



MAINTENANCE ENGINEER LICENSING (PART 66)
ASAP TECHNICAL WORKING GROUP (TWG)
Second Meeting Report 29-30 January 2020

The Maintenance Engineer Licensing (Part 66) Technical Working Group is established and operates in accordance with the Terms of Reference of the Aviation Safety Advisory Panel (ASAP) dated September 2017 (or as amended).

PURPOSE

The role of the TWG will be to provide relevant technical expertise and industry sector insight for the analysis and review of Civil Aviation Safety Regulations (CASR) Part 66 and Manual of Standards (MOS) in accordance with the agreed policy principles.

The TWG will:

- Provide industry sector insight and understanding of current needs and challenges
- Provide current, relevant technical expertise for the development, analysis and review of legislative and non-legislative solutions to the identified issues
- Assist with the development of draft regulations, guidance materials and other supporting materials
- Provide endorsement and or conditional endorsement of draft regulations, guidance materials and other supporting materials for consideration by the ASAP and CASA.
- Consider whether there are any related opportunities for improvement to CASR Part 147 (Maintenance Training Organisations)

POLICY OUTCOMES

The core policy outcome for the reform of Part 66 is alignment, to the greatest extent possible, with European Aviation Safety Agency (EASA) equivalent regulations. EASA regulations are widely recognised globally as a benchmark standard that is both practical and appropriate.

Other key objectives and policy outcomes to guide all activity on the reform of Part 66 regulations are to:

- reduce the complexity and streamline Part 66 regulations and the Manual of Standards (MOS)
- remove ambiguities and fix anomalies presently in the legislation and guidance material
- create a more progressive licensing system that includes a licence outcome appropriate for the general aviation sector of the industry
- improve the way privileges are stated on licences to provide clarity
- reduce the prescriptiveness of the Part 66 MOS and rely on the EASA knowledge modules as the licensing standard, in order to provide more flexibility for future development of training packages
- ensure legislation and training requirements maintain compliance with ICAO standards and recommendations

- work closely with the Aerospace Education and Training Industry Reference Committee (IRC) to establish a more efficient and structured training package for the complete licensing system, comprised of competency units that accurately align to the subjects contained within the EASA knowledge modules.
- seek to achieve recognition of prior learning between EASA and CASA

SPECIFIC OBJECTIVES

The project has three key components.

1. **Legislation.** Review and recommend changes to the Part 66 regulations and MOS, to achieve the policy outcomes.
2. **Licence privileges.** Review and recommend changes to clarify and improve the understanding of licence privileges to achieve the policy outcomes.
3. **Aeroskills training.** To assist, where necessary, in the development of a revised Aeroskills training package by the Aerospace Education and Training Industry Reference Committee (IRC) of the Department of Education.

REPORTING ARRANGEMENTS

The TWG will provide a status report to the regular meetings of the ASAP on progress.

Recommendations and reports of the TWG will be provided to the Chair of the ASAP, through the secretariat.

Timelines for specific outputs will be developed as part of the initial work, with an update included with the first status report.

ROLES AND RESPONSIBILITIES

CASA	TWG Members
<ul style="list-style-type: none"> • Organise meetings and workshops, and produce agendas, papers and supporting materials • Facilitate meetings and workshops • Record insights and findings • Communicate openly and consistently with TWG members about project status and issues • Respect the time of all TWG members by minimising work required to achieve outcomes 	<ul style="list-style-type: none"> • Commit to supporting the project objectives and timeline • Engage and collaborate constructively at all times • Prepare for working group activities by reviewing agendas, papers and supporting materials • Provide timely and considered advice in meetings, and between meetings as required • Respond to requests for feedback on draft materials within agreed timeframes

CONSENSUS

A key aim of the TWG is that a consensus be reached, wherever possible, in the finalisation and preparation of advice for the ASAP and CASA.

The TWG will be guided by the ASAP Terms of Reference (Section 6) with respect to determining and documenting consensus.

MEMBERSHIP

Members of the TWG have been appointed by the ASAP Chair, following ASAP processes.

