



Australian Government

Civil Aviation Safety Authority

Notice of Proposed Rule Making

A Proposal to Modernise and Harmonise Rules for the Maintenance of Australian Aircraft and Licensing of Aircraft Maintenance Personnel

Proposed Policy for Parts 42, 66, 145 and 147 of the
Civil Aviation Safety Regulations 1998 (CASRs)

Who this NPRM applies to

It is expected that this proposal will have a direct impact on the following persons in the aviation industry:

Maintenance Organisations, Maintenance Training Organisations, Licensed Aircraft Maintenance Engineers (LAMEs), Airworthiness Authority holders, Registered Operators, Certificate of Registration holders, Holders of Air Operator's Certificates and their personnel, Authorised Persons, Pilots, and other people carrying out aircraft maintenance.

Issued as part of the process of public consultation by
CASA's Regulatory Development Management Branch

Document NPRM 0604MS – October 2006

Foreword

Background

Development of the “Maintenance Package” of regulations has been undertaken in partnership with the aviation industry for several years. The package was proposed in the maintenance-related Notices of Proposed Rule Making (NPRMs) published as Civil Aviation Safety Regulations (CASR) Parts and subparts in late 2001, early 2002 and late 2004.

CASA undertook a comprehensive evaluation of the industry’s requirements and sought public comments to determine the most effective regulatory choices to achieve the objectives of CASA’s Regulatory Reform Programme (RRP).

Review of the comments received has identified issues relating to policy acceptance, technical inconsistencies, drafting style, wording choice and layout of regulations as well as some problems with the regulatory structure, framework and rule interdependencies.

Because of the availability of a new regulatory style pioneered by the European Aviation Safety Agency (EASA), CASA decided to amend the package of proposed regulations and commence a further period of consultation. CASA considers that it is necessary to seek comment on the changes made to the regulations as a result of areas of policy change and the new style of regulation writing. Some of these regulatory changes have, however, previously been consulted on.

The policy outcome proposed in this new NPRM includes some of the original intent of the earlier maintenance package NPRMs but there are also some changes to policy, style, and structure. The policy provides, as far as possible, for the alignment of the Australian legislation with national and international regulatory best practice, correcting some problems with the current regulations and introducing an integrated approach to managing aviation safety and quality.

Clear and concise legislation which is harmonised with international regulatory practices will result in easier and better compliance and understanding, and will enhance aviation safety.

The objective of this document is to invite members of the aviation community and the public to comment on the proposed policy changes intended for aviation maintenance regulations. The proposed policy will lead to regulations which will establish the revised regulatory framework for continuing airworthiness, maintenance personnel licensing, maintenance organisations and maintenance training organisations.

This NPRM describes the proposed policy outcomes rather than detailing the specific regulations. When the final policy has been established after input from the aviation community and the public, final drafting instructions will be sent to the Attorney-General’s Department, Office of Legal Drafting and Publishing, to draft the proposed new regulations. The drafted regulations will then also be made available to the aviation industry and public for comment prior to finalisation of the regulations.

To allow some sectors of industry to gain the benefits of the new system as soon as possible, an early implementation of the changes, particularly in relation to maintenance personnel licensing and training, will be available for industry to take up if they desire. This will be undertaken using existing Civil Aviation Regulations 1988 (CAR), supported by revised Civil Aviation Orders (CAOs). Further detail on this is included in the NPRM.

Proposed changes in a page

The time-conscious reader can obtain a quick appreciation of the proposed regulatory structural changes in Section 2 of this NPRM). A more detailed explanation of the content is provided as background (NPRM Section 3), with each proposed regulatory Part described in NPRM Sections 4 to 7.

How you can help us

CASA is responsible under the *Civil Aviation Act 1988*, amongst other functions, for developing and promulgating appropriate, clear and concise aviation safety standards. “In the performance of this function and the exercise of its powers, CASA must, where appropriate, consult with government, commercial, industrial, consumer and other relevant bodies and organisations...”

Civil Aviation Act 1988 Subsection 9(1)(c) and Section 16

“CASA is committed to working cooperatively with the aviation industry to maintain and enhance aviation safety. This is especially important as far as the development of standards and regulatory material is concerned.”

CASA Standards Development and Rule Making Manual, 2.5.1

To ensure clear and relevant safety standards, CASA needs the benefit of your knowledge as an aviator, aviation consumer and/or provider of related products and services **by completing the online or enclosed Response Form and returning it to CASA by 27 November 2006.**

The proposed *Making* (signed into law by the Governor-General) of the new regulations is mid 2007. The new regulations would *Commence* (take legal effect) later in 2007.

To allow a timely adoption of the policy outcomes after consideration of comments received, CASA will initiate an early implementation of most of the final policy position using the existing CAR 1988 provisions. An overview of this transition is also provided in the NPRM.

During the development of the proposed new policies and regulations, the need for all persons to retain their existing privileges and permissions has been paramount.

I would like to thank you for expressing interest in this proposal and emphasise that no rule changes will be undertaken until all NPRM responses and submissions received by the closing date have been considered.



Peter Boyd
Head, Planning and Governance Office

31 October 2006

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* <u>YOU CAN RESPOND ONLINE OR BY FAX, POST OR E-MAIL</u> *	
<p>A web-based online response form is offered as an alternative to the printed form in this NPRM. Online submission is the preferred method of sending your comments to CASA. If you are connected to the Internet, type rrp.casa.gov.au/respond into your web browser and follow the links for this NPRM.</p>	
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Abbreviations

AD	Airworthiness Directive
AMC	Acceptable Means of Compliance
AMEL	Aircraft Maintenance Engineer Licence
AMO	Approved Maintenance Organisation
AMP	Aircraft Maintenance Program
AMS	Aviation Maintenance Specialist
AOC	Air Operator's Certificate
ARC	Authorised Release Certificate
CAAP	Civil Aviation Advisory Publication
CAMO	Continuing Airworthiness Management Organisation
CAO	Civil Aviation Order
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CAW	Continuing Airworthiness
CoA	Certificate of Airworthiness
CoR	Certificate of Registration
CRS	Certificate of Release to Service
EASA	European Aviation Safety Agency
EU	European Union
FAA	Federal Aviation Administration (of the USA)
FAR	Federal Aviation Regulation (of the USA)
GM	Guidance Material
ICAO	International Civil Aviation Organization
JAA	Joint Aviation Authorities (of Europe)
JAR	Joint Aviation Requirement (of the JAA)
LAME	Licensed Aircraft Maintenance Engineer
LRU	Line Replaceable Unit
MA	Maintenance Authority
MEL	Minimum Equipment List
MRO	Maintenance, Repair and Overhaul
MTO	Maintenance Training Organisation

NAA	National Airworthiness Authority
NDI	Non-destructive Inspection
NDT	Non-destructive Testing
NFRM	Notice of Final Rule Making
NPRM	Notice of Proposed Rule Making
OEM	Original Equipment Manufacturer
PPE	Personal Protective Equipment
RCC	Recognition of Current Competency
RO	Registered Operator
RPL	Recognition of Prior Learning
RTO	Registered Training Organisation
SCC	Standards Consultative Committee
SOR	Summary of Responses

1. The Consultation Process

1.1 This Notice of Proposed Rule Making (NPRM) is issued under CASA's Regulatory Reform Programme (RRP). The RRP aims to develop standards that are appropriate, clear, concise, aligned with regulatory best practice and adapted if necessary, for Australian industry conditions.

1.2 This NPRM invites consultation on a revised approach to regulatory management previously proposed by CASA for aviation maintenance and maintenance personnel licensing rules. It includes a revised regulatory arrangement for the training, qualification and experience of persons controlling and performing maintenance.

Making comments

1.3 CASA is seeking submissions and comments from the public and the aviation industry on this NPRM by 27 November 2006. Instructions on how to submit comments can be found on the Response Form contained in this NPRM.

1.4 Copies of this NPRM can be obtained from the CASA website at www.casa.gov.au/maintregs. Alternatively, CD-ROM copies can be obtained by e-mailing CASA at nprm0604ms@casa.gov.au or writing to:

Regulatory Documentation Coordinator
Regulatory Development Management Branch
Civil Aviation Safety Authority
Reply Paid 2005
Canberra ACT 2601

What does CASA do with your comments?

1.5 At the end of the response period for public comments, all submissions will be analysed, evaluated and considered. After the closing date for comments, a Summary of Responses (SOR) will be prepared and made publicly available as part of the Notice of Final Rule Making (NFRM). CASA will subsequently provide copies of draft legislation including savings and transitional provisions for comments. The consultation process will be completed by the publication of an NFRM.

1.6 There is a requirement for CASA to register each comment and submission received, but CASA will not answer individual comments unless specifically requested.

Confidentiality

1.7 The names of contributors will be published in the subsequent NFRM, except where CASA is specifically requested by the contributor not to do so.


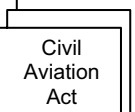
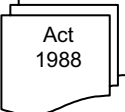
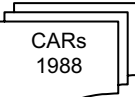
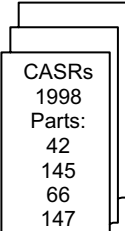
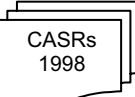
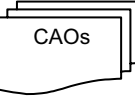
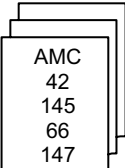

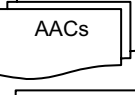
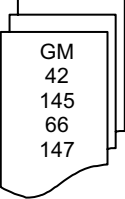
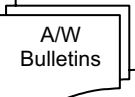
1.8 A request made under the *Freedom of Information Act 1982* for access to a submission marked confidential, will be determined by the requirements of that Act.

