



Australian Government

Civil Aviation Safety Authority

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

[Signed P. Spence]

Pip Spence
Director of Aviation Safety

1 December 2021

Part 135 Manual of Standards Amendment Instrument 2021 (No. 1)

1 Name

This instrument is the *Part 135 Manual of Standards Amendment Instrument 2021 (No. 1)*.

2 Commencement

This instrument commences at the time it is registered.

3 Amendment of Part 135 Manual of Standards

Schedule 1 amends the *Part 135 Manual of Standards*.

Schedule 1 Amendments

[1] Section 1.04

insert

NAA means national aviation authority.

[2] Chapter 1, after section 1.07

insert

1.08 Maximum distance of an area of water from land to be a suitable forced landing area

RESERVED

1.09 Additional permitted categories of aeroplanes

For subparagraph 135.030(1)(b)(iv) of CASR, the following categories are prescribed:

- (a) utility;
- (b) acrobatic.

[3] Subsection 3.01(1), Note 2

omit

disinfection

insert

aircraft disinsection

[4] Section 3.04, Table 3.04, Item 2

omit

pyrotechnic

[5] Section 7.02, definition of *contingency fuel*, paragraph (a)

substitute

(a) if:

- (i) the aeroplane is a piston-engine aeroplane — 10% of the trip fuel amount for the flight; or
- (ii) the aeroplane is a turbine-engine aeroplane — 5% of the trip fuel amount for the flight;

[6] Section 7.02, definition of *MSL*

omit

[7] Paragraph 8.03(b)

omit

type acceptance certificate

insert

type certificate, type acceptance certificate, or supplemental type certificate,

[8] Paragraph 8.03(b), Note

omit

term *type acceptance certificate*

insert

terms *type certificate*, *type acceptance certificate* and *supplemental type certificate*

[9] Subsection 8.04(1)

omit

all the words from and including “the flight” to and including “relevant”

insert

a flight of a relevant aeroplane, which makes it necessary, in the interests of safety, for the pilot in command of the

[10] Section 8.05

substitute

8.05 Prescribed matters—decision point

- (1) A prescribed matter, for subregulation 135.240(2) of CASR, is the determination of the decision point for a runway from which a relevant aeroplane is to take-off.
- (2) In this section:

decision point, for a runway, means the last point a relevant aeroplane reaches, whilst travelling on the runway during take-off, at which the pilot in command of the aeroplane may elect to abort the take-off with a reasonable expectation that the aeroplane can be stopped without causing injury to a person or damage to property.

[11] Sections 8.08 and 8.09

substitute

8.08 Prescribed matters—suitable route and forced landing areas

- (1) Subject to subsection (2), a prescribed matter, for subregulation 135.240(2) of CASR, is the maintenance, during a flight of a relevant aeroplane, of the maximum time the aeroplane may be outside the glide range of a suitable forced landing area, for the flight, to 15 minutes at the normal cruising speed in still air, having regard to the following:
 - (a) the nature of the terrain that would be overflown during the flight;
 - (b) the weather information for the route of the flight, including seasonal and other adverse meteorological influences that could affect the conduct of the flight;
 - (c) if water would be over-flown during the flight:
 - (i) the ditching capability of the aeroplane's design, taking into account the requirement stated in paragraph 135.015(3)(a) of CASR; and
 - (ii) the identification of areas of water that meet the requirements stated in paragraph 135.015(3)(c) of CASR.
- (2) If an IFR flight, or VFR flight at night, of a relevant aeroplane is a medical transport operation the primary purpose of which is to transport medical personnel to or from a location to help a person, at or in the vicinity of the location, who requires emergency medical assistance, subsection (1) does not apply to the flight until 2 December 2022.
- (3) Also, a prescribed matter for subregulation 135.240(2) of CASR is each of the following circumstances in which, during a flight of a relevant aeroplane, the time the aeroplane may be outside the glide range of a suitable forced landing area, for the flight, may be more than the maximum time mentioned in subsection (1):
 - (a) if the flight is a medical transport operation — the aeroplane is diverted to a location for the purpose of assisting a person, at or in the vicinity of the location, who requires emergency medical assistance;
 - (b) the aeroplane is being flown in accordance with an authorised instrument approach procedure or authorised instrument departure procedure;
 - (c) the aeroplane's pilot in command is complying with an ATS instruction, other than if the instruction is given because of a request made by the pilot in command to ATS not relating to aviation safety;
 - (d) if the aeroplane is being flown outside controlled airspace — the aeroplane's pilot in command is ensuring appropriate separation of the aeroplane from other aircraft being flown in the aeroplane's vicinity.
- (4) Also, a prescribed matter, for subregulation 135.240(2) of CASR, is:
 - (a) the identification, before a flight of a relevant aeroplane, of aerodromes and suitable forced landing areas, for the flight, which are available for a forced landing of the aeroplane; and
 - (b) the programming of the locations of the identified aerodromes and suitable forced landing areas into the aeroplane's navigation system.

