

Explanatory Statement

Acts Interpretation Act 1901

Civil Aviation Safety Regulations 1998

Part 91 MOS Amendment Instrument 2021 (No. 1)

Purpose

The *Part 91 MOS Amendment Instrument 2021 (No. 1)* (the **MOS amendment**) amends the *Part 91 (General Operating and Flight Rules) Manual of Standards 2020* (the **MOS**).

The MOS, which commences on 2 December 2021, sets out the standards for “the rules of the air” for all pilots, and the general operating rules for pilots who are not operating under an Air Operator’s Certificate or other certificate, and is the foundation for all aviation operations. The MOS was made under regulation 91.040 of Part 91 of the *Civil Aviation Safety Regulations 1998 (CASR)*. It consolidates the existing rules of the air and contains some new rules to enhance operational flexibility, improve aviation safety, and bring Australian requirements more in line with the Standards and Recommended Practices of the International Civil Aviation Organization (**ICAO**).

The MOS amendment, which also commences on 2 December 2021, is necessary to make a number of miscellaneous minor or machinery amendments to the MOS. Their purpose is to make a range of corrections and updates to the MOS, and to relocate provisions into the MOS that are located in Civil Aviation Orders or other instruments that currently exist and are in force. These MOS amendments do not substantially alter the existing arrangements, whether as provided for by the MOS with effect on and from 2 December 2021, or as would be provided for on that date by those other instruments if they continued to exist transitionally and independently of the MOS.

Legislation

The *Civil Aviation Act 1988* (the **Act**) establishes the regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

Subsection 98 (1) of the Act provides, in part, that the Governor-General may make regulations, not inconsistent with the Act, prescribing matters required or permitted by the Act to be prescribed, or necessary or convenient to be prescribed, for carrying out or giving effect to the Act. The *Civil Aviation Regulations 1988 (CAR)* and CASR are made under the Act.

The *Civil Aviation Safety Amendment (Part 91) Regulations 2018 (Part 91 of CASR)* were registered on 18 December 2018, and amended by the *Civil Aviation Legislation Amendment (Flight Operations—Miscellaneous Amendments) Regulations 2020* registered on 6 October 2020. Part 91 of CASR commences on 2 December 2021. Under regulation 91.040 of CASR, the Civil Aviation Safety Authority (**CASA**) may issue a Manual of Standards for Part 91 of CASR that prescribes matters required or permitted by that Part to be prescribed, or necessary or convenient for carrying out or giving effect to Part 91. This power is complemented by other provisions throughout Part 91 which empower CASA to prescribe specific matters in the MOS.

Section 4 of the *Acts Interpretation Act 1901* (the **AIA**) as applied by section 13 of the *Legislation Act 2003* (the **LA**) provides, among other things, that if an Act (including a regulation) is enacted and at a time after its enactment (the **start time**) the Act will confer power to make an instrument, that power may be exercised before the start time as if the relevant commencement had occurred. However, in general terms, the exercise of this power does not confer a power or right to impose an obligation on a person before the relevant commencement. Using section 4 of the AIA, the MOS is made under regulation 91.040 of CASR, a regulation that will not commence until 2 December 2021.

The MOS amendment is made under the same head of power, and on the same basis, as the MOS itself.

For convenience in this Explanatory Statement, unless a contrary intention appears, mention of a provision with the prefix “91.” is a reference to that provision in Part 91 of CASR.

More details about the MOS amendments are set out in Appendix 2 of this Explanatory Statement.

Legislation Act 2003

Under subsection 8 (4) of the LA, an instrument is a legislative instrument if it is made under a power delegated by the Parliament, and any provision determines the law or alters the content of the law, and it has the direct or indirect effect of affecting a privilege or interest, imposing an obligation, creating a right, or varying or removing an obligation or right. The MOS satisfied these requirements and, consequentially, the MOS amendment also does so.

Under paragraphs 98 (5A) (a) and (5AA) (a) of the Act, an instrument made under regulations is a legislative instrument if it is issued in relation to matters affecting the safe navigation and operation of aircraft, and is expressed to apply to classes of persons.

On each of these criteria, the MOS is a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA. Consequentially, the same provisions and conclusions apply to the MOS amendment.

Incorporations by reference

Under subsection 98 (5D) of the Act, the MOS may apply, adopt or incorporate any matter contained in any instrument or other writing. A non-legislative instrument may be incorporated into a legislative instrument made under the Act, as that non-legislative instrument exists or is in force at a particular time or from time to time (including a non-legislative instrument that does not exist when the legislative instrument is made).

Under paragraph 15J (2) (c) of the LA, the Explanatory Statement must contain a description of the incorporated documents and indicate how they may be obtained. A Table was included in the Explanatory Statement for the MOS listing and explaining the various incorporated documents.

The MOS amendment, as such, incorporates the following further documents.

Document	Description	Manner of incorporation	Source
<i>RTCA DO-258A</i>	This document defines interoperability requirements for communication services and Air Traffic Services (ATS) applications and allocates these requirements to stakeholders. This document is called up in the definition of <i>datalink operations</i> in subsection 11.09 (1A).	As in force from time to time	This document is publicly available but subject to copyright protection. The document may be purchased from RTCA (www.rtca.org) — see below for further information.

Document	Description	Manner of incorporation	Source
<i>EUROCAE ED-100A</i>	<p>This document defines interoperability requirements for communication services and Air Traffic Services (ATS) applications and allocates these requirements to stakeholders.</p> <p>This document is called up in the definition of <i>datalink operations</i> in subsection 11.09 (1A).</p>	As in force from time to time	<p>This document is publicly available but subject to copyright protection. The document may be purchased from EUROCAE (https://eshop.eurocae.net/eurocae-documents-and-reports/) — see below for further information.</p>
<i>ICAO Doc 9869, Performance-based Communications and Surveillance (PBCS) Manual</i>	<p>This document defines <i>PBCS</i>, specifically guidance and information concerning the framework for managing communication and surveillance performance in accordance with globally accepted required communication performance (RCP) and required surveillance performance (RSP) specifications.</p> <p>This document is called up in subsections 11.09 (6) and (7).</p>	As in force from time to time	<p>This document is publicly available but subject to copyright that belongs to ICAO. It is made available by ICAO for a fee (https://store.icao.int/) — see below for further information.</p>
<i>AC 91-18 Restraint of infants and children</i>	<p>This document provides guidance regarding the requirements of regulation 91.560 of the <i>Civil Aviation Safety Regulations 1998</i> (CASR) and the Part 91 MOS relating to the restraint of infants and children.</p> <p>This document is called up in the Note in section 20.02.</p>	As in force from time to time	<p>This document is available for free on the Federal Register of Legislation website (https://www.legislation.gov.au/)</p>

Document	Description	Manner of incorporation	Source
<p>14 CFR 91.225 — regulation 91.225 of the United States Title 14 Code of Federal Regulations (CFR) titled <i>Automatic Dependent Surveillance-Broadcast (ADS-B) Out equipment and use</i></p>	<p>FAR 91 sets out the FAA general operating and flight rules. 14 CFR 91.225 sets out, within FAR 91, the FAA requirements for ADS-B equipment and its use.</p> <p>This document is defined in section 26.67 and called up in section 26.72 of the MOS.</p>	<p>As in force from time to time</p>	<p>This document is available for free on the Electronic Code of Federal Regulations website (https://www.ecfr.gov/cgi-bin/text-idx?SID=24e75b7361a31df6fc7b4b34c9208c66&mc=true&tpl=/ecfrbrowse/Title14/14tab_02.tpl).</p>
(E)TSO-C199	<p>This document provides requirements that traffic awareness beacon systems (TABs) must meet in order to be identified with the applicable ETSO marking.</p> <p>This document is used in the definition of Class A TABs and Class B TABs in 26.67 and variously called up in sections 26.72A, 26.72B and 26.72C of the MOS amendment.</p>	<p>As in force from time to time</p>	<p>This document is available for free on the EASA website (https://www.easa.europa.eu/domains/aircraft-products/etso-authorisations/list-of-all-etso).</p>
TSO-C199	<p>This document provides requirements that traffic awareness beacon systems (TABs) must meet in order to be identified with the applicable TSO marking.</p> <p>This document is used in the definition of Class A TABs and Class B TABs in 26.67 and variously called up in sections 26.72A, 26.72B and 26.72C of the MOS amendment.</p>	<p>As in force from time to time</p>	<p>This document is available for free on the FAA website (https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgTSO.nsf/MainFrame?OpenFrameSet).</p>

Document	Description	Manner of incorporation	Source
Aeronautical Information Publication (AIP)	The AIP is published by Airservices Australia to disseminate information relevant to aviation participants on matters essential to safe air navigation. Various provisions of the MOS call up this document.	As in force or existing from time to time.	The AIP is available for free on the Airservices Australia website www.airservicesaustralia.com/aip/aip.asp .

The documents mentioned above that are subject to copyright are commercial products for which there is a cost. However, these costs are not considered to be unreasonably onerous for operators to whom they are most relevant. Nevertheless, they do involve a modest impost for some others, although academic and other researchers may obtain free access through university library subscriptions.

CASA has no effective control over these product costs and it is considered extremely unlikely that the relevant owner of the intellectual property in the documents would sell CASA the copyright at a price that would be an effective and efficient use of CASA's appropriated funds, or would otherwise permit CASA to make the document freely available.

CASA has incorporated the documents in the instrument because, under the Chicago Convention, they are appropriate and necessary to modernise the safety regulatory scheme in the Part 91 MOS, and because no other similar documents that serve the same aviation safety purpose are freely available.

CASA has noted the views of the former Senate Standing Committee on Regulations and Ordinances (in its report *Parliamentary scrutiny of delegated legislation*, tabled out of session on 3 June 2019) that:

The incorporation of material by reference (particularly where that material is not publicly available) has been a longstanding concern for the committee. [para 3.65]

and:

The committee appreciates that it may in some cases be costly to provide free, public access to all incorporated Australian and international standards. Nevertheless, the committee reiterates that one of its core functions is to ensure that all persons subject to or interested in the law may readily and freely access its terms. It intends to continue to monitor this issue. Any justification for a failure to provide for public access to incorporated documents, and any action the committee takes in relation to this matter, will be determined on a case-by-case basis. [para 3.75]

CASA appreciates the Committee's concern, which remains a concern of the Senate Standing Committee for the Scrutiny of Delegated Legislation, and to mitigate the situation as far as currently practicable, proposes that where an incorporated document is copyright and not otherwise freely available to the general public, but is available to CASA as a licenced subscriber, CASA will, by prior arrangement, make CASA's copy available, for in situ viewing, free of charge, at any office of CASA.

Consultation

Under regulation 11.280 in Subpart 11.J of CASR, if CASA intends to issue a MOS, CASA must, in effect, engage in public consultation on the draft MOS. This requirement also applies to a MOS amendment.

However, under paragraph 11.275 (1) (d), CASA is not obliged to consult if the Director of Aviation Safety (the **Director**) determines that the MOS is of a minor or machinery nature that does not substantially alter existing arrangements. In such circumstances, under subregulation 11.275 (2), CASA must publish the determination, and a statement of reasons for it, on the internet within 28 days after making the determination. The Director has made such a determination because the purpose of the MOS amendment is to make a range of corrections and updates to the MOS, and to relocate into the MOS, with equivalent safety outcomes, provisions from the following existing, in force, Civil Aviation Orders or other instruments (not every provisions of an instrument mentioned below is relocated into the MOS):

- *Manual of Standards Subpart 91.U Instrument 2005*
- *CASA 30/21 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2021*
- *CASA EX40/2002 Exemption from subregulation 251 (1)*
- *Civil Aviation Order 20.18 (Aircraft equipment — basic operational requirements) Instrument 2014 (as amended).*

The MOS amendments do not substantially alter the existing arrangements, whether as provided for by the MOS with effect on and from 2 December 2021, or as would be provided for on that date by the relevant provisions of those other instruments if they continued to exist transitionally and independently of the MOS.

