

Explanatory Statement

Civil Aviation Safety Regulations 1998

Part 61 Manual of Standards Amendment Instrument 2016 (No. 1)

Purpose

The purpose of the *Part 61 Manual of Standards Amendment Instrument 2016 (No. 1)* (the *MOS amendment*) is to remove references to the use of azimuth guidance from certain flight test requirements under Schedule 5 of the Part 61 Manual of Standards (*MOS*). The requirements formerly appeared in Appendices K.1, K.2 for air transport pilot licence (*ATPL*) aircraft category rating flight tests, and Appendix M.1 for instrument rating flight tests. The requirements are removed because approximately half of the navigation infrastructure is being progressively decommissioned from 26 May 2016 by the Navigation Rationalisation Project of Airservices Australia (*AA*), which will significantly reduce the opportunity to conduct instrument approach operations using azimuth guidance indicators.

Legislation — the Act

Under subsection 98 (1) of the *Civil Aviation Act 1988* (the *Act*), the Governor-General may, among other things, make regulations prescribing matters required, permitted, necessary or convenient for the Act and in the interests of the safety of air navigation.

Legislation — Part 61 of CASR 1998

Some of these regulations are contained in the *Civil Aviation Safety Regulations 1998* (*CASR 1998*). Part 61 of CASR 1998 deals with flight crew licensing including flight tests.

A fundamental rationale behind Part 61 of CASR 1998 is that a pilot may be authorised to fly a particular type of aircraft, for a particular kind of operation, only if he or she has undertaken sufficient training and an assessment has been made to confirm that the pilot is competent in operating that type of aircraft for the particular kind of operation in question. In addition, a pilot must periodically undergo a review of their continued competence operating the aircraft if the pilot wishes to continue flying that type of aircraft in that kind of operation.

Legislation — Manual of Standards

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. By virtue of this power, regulation 61.035 of CASR 1998 provides for the issue of a MOS for Part 61.

Under subregulation 61.035 (1), for paragraph 98 (5A) (a) of the Act, CASA may issue a MOS that sets out matters relating to flight crew licences, including flight tests.

Schedule 5 of the Part 61 MOS concerns flight test standards.

Section K of Schedule 5 deals with air transport pilot licences (*ATPL*). Appendix K.1 sets out the flight test requirements for the ATPL aeroplane category rating flight test. Under subclause 1.6, the applicant for the licence and rating must, among other things, perform instrument approach operations for at least 3 different kinds of procedures, *including an approach using azimuth guidance*, and a 2D instrument approach operation and an instrument landing system (*ILS*) or a ground-based

augmentation system landing system (*GLS*) instrument approach to a published decision altitude (*DA*).

Appendix K.2 sets out the flight test requirements for the ATPL helicopter category rating flight test. If the applicant for the licence or rating is the holder of an instrument rating, under subclause 1.5, he or she must, among other things, perform instrument approaches for at least 3 different kinds of procedures, *including an approach using azimuth guidance*, a 2D instrument approach operation and an ILS or GLS instrument approach to a published DA.

Section M of Schedule 5 deals with instrument ratings. Appendix M.1 sets out the instrument rating flight test requirements. Under paragraph 1.3 (a), the applicant for the rating must, among other things, demonstrate her or his competency by performing instrument approach operations for at least 2 different kinds of procedures, including at least *1 approach using azimuth guidance*, except as provided for in subclause 1.7.

Under subclause 1.7, the requirement in paragraph 1.3 (a) to demonstrate competency performing an instrument approach operation using azimuth guidance is not required if: the aircraft is not capable of providing azimuth guidance; and the applicant has completed relevant training in the use of azimuth guidance; and the flight examiner is satisfied the training records indicate competency was achieved during training.

Background

Under the Navigation Rationalisation Project of AA, on, and progressively from, 26 May 2016, many ground-based navigational aids will be switched off as part of the transition towards comprehensive use of the global navigation satellite system (*GNSS*) for operations under the instrument flight rules operations. As a result, a significant number of ground-based navigation aids, including many non-directional beacons (*NDBs*) will cease to be available for aircraft navigation.

There are 2 methods of providing navigation guidance to pilots using instrument navigation displays: azimuth guidance indicators and lateral deviation indicators. Some aircraft systems are able to use navigation data sourced from ground navigation aid stations and display it using *both* indicating methods. However, many older aircraft have limited display capability and can only display azimuth guidance, sourced from NDBs, using a conventional automatic direction finder (*ADF*). More modern systems are able to display data from other systems such as GNSS as azimuth guidance. Other systems make it possible to display very high-frequency omni-directional range (*VOR*) track information as azimuth guidance, although it is more common to use a course deviation indicator (*CDI*) for lateral deviation. Increasingly, more modern aircraft are not fitted with ADFs.

