



Australian Government

Civil Aviation Safety Authority

Part 60 Manual of Standards 2019

I, GRAEME MILLS CRAWFORD, Acting Director of Aviation Safety, on behalf of CASA, make this instrument under paragraph 9 (1) (c) of the *Civil Aviation Act 1988* and regulation 60.020 of the *Civil Aviation Safety Regulations 1998*.

[Signed G.M. Crawford]

Graeme M. Crawford
Acting Director of Aviation Safety

9 September 2019

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Note This Table of Contents is for guidance only. It is not a formal part of the *Part 60 Manual of Standards*.

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Part 60 Manual of Standards

CHAPTER 1 PRELIMINARY

1 Name

- (1) This instrument is the *Manual of Standards (MOS) – Part 60*.
Note See definition of *Manual of Standards* in regulation 60.010 of CASR.
- (2) This instrument may be cited as the *Part 60 Manual of Standards*.

1A Commencement

This instrument commences on the day after it is registered.

1B Repeal

Manual of Standards Part 60 – Synthetic Training Devices (also known as F2007B01089), as amended, is repealed.

2 Interpretation

Note In this instrument, certain terms and expressions have the same meaning as they have in the *Civil Aviation Act 1988* and the regulations. These include: *aeroplane, EASA, FAA, FARs, flight simulator, flight simulator qualification, flight simulator qualification certificate, flight training device, helicopter, ICAO, national aviation authority, operator, qualification level, recurrent evaluation and special evaluation*.

- (1) In this instrument:
FAA FSTD Directive 2 means FSTD Directive 2 set out in Attachment 6 (*FSTD Directives Applicable to Airplane Flight Simulators*) to FARs, Subchapter D, Part 60, Appendix A, *Qualification Performance Standards for Airplane Full Flight Simulators*, as published on 31 May 2016.
qualification level D means flight simulator qualification level D in item 4 of Table 60.020-1 of CASR.
- (2) For this instrument, a reference to a national aviation authority (however described) or an officer of a national aviation authority, that is in a standard mentioned in sections 3 to 7, other than either of the following standards, is taken to be a reference to CASA:
 - (a) Manual of Standards Part 60 – Synthetic Training Devices;
 - (b) *Operational Standards and Requirements — Approved Flight Simulators (FSD-1)*, published by CASA.

CHAPTER 2 FLIGHT SIMULATOR STANDARDS

3 Aeroplane flight simulator standards

- (1) For subregulation 60.020 (1) of CASR, the standards for the determination of the qualification level of an aeroplane flight simulator are any of the following:
 - (a) FARs, Subchapter D, Part 60, Appendix A, *Qualification Performance Standards for Airplane Full Flight Simulators*, as existing from time to time;

Note Chapter I of Title 14 of the Code of Federal Regulations is also known as the Federal Aviation Regulations — see definition of **FARs** in the CASR Dictionary. At the time this instrument commences, the latest issue of the FARs, Subchapter D, Part 60 (*Flight Simulation Training Device Initial and Continuing Qualification and Use*) (14 CFR Part 60), is the issue published in 2016. This issue is also known as “FARs Part 60, Change 2”.
 - (b) until the end of 24 March 2021 — FARs, Subchapter D, Part 60, Appendix A, *Qualification Performance Standards for Airplane Full Flight Simulators*, as published on 9 May 2008;

Note The *Civil Aviation Safety Amendment (Part 121) Regulations 2018* commence on 25 March 2021 — see section 2 of the regulations. The issue of the FARs, Subchapter D, Part 60 (*Flight Simulation Training Device Initial and Continuing Qualification and Use*) (14 CFR Part 60) published on 9 May 2008 is also known as “FARs Part 60, Change 1”.
 - (c) the latest issue of the EASA *Certification Specifications for Aeroplane Flight Simulation Training Devices* (CS-FSTD(A)), as existing from time to time;

Note At the time this instrument commences, the latest issue of the EASA *Certification Specifications for Aeroplane Flight Simulation Training Devices* (CS-FSTD(A)) is Issue 2, dated 3 May 2018 (Annex to ED Decision 2018/006/R). Issue 2 entered into force on 9 January 2019 (see Article 2 of ED Decision 2018/006/R and Article 2 of the Commission Implementing Regulation (EU) 2018/1974, published in the Official Journal of the European Union on 20 December 2018). See the Annex to ED Decision 2012/010/R for the initial issue of the certification specifications.
 - (d) subject to subsection (2), the latest edition of the ICAO *Manual of Criteria for the Qualification of Flight Simulation Training Devices, Volume 1 — Aeroplanes* (ICAO Doc 9625), as existing from time to time.

Note At the time this instrument commences, the latest edition of the ICAO *Manual of Criteria for the Qualification of Flight Simulation Training Devices, Volume 1 — Aeroplanes* (ICAO Doc 9625) is the Fourth Edition, 2015.
- (2) The ICAO standard mentioned in paragraph (1) (d) may be used only to determine if an aeroplane flight simulator has satisfied the requirements for qualification level D.
- (3) For subsection (2), device Type VII in the ICAO standard mentioned in paragraph (1) (d) is equivalent to qualification level D.

4 Helicopter flight simulator standards

For subregulation 60.020 (1) of CASR, the standards for the determination of the qualification level of a helicopter flight simulator are any of the following:

- (a) FARs, Subchapter D, Part 60, Appendix C, *Qualification Performance Standards for Helicopter Full Flight Simulators*, as existing from time to time;

Note At the time this instrument commences, the latest issue of the FARs, Subchapter D, Part 60 (*Flight Simulation Training Device Initial and Continuing Qualification and Use*) (14 CFR Part 60) is the issue published in 2016. This issue is also known as “FARs Part 60, Change 2”.
- (b) the latest issue of the EASA *Certification Specifications for Helicopter Flight Simulation Training Devices* (CS-FSTD(H)), as existing from time to time.

