

Notice of Proposed Rule Making

NPRM 19-02

14 February 2019

Part 66 Aircraft Maintenance Personnel Licensing

Docket 16/CAR/9

Engineer Licensing

Consequential Amendments

Part 19

Part 61

Background to the Civil Aviation Rules

The Civil Aviation Rules (**the Rules**) establish the minimum regulatory safety boundary for participants to gain entry into, operate within, and exit the New Zealand civil aviation system. The Rules are structured in a manner similar to the Federal Aviation Regulations of the USA.

Rules are divided into Parts and each Part contains a series of individual rules that relate to a particular aviation activity. Some rules empower the use of a CAA Notice. Notices contain specific mandatory requirements including detail about the approvals, standards, conditions, procedures and technical specifications that have been approved or determined by the Director as being appropriate in accordance with the corresponding enabling rule.

Advisory Circulars accompany many rule Parts and contain information about standards, practices and procedures that the Director has established to be an acceptable means of compliance with the associated rule. An advisory circular may also contain guidance material to facilitate compliance with the rule requirements.

The objective of the Civil Aviation Rules system is to strike a balance of responsibility between, on the one hand, the Crown and regulatory authority (CAA) and, on the other hand, those who provide services and exercise privileges in the civil aviation system. This balance must enable the Crown and regulatory 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 within the safety boundary.

Section 12 of the Civil Aviation Act 1990 prescribes general requirements for participants in the civil aviation system and requires, amongst other things, participants 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 for any of the following purposes:

- the implementation of New Zealand's obligations under the Convention
- to allow for the mutual recognition of safety certifications in accordance with the ANZA mutual recognition agreements
- the provision of aviation meteorological services, search and rescue services and civil aviation security programmes and services
- assisting aviation safety and security, including but not limited to personal security
- assisting economic development
- improving access and mobility
- protecting and promoting public health
- ensuring environmental sustainability
- any matter related or reasonably incidental to any of the following:
 - i. The Minister's objectives under section 14 of the Act;
 - ii. The Minister's functions under section 14A of the Act;
 - iii. The Authority's objectives under section 72AA of the Act;
 - iv. The Authority's functions and duties under section 72B of the Act;
 - v. The Director's functions and powers under section 72I of the Act; and
- any other matter contemplated by any provision of the Act.

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1. Purpose of this NPRM

The purpose of this rule-making proposal is to review and update those areas of Part 66 that no longer reflect modern aircraft technology and maintenance practices. This is particularly so in the areas of integrated aircraft avionics, maintenance practices, and improvements in aircraft reliability.

2. Background to the proposal

2.1 General Summary

The purpose of Civil Aviation Rule (CAR) Part 66 is to prescribe rules governing:

- the issue of aircraft maintenance licences, certificates, and ratings
- the privileges and limitations of these licences, certificates, and ratings.

A number of Advisory Circulars (AC), including training syllabi set the knowledge, coursework, and experience expectations for obtaining a licence, support Part 66.

Part 66 has not been comprehensively reviewed or updated since its introduction in 1997. In addition, Part 66 is prescriptive in certain areas, which prevents it being easily adapted to accommodate changes resulting from advances in technology and aircraft maintenance engineering best practice. As a result, in some areas it has not kept pace with modern aircraft technology, including avionics, and modern maintenance practices.

Between 2006 and 2008, five issue petitions were presented to the CAA in relation to problems with Part 66. The issues raised included:

- the increasing reliability of aircraft technology making the rules unnecessarily onerous
- the need for on-going competency assurance for Part 66 licence holders utilising the Inspection Authorisation (IA) privilege
- issues with outdated technology or practice being required in the rules, and
- other general fix-ups.

These issues were assessed and in 2014 the CAA Issue Assessment Panel agreed to a scoping paper to review Part 66. The initial phase of this review included significant policy assessment and stakeholder engagement with both internal and external technical experts, and provided significant and valuable input into the project. The information gathered from this phase provided the basis of a public consultation document “*Part 66 Aircraft Maintenance Personnel Licensing-Improving Aircraft Maintenance Engineer Licensing*” dated 15 August 2014. Consultation on the document took place from August to October 2014 with 1,401 individuals and 89 organisations directly invited to make comment. Sixty-six submissions were received with the majority of the submissions supporting the opportunity for this review.

In October and December 2015 the CAA Issue Assessment Panel assessed the recommendations arising from the 2014 consultation document. The Panel agreed to policy recommendations and associated proposed rule amendments, which were then forwarded to the Ministry of Transport (MOT). A Regulatory Impact Statement (RIS) was produced in February 2017 and submitted to the MOT. The MOT reviewed these recommendations and proposed rule amendments and accepted them for inclusion on the Transport Rules Programme.

In April 2017 the CAA issued Rule Drafting Instructions containing the policy recommendations and the instructions proposing rule amendments to Part 66. These proposed changes to Part 66 are intended to achieve three primary objectives:

- modernise and create a more resilient Part 66 regime
- improve safety
- remove or minimise regulatory burden where doing so poses no additional risk to safety.

2.2 Issues addressed during development

The issues identified to be addressed by rule amendments were:

- delete Aeroplane Groups 3 and 4 as stand-alone Category ratings
- remove additional privileges for Aeroplane and Powerplant rated Licensed Aircraft Maintenance Engineers (LAME) to carry out the installation of avionics equipment
- rename Part 66 Appendix C to “limited privileges”
- delete references to specific types of radio systems
- amend the Electrical, Instrument and Radio Group ratings to remove references to aircraft weight and pressurisation
- amend Electrical, Instrument and Radio Group ratings to require type-specific ratings for complex electrical, instrument and radio systems
- enable Electrical, Instrument and Radio rated LAMEs to obtain Inspection Authorisation privileges to certify for conformity avionics-related major modifications and major repairs only
- extend the allowable period for a Certificate of Maintenance Approval (CMA) from two years to up to five years
- clarify that LAMEs must be “competent” (as opposed to “familiar”) to exercise the relevant additional privileges listed in Appendix C, and that LAMEs need to have access to special test equipment where required to carry out those additional privileges
- require recurrent training for all Part 66 license holders at least every two years
- introduce a requirement specifying that Inspection Authorisation privileges must have been exercised for a period of not less than six months in the last 24 months
- include a requirement for LAMEs to complete a specified acceptable course of training to be eligible for a Group or Type rating
- require evidence of knowledge improvement based on a knowledge deficiency report (KDR) to Category license applicants to be reviewed and signed by a LAME licensed in the respective Category, and submitted to the CAA with the application
- delete reference to “oral examinations” in rule 66.13(d)
- require LAMEs to notify the CAA of relevant medically significant changes affecting their fit and proper person status
- amend rule 66.15 to align with rule 61.19
- revoke Part 66 Appendix A
- ensure Part 66 is editorially correct and in plain English
- transfer the transitional provisions of rule 19.401 to Part 66; and
- correct a reference in rule 66.55(a).