Appendix 3 provides further information on why each amendment is of a minor or machinery nature.

There has, nevertheless, been considerable informal consultation with the aviation industry in the course of preparation of the amendments. Many of the amendments have arisen due to extensive feedback from the aviation industry to CASA via multiple communication channels, both individual direct feedback, and collective feedback from various working groups.

Regulation Impact Statement

A Regulation Impact Statement (**RIS**) was prepared by CASA for the new Part 91 and this RIS also covered the MOS and the MOS amendment which the regulations empowered. The RIS was assessed by the Office of Best Practice Regulation (**OBPR**) as compliant with the Best Practice Regulation requirements and contained a level of analysis commensurate with the likely impacts (OBPR id: 23625). A copy of the RIS was included in the Explanatory Statement for the new Part 91 regulations (<https://www.legislation.gov.au/Details/F2018L01783/Download>).

Statement of Compatibility with Human Rights

A Statement of Compatibility with Human Rights is at Appendix 1. This concludes that the MOS amendment, as a set of minor or machinery amendments, is compatible with human rights.

Commencement and making

The MOS amendment commences immediately after the commencement of Part 91 of CASR and the MOS, on 2 December 2021. The empowerment for the MOS amendment, contained in Part 91, in particular in regulation 91.040, had not commenced when the MOS amendment was made. However, this is permitted under section 4 of the AIA which authorises the anticipatory making of a subordinate instrument in these circumstances, provided the instrument does not commence until (or after) the delayed empowering instrument has itself commenced.

The MOS amendment has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the
Human Rights (Parliamentary Scrutiny) Act 2011*

Part 91 MOS Amendment Instrument 2021 (No. 1)

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

The *Part 91 MOS Amendment Instrument 2021 (No. 1)* (the **MOS amendment**) amends the *Part 91 (General Operating and Flight Rules) Manual of Standards 2020* (the **MOS**).

The MOS, which commences on 2 December 2021, sets out the standards for “the rules of the air” for all pilots, and the general operating rules for pilots who are not operating under an Air Operator’s Certificate (**AOC**) or other certificate, and is the foundation for all aviation operations. The MOS was made under regulation 91.040 of Part 91 of the *Civil Aviation Safety Regulations 1998 (CASR)*. It consolidates the existing rules of the air and contains some new rules to enhance operational flexibility, improve aviation safety, and bring Australian requirements more in line with the Standards and Recommended Practices of the International Civil Aviation Organization (**ICAO**).

The MOS amendment, which also commences on 2 December 2021, is necessary to make a number of miscellaneous minor or machinery amendments to the MOS. Their purpose is to make a range of corrections and updates to the MOS, and to relocate provisions into the MOS that are located in Civil Aviation Orders or other instruments that currently exist and are in force. These MOS amendments do not substantially alter the existing arrangements, whether as provided for by the MOS with effect on and from 2 December 2021, or as would be provided for on that date by those other instruments if they continued to exist transitionally and independently of the MOS.

Human rights implications

When it was made, the Explanatory Statement for the MOS explained that, of their very nature in addressing aviation safety issues, its provisions may engage the following human rights:

- the right to life under Article 6 and the right to privacy and reputation under Article 17 of the International Covenant on Civil and Political Rights (the **ICCPR**)
- the right to work under Article 6 (1) and the right to safe and healthy working conditions under Article 7 of the International Covenant on Economic, Social and Cultural Rights (the **ICESCR**).

That earlier Explanatory Statement concluded that the MOS was a legislative instrument that was compatible with human rights and, to the extent that it may also limit human rights, the limitations were reasonable, necessary and proportionate to ensure the safety and the integrity of the aviation safety system upon which all aviation operations rely.

The MOS amendment is also a legislative instrument but it contains only minor or machinery amendments as explained above, and these do not, of themselves, directly engage human rights, nor do they increase any engagement with human rights already recorded in the Explanatory Statement for the MOS as amended. The instrument is, in itself, therefore, compatible with human rights.

Conclusion

The MOS is a legislative instrument that is compatible with human rights.

Details of the Part 91 MOS Amendment Instrument 2021 (No. 1)

1 Name of instrument

This section 1 provides for the naming of the *Part 91 MOS Amendment Instrument 2021 (No. 1)* (the *MOS amendment*).

2 Commencement

This section provides for the commencement of the MOS amendment on 2 December 2021.

3 Amendment of Part 91 Manual of Standards

This section provides that Schedule 1 amends the *Part 91 (General Operating and Flight Rules) Manual of Standards 2020* (the *MOS*).

Schedule 1 Amendments

[1] Subsection 1.05 (1), including the Note

Amendment 1 provides that in the MOS amendment, unless a contrary intention appears, a reference to a particular AS/NZS standard is a reference to the particular joint Australian and New Zealand Standard (the *standard*), as applicable; or a later version of the standard, as applicable. “Applicable”, in relation to the standard, is a reference to the version of the standard that was in existence and applicable to the thing on the date of its manufacture.

[2] Subsection 1.07 (6), definitions and abbreviations

Amendment 2 adds new definitions to the MOS.

[3] Subsection 1.07 (6), definitions and abbreviations

Amendment 3 deletes some redundant definitions from the MOS.

[4] Subsection 1.07 (6), definition of *approved provider*

[5] Subsection 1.07 (6), definition of *MSA, or minimum sector altitude*

[5A] Subsection 1.07 (6), paragraphs (a) and (b) of the definition of *navigational tolerance*

[6] Subsection 1.07 (6), definition of *precision approach procedure*

[7] Subsection 1.07 (6), definition of *QNH*

[8] Subsection 1.07 (6), definition of *RVSM or reduced vertical separation minimum*

[9] Subsection 1.07 (6), definition of *VFR climb/descend*

[10] Subsection 1.07 (6), definition of *VFR-on-top*

Amendments 4 to 10 modify some existing definitions in the MOS.

[11] Section 2.02

Amendment 11, for the definition of *specified aircraft performance category* in this MOS section, removes the operational airspeed limitations of the performance categories. References to the speed ranges are now in section 14.09.

- [12] **Paragraph 2.05 (2) (b)**
Amendment 12 corrects an editorial error.
- [13] **Section 2.09, Table 2.09 (1)**
Amendment 13 adds an explanatory Note.
- [14] **Section 2.10, Table 2.10 (1)**
Amendment 14 adds omitted superscripts for the FL110, FL115, FL120, FL125 items.
- [15] **Section 2.10, Table 2.10 (1)**
Amendment 15 adds an explanatory Note.
- [16] **Section 4.01, the Note**
Amendments 16 adds an additional section reference to the existing Note.
- [17] **Section 4.02, Table 4.02 (1), column 3, item 2**
Amendment 17 provides for ATC-authorized maximum indicated air speed variations that had been omitted.
- [18] **Paragraph 5.02 (2) (a)**
Amendment 18 corrects an editorial.
- [19] **Section 6.01**
Amendment 19 corrects an editorial error.
- [20] **Subsection 7.02 (1)**
Amendment 20 is consequential on Amendment 22.
- [21] **After subsection 7.02 (1)**
Amendment 21 requires weather information that was studied more than an hour before take-off, to be updated and reviewed in the hour before take-off.
- [22] **After subsection 7.02 (5)**
Amendment 22 disappplies certain specific flight planning forecast requirements in the case of an IFR flight that is a Part 121 operation.
- [23] **Subsection 7.03 (2)**
Amendment 23 sets out the requirements in which certain flights, that departed without certain weather forecast or reports, must return to the departure aerodrome if the required reports are not obtained within 30 minutes of departure.
- [24] **Subsection 8.04 (3)**
Amendment 24 provides for when the pilot in command of an aircraft must nominate a destination alternate aerodrome in the absence of a forecast for the planned destination aerodrome.
- [25] **Subsection 8.08 (1), Table 8.08 (1), column 2, item 2, paragraph (b)**
Amendment 25 clarifies that Day IFR is the intended type of operation for certain alternate minima at Australian aerodromes.
- [26] **Paragraph 8.08 (3) (c), the Note**
Amendment 26 corrects an editorial error in the Note.
- [27] **Section 9.01, at the foot**
Amendment 27 adds an explanatory Note.

[28] Paragraph 9.02 (2) (b)

Amendment 28 requires that flight notification is required where a flight over water is conducted beyond a distance from land greater than that which would allow the aircraft to reach land with an engine inoperative.

[29] Subsection 9.02 (2)

Amendment 29 requires the pilot in command to ensure that flight notification is undertaken rather than require that the pilot in command must personally undertake them.

[30] Subsection 9.03 (1)

Amendment 30 requires a pilot in command to ensure that changes to certain flight notifications are conveyed to ATS rather than require that the pilot in command must personally communicate them.

[31] Paragraph 9.03 (1) (h)

Amendment 31 excepts an Australian air transport operation from the requirement to notify ATS of changes in the number of people on board the aircraft because there are alternative requirements for such operators to have access to updated passenger lists at all times.

[32] Subsection 9.03 (2)

Amendment 32 requires a pilot in command to ensure that certain SARTIME-related changes are conveyed to ATS rather than require that the pilot in command must personally communicate them.

[33] Section 9.04

Amendment 33 requires a pilot in command to ensure that SARTIME is appropriately cancelled rather than require that the pilot in command must personally perform the cancellation.

[34] Paragraph 9.05 (2) (b)

Amendment 34 broadens beyond telephones the range of communication tools that a responsible person for receipt of a flight note must have access to.

[35] Section 10.02

Amendment 35 requires a pilot in command to ensure that pre-take-off checks are completed rather than require that the pilot in command must personally complete them.

[36] Subparagraph 10.02 (j) (iv)

Amendment 36 reflects the existing Civil Aviation Order (*CAO*) 20.7 requirement that an oxygen mask be operative rather than just connected to the aircraft's communication system.

[37] Subsection 10.03 (3), including the Note

Amendment 37 removes subparagraph (3) as this requirement is already covered by CASR 91.150 and CAR 50.

[38] Subsection 11.02 (3), Table 11.02 (3), after item 4

Amendment 38 corrects the omission of an Area QNH value for FL 130 in the transition level Table.

[39] RESERVED**[40] Section 11.03, heading**

Amendment 40 provides for a more accurate section heading.

[41] After subsection 11.03 (1)

Amendment 41 provides that ATS must be notified as soon as practicable if an aircraft, declared in a flight plan as capable of navigating to the RNP 2, RNP 4 or RNP 10 navigation specification, does not have at least 2 independent and operative long-range navigation systems (*LRNSs*) confirmed before entering oceanic airspace.

[42] Paragraph 11.06 (a)

Amendment 42 corrects an editorial error to include rotorcraft, not just aeroplanes.

[43] Section 11.08

Amendment 43 clarifies the way CASA may approve flights in NAT-HLA airspace by including the criteria on which such approvals may be issued.