Persons and groups affected

1.9 Together with CASA, the key stakeholders affected by this proposal are:

- Maintenance Organisations
- Maintenance Training Organisations
- Licensed Aircraft Maintenance Engineers
- Airworthiness Authority holders
- Registered Operators
- Certificate of Registration holders
- Holders of Air Operator's Certificates and their personnel
- CASA Authorisation holders
- Authorised Persons
- Pilots
- Other people who carry out maintenance

2. Proposed Regulatory Structural Changes in a Page

International Standards	Current Structure	Proposed Structure	Maintenance and Maintenance Personnel – Revised Standards															
			<table border="1"> <thead> <tr> <th data-bbox="869 501 1435 580">CASA Existing</th> <th data-bbox="1435 501 2002 580">Proposed EASA-Like</th> </tr> </thead> <tbody> <tr> <td data-bbox="869 580 1435 651">Civil Aviation Act 1988</td> <td data-bbox="1435 580 2002 651">Civil Aviation Act 1988</td> </tr> <tr> <td data-bbox="869 651 1435 775">Civil Aviation Regulations 1988 CASRs 1998</td> <td data-bbox="1435 651 2002 775">CASRs 1998, includes new Parts 42, 66, 145 and 147</td> </tr> <tr> <td data-bbox="869 775 1435 882">Civil Aviation Orders</td> <td data-bbox="1435 775 2002 882">CAO transition only for new Parts 66 and 147 (Note 1)</td> </tr> <tr> <td data-bbox="869 882 1435 983">Civil Aviation Advisory Publications</td> <td data-bbox="1435 882 2002 983">Acceptable Means of Compliance (Note 2)</td> </tr> <tr> <td data-bbox="869 983 1435 1091">Airworthiness Advisory Circulars and Airworthiness Bulletins</td> <td data-bbox="1435 983 2002 1091">Guidance Material (Note 2)</td> </tr> <tr> <td data-bbox="869 1091 1435 1235">Ongoing surveillance using the Act, Regulations and Organisation Manuals</td> <td data-bbox="1435 1091 2002 1235">Ongoing oversight using exposition</td> </tr> </tbody> </table>		CASA Existing	Proposed EASA-Like	Civil Aviation Act 1988	Civil Aviation Act 1988	Civil Aviation Regulations 1988 CASRs 1998	CASRs 1998, includes new Parts 42, 66, 145 and 147	Civil Aviation Orders	CAO transition only for new Parts 66 and 147 (Note 1)	Civil Aviation Advisory Publications	Acceptable Means of Compliance (Note 2)	Airworthiness Advisory Circulars and Airworthiness Bulletins	Guidance Material (Note 2)	Ongoing surveillance using the Act, Regulations and Organisation Manuals	Ongoing oversight using exposition
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ICAO Annex 1 Personnel Licensing																		
ICAO Annex 6 Operation of Aircraft																		
ICAO Annex 8 Airworthiness of Aircraft																		
																		
																		
			<p>Note 1: This CAO will be repealed after commencement of the new Regulations above</p> <p>Note 2: Specific to a particular regulation</p>															

3. Explanation of the Change Proposal

3.1 Earlier responses

3.1.1 CASA previously consulted extensively including NPRM 0407MS which introduced some of the concepts embodied in this current NPRM.

3.1.2 NPRM 0407MS introduced, and invited consultation on, a revised approach to the comprehensive regulatory regime previously proposed by CASA relating to the rules for aircraft maintenance and maintenance personnel. The NPRM included a revised regulatory framework for the training, qualification and experience of persons controlling and performing maintenance and a set of performance standards for the carrying out of maintenance, distribution, training and associated activities. The proposed regulatory framework articulated in NPRM 0407MS consisted of:

- CASR Part 43 – Maintainer’s responsibilities
- CASR Subpart 91.M – Airworthiness and maintenance control
- CASR Subpart 121.M – Airworthiness and maintenance control
- CASR Subpart 133.M – Airworthiness and maintenance control
- CASR Subpart 135.M – Airworthiness and maintenance control
- CASR Part 145 – Approved maintenance organisations
- CASR Part 144 – Approved distribution organisations
- CASR Part 183 – Authorised airworthiness representatives
- CASR Part 66 – Maintenance personnel licensing
- CASR Part 147 – Maintenance training organisations

3.1.3 The replies and comments to NPRM 0407MS were considerable and showed that many of the respondents had given balanced thought to their comments. CASA has reviewed those comments and noted in particular the following:

- Some disagreements with proposed policies
- The need for flexibility across industry sectors
- The ageing Australian fleet
- Introduction of new technology
- Concerns with two-yearly renewal of licences
- Lack of conformity with international conventions.

3.1.4 These comments were all taken into account to help us when reviewing the EASA model and content. Many of these issues have been addressed in the policies proposed in this NPRM.

3.1.5 The publication of this NPRM formally closes comments and consultation on NPRM 0407MS. CASA would like to thank all respondents to NPRM 0407MS for their valuable contribution. Further detail on NPRM 0407MS can be found at the following webpage: <http://rrp.casa.gov.au/nprm/nprm0407ms.asp>.

3.2 Background and overview of this proposal

3.2.1 CASA has consulted with the Australian aviation industry and believes the current regulations for aircraft maintenance and maintenance personnel have become complicated and outdated. They are not clear, concise or harmonised with international regulatory practice and are not always appropriate for the Australian aviation environment.

3.2.2 The current regulations are sometimes difficult to understand and comply with, and increasingly rely on exemptions to be practicable. They also inhibit innovation and may cause an additional cost to industry while not necessarily adding safety benefits.

3.2.3 The current regulations and supporting material have been progressively added to over several years in an attempt to keep pace with international trends and local conditions but do not necessarily follow international regulatory best practice. Information necessary for compliance can also be difficult to find by industry and CASA staff.

3.2.4 The current rules have increasingly fallen out of line with international regulations. This lack of harmonisation increasingly limits Australia's ability to respond to international changes in safety-related practices and in some circumstances prevents Australian industry from competing for international work.

3.2.5 There is also some ambiguity in the current regulations and their supporting documents, causing confusion and lack of understanding of the standard of compliance expected by CASA. The rapidly changing technical nature of the industry is not catered for by the current regulations. Differing requirements for varying industry sectors are also difficult to implement under the current regulations and structure.

3.2.6 CASA is required, by its statutory obligations, and is also committed to working in partnership with the aviation industry to maintain and enhance aviation safety. The CASA Standards Consultative Committee (SCC) and, for the maintenance regulations, the Maintenance Standards Subcommittee (MSC) of the SCC, are joint aviation industry/CASA forums, set up to formally involve the aviation industry in the development phase of regulatory material. Development of some of the standards has been with specific industry groups. The representatives on the SCC Maintenance Standards Subcommittee have also given a valuable contribution to the development of this proposal.

3.2.7 The Chief Executive Officer of CASA, Bruce Byron, directed in late 2005 that a joint industry and CASA team be formed to progress the maintenance regulations suite. The purpose was to facilitate movement to world-standard aviation maintenance regulations which were suitable for the Australian industry.

3.2.8 He said the team was to use advisers, consult with stakeholders, and have a result as soon as possible. Another goal was to trial a joint approach to regulatory reform. The team chosen was small and had a good balance of coverage from industry and CASA.

3.2.9 Members were:

- Team leader (CASA)
- Legal drafting (CASA)
- Maintenance personnel licensing (CASA)
- General aviation operations group (CASA)
- General aviation representative (Industry)
- Maintenance repair and overhaul representative (Industry)
- Training representative (Industry)
- Regular public transport operator representative (Industry)
- Maintenance subcommittee representative (Industry)

3.3 Methodology

3.3.1 The team's approach to the project was an open, transparent and honest exchange of ideas when studying and researching the EASA maintenance suite which comprised Part 66, Part 145, Part 147 and Part M. Advisor groups supporting the project team have included aviation industry peak bodies, representatives of the SCC and MSC, Commonwealth Government departments/agencies and the wider aviation industry.

3.3.2 There was an early need to understand the philosophy behind the European approach and meet with EASA to learn the Agency's point of view, rule structure, content and their plans for building on previous experience.

3.3.3 Meetings took place with representative National Airworthiness Authorities (NAAs) in the European Union (EU) and outside the EU to understand the NAA approach to applying the regulations, implications of applying the regulations and their transition plans. The team also met with the Joint Aviation Authorities (JAA) for a background brief and their view of the future.

3.3.4 Further meetings were held with major industry Maintenance, Repair and Overhaul (MRO) organisations in Europe and Asia. Small general aviation shops were visited to appreciate their understanding of the regulations, EASA and their particular NAA. A small team attended an EASA general aviation and sports maintenance conference. The team also met with the global body representing aircraft engineers for their view on the regulations.

3.3.5 EASA rules are practical, safety-based and designed to work flexibly. This flexibility is achieved by outcome-based high-level rules, based upon a two-tier structure with multiple means of compliance. The structure includes, and is formatted, as regulations supported by Acceptable Means of Compliance (AMC) and Guidance Materials (GM).

3.3.6 Resulting from maximum devolution of responsibility to industry, the focus is on organisational approval, not the individual. An organisational exposition is used by industry to describe the method of meeting the required outcomes of the rules.

3.3.7 The proposed rules for air transport including maintenance organisations (Part 145), personnel licensing (Part 66) and training (Part 147) are mature and support industry best practice. The rules have a high-level of commercial reality and human factors considerations. The EASA rules for general aviation are in place but not yet implemented, although consideration of substantial changes to these rules prior to their implementation in September 2008 is well underway.

3.3.8 The rule set arranges for organisational outcomes rather than approvals and an approved exposition is used for detailed oversight. This outcome-based legislative style and devolution to industry will change current CASA oversight procedures and aspects of CASA's approach to enforcement procedures. Increased industry privileges and approvals will also decrease the need for industry to routinely seek approvals from CASA.

3.3.9 The team decided the overall EASA result for maintenance is practical and focused on safety, by using an outcome-based regulatory system which is well supported by integrated AMCs and GM. In this regulatory style, an organisation gives an exposition to CASA which details how the organisation will conduct its operations and maintain the desired level of safety. Once the exposition is approved, CASA oversees the organisation to ensure it continues to operate in accordance with the approved exposition.

3.3.10 This NPRM addresses the policy outcomes of the adoption of a regulatory style similar to that proven by EASA. This regulatory style also allows for different methods of achieving the outcomes for large and small aircraft and various types of operations.

Note: Further information on EASA can be found at: <http://www.easa.europa.eu/home/>.

3.4 Consultation

3.4.1 The team has used various types of consultation methods which are briefly described below.

3.4.2 Use of existing SCC/MSC mechanisms – The joint team has provided regular progress updates to the SCC and the MSC covering what the team has learnt and consideration of future directions.

3.4.3 Website content – A hyperlink was created on the CASA website homepage for the maintenance regulations project early in the project and regularly updated. This can be accessed at www.casa.gov.au/maintregs.

3.4.4 Roadshows – The joint team conducted a roadshow in May this year to introduce some of the concepts to industry. That roadshow undertook seventeen sessions in a variety of locations throughout Australia and attracted over 540 people. The roadshow presentations can be viewed on the CASA website at the following address: www.casa.gov.au/maintregs.

3.5 Description of an EASA-like structure of regulations for Australia

3.5.1 EASA was faced with the problem of identifying a system that would work and provide a safe and standardised result in an environment with 25 different nations using 21 official languages, differing regulation and enforcement processes and education/training systems. To meet this requirement, EASA put in place a set of safety outcome-based legislation which directs their aviation industry to the required result of the legislation. Effectively this tells the industry WHAT needs to be achieved but does not go to the detail of HOW it will be achieved.