2.3 ICAO Standards and Recommended Practices (SARPS)

The proposed rule amendments are intended to align with International Civil Aviation Organization (ICAO) SARPS to the extent practicable, and are written in consultation with the following Annexes:

- Annex 1 – *Personnel Licensing*
- Annex 6 – *Operation of Aircraft*
- Annex 8 – *Airworthiness of Aircraft*
- Annex 19 – *Safety Management*

2.4 Level of Risk to New Zealand Aviation Safety

There is a lack of robust and comprehensive evidence to identify areas where risks to safety have occurred with regards to Part 66, however, the CAA has received reports of sub-standard work done by people without the appropriate ratings. In the face of this limited data, the CAA made assumptions based on anecdotal evidence and international practice to determine that the proposed changes to Part 66 address safety risks in a proportionate manner. Consequently, public consultation and other stakeholder engagement were critical in developing these changes and testing assumptions. The areas of risk in the current Part 66 are seen as:

- the rules are overly prescriptive preventing them from keeping pace with advances in aircraft maintenance engineering and technology;
- although licensed aircraft maintenance engineers (LAMEs) are required to be a Fit and Proper Person under the Act, there is no requirement to report changes in medical status to the Director; and
- currently an Inspection Authorisation (IA) is restricted to Aeroplane and Rotorcraft Category rating holders with a Powerplant rating who may have little or no training in modern integrated avionics systems.

2.5 Key Stakeholders

The CAA identified the following as key stakeholders in the proposed rule amendments contained in this NPRM:

- The CAA
- The Minister of Transport
- The Ministry of Transport
- Licensed aircraft maintenance engineers
- Aircraft operators
- Aircraft Engineering Association of New Zealand.

2.6 Compliance Costs

These proposals are designed to improve safety while minimising cost and regulatory burden on the aviation industry. The impacts of the proposals will vary considerably among LAMEs and maintenance organisations depending on their current practices but are expected to be minimal overall.

3. NPRM Development

3.1 Rules Drafting Group

A Rules Drafting Group (RDG) was established in July 2017 comprising Civil Aviation Authority (CAA) subject matter experts (SMEs) together with industry and Ministry of Transport representatives. In addition, the Aircraft Engineering Association of New Zealand (AEANZ) was asked for their views on specific policy proposals arising from the RDG meetings as a preliminary test of industry understanding and practicability. The purpose of the RDG was to develop the proposed rule amendments identified by the Rules Drafting Instructions and assist in the development of this NPRM.

3.2 Rules Drafting Group Discussions

3.2.1 *Rule 66.203 Eligibility Requirements-Certificate of Inspection Authorisation*

At present, holding an Inspection Authorisation (IA) is limited to Aeroplane and Rotorcraft Category-rated Licenced Aircraft Maintenance Engineers (LAMEs) with a Powerplant rating who may have little or no training in avionics systems, yet are approved to review and certify conformity. As aircraft systems become increasingly complex and integrated in nature, there is a need for LAMEs with an Electrical, Instrument and/or Radio ratings to be eligible for an Inspection Authorisation (IA) certificate.

The RDG agreed to propose an amendment to rule 66.203 to insert Electrical, Instrument or Radio Category rating holders as eligible for a Certificate of Inspection Authorisation, with the restriction that IA certificates for Electrical, Instrument and Radio rating holders must be limited to certifying for conformity of avionics-related major modifications and major repairs, and further limited to ensuring the conformity of the type or group the LAME is rated on. Rule 66.205 would also be amended to include these limitations. This proposal would ensure the availability of appropriately rated LAMEs to carry out IA tasks on certain aircraft functions.

In addition, a new proposal was raised from within the RDG for a LAME with Electrical, Instrument or Radio Category ratings with an IA certificate to be eligible to conduct a Review of Airworthiness (RA). This proposal was raised to formally test industry views on whether a LAME with an avionics IA should be able to conduct an RA.

These two proposals were passed to the AEANZ for their view. The AEANZ did not support the proposed changes to rule 66.203. After further discussion with the RDG, it was then decided to not proceed with the additional proposal for an avionics IA to have the ability to conduct an RA.

3.2.2 *Appendix C Additional Privileges*

Part 66 Appendix C lists the additional privileges which some specified LAMEs may “perform or supervise, and certify release to service” if they are rated on the applicable aircraft type. The intent of Appendix C is to recognise that some aircraft have relatively simple systems that a person rated on that type can reasonably undertake even where they may not have specific specialist training for that task.

However, in many cases and increasingly frequently, these additional privileges no longer meet that intent or are no longer appropriate given technological advances. This creates a safety risk where a LAME without sufficient knowledge or training is allowed to conduct certain tasks as an additional privilege. It is proposed to amend the title of Appendix C to read “Limited Privileges” as the current title can lead to confusion resulting in LAMEs interpreting it to mean they can carry out tasks beyond their qualifications and rating.

It is proposed to remove the additional privileges for Aeroplane-, Rotorcraft- and Powerplant-rated LAMEs to carry out the installation of avionics equipment. The privileges in Appendix C(a) and (b) would be limited to the maintenance of certain systems or parts, the functional testing of certain systems or parts, and the replacement of line replaceable units (LRUs).

It is also proposed to add re-calculation of weight and balance to the privileges in Appendix C(c), with guidance material to be developed.

The proposal to remove the additional privilege relating to installation of radio systems was passed to the AEANZ for their view. The AEANZ was opposed to the proposal. After consideration and further discussion with the RDG, CAA has decided to proceed with this proposal.

3.2.3 *Appendix B.1 Avionics ratings based on system complexity*

Part 66 Appendix B specifies that Electrical, Instrument, and Radio (E, I, & R) ratings be granted on the basis of the weight of the aircraft which the avionic system is installed in, and whether it is a pressurised aircraft. Electrical, instrument and radio maintenance work is different from other aircraft maintenance (e.g. engine and airframe) in that it is based upon the avionics system of the aircraft and not on the size of the aircraft. In many cases, the same electrical, instrument, or radio system is used in aircraft of different weights, and pressurised or unpressurised aircraft.

Some systems, however, are more complex than others and that complexity is not necessarily tied to the weight of the aircraft. Under the current rules, LAMEs rated to lightweight aircraft are able to exercise avionics privileges on complex systems they may not be adequately trained for. Conversely, some LAMEs are being restricted from conducting avionics maintenance on larger aircraft even if they have the appropriate training.

The proposal is to delete reference to aircraft weight and pressurisation in Appendix B.1(d) and (e) so that E, I, & R ratings be based on the complexity of a particular avionic system, regardless of aircraft size. To conduct maintenance on more complex electrical, instrument, and radio systems, it is proposed to amend Appendix B.1(d)(e) and (f) to require type-specific ratings to ensure appropriate training and qualification.

Guidance material will be developed to describe a complex avionics system.

3.2.4 *Improve flexibility with a less prescriptive list of radio systems – Appendix C*

Part 66 Appendix C lists specific radio systems: very high frequency (VHF), and high frequency (HF)), the maintenance and installation of which are additional privileges for Category licence holders. The specificity of radio systems in Appendix C prevents the adoption of new technologies in a timely manner.

