Australian Government

Civil Aviation Safety Authority

I, PHILIPPA JILLIAN SPENCE, Director of Aviation Safety, on behalf of CASA, make this instrument under regulations 91.040 and 201.025 of the *Civil Aviation Safety Regulations 1998*.

[Signed P. Spence]
Pip Spence
Director of Aviation Safety

3 February 2025

Part 91 MOS Amendment Instrument 2025 (No. 1)

1 Name of instrument

This instrument is the *Part 91 MOS Amendment Instrument 2025 (No. 1)*.

Note MOS is short for Manual of Standards.

2 Commencement

This instrument commences on 1 March 2025.

3 Amendment of the Part 91 Manual of Standards

Schedule 1 amends the *Part 91 (General Operating and Flight Rules) Manual of Standards 2020*.

Schedule 1 Amendments

[1] Subsection 1.07 (6), Definitions

insert

AFIS means Aerodrome Flight Information Service.

approach procedure with vertical guidance means a PBN IAP designed for 3D instrument approach operations Type A.

Type A, for an instrument approach operation, means a minimum descent height, or a decision height at or above 250 ft.

Type B, for an instrument approach operation, means a decision height below 250 ft, and includes CAT I ILS and low-visibility CAT II and CAT III ILS.

[2] Subsection 1.07 (6), definition of *non-precision approach*

repeal and substitute

non-precision approach procedure means an IAP designed for 2D instrument approach operations Type A.

[3] Subsection 1.07 (6), definition of *precision approach procedure*

repeal and substitute

precision approach procedure means an IAP based on an ILS, an MLS, a GLS or an SBAS CAT I, and which is designed for 3D instrument approach operations Type A or B.

[4] Section 2.07, Table 2.07 (3), Item 2B, Column 5

insert

Clear of cloud

[5] Section 6.02

repeal and substitute

6.02 RESERVED

[6] Subsection 8.02 (2)

repeal and substitute

(2) The definition in subsection (1) may be read as if there were no mention of probabilities in subparagraph (1) (b) (ii) and paragraph (1) (d), but only if:

(a) flight planning for a flight is based on a TAF3; and

(b) the ETA of the flight is within the first 3 hours of the TAF3 validity period; and

(c) the ETA does not fall outside the end time (if any) specified for the TAF3 service.

[7] Paragraph 10.02 (a)

omit

available for use

insert

available, suitable and safe for use

[8] Section 11.22

repeal and substitute

11.22 Danger areas

Subject to section 11.23, the pilot in command of an aircraft **may fly** within or across a danger area that is **not** a military operating area provided that:

(a) before the flight, the pilot in command is demonstrably aware of the specific activity which causes the area to be a danger area; and

(b) before and during the flight, the pilot in command takes appropriate precautions against any safety risks that could arise from the flight; and

(c) the pilot in command complies with the conditions (**if any**) for the area under CASA's *Designation of Prohibited, Restricted and Danger Areas – Declaration and Determination (Permanent PRDs) Instruments* as in force from time to time.

Note The Designation of Prohibited, Restricted and Danger Areas – Declaration and Determination (Permanent PRDs) Instruments and the relevant Designated Airspace Handbooks are published every 6 months.

11.23 Military operating areas

The pilot in command of an aircraft **must not fly** within or across a military operating area unless the pilot in command complies with the conditions for the area under CASA's *Designation of Prohibited, Restricted and Danger Areas – Declaration and Determination (Permanent PRDs) Instrument* as in force from time to time.

Note 1 The Designation of Prohibited, Restricted and Danger Areas – Declaration and Determination (Permanent PRDs) Instruments and the relevant Designated Airspace Handbooks are published every 6 months.

Note 2 Military operating areas (***MOAs***) are a special form of danger areas where military activities are conducted with risk levels more commonly associated with restricted areas, and hence MOAs have strict entry conditions applicable to Australian aircraft.

Note 3 Unauthorised entry or flight in an active military operating area is an offence under regulations 6, 15 and 16 of the *Airspace Regulations 2007*.

[9] Section 15.02, Definitions

insert

APV means any of the following approach procedures with vertical guidance:

(a) RNP APCH – LNAV/VNAV;

(b) RNP APCH – LPV (decision height at or above 250 ft);

(c) RNP AR APCH – RNP 0.x.

Note For a RNP AR APCH procedure the minima is represented as RNP 0.x where 0.x refers to the RNP value specific to the final approach segment.

NPA means any of the following non-precision approach procedures:

(a) NDB, VOR or LOC;

(b) RNP APCH – LNAV;

(c) RNP APCH – LP.

PA means any of the following precision approach procedures:

(a) ILS (not including CAT II or CAT III);

(b) GLS;

(c) RNP APCH – LPV (decision height below 250 ft).

Note Approaches with minima below CAT I precision approach minima, are low-visibility approaches which require specific approvals not covered here. See paragraph 15.09 (1) (a) of the Part 91 Manual of Standards for low-visibility operations.

visible approach lighting splay means:

(a) for a specified aircraft performance category A or B aircraft — not more than 10 degrees from the runway centreline; or

(b) for a specified aircraft performance category C, D or E aircraft — not more than 5 degrees from the runway centreline.

