



**PART 131 MANUAL OF STANDARDS (MOS)  
ASAP TECHNICAL WORKING GROUP (TWG)  
TASKING INSTRUCTIONS and SECOND REPORT**

**12 NOVEMBER 2021**

*The Part 131 MOS 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 2017 (or as amended).*

**BACKGROUND**

Civil Aviation Safety Regulation (CASR) Part 131 was made in December 2019 and will commence on 2 December 2021. CASA formed a working group to discuss the policies to be articulated in the Part 131 Manual of Standards (MOS) who first met in February 2020. CASA proposes shifting this industry working group into an ASAP TWG to remain in line with current consultation processes. For consistency, CASA also proposes the appointment of the same industry members for the ASAP TWG. (See 'Membership' below).

Since February 2020, CASA has been progressively developing a draft Manual of Standards (MOS) that can be consulted with industry representatives prior to conducting a public consultation activity.

**PURPOSE**

The Part 131 MOS Technical Working Group 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 identified issues.
- Assist with the development of draft regulations, standards, guidance materials and other supporting materials – both before and after public consultation.
- Provide endorsement and/or conditional endorsement of draft regulations, standards, guidance materials and other supporting materials for consideration by the ASAP and CASA.

**KEY PROPOSALS**

**Key proposal 1:** Consolidate the operational standards for lighter-than-air aircraft engaged in the following activities:

- Balloon transport operations
- Specialised balloon operations
- Recreational balloon operations
- Tethered gas balloon operations

*Note. The definition of what constitutes a standard visual signal, the requirement for an intercepted aircraft to comply with ICAO Annex 2 and the placarding requirements for experimental aircraft (including Part 131 experimental aircraft) are contained in the Part 91 MOS.*

**Key proposal 2:** Define balloon flying training to mean two kinds of activity:

- Balloon flying training for the authorisation granted by a Part 131 ASAO
- Balloon flying training conducted as a prescribed activity under regulation 206 of CAR in accordance with Part 5 of CAR

**Key proposal 3:** Apply, where possible, outcome-based rules for safe flight and encourage operators to identify hazards and risk mitigation strategies.

**Key proposal 4:** Apply additional operational requirements for balloon transport operators.

**Key proposal 5:** The Part 131 MOS will include delayed start dates for requirements introducing change unable to be reasonably complied by 2 December 2021.

## SPECIFIC OBJECTIVES

1. The TWG is to evaluate whether the draft Part 131 MOS will:
  - a. Achieve the policy intent/identified key proposals
  - b. Be implementable by the Australian aviation industry
2. The TWG is to provide a concise summary to the ASAP recommending either:
  - a. the ASAP endorse the Part 131 MOS.
  - b. the ASAP endorse the Part 131 MOS provided certain issues are resolved.
  - c. the ASAP does not endorse the Part 131 MOS due to underlying policy inconsistencies.

## TWG MEETINGS

The TWG meetings were held via videoconference on the following dates:

- 30 March 2021
- 20 April 2021
- 10 August 2021
- 4 November 2021
- 12 November 2021

The first Part 131 TWG report was provided to the ASAP after the TWG's meeting on 10 August 2021.

## ROLES AND RESPONSIBILITIES

CASA	TWG Members
<ul style="list-style-type: none"><li>• Organise meetings and workshops, and produce agendas, papers and supporting materials</li><li>• Facilitate meetings and workshops</li><li>• Record insights and findings</li><li>• Communicate openly and consistently with TWG members about project status and issues</li><li>• Respect the time of all TWG members by minimising work required to achieve outcomes</li></ul>	<ul style="list-style-type: none"><li>• Commit to supporting the project objectives and timeline</li><li>• Engage and collaborate constructively at all times</li><li>• Prepare for working group activities by reviewing agendas, papers and supporting materials</li><li>• Provide timely and considered advice in meetings, and between meetings as required</li><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 – Appendix 1 attached) with respect to determining and documenting consensus.

## MEMBERSHIP

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

The Part 131 MOS TWG consists of the following members:

Steve Buckley	Clayton Priddle
Graeme Day	Jay Schesser

Sean Kavanagh	Martin Tregale
Jonathan Oehm	John Wallington

At the TWG meeting on 12 November, industry representatives Damian Crock and Steve Griffin were also in attendance as Observers and provided input to the discussions.

