



## SUMMARY OF CONSULTATION

# Standards for qualification of aeroplane flight simulators under Part 60

Part 60 Manual of Standards

<b>Date</b>	June 2019
<b>Project number</b>	FS 18/07
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## Overview

This consultation was published on the CASA Consultation Hub between 13 March 2019 and 10 April 2019. It sought the views of industry participants in Part 60 flight simulation operations and other interested people on a proposal to amend the Manual of Standards (MOS) for Part 60 of the *Civil Aviation Safety Regulations 1988 (CASR)* to allow aeroplane full flight simulators to be qualified under the applicable European Aviation Safety Agency (EASA), Federal Aviation Administration of the USA (FAA) or International Civil Aviation Organization (ICAO) standards. The consultation has now closed, and a summary of the feedback is provided below.

## About this consultation

The consultation process asked respondents to assess whether they agreed with the proposed change or not. It also provided the opportunity for input on whether the proposed change should be modified to better suit the desired outcome.

Prior to the consultation, CASA held a workshop for the operators of aeroplane flight simulators subject to Part 60. There was general support for the proposed change, however several operators questioned the modification or upgrade of some existing flight simulators under the proposed change. The key issue related to what standard should be applied when an existing flight simulator is modified for specific training capabilities in a manner similar to that available to comparable operators under FAA FSTD Directive 2. These respondents were asked to prepare a response and submit it through the formal consultation process.

In discussions with industry stakeholders it was emphasised that:

- a. There will be no cost for existing flight simulators who do not upgrade.
- b. There will be only a minimal cost for flight simulators who upgrade.
- c. There will be reduced costs for new flight simulators as they will be using international standards.

## Respondents

Ten responses were received within the Consultation period. One response was received after the end of the consultation period but was accepted by CASA as the intention to lodge had been received within the prescribed period.

Six respondents gave permission for their response to be published and 4 withheld permission. Most respondents were Part 60 simulator operators.

## Summary of feedback

Three respondents supported the change, with a further six supporting with suggestions. One respondent did not provide an answer in this category. The Table below contains a summary of both the feedback and CASA's response.

Feedback Item	CASA response
1. Suggestion that FSTDs may be qualified by their Training Device Manufacturers as they know their devices best. This will save time and money.	Comment not related to the MOS consultation.  Comment relates to approval of flight simulators (not the standard used). CASA's flight simulator evaluation process is consistent with FAA and EASA processes.
2. Does the MOS change include helicopter simulators?	No - helicopter flight simulator standards are already included in MOS by reference to the other international standards.
3. CASA should review the latest VR technology, as this will be a big help and safety initiative for high skill areas in helicopter operations.	Comment not related to the MOS consultation.  VR standards may be considered in future as specific technologies.
4. Will CASA require operators to comply with FAA time frames for visual model updates?	Visual model requirements are detailed in paragraph f of Attachment 3 to Appendix A to FAR Part 60. Flight simulators qualified to this standard should comply with this requirement. Requirement allows an extension to the timeframe to be granted.
5. Will CASA require Objective Motion Cueing Tests to be included in the QTG?	Objective motion cueing tests should be included in the initial Qualification Test Guide if required by the standard.
6. Broad support for the changes	Noted.
7. Suggestion that CASA adopt a series of amendments to Part 60 allowing more flexibility in the recurrent annual evaluation processes	Comment not related to the MOS consultation.  These suggestions are being considered as a part of CASA's process improvement activities.
8. Not necessary for older devices to meet the complete FAR Part 60 Change 1 standard before adding additional Directive 2 requirements/tests. The significant and prohibitive cost in simulator downtime and capital to upgrade devices to meet the Change 1 standards would not produce any additional benefit and would not add to the fidelity of the training of the EET elements	Comment is accepted. MOS change proposal will be amended to allow devices which can meet the qualification standards in ICAO Doc 9625 First Edition to be upgraded (for example for UPRT capability).
9. Reaffirm that UPRT is critical for all Australian operators (including those in general aviation). UPRT should be incorporated as a priority into all levels of flight training. CASA should proactively take the lead on this, particularly	Comment not related to the MOS consultation.  CASA is adopting the Annex 1 and Annex 6 requirements and will consider widening application of UPRT as the international community develops

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Feedback Item	CASA response
with respect to both the affordable availability, and use, of sophisticated FSTDs	training standards and regulatory requirements.
10. There may be some older simulator types where it is not practicable to achieve the standards required by FAR 60 Change 1 or 2 (or equivalent). The regulator should have discretion, subject to risk mitigation considerations, to approve an “off-shore second-hand” simulator for training, based on a previously recognised standard where there is no similar device in country.	The MOS Part 60 defines a minimum standard for flight simulators being relocated and qualified in Australia. This is consistent with FAA and EASA. Such regulations do not normally have a Risk Assessment based approval process. If an operator wishes to mount an "Equivalent Safety" case this is best done under CASR Part 11 with a request for an exemption.
11. Some relief should be provided against the requirements outlined in the Consultation to allow the technical primary reference document that supports the existing FSTD qualification to be retained if there is no modification to be made to the device other than the addition of UPRT functionality.	Accept comment. MOS amended.

## Future directions

CASA has noted the support for the change to the Part 60 MOS and the additional responses and will be taken into account when planning future regulatory amendments.

For the responses specifically relating to FSTD Directive 2, CASA will amend the proposed MOS to allow devices which can meet the qualification standards in ICAO Doc 9625 First Edition to be upgraded (for example for UPRT capability).

## Final rulemaking

The additional wording in the MOS change does not affect the original purposes of the consultation. It allows the inclusion of a small number of devices whose complete upgrade would not be economically feasible. For these devices, CASA will develop wording for the qualification certificates that makes clear what additional training is approved and according to the appropriate standard. CASA will proceed to finalise the MOS wording and publish the revision as soon as is practicable to allow device qualification under the appropriate standard. CASA will proceed to finalise the MOS wording and publish the revision as soon as is practicable to allow device qualification under the new MOS to commence.