

| | | |
|---|---|------------------------|
| OPS 1.1.033 |  | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

1. Objective

- 1.1. This section contains direction and guidance to be used by principal operations inspectors (POIs) for the evaluation of an operator's special curriculum segments for approval. To conduct such an evaluation, POIs should be aware of the following distinction between basic training and special training.

2. General

2.1. Basic Training.

The six training categories defined in OPS 1.1.032 contain the basic training required for crewmembers and dispatchers for qualification in a specific duty position on a specified aircraft type. Training in the operations and procedures necessary to operate in the standard service volume to standard minimums is an integral part of these curriculums. This basic training must be conducted by all operators. Training methods and events are specified either in regulations or advisory circulars and are well understood in the air transportation industry.

2.2. Special Training.

“Special” training is that training conducted by an operator to qualify crewmembers and dispatchers beyond the scope of basic training. Each operator is required to conduct only that special training required for the operator's specific operations. Special training consists of either curriculum segments integrated into one or more of the six defined training categories or of curriculum segments grouped as an independent program. Special training is normally required for operations which require specific authorization by the operator's operations specifications (OpSpecs), such as the following:

- Class II navigation
- MNPS,
- Polar Operations,
- RNP-RNAV Arrivals, Departures and Instrument Approaches
- CAT II and CAT III approaches
- Lower-than-standard minimums takeoffs
- Extended-range operations with two-engine airplanes
- Use of an autopilot instead of a second-in-command
- Airborne radar approaches
- Zero Flight-Time Training (ZFTT)

| | | |
|---|---|------------------------|
| OPS 1.1.033 |  | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

3. Reference Material, Forms & Job-Aids

3.1. Reference Material

3.1.1. List of Applicable FAA Advisory Circulars (AC)
Inspectors and test team leaders should consult:

AC 00-2.6 Advisory Circular Checklist, for the most recent edition of the following ACs

AC 20-101 Airworthiness Approval of Omega/VLF Navigation Systems for the United States NAS and Alaska

AC 91-70 Oceanic Operations. (In final draft at time of publication of Change 8)

AC 90-45 Approval of Area Navigation Systems for Use in the U.S. National Airspace System

AC 90-76 Flight Operations in Oceanic Airspace

AC 90-79 Recommended Practices and Procedures for the Use of Electronic Long-Range Navigation Equipment

AC 90-92 Guidelines for the Operational Use of Loran-C Navigation Systems Outside the U.S. National Airspace System (NAS)

AC 120-17 Maintenance Control by Reliability Methods

AC 120-28 Criteria for Approval of Category III Landing Weather Minima

AC 120-29 Criteria for Approving Category I and Category II Landing Minima for 14 CFR 121 Operators

AC 120-31 Operational and Airworthiness Approval of Airborne Omega Radio Navigation Systems as a Means of Updating Self - Contained Navigation Systems

AC 120-33 Operational Approval of Airborne Long-Range Navigation Systems for Flight Within the North Atlantic Minimum Navigation Performance Specifications Airspace

AC 120-37 Operational and Airworthiness Approval of Airborne Omega Radio Navigational Systems as a Sole Means of Long Range Navigation Outside the United States

AC 120-42 Extended-Range Operation with Two-Engine Airplanes (ETOPS)

| | | |
|---|---|------------------------|
| OPS 1.1.033 |  | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

AC 121-13 Self-Contained Navigation Systems (Long Range)

4. Process

SPECIFIC APPLICATIONS OF SPECIAL CURRICULUMS.

POIs should know of several common situations in which special curriculum segments are required. Some examples of specific applications of special curriculums follow.

- 4.1. **ANR Chapter 13 Operations.** In those operations it is a requirement that flight crewmembers possess knowledge of those procedures and OpSpecs applicable to these operations. For Class II navigation it may be required for flight crewmembers to have knowledge of specialized navigation procedures (such as MNPS) and equipment (such as INS, RNAV / RNP). POIs should ensure that in these air carrier operations, flight crewmembers are required to have supervised practice and to demonstrate their competence in these operations before performing them without supervision.
- 4.2. **CAT II and CAT III Approaches.** For training in CAT II and CAT III approaches, POIs must ensure that the required training includes special equipment, procedures, practice, and a demonstration of competency. While some operators have successfully integrated this training into the six defined categories of training, others have conducted this training as a separate curriculum. POIs may approve either method of organization.
- 4.3. **Lower-Than-Standard Minimum Takeoffs.** Before pilots may conduct takeoffs with lower-than-standard minimums in revenue service, they must be given training and practice in, and have successfully demonstrated competence in, performing takeoffs in minimum authorized visibility conditions. POIs must ensure that training is given in: runway and lighting requirements; rejected takeoffs at, or near, V_1 with a failure of the most critical engine; taxi operations; and in procedures to prevent runway incursions under low visibility conditions. While the preferred method of conducting this training is in a simulator, other methods may be approved by the POI for operators who do not use simulators in flight training.
- 4.4. **Autopilot Instead of SIC.** Pilots of general purpose, single-engine and multi-engine families of aircraft used in ANR Ops. Chap. 12 operations may be authorized to conduct IFR operations without an SIC, provided they have completed a special curriculum segment for qualification in such operations. Both the instrument proficiency check and the competency check required by ANR Ops. 318, 320 (when conducted

