

Australian Government

^{*} Civil Aviation SafetyAuthority

Civil Aviation Order 82.3 (as amended)

made under paragraph 28BA (1) (b) and subsection 98 (4A) of the Civil Aviation Act 1988.

This compilation was prepared on 4 December 2017 taking into account amendments up to *Civil Aviation Legislation Amendment and Repeal (Australian Technical Standard Orders) Instrument 2017.* It is a compilation of Civil Aviation Order 82.3 (Conditions on Air Operators' Certificates authorising regular public transport operations in other than high capacity aircraft) as amended and in force on 30 November 2017.

Prepared by the Legal Advisory, Drafting and Contracts Section, Legal Affairs, Regulatory Policy & International Strategy Branch, Civil Aviation Safety Authority, Canberra.

Compilation No. 18.

Contents

Section 82.3 (Conditions on Air Operators' Certificates authorising regular public transport operations in other than high capacity aircraft)

	Page
1Application of conditions	2
1A Interpretation	2
1AA Implementation plan for SMS [see Table A]	2
2 Obligations in relation to organisation and facilities [see Table A]	2
2A Safety management system	3
2B SMS amendment process	5
2C Alteration of an approved SMS amendment process	6
2D HF&NTS training and assessment program amendments	6
2E HF&NTS program amendment process	6
2F Alteration of an approved HF&NTS program amendment process	7
3 Obligations in relation to training and checking	7
4 Obligations in relation to maintenance	8
4A Obligation to be registered operator	8
5 Obligations in relation to aerodromes	8
5A Conditions in relation to communication services at non-controlled aerodromes	10
6 Obligations in relation to aeroplane certification and performance	10
7, Obligations in relation to flight category and aeroplane requirements	11
8 Obligations in relation to flight crew	12
9	13
9A Obligations in relation to international carriage of a copy of the AOC [see Table A]	13
10 Obligations in relation to foreign registered aircraft	13
11 Obligations in relation to AOC Holder's Safety Questionnaire	15
Appendix 1	16
Appendix 2	18
Appendix 3	20
Appendix 4	21
Appendix 5	23
Appendix 6	24
Appendix 6A	27
Appendix 7	29
Notes to Civil Aviation Order 82.3	31

1

Section 82.3

Conditions on Air Operators' Certificates authorising regular public transport operations in other than high capacity aircraft

1 Application of conditions

- 1.1 This section applies to certificates authorising regular public transport operations in other than high capacity aircraft.
- 1.2 For the purposes of paragraph 28BA (1) (b) of the Act, the conditions set out in this section are conditions subject to which a certificate to which this section applies has effect.
- 1.3 The conditions and obligations set out in this section are in addition to the conditions set out in section 82.0.

1A Interpretation

1A.2 A reference in this section to a regulation identified by a number is a reference to the regulation in the *Civil Aviation Regulations 1988* identified by that number.

1AA Implementation plan for SMS [see Table A]

Each operator who holds an AOC on 1 April 2009 must give CASA for approval the operator's plan for implementation of a safety management system.

2 Obligations in relation to organisation and facilities [see Table A]

- 2.1 Each operator must:
 - (a) establish and maintain an appropriate organisation, with a sound and effective management structure that uses a safety management system approved by CASA; and

Note Guidance on what CASA will consider in deciding whether to approve an SMS is contained in the following (the *CAAP SMS package*):

- (a) CAAP SMS-01 (v. 1.1) Safety Management Systems for Regular Public Transport Operations (October 2018);
- (b) CAAP SMS-2(0) Integration of Human Factors (HF) into Safety Management Systems (SMS) (January 2009);
- (c) CAAP SMS-3(1) Human Factors and Non-Technical Skills Training for Regular Public Transport Operations (April 2011).
- CASA will also have regard to the current edition of the *Safety Management Manual*, Doc 9859, published by the International Civil Aviation Organization (*Safety Management Manual*).
- by make adequate provision for training and checking of personnel and the inspection and maintenance of aircraft; and

(c) have a program, approved by CASA, to train and assess personnel in human factors and non-technical skills with the aim of minimising human error. *Note* The CAAP SMS package and the *Safety Management Manual* contain guidance on what CASA will consider in deciding whether to approve a program for human factors and nontechnical skills training.

- 2.2 Each operator must establish and appoint persons to the following (or equivalent) supervisory positions within the organisation:
 - (a) Chief Pilot;
 - (b) Check Pilots.
- 2.3 In spite of paragraph 2.2, CASA may, having regard to the size of the organisation, or the nature and scope of services, of an operator:

Commented [A1]: These publications will be required to be updated.

- (a) require the operator to provide additional supervisory positions; or
- (b) approve the allocation of the duties and responsibilities associated with more than 1 position to 1 person.
- 2.4 Each operator must ensure that persons occupying supervisory positions within the training and checking organisation are:
 - (a) approved by CASA; and
 - (b) employed on a full-time basis, unless otherwise approved by CASA.
- 2.5 Each operator must provide and maintain facilities and documentation sufficient to enable the operator to conduct services with safety and in compliance with Appendix 1.
- 2.6 For the purposes of subregulations 215 (3) and (6) of the *Civil Aviation Regulations* 1988, each operator must include in the operator's operations manual so much of the information set out in CASA's publication "Guide to the preparation of Operations Manuals" that is relevant to the operator's operations and must provide copies of the manual to all operating crew members employed by the operator.
- 2.7 In this subsection:

human factors or *HF* means the minimisation of human error and its consequences by optimising the relationships within systems between people, activities and equipment.

non-technical skills means specific human competencies, including critical decision making, team communication, situational awareness and workload management, which may minimise human error in aviation.

Safety information means any data and information, in any form, generated within, or captured, collected or held by and within an operator's approved safety management system, including a flight data analysis program and other kinds of safety data collection and processing systems, and inclusive of any personal information relating to individuals.

safety management system or SMS has the meaning given in subsection 2A.

2A Safety management system

- 2A.1 For this Order, a *safety management system* or *SMS* is a systematic approach to managing safety that must:
 - (a) include the organisational structures, accountabilities, policies and procedures necessary to manage safety in a systematic way; and
 - (b) comply with paragraph 2A.2.
- 2A.2 Subject to paragraph 2A.4, an SMS must, as a minimum, include the following:
 - (a) a statement of the operator's safety policy and objectives, including documented details of the following:
 - (i) the management commitment to, and responsibility for, safety risk management;
 - (ii) the safety accountabilities of managers;
 - (iii) the appointment of key safety personnel;
 - (iv) the SMS implementation plan;
 - (v) the relevant third-party relationships and interactions;
 - (vi) the coordination of the emergency response plan;
 - (b) a safety risk management plan, including documented details of the following:

- (i) hazard identification processes;
- (ii) risk assessment and mitigation processes;
- (c) a safety assurance system, including documented details of the following:
 - (i) safety performance monitoring and measurement;
 - (ii) management of change;
 - (iii) continuous improvement of the SMS;
- (d) a safety promotion system, including documented details of the following:
 - (i) training and education;
 - (ii) safety communication;
- (e) for an operator who operates an aircraft with a maximum take-off weight exceeding 27 000 kg — a flight data analysis program (*FDAP*) in accordance with paragraph 2A.3.
- (f) a documented process to ensure that, in accordance with and subject to the conditions set out in Appendix [X], the safety information collected, stored and analysed is not used or made available for use for purposes other than maintaining or improving safety;
- *Note* An operator is not prevented from using safety information collected stored or analysed to take any preventive, corrective or remedial action that is necessary to maintain or improve aviation safety.
- 2A.3 For subparagraph 2A.2 (e), a FDAP must:
 - (a) regularly record and analyse the operational flight data of individual and aggregated operations to improve the safety of flight operations; and
 - (b) be integrated into the safety assurance system mentioned in subparagraph 2A.2 (c); and
 - (c) be supplied by:
 - (i) the operator; or
 - (ii) without in any way compromising the operator's responsibility for the existence and effectiveness of the FDAP — another appropriate person; and
 - (d) ensure that, except in accordance with the conditions set out in Appendix [X]:
 - (i) no disciplinary, punitive or related action may be taken by the operator against a person who reports, or is the source of, the data; and
 - (ii) the identity of a person who reports, or is the source of, data to the program, or in respect of whom such data is reported, is protected from disclosure to anyone other than a person designated in the operator's SMS, whose duty requires him or her to analyse operational flight data in accordance with procedures set out in the operator's SMS, and who has access to identity information solely for that purpose.
 - (e) Nothing in paragraph 2A.3 is intended to prevent an operator from using data recorded through the operation of a FDAP for the purposes of maintaining or improving safety in accordance with, and subject to, the conditions set out in Appendix [X].
- 2A.4 An SMS approved by CASA under subparagraph 2.1 (a) may only be amended in accordance with subsection 2B.
- 2A.5 An SMS may have a process for the amendment of the SMS in accordance with subsection 2B.