[12] **Chapter 9, heading**

substitute

Chapter 9 — Safety briefings, instructions and demonstrations, and certain flights over water

Division 1—Safety briefings, instructions and demonstrations

[13] **Chapter 9, after section 9.03**

insert

Division 2—Flight of more than 25 nautical miles over water from a suitable forced landing area

RESERVED

[14] **Section 10.02, definition of *clearway*, paragraph (b)**

omit

national aviation authority

insert

NAA

[15] **Section 10.04**

omit

the following table

insert

Table 10.04

[16] **Section 10.04, Table, heading**

omit

Table

insert

Table 10.04

[17] **Section 10.11**

omit

the following table

insert

Table 10.11

[18] **Section 10.11, Table, heading**

omit

Table

insert

Table 10.11

[19] Paragraph 11.02(4)(d)

omit

aeroplane.

insert

aeroplane; and

[20] At the end of section 11.02(4)

insert

- (e) if the equipment is surveillance equipment — the equipment, whether functional or otherwise, must not at any time adversely affect the safety of other aircraft or interfere with the proper functioning of an air traffic service.

[21] Section 11.04

substitute

11.04 Serviceability of equipment

Any equipment required by this Chapter to be fitted to, or carried on, an aircraft for a flight must be operative unless:

- (a) another section of this Chapter provides otherwise; or

Note: A minimum equipment list (a *MEL*), approved under regulation 91.935 of CASR, may only permit equipment required to be fitted to, or carried on, an aircraft by this Chapter, to be unserviceable within the limits of the requirements stated in this Chapter. For example, section 11.21 provides for an allowable period of 72 hours in relation to flights of an aeroplane with inoperative altitude alerting equipment. An MEL would not be approved if it contained a maximum period for altitude alerting equipment to be inoperative that was greater than the period specified by either a master minimum equipment list (MMEL) or the legislation.

- (b) the equipment:

- (i) is inoperative because of a defect that has been approved as a permissible unserviceability for the aircraft for the flight; and
(ii) is fitted, or carried, in accordance with the permissible unserviceability.

[22] Subsection 11.08(1)

omit

all the words from and including “(a *relevant*” to and including “radiocommunications,”

insert

, for a flight,

[23] Subsection 11.08(1)

omit

91.675,

insert

91.675

[24] Subsection 11.08(2)

omit

a relevant

insert

an

[25] Paragraph 11.08(3)(b)

substitute

- (b) if a VHF radiocommunication system would not allow for continuous communication with ATS at all stages of the flight — one of the following:
- (i) an additional radiocommunication system capable of continuous two-way communications with ATS or the rotorcraft's operator;
 - (ii) an additional radiocommunication system capable of, after activation of the system by a crew member of the rotorcraft, sending an automatic notification to the rotorcraft's operator, or a person nominated by the operator, which:
 - (A) notifies the operator or person of an emergency situation during the flight; and
 - (B) includes information about the rotorcraft's general location.

Note: The notification may involve a signal from the radiocommunication system being relayed via multiple communication technologies, for example, satellite relays or mobile phone networks.

[26] Subsection 11.08(4)

substitute

- (4) If an additional radiocommunication system is fitted to the rotorcraft under paragraph (3)(b), the system must only be used for communications with ATS, the rotorcraft's operator or a person nominated by the operator, during the flight, when VHF communications with ATS are not available.

