# Australian Government Civil Aviation SafetyAuthority

### AVIATION SAFETY ADVISORY PANEL

# AIR TRANSPORT and CONTINUING AIRWORTHINESS ASAP TECHNICAL WORKING GROUP TASKING INSTRUCTIONS and FIFTH REPORT

27 June 2022

The Air Transport and Continuing Airworthiness Technical Working Group (TWG) 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).

### **BACKGROUND/CONTEXT**

The following principles of reform were endorsed by the ASAP on 14 March 2019:

- Ensure compliance with the standards set by the ICAO for commercial air transport operation:
  - Annex 6 Part 1 International Commercial Air Transport Aeroplanes
  - o Annex 6 Part III, Section II International Commercial Air Transport Helicopters
- Facilitate harmonisation with legislation of leading aviation states, as applicable for the Australian environment
- Ensure compatibility with the new flight operations regulations
- Ensure regulatory requirements are proportionate to the risk associated with the relevant operational classification
- Provide transitional strategies to minimise the disruption to the industry.
- Consider the economic and cost impact on individuals, businesses and the community in the development and finalisation of new or amended regulatory changes.

### **PURPOSE**

In conducting this activity, the TWG is to utilise relevant technical expertise and industry sector insight for the analysis, development and review of legislation in accordance with 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 policies, regulations, advisory materials and transition strategies.
- Provide endorsement and or conditional endorsement of policies, regulations, advisory materials and transition strategies for consideration by the ASAP and CASA.

### **TWG OUTCOMES**

- 1. **Detailed policy development.** Review the relevant existing Australian legislation, ICAO standards and foreign legislations and determine:
  - a. detailed policy proposals for the new Australian legislation.
  - b. transitional strategies to minimise the disruption to current industry.
- 2. **Legislation development.** Legislation to be drafted to reflect the policies settled in stage 1.

### TWG MEETINGS

- 21-23 August 2019 in Canberra.
- 10-11 September 2019 in Canberra.
- 24 October 2019

- 15, 17, 22 and 24 September 2020
- 10 November 2020
- 25 and 30 November 2021
- 14 and 27 June 2022

### **ROLES AND RESPONSIBILITIES**

CASA	TWG Members
Organise meetings and workshops, and produce agendas, papers and	<ul> <li>Commit to supporting the project objectives and timeline</li> </ul>
supporting materials	Engage and collaborate constructively at
Facilitate meetings and workshops	all times
Record insights and findings	Prepare for working group activities by
Communicate openly and consistently with TWG members about project status	reviewing agendas, papers and supporting materials
and issues	Provide timely and considered advice in
Respect the time of all TWG members by minimising work required to achieve	meetings, and between meetings as required
outcomes	<ul> <li>Respond to requests for feedback on draft materials within agreed timeframes</li> </ul>

### **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 ATCA TWG consists of the following members:

- Andrew Bishop
- Shannon Wells
- Sheridan Austin
- Ernie Shapanis
- Colin Miller
- Warren Bossie
- Chris Schrapel
- Richard Anderson
- Jeff Boyd

The TWG CASA Lead, Ben Challender, was supported by CASA subject matter experts during the meeting.

The ASAP Secretariat was represented by Chace Eldridge.

### 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 TWG Report, 27 June 2022**

A. Does the TWG agree that the Policy Proposal is suitable to begin development of legislative and guidance materials?

FULL CONSENSUS / GENERAL CONSENSUS / DISSENT

### Comments:

The TWG support and endorse that CASA begins developing legislative and guidance materials for the air transport continuing airworthiness transition into Civil Aviation Safety Regulations (CASR) Parts 42 and 145. The group recognise that although they have raised some concerns, they generally agree with the policy intent and feel it would be valuable for legislation to be drafted to reflect this. The TWG would like to be involved where possible throughout this process, including reviewing the materials as they are completed progressively so that their feedback can be more easily utilised by CASA.