The TWG CASA Lead, Roger Crosthwaite, was supported by CASA subject matter experts during the meeting.

The ASAP Secretariat was represented by Matthew Di Toro.

## 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 – SECOND REPORT, 12 NOVEMBER 2021

One member of the TWG presented written comments and proposed they be captured in the TWG report as the TWG's position and recommendation. The TWG were in full consensus in agreeing to the comments and that they reflected the position of the TWG. The comments are reflected in **Outcome B**.

### A. Does the TWG agree that the Part 131 MOS achieves the policy intent and is implementable by the industry?

FULL CONSENSUS / GENERAL CONSENSUS **DISSENT**

*Comments:*

See comments below.

### B. Does the TWG recommend that the ASAP endorses the Part 131 MOS?

FULL CONSENSUS / GENERAL CONSENSUS **DISSENT**

*Comments:*

All members of the Part 131 TWG **do not recommend** that the ASAP endorses the Part 131 MOS.

All the Industry (both private and commercial ballooning) representatives on 131 The Technical Working Group consider the implementation date of 2<sup>nd</sup> Dec 2021 inappropriate. In view of this timeframe and with regard to new information that has become available as a result of more in depth understanding of the 131 MOS the members of the TWG (representing all commercial operators in Australia) considers it inappropriate to sign off on the MOS at this time.

They:

- requests a moratorium/deferral for 12 to 24 months.
- request a process in the deferral period to consider the MOS in greater detail and in a time frame that allows industry adequate time to implement change.

- note it is not the current role of The Working Group to consider the Regulation itself but there are concerns about the content, process and consultation available prior to the implementation of CASR 131.
- request the TWG's role be extended to review the Regulation.
- note it is not the current role of The Working Group to consider the Plain English Guide but there are concerns about its fitness for purpose.
- request the TWG role be extended to review the Plain English Guide and that CASA provides resources such that the Guide is developed in conjunction with the review and be available prior to a further period of industry review (which this time should be for a reasonable period).

The TWG regrets the timing of this position but it has resulted from a number of factors including appropriate and timely consultation, the clarity of the documentation and COVID. The TWG industry members are seeking:

1. A rule set that properly reflects the type of aircraft it is being written for and in which the differences are genuinely addressed by CASA.
2. A rule set as simple and clear as possible.
3. A easy to read well structured Plain English Guide for use by industry.'

Due to many differences in the outcomes from Part 131 for commercial and private operators TWG members representing private pilots limit their request to a moratorium for 12 to 24 months.

#### Other comments:

##### *Comments:*

The TWG advises the ASAP that the group has reached its position in Outcome B because there has been further time to digest and review the draft MOS. As a result, members have become aware of significant issues that need more time to be worked through (see **Appendix 3** – note that this document is still a work in progress). This is in addition to the TWG's significant concerns about implementation by 2 December.

#### CASA Lead Summary

##### Roger Crosthwaite

##### *Comment:*

I thank the TWG members for their contributions and engagement on the development of the Part 131 MOS. CASA will consider the options for balloon operators under the new regulations noting the different issues related to private versus commercial operations and how they might be handled. We are committed to continuing our work with the group.

#### Appendix

1. Extract from ASAP Terms of Reference
2. Meeting Summaries:
  - a. 30 March 2021
  - b. 20 April 2021
  - c. 4 November 2021
  - d. 12 November
3. Issues identified by the TWG (written by Steve Griffin) – *work in progress*
4. Draft Summary of Consultation

