Explanatory Statement

Civil Aviation Safety Regulations 1998

CASA 33/18 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2018

Purpose

This legislative instrument gives a direction to certain classes of aircraft operators that they must not make declarations about their required communication performance (*RCP*) and their required surveillance performance (*RSP*) capabilities unless certain mandated equipment and performance standards are met.

The direction will have the practical effect of "authorising" Australian registered aircraft and aircraft operated by Australian operators to declare RCP 240 and RSP 180 capabilities in Australian and foreign airspace where such performance requirements are prescribed.

Legislation

Section 98 of the *Civil Aviation Act 1988* (the *Act*) empowers the Governor-General to make regulations for the Act and the safety of air navigation. Relevantly, the Governor-General has made the *Civil Aviation Safety Regulations 1998* (*CASR*). Under paragraph 11.245 (1) (a) of CASR, for subsection 98 (5A) of the Act, CASA may, by instrument, issue a direction about any matter affecting the safe navigation and operation of aircraft. Under paragraphs 11.245 (2) (a), (b) and (c), CASA may issue such a direction only if CASA is satisfied that it is necessary in the interests of safety, only if the direction is not inconsistent with the Act, and only for the purposes of CASA's functions.

Under regulation 11.250, a direction ceases to be in force on a day specified in the instrument, or if no day is specified, 1 year after the instrument commences. Under *subregulation* 11.255 (1), it is an offence to contravene a direction under regulation 11.245 that is applicable to the person.

Background

In November 2016, through their *PANS-ATM (Doc.4444)*, ICAO introduced new requirements for performance-based communications and surveillance (*PBCS*) which involve the application of RCP 240 and RSP 180 to certain separation minima in Oceanic airspace. The Asia/Pacific Regional Office of ICAO (APAC) has published the requirements in the *Regional Supplementary Procedures (Doc 7030)* for effect on and from 29 March 2018.

Like many other States at present, Australia is not intending to implement the new procedures in its own airspace within the ICAO time frame. In any event, many aircraft operators are not ready for operational implementation of PBCS by the target date. Nevertheless, there are some foreign States which already require aircraft flying in their airspace to have RCP 240 and RSP 180 capabilities to operate on certain routes or flight levels, and these States require declarations of appropriate authorisation.

Thus, Australian registered aircraft operating in a variety of airspace overseas will be subject to the PBCS authorisation requirements implemented by foreign States. These States require Australian registered aircraft to have a specific PBCS authorisation issued by CASA.

The direction is designed to provide a safe and effective PBCS authorisation mechanism for these purposes. It does so by directing that relevant operators must *not* declare relevant capabilities *unless* they comply with the requirements of the direction.

Operationally, aircraft which currently conduct datalink operations in Australian airspace already technically meet RCP 240 and RSP 180 requirements. For such operators, no new equipment or operational procedures are needed though some aircraft documents will have to be updated and some flight crew knowledge and personnel training will be necessary.

Airservices Australia (AA) has a system for datalink monitoring and provides advice to operators when consistent non-compliance with the applicable operational criteria is observed

Details of the instrument

Under section 5, the instrument applies to aircraft operators who operate an Australian aircraft or hold an air operator's certificate (an AOC) and who conduct datalink operations in Australia. A datalink operation is one in which ATC/pilot communications and position reports occur over a datalink.

Under section 6, a relevant aircraft operator (or a pilot on behalf of the operator) is directed that, when operating in any airspace for which PBCS is prescribed, they must not declare that the relevant aircraft has RCP or RSP capabilities unless the capabilities are for RCP 240 and RSP 180, and unless the requirements set out in Schedule 1 are complied with at the time of the declaration.

As explained in a Note, the practical effect of this is that an aircraft operator to whom the instrument applies and who fully complies with the requirements may consider that he or she is "authorised" to declare RCP 240 and RSP 180 capabilities.

