Explanatory Statement

Civil Aviation Safety Regulations 1998

CASA 69/19 — Temporary Prohibition of Operations (Boeing 737 MAX Aircraft) Direction 2019

Purpose

The purpose of this instrument is to prohibit air transport operators and other persons from operating Boeing 737-8 and Boeing 737-9 aircraft (*B737 MAX aircraft*) within Australian territory, other than for specified flights authorised by the Civil Aviation Safety Authority (*CASA*). The prohibition is due to concerns regarding the safety of B737 MAX aircraft and is for a period of 6 months.

The instrument repeals and replaces instrument CASA 21/19 that prohibited all operations of B737 MAX aircraft within Australian territory from 29 March 2019 to 29 September 2019.

Legislation

Section 98 of the *Civil Aviation Act 1988* (the *Act*) empowers the Governor-General to make regulations for the Act and in the interests of the safety of air navigation. Relevantly, the Governor-General has made the *Civil Aviation Safety Regulations 1998* (*CASR*) and *Civil Aviation Regulations 1988* (*CAR*).

Subpart 11.G of CASR provides for CASA to issue directions in relation to matters affecting the safety of air navigation. 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. Subregulation 11.245 (2) of CASR provides that CASA may issue such a direction if CASA is satisfied that it is necessary to do so in the interests of the safety of air navigation, if the direction is not inconsistent with the Act, and for the purposes of CASA's functions.

Under paragraph 11.250 (a) of CASR, a direction under regulation 11.245 ceases to be in force on the day specified in the direction. Under regulation 11.255, it is an offence of strict liability for a person to contravene a direction under regulation 11.245.

Section 3 of the Act defines *civil aviation authorisation* as an authorisation under this Act or the regulations to undertake a particular activity (whether the authorisation is called an AOC, permission, authority licence, certificate, rating or endorsement or is known by some other name).

Section 31 of the Act and regulation 201.004 of CASR provides for merits review of civil aviation authorisations.

Subsection 26 (2) of the Act, read with section 14 of the *Air Navigation Act 1920 (ANA)*, has effect to permit a person to operate a foreign registered aircraft into Australia, and land in Australia, in a non-scheduled flight. However, in giving effect to the Convention on International Civil Aviation (*Chicago Convention*), section 14 of the ANA is subject to clause 9 (b) of the Chicago Convention which preserves for contracting States the right to temporarily prohibit flying over its territory, provided that the prohibition applies without restriction to aircraft of all States.

Background

On 29 October 2018, Lion Air Flight JT610 operated by Lion Air crashed into the sea off Jakarta, Indonesia. The aircraft operated for this flight was a Boeing 737-8 aircraft on a scheduled domestic flight from Soekarno-Hatta International Airport in Jakarta to Depati Amir Airport in Pangkal Pinang. All 189 passengers and crew were killed in the accident.

On 7 November 2018, the Federal Aviation Administration of the United States of America (*FAA*) issued emergency Airworthiness Directive (*AD*) 2018-23-51 to owners and operators of the B737 MAX aircraft. The AD states that it was "prompted by analysis performed by the manufacturer showing that if an erroneously high single angle of attack (AOA) sensor input is received by the flight control system, there is a potential for repeated nose-down trim commands of the horizontal stabilizer. This condition, if not addressed, could cause the flight crew to have difficulty controlling the airplane, and lead to excessive nose-down attitude, significant altitude loss, and possible impact with terrain."

The FAA issued the AD because it evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. The AD required revised certificate limitations and operating procedures of the airplane flight manual to provide the flight crew with runaway horizontal stabilizer trim procedures to follow under certain conditions.

The AD states: "In the event of an uncommanded horizontal stabilizer trim movement, combined with any of the following potential effects or indications resulting from an erroneous Angle of Attack (AOA) input, the flight crew must comply with the Runaway Stabilizer procedure in the Operating Procedures chapter of this manual:".

On 10 March 2019, Ethiopian Airlines operated a Boeing 737-8 aircraft on a flight ET302 to Nairobi from Addis Ababa when it crashed shortly after reporting technical problems and seeking permission to turn back. All 157 persons on the aircraft were killed. The cause of the accident has not been established.

On 12 March 2019, CASA issued directions to specified foreign air transport Air Operator Certificate holders conducting flight operations into and out of Australia to cease operations of the Boeing 737-8 aircraft to and from Australia, or within Australian territory. The Director of Aviation Safety, who issued the directions, advised at the time that he would review the terms of the directions after findings into the accidents described above are released.

On 13 March 2019, the investigation of the Ethiopian Airlines ET302 crash identified information from the wreckage suggesting the aircraft's configuration just after take-off that, taken together with newly-refined data from satellite-based tracking of the aircraft's flight path, indicates some similarities between the ET302 and JT610 accidents that warrant further investigation of the possibility of a shared cause for the 2 incidents that needs to be better understood and addressed. On the same day the FAA, through an Emergency Order of Prohibition, ordered the grounding of all B737 MAX aircraft by U.S. certificated operators and also prohibited the operation of these aircraft in the territory of the United States.