The navigation aid decommissioning phase of the Navigation Rationalisation Project marks a significant milestone as satellite-based systems assume the primary means of navigation. Pilots are progressively relying less on the old systems and this is also being reflected in the flight training and flight testing requirements.

Consequently, with the removal of many NDBs, flight tests which require approaches using azimuth guidance would become progressively less and less practicable. Such tests may even become unsafe as a result of congestion around the diminishing number of NDBs.

Prior to the commencement of Part 61 on 1 September 2014, requirements for the grant of an instrument rating did not require competency conducting instrument approach operations using azimuth guidance indicators. A person could obtain an instrument rating using only a VOR or an NDB.

The MOS amendment removes any specific requirement for flight testing to involve instrument approach operations using azimuth guidance.

While this is likely to result in fewer pilots being tested for competency in approach operations using azimuth guidance, with the withdrawal of NDBs, pilots are also less likely to have to rely on azimuth guidance as a primary navigation aid.

Part 61 (for example, subregulation 61.870 (6)) limits pilots from using azimuth guidance unless recent experience has actually been achieved.

The proposal does not remove the requirement for pilots to demonstrate competency conducting particular kinds of instrument approach procedures. Thus, under subregulation 61.860 (5), a pilot would only be authorised to conduct an approach using an NDB (as an example of a system which normally uses azimuth guidance) if he or she had received training and demonstrated competency performing such an approach procedure.

CASA has assessed the risk of removing the requirement for relevant flight tests to include approaches using azimuth guidance, taking into account the limitations of older aircraft, the risks of congestion as installations are progressively decommissioned, and the requirements for pilots to demonstrate competency for particular kinds of instrument approach procedures.

CASA has concluded that the risk profile for the continuing adequacy of relevant flight tests is not significantly changed as a result of removing the flight test requirement for approaches using azimuth guidance.

CASA will, however, continue to monitor flight tests and keep under review any need for options to assess competency using azimuth guidance indicators.

MOS amendment

The MOS amendment removes references to using azimuth guidance indicators from Appendices K.1, K.2 and M.1 for ATPL aircraft category rating flight tests and instrument rating flight tests.

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 the MOS, and the MOS amendment, apply, not to a particular person or a particular aircraft or aeronautical product but to classes of persons and aircraft 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 (AIA)*, 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

Much of the public consultation on the Navigation Rationalisation Project has been carried forward with the aviation community by AA whose project it is. However, the consequences of the withdrawal of navigation infrastructure on flight training and flight testing have also been the subject of consultation by CASA through the Regional Airspace and Procedures Advisory Committees and at other meetings.

CASA has consulted with various flight training operators, including at Moorabbin in Melbourne on 29 March 2016, when access and safety concerns regarding the reduction in infrastructure were discussed, in particular the anticipation of significant congestion at certain locations. CASA also consulted with industry operators in Tasmania and Queensland in April and May 2016, again focusing on the same access and safety concerns.

Against this background, CASA has considered the issue of how best to address the requirements for use of azimuth guidance in relevant flight tests. Having assessed the safety implications of the matter as described above, CASA in turn is responding directly to the representations made to it. In the light of this sequence of events, and CASA's agreement to act quickly, more formal consultation has not been undertaken because CASA considered it was neither necessary nor appropriate in the circumstances.

Office of Best Practice Regulation (OBPR)

Part 61 under which the MOS amendment is made, was made by the *Civil Aviation Legislation Amendment Regulation 2013 (No. 1)*, as amended by the *Civil Aviation Legislation Amendment (Flight Crew Licensing Suite) Regulation 2013*, and the *Civil Aviation Legislation Amendment (Flight Crew Licensing and Other Matters) Regulation 2013*. A Regulation Impact Statement (**RIS**) was prepared by CASA for the regulations which constitute the head of power for the MOS. This RIS was assessed as adequate by OBPR (OBPR ID: 2777) and applies for the purpose of the MOS amendment.

Statement of Compatibility with Human Rights

The Statement in Appendix 2 is prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. The legislative instrument does not directly engage any of the applicable rights or freedoms, and is compatible with human rights, as it does not directly raise any human rights issues.

Commencement and making

The MOS amendment commences on 26 May 2016.

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.

[Part 61 Manual of Standards Amendment Instrument 2016 (No. 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

Part 61 Manual of Standards Amendment Instrument 2016 (No. 1)

This *Part 61 Manual of Standards Amendment Instrument 2016 (No. 1)* (the **MOS amendment**) 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 purpose of the MOS amendment is to remove references to the use of azimuth guidance from certain flight test requirements under Schedule 5 of the Part 61 Manual of Standards. The requirements are removed because operations using azimuth guidance are based on ground-based navigation systems, approximately 50% of which are being progressively decommissioned from 26 May 2016.

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 and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Civil Aviation Safety Authority