3.5.2 To decide how it will achieve the desired outcome of the regulations industry has two broad options: either to consider and use a published Acceptable Means of Compliance (AMC), or to decide on another approach which suits their specific environment and business needs. The AMCs are cross-referenced to a specific regulation so there is direct connection between them. Therefore the AMCs are one way of understanding the HOW of the requirements but they are advisory and not binding on the industry. If an industry organisation wishes to use a differing method of achieving the required outcome then it will develop this method, write it up and provide it to CASA for consideration and approval.

3.5.3 As part of the process of seeking an approval from CASA, the industry needs to inform CASA of the systems and processes they will use to meet the required outcomes. The mechanism to inform CASA of this is called an “exposition”. An exposition is effectively a manual of procedures similar to many of the manuals presently kept by organisations who hold an Air Operator’s Certificate or a Certificate of Approval. The exposition requirements are covered in the proposed legislation and it would be made up of a combination of AMC material and the organisation’s specific procedures and processes. The AMCs are not always highly detailed and sometimes they would require some amplification in the exposition.

3.5.4 The exposition is specifically designed to allow industry organisations to describe, in their own words, its operations and procedures which allow it to meet the requirements of the regulations. The exposition is intended to be a working document and not just a manual which bears relevance only to the regulator’s certification requirements. The exposition may vary in shape and form depending on the organisation which it applies to. The exposition can be considered as both the mechanism for initial entry assessment leading to an approval and the ongoing “living” document which reflects the organisations actual working arrangements and any changes allowed via an approved procedure.

3.5.5 The system also uses Guidance Material (GM) which is designed to explain the desired outcome of the regulation. The GM is also cross-referenced to both the regulation and the pertinent AMC so that all three can be used concurrently to give a clear view of the requirements.

3.5.6 Once an exposition is approved by CASA it then becomes a prime document for the organisation and the regulator. As the regulations themselves are outcome-based rather than detailed, the approved exposition will be the document that CASA uses as a baseline during oversight and interface with an industry organisation.

3.5.7 The exposition process includes the capability of minor amendments to the approved exposition being undertaken by the organisation with no recourse to CASA. The system of self amendment, called indirect approval, needs to be described in the exposition and will be approved as part of the overall approval process. Changes to the exposition which are not minor will still require to be approved by CASA.

3.5.8 The major advantage of this style of regulation is that it allows a flexible approach to processes and procedures by the industry and the regulator. This flexible approach then allows industry to innovate and consider new and more effective ways of achieving the required outcomes.

3.5.9 Simply put, outcome-based legislation allows an acceptable safety outcome to be reached via multiple pathways. This involves a simple regulation expressing the required outcome supported by an AMC and GM. The four maintenance-related rule parts that will be put in place (CASR Parts 42, 66, 145 and 147) will be written using this system of outcome-based legislation.

3.6 Concepts

3.6.1 An EASA-like system contains some specific concepts which are worthwhile to cover before individual regulation parts are discussed.

3.6.2 For the purposes of this NPRM:

Certificate of Release to Service means a maintenance certification for completion of a task or an aircraft in its entirety by an appropriate person under Part 42, 66 or 145.

Complex aircraft means an aircraft that has been deemed to be complex by CASA, after consideration of factors such as certificated maximum passenger seating capacity, multi-crew requirements, design philosophy and technology.

large aircraft means:

(a) an aeroplane that:

(i) has a maximum take-off weight of more than 5,700kgs; or

(ii) has been type-certified under SFAR 41 or FAR 23 (commuter) class.

(b) a helicopter that has a maximum take-off weight of more than 3,175kgs or is multi-engined.

public air transport means publicly available services for the carriage of passengers and/or freight, whether on a scheduled or non-scheduled basis.

3.7 The proposed Parts

- **Part 42** – Continuing Airworthiness
 - This Part establishes the measures to be taken to ensure that airworthiness is maintained, including maintenance. It also specifies the conditions to be met by the persons or organisations involved in such continuing airworthiness management.
- **Part 66** – Maintenance Personnel Licensing
 - This Part establishes the requirements for the issue of an Aircraft Maintenance Licence, other permissions and the conditions of validity and use of these licences and permission, for aeroplanes, helicopters and other specialised maintenance tasks.
- **Part 145** – Approved Maintenance Organisations
 - This Part establishes the requirements to be met by an organisation to qualify for the issue or continuation of an approval for the maintenance of aircraft and components.
- **Part 147** – Maintenance Training Organisations
 - This Part establishes the requirements to be met by an organisation to qualify for the issue or continuation of an approval to conduct training as specified in Part 66.

3.7.1 This NPRM is an integrated document and in order for the reader to gain a full understanding of all the relevant information for a specific subject it is advisable to review the document as a whole.

3.8 Objectives

3.8.1 The objectives for the proposed maintenance regulations are to:

- Create a new, comprehensive safety regulatory framework for continuing airworthiness, maintenance organisations approvals, maintenance personnel licensing and maintenance training organisations.
- Achieve a regulatory framework and standards that are focused on safety and are appropriate, clear, concise and unambiguous.
- Provide a regulatory framework suitable for flexible implementation appropriate to various industry sectors.
- Harmonise with the International Civil Aviation Organization (ICAO) and international best practice when appropriate.
- Promote and maintain an environment where participants in the civil aviation system assume responsibility for their safety actions.
- Provide for the reduction of international barriers relating to the acceptance overseas of Australian civil aviation products, services and personnel.

- Provide standards that are aligned with international best practice, after consideration of Australian circumstances.
- Enhance the ability for CASA's oversight in the civil aviation system to be reduced to an appropriate level, through all or any of the following daily interaction:
 - A reduction in unnecessary or unclear regulatory requirements;
 - The devolution, when appropriate, of CASA functions and powers;
 - The granting of wider privileges and related responsibilities to industry.

3.9 Benefits

3.9.1 Benefits of the EASA-like approach in Australia include:

- The new Australian regulations will be based on an existing and effective set of overseas legislation. They lend themselves to a relatively rapid adoption.
- The inherent flexibility of the regulation style allows consideration of very flexible implementation in various sectors. For example, the regulations could be adopted immediately for airlines in a particular manner and then adopted at a later time with differing methods of meeting the required outcomes by the General Aviation sector.
- A basic tenet of this move to, and harmonise with, an overseas licensing structure is to allow international recognition of Australian qualifications for licence holders.
- The harmonisation with a major overseas system of our regulatory requirements for maintenance organisations and maintenance training organisations will allow them to compete for business internationally with a recognised certification basis.
- The flexibility in the system allows industry to innovate and establish new and improved methods, and takes away existing restrictions which inhibit the regulator from approving such innovations.
- Actual aircraft maintenance costs are driven by many factors, however the introduction of this system will lessen costs relating to meeting regulatory requirements across most industry sectors. Additionally, the flexibility inherent in the system will allow industry to evolve and innovate more cost-effective ways of meeting the safety outcomes required by the regulations.
- The use of integrated management systems to provide aviation safety and quality outcomes will allow CASA to move to more modern and reduced audit programs. When combined with the additional privileges and approval powers that industry will be able to exercise, this will markedly reduce the level and cost of regular interface between the industry and CASA.

4. Part 42 – Continuing Airworthiness

4.1 Overview of the Part

4.1.1 Proposed CASR Part 42 is equivalent to the EASA Part M and provides the overall policy directions for the whole of the maintenance suite of regulations including individuals and approved maintenance organisations. It is written in an outcome-based style and provides direction on the requirements for maintenance based on both the size of aircraft and sector of the aviation industry.

4.1.2 In an Australian context, Part 42 is equivalent in the previous NPRM0407MS to a combination of the individual Subparts M (airworthiness and maintenance control) and Part 43 (maintainer's responsibilities), and:

- Establishes responsibilities of individuals or organisations and the measures to be taken to ensure that continuing airworthiness (CAW) is maintained;
- Specifies the conditions to be met by persons or organisations involved in such CAW management;
- Establishes that the registered operator is responsible for CAW of an aircraft;
- Establishes that maintenance of large aircraft, including those for Public Air Transport, must be carried out by a Part 145 approved maintenance organisation (AMO);
- Provides the requirements for a Subpart F – Maintenance Organisation which is not a Part 145 maintenance organisation. A Subpart F organisation is a smaller maintenance organisation which can maintain small aircraft. The Subpart also provides the authority to issue an organisational approval for such an organisation;
- Provides the concept overview and requirements for a Subpart G – Continuing Airworthiness Management Organisation (CAMO) and the authority to issue an organisational approval for such an organisation;
- Allows the registered operator to contract the tasks for CAW to a Continuing Airworthiness Management Organisation (CAMO);
- Provides overview of the airworthiness review process which is undertaken annually for most aircraft and the Airworthiness Review Certificate; and
- Provides detail on the requirements for the Certificate of Release to Service (CRS) after maintenance undertaken under Part 42 and therefore covers the privileges of CRS and the differing restrictions:
 - within a Subpart F organisation;
 - for the Part 66 LAME not working in an organisation; and
 - for the owner/pilot of a privately-operated aircraft.

4.2 The proposed policy

4.2.1 The proposed policy description outlined below is intended to give the reader an understanding of the main policy outcomes which this Part aims to achieve.

4.2.2 Scope

- The Part will set out the measures to be taken to ensure continuing airworthiness of aircraft, including maintenance, and the conditions to be met by the persons or organisations involved in continuing airworthiness management.

4.2.3 Application

- Part 42 will apply to organisations and personnel involved in the continuing airworthiness of aircraft and aircraft components, including maintenance. The organisations and persons would include:
 - registered operators;
 - persons or organisations performing maintenance including pilot-owners;
 - Air Operator's Certificate holders; and
 - Continuing Airworthiness Management Organisations.
- Part 42 will not apply to:
 - aircraft which are currently exempted from Parts 4, 4A, and 4B of CAR 1988 through 95 series CAOs. These aircraft will come under proposed CASR Part 103;
 - some unmanned aircraft that are currently exempted from Parts 4, 4A, and 4B of CAR 1988 through CASR Part 101; and
 - some other aircraft that are subject to a special Certificate of Airworthiness (such as limited or experimental) and are unable to comply with Part 42 requirements.