The Part 66 TWG consists of the following members:

Michael McGill (CASA Lead)	Keith Blaik	Mark Thompson
Jared Smith	Wayne Davey**	Steven Wright
Rod Tomlins	Mary Brown	Stephen Re
Ted Goetz	Mike Higgins*	

* Participated at the start of day 1 only due bushfires.

** Unavailable for the TWG meeting

The TWG CASA Lead was joined by CASA subject matter experts, Saskia Ford, Peter Ball, Mark Hinchliffe, and Craig Johnson throughout the meeting.

The ASAP Secretariat was represented by Matthew Bouttell.

PROCESS FOR ACHIEVING CONSENSUS

As required by the ASAP (& TWG) Terms of reference, there must be agreement by all participants on the method used for obtaining consensus.

All eight members in attendance at the TWG meeting were in full agreement with the report and provided commentary to support their consensus.

The CASA Lead has also provided commentary of the effectiveness of the TWG and whether it's believed that the recorded outcomes are a fair representation of the TWG from a CASA perspective.

SUMMARY OF OUTCOMES – TWG Meeting 29-30 January 2020

This meeting of the TWG worked towards achieving the overall TWG outcomes as described in the ASAP TWG Tasking Instructions listed under three categories: **Legislation, Licence privileges and Aeroskills training.**

The purpose of this TWG meeting was for the TWG to review the Summary of Consultation (SOC) on CASA's proposal to amend the Part 66 MOS to introduce a 'self-study' training and examination pathway. The TWG were also asked to review the draft AC 66-08 – Part 66 aircraft engineer licenses – privileges.

- A. Was there consensus achieved among the TWG members that the SOC for CASA's proposal to amend the Part 66 MOS to introduce a 'self-study' training and examination pathway reflected the feedback from Industry?**

CONSENSUS

GENERAL CONSENSUS / DISSENT

Comments:

From the information provided by CASA in the draft Summary of Consultation, the TWG members were comfortable that the SOC reflected industry feedback. Feedback highlighted that, whilst valuable to all sectors, it is apparent that the Self Study pathway is essential for regional and remote access and affordability for general aviation.

- B. Is the TWG supportive of CASA's reasoning for the 'self-study' pathway and how it would be introduced?**

CONSENSUS

GENERAL CONSENSUS / DISSENT

Comments:

The TWG is supportive of CASA's development of options for a Self-Study pathway.

The TWG acknowledges some of the barriers for the successful implementation including:

- 1) This will require significant increase of resourcing and prioritising (within CASA) for this initiative to be expedited as the CASA basics system will cease in July 2020.
- 2) Effective communication will be required for industry to understand the system, particularly rural and remote communities
- 3) Cost of self-study, to the individual especially in rural and remote communities, and of implementation and eligibility requirements under existing state government funding arrangements. This includes cost of exams at rural and remote locations.

Whilst noting this would have no initial alignment with vocational outcomes, it should provide a progressive structure that supports transition into the current VET system

The TWG supports CASA's continued objective to align with EASA.

To maximise harmonisation with EASA and to expedite progress, the TWG strongly recommends that CASA should utilise the exact wording and language as EASA.

C. Is the TWG supportive of the DRAFT AC 66-08?



GENERAL CONSENSUS / DISSENT

Comments:

The TWG members are supportive of the AC for providing clarification on engineering licensing privileges noting some minor amendments are required. CASA will make these amendments and re-circulate to TWG members prior to public consultations to finalise this consensus.

The TWG notes the time taken to get to this point has been excessive due to apparent under-resourcing and competing priorities.

D. Does the TWG have any feedback for the ASAP to review and consider?

Comments:

- First and foremost, CASA must align with EASA requirements and language
- CASA need to appropriately resource internal departments to expedite improvements to Part 66, and particularly this initiative.
- Prioritising Part 66 MOS changes within CASA's drafting resources is essential
- TWG expressed disappointment that it has taken two years to get to this point given CASA basics cease in July 2020, however it was noting the good work the CASA project lead has done to this point
- As a priority CASA need to progress the development of a progressive licensing system that caters for the Australian aircraft fleet (eg. small aircraft to air transport).

