

Explanatory Statement

Civil Aviation Safety Regulations 1998

Manual of Standards Part 172 Amendment Instrument 2013 (No. 1)

Subsection 9 (1) of the *Civil Aviation Act 1988* (the *Act*) provides that the functions of the Civil Aviation Safety Authority (**CASA**) include conducting the safety regulation of civil air operations in Australian territory by means that include developing and promulgating appropriate, clear and concise aviation safety standards.

Subsection 98 (1) of the Act provides that the Governor-General may make regulations for the Act and in the interests of the safety of air navigation.

Some of these regulations are contained in the *Civil Aviation Safety Regulations 1998* (**CASR 1998**). Part 172 of CASR 1998 deals with air traffic service (**ATS**) providers. Under regulation 172.022 of CASR 1998, CASA may issue the Manual of Standards (MOS) – Part 172 (**MOS Part 172**). MOS Part 172 may provide for standards, including procedures, systems and documents used to provide an ATS, and standards for facilities and equipment used to provide an ATS.

Background

MOS Part 172 was originally issued in 2002 and last amended in June 2011.

Airservices Australia (**AA**) is the only ATS provider for civil ATS in Australian territory.

Several new air traffic procedures and systems have recently been introduced into the Australian aviation environment, which allow more efficient provision of ATS.

MOS Part 172 contains detailed requirements for the conduct of air traffic operations. This detail sometimes limits the ability to introduce new or innovative procedures and systems. Some of the recent changes were only possible because CASA granted exemptions against the existing standards in MOS Part 172 (CASA EX123/12, CASA EX05/13 and CASA EX72/13). These exemptions were only granted after CASA assessed a safety case presented by AA and deemed the changes acceptable. In making those exemptions, CASA regarded as paramount the preservation of an acceptable level of aviation safety. Those exemptions are subject to conditions considered by CASA to be necessary in the interests of the safety of air navigation.

Issue

CASA believes that the contents of the exemptions contain appropriate standards. It was, therefore, desirable for the MOS Part 172 to be amended to reflect those standards.

CASA also identified a number of minor editorial changes to provisions of MOS Part 172 that should be made to clarify the meaning of those provisions. Those minor changes were also made by this instrument.

The instrument amended various provisions in MOS Part 172. Details of the amendments are set out in Attachment 1.

Legislative Instruments Act

Under subsections 98 (5AA) and (5AB) of the Act, an instrument issued under a regulation made under paragraph 98 (5A) (a) of the Act, is a legislative instrument for the *Legislative Instruments Act 2003* (the **LIA**) if it relates to the safe navigation and operation of aircraft and applies more broadly than to a particular aircraft or person. The instrument is of general application and is, therefore, a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 24, and 38 and 42, of the LIA.

Consultation

Consultation under section 17 of the LIA was undertaken as follows. In accordance with Subpart 11.J of CASR 1998, CASA produced a Notice of Proposed Change (NPC No. 172/05), which was formally published by CASA on its website on 23 July 2013 inviting comments from the public and aviation industry. Two responses to the Notice were received, 1 from a helicopter operator and the other from AA. CASA took note of the comments made and modified the original proposal and the amendment.

In addition, AA was provided with a draft instrument. Its comments were taken into account in finalising the instrument.

In these circumstances, CASA believes that no further consultation is necessary or appropriate.

Office of Best Practice Regulation (OBPR)

The OBPR assessed the proposed amendment as minor and machinery in nature and that no further analysis in the form of a Regulation Impact Statement was required (OBPR Id: 14825).

Statement of Compatibility with Human Rights

A Statement of Compatibility with Human Rights is at Attachment 2.

Making and commencement

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

The instrument commences on 1 January 2014.

[Manual of Standards Part 172 Amendment Instrument 2013 (No. 1)]

Attachment 1

Amendments to Manual of Standards (MOS) – Part 172

The items in Schedule 1 of the instrument amended the Manual of Standards (MOS) – Part 172.

Item 1 substituted a new subsection 1.1.2.4 which reflects the current process for the making of a MOS, including that a MOS is a legislative instrument under the LIA that requires registration and tabling and is subject to scrutiny and disallowance by Parliament.

Item 2 made a minor typographical correction in subsection 3.1.4.2.

Item 3 replaced subsection 9.1.6.1 with new subsections 9.1.6.1 and 9.1.6.1A. The new subsections clarify the requirements in relation to voice recording of certain pieces of information during the handover of responsibility for a particular air traffic control (*ATC*) function from 1 air traffic controller to another.

Item 4 substituted a revised subsection 10.2.1.1 which replaced prescriptive accuracy standards for use of Automatic Dependent Surveillance – Broadcast (*ABS-B*) data. Instead, use of ADS-B will be dependent on the ATS provider demonstrating that the quality of the relevant data is suitable for the particular purpose.

Items 5 and 6 substituted a revised subsection 10.2.5.1 and omitted subsection 10.2.5.2. They replace the previous requirement for identifying an aircraft prior to providing a surveillance service. The revised subsection 10.2.5.1 instead refers to the standards in the International Civil Aviation Organization (*ICAO*) Procedures for Air Navigation Services – Air Traffic Management (*PANS-ATM*).

Item 7 omitted paragraph 10.2.9.2 (d), which related to radar cloud break procedures, and is a consequential amendment arising from the omission of subsection 10.2.13 by item 8. Item 7 also made a consequential editorial amendment to paragraph 10.2.9.2 (c).