A Note that is for the benefit of operators and national aviation authorities (*NAAs*), explains that it is ultimately a matter for an NAA responsible for relevant foreign airspace to be satisfied that an operator's declaration is valid for the particular aircraft at the time of any declaration, audit or inspection. A false declaration would, however, constitute an offence under regulation 11.255 of CASR and could result in other legal consequences under the Act.

Schedule 1 sets out the underpinning requirements.

The aircraft must be equipped with avionics supporting ADS-C and controller-pilot datalink communication applications over FANS 1/A.

A declaration of RCP 240 and RSP 180 capabilities must not be made if the aircraft operator has received advice from AA that the relevant aircraft has consistently not met the operational criteria of RCP 240 and RSP 180 specifications, and has failed to rectify the problem.

A Note is designed to remind operators that AA monitors datalink communications in Australian airspace and issues advice when there has been consistent non-compliance with the operational criteria of RCP 240 and RSP 180.

The aircraft flight manual, an original equipment manufacturer's service letter, or another relevant document from the entity responsible for the design approval of the aircraft datalink

communications equipment, must include a Statement of Compliance (*SOC*) that the aircraft system is approved for datalink communications using FANS 1/A avionics and the aircraft datalink system meets the aircraft-allocated requirements of the RCP 240 and RSP 180 specifications.

To address circumstances where a SOC has been applied for but not received, a temporary substitute, pending the formal issue of the SOC, is a copy of the operator's request to the appropriate design authority for an appropriate SOC, provided that there has been no indication of non-compliance given by the State of Design.

Where the aircraft is operated in accordance with a minimum equipment list (*MEL*), the relevant RCP 240 and RSP 180 capabilities must be included in the MEL.

To address circumstances where such a relevant MEL has been applied for but not received, a temporary substitute, pending the formal issue of the MEL, is a copy of the operator's request to the appropriate authority for the information relevant to the RCP 240 and RSP 180 capabilities to be included in the MEL.

The agreement between the aircraft operator and the communication services provider must include appropriate specified terms and conditions to guarantee the effectiveness of the datalink system, for example: that there is adequate subnetwork coverage in the route flown; that there is to be notification of coverage and performance failures; that there is to be recording of datalink messages for 30 days; that datalink messages will be available on written request by CASA or its foreign equivalents; that datalink messages will not be manipulated or altered; and that network-allocated requirements will be met in accordance with ICAO Doc 9869, *Performance-based Communications and Surveillance (PBCS) Manual.*

To address circumstances where the agreement between the aircraft operator and the communication services provider does not include the appropriate terms and conditions, a temporary substitute, pending a revised agreement, is a copy of the operator's request to the provider for such a revised agreement.

Each member of the relevant flight crew must have appropriate knowledge of various matters, including the PBCS concept, the RCP and RSP specifications, proper entering of RCP and RSP descriptors in the flight plan, and relevant ATC procedures for datalink failures and non-compliance with prescribed RCP and RSP specifications.

The operator's operations manual must contain appropriate procedures for ensuring that the requirements of the direction instrument are met.

Finally, for documents, both Australian and foreign, referenced in the instrument for the purposes of definitions, provision is made that, unless the contrary intention appears, the reference is taken to be a reference to the relevant document as in force or existing from time to time

Access to incorporated documents

For datalink communications standards and requirements, FANS 1/A is based on EUROCAE ED-100A/RTCA DO-258A, incorporated by reference into the direction instrument as in force from time to time. These are European and American standards documents against which equipment is certified as fit for purpose. Relevant declaration requirements are

contained in ICAO Doc 9869, the PBCS Manual, also incorporated by reference into the direction instrument, as in force from time to time. This document is ICAO's performance standards document for datalink communications. All of these documents are proprietary, copyright, fee-for-service documents, prepared on a commercial basis and they may be purchased from EUROCAE, RTCA Inc or ICAO as the case may be.

