



CASA ref: D22/463180

MAINTENANCE ENGINEER LICENSING (PART 66) ASAP TECHNICAL WORKING GROUP (TWG) TASKING INSTRUCTIONS and FIFTH REPORT 18 November 2022

The Maintenance Engineer Licensing Technical Working Group is established to operate and report to the Aviation Safety Advisory Panel (ASAP) in accordance with the Terms of Reference of the ASAP dated November 2021 (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.

- 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 regulation, 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) to ensure Part 147 is entirely compatible with Part 66 and provides complementary set of regulations.

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 licence 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

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.

ROLES AND RESPONSIBILITIES

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

Recommendation 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.

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.

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

MEMBERSHIP

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

The Maintenance Engineer Licensing consists of the following members:

- Mark Thompson (Co-Chair)
- Keith Blaik
- Ted Goetz
- Stephen Re
- Rod Tomlins
- Steven Wright *

- Darren Barnfield *
- Mark Howe
- Aaron Smith
- Sheridan Austin
- Megan Kaisner (*Observer*)

The TWG CASA Lead, Benjamin Challender, was supported by Mick McGill, Michael English, Craig Johnson and Matthew Castello during the meeting.

The ASAP Secretariat was represented by Mwala Puteho.

*Denotes members not present at meeting.

MEETING SUMMARY – 18 November 2022

- The primary purpose of the meeting was to discuss and evaluate the viability of CASA's progressive modular licence proposal using exclusions, with anticipation of gaining consensus on the proposal. Furthermore, the meeting served as a platform for the TWG to be briefed on the published Regional Aviation Association of Australia (RAAA) paper on Aircraft Maintenance Engineer shortages.
- The TWG was advised that the modular licence would utilise existing standards and would not change the competency standards, eliminating safety concerns around the competency of LAME's. It was further noted that the modular licence proposal would be a two-phase process, the first stage using exclusions is the short-term solution and the second phase would build upon a positive descriptive licence and is the longer term outcome.
- The CASA project team provided the TWG with a high - level presentation outlining the basic structures of the progressive modular licence. The presentation outlined that in the interim the concept is to issue licences with "blanket" exclusions (i.e. engine, airframe, electrical, avionics etc); it was further summarised that the proposed AME licence subsets would be as followed:

B1	B2
<ul style="list-style-type: none"> ○ Airframe <ul style="list-style-type: none"> - Aeroplane - Rotorcraft ○ Powerplant <ul style="list-style-type: none"> - Piston engines - Turbine engines ○ B1 Add <ul style="list-style-type: none"> - Propellers - Electrical, Avionics LRU 	<ul style="list-style-type: none"> ○ Electrical ○ Com/Nav ○ Instruments ○ Auto flight ○ Surveillance ○ Airframe systems

- CASA further provided a high-level example of what a proposed B1.1 airframe only licence would consist of. The TWG was briefed on the privileges, knowledge modules, experience and exclusions limited to 7 as outlined below. The TWG was additionally provided with an example of the construct of the proposed B1.2 Piston engine licence.

Proposed B1.2 Airframe only	
Privileges – All aeroplane mechanical and structural systems (<i>Not including powerplant, electrical or avionics systems</i>)	Knowledge Modules – 1,2,6,7,8,10,11B
Experience – Basic experience logbook: Modules 7,11B (Part 3 as applicable)	Exclusions - E1, E3, E4, E5, E6,E9,E10

- CASA further defined its framework for a progressive modular pathway for the B2 licence, which would be modelled on the European Aviation Safety Agency (EASA) B2L. CASA further

advised the TWG that the pathway towards a B2 proposed would require the introduction of new examinations.