It is proposed to delete references to VHF and HF radio systems in Part 66 Appendix C(a)(4), (c)(4), and (d)(4). This rule should list only the installation and maintenance of radio systems generically.

This proposal would enable a more resilient rule whereby rule amendments are not required when new radio technology is introduced

3.2.5 *Appendix B – Group and Type Ratings – Groups 3 and 4, and Groups 5 and 6*

The skills and training to maintain Aeroplane rating categories Groups 3 and 4 are largely the same as those for Groups 1 and 2, with the exception of some specialised training required for fibre reinforced plastic (FRP) in Group 4. This similarity is expected to become greater in future as new aircraft construction material is introduced, phasing out the older materials of Groups 3 and 4. As a consequence, the training for construction materials for Groups 3 and 4 are also covered in Groups 1 and 2, making them redundant. This creates an unnecessary administrative burden for both the CAA and industry.

The proposed change was initially intended to update Appendix B by deleting Aeroplane Groups 3 and 4 as stand-alone Category ratings, and including Aeroplane Groups 5 and 6 as currently in place but not listed in Part 66. As a result of RDG discussions, it was decided to retain Group 3 to provide for aeroplanes with wood and fabric construction that require considerable skill to maintain. Just passing an exam is not sufficient – a high level of experience and skill is also needed.

It is proposed to delete Aeroplane Group 4 as a stand-alone Category rating from Part 66 Appendix B.1(a), and insert Aeroplane Groups 5 and 6 into Appendix B.1, as currently provided in AC66-1 Appendix 1.

There is a non-legislative piece of work currently planned for the CAA Licensing and Personnel Unit to review and update training material and course syllabi, which will ensure that Group 4 training material is appropriately transferred to other Group rating training

3.2.6 *Extend Certificate of Maintenance Approval - Rule 66.11*

A Certificate of Maintenance Approval (CMA) can be issued under rule 66.11(b)(1) for up to two years to applicants who provide evidence of appropriate practical experience and have passed acceptable examinations or courses, but may not otherwise hold the appropriate rating. The exact length of a CMA within that two year window is determined on a case-by-case basis. The intent is to allow maintenance to be performed in limited and controlled situations where it would otherwise not be available.

The current two year limit for a CMA poses a barrier to enabling otherwise qualified LAMEs to carry out the full and necessary maintenance in some circumstances. The required practical experience for obtaining a rating cannot always be reasonably met because of an aircraft's technological reliability. In some cases, that reliability is such that it takes more than two years to meet the practical experience required for a rating.

This proposal does not fundamentally change the intent of CMAs. Rather, it allows that intent to be applicable to for a longer period of time to account for advances in technology. This proposal would have the effect of increased length of time for skilled maintenance engineers to undertake specific tasks where it is otherwise unreasonable to expect the prescribed practical experience to be met.

It is proposed to amend rule 66.11(b)(1) to allow the granting of a CMA for a period of up to five years. The exact length of a CMA within this five year period would be determined on a case-by-case basis, as is currently done.

3.2.7 *LAME Obligation To Ensure Competency To Exercise Privileges - Rule 66.55*

Part 66 licences are valid for life, and there are no clear or comprehensive competency or recurrent training requirements for LAMEs. The CAA has received advice that some maintenance of avionics by non-Electrical, Instrument, or Radio rating holders (as allowed under Part 66 Appendix C) is sub-standard, posing risks to safety and business in the avionics subsector. However, there is limited substantiated evidence of a safety problem of the extent that would justify rule changes beyond that proposed in this NPRM.

Anecdotal evidence suggests there is a problem with the term “familiar” (as currently used in rule 66.55(b)) being interpreted as having some knowledge of a particular task might not be adequate. This is different from “competent”, which infers relevant skill, knowledge and possibly a formal qualification¹. As aviation technology becomes

¹ The descriptions of the terms “competent” and “competency” are based on the definitions contained in ICAO Annex 1 – *Personnel Licensing*.

increasingly complex, safety risks are more likely to arise where LAMEs may not be fully competent to exercise the privileges of their licence and there is no standard mechanism to assess their competency or currency on an ongoing basis. These risks are likely to become more significant as aircraft and technology continue to rapidly advance in complexity and integration, the LAME workforce ages, and safety management system requirements place more responsibility on industry to manage its own risks.

The proposal to replace “familiar” with “competent” is intended to give LAMEs greater awareness of their obligation to only undertake aircraft maintenance work they are appropriately qualified and competent for. Enhancing this rule would also provide a mechanism to require a LAME to demonstrate their competence where necessary (e.g. via practical demonstrations or training completion certificates). There is no intention of establishing a self-assessment scheme for LAMEs to test their own competency. However, CAA guidance material will be amended to define “competence”.

Also, the proposal clarifies the intent of rule 66.55(c): that LAMEs must have access to and use special test equipment - where necessary. At present, the rule requires the LAME to be trained on that equipment, but there is no requirement to use the equipment.

3.2.8 *Ensure Up-To-Date Experience and Training - Rules 66.57, 66.103, 66.203, 66.207*

The rapid development of aircraft technology makes it increasingly challenging for LAMEs to be up-to-date in their knowledge and training. Even where a LAME regularly works on a certain aircraft or component, technological advancements may still require frequent training and upskilling. Also, where technology is becoming more reliable, a LAME may not have had to perform maintenance on an aircraft or component for an extended period of time, but due to technological advancements during that period upskilling is required.

The rules do not currently require LAMEs to undertake ongoing professional training to stay up-to-date with industry standards and practices, technical matters or regulations. Many LAMEs regularly do this as best practice or incidentally through on-the-job experience, though this is not consistent across the workforce. Given that a Part 66 licence has no expiry, there is a risk that some LAMEs could continue practising under their licence without being up-to-date, and perhaps without realising it.

There are three proposed amendments associated with this objective:

1. Amend rule 66.57 to provide LAMEs with an additional option of meeting recent experience requirements by completing recurrent training at least every two years. This proposal is designed to enable LAMEs to complete recurrent training in the way that best suits them. For example, such training can be obtained from the aircraft manufacturer, a certificated Part 141, 145 or 147 organisation, the Director, the authority of a foreign state acceptable to the Director, or a Civil Aviation Safety Authority (CASA) of Australia Part 147 certificated organisation; and can be done via a course, online, seminar, etc. as acceptable. Comprehensive guidance material will be developed for defining acceptable training. The CAA does not have accurate cost information for this recurrent training and invites industry comment on this.
2. Amend rule 66.103 to require LAMEs to complete an acceptable consolidated accelerated, practical, or simulated course of training to obtain a Group or specific Type rating. This proposal is intended to provide additional flexibility for LAMEs to obtain Group or Type ratings where the minimum experience time for a particular rating is impractical given technological reliability. This proposal is for the introduction of a new means to obtain a minimum level of acceptable skills and knowledge in such cases through completing a course deemed acceptable by the Director. Generally, such courses would include those similar to what is proposed for recurrent training: from the aircraft manufacturer; a certificated Part 141, 145 or 147 organisation; the Director; the authority of a foreign state acceptable to the Director; or a CASA Part 147 certificated organisation, and can be done via a course, online, seminar, etc. as acceptable.
3. Amend rule 66.207 to specify that Inspection Authorisation (IA) privileges must have been exercised for a period of not less than six months in the last 24 months. This proposal aligns the experience requirements for exercising IA privileges with that for exercising general licence requirements as per rule 66.57. The intent of this proposal is to fill a gap by ensuring that IA holders who may only infrequently exercise IA privileges remain current for those times they do exercise those privileges.