## Appendix 1 – (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.



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**MEETING SUMMARY**

**30 MARCH 2021**

**SUMMARY OF MEETING**

- The purpose of the meeting was to discuss and review Part 131 MOS, starting with key issues raised by the TWG members.
- CASA briefed the TWG on the progress of the legislation and the development of the guidance material, such as the Part 131 Plain English Guide (PEG). The TWG were advised that the PEG will be able to be completed once the standards in the MOS are settled. The TWG will be welcome to review and provide feedback on the PEG.
- One TWG member raised that it would have been preferential to have more than two weeks to review the MOS, however it was noted that the consultation process was on-going and the TWG will be able to provide feedback offline and in subsequent meetings.
- The TWG enquired about certain definitions. One definition discussed at length was ‘authorised weather report’ and the requirement to keep it for three months. The TWG discussed that there are a variety of weather reports that operators review and noted that some may not be ‘authorised’ but are necessary prior to departure. CASA will review the definition to determine whether it is too limiting and narrow.
- The TWG enquired about the transponder provisions, specifically on the requirement to carry a Mode S transponder and requested further clarification on the requirements.
- The TWG enquired on a few other provisions which were added to the issues register for CASA to consider and report back to the TWG. This includes a discussion on the ELT requirements and the requirement for the responsible person for the receipt of a flight note to have access to two operative phones.
- The TWG will meet again on Tuesday 30 April to review CASA’s suggested solutions to the issues raised and the update to the MOS to reflect any changes. The TWG agreed to provide written feedback via email with any further issues or enquiries on the MOS to add to the issues register.
- The TWG meeting was very productive and positive.

## **ATTENDANCE**

The Part 131 MOS TWG meeting was attended by:

Steve Buckley	Sean Kavanagh
Graeme Day	Clayton Priddle
Jonathan Oehm	Jay Schesser
Martin Tregale	John Wallington

### **CASA Representatives:**

Roger Crosthwaite	Alan Shore
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The ASAP Secretariat was represented by Matthew Di Toro.



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**MEETING SUMMARY**

**20 APRIL 2021**

**SUMMARY OF MEETING**

- There were main items on the agenda for the meeting – the first item was to work through the issues register to progress the open items. The second item was to review the remaining Chapters 28 and 29 in the MOS that were not covered at the previous meeting.

**Discussion on the issues register**

- Item 33 – re journey log requirement in subsection 5.02. The information about the application of the standards in the issues list was accepted by the group. The record needs to be kept but it can be in a form that reflects what is done now.
- Item 34 – re keeping records of weather reports. In short, the requirement in subsection 6.03(3) to keep records of weather forecasts is going to be deleted from the MOS. The group supported the proposed change.
- Item 35 – re flight preparation weather assessments – section 12.02. To summarise, we described the purpose of the authorised weather report being necessary as it represents a reliable resource and doesn't preclude referencing other sources. The proposal is to retain the standard and the group supported that conclusion.
- Item 36 – re communication system requirement for person receiving a flight note. The group discussed this issue and concluded that it would be better for the operator to describe in its exposition how it would achieve the outcome of being able to reliably communicate matters associated with the flight note rather than prescribing the 2 telephones provision. It would provide for acceptable means of compliance to deal with a range of circumstances such as system failure, lack of network connectivity and so on. While the MOS doesn't prescribe mobile phones, that has been the focus of the discussions and the problem case is mainly about the single-person retrieval case. As a result of the new approach, this issue is considered to be resolved although the text to be developed should be reviewed.
- Item 47 – re pilot restraint harness for take-off and landing – section 26.11. There was discussion on the topic which concluded with retaining the standard. There is a different perspective that recommends the take-off case not be mandatory due to various reasons such as the possible encouragement of pilot to take-off in adverse conditions and concerns passengers might have if the pilot is restrained but they aren't. The group noted these points but felt it is appropriate to retain the standard. This issue is taken to be resolved.
- Item 48 – re ELT requirements – section 26.15. The discussion centred on the appropriateness of an ELT being useful for a SAR purpose and that could only be achieved by it being registered with AMSA. The conclusion was to retain the standard and therefore the issue is taken to be resolved.



- Item 49 – re transponders – section 26.10. The group was advised that further information from CASA says the current standards are suitable and so would be incorporated into the MOS, noting this change would apply to Part 91 as well. The issue is taken to be resolved.

#### **Discussion on Chapters 28 and 29 in the MOS**

- Chapter 27 – discussion on the training and checking requirements. The main issue was about who checks the head of flying operations. Reference was made to the current arrangement of one HoFO checking another operator's HoFO. During the discussion, it was noted section 27.11 makes provision for various people to be able to do the training and checks and we felt it was sufficient to cover such a scenario. CASA agreed to review and confirm this was feasible as written in the MOS. The important point was that whoever does the training and checking needs to be competent to carry out those functions. We also confirmed that the CAO 20.11 12 months requirement was now 24 months. No further action required other than to check that referred to above unless a gap is found in the current draft.
- Chapter 28 – discussion on the ground support personnel standards. There was discussion about the possibility of using other people for particular functions – the case discussed was the driver of retrieval and transport vehicles and whether they had to be trained. The conclusion reached by the group was that the driver role as such didn't call for training but if that person had a ground support role as per the regulations, then they would have to be trained and checked. There is a definition of ground support personnel in the MOS. Following the discussion, it was agreed this issue was resolved and no action required.