Note Under paragraph 2.7, SMS has the meaning given in subsection 2A and includes the documents mentioned in subsection 2A.

2A.6 Nothing in subsection 2A is intended to prevent, restrict or limit CASA's access to, or use of, any safety information held by an operator.
Note CASA's use of an operator's safety information is subject to the provisions of CASA Directive 02-0053, *Limitations on the Use of Safety Information* (July 2019).

2B SMS amendment process

2B.1 In this subsection:

SMS amendment process is a process within an SMS for amendment of the SMS, or a specified part of the SMS, in accordance with this subsection.

Note The SMS amendment process can only be altered in accordance with subsection 2C.

- 2B.2 An operator, who does not have an SMS amendment process approved by CASA, must not amend the operator's approved SMS without CASA's approval.
- 2B.3 For paragraph 2B.2, CASA's approval may only be given in the form of a new SMS approval.
- 2B.4 If an operator has an SMS amendment process, it must be approved in writing by CASA at the time CASA approves the operator's SMS.
- 2B.5 An approved SMS amendment process must have the capacity to identify and record reliable information from which a reasoned and persuasive safety case may be developed to demonstrate whether or not a proposed amendment to the SMS is likely to:
 - (a) maintain at least the same level of safety as that which exists under the SMS at the time of the proposed amendment; or
 - (b) increase the level of safety above that which exists under the SMS at the time of the proposed amendment.
- 2B.6 Subject to paragraph 2B.10, if an operator has an approved SMS amendment process, the operator may, without CASA's approval, make a proposed amendment to the operator's SMS, but only if:
 - (a) the proposed amendment is:
 - (i) merely editorial; or
 - (ii) such that no reasonable person could doubt that the proposed amendment increases the level of safety above that which exists under the SMS at the time of the proposed amendment; or
 - (b) a safety case, developed in the SMS amendment process, demonstrates that the proposed amendment is likely to:
 - (i) maintain at least the same level of safety as that which exists under the SMS at the time of the proposed amendment; or
 - (ii) increase the level of safety above that which exists under the SMS at the time of the proposed amendment.
- 2B.7 If an operator makes an amendment to the operator's SMS in accordance with this subsection, the amendment must not take effect until it is documented by being incorporated into every copy of the documents mentioned in subsection 2A used by the operator to which the amendment is relevant.
- 2B.8 If an operator makes an amendment to the operator's SMS in accordance with this subsection, the amendment must be notified in writing to CASA in accordance with a procedure and timetable that must be set out in the operator's approved SMS amendment process.
- 2B.9 An approved SMS amendment process may itself only be altered in accordance with subsection 2C.

2B.10 An amendment to part of an SMS, on which an approved SMS amendment process directly depends in order to comply with paragraph 2B.5, is deemed to be an alteration of the SMS amendment process to which subsection 2C applies.

Note If, as part of its general capacity to demonstrate the safety of SMS amendments, the SMS amendment process *directly* depends on some feature of the SMS itself, a proposed amendment to that SMS feature would be considered an amendment of the SMS amendment process. Subsection 2C would, therefore, apply to the proposed amendment.

2C Alteration of an approved SMS amendment process

- 2C.1 An operator with an approved SMS amendment process must not alter the process without CASA's written approval.
- 2C.2 For paragraph 2C.1, CASA's written approval may only be:
 - (a) given on application; and
 - (b) in the form of an approval for an SMS containing a new SMS amendment process in accordance with subsection 2B.

2D HF&NTS training and assessment program amendments

2D.1 In this subsection, and in subsections 2E and 2F:

HF&NTS means human factors and non-technical skills.

HF&NTS program amendment process means a process within an HF&NTS program for amendment of the program, or a specified part of the program, in accordance with subsection 2E.

Note The HF&NTS program amendment process can only be altered in accordance with subsection 2F.

HF&NTS program means an operator's program to train and assess the operator's personnel in HF&NTS and includes the operator's documents for the program.

- 2D.2 An HF&NTS program approved by CASA under subparagraph 2.1 (c) may only be amended in accordance with subsection 2E.
- 2D.3 An HF&NTS program may have an HF&NTS program amendment process for the program in accordance with subsection 2E.

2E HF&NTS program amendment process

- 2E.1 An operator, who does not have an HF&NTS program amendment process approved by CASA, must not amend the operator's approved HF&NTS program without CASA's approval.
- 2E.2 For paragraph 2E.1, CASA's approval may only be given in the form of a new HF&NTS program approval.
- 2E.3 If an operator has an HF&NTS program amendment process, it must be approved in writing by CASA at the time CASA approves the operator's HF&NTS program.
- 2E.4 An approved HF&NTS program amendment process must have the capacity to identify and record reliable information from which a reasoned and persuasive safety case may be developed to demonstrate whether or not a proposed amendment to the HF&NTS program is likely to:
 - (a) maintain at least the same level of safety as that which exists under the HF&NTS program at the time of the proposed amendment; or
 - (b) increase the level of safety above that which exists under the HF&NTS program at the time of the proposed amendment.

- 2E.5 If an operator has an approved HF&NTS program amendment process, the operator may, without CASA's approval, make a proposed amendment to the operator's approved HF&NTS program but only if:
 - (a) the proposed amendment is:
 - (i) merely editorial; or
 - (ii) such that no reasonable person could doubt that the proposed amendment increases the level of safety above that which exists under the SMS at the time of the proposed amendment; or
 - (b) a safety case developed in the HF&NTS program amendment process demonstrates that the proposed amendment is likely to:
 - (i) maintain at least the same level of safety as that which exists under the HF&NTS program at the time of the proposed amendment; or
 - (ii) increase the level of safety above that which exists under the HF&NTS program at the time of the proposed amendment.
- 2E.6 If an operator makes an amendment to the operator's approved HF&NTS program in accordance with this subsection, the amendment must not take effect until it is documented by being incorporated into every copy of the HF&NTS program documents used by the operator to which the amendment is relevant.
- 2E.7 If an operator makes an amendment to the operator's approved HF&NTS program in accordance with this subsection, the amendment must be notified in writing to CASA in accordance with a procedure and timetable that must be set out in the operator's approved HF&NTS program amendment process.
- 2E.8 An approved HF&NTS program amendment process may only be altered in accordance with subsection 2F.

2F Alteration of an approved HF&NTS program amendment process

- 2F.1 An operator with an approved HF&NTS program amendment process must not alter the process without CASA's written approval.
- 2F.2 For paragraph 2F.2, CASA's written approval may only be:
 - (a) given on application; and
 - (b) in the form of an approval for an HF&NTS program containing a new HF&NTS program amendment process in accordance with subsection 2E.

3 Obligations in relation to training and checking

3.1 Subject to paragraph 3.2A, each operator must provide a training and checking organisation under regulation 217.

3.2 Subject to paragraph 3.2A, a training and checking organisation must be in accordance with Appendix 2.

- 3.2A The operator may contract a Part 142 operator to perform activities that the operator would otherwise be required by this subsection to perform, other than checking for aircraft that have a maximum operational passenger seat configuration of more than 30 seats.
- 3.3 Each operator must ensure that a person does not act as an operating crew member on a scheduled revenue service unless that person has satisfactorily completed all necessary training programs and proficiency checks and has been certified by a check pilot as being competent to act as an operating crew member.

4 Obligations in relation to maintenance

4.1 If Part 42 of the *Civil Aviation Safety Regulations 1998* (*CASR 1998*) does not apply to an operator, the operator must provide a system of maintenance of aeroplanes and establish a system of maintenance control in accordance with the requirements of, or issued under, the *Civil Aviation Regulations 1988*.

Note 1 Part 42 of CASR 1998 applies to all registered aircraft, subject to transitional provisions designed to transition operators over a 2 year period.

Note 2 Commencing on 27 June 2011, subregulation 42.040 (1), with subregulation 202.180 (1), of CASR 1998, requires (**as a condition on the AOC**) that the operator of a registered aircraft authorised to operate under an AOC issued for a purpose mentioned in paragraph 206 (1) (c) of CAR 1988 (generally speaking, RPT), must be approved by CASA as a continuing airworthiness management organisation (a *CAMO*) for the type and model of the aircraft.

4A Obligation to be registered operator

- 4A.1 This subsection applies to each AOC holder approved by CASA to be a continuing airworthiness management organisation (a *CAMO*) under Subpart 42.6 of CASR 1998.
- 4A.2 Unless CASA approves otherwise, the AOC holder must be the registered operator of each Australian aircraft that is authorised under the holder's AOC to operate for a purpose mentioned in paragraph 206 (1) (c) of CAR 1988.

4A.3 In this subsection:

registered operator means registered operator under Part 47 of CASR 1998.