[44] Section 11.09

Amendment 44 reflects existing instrument CASA 30/21 whose contents are now relocated into the MOS. For the flight of an aircraft in any class of airspace that involves datalink operations using FANS 1/A, where flight plans declare RCP or RSP capabilities, certain procedural steps must be followed and technical requirements met. Thus, in effect, before declaring RCP 240 or RSP 180 capabilities on a flight plan, the pilot in command must check with the operator to ensure that any previous consistent failure has been remedied. A declaration must not be made unless various equipment, documentation, and communication service requirements have been met and evidenced through a statement of compliance, for example, in the AFM, an original equipment manufacturer's letter, or the equipment designer's document. The pilot in command must also be reasonably satisfied that an agreement, or a request for agreement, is in place between the operator and the communication service provider underpinning specific aspects of the technical effectiveness and reliability of the datalink operations and messages, and addressing the need for network-allocated requirements for the RCP 240 and RSP 180 specifications to be met.

[45] Sub-subparagraph 11.10 (2) (b) (iv) (A)

Amendment 45 removes a superfluous reference to minimum sector altitude (MSA).

[46] After section 11.10 (new section 11.10A)

Amendment 46 is designed to achieve, in section 11.10A, equivalent safety outcomes to the requirements of existing instruments CASA 490/05 and CASA 97/13. The amendment identifies mandatory broadcast areas (*MBAs*) and their requirements via a table. The radio broadcasts or reports required to be made in relation to an MBA, or the radio carriage or fitment requirements for flight within an MBA, are contained in sections 21.09 and 26.18, respectively. For Class G airspace, it is provided that a volume of Class G airspace is an MBA if it is so specified in the AIP (as in force from time to time), including for circumstances in which an Airservices Australia Surveillance Flight Information Service (an *SFIS*) is active for the MBA.

[47] Section 11.11

Amendment 47 inserts a new cross-referencing Note in relation to operations conducted at controlled aerodromes.

[48] Section 11.13, heading

Amendment 48 provides for a more accurate section heading.

[49] Sections 11.14 and 11.15

Amendment 49 is designed to achieve, in section 11.14, the reservation of a section of the MOS, in a suitable location, for the future insertion, if appropriate following consultation, of any additional requirements relating to controlled aerodromes. Section 11.15 reflects an editorial change to merge former section 11.14 about entry into Class A, B, C or E airspace, and section 11.15 (about entry into Class D airspace) into a single section so that the requirements are consistently expressed.

[50] Section 11.17

Amendment 50 is an editorial correction.

[51] After subsection 11.17 (1)

Amendment 51 provides that a pilot in command of an IFR flight may only request a clearance for a VFR climb or VFR descent in a control area that is Class D or Class E airspace.

[52] After subsection 11.17 (3)

Amendment 52 provides that a pilot in command of an IFR flight may only request a clearance for a VFR-on-top operation in a control area that is Class E airspace.

[53] After paragraph 11.17 (4) (c)

Amendment 53 adds a new Note to explain the scope of maintaining separation from other aircraft.

[54] Section 11.22, the Note

Amendment 54 corrects an incorrect citation in a Note.

[55] Section 12.03

Amendment 55 adds a Note to explain what the word “Reserved” means when used as a placeholder.

[56] Subparagraph 14.02 (1) (c) (i)

Amendment 56 corrects a drafting error to clarify that for an IFR flight, navigation by visual reference to the ground or water may only be used when neither area navigation nor a ground-based navigation aid can be used.

[57] Paragraphs 14.03 (1) (b), (c) and (d)

Amendment 57 removes the option for a pilot in command to use an actual QNH within 100 nautical miles from an approved source, as a QNH setting option in an instrument approach. This option was incompatible with instrument approach design standards and was mistakenly included in subsection 14.03 (1).

[58] After section 14.08

Amendment 58 creates a new section 14.09, and a related table, to contain the requirements for the operation of an aircraft in a specified aircraft performance category. These requirements were previously incorrectly located in section 2.02. The effect is that when conducting an authorised instrument approach procedure in IMC in an aircraft in a specified aircraft performance category or a higher specified aircraft performance category, the pilot in command must ensure that the aircraft is operated within the range of, or at not more than the maximum, indicated air speed provided for in the table.

However, the aircraft must not be operated at a lower specified aircraft performance category without CASA approval.

[59] Section 15.02, definition of *qualifying multi-engine aeroplane*

Amendment 59 modifies the definition of *qualifying multi-engine aeroplane* to better reflect the requirements already contained in instrument CASA 270/14. This will permit any propeller-powered, multi-engine aeroplane to be a qualifying multi-engine aeroplane, if it has 2 pilots, or if single piloted, it has operative autofeather.

[60] Paragraph 15.07 (2) (a)

Amendment 60 substitutes the use of the defined term V_{yse} (best rate of climb speed with OEI) with the defined term V_y (best rate of climb speed). This replacement was necessary as V_{yse} is not the correct defined term in relation to rotorcraft. This change then modifies one of the take-off minima for a qualifying multi-engine rotorcraft to be a cloud ceiling not lower than the height at which V_y or V_{min} IMC (the minimum operating speed in IMC) can be achieved (whichever is the greater).

[61] Section 15.09

Amendment 61 corrects an omission by providing for landing minima in a low-visibility operation — they must be as specified in a CASA approval. The amendment also makes it clear that the landing minima requirement is that the pilot in command must not land when the conditions are below the landing minima.

[62] After subsection 15.10 (6)

Amendment 62 corrects an omission by providing for landing minima for an IFR aircraft that is flying to an aerodrome that does not have an authorised instrument approach procedure or there is no procedure available that the flight crew members can utilise.

[63] After subparagraph 15.11 (2) (b) (ii)

Amendment 63 adds a new Note to provide guidance on non-precision approaches (*NPA*s) that have a minimum flight visibility of 5 km, but where the geographical point of attaining the minimum altitude is more than 5 km from the prescribed visual references.

[64] Paragraph 16.01 (2) (a)

Amendment 64 is an editorial correction.

[65] Paragraphs 16.03 (4) (b) and (c), including the Note

Amendment 65 corrects RVR zone requirements so that a MID RVR report is required if the END RVR zone is not providing valid reports, and an END RVR report is required if the MID RVR is not providing valid reports.

[66] Section 17.01

Amendment 66 adds a Note to explain what the word “Reserved” means when used as a placeholder.

[67] Section 18.01

Amendment 67 updates a previously Reserved provision about who may start the engine of an aeroplane or cause the engine to be started — the relevant prescription is a person operating an aeroplane for maintenance or maintenance training.

[68] Section 19.02, Table 19.02 (2)

Amendment 68 replaces the use of the defined terms *small aeroplane* and *large aeroplane* with more direct references to the specific conditions. It also removes existing item 7 of the table that contained a night VFR fuel requirement that is not present in

Table 1 of the existing instrument CASA 29/18. Specifically in relation to rotorcraft, the MOS intended to carry across the existing provisions of items 5 and 6 of Table 1 of CASA 29/18.

[69] After subsection 19.04 (4)

Amendment 69 corrects an omission in relation to fuel required when an aircraft that is unable to land at the planned destination aerodrome diverts to the planned destination alternate. The pilot in command must ensure that the aircraft is carrying appropriate destination alternate fuel, holding fuel, and final reserve fuel.

[70] Subsection 20.01 (2)

Amendment 70 is intended to replicate the regulatory effects of existing instrument CASA EX40/2002. It extends alleviation from seating requirements in medical transport operations if the patient is an infant, or a child under the age of 6, for whom a safety harness is considered detrimental and who can instead be carried (for an infant) inside an incubator, humidicrib, or other neonatal transport unit, or (for an infant or a child) in the arms or on the lap of an adult occupying a seat, in accordance with the procedures in the operator's exposition.

[71] Section 20.02

Amendment 71 adds a new signpost Note for where to obtain general guidance on infant and child restraints.

[72] Paragraph 20.03 (1) (c)

Amendment 72 removes an erroneous requirement that an infant seatbelt must be approved under Part 21 of CASR.

[73] After subsection 20.03 (2)

Amendment 73 is intended to replicate the effect of the requirements under CASA EX127/18 and CASA EX123/19 providing alternative means of child restraint. Thus, a child who is not more than 12 years old may be restrained as if an infant, in a seated adult person's arms or lap if the responsible adult produces a medical certificate stating that the child has a serious medical condition which prevents sitting upright unaided, is nevertheless fit to travel, and weighed less than 16 kg on the date of the certificate.

[74] Subsection 20.04 (1), definition of *automotive child restraint system*

Amendment 74 adds a new signpost Note for AS/NZS standards.

[75] Subsection 20.04 (2)

[76] Paragraphs 20.04 (2) (b), (c), and (d)

[78] Paragraph 20.04 (3) (b)

Amendments 75, 76 and 78 are designed to ensure that provisions for child restraint systems also apply for infants.

[77] Subsection 20.04 (2)

Amendment 77 adds a new Note containing advice for operators and pilots in command in relation to securing a child restraint system in accordance with the manufacturer's instructions.

[79] Paragraph 20.6 (r)

Amendment 79 is intended to capture a passenger safety briefing requirement peculiar to parachuting so that the briefing must include the physical locations within, or on, the

aircraft that the passenger must occupy during the flight in order to ensure the aircraft is operated within the aircraft's weight and balance limits during the flight.

[80] Section 20.07

Amendment 80 adds a Note to explain what the word "Reserved" means when used as a placeholder.

[81] Section 21.01

Amendment 81 corrects an omission from the MOS by prescribing 2 radio frequencies on which a person must not transmit unless they are appropriately authorised or qualified, namely, the CTAF for a non-controlled aerodrome and the frequency for an MBA.

[82] Section 21.02

Amendment 82 requires a pilot in command to ensure that certain broadcasts and reports relating to a flight are made rather than require that the pilot in command must personally make them.

[83] Section 21.03, including the Note

Amendment 83 corrects an editorial error.

[84] Section 21.04, heading

Amendment 84 provides for a more accurate section heading.

[85] Subsection 21.04 (1)

Amendment 85 requires a pilot in command to ensure that broadcasts on the CTAF are made, as prescribed, for a non-controlled aerodrome, rather than require that the pilot in command must personally make them.

[86] Paragraph 21.04 (1) (a)

Amendment 86 corrects an editorial error.

[87] Subsection 21.04 (1)

Amendment 87 adds a new signpost Note to point to additional broadcast requirements for a non-controlled aerodrome in a mandatory broadcast area.

[88] Subsection 21.04 (2)

Amendment 88 requires a pilot in command to ensure that certain broadcasts on the CTAF are made, as prescribed, for a non-controlled aerodrome, rather than require that the pilot in command must personally make them.

[89] Subsection 21.04 (2), Table 21.04 (1)

Amendment 89 removes a redundant column from the table.

[90] Section 21.05

Amendment 90 replaces the existing section 21.05 of the MOS. Specific changes include correctly applying the section to pilots in command of aircraft on the ground of controlled aerodromes, requiring a relevant pilot in command to ensure that reports are to the ATC service instead of the more generic air traffic service, and modifying the section to not require a pilot in command to personally make the required reports and broadcasts, but rather require the pilot in command to ensure the reports and broadcasts are made. The amendment also retitles and modifies *Table 21.05 (1) — An aircraft at a controlled aerodrome, or in Class A, B, C or D airspace, or an IFR aircraft in Class E airspace — reports*, to clarify when airborne, departure and position reports are required. The amendment moves item 9 of Table 21.06 (1) into Table 21.05 (1) as this reporting

obligation occurs before the aircraft leaves controlled airspace on descent. The amendment adds a special rule to ensure the report related to this new item added to Table 21.05 (1) is made to the air traffic service for the Class G airspace volume that an aircraft will descend into after leaving controlled airspace, rather than to the air traffic control service for the controlled airspace within which the aircraft is still present.

