



**Australian Government**

**Civil Aviation Safety Authority**

# **NOTICE OF FINAL RULE MAKING**

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

**Civil Aviation Safety Regulations (CASRs)  
Parts 42, 66, 145 and 147**

Readers should note that this Notice of Final Rule Making (NFRM) contains the consolidated summary of responses, CASA's comments and disposition of comments to Notice of Proposed Rule Making (NPRM) 0604MS and consultation on draft CASR Parts 42, 66, 145 and 147. The NFRM also outlines CASA's agreed policy and intended legislative changes and finalises the public consultation process in respect of the NPRM.

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

Document NFRM 0604MS – February 2011



## Foreword

The Civil Aviation Safety Authority (CASA) is replacing all existing *Civil Aviation Regulations 1988* (CAR) with the *Civil Aviation Safety Regulations 1998* (CASR). As part of that process, CASA released for public comment, on 31 October 2006, the Notice of Proposed Rule Making (NPRM) 0604MS: *A Proposal to Modernise and Harmonise Rules for the Maintenance of Australian Aircraft and Licensing of Aircraft Maintenance Personnel*.

CASA is committed to the conduct of regulatory development in cooperation and consultation with the Australian aviation industry. This Notice of Final Rule Making (NFRM) is an integral step in the ongoing development process related to the new suite of maintenance regulations.

This NFRM:

- provides a background of the regulatory policy proposed and consultation undertaken;
- discusses the submissions made in response to NPRM 0604MS;
- discusses the further submissions made in response to the consultation draft regulations;
- provides an analysis of the responses and gives a CASA response and disposition;
- discusses the impact and gives an explanation of the changes;
- provides the final Regulations and Manuals of Standards (MOS); and
- provides a description of the remaining rule making processes.

associated with the development of CASR Parts 42, 66, 145 and 147.

I would like to thank everyone who responded to the publication of NPRM 0604MS, the consultation Regulations and associated MOS for the proposed CASR Parts 42, 66, 145 and 147.



Peter Boyd  
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24 February 2011

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## Acronyms

<b>AD</b>	Airworthiness Directive
<b>AMC</b>	Acceptable Means of Compliance
<b>AMEL</b>	Aircraft Maintenance Engineer Licence
<b>AMO</b>	Approved Maintenance Organisation
<b>AMP</b>	Aircraft Maintenance Program
<b>AOC</b>	Air Operator's Certificate
<b>ARC</b>	Authorised Release Certificate
<b>CAAP</b>	Civil Aviation Advisory Publication
<b>CAMO</b>	Continuing Airworthiness Management Organisation
<b>CAO</b>	Civil Aviation Order
<b>CAR</b>	Civil Aviation Regulations 1988
<b>CASA</b>	Civil Aviation Safety Authority
<b>CASR</b>	Civil Aviation Safety Regulations 1998
<b>CAW</b>	Continuing Airworthiness
<b>CoA</b>	Certificate of Airworthiness
<b>CoR</b>	Certificate of Registration
<b>CRS</b>	Certificate of Release to Service
<b>EASA</b>	European Aviation Safety Agency
<b>EU</b>	European Union
<b>FAA</b>	Federal Aviation Administration (of the USA)
<b>FAR</b>	Federal Aviation Regulation (of the USA)
<b>GM</b>	Guidance Material
<b>ICAO</b>	International Civil Aviation Organization
<b>JAA</b>	Joint Aviation Authorities (of Europe)
<b>JAR</b>	Joint Aviation Requirement (of the JAA)
<b>LAME</b>	Licensed Aircraft Maintenance Engineer
<b>LRU</b>	Line Replaceable Unit
<b>MA</b>	Maintenance Authority
<b>MEL</b>	Minimum Equipment List
<b>MRO</b>	Maintenance, Repair and Overhaul
<b>MTO</b>	Maintenance Training Organisation
<b>NAA</b>	National Airworthiness Authority
<b>NDI</b>	Non-destructive Inspection
<b>NDT</b>	Non-destructive Testing
<b>NFRM</b>	Notice of Final Rule Making
<b>NPRM</b>	Notice of Proposed Rule Making
<b>OEM</b>	Original Equipment Manufacturer
<b>RCC</b>	Recognition of Current Competency
<b>RO</b>	Registered Operator
<b>RPL</b>	Recognition of Prior Learning
<b>RTO</b>	Registered Training Organisation
<b>SCC</b>	Standards Consultative Committee
<b>SOR</b>	Summary of Responses

## Final Rule Making

### 1. Background

1.1 The CARs and Civil Aviation Orders (CAOs) were enacted in 1988, replacing the Air Navigation Regulations and Air Navigation Orders.