5 Obligations in relation to aerodromes

- 5.1 Subject to paragraph 5.2, an operator must conduct operations in accordance with regulation 92A.
- 5.2 Subject to paragraphs 5.2.1, 5.2.2 and 5.3, an operator may operate aeroplanes having a maximum take-off weight not exceeding 5 700 kg at aerodromes which meet the standards specified in Appendix 3 or which CASA has approved in writing in relation to the operator.
- 5.2.1 CASA must not approve an aerodrome under paragraph 5.2 unless:
 - (a) the operator provides CASA with details of the surface and dimensions of the aerodrome proposed to be approved, being details of the kind set out in Appendix 3; and
 - (b) CASA is satisfied, after considering those details, that the aerodrome is suitable for the take-off and landing of aeroplanes with maximum take-off weight not exceeding 5 700 kg.

5.2.2 An approval under paragraph 5.2 is subject to such conditions (if any) as CASA specifies in the approval as being necessary in the interests of safety.

In spite of paragraph 5.2, an operator must not operate an aeroplane from an aerodrome referred to in paragraph 5.2 unless:

- (a) the operator publishes in the operator's operations manual a diagram, and aerodrome information, for the aerodrome depicting:
 - (i) aerodrome position and elevation; and
 - (ii) runway and runway strip dimensions, direction and types of surfaces; and
 - (iii) positions of taxiways and aprons; and
 - (iv) windsock position; and
 - (v) take-off distance and landing distances available, runway slopes and supplementary take-off distances if applicable; and

- (vi) any obstacle that could affect take-off and landing manoeuvres at the aerodrome; and
- (ab) the operator's operation manual also includes:
 - (i) the specific procedures (if any) applicable to the aerodrome; and
 - (ii) information about the aircraft's limiting take-off and landing weights (if any) applicable to each runway under the expected range of meteorological conditions, or expected worse case conditions, at the aerodrome; and
 - (iii) the minimum fuel requirement for flights to and from the aerodrome; and
 - (iv) the procedures by which the certificate holder, before conducting an operation to that aerodrome, checks the suitability of the aerodrome for the operation and ensures that the flight crew members for the operation are made aware whether the aerodrome is suitable for the operation; and
 - (v) the names of the pilots employed by the certificate holder who are qualified to operate aeroplanes covered by the certificate; and
 - (vi) the contact details of the aerodrome's operator and of the person responsible for informing aircraft operators about the conditions prevailing at the aerodrome; and
- (ac) if the latest edition of the publication known as AIP Enroute Supplement Australia does not contain all the following details about the aerodrome:
 - (i) the diagram and information mentioned in subparagraph (a);
 - (ii) the matters mentioned in sub-subparagraph (ab) (i), (ii), (iii) and (vi); the operator ensures that there is available on board the aeroplane for use by the pilot a handbook that sets out all those details in an approved form; and
- (b) the operator ensures that adequate arrangements are provided for passenger safety during aircraft loading and unloading on the apron areas; and
- (c) the operator is satisfied on reasonable grounds that the aerodrome operator has taken adequate precautions to ensure that persons, objects and animals are kept clear of strips and alighting areas during landings and take-offs and clear of aeroplanes when on the ground with engines operating; and
- (d) the operator establishes an approved aerodrome inspection and reporting system to ensure continued compliance with the standards specified in Appendix 3 or the details referred to in paragraph 5.2.1, as the case may be; and
- (e) each flight crew member on board the aeroplane:
 - (i) has been trained in short field operations with particular emphasis on the performance operating limitations of the aeroplanes employed by the certificate holder in those operations; and
 - (ii) has been given by the certificate holder a copy of the latest edition of CAAP 92A-1; and
 - (iii) has a working knowledge of the contents of that document; and
 - (f) the certificate holder has an agent at the aerodrome whose duty it is to provide the certificate holder, whenever any conditions exist at or near the aerodrome that may affect the safety of an aeroplane attempting to land at the aerodrome, with information regarding those conditions; and
- (g) the agent mentioned in subparagraph (f):
 - (i) has been given by the certificate holder a copy of the latest edition of CAAP 92A-1; and

(ii) has a working knowledge of the contents of that document.

- 5.4 Unless otherwise approved in writing by CASA and subject to paragraph 5.5, an operator must not permit turbo-jet aeroplanes to use runways that are not equipped with electronic or visual approach slope guidance.
- 5.5 Paragraph 5.4 does not apply to runways at nominated alternate aerodromes.
- 5A Conditions in relation to communication services at non-controlled aerodromes
- 5A.1 Subject to this subsection, an aircraft that is required under subsection 8 to be, and is, crewed by at least 2 pilots must not be operated within the terminal airspace of a non-controlled aerodrome unless:
 - (a) there is a radiocommunication confirmation system for the aerodrome; and
 - (b) that radiocommunication confirmation system is in operation when the aircraft is within the terminal airspace.
- 5A.1A Paragraph 5A.1 does not apply if an aircraft is using a non-controlled aerodrome as an alternate aerodrome.
- 5A.1B Paragraph 5A.1 does not apply to an aircraft that:
 - (a) was scheduled to arrive at, or depart from, an aerodrome at a time when the aerodrome was not a non-controlled aerodrome; but
 - (b) has had its operation delayed so that, at the actual time of its arrival at, or its departure from, the aerodrome, the aerodrome is a non-controlled aerodrome.
- 5A.2 Paragraph 5A.1 does not apply in respect of a non-controlled aerodrome if CASA determines in writing that it is technically impracticable to provide a radiocommunication confirmation system for the aerodrome.
- 5A.3 If the radiocommunication confirmation system at a non-controlled aerodrome becomes unserviceable, paragraph 5A.1 does not apply in respect of that aerodrome for:
 - (a) the period during which the system remains unserviceable; or
 - (b) the period of 7 days commencing on the day on which the system becomes unserviceable,

whichever is shorter.

6 Obligations in relation to aeroplane certification and performance

- 6.1 Aeroplanes must be certificated as follows:
 - (a) subject to subparagraphs (b) and (c) and paragraph 6.4, aeroplanes which have a maximum take-off weight (*MTOW*) exceeding 3 500 kg in the:
 - (i) transport category; or
 - (ii) commuter category; or
 - (iii) normal category, subject to the condition that the aeroplane meets the requirements of Appendix 5 of this Order;
 - (b) aeroplanes in respect of which a certificate of type approval or type acceptance certificate has been issued and which have an MTOW exceeding 3 500 kg and comply with the United States of America Special Federal Aviation Regulation No. 41 — normal category;
 - (c) aeroplanes which have a MTOW exceeding 8 618 kg and which have a seating configuration to seat more than 19 passengers — transport category;

- (d) aeroplanes which have a MTOW not exceeding 3 500 kg normal category, commuter category or transport category.
- 6.2 Subject to paragraph 6.5, each operator must ensure that aeroplanes having a MTOW exceeding 5 700 kg are operated in compliance with section 20.7.1 or 20.7.1B and aeroplanes having a MTOW not exceeding 5 700 kg are operated in compliance with section 20.7.2.
- 6.3 Each operator must ensure that aeroplanes operated over routes and in weather conditions where icing is forecast or known to exist are certificated for unrestricted flight in icing conditions.
- 6.4 Subparagraph 6.1 (a) does not apply to:
 - (a) a single engine aeroplane operated under the I.F.R. in accordance with approvals given under subparagraphs 175A (1) (d) (i) and (ii) of the *Civil Aviation Regulations 1988*; or
 - (b) a single engine aeroplane operated under the V.F.R. in accordance with paragraph 7.4.
- 6.5 Paragraph 6.2 does not apply to:
 - (a) an operator who operates a single engine aeroplane under the I.F.R. in accordance with approvals given under subparagraphs 175A (1) (d) (i) and (ii) of the *Civil Aviation Regulations 1988*; or
 - (b) an operator who operates a single engine aeroplane under the V.F.R. in accordance with paragraph 7.4.

