



## SUMMARY OF CONSULTATION

# Proposed rules for air transport operations - smaller aeroplanes

Civil Aviation Legislation Amendment (Part 135) Regulation 2018

|                       |            |
|-----------------------|------------|
| <b>Date</b>           | April 2019 |
| <b>Project number</b> | OS 01/11   |
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## Overview

CASA published a consultation draft — Proposed changes to the rules for smaller aeroplanes air transport operations - Part 135 of CASR and the Part 135 Manual of Standards (MOS) — on the CASA Consultation Hub from 3 August to 2 September 2018.

This consultation activity, and separate consultation activities for Parts 121 and 133 of the *Civil Aviation Safety Regulations 1998 (CASR)*, all involved consultation on the proposed Part 119 of the *Civil Aviation Safety Regulations 1998 (CASR)*. As feedback on Part 119 of CASR was spread across these three activities, CASA will publish a dedicated Part 119 Summary of Consultation (SOC) document.

This document focuses solely on Part 135 of the *Civil Aviation Safety Regulations 1998 (CASR)* and the Part 135 MOS.

The consultation provided an overview of the main changes to the current rules for smaller aeroplane charter and regular public transport. It identified the new rules for each of the main changes, advised that other changes may be applicable to industry participants and recommended an additional review of the materials provided. Feedback was sought from industry on the proposed regulations and manual of standards.

In 2017, CASA established an Aviation Safety Advisory Panel (ASAP) made up of industry representatives. In late June 2018, the panel convened a technical working group (TWG) to evaluate drafts of the Part 119 regulations, the Part 135 regulations and the Part 135 MOS.

The TWG made several suggestions and highlighted 31 specific issues; the majority of which CASA sought to address in this consultation draft. Feedback on Part 135 of CASR from previous consultations was also considered and incorporated into the 2018 consultation drafts. A small number of TWG recommendations were still under active consideration by CASA prior to the consultation.

This SOC provides a summary of the main themes that emerged from reviewing the consultation responses.

## Respondents

Part 135 has been the subject of multiple previous public consultations. CASA received a total of 12 submissions to this consultation. Seven responses were from organisations or operators and 5 were from individuals. Seven respondents consented to have their comments attributed to them including publication on the CASA Consultation Hub.

### Organisations / operators

| Representative  | Organisation  |
|-----------------|---|
| Lachlan Gray    | The Australian Airline Pilots Association (AusALPA) |
| Mike Higgins    | Regional Aviation Association of Australia          |
| Andrew Eldridge | The Royal Federation of Aero Clubs of Australia     |
| Adam Holt       | 1981  |

## Individuals

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| Name         |
|--------------|
| James Bate   |
| Peter Harris |
| Mark Nunn    |

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## Key proposals

The document, —Summary of Proposed Change - Australian air transport operations - smaller aeroplanes — published in August 2018, outlined the following key proposals:

- Enabling extant charter operators, by merging the concepts of charter and regular public transport (RPT) into air transport and providing a common level of safety, to conduct fixed scheduled flights that are available to persons generally (an ability currently requiring an RPT AOC).
- Where the aircraft type has a master minimum equipment list, require aeroplanes flown internationally, or domestically under the instrument flight rules (IFR), to be operated in accordance with a minimum equipment list.
- The proposed regulations, where possible, allow for an outcomes-based approach to be adopted in the operator's exposition procedures.
- Relaxation of aerodrome requirements and require operators to ensure that aerodromes are suitable for the take-off and landing of the aeroplane, subject to the applicable performance requirements stated in Subpart 135.F and the Part 135 MOS.
- Relaxation of simulator requirements for aeroplanes certificated with greater than nine passenger seats but operated with a maximum operational passenger seat configuration (MOPSC) of nine or less.
- Align with International Civil Aviation Organization (ICAO) standards and alleviate existing requirements for the carriage and use of oxygen by non-pressurised aeroplanes when operating for no longer than 30 minutes between 10 000 ft and FL130.
- Modified performance provisions based on CAOs 20.7.2, 20.7.1B and 20.7.4.
- Require take-off alternate aerodromes under certain conditions.
- Require sterile cockpit operations during certain flight phases.
- Require operators to specify certain procedures for flights of prescribed single-engine aeroplanes (formerly known as approved single-engine turbine powered aeroplanes (ASETPA)).
- Define suitable forced landing areas and modify overwater flight rules for prescribed single-engine aeroplanes.
- Require operators to specify procedures for determining how, and by whom, operational control for a flight is to be exercised.
- Require journey logs for each flight (although the journey log could be combined with other documentation).

- Enable operators to flexibly define procedures for providing updated information in relation to a multi-journey flight in cases where keeping copies of updated information on the ground is impractical.
- Require at least one member of the aeroplane's flight crew when operating at night under the visual flight rules to be authorised under Part 61 of the *Civil Aviation Safety Regulations 1998 (CASR)* to conduct an instrument flight rules (IFR) flight.
- Require information about search and rescue (SAR) services to be readily accessible to flight crew members, and for information about emergency and survival equipment carried on an aeroplane to be available for on-forwarding by the operator to a rescue coordination centre (RCC).
- Require aeroplanes over 5 700 kg MTOW when flown under night VFR or IFR rules in the conduct of passenger or medical transport operations to be fitted with terrain awareness warning system (TAWS) equipment.
- Modified requirements for the fitment of airborne weather radar equipment.
- Training and checking requirements for all crew.
- Provisions for the Part 135 MOS to prescribe updated distance limitations similar to those currently required by CAO 82.0. (Note that these provisions are preliminary and may be changed once the Part 121 MOS is finalised in late 2018 or early 2019. If the applicable Part 135 MOS provisions are changed they will be publicly consulted, ideally at the same time as the Part 121 MOS.)

## Key feedback

Two recurring themes from feedback were the absence of unique rules for scenic and joy flights and the necessity for comprehensive guidance material and education to enable industry to understand and apply the changes. Multiple pieces of other individual feedback were received. Some feedback indicates that Part 135 and the Part 135 MOS could be clearer and would benefit from better annotations and explanatory notes to enable easier cross-referencing between CASR parts and the various MOS's.