### **B. TWG General Comments**



### Comments:

- The TWG would like to review the project's issues register to see how their identified concerns have been addressed.
- Additional representation from smaller operators in the TWG would add value to the consultation.
- There is support for some of the future meetings to be face-to-face as this has improved group output previously.
- To better accommodate smaller operators, the scalability of the legislation could be improved.
- The TWG reiterated the need for sufficient guidance material to assist operators and organisations with understanding the new policies and transitioning effectively. The group suggested including worked examples (further information in meeting summary), sample expositions and a Plain English Guide.

### **CASA Lead Summary**

### Iftekhar Ahmed and Ben Challender

### Comment:

CASA thanks the TWG members for their ongoing efforts to progress this work. CASA acknowledges the concerns raised by TWG members and will continue to work with the TWG to produce a comprehensive suite of legislation and advisory material that provides safe and practical outcomes for the broader industry.

### **Appendices**

- 1. Extract from ASAP Terms of Reference
- 2. Recent meeting summaries

### 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 reconsider 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 2

### Recent Meeting Summaries AIR TRANSPORT CONTINUING AIRWORTHINESS TECHNICAL WORKING GROUP

The Air Transport Continuing Airworthiness (ATCA) Technical Working Group (TWG) 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.

### **MEETING SUMMARY – 14 JUNE 2022**

- The aim of the meeting was to receive formal endorsement of the transition policies (Appendix 1) associated with ATCA from the TWG. Moreover, the project team sought feedback on additional documentation, detail or guidance that would assist industry transition.
- The TWG confirmed it had no objections with a reasonable number of additional attendees from the Civil Aviation Safety Authority (CASA) observing future meetings, in the interest of better understanding industry concerns before implementing these rules.
- The TWG expressed a strong desire to increase their involvement with the project, particularly the decision-making and development of policies and materials going forward. They felt they are currently used as a review mechanism and that this creates delays when they have concerns with the developed policies. As such, the TWG suggested increasing the frequency of meetings or holding an in-person session to better work through issues alongside the CASA team.
- Operators and maintenance organisations can transition at any time within the transition period without implicating each other. The TWG expressed the need for education and guidance for industry throughout the transition process to highlight the benefits.
- There was confusion around which operations will require a continuing airworthiness
  management organisation (CAMO). Ultimately, every passenger transport operation will
  require a CAMO. The TWG were concerned about the availability of personnel to perform
  this maintenance for smaller operators. However, the ability to contract CAMO
  requirements should assist. It was suggested that standards for CAMOs be scalable.
- Existing maintenance controllers can be appointed to the new equivalent position without being reassessed; however, the group ascertained some changes to legislative requirements are needed and this may cause issues with individuals who would not meet standards but are being automatically reapproved. Ideally, the framework will shift approval responsibility from individuals to organisations.
- The TWG is concerned about certain requirements within Part 42 being unreasonable for smaller operators. Specifically, how the existing arrangements will translate into new legislation and the personnel requirements.
- The TWG reiterated the need for more regular engagement, stating that the industry has shifted since when the previous policy discussions were held. To avoid overburdening industry with legislative changes, existing provisions can be brought across to the new regulations and transition time periods can be adjusted.
- Some confusion was identified between air transport and non-air transport operations and their respective continuing airworthiness requirements.

- There was consensus that a straight transition to Part 42 would not be appropriate, legislation should be secondary to the policy intent. For example, personnel are not expected to get new qualifications to hold the same positions they did previously.
- The TWG believes that although most policies are suitable and appropriate, there was some concern with policy 15 (Appendix 1) as some organisations who would not be reassessed may not fully understand the expected changes.
- Another meeting is required to continue working through issues discussed with the aim of incrementally working towards an agreed transition policy.

### **ATTENDANCE**

### The ATCA TWG meeting was attended by:

- Shannon Wells
- Chris Schrapel
- Sheridan Austin
- Jeff Boyd
- Andrew Bishop
- Warren Bossie

### **Apologies**

- Richard Anderson
- Ernie Shapanis
- Colin Miller

### **CASA Representatives:**

- Ben Challender
- Lance Cooper
- Chris Rapp
- Iftekhar Ahmed

The ASAP Secretariat was represented by Chace Eldridge.

