



Australian Government

Civil Aviation Safety Authority

I, PHILIPPA JILLIAN SPENCE, Director of Aviation Safety, on behalf of CASA, make this instrument under regulation 135.025 of the *Civil Aviation Safety Regulations 1998*.

[Signed P. Spence]

Pip Spence
Director of Aviation Safety

29 November 2023

Part 135 Manual of Standards Amendment Instrument 2023 (No. 1)

1 Name of instrument

This instrument is the *Part 135 Manual of Standards Amendment Instrument 2023 (No. 1)*.

2 Commencement

This instrument commences on 2 December 2023.

3 Amendment of the Part 135 Manual of Standards

Schedule 1 amends the *Part 135 (Australian Air Transport Operations—Smaller Aeroplanes) Manual of Standards 2020*.

Schedule 1 Amendments

[1] Paragraph 3.02(a)

repeal and substitute

- (a) the aeroplane's certificate of registration;
- (aa) for a registered aeroplane—the aeroplane's certificate of airworthiness;
- (ab) for a foreign registered aeroplane—the aeroplane's authorisation (however described) that is equivalent to a certificate of airworthiness;

[2] Section 10.02, Definitions

insert

runway strip:

- (a) for an aerodrome in Australian territory—has the meaning given in the *Part 139 (Aerodromes) Manual of Standards 2019*; and
- (b) for an aerodrome in a foreign country—means the runway strip for a runway at the aerodrome, as declared in accordance with the relevant requirements of the NAA of the country.

[3] Section 10.02, definition of *take-off distance available*

repeal and substitute

take-off distance available, for a take-off of an aeroplane at an aerodrome, means the total of:

- (a) the length of the take-off run available for a runway at the aerodrome; and
- (b) if:
 - (i) a clearway is provided at the aerodrome—the length of the clearway; or
 - (ii) a clearway is not provided at the aerodrome—the length of the part of the runway strip between the end of the runway and the runway strip end.

[4] Paragraphs 11.01(5)(b) and (c)

repeal and substitute

- (b) any mention of feet (or ft) in the context of an altitude is taken to mean feet above mean sea level (AMSL), unless otherwise stated.

[5] Subparagraph 11.08(3)(b)(i)

omit

rotorcraft's

insert

aeroplane's

[6] Subparagraph 11.08(3)(b)(ii)

omit

rotorcraft

insert

aeroplane

[7] Subparagraph 11.08(3)(b)(ii)

omit

rotorcraft's

insert

aeroplane's

[8] Sub-subparagraph 11.08(3)(b)(ii)(B)

omit

rotorcraft's

insert

aeroplane's

[9] Subsection 11.08(4)

omit

rotorcraft

insert

aeroplane

[10] Subsection 11.08(4)

omit

rotorcraft's

insert

aeroplane's

[11] Section 11.19, definition of GPWS

omit

[12] Section 11.19, Definitions

insert

TAWS-Class B+ means a TAWS that:

- (a) is a TAWS-Class B; and
- (b) includes a colour terrain display that meets the following requirements:
 - (i) the displayed terrain information must be depicted relative to the aeroplane's position such that the pilot can estimate the relative bearing to the terrain of interest;
 - (ii) the displayed terrain information must be depicted relative to the aeroplane's position such that the pilot may estimate the distance to the terrain of interest;
 - (iii) the displayed terrain information depicted must be oriented to either the heading or the track of the aeroplane, and may include an additional selectable north-up orientation format;
 - (iv) variations in terrain elevation must be depicted relative to the aeroplane's current or projected elevation (above and below) and be visually distinct, except that terrain that is more than 2 000 feet below the aeroplane's elevation may be excluded;
 - (v) terrain that generates alerts must be displayed in a manner that distinguishes it from non-hazardous terrain, consistent with the caution and warning alert level relevant to the TAWS Class B equipment.

[13] Paragraph 11.22(2)(b)

omit

issued with a certificate of airworthiness

insert

registered, in Australia or elsewhere,

[14] Section 11.25

repeal and substitute

11.25 Terrain awareness and warning system (TAWS)

- (1) This section applies to an aeroplane, for an IFR flight, or a VFR flight at night, if it is conducting a passenger transport operation or a medical transport operation.
- (2) If the aeroplane is a turbine-engine aeroplane:
 - (a) with an MTOW of more than 5 700 kg; or
 - (b) that is carrying 10 or more passengers;then it must be fitted with a TAWS-Class A.

- (3) If the aeroplane is a turbine-engine aeroplane:
 - (a) with an MTOW of 5 700 kg or less; and
 - (b) that is carrying 10 or more passengers;then, it must be fitted with a TAWS-Class A or a TAWS-Class B+.
- (4) If the aeroplane is a piston-engine aeroplane:
 - (a) with an MTOW of more than 5 700 kg; or
 - (b) that is carrying 10 or more passengers;then it must be fitted with a TAWS-Class A, a TAWS-Class B+ or TAWS-Class B.
- (5) This section applies subject to sections 11.25A and 11.26.

[15] RESERVED

[16] Section 11.25A

repeal and substitute

11.25A Transitional provision—CAO 20.18

- (1) In this section:

CAO 20.18 means *Civil Aviation Order 20.18*.

TAWS-B+ system has the meaning given by paragraph 2.1 of repealed CAO 20.18, as in force immediately before the commencement of this instrument.