#### **Other issues discussed**

- Other issues – the group covered several other issues in the list such as wheelchair issue in item 43 about persons requiring assistance. Item 41 about operating in the vicinity of non-controlled aerodromes was raised and CASA agreed to review it to ensure the intent, as the group discussed, was correctly captured.
- CASA advised it will take the feedback received and actions to amend the draft MOS and prepare the summary of proposed change consultation documents.
- The TWG will meet again to finalise the consultation version of the MOS.

#### **ATTENDANCE**

The Part 131 MOS TWG meeting was attended by:

Steve Buckley	Jonathan Oehm
Graeme Day	Jay Schesser

#### **Apologies**

Sean Kavanagh, Martin Tregale, Clayton Priddle, John Wallington

#### **CASA Representatives:**

Roger Crosthwaite	Alan Shore
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The ASAP Secretariat was not in attendance.



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**MEETING SUMMARY**

**4 NOVEMBER 2021**

**SUMMARY OF MEETING**

- The purpose of the meeting was to discuss the updated draft Part 131 MOS which had minor amendments as a result of public consultation. *Please note:* as some TWG members were not present for the meeting, this meeting summary refers to the outcomes and discussions of the TWG members present – refer to the attendance list below.
- The TWG members strongly emphasised that the primary concern of operators is the implementation of the rules by 2 December, particularly as the final MOS hasn't been finalised. The TWG raised concerns that there was not enough time to meet the transition requirements by 2 December. The TWG also discussed the pressure many small and self-employed operators are under to ensure the transition requirements are met.
- The TWG discussed the transition requirements in relation to modifications to their operations manuals. CASA clarified its expectations of operators to meet their transition requirements by 2 December. It advised that the expectations are:
  - the provision of an operator's management of change process (of which can be copied from the template provided by CASA and modified to suit the operator); and
  - the insertion of the mapping documents as an attachment with a covering sentence in the Operations Manual. The mapping documents and example covering sentence are provided by CASA and can be copied across to their manuals.

CASA also advised that its expectations are that operators undergo their best endeavours to transition and noted that there will be no approval or assessment of an operator's manual.

- The TWG members expressed that the clarification of CASA's expectations of operators' transition requirements was helpful, however noted that operators will require assistance – such as with the provision of templates and/or examples that operators can copy across to their manuals. CASA indicated its readiness to provide support including one on one discussions.
- On the MOS specifically, all the TWG members in attendance stated they were supportive of the MOS, noting that the changes made after the public consultation were sensible.
- The TWG queried if there was an on-going avenue for change should elements of the rules not work. CASA advised that this is the case and added that it will support operators through training and facilitate appropriate changes.
- The TWG suggested that a Q&A session be hosted with CASA in a couple of weeks (but prior to 2 December) for operators to directly ask questions to assist them meet the 2 December

transition requirements. CASA welcomed this suggestion and commits to hosting this. Engagement before that is also available if operators wish to have that support.

- The next meeting with the TWG will be held on Friday 12 November. The purpose of this meeting will be to focus on the MOS and obtained the TWG's advice for the ASAP.

#### **ATTENDANCE**

The Part 131 MOS TWG meeting was attended by:

Steve Buckley	Sean Kavanagh
Graeme Day	Jonathan Oehm
Martin Tregale	

#### **Apologies**

Jay Schesser, Clayton Priddle, John Wallington

#### **CASA Representatives:**

Roger Crosthwaite	Alan Shore
Ian Hogben	

The ASAP Secretariat was represented by Matthew Di Toro.