3.2.9 *Raise Standards For Demonstrating Knowledge – Rules 66.13, 66.53.*

It is common, though not standard, for students to be issued a knowledge deficiency report (KDR) after their licence examinations. KDRs outline areas of knowledge weaknesses based on the student’s exam. In many cases, students will be further instructed and assessed for additional material on which their test results indicate particular weaknesses.

Furthermore, because of practical limitations to testing applicants for all relevant information, rating examinations test for only a small portion of the information the applicant would need to exercise their licence or privileges. A pass mark of 70 percent means that up to 30 percent of a test is allowed to be incorrect, and this is only a fraction of all possible knowledge the LAME would need. This results in a potentially considerable gap in ensuring that applicants for a licence or rating are sufficiently knowledgeable to exercise their privileges. The KDR process provides a level of additional assurance that students are adequately trained.

There is also currently a requirement for a three month stand-down period for applicants who fail an oral examination three times. The purpose of this is to encourage these applicants to take more time to study the material necessary to pass. There is no such requirement for written tests creating a gap in applying a stand-down period between written and oral examinations. There is no identified reason why these testing approaches should be treated differently.

There are two proposed rule amendments with the intent of raising the standard of Part 66 licence applicants for demonstrating knowledge:

1. Amend rule 66.53 to insert a new requirement for Category licence applicants to complete a KDR, and have it reviewed and signed by a LAME licenced in the same Category being applied for, and submit this to the CAA with their licence application. Guidance on KDR requirements will be developed so that the KDR review process is competency-based. For example, the guidance would describe that follow up assessment based upon a KDR should include the applicant giving a practical demonstration of completing the task identified in their KDR as a shortcoming, rather than posing the same or similar question as in an exam.
2. Also, delete the word “oral” in rule 66.13(d) and delete the reference in that rule to rule 66.53(a)(3). The effect of this is to apply the three month stand-down period after three failed examinations in rule 66.13(d) to both oral and written examinations.

3.2.10 Require LAMEs To Assure The CAA They Are Medically Able To Exercise Privileges-Rule 66.19 and Rule 66.9

Most other aviation document holders, such as pilots and air traffic personnel, have significantly more stringent medical requirements. For example, a requirement to obtain a medical certificate both for their initial licence and at regular intervals thereafter to keep exercising the privileges of their licence. Section 27C of the Civil Aviation Act requires medical certificate holders to report to the CAA relevant changes to their medical condition.. Because LAMEs are not required to hold a medical certificate this reporting requirement does not apply.

LAMEs are, however, required to be a fit and proper person (FPP) to obtain a Part 66 licence as per Civil Aviation Act section 9, and must not exercise their privileges after licensing if they later become unfit. One of the FPP criteria in section 10 of the Civil Aviation Act is “any history of physical or mental health or serious behavioural problems” . Therefore a participant’s medical condition is broadly relevant to their FPP status.

Rule 66.19 specifies that a LAME cannot exercise the privileges of their licence if they have a “known medical condition, or increase of a known medical condition, that creates a risk of harm to that person or to any other person.”

As a Part 66 licence has no expiry date, and there are no requirements to report changes in medical status to the Director of Civil Aviation, the CAA’s position is that there is insufficient safety assurance of LAMEs’ medical fitness to exercise their privileges.; . Guidance material will be developed to help LAMEs determine when a change to their medical status may be considered “medically significant.”

The intent of this proposal is to create a regulatory regime whereby the Director of Civil Aviation has the confidence that LAMEs are medically able to safely carry out their privileges, and that any requirements for this are clearly set out, and are proportionate to the risks. Because of the current limited evidence and the aviation safety context within which LAMEs operate full medical certification and its associated costs are not considered justified.

It is proposed to amend rule 66.19 to replace the term “medical deficiency” with “medical condition”, and require Part 66 licence holders to report to the CAA relevant medically significant changes that may have an impact on their FPP status. Upon receipt of notifications, the CAA would follow its standard process for assessing whether appropriate interventions are needed such as restrictions on a licence. Where a LAME does not comply with the requirement

proposed here, the CAA would consider an appropriate regulatory intervention. The CAA would use its risk-based and professional regulatory skills to determine the appropriate intervention, in line with its Regulatory Operating Model.²

This proposal will require consequential amendments to rule 66.9 to insert a corresponding provision that the Director must be satisfied with the applicant's medical fitness.

3.2.11 *Strengthen Director's Procedures For Investigating Examination Misconduct*

Part 66 provides procedures the Director of Civil Aviation must follow when investigating allegations of misconduct during examinations. Part 61 - *Pilot Licences and Ratings* provides similar procedures for pilots. The procedures followed by the Director when investigating allegations of unauthorised conduct on a Part 66 licensing exam (rule 66.15) are not aligned with those for pilot licensing (rule 61.19). This risks inconsistency and procedural issues with regards to natural justice and fair processes, and could undermine the integrity of the Part 66 examination process.

It is proposed to amend rule 66.15 "Cheating or other unauthorised conduct" to align with rule 61.19 "Written examinations – unauthorised conduct". This proposal would provide greater detail and clarity on the procedural steps to be taken by the Director in the case of alleged examination misconduct. At the final Legal and Policy review stage of this proposal it was determined that some text in rule 61.19 lacked clarity. It was then decided to make consequential changes to parts of rule 61.19 and include these changes in the revised rule 66.15.

3.2.12 *Revoke Appendix A – Transitional Arrangements*

Appendix A provides a small set of transitional rules from when Part 66 was first introduced. The licences and ratings referred to in Appendix A are no longer in use or being issued and therefore Appendix A can be revoked. Note – it is intended to retain the current labelling of the other Appendices.

3.2.13 *Part 19 – Transition Rules*

Incorporate the text of rule 19.401 – *Re-examination of maintenance personal in Part 66* new rule 66.14 – *Re-examination of licences*

3.2.14 *Correct Reference In Rule 66.55*

Rule 66.55(a) refers to rule 145.5 "Requirement for certificate" for aircraft maintenance. The reference should be to rule 43.54 "Maintenance required under Part 145" as that rule is the appropriate foundational rule for when the specified maintenance is authorised.

3.2.15 *Insert English language proficiency requirement in rule 66.9(b)*

Rule 66.9(a) includes a requirement for English language proficiency but there is no such requirement in rule 66.9(b) for a foreign applicant. It is proposed to repeat the text in rule 66.9(a)(2) in rule 66.9(b).