- (2) This section applies to a turbine-engine aeroplane, for an IFR flight, which:
 - (a) is conducting a passenger transport operation; and
 - (b) has an MTOW of 5 700 kg or less; and
 - (c) is carrying 10 or more passengers; and
 - (d) is fitted with visual display of a TAWS-B+ system that is not compliant with the TAWS-Class B+ terrain display requirements before 2 December 2023.
- (3) Despite section 11.25, until immediately before 3 June 2024, the aeroplane must be fitted with one of the following:
 - (a) a TAWS-B+ system;
 - (b) a TAWS-Class B+;
 - (c) a TAWS-Class A.

- (4) This section applies subject to section 11.26.

[17] RESERVED

[18] Section 11.26, the chapeau

omit

GPWS, or a TAWS,

insert

TAWS

[19] Subparagraph 11.26(a)(i)

omit

GPWS, or TAWS,

insert

TAWS

[20] Subparagraph 11.26(a)(ii)

omit

GPWS, or TAWS,

insert

TAWS

[21] Subsection 11.28(1)

repeal and substitute

- (1) Airborne weather radar equipment, fitted to an aeroplane under section 11.27, may be inoperative at the beginning of a flight, but only if the relevant forecasts or reports indicate there are no potentially hazardous weather conditions in any of the following flight paths:
 - (a) in the flight path along which the aeroplane will be flown;
 - (b) if the operational flight plan for the flight includes an alternate aerodrome—in the flight path to that aerodrome.

[22] Subsection 11.40(1)

omit

fitted with supplemental

insert

fitted with, or carry, supplemental

[23] Subsections 11.41(1) and (2)

repeal and substitute

- (1) An unpressurised aeroplane operated at a pressure altitude above 10 000 ft (a ***relevant aeroplane***) must be fitted with, or carry, sufficient supplemental oxygen to meet the requirements set out in Table 11.41(2).
- (2) A relevant aeroplane to which subsection (1) applies must be fitted with, or carry, supplemental oxygen equipment capable of storing, and dispensing, supplemental oxygen to crew members and passengers.

[24] Subsection 11.58(2), the chapeau

omit

following distances:

insert

following distances from a suitable forced landing area situated on land:

[25] Subsection 11.58(4)

omit

paragraph (3)(a),

insert

subparagraph (3)(b)(i),

[26] Paragraph 11.58(4)(b)

omit

landing area, situated on land, for the flight.

insert

landing area for the flight.

[27] Division 13 of Chapter 11, the heading

repeal and substitute

Division 13—Surveillance equipment

[28] Section 11.60, the heading

repeal and substitute

11.60 Carriage of surveillance equipment

[29] Subsection 11.60(1)

repeal

[30] Subsection 11.60(2)

omit

For subsection (1), an

insert

An

[31] Subsection 11.60(2), Table 11.60(2), Item 3, paragraph (a)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[32] Subsection 11.60(2), Table 11.60(2), Item 4, paragraph (a)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[33] Section 11.61, the heading

repeal and substitute

11.61 Operation of surveillance equipment—general requirements

[34] Subsections 11.61(1), (2), (3) and (4)

repeal and substitute

- (1) The requirements of this section are subject to section 11.65.
- (2) Surveillance equipment required to be fitted to, or carried on, an aircraft by section 11.60 must be continuously operated during the circumstances mentioned in section 11.60.
- (3) Subsection (2) does not apply if air traffic control has issued an instruction that the surveillance equipment is not to be operated.

- (4) If an aircraft is fitted with more than 1 approved transponder, only 1 transponder is to be operated at any time.

[35] Subsection 11.61(8)

repeal and substitute

- (8) Pressure altitude information reported by an approved transponder or an approved ADS-B OUT equipment configuration must be determined by:
- (a) a barometric encoder of a type authorised by CASA or the NAA of a recognised country in accordance with (E)TSO-C88a; or
 - (b) another system approved under Part 21 of CASR as having a level of performance equivalent to a system mentioned in paragraph (a).

[36] Section 11.62, the heading

repeal and substitute

11.62 Mode S transponders and ADS-B OUT—specific requirements

[37] Subsection 11.62(4)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[38] Subsection 11.62(6)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[39] Subsection 11.63(1)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[40] Subsection 11.63(2)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[41] Subsection 11.64(3)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[42] Subsection 11.64(4)

omit

issued with a certificate of airworthiness

insert

certificated in its country of manufacture

[43] Section 11.65, the heading

repeal and substitute

11.65 Aeroplane flown with inoperative surveillance equipment

[44] Section 11.65, the chapeau

omit

An approved transponder

insert

Surveillance equipment

[45] Paragraph 11.65(a)

omit

approved transponder

insert

surveillance equipment

[46] Paragraph 11.65(b)

omit

approved transponder

insert

surveillance equipment

[47] Section 11.65, the Note

repeal and substitute

Note See also section 11.04 for additional requirements related to a flight with inoperative equipment. For a flight with inoperative surveillance equipment, within controlled airspace or at a controlled aerodrome, Division 11.2 of the Part 91 Manual of Standards has requirements related to air traffic control clearances. Whether a clearance is issued, or when a clearance may be issued, could be affected by the flight not being conducted with operative surveillance equipment.

[48] Paragraph 13.05(2)(d)

omit

experienced, for example, low visibility operations.

insert

experienced.

[49] Paragraph 14.05(2)(d)

omit

experienced, for example, low level operations.

insert

experienced.
