

Explanatory Statement

Civil Aviation Safety Regulations 1998

Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)

Purpose

The purpose of the *Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)* (the **MOS amendment**) is to revise certain provisions of the *Manual of Standards (MOS) Part 173 – Standards Applicable to the Provision of Instrument Flight Procedure Design (MOS Part 173)* concerning procedure design authorisations and off-shore installations.

Relevant existing provisions in MOS Part 173 do not reflect current navigational technology. However, it is such technology that drives the operational procedures followed by those sectors of the aviation industry which use helicopters to service off-shore resource extraction facilities such as oil and gas rigs. It has been necessary, therefore, to review and update the MOS provisions concerning the design of helicopter instrument approach procedures to these facilities to ensure appropriate consistency between current technology, operational procedures and legislative requirements.

Legislation

Paragraph 9 (1) (c) of the *Civil Aviation Act 1988* (the **Act**) provides that CASA has the function of developing and promulgating appropriate, clear and concise aviation safety standards for the safety regulation of civil air operations in Australian territory and Australian aircraft.

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.

Under paragraph 98 (5A) (a) of the Act, the regulations may empower CASA to issue instruments in relation to matters affecting the safe navigation and operation of aircraft.

Part 173 of CASR 1998

Some of these regulations are contained in the *Civil Aviation Safety Regulations 1998 (CASR 1998)*. Part 173 of CASR 1998 deals with standards applicable to the design of instrument flight procedures, including the issue of procedure design certificates and procedure design authorisations. (References below to a provision commencing with the number “173” is a reference to Part 173 of CASR 1998.)

Under regulation 173.010, the standards for instrument flight procedure design are those set out in MOS Part 173.

Following commencement of amendments made by the *Civil Aviation Legislation Amendment (Miscellaneous Measures) Regulation 2016* (the **Miscellaneous Measures Regulations**), under subparagraph 173.030 (b) (ii), a procedure design authorisation is a CASA authorisation that allows a person to carry out design work on a terminal instrument flight procedure of a type covered by the authorisation for use by Australian aircraft operating under the IFR at, or in the vicinity of, an off-shore installation located no closer than the distance specified in MOS Part 173 from the nearest land.

Prior to the Miscellaneous Measures Regulations, this distance was limited to 30 NM from the nearest land. The MOS amendment introduces the concept of a 15 NM minimum

separation from land. This is possible because the definition of *off-shore installation* in regulation 173.030 has been modified by the Miscellaneous Measures Regulations to permit these instrument procedures to be designed by authorised designers rather than certified designers.

Under regulation 173.250, authorised designers' operations manuals must comply with MOS Part 173. Under regulation 173.260, authorised designers must design terminal instrument flight procedures in accordance with, among other things, MOS Part 173. Under regulation 173.270, authorised designers are responsible for maintaining terminal instrument flight procedures in accordance with MOS Part 173. These are supplementary heads of power for MOS Part 173 and are adopted for the MOS amendment.

MOS Part 173

Helicopter instrument approach criteria to off-shore installations are contained in Sections 8.6 and 8.7 of MOS Part 173.

The approach criteria are highly technical. Section 8.6 concerns airborne radar approaches used in conjunction with terrestrial radio navigation aids. Section 8.7 concerns approaches using non-directional beacons (*NDBs*) located on off-shore installations.

Background

Current instrument approach design criteria have not changed for many years and reflect a reliance on land-based navigation facilities that, in many cases, are not relevant to off-shore operations off the Australian coast, particularly to off-shore exploration installations such as oil and gas rigs. In addition, the current instrument approach design criteria do not reflect the use of GNSS technology.

The MOS amendment introduces GNSS as an adjunct to the existing airborne radar approach techniques and removes reference to the use of NDBs as an alternative navigational option. Significantly, the MOS amendment also introduces the concept of a 15 NM minimum separation from land for design purposes, thereby expanding the number of off-shore installations that may receive instrument approaches.

The MOS amendment makes, in effect, 6 key changes to the MOS through:

- introduction of a 15 NM separation from land
- amendment to the types of available procedures
- revision of rules concerning determination of visibility
- refinement of obstacle clearance check procedures
- deletion of the procedure design tolerances
- amendment of the determination of obstacle avoidance distance.

These outcomes are achieved particularly through: the repeal of existing Section 8.6 and its substitution with a new Section 8.6, including navigational diagrams and navigation calculation templates; and the repeal of Section 8.7 (on NDBs).

Modification of Section 8.8, which among other things includes reference to GNSS, are essentially editorial and for administrative updating. The drafting has been improved without significantly altering the intent of the provisions modified.

There are also minor amendments made to Sections 3.2, 6.1 and 6.2 of MOS Part 173, consequential on the changes to Sections 8.6 and 8.7.

The overall structure of the MOS amendment is shown in Appendix 2.