### **Appendix**

1. Transition Policy Overview

### **Appendix 1: Transition policy overview**

Transition of air transport operators and maintenance organisations into the future regulations for continuing airworthiness and maintenance

### Introduction

Regulatory reform of the continuing airworthiness and maintenance requirements for air transport aircraft commenced in 2011 with the introduction of new legislation for, initially, aircraft conducting scheduled air transport operations (previously called regular public transport).

Currently, and until the completion of regulatory reform, the air transport aircraft industry is regulated under two sets of legislation. That is, since 2011 Part 42 of Civil Aviation Safety Regulations 1998 (CASR) has applied to scheduled air transport operations and where a voluntary election of Part 42 has been made. Whereas, for operations that are not scheduled air transport and where no voluntary election of Part 42 has been made, Parts 4, 4A and 4B of Civil Aviation Regulations 1988 (CAR) continue to apply.

A similar dual legislation situation also exists for approval of maintenance organisations that carry out maintenance of aircraft or aeronautical products. That is, a maintenance organisation may currently be approved under Part 145 of CASR or regulation 30 of CAR (CAR 30). A Part 145 approval is required to carry out certain maintenance on an aircraft to which Part 42 of CASR applies, and on aeronautical products for such aircraft. Under a transitional regulation, aeronautical products that underwent maintenance before 27 June 2013 by a CAR 30-approved maintenance organisation may still be installed on a Part 42 aircraft.

To complete the regulatory reform program for all aircraft used in air transport operations, requirements in CAR will be moved to the CASRs in comprehensive and proportionate continuing airworthiness and maintenance standards.

### Effect of regulatory reform

Regulatory reform will necessitate a process of regulatory transition for operators and maintenance organisations holding permissions under the CAR and, to a lesser extent, those already holding permissions under the CASR. As described below, CASA is consulting on, and developing transitional arrangements to minimise disruption and burden to the industry.

There are approximately 520 air transport aircraft operators and 540 maintenance organisations who are currently under the CAR requirements for continuing airworthiness and maintenance organisation approvals respectively. Approximately 70 of the 520 aircraft operators operate Class A aircraft and would therefore already have experience with formal continuing airworthiness management requirements. The remaining 450 operators operate Class B aircraft only and therefore, whilst they are required to have a Head of Aircraft Airworthiness and Maintenance Control (HAAMC) under the AOC, they are not currently subject to formal continuing airworthiness management requirements in the form of an approved maintenance control manual overseen by an approved maintenance controller.

### Transition principles

Following the commencement of the future regulations, CASA is proposing a 3-year transition period for air transport aircraft operators and maintenance organisations to move to compliance with the new legislation. The period and arrangements for transition will allow for:

- Flexibility for permission holders to prepare and transition at a time convenient to them within the transition period.
- Flexibility for an operator and their preferred maintenance organisation(s) to transition independently of each other whilst maintaining their maintenance service relationship.

 Recognition of existing approvals, including organisation's personnel, resources and capabilities, with corresponding requirements under the new regulations.