Failure to achieve the above will have substantial effects on industry's ability to produce licensed engineers further exacerbating the LAME shortage particularly in rural and regional Australia and restrict Australia's capacity to capitalise on international and local opportunities.

CASA Lead Summary

Michael McGill

Comment:

I'd like to thank all Part 66 TWG members and CASA participants for making yourselves available over these last two days and applaud you all for your informative contribution to discussions had on some very complex and technical Part 66 training and licensing issues.

A very positive meeting with a clear focus moving forward.

Once again, many thanks to this diverse group of passionate maintenance engineers.

Part 66 Future direction

The CASA project lead advised TWG members that post this meeting, CASA will focus on developing the legislation to support the self-study pathway and conduct work that focuses on proposals for a small aircraft license along with enabling progressive license outcomes. This would be prioritised so that we can bring the TWG back together within 6 months.

(extract) From ASAP and TWG Terms of Reference regarding Consensus

- 6.1** A key aim of the ASAP is that a consensus be reached, wherever possible, in the finalisation and preparation of advice to the CEO/DAS.
- 6.2** For present purposes, 'consensus' is understood to mean agreement by all parties that a specific course of action is acceptable.
- 6.3** Achieving consensus may require debate and deliberation between divergent segments of the aviation community and individual members of the ASAP or its Technical Working Groups.
- 6.4** Consensus does not mean that the 'majority rules'. Consensus can be unanimous or near unanimous. Consensual outcomes include:
 - 6.4.1 Full consensus**, where all members agree fully in context and principle and fully support the specific course of action.
 - 6.4.2 General consensus**, where there may well be disagreement, but the group has heard, recognised, acknowledged and reconciled the concerns or objections to the general acceptance of the group. Although not every member may fully agree in context and principle, all members support the overall position and agree not to object to the proposed recommendation.
 - 6.4.3 Dissent**, where differing in opinions about the specific course of action are maintained. There may be times when one, some, or all members do not agree with the recommendation or cannot reach agreement on a recommendation.

Determining and Documenting Consensus

- 6.5** The ASAP (and Technical Working Groups) should establish a process by which it determines if consensus has been reached. The way in which the level of consensus is to be measured should be determined before substantive matters are considered. This may be by way of voting or by polling members. Consensus is desirable, but where it is not possible, it is important that information and analysis that supports differing perspectives is presented.
- 6.6** Where there is full consensus, the report, recommendation or advice should expressly state that every member of the ASAP (or Technical Working Group) was in full agreement with the advice.
- 6.7** Where there is general consensus, the nature and reasons for any concern by members that do not fully agree with the majority recommendation should be included with the advice.
- 6.8** Where there is dissent, the advice should explain the issues and concerns and why an agreement was not reached. If a member does not concur with one or more of the recommendations, that person's dissenting position should be clearly reflected.
- 6.9** If there is an opportunity to do so, the ASAP (or Technical Working Group) should re-consider the report or advice, along with any dissenting views, to see if there might be scope for further reconciliation, on which basis some, if not all, disagreements may be resolved by compromise.

Appendix

- 1. TWG Agenda
- 2. DRAFT Summary of Consultation – Proposed amendment to Part 66 Manual of Standards (MOS) aircraft engineer licensing training (as presented to the TWG)

Part 66 Post Implementation Review (PIR)
ASAP Technical Working Group (TWG) 2nd meeting
Wednesday and Thursday, 29th & 30th January 2020

Meeting Agenda

Meeting:	Part 66 PIR Technical Working Group (TWG)
Date:	Wednesday 29 th to Thursday 30 th January 2020
Time:	9:00am – 4:30pm Wed 9:00am – 3:00pm Thu
Location:	Level 1 Conference Room, 16 Furzer St Phillip, ACT
Papers:	<ul style="list-style-type: none"> • Summary of Proposed Change, 'consultation document' (CD 1908SS) – on proposed amendment to Part 66 Manual of Standards (MOS) aircraft engineer licensing training – that introduces a new 'self-study' training and examination pathway for Part 66 aircraft engineer licensing. • Summary of Consultation (SoC 1908SS) – summary of comments received to the self-study' proposal⁸⁸ • Part 66 'self-study' proposal – defining the policies • 'Draft' Advisory Circular AC66-08 – Part 66 aircraft engineer licences - privileges