Feedback from those respondents who consented to having their responses published and CASA's indicative actions are at Appendix A.

## Notice of final rulemaking

CASA has undertaken the actions related to the Part 135 regulations indicated at Appendix A. CASA is working to complete the actions related to the Part 135 MOS and expects to make the Part 135 MOS mid-2019.

The modified [Part 135](#) regulations were made on 6 December 2018 and are available on the Federal Register of Legislation website <<https://www.legislation.gov.au/Details/F2018L01782>>. Commencement is planned for 25 March 2021 except for identified provisions that have a delayed commencement date. The only Part 135 provisions currently identified that have a delayed commencement date are the MOS provisions related to TAWS and weather radar. The TAWS provisions are delayed until 2 years after commencement. The weather radar provisions are also delayed until 2 years after commencement but with a condition that operators must continue to comply with the weather radar provisions of [Instrument Number DASR 4/1994](#) until

that date. The Instrument can be found on the Federal Register of Legislation website < <https://www.legislation.gov.au/Details/F2018L01782> >. This instrument is the legal authority for the current weather radar requirements expressed in the AIP at para 4.1 of GEN 1.5. CASA does not intend to have a transition period for the Part 135 regulations in its entirety.

## Future direction

The ASAP endorsed the making of Part 135 in 2018 provided that certain concerns raised by the Part 135 TWG are addressed prior to implementation and, where necessary, further discussions are held with industry. The [Part 135 TWG report](#) is available on the CASA website <<https://www.casa.gov.au/about-us/standard-page/part-135-twg-australian-air-transport-operations-small-aeroplane-operations>>. In responding to the concerns raised by the ASAP, CASA will be, in 2019, undertaking a review of the Part 121 and Part 135 passenger limit. The terms of reference for this review will be determined in consultation with the ASAP prior to review commencement. To enable legislative amendments to be implemented, where these are determined by CASA as appropriate, the review is intended to be completed in 2019.

Part 135 is one piece of a suite of six interlinked operational regulations. The other elements are Parts 91, 119, 121, 133 and 138 of CASR. Many operators will conduct operations across multiple CASR parts. Clear guidance will be necessary to outline how the different parts interrelate and how complying with requirements in one part would satisfy requirements in another. CASA intends to have critical elements of this guidance available by early 2020 — well in advance of the commencement date of 25 March 2021.

CASA intends to put in place regulatory provisions that deem current authorisations to be equivalent to future requirements to the maximum extent possible to minimize the burden of regulatory change applicable to both industry and CASA. Commencing in 2019, CASA will conduct a detailed analysis of existing AOC permissions, approvals, for example, to determine which current regulatory requirements can be deemed equivalent to future requirements.

## **Appendix A**

### **Consolidated summary of comments received, CASA's response and planned action**

## Response 1

This individual response was submitted by Mark Nunn.

### Comment 1-1

Reg 135.745 of CASR Sec 133, 134 and 135 MOS will need to have extensive open discussion in a forum type event or have an open newsletter updated regularly.

The financial imposition of more check flights may possibly not have the desired reduction in safety differential that is expected.... although on merit it seems to be a good idea.

### CASA response

CASA has discussed these provisions extensively over several years within industry forums and working groups. CASA considers that the frequency of reviews and checks required by Part 61 is not sufficient for air transport operations and believes the increase in frequency is warranted for these operations.

### CASA action

No change to be made.

## Response 2

This response was submitted by Andrew Eldridge representing the Royal Federation of Aero Clubs of Australia.

### Comment 2-1

Please explicitly allow scenic and joyflights to be conducted under Parts 141/2 and exempt these from the requirements of Part 119/135 by classifying them as not transport operations. Warbird experience flights have the same issue, but they have been singled out for privileged treatment. Please make all "flight experience" flights with informed, consenting passengers, to be allowed under Parts other than 119/135.

### CASA response

CASA notes this comment and, as indicated in the Summary of Proposed Change, will consult with industry in 2019 on the regulatory provisions for scenic and joy flight operations.

### CASA action

No change to be made.

## Response 3

This individual response was submitted by Peter Harris.

### Comment 3-1

Again, NPRM 1306OS - Regulatory requirements for scenic flights in small aircraft has not been referenced. Disappointing.

### **CASA response**

CASA notes this comment and, as indicated in the Summary of Proposed Change, will consult with industry in 2019 on the regulatory provisions for scenic and joy flight operations.

### **CASA action**

No change to be made.

## **Response 4**

This response was submitted by Adam Holt for an organisation identified as “1981”.

### **Comment 4-1**

135.025 - Will this mean that flights outside of this will not be permitted. Major flight planning adjustments would be required increasing cost of operations significantly or requiring twin engine aircraft. This will stop half of the flights through Northern QLD, NW WA and Central Australia.

### **CASA response**

The definition of “suitable forced landing area” does not mean that flights will not be permitted outside of these areas. To understand the effect of this definition it is necessary to evaluate how the term is used within the regulations and MOS.

Aside from when it is defined, the term is only used within the regulations in relation to flights over water for single-engine aeroplanes. The term is also used in the MOS when outlining requirements for operator procedures for the use of a prescribed single-engine aeroplane (formerly called approved single engine turbine powered aeroplane – ASETPA) and for life jackets and life rafts.

### **CASA action**

No change to be made.

### **Comment 4-2**

Training and checking requirements are sensible but would suggest more information on who will be considered suitable. 500 hours total and 6 months in commercial ops is just the same as a CP. So nothing has changed except an entire new section to the manual.

### **CASA response**

CASA notes this comment and intends to provide more comprehensive guidance material well in advance of the commencement of the regulations in early 2021.

### **CASA action**

Noted for guidance material development.

## **Response 5**

This response was submitted by Mike Higgins for the Regional Aviation Association of Australia.



## Comment 5-1

With reference to any reduction in cruise speed distance travelled in 15 minutes plus distance at glide to 1000' AGL in terms of life raft carriage over water needs further explanation. There is inconsistency in the documents provided between ASEA and SEA operations.

There is no opportunity to comment on the passenger limit of 9 under the IFR and single pilot.