7 Obligations in relation to flight category and aeroplane requirements

- 7.1 Subject to paragraph 7.4, each operator must conduct operations in multi-engined aeroplanes equipped for flight under the instrument flight rules (I.F.R.).
- 7.2 Subject to paragraphs 7.2.1, 7.2.2, 7.2.3, 7.3 and 7.4, each operator must conduct flights under the I.F.R.
- 7.2.1 An operator may conduct flights under the V.F.R. in Class E airspace, if:
 - (a) the flight is conducted in V.M.C.; and
 - (b) the pilot in command has, while in Class G airspace, requested air traffic control to follow I.F.R. pick-up procedures; and
 - (c) the pilot in command is awaiting an air traffic control clearance to operate under the I.F.R. in Class E airspace.
- 7.2.2 An operator and a pilot in command who conduct a flight under the V.F.R. in accordance with paragraph 7.2.1 must, if the aircraft is not climbing, ensure that it maintains an altitude appropriate to a flight under the V.F.R.
- 7.2.3 In all other respects, a flight to which paragraph 7.2.1 applies must be conducted as if it were a flight under the I.F.R.
 - An operator may conduct a flight under the V.F.R. in multi-engine aeroplanes if:
 - (a) the flight is by day; and
 - (b) the operator and the pilot in command are satisfied that the flight is not able to be conducted under the I.F.R. but can be conducted safely under the V.F.R.; and
 - (c) the flight crew is able to communicate at all times during the flight with:
 - (i) Air Traffic Control; or
 - (ii) Flight Service; or
 - (iii) the operator; or

- (iv) a representative of the operator who has immediate access to a serviceable telephone; and
- (d) the equipment required under paragraph 7.1:
 - (i) is serviceable; or
 - (ii) has a permissible unserviceability.
- 7.4 An operator may conduct flights under the V.F.R. in single engine aeroplanes equipped with the flight and navigation equipment specified in Appendix II to section 20.18, if:
 - (a) the flight is conducted in accordance with subparagraphs 7.3 (a) and (c); and
 - (b) the operator and pilot in command are satisfied that the flight can be conducted safely under the V.F.R.; and
 - (c) the pilot in command holds a valid command (single engine aeroplane), or command (multi-engine aeroplane), instrument rating whether or not the pilot meets recent experience requirements set out in Civil Aviation Orders; and
 - (d) the flight and navigation equipment specified in Appendix II to section 20.18 is:
 - (i) serviceable; or
 - (ii) has a permissible unserviceability.
- 7.5 For the purposes of paragraph 7.4, a single engine aeroplane used to conduct a flight under the V.F.R. does not require duplicated sources of power supply in accordance with Appendix II to section 20.18.

8 Obligations in relation to flight crew

- 8.1 Subject to paragraph 8.2, each operator must provide the minimum flight crew specified in the aircraft flight manual, but must ensure that at least 2 pilots are used for the conduct of operations in:
 - (a) aeroplanes certificated under Appendix 1 of Part 101.4 of the Orders; and
 - (b) jet aeroplanes having a MTOW exceeding 3 500 kg; and
 - (c) aircraft in which more than 9 passenger seats may be fitted.
- 8.2 In spite of paragraph 8.1, 2 pilots need not be used for an operation in an aircraft of the kind referred to in paragraph 8.1 if, but only if:
 - (a) the aircraft is certificated for single pilot operations; and
 - (b) the operator's air operator's certificate restricts the number of adult passengers that may be carried in the aircraft on the operation to 9 or fewer; and
 - (c) the operation is conducted in accordance with that restriction.
- 8.3 Subject to paragraphs 8.4, 8.5 and 8.6, each operator must ensure that each pilot
- employed by the operator has the relevant qualifications set out in Appendix 4 for aircraft of the type operated by the pilot and meets the recent experience requirements equivalent to those specified for the holders of Air Transport Pilot Licences in subsection 11 of section 40.1.5.
- 8.4 CASA may by written notice permit the employment by an operator of pilots who do not have those qualifications where the operator has established a course of training which CASA is satisfied achieves an equivalent standard of skill and knowledge.
- 8.5 In the case of a pilot operating an aeroplane having a maximum take-off weight of 5 700 kg or less employed in a regular public transport operation, the requirement that the pilot must have the relevant qualifications set out in Appendix 4 applies only if the operation involves the carriage of passengers.

- 8.6 The pilot in command of an aeroplane is not required to have aeronautical experience as a pilot in command on night operations, if:
 - (a) the Air Operator's Certificate is subject to the condition that operations are to be carried out only under the V.F.R. by day; and
 - (b) the operator ensures that the operation is carried out in accordance with that condition; and
 - (c) the aeroplane belongs to 1 of the following categories:
 - (i) single pilot aeroplanes normal category;
 - (ii) single engine turbine powered aeroplanes normal category;
 - (iii) single pilot aeroplanes transport category.

9 Obligations in relation to single pilot operations

- 9.1 An operator must not carry, on a flight crewed by a single pilot, more than:
 - (a) 9 adult passengers; or
 - (b) 11 passengers of whom at least 2 are infants or children.

9A Obligations in relation to international carriage of a copy of the AOC [see Table A]

Each operator of an aircraft engaged in an international flight must ensure that the pilot in command can present a true and complete hard copy of the following documents to any person who has a lawful right to inspect them before, during or at the end of the flight:

- (a) the operator's current AOC; and
- (b) each operational specification (if any) issued in conjunction with the AOC that is relevant to the aircraft.

10 Obligations in relation to foreign registered aircraft

- 10.1 This subsection applies to foreign registered aircraft only.
- 10.2 Subject to paragraphs 10.3 and 10.5, an operator who holds a certificate authorising the operation of a turbine engined aeroplane that:
 - (a) has a maximum take-off weight of more than 15 000 kg; or
 - (b) is carrying 10 or more passengers;

must ensure that the aeroplane is not operated under the I.F.R. in regular public transport operations unless it is fitted with a ground proximity warning system (GPWS) that meets the requirements of section 108.36.

10.3 Paragraph 10.2 does not apply to the operator if:

(a) at any time before the aeroplane is operated under the I.F.R. in regular public transport operations, the person who was, at that time, the holder of the certificate authorising the operation of the aeroplane has given to CASA an undertaking in an approved form that the aeroplane will, on or before 1 January 2001, be fitted with an approved GPWS that has a predictive terrain hazard warning function; and

- (b) the operations manual provided by the holder of the certificate authorising the operation of the aeroplane sets out the details of a course of training in awareness of controlled flight into terrain; and
- (c) the pilot in command of the aeroplane, and (if applicable) any other pilot occupying a control seat in the aeroplane, have completed the course of training.
- 10.4 Paragraphs 10.2 and 10.3 cease to have effect at the end of 31 December 2000.

- 10.5 An operator who holds a certificate authorising the operation of a turbine engined aeroplane that:
 - (a) has a maximum take-off weight of more than 15 000 kg or is carrying 10 or more passengers; and
 - (b) is engaged in regular public transport operations;

must ensure that the aeroplane is not operated under the Instrument Flight Rules unless it is fitted with:

- (c) an approved ground proximity warning system (GPWS) that has a predictive terrain hazard warning function; or
- (d) if paragraph 10.6 applies a GPWS that meets the requirements of section 108.36 (a section 108.36 GPWS); or
- (e) if the aeroplane has a maximum take-off weight of 5 700 kg or less, but carrying 10 or more passengers a TAWS-B + system.
- 10.6 Up to the end of June 2005, an aeroplane may be fitted with a section 108.36 GPWS:
 - (a) if, immediately before 1 January 2001, paragraph 10.2 applied to the aeroplane; or
 - (b) if the aeroplane first becomes a foreign registered aircraft on or after 1 January 2001 (unless it is an aircraft in respect of which an undertaking has been given under paragraph 9.1A of section 20.18, as in force immediately before 1 January 2001); or
 - (c) if:
 - (i) immediately before 1 January 2001, paragraph 10.2 did not apply to the aeroplane because of paragraph 10.3; and
 - (ii) the holder of the AOC authorising the operation of the aeroplane (the AOC holder) provides satisfactory evidence to CASA, in accordance with paragraph 10.7, that it is not possible to fit the aeroplane with an approved GPWS that has a predictive terrain hazard warning function.
- 10.7 For the purposes of sub-subparagraph 10.6 (c) (ii), evidence is taken to be satisfactory only if it is:
 - (a) a statement in writing to the AOC holder from the manufacturer of an approved GPWS that has a predictive terrain hazard warning function; or
 - (b) a statutory declaration by the AOC holder;

to the effect that the FAA's list of supplemental type certificates does not include any reference to a supplemental type certificate relating to the fitting of an approved GPWS that has that function.

- 10.8 **The** operator of a foreign registered aircraft must ensure that it complies with the requirements (*Directions*) in Appendices 6 and 6A. The definitions in Appendix 6 also apply for Appendices 6A and 7.
- 10.9 If the pilot in command of an aircraft operated under an AOC uses an EFB as a means of complying, or partially complying, with paragraph 233 (1) (h) of the *Civil Aviation Regulations 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 Civil Aviation Order 82.0 (*CAO 82.0*).
- 10.10 For paragraph 10.9, *EFB* has the meaning given to it in Appendix 9 of CAO 82.0.