The FAA Emergency Order allows special flight permits to be issued in accordance with specified U.S. Federal Aviation Regulations, "including to allow non-passenger carrying flights, as needed, for purposes of flight to a base for storage, production flight testing, repairs, alterations, or maintenance." These kinds of flights are known in the aviation industry as "ferry flights".

The FAA Emergency Order also allows for experimental airworthiness certificates to be issued but this instrument does not provide for CASA to issue these certificates because there are no B737 MAX aircraft registered in Australia.

The European Union Aviation Safety Agency (*EASA*) has also reconsidered ferry flights by B 737 MAX aircraft. On 25 March 2019, EASA issued Airworthiness Directive AD No. 2019-051R1 to replace Emergency AD 2019-0051-E. EASA AD No. 2019-0051R1 allows for ferry flights by B737 MAX aircraft operating with a permit-to-fly and under approved flight conditions. These flight conditions are the EASA *Flight Conditions that will be applicable for ferry flights for the B737 MAX related to the EASA AD2019-0051R1*.

CASA response

Given the seriousness of the accidents involving the B737 MAX, the similarities between them, and the absence of verified measures to prevent occurrence of similar accidents in the future, CASA decided in March that all operations of B737 MAX aircraft should be prohibited in Australia as a precaution and on 29 March 2019 issued instrument CASA 21/19 to give effect to this prohibition.

Instrument CASA 21/19 was issued after the directions CASA issued to individual operators on 12 March 2019. Instrument CASA 21/19 will repeal on 29 September 2019.

CASA has now reviewed the terms of instrument CASA 21/19 and has decided to continue the prohibition on the operation of B737 MAX aircraft within Australian territory but, consistent with the FAA Prohibition Order and EASA Airworthiness Directive AD No. 2019-0051R1, to allow the B737 MAX aircraft to conduct authorised non-passenger carrying, non-commercial flights to, or for the purposes of a flight to, a base for any of the following purposes relating to the aircraft: storage, production flight testing, repairs, alterations or maintenance.

Overview of instrument

The instrument is a direction under regulation 11.245 of CASR that prohibits a person from operating a B737 MAX aircraft in Australian territory other than for certain kinds of flights authorised by CASA. The instrument defines "authorised flight" (see under the heading "Content of instrument" below).

The concept of "operate" covers both an actual flight of an aircraft by a pilot and the organisation of a flight of an aircraft by a person. A person may be either a natural person or a corporate entity.

A decision refusing to grant an authorisation for a flight, or to impose a condition on an authorisation, would be subject to merits review before the Administrative Appeals Tribunal under section 31 of the Act or regulation 201.004 (Table 201.004, item 1) of CASR.

CASA has assessed the impact the instrument will have on aviation safety and is satisfied that it will protect aviation safety as it prohibits the operation of aircraft that may be unsafe.

The prohibition direction is for 6 months, but may be repealed earlier if CASA is satisfied the operation of B737 MAX aircraft does not pose a risk to the safety of air navigation. The instrument enables CASA to grant individual authorisations for non-passenger carrying flights that are not for commercial purposes, and are to, or for the purposes of a flight to, a base, for any of the following purposes: storage of the aircraft, production flight testing of the aircraft,

repairs or alterations to the aircraft or maintenance of the aircraft. CASA must also consider the flight would not be likely to have an adverse effect on the safety of air navigation. Authorisations may be given subject to conditions imposed in the interests of safety.

Content of instrument

Section 1 of the instrument sets out the name of the instrument.

Section 2 of the instrument repeals CASA 21/19 — *Temporary Prohibition of Operations (Boeing 737 MAX Aircraft) Direction 2019.*

Section 3 sets out the duration of the instrument. The instrument commenced on the day after it was registered and is repealed at the end of 6 months from the day it commences. A note to the section explains that, for regulation 11.250 of CASR, the direction in section 5 ceases to be in force on the day the instrument is repealed.

Section 4 sets out a key definition for the instrument. *Base* is defined as meaning an aerodrome or other location in or outside Australian territory.

A note to section 4 refers to other definitions relevant to the instrument that are set out in the Act, CAR or CASR, including *Australian territory*. Section 3 of the Act defines *Australian territory* as meaning the territory of Australia and of every external Territory, the territorial sea of Australia and of every external Territory and the airspace over any such territory or sea.

Section 5 sets out a direction made under regulation 11.245 of CASR. The direction is that a person must not operate a Boeing 737-8 or 737-9 model aircraft in Australian territory, other than for an authorised flight.