## Air transport aircraft operators – transition to future continuing airworthiness requirements in CASR

### Continuing airworthiness management

- There will be a 3-year transition period for air transport operators who currently comply with continuing airworthiness requirements in CAR, to move over to the future continuing airworthiness requirements in the CASR.
- 2) Operators who have more than one aircraft will be able to apply the future continuing airworthiness legislation to each of their aircraft at different times within the 3-year transition period.
- 3) Under future continuing airworthiness legislation, an air transport AOC holder must hold a continuing airworthiness management organisation (CAMO) approval for the aircraft or, for operations under Parts 133 or 135, the operator may contract another person or organisation that holds a CAMO approval for the aircraft.
- 4) Under future continuing airworthiness legislation, the CAMO for an air transport aircraft must be the Registered Operator of the aircraft.
- 5) In addition to managing the continuing airworthiness requirements for an aircraft, a CAMO will be allowed to approve a maintenance program for an aircraft if they meet certain requirements and have qualified maintenance program personnel. Existing delegations and authorisations issued to individuals for system of maintenance approvals under regulations 42M and 42R of CAR will transition into CAMO arrangements after those regulations are repealed.
- 6) When an operator transitions to the future continuing airworthiness legislation, existing personnel appointed as the Head of Aircraft Airworthiness and Maintenance Control (HAAMC) or as an approved maintenance controller will be allowed to be appointed to equivalent positions by the AOC holder or CAMO without having to be reassessed.
- 7) Following transition, certain existing airworthiness approvals issued for the aircraft under the CAR would continue to be recognised. For example, systems of maintenance, reliability programs, permissible unserviceability approvals, as well as exemption and variations in relation to maintenance data and regular maintenance requirements for an aircraft will all be automatically transitioned into the corresponding CASR arrangements.
- 8) Some things that have been approved or issued under the CAR for the continuing airworthiness or maintenance of aircraft will not be recognised under the future continuing airworthiness legislation. These are things that generally will no longer be required or for which there will be different arrangements under the new CASR. For example, approval of an alternate to a logbook, directions under CAR 38(1) and approved systems of certification for maintenance.
- 9) Regulations will continue to allow operators of certain aircraft to voluntarily elect to apply future continuing airworthiness legislation to their aircraft. For example, a type certificated aircraft operated only for private and aerial work operations, which will nominally be covered by CASR Part 43, would be able to be maintained under the air transport legislation if that is desired by the operator the air transport legislation will provide some scalability for these situations, but will not adopt all the concepts and associated flexibility of CASR Part 43.

### Maintenance

10) Under the future continuing airworthiness legislation, aircraft must be maintained by a maintenance organisation that is approved under the CASR. Limited maintenance may also be carried out by the pilot or a licenced aircraft engineer. However, to support operators who have

transitioned their aircraft to the future legislation, existing CAR 30 maintenance organisations will be allowed during the transition period to continue to carry out maintenance on aircraft that are used in non-scheduled air transport operations. As is currently the case, CAR 30 maintenance organisations will not be allowed to maintain aircraft that conduct scheduled air transport operations.

- 11) CAR 30 maintenance organisations that carry out maintenance on transitioned aircraft during the transition period will primarily follow the aircraft maintenance performance rules in the CAR but will also need to comply with certain maintenance requirements in the future legislation in the CASR in lieu of the equivalent CAR requirement. For example, CAR 30 maintenance organisations will need to comply with the future CASR requirements for maintenance certification and issuing a certificate of release to service for the aircraft. Therefore, the organisation will need to have procedures in the form of a supplement to their existing procedures manual to ensure compliance with the applicable performance rules of the future legislation.
  - a. CASA will provide guidance for an organisation to develop a supplement which the organisation must incorporate into their procedures manual. A copy of the supplement must be provided to CASA prior to working under the new legislation, but will not need to be approved by CASA prior to use.
- 12) Future continuing airworthiness legislation will allow installation of aeronautical products that have been maintained and released by a CAR 30 maintenance organisation. This will provide support for maintenance of aircraft during the transition period and allow use of existing replacement parts that are owned by operators or others.
- 13) During the transition period, air transport aircraft that have not yet transitioned to future continuing airworthiness legislation may continue to be maintained by a CAR 30 maintenance organisation or an existing Part 145 maintenance organisation that is approved for CAR maintenance.