[91] Sections 21.06, 21.07, 21.08

Amendment 91 requires (subsection 21.06 (1)) a pilot in command of an IFR aircraft in Class G airspace to ensure that reports to the air traffic service, and other required reports and broadcasts, are made in accordance with the relevant prescriptions, rather than make the reports personally.

The amendment also addresses (subsection 21.06 (2)) an omission in relation to remote aerodromes in Australian territory that do not have VHF coverage that enables aircraft on the surface of the aerodrome (where the taxiing call is made), or at low level after departure (where the departure call is made) to make radio contact with ATS. The amendment provides that if the pilot in command of an IFR aircraft in Class G airspace is unable to make relevant contact with the air traffic service, the aircraft may taxi and take-off if other prescribed broadcasts are made, contact with the air traffic service is established as soon as possible after take-off, and for AOC holders, aerial work operators, and Part 141 certificate holders, relevant on-the-ground radio contact is assured or, for larger Part 121 aircraft, a prescribed SARTIME is established.

The amendment requires (subsection 21.07 (1)) a relevant pilot in command of a VFR aircraft in Class E or G airspace to ensure that reports to the air traffic service, and other required reports and broadcasts, are made in accordance with the relevant prescriptions, rather than make the reports personally.

The amendment requires (section 21.08) a relevant pilot in command of a flight in RVSM airspace within an Australian FIR to ensure that certain FL deviation reports are made rather than make the reports personally.

The amendment (section 21.09) contains provisions previously located in other instruments concerning mandatory broadcast areas to ensure that the pilot in command of an aircraft intending to operate in an MBA must make prescribed broadcasts and reports, containing specifically prescribed information depending on whether or not an SFIS is active for the MBA.

[92] Paragraphs 26.01 (3) (b) and (c)

Amendment 92 is consequential on the relocation of paragraph (c), about serviceability of equipment, to section 26.04.

[93] Subsection 26.02 (2)

Amendment 93 modifies section 26.02, about aircraft equipment approvals, so that, although certain aircraft equipment must be compliant with, or approved under, Part 21 of CASR, this requirement does not apply to surveillance equipment for certain light sport or experimental aircraft as detailed in Division 26.16.

[94] Subsection 26.02 (5)

Amendment 94 (removal of subsection 26.02 (5)) is consequential on amendment 93 (modification of subsection 26.02 (2)) because a Part 21 approval would no longer be required for surveillance equipment, making the subsection 26.02 (5) relief redundant.

[95] Subsection 26.02 (7)

Amendment 95 adds a new signpost Note in relation to surveillance equipment.

[96] Section 26.04

Amendment 96 more clearly mandates that any equipment required by Chapter 26 to be fitted to, or carried on, an aircraft for a flight must be operative unless another section of the Chapter provides otherwise, or a permissible unserviceability is involved. A new Note is added to explain the limitations of a minimum equipment list (*MEL*).

[97] Subsection 26.07 (1)

Amendment 97, in effect, adds 2 new signpost Notes.

[98] Subsection 26.08 (1)

Amendment 98 adds a new signpost Note.

[99] Subsection 26.11 (1)

Amendment 99, in effect, adds 2 new signpost Notes.

[100] Subsection 26.11 (4)

Amendment 100 recasts the MOS original for clarity, so the negative “must not begin a flight if” formulation becomes a positive “must not begin a flight unless” formulation, without changing the original effect. A new Note about visual external surface cues is also added.

[101] Subsection 26.12 (1)

Amendment 101 adds a new signpost Note.

[102] Subsection 26.18 (2)

Amendment 102 is consequential of amendment 104.

[103] After subsection 26.18 (3)

Amendment 103 is a new requirement to ensure that radios are fitted in mandatory broadcast areas (*MBAs*) despite not being required for a flight under the VFR by day in Class G airspace at or below 5 000 ft AMSL. A new signpost Note about MBAs is also added.

[104] Paragraphs 26.19 (c) and (d)

Amendment 104 provides, in effect, that an aircraft for which a radiocommunication system is required may begin a flight with inoperative radiocommunication system in Class G airspace above 5 000 ft AMSL, or when conducted in an MBA at any altitude) if certain prescribed conditions are met, including that the flight is conducted during the day in VMC, in-company with another, appropriately authorised, operative-radio-carrying, aircraft which makes all required broadcasts and reports for both aircraft.

[105] Subsection 26.22 (5) (second occurring)

Amendment 105 makes an editorial correction.

[106] Subsection 26.24 (1)

Amendment 106 removes the phrase “or in poor visibility” as it could not be practically complied with by pilots. While poor visibility conditions may be predicted by weather forecasts, the prediction of these conditions is not guaranteed. As a result, as currently written, this provision could generate an outcome where pilots commit an offence that they could not reasonably predict or avoid. Additionally, poor visibility was not legally

defined and the provision, therefore, lacked sufficient specificity to enable reasonable compliance.

[107] Section 26.27

[108] Section 26.28

[109] Section 26.29

Amendments 107, 108 and 109 each add a Note to explain what the word “Reserved” means when used as a placeholder.

[110] Paragraph 26.31 (a)

Amendment 110 corrects an editorial error.

[111] Subparagraph 26.32 (a) (i)

Amendment 111 corrects an editorial error.

[112] Section 26.39

Amendment 112 adds a Note to explain what the word “Reserved” means when used as a placeholder.

[113] Subsection 26.43 (1)

Amendment 113 corrects the mention of 10 000 ft pressure altitude which was an error, and inserts the correct pressure altitude of FL125.

[114] Subsection 26.52 (1)

Amendment 114 relates to section 26.52 which deals with when flight is permitted with an inoperative electronic locator transmitter (*ELT*). The amendment is designed to avoid the possibility of aircraft flight over water equipped with a raft but with inoperative ELT.

[115] Paragraph 26.53 (3) (c)

Amendment 115 recasts the paragraph in a clearer form without changing its previous meaning.

[116] Section 26.55, heading

Amendment 116 provides for a more accurate section heading by including mention of rotorcraft which do not fall within the definition of “amphibian” aircraft.

[117] Subsection 26.55 (1)

Amendment 117 ensures that section 26.55, about sea anchors and mooring equipment, applies only to a seaplane and an amphibian but also to a rotorcraft designed to take off from, and land on, water or land.

[118] Section 26.63, Definitions, including the Note

Amendment 118 corrects an incorrect section citation.

[119] Paragraph 26.65 (1) (a)

Amendment 119 reflects the disuse of the unmapped Talgarno as a waypoint, and its replacement by an existing VFR waypoint known as Anna Plains which appears in the En Route Supplement Australia.

[120] Section 26.65, Figure 26.65-1 Central Australia remote area

Amendment 120 replaces the previous map of the Central Australia Remote Area with a new map showing Anna Plains, as follows:

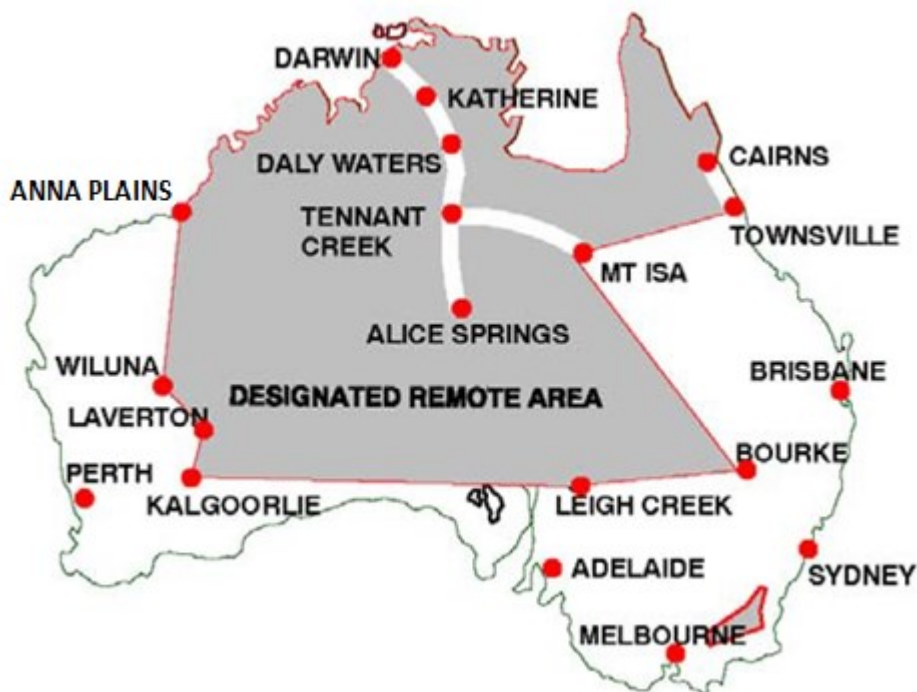


Figure 26.65-1 Central Australia Remote Area

[121] Section 26.66 and the immediately following Division heading

Amendment 121 inserts a new Division 26.16 concerning surveillance equipment. New section 26.66 is intended to reflect updates previously made to the analogous provisions in CAO 20.18 in relation to such equipment.

Section 26.66 excludes certain sport and experimental aircraft from any requirement in the Division that surveillance equipment be authorised in accordance with a particular TSO or ETSO, if the configuration of the surveillance equipment that is already fitted or carried provides the same surveillance capability, and the pilot or the operator has a statement of conformance from the equipment manufacturer stating the particular standard or standards of the TSO or ETSO with which the equipment conforms.

The same exclusion applies to the requirement in subsection 26.75 (4) that an approved integrated TABS device be authorised by the relevant NAA of the equipment manufacturer if the configuration of the equipment that is already fitted or carried provides the same surveillance capability as would be provided if the equipment had been expressly authorised by the relevant NAA, and the pilot or the operator has a statement of conformance from the equipment manufacturer stating the equipment meets the requirements of the Division.

[122] Section 26.67, Definitions

Amendment 122 amends or adds to the existing definitions for the Division, some of which give rise to incorporations by reference which are explained in the Incorporations by Reference section of this Explanatory Statement.

[123] Section 26.67, paragraph (b) of definition of *assigned aircraft address*

Amendment 123 removes from the definition mention of Part 103 of CASR which is incorrect.

[124] Section 26.67, definition of EASA CS-ACNS

Amendment 124 corrects the definition by providing for the relevant standards to be those in the 17 December 2013 version of the EASA document referred to, or those in any later version of that EASA document.

[125] Section 26.67, definition of NACp

Amendment 125 updates the paragraph reference, in the RTCA/DO-260B document, for the source of the specification of Navigation Accuracy Category – Position.

[126] Section 26.67, definition of NIC

Amendment 126 updates the paragraph reference, in the RTCA/DO-260B document, for the source of the specification of Navigation Integrity Category. The amendment also corrects a typographical error in the citation of the RTCA/DO-260B document.

[127] Section 26.67, definition of RTCA/DO-260B

Amendment 127 corrects the definition by providing for the relevant standards to be those in the 2 December 2009 version of the RTCA document, unless a later version, as in force from time to time, is expressly referred to.

[128] Section 26.67, definition of SIL

Amendment 128 updates the paragraph reference for the source of the specification of Source Integrity Level in RTCA/DO-260B.

[129] Section 26.68

Amendment 129, after replacing the term “transponder” with “surveillance equipment”, replicates subsection 26.68 (1) in prescribing required surveillance equipment and the requirements it must meet. New subsection 26.68 (2) provides that an aircraft operating at Brisbane, Sydney, Melbourne or Perth aerodrome must be fitted with, or carry, at least 1 approved Mode S transponder with ADS-B capability — this requirement was previously in existing Table 26.68 (2).

