Differences, such as the age limit, will be registered with ICAO.

It is important that Part 145 certifying engineers fully understand that they are certifying on behalf of their maintenance organisation and not on behalf of the Director. This understanding is a key factor in the development of the quality culture required of a Part 145 organisation.

1.5 Cross references in Parts 43 and 145

One commenter noted that Parts 43 and 145 had references to licences issued under Part 65 rather than maintenance engineer licences issued under Part 66. The commenter requested that consequential amendments be made.

CAA comment: The CAA agrees and has corrected these cross references. The references to Part 65 are out of date and refer to a draft of Part 66 that was entitled Part 65.

2. Specific comments on the NPRM

Specific comments received from the submissions are discussed as follows:

2.1 66.3 Definitions [Final Rule 66.3]

One commenter suggested that the wording in the definitions of major repairs and major modifications contained statements that were negative, such as "cannot be performed" and "not performed".

CAA response: The CAA agrees. The definitions have been reviewed and rewritten. As minor modifications and repairs are considered to be maintenance only definitions for major modifications and repairs are required.

2.2 66.9 Issue of licences, certificates and ratings [Final Rule 66.9]

One commenter inquired about the fit and proper person test and what are the parameters of the test.

CAA response: The details of the test are contained in Part 1 of the Civil Aviation Act 1990.

2.3 66.11 Duration of licences and certificates [Final Rule 66.11]

One commenter suggested that owners, as well as the principal constructor, should be permitted to hold a maintenance approval to maintain their amateur built aircraft.

CAA Response: Maintenance approvals are issued to principal constructors on the basis that they have undergone an education process during the building of an aircraft. When this is considered in conjunction with an acceptable level of experience of maintaining the aircraft, it can provide justification for granting certification privileges by means of a maintenance approval. The CAA believes that it is reasonable to restrict the granting of approvals to principal constructors of amateur built aeroplanes. The CAA believes, that in the interest of providing adequate certification coverage in regions of New Zealand, it may be appropriate to grant maintenance approval coverage to a principal constructor which allows certification privileges on aircraft of the same type or similar construction to the aircraft that person has constructed. Further guidance will appear in advisory circular material.

2.4 66.13 Examinations [Final Rule 66.13]

One commenter suggested that the number of unsuccessful attempts at the oral examination required by 66.53(3) should be limited to two, at which point a stand down period is applied.

CAA Response: The CAA supports this submission which has similarities with previous NZCAR requirements. It has been decided to limit the number of unsuccessful attempts to three after which a three month stand down period will apply.

2.5 66.17 Offences involving alcohol or drugs

Three commenters asked for clarification of this rule.

CAA response: This rule promulgates the CAA position in respect of persons involved in offences involving alcohol and drugs and their continuing to meet the fit and proper person test. The details of the test are contained in Part 1 of the Civil Aviation Act 1990.

2.6 66.19 Medical Requirements [Final Rule 66.19]

One commenter required clarification of "known medical deficiency" and on whose opinion a medical decision is to be made. A second commenter suggested a colour blindness test for avionic category licence holders.

CAA Response: In keeping with the ICAO March 1996 proposed amendment, the CAA has elected to not impose a medical assessment in respect of Part 66 licence holders. The CAA believes the current situation to be acceptable and that the requirements of 66.19 which prohibit the use of privileges should the holder of a licence or certificate become unfit are adequate.

2.7 66.53 Eligibility Requirements [Final Rule 66.53]

Two commenters highlighted that the reduction in practical experience for an additional category, for an applicant that has held a licence for ten years or more, which was provided by NZCAR section L, has not been provided for in the NPRM.

CAA Response:

The concession available to an applicant who has held a licence for ten years has been included in the final rule.

One commenter stated that the minimum age requirement of 21 years was too high.

CAA Response:

The minimum age of twenty one years is considered appropriate and is supported by industry groups.

One commenter said that the term equivalent should be removed from 66.53(a)(2) which refers to written examinations acceptable to the Director.

CAA Response:

The term equivalent has been retained in the final rule to allow for flexibility. The rule refers to "written examinations or their equivalent." The retention of the term allows for oral examinations should the Director approve this type of examination in the future. It is not the CAA's intention to move away from

written examinations but it does wish to retain the flexibility of all examination methods should they be required in the future.

One commenter requested that an amendment be introduced to require an applicant for a licence to have met the experience and basic examination requirements prior to applying to sit the Air Law examinations

CAA Response:

The requirement to have completed the basic examinations and practical experience prior to sitting the Air Law examinations is sensible. This will be published as advisory circular material.

One commenter stated that the examinations acceptable to the Director should have been included in the NPRM.

CAA Response:

The examinations acceptable to the Director will be published as advisory circular material. The CAA intends to introduce human factors and supervision as new topic areas, however the majority of the existing curriculum will remain unchanged.

2.8 66.53 Eligibility Requirements [Final Rule 66.53]

One commenter suggested that the words "course of instruction" should be replaced by the term course of training as this indicates the result of instruction and practice.

CAA Response: The CAA agrees and an amendment has been made.

2.9 66.55 Privileges and limitations [Final Rule 66.55]

One commenter suggested that the requirement for the holder of an aircraft maintenance engineers licence to be familiar with the aircraft or component to be certified should appear in this rule.

