

Explanatory Statement

Civil Aviation Safety Regulations 1998

CASA 30/21 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2021

Purpose

CASA 30/21 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2021 (the **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 instrument 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, the Civil Aviation Safety Authority (**CASA**) may, by instrument, issue a direction about any matter affecting the safe navigation and operation of aircraft. Under subregulation 11.245 (2), 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 Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) (Doc. 4444), the International Civil Aviation Organization (**ICAO**) introduced new requirements for performance-based communication and surveillance (**PBCS**). PBCS includes functional, safety and performance requirements for communication and surveillance systems, intended for use for flight in oceanic airspace and the associated provision of air traffic services. The performance requirements for communication and surveillance are respectively specified in terms of Required Communication Performance (**RCP**) and Required Surveillance Performance (**RSP**), together with an appended numeric parameter value. RCP 240 and RSP 180 are typical PBCS specifications that have been introduced for the application of air traffic control separation in oceanic airspace.

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.

In 2018, CASA issued *CASA 33/18 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2018 (CASA 33/18)*. That 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.

CASA 33/18 is repealed at the end of 30 April 2021.

Overview of instrument

This instrument reissues the direction in CASA 33/18.

The instrument commences on 1 May 2021 and is repealed at the end of 30 April 2024. In the lead-up to the repeal of the instrument, CASA will review its provisions and determine how best to address any continuing or new requirements for declaration authorisations.

CASA has assessed the impact of the directions in the instrument on aviation safety and is satisfied they have no impact on the safety of a relevant operator's operations.

Documents incorporated by reference

For datalink communications standards and requirements, FANS 1/A is based on EUROCAE ED-100A/RTCA DO-258A, incorporated by reference into the 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, *Performance-based Communication and Surveillance (PBCS) Manual* (the **PBCS Manual**), also incorporated by reference into the 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 EUROCAE/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 other 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 instrument, or to any interested person.

Content of instrument

Section 1 sets out the name of the instrument.

Section 2 sets out the duration of the instrument, which commences on 1 May 2021 and is repealed at the end of 30 April 2024.

Section 3 sets out definitions for the instrument.

Section 4 states that a reference in the instrument to an instrument or document is a reference to that instrument or document as in force or existing from time to time.

Under section 5, the instrument applies to aircraft operators who operate an Australian aircraft, or hold an air operator's certificate (an *AOC*) issued under the Act, and conduct datalink operations and intend to declare RCP and RSP capabilities for the aircraft in any Australian-administered, or foreign-administered, airspace. 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 Note 1 to section 6, 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 it is "authorised" to declare RCP 240 and RSP 180 capabilities.

Note 2 is for the benefit of operators and national aviation authorities (*NAAAs*) It 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.

Clause 1 of Schedule 1 requires the aircraft to be equipped with avionics supporting ADS-C and controller-pilot datalink communication applications over FANS 1/A.

Under clause 2 of Schedule 1, 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.

The Note to clause 2 reminds 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.

Under clause 3 of Schedule 1, 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, under clause 4 of Schedule 1, 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.

Under clause 5 of Schedule 1, where the aircraft is operated in accordance with a minimum equipment list (**MEL**), the information relevant to 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, under clause 6 of Schedule 1, 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.

Under clause 7 of Schedule 1, 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, the 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, under clause 8 of Schedule 1, a temporary substitute, pending a revised agreement, is a copy of the operator's request to the provider for such a revised agreement.

Clause 9 of Schedule 1 requires each member of the relevant flight crew to 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.

Clause 10 of Schedule 1 requires the aircraft operator to ensure that its relevant personnel have appropriate knowledge of the relevant RCP and RSP specifications. The Note to clause 10 lists documents that the aircraft operator may use to develop training material for its personnel. These documents are mentioned for guidance only and are not incorporated in the instrument by reference.

Under clause 11 of Schedule 1, the operator's operations manual must contain appropriate procedures for ensuring that the requirements of the instrument are met.

Legislation Act 2003 (the LA)

Paragraph 98 (5A) (a) of the Act provides that CASA may issue instruments in relation to matters affecting the safe navigation and operation, or the maintenance, of aircraft. Additionally, paragraph 98 (5AA) (a) of the Act provides that an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if the instrument is expressed to apply in relation to a class of persons and paragraph 98 (5AA) (b) of the Act provides that an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if the instrument is expressed to apply in relation to a class of aircraft.

The instrument applies to a class of persons, being relevant aircraft operators, and a class of aircraft, including Australian aircraft operated by relevant aircraft operators. The instrument is, therefore, a legislative instrument, and is subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LA.

Consultation

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".

CASA is satisfied that no further consultation is appropriate or reasonably practicable for this instrument for section 17 of the LA.

Sector risk, economic and cost impact

Subsection 9A (3) of the Act states that subject to regarding the safety of air navigation as the most important consideration, in developing and promulgating aviation safety standards under paragraph 9 (1) (c), CASA must:

- (a) consider the economic and cost impact on individuals, businesses and the community of the standards; and
- (b) take into account the differing risks associated with different industry sectors.

The cost impact of a standard refers to the direct cost (in the sense of price or expense) which a standard would cause individuals, businesses and the community to incur. The economic impact of a standard refers to the impact a standard would have on the production, distribution and use of wealth across the economy, at the level of the individual, relevant businesses in the aviation sector, and the community more broadly.

The economic impact of a standard could also include the general financial impact of that standard on different industry sectors.

As the instrument replaces an expiring instrument with the same provisions and conditions, there will be no change of economic or cost impact on individuals, businesses or the community.

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 of Compatibility with Human Rights at Attachment 1 has been 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.

Making and commencement

The instrument has been made by a delegate of CASA relying on the power of delegation under subregulation 11.260 (1) of CASR.

The instrument commences on 1 May 2021 and is repealed at the end of 30 April 2024.

Statement of Compatibility with Human Rights

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

CASA 30/21 – Required Communication Performance and Required Surveillance Performance (RCP 240 and RSP 180) Capability Declarations – Direction 2021

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 instrument 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, the International Civil Aviation Organization introduced new requirements for performance-based communication 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 the Civil Aviation Safety Authority.

The instrument 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 instrument 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