3.3 Transitional Provisions

In different ways, the proposals here will have an impact on all Part 66 licence holders and maintenance organisations certificated under Part 145 *Aircraft Maintenance Organisations – Certification*. Namely, the proposals requiring transitional provisions are those for rules 66.11, 66.53, 66.57, 66.19, 66.103(3), Appendix B.1 (d) and (e), and Appendix C. To address transitional matters, affected parties will be given 12 months to transition to the new regime. This timeframe is negotiable and can be amended during drafting and consultation stages. The new regime will apply 12 months from the date of rule signing by the Minister of Transport.

3.4 Savings Provisions

The proposed revocation of Appendix A and rules in Appendix B relating to Aeroplane Group 4 will affect aviation document holders, so savings provisions will be required. The effect of revoking Appendix A is that holders of a Type I (major), Type II (minor) and/or ratings held on a licence issued under the Civil Aviation Regulations 1953 would no longer have explicit transitional provisions provided for their licences. As with Part 66 licences, these licences are valid for life. CAA records indicate that it is very unlikely that anyone is currently conducting maintenance under that authority, making Appendix A irrelevant. Nonetheless, it would be prudent to include a savings provision for these licences.

² <http://www.caa.govt.nz/policy-ops/policy-ops/>

There have been 184 Group 4 ratings issued but it is not known how many are still active. The effect of revoking Aeroplane Group 4 is that current licence holders rated in this Group would no longer have that rating recognised. This is not an intended outcome of the policy. Rather, the intent is to issue no new Aeroplane Group 4 ratings, but to continue recognising those issued up to the time the rule changes come into effect. A savings provision is required to enable this.

4. Summary of proposed changes

Following RDG and industry discussion on the issues noted in 2.2 of this document, the proposed changes are as follows:

- Amend rule 66.203 and rule 66.205 – *Eligibility requirements* to allow Electrical, Instrument or Radio Category rating holders to be eligible for a Certificate of Inspection Authorisation with certain restrictions and limitations
- Amend Appendix C to remove the additional privileges for Aeroplane, Rotorcraft, and Powerplant rated LAMEs to carry out the installation of avionics equipment. Amend Appendix C(c) to include re-calculate weight and balance. Also, amend the title to read “Limited Privileges”.
- Amend Appendix B.1(d) and (e) to delete reference to aircraft weight and pressurisation. Also amend Appendix B.1(d), (e), and (f) to require type-specific ratings for complex avionics systems
- Delete reference to VHF and HF radios in Appendix C(a)(4), (c)(4), and (d)(4)
- Delete Aeroplane Group 4 from Appendix B.1 and add Aeroplane Groups 5 and 6.
- Amend rule 66.11 to extend a Certificate of Maintenance Approval for up to 5 years
- Amend rule 66.55(b) by replacing “is familiar with” with “can demonstrate competency on the maintenance of”
- Amend rules 66.57, 66.103, 66.203, and 66.207 to require LAMEs to stay up-to-date with industry standards and practices, technical matters, and regulations.
- Amend rules 66.13 and 66.53 to raise the standard of licence applicants for demonstrating knowledge. Rule 66.53 is amended by adding a new requirement for an applicant to complete a knowledge deficiency report, and rule 66.13(d) is amended by deleting the word “oral”.
- Amend rules 66.19 and 66.9 to require LAMEs to assure the Director that they are medically able to exercise the privileges of their licence. Rule 66.19 is amended by replacing the term “medical deficiency” with the term “medical condition”, and require licence holders to report any medically significant changes that impact their fit and proper person status. Rule 66.9 is amended by inserting a provision that the Director must be satisfied with the applicant’s medical fitness.
- Amend rule 66.15 to align the Director’s procedures for investigating examination misconduct with that for pilots in Part 61
- Appendix A – *transitional arrangements* is revoked and the appendix letter is reserved
- Add a new rule 66.14 *re-examination of licences* incorporating the text of rule 19.401
- Amend rule 66.9(b) to include an English language proficiency requirement.

5. Legislative analysis

5.1 Power to make rules

The Minister may make ordinary rules under sections 28 and 30 of the Civil Aviation Act 1990, for various purposes including implementing New Zealand’s obligations under the Chicago Convention 1944; assisting aviation safety and security; and any matter contemplated under the Act.

These proposed rules are made pursuant to:

- (a) Section 28(1)(a) that allows the Minister to make rules for the purpose of implementation of New Zealand’s obligations under the Convention;

- (b) Section 28(1)(ab) that allows the Minister to make rules to allow for the mutual recognition of safety certifications in accordance with the ANZA mutual recognition agreements;
- (c) Section 28(1)(c) that allows the Minister to make rules for the purpose of assisting aviation safety and security, including (but not limited to) personal security;
- (d) Section 28(cc)(i) that allows the Minister to make rules for the purpose of the Minister's objectives under section 14, which includes ensuring that New Zealand's obligations under international civil aviation agreements are implemented;
- (e) Section 30(a) that allows the Minister to make rules for the designation, classification, and certification of all or any of the following:
 - (i) aircraft:
 - (ii) aircraft maintenance personnel:
 - (iii) aviation examiners or medical examiners:
 - (iv) aviation training organisations:
 - (v) aircraft design, manufacture, and maintenance organisations:
 - (vi) any other person who provides services in the civil aviation system, and any aircraft, aeronautical products, aviation related services, facilities, and equipment operated in support of the civil aviation system, or classes of such persons, aircraft, aeronautical products, aviation related services, facilities, and equipment operated in support of the civil aviation system:
- (f) Section 30(b) that allows the Minister to make rules for the setting of standards, specifications, restrictions, and licensing requirements for all or any of those persons or things specified in paragraph (e), including but not limited to the following:
 - (i) the specifications of the privileges, limitations, and ratings associated with licenses or other forms of approval:
 - (ii) the setting of standards for training systems and techniques, including recurrent training requirements:
 - (iii) the setting of medical standards for personnel:
 - (iv) the specification of standards of design, construction, manufacture, maintenance, processing, testing, supply, approval, and identification of aircraft and aeronautical products:
 - (v) the format of aviation documents, forms, and applications, including the specification of information required on all application forms for aviation documents:
 - (vi) the provision of information to the Authority or the Director by applicants for or holders of aviation documents.

5.2 Matters to be taken into account

The development of this NPRM and the proposed rule changes take into account the matters under section 33 of the Act that the Minister must take into account when making ordinary rules including the following:

ICAO Standards and Recommended Practices

The proposed rule amendments comply with applicable sections of the following International Civil Aviation Organization (ICAO) Annexes:

- Annex 1 – Personnel Licensing
- Annex 8 – Airworthiness of Aircraft

Assisting economic development

The proposed rule amendments will have no detrimental impact on economic development. It will support economic development in the aviation industry by ensuring a well-qualified licenced aircraft maintenance engineer workforce.

Assisting safety and personal security

The proposed rule amendments will improve aviation safety by ensuring licensed aircraft maintenance engineers keep current on technology advances and aircraft maintenance best practice.

Improving access and mobility

The proposed rule amendments will have no impact on access and mobility.

Protecting and promoting public health

The proposed rule amendments will have no impact on protecting and promoting public health

Ensuring environmental sustainability

The proposed rule amendments will have an impact on environmental sustainability in that well maintained aircraft will meet and continue to meet, aviation noise and emission requirements.