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**MEETING SUMMARY**

**12 NOVEMBER 2021**

**SUMMARY OF MEETING**

- The purpose of the meeting was to discuss the TWG's feedback on the draft MOS and for the TWG to determine their advice for the ASAP.
- The TWG advised that they did not believe that the MOS should be endorsed by the ASAP and that it should be deferred to allow more time to work on it further. More detail on the TWG's position and recommendation is provided in their TWG report of 12 November in Outcome B.
- The point was raised that there is precedence to defer the making of the MOS given the recent announcements for the Part 105 and Part 103 MOSs. The TWG strongly reiterated that the implementation date of 2 December was inappropriate given the MOS was still to be made, guidance materials to be published, and operators were under pressure to meet the transition requirements by 2 December.
- The TWG advised that in recent weeks members were made aware of significant issues with the MOS (and the regulation) that require further work, and this highlighted the needs for the MOS to be reviewed more thoroughly. Members added that with more time, the MOS (and regulation) can be improved.
- The TWG are motivated by good intent and are eager to regroup to work with CASA.
- CASA will review options for a pathway forward given the significant complexities associated with a MOS deferral and will reengage with the TWG as soon as possible.

**ATTENDANCE**

The Part 131 MOS TWG meeting was attended by:

Steve Buckley	Sean Kavanagh
John Wallington* ( <i>also proxy for Graeme Day</i> )	Jay Schesser
Martin Tregale	Clayton Priddle

**Industry Observers**

Damian Crock, Steve Griffin

**Apologies**

Graeme Day, Jonathan Oehm

**CASA Representatives:**

Roger Crosthwaite	Ian Hogben
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The ASAP Secretariat was represented by Matthew Di Toro.

## CASR 91 / 131 & 131 MOS Notes

### Definition of Recreational activity

131.025 is incomplete and relies on a provision in CAR 206 (1)(vi) to capture balloon flying training for the grant of a flight crew licence or rating as a commercial / non-recreational purpose. Other sections of CAR206 seem to be not included within the definition of specialised balloon operations. How is it possible to selectively apply the CAR 206 provisions?

### Night VFR Flight

27.06(2)(b) requires a check flight of at least one hour carried out at night.

19.02(4)(a)(i) precludes a 131 aircraft from taking off more than 1 hour before first light.

The 2 requirements are mutually exclusive.

### Night Instrumentation

MOS does not require what is arguably the single most important piece of night equipment – an audio vario

### 131.315 Flights at Night

Why is a 131.035 approval required? It should be allowed under an AOC where there are documented practices and procedures. Need to get away from the never ending cycle of permissions and approvals.....

### 131.320 Use of Supplemental Oxygen etc.

Why is an approval needed? The requirements for use of oxygen are clear. This is a Red tape requirement

### MOS 26.02 Approval of aircraft equipment

26.02(1)(b) limits the experimental purposes to which the exclusion act to 21.191(g) “amateur built “only. Why have the other experimental purposes not been included? There have been Experimental Certificates issued under 21.191(a), (b) and kits which could be built under 21.191(h) are available why is there a different set of rules for these classifications.

### MOS 26.05 Flight Instruments

26.05(1)(f) excepts the need for a temperature indicator in a gas balloon. Why?

### MOS 26.10 Lines and ropes

26.10(2) has the effect of requiring a hot air balloon to carry a trail rope. Why?

### MOS26.13 Lights for VFR flight at night

26.13(c)(i) requires that anticollision lights fitted to balloons at night meet the certification standards of CS31HB, CS-31GB or BCAR Part 31. None of those standards contain specifications for lights.

### MOS26.14 Supplemental Oxygen equipment and supplies

26.14(2) (b) requires a written approval by a Part 131 ASAO for oxygen systems used in a Part 131 recreational activity – how can CASA reasonably expect an ASAO to assess and approve a life support system?

### MOS 26.11 Pilot restraint harness

26.11(2) requires that a pilot restraint harness be fitted to each basket that is used for transport operations. 26.11(4) provides an exclusion where such a harness cannot be safely fitted. The design standards BCAR31 and CS31HB only require pilot restraints to be fitted to baskets which have a separate pilot compartment – the CASR131MOS requirement would be prohibitively expensive to retrofit to existing baskets that either don't require pilot restraint harnesses to be fitted as part of the certification standard or were built prior to the introduction of the requirement in the design standard.

### MOS Division 26.10 Surveillance equipment

This 11 page division of the MOS replicates technical detail relating to transponders and electronic conspicuity devices found elsewhere in CASA legislation. Why is it duplicated in the Part 131 MOS?