| | | |
|---|--|------------------------|
| OPS 1.1.033 |  CAAI | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

qualifies the applicant for IFR operations) are to be conducted using an SIC. During these checks, the applicant must demonstrate adequate crew coordination and leadership skills. When the applicant is qualifying for single pilot IFR operations, the applicant must also demonstrate the ability to safely conduct IFR flight without the assistance of another pilot or an autopilot.

4.5. Zero Flight Time Training

4.5.1. GENERAL

4.5.1.1 According to FAR 121 Appendix F, notwithstanding any approval for training and checking in a simulator, at least two actual landings must be performed in the aircraft. With the recent advances in simulator technology, a training program with approved ZFTT can be exempt from this requirement.

4.5.1.2 Approval for ZFTT will only be given to a commercial operator, or a Training Organisation having a specific approved arrangement with an operator.

4.5.1.3 The training organisation or operator will ensure that the student pre-requisites are met before starting the Type Rating Course.

4.5.2. APPROVAL OF TYPE RATING COURSE USING ZFTT

4.5.2.1 The flight simulator to be used shall be qualified as a Level C or D simulator and user approved for ZFTT by the CAAI in accordance with OPS 1.1.062. User approval will only be given if the flight simulator is representative of the aeroplane flown by the operator.

4.5.2.2 The flight simulator approved for ZFTT shall be serviceable according to the quality system criteria of the FTD operator. Some equipment may be unserviceable provided that it is not required during the simulator lesson. The motion and the visual shall be fully serviceable.

4.5.2.3 For an initial approval to conduct ZFTT the operator shall have held an Air Operator's Certificate for at least one year. This period may be reduced at the discretion of the CAAI where the operator and the TRTO have experience of type rating training.

4.5.2.4 Approval for ZFTT shall only be given if the operator has at least 90 days operational experience of the aeroplane type. In the case of ZFTT provided by a training organisation having a specific approved arrangement with an Operator, the 90 days operational experience requirements will not apply if the Instructor involved in the additional take-offs and landings requirement, has operational experience acceptable to the CAAI on the aeroplane type.

| | | |
|---|---|------------------------|
| OPS 1.1.033 |  | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

4.5.3. REQUIRED PILOT EXPERIENCE

4.5.3.1 The ZFTT program must have a specified minimum experience for pilots undertaking such training.

4.5.3.2 The program must be adapted for these minimum requirements and to the type of previous experience, e.g. transition from turbo-prop to jet or vice versa.

4.5.3.3 For a ZFTT in a Level C Flight Simulator, those minimum shall not be less than 1500 hours flight time or 300 route sectors.

4.5.4. Additional Simulator Training

4.5.4.1 Unless specified otherwise, a specific simulator session including a minimum of six additional take-offs and landings must be included in the type rating course. The simulator must be operated in a normal flight scenario. Repositioning is not allowed.

4.5.4.2 The additional simulator training shall be conducted at the end of the conversion course, not later than 21 days after the skill test.

4.5.4.3 If this takeoff and landing training has not been completed within 21 days from the skill test, the applicant shall provide appropriate training approved by the CAAI.

4.5.4.4 The simulator session shall be conducted with qualified crew-members occupying all required crew-member positions except for the trainee position.

4.5.4.5 The instructor conducting the training shall occupy a pilot position.

4.5.4.6 The instructor conducting the training shall be fully qualified and current (e.g. not a simulator-only instructor).

4.5.4.7 For transitioning between similar aircraft types, the number of takeoffs and landings can be reduced, at the discretion of the CAAI.

4.5.5. Initial Operating Experience

4.5.5.1 The pilot undertaking ZFTT shall commence Initial Operating Experience, as specified in ANR.OPS 456 within 21 days of the day of the skill test.

4.5.5.2 If Initial Operating experience has not commenced in 21 days from the skill test, the applicant shall provide appropriate training approved by the CAAI.

4.5.5.3 As stated in ANR.OPS