1.2 In June 1996, CASA initiated the Regulatory Framework Program to review and rewrite the CARs and CAOs. The proposed new legislation was to be called the Civil Aviation Safety Regulations and was intended to consolidate the existing Regulations and Orders in one body thereby reducing the number of levels of legislation under the *Civil Aviation Act 1988*.

1.3 Another aim of the review was to establish closer compliance with the International Civil Aviation Organization's Standards and Recommended Practices and to harmonise with the safety requirements of other National Airworthiness Authorities by removing, wherever practicable, maintenance requirements and terminology which was unique to Australia. The revision has been a continuing process of consultation, revision and further consultation since 1996, with NPRMs being published in 1999, 2001, 2002 and 2004.

1.4 In late 2005, the Chief Executive Officer of CASA directed that a joint CASA/Industry team be established to develop a suite of maintenance regulations modelled on the structure which had been pioneered by the European Aviation Safety Agency (EASA). As a result of that direction, CASA (on 31 October 2006) published **NPRM 0604MS – 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 Regulations 1988 (CASRs)**.

1.5 NPRM 0604MS introduced, and invited public comments on a proposed regulatory framework for:

- a modernised aircraft maintenance certification licence structure;
- an integrated national set of standards for approval of aircraft maintenance training organisations;
- maintenance regulations that harmonise with international Authorities and facilitate modernisation and technological change within the Australian aviation industry; and
- an internationally harmonised aircraft maintenance organisation structure.

1.6 The period for public comment on the proposals contained in NPRM 0604MS closed on 27 November 2006. During the consultation period, CASA received 85 responses to the initial NPRM. The proposals in NPRM 0604MS were generally well accepted by industry participants who had some prior experience of EASA, particularly the airlines and their maintenance organisations.

1.7 Based on the feedback received after publication of the NPRM, CASA carried out further development of the draft Regulations incorporating some submissions that arose out of the consultation process. It became evident during this process that Australian legislative format protocols could not accommodate some aspects of the European regulatory style.

1.8 In order to reconcile the two differing styles while retaining the original policy intent of the NPRM, CASA, in consultation with the Attorney-General's Office of Legislative Drafting and Publishing, restructured the draft CASRs to empower the use of Manuals of Standards (MOS). On 6 November 2009, CASA published consultation drafts of CASR Parts 42, 66, 145 and 147 and their associated MOSs to seek further comments in relation to how the draft Regulations and MOSs addressed the policies previously consulted in NPRM 0604MS. The closing date for these comments was 18 December 2009.

1.9 CASA reviewed all the comments received and as a consequence of this review of public comments, made further amendments to the final legislation.

## 2. Purpose

2.1 The purpose of this NFRM is to provide a consolidation of all comments received as part of the consultative process, as well as to provide CASA's response to each of those comments and a final disposition in respect of each comment.

2.2 The list of respondents consenting to publish their names are as follows:

### **Organisations**

RAAA – Regional Aviation Association of Australia  
IASA – International Aviation Service Assistance  
MAF – Missionary Aviation Fellowship  
AEA – Aircraft Electronics Association  
Bilyara Aviation Services  
Hawker Pacific P/L  
PM Aviation Moruya  
ALAEA – Australian Licenced Aircraft Engineers Association

### **Individuals**

Mikhael Alfons  
Ian Bailey  
Tim Baker  
Michael Bodley  
Mary Brown  
Jim Charlesworth  
Lesley Collins  
Lance Cooper  
Paul Cornish  
Paul Crosby



Darren Dunbier  
William Edwards  
Robert Findlay  
Kevin Haase  
Linton Hayres  
Raymond Hill  
Michael Horsley  
Peter Jackson  
Matthew Johns  
Ron Koyich  
Lou Magritzer  
Peter Marosszkey  
Kevin McKay  
Mark Moore  
Alistair Moorhead  
Michael Morrissey  
David Newman  
Clayton Priddle  
David Rees  
Trevor Robinson  
Russell Shields  
Barry Sims  
John Soars  
James Stonier  
Michael Suann  
Garry Sweetnam  
Luke Tappouras  
Neil Thompson  
Simon Thompson  
Rodney Tomlins  
Steven Watt  
Kevin White  
Steve Winspear

### 3. Consultation Process

3.1 CASA recognised that industry involvement was a crucial element in the successful development of these Regulations. Accordingly, a joint CASA/Industry team (project team) was formed to oversee and guide the process.

3.2 The project team consulted widely with industry associations, aircraft operators and individual organisations across the industry spectrum. The team also worked closely with the CASA/Industry Standards Consultative Committee (SCC) and the Maintenance Standards Sub-committee (MSC).