### CASA response

CASA notes the comment. Regarding further explanation of the requirement for life raft carriage CASA intends to provide more comprehensive guidance material well in advance of the commencement of the regulations in early 2021. CASA considers that the opportunity was provided to comment on the passenger limit of 9 as this limit is part of the Part 135 regulations. CASA has agreed to undertake a review of the 9-seat limit in 2019.

### CASA action

Noted for guidance material development.

## Response 6

This individual response was submitted by James Bate.

## Comment 6-1

### 135.005 needs review

As pointed out by the ASAP TWG group I think that restricting aircraft designed for single pilot operations with 9 or more passenger seats to 2 crew IFR is far too restrictive. B200 have been operated to the equivalent of part 135 in Australia for decades, where is the safety case that they should now be operated to part 121 (and the associated CAO20.7.1B performance restrictions when fitted with more than 9 passenger seats?

### CASA response

CASA has reviewed the applicability threshold several times throughout the development cycle of the CASR parts and believes that the applicability provisions are appropriately set and in line with world's best practice. CASA has agreed to undertake a review of the 9-seat limit in 2019.

### CASA action

No change to be made.

## Comment 6-2

### 121.Z. needs review

There are not that many aircraft that fall into this category, but one such aircraft is the C208B. I have operated this aircraft in excess of 1800 hours under the IFR, in a mix of single pilot charter and both single and multi-crew RPT. This aircraft is perfectly suited for single pilot operations, and ergonomically it was never designed for 2 crew operations. The aircraft that I flew were all fitted with the British style seating option with 12 passenger seats + 2 crew (1 of which could be used for a 13th passenger if charter). This aircraft is very simple to fly, akin to a Cessna 206 with

a turbine engine. To require this IFR aircraft to be operated 2 crew with more than 9 passengers provides very little safety gain versus an increase in cost and efficiency to the operator, and it could be argued an actual reduction in safety due to the extra, unnecessary pilot reducing how much contingency fuel may be carried above and beyond what is legally required. To suggest that passenger safety is only improved/important if carrying more than 9 is ludicrous, so either make the requirement for 2 crew to be on all IFR flights or respect the aircraft design limitations for minimum flight crew.

### **CASA response**

CASA has extensively listened to industry regarding the provisions of Subpart 121.Z throughout the CASR development cycle. Subpart 121.Z originally required an ASETPA aircraft for all operations and this was changed. Subpart 121.Z originally required 2 crew for all operations and this was changed. The made regulations, that require 2 crew for single-engine IFR operations when greater than 9 passengers are carried, were based on other international best practice regulatory models. CASA has agreed to undertake a review of the 9-seat limit in 2019.

### **CASA action**

No change to be made.

### **Comment 6-3**

#### **135.075 (4)-(e)**

Requires all IFR flights to carry a "*statement identifying the person and the special consideration....required during an evacuation*". This is not practical or necessary for a medical transport operation as it would apply to almost every flight, and is already covered by 135.285 (3): "*An aeroplane operator's exposition must include procedures for informing crew members for a flight about any passenger with reduced mobility who is to be carried on the flight.*" so is an unnecessary paperwork burden. For medical transport operations this would already be at the forefront of the crews mind as they would be one of only a few passengers on board, and the crew would in most cases have been involved in loading the passengers/patient so would be aware of the situation.

### **CASA response**

CASA notes that regulation 135.075 does not specify the form such a statement must take. CASA notes that it is therefore at the discretion of the operator how they satisfy this requirement.

### **CASA action**

No change to be made.

### **Comment 6-4**

#### **135.685 and MOS 128 needs review**

The tightening of life raft restrictions means that reef scenic flights couldn't be operated out of small 4-6 seat single engine aircraft further than about 12nm offshore, for example C182/C177 as the only safe place to stow a liferaft would be the rear cargo area, which would not be easily accessible in a ditching. The current requirement for life jackets to be worn when below 2000ft

should be mitigation enough in these heavily trafficked areas where a ditching would have a rescue chopper within a 15 min flight and multiple ocean craft in the area. Note. If this is covered by MOS 128 (3) then please excuse the above.

### **CASA response**

CASA considers the requirement an appropriate risk mitigator for flights over water and notes that the definition of suitable forced landing area is sufficiently broad that isolated atolls or reef structures above water may, in some cases, be classed as suitable forced landing areas.

### **CASA action**

No change to be made.

### **Comment 6-5**

#### **MOS 126.**

Guidance material indicated no change to 20.11 life jacket requirements, but 126 didn't mention the requirement to wear life jackets in single engine aircraft over water below 2000ft. If this was not a mistake I suggest that it should be reintroduced, as an engine failure at low level leave very little time for donning life jackets. The wearable, quick don style lifejackets are great and perfect for this.

### **CASA response**

CASA notes that the Part 135 MOS requires a life jacket to be worn whenever the aircraft is beyond gliding distance from a suitable forced landing area and considers this an appropriate limit to require the wearing of life jackets. In many cases of flight below 2000' AGL over water, this would likely be the case.

### **CASA action**

No change to be made.

### **Comment 6-6**

#### **Review 135.185**

As it reads the only way to avoid a possible offence of strict liability would be to carry alternate fuel on every sector regardless of the forecast because it is now an offence to get caught out due to changing weather. While the intent of the regulation is sound, and the ability to reduce to landing minima rather than alternate minima when within 30 minute flight time makes sense, the fact that it is an offence at all is worrying. During most flights while carrying minimum legal fuel there will be a point where diverting to an alternate is not possible. If you were then to receive an updated TAF with an unexpected deterioration you could be in a position with no legal option available to you. While this situation is not a good one to be in and may require an emergency to be declared, why should it be criminal to trust a TAF? I'd argue that this may actually harm safety as somebody in this situation is less likely to speak up and request assistance from ATC. It is essentially saying the pilot is required to be a better weather forecaster than the BOM office.

