

## Explanatory Statement

### Civil Aviation Act 1988

### Civil Aviation Order 82.5 Amendment Instrument 2012 (No. 2)

#### Purpose

The *Civil Aviation Order 82.0 Amendment Instrument 2012 (No. 2)* (the **main CAO 82.0 amendment**) established standards and rules for the use of electronic flight bags (**EFB**). It imposed these standards and rules as conditions on Australian Air Operators' Certificate (**AOC**) holders, and their pilots in command, for regular public transport (**RPT**), charter and aerial work operations.

The purpose of *Civil Aviation Order 82.5 Amendment Instrument 2012 (No. 2)* (the **CAO amendment**) is to apply these standards and rules to RPT operations by foreign aircraft AOC holders using high capacity aircraft.

Under the main CAO 82.0 amendment, an EFB is the portable electronic screen and hardware device of an EFB system that also includes software, and connected antennae and power. It is used on the flight deck of an aircraft by the flight crew in the operation of the aircraft by providing relevant data storage, search, computational and display capabilities, for example, of maps and charts. Under the main CAO 82.0 amendment, an EFB is not an installed fixture, though in use it may be mounted on a fixture or on a kneepad. Nor is an EFB an item of equipment or instrumentation whose fitment or carriage is mandatory, or a navigation computer, or broadcast or recording equipment.

The CAO amendment is made in association with the main CAO 82.0 amendment, and *Civil Aviation Order 82.3 Amendment Instrument 2012 (No. 1)* which imposes conditions for EFB use *in aircraft other than high capacity aircraft* when operated under a foreign aircraft AOC authorising RPT operations.

#### Legislative background

##### CAO 82.5

Under section 27 of the *Civil Aviation Act 1988* (the **Act**), CASA may issue AOCs with respect to aircraft for the purpose of safety regulation. Under section 28 of the Act, CASA must issue the AOC if satisfied that the applicant can comply with the requirements of Australian civil aviation safety legislation.

Under paragraph 28BA (1) (b) of the Act, an AOC has effect subject to any conditions specified in the regulations or Civil Aviation Orders (the **CAOs**).

Additionally, under subsection 98 (4A) of the Act, CASA may issue CAOs, not inconsistent with the Act, in respect to any matter in relation to which regulations may be made for the purposes of, relevantly, section 28BA of the Act (conditions on AOCs).

Part 82 of the CAOs specifies conditions on AOCs for various kinds of operations. CAO 82.5 contains conditions on AOCs that authorise RPT operations in *high*

*capacity aircraft*. High capacity aircraft is defined in paragraph 2.1 of CAO 82.0 as an aircraft certificated as having a maximum seating capacity exceeding 38 seats or a maximum payload exceeding 4 200 kilograms . Subsection 10 of CAO 82.5 deals with conditions on *foreign aircraft AOCs for high capacity aircraft*.

### CAR 233 (1) (h)

Paragraph 233 (1) (h) of the *Civil Aviation Regulations 1988 (CAR 1988)* places a critical pre-flight safety responsibility on the pilot in command of an aircraft. It provides, in effect, that the pilot in command must not commence a flight without checking and ensuring that the “latest editions of the aeronautical maps, charts and other aeronautical information and instructions ... [for] the route to be flown and ... any alternative route that may be flown” are carried in the aircraft and readily accessible to the flight crew. The maps etc. must be those published by the AIP or by another CASA-approved source.

### **Background**

Previously (and in many instances, still) the latest AIP (or other approved) editions of the aeronautical maps, charts and other aeronautical information and instructions for the route to be flown and any alternative route that may be flown were carried on to an aircraft in a flight bag.

Increasingly, however, pilots and AOC holders are using commercial, off-the-shelf, electronic “tablets”, such as Apple’s iPad and other similar devices, as portable EFBs loaded with purpose-designed, aviation-related, software as substitutes for what would previously have been AIP hardcopy aeronautical maps etc. These cutting-edge electronic devices have rendered obsolete or inadequate various previous ICAO Standards and Practices (*SARPs*), and are likely to lead in time to the “paperless cockpit”.

However, the unregulated use of unapproved electronic substitute data used in critical phases of aircraft operations obviously gives rise to serious safety concerns. In response to this development, the Operations Panel of ICAO reconvened the EFB Subgroup (*EFBSG*) with CASA as a member, to consider developing new SARPs and related guidance material for appropriate national safety-regulator approval of EFB use.

Until now, CASA has had no legislation or guidance material for this rapidly developing EFB use, and finalisation of the new generation of ICAO SARPs is awaited. However, the availability of relevant ICAO information, and CASA participation in the EFBSG, has given CASA the capacity to proactively implement a set of minimum EFB safety standards in anticipation of the ICAO SARPs.

CASA considers that, in a changing technological environment, gaining experience from implementation of these standards and rules is a necessary proactive safety initiative for CASA, for pilots in command and for relevant AOC holders. With this in mind, the CAO amendment is being made and it will be reviewed when the ICAO SARPs are finalised.