## Maintenance organisations – transition to future maintenance organisation approval under CASR

- 14) In future all approvals of a maintenance organisation will be issued under the CASR.
- 15) There will be a 3-year transition period for CAR 30 maintenance organisations to be approved under the CASR if they intend to maintain air transport aircraft or aeronautical products for air transport aircraft. The transition period for maintenance organisations will coincide with the transition period for air transport operators to apply future continuing airworthiness legislation to their aircraft.
  - a. For the purpose of transition to a maintenance organisation approval under the CASR, the holder of an existing CAR 30 approval will not be re-assessed in regard to their capabilities in terms of the organisation's facilities, equipment and data, if the scope of approval is equivalent to the CAR 30 approval, and if CASA has not identified a current deficiency in the organisation's facilities, equipment or data.
- 16) There will be no provisions in the CASRs for CASA to issue maintenance authorities such as those currently issued for welding and NDT. However, a maintenance organisation approved under the CASR will be allowed to recognise the qualifications and experience of an employee who holds a welding or NDT authority, for the purposes of issuing that person with a certification authorisation for equivalent tasks within the organisation.
- 17) During the transition period, CASA will no longer issue new certificates of approval under CAR 30, however changes to existing certificates of approval may still be made under CAR 30A. Application of CAR 30 and CAR 30A to the air transport sectors will be repealed after the transition period.

- 18) During the transition period, a CAR 30 maintenance organisation that has not yet obtained approval under CASR, will be able to maintain the following aircraft within the scope of their approval:
  - a. Aircraft that are under the CAR 1988 continuing airworthiness regulations including air transport aircraft that have not yet transitioned to future continuing airworthiness legislation.
  - b. Aircraft used in non-scheduled air transport that have transitioned to future continuing airworthiness legislation, but only if the maintenance organisation has a supplement in their procedures manual to ensure compliance with certain maintenance performance rules in the future legislation. For example, the future requirements for maintenance certification and issuing a certificate of release to service for the aircraft.
- 19) If during the transition period a CAR 30 organisation, that is authorised for aircraft maintenance, obtains maintenance organisation approval under the CASR, it will be possible for the organisation to retain their CAR 30 certificate until the end of the transition period for the purpose of maintaining aircraft that remain under continuing airworthiness legislation in the CAR.
- 20) Until the end of the transition period, a CAR 30 maintenance organisation that is authorised for aircraft component maintenance may continue to maintain and issue authorised release certificates for aeronautical products in accordance with the requirements of the CAR. It will not be necessary for the maintenance organisation to comply with any specific maintenance performance rule in the CASR, and the aeronautical products released by the CAR 30 organisation will be eligible for installation on an aircraft under the future continuing airworthiness legislation.