Attendees:

CASA	Industry
Mick McGill Airworthiness Standards (Part 66 project leader)	Keith Blaik individual LAME – GA sector
Ben Challender Manager, Airworthiness Standards	Rod Tomlins individual LAME – RPT sector
Craig Johnson Section Manager, Maintenance Personnel Licensing Specialist Services	Mary Brown Nth Qld Aviation Services (AMO small GA maintenance org)
Saskia Coleman CASA CTM, Northern Region - Darwin office	Ted Goetz QANTAS (AMO large RPT maintenance org)
Mark Hinchliffe CASA AWI, Western Region - Perth office	Stephen Re Australian Licensed Aircraft Engineers Association (ALAEA)

Peter Ball CASA Aviation Safety Adviser	Mark Thompson Aviation Australia (Part 147 ATO delivering both CASA & EASA training)
Matthew Bouttell Section Manager, Industry Relations (ASAP Secretary)	Steven Wright individual LAME and maintenance training consultant
	Jared Smith RA Aus
	Mike Higgins CEO, Regional Aviation Association of Australia (RAAA)

Meeting Agenda

Day 1

8:30 – 9:00	Informal meet and greet
9:00 – 9:15	Welcome Matt Bouttell
9:15 – 9:30	Outline and tasking/expectations for ASAP TWG Matt Bouttell
9:30 – 10:30	Status update on Part 66 PIR work

Morning tea (15 min)

10:45 – 12:30	Part 66 ‘self-study’ proposal [consulted 30 Aug – 27 Sep 2019]
	<ul style="list-style-type: none"> • Presentation of draft ‘Summary of Consultation’ document on proposed amendment to Part 66 Manual of Standards (MOS) aircraft engineer licensing training – that would introduce a new ‘self-study’ training and examination pathway for Part 66 aircraft engineer licensing • TWG discussion on comments received to the self-study proposal

Lunch (45 min)

13:15 – 15:30	Progress discussions on comments received to the self-study proposal
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Short afternoon break (10 min)

15:40 – 16:30 Defining the policy issues of the self-study pathway – working group discussions

Day 2

9:00 – 10:30 Discussions on any other Part 66 PIR issues

Morning tea (15 min)

10:45 – 12:30 Progress discussions

Lunch (45 min)

13:15 – 14:00 Comments on any other Part 66 issues

14:00 – 15:00 Initial drafting of TWG report for ASAP



SUMMARY OF CONSULTATION



Proposed amendment to Part 66 Manual of Standards (MOS) aircraft engineer licensing training



Part 66 Manual of Standards

Date	January 2020
Project number	MS 16/05
File ref	D19/382835

Overview

CASA published the Consultation Draft (CD 1908SS) on proposed amendments to the Part 66 Manual of Standards (MOS) - aircraft engineer licensing training, on the Consultation Hub from 30 August to 27 September 2019. The consultation invited industry to provide feedback and comments on a set of proposed amendments that would introduce a new 'self-study' training and examination pathway that would lead to the grant of a Part 66 aircraft engineer licence.

The proposed new pathway is an alternative to the current requirement to undertake licence category training via a Part 147 Maintenance Training Organisation (MTO) and will be similar to the CASA Basics examinations/Schedule of Experience scheme that existed under the previous CAR 31 licensing system. A summary of feedback received is provided below. CASA appreciates the time taken by industry to respond during the consultation period and the contributions made by all respondents

Respondents

CASA received a total of one hundred and twenty-nine (129) submissions to the consultation from 129 respondents. Eighty-one (81) respondents consented to having their comments published on the CASA website, forty-three (43) requested their comments remain confidential and five (5) responses were from CASA officers. Where permission has been granted, individual responses are available on the CASA Consultation Hub.

Key feedback

From the 129 submissions received:

- Ninety-six (96) respondents indicated support for the proposal to introduce a new 'self-study' training and examination pathway
- Fourteen (14) respondents did not support the proposal
- Twelve (12) respondents didn't provide support for the proposal either way.

