Australian Government

Civil Aviation Safety Authority

I, MARK ALAN SKIDMORE, Director of Aviation Safety, on behalf of CASA, make this instrument under paragraph 9 (1) (c) of the *Civil Aviation Act 1988* and regulation 173.010 and paragraph 173.085 (1) (b) of the *Civil Aviation Safety Regulations 1998*.

[Signed M. Skidmore]
Mark Skidmore AM
Director of Aviation Safety

25 March 2015

Manual of Standards Part 173 Amendment Instrument 2015 (No. 1)

1 Name of instrument

This instrument is the *Manual of Standards Part 173 Amendment Instrument 2015 (No. 1)*.

2 Commencement

This instrument commences on 1 April 2015.

3 Amendment of the Manual of Standards Part 173

Schedule 1 amends the Manual of Standards (MOS) Part 173 — Standards Applicable to the Provision of Instrument Flight Procedure Design.

Schedule 1 Amendments

[1] Paragraph 1.1.1.2

substitute

1.1.1.2 For the design of:

(a) Instrument Flight Procedures, other than the design of Required Navigation Performance Authorization Required Approach (***RNP AR APCH***) procedures, the design standards are contained in:

(i) International Civil Aviation Organization (***ICAO***) Publication Doc 8168-OPS/611, Volumes I and II, also referred to as the Procedures for Air Navigation Services – Aircraft Operations (***PANS-OPS***); and

(ii) this Manual of Standards (***MOS***) which comprises:

(A) additional design standards not included in PANS-OPS; and

(B) differences which are adopted by Australia; and

(C) new or developing standards; and

(b) RNP AR APCH procedures, the design standards are contained in:

(i) PANS-OPS; and

(ii) this MOS which comprise:

(A) additional design standards not included in PANS-OPS; and

(B) differences which are adopted by Australia; and

(C) new or developing standards; and

(iii) ICAO Publication Doc 9905-AN/471, also referred to as the Required Navigation Performance Authorization Required Procedure Design Manual (***ICAO Doc 9905***).

[2] Section 1.1.2, the title

substitute

Differences between ICAO documents and standards in the MOS

[3] Paragraph 1.1.5.1

substitute

1.1.5.1 These standards should be read in conjunction with:

(a) ICAO Procedures for Air Navigation — Air Operations, Doc 8168-OPS/611, Volume II — Construction of Visual and Instrument Flight Procedures; and

(b) ICAO Instrument Flight Procedures Construction Manual, Doc 9368-AN/911; and

(c) ICAO Template Manual for Holding, Reversal and Racetrack Procedures, Doc 9371-AN/912/2; and

(d) ICAO Required Navigation Performance Authorization Required Procedure Design Manual, Doc 9905-AN/471.

[4] Paragraph 2.1.1.1 (m)

omit

ICAO Doc 8168 and this MOS,

insert

PANS-OPS, this MOS, ICAO Doc 9905 if applicable,

[5] Paragraph 4.1.1.1

substitute

4.1.1.1 The following documents, as applicable, are required for the design of instrument flight procedures and management of the design process:

(a) CASA Manual of Standards (MOS) Part 173;

(b) ICAO Procedures for Air Navigation — Air Operations, Doc 8168-OPS/611, Volume II — Construction of Visual and Instrument Flight Procedures;

(c) ICAO Instrument Flight Procedures Construction Manual, Doc 9368-AN/911;

(d) ICAO Template Manual for Holding, Reversal and Racetrack Procedures, Doc 9371-AN/912/2;

(e) ICAO Required Navigation Performance Authorization Required Procedure Design Manual, Doc 9905-AN/471;

(f) ICAO Quality Assurance Manual for Flight Procedures Design, Doc 9906-AN/472, Volume 1 — Flight Procedures Design Quality Assurance System;

(g) ICAO Quality Assurance Manual for Flight Procedures Design, Doc 9906-AN/472, Volume 2 — Flight Procedure Designer Training (Development of a Flight Procedures Designer Training Programme);

(h) ICAO Quality Assurance Manual for Flight Procedures Design, Doc 9906-AN/472, Volume 3 — Flight Procedure Design Software Validation;

(i) ICAO Quality Assurance Manual for Flight Procedures Design, Doc 9906, Volume 5 — Validation of Instrument Flight Procedures;

(j) ICAO Performance Based Navigation (PBN) Manual, Doc 9613-AN/937.

[6] Paragraph 6.1.1.1

substitute

6.1.1.1 Terminal Instrument Flight Procedures are classified as one of the following types:

(a) Non-precision Approach (Ground-based);

(b) Non-precision Approach (RNP APCH);

(c) Precision Approach (Ground-based);

(d) Precision Approach (GBAS);

(e) Approach with Vertical Guidance (APV);

(ea) Required Navigation Performance Authorization Required Approach (RNP AR APCH);

(f) Departure;

(g) Helicopter (Off-shore) — Airborne Radar;

(h) Helicopter (Off-shore) — Non-directional Beacons (NDB).

[7] After paragraph 7.1.5.3

insert

7.1.5.4 An aircraft flight simulator, approved by the CASA validation pilot may be used to verify database information and flyability of the procedure.

[8] Paragraph 7.1.6.2

substitute

7.1.6.2 Only persons involved in the validation procedure being conducted in an aircraft are to be carried in the aircraft.

[9] Paragraph 7.1.24.3

substitute

7.1.24.3 Should the validation pilot not be qualified as pilot-in-command of a helicopter, aircraft or flight simulator to be used for a validation flight, another pilot may be assigned to be the pilot in command provided that the validation pilot occupies a seat in the cockpit and directs the conduct of the validation.

[10] Paragraph 8.1.1.4 (c) (i) (A)

omit

Part III, Chap 7,

insert

or ICAO Doc 9905 missed approach criteria,

[11] Paragraph 8.1.1.5 (b) (iii) (A)

omit

Part III, Chap 7

insert

or ICAO Doc 9905 missed approach criteria,

[12] Paragraph 8.1.3.1

omit

PANS-OPS Vol II.

insert

PANS-OPS Vol II or ICAO Doc 9905 for RNP AR APCH.

[13] Paragraph 8.1.5.1, the chapeau

omit

PANS-OPS Vol II, the following factors are to be taken into account in determining OCA:

insert

PANS-OPS Vol II or ICAO Doc 9905 for RNP AR APCH, the following factors are to be taken into account in determining OCA:

[14] Paragraph 8.1.7.2 (a)

omit

ICAO PANS-OPS Vol II

insert

ICAO PANS-OPS Vol II or ICAO Doc 9905 for RNP AR APCH