### MOS 26.19 Exceptions to (E)TSO or NAA requirements

MOS 26.19 allows the use of equipment that does not meet the requirements of a TSO so long as the pilot or operator have a statement of conformance for the device.

Tables 26.21(3) and 26.22(3) require that devices be 'approved' but there is no suggestion about how these might be approved, to what standard or who is allowed to approve them.

### 91.715 Causing or simulating failure of flight instruments

This provision is substantially inappropriate for Part 131 aircraft operations, it is provisions like this which led the industry to request a completely independent part of the regulations. This reg should be 'turned off' for Part 131 operation and replaced with an appropriate provision in Part 131.

### MOS 24.02 Circumstances and methods for calculating maximum weight

Note at paragraph 2 makes reference to CAO 100.96 in relation to the empty weight of an aircraft. Note at paragraph 3 makes reference to Advisory Circulars associated with Parts 121, 133 and 135. Why wasn't similar content included in the 131 advisory material so that it could be appropriate for the class of aircraft.

24.02 (3)(b) refers to Standard weights prescribed in 10.01 of the Part 121 MOS. Why aren't these in the 131 MOS

### MOS 24.04 Circumstances and methods for calculating minimum loading weight

24.04(2)(b) and (c) are irrelevant in calculations of minimum loading weight. How are they to be considered as part of the calculation?

### MOS25.06 Carriage of children as passengers

Restricts the ability of an operator to decline to carry a child for a reason other than those specified. Some operators choose not to carry children for other reasons. Balloon operators are not common carriers.

### MOS 25.08 Exposition Requirements

This section is placed inappropriately within the MOS – it should be within Division 131.B.6 with the other requirements for the MOS.

### MOS 13.02 Flight notification requirements

13.02 (1) – the wording between (d) and (e) make no sense. The words 'in accordance with procedures published in authorised aeronautical information.' Should be moved to after (g). The word 'and' at the end of (e), (f) & (g) should be replaced with 'or'.

### MOS13.03 Changes to flight plans and SARTIME nominations

13.03(2)(b) Seems very odd. Is this to cater for skydiving operations or is this provision in this place to cater for passengers or crew who fall out of the aircraft accidentally during flight? It would seem more logical that POB be notified before a flight begins.

### MOS 14.03 / 14.04 Checking systems for measuring and displaying pressure altitude

These requirements are completely inappropriate for Part 131 aircraft which rarely launch from an aerodrome.

### 131.355 Additional right of way rules

**131.355 (3) is dangerous.** Despite their ability to manoeuvre the aircraft the pilot of an airship is highly unlikely to have visibility of another aircraft which is above. This is the same case which leads to the pilot of a balloon having to give way to one that is below.

### MOS 18.03 Requirements for Part 131 aircraft flights over water

18.03(3) does not allow the pilot to decide to take none of items mentioned in (a) to (d) which is a distinct possibility for many flights over small bodies of water.

18.03(4) How? If this is to be a requirement then it should be noted as required content in the operator's exposition.

### 91.690 Pilot in command to report contraventions relating to emergencies

91.690 (3) seems to go against the principles of a just culture and is bad regulation. Whilst the pilot in command is afforded protection against having a reported contravention used as evidence against them the operator is not afforded similar protection. This would undoubtedly lead to some operators applying pressure to pilots to not make reports.

91.690(2) almost encourages operators not to report contraventions as they are at liberty to claim that they may be incriminating themselves.

### MOS 15.03 Australian domestic airspace – inoperative radio requirements

MOS15.03(2)(a) requirements are confused, inappropriate and not in a logical order. If operating in Class A or E you are already in controlled airspace so (2)(a)(i) is illogical.

Item should be renumbered as :

- (ii) should be the first action i.e. keep using the radio as if it is transmitting;
- (iii) should be the second action i.e. if you are above 5,000 you should descend and may continue if you are outside of controlled airspace;
- should be the modified and the last option i.e. if outside of controlled airspace stay out, if inside of controlled airspace get out or land as soon as practicable

The note relating to transponder requirements is inappropriate. If selecting 7600 on a transponder is a requirement then it should be specified rather than it being hidden in an otherwise unrelated part of the MOS.