Across all received feedback, the common themes commented on were:

- Affordability of training. Fees currently charged by Part 147 MTOs makes training for a Part 66 licence largely unaffordable.
- Access to Part 147 training including geographical distances from available MTOs, travel costs and the time off work required (i.e. periods of block release, or minimum one-year full-time study) to attend training.
 - Currently there is no alternative pathway for adult qualified tradespersons to achieve a Part 66 licence without having to attend an MTO. Without affordable training pathway options, adult qualified tradespersons are less likely to consider a career in aircraft maintenance. Self-study is the only viable option for many engineers, due to location and work commitments.
- Recognition of prior learning (RPL) assessment costs are very costly and frustratingly slow to get an outcome after paying large costs.

- Licensed Aircraft Maintenance Engineer (LAME) shortage where the current training pathway limits opportunities for individuals qualified in affiliate trades from considering a career in aircraft maintenance. More aircraft engineers are needed, and these changes will hopefully provide an alternate pathway for people to achieve these qualifications.
- Flexibility offered under self-study option – self-study allows an AME to earn a living and gain the required experience while acquiring the required knowledge.
- Current training package issues – misalignment of the Diploma of Aeroskills qualification required for a category of licence to the knowledge modules stated in the 66 MOS (i.e. misalignment of units of competency to the Part 66 knowledge syllabus).
- Lack of availability of clear guidance and or information for training pathways, process and options – both CASA and the Part 147 MTOs need to provide clear guidance and information to prospective students that identifies training pathway options.

Theme 1 – Affordability of training

Fifty-six (56) respondents commented on the current costs of training conducted by Part 147 MTOs as being a major concern, with one respondent stating:

"Costs involved with full-time study, as well as the need to, probably, re-locate from home is a major disincentive to take up study."

Theme 2 – Access to Part 147 training

Twenty-eight (28) respondents commented on the difficulties in accessing Part 147 training due to their geographical location and the requirement to take time off work to attend training, with one respondent stating:

"... in regional and remote Australia it has become increasingly difficult for young people to obtain their licences through the Part 147 system, mainly due to the isolation and cost of travel. Operators have been less likely to employ apprentices because of this."

Theme 3 – RPL assessment costs

Respondents also commented on the current costs for RPL assessments, with one respondent stating:

"RPL process is costly & frustratingly slow to get an outcome after paying a large cost."

Theme 4 – LAME shortage

Twenty-two (22) respondents commented on the current shortage and decline of LAMEs in the aircraft maintenance sector. Examples of those comments were:

"The current system is an onerous and costly one which effectively discourages those participants from becoming licensed. This has created a shortage of licensed engineers as older LAMEs retire or leave the industry."

"There needs to be a pathway for adult qualified tradespersons to achieve a LAME Licence without going to a Training School. For many decades the industry has gained LAMEs from the CASA Basics/SOE system. A Part 66 self-study pathway must work as well as the previous SOE system or there will be no LAME's in the future of GA."

SUMMARY OF CONSULTATION ON PROPOSED AMENDMENT TO PART 66 MANUAL OF STANDARDS (MOS) AIRCRAFT ENGINEER LICENSING TRAINING

"The self-study initiative is essential to increasing the number of LAMEs for our future industry, especially in regional areas."

"To hard for AME's to gain Licence qualifications at present due to the RTO/MTO attendance requirement."

"The ability for a candidate to complete a self-study pathway whilst employed and engaged in practical training will ensure a competency and retention rate that is required urgently within industry."

Theme 5 – Flexibility offered under self-study option

Twenty-one (21) respondents commented on the flexibility that may present through introduction of a self-study pathway. Examples of those comments were:

"...within the next 10 years there will be a massive shortage of qualified and competent engineers largely due to an aging workforce and the excessive cost, time and access to training for apprentices with Part 147 organisations.

It appears the current training system is not sustainable long term and a flexible education option will enable greater access for AMEs to achieve theory training requirements whilst having the added benefit of continuing day to day employment."

"I would like to become a licensed engineer but the cost of travel and also to be away from family and the time off work to train at an institution is almost impossible for me. Logging my experiences working on aircraft with the extremely talented engineers I work with and taking exams close to where I live is the best news I've heard in ages. Keep it simple and it will be much easier for everyone."