### **CASA response**

This provision creates an alleviation and additional flexibility compared to current requirements. In summary, the regulation provides that a person only commits an offence if the flight is continued to the destination for which they do not possess, but require, alternate fuel, and the revised forecast is not received within 30 minutes of the destination and the weather is above landing minima or the flight is carrying fuel for the destination plus 30 minutes. If, however, there was no other destination possible and these requirements could not be met, then it would be expected that an emergency would be declared and therefore the overriding emergency provisions under the Act would constitute a defence against committing an offence.

### **CASA action**

No change to be made.

### **Comment 6-7**

#### **135.355 Using headsets**

If this could be altered to mention something about headset failures and the ability to use the backup hand held microphone and aircraft speaker for limited times/sectors? Otherwise there would be a requirement for each crew member to carry 2 headsets in case of failures. This contradicts MOS 111 (2) (b).

This regulation also makes it illegal to use the oxygen mask as the primary source of communication with ATC.

### **CASA response**

CASA notes this comment, however, believes the regulation is appropriate.

### **CASA action**

No change to be made.

### **Comment 6-8**

#### **135.560 Inoperative Automatic Pilot**

This regulation is a severe reduction on the current allowance in CAO 20.18 4.1C. This new regulation will cause severe financial penalties to single pilot operators that are not required for little safety gain. The current regulation allow: "*if the pilot is satisfied that it is safe to do so, be operated under the Instrument Flight Rules by a single pilot at any time within the period of 3 days commencing on the day on which the automatic pilot loses the capability.*" This allows the aircraft to be returned to a maintenance base to be repaired rather than expensive repairs being required in remote locations (Trust me mid wet season in the north you cannot expect VMC by day for weeks at a time, plus the extra resources required to continue the current flight's journey in another aircraft).

To allow a similar, but not so severely limiting increase in safety would CASA consider something similar to:

*"if the pilot is satisfied that it is safe to do so, the aircraft may be operated under the Instrument Flight Rules by a single pilot at any time with an inoperative automatic pilot system within the*

*period of 3 days commencing on the day on which the automatic pilot loses the capability, as long as each flight begins from an aerodrome at which there is no facility for the automatic pilot to be repaired or replaced.”*

### **CASA response**

CASA considers that the current provisions for the pilot in command (PIC) “to be satisfied” is not appropriate to the increased flexibility for current charter operators to do RPT like operations in the future.

CASA notes that the Part 135 proposed provision effectively limits the ability of the operator to conduct an IFR air transport operation but does not prohibit the operator from conducting either a VFR air transport operation or a Part 91 operation to move the aircraft to a place of repair.

### **CASA action**

No change to be made.

### **Comment 6-9**

#### **MOS 114, 115 and 116**

I believe that these regulations are confusing the term “*Cabin pressure altitude*” and “*Flight altitude*”. Based on planned cabin altitudes these regulations would apply to no flights. Comparing to CAO 20.4 I understand what their intent is but the wording is incorrect. For example See CAO 20.4 7.3 vs MOS 115 (4) or CAO 20.4 8.8 vs MOS 116 (1). 116 (1) Table Pressurised aeroplanes could also have some easier to understand wording. Eg Item 1 column 3 “*the greater of the following: (a) 10 minutes; (b) the period while the aeroplane’s cabin pressure altitude would exceed flight level 150 while the aircraft is descended in accordance with the emergency procedures specified in the aircraft’s flight manual*”

Also keep in mind aircraft POH do not always state how long an emergency decent will take from different altitudes, and therefore regulations such as MOS 116 (1) item 2 “*the period while the aeroplane’s cabin pressure altitude exceeds flight level 140*” are hard to define. Perhaps oxygen for a minimum of 30% of passengers for 15 minutes (similar to CAO 20.4 7.5 (b)) could be used in the absence of operator/aircraft manufacturer evidence of time to descend?

### **CASA response**

Section 116 of the MOS to be reviewed as per comment 6-10.

CASA considers that section 114 of the Part 135 MOS is accurate.

CASA agrees that section 115 of the MOS would effectively result in no supplemental oxygen needing to be carried for this circumstance and this is incorrect. CASA will amend this section to delete para (1) as it is redundant.

### **CASA action**

Section 115 of the Part 135 MOS to be re-drafted to delete existing para (1).

### **Comment 6-10**

#### **MOS 116 (1) item 1 and 2**

If the regulations are not being changed drastically from CAO 20.4 I believe item 1, column 1 should read: *“the aeroplane’s Flight altitude exceeds flight level 250”* instead of: *“the aeroplane’s cabin pressure altitude exceeds flight level 150”* and *“the aeroplane’s Flight altitude exceeds flight level 140 but does not exceed flight level 250”* Instead of: *“the aeroplane’s cabin pressure altitude exceeds flight level 140 but does not exceed flight level 150”*

**CASA response**

CASA will review these provisions.

**CASA action**

Provisions to be reviewed.

**Comment 6-11**

**MOS 118 Oxygen masks for pilots**

I believe an “or” is missing between (2) (a) and (b).

*(2) Also, for subregulation 135.620(1) of CASR, if, during the flight, the aeroplane will be flown above flight level 250, the following are prescribed: (a) the oxygen mask must be of a kind that can, within 5 seconds of being deployed for use and with 1 hand from the ready-position, be placed on the face, and be secured and sealed; (b) while the aeroplane is flown above flight level 250, at least 1 pilot who is in a pilot seat must wear and use the oxygen mask.*

**CASA response**

CASA agrees with this comment and shall add an “or” between paras (2)(a) and (2)(b) in section 118 of the Part 135 MOS.

**CASA action**

Part 135 MOS to be amended.

**Comment 6-12**

**MOS 85 vs 92**

MOS 85 appears to allow GNSS overlay approaches (ie. Flying a VOR approach referenced to the GPS VOR waypoint rather than using the VOR equipment). This is a great idea, and will make NDB approaches much safer by cutting out coastal refraction etc. However, if this is the case why does MOS 92 still require GNSS arrivals to use the VOR/NDB for primary track guidance? Is this not the intent of MOS 85 or is MOS 92 just a carry-over from the old regulations and is now obsolete?

