Explanatory Statement

Civil Aviation Safety Regulations 1998

Manual of Standards Part 173 Amendment (No. 1) 2011

Purpose
The purpose of *Manual of Standards Part 173 Amendment (No. 1) 2011* (the ***MOS amendment***) is to introduce instrument flight procedure design standards for precision approach Category II and III operations.

Legislation
Section 98 (1) of the *Civil Aviation Act 1988* (the ***Act***) provides that the Governor-General may make regulations for the purposes of 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***). In particular, Part 173 of CASR 1998 deals with, among other things, standards that apply to the design of instrument flight procedures.

Under regulation 173.085 of CASR 1998, a certified designer designing a terminal instrument flight must ensure that the procedure is designed in accordance with any applicable standards set out or referred to in International Civil Aviation Organization (***ICAO***) Doc. 8168 (PANS-OPS); and any applicable standards set out in the Manual of Standards Part 173—Standards Applicable to Instrument Flight Procedure Design (***the MOS***).

Related instruments
Manual of Standards Part 173 Amendment Instrument (No. 1) 2011 (the ***MOS amendment***) amends the MOS. It is 1 of a package of 4 inter-related instruments dealing with low visibility operations arising from the same background, the other 3 being a determination of meteorological minima, a MOS Part 139 amendment and a MOS Part 172 amendment.

Background
In October 2007, CASA commenced Project AS 07/13 – Regulation of Low Visibility Operations. The objective of the project was to develop appropriate requirements and guidelines for the conduct in Australia of aircraft operations in conditions of reduced cloud ceiling or low visibility. The project reviewed local and international standards, consulted with industry and made recommendations for developing safe standards for low visibility operations.

Discussion Paper 0805AS – Low Visibility Operations in Australia (the ***DP***) was published on 4 August 2008. It introduced 28 proposals covering aircraft operations, aerodrome and air traffic control operations, instrument flight procedure design, aeronautical information services, and associated CASA approval processes. Significant proposals included:

- alignment of flight operational requirements (aerodrome infrastructure like lighting and markings) with standards for such infrastructure
- raising the existing take-off visibility minimum for aircraft at non-controlled aerodromes from 500 m to 800 m; but with the provision for operators to take off in visibility conditions of not less than 550 m in certain circumstances

- establishing ICAO-conforming Precision Approach Category II and Category III minima for use at suitably equipped aerodromes by approved aircraft operators
- adopting a number of ICAO standards for aerodrome infrastructure for low visibility operations.

Following consultations on the DP, on 12 December 2009 CASA released Notice of Proposed Rule Making (NPRM) 0906AS – IFR minima and low visibility operations (the ***NPRM***). The NPRM formally notified CASA's intention to implement the majority of the proposals introduced by the DP, including:

- aligning aircraft operational approvals and aerodrome infrastructure requirements around trigger visibility criteria of 800 m, 550 m and 350 m
- for future CASRs relating to air transport operations (such as Parts 121, 133 and 135), amending the existing proposal for approach bans so that:
  - the approach ban "limit" would be standardised, for both precision and non-precision approaches, at the point the aircraft descends through 1 000 feet above aerodrome level; and
  - a runway visibility assessment, in addition to an RVR or meteorological visibility report, may be used by a pilot to make the decision to continue or discontinue an approach
- adopting the revised ICAO visibility minima for Precision Approach Categories II, IIIA and IIIB
- establishing closer alignment between Australian aerodrome infrastructure requirements and ICAO Standards and Recommended Practices (***SARPs***) with respect to operations in visibility conditions of less than 800 m
- permitting approach light systems with either distance coded centreline or Barrette centreline configurations, as detailed in ICAO Annex 14 — Aerodromes
- adopting ICAO standards for runway touchdown zone markings and aiming point markings
- promulgating a Civil Aviation Advisory Publication (***CAAP***) to assist aircraft operators in applying for permission to conduct low visibility operations.

CASA received 10 responses to the NPRM and, in general, the proposals received a favourable response. The next step in the amendment process was the authorisation of changes to the relevant legislative documents. This Explanatory Statement covers changes to Manual of Standards Part 173.

Key feature of specific changes in the MOS amendment and their impact

A Adoption of standard visibility minima for precision approach Category II and III operations

New standards are introduced which provide visibility and decision altitude minima for precision approach Category II and III operations. These minima and associated aerodrome requirements are consistent with ICAO SARPs contained in Annexes 6 (Operation of Aircraft) and 14 (Aerodromes) to the International Convention on International Civil Aviation.