The new standards and rules will also facilitate AOC holders' safe and appropriate use of EFB which can result in the cost savings which arise from effective forms of computerisation and the move away from paper dependent environments.

### **The CAO amendment**

The CAO amendment provides that if the pilot in command of an aircraft operated under a relevant foreign aircraft AOC uses an EFB as a means of complying, or partially complying, with paragraph 233 (1) (h) of CAR 1988, each certificate authorising operations under the AOC is subject to the condition that the AOC holder must comply with, and ensure flight crew compliance with, the applicable requirements in Appendix 9 of the main CAO 82.0 amendment.

Appendix 9 in the main CAO 82.0 amendment is a new appendix containing the detailed standards and rules for use of EFB.

It establishes certain classes (1 and 2) and functionality levels (1 to 4) for permitted EFB. It sets rules for EFB software validation, and the safe mounting of a portable EFB in the cockpit. The AOC holder must identify in the operations manual the particular EFB whose use is permitted by the AOC holder as suitable for the type of operations in which it will be used.

The AOC holder must appoint a trained EFB Administrator to manage and administer the obligations arising under the CAO amendment and contained in the operations manual for EFB use (including human factors impacts), the accuracy, currency and validation of data, flight crew EFB training, and backup EFB.

The operations manual must have procedures to safely manage the EFB hardware and accessories, including removal, repair, replacement, re-installation, maintenance and storage.

The AOC holder must also set out in the operations manual procedures for loading software, for data entry and verification, for tracking EFB database expiry dates, for flight crew error and defect reporting, and for testing.

The operations manual must have flight crew procedures for who may use the EFB, when and how, and for establishing the order of precedence if there is more than 1 permitted EFB.

The AOC holder must ensure that the hardware of a permitted EFB and an EFB system is maintained in accordance with an appropriate document (for example, a maintenance control manual), which sets out detailed operational procedures for the maintenance control of a permitted EFB and EFB system. The procedures must ensure that:

- only the original manufacturer of the permitted EFB, or a person approved in writing by the original manufacturer, may maintain the hardware of a permitted EFB
- only the original manufacturer of the permitted EFB, or a person approved in writing by the original manufacturer, may modify the operating system of the permitted EFB

- only the original producer of a software application loaded on to a permitted EFB, or a person approved in writing by the original producer, may modify that software application for use on the EFB.

The above references to the main CAO 82.0 amendment are an overview only. The instrument is detailed and technical and further details are contained in the main CAO 82.0 amendment and its Explanatory Statement.

### **Legislative Instruments Act 2003 (LIA)**

Paragraph 28BA (1) (b) of the Act provides that an AOC has effect subject to any conditions “specified in the regulations or Civil Aviation Orders”.

Subsection 98 (4A) of the Act provides that CASA may issue CAOs with respect to any matter in relation to which regulations may be made for the purposes of section 28BA.

Under subsection 98 (4B) of the Act, a CAO issued under subsection 98 (4A) is stated to be a legislative instrument and is, therefore, subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LIA.

By providing that an AOC has effect subject to any conditions specified in the regulations or CAOs, paragraph 28BA (1) (b) of the Act is a separate head of power for the making of relevant CAOs. For section 5 of the LIA, such CAOs would be legislative instruments subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LIA.

The CAO amendment is made under both paragraph 28BA (1) (b) of the Act and subsection 98 (4A) of the Act and is a legislative instrument.

### **Consultation**

Consultation under section 17 of the LIA has been carried out as follows.

In December 2011, a CASA Discussion Forum was established. Industry representatives from the major airlines, regional carriers and other interested parties were invited to join the forum. Two meetings were held in Canberra where proposals were discussed and relevant draft documents were presented. All industry responses were logged on the Discussion Forum website and were considered before the release of the final draft as part of a Notice of Proposed Rule Making (*NPRM*). The *NPRM* was open for comment for a somewhat more limited period than usual – 4 weeks – as it was considered that the parties most affected had had the opportunity to provide comment directly to CASA through the Forum and the Forum website.

### **Office of Best Practice Regulation (OBPR)**

The instrument applies standards and rules for the use of EFB to relevant AOC holders and pilots in command of aircraft operated under the AOC. Use of EFB is optional for a pilot or an operator but if an EFB is used in circumstances covered by the CAO amendment its use must comply with the amendment. A Regulation Impact Statement is not required for OBPR in this case because a preliminary assessment of business compliance costs in the context of the nature of the instrument indicates that it will have only a nil to low impact on business.

**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*.

**Commencement and making**

The CAO amendment takes effect on the day after registration and immediately after the commencement of the main CAO 82.0 amendment. 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 82.5 Amendment Instrument 2012 (No. 2)*]

**Statement of Compatibility with Human Rights**

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

**Civil Aviation Order 82.5 Amendment Instrument 2012 (No. 2)**

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 purpose of the CAO amendment is to establish standards and rules for the use of EFB by AOC holders and pilots in command of aircraft operated under the AOC. The use of EFB by relevant operators is optional, but for safety reasons must be in accordance with the requirements of the CAO amendment.

**Human rights implications**

The safety standards and rules are 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**