Suggestions and requests for a self-study system to provide flexibility to:

"include the ability to self-study specific modules (and do the required practical) for the removal of exclusions."

"enable a new starter to do only the required modules and practical for a basic licence without having to complete all Part 66 training modules."

"enable a person who has started with a Part 147 training provider to change to self-study, or vice versa."

"enable a person who self-studies aeroplane piston engine modules and gets a licence, to be able to later self-study additional modules for further licence scope."

CASA response to the suggestions and requests for a self-study system

CASA notes these suggestions. The detailed policies for the proposed self-study pathway that will address the comments above are yet to be discussed in detail by CASA.

Theme 6 – Current training package issues

Fifteen (15) respondents commented on issues with the current Aeroskills training package, with one respondent stating:

"...the units of competency do not align with CASR Part 66 Module examination requirements.

"Due to this misalignment and involvement of other agencies like IBSA and ASQA, the student enrolments have reduced and the delivery of Aeroskills qualification plus conducting CASR Part 66 Module examinations has become very expensive for all

SUMMARY OF CONSULTATION ON PROPOSED AMENDMENT TO PART 66 MANUAL OF STANDARDS (MOS) AIRCRAFT ENGINEER LICENSING TRAINING

TAFE's business. Also, the student and most of their employers are unable to afford the cost of the examinations and the fees for the all units of competency."

Theme 7 – Lack of availability of clear guidance/information for training pathways/process/options

Three (3) respondents commented on the lack of availability of clear guidance and information for training pathways, processes and options. Examples of those comments were:

"I currently have a B2, am trying to get my B1.2 Licence thru a 147 school and have had nothing but problems. The whole process has been full of hurdles with no clear path to gaining a licence."

"the life of our industry is fast expiring from lack of a clear, unambiguous and suitable pathway to become licensed to certify for maintenance in our industry."

"...we require clear information and guidelines for current part 66 licence holders to gain additional licences or exclusion removal via self-study."

Additional comments against miscellaneous 66 MOS amendments

In addition to the proposed self-study pathway, this consultation included other miscellaneous amendments to reduce complexity of the Part 66 MOS, to more closely align to EASA Part 66. Respondents comments to some of these miscellaneous changes were:

"If the mandate is to use EASA why not adopt directly – By continuing not to embrace the entire words we continue to have interpretation and add complexity to a regulatory set that is quickly becoming the global standard for aviation. This is the direction CASA should adopt so that LAME qualifications will be globally recognised. The result would allow Australian MRO's, large and small, to be significantly more capable of acquiring work in the Asia-Pacific region which is a theme being put forward by many State Governments and also the Federal Government. Additionally, this would further align Defence qualifications after their recent implementation of the DASR suite of regulations which essentially mirror EASA Part 66. Australia's regulator, CASA, due to its relationship with the AQF competency framework in Part 66, could lead the world in this area. Competency assessment against the workplace is something that most NAA's around the world are currently trying to understand."

"The real issue here, is the lack of a licence outcome suited for the smaller GA organisations"

"...guidance the TWG was given, first and foremost,...follow EASA principles and where possible align/adopt this approach. Therefore, it is extremely disappointing that the EASA B3 licence outcome which embraces <2000kgs piston engine unpressurised aircraft (those typically used in the remote areas) is not part of this consultation."

"It is a good move that CASA allows Part 66 exams to replace the old CASA basics at their exam centres and that in conjunction with the B3 option would go a long way to resolving this ongoing issue. It also provides a graduated pathway, much like the old CASA basics did, that can be built on if LAME's decided to move into the larger RPT organisations."

Future direction

Overall, respondents have strongly supported the proposal to introduce a self-study training and an examination pathway that leads to the grant of a Part 66 aircraft engineer licence. Support for the other proposed miscellaneous changes to the Part 66 MOS were also expressed.

CASA will, with close consideration given to feedback provided, proceed with development of the detailed policies required for introduction of the self-study pathway.

On completion of the policy development stage in the first half of 2020, CASA will seek additional feedback from industry on those defined policies through a second round of consultation.

DRAFT