11 **Obligations in relation to AOC Holder's Safety Questionnaire**

- 11.1 CASA may in writing or by electronic means or by facsimile ask an AOC holder to complete an AOC Holder's Safety Questionnaire (AHSQ) by accurately answering all questions in the AHSQ.
- 11.2 Each AOC holder must:
 - (a) comply with the request; and
 - (b) ensure that the AHSQ is completed and submitted not later than 28 days after
- .tr g o CASA fo consecutions co

Appendix 1

Paragraph 2.5

Facilities and documentation

1 Facilities

- 1.1 Each operator must provide and maintain at least the following facilities:
 - (a) an operating headquarters through which CASA may communicate with the person or persons responsible for any aspect of the operations conducted under the terms of the certificate;
 - (b) buildings, at each place where operating crew are based, of adequate size and suitable for the conduct of the operator's operations;
 - (c) at each port serviced by the operator, a set of weighing scales suitable for determining passenger and cargo weight;
 - (d) training facilities and aids as required by the Civil Aviation Orders.

2 Documentation

- 2.1 Each operator must provide and maintain a reference library of operational documents which is readily available to all operating crews and which includes:
 - (a) a copy of the Act, the *Civil Aviation Regulations 1988*, the *Civil Aviation Regulations 1998* and those Parts of the Civil Aviation Orders that apply to the operator's operations; and
 - (b) Aeronautical Information Publications; and
 - (c) an operations manual; and
 - (d) a training and checking manual or an operations manual supplement as required by Appendix 2; and
 - (e) if the carriage of dangerous goods is intended, a dangerous goods manual or operations manual supplement.
- 2.2 The documentation referred to in subclause 2.1 must be kept in an orderly fashion and must be regularly updated and the responsibility for its maintenance must be clearly defined.
- 2.3 Each operator must distribute updated operational material to flight crews and other operating staff as appropriate, and must maintain records of that distribution.
- 2.4 Each operator must provide a Maintenance Control Manual or Maintenance Manual.
- 2.5 Each operator must maintain:
 - (a) up-to-date records showing the recent experience status of each flight crew member and the currency of licences, ratings and endorsements held; and
 - (b) up-to-date records showing the flight time and duty time achieved by each flight crew member during the immediately preceding 7 days, 30 consecutive days and 365 days and during each fortnight standing alone for the preceding 12 months; and
 - (c) current flight crew rosters; and
 - (d) trip records of operations for the immediately preceding 12 months; and
 - (e) load sheets and passenger and cargo manifests for the immediately preceding 3 months; and
 - (f) fuel records as required by regulation 220; and
 - (g) training and checking records as required by Appendix 2; and
 - (h) training and checking records relating to operational support personnel.

- 2.6 For its leased aircraft the operator must provide details of the lease conditions to enable CASA to:
 - (a) assess the arrangements for operational control of the aircraft; and
 - (b) assess the arrangements for the maintenance of the aircraft; and
 - (c) ensure that the aircraft meets airworthiness requirements.

PRELIMMARY DRAFTFORDSCUSSION

Appendix 2

Paragraph 3.2

Training and checking organisations

1 General

- 1.1 A training and checking organisation provided by an operator:
 - (a) must be wholly contained within the operator's organisational structure; and
 - (b) must be wholly responsible to the operator for the standard of flight operations.

2 Management

- 2.1 Each operator must ensure that the Chief Pilot is responsible for the effective management of the training and checking organisation.
- 2.2 The operator must appoint sufficient personnel to ensure that all training programs, examinations and proficiency checks can be undertaken to the satisfaction of CASA.

3 Ground facilities, equipment and training aids

- 3.1 Each operator must provide facilities, equipment and training aids to meet the requirements of each training program.
- 3.2 Each operator must maintain an up-to-date library of training reference publications and other related operational documents for the use of staff and personnel under training.
- 3.3 Each operator may, subject to the written approval of CASA, use flight simulators and/or synthetic trainers for training and testing purposes to the extent prescribed in each training program and provided for in section 45.0.
- 3.4 Flight simulators and synthetic trainers must be operated and maintained in accordance with the procedures mentioned in Manual of Standards (*MOS*) Part 60 Synthetic Training Devices and the document entitled *Operational Standards and Requirements Approved Synthetic Trainers FSD2*.
- 3.5 Each operator must provide a facility suitably equipped for the periodic demonstrations of proficiency in emergency procedures required by section 20.11 and must make available such items of emergency equipment as may be necessary.

4 Training and checking manual

- 4.1 Each operator must provide a training and checking manual acceptable to CASA which may be a section of an operations manual or a separate document.
- 4.2 Each operator must provide copies of the manual to:

(a) CASA; and

(b) all operating crew members assigned to checking or training duties.

- The training and checking manual must include:
- (a) an outline of the structure of the training and checking organisation and a statement of its authority and role; and
- (b) the duties and responsibilities of all training and checking personnel; and
- (c) recent experience and proficiency requirements applicable to training and checking personnel plus special limitations, if any; and
- (d) course outlines, syllabuses and completion standards for each flight or simulator training program currently in use; and

- (e) command responsibility requirements for the conduct of flight proficiency checks; and
- (f) special procedures and limitations relating to the conduct of practice and simulated emergency and abnormal flight operations; and
- (g) other general limitations and procedures to be observed for the conduct of flying training operations; and
- (h) instructions and general requirements relating to the conduct of training sequences and proficiency checks in flight simulators and synthetic trainers; and
- (i) administrative requirements and examples of all documents, records and certificates associated with each training program and proficiency check; and
- (j) details of security arrangements for all examination material; and
- (k) procedures to be followed when a satisfactory standard is not achieved

5 Training records

- 5.1 Each operator must maintain a training file in respect of each flight crew member, recording at least:
 - (a) each ground training course completed or attempted, including the results for each phase or subject and the final assessment of the standard achieved; and
 - (b) each endorsement training course completed or attempted, including the results of each phase of training, the number of times each exercise was undertaken and the results of each test or check; and
 - (c) each flight or simulator proficiency check completed or attempted, including the results of each phase of training, the number of times each exercise was undertaken and the results of each check; and
- (d) each period of training, other than training referred to in paragraph (a), (b) and (c), undertaken in an aircraft or simulator, including the exercises completed or attempted, and an assessment of the standard achieved.

Appendix 3

Paragraph 5.2

Standards for aerodromes to be used by aeroplanes with maximum take-off weight of not more than 5 700 kg

Surfaces	Standards for aerodrome: • used during the day by aeroplanes with maximum take-off weight of 3 500 kg or more; or • used at night	Standards for aerodrome used during the day by aeroplanes of not more than 3 500 kg
Runway and runway strip		w
Runway width Runway strip width – graded Runway longitudinal slope Runway transverse slope Runway strip transverse slope	18m minimum 80m minimum 2% maximum 2.5% maximum 2.5% maximum	15m minimum 60m minimum 2% maximum 2.5% maximum 2.5% maximum
Approach and take-off surfaces	¢O.	
Length of inner edge Distance of inner edge before threshold Divergence, each side Length of surface Slope	80m 60m 10% 2 500m 4% maximum	60m 30m 10% 1 600m 5% maximum
Transitional surface		
Slope	20%	20%
Inner horizontal surface		
Height Radius from the mid-point of end of runway strip	45m 2 500m	45m 2 000m
Q [×]		

Appendix 4

Paragraph 8.3

1 Qualifications of pilots in command		
Category	Qualifications	Minimum aeronautical experience
Single pilot aeroplanes — normal category	Commercial pilot (aeroplane) licence or air transport pilot (aeroplane) licence	700 hours total experience as a pilot that includes:
	Command (multi-engine aeroplane) instrument rating	150 hours as a pilot in command (or acting as pilot in command under supervision) on multi-engine aeroplanes under the LF.R.; and 10 hours as pilot in command (or acting as pilot in command under supervision) on the aeroplane type; and 50 hours experience as pilot on night operations.
Single engine turbine powered aeroplanes — normal category	Commercial pilot (aeroplane) licence or air transport pilot (aeroplane) licence Command (multi-engine aeroplane) instrument rating or command (single engine aeroplane) instrument rating	700 hours total experience as a pilot that includes: 150 hours as pilot in command (or acting as pilot in command under supervision) under the I.F.R. in aeroplanes; and 10 hours as pilot in command (or acting as pilot in command under supervision) on the aeroplane type; and
		50 hours experience as pilot on night operations.

ns of pilots in alificatio ~

Category	Qualifications	Minimum aeronautical experience
Single pilot aeroplanes — transport category	Commercial pilot (aeroplane) licence or air transport pilot (aeroplane) licence	1 000 hours total experience as a pilot, that includes:
	Command (multi-engine aeroplane) instrument rating	300 hours as pilot in command (or acting as pilot in command under supervision) on multi-engine aeroplanes under I.F.R.; and 20 hours as pilot in command (or acting as pilot in command under supervision) on the aeroplane type; and 50 hours experience as pilot on night operations.
Multi-crew aeroplanes not exceeding 5 700 kg MTOW	Air transport pilot (aeroplane) licence	1 200 hours total experience as a pilot, that includes:
	Command (multi-engine aeroplane) instrument rating	400 hours as pilot in command (or acting as pilot in command under supervision) on multi-engine aeroplanes under the I.F.R.; and 50 hours as pilot in command (or acting as pilot in command under supervision) on the aeroplane type; and 100 hours experience as a pilot on night operations.
Aeroplanes exceeding 5 700 kg MTOW	Air transport pilot (aeroplane) licence	2 000 hours total experience as a pilot, that includes:
PRELIMIN	Command (multi-engine aeroplane) instrument rating	500 hours as pilot in command (or acting as pilot in command under supervision) on multi-engine aeroplanes under the I.F.R.; and 50 hours as pilot in command (or acting as pilot in command under supervision) on the aeroplane type; and
		100 hours experience as a pilot on night operations.