This table of surveillance equipment requirements is further modified by including alternative equipment requirements for VFR operations in various classes of airspace above and below FL290. For Class E airspace not above FL290, and Class G from 10 000 ft to not above FL290, the surveillance equipment requirements do not apply to an aircraft if the aircraft does not have an engine, or sufficient engine-driven electrical power generation capacity to power the equipment.

[130] After section 26.68 (new section 26.68A)

Amendment 130 creates a new section 26.68A which tabulates the surveillance equipment, and circumstances, for an aircraft to be fitted with, or carry, optional, as opposed to required, surveillance equipment.

[131] Section 26.69

Amendment 131 updates and reorders some aspects of the existing section 26.69 in prescribing general requirements for surveillance equipment. Surveillance equipment, whether required or optional, must be continuously operated during prescribed circumstances, though if an aircraft is fitted with more than 1 approved transponder, only 1 transponder is to be operated at any time. Unless otherwise required by ATC, an aircraft that is flying in formation with, or is in-company with, 1 or more other aircraft, is not required to operate surveillance equipment if serviceable surveillance equipment is operated by any of the other aircraft at all times while the aircraft are flying in formation or are in-company.

Transponder Mode A standard codes are prescribed for various kinds of flights and different classes of airspace. Mandatory Mode A codes are prescribed for different kinds of emergencies and these must be used unless the pilot reasonably believes that maintaining an existing Mode A code would result in a safer outcome. A rule prescribes how pressure altitude information reported by an approved transponder or approved ADS-B OUT equipment configuration is to be determined.

[132] Section 26.70, heading

Amendment 132 provides for a more accurate section heading.

[133] Paragraph 26.70 (1) (b)

Amendment 133 makes an editorial correction.

[134] Subparagraph 26.70 (1) (b) (ii)

Amendment 134 removes an incorrect mention of an ASAO identifier as input for an approved Mode S transponder.

[135] Subsection 26.70 (2)

Amendment 135 updates the range of fitted or carried equipment that can transmit an approved ADS-B OUT signal so that it now includes an approved integrated TABS configuration and an approved EC device configuration, for which prescribed identifying data must be inputted.

[136] Subparagraph 26.70 (2) (b) (ii)

Amendment 136 removes an incorrect mention of an ASAO identifier as input for an approved Mode S transponder.

[137] Subsection 26.70 (5), Note 2

Amendment 137 makes an editorial correction.

[138] Subsection 26.70 (7)

Amendment 138 updates the range of fitted or carried equipment that can transmit an approved ADS-B OUT signal. An aircraft with the equipment other than this equipment must not fly in Australian territory unless the equipment is deactivated or set to zero for certain prescribed values.

[139] Subparagraph 26.71 (1) (b) (i)

Amendment 139 makes an editorial correction.

[140] Section 26.72

Amendment 140 corrects the alternate ADS-B OUT equipment configuration approval requirements because they did not reflect the existing CAO 20.18 prescriptions whose effect it was intended to replicate.

[141] After section 26.72

Amendment 141 inserts 3 new sections to prescribe requirements for surveillance equipment in the form of certain approved Mode S transponders (new section 26.72A), approved integrated traffic awareness beacon system (TABS) devices (new section 26.72B), and approved equipment configuration (EC) devices (new section 26.72C). These requirements are taken, unchanged in any material particulars, from Appendix XII of CAO 20.18 to be more appropriately relocated to the Part 91 MOS.

[142] Section 26.73

Amendment 142, dealing with inoperative equipment under section 26.73, updates the terminology from transponders to the more generic surveillance equipment to be consistent with the other changes in Chapter 26. The amendment also inserts a necessary safety requirement that before an aircraft commences a flight with inoperative surveillance equipment, the pilot in command must inform ATS about the unserviceability.

[143] After subsection 28.03 (4)

Amendment 143, based on existing instrument CASA 30/21, adds a new subsection to section 28.03 to ensure that an aircraft fitted with airborne collision avoidance system (the *ACAS*) includes in its MEL information regarding the aircraft's RCP 240 and RSP 180 capabilities.

Part 91 MOS Amendment Instrument 2021 (No. 1)

Explanation of minor or machinery nature

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
1	1.05 (1), including the Note	Added clarifying information regarding how a specific date works when used in conjunction with an AS/NZS standard in the MOS.	<u>Minor change</u> Text added to provide useful clarifying comments to industry regarding how AS/NZS dates work when prescribed in the MOS.
2	1.07 (6), Definitions	Added a cross-reference definition of “approved GNSS position source”.	<u>Minor change</u> The term <i>approved GNSS position source</i> is currently only used in the surveillance equipment division of the equipment Chapter and originally did not need MOS-wide application. However, another change in this instrument resulted in this defined term being used in section 26.67 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Added definition for “ATS surveillance service”.	<u>Minor change</u> The term <i>ATS surveillance service</i> is used in item 2 of Table 21.05 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Added definition for “ATS surveillance system”.	<u>Minor change</u> The term <i>ATS surveillance system</i> is used in item 2 of Table 21.05 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Definition for “FATO” amended to align with Part 138 MOS definition.	<u>Minor change</u> The term <i>FATO</i> is amended to use the same wording as Part 138 MOS, which points to the CASA Dictionary. The Part 91 MOS and Part 138 MOS definitions should be aligned, and the proposed amendment will achieve that by adopting the Part 138 definition

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
			into Part 91 MOS.
2	1.07 (6), Definitions	Added definition for “flying in formation”.	<u>Minor change</u> The term <i>flying in formation</i> is used in sections 6.01 and 26.69 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Added definition for “in-company”.	<u>Minor change</u> The term <i>in-company</i> is used in section 26.69 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Definition for “jump aircraft” added to align with Part 105 MOS definition, for use in section 20.06.	<u>Minor change</u> The term <i>jump aircraft</i> is used in section 20.06 which necessitated this definition being included in subsection 1.07 (6).
2	1.07 (6), Definitions	Added the definition of “LOA”.	<u>Minor change</u> The term <i>LOA</i> is being added to support the definition of <i>Type 2 LOA</i> , which in turn is needed to correct the definition of <i>approved provider</i> in the MOS which is incorrect and is being corrected by these amendments. The definition is being added to achieve existing instrument’s intent and match existing practice.
2	1.07 (6), Definitions	Added definition for “manufacturer’s data manual”.	<u>Minor change</u> The term <i>manufacturer’s data manual</i> is used in the performance chapters of the Part 91 MOS (24 and 25) but is not defined. This new definition is the same as the existing definition in CAO 20.7.1B with the exception that it has been expanded by the use of the word “aircraft” instead of the word “aeroplanes” as per the CAO. The definition is being added to achieve existing instrument’s intent and match existing practice.
2	1.07 (6), Definitions	Added definition for “MBA”.	<u>Machinery change</u> The term <i>MBA</i> has been added to support the addition of mandatory broadcast areas being added to

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
			section 11.10A. The Office Airspace Regulation has determined that the existing broadcast areas specified in instruments CASA 240/05 and CASA 97/13 should be termed “mandatory broadcast areas” in the Part 91 MOS in order to differentiate these areas from the numerous other “broadcast areas” currently mentioned in the AIP that are not mandatory use.
2	1.07 (6), Definitions	Added definition for “SBAS CAT I”.	<u>Minor change</u> The term SBAS CAT I is being added to clarify and support the use of the term in the definition of precision approach procedure .
2	1.07 (6), Definitions	Added the definition of “Type 2 DAT approval”.	<u>Minor change</u> The term Type 2 DAT approval is being added to support and correct the definition of approved provider in the MOS which is incorrect and is being corrected by these amendments. The definition is being added to achieve existing instrument’s intent and match existing practice.
2	1.07 (6), Definitions	Added the definition of “Type 2 LOA”.	<u>Minor change</u> The term Type 2 LOA is being added to support and correct the definition of approved provider in the MOS which is incorrect and is being corrected by these amendments. The definition is being added to achieve existing instrument’s intent and match existing practice.
3	1.07 (6), Definitions	Deleted definition for “ASAO”.	<u>Minor change</u> The term ASAO is already defined in CASR Dictionary, and its 3 current occurrences in the Part 91 MOS are being deleted as they are no longer required.
3	1.07 (6), Definitions	Deleted definition for “large aeroplane”.	<u>Minor change</u> The term “ larger aeroplane ” is used in the naming of Part 121 which is for aeroplanes

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
			<p>> 8 618 kg MTOW.</p> <p>Use of the term “large aeroplane”, to describe an aeroplane with a MTOW greater than 5 700 kg, is prone to confusion as the terms are in practice often interchanged for either use.</p> <p>The use of the term “large aeroplane” can be replaced with the phrase “aeroplane with MTOW > 5 700 kg”, and in this MOS is only used in Table 19.02 (2).</p>
3	1.07 (6), Definitions	Deleted definition for “small aeroplane”.	<p><u>Minor change</u></p> <p>The term “smaller aeroplane” is used in the naming of Part 135 MOS which is for aeroplanes not more than 8 618 kg MTOW.</p> <p>Use of the term “small aeroplane”, to describe an aeroplane with a MTOW less than or equal to 5 700 kg, is prone to confusion as the terms are in practice often interchanged for either use.</p> <p>The use of the term “small aeroplane” can be replaced with the phrase “aeroplane with MTOW ≤ 5 700 kg”, and in this MOS is only used in Table 19.02 (2).</p>
4	1.07 (6), Definitions	Modified the definition of “approved provider”.	<p><u>Minor change</u></p> <p>The term approved provider is incorrect in that it states that an approved provider of a navigation database is a Part 175 data service provider. In practice, Part 175 data service providers send data to persons holding certain approvals from the FAA or EASA (called a Type 2 LOA or a Type 2 DAT approval). The definition is being modified to achieve existing instrument’s intent and match existing practice.</p>
5	1.07 (6), Definitions	Amended definition for “MSA”.	<p><u>Minor change</u></p> <p>The definition for MSA, in error,</p>

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
			only includes sectors of a 25 NM circle, where this change includes non-sectorised 25 NM and 10 NM circles. The 10 NM MSA is unique to Australia. The definition is being amended to achieve the existing definition's intent and match existing practice.
5A	1.07 (6), Definitions	Amended paragraphs (a) and (b) of the definition of "navigational tolerance".	<u>Minor change</u> Paragraphs (a) and (b) of the definition of navigational tolerance are incorrect. This definition is only used in paragraph 15.11 (1) (a) of the Part 91 MOS in relation to when a missed approach must be conducted during an instrument approach procedure (IAP). The tolerance for a PBN operation should be the RNP value, not ½ the RNP value. The tolerance for a VOR or LOC-based operation should be full scale deflection, not half scale deflection. The lower tolerances currently mentioned in these paragraphs of the definition are tolerances used in licensing standards but they are not correct as operational limits.
6	1.07 (6), Definitions	Amended definition for "precision approach procedure".	<u>Minor change</u> The definition for precision approach procedure , in error, includes all SBAS approaches where only SBAS CAT I approaches are precision approaches. The definition is being amended to only include SBAS CAT I approaches which achieves the existing definition's intent and matches existing practice.