Item 8 omitted subsection 10.2.12, which related to Surveillance Radar Approach Procedures, because these procedures are no longer used in the civil air traffic environment and controllers are no longer trained in their use. Item 8 also omitted subsection 10.2.13, which related to radar cloud break procedures, because such procedures are not consistent with international practice and are no longer used in the civil air traffic environment.

Item 9 substituted a revised subsection 10.4.2.1, relating to independent parallel approaches in instrument meteorological conditions (*IMC*). The amendments omit the prescriptive scan rate and azimuth accuracy requirements for an ATS surveillance system, and instead require the use of a system demonstrably suitable, by technical and safety assessment, for such approach operations. The revised subsection 10.4.2.1 also reflects a number of editorial amendments, including renumbering of subsections.

Item 10 substituted revised subsections 10.5.5.1 and 10.5.5.2 and inserted a new subsection 10.5.5.2A. The provisions relate to horizontal separation minima based on ATS surveillance systems. The amendments omit the previous prescriptive scan rate requirements from the surveillance system requirements for use of 3 nautical miles separation. Instead, the revised subsections require the use of a system demonstrably suitable, by technical and safety assessment, for 3 nautical miles separation.

New subsection 10.5.5.2A introduced the ICAO standard for using 2.5 nautical miles separation between aircraft on final approach. This change is intended to improve efficiency during busy runway approach operations.

Item 11 amended a waypoint referred to in the description of an oceanic control area in subsection 10.6.4. The waypoint has been changed from EGAVI to UPNOT.

Item 12 amended the application of 1 000 feet vertical separation minima to omit the reference to Class A service. This amendment aligns with the standards in PANS-ATM.

Item 13 amended Table 10.8-3 in subsection 10.8.3.8, which details the tolerances applicable to short range navigation aids. Separation tolerances have been added for use of Global Navigation Satellite System (**GNSS**) and Required Navigational Performance position on final approach. This addition takes account of new technology.

Item 14 omitted subsection 10.11.1.3, which contained an obsolete procedure for ATC to make a broadcast on the appropriate frequency before a parachute jump in Class E airspace.

Item 15 renumbered the subsections in subsection 10.12.1 to provide consistency, and avoid confusion, with other provisions in the MOS.

Items 16 and 17 amended subsection 10.12.2.1, which relates to time-based wake turbulence separation minima. The amendment in item 16 extends the application of the minima for full length operations to aircraft taking off on crossing runways or departing on flight paths that cross shortly after take-off. Item 17 inserts a new diagram demonstrating crossing runway operations and crossing flight paths.

Item 18 amended the requirements in paragraph 10.12.3.1 (b) for pilot waiver of wake turbulence separation. The wake turbulence generated by an aircraft extends behind and progressively drops below the level of the generating aircraft. It is generally accepted that the wake turbulence does not drop as low as 1 000 feet below the aircraft. Therefore, ATC is not required to apply wake turbulence separation for a following aircraft which is 1 000 feet or more below the level of the leading aircraft. The provision previously required ATC to apply wake turbulence separation for an aircraft that was not more than 1 000 feet below the level of the leading aircraft.

Item 19 substituted a revised subsection 10.12.3.4 to clarify when ATC must not waive the relevant wake turbulence separation minimum for a light or medium aircraft taking-off after a heavy or super aircraft. The subsection is no longer limited to fixed-wing aircraft and only applies when the aircraft use the same runway. The amendment removed doubt about whether the subsection applied when aircraft took-off on different runways that were within 760 metres. This amendment has been made for safety and for consistency with the reference standard published by the Federal Aviation Administration of the United States of America.

Item 20 substituted a revised subsection 10.13.2.3, which relates to the standards for separation between an aircraft that has commenced final approach and a departing aircraft. The amendment clarified the interaction of the subsections in subsection 10.13.2 and the paragraphs within subsection 10.13.2.3.

Item 21 substituted a revised subsection 10.13.2.4, which relates to a take-off in a direction that differs by at least 45 degrees from the reciprocal of a straight-in final approach. The amendment allows the use of a GNSS report to determine whether an arriving aircraft has

passed a point that is 5 nautical miles from the landing threshold. It also makes editorial amendments to the subsection to clarify its operation.

Item 22 amended subsection 10.13.2.6 so that it applies when an ATS surveillance system suitable for 3 nautical miles separation is used to determine aircraft position. The subsection previously only applied when a Terminal Approach Radar was used. The amendment also clarifies that the subsection applies for the purposes of subsections 10.13.2.3 and 10.13.2.4.

Item 23 amended subsection 10.13.8, which relates to runway separation minima in various situations. It clarifies that the minima specified for the take-off of a helicopter applies when the helicopter is taking-off behind a previous departing helicopter from a helicopter landing site. The item also inserts a new standard for a departing helicopter that uses a runway for a take-off roll prior to becoming airborne.

Attachment 2**Statement of Compatibility with Human Rights**

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

Manual of Standards Part 172 Amendment Instrument 2013 (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

This legislative instrument amends the Manual of Standards (MOS) – Part 172, which provides standards, including procedures, systems and documents used to provide an air traffic service (*ATS*), and standards for facilities and equipment used to provide an ATS.

The principal purpose of the legislative instrument is to allow for several new air traffic procedures and systems which have recently been introduced into the Australian aviation environment, and which allow more efficient conduct of air traffic operations.

Human rights implications

This legislative instrument does not engage any of the applicable rights or freedoms.

Conclusion

This legislative instrument is compatible with human rights as it does not raise any human rights issues.

Civil Aviation Safety Authority