**CASA response**

CASA agrees that there is inconsistency between these provisions. It is CASA’s intent to allow the use of an approved GNSS as a substitute for certain ground-based navigation aids and procedures, provided certain minimum conditions are met. CASA will review these provisions and the conditions to ensure that they are harmonised and that the appropriate safety conditions relating to track keeping are specified.

**CASA action**

Part 135 MOS provisions to be reviewed.

**Comment 6-13**

**135.815 (1) Recent experience requirements operator**

Suggest either a definition for “*assigns a pilot to duty*” or alternatively a rewording to allow rostering a pilot to a flight that they do not currently meet the recency requirements for, with the intention that they will meet the requirements by the time of the flight itself.

**CASA response**

CASA agrees that the offence as written would result in an unintended outcome. CASA will review this provision and appropriately amend it, relating it to a requirement by the operator for a pilot to perform a duty.

**CASA action**

Regulation to be amended.

**Comment 6-14**

**135.815 use of the term “Kind”**

The draft dictionary defines the term “Kind” as: *kind, of an aircraft, means: (a) for an aircraft that is covered by an aircraft type rating—the aircraft type rating; and (b) for an aircraft that is not covered by an aircraft type rating—the type of aircraft*

Nothing is defined for “Type of aircraft”. What is intended by this? Should this perhaps be Class instead?

**CASA response**

Type of aircraft is also defined in the CASR dictionary, as follows:

*type*, for an aircraft, aircraft engine or propeller, means a design and make of aircraft, aircraft engine or propeller and, where appropriate, refers to a group of essentially similar aircraft, aircraft engines or propellers which, although possibly existing in different models, stem from a common basic design.

**CASA action**

No change to be made.

**Comment 6-15**

**Proposed new “Emergency” regulation**

With the introduction of a number of new offences of strict liability, and the talk that this is partly modelled on the American FAR's, one regulation that appears to be missing is an equivalent of:

14 CFR 91.3(b)

14 CFR 135.19(b)



14 CFR 121.557(a)

All of which state in slightly different ways that "In an emergency involving the safety of persons or property, the pilot in command may deviate from the rules of this part to the extent required to meet that emergency."

If this isn't already covered by a regulation elsewhere in the CASR that I have missed, then a regulation similar to this would go a long way to mitigating the problems with 135.185.

**CASA response**

In the Australian legal construct this type of provision isn't needed due to the emergency provisions already contained within the *Civil Aviation Act 1988 (the Act)* and the Criminal Code. CASA provided a brief explanation of this matter as part of the Part 91 of the *Civil Aviation Safety Regulations 1998 (CASR)* public consultation earlier in 2018 and this stated:

**Finally, in an emergency, a pilot's overriding responsibility is for the safety of their flight. It would normally be a defence against breaking any rule, if breaking the rule were necessary in responding to an emergency.**

**CASA action**

No change to be made.

**Response 7**

This response was submitted by Lachlan Gray for the Australian Airline Pilots Association (AusALPA).

**Comment 7-1**

**Supporting Documents**

Despite the best efforts of [sic - the CASA] team, for which we are most appreciative and applaud, we find it to be a somewhat unnecessary struggle to properly consider proposed legislation that relies heavily on secondary documents that are not complete or consistent across the operational parts. To that extent, we must qualify our comments on the basis that they are made according to the material before us, knowing full well that the documents and some policy matters are not in their final form or are yet to be developed.

**CASA response**

CASA considers that the amount of guidance material provided as part of this consultation was sufficient to enable industry to assess the impact of the proposed regulations. A public consultation is conducted to obtain feedback which may result in changes, some of which may obviate considerable work if a complete set of guidance material was to be produced. CASA also notes that the broad scope of these changes was not unknown to industry noting the multiple previous consultations that have been carried out on these specific matters.

**CASA action**

Noted for guidance material development.



## **Comment 7-2**

### **Drafting Style**

We have made the point previously that the legal drafting, while perhaps satisfying for lawyers, is not assisting the industry's understanding of the legal framework under which they operate. It is difficult to see how much of the proposed legislation satisfies any common or ordinary meaning of "plain English" and AusALPA would be very disappointed if the end result of the regulatory development is an increase in industry non-compliance through lack of clarity.

### **CASA response**

CASA notes this comment and intends to provide more comprehensive guidance material well in advance of the commencement of the regulations in early 2021.

### **CASA action**

Noted for guidance material development.

## **Comment 7-3**

### **Strict Liability**

AusALPA views the Government's approach to strict liability in civil aviation law to be an unrealistic and unhelpful use of this type of provision. It represents an overly simplistic approach to compliance that focuses on pilots without sufficient, if any, regard to operational circumstance or safety outcomes. A recent example of this type of unfairness was CASA's pursuit of the pilot involved in the Westwind ditching off Norfolk Island as distinct from the neutral approach that CASA adopted towards the operator, as revealed by the Senate Inquiry.

We recognise that there is a place for strict liability offences and that the unusually high level of regulation in aviation will likely result in a higher than normal number of such offences.

However, there seems to us to be an increasing propensity to deliberately reduce complex systems to a series of simple isolated factors whose purpose is primarily to support strict liability penalty provisions, rather than to address the real safety outcomes, when those factors are part of a dynamic and interactive operational environment. This "tail wagging the dog" approach to compliance and enforcement often means that few organisational malaises are redressed or even mitigated and those who have the greatest influence and control over corporate culture inevitably escape attention, let alone sanction.

AusALPA has no evidence to date that suggests in any discernible way that CASA, DIRDC or any of the Attorney-General's portfolio agencies have done any review or reconsideration of the wholesale application of strict liability provision to civil aviation offences.

That situation was, and remains, unacceptable to us.

We have been told that a review has been planned at some future date. We have also been told that the review will be conducted separately from the operational teams developing the rule sets and, most likely, exclusively by legal practitioners from the various Government entities involved in producing civil aviation legislation. AusALPA is strongly opposed to this approach.

Any review of strict liability provisions in civil aviation law must be conducted primarily as an operational activity in the first instance. Secondly, any relevant legal advice should preferably

come from external sources such as the Australian Law Reform Commission rather than from the people who may well be motivated to minimise change and to preserve the status quo. In any event, such a review is essential and urgent.