5.3 Incorporation by reference

The proposed rule amendments contain no material incorporated by reference.

5.4 Civil Aviation (Offences) Regulations

Schedule 1 of the Civil Aviation (Offences) Regulations is made by the Governor General pursuant to section 100 of the Civil Aviation Act 1990 and contains a list of summary and infringement penalties associated with offences against various civil aviation rules.

The proposed rule amendments will require amendment to the Civil Aviation (Offences) Regulations. The proposed new offences and penalties are in respect to the following proposals:

- Rule 66.19-Medical requirements. Medical deficiency changed to medical condition, and requirement added to notify the Director of any change in medical condition.
- Rule 66.15(a) – Cheating or other unauthorised conduct. The text is aligned with the (Offences) Regulations text for rule 61.19.
- Rule 66.55(b)-Privileges and limitations. The term “familiar “is replaced by “can demonstrate competency on the maintenance on”.
- Rule 66.55(c)-Privileges and limitations-test equipment. Amended by clarifying that holder must be trained on and use special test equipment when required.

6. Submissions on the NPRM**6.1 Submissions are invited**

This proposal has been developed following a CAA policy review of Part 66 in 2014. This review led to the formation in 2017 of a Rules Drafting Group comprising CAA subject matter experts together with industry and MoT representatives to draft the proposed rule amendments. Interested persons are invited to participate in the making of the proposed rules by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rule making is taken. If there is a need to make any significant change to the rule requirements in this proposal as a result of the submissions received, then interested persons may be invited to make further submissions.

6.2 Examination of submissions

All submissions will be available for examination by interested persons both before and after the closing date for submissions. A consultation summary will be published on the CAA web site and provided to each person who submits a written submission on this NPRM.

Submissions may be examined by appointment with the Docket Clerk at the Civil Aviation Authority Level 15, Asteron Centre, 55 Featherston Street, Wellington 6011 between 8:30 am and 4:30 pm on weekdays, except statutory holidays. Appointments to examine submissions are to be arranged by phone or email docket@caa.govt.nz.

6.3 Official Information Act

Submitters should note that subject to the Official Information Act 1982 any information attached to submissions will become part of the docket file and will be available to the public for examination.

Submitters should state clearly if there is any information in their submission that is commercially sensitive or for some other reason the submitter does not want the information to be released to other interested parties. The CAA will consider this in making a decision in respect of any Official Information Act requests. It should be noted that the CAA cannot guarantee confidentiality in respect of any specific submissions.

6.4 How to make a submission

6.4.1 Online response form

An online response form is available on the CAA web site at <https://www.caa.govt.nz/rules/nprms-open-for-submissions/>. When submitted this form will be sent directly to the Docket Inbox.

6.4.2 Submission response sheet

A submission response sheet may also be downloaded from the CAA website and sent by the following methods:

e-mail docket@caa.govt.nz and marked NPRM 19-02

by mail: Docket Clerk (NPRM 19-02)
Civil Aviation Authority
PO Box 3555
Wellington 6140
New Zealand

delivered: Docket Clerk (NPRM 19-02)
Civil Aviation Authority
Asteron House
Level 15
55 Featherston Street
Wellington 6011

6.5 Final date for submissions

Comments must be received before 29 March 2019

6.6 Availability of the NPRM:

Any person may obtain a copy of this NPRM from–

CAA web site: www.caa.govt.nz;

or from:

Docket Clerk
Civil Aviation Authority
Asteron House
Level 15
55 Featherston Street
Wellington 6011
Phone: 64–4–560 9640 (quoting NPRM 19-02)

6.7 Further information

For further information, contact:

Peter E Williams

Rules Drafter

Email: peter.williams@caa.govt.nz

7. Proposed Rule Amendments

[New text shown as shaded]

Part 66 Aircraft Maintenance Personnel Licensing

Subpart A—General

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; and
- (5) the applicant is medically fit to exercise the privileges of an aircraft maintenance engineer licence holder as required by rule 66.19.

(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~~ examinations required by rule 66.53(a); and
- (5) the applicant does not have a medical condition ~~deficiency~~ that creates a risk of harm to that person or to any other person from the exercising of privileges under this Part; and
- (6) 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.

(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 rule 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.

(d) A certificate of maintenance approval may be granted for a period not exceeding 5 years. ~~(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.~~

(e) A certificate of inspection authorisation may be granted for a period not exceeding 5 years. ~~of up to 60 months.~~

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

66.13 Examinations

- (a) ~~Each~~ An applicant for the grant of a licence, rating, or certificate under this Part must —
- (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 rule 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 an examination 3 times shall be ineligible to reapply for that examination for a period of 3 months from the date of the last attempt. ~~the oral examination required by 66.53(a)(3) 3 times~~

66.14 Re-examination of licences]

- (a) If the Director has reasonable grounds to believe that the holder of any licence, certificate, or rating issued under this Part does not have the competence to exercise the privileges of that licence, certificate, or rating, the Director may require the holder to undergo re-examination to establish that holder's competency
- (b) Before taking action under paragraph (a), the Director must inform the holder in writing of the grounds for the re-examination.

66.15 Cheating or other unauthorised conduct

- (a) During any written examination required under this Part, a person must not do, or attempt to do, or procure another person to do any of the following— ~~no person shall, unless authorised by the conducting officer~~
- (1) copy from another person;
 - (2) refer to any unauthorised source of information;
 - (3) communicate in any way with another person, except the person administering the examination; ~~anyone other than the conducting officer~~
 - (4) take an examination on behalf of another person; ~~anyone else~~
 - (5) remove written or printed material from the examination room, unless authorised to do so by the person administering the examination;
 - (6) use any means or device to copy electronic, written or printed material supplied during the examination; ~~record any examination by electronic means~~
 - (7) take unauthorised material into an examination room
- (b) If the Director has reasonable grounds to believe that a person has attempted, committed, or has procured another person to commit, any conduct prohibited in paragraph (a), the Director may immediately suspend the release of all or part of the examination results for the person until—
- ~~(1) the Director determines after due investigation, the action, if any, to be taken under paragraph (c); or~~
 - ~~(2) if the person makes a request in writing to the Director, the Director determines after due investigation and the completion of any summary proceedings for a breach of paragraph (a) arising from the alleged conduct, the action, if any, to be taken under paragraph (c). 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.~~

(c) If the Director has reasonable grounds to believe that a person has attempted, committed, or has procured another person to commit, any conduct prohibited by paragraph (a), the Director may—

(1) disqualify the person from the result of the examination;

(2) ~~debar~~ the person from sitting any examination for a specified period not exceeding 12 months.

(d) Before taking an action under paragraph (b) or (c), the Director must reasonably inform the person in writing of the details of the alleged conduct prohibited in paragraph (a).

(e) If the Director proposes to take an action under paragraph (c), the Director must give notice in accordance with section 11 of the Act, which applies as if the proposed action were a proposed adverse decision under the Act. For the avoidance of doubt the Director is not required to give notice of appeal under section 11(2)(e) or section 11(6)(b)(iii) of the Act.