- CASA noted that the proposed solutions above can be implemented rapidly, with simple MOS amendment changes to permit the issuing of licences with the use of exclusions.
- The TWG discussed Composite repairs and advised CASA that including Composite aircraft in the proposal could cause concern, citing current issues around the quality of composite repairs and questions over who is legally entitled to conduct this maintenance. CASA advised the TWG the issue would be taken on notice and be revisited as more details on the proposal are provided. **(CASA action item)**
- The TWG enquired how the electrical fundamentals would be covered under the theory requirements. CASA took the questions on notice and advised TWG that further details will be outlined in the next meeting.
- The TWG discussed the proposed B1 add – on of propellers to the engine modular licence as an exclusion, it was noted by TWG members that a licence holder without the propeller category would not be of benefit to certain maintenance organisations. CASA advised that it would take the enquiry on notice and provide further details as the proposal moves from the concept stages.
- The TWG discussed the recommendations outlined in the RAAA paper, focusing on the recognition of international LAME's in potentially addressing the LAME shortage issue. As part of the discussion CASA noted that the recognition of international LAME's was not on its work list as a priority. However, it was later determined that the proposed MOS changes may allow for the issue of a CASA licence with exclusions depending on the actual Foreign licence being assessed.
- The CASA team provided the TWG with an outline of the work currently being undertaken, it was noted that CASA is currently working on 5 streams of legislative projects which include: the legacy part 66 PIR activities, Type rating initiatives, Modular Licencing, General Aviation licence category and Exclusion removal via self-study. The purpose of summarising the priorities that CASA is working on was to allow the TWG as an independent group the ability to provide feedback on what are the industry's priorities.
- The TWG advised CASA that the absolute top priority is to solve the LAME shortage in General Aviation and the modular licence would be a possible short-term solution. It was further stated by the TWG that the modular licence and General Aviation licence solution were flagged as a priority in 2019. The TWG further emphasized to CASA the importance of directing all resources towards the modular licence initiative to ensure rapid outcomes for industry.
- The TWG provided CASA with a high-level endorsement to progress work on the progressive modular licence proposal using exclusions, CASA advised that it would commence work in providing more details on the constructs of the progressive module licence proposal to be presented to the TWG.
- The TWG and CASA agreed that the next meeting date would be the 9th December 2022 and that CASA would provide the TWG members with more details in regards to their proposal by Monday 5 December 2022.

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.

To obtain consensus, the TWG will discuss their views on the provided material during the meeting then address the below Outcomes.

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

SUMMARY OF OUTCOMES – Fifth Report 18 November 2022

1. Does TWG support CASA's proposed pathway of the progressive modular licensing initiatives.

FULL CONSENSUS / GENERAL CONSENSUS / DISSENT

Comments:

The TWG broadly supported and endorsed the proposed progressive modular licence with exclusions based on the presentation provided by CASA. Furthermore, the TWG recommended that CASA begin work on providing detailed structures and makeup of the conceptual modular licence with exclusions. As part of the recommendation and endorsement, the TWG would like to highlight the following:

- The TWG strongly emphasised the importance of utilising the existing Part 66 modules without alterations in achieving the outcomes of an initial licence (B1 and B2)
- The TWG accepted the use of exclusions to achieve the outcomes of a modular licence provided they are "blanket type exclusion" e.g., covering the entire aircraft.
- The TWG recommends and highlights to CASA senior managers and the ASAP that the progressive modular licensing initiative needs to be made a top priority for the CASA AEB project team, with appropriate resourcing allocated to the team to rapidly achieve outcomes for the industry.
- The TWG also noted several members had been in discussion with CASA senior management and minor MOS changes that have always taken many months to be completed could now be achieved quite quickly. This was a significant consideration in the TWG's support of this approach.

Other Recommendation

The TWG has identified concerns around maintenance performed on composite aircraft and recommended CASA consider methods to educate, engage and provide guidance to industry to improve maintenance standards. This issue is likely to get worse as composite materials become more widely used.

CASA Lead Summary

Ben Challenger

Comment:

CASA acknowledges and appreciates the support of the TWG to progress the modular licensing initiative as a priority, as well as the TWG's technical policy recommendations and proposed timeframe.

CASA also acknowledges the TWG's concerns around guidance and information on maintenance of composite aircraft. CASA will review both the information on the subject and its delivery to ensure the information is useful and readily accessible by industry.

CASA would like to thank Ms Kaisner for attending the meeting and providing valuable insights into the practical and administrative challenges faced by the regional GA industry under the current LAME training arrangements.

Appendix

1. Extract from ASAP Terms of Reference

Appendix 1

ASAP and TWG Terms of Reference regarding Consensus (Extract)

- 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.