3.3 A proposal was produced and circulated to industry as a NPRM on 31 October 2006 and closed for comment on 27 November 2006. All comments received were formally evaluated and CASAs responses and dispositions to those comments are reflected in the Summary of Responses (SOR) at Annex A of this NFRM.

3.4 As part of the development process, in February 2007, in consultation with SCC and MSC, CASA published CAO 100.66 which formed an integral part of the consultation process, while permitting voluntary early uptake by those individuals and organisations that wished to do so. The CAO 100.66 provided CASA and industry with a unique opportunity to trial the policies of the proposed Regulations (Parts 66 and 147) and thereby contribute to their further development.

3.5 CASA conducted general industry ‘roadshows’ in 2006 and 2008 presenting the concepts to approximately 800 people and brought back their comments, criticisms and suggestions for consideration by the project team.

3.6 In response to the initial NPRM comments, a number of amendments were made to the proposed Regulations to rectify identified deficiencies and clarify some matters, in a manner consistent with the policy direction proposed by the NPRM. An outcome of this process was the introduction of MOSs.

3.7 These amendments have made changes to the final structure of the legislation, while preserving the original policy intent of the NPRM. The parts of the NPRM proposal that were removed from each Regulation are now in the main, incorporated into the related MOS.

#### ***Further consultation***

3.8 In November 2009, the amended draft proposed Regulations and accompanying MOSs were released for a further round of general public consultation. The responses to these further consultation drafts are detailed in the SOR at Annex A of this NFRM with CASAs responses and dispositions.

3.9 The project teams then met in individual sessions with a cross-section of affected operators and maintenance organisations in order to further consult with industry in relation to the Regulations and the MOS.

## **4. Analysis of Comments**

4.1 Of the 85 responses to the initial NPRM, 11 sought further information without making comment. A significant number of the other responses included some questions and comments on various aspects of the proposals. Most of the questions raised by the NPRM were subsequently dealt with in the consultation drafts of the proposed Regulations which were released in November 2009. The responses to the consultation drafts revealed that very few matters required further clarification and subsequent versions of the drafts have addressed those remaining matters.

4.2 Overall, responses to drafts of CASR Parts 42 and 66 found some aspects of the proposed legislation unacceptable unless changes were made, while responses to drafts of CASR Parts 145 and 147 were mainly rated as either acceptable or acceptable with change.

4.3 There was general opposition from the Australian Licensed Aircraft Engineers Association (ALAEA) management and its members who opposed the proposals relating to pilot maintenance, licence training provisions and changed terminology. A total of 1108 pro-forma objections were received from ALAEA members and these were considered collectively. CASAs responses and dispositions to these comments are listed in the SOR at Annex A to this NFRM.

### Distribution of General Comments

4.4 CASA received 85 responses to the initial NPRM, 14 responses to the consultation drafts and 1108 pro-forma responses from ALAEA membership. The distribution of general comments, grouped against a comment topic, is shown in Figure 1 below.

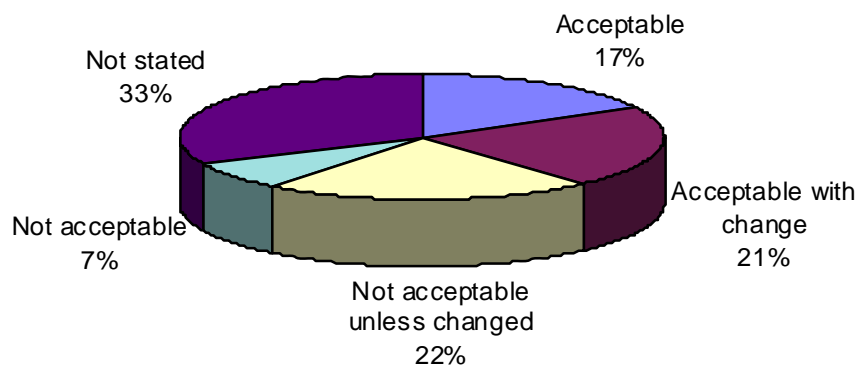
**Figure 1 - Distribution of General Comments**

