

ADVISORY CIRCULAR

No. : AC-28-01-022

Date : 1 March 2016

A. SUBJECT.

Flight Synthetic Training Device (FSTD) Approval to use - ZFTT Approval

B. PURPOSE.

This Advisory Circular (AC) provides guidance for Air Operator Certificate (AOC) holder/applicant to obtain FSTD approval to use - ZFTT approval for training and checking.

C. STATUS.

This is the third edition of AC - 28 - 01 - 022, dated 1 March 2016, and it will remain current until withdrawn or superseded.

D. CONTENTS.

- 1.0 Flight synthetic training device (FSTD) approval.
- 2.0 Foreign flight synthetic training devices (FSTDs) approval to use - ZFTT approval.
- 3.0 Locally flight synthetic training device (FSTD) approval to use - ZFTT approval.

Appendix A - Appendix 1 to JCAR FCL 1.261(c) (2) Approval of Airplane Zero Flight Time Type Rating Training Courses.

E. REFERENCES.

The following documents are used as reference material:

- JCAR FCL 1.
- JCAR FSTD A.

Flight Synthetic Training Devices (FSTDS) Approval to Use - ZFTT Approval

1.0 Flight Synthetic Training Devices (FSTDS) approval.

- 1.1 All synthetic training devices (STD), such as flight simulators or flight training devices (FTD), replacing an airplane for training and/or checking purposes is to be qualified in accordance with the requirements applicable to synthetic training devices. An operator intending to use such STD must obtain approval from CARC.
- 1.2 The line check is performed in the airplane and all other training and checking should be performed in the airplane of the same type or an approved flight simulator or in the case of emergency and safety equipment training, in a representative training device. The type of equipment used for training and checking should be representative of the instrumentation, equipment and layout of the airplane type operated by the flight crew member.

2.0 Foreign Flight Synthetic Training Device (FSTD) Approval to Use - ZFTT Approval.

2.1 Approval Requirements.

- a. FSTD operator shall hold a valid operator / TRTO approval certificate issued by ICAO contracting State.
- b. There are no differences between the actual aircraft used by AOC holder/applicant and the foreign FSTD. The type of equipment used for training and checking should be representative of the engines, instrumentation, equipment and layout of the airplane type operated by the flight crew member.
- c. The FSTD is FAA or EASA approved.

2.2 Approval Supporting Documents.

- a. AOC holder/applicant shall apply for approval to use the FSTD.
- b. A valid copy of the FSTD operator/TRTO approval certificate approval certificate.
- c. A valid copy of the FSTD qualification certificate.
- d. A valid copy of the FSTD specification meeting the airplane type training and checking requirements.

- e. A copy of the differences list between actual aircraft used by AOC holder/applicant and the FSTD if any, with special regard to engines, instrumentation, equipment and layout of the airplane type operated by the flight crew member.
- f. A valid copy of the FSTD FAA or EASA approval.

2.3 Approval Conditions.

- a. FSTD approval to use will be validated based on the supporting documents and the FSTD will be subject to technical assessment to ensure satisfactory function and there are no differences with the actual aircraft used by the AOC holder/applicant.
- b. FSTD training and checking conditions:
 - (1) The training and checking will be conducted in accordance with the AOC holder/applicant operations manual part D.
 - (2) The training and checking will be conducted by AOC holder/applicant type rating instructors (TRIs), synthetic flight instructors (SFIs), type rating examiners (TREs) and synthetic flight examiners (SFEs).
 - (3) The AOC holder/applicant training and checking reports detailed in the operations manual part D will be used for the training and checking records.
 - (4) CARC proficiency check reports and applications will be used for rating revalidation.
- c. FSTD will be part of the AOC holder/applicant annual quality system inspection program.
- d. FSTD shall continue to meet the approval conditions during the period of the approval - 24 calendar months.

2.4 Approval Renewal.

Subject to the agreement between the AOC holder and the foreign approved FSTD operators/TRTO, approval may be renewed providing that the FSTD continue to meet the initial approval conditions.

2.5 Approval Privileges. The provision of the FSTD to the AOC holder/applicant for:

- a. The training and checking in accordance with operations manual part D.
- b. The revalidation of type rating, type rating instructor rating and synthetic flight instructor rating in accordance with JCAR FCL 1 revalidation requirements.
- c. ZFTT type rating and type rating instructor courses providing that the foreign FSTD belongs to a foreign TRTO that is approved to provide these training courses.

3.0 Local Flight Synthetic Training Device (FSTD) Approval to Use - ZFTT Approval.

3.1 Approval Requirements.

- a. FSTD operator shall hold a valid operator / TRTO approval certificate.
- b. There are no differences between the actual aircraft used by AOC holder/applicant and the local FSTD. The type of equipment used for training and checking should be representative of the engines, instrumentation, equipment and layout of the airplane type operated by the flight crew member.

