Explanatory Statement

Civil Aviation Act 1988

Civil Aviation Order 40.1.0 Amendment Instrument 2012 (No. 2)

Purpose

The purpose of *Civil Aviation Order 40.1.0 Amendment Instrument 2012 (No. 2)* (the *CAO Amendment*) is to give primacy to the use of qualified synthetic training devices (*QSTD*) (like flight simulators) for conversion training in certain aircraft.

CAO 40.1.0 — legislative background

Under subregulation 5.22 (1) of the *Civil Aviation Regulations 1988* (*CAR 1988*), CASA may give directions in CAOs prescribing the aircraft endorsements that must be held by a licence holder to carry out the duties authorised by the licence in a type or class of aircraft.

Under subregulation 5.23 (1) of the CAR 1988, CASA may give directions in Civil Aviation Orders (the *CAOs*) setting out the requirements for the issue of an aircraft endorsement.

Under regulation 11.245 of the *Civil Aviation Safety Regulations 1998* (*CASR 1998*), CASA may, by instrument (such as a CAO), issue directions necessary for the safe navigation and operation of aircraft. Under regulation 11.250 of CASR 1998, a direction specifying a date on which it is to cease to be in force, ceases on that date. (Directions without a cease-by date would cease to be in force after 1 year.)

Conversion training generally

There are always safety risks associated with the conduct of training in aircraft. For this reason CASA encourages, and in some cases mandates, the use of flight simulators or flight training devices for certain training rather than use of an aircraft as such.

This is particularly the case for competency training, checking, non-normal exercises, co-pilot training (*relevant activities*) and *conversion training*.

Competency training, checking, non-normal exercises, co-pilot training and, in some cases, conversion training, are an essential part of the on-going training and competency requirements of certain flight crews.

However, because of the potentially catastrophic consequences of in-flight pilot error in some of these activities when carried put in an aircraft, it is considered safer but no less effective for pilots to conduct such activities in a QSTD (that is, generally, a flight simulator or a flight training device).

Therefore, in the interests of greater safety, CASA has decided to more closely regulate the conduct of relevant activities and conversion training in the target group of large aircraft and smaller multi-engine aircraft.

For conversion training, this has been done by directing that the training may not be conducted in certain aeroplanes if a QSTD for the training is *available* in Australia or in a *recognised foreign State*.

Related CAO amendments — relevant activities in aircraft and conversion training in helicopters

The CAO Amendment is made simultaneously with related amendments to CAO 82.0 (conditions on aircraft AOCs) and CAO 40.3.0 (concerning aircraft endorsements – helicopters).

Through the imposition of additional conditions on AOCs, CAO 82.0 amendments address *relevant activities*, namely, competency training, checking, non-normal exercises, and co-pilot training in which, like conversion training, there are always some risks associated with the conduct of the training in an aircraft. For this reason, under CAO 82.0, CASA now mandates the use of available QSTDs for relevant activities in certain circumstances.

The CAO 40.3.0 amendments provide that for generally comparable kinds of helicopters as are covered by this CAO Amendment for aeroplanes, from 1 April 2013 until 31 March 2016, *conversion training for helicopters* (which can have similar risks of in-flight pilot error as relevant activities) must be conducted in an available QSTD. The key definitions of *available* and *recognised foreign State* are the same as in this CAO Amendment (see below).

The CAO Amendment in more detail

The CAO Amendment addresses conversion training in 3 kinds of aircraft (for this Explanatory Statement only, descriptively called category (A), (B) and (C)):

- (A) multi-engine aeroplanes for at least 10, and not more than 19, passengers (*passenger seating capacity*, as defined); and
- (B) any aeroplane for at least 20 passengers; and
- (C) an aeroplane with a maximum take-off weight (MTOW) exceeding 8 618 kg.

For these aeroplanes, an endorsement to fly an aeroplane type following conversion training for the type may only be issued if the conversion training was conducted in a QSTD for the type. For consistency, this requirement also applies for each other mention of conversion training in the Order.