Oppose appointment of Registered Operator for managing maintenance	1
AMEs and AMTs should certify for maintenance	1
CASA should adopt NZ/FAA rule models	4
Australia should allow FBOs as in the US	1
The title LAME should be used instead of Part 66 Licence holder	2
Manufacturers should be permitted to maintain their own product	1
Aircraft weight and balance requirements- concerned about changes	1
Pilots & flight engineers should not be permitted to perform any form of maintenance on aircraft.	1
Training standards for people approved to carry out maintenance will be reduced by these rules	2
Duty times should be specified for AMEs/LAMEs	1
Confusion between Part 145 & Subpart F	5
AMOs should be ISO accredited	1
Want wider scope for the category B2 licence	1
Opposed to EASA concept	1
It is not acceptable that mechanical licence will include avionics & electrical privileges	25
Category B1 and B2 licences should not have certification privileges for small aircraft without specific training.	2
Questions about proposed regulatory details	11
Do not support any change at all	2
Will only support the rules if they reduce maintenance costs to owners	1
Concerned about transitional issues particularly how the line between large & small aircraft is managed.	1
Want pre-approved generic expositions	1
Object to company authorisations	1
Object to Subpart F. All AMOs should be required to be Part 145	1
Want category A licence to have IFE privileges	1
Object to Airworthiness Review for small aircraft	1
Bring back the independent LAME	1
Concerned about impact on small type training theory deliverers	1
Do not want hot air balloons to be caught up in Part 42 or 145	1

Want CASA to introduce AMS for amateur aircraft constructors to perform their own maintenance	1
Transit Authorities should be granted A cat licences	1
Do not agree with requirement to list contractors in Exposition	1
18 years of age is too young to hold a licence	1

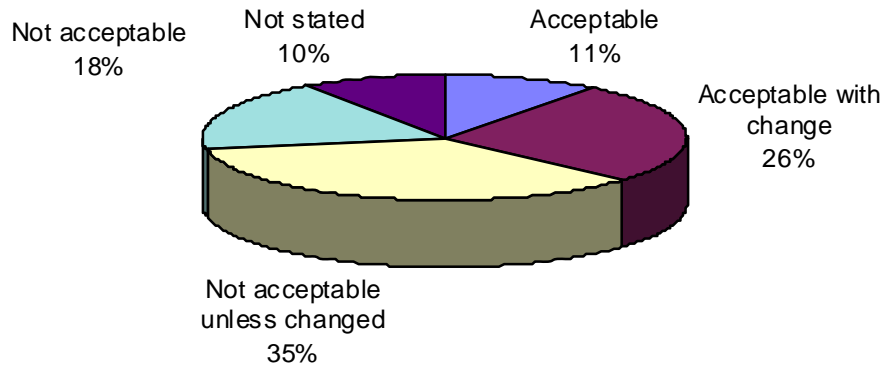
4.5 The questions in the NPRM asked for one of four responses about the acceptability of each proposed regulatory Part. The disposition of public responses to each Part is shown in Figures 2 to 5 below:

**Figure 2 – CASR Part 42**



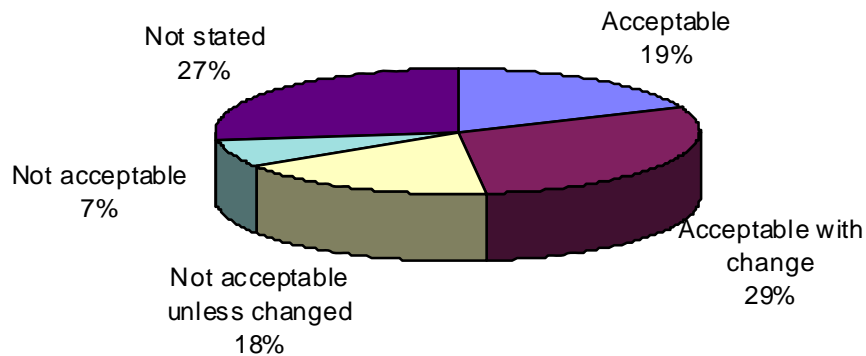
<b>Disposition of Responses</b>	<b>No. of Responses</b>
Acceptable without change	17
Acceptable but would be improved if changed	21
Not acceptable but would be acceptable if changed	22
Not acceptable under any circumstances	7
Not stated	32
	Total = 99

**Figure 4 – CASR Part 66**



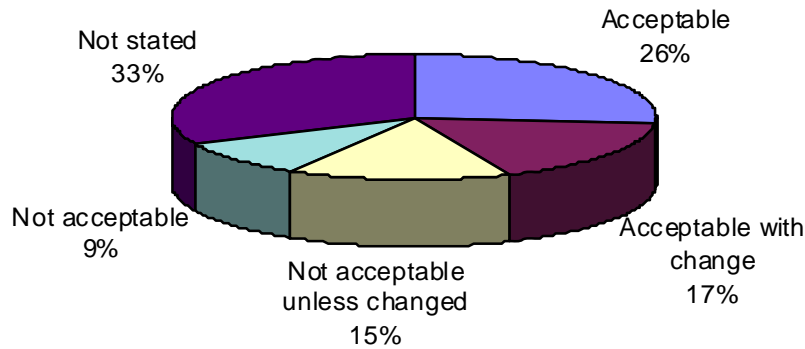
Disposition of Responses	No. of Responses
Acceptable without change	11
Acceptable but would be improved if changed	27
Not acceptable but would be acceptable if changed	36
Not acceptable under any circumstances	20
Not stated	10
<b>Total</b>	<b>104</b>