[27] Section 11.09, after heading

insert

Note: For an aircraft entering oceanic airspace with RNP 2, RNP 4, or RNP 10, navigation specification capability, see subsections 11.03(1B) and (1C) of the Part 91 Manual of Standards in relation to long range navigation systems (LRNS) operability requirements. The term *oceanic airspace* is defined in subsection 11.01(2) of the Part 91 Manual of Standards.

[28] Subsection 11.18(1)

omit

, or in poor visibility,

[29] Section 11.19

insert

GPWS means ground proximity warning system.

TAWS means terrain awareness and avoidance system.

[30] Section 11.21, at the end

insert

Note: For a flight of an aeroplane fitted with inoperative altitude alerting equipment, section 11.07 of the Part 91 Manual of Standards states requirements in relation to air traffic control clearances.

[31] Subsection 11.23(3), Note

omit

Note

insert

Note:

[32] Section 11.24

substitute

11.24 Flight with inoperative ACAS

An approved ACAS fitted to an aeroplane under section 11.22 may be inoperative at the beginning of a flight of the aeroplane only if:

- (a) either:
 - (i) the flight begins:
 - (A) from an aerodrome at which there is no facility for the ACAS to be repaired or replaced; and
 - (B) within 72 hours of the time the ACAS was found to be inoperative; or
 - (ii) the flight is to an aerodrome at which there is a facility for the ACAS to be repaired or replaced; and
- (b) if the aeroplane is required to be fitted with an altitude alerting system or assigned altitude indicator, as applicable — the system or indicator is not also inoperative.

[33] Subsections 11.25(1) to (3)

substitute

- (1) This section applies to an aeroplane, for an IFR flight or VFR flight at night, which:
 - (a) is conducting a passenger transport operation or medical transport operation; and
 - (b) has an MTOW of more than 5 700 kg or is carrying 10 or more passengers.

[34] Subsection 11.25(6)

omit

section 11.26

insert

sections 11.25A and 11.26

[35] Subsections 11.25(4) to (6)

renumber as subsections (2) to (4)

[36] After section 11.25

insert

11.25A Transitional provision—CAO 20.18

- (1) In this section:

CAO 20.18 means *Civil Aviation Order 20.18*.

predictive terrain hazard warning function has the same meaning as in subparagraph 9.1D(a) of repealed CAO 20.18, as in force immediately before the commencement of this instrument.

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) is carrying 10 or more passengers.
- (3) Subsection (4) applies if the aeroplane:
 - (a) has an MTOW of more than 5 700 kg; and
 - (b) immediately before the commencement of this instrument, would have been required to be fitted with a GPWS under subparagraph 9.1C(c) of repealed CAO 20.18.
- (4) Until immediately before 2 December 2023, the aeroplane must be fitted with one of the following:
 - (a) a GPWS that has a predictive terrain hazard warning function, which meets the requirements stated in subparagraph 9.1D(b) and paragraph 9.2 of repealed CAO 20.18, as in force immediately before the commencement of this instrument;
 - (b) a TAWS-Class A.
- (5) Subsection (6) applies if the aeroplane
 - (a) has an MTOW of 5 700 kg or less; and
 - (b) immediately before the commencement of this instrument, would have been required to be fitted with:
 - (i) a GPWS under subparagraph 9.1C(c) of repealed CAO 20.18; or
 - (ii) a TAWS-B+ system under subparagraph 9.1C(e) of repealed CAO 20.18.
- (6) Until immediately before 2 December 2023, the aeroplane must be fitted with one of the following:
 - (a) a GPWS that has a predictive terrain hazard warning function, which meets the requirements stated in subparagraph 9.1D(b) and paragraph 9.2 of repealed CAO 20.18, as in force immediately before the commencement of this instrument;
 - (b) a TAWS-B+ system;
 - (c) a TAWS-Class A.
- (7) This section applies subject to section 11.26.