2 Qualifications of co-pilots

Co-pilots of all categories of aeroplanes must hold at least a commercial pilot (aeroplane) licence or a multi-crew pilot (aeroplane) licence, an instrument rating endorsed "co-pilot" and a co-pilot endorsement for the type or class of aeroplane in which that type is included.

Appendix 5

1 Landing gear warning

- 1.1 Except as provided in subclauses 1.4 and 1.5 of this Appendix, aeroplanes equipped with retractable landing gear or retractable floats must be provided with an audible warning device to give unmistakable continuous warning if the landing or alighting gear is not fully extended and locked when:
 - (a) 1 or more throttles are retarded to or beyond the position for a normal landing approach; and
 - (b) the wing flaps are extended beyond the approach-climb configuration. *Note* The flap warning may be initiated by a sensing unit installed at any suitable location in the flap system.
- 1.2 If provision is made for silencing audible warnings that are derived from the throttle positions, the design of the warning system must ensure that after a warning has been silenced, the subsequent retardation of any throttles to or beyond the position for a normal landing approach results in an audible warning.
- 1.3 Nothing must be done to silence warnings derived from the position of the wing flaps.
- 1.4 The requirement of paragraph 1.1 (a) of this Appendix does not apply to:(a) amphibious aeroplanes; and
 - (b) aeroplanes having the throttle lever(s) mechanically interconnected with the landing gear selector lever in such a way that the throttle(s) cannot be closed until the landing gear is fully down and locked.
- 1.5 The requirement of paragraph 1.1 (b) of this Appendix does not apply to an aeroplane which is of the same type as another type of aeroplane for which an Australian certificate of airworthiness or import permit was issued before 30 June 1967.

2 Propeller feathering systems

Except where CASA is satisfied that adequate safety will be provided, automatic propeller feathering systems must be designed to ensure that a propeller will not feather automatically when any other propeller is already feathered or in the process of being feathered.

3 Powerplant fire protection

- 3.1 Engine compartment fire detection and extinguishing systems must be installed if the aeroplane is equipped with supercharged or turbo supercharged piston engines or gas turbine engines.
- 3.2 An engine compartment fire detection system required by subclause 3.1 of this Appendix must meet the requirements of section 1203 of Federal Aviation Regulation (*FAR*) Part 23 or European Aviation Safety Agency (*EASA*) CS-23.
- The powerplant fire warnings must be indicated in the cockpit by individual red lights and also by an audible warning device that may be common to all fire detection circuits.
- 3.4 An audible warning device must be capable of being silenced.
- 3.5 Fire extinguishing systems required by subclause 3.1 of this Appendix must meet the requirements of sections 1195, 1197, 1199 and 1201 of FAR Part 23 or EASA CS-23.

Appendix 6

Paragraph 10.8

Directions relating to carriage and use of automatic dependent surveillance – broadcast equipment

1 In this Appendix: ADS-B means automatic dependent surveillance - broadcast. ADS-B test flight means a flight to prove ADS-B transmitting equipment that is newly installed on the aircraft undertaking the flight. aircraft means a foreign aircraft. aircraft address means a unique code of 24 binary bits assigned to an aircraft by or under the authority of an NAA for the purpose of air to ground communication, navigation and surveillance. approved equipment configuration means an equipment configuration that: (a) meets the conditions for approval set out in Appendix 7; or (b) is approved in writing by CASA. Note Equipment configurations approved by CASA are published in Appendix D of Advisory Circular 21-45. EHS DAPs means enhanced surveillance downlink of aircraft parameters. ATC means air traffic control. EASA means the European Aviation Safety Agency. EASA AMC 20-24 means EASA document AMC 20-24 titled Certification Considerations for Enhanced ATS in Non-Radar Areas using ADS-B Surveillance (ADS-B-NRA) via 1090 MHZ Extended Squitter, dated 2 May 2008. ETSO means European Technical Standard Order of the EASA. FAA means the Federal Aviation Administration of the United States. FDE means Fault Detection and Exclusion, a feature of a GNSS receiver that excludes faulty satellites from position computation. FL 290 means flight level 290. Note Flight level 290 is defined in subregulation 2 (1) of CAR 1988. GNSS means the Global Navigation Satellite System installed in an aircraft to continually compute the position of the aircraft by use of the GPS. GPS means the Global Positioning System. HPL means the Horizontal Protection Level of the GNSS position of an aircraft as an output of the GNSS receiver or system. *Mode A* is a transponder function that transmits a 4-digit octal identification code for an aircraft when interrogated by an SSR, the code having been assigned to the aircraft by ATC for the relevant flight sector. Mode A code is the 4-digit octal identification code transmitted by a Mode A transponder function. *Mode* C is a transponder function that transmits a 4-digit octal code for an aircraft's pressure altitude when interrogated by an SSR.

Mode C code is the 4-digit octal identification code transmitted by a Mode C transponder function.

Mode S is a monopulse radar interrogation technique that improves the accuracy of the azimuth and range information of an aircraft, and uses a unique aircraft address to selectively call individual aircraft.

NAA has the same meaning as in regulation 1.4 of the *Civil Aviation Safety Regulations 1998.*

Note "*NAA*, for a country other than Australia, means:

(a) the national airworthiness authority of the country; or

(b) EASA, in relation to any function or task that EASA carries out on behalf of the country."

NIC means Navigation Integrity Category as specified in paragraph 2.2.3.2.7.2.6 of RTCA/DO-260A.

NUCp means Navigation Uncertainty Category – Position as specified in paragraph 2.2.8.1.5 of RTCA/DO-260.

RTCA/DO-229D means document RTCA/DO-229D titled *Minimum Operational Performance Standards for Global Positioning System/Wide Area Augmentation System Airborne Equipment*, dated 13 December 2006, of the RTCA Inc. of Washington D.C. USA (*RTCA Inc.*).

RTCA/DO-260 means RTCA Inc. document RTCA/DO-260 titled Minimum Operational Performance Standards for 1090 MHz Automatic Dependent Surveillance – Broadcast, dated 13 September 2000.

RTCA/DO-260A means RTCA Inc. document RTCA/DO-260A titled *Minimum* Operational Performance Standards for 1090 MHz Automatic Dependent Surveillance – Broadcast (ADS-B) and Traffic Information Services – Broadcast (TIS-B), dated 10 April 2003.

SA means Selective Availability, and is a function of the GPS that has the effect of degrading the accuracy of the computed GPS position of a GNSS-equipped aircraft. *SSR* means a secondary surveillance radar system that is used by ATC to detect an aircraft equipped with a radar transponder.

TSO means Technical Standard Order of the FAA.

Note NAA is defined in regulation 1.4 of the Civil Aviation Safety Regulations 1998.

- 2 If an aircraft carries ADS-B transmitting equipment for operational use in Australian territory, the equipment must comply with an approved equipment configuration.
- 3 If an aircraft carries serviceable ADS-B transmitting equipment for operational use in Australian territory, the equipment must transmit:
 - (a) a flight identification that corresponds exactly to the aircraft identification mentioned on the flight notification filed with, or relayed to air traffic control *(ATC)* for the flight; or

(b) another flight identification directed or approved by ATC.

If an aircraft carries serviceable ADS-B transmitting equipment that complies with an approved equipment configuration, the equipment must be operated continuously during the flight in all airspace at all altitudes unless the pilot is directed or approved otherwise by ATC.

5 If an aircraft carries ADS-B transmitting equipment which does not comply with an approved equipment configuration, the aircraft must not fly in Australian territory unless the equipment is:

(a) deactivated; or

(b) set to transmit only a value of zero for the NUCp or NIC.

Note It is considered equivalent to deactivation if NUCp or NIC is set to continually transmit only a value of zero.