[Amended To align with rule 61.19]

66.19 Medical requirements

(a) A holder of a licence or certificate issued under this Part must not exercise the privileges of that licence or certificate while that person has a known medical ~~conditiondeficiency~~, or ~~increase~~ ~~change of a known~~ in an existing medical ~~conditiondeficiency~~, that creates a risk of harm to that person or to any other person ~~resulting from the holder's~~ ~~from the exercising of privileges under this Part.~~

(b) A holder of a licence or certificate issued under this Part must notify the Director as soon as practicable after he or she becomes aware that they have a medical ~~conditiondeficiency~~ or a change in a known medical ~~conditiondeficiency~~, that creates a risk of harm to that person or to any other person resulting from the holder's exercising of privileges under this Part

Subpart B—Aircraft Maintenance Engineer Licence

66.53 Eligibility requirements

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

(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 ~~4 yearsforty-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 ~~3 yearsthirty-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 ~~5 yearssixty 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 ~~3 yearsthirty-six months~~ of supervised training and experience, conducted by the holder of a training organisation certificate granted under section 9 of the Act and in accordance with Part 141 or Part 147 if the certificate authorised the conduct of such a course; ~~and~~

(5) complete and submit to the Director as part of the application a knowledge deficiency report for each written examination required for issue in the category of the licence sought, certified by a licenced aircraft maintenance engineer in the same category being applied for.

(b) For each option in paragraph (a)(4), ~~2 years24 months~~ of the experience required must 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) ~~2 years24 months~~ of experience appropriate to the category of licence sought; or
- (2) ~~1 year12 months~~ of experience appropriate to the category of licence sought if the applicant has exercised the privileges of an aircraft maintenance engineer licence for 10 or more years.

[New sub para (a)(5) to require an applicant to complete a KDR]

66.55 Privileges and limitations

(a) Subject to paragraphs (b), (c), and the requirements of rule ~~43.54145.5~~, 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) ~~A The~~ holder of an aircraft maintenance engineer licence ~~must shall~~ not exercise the privileges of that licence on an aircraft or component unless that person ~~is familiar with~~ can demonstrate competency on the maintenance of the aircraft or component and—

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

(c) ~~A The~~ holder of an aircraft maintenance engineer licence ~~must shall~~ not exercise the ~~limited additional~~ privileges specified in Appendix C that require the use of special test equipment unless—

- (1) the holder has evidence that they have received training on the use of that equipment; ~~and~~
- (2) the holder uses the special test equipment when required.

66.57 Recent experience requirements

A holder of an aircraft maintenance engineer licence must not exercise the privileges of the licence unless, within the immediately preceding 2 years, 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; ~~and or~~
- (3) completed recurrent training in order to be current and proficient relevant to the ratings held, conducted by—
 - (i) the aircraft manufacturer; or
 - (ii) a Part 141, Part 145, or Part 147 Certificated Training Organisation; or
 - (iii) a competent authority of a foreign Contracting State acceptable to the Director; or
 - (iv) the Director.

[New sub-para to add an option for LAMEs to undergo recurrent training to keep up-to-date]

Subpart C—Aircraft Maintenance Engineer Ratings

66.103 Eligibility requirements

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

- (1) hold a current aircraft maintenance engineer licence in the relevant category; and
- (2) have completed 6 months practical experience on the type or group of aircraft for which the rating is sought; ~~or other similar experience acceptable to the Director; or and~~
- (3) have successfully completed a ~~consolidated, accelerated, practical, or simulated course~~ period of training acceptable to the Director conducted by—
 - (i) the manufacturer; or
 - (ii) a Part 141, Part 145, or Part 147 Certificated Training Organisation; or
 - (iii) a competent authority of a foreign Contracting ~~S~~state acceptable to the Director; or
 - (iv) the Director.

Subpart E—Certificate of Inspection Authorisation

66.203 Eligibility requirements

(a) To be eligible for a certificate of inspection authorisation a person must hold a rated aircraft maintenance engineer licence issued under this Part, or an equivalent Australian aircraft maintenance engineer licence registered in New Zealand, ~~in—~~

- (1) ~~in~~ both aeroplane and powerplant categories; or
- (2) ~~in~~ both rotorcraft and powerplant categories; or
- (3) ~~in~~ electrical group 1, instrument groups 1 and 2, and radio groups 1, 2, and 3 categories.

(b) A person referred to in paragraph (a) must, at the time of application have—

- (1) held the licence for a period of at least 5 years; and
- (2) met the recent experience requirement prescribed in rule 66.57 for a period of at least 5 years; and
- (3) ~~have,~~ within the immediately preceding 2 years—
 - (i) exercised the privileges of an aircraft maintenance engineer licence for a period of not less than 6 months; or
 - (ii) supervised, in an executive capacity, the maintenance of aircraft; 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 rules, conducted by—
- (i) the holder of a maintenance training organisation certificate or a restricted maintenance training organisation certificate issued under Part 147; or
 - (ii) the Director.

~~To be eligible for a certificate of inspection authorisation a person must—~~

- ~~(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 a maintenance training organisation certificate or a restricted maintenance training organisation certificate issued under Part 147; or~~
 - ~~(ii) the Director.~~

66.205 Privileges and limitations

- (a) Subject to paragraph (b), ~~(c), and (d)~~, a certificate of inspection authorisation entitles the holder to—
- (1) perform a review of airworthiness ~~an annual review of aircraft maintenance~~ in accordance with Part 43, Subpart D; and
 - (2) certify conformity in accordance 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 ~~must~~ not exercise the privileges specified in paragraph (a) unless that person has available ~~and uses~~ the equipment, facilities, and inspection data necessary to properly inspect airframes, powerplants, propellers, or any related part or component.
- (c) A holder of a licence in electrical group 1, instrument groups 1 and 2, and radio groups 1, 2, and 3 is restricted to certify conformity in accordance with the technical data listed in Appendix D to Part 21 after completion of avionics major repairs and major modifications.
- (d) To avoid doubt a holder of a licence in electrical group 1, instrument groups 1 and 2, and radio groups 1, 2, and 3 ~~must not~~ certify conformity for any surrounding structure that requires modification.

66.207 Recent experience requirements

The holder of a certificate of inspection authorisation ~~must~~~~shall~~ not exercise the privileges of that certificate unless:—

- (1) within the preceding 12 months, the holder has—
 - (i) performed 4 annual reviews of aircraft maintenance in accordance with Part 43, Subpart D; or

- (ii) 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
 - (iii) performed a combination of subparagraphs (1) and (2); or
 - (iv) successfully completed a refresher course comprising at least 8 hours instruction that is acceptable to the Director; or
 - (v) successfully completed an examination acceptable to the Director; and
- (2) within the immediately preceding 2 years, the holder has for a period of at least 6 months exercised the privileges of the certificate of inspection authorisation.

[To align with rule 66.57]

66.209 Transitional provisions

The following provisions come into effect on [12 months after the rule comes into force]:

- (a) rule 66.11(b).
- (b) rule 66.19(b).
- (c) rule 66.53(a)(5).
- (d) rule 66.57(3).
- (e) rule 66.103(3).
- (f) Appendix B.1(d) and (e).
- (g) Appendix C.