[37] Section 11.26

omit

11.25

insert

11.25 or 11.25A

[38] Paragraph 11.26(b)

omit

91.305(2),

insert

91.305(2)

[39] Section 11.27, heading

omit

ra dar

insert

radar

[40] Section 11.30

substitute

One FDR must be fitted to an aeroplane that has an MTOW of more than 5 700 kg and is:

- (a) turbine-powered; or
- (b) of a type first certificated in its country of manufacture on, or after, 1 July 1965.

[41] Paragraph 11.31(a)

substitute

(a) an aeroplane that has an MTOW of more than 5 700 kg and is:

- (i) turbine-powered; or
- (ii) of a type first certificated in its country of manufacture on, or after, 1 July 1965;

[42] Subsection 11.41(4), Table 11.41(2), Item 3

omit

after

insert

for at least 10% of the passengers, after

[43] Paragraph 11.43(2)(a)

substitute

(a) is of a type that was first issued with a certificate of airworthiness, or an authorisation (however described) equivalent to a certificate of airworthiness issued by the NAA of a Contracting State, on, or after, 9 November 1998; and

[44] Subsection 11.44(4)

omit

megaphone or radiocommunications equipment,

insert

or radiocommunications, equipment

[45] Paragraph 11.58(2)(a)

omit

jet-driven

insert

jet-driven,

[46] Paragraph 11.58(2)(b)

omit

turbine-engine propeller-driven

insert

propeller-driven, turbine-engine, multi-engine

- [47] **Section 11.59, definition of *EASA AMC 20-24***
omit
, as in force or existing from time to time
- [48] **Section 11.59, definition of *EASA CS-ACNS***
omit
as in force or existing from time to time
insert
or any later version
- [49] **Section 11.59, definition of *NIC***
omit
2.2.3.2.7.2.6
insert
2.2.8.1.16
- [50] **Section 11.59, definitions of *SIL, surveillance radar* and *transponder***
substitute

SIL means Source Integrity Level, as specified in paragraph 2.2.3.2.7.2.9 of RTCA/DO-260B.

surveillance radar means radar equipment used to determine the position of an aircraft in range and azimuth.

transponder means an aircraft's SSR transponder.
- [51] **Subparagraphs 11.62(1)(b)(i) and (ii)**
omit
ATC
insert
ATS
- [52] **Section 11.65, Note**
omit
related to flight
insert
related to a flight
- [53] **Section 12.01, definition of *flight crew* member *general emergency check of competency***
omit
flight crew member
insert
flight crew member
- [54] **Subsections 12.04(2), 13.04(2) and 14.04(2)**
omit
underwater escape and (wherever occurring)

[55] Section 12.08

substitute

12.08 Recurrent training and checking

- (1) The flight crew member must have successfully completed the operator's recurrent training and checking for the aeroplane, in accordance with the requirements stated in subsections (3) and (4).
- (2) The operator's recurrent training and checking, for the aeroplane, in relation to the use of life rafts or life jackets does not need to include in-water practical training.
- (3) The flight crew member must successfully undertake the operator's flight crew member general emergency check of competency, for the relevant type or class of aeroplane, as follows:
 - (a) in relation to the use of life rafts — subject to subsection (5), at intervals of not more than 3 years after the previous check;
 - (b) otherwise — subject to subsection (5), at intervals of not more than 1 year after the previous check.
- (4) The flight crew member must successfully undertake the operator's flight crew member proficiency check, for the relevant type or class of aeroplane, as follows:
 - (a) for a flight crew member only conducting a flight under the VFR by day — subject to subsections (5) and (6), initially 6 months after first commencing unsupervised line operations for the operator, and then at intervals of 1 year after the previous proficiency check;
 - (b) otherwise — subject to subsections (5) and (6), initially 6 months after first commencing unsupervised line operations for the operator, and then at intervals of 6 months after the previous proficiency check.
- (5) Any check of competency or proficiency mentioned in this section, required to be completed at intervals of 1 or 3 years, successfully completed within 90 days before, or after, its due date is taken to meet the requirements stated in this section as if it had been completed on the due date.
- (6) Any check of competency or proficiency mentioned in this section, required to be completed at intervals of 6 months, successfully completed within 30 days before, or after, its due date is taken to meet the requirements stated in this section as if it had been completed on the due date.
- (7) A flight crew member who fails to demonstrate competency or continuing competency, for the relevant type or class of aeroplane, under this section must not conduct a line operation with the relevant type or class of aeroplane unless the flight crew member has met the remedial training requirements stated in section 12.09.