### **CASA response**

CASA notes these comments.

### **CASA action**

No change to be made.

## **Comment 7-4**

### **Penalty Provisions**

In 1990, when the CAA licensing rules were rewritten to become Part 5 of the CARs, the operational drafters reviewed each provision and applied maximum penalties drawn from the range of 5, 10, 15, 25 and 50 penalty units. Judgement on proportionality was applied very carefully, both to reflect the balance between administrative and safety outcomes as well as to provide guidance to the courts on the relative severity of the offence.

Today, we find that what were once considered to be minor offences, indicated by low range penalties, have morphed into major offences attracting the maximum allowable penalties of 50 penalty units. There are very few, if any, offences that vary from this apparently default level of maximum penalty.

AusALPA can find no public evidence of a formal process that changed the original risk and preservation of evidence assessments to a penalty scheme for which virtually every offence attracts the allowable maximum. The complete lack of transparency of such deliberations can only create distrust among those most affected. This is particularly so when the regulations appear to have adopted a much narrower class of persons committing offences, in many cases removing operators from the spotlight. It is far from clear to us why CASA has chosen to resile from adopting the broadest range of potential offenders, reflective of a true safety systems focus.

Has CASA withdrawn from providing guidance to the Courts on relative severity of offences, leaving the Courts to determine proportionality simply on the basis of the arguments presented in each case? Has the concept of system safety fallen out of favour within CASA in preference to targeting only pilots, many of whom have no real or effective protections whatsoever in preserving their livelihoods when faced with conflict between safety and commercial outcomes?

AusALPA strongly asserts that there must be a transparent process that re-examines all of the penalty provisions in accordance with a publicly available doctrine and that includes relevant stakeholders. Once again, this review process must be an operational review rather than a legal practitioner's review in the same vein as we set out above for the review of strict liability provisions.

### **CASA response**

CASA notes this comment and, as indicated at the recent TWGs, it remains CASA's overall intent to review penalty provisions once substantive work on the CASR suite is complete.

### **CASA action**

Noted for future review into penalty provisions.

### **Comment 7-5**

#### **Strict Liability and Penalty Review Timing**

AusALPA considers both these reviews to be urgent.

Part of the development of any new rules must be demonstrations of good faith by the regulator that the imposition of penalties, both administrative and criminal, are the outcome of well-considered, systematic and proportionate assessments of the gravity of each offence. It is critical that the reviews are not seen to be self-serving internal processes, since the required collateral outcome is the building of trust in the way that the regulator meets its duty to the Australian public, rather than to itself.

### **CASA response**

CASA notes this comment and, as indicated at the recent TWGs, it remains CASA's overall intent to review penalty provisions once substantive work on the CASR suite is complete.

### **CASA action**

Noted for future action.

### **Comment 7-6**

#### **Readability of the Documents**

AusALPA has engaged many of our representatives and staff to review the various CASR Flight Operations Parts. A recurring theme of comment is regarding the difficulty with reading the documents and understanding the linkages and interrelationship with other sections in either the relevant associated MOS, or to the other CASR Parts. One means of improving this would be to apply a consistent method of indexation and subpart division across all these, and other, CASR Parts.

When solely considering the indexation of the draft documents, AusALPA finds that the draft documents for Part 121 to be the closest to a good example of readability, with improvements still possible. Within the draft Part 121 documents, the subpart in the regulations (the Part) corresponds to the subpart within the MOS. For example, subpart N within the Part is for Flight Crew and this is provided in almost the same manner within the MOS where there is at least an annotation in parentheses as such "CHAPTER 6: (SUBPART 121.N – Flight crew)".

We believe that it would be quite beneficial to the user of the documents if the MOS subparts were annotated as they are in the CASR Parts. This should also be applied to all other CASR Parts and associated MOSs. Continuing the example, subpart N – Flight Crew, should be annotated the same across all the flight operations CASR draft documents, rather than the current situation:

| <b>Flight Ops CASRs: Useful Subpart Indexation Consistently Applied</b> |     |         |           |     |     |
|---|-----|---------|-----------|-----|-----|
| CASR Part #   | 91  | 119     | 121       | 133 | 135 |
| Part  | Yes | Yes     | Yes       | Yes | Yes |
| MOS   | No  | Nil MOS | Partially | No  | No  |

With the exception of Part 119, all the other four Parts have subpart linkages to and from Part 91. There exists some consistency across the regulatory Parts but it is within the MOSs that there is considerable inconsistency. AusALPA believes that this is an area of amendment that must be addressed prior to the final rulemaking.

AusALPA would like to acknowledge the presence of some useful linkages provided in the draft documents. Within CASR 135.005, paragraph (2) provides a useful table to outline which Part 135 CASRs supersede those in Part 91. However, beyond those regulations that supersede others, there are many other regulations where Part 91 requirements continue to apply and, in some instances, this has been annotated with a very useful note. For example, within CASR 135.045:

**135.045 Compliance with flight manual**

(1) The operator of an aeroplane for a flight contravenes this subregulation if the aeroplane is operated in a way during the flight that does not meet a requirement or limitation that:

- (a) is set out in the aeroplane’s flight manual; and
- (b) relates to the operation of the aeroplane.

Note: The pilot in command of the aeroplane must also ensure the aeroplane is operated in accordance with the aircraft flight manual instructions: see regulation 91.100.

AusALPA finds that this is a most useful note and we firmly encourage the provision of this type of note as much as possible. Unfortunately, we find that this is currently a limited example. For instance, a similar note linking CASR 135.070(2) and (3) to CASR 91.115(2) would be equally useful and there are most likely other opportunities to replicate this method and in turn, improve the readability, comprehension and compliance of the CASRs by users

AusALPA notes that the Draft AMC/GM includes some (but not all) cross-references, which we presume will migrate to the MOS, however it is our preference for the linkage-note to be in the primary legislation.

**CASA response**

CASA notes these comments. CASA will consider them carefully in crafting the final signposting for the MOS. As part of the final regulatory drafting, considerable structural adjustments have been made across the CASR parts to align, to the maximum extent possible, similar content and similar concepts. CASA notes the usefulness of “notes”. However, extensive use of them will expand considerably the volume of the regulations.