However, this requirement does not apply:

- (a) for a category (A) aircraft if a QSTD is not available in Australia; and
- (b) for a category (B) or (C) aircraft if a QSTD is not available in Australia or in a recognised foreign State.

The requirement does not apply generally to the issue of a co-pilot endorsement because the syllabus of training for a co-pilot endorsement does not contain what CASA considers to be high-risk exercises. However, where a pilot with a co-pilot endorsement operates an aeroplane for an operator subject to the amendments in CAO 82.0, the pilot will require additional training, conducted in a QSTD, as outlined in the amendments.

The amendment also mandates that for the aircraft categories (A), (B) and (C) conversion training is to be conducted in an available QSTD and not in an aeroplane in certain circumstances.

Thus, under the amendment it is directed that, in the interests of aviation safety, on and from 1 April 2013 until 31 March 2016, conversion training for an aeroplane must not be conducted in an aeroplane and must be conducted in a QSTD if:

- (a) for a category (A) aeroplane a QSTD for the aeroplane type is available in Australia; or
- (b) for a category (B) or (C) aeroplane a QSTD for the aeroplane type is available in Australia or in a recognised foreign State.

Available

For the CAO Amendment, "available" means that the QSTD:

- (a) exists in Australia or a recognised foreign State, as the case requires; and
- (b) is offered for use on a commercial basis; and
- (c) is serviceable and available to an operator to use or reserve for the operator's use.

Recognised foreign State

For the CAO Amendment, *recognised foreign State* is defined as a foreign State approved by CASA for the CAO Amendment, and includes the following:

- (a) Canada;
- (b) Hong Kong (Special Administrative Region of China);
- (c) New Zealand;
- (d) United States of America;
- (e) the following European Aviation Safety Agency (EASA) member States:
 - (i) Belgium;
 - (ii) Czech Republic;
 - (iii) Denmark;
 - (iv) Finland;
 - (v) France;
 - (vi) Germany;
 - (vii) Ireland;
 - (viii) Italy;
 - (ix) Netherlands;
 - (x) Norway;
 - (xi) Portugal;
 - (xii) Spain;
 - (xiii) Sweden;
 - (xiv) Switzerland;
 - (xv) United Kingdom.

Legislative Instruments Act 2003 (the LIA)

Under subregulation 5.22 (1) of CAR 1988, CASA may give directions in CAOs prescribing aircraft endorsements. Under subsections 98 (5) and 98 (5AAA) of the Act, such a CAO is a legislative instrument for the LIA. The CAO Amendment is, therefore, a legislative instrument. It is subject to registration, and tabling and disallowance in the Parliament, under sections 24, and 38 and 42, of the LIA.

Consultation

Consultation under section 17 of the LIA has been carried out through the publication of a CASA Discussion Paper in December 2009, a Notice of Proposed Rule Making (*NPRM*) in October 2010, and further consultation with respondents to the NPRM from December 2011 to February 2012.

Regulation Impact Statement

A Regulation Impact Statement was prepared by CASA and assessed by the Office of Best Practice Regulation as meeting the Australian Government's Best Practice Regulation requirements (OBPR ID: 13510).

Statement of Compatibility with Human Rights

The following Statement is prepared in accordance with Part 3 of the *Human Rights* (*Parliamentary Scrutiny*) *Act 2011*.

The purpose of the CAO Amendment is to give primacy to the use of QSTD for conversion training in certain aeroplanes.

The 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*. 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 CAO Amendment takes effect on the day after registration and simultaneously with the 2 related CAO amendments. It has been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

[Civil Aviation Order 40.1.0 Amendment Instrument 2012 (No. 2)]

Appendix 1

Details of Civil Aviation Order 40.1.0 Amendment Instrument 2012 (No. 2)

1 Name of instrument

Under this section, the instrument is the *Civil Aviation Order* 40.1.0 *Amendment Instrument* 2012 (No. 2).

2 Commencement

Under this section, the instrument commences on the day after registration.

3 Amendment of Civil Aviation Order 40.1.0

Under this section, Schedule 1 amends Civil Aviation Order 40.1.0.