Note: The operator of an aeroplane for a flight commits an offence if the operator assigns a person to duty as a flight crew member for the flight and the person has not been assessed by the operator, in accordance with the operator's training and checking system, as competent to perform the duties assigned to the person for the flight: see regulation 135.385 of CASR.

[56] Paragraph 13.05(2)(d)

omit

or NVIS operations

[57] Section 13.08

substitute

13.08 Recurrent training and checking

- (1) The air crew member must have successfully completed the operator's recurrent training and checking for the aeroplane, in accordance with the requirements stated in subsections (3) and (4).
- (2) The operator's recurrent training and checking, for the aeroplane, in relation to the use of life rafts or life jackets does not need to include in-water practical training.
- (3) The air crew member must successfully undertake the operator's air crew member general emergency check of competency, for the relevant kind of aeroplane, as follows:
 - (a) in relation to the use of life rafts — subject to subsection (5), at intervals of not more than 3 years after the previous check;
 - (b) otherwise — subject to subsection (5), at intervals of not more than 1 year after the previous check.
- (4) Subject to subsection (5), the air crew member must successfully undertake the operator's air crew member proficiency check, for the relevant kind of aeroplane, initially 1 year after first commencing unsupervised line operations for the operator, and then at intervals of 1 year after the previous proficiency check.
- (5) Any check of competency or proficiency mentioned in this section, required to be completed at intervals of 1 or 3 years, successfully completed within 90 days before, or after, its due date is taken to meet the requirements stated in this section as if it had been completed on the due date.
- (6) An air crew member who fails to demonstrate competency or continuing competency, for the relevant kind of aeroplane, under this section must not perform the duties of an air crew member in the relevant kind of aeroplane unless the air crew member has met the remedial training requirements stated in section 13.09.

Note: The operator of an aeroplane for a flight commits an offence if the operator assigns a person to duty as an air crew member for the flight and the person has not been assessed by the operator, in accordance with the operator's exposition, as competent to perform the duties assigned to the person for the flight: see regulation 135.450 of CASR.

[58] Section 14.08

substitute

14.08 Recurrent training and checking

- (1) The medical transport specialist must have successfully completed the operator's recurrent training and checking for the aeroplane, in accordance with the requirements stated in subsections (3) and (4).
- (2) The operator's recurrent training and checking, for the aeroplane, in relation to the use of life rafts or life jackets does not need to include in-water practical training.
- (3) The medical transport specialist must successfully undertake the operator's medical transport specialist general emergency check of competency, for the relevant kind of aeroplane, as follows:
 - (a) in relation to the use of life rafts — subject to subsection (5), at intervals of not more than 3 years after the previous check;

- (b) otherwise — subject to subsection (5), at intervals of not more than 1 year after the previous check.
- (4) Subject to subsection (5), the medical transport specialist must successfully undertake the operator's medical transport specialist proficiency check, for the relevant kind of aeroplane, initially 1 year after first commencing unsupervised line operations for the operator, and then at intervals of 1 year after the previous proficiency check.
- (5) Any check of competency or proficiency mentioned in this section, required to be completed at intervals of 1 or 3 years, successfully completed within 90 days before, or after, its due date is taken to meet the requirements stated in this section as if it had been completed on the due date.
- (6) A medical transport specialist who fails to demonstrate competency or continuing competency, for the relevant kind of aeroplane, under this section must not perform the duties of a medical transport specialist in the relevant kind of aeroplane unless the medical transport specialist has met the remedial training requirements stated in section 14.09.

Note: The operator of an aeroplane for a flight commits an offence if the operator assigns a person to duty as a medical transport specialist for the flight and the person has not been assessed by the operator, in accordance with the operator's exposition, as competent to perform the duties assigned to the person for the flight: see regulation 135.465 of CASR.