CASA will consider methods for providing clear guidance materials and the relationships between the different CASR parts. The activity-based structure of the future CASR parts is

intended to make it easier to locate the unique rules that apply to different aviation activities. In comparison, the current system of CARs and CAOs lacks any real reference links between the two levels of legislative material.

### **CASA action**

Noted for future action.

### **Comment 7-7**

#### **Flight Planning Requirements and CASR linkages**

CASR 135.145(3)(a) outlines a requirement for access to weather assessment, for planning purposes, prior to and during a flight. We note that the MOS doesn't provide further on this point and nor does the AMC. It is not listed within the AMC, MOS or the Part that there is a relevant Part 91 MOS reference on this topic which provides the applicable process for the purposes of Part 121 and, we presume, part 135.

It is doubtful, in the absence of a suitable cross-reference, whether section 7 of the Part 91 MOS is legally authorised as applicable as the Part 135 process, even though it would be a bizarre outcome that the process was available for Parts 91 and 121 but not Part 135. Importantly, unless Part 91 MOS section 7.03 is properly authorised, a Part 135 flight, unable to obtain an authorised weather forecast before departure, would not be authorised to depart and subsequently obtain the weather assessment (pursuant to certain conditions).

AusALPA believes that the absence of a note cross-referencing the Part 91 MOS makes the pathway to enlightenment unnecessarily difficult, particularly if you are expecting more stringent Part 135 requirements in this context. There needs to be a consistent approach to alerting a reader to another documented process such as this, if not in the parent regulation, then certainly in the appropriate MOS entry.

### **CASA response**

The wording of subregulation 135.345(3) provides for the possibility, as outlined in the Part 91 MOS, that certain weather forecasts may not be required to be obtained before flight. The term "flight preparation (weather assessment) requirements" is a defined term and links legally to the Part 91 regulation and subsequently to the Part 91 MOS.

Regulation 135.145 is primarily intended to create a requirement on the operator. The Part 91 requirement is expressed to be a requirement on the PIC. While not exclusively the case, the nature of the CASR parts is that the air transport parts largely provide for operator-based requirements whereas Part 91 is largely PIC based requirements although some requirements do overlap..

### **CASA action**

CASA notes that education on the types and nature of the inter-linkages between the CASR parts will be necessary.

## Comment 7-8

### Compliance with Exposition

AusALPA considers that CASR 135.055 (and the similar requirements in other operational parts) would be better placed in Part 119.

### CASA response

CASA agrees and will make this change across Parts 121, 133 and 135.

### CASA action

Relevant “Compliance with exposition” regulations across Parts 121, 133 and 135 to be centralised in Part 119.

## Comment 7-9

### Qualifications of Pilots - NTS/HF

AusALPA finds that there are inconsistencies in the draft CASR Flight Operations Parts in relation to an operator’s responsibilities to ensure that flight crew have completed the required Human Factors (HF) and Non-Technical Skills (NTS) training as per the draft Part 119 (Division E.2—Training and assessment in human factors principles and non-technical skills).

For example, in the current draft Part 121, CASR 121.715(2) includes this requirement:

(d) the pilot has successfully completed the aeroplane operator’s training in human factors principles and non-technical skills relevant to the duties of a pilot in command

We believe that this Part 121 HF/NTS requirement on operators is wholly consistent with Division E.2 of Part 119 but note that it isn’t consistently applied to all the crew where it is equally applicable. This obligation on operators is just as applicable in small aircraft air transport operations under Part 135 but isn’t found within Part 135, not even for multi crew operations. Part 119 Division E.2 outlines that crew, and other operational safety-critical personnel, must be trained in HF and NTS. Given the increasing recognition of the role HF/NTS has in enhancing aviation safety and mitigating risks, AusALPA believes that the clearly stated obligation, related to HF/NTS qualification requirement found in Part 121, should also be included in the relevant sections within Part 135.

Understanding that Part 135 involves operations for single or multi crew operation, this should be reflected in the qualifications required for all the various crew members. Thus we make specific note that these HF/NTS training and qualification obligations for operators should also be reflected in Subpart 135.P—Crew other than flight crew.

### CASA response

CASA notes this inconsistency and considers that Part 119 sufficiently outlines the requirements in relation to HF/NTS training and assessment and that it provides for operator flexibility in this matter.

### CASA action

Part 121 provision noted in the comment to be deleted.



**Comment 7-10**

**Qualifications of Pilots – Ratings and Endorsements**

AusALPA finds that the references to Part 61 qualifications found within Part 135 are inconsistent and currently insufficient. AusALPA believes that it is correct to clearly provide an obligation on operators that they must ensure that crew operating their aircraft are authorised and qualified to do so, as per Part 61. Currently though, the draft operational Parts (Parts 121, 133 and 135) provide differing and inconsistent obligations for this responsibility both within and between Parts.

The following table outlines and displays the inconsistencies found in the draft CASRs on the matter of an operator’s obligations to ensure that a pilot assigned to duty for the flight is authorised under Part 61 to pilot the aeroplane or rotorcraft for the flight:

| <b>Operator’s Obligations to ensure that a Pilot is qualified as per Part 61</b> |                      |                       |                      |
|--|----------------------|-----------------------|----------------------|
|  | <b>Part 121</b>      | <b>Part 133</b>       | <b>Part 135</b>      |
| <b>Flight Crew Rank:</b>   | Sub Reg Reference    | Sub Reg Reference     | Sub Reg Reference    |
| <b>PIC</b>   | NIL Exists           | Yes, 133. 685 (2) (d) | Yes, 135.760 (2) (d) |
| <b>Co-pilots</b>   | Yes, 121.720 (2) (b) | NIL Exists            | NIL Exists           |

As we can see here, there even exists inconsistency in the operational Parts between whether it is the PIC or Co-pilot (including Cruise relief co-pilots) regarding the Part 61 qualifications obligations on operators.

**CASA response**

CASA agrees and will make changes to consistently refer to the requirements under Part 61 in relation to pilot qualifications.