4.2.4 Responsibilities

- The registered operator of an aircraft will be responsible for the continuing airworthiness of the aircraft and will have to ensure that the aircraft is not operated unless:
 - the aircraft is maintained in airworthy condition;
 - any operational or emergency equipment fitted is correctly installed and serviceable, or clearly identified as unserviceable;
 - the C of A remains valid; and
 - maintenance is carried out in accordance with the maintenance program.
- A person or organisation carrying out maintenance on an aircraft will be responsible for the tasks performed.
- The pilot in command or, for public air transport the AOC holder, will be responsible for satisfactory accomplishment of the pre-flight check. This check must be carried out by the pilot in command, a Part 66 certifying person or another qualified person.

- The registered operator will be able to pass on the management of the maintenance tasks associated with continuing airworthiness to an approved Continuing Airworthiness Management Organisation in accordance with an arrangement set out in Part 42, and must do so for a large aircraft.
- Maintenance of large aircraft and their components will have to be carried out by a maintenance organisation approved under Part 145.
- Maintenance of aircraft that are not large but engaged in public air transport and their components will have to be carried out either by a maintenance organisation approved under the Part 145 or Subpart F of this Part.
- For public air transport, the registered operator will be approved:
 - under Subpart G for the management of continuing airworthiness of the aircraft operated; and
 - as a Part 145 organisation, or have a contract with a Part 145 organisation to carry out maintenance on the aircraft operated.
- For operations requiring an operating certificate such as some aerial work categories, the registered operator will have to be approved under:
 - Subpart G for the management of continuing airworthiness of the aircraft operated, or contract such an organisation; and
 - as an appropriate maintenance organisation or have a contract with a Part 145 or Subpart F (of this Part) organisation to carry out maintenance on the aircraft operated.

4.2.5 Continuing airworthiness tasks

- The continuing airworthiness of the aircraft will be ensured by:
 - accomplishment of a pre-flight check;
 - rectification in accordance with maintenance data of any defect or damage affecting safe operation;
 - accomplishment of maintenance in accordance with a maintenance program and analysis of the effectiveness of that program;
 - compliance with all mandatory continuing airworthiness requirements such as Airworthiness Directives (ADs);
 - modifications and repairs in accordance with design data; and
 - a process for assessment of service information (e.g. bulletins, letters etc) for large aircraft and aircraft engaged in public air transport.

4.2.6 Maintenance program

- A maintenance program will have to establish compliance with:
 - instructions for continuing airworthiness issued in accordance with Part 21; and
 - instructions issued by CASA.

- A maintenance program must include maintenance tasks that have been specified as mandatory in the type design approval (e.g. airworthiness limitations and certification maintenance requirements).
- A maintenance program will have to contain details of all scheduled maintenance applicable to the aircraft's intended operation.
- A maintenance program will have to contain a reliability module, if the program is based on ATA MSG-3 logic or mainly uses condition monitoring.
- A maintenance program will have to be reviewed and amended when necessary to ensure the program continues to be valid.
- Maintenance programs for large aircraft or aircraft engaged in public air transport will have to be approved by CASA or the CAMO responsible for continuing airworthiness management of the aircraft.
- Generic maintenance programs for certain classes of aircraft will continue to be available typically for small aircraft not engaged in public air transport and will include mandatory airworthiness requirements.

4.2.7 Aircraft Continuing Airworthiness Record System

- After the completion of any maintenance, the associated certificate of release to service will be entered in the aircraft's continuing airworthiness records.
- All aircraft will require a flight and technical log. For aircraft not in public air transport, this may be similar to the existing Maintenance Release.

4.2.8 Maintenance data

- The person or organisation carrying out maintenance must have access to and use only applicable, current maintenance data in the performance of maintenance including modifications and repairs.

4.2.9 Performance of maintenance

- All maintenance must be carried out:
 - by appropriate persons and in accordance with the methods, techniques, standards and instructions mentioned in the applicable maintenance data;
 - using the tools, equipment and material (or equivalent when appropriate) mentioned in the applicable maintenance data; and
 - within any environmental limitations mentioned in the applicable maintenance data.
- An independent inspection will have to be carried out after any 'flight safety sensitive' maintenance task.
- Tools and equipment used in maintenance must be controlled and calibrated to an officially recognised standard that applies to them.
- The area where maintenance is carried out must be well organised, clean and uncontaminated.

4.2.10 Aircraft defects

- Defects that the aircraft cannot be operated with must be rectified before flight.
- Defects that the aircraft can be operated with and which are not rectified before flight must be entered in the aircraft records.

4.2.11 Installation of components, parts and use of material

- A component may only be fitted if it is in a satisfactory condition, and has been released to service with an appropriate release certificate. An appropriate release certificate should identify the effectivity of the component. The person or organisation must ensure components are eligible for fitment with reference to modification and AD status.
- Standard parts may only be fitted to an aircraft or a component where maintenance data specifies use of the part and it is accompanied by evidence of conformity traceable to the applicable standard.
- Material may only be used on an aircraft where maintenance data specifies use of the part and it is accompanied by evidence of conformity traceable to the applicable specification.

4.2.12 Component maintenance

- Maintenance of a component may only be carried out by an appropriately approved maintenance organisation.

4.2.13 Service life-limited components

- Installed components must not exceed the service life limit established for the component.

A SUBPART 'F' MAINTENANCE ORGANISATION

4.2.14 Scope

- A Subpart F maintenance organisation is generally a smaller or more specialised organisation that conducts maintenance which is not required to be covered by a Part 145 maintenance organisational approval.
- Includes requirements to maintain aircraft and components other than large aircraft and their components in accordance with policy and procedures, contained in the organisation's exposition. This Subpart includes the ability to approve the organisation.

Note: A Subpart F organisation may also seek approval to maintain aircraft used in public air transport that are not large or are not required to use a Part 145 maintenance organisation. If the Subpart F organisation wishes the scope of its approval to cover this work, there will be some additional requirements it must meet. These are to ensure the relationship between it and the aircraft operator gives the outcome required to support public air transport operations.

However, in this case the Acceptable Means of Compliance will provide guidance appropriate to the scope of the approved activities and the interconnection with the air operator.

4.2.15 Application

- Organisational approvals will be issued and amended by CASA.

4.2.16 Facility requirements

- Organisations must provide facilities appropriate for all planned work with consideration of environmental conditions.
- Specialised workshops must be segregated to avoid contamination.
- Appropriate office accommodation should be provided for management and certifying staff.
- The working environment must be appropriate to the tasks carried out such that the effectiveness of the personnel is not impaired by temperature, dust contamination, lighting or noise. Specific conditions identified in the maintenance data must be observed and include provision of Personal Protective Equipment (PPE) where required. If environmental conditions deteriorate to an unacceptable level, tasks must be suspended until satisfactory conditions are re-established.
- There must be secure storage for components, equipment, tools and material. Storage of parts and materials must be in accordance with the manufacturer's requirements to prevent damage and deterioration. Access to parts and materials storage areas are to be restricted to authorised personnel only.

4.2.17 Maintenance Organisation Exposition document

- The 'exposition' is an approved document that specifies the scope of activity and shows how the organisation intends to comply with this Subpart. The exposition must include:
 - a statement signed by the Accountable Manager;
 - the organisation's management process and include an organisational review to determine that it continues to comply with this Subpart. The review must be conducted at least annually;
 - titles, duties and responsibilities of nominated and authorised persons;
 - a specification of approved activities;
 - a description of staffing resources and notification procedures for organisational changes;
 - the maintenance procedures established by the organisation including the amendment of procedures;
 - a description of its facilities; and
 - a list of any contracted organisations.
- Amendments to the exposition must be approved by CASA except where a procedure is approved for minor amendments.

4.2.18 Personnel Requirements

- The organisation must appoint an Accountable Manager with authority to ensure adequate financial resources are available to support proposed approved activities in accordance with this Part. The Accountable Manager must demonstrate a basic understanding of these Parts and establish appropriate policies to ensure compliance with this Subpart.
- The organisation must appoint sufficient nominated persons with demonstrated knowledge, background and experience to ensure compliance with this Subpart.
- The organisation must have the capability to plan staffing for any proposed maintenance activity.
- The organisation must establish procedures to control the competence of personnel involved in maintenance with consideration given to job function, the application of human factors and human performance issues.
- The organisation must ensure personnel performing NDT/NDI and other specialised tasks are appropriately qualified in accordance with Standards recognised by CASA (e.g. AS/NZ or ISO).
- The organisation must have appropriate licence holders (see Section 6 of this NPRM). Personnel may be sub-contracted in accordance with a procedure detailed in the exposition.
- The organisation must maintain a register of authorised personnel.
- The certifying staff must ensure all work required by a customer is accomplished, or assess work not carried out for deferral to another specified check or time limit.

4.2.19 Certifying Staff

- The organisation must ensure certifying staff have an adequate understanding of the organisation procedures before the issue or reissue of an authorisation.
- The organisation may issue an authorisation in relation to a basic category, subcategory or type rating listed on an individual's Part 66 licence.
- The minimum age for certifying staff is 18 years.
- The organisation must ensure the involvement of all certifying staff in maintenance and exercising certification privileges for at least 6 months in any consecutive 2-year period.
- The organisation must issue a certification authorisation that clearly specifies its scope and limits and provide certifying staff with a copy of their authorisation.
- A nominated person will be responsible for issuing certification authorisations to staff, in accordance with a procedure in the exposition.
- The organisation must maintain records of all certifying staff containing details of Part 66 licences, completed training and the scope of the each certification authorisation.
- Records must be retained for 2 years after an authorised person ceases employment, or the authorisation has been withdrawn.

4.2.20 Component, Equipment and Tools

- The organisation must have available all necessary tools, equipment and materials to perform the approved scope of work, except where infrequency of use does not require permanent access as detailed in the exposition.
- The organisation must use the manufacturer's specified tools, equipment and materials or agreed alternatives as detailed in the exposition.
- The organisation must ensure control and calibration of tools or equipment in accordance with a CASA-recognised standard (e.g. AS/NZ, ISO or manufacturer) and be supported by appropriate records.

4.2.21 Maintenance Requirements

- The Subpart F organisation will have to meet the maintenance requirements specified in Part 42 as applicable.

4.2.22 Certification of maintenance

- Certification will be carried out as per the requirements of Part 42.

4.2.23 Maintenance Records

- The organisation must record all details of maintenance carried out including records supporting the issue of the Certificate of Release to Service or contractor's release documents.
- The organisation must provide a copy of each Certificate of Release to Service, to the aircraft operator together with any specific approved repair/modification data.
- The organisation must retain a copy of detailed maintenance records and maintenance data for 2 years from the date the work was released.
- Maintenance record storage must be protected from fire, flood and theft. Any computer back up disks or tapes must be kept at a different location and the organisation must ensure they remain in good condition.
- Where an organisation terminates its operation, all records covering the last 2 years must be forwarded to the registered operator.