Impact
No significant impact is expected as a result of this new standard because the only existing precision approach Category II and III instrument flight procedures were designed in accordance with the relevant ICAO SARPs.

B Miscellaneous editorial change

The existing table of minimum visibility standards for precision approach Category I instrument flight procedure is replaced with a new table that describes more clearly the lighting and marking requirements, but without changing the original standards or requirements.

Impact
CASA's assessment is that the changes will have no impact on instrument flight procedure design.

MOS amendment
Details of the MOS amendment are contained in Attachment 1.

Legislative Instruments Act
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. Subregulation 173.022 (1) of CASR 1998 consequentially empowers the making of the MOS and the MOS amendment.

Under subsection 98 (5AA) of the Act, an instrument issued under paragraph 98 (5A) (a) (that is, the MOS amendment) is a legislative instrument for the *Legislative Instruments Act 2003* (the ***LIA***) if it is expressed to apply to a class of persons or aircraft rather than to a singe person or aircraft.

Applying as it does to ATS providers generally, the MOS amendment is, therefore, a legislative instrument subject to registration under section 24 of the LIA, and tabling and disallowance in the Parliament under sections 38 and 42 of the LIA.

Consultation
Consultation under section 17 of the LIA has taken place under the NPRM process described above and in accordance with the requirements for making a MOS under Subpart 11.J of CASR 1998.

As noted, NPRM 0906AS – IFR minima and low visibility operations – was released for public consultation on 12 December 2009. The period for comment closed on 12 February 2010. There were 10 responses to the NPRM and CASA took each response into account in deciding how to proceed further with the NPRM.

Office of Best Practice Regulation (*OBPR*)
CASA assessed the proposed changes for their impact on industry, and concluded that all the changes are expected to have a nil to low impact. CASA also submitted the change proposals for review by the OBPR, and has been informed that no Regulation Impact Statement is required (OBPR Exemption 10996 refers).

Making, commencement and date of effect
The MOS amendment commences on the day after it is registered.

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

Attachment 1

Manual of Standards Part 173 Amendment (No. 1) 2011

1 Name of instrument

Under this section, the instrument is named the *Manual of Standards Part 173 Amendment Instrument (No. 1) 2011*.

2 Commencement

Under this section, the instrument commences on the day after it is registered.

3 Amendment of the Manual of Standards Part 173

Under this section, Schedule 1 amends Manual of Standards Part 173.

Schedule 1 Amendments

[1] Subsection 8.1.6.1

This amendment is intended to modify the applicability of subsection 8.1.6.1 so that it applies to instrument flight procedures *other than* precision approach Category II or III instrument flight procedures. This is because the requirements for precision approach Category II or III instrument flight procedure design are not dependent on subsection 8.1.6.1 but are self-contained in a new subsection to be added by Amendment [4].

[2] Subsection 8.1.6.2

This amendment is intended to modify the applicability of subsection 8.1.6.2 so that it applies to instrument flight procedures *other than* precision approach Category II or III instrument flight procedures. This is because the requirements for precision approach Category II or III instrument flight procedure design are not dependent on subsection 8.1.6.1 but are self-contained in a new subsection to be added by Amendment [4].

[3] Subsection 8.1.6.2, Table 8-1

This amendment replaces the existing table of minimum visibility standards for precision approach Category I instrument flight procedure with a new table that describes more clearly the lighting and marking requirements, but without changing the original standards or requirements.

[4] After subsection 8.1.6.2 (including Table 8-1)

This amendment inserts new standards detailing the minimum visibility values for precision approach Category II and III procedures depending on the lighting and visibility reporting capabilities of the relevant aerodrome.

[5] Subsection 8.1.7.2

This amendment makes a clarifying grammatical correction to subsection 8.1.7.2 by amending the text from reading "The State DA/MDA must not be less than…" to "The State DA/MDA must not be less than *any of the following*:" This is to ensure there is no misunderstanding. The State DA/MDA must not be less than *any* of the listed values.

[6] Paragraph 8.1.7.2 (d)

This amendment corrects a typographical error.

[7] After paragraph 8.1.7. 2 (d)

This amendment inserts paragraph 8.1.7.2 (e) which is a new State decision altitude (***DA***) for precision approach Category II procedures. Thus, the State DA must not be less than the threshold elevation plus 100 feet.