Legislation Act 2003 (the LA)

As mentioned above, under paragraph 98 (5A) (a) of the Act, regulations made for that provision may empower CASA to issue instruments in relation to matters affecting the safe navigation and operation of aircraft. Under subsection 98 (5AA) of the Act, an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if expressed to apply in relation to a class of persons or aircraft or aeronautical products.

The various standards set by MOS Part 173, and the MOS amendment, apply, not to a particular person but to classes of persons and, therefore, the MOS amendment is a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

Acts Interpretation Act 1901

Under subsection 33 (3) of the *Acts Interpretation Act 1901*, where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

Consultation

Over a period commencing in 2012, CASA convened meetings of aviation industry representatives who had concerns about the adequacy of the current helicopter instrument approach procedure design criteria, in particular the lack of access to GNSS technology. Draft proposals were considered and these proposals were taken into formal consultation under the auspices of the Standards Consultative Committee (**SCC**), a joint CASA/industry consultation forum.

In December 2013, the SCC's Airspace and Infrastructure Users Group approved the creation of the Off-shore Helicopter Working Group. This working group developed a set of concrete proposals for the amendment of Part 173 of CASR 1998. These proposals were released for public consultation in May 2015 through CASA's Notice of Proposed Rule Making titled *Off-shore helicopter instrument flight procedures – Proposed amendments to the Part 173 Manual of Standards*. The consultation was particularly addressed to helicopter operators who conducted operations to off-shore resource extraction facilities. The consultation period closed on 16 June 2016 (NPRM 1401AS – May 2016, Project Number: AS 04/02).

CASA took into account all comments and responses received and, as a result, made some further amendments to the proposals, achieving the 6 key changes mentioned above.

Office of Best Practice Regulation (OBPR)

OBPR assessed the impacts of the proposed changes under the Miscellaneous Measures Regulations and determined that a Regulation Impact Statement (**RIS**) was not required for those regulations (OBPR ID: 18413). Consequently, no additional analysis in the form of a

RIS is required for the MOS amendment that arises from amendments made by those regulations.

Statement of Compatibility with Human Rights

A Statement of Compatibility with Human Rights is at Appendix 1.

Making and commencement

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

The instrument commences on the day after registration.

[Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)]

Appendix 1**Statement of Compatibility with Human Rights**

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

Civil Aviation Safety Regulations 1998***Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)*****Overview of the legislative instrument**

The purpose of the *Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)* (the **MOS amendment**) is to revise certain provisions of the *Manual of Standards (MOS) Part 173 – Standards Applicable to the Provision of Instrument Flight Procedure Design (MOS Part 173)* concerning procedure design authorisations and off-shore installations.

Relevant existing provisions in MOS Part 173 do not reflect current navigational technology. However, it is such technology that drives the operational procedures followed by those sectors of the aviation industry which use helicopters to service off-shore resource extraction facilities such as oil and gas rigs. It has been necessary, therefore, to review and update the MOS provisions concerning the design of helicopter instrument approach procedures to these facilities to ensure appropriate consistency between current technology, operational procedures and legislative requirements.

Human rights implications

The MOS amendment is a legislative instrument that 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*. The instrument does not engage any of the applicable rights or freedoms.

Conclusion

The MOS amendment is compatible with the human rights as it does not raise any human rights issues.

Civil Aviation Safety Authority

Manual of Standards Part 173 Amendment Instrument 2017 (No. 1)

1 Name of instrument

Section 1 names the MOS amendment.

2 Commencement

Section 2 commences it on the day after registration.

3 Amendment of the Manual of Standards Part 173

Under section 3, Schedule 1 amends the MOS.

Schedule 1 Amendments

[1] Paragraph 3.2.1.2 (b)

This item is consequential on the rewriting of Section 8.6 and the repeal of Section 8.7.

[2] Paragraphs 6.1.1.1 (g) and (h)

This item is consequential on the repeal of Section 8.7.

[3] Paragraph 6.1.2.1

This item is consequential on the repeal of Section 8.7.

[4] Paragraph 6.1.2.2

This item updates CASA contact details.

[5] Paragraph 6.1.3.2

This item updates CASA contact details.

[6] Paragraph 6.2.1.2 (b)

This item is consequential on the repeal of Section 8.7.

[7] Section 8.6

This item creates the new Section 8.6, including navigational diagrams and calculations, to revise the requirements for helicopter off-shore procedures using airborne radar.

[8] Section 8.7

This item repeals Section 8.7 (NDBs).

[9] Section 8.8

This item renames Section 8.8 to include an up-to-date reference to GNSS. It also makes essentially editorial and drafting improvements without significantly altering the intent of the section.

[10] – [21] Section 8.8

These items make amendments to Section 8.8 consequential on the revision of Section 8.6 and the repeal of Section 8.7, and make some corrections to the numbering of Figures.