4.2.24 Privileges of the Organisation

- In accordance with its approved exposition, the organisation will be entitled to carry out aircraft or component maintenance at approved and identified locations capable of supporting that maintenance.
- Approval of the organisation will be unlimited subject to continued compliance.

4.2.25 Additional Requirements for Subpart F organisations working on Public Air Transport aircraft

- Organisations approved under this Subpart who are seeking an approval which has scope covering maintenance on small aircraft engaged in Public Air Transport must also ensure they meet the following additional requirements which are italicised:
 - *The management process must include consideration of elements related to human factors, risks from occurrence of multiple maintenance errors and aviation safety considerations.*



- The certifying staff must ensure all work required by a customer is accomplished, or assess work not carried out for deferral to another specified check or time limit *with agreement of the operator*.
- *The minimum age for certifying staff is 21 years.*
- *An organisation may issue a limited authorisation for a repetitive pre-flight or daily airworthiness directive that allows aircrew to carry out the task where the authorisation is based on sufficient practical training.*
- *For aircraft operating away from a supported location, the flight crew can be issued a limited certification authorisation for specific tasks following sufficient practical training in accordance with a procedure in the exposition.*
- *If following unforeseen cases where an aircraft is grounded away from a supported base, a certification authorisation may be issued for a single operation under appropriate procedures.*
- The organisation must maintain records of all certifying staff containing:
 - all training completed
 - details of Part 66 licences
 - the scope of each certification authorisation
 - particulars of additional staff with certification authorisations *including limited or one-off authorisations*.
- For the purpose of this Subpart, applicable maintenance data includes any CASA procedure, operational directive, airworthiness directive, instructions for continuing airworthiness issued by the type certificate holder or a standard recognised by CASA.
- *The organisation must establish a procedure to ensure any errors found in maintenance data are recorded and notified to the author of the data.*
- *The organisation should not rely on data that it reasonably believes to be in error and should notify maintenance staff likely to utilise the data.*
- *The organisation may modify maintenance instructions, excluding engineering design of repairs and modifications, in accordance with a procedure detailed in the exposition. Changes must demonstrate an equivalent standard is achieved the type certificate holder and operator must be must be informed of such changes.*
- The organisation must provide a work card or worksheet system with precise reference the maintenance data. *Where an operator requires their work card or worksheet system to be used, the organisation must establish a procedure to ensure correct completion of the operator's system.*

4.2.26 Administration and enforcement provisions

- This Part will operate in accordance with the administrative and enforcement processes covered by CASR Parts 11 and 13.

A SUBPART 'G' CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

4.2.27 A Continuing Airworthiness Management Organisation (CAMO) is an organisation approved by CASA to manage the continuing airworthiness tasks that an operator may perform or contract out. The tasks that a CAMO may perform are similar to the current airworthiness and maintenance control tasks. The CAMO may also be approved to perform the annual airworthiness review. CAMOs are not approved to perform actual maintenance activities.

4.2.28 Extent of Approval

- A CAMO will be approved by CASA. The exposition for the CAMO will specify the scope of the approval.

4.2.29 Continuing Airworthiness Management Exposition

- The CAMO will have to have an exposition, approved by CASA, containing the following information:
 - a statement signed by the Accountable Manager that the exposition and any associated manuals demonstrate that the CAMO will comply with this Part;
 - the organisation's scope of work;
 - the titles and names of the responsible persons;
 - a chart showing chains of responsibility for the persons within the organisation;
 - the list of airworthiness review staff;
 - a description of the facilities;
 - the procedures to ensure that it complies with this Part; and
 - exposition amendment procedures.

4.2.30 Personnel requirements

- The CAMO will have to appoint an Accountable Manager, who has corporate authority for ensuring that all continuing airworthiness management activities can be financed and carried out in accordance with this Part. The Accountable Manager must demonstrate a basic understanding of these Parts and ensure aviation safety, quality and compliance policies are established.
- For an AOC holder engaged in public air transport, the Accountable Manager will be the person who also has corporate authority for the operations of the AOC.
- The CAMO must appoint sufficient responsible managers with demonstrated knowledge, background and experience to ensure compliance with this Part including deputies.
- The CAMO will have to have sufficient appropriately qualified staff for its expected work.

4.2.31 Airworthiness review staff

- To be approved to carry out airworthiness reviews, the CAMO must have airworthiness review staff who can issue airworthiness review certificates or recommendations.
- The airworthiness review staff will have to meet specific qualification, experience and training requirements.

4.2.32 Continuing airworthiness management

- For every aircraft managed, the CAMO will have to do the following:
 - Develop, control and manage the approval of a maintenance program including any applicable reliability program for the aircraft;
 - manage the approval of modification and repairs;
 - ensure that all required maintenance is carried out;
 - manage and archive all continuing airworthiness records and any operator's technical log; and
 - ensure that the mass and balance statement reflects the current status of the aircraft.

4.2.33 Airworthiness Review

- When the CAMO carries out an airworthiness review of an aircraft, it will conduct a physical inspection of the aircraft and a review of the aircraft records to ensure that all the required maintenance has been carried out in accordance with this Part and that the aircraft meets its type design.

4.2.34 Privileges of the CAMO

- The CAMO will be able to do the following:
 - manage the continuing airworthiness aircraft covered by its approval;
 - arrange to carry out any task of continuing airworthiness in accordance with its approval, with another organisation that is working under the CAMO's quality system; and
 - issue an airworthiness review certificate or make a recommendation for the airworthiness review certificate to be issued by CASA.

4.2.35 Management System

- The CAMO must establish a management system and designate a manager to monitor compliance with, and the adequacy of, procedures required to ensure airworthy aircraft.
- Compliance monitoring will have to include a feedback system to the Accountable Manager to ensure corrective actions as necessary.

4.2.36 Record keeping

- The CAMO will have to retain aircraft continuing airworthiness records relevant to all activities carried out by the CAMO.

AIRCRAFT CERTIFICATE OF RELEASE TO SERVICE

4.2.37 Aircraft Certificate of Release to Service

- A Certificate of Release to Service under this Part will have to be completed before flight at the completion of any maintenance.
- Aircraft maintained by a Part 145 organisation will be released to service in accordance with Part 145.
- When satisfied that all maintenance required has been properly carried out, a Certificate of Release to Service for an aircraft can be issued under this Part by:
 - certifying staff on behalf of the approved Subpart F organisation;
 - certifying staff in accordance with Part 66 for non-complex maintenance tasks; or
 - a pilot-owner within limits imposed by this Part.
- The Certificate of Release to Service will include basic details of the maintenance carried out, the date the maintenance was completed and either:
 - the identity and approval reference of the maintenance organisation approved under Subpart F and the certifying staff who issued the certificate;
 - for non-complex maintenance tasks certified in accordance with Part 66, the identity and any licence number of the person who issued the certificate; or
 - For pilot-owner maintenance, the details of the pilot-owner.
- Any maintenance that is incomplete will have to be noted in the certificate of release to service before it is issued.
- A Certificate of Release to Service cannot be issued for an aircraft if the certifying staff is aware that the aircraft is in a unsafe condition.

4.2.38 Component Certificate of Release to Service

- A component Certificate of Release to Service must be issued at the completion of maintenance on that component.

AIRCRAFT AIRWORTHINESS REVIEW

4.2.39 Aircraft Airworthiness Review

- An Aircraft Airworthiness Review is intended to ensure that all the necessary maintenance tasks, including incorporation of mandatory directives and review of manufacturers service information, has been undertaken in the preceding 12 months. This is to ensure that the aircraft and equipment fitted continues to be airworthy in regard to the aircraft's configuration and original type design or has been properly modified.
- An annual review of the aircraft and its records will have to be carried out and will be required to continue the validity of the Certificate of Airworthiness.
- If the aircraft is in a controlled environment, the CAMO managing the aircraft will be able to issue the airworthiness review certificate. A controlled environment is where the aircraft is continuously managed by the same CAMO over the preceding 12 months, and is maintained by an approved maintenance organisation.

- If a CAMO has issued an airworthiness review certificate and the aircraft has remained in a controlled environment, the CAMO will be able to extend the validity of the airworthiness review certificate for 1 year on 2 consecutive occasions.
- If an aircraft is not in a controlled environment, or is managed by a CAMO that does not hold the privilege to carry out airworthiness review, CASA (or a delegate) will be able to issue the airworthiness review certificate following a satisfactory assessment based on a recommendation made by an appropriately approved CAMO.
- Implementation of the Annual Airworthiness Review requirement will vary between industry sectors and therefore Acceptable Means of Compliance will provide guidance appropriate to the scope of the approved activities.

4.2.40 Validity of the Airworthiness Review Certificate

- An airworthiness review certificate will become invalid if the aircraft's certificate of airworthiness or the type certificate under which the certificate of airworthiness was issued is suspended or revoked or the aircraft ceases to be registered in Australia.

ADMINISTRATION AND ENFORCEMENT PROVISIONS

4.2.41 Administration and enforcement provisions

- This Part will operate in accordance with the administrative and enforcement processes covered by CASR Parts 11 and 13.

5. Part 145 – Approved Maintenance Organisations

5.1 Overview of the Part

5.1.1 Part 145 is similar to that published in the previous NPRM 0407MS and is divided into sections to easily locate specific areas of the Part. This Part should be read in conjunction with Part 42.

5.1.2 This Part includes:

- Privileges and responsibilities of the maintenance organisation;
- The requirement to authorise staff to perform and/or certify maintenance including special processes and tasks;
- Public air transport operations using large aircraft must have maintenance performed by a Part 145 approved organisation;
- Identification of facility requirements;
- Identification of personnel requirements;
- A process for preventative and corrective actions of maintenance errors;
- A management system which is desirably integrated and will produce aviation safety and quality outcomes;
- A maintenance organisation exposition containing elements on:
 - a management system including quality policy;
 - aviation safety policy;

- maintenance procedures;
 - methods of certification for maintenance;
 - maintenance data to be held and controlled; and
 - equipment, tools and material control.
- A staff training program;
 - Definition of the role of Category C licence holders who sign a Certificate of Release to Service after base maintenance; and
 - Alteration to the approval mechanism for specialised maintenance activities e.g. NDT and welding.

5.2 The proposed policy

5.2.1 The proposed policy description outlined below is intended to give the reader an understanding of the main policy outcomes which this Part aims to achieve.

5.2.2 Scope and terms of an approval

- Includes requirements to be met to qualify, or continue to qualify, to maintain aircraft and components, in accordance with the policy and procedures contained in the organisation's exposition.