3.2 Approval Supporting Documents.

- a. AOC holder/applicant shall apply for approval to use local FSTD for training and checking.
- b. A valid copy of the FSTD operator/TRTO approval certificate.
- c. A valid copy of the FSTD qualification certificate.
- d. A valid copy of the FSTD specification meeting the airplane type training and checking requirements.
- e. A copy of the differences list between actual aircraft used by the AOC holder/applicant and the local FSTD if any with special regard to engines, instrumentation, equipment and layout of the airplane type operated by the flight crew member.

3.3 Approval Conditions.

- a. FSTD approval to use will be validated based on the supporting documents and the local FSTD will be subject to technical assessment to ensure that satisfactory function and there are no differences with the actual aircraft used by the AOC holder/applicant.
- b. FSTD training and checking conditions:
 - (1) The training and checking will be conducted in accordance with the AOC holder/applicant operations manual part D.
 - (2) The training and checking will be conducted by AOC holder/applicant type rating instructors (TRIs), synthetic flight instructors (SFIs), type rating examiners (TREs) and synthetic flight examiners (SFEs).
 - (3) The AOC holder/applicant training and checking reports detailed in the operations manual part D will be used for the training and checking records.
 - (4) CARC proficiency check reports and applications will be used for ratings revalidation.
- c. The FSTD will be part of the AOC holder/applicant annual quality system inspection program.
- d. The local FSTD shall continue to meet the approval conditions during the period of the approval - 24 calendar months.

3.4 Approval Renewal.

Subject to the agreement between the AOC holder and the local FSTD operator/TRTO, approval may be renewed providing that the FSTD continue to meet the initial approval conditions.

3.5 Approval Privileges. The provision of the FSTD to the AOC holder/applicant for:

- a. The training and checking in accordance with the operations manual part D.
- b. The revalidation of type rating, type rating instructor rating and synthetic flight instructor rating in accordance with JCAR FCL 1 revalidation requirements.

- c. ZFTT type rating and type rating instructor courses providing that the local FSTD belongs to a local TRTO that is approved to provide these training courses.

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Appendix - A**Appendix 1 to JCAR FCL 1.261(c) (2) Approval of Airplane Zero Flight Time Type Rating Training Courses.****1. General.**

- (a) Approval for ZFTT will only be given to a Training Organization of an JCAR-OPS 1 operator or a Training Organization having a specific approved arrangement with a JCAR-OPS 1 operator.
- (b) The training organization shall ensure that the student pre-requisites are met before starting the Type Rating Course.
- (c) The Type Rating will be restricted to that Operator until flying under supervision has been accomplished.

2. Approval of Type Rating Course Using ZFTT.

- (a) The flight simulator to be used shall be qualified in accordance with JCAR-STD (A) and user approved for ZFTT by CARC. User approval will only be given if the flight simulator is representative of the airplane flown by the operator.
- (b) The flight simulator approved for ZFTT shall be serviceable according to the quality system criteria of the STD operator (see AMC JCAR-STD 1 A.025). Some equipment may be unserviceable provided that it is not required during the simulator lesson. The motion and the visual shall be fully serviceable.
- (c) Unless specified otherwise, a specific simulator session including a minimum of 6 additional take-offs and landings included in the type rating course shall be conducted according to JCAR-OPS 1.945(d)(2).
- (d) For an initial approval to conduct ZFTT the operator shall have held a JCAR-OPS 1 Air Operator's Certificate for at least 1 year. This period may be reduced at the discretion of CARC where the operator and the TRTO have experience of type rating training.
- (e) Approval for ZFTT shall only be given if the operator has at least 90 days operational experience of the airplane type. In the case of ZFTT provided by a training organization having a specific approved arrangement with a JCAR-OPS 1 Operator, the (90) days operational experience requirements will not apply if the TRI (A) involved in the additional take-offs and landings requirement in JCAR-OPS 1.945 (d)(2), has operational experience acceptable to CARC on the airplane type.

- (f) The check required in JCAR-OPS 1.965(b) may be combined with the type rating skill test. When this is not, a conversion course shall be conducted and a check completed according to JCAR-OPS 1.945 before the specific simulator session.

3. Required Pilot Experience.

A pilot undertaking ZFTT course shall have completed, on a multi-pilot turbo-jet transport category airplane or on a multi-pilot turbo-prop airplane having a MTOM of not less than (10) tonnes or an approved passenger seating configuration of more than (19) passengers, at least:

- (a) (1500) hours flight time or (250) route sectors if a flight simulator qualified to level CG, C or interim C is used during the course; or
- (b) (500) hours flight time or (100) route sectors if a flight simulator qualified to level DG, Interim D or D is used during the course.

When a pilot is changing from a turbo-prop to a turbo-jet airplane or from a turbo-jet to a turbo-prop airplane, additional simulator training approved by CARC shall be required.