**Figure 3 – CASR Part 145**



Disposition of Responses	No. of Responses
Acceptable without change	18
Acceptable but would be improved if changed	28
Not acceptable but would be acceptable if changed	17
Not acceptable under any circumstances	7
Not stated	26
<b>Total</b>	<b>96</b>

**Figure 5 – CASR Part 147**



Disposition of Responses	No. of Responses
Acceptable without change	23
Acceptable but would be improved if changed	15
Not acceptable but would be acceptable if changed	13
Not acceptable under any circumstances	8
Not stated	28
	Total =87

4.6 These charts and tables show that a significant number of “No opinion” responses were recorded because many respondents only wished to comment on one or two of the proposed regulations.

## 5. Overall Consultation

5.1 All of the NPRM comments received have been evaluated by CASA. The distribution of comments received was wide-ranging and many suggestions have been accepted by CASA and incorporated where appropriate.

5.2 The final drafts of the Regulations and MOSs, are the outcome not only of the four years of consultation and development leading up to this NFRM, but also of the consultation and development that accompanied all of the preceding NPRMs that have been published by CASA since the commencement of the regulatory review/reform process in 1996.

## 6. Regulatory Impacts

6.1 CASA prepared a Regulation Impact Statement (RIS) that met the Government's Best Practice Regulation requirements as provided by the Department of Finance and Deregulation. A key finding from the RIS was that the introduction of CASR Part 42, 66, 145 and 147 would provide a net benefit to society. Whilst there would be a cost for maintenance organisations to prepare an exposition and implement a safety management system, and for aircraft operators to upgrade their continuing airworthiness requirements, there would also be offsetting benefits. These included: a significant efficiency benefit derived from implementing the EASA licensing system of engineers and a safety benefit in relation to safety management systems and the continuing airworthiness requirements. The RIS was published as part of the Explanatory Statement and can be viewed at:

<http://www.comlaw.gov.au/Details/F2010L03195/Explanatory%20Statement/Text>

## 7. Implementation and Remaining Rule Making

7.1 The Regulations were made on 8 December 2010 and commence from 27 June 2011.

7.2 CASR Part 42 is the primary driver of the relationships between the Maintenance suite of Regulations and other (mainly operational) CASR Parts either made or proposed. These CASR Parts include Parts 21, 91, 119, 121, 129, 133, 135, 136, 137 and 138.

7.3 Many of the operational CASR Parts are still under development and as an interim measure, CASR Part 42 will use the existing CAR 1988 terminology and references [such as CAR 206(1)(c)] to establish applicability of the maintenance CASRs for the first phase of transition activities.

7.4 CASR Parts 42 and 145, which cover the continuing airworthiness and approval of maintenance organisations, will only apply to Regular Public Transport operators, as described in CAR 206(1)(c) in the first instance. The Regulations provide operators and maintainers of RPT aircraft and aeronautical products two years from 27 June 2011 to meet the requirements of the new Regulations.

7.5 The future expanded application of CASR Parts 42 and 145, to cover all other classes of aircraft operations (Charter, Aerial work and General Aviation(GA)), is dependent on the finalisation of the amendments to the CASR operational Regulations and would not occur any earlier than June 2013.

7.6 The policies of other major GA countries such as the United States of America will be considered as part of any adjustments to the Regulations for application to Charter, Aerial work and GA operations. These changes would be consulted with the industry and the public before the application of the legislation is expanded.

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7.7 CASR Parts 66 and 147 that deal with licensing of maintenance personnel and approval of maintenance training organisations would take immediate effect from 27 June 2011. The principal feature of the CASR Part 66 licence conversion process is that current licence holders will retain the same privileges they currently hold. This will be achieved through a combination of licence and type ratings and ‘savings’ provisions in the Regulations.

7.8 The Regulations provide maintenance training organisations with two years from 27 June 2011 to meet the new requirements of the new Regulations.



# **NOTICE OF FINAL RULE MAKING**

## **Rules for the Maintenance of Australian Aircraft and Aviation Personnel Licensing**

### **Civil Aviation Safety Regulations (CASRs) Parts 42, 66, 145 and 147**

Document NFRM 0604MS

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