5.2.3 Applications

- Contains details on the initial application for an approval, or for the amendment of an existing approval, as a maintenance organisation.
- Applications to be made by the Accountable Manager.
- Applications should include:
 - a copy of the applicant's exposition; and
 - detail the arrangements that the organisation has for access to facilities, equipment or data that the organisation does not own and proposes to use for the delivery of maintenance.

5.2.4 Facility requirements

- Organisations must provide facilities appropriate for all planned work having regard to environmental conditions.
- Specialised workshops are to be segregated as appropriate to avoid contamination.
- Appropriate office accommodation should be provided for the management and certifying staff.
- Working environment must be appropriate for the tasks carried out such that the effectiveness of the personnel is not impaired by temperature, dust contamination, lighting or noise. Specific conditions identified in the maintenance data must be observed and include provision of Personal Protective Equipment (PPE) where required. If environmental conditions deteriorate to an unacceptable level, tasks must be suspended until satisfactory conditions are re-established.

- Secure storage for components, equipment, tools and material. Storage of parts and materials must be in accordance with the manufacturer's requirements to prevent damage and deterioration. Access to parts and materials storage areas are to be restricted to authorised personnel only.

5.2.5 Personnel requirements

- The organisation must appoint an Accountable Manager with sufficient corporate authority to ensure adequate financial resources are available to support proposed or approved activities. The Accountable Manager must demonstrate a basic understanding of these Parts and ensure aviation safety, quality and compliance policies are established.
- The organisation must appoint sufficient responsible managers including deputies with demonstrated knowledge, background and experience to ensure compliance with this Part.
- The organisation must have the capability to plan maintenance man hours for any proposed maintenance activity.
- The organisation must establish procedures to confirm the competence of personnel involved in maintenance and audits, with consideration given to job function, application of human factors and human performance issues.
- The organisation must ensure personnel performing NDT/NDI and other specialised tasks are appropriately qualified in accordance with CASA-recognised standards. (e.g. AS/NZ or ISO).
- Organisations maintaining large aircraft must have:
 - For line maintenance, type rated B1 and B2 certifying staff. They may also use task authorised A licence holders for minor scheduled maintenance and simple defect rectification;
 - For base maintenance, type rated staff in category C with sufficient B1 and B2 certifying staff to support the category C staff. B1 and B2 staff must certify tasks or inspections have been carried out prior to the category C certification.
- In the case of base maintenance of other than large aircraft, the organisation must have appropriate B1 and B2 licence holders.
- The organisation must maintain a register of authorised personnel.
- The category C certifying staff must ensure all work required by an operator is accomplished, or assess work not carried out for deferral to another specified check or time limit, with agreement of the operator.
- Where an organisation maintains an approved facility outside Australia, certifying staff may be qualified in accordance with the national aviation regulations of the state in which the organisation's facility is located, providing they meet equivalent standards to the appropriate CASR Part.
- An organisation may issue a limited authorisation for a repetitive pre-flight airworthiness directive, which allows flight technical crew to carry out the task where the authorisation is based on sufficient practical training.

- For aircraft operating away from a supported location, an organisation can issue flight crew with a limited certification authorisation for specific tasks following sufficient practical training in accordance with a procedure described in the exposition.
- Following unforeseen cases where an aircraft is grounded away from a supported base, under certain circumstances a certification authorisation may be issued to an appropriately licensed person for a single operation under appropriate procedures.

5.2.6 Certifying staff and category B1 and B2 support staff

- An organisation must ensure certifying staff have an adequate understanding of the organisation procedures before the organisation issues or reissues an authorisation to its staff.
- The organisation may issue an authorisation, in relation to a basic category, subcategory or type rating listed on an individual's Part 66 licence.
- The minimum age for certifying staff is 21 years.
- An organisation must ensure all certifying staff and B1 and B2 support staff are involved in actually carrying out maintenance and/or exercising certification privileges for at least 6 months in any consecutive 2 year period.
- An organisation must establish a continuation and refresher training program to ensure that staff receive sufficient training to have up to date knowledge of relevant technology, organisational procedures and human factors issues.
- The organisation must issue a certification authorisation which clearly specifies its scope and limits and provide certifying staff with a copy of their certification authorisation.
- The person responsible for the compliance management will issue certification authorisations to staff, in accordance with a procedure in the exposition.
- The organisation must maintain records of all certifying staff containing:
 - all training completed;
 - details of Part 66 licences;
 - the scope of each certification authorisation; and
 - particulars of additional staff with certification authorisations including limited or one-off authorisations.
- Records must be retained for 2 years after an authorised person ceases employment, or the authorisation has been withdrawn.

5.2.7 Equipment tools and materials

- The organisation must have available all necessary tools, equipment and materials to perform the approved scope of work. Infrequency of use may be a reason to not require permanent access, as detailed in the exposition.
- Use the manufacturer specified tools, equipment and materials, or alternatives by a procedure detailed in the exposition.

- The organisation must ensure control and calibration of tools or equipment in accordance with a CASA recognised standard and be supported by appropriate records.

5.2.8 Acceptance of components

- All components will be classified and appropriately segregated as serviceable, unserviceable, unsalvageable, standard parts or material (both raw and consumable).
- The organisation must ensure components are eligible for fitment with reference to modification and AD status.
- The organisation may fabricate certain parts used in the course of maintenance within its own facilities, provided appropriate procedures are identified in the exposition.
- Components which have reached their life limit or are non-repairable must be classified as unsalvageable and their continued use prevented.

5.2.9 Maintenance data

- The organisation must have access to and use applicable current maintenance data for all work undertaken. The organisation must establish a procedure to ensure the data it controls is kept up-to-date and is readily available for use when required by maintenance personnel.
- For the purpose of Part 145, applicable maintenance data includes any CASA procedure, operational directive, airworthiness directive and instructions for continuing airworthiness issued by the type certificate holder or a standard recognised by CASA.
- The organisation must establish a procedure to ensure any errors found in maintenance data are recorded and notified to the author of the data.
- The organisation should not rely on data that it reasonably believes to be in error and should notify maintenance staff likely to utilise the data.
- The organisation may modify maintenance instructions, excluding engineering design of repairs and modifications, in accordance with a procedure detailed in the exposition. Changes must demonstrate that an equivalent outcome is achieved, and the type certificate holder and the aircraft operator must be informed of such changes.
- The organisation must provide a common work card or worksheet system with precise references to the maintenance data. Where an operator requires their work card or worksheet system to be used, the organisation must establish a procedure to ensure correct completion of the operator's system.
- Where work cards or worksheets are computer generated and held on an electronic database, it must be updated within 48 hours of work being carried out.

5.2.10 Production planning

- The organisation must have a planning system appropriate to the amount and complexity of work undertaken to ensure the safe completion of maintenance work and must take into account human performance limitations.

- When required to hand over maintenance tasks due to shift or personnel changeover, relevant information must be adequately communicated.

5.2.11 Certification of maintenance

- A Certificate of Release to Service must be issued before flight when all maintenance has been carried out in accordance with the organisation's procedures, by appropriately authorised certifying staff on behalf of the organisation.
- An Authorised Release Certificate must be issued at completion of maintenance on a component. Where an organisation maintains a component for its own use, an Authorised Release Certificate is not required, providing the organisation has an approved internal release procedure defined in the exposition.
- When an organisation is unable to complete all maintenance, it must enter such fact in the aircraft certificate of release to service.
- When an aircraft is grounded at other than a main line station or main base due to the unavailability of a certified component, a component may be fitted without an appropriate release certificate where its serviceability is established in compliance with all applicable maintenance and operational requirements. Use of the component is limited to a maximum of 30 flight hours or until the aircraft first returns to a main line station or main base.

5.2.12 Maintenance Records

- The organisation must record all details of maintenance carried out. This must include records supporting the issue of the Certificate of Release to Service, including subcontractor's release documents.
- The organisation must provide a copy of each Certificate of Release to Service to the aircraft operator, together with any specific approved repair/modification data.
- The organisation must retain a copy of detailed maintenance records and maintenance data for 2 years from the date the work was released.
- Maintenance record storage must be designed to be safe from fire, flood and theft. Any computer back up disks or tapes must be kept at a different location and the organisation must ensure they remain in good condition.
- Where an organisation terminates its operation, all records covering the last 2 years must be distributed to the aircraft owner or registered operator.

5.2.13 Occurrence reporting

- The organisation must report to CASA, the state of registry, the aircraft operator and the organisation responsible for the design of the aircraft or component any condition that has resulted in or may result in a hazard that seriously affects flight safety.
- The organisation must establish a procedure, detailed in its exposition, for the collection, evaluation, reporting, analysis and circulation of information as necessary.

5.2.14 Management System

- The organisation must establish a management system to control aviation safety and compliance with this Part based on quality management.

- The organisation must document procedures taking into account human factors and human performance, including:
 - all aspects of maintenance activity covered by the approval;
 - minimising the risk of multiple errors and methods to capture errors on critical systems;
 - establishing a system that includes an audit program to monitor compliance and includes quality aspects; and
 - a management review process reporting to the Accountable Manager to ensure timely corrective action in response to audit findings.

5.2.15 Maintenance Organisation Exposition document

- The exposition is a document that specifies the scope of work approved and shows how the organisation intends to comply with this Part. The exposition must include:
 - a statement signed by the Accountable Manager;
 - the organisation's management system;
 - titles, duties and responsibilities of nominated post holders and authorised persons and their deputies;
 - a specification of approved activities;
 - a description of manpower resources including an organisation chart and notification procedures for organisational changes;
 - the maintenance procedures established by the organisation including the amendment procedure;
 - a description of facilities including line stations; and
 - a list of contracted and sub-contracted organisations.
- Amendments to the exposition must be approved by CASA except where the approved exposition includes a procedure for minor amendments.

5.2.16 Privileges of the organisation

- In accordance with its approved exposition, the organisation will be entitled to carry out aircraft or component maintenance at approved and identified locations capable of supporting that maintenance.
- It may subcontract work to an organisation working under its quality system, providing such work does not include base maintenance, a complete workshop check, overhaul of an engine or engine module.
- Organisational approvals may be perpetual or granted with a time-limit, subject to continued compliance.

5.2.17 Administration and enforcement provisions

- This Part will operate in accordance with the administrative and enforcement processes contemplated by CASR Parts 11 and 13.