66.211 Savings provisions

(a) The holder of a Type I (major), Type II (minor), or group or type rating or licence issued under the Civil Aviation Regulations 1953 that was granted before [date the rule comes into force], may continue to have the rating or licence recognised.

(b) The holder of a licence with a rating issued under Appendix B.1 Group 4 that was granted before [date the rule comes into force], may continue to have the rating recognised.

Appendix A Transitional Arrangements - [Revoked and the Appendix letter is Reserved]

Appendix B — Group and Type Ratings

B.1 Groups

Ratings may be issued in the following Groups:

- (a) Aeroplane

Group 1: Unpressurised aeroplanes with fixed landing gear not exceeding 5700 kg, other than Group 3: ~~Metal stressed skin~~

Group 2: Unpressurised aeroplanes other than Group 1 and Group 3: ~~Metal stressed skin~~

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

Group 4: [Revoked and the Group number is Reserved]

Group 5: Pressurised aeroplanes not exceeding 5700kg MCTOW, by individual type:

Group 6: Pressurised aeroplanes exceeding 5700kg MCTOW, by individual type.

(b) Rotorcraft

Group 1: Piston engine rotorcraft:**Group 2:** Single turbine engine rotorcraft:**Group 3:** Twin turbine engine rotorcraft, by individual type:

(c) Powerplant

Group 1: Normally aspirated piston engines:**Group 2:** Turbocharged or supercharged engines:**Group 3:** All turbine engines, by individual type:

(d) Electrical - Complex systems require type-specific ratings

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

- (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 - Complex systems require type-specific ratings

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 – Complex systems require type-specific ratings

Group 1: Airborne communication systems including but not limited to UHF, VHF, HF, CVR, audio and ELT:**Group 2:** Airborne navigation systems including ADF, VOR, ILS, VLF, marker beacon, GPS and GNSS: ~~Omega~~**Group 3:** Airborne surveillance systems including weather radar, doppler, radio altimeter, DME, transponder, ADS-B systems, 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.**Appendix C — Limited Privileges Additional**

(a) A 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 125, Subpart G or Part 135, Subpart G of Group 1 electrical and instrument systems and Group 1, 2, and 3 radio systems:
 - (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:
 - (3) maintenance of electrical storage batteries:
 - (4) maintenance of radio systems: ~~and installation of VHF and HF radio systems~~
 - (5) replacement of line replaceable units:
 - (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, if rated on the applicable powerplant type:
- (1) functional checks and testing of engine instruments provided no special testing equipment is required:
 - (2) replacement, adjustment and functional testing of components and systems associated with the engine provided no special test equipment is required:
 - (3) replacement of avionic line replaceable units associated with the powerplant.
- (c) The holder of a rated 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 125, Subpart G or Part 135, Subpart G of Group 1 electrical and instrument, and Group 1, 2, and 3 radio systems:
 - (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:
 - (3) maintenance of electrical storage batteries:
 - (4) maintenance and installation of radio systems: ~~VHF and HF~~
 - (5) replacement of line replaceable units:
 - (6) re-calculate weight and balance.
- [Added new sub para to allow re-calculate weight and balance]*
- (d) The holder of a rated 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 125, Subpart G or Part 135, Subpart G:
 - (2) replacement, adjustment, and function testing of electrical and instrument components and systems (excluding compass systems) except where special test equipment is required:
 - (3) repair and replacement of interwiring and instrument plumbing:
 - (4) installation of radio systems: ~~VHF and HF~~
 - (5) compensation and component changing of direct reading compasses.

Consequential Amendments

Part 19 Transition Rules

Subpart I—Personnel

19.401 Re-examination of maintenance personnel licences *[Revoked]*

~~The Director may re-examine the holder of any licence, certificate, or rating issued under Part 66 if he considers that action necessary to establish the holder's competency. As a result of any such re-examination the Director may vary or cancel the licence, certificate, or rating if he thinks fit.~~

[Included in rule 66.14]

Part 61 Pilot Licences and Ratings

Subpart A—General

61.19 Written examinations—unauthorised conduct

(a) During any written examination required under this Part, a person must not do, or attempt to do, or procure another person to do any of the following—

- (1) copy from another person:
- (2) refer to any unauthorised source of information:
- (3) communicate in any way with another person, except the person administering the examination:
- (4) take an examination on behalf of another person:
- (5) remove written or printed material from the examination room, unless authorised to do so by the person administering the examination:
- (6) take unauthorised material into an examination room:
- (7) use any means or device to copy electronic, written or printed material supplied during the examination.

(b) If the Director has reasonable grounds to believe that a person has attempted, committed or has procured another person to commit, any conduct prohibited in paragraph (a), the Director may immediately suspend the release of all or part of the examination results for the person until—

the Director determines after due investigation, the action, if any, to be taken under paragraph (c).~~;~~~~or~~

~~(2) if the person makes a request in writing to the Director, the Director determines after due investigation and the completion of any summary proceedings for a breach of rule 61.19(a) arising from the alleged conduct, the action, if any, to be taken under paragraph (c).~~

(c) If the Director has reasonable grounds to believe that a person has attempted, committed, or has procured another person to commit, any conduct prohibited by paragraph (a), the Director may—

- (1) disqualify the person from the result of the examination:
- (2) ~~de~~bar the person from sitting any examination for a specified period not exceeding 12 months.

(d) Before taking an action under paragraph (b) or (c), the Director must reasonably inform the person in writing of the details of the alleged conduct prohibited in paragraph (a).

(e) If the Director proposes to take an action under paragraph (c), the Director must give notice in accordance with section 11 of the Act, which applies as if the proposed action were a proposed adverse decision under the Act. For the avoidance of doubt the Director is not required to give notice of appeal under section 11(2)(e) or section 11(6)(b)(iii) of the Act.

Advisory Circular (AC)

Revisions to associated Advisory Circulars to be developed - **AC66-1**

Appendix

Table of Amendments to Civil Aviation (Offences) Regulations

The following amendments are proposed to the Civil Aviation (Offences) Regulations as a consequence of the proposed amendments to Part 66:

Provision	Brief Description	Fines and Fees (\$)			
		Summary Conviction		Infringement Fees	
		Individual	Body Corporate	Individual	Body Corporate
Part 66	Aircraft Maintenance Personnel Licensing				
66.15(a)	Person may must not perform prescribed act of unauthorised conduct in relation to written examinations	5,000		1,000	
66.19	Responsibilities of holder of licence or certificate issued under this part: medical notification requirements and limitations relating to medical conditions	1,250		500	
66.55(b)	Holder of aircraft maintenance engineer licence may not exercise privileges of licence unless can demonstrate competency on the maintenance of the aircraft or components, and holds prescribed ratings or approved additional privileges.	2,500		1,000	
66.55(c)	Holder of aircraft maintenance engineer licence may not exercise limited privileges unless trained on and uses special	1,250		500	

	test equipment when required.				
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