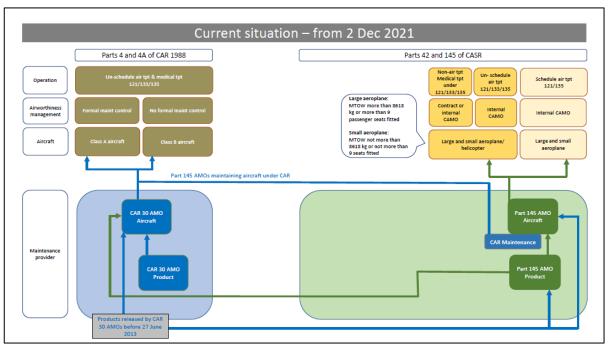


Figure 1: Current situation

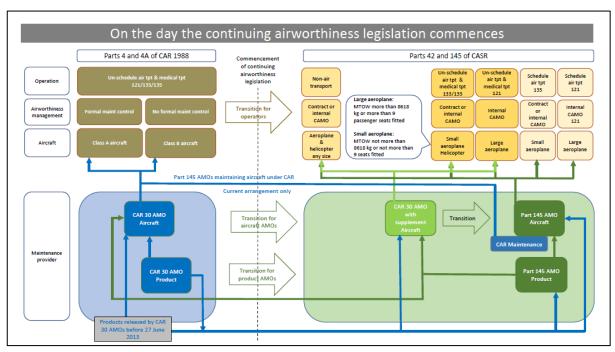


Figure 2: When continuing airworthiness legislation begins

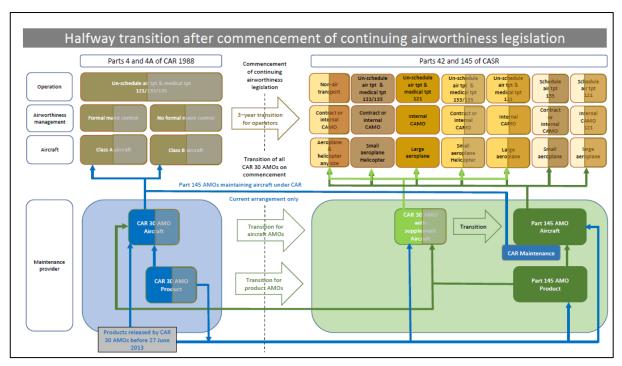


Figure 3: Halfway through transition

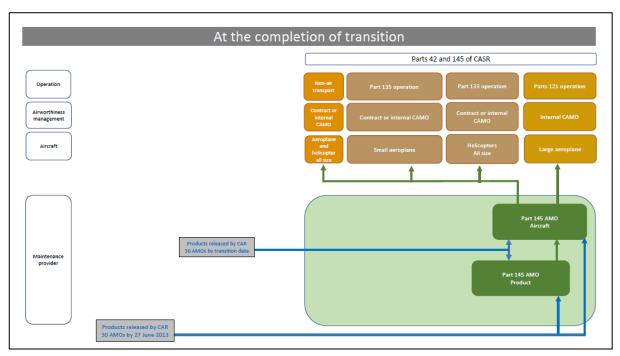


Figure 4: After transition period

### **MEETING SUMMARY - 27 JUNE 2022**

- The aim of this meeting was to seek TWG endorsement to begin developing legislative and guidance materials based on the transition policy proposals presented.
- The TWG is satisfied with the overall policy intent but highlighted the need for clear guidance for organisations. Adequate resourcing must be considered to process applications and approvals in a timely fashion, particularly given the wide variety of manuals used by industry. This will ensure agreed upon application processing timelines are adhered to.
- The TWG reiterated that given the current stage of development, it is worthwhile
  addressing noted concerns to avoid situations like when Part 135 was implemented ahead
  of the maintenance regulations, against the advice of the TWG. As such, the CASA project
  team will share their issues register from throughout the project history to show how issues
  have been addressed.
- Both CASA and the TWG agree that additional representation from smaller operators would add value to the consultation. This could be as a TWG member, observer or through discussions with the project team.
- The materials presented to the TWG, and future guidance materials, can benefit from including simple, realistic, worked examples and transition scenarios that account for impacts on specific operators and organisations.
- The TWG felt a Plain English Guide, sample exposition and acceptable means of compliance will all help to simplify the transition for impacted stakeholders, such as aeronautical product maintenance organisations. The exemplar scenarios could cover a smaller overhaul and repair business, small air transport helicopter operator and a large air transport operator with a varied fleet, as an example. This would highlight the updates required under the new proposed regulations for operators who fall into those categories.
- The TWG agreed that CASA should begin drafting legislative and further materials into CASR Parts 42 and 145. They would like to meet again to review these materials before any public consultation to ensure their concerns have been addressed. They are satisfied with the transition and end state policy intent. However, the TWG specifically discouraged the use of the Manual Authoring and Assessment Tool (MAAT) in this transition process due to usability concerns.
- Currently, the policies will be placed within Part 145 to improve efficiency, similarities and scalabilities and to avoid developing a new regulatory set.
- The TWG would like the next meeting to be in person, if possible, as this has improved group output in the past. They would like the work done by CASA to be presented to them progressively, as it gets completed, to allow for a more consultative review process. The next meeting will likely be in 2-3 months.

### **ATTENDANCE**

### The ATCA TWG meeting was attended by:

- Shannon Wells
- Chris Schrapel
- Sheridan Austin

- Ernie Shapanis
- Andrew Bishop
- Colin Miller

### **Apologies**

- Warren Bossie
- Jeff Boyd
- Richard Anderson

### **CASA Representatives:**

- Ben Challender
- Chris Rapp
- Iftekhar Ahmed

The ASAP Secretariat was represented by Chace Eldridge.