6. Part 66 – Maintenance Personnel Licensing

6.1 Overview of the Part

6.1.1 CASR Part 66 is intended to be equivalent to the EASA Part 66 and provides for:

- Adoption of the EASA licence ratings for Australia;
- The licensing system divides licences into four categories. These are:
 - A;
 - B1;
 - B2; and
 - C;
- There are four sub-categories which are applicable to the A and B1 licences as follows:
 - A1 and B1.1 = fixed wing aeroplane with turbine engines
 - A2 and B1.2 = fixed wing aeroplane with piston engine
 - A3 and B1.3 = helicopter with turbine engine
 - A4 and B1.4 = helicopter with piston engine;
- Future maintenance licences will be perpetual and CASA will require that licence holders provide documentation for a records check every 5 years;
- The capability to certify is the responsibility of the individual licence holder. If the LAME is in an organisation, this responsibility will be jointly managed by the organisation and licence holder;
- Individuals will be responsible for ensuring that they maintain the requirements necessary to exercise the privileges of their licence;
- Competency-based training is the Australian method of qualifying for initial issue of a Part 66 licence;
- Industry experience times are reduced to balance the output of competency-based training;
- Type training will include both theory and practical elements;
- A generic Aviation Maintenance Specialist (AMS) certificate will be introduced to allow flexibility for other maintenance activities not covered by a licence;
- Aeroplanes below 5,700kg can be covered by a ‘B1’ or ‘B2’ licence within the scope of the licence held and normally without further rating requirements; and
- Turbine engines that may never be fitted to aeroplanes above 5,700kg MTOW or helicopters above 3,175kg MTOW will not normally require a type rating unless deemed to require one by CASA.

6.2 The proposed policy

6.2.1 The proposed policy description outlined below is intended to give the reader an understanding of the main policy outcomes which this Part aims to achieve.

6.2.2 Scope

- Licences can be issued in categories: A, B1, B2 and C. (Refer to Annex A to this NPRM – A Guide to Licence Categories, Subcategories and Ratings, for details.)

6.2.3 Application

- Licences will be issued and amended by CASA.

6.2.4 Eligibility

- An Aircraft Maintenance Engineer Licence (AMEL) will only be granted to an applicant who is at least 18 years of age. Part 145 also has age limits for the exercise of certification privileges.

6.2.5 Privileges

- The privilege of any licence is to issue a Certificate of Release to Service (CRS) for aircraft maintenance.
- Category ‘B1’ – May issue a CRS following maintenance of structure, power plant, mechanical, electrical systems and replacement of avionic Line Replaceable Units (LRUs) requiring simple tests to prove serviceability. The subcategories of ‘B1’ also include the scope of the associated subcategory ‘A’ licence.
- Category ‘B2’ – May issue a CRS following maintenance of avionic and electrical systems.

Note: The joint team is considering the need for a maintenance licence specifically for the general aviation sector not appropriately catered for by the EASA licence ratings. Such a licence (proposed ‘B3’) would be restricted to aeroplanes below 5,700kg and helicopters below 3,175kg MTOW. The scope of this licence is not yet confirmed but is likely to be variable and would be dependant on the training undertaken to support a specific licence result. The team will be further exploring this issue with industry.

- There are specific conditions which are applicable to some categories and subcategories of AMEL. These are:
 - a Category ‘A’ – May issue a CRS following minor scheduled maintenance and simple defect rectification for specific maintenance tasks which have been personally performed in a Part 145 organisation; and
 - a Category ‘C’ – May issue a CRS following base maintenance carried out in a Part 145 organisation.
- All licence holders must comply with requirements of Parts 42 and 145 applicable to them.
- Individual AMEL holders must ensure they have at least 6 months experience in the preceding 24 months before making any certification.
- Licence holders must be able to read, write, communicate and understand the English language

6.2.6 Competency, Knowledge and Experience requirements

- Training for a licence outcome under Part 66 will involve competency units provided through an approved training organisation under Part 147. Syllabi relating to specific licence requirements and competencies will be included as an attachment to Part 66.
- An applicant for an AMEL must demonstrate competence, including a level of knowledge, in the subject modules for the category or subcategory of licence sought.
- Assessment of competence, including a knowledge examination, must be conducted by a training organisation approved under Part 147.
- Practical maintenance experience on operating aircraft inclusive of apprenticeship training will be for:
 - Category ‘A’
 - 2 years and the units of competency for the category or subcategory sought.
 - Categories ‘B1.2 and B1.4’
 - 3 years and the units of competency for the category or subcategory sought.
 - Categories ‘B1.1’, ‘B1.3’ and ‘B2’
 - 4 years and the units of competency for the category or subcategory sought.
 - Category ‘C’
 - 3 years of experience on large aircraft as the holder of a category B1.1, B1.3 or B2 licence or as support staff holding a category B1.1, B1.3 or B2 licence in a Part 145 organisation, or both; or
 - 5 years of experience on large aircraft as the holder of a category B1.2 or B1.4 licence or as support staff holding a category B1.2 or B1.4 licence in a Part 145 organisation, or both; or
 - A degree in a relevant technical aviation discipline and 3 years of experience working in a civil aircraft maintenance environment including 6 months observation of base maintenance tasks.
- Additional experience and competencies will be required for a subsequent category or subcategory of licence.

6.2.7 Licence validity

- Licences will be perpetual and require a 5-yearly records check with CASA.

6.2.8 Type / task training and ratings

- Category ‘A’ licence holders may only exercise certification privileges on specific aircraft types and tasks following training by a Part 145 or Part 147 approved training organisation. They must also be authorised by the Part 145 organisation they work for.
- Category ‘B1’, ‘B2’ and ‘C’ licence holders may only exercise certification privileges on a specific aircraft type following training by a Part 147 organisation and endorsement of the rating on the licence. For category ‘C’ licences obtained via the academic pathway, practical training is not required.

- For other than large aircraft, specific type rating will normally not be required unless CASA determines the aircraft requires a rating.

6.2.9 Identify licence revalidation requirements

- Describes the requirements to revalidate a licence that has become invalid.

6.2.10 Identify the requirements to gain an AMS certificate

- This section covers the application and eligibility requirements for the granting of an AMS certificate. AMS certificates may be endorsed for maintenance activities not covered by a traditional AMEL and by necessity will be flexible both in their nature and specification of the qualifications required for their issue.

6.2.11 Administration and enforcement provisions

- This Part will operate in accordance with the administrative and enforcement processes covered by CASR Parts 11 and 13.

7. Part 147 – Maintenance Training Organisations

7.1 Overview of the Part

7.1.1 CASR Part 147 is equivalent to the EASA Part 147 and provides for:

- Appropriate consideration of nationally-endorsed Registered Training Organisations;
- Training to meet Part 66 outcomes for initial licence issue and type training;
- Part 147 organisations to also undertake other maintenance training not leading to a Part 66 licence outcome;
- Training required under Part 145 or Part 42 not automatically needing a Part 147 certification;
- A provision to establish an appropriate relationship with a maintenance organisation to assist with practical training;
- Provision of recognition of prior learning (RPL) and recognition of current competency (RCC) will be undertaken by approved organisations; and
- An organisational approval based on assessment of the organisation's exposition.

7.2 The proposed policy

7.2.1 The proposed policy description outlined below is intended to give the reader an understanding of the main policy outcomes which this Part aims to achieve.

7.2.2 Scope

- The requirements to be met by an organisation seeking approval to conduct training, examinations and assessments in accordance with Part 66, and the process for approval of the organisation.

7.2.3 Application

- Contains details on the initial application for an approval, or for the amendment of an existing approval, as a maintenance training organisation.
- Applications to be made by the Accountable Manager.
- Applications should include:
 - a copy of the applicant's exposition document and the course plan for each accredited course or non-accredited course that is proposed to be covered by the approval; and
 - detail the arrangements that the organisation has for access to facilities, equipment or data that the organisation does not own and proposes to use in the delivery of maintenance training.

7.2.4 Facility requirements

- Details the facility requirements to provide for proper performance of all planned training and examination activities.
- For accredited training:
 - A basic training workshop or maintenance facility separate from training classrooms for practical instruction appropriate to the planned training course or demonstration of the arrangement for access to such a facility.
- Appropriate accommodation should be provided for the management, staff and students.
- Adequate weather protection, lighting, noise protection and proper operation of all planned training and examinations.
- Provision of secure storage for examination papers and training records.
- Provision of a library containing all technical material appropriate to the scope and level of training undertaken.

7.2.5 Identify maximum student numbers

- Outlines the maximum number of students for:
 - Knowledge training — 28 students;
 - Practical training — 15 students for each supervisor or assessor;
 - Practical consolidation training — the number mentioned in the course plan for the session.

7.2.6 Identify personnel requirements

- Organisation must appoint:
 - an Accountable Manager who has corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by this Part; and
 - responsible managers as appropriate to ensure the organisation can comply with this Part.

- Organisation must employ sufficient staff to plan and perform knowledge and practical training and to conduct knowledge examinations and practical assessments in accordance with the approval.
- Organisation must state the standards required (experience and qualifications) for their instructors, knowledge examiners and practical assessors and must maintain a record of all instructors, knowledge examiners and practical assessors.
- Organisation must provide professional development for their instructors, knowledge examiners and practical assessors.

7.2.7 Instructional equipment

- Identifies the equipment requirements for theory, practical, type or task training and the requirement for access to an aircraft or an example of that aircraft, engine or a synthetic training device for type or task training.

7.2.8 Training Procedures and Quality System

- The organisation must establish procedures to ensure proper training standards, a student attendance system, competency assessment and compliance with this Part. This should include:
 - an independent audit function; and
 - a feedback system to ensure corrective action of audit findings.

7.2.9 Maintenance Training Organisation Exposition (MTOE)

- The organisation must maintain an exposition document, approved by CASA, that describes the organisation and its procedures for complying with this Part. The following information should be included:
 - A statement signed by the Accountable Manager;
 - Titles, duties and responsibilities of nominated post holders including responsible managers, training instructors, knowledge examiners and practical assessors. This also includes:
 - the training an instructor is approved by the organisation to deliver;
 - the scope of examinations an examiner is approved by the organisation to examine;
 - the standards a practical assessor is approved by the organisation to assess; and
 - the experience and qualifications of instructors, examiners and practical assessors;
 - An organisation chart showing chains of responsibility;
 - A list of training courses to be delivered under the scope of the approval including course plans and student-instructor ratios;
 - The training and quality procedures relevant to the scope of approval including the production of training material; and
 - A description of the training and examination facilities.

7.2.10 Privileges

- Maintenance training organisation may carry out training activities as permitted by the organisation's exposition and approval including:
 - Accredited (apprentice) training for Part 66;
 - Type training (ratings) as determined by Part 66;
 - Issuing certificates showing successful completion of training;
 - Conduct of training and assessments at various locations; and
 - Sub-contracting training functions and activities.