**CASA action**

Applicable regulations relating to pilot qualifications in Parts 121, 133 and 135 to be changed to consistently refer to Part 61.

**Comment 7-11**

**Cosmic Radiation Limits**

AusALPA notes that the CASR 135.375 partially reflects single dose limits in accordance with ICAO Annex 6 para 4.2.11.2 based on Concorde operational advice from the early 1970s. The referenced ICAO Circular 127 was produced in 1975 and is based on ICRP Publication 9. The latest relevant ICRP document is Publication 132 Radiological Protection from Cosmic Radiation in Aviation and the latest Australian document is ARPANSA RPS-G2 Guide for Radiation Protection in Existing Exposure Situations. While CASA at the Part 121 TWG flatly rejected updating this series of regulations on the basis that none of those documents were standards, we are compelled to make the point that Australia need not hide behind the ICAO standards development ‘tortoise’ to adopt a modern approach that protects aircrew against potential long-term health consequences for which we require lifetime public health records to provide the

statistical data. Operations above 26,000ft can result in significant doses and we strongly recommend that flight crew radiation exposure doses should be individually monitored and optimised to ALARA levels unless competent analysis shows that no flight crew member will be exposed to in-flight radiation of 1 or more mSv per year.

ARPANSA RPS-G2 includes the following:

### **4.3 Aircrew exposure to cosmic rays**

Aircrew are exposed to elevated levels of cosmic radiation while flying at high altitude. In Australia, it is expected that an assessment of exposure for aircrew of all domestic and long-haul crews would be warranted. The ICRP, in Publication 132 (ICRP 2016), recommends that a reference level in the 5-10 mSv y<sup>-1</sup> range is selected by employers. The selected reference value is not a dose limit, but represents the level of dose below which exposure should be maintained and reduced as low as reasonably achievable, taking into account economic and societal factors. For Australia, a reference level of 6 mSv y<sup>-1</sup> (see Annex A), is considered appropriate. Where the doses of aircrew are likely to exceed this reference level, and it is not possible to reduce exposure below this reference level, then the relevant clauses for occupational exposure in planned exposure situations as described in the Code for Radiation Protection in Planned Exposure Situations, RPS C-1 (ARPANSA 2016) apply.

For pregnant aircrew, additional protection of the embryo/foetus must be considered. The working conditions of a pregnant worker, after declaration of pregnancy, must ensure that the additional dose to the embryo/foetus would not exceed about 1 mSv y<sup>-1</sup> during the remainder of the pregnancy. If a reference level is in use by employers, dose records or other pertinent assessment are to be kept to enable the optimisation of the reference level.

Radiation doses from cosmic radiation received by occasional flyers is sufficiently low that there is no need to warrant the introduction of protection measures. However, the ICRP recommends that general information about cosmic radiation associated with aviation be available for all passengers (ICRP 2016). Frequent flyers are considered as public exposure and are treated in the same way as occasional flyers (ICRP 2016).

The ICRP, in Publication 132 (ICRP 2016), recommends that, frequent flyers who have exposures comparable to aircrew should be managed as occupationally exposed on a case-by-case basis according to prevailing circumstances. This may result in individuals assessing their own exposure using freely available dose calculators in order to be aware of their exposure and adapt their flight frequency if they feel the need and therefore use this information to engage with their employer, if appropriate.

### **CASA response**

CASA notes that Part 135 requires operators to specify the cosmic radiation limits receivable inside the aeroplane cabin for flights. Operators can choose which standard they apply in this regard and CASA will publish guidance regarding the applicable regulations as part of guidance material.

### **CASA action**

No change to be made.



## Comment 7-12

### First Aid Kit Guidance

AusALPA finds that the Part 135 provisions relating to the contents of first aid kits to be lacking in detail. CASR 135.685 provides that the MOS may require such equipment. The 135 MOS, Chapter 2, Division 2 provides a table where first aid kits are listed and the prescription of the details of the first aid kit can be found within column two of that table. However, the actual required contents of the kit are not provided here. Instead, all that the MOS table requires is that there is a provision in the first-aid kit of the details of the emergency medical supplies in the kit, not what is actually required or may be in the kit.

We recognise that this is similar to the corresponding sections within the Part 121 draft documents. However, in contrast, the Part 121 AMC provides a list of what may be included in the first aid kit whilst the Part 135 AMC does not. See GM 121.615 (Procedures relating to first-aid kits) and Table 4 of GM 135.685 (Emergency and survival equipment) for more on this difference. AusALPA believes that there shouldn't be a difference in the guidance provided within these two AMCs.

### CASA response

CASA notes this comment.

### CASA action

Noted for guidance material development.

## Comment 7-13

### Automatic Pilot Systems and Improved Safety Mitigators

AusALPA notes that there are proposed changes to autopilot fitment and serviceability requirements for Part 135 operations. We recognise these changes as improvements and strongly support the proposed updates to the associated regulations. In particular, we strongly support the context of CASR 135.560 and support the non-inclusion of paragraph CAO 20.18 4.1C (b).

The charter accident rate in smaller single pilot aircraft is recognised to be higher than in other aircraft operations. Generally, the flight crew operating these services are less experienced and less supported by organisational structures and systems than is the case for operations where more experienced flight crew are operating. Single pilot operations are often higher workload operations too. AusALPA agrees with CASA's initiative to reduce opportunities for riskier flight by limiting autopilot inoperative operations to VMC by day only.

AusALPA also supports the removal of the above mentioned CAO paragraph on the grounds that pilot discretion can be highly problematic. We recognise that too often this pilot discretion is known and used by the operator with 'assertive suggestion' to flight crew (especially less experienced flight crew) citing that because it is possible under the regulation to do it, then it is 'ok to go'.

It should be noted that there is much within the regulations that we support but have not deemed it necessary to provide specific comment. However, this provision is a worthy exception. Similarly, we believe it is important to recognise the proposed changes related to:

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- TAWS (Traffic Awareness and Warning Systems)
- Modified requirements for the fitment of airborne weather radar equipment
- Training and checking requirements for all crew.

**CASA response**

CASA notes these comments.

**CASA action**

No change to be made.