Authorised flight is defined in section 5 as meaning a non-passenger carrying flight that:

- (a) is conducted by an aircraft that is approved to conduct the flight by the national aviation authority of the State of registry of the aircraft; and
- (b) is not for a commercial purpose (as defined in regulation 2 of CAR); and
- (c) is to, or for the purposes of a flight to, a base for any of the following purposes:
 - (i) storage of the aircraft;
 - (ii) production flight testing of the aircraft;
 - (iii) repairs or alterations to the aircraft;
 - (iv) maintenance of the aircraft; and
- (d) CASA considers would not be likely to have an adverse effect on the safety of air navigation; and
- (e) is authorised in writing by CASA.

The definition ensures that an authorised flight cannot be a commercial flight. Although this requirement is not specifically mentioned in the FAA Emergency Order, special flight permits are not issued by the FAA for commercial flights.

As indicated earlier, a decision by CASA to refuse to grant an authorisation for a flight, or to impose a condition on an authorisation, would be subject to merits review before the Administrative Appeals Tribunal under section 31 of the Act or regulation 201.004 (Table 201.004, item 1) of CASR.

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. The instrument is a direction, made for subsection 98 (5A) of the Act, prohibiting all persons from operating B737 MAX aircraft in Australian territory other than for authorised flights. 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

Consultation would not be appropriate in this instance given the seriousness of the concerns that have given rise to the precautionary action taken by CASA in issuing this instrument and the fact that the instrument is required for B737 MAX aircraft to be regulated in Australian territory under arrangements consistent with those of other international aviation regulatory authorities.

There are also challenges in identifying members of the relevant communities, given that no B737 MAX aircraft are currently operating in Australia but foreign aircraft are, in some circumstances, allowed under the Act to fly in Australian territory. In these circumstances, CASA is satisfied that no consultation is appropriate or reasonably practicable for this instrument for section 17 of the LA.

Office of Best Practice Regulation (OBPR)

A Regulation Impact Statement (*RIS*) is not required in this case, as the instrument is covered by a standing agreement between CASA and OBPR under which a RIS is not required for directions (OBPR id: 14507).

Statement of Compatibility with Human Rights

The instrument is compatible with human rights. A Statement of Compatibility with Human Rights is at Attachment 1.

Making and commencement

The instrument has been made by the Acting Executive Manager, Regulatory Services & Surveillance, a delegate of CASA, in accordance with subsection 73 (2) of the Act.

The instrument commenced on the day after it was registered and is repealed at the end of 6 months after the day it commenced.

Statement of Compatibility with Human Rights

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

CASA 69/19 — Temporary Prohibition of Operations (Boeing 737 MAX Aircraft) Direction 2019

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

This instrument is a direction under regulation 11.245 of CASR that prohibits a person from operating a Boeing 737-8 or 737-9 aircraft (*B737 MAX aircraft*) in Australian territory, other than for an authorised flight.

Authorised flight is defined in the instrument as meaning a non-passenger carrying flight that:

- (a) is conducted by an aircraft that is approved to conduct the flight by the national aviation authority of the State of registry of the aircraft; and
- (b) is not for a commercial purpose (as defined in regulation 2 of CAR); and
- (c) is to, or for the purposes of a flight to, a base for any of the following purposes:
 - (i) storage of the aircraft;
 - (ii) production flight testing of the aircraft;
 - (iii) repairs or alterations to the aircraft;
 - (iv) maintenance of the aircraft; and
- (d) CASA considers would not be likely to have an adverse effect on the safety of air navigation; and
- (e) is authorised in writing by CASA.

The instrument continues the prohibition on the operation of B737 MAX aircraft within Australian territory that was imposed by instrument CASA 21/19 but, consistent with the approach taken by the Federal Aviation Administration and the European Union Aviation Safety Agency, allows B737 MAX aircraft to conduct authorised non-passenger carrying flights.

Human rights implications

The instrument potentially engages negatively with the right to work, as by prohibiting B737 MAX aircraft from being operated in Australian territory, other than for authorised flights, it has the effect of preventing Australians working on or in such aircraft, whether as crew members or ground crew. However, at present there are no Australian-registered B737 MAX aircraft that would have this effect. The instrument also engages positively with rights at work by ensuring that no person works in Australia as a crew member on commercial or passenger-carrying aircraft that may be unsafe, on the basis of recent fatal accidents involving B737 MAX aircraft.

Any limitation on human rights is reasonable, necessary and proportionate given the need to protect the safety of air navigation, prevent aircraft accidents and protect human life.

The instrument includes safeguards to address any risk to the life and health of persons by not allowing the authorisation of passenger flights. Any risks to the life and health of pilots, any other crew members or persons on the ground are addressed by ensuring the B737 MAX aircraft may only be flown if the flight is conducted by an aircraft approved by the national aviation authority of the State of registry of the aircraft and CASA considers the flight would not be likely to have an adverse effect on the safety of air navigation. CASA may also impose conditions on the authorisation that it considers necessary in the interests of the safety of air navigation.

Conclusion

This legislative instrument is compatible with human rights because to the extent that it may limit human rights, those limitations are reasonable, necessary and proportionate.

Civil Aviation Safety Authority