As a matter of practicality, it would be almost impossible for aircraft operators to function in Australian and foreign airspace without having their own subscription access to relevant ICAO and EURAE/RTCA documents. Nevertheless, as a current subscriber for the documents, CASA will make the relevant sections of the incorporated documents available, in its Canberra or regional offices, by arrangement, and, in keeping with the proprietary nature of the documents, for viewing only, to any aircraft operator who is affected by the direction instrument, or to any interested person.

Duration

The direction commences on the day after it is registered. It is expressed to operate until it is repealed at the end of 30 April 2021. In the lead-up to the expiry of the instrument, CASA will review its provisions and determine how best to address any continuing or new requirements for declaration authorisations.

Legislation Act 2003 (the LA)

Directions under Subpart 11.G of CASR 1998 are "for subsection 98 (5A)" of the Act, that is, for regulations which empower the issue of certain instruments, like directions, in relation to "(a) matters affecting the safe navigation and operation, or the maintenance, of aircraft" and "(b) the airworthiness of, or design standards for, aircraft". The direction is clearly one in relation to matters affecting the safe navigation and operation of aircraft.

Under subsection 98 (5AA) of the Act, a direction issued under paragraph 98 (5A) (a), for such matters, is a legislative instrument if expressed to apply in relation to a class of persons, a class of aircraft or a class of aeronautical products (as distinct from a particular person, aircraft or product).

The exemption applies to a class of persons (relevant aircraft operators) and is, therefore, a legislative instrument subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

Consultation

Under section 17 of the LA, CASA is to be satisfied that appropriate consultation, as is reasonably practicable, has been undertaken in relation to a proposed instrument. The Explanatory Statement is required to describe the nature of any consultation that has been carried out or, if there has been no consultation, to explain why none was undertaken (see paragraphs 15J (2) (d) and (e)).

CASA engaged in public consultation which included AA and aircraft operators who conduct international operations. Such operators require and have sought an appropriate authorisation mechanism for their relevant international operations. Although the instrument is in the form of a direction, it is ultimately facilitative in providing a standing authorisation mechanism for operators who comply with what are in effect safety "conditions".

Office of Best Practice Regulation (OBPR)

A Regulation Impact Statement (*RIS*) is not required because the direction is covered by a standing agreement between CASA and OBPR under which a RIS is not required for such a direction (OBPR id: 14507).

Statement of Compatibility with Human Rights

The Statement in Appendix 1 is prepared in accordance with Part 3 of the *Human Rights* (*Parliamentary Scrutiny*) *Act 2011*. The instrument does not engage any of the applicable rights or freedoms, and is compatible with human rights, as it does not raise any human rights issues.

Commencement and making

The direction commences on the day after it is registered and is repealed at the end of 30 April 2021.

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

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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 direction will have the practical effect of "authorising" Australian registered aircraft and aircraft operated by Australian operators to declare required communication performance 240 (*RCP 240*) and required surveillance performance 180 (*RSP 180*) capabilities in Australian and foreign airspace where such performance requirements are prescribed. This requirement arises because in November 2016, ICAO introduced new requirements for performance-based communications and surveillance (*PBCS*) relating to RCP 240 and RSP 180 performance capabilities. There are some foreign States which already require aircraft flying in their airspace to have these performance capabilities and these States require declarations of appropriate authorisation. Consequently, Australian registered aircraft operating in a variety of airspace overseas will be required to have a specific PBCS system authorisation issued by CASA.

The direction is designed to provide a safe and effective PBCS authorisation mechanism for these purposes. It does so by directing that relevant operators must *not* declare relevant capabilities *unless* they comply with a set of technical, training and verification requirements mandated by the direction. The direction is, therefore, essentially an approval mechanism for operators who are prepared to be equipped and ready for flight in prescribed foreign airspace. Australia has not yet prescribed similar requirements but may propose to do so in the future. If and when this occurs, the instrument will also apply in Australian airspace.

Human rights implications

The legislative instrument is beneficial in purpose and content and 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

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

Civil Aviation Safety Authority