CAA Response: The CAA agrees and the requirement has been added to the final rule.

2.10 66.201 Applicability - Certificate of Inspection Authorisation [Final Rule 66.201]

One commenter suggested the deletion of the Certificate of Inspection Authorisation in total. It was suggested that "The real problem is that some engineers do not do their paper work correctly".

CAA Response: The CAA disagrees with this submission and emphasises the value of this new certificate as detailed in the preamble of the NPRM to Part 66. There are a number of benefits to the industry and feed back from the initial

inspection authorisation certificate holders courses have indicated support for the concept and the expected raising of airworthiness standards. The CAA also highlights that one area of the inspection authorisation certificate holders responsibilities is to audit aircraft records. This should correct the deficiencies reported as the real problem in this submission.

2.11 66.203 Eligibility requirements, Certificate of Inspection Authorisation [Final rule 66.203]

One commenter stated that the certificate of inspection authorisation should be available to Type I and II licence holders in any category. The same commenter questioned the need for examination passes in airframe and machine overhaul.

CAA Response: The CAA believes that it is not appropriate to allow the inspection authorisation to be granted to the holder of avionic categories only. The requirement to hold the powerplant and aeroplane, or, rotorcraft and powerplant categories has been retained in the final rule. This decision is based on the requirement for the inspection authorisation holder to review aircraft for general condition and assess the aircraft modification state. These areas require a level of mechanical expertise and training that would not normally be available to the holder of an avionic category only, licence.

The requirement for examinations in airframe and machine overhaul has been reviewed. Due to the similarity of the subjects it has been decided to remove the requirement for the machine overhaul examination credit.

2.12 66.209 Requirement to maintain logbook [Final Rule 66.209]

One commenter stated that the permanent records required to be kept by the holder of an inspection authorisation should also include evidence of examination passes if that was the method by which recent experience requirements were met.

CAA Response: The CAA agrees and this extra item appears in the final rule

2.13 Appendix B Group and Type Ratings

Three commenters pointed out that the traditional demarcation between group 1 and two aeroplanes, which has been a retractable undercarriage did not appear in the NPRM.

CAA Response: The CAA agrees. This was an error and the final rule will retain the traditional classification of Group 1 and Group 2 aeroplanes.

2.14 145.60 Authorisation Procedures

One commenter observed that the word "or" appeared at the end of paragraph (d)(3). It was pointed out that this made paragraph (e) an alternative means of compliance to the training in paragraph (d).

CAA Response: The CAA agrees and the word has been removed.

2.15 43.203 Persons to certify conformity

One commenter suggested that a statement should be made in the rule to indicate that glider maintenance can be certified by a person authorised by a Part 149 organisation. It was also suggested that this statement should be made in respect of persons that may certify conformity of an aircraft or aircraft component when that aircraft is a glider.

CAA Response: The CAA does not agree that a statement providing for maintenance of gliders by non licensed engineers is required in this Part. The provision for maintenance to be performed by engineers authorised by a Part 149 organisation is contained in Part 43. This is the general maintenance rules which cover all aircraft including gliders. It is considered that this is the appropriate place for the general exemption regarding maintenance certification of gliders. The second part of this submission was to allow the certification of conformity of gliders or glider components to approved data by a person authorised by a Part 149 organisation. The CAA agrees with this part of the submission and an amendment to the rule has been carried out. It should be noted that persons who are approved by a Part 149 organisation to carry out the annual review of airworthiness or certification of conformity of major repairs or modifications to approved data in respect of a glider will be required to attend and pass a course of training acceptable to the Director.

Transitional arrangements

Appendix A to Part 66 provides:

- (a) Examination credits for the Type I (major) aircraft maintenance engineer licence subjects are acceptable to the Director for the purposes of 66.203(3) and 145.60(d)(1)(ii).
- (b) A current Type II (minor) aircraft maintenance engineer licence issued under the Civil Aviation Regulations 1953 shall be deemed an aircraft maintenance engineer licence issued under this Part in the corresponding category of licence and may be exchanged without further examination or test.
- (c) A group or type rating held on a licence issued under the Civil Aviation Regulations 1953 shall carry over to a licence issued under this Part and is deemed to have been issued under this Part.

Regulatory activities

Part 66 replaces the requirements of Part XII of the Civil Aviation Regulations 1953 and New Zealand Civil Airworthiness Requirements Sections D.4, G and L.

Section 14(2) of the Civil Aviation Amendment Act 1991 (as amended by section 34 of 1996 No. 91) deems the Civil Aviation (Security) Regulations 1989 that are continued in force by section 8 of that Act to be revoked on the close of 31 March 1997.

Conclusion

We conclude that Part 66 introduces the Aircraft Engineers Maintenance Licence to the Civil Aviation Rules environment in a manner that is acceptable to both the CAA and the majority of those individuals employed within the aviation engineering industry. Although a small number of specific areas of the NPRM attracted comment the number of individual submissions were high. The CAA believes that the extended consultation with industry organisations such as SLAET, AMAPE, AIA and a number of Part 145 organisations, plus the submissions of individuals, has provided a basis for a final rule which addresses the concerns expressed during the early stages of development.