- 6 However, the equipment need not be deactivated as mentioned in clause 5 if the aircraft is undertaking an ADS-B test flight in VMC in airspace below FL 290.
- 7 Subject to clause 8, on and after 12 December 2013, if an aircraft operates at or above FL 290, it must carry serviceable ADS-B transmitting equipment that complies with an approved equipment configuration.
- 7A Subject to clause 8, on and after 2 February 2017, an aircraft that is operated under the I.F.R. must carry serviceable ADS-B equipment that complies with an approved equipment configuration.
- 8 Clauses 7 and 7A do not apply to an aircraft if:
 - (a) the aircraft owner, operator or pilot has written authorisation from CASA for the operation of the aircraft without the ADS-B transmitting equipment; or
 - (b) the equipment is unserviceable for a flight, and each of the following applies:(i) the flight takes place within 3 days of the discovery of the unserviceability;
 - (1) the flight takes place within 5 days of the discovery of the unserviceability; and
 - (ii) at least 1 of the following applies for the flight:
 - (A) flight with unserviceable instruments or equipment has been approved by CASA, subject to such conditions as CASA specifies;
 - (B) the unserviceability is a permissible unserviceability set out in the minimum equipment list as approved by the NAA of the State of registration of the aircraft;
 - (C) CASA has approved the flight with the unserviceable equipment and any applicable conditions that CASA has specified in writing have been complied with; and
- (iii) ATC clears the flight before it commences despite the unserviceability.

Appendix 6A

Paragraph 10.8

Standards for Mode S transponder equipment

- 1 If the aircraft carries Mode S transponder equipment (the *equipment*), the equipment must meet the standards set out in this Appendix.
- 2 The equipment must be of a type that is authorised by:
 - (a) the FAA, in accordance with TSO-C112 as in force on 5 February 1986, or a later version as in force from time to time; or
 - (b) EASA, in accordance with ETSO-C112a as in force on 24 October 2003, or a later version as in force from time to time; or
 - (c) CASA, in accordance with an instrument of approval of the type.

Note 1 CASA Advisory Circular 21-46 provides guidelines on Mode S transponder equipment.

Note 2 If Mode S transponder equipment incorporates ADS-B functionality, the standards set out in Appendix 6 for ADS-B transmitting equipment will also apply to the Mode S transponder equipment.

- 3 The aircraft address entered into the equipment must exactly correspond to the aircraft address assigned to the aircraft by the NAA of the State of registration of the aircraft.
- 4 The equipment must transmit each of the following when interrogated on the manoeuvring area of an aerodrome or in flight:
 - (a) the aircraft address;
 - (b) the Mode A code;
 - (c) the Mode C code;
 - (d) subject to clause 6, the aircraft's flight identification in accordance with clause 5.
- 5 The aircraft flight identification must:
 - (a) if a flight notification is filed with ATC for the flight correspond exactly with the aircraft identification mentioned on the flight notification; or
 - (b) if no flight notification is filed with ATC for the flight be the aircraft's nationality and registration mark; or
 - (c) be another flight identification directed or approved for use by ATC.
- 6 Mode S transponder transmission of the aircraft flight identification is optional for any aircraft that was first registered in its State of registration before 9 February 2012 (an *older aircraft*). However, if an older aircraft is equipped to transmit, and transmits, an aircraft flight identification then that aircraft flight identification must be in accordance with clause 5.
- 7 If the equipment transmits any Mode S EHS DAPs, the transmitted DAPs must comply with the standards set out in paragraph 3.1.2.10.5.2.3 and Table 3-10 of Volume IV, Surveillance and Collision Avoidance Systems, of Annex 10 of the Chicago Convention.

Note 1 Paragraph 3.1.2.10.5.2.3 includes 3.1.2.10.5.2.3.1, 3.1.2.10.5.2.3.2 and 3.1.2.10.5.2.3.3. *Note 2* Australian Mode S SSR are EHS DAPs-capable, and operational use of EHS DAPS is to be introduced in Australia. Implementation of Mode S EHS DAPs transmissions that are not in accordance with the ICAO standards may be misleading to ATC. Operators need to ensure that correct parameters are being transmitted.

- 8 If the equipment is carried in an aircraft first registered in its State of registration on or after 9 February 2012:
 - (a) having a certificated maximum take-off weight above 5 700 kg or

- (b) that is capable of normal operation at a maximum cruising true air speed above 250 knots;
- the equipment's receiving and transmitting antennae must:
- (c) be located in the upper and lower fuselage; and
- (d) operate in diversity, as specified in paragraphs 3.1.2.10.4 to 3.1.2.10.4.5 (inclusive) of Volume IV, Surveillance and Collision Avoidance Systems, of Annex 10 of the Chicago Convention.

PRELIMMARY DRAFTFOR DISCUSSION

Appendix 7

Paragraph 10.8 and definition of *approved equipment configuration* in clause 1 of Appendix 6

Part A

Approved equipment configuration

1 An equipment configuration is approved if it complies with the standards specified in Part B or Part C of this Appendix.

Part B

ADS-B transmitting equipment — standard for approval

- 2 ADS-B transmitting equipment must be of a type that:
 - (a) is authorised by the FAA in accordance with TSO-C166 as in force on 20 September 2004, or a later version as in force from time to time; or
 - (b) meets the following requirements:
 - (i) the type must be accepted by CASA as meeting the specifications in RTCA/DO-260 dated 13 September 2000, or a later version as in force from time to time;
 - (ii) the type must utilise HPL at all times HPL is available; or
 - (c) is otherwise authorised, in writing, by CASA for the purposes of subsection 9B of Civil Aviation Order 20.18 as being equivalent to one of the foregoing types.

GNSS position source equipment — standard for aircraft manufactured on or after 8 December 2016

- 3 For an aircraft manufactured on or after 8 December 2016, the geographical position transmitted by the ADS-B transmitting equipment must be determined by:
 - (a) a GNSS receiver of a type that is authorised by the FAA in accordance with TSO-C145a or TSO-C146a as in force on 19 September 2002, or a later version as in force from time to time; or
 - (b) a GNSS receiver of a type that is authorised by the FAA in accordance with TSO-C196 as in force on 9 September 2009, or a later version as in force from time to time; or
 - (c) a GNSS receiver or system which meets the following requirements:(i) is certified by an NAA for use in flight under the I.F.R.;
 - (ii) has included in its specification and operation the following:
 - (A) FDE, computed in accordance with the definition at paragraph 1.7.3 of RTCA/DO-229D;
 - (B) the output function HPL, computed in accordance with the definition at paragraph 1.7.2 of RTCA/DO-229D;
 - (C) functionality that, for the purpose of HPL computation, accounts for the absence of the SA of the GPS in accordance with paragraph 1.8.1.1 of RTCA/DO-229D; or
 - (d) another equivalent system authorised in writing by CASA.

Note The following GNSS receivers meet the requirements of clause 3, namely, those certified to TSO-C145a or TSO-C146a, or later versions, or those manufactured to comply with TSO-C196.

GNSS position source equipment — standard for aircraft manufactured before 8 December 2016

- 4 For an aircraft manufactured before 8 December 2016, the geographical position transmitted by the ADS-B transmitting equipment must be determined by:
 - (a) a GNSS receiver or system that complies with the requirements of clause 3, other than sub-subparagraph 3 (c) (ii) (C) which is optional; or
 - (b) an equivalent GNSS receiver or system that has been approved in writing by CASA.

Note The following GNSS receivers meet the requirements of clause 4, namely, those certified to TSO-C145a or TSO-C146a, or later versions, or those manufactured to comply with TSO-C196. Some later versions of GNSS receivers certified to TSO-C129 may also meet the requirements, i.e. those having FDE and HPL features incorporated.

Altitude source equipment - standard

- 5 The pressure altitude transmitted by the ADS-B transmitting equipment must be determined by:
 - (a) a barometric encoder of a type that is authorised by:
 - (i) the FAA in accordance with TSO-C88a as in force on 18 August 1983, or a later version as in force from time to time; or
 - (ii) EASA in accordance with ETSO-C88a as in force on 24 October 2003, or a later version as in force from time to time; or
 - (b) another equivalent system authorised in writing by CASA.

Aircraft address — standard

- 6 Unless otherwise approved in writing by CASA, the ADS-B transmitting equipment must:
 - (a) transmit the current aircraft address; and
 - (b) allow the pilot to activate and deactivate transmission during flight.

Note The requirement in paragraph 6 (b) is met if the ADS-B transmitting equipment has a cockpit control that enables the pilot to turn the ADS-B transmissions on and off.

Part C

Alternative approved equipment configuration — standard for aircraft manufactured on or after 8 December 2016

- 7 For an aircraft manufactured on or after 8 December 2016, an equipment configuration is approved if:
 - (a) it has been certified by EASA as meeting the standards of EASA AMC 20-24; and
 - (b) the aircraft flight manual attests to the certification; and
 - (c) the GNSS receiver or system complies with the requirements of clause 3 in Part B.

Alternative approved equipment configuration — standard for aircraft manufactured before 8 December 2016

- 8 For an aircraft manufactured before 8 December 2016, an equipment configuration is approved if:
 - (a) it has been certified by EASA as meeting the standards of EASA AMC 20-24; and
 - (b) the aircraft flight manual attests to the certification; and
 - (c) the GNSS receiver or system complies with the requirements of clause 4 in Part B.