Note 1 Straight in approaches may be designed up to 30 degrees from runway heading for a Category A or Category B aircraft, and up to 15 degrees from runway heading for a Category C or Category D aircraft, in accordance with the design criteria in ICAO Doc 8618 PAN OPS Vol II.

Note 2 Instrument approach procedures designed with final approach tracks outside of the visible approach lighting splay, while potentially still a straight-in approach, do not have minimum visibility based on availability of an approach lighting system, even if installed.

Note 3 Rotorcraft not operating to specific Category H approaches are assumed to be Category A operations.

[10] Section 15.03

add at the end

Note If engine failure or loss of pressurisation occurs during a take-off, and the meteorological conditions necessitate flight to another aerodrome, the departure aerodrome would be the critical point for calculations of additional fuel. See also the definition of ***additional fuel*** in subsection 1.07 (6) and its application in section 19.04.

[11] Section 15.10

repeal and substitute

15.10 Landing minima

(1) For a PA — the minimum **altitude** or **height** must be at least the highest of the following:

(a) the DA or DH specified on the instrument approach chart for the IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

Note But see subsection (7).

(2) For a PA — the minimum **visibility** must be at least the greatest of the following:

(a) the RVR or visibility specified on the instrument approach chart for the IAP being conducted;

(b) relevant minima specified in the AFM;

(c) relevant minima specified in the operator's exposition or operations manual;

(d) 800 m — but only if:

(i) the TDZ RVR report is not available; or

(ii) the approach lighting system normally available at and beyond 720 m from the runway threshold is inoperative;

(e) 1 200 m — but only if:

(i) the approach cannot be flown to at least the landing minima using a flight director, a HUD or an autopilot; or

(ii) the aircraft is not equipped with an operative failure warning system for the primary attitude and heading reference systems; or

(iii) high intensity runway edge lighting is not in operation; or

(iv) the approach lighting system normally available at and beyond 420 m from the runway threshold is inoperative;

(f) if the approach lighting system normally available at and beyond 210 m from the runway threshold is inoperative, or the whole approach lighting system is inoperative, the greater of:

(i) the visibility specified on the instrument approach chart, plus a value equivalent to the published length of the approach lighting system rounded up to the next 100 m; and

Note Rounding is *upwards* to the *next* 100 m.

(ii) 1 500 m;

(g) the greater of either 1.5 times the RVR or 1.5 times the visibility specified on the instrument approach chart for the IAP being conducted — but only if:

(i) a lighting failure has occurred on a runway at a controlled aerodrome; and

(ii) doubled spacing of runway edge lights results.

Note 1 At a controlled aerodrome, in the event of failure of 1 electrical circuit on a runway equipped with interleaved circuitry lighting, pilots will be notified of a doubled spacing of runway edge lights, that is, from 60 m spacing to 120 m spacing.

Note 2 The length of any installed approach lighting system (***ALS***) is used in the IAP design and may reduce the visibility required. Where this has occurred, the pilot needs to correct the visibility required when the ALS is partially or fully inoperative.

Note 3 But see subsection (8).

(3) For a straight-in approach that is an APV or an NPA with the final approach track **aligned** within the visible approach lighting splay — the minimum **altitude** or **height** must be at least the highest of the following:

(a) the DA or DH, or the MDA or MDH, specified on the instrument approach chart for IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

Note But see subsection (7).

(4) For a straight-in approach that is an APV or an NPA with the final approach track **aligned** within the visible approach lighting splay — the minimum **visibility** must be at least the greatest of the following:

(a) the visibility specified on the instrument approach chart for IAP being conducted;

(b) relevant minima specified in the AFM;

(c) relevant minima specified in the operator's exposition or operations manual;

(d) 1 200 m — but only if the approach lighting system normally available at and beyond 420 m from the runway threshold is inoperative;

(e) if the approach lighting system normally available at and beyond 210 m from the runway threshold is inoperative, or the whole approach lighting system is inoperative, the greater of:

(i) the visibility specified on the instrument approach chart, plus a value equivalent to the published length of the approach lighting system rounded up to the next 100 m; and

Note Rounding is *upwards* to the *next* 100 m.

(ii) 1 500 m.

Note 1 The length of any installed approach lighting system (***ALS***) is used in the IAP design and may reduce the visibility required. Where this has occurred, the pilot needs to correct the visibility required when the ALS is partially or fully inoperative.

Note 2 But see subsection (8).

(5) For a straight-in approach that is an APV or a NPA with the final approach track **not aligned** within the visible approach lighting splay, or with **no** approach lighting system installed — the minimum **altitude** or **height** must be at least the highest of the following:

(a) the DA or DH, or the MDA or MDH, specified on the instrument approach chart for the IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

Note But see subsection (7).

(6) For a straight-in approach that is an APV or a NPA with the final approach track **not aligned** within the visible approach lighting splay, or with **no** approach lighting

system installed — the minimum **visibility** must be at least the greatest of the following:

(a) the visibility specified on the instrument approach chart for the IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

Note But see subsection (8).