### MOS 15.04 Mandatory broadcast area requirements

Why is this in 131MOS? The details are contained in ERSA and the extents are shown on charts. The table is incomplete, at least Redcliffe MBZ is missing.



Surely this section should just require that operations within a MBZ be conducted in accordance with the procedures published in AIP rather than introducing a constant requirement to amend the MOS based on flexible and variable airspace operational requirements.

The specific requirements for individual areas shouldn't be in 91 MOS either.

#### MOS 15.06 Controlled aerodromes

The language used in this section is inconsistent with other parts of the MOS. In Division 26.10 Surveillance equipment there are clear differences between the requirements for operations **at** controlled aerodromes and operations within the controlled airspace associated with an aerodrome but not on the surface of the aerodrome. This section refers to operations at a controlled aerodrome which would imply on or over the surface of the aerodrome whereas I believe the intent is for the rules to apply more generally to the controlled airspace surrounding the aerodrome.

The MOS seems to require separate ASAO endorsements for operations at a controlled aerodrome and operations in the controlled airspace associated with a controlled aerodrome. If this is the intent then that hasn't been conveyed to the ABF or the industry.

There is not a relevant ASAO approved to issue the relevant 'controlled airspace' endorsement for recreational pilots at this time. Implementation of the 131 MOS will have an immediate adverse effect on the many recreational pilots who operate regularly within the Canberra control zone unless a transitional provision is put in place.

#### MOS 15.07 Control zones and areas – entry into Class A, B, C, D or E airspace

15.07(1) lumpy wording. A control zone or control area can only be Class A,B,C,D or E airspace, why are both stated. The words 'a Part 131 aircraft must not enter a control zone or a control area without ATC clearance' and 'a Part 131 aircraft must not enter Class A, B, C, D or E airspace without ATC clearance' have the same meaning.

15.07(3) is nonsense – when an ATC service is not active the control zone and control area do not exist. It is superfluous to mention that a requirement doesn't apply to something that doesn't exist.

Suggest replacing this section with:

- (i) An IFR flight must not enter Class A, B, C, D or E airspace without ATC clearance
- (ii) A VFR flight must not enter Class A, B, C or D airspace without ATC clearance

#### MOS 20.02 Requirements (Tethering)

20.02(1) requires that permission or approval be held to tether a balloon in certain circumstances. It is not specified who the permission or approval must be granted by for uncertified aerodromes, ALA and HLS – will the aerodrome gardener or local priest suffice?

#### MOS 21.03 General requirements (Fuel and ballast)

21.03(4)(a)(i) incorrectly refers to the 'total loaded weight'. 'total loaded mass' is the appropriate term. A balloon which is neutrally buoyant has zero weight.

#### MOS 21.06 Procedures if fuel reaches specified amounts

It is unclear what the purpose of this paragraph is. It doesn't **require** anything which would preserve the reserve fuel.

Do you need to need to attempt to land at an alternate which will preserve the reserve fuel? If the conditions on arrival at a suitable final landing area are terrible what is required?

### 91.485 Equipment or electronic devices operating near aircraft

This regulation is not appropriate for balloon fuel tank refuelling operations which are commonly conducted away from the aircraft. There have been several refuelling fires over the years which would not have been captured by these requirements.

Different safety precautions are required for balloon fuel tank refilling which involves handling low pressure gas/ vapour fuels and fuelling of tanks not installed or co-located with an aircraft.

### 131.095 Changes of name etc

131.095(1)(b) is impractical. How can a person reasonably be expected to amend an exposition with changes which haven't yet occurred. i.e. change of a business name or telephone contact details or mailing address. The requirement should be to amend the exposition and notify CASA within a specified period e.g. 7 days

### 131.100 Application of approval of significant changes

131.100(2)(a) is almost impossible to interpret. It refers to a circumstance mentioned in 131.195(1)(e)(iv). That paragraph refers to the name of a person who is approved to fill a key position. Surely a person's name isn't considered to be a circumstance.

According to 131.030 any change to the key personnel is a significant change. 131.100(2) allows for a preapproved person can act in a key position for a period of greater than 35 days provided the operator notifies CASA within 7 days after the change is made. If however they are going to act in the same role for no more than 35 days ( a lesser period of time) then the change needs to be pre-approved by CASA IAW 131.100(1)– surely that is not the intent of the regulation.