Notes to Civil Aviation Order 82.3

Note 1

The Civil Aviation Order (in force under the *Civil Aviation Act 1988*) as shown in this compilation comprises Civil Aviation Order 82.3 amended as indicated in the Tables below.

Table of Orders

Year and number	Date of notification in <i>Gazette/</i> registration on FRLI	Date of commencement	Application, saving or transitional provisions
CAO 2004 No. R54	23 December 2004 (F2005B00882)	23 December 2004 (s. 2)	cil)
CAO 2004 No. 8	23 December 2004 (F2005B00955)	23 December 2004 (s. 2)	S
CAO 2005 No. 1	FRLI 27 January 2005 (F2005L00126)	28 January 2005 (s. 1)	
CAO 82.3 2006 No. 1	FRLI 25 May 2006 (F2006L01564)	26 May 2006 (s. 2)	
CAO 82.3 2007 No. 1	FRLI 18 June 2007 (F2007L01690)	19 June 2007 (s. 2)	\mathbf{v}^*
CAO 82.3 2007 No. 2	FRLI 30 October 2007 (F2007L04071)	31 October 2007 (s. 2)	7
CAO 82.3 2008 No. 1	FRLI 16 April 2008 (F2008L00901)	17 April 2008 (s. 2)	
CAO 82.3 2008 No. 2	FRLI 22 December 2008 (F2008L04373)	23 December 2008 (s. 2)	
CAO 82.3 2009 No. 1	FRLI 30 January 2009 (F2009L00232)	31 January 2009 (s. 2)	s. 3 (Table A)
CAO 82.3 2009 No. 2	FRLI 5 March 2009 (F2009L00210)	6 March 2009 (s. 2)	
CAO 82.3 2009 No. 3	FRLI 22 December 2009 (F2009L04206)	23 December 2009 (s. 2)	
CAO 82.3 2010 No. 1	FRLI 12 April 2010 (F2010L00698)	13 April 2010 (s. 2)	
CAO 82.3 2010 No. 2	FRLI 28 May 2010 (F2010L01262)	3 June 2010 (s. 2)	
CAO 82.3 2011 No. 1	FRLI 22 June 2011 (F2011L01197)	27 June 2011 (s. 2)	
CAO 82.3 2011 No. 2	FRLI 13 January 2012 (F2012L00035)	14 January 2012 (s. 2)	
CAO 82.3 2012 No. 1	FRLI 21 November 2012 (F2012L02209)	22 November 2012 (s. 2)	
CAO 82.3 2014 No. 1	FRLI 21 May 2014 (F2014L00584)	22 May 2014 (s. 2)	
CAO 82.3 2014 No. 2	FRLI 22 August 2014 (F2014L01113)	23 August 2014 (s. 2)	
CAO (Flight Crew Licensing) Repeal and Amendment Instrument 2014 (No. 1)	FRLI 29 August 2014 (F2014L01177)	1 September 2014 (s. 2)	Sections 3 and 31 (Table A)

Civil Aviation	FRL 30 November 2017	30 November 2017	_
& Repeal	(F2017L01555)	(5. 2)	
(ATSOs)			
Instrument 2017			

Table of Amendments

ad. = added or inserted am. = amended rep.= repealed rs. = repealed and substituted

Provision affected	How affected
s. 82.3	rs. CAO 2004 No. R54
subs. 1AA	ad. CAO 82.3 2009 No. 1
subs. 2	am. CAO 82.3 2009 No. 1, CAO 82.3 2014 No. 2
subs. 2A	ad. CAO 82.3 2009 No. 1 am. CAO 82.3 2014 No. 2
subs. 2B	ad. CAO 82.3 2014 No. 2
subs. 2C	ad. CAO 82.3 2014 No. 2
subs. 2D	ad. CAO 82.3 2014 No. 2
subs. 2E	ad. CAO 82.3 2014 No. 2
subs. 2F	ad. CAO 82.3 2014 No. 2
subs. 3	am. F2014L01177
subs. 4	am. CAO 82.3 2011 No. 1
subs. 4A	ad. CAO 82.3 2011 No. 1
subs. 5B	rep. CAO 82.3 2010 No. 2
subs. 6	am. CAO 82.3 2008 No. 1; CAO 82.3 2011 No. 1
subs. 7	am. CAO 2004 No. 8
subs. 9A	ad. CAO 82.3 2009 No. 1
subs.10	am. CAO 2005 No. 1; CAO 82.3 2007 No. 1; CAO 82.3 2009 No. 2; CAO 82.3 2011 No. 2; CAO 82.3 2012 No. 1
subs. 11	ad. CAO 82.3 2007 No. 2
Appendix 1	am. CAO 82.3 2010 No. 1
Appendix 2	am. CAO 82.3 2006 No. 1
Appendix 4	am. CAO 82.3 2008 No. 2
Appendix 5	ad. CAO 82.3 2008 No. 1
Appendix 6	ad. CAO 82.3 2009 No. 2
	am. CAO 82.3 2009 No. 3; CAO 82.3 2011 No. 2; CAO 82.3 2014 No. 1; F2017L01553
Appendix 6A	ad. CAO 82.3 2011 No. 2
Appendix 7	ad. CAO 82.3 2009 No. 2
	rs. CAO 82.3 2009 No. 3
PRELIN	

32

Table A Application, saving or transitional provisions

Civil Aviation Order 82.3 Amendment Order (No. 1) 2009 (F2009L00232)

3 Application

- (1) Unless CASA approves otherwise in writing for an operator, amendment 1 in Schedule 1 applies to each operator on 1 July 2009.
- (2) Unless CASA approves otherwise in writing for an operator, amendment 2 in Schedule 1 applies to each operator on and from:
 - (a) 1 February 2010; or
 - (b) if the operator notifies an earlier date in writing to CASA that date
- (3) Unless CASA approves otherwise in writing for an operator, amendment 3 Schedule 1 applies to each operator on and from:
 - (a) 1 February 2010; or
 - (b) if the operator notifies an earlier date in writing to CASA that date.

Note AOC holders may chose to have their operations governed by the new arrangements from a date before 1 February 2010.

(4) Amendment 6 in Schedule 1 applies to each operator on and from 1 December 2009.

The amendments referred to in the application provision are set out below:

Amendments

- [1] After subsection 1A
 - insert

1AA Implementation plan for SMS

Each operator who holds an AOC on 1 April 2009 must give CASA for approval the operator's plan for implementation of a safety management system.

[2] Subparagraph 2.1 (a)

substitute

(a) establish and maintain an appropriate organisation, with a sound and effective management structure that uses a safety management system approved by CASA; and

Note Guidance on what CASA will consider in deciding whether to approve an SMS is contained in the following (the *CAAP SMS package*):

 CAAP SMS-1(0) — Safety Management Systems for Regular Public Transport Operations;

- CAAP SMS-2(0) Integration of Human Factors (HF) into Safety Management Systems (SMS);
- (c) CAAP SMS-3(0) Human Factors and Non-Technical Skills Training for Regular Public Transport Operations.

[3] After subparagraph 2.1 (b)

insert

; and (c) have a program, approved by CASA, to train and assess personnel in human factors and non-technical skills with the aim of minimising human error.

Note The CAAP SMS package contains guidance on what CASA will consider in deciding whether to approve a program for human factors and non-technical skill.

[6] After subsection 9

insert

9A Obligations in relation to international carriage of a copy of the AOC

Each operator of an aircraft engaged in an international flight must ensure that the pilot in command can present a true and complete hard copy of the following documents to any person who has a lawful right to inspect them before, during or at the end of the flight:

- (a) the operator's current AOC; and
- (b) each operational specification (if any) issued in conjunction with the AOC that is relevant to the aircraft.

Sections 3 and 31 of Civil Aviation Order (Flight Crew Licensing) Repeal and Amendment Instrument 2014 (No. 1) read as follows:

3 Definitions

(1) In this instrument:

continued authorisation has the meaning given by regulation 202.261 of the Civil Aviation Safety Regulations 1998 (CASR 1998).

new authorisation has the meaning given by regulation 202.261 of CASR 1998.

(2) A reference in this instrument to a Civil Aviation Order identified by a specified number is taken to include a reference to the section of the Civil Aviation Orders with that number.

Note Some existing legislative instruments are referred to as a Civil Aviation Order followed by a number. Other instruments are referred to as a section of the Civil Aviation Orders. For consistency, in this instrument, all such instruments are referred to as a Civil Aviation Order followed by a number. For example, a reference to Civil Aviation Order 40.2.2 is taken to include a reference to section 40.2.2 of the Civil Aviation Orders.

Transitional — application of Civil Aviation Orders

The Civil Aviation Orders apply to a continued authorisation as if it were the equivalent new authorisation.

31