7.2.11 Administration and enforcement provisions

- This Part will operate in accordance with the administrative and enforcement processes covered by CASR Parts 11 and 13.

8. Transition

8.1 The transition period will have two phases with early implementation commencing in the first quarter of 2007, using the existing Regulation 33 of the CARs 1988 and a new Civil Aviation Order (CAO) to give a result similar to the EASA style of licence and recognition of competency-based training. The second phase will begin when the proposed CASR Parts take effect, anticipated in late 2007.

Phase One (Civil Aviation Order - Maintenance Authority)

8.2 Phase One provides for an early implementation of EASA-like Category A, B1 and B2 licence outcomes. These outcomes will only be available for applicants who have achieved the CASA knowledge and competency requirements included in the new CAO, and who apply to CASA.

8.3 The new CAO will provide a mechanism for Registered Training Organisations to seek an approval from CASA equivalent to the requirements of the proposed Part 147. This will allow these organisations to provide training which leads to a Part 66 equivalent licence outcome.

8.4 The CAO will require the applicant to provide CASA with a statement from a CASA recognised training organisation that they have achieved a Category A, B1 or B2 outcome. Training organisations will be able to apply recognition of current competency and recognition of prior learning principles to a potential applicant's situation. This will also allow any recognised training organisation to determine and deliver, if necessary, any training shortfall to allow the potential applicant to achieve a licence result.

8.5 Once the training shortfall is achieved the applicant can supply evidence of successful completion of training for the A, B1 or B2 category outcome.

8.6 CASA would then issue a ‘Maintenance Authority’ to the individual in the category A, B1 or B2 being applied for. To gain a type specific rating for a B1 or B2 licence, the applicant would also need to supply CASA with evidence of completing the applicable B1 or B2 type training course. It is not expected that Category A, B1 or B2 rated maintenance authorities with limitations would be issued during Phase One.

8.7 This early implementation will mainly affect licence holders willing to undertake further training, those presently training for a licence outcome, and training organisations.

Phase Two

8.8 The conversion process will be fairly automatic during Phase Two. It is envisaged that the staged conversions will be tied in with the existing licence renewal dates during the transition period. CASA is considering a conversion process which would forecast to an individual the “offer” of Part 66 categories and ratings which would be applicable to the individual. If the “offer” is accepted by the applicant, then issue of the new licence would be forthcoming. If there was a discrepancy between the “offer” and the applicant’s Part 66 expectations, then liaison between the applicant and CASA would commence and a review of the situation would occur.

8.9 During this conversion process, licences would be issued with limitations to achieve parity with existing licence scope and privileges to the new A, B1 and B2 licence scope and privileges.

8.10 No existing licence privileges, will be lost during transition. Individuals who attained early implementation under Phase One will automatically convert their Maintenance Authority to a Part 66 licence.

Reciprocal Recognition

8.11 CASA already has agreement with EASA that negotiation on reciprocal recognition regimes will occur once Australia has the new rule Parts in place. It is intended that the outcome of these discussion will be a reciprocal recognition regime which will allow mutual acceptance of maintenance personnel licences, training and organisational approvals.

NPRM 0604MS Response Form

A PROPOSAL TO MODERNISE AND HARMONISE RULES FOR THE MAINTENANCE OF AUSTRALIAN AIRCRAFT AND LICENSING OF AIRCRAFT MAINTENANCE PERSONNEL

Please complete your response by **27 November 2006** and return it by one of the following means:

Online (preferred method*) rrp.casa.gov.au/respond

Fax 1800 653 897 (free call)

Post (no stamp required in Australia)

CASA Regulatory Development Management Branch
Reply Paid 2005, Canberra ACT 2601, Australia

E-mail (use the response format in this NPRM)

nprm0604ms@casa.gov.au

* A web-based online response form is offered as an alternative to the printed form in this NPRM. Online submission is the preferred method of sending your comments to CASA. If you are connected to the Internet, type rrp.casa.gov.au/respond into your web browser and follow the links for this NPRM.

Your Details

Please provide relevant information below and indicate your acceptance or otherwise of the proposal presented in this Notice of Proposed Rule Making by ticking [✓] the appropriate boxes.

Your name: _____ ARN* (if known): _____

Organisation: _____ ARN* (if known): _____

Address: _____

*Aviation Reference Number, usually your CASA-issued licence or certificate number

Your telephone number (optional): _____ (to enable the Project Manager to contact you as necessary)

Do you consent to have your name published as a respondent to this NPRM? YES [] NO []

Signed: Date:

Your affiliation (who you are representing):

Private Industry Association Airline Union Government Other

The name/title of your affiliation (where relevant) _____

Your involvement in the aviation industry:

Consumer Pilot or Flight Crew Ground or Support Staff Product or Service Provider Aircraft Owner Operator

Your satisfaction with the adequacy of existing legislation/requirement in relation to this topic (if any):

Very satisfied Satisfied No opinion Dissatisfied Very Dissatisfied

Key Change Proposals (refer to NPRM Section 3)

CASA invites you to advise your comments on the subject matter proposed in this NPRM by indicating your preference by ticking [✓] the appropriate box and commenting below:

Proposed Policy for CASR Part 42 – Continuing Airworthiness

- this is acceptable without any changes
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances
- no opinion

Comments (and, if appropriate, an estimate of any consequential impacts including costs): _____

Proposed Policy for CASR Part 145 – Approved Maintenance Organisations

- this is acceptable without any changes
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances
- no opinion

Comments (and, if appropriate, an estimate of any consequential impacts including costs): _____

Proposed Policy for CASR Part 66 – Maintenance Personnel Licensing

- this is acceptable without any changes
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances
- no opinion

Comments (and, if appropriate, an estimate of any consequential impacts including costs): _____

Proposed Policy for CASR Part 147 – Maintenance Training Organisations

- this is acceptable without any changes
- acceptable but would be improved if changes were made
- not acceptable but would be acceptable if changes were made
- not acceptable under any circumstances
- no opinion

Comments (and, if appropriate, an estimate of any consequential impacts including costs): _____

General and Specific Comments

Having read this proposal, are there any specific issues that you wish to see addressed?

Section/ Paragraph Reference	Comments or Suggestions
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Thank you

Your responses ensure balanced consideration by CASA of the interests of the aviation community and consumers.



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Annex A

A Guide to Licence Categories, Subcategories and Ratings

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A Guide to Licence Categories, Subcategories and Ratings

As CASA is replicating the EASA maintenance licensing system, the prime references are the Annexes to EASA Part 66 and in particular clauses 66.A.1 and 66.A.45.

The licensing system divides licences into four categories. These are A, B1, B2 and C. Each provides an authorisation or permission to release an aircraft or component to service after work, in a specific field covered by the category of licence for the work that has been undertaken. This category of licence can be considered as reflecting a broad “trade” qualification. Each of these categories includes a wide series of “tasks coverage” to which the licence is applicable. For example, a B1 licence is applicable to airframes, engines and some limited electrical systems.

Due to the breadth of these categories and the intricacy and specificity of certain aircraft classifications, the first two of these licences are then subcategorised using a standard criterion. This criterion addresses two factors which cover the class of aeroplane, either fixed wing or helicopter and the engine type, either turbine engine or piston engine. This leads to four subcategories which are applicable to the A and B1 licences as follows:

- A1 and B1.1 = fixed wing aeroplane with turbine engine
- A2 and B1.2 = fixed wing aeroplane with piston engine
- A3 and B1.3 = helicopter with turbine engine
- A4 and B1.4 = helicopter with piston engine

This leads to the following licences being available:

- A1.1 = fixed wing turbine
- A1.2 = fixed wing piston
- A1.3 = helicopter turbine
- A1.4 = helicopter piston
- B1.1 = fixed wing turbine
- B1.2 = fixed wing piston
- B1.3 = helicopter turbine
- B1.4 = helicopter piston
- B2 = all
- C = all

This combination of licence category and subcategory drives the training syllabus required for initial qualification and licensing via an apprenticeship or equivalent.

The more complex an aircraft, the greater is the requirement for additional training relating to that specific aircraft type. This type of training and the subsequent inclusion

of this “permission” to release a specific aircraft to service is a rating. Such a rating would normally only fall within the field of a specific licence category or subcategory. For example, to train and gain a rating on the airframe and engine of a Boeing 747, you would first need a B1 licence in the subcategory of B1.1 (fixed wing aeroplane with turbine engines). You could not train for and gain this rating if your licence was a B1.4 as this is a helicopter and piston engine related licence.

CASA has decided that for a specific class of aircraft below 5,700kg (which is a globally recognised break point under the Chicago Convention and its Annexes), there is no need normally for specific training and rating by aircraft type. This will allow a person for example with a B1.1 licence to exercise the privileges of their licence for any fixed wing aeroplane which is turbine engine powered and is below 5,700kg, with no further training or rating. CASA has the ability to direct that a specific aircraft type under 5,700kg needs a specific rating if there is an unusual safety reason for doing so.

All aircraft above 5,700kg will require specific training and a rating. CASA also will have the ability to designate a specific aircraft type above 5,700kg as not requiring specific training and a rating, if there is a reason for doing so. Such a reason may be consideration that an aircraft such as a DC-3 might be no more complex than an aircraft below 5,700kg and therefore does not need a specific rating. Note that this example is for illustrative purposes only.

The EASA system, which Australia is moving to, also includes some other forms of control mechanisms which are generic across the system and are not specific to the maintenance licensing system. These include the previously mentioned weight break at 5,700kg which gives us our description of large and non-large aircraft. An additional control is the definition of a complex and non-complex aircraft which is not used in Part 66 but is elsewhere in the maintenance suite. These definitions are applicable in many areas of the EASA regulations as control mechanisms.

**Please forward your response to CASA by
27th November 2006
by one of the following means:**

Online (preferred method)

rrp.casa.gov.au/respond

Fax

To: Regulatory Documentation Coordinator
1800 653 897 (free call) or international +612 6217 1691

Post (no stamp required in Australia)

Reply Paid 2005

Regulatory Documentation Coordinator
CASA's Regulatory Development Management Branch
Canberra ACT 2601, Australia

E-mail (use the response format in this NPRM)

nprm0604ms@casa.gov.au

Additional information is available from:

Maintenance Regulations Project Team

Post (no stamp required in Australia)

Reply Paid 2005

Civil Aviation Safety Authority
Canberra ACT 2601, Australia

E-mail nprm0604ms@casa.gov.au

Telephone: 131 757 (for the cost of a local call)

International +61 131 757

Fax: 02 6217 1466

International +61 2 6217 1466