(7) Despite subsections (1), (3) and (5), if an aircraft is conducting a circling manoeuvre from **any** approach — the minimum **altitude** or **height** must be at least the highest of the following:

(a) the circling minimum altitude specified on the instrument approach chart for the IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

(8) Despite subsections (2), (4) and (6), if an aircraft is conducting a circling manoeuvre from **any** approach — the minimum **visibility** must be at least the greatest of the following:

(a) the circling minimum visibility specified on the instrument approach chart for the IAP being conducted;

(b) the relevant minima specified in the AFM;

(c) the relevant minima specified in the operator's exposition or operations manual.

Note DME or GNSS arrivals, while using NDB or VOR for lateral tracking and DME or GNSS for distance information, are only published with circling minima. As such, only subsections (7) and (8) apply to DME or GNSS approaches.

(9) For an aerodrome **without** an authorised IAP, the minimum **altitude** must be at least the altitude at which the flight can comply with the requirements relating to visual approach procedures published in the authorised aeronautical information for the purposes of subparagraph 91.305 (3) (b) (i).

(10) For an aerodrome **without** an authorised IAP, the minimum **visibility** must be at least the flight visibility specified in Table 2.07 (3) for the type of aircraft, the class of airspace, and the height.

Note Table 2.07 (3) specifies the VMC criteria. The effect of this subsection is that flight visibility must be at least the greatest flight visibility relevant to the aircraft if it were required to maintain VMC during the flight to the aerodrome.

[12] Subparagraph 15.11 (1) (d) (i), the chapeau

repeal and substitute

(i) for an APV or a PA:

[13] Subparagraph 15.11 (1) (d) (ii), the chapeau

repeal and substitute

(ii) for an NPA:

[14] Subparagraph 15.11 (2) (b) (i)

repeal and substitute

(i) the flight visibility must be not less than the landing minima specified in section 15.10; and

[15] Subparagraph 15.11 (2) (b) (ii), the Note

omit

NPAs

insert

non-precision approach procedures

[16] Before section 20.01

insert

Note In this Division, any reference to a seat, a seatbelt, a shoulder harness or a restraint system is a reference to an approved seat, an approved seatbelt, an approved shoulder harness or an approved restraint system, where "approved" means approved under Part 21 of CASR: see subsection 1.07 (5).

[17] Before section 20.02

insert

Note In this Division, any reference to a seat, a seatbelt, a shoulder harness or a restraint system is a reference to an approved seat, an approved seatbelt, an approved shoulder harness or an approved restraint system, where "approved" means approved under Part 21 of CASR: see subsection 1.07 (5).

[18] Section 21.03

omit

The broadcasts

insert

(1) The broadcasts

[19] Section 21.03, after the Note

insert

(2) For subsection (1), published radio frequency is taken to include the use of a relevant datalink, ADS-C, CPDLC, or SATCOM voice communication.

[20] Paragraph 21.05 (1) (d)

omit

subsections (1A) and (1B),

insert

subsections (1A), (1B) and (1C),

[21] After subsection 21.05 (1B)

insert

(1C) Despite paragraph (1) (d), for item 11 of Table 21.05 (1), a report to cancel SARWATCH is not required if an aircraft has arrived at a controlled aerodrome during tower hours.

Note SARWATCH is automatically cancelled by ATC without the need to report to ATC.

[22] After subsection 21.06 (2A)

insert

(2B) Despite paragraph (1) (a), for item 10 of Table 21.06 (1), a report to cancel SARWATCH is not required if an aircraft has arrived at a non-controlled aerodrome with an AFIS during AFIS hours.

Note 1 SARWATCH is automatically cancelled by the AFIS without the need for a specific pilot report.

Note 2 Despite the similarity in abbreviation, an AFIS and SFIS are significantly different air traffic services. Refer to the AIP for a description of these services.

[23] Division 26.4, the Title

repeal and substitute

Division 26.4 Flight instruments — rotorcraft

[24] Division 26.5, the Title

repeal and substitute

Division 26.5 Flight instruments — experimental, light sport and certain other aircraft

[25] Paragraph 26.48 (3A) (b), second occurring

omit

(b) the aircraft is:

insert

(c) the aircraft is:

[26] After subsection 26.48 (6)

insert

Note If an aircraft is not fitted with an automatic ELT, it is recommended that, as far as practicable, the survival ELT should be carried on the person of the pilot, particularly in a one-pilot operation.

[27] Paragraph 26.49 (b)

omit

is fitted to, or carried on,

insert

is required to be fitted to, or carried on,

[28] Paragraph 26.49 (c)

omit

is fitted to, or carried on,

insert

is required to be fitted to, or carried on,

[29] Subsection 26.60 (2), the chapeau

omit

is flown further over water than the following distances:

insert

is flown over water and is further from land than the following distances:

[30] Paragraph 26.60 (2) (b), the chapeau

omit

for a turbine-engine propeller-driven aeroplane

insert

for a propellor-driven turbine-engine multi-engine aeroplane