Schedule 1 Amendment

- [1] This amendment inserts 2 new subsections in CAO 40.1.0.
- 2A.1 There is a new subsection 2A, *Endorsement following conversion training*, paragraph 2A.1 of which contains definitions of some new words and phrases used in the amendment including *available* and *recognised foreign State* (see below).
- 2A.2 Under this paragraph, subsection 2A is expressed to apply in relation to conversion training for any of the following:
 - (a) a multi-engine aeroplane with a passenger seating capacity of not less than 10, and not more than 19, seats;
 - (b) an aeroplane with a passenger seating capacity of not less than 20 seats;
 - (c) an aeroplane with a maximum take-off weight (MTOW) exceeding 8 618 kg.
- 2A.3 Under this paragraph, subject to paragraphs 2A.5 and 2A.6, on and from 1 April 2013, an endorsement to fly an aeroplane type following conversion training for the type may only be issued if the training was conducted in a QSTD for the type.
- 2A.4 Under this paragraph, mention of aeroplane use or aeroplane manoeuvres, in relation to conversion training, means use of a synthetic training device for paragraph 2A.3, and simulation of the manoeuvres by the device. This is to ensure that the amendment applies for other mentions in the Order to conversion training.
- 2A.5 Under this paragraph, paragraph 2A.3 does not apply:
 - (a) for an aeroplane mentioned in subparagraph 2A.2 (a) if a QSTD for the aeroplane type is not available in Australia; and
 - (b) for an aeroplane mentioned in subparagraph 2A.2 (b) or (c) if a QSTD for the aeroplane type is not available in Australia or in a recognised foreign State.
- 2A.6 Under this paragraph, paragraph 2A.3 does not apply to the issue of a co-pilot endorsement.
- 2B.1 There is also a new subsection 2B. Under a new subsection 2B, *Conversion training to be in a synthetic training device not an aeroplane*, it is directed that, in the interests of aviation safety, on and from 1 April 2013 until 31 March

2016, conversion training for an aeroplane mentioned in paragraph 2A.2 must not be conducted in an aeroplane and must be conducted in a OSTD if:

- (a) for an aeroplane mentioned in subparagraph 2A.2 (a) a QSTD for the aeroplane type is available in Australia; or
- (b) for an aeroplane mentioned in subparagraph 2A.2 (b) or (c) a QSTD for the aeroplane type is available in Australia or in a recognised foreign State.

For both subsections 2A and 2B:

available, for the availability of a QSTD to a person undergoing conversion training, means that the QSTD:

- (a) exists in Australia or a recognised foreign State, as the case requires; and
- (b) is offered for use on a commercial basis; and
- (c) is serviceable and available to be used by the person, or reserved by the person or by an operator on behalf of the person.

recognised foreign State means a foreign State approved by CASA for this subsection and includes the following:

- (a) Canada;
- (b) Hong Kong (Special Administrative Region of China);
- (c) New Zealand;
- (d) United States of America;
- (e) the following European Aviation Safety Agency (EASA) member States:
 - (i) Belgium;
 - (ii) Czech Republic;
 - (iii) Denmark;
 - (iv) Finland;
 - (v) France;
 - (vi) Germany;
 - (vii) Ireland;
 - (viii) Italy;
 - (ix) Netherlands;
 - (x) Norway;
 - (xi) Portugal;
 - (xii) Spain;
 - (xiii) Sweden;
 - (xiv) Switzerland;
 - (xv) United Kingdom.

Note 1 explains that subsection 2B is a direction under regulations 5 of CAR 1988 and 11.245 of CASR 1998. It is intended to ensure that *conversion training* is not conducted in an aeroplane in the circumstances in which subsection 2B applies.

Note 2 explains that for paragraph 11.250 (a) of CASR 1998, a day – 31 March 2016 in this case – is specified as the day on which the direction in subsection 2B ceases to be in force. The duration of the direction may, however, be extended by amendment to CAO 40.1.0 if it is not replaced by regulations amending CASR 1998.