Note At the time this instrument commences, the latest issue of the EASA *Certification Specifications for Helicopter Flight Simulation Training Devices* (CS-FSTD(H)) is Initial issue dated 26 June 2012 (Annex to ED Decision 2012/011/R).

5 Transitional arrangements — aeroplane qualified flight simulator standards

- (1) If the current qualification level of an aeroplane qualified flight simulator was determined in accordance with a standard mentioned in subsection (2), the standard for the assessment during a recurrent evaluation of the aeroplane qualified flight simulator against that qualification level is that standard as existing at the time that qualification level was determined.

Example

If an aeroplane flight simulator was qualified on 1 January 2010 at Level A, B, C or D using a standard mentioned in subsection (2), then any recurrent evaluation of the simulator would check that the simulator continues to meet that standard as it existed on 1 January 2010, not that standard as it exists on the date of the recurrent evaluation.

- (2) For subregulation 60.020 (1) of CASR, the standards for subsection (1) are any of the following:
- (a) Chapter 3 of Manual of Standards Part 60 – Synthetic Training Devices;
 - (b) *Operational Standards and Requirements – Approved Flight Simulators (FSD-1)*, published by CASA;
 - (c) the ICAO *Manual of Criteria for the Qualification of Flight Simulators* (ICAO Doc 9625-AN/938, first edition, dated 1995).

Note See paragraph 14.1.1 of FSD-1 Version 6.2, which refers to this standard as the International Standards for the Qualification of Airplane Flight Simulators.

- (3) However, if CASA has changed the qualification level of the aeroplane qualified flight simulator after this instrument commences, the standard for the assessment during a recurrent evaluation of the aeroplane qualified flight simulator against the qualification level as changed is a standard mentioned in subsection 3 (1).

Note See subregulation 60.045 (3) of CASR for the qualification level against which a qualified flight simulator must be assessed during a recurrent evaluation, including if CASA has changed the qualification level since the initial evaluation.

- (4) Also, until the end of 24 March 2021, the standard mentioned in subsection (5) applies for the assessment, during a recurrent evaluation or a special evaluation, of an aeroplane qualified flight simulator against its current qualification level if:
- (a) that qualification level was determined in accordance with either of the following standards:
 - (i) Chapter 3 of Manual of Standards Part 60 – Synthetic Training Devices;
 - (ii) the ICAO *Manual of Criteria for the Qualification of Flight Simulators* (ICAO Doc 9625-AN/938, first edition, dated 1995); and
 - (b) the equipment or software of the simulator has, since that qualification level was determined, been modified under regulation 60.070 of CASR for full stall training.
- (5) For subsection (4), the standard is:
- (a) the standard mentioned in paragraph (4) (a) under which the current qualification level of the aeroplane qualified flight simulator was determined, as existing at the time that qualification level was determined; and
 - (b) the full flight simulator requirements mentioned in paragraph 4 of Section I of FAA FSTD Directive 2 that are “For FSTDs initially qualified before May 31, 2016”.

- (6) For paragraph 5 (b), Table A1A of Attachment 1 and Table A2A of Attachment 2 to FARs, Subchapter D, Part 60, Appendix A, *Qualification Performance Standards for Airplane Full Flight Simulators* are incorporated as existing from time to time.

CHAPTER 3 FLIGHT TRAINING DEVICE STANDARDS

6 Aeroplane flight training device standards

For subregulation 60.020 (2) of CASR, the standards for the determination of the qualification level of an aeroplane flight training device are any of the following:

- (a) FARs, Subchapter D, Part 60, Appendix B, *Qualification Performance Standards for Airplane Flight Training Devices*, as existing from time to time;

Note Chapter I of Title 14 of the Code of Federal Regulations is also known as the Federal Aviation Regulations — see definition of **FARs** in the CASR Dictionary. At the time this instrument commences the latest issue of the FARs, Subchapter D, Part 60 (*Flight Simulation Training Device Initial and Continuing Qualification and Use*) (14 CFR Part 60) is the issue published in 2016. This issue is also known as “FARs Part 60, Change 2”.

- (b) the latest issue of the EASA *Certification Specifications for Aeroplane Flight Simulation Training Devices* (CS-FSTD(A)), as existing from time to time.

Note At the time this instrument commences, the latest issue of the EASA *Certification Specifications for Aeroplane Flight Simulation Training Devices* (CS-FSTD(A)) is Issue 2, dated 3 May 2018 (Annex to ED Decision 2018/006/R). See the Annex to ED Decision 2012/010/R for the initial issue of the certification specifications.

7 Helicopter flight training device standards

For subregulation 60.020 (2) of CASR, the standards for the determination of a qualification level of a helicopter flight training device are any of the following:

- (a) FARs, Subchapter D, Part 60, Appendix D, *Qualification Performance Standards for Helicopter Flight Training Devices*, as existing from time to time;

Note For information that may assist in accessing this document see the Note to paragraph 6 (a).

- (b) the latest issue of the EASA *Certification Specifications for Helicopter Flight Simulation Training Devices* (CS-FSTD(H)), as existing from time to time.

Note At the time this instrument commences, the latest issue of the EASA *Certification Specifications for Helicopter Flight Simulation Training Devices* is Initial issue dated 26 June 2012, (CS-FSTD(H)) (Annex to ED Decision 2012/011/R).