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
7	1.07 (6), Definitions	Amended definition for “QNH”.	<p><u>Minor change</u> The definition for QNH uses the term “elevation AMSL”, but not the term “altitude”. The definition is being amended to include the term “altitude” which is already defined in the CASA Dictionary which achieves the existing definition’s intent and matches existing practice.</p>
8	1.07 (6), Definitions	Amended definition for “RVSM”.	<p><u>Minor change</u> The definition for RVSM, in error, refers to RVSM only and not RVSM airspace. The CASA Dictionary does not define RVSM but does define the term RVSM airspace, which is being amended here to achieve the existing definition’s intent and matches existing practice.</p>
9	1.07 (6), Definitions	Amended definition for “VFR climb/descend”. Added definition for “VFR descent”.	<p><u>Minor change</u> The definition for VFR climb/descend, in error, refers to both climb and descend, not descent. This definition will be separated out to include separate definitions for VFR climb and VFR descent. The term “descend” (used in error) has been corrected to “descent”. These definitions being added and amended will achieve existing instrument’s intent and match existing practice.</p>
10	1.07 (6), Definitions	Amended definition for “VFR-on-top”.	<p><u>Machinery change</u> The definition for VFR-on-top includes operational limitations that should be included in the MOS requirements. The amended definition removes the operational limitations placing them in section 11.17 as MOS requirements which does not change the intent or existing practice of VFR-on-top.</p>

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
11	2.02, Specified aircraft performance category	Multiple editorial changes to clarify what the specified aircraft performance category is, and separating out the limitations of the performance categories (see section 14.09 for limitations).	<p><u>Machinery change</u> The construct of this section merges the definition of “aircraft performance categories” and the operating rules for each particular performance category. The amended wording removes the operating limitations of performance categories from Table 2.02 and adds them in to section 14.09. Additionally, reference to regulation CASR 91.320 as the head of power for performance categories, and clarification of higher and lower categories which are alphabetic not numeric, are also added. These changes do not affect the existing instrument’s intent and match existing practice.</p>
12	2.05 (2) (b)	Added the word “in” to paragraph (2) (b).	<p><u>Minor change</u> The sentence structure in this section is in error. The word “in” is added to paragraph (2) (b) to grammatically correct this sentence when referencing column 3 of Table 2.05 (1). This change does not affect the existing instrument’s intent and matches existing practice.</p>
13	Table 2.09, Specified cruising levels for operations at or north of 80° south	Editorial Note added to reference application.	<p><u>Minor change</u> A Note is added at the bottom of this table to reference section 11.02, which contains the application of the cruising levels with respect to varying QNH levels. This addition does not affect the existing instrument’s intent and clarifies existing practice.</p>
14 and 15	Table 2.10, Specified cruising levels for operations south of 80° south	Editorial changes added to reference application of cruising levels.	<p><u>Minor change</u> Superscript numbers were omitted in error for FL110 through to FL125. They are required to point to Notes at the bottom of the table. An additional Note is added at the bottom of</p>

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			this table to reference section 11.02 which contains the application of the cruising levels with respect to varying QNH levels. This addition does not affect the existing instrument's intent and clarifies existing practice.
16	4.01, Purpose	Editorial change to existing Note.	<u>Minor change</u> The Note for this section referenced other MOS sections that have airspeed requirements. As the new section 14.09 is being added to the MOS, section 14.09 is added to this Note.
17	Table 4.02 (1), column 3, item 2	Amended the maximum speeds for Class D airspace to allow the maximum speed within 2 500 ft AGL and 4 NM to be varied from 200 kts to a maximum of 250 kts when authorised by ATC and allow the maximum speed of 250 kts outside these vertical and lateral boundaries to be above 250 kts when authorised by ATC in response to the pilot declaring it is an operational requirement.	<u>Minor change</u> The wording was in error as it is inconsistent with existing subsection 10.1.4 of Manual of Standards (MOS) – Part 172. Subsection 10.1.4 allows ATC to permit speed increases up to 250 kts from 200 kts, and permit greater than 250 kts if the pilot in command (<i>PIC</i>) informs it is an operational requirement. This addition brings this MOS into alignment with existing instrument's intent and clarifies existing practice.
18	5.02, Journey log information before an international flight begins	Editorial correction of existing mistake.	<u>Minor change</u> To require both the aircraft registration and the flight number, is incorrect. The word “and” is replaced with “or” to bring the sentence back to original intent.

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19	6.01		<u>Minor change</u> The sentence structure in this section is in error. The word “to” is added to grammatically correct this sentence. This change does not affect the existing instrument’s intent and matches existing practice.
20 and 21	7.02 (1) and (1A), Forecasts for flight planning	Editorial clarification of existing requirement.	<u>Minor change</u> Industry feedback was received that the wording of subsection (1) was difficult to interpret. The change clarifies that the flight needs to be planned with weather (forecasts and reports) that is not older than 1 hour prior to commencing flight, where available. Additionally subsection (1A) has been added to clarify earlier planning is allowed but requires updated weather information to be used within 1 hour of flight. This change does not affect the existing instrument’s intent and matches existing practice.
22	7.02 (5), Forecasts for flight planning	Added new subsection (7) to disapply subsections (4) and (5) to Part 121 operations.	<u>Minor change</u> This change is necessary to ensure that Part 121 operators are not required to comply with requirements that are not in accordance with the Part 121 alternate aerodromes requirements resulting from regulation 121.170 and Chapter 4 of the Part 121 MOS.
23	7.03 (2) and (3)	Added text to 7.03 (2) to disapply (2) to Part 121 operations. Added new subsection (3) to apply to Part 121 operations.	<u>Minor change</u> The wording was in error as it is inconsistent with the Part 121 regulations. Hence, subsection 7.03 (2) is disappplied for Part 121 operations with the inserted subsection 7.03 (3) written to impose the correct requirements on those Part 121 operations.
24	8.04 (3)	Amended subsection to add reference to destination	<u>Minor change</u> The wording was in error as it unintentionally applied to

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		aerodrome.	departure, destination and any alternate aerodrome. The additional words specifically apply this subsection to only a destination aerodrome which was as per intention and current practice.
25	Table 8.08 (1), Alternate minima at Australian aerodromes	Editorial correction of existing omission.	<u>Minor change</u> This change is necessary to ensure that item 2 details alternate minima for day IFR aircraft only, not all IFR aircraft, as item 2 (b) omitted the word “Day” in error. Note that the table does not cover night IFR scenario as this is covered by subsection 8.05 (1) already. This change does not affect the existing instrument’s intent and matches existing practice.
26	8.08 (3)	Editorial correction of error in the Note at the end of the subsection.	<u>Minor change</u> The wording was in error as it unintentionally used the word “approach” instead of “alternate”. The change is needed to correct this sentence back to original intent and match existing practice. There is no such minima as “special approach minima”; there is “special alternate minima”.
27	9.01, Purpose	Editorial Note added for clarification.	<u>Minor change</u> The section’s intent can be made clearer with the addition of a Note. The Note adds clarity and does not affect the existing instrument’s intent and matches existing practice.
28	9.02 (2), Flight notification requirements	Editorial change added to clarify which over water flights require a flight notification.	<u>Minor change</u> The wording requires any VFR flight over water to submit some form of flight notification. This is in error and is inconsistent with intent and current practice. The intent was for flights that were single engine and were beyond glide range while over water to require some form of flight

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			notification (SARTIME or Flight Note), see instrument CASA 113/09. Words are needed to clarify which VFR overwater flights require flight notification.
29, 30, 31 and 32	9.02 (2), 9.03 (1) and (2), Changes to flight plans and SARTIME nominations	Editorial changes to clarify that the PIC does not need to personally complete the required tasks but must ensure they are done. Also exempting air transport operations from updating people on board (POB).	<u>Minor change</u> The wording was in error as it unintentionally requires only pilots in command who have personally submitted their own flight notification, to update ATS of changes. The intent and current practice is for every PIC to ensure ATS is updated with any changes, which also enables another person to do these tasks. Additionally the requirement to update POB, if changed, unintentionally includes air transport operations under Parts 121, 133 and 135, who are already required to hold passenger lists for their flights. Wording is added to change this section to agree with intent and current practice.
33	9.04, Cancelling SARTIME	Editorial changes to clarify that the PIC must ensure SARTIME is cancelled.	<u>Minor change</u> The provision does not correctly encapsulate existing requirements, whereby persons, other than the PIC, might have nominated a SARTIME. The changes ensure that the PIC is responsible for ensuring that all SARTIMEs relevant to the PIC's flight must be cancelled by the specified time, independent of who submitted notification originally
34	9.05 (2), Responsible persons for the receipt of a flight note	Clarification that any method of communication with search and rescue is acceptable, not just by telephone.	<u>Minor change</u> The wording inadvertently requires a responsible person to have access to 2 telephones to contact search and rescue. The intent and current practice is that 2 methods of contact with

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			SAR are acceptable. The amended wording corrects the mention of 2 telephones to 2 methods.
35	10.02	Amended the chapeau so that the PIC must ensure the tasks listed in the subsection are done, but not have to personally do the tasks.	<u>Minor change</u> The wording requires the PIC to personally complete the pre-flight checks listed in this section, whereas the intent and current practice was to require the PIC to ensure they are done, allowing another person to do these tasks, as appropriate.
36	10.02 (j) (iv)	Amended subparagraph (j) (iv) to match the existing requirement in CAO 20.4.	<u>Minor change</u> The words of subparagraph (j) (iv) changed the tasks required to be performed by the pilot when compared to the requirement in subparagraph 4.1 (b) of CAO 20.4. The policy intent was to carry across the same outcome. The changes return the meaning to the intent and current practice.
37	10.03 (3), Checking systems for measuring and displaying pressure altitude — general	Deleted subsection as already covered in existing regulations.	<u>Minor change</u> Subsection (3) requires the placarding and reporting of an inoperative pressure altitude system. This is as per current practice and existing regulations. Regulation 91.150 of CASR requires inoperative equipment to be placarded as inoperative while regulation 50 of CAR requires defects to be reported. As such this subsection can be deleted entirely.
38	Table 11.02 (3)	Added item 5 which was missed in translating existing AIP data to MOS.	<u>Minor change</u> The table mistakenly omitted item 5 when it was initially drafted from Figure 1 from AIP 1.7, page 4. The added words correct this omission.
39	RESERVED		
40	11.03	The section title and some existing subsection numbers are amended due to	<u>Machinery change</u> The wording did not carry across the requirement for at least 2 long-range navigation systems to

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		<p>the insertion of 3 new subsections that carry over a missing requirement from the to-be-repealed Subpart 91U MOS. The requirement is prior to a flight entering oceanic airspace that is RNP 2 or 4 or 10, the crew must check that the aircraft has at least 2 operative long-range navigation systems. If the aircraft does not, then the crew must advise ATC.</p>	<p>be functioning when operating to RNP 4 or 10 from Subpart 91U MOS, or when RNP 2 from CAO 20.91. It was accidentally overlooked and not included in the Part 91 MOS. Adding this requirement into the MOS now will not have any adverse effects on the industry since this is an existing requirement harmonised with global practice. Current practice in some oceanic airspace, to achieve the most efficient use of the airspace, requires aircraft to meet a navigation standard of RNP 2 or 4 or 10. When this is required, global standards require at least 2 long-range navigation systems to be functioning, each of them capable of the required navigation specification. If the aircraft does not have this minimum number of functioning LRNSs, the crew must advise ATC.</p>
41	After 11.03 (1)	<p>This subsection needed to be amended to ensure that its requirements do not apply to a GNSS used within a multi-sensor navigation system that meets paragraph (b) of the definition of “approved GNSS”.</p>	<p><u>Minor change</u> This subsection requires GNSS Fault Detection and Exclusion (FDE) predictions to be made prior to the departure of a flight intended to operate in oceanic airspace. Editorially, this subsection is being renumbered as subsection (5) by the effect of the change mentioned immediately above. Substantively, an industry enquiry led to FSB identifying that a multi-sensor navigation system (as per paragraph (b) of the definition of approved GNSS) should not be required to meet the requirements of this subsection.</p>
42	11.06 (a)	<p>Corrected aeroplane to aircraft, due to earlier error.</p>	<p><u>Minor change</u> The word “aeroplane” in paragraph 11.06 (a) excluded rotorcraft. The intent is for</p>