### 131.150 Head of flying operations – responsibilities

131.150(2)(f) refers to the HOFO responsibilities about contracts with Part 142 operators who conduct recurrent training and checking for the operator. Part 142 is not applicable to Part 131 aircraft. These provisions are therefore inappropriate and should be removed.

### MOS 27.07 Purpose

27.07(2) Introduces a term 'relevant operation' which has a meaning of balloon transport operation. The term balloon transport operation is used consistently throughout the remainder of the document. Why has it not been used in this division? The use of a defined term which is inconsistent with the remainder of the MOS could lead to misinterpretation.

### MOS 27.09 Balloon transport operations – general emergency training and competency

The content of this section looks very much like it is a cut and paste of requirements applied to other aircraft operations which have been butchered in a failed attempt to make them fit balloon operations.

27.09(2)(d) This is a new requirement and very expensive to comply with. Where is the Regulatory Impact Statement supporting its introduction?

27.09(3)(h) 'safe operation of the inflation fan' is a normal procedure. Why is it included in the specific emergency procedures training? If fan training needs to be covered in emergency procedure training then emergency procedures such as 'actions in the event of a fan malfunction or failure or abnormal operation' should be covered.

27.09(4) will require in water life jacket training for all pilots. It will need to need repeated for each operator that a pilot works for. Where is the Regulatory Impact Statement which supports the need for the introduction of this?

27.09(3)(e) provides an exemption from the need to conduct ditching training as part of general emergency procedures training as no operators in Australia plan to operate more than 1km from the shore. This same exemption should apply to in water life jacket training.

#### MOS 27.10 Balloon transport operations – transition training to first act as pilot in command without supervision.

The content of this section looks very much like it is a cut and paste of requirements applied to other aircraft operations (multicrew RPT most likely) which have been butchered in a failed attempt to make them fit balloon operations.

The requirements are substantially inappropriate as they should all be covered during induction training i.e. before a pilot acts as a pilot in any capacity.

#### MOS 27.11 Recurrent check and training operations

The requirements are not fit for purpose in the balloon transport context. They appear to be a butchered cut and paste from the RPT operating requirements.

#### MOS 27.12 Requirements for individuals conducting training and checking (flight crew)

The requirements are not fit for purpose in the balloon transport context. They appear to be a butchered cut and paste from the RPT operating requirements.

Despite various parts of the content inferring that there will be a system for approving check and training persons there are no details relating to that nor a requirement to include such detail in the operator's exposition. The parallel section relating to ground crew training stipulates an incomplete list of content that must be included in the exposition at 28.05

27.12(2)(c)(i) stipulates that a check and training person must meet 'the minimum experience and entry control requirements'. Where are these detailed?

27.12(2)(c)(ii) requires that a person complete 'the training program' who can run and what is the syllabus for the training program?

27.12(2)(c)(iii) requires that 'a check and training person meet the relevant recency or proficiency requirements for the balloon transport operation that is subject of the training and checking as set out in the operator's exposition and in CASR and CAR.' Where are the requirements in CASR and CAR?

#### MOS 28.03 Requirements for individuals conducting training and checking (ground crew)

28.03(2)(c)(i) mentions 'minimum experience and entry control requirements to perform a check and training or a competency assessment role' but these do not appear to be listed anywhere

28.03(2)(c)(ii) mentions 'the training program for a check and training person' but the requirements for the training program do not appear to be listed anywhere

28.03(2)(c)(iii) requires that 'a check and training person meet the relevant recency or proficiency requirements for the balloon transport operation that is subject of the training and checking as set out in the operator's exposition and in CASR and CAR.' Where are the requirements in CASR and CAR?

#### MOS 28.05 Exposition requirements

This section does not mention a requirement for training, assessment, nomination or approval of persons who are to be approved to train and assess ground crew despite the Division inferring that detail will be included in the exposition

#### 131.185 Training and checking system

Chapters 27 & 28 of MOS seem to have been included post consultation. These include elements of a training and checking system which are incomplete. 131.185 states 'This regulation heading is reserved for future use'.

#### MOS Table 7.01 Emergency and survival equipment

What are the standards for pyrotechnic signalling devices? Who / how is a determination to be made as to whether another type of signalling device is 'equally effective'?