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			section 11.06 ACAS resolution advisory to apply to rotorcraft and aeroplanes. Hence, the change from aeroplane to aircraft to enable correct application.
43	11.08	Amended to change the requirement for a specific approval, to authorised to operate when requirements are met.	<u>Minor change</u> The wording did not contain the requirement that approval for operation in NAT-HLA will be assessed against. The additional words clarify what an approval to operate in NAT-HLA will be assessed against, which is the current practice.
44	11.09	Added content to previously reserved section.	<u>Machinery change</u> The wording reserves this section for future use. The intent and current practice is as per existing instrument CASA 30/21. These requirements need to be added as per additional subsections.
45	11.10 (2) (b) (iv) (A)	Deleted the reference to MSA.	<u>Minor change</u> The wording in subparagraph 11.10 (2) (b) (iv) includes the phrase “MSA/LSALT”. This is in error as the definition of LSALT includes MSA. The word MSA is superfluous and can be deleted.
46	11.10A	Added new section covering MBAs.	<u>Machinery change</u> New wording is required to add details of mandatory broadcast areas (MBAs) into the Part 91 MOS, as CASA has determined that the existing broadcast areas specified in instruments CASA 240/05 and CASA 97/13 should be termed “mandatory broadcast areas” in the Part 91 MOS in order to differentiate these areas from the numerous other “broadcast areas” currently mentioned in the AIP that do not have mandatory broadcast requirements. This new section details current practice from the AIP.

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47	11.11		<u>Minor change</u> The Note added to section 11.11 points to regulation 91.405 of CASR, which has additional legal requirements for operation in controlled aerodromes. The additional words are for clarification and do not change the intent or current practice.
48	11.13	Revised heading.	<u>Minor change</u> The current heading is too specific as the section deals with more than clearance requirements. The change does not change the intent of the section and adds clarity.
49	11.14	Reserved for future use	<u>Reserved for future use</u>
49	11.15 (was 11.14)	Added Class D airspace to new subsection 11.15 (1). Deleted existing section 11.15.	<u>Minor change</u> The wording, in error, did not contain the Class D airspace. This addition brings the MOS into harmony with current practice.
50, 51, 52 and 53	11.17	Added the operational limitations removed from definitions of “VFR Climb”, “VFR descent” and “VFR-on-top”. Renumbered subparagraphs as needed.	<u>Machinery change</u> The definitions of <i>VFR climb</i> , <i>VFR descent</i> and <i>VFR-on-top</i> have had the operational limitations removed (see subsection 1.07 (6)). These operational limitations now need to be included here in the MOS, along with a Note for clarification. The added words are as per the intent and current practice.
54	11.22	Corrected reference to CASR 91.	<u>Minor change.</u> The wording in the Note references regulation 91.155 of CASR in error. The correct reference is regulation 91.255.
55	12.03	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.

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56	14.02 (1) (c)	Correction added to fix earlier error.	<u>Minor change</u> The text of subparagraph (1) (c) (i) was in error with the initial and current intent which is to allow paragraph (c) only if paragraphs (a) and (b) were not possible. The addition corrects the text to achieve correct intent and current practice.
57	14.03 (1) (b), (c) and (d)	Deleted clause (b) and renumbered subsequent paragraphs.	<u>Minor change</u> The text in paragraph (b) is in error and needed to be deleted to achieve current intent and industry practice.
58	After 14.08	New section added.	<u>Machinery change</u> This new section and table are added to include the operational limitations of aircraft performance categories removed from section 2.02. The added words are as per the intent and current practice.
59	15.02	Corrected definition of “qualifying multi-engine aeroplane”.	<u>Minor change</u> The wording of the term <i>qualifying multi-engine aeroplane</i> is in error. The wording needed to be corrected to include piston or turboprop aeroplanes with either 2 pilots or 1 pilot and fitted with operative autofeather. The added words are as per the intent and current practice.
60	15.07 (2) (a)		<u>Minor change</u> The wording of paragraph (2) (a) is in error and needed clarification. The use of V_{yse} is incorrect and should be V_y , while additional wording needed to be added to clearly relate a minimum airspeed with the cloud ceiling. The added words are as per the intent and current practice.
61	15.09	Amended to allow low-visibility landings and intent not to continue if	<u>Minor change</u> The wording of section 15.09 is in error and needed clarification. Currently, the section did not

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		weather below minima.	allow for any low-visibility landings or have the requirement to only continue the landing if weather is above the minima (low-visibility approval or otherwise). The new wording corrects this and are as per the intent and current practice.
62	After 15.10 (6)	Added previously missed situation for aerodrome without an authorised IAP.	<u>Minor change</u> The wording of section 15.10 did not cover the landing minima for an aerodrome without an authorised IAP, which was originally omitted in error. The new wording adds minimum altitude and minimum visibility for this situation being as per the intent and current practice.
63	After 15.11 (2) (b) (ii)	Added Note for guidance in unique situation.	<u>Minor change</u> The Note added to paragraph 15.11 (2) (b) clarifies the situation where an NPA approach has a visual segment after the minimum descent altitude. The additional words do not change the intent or current practice.
64	16.01 (2) (a)	Added the word “control” to correct the applicability to air traffic control service.	<u>Minor change</u> The wording of paragraph 16.01 (2) (a) is in error with the consulted policy relating to approach bans which was that the rules would only apply at aerodromes that had ATC and RVR. Adding the word “control” aligns the applicability to the consulted policy and current intent.
65	Paragraphs 16.03 (4) (b) and (c), including the Note	Replaced erroneous requirements.	<u>Minor change</u> The wording of paragraphs 16.03 (4) (b) and (c) is in error and did not align with international practice or intent. The correction brings low-visibility requirements for RVRs in line with existing policy and current industry standards.
66	17.01	Added clarification	<u>Minor change</u>

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		Note.	The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.
67	18.01	Added “maintenance or maintenance training” persons.	<u>Minor change</u> The wording of regulation 91.430 of CASR allows maintenance staff to operate a rotorcraft while on the ground for maintenance, but the same exception was incorrectly missed from regulation 91.425 of CASR which applies to aeroplanes. The ability for maintenance, or maintenance training, persons to start the engine of an aeroplane needed to be reinstated by additional words added here.
68	Section 19.02, Table 19.02 (2), item column and column 1	Replaced terms “small” and “large” with requirements of each term.	<u>Minor change</u> The table in section 19.02 used the terms “small aeroplane” and “large aeroplane” to describe aeroplanes that have <i>less than or equal to</i> and <i>greater than 5700</i> kg MTOW, respectively. This created confusion with the terminology used by regulation 135 of CASR – Smaller aeroplanes and regulation 121 of CASR – Larger aeroplanes. The use of less <i>than or equal to</i> and <i>greater than 5 700</i> kg MTOW within this table will remove any ambiguity.
69	After 19.04 (4)	Added subsections to clarify fuel requirements when diverting to a planned destination alternate.	<u>Minor change</u> The wording left an inconsistency with Part 135 and 121 MOSs where, after the transition from destination to destination alternate, the flight did not require paragraph (3) (a) trip fuel or (3) (e) additional fuel, from that time. The added wording clarifies that paragraph (3) (a) trip fuel or (3) (e) additional fuel is not

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			required from that time and this is consistent with intent and current practice.
70	20.01 (2)	Added prescribed circumstances for the carriage of infant or child medical patients.	<u>Machinery change</u> The subsection did not replicate the exemption for infants and children in instrument CASA EX40/2002, allowing carriage in an incubator or similar, or carried on the lap or in the arms of an adult. The additional subsections are consistent with current intent and industry practice.
71	20.02	Added Note that points to guidance document on restraint of infants and children.	<u>Minor change</u> The Note added to section 20.02 clarifies what the main guidance document is on this topic. The additional words do not change the intent or current practice.
72 and 73	20.03 (1) (c) and after subsection 20.03 (2)	Added requirements for the restraint of a child with a serious medical condition.	<u>Machinery change</u> The wording in this section did not allow the restraining of a child who has a serious medical condition to be carried as per the requirements of an infant. The additional words replicate instruments CASA EX127/18 and CASA EX123/19 current intent and industry practice.
74	20.04 (1)	Added a Note after the definition of “automotive child restraint system” to link to subsection 1.05 (1) that sets the rules for how AS/NZS are used in the MOS.	<u>Minor change</u> The Note added to subsection 20.04 (1) cross-references the earlier clarification for how the dates of AS/NZS are used in the MOS. The additional words do not change the intent or current practice.
75, 76, 77 and 78	20.04 (2) and (3)	Amended the subsections to include infants to be allowed to use child restraints.	<u>Minor change</u> The wording did not allow infants to use child restraint systems, which was omitted in error. The additional words clarify that infants can also be restrained by an approved child restraint, bringing the MOS in line with current industry practice, CAAP 235-2 and the intent of

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			these subsections.
79	20.06 (r)	Added a paragraph for briefing passengers on a parachute jump aircraft.	<u>Minor change</u> The section did not cover the briefing of persons on board parachuting aircraft so they position where needed for the aircraft to stay within weight and balance limits. The additional paragraph covers this and is in line with current industry practice, and the intent of this section.
80	20.07	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added for clarification and does not change the intent or current practice.
81	21.01	Added 2 kinds of radio frequencies which require persons to be authorised/qualified to use.	<u>Minor change</u> The current regulations 91.400 and 91.625 of CASR and the new definition of “aviation safety radio frequency” in the CASR Dictionary, including its effect on Part 64 of CASR, combine to allow a person to transmit in a mandatory broadcast area (MBA) or in a published CTAF at a non-controlled aerodrome that was not a certified, registered, military or designated without needing an Aeronautical Radio Operator’s Certificate. The additional words align the MOS with existing practice and intent.
82	21.02	Corrected wording to allow flight crew other than the PIC to make radio calls.	<u>Minor change</u> The wording required the PIC to personally make all radio calls, whereas the intent and current practice was to require the PIC to ensure they are done, allowing other flight crew the use of the radio.
83	21.03	Corrected use of ATC to air traffic service.	<u>Minor change</u> The wording uses ATS, in error, where air traffic service should have been used. The additional words do not change the intent or

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			current practice.
84, 85, 86, 87, 88 and 89	21.04	Editorial correction for the use of CTAF wording and PIC to ensure broadcasts are made.	<u>Minor change</u> The wording requires the PIC to personally make all radio calls and the term CTAF is used as a location, not as a frequency. The changes allow other flight crew the use of the radio and corrects the use of CTAF as a frequency. These changes do not change the intent or current practice.
90	21.05	Editorial corrections for use of ATC service instead of ATS. Addition of reference to aircraft on the ground at a controlled aerodrome and reports prior to entering Class G airspace. Corresponding corrections to the table for above situations.	<u>Minor change</u> The section was in error as it requires the PIC to make all reports, does not require reports from aircraft on the ground at controlled aerodromes and incorrectly uses the term ATC. The changes allow other flight crew to use the radio, requires appropriate reports from aircraft on the ground at controlled aerodromes and uses the term ATC service correctly. These changes do not change the intent or current practice.
91	21.06	Addition of alleviation for radio contact on ground and after departure for IFR aircraft in Class G airspace. Editorial correction for PIC to ensure radio reports are made.	<u>Minor change</u> The section was in error as there was no alleviation for IFR aircraft in Class G airspace, that cannot contact air traffic service on the ground or after departure, to continue under certain circumstances; and it required the PIC to make all reports. The changes allow IFR aircraft in Class G airspace to depart under certain circumstances and allows other flight crew to use the radio. These changes do not change the intent or current industry practice, which is as per AIP ENR 1.1, para 9.1.1.
91	21.07	Editorial correction for PIC to ensure radio reports are made.	<u>Minor change</u> The wording requires the PIC to personally make all radio calls, whereas the intent and current practice was to require the PIC to

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			ensure they are done, allowing other flight crew the use of the radio.
91	21.08	Editorial correction for PIC to ensure radio reports are made.	<u>Minor change</u> The wording requires the PIC to personally make all radio calls whereas the intent and current practice was to require the PIC to ensure they are done, allowing other flight crew the use of the radio.
91	21.09	Added new section to define radio use within MBAs.	<u>Machinery change</u> This new section and table are added to support the addition of MBAs into the Part 91 MOS, to clarify that the PIC is responsible to ensure radio calls are made, and to list specific radio requirements within MBAs. These additions do not change the intent or current industry practice.
92	26.01 (3)	Deletion due to inclusion in section 26.04	<u>Minor change</u> Paragraph (3) (c) can be deleted as this topic is now covered in section 26.04.
93, 94 and 95	26.02	Added editorial exclusion and deleted subsection now not needed.	<u>Minor change</u> The subsection was in error as it required Part 21 approval even when Division 26.16 did not require compliance with a TSO or ETSO, Also subsection (5) was not needed and a clarification Note was required regarding optionally fitted or carried surveillance equipment. The changes correct these points and do not change the intent or current industry practice.
96	26.04	Section is reframed for clarity.	<u>Minor change</u> The wording needed clarification as it was framed as flight with inoperative equipment. The changes reframe the section to require that equipment required by this Chapter be operative, and then states the allowable exceptions. The changes do not change the intent or current

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			industry practice.
97	26.07	Add 2 Notes. The first is after paragraph (1) (a) that provides a cross-reference to the definition of “approved GNSS”. This same Note is already in other places in the MOS. The second is a Note at the end of subsection (1), cross-referring readers to the new section 11.03 long-range navigation system requirements for certain oceanic airspace.	<u>Minor change</u> The wording needed clarification via linking to section 1.07 definition for approved GNSS and the new requirements being added to section 11.03. These changes do not change the intent or current industry practice.
98	26.08	Added a Note at the end of subsection (1), cross-referring readers to the new section 11.03 long-range navigation system requirements for certain oceanic airspace.	<u>Minor change</u> The wording needed clarification via linking to the new requirements being added to section 11.03. This Note does not change the intent or current industry practice.
99	26.11 (1)	Added 2 Notes. The first is after paragraph (1) (a) that provides a cross-reference to the definition of “approved GNSS”. This same Note is already in other places in the MOS. The second is a Note at the end of subsection (1) cross-referring readers to the new section 11.03 long-range navigation system requirements for	<u>Minor change</u> The wording needed clarification via linking to section 1.07 definition for approved GNSS and the new requirements being added to section 11.03. These changes do not change the intent or current industry practice.

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		certain oceanic airspace.	
100	26.11 (4)	Subsection is reframed for clarity.	<u>Minor change</u> The wording needed clarification as it is framed as multiple negative phrases. The changes reframe the requirements in the positive and do not change the intent or current industry practice.
101	26.12 (1)	Added a Note at the end of subsection (1), cross-referring readers to the new section 11.03 long-range navigation system requirements for certain oceanic airspace.	<u>Minor change</u> The wording needed clarification via linking to the new requirements being added to section 11.03. This Note does not change the intent or current industry practice.
102 and 103	26.18	Added requirement for MBAs.	<u>Machinery change</u> The wording did not align with the mandatory nature of radio use within the newly-defined MBAs. The additional wording aligns this section with the current intent and current industry practice.
104	26.19	Added requirements for inoperative radio within an MBA and aligned the existing Class G airspace requirements to those of the MBA for ease of use by the industry.	<u>Minor change</u> The wording did not detail operation in the newly-added MBAs or adequately align with the safety controls used in regulation 91.400 of CASR for operation without an operative radio at various aerodromes. The changes detail inoperative radio flights within MBAs and certain Class G situations. The additional wording aligns this section with the current intent and current industry practice.
105	26.22 (6)	Renumbered.	<u>Minor change</u> The numbering missed number 5 and used 6. This change back to 5 has no impact on meaning or intent.
106	26.24 (1)	Deleted the requirement for navigation lights to	<u>Minor change</u> The wording uses the phrase <i>poor visibility</i> which was carried over

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
		be fitted (and as a consequence displayed) in conditions of poor visibility.	from regulation 195 of CAR. However, it has never been defined and nor can the requirement to ensure navigation lights are fitted during conditions of poor visibility be practically met. A review of comparable regulatory requirements (FAA, EASA, NZ CAA) and ICAO standards has identified that navigation light requirements in those rules are only linked to operating at night — that is, the Australian rule regarding navigation lights being fitted in poor visibility is unique. CASA has determined that deleting this requirement is appropriate and will not result in an unacceptable level of aviation safety.
107	26.27	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.
108	26.28	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.
109	26.29	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.
110	26.31	Editorial fix.	<u>Minor change</u> The wording was in error with the requirement of paragraphs (a) and (b). To align with subsection 6 of

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			CAO 20.18, which was the intent, the requirement needs to state (a) turbine powered <i>or</i> (b) certificate of airworthiness after 1 July 1965. The change corrects wording to achieve current situation and policy intent.
111	26.32	Editorial fix.	<u>Minor change</u> The wording is in error with the requirement of paragraphs (a) and (b). To align with subsection 6 of CAO 20.18, which was the intent, the requirement needs to state (a) turbine powered <i>or</i> (b) certificate of airworthiness after 1 July 1965. The change corrects wording to achieve current situation and policy intent.
112	26.39	Added clarification Note.	<u>Minor change</u> The text remains unchanged, but a Note is added to clarify that there are currently no requirements in this section. The additional words are for clarification and do not change the intent or current practice.
113	26.43 (1)	Editorial fix.	<u>Minor change</u> The wording of subsection (1) is in error with the requirements for supplemental oxygen when operated above a pressure altitude of 10 000 ft. 10 000 ft was entered in error and needs to be corrected to 12 500 ft. This change returns requirements to current intent for the policy.
114	26.52 (1)	Added additional requirement to fix omission.	<u>Minor change</u> The wording was in error as it would allow an aircraft that requires a single life raft to have an inoperative ELT. To align with policy intent, regulation 252A of CAR and subsection 6 of CAO 20.11, this subsection needs to be disapplied to aircraft carrying a life raft. This change returns the wording to desired policy.
115	26.53 (3) (c)	Replaced reference	<u>Minor change</u>

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		to earlier paragraph, with wording from earlier paragraph, for clarity.	The wording was reported as confusing. The changed wording clarifies the intended meaning, with no change to outcome.
116 and 117	26.55	Added rotorcraft to this section heading and paragraph (1) (a).	<u>Minor change</u> The wording did not include rotorcraft, in error, as the CASR Dictionary definition of amphibian includes only aeroplanes. The changed wording adds rotorcraft to this section to achieve original intent.
118	26.63	Corrected reference to MOS section.	<u>Minor change</u> The wording includes references to 26.64, which is incorrect. The change corrects the references to 26.65 which was intended.
119 and 120	26.65 (1) (a)	Adjusted name of corner of remote area.	<u>Minor change</u> The wording was carried over from existing limits of the remote area correctly. Industry feedback has since highlighted that the existing corner of the remote area, Talgarno, a post-World War II temporary military base, is no longer on current maps. Anna Plains is the station where Talgarno was located, and the station airstrip is the VFR waypoint "Anna Plains" which is <1 km from Talgarno waypoint. The change of Talgarno to Anna Plains on the remote area map does not change the intent of the meaning of remote area.
121	26.66	Added new section into previously reserved numbering.	<u>Machinery change</u> This section was reserved but needs to be used to replicate existing CAO 20.18 provisions which have been amended since initial Part 91 MOS was published. Subsections (1) and (2) are intended to replicate the existing paragraphs 9B.12 and 9C.11 of CAO 20.18. Subsection (3) is intended to replicate existing clauses of

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
			Appendix XIII, Part B of CAO 20.18. This change will align the MOS to existing policy.
122, 123, 124, 125, 126, 127 and 128	26.67	Added multiple new definitions and deleted reference to Part 103 aircraft.	<u>Machinery change</u> This section needs to replicate existing CAO 20.18 provisions which have been amended since initial Part 91 MOS was published. Multiple definitions need insertion from CAO 20.18, in relation to the VFR ADS-B modifications done to that CAO, that have not yet been incorporated into this MOS. Additionally, reference to Part 103 in MOS Chapter 26 is in error and should be deleted as regulation 91.030 of CASR disapplies Subpart 91.K (includes regulation 91.810), where regulation 91.810 is the head of power for this MOS Chapter. These changes will align the MOS to existing policy.
129	26.68	Amended multiple areas within this section.	<u>Machinery change</u> This section needs to replicate existing CAO 20.18 provisions which have been amended since the Part 91 MOS was made. These changes will align the MOS to existing policy.
130	After 26.68	Added new section, renumbered as 26.68A.	<u>Machinery change</u> This new section is added to replicate existing CAO 20.18 provisions which have been amended since the Part 91 MOS was made. These changes will align the MOS to existing policy.
131	26.69	Amended multiple areas and made deletions within this section.	<u>Machinery change</u> This section needs to replicate existing CAO 20.18 provisions which have been amended since the Part 91 MOS was made. These changes will align the MOS to existing policy.
132, 133, 134, 135, 136, 137and	26.70	Amended multiple areas and made deletions within this	<u>Machinery change</u> This section did not include other kinds of portable ADS-B

Amendment number of the MOS amendment)	Provision referenced	Brief description of amendment	Minor or machinery reasoning
138		section.	equipment. Additionally, reference to ASAO in MOS Chapter 26 was in error, as regulation 91.030 of CASR disapplied Subpart 91.K (including regulation 91.810), where regulation 91.810 is the head of power for this MOS Chapter. These changes will align the MOS to existing policy.
139	26.71	Editorial correction to use defined term.	<u>Minor change</u> This section uses the term “FDE” incorrectly. The change to “GNSS FDE” will correct the MOS to existing policy.
140	26.72	Amended multiple areas and made deletions within this section.	<u>Machinery change</u> This section needs to replicate existing CAO 20.18 provisions which have been amended since the Part 91 MOS was made. These changes will align the MOS to existing policy.
141	After 26.72	Added new sections, renumbered as 26.72A, 26.72B and 26.72C	<u>Machinery change</u> These new sections are added to replicate existing CAO 20.18 provisions in Appendices XII, XIII and XIV, respectively, which have been amended since the Part 91 MOS was made. These changes will align the MOS to existing policy.
142	26.73	Amended multiple areas and made deletions within this section.	<u>Machinery change</u> This section used the term “approved transponder”, but its use limited the inclusion of new technology. These changes will align the MOS to existing policy and allow the inclusion of future technology.
143	After 28.03 (4)	Added new subparagraph.	<u>Machinery change</u> This section did not specifically mention the inclusion of RCP 240 and RSP 180 information within the MEL. This addition clarifies their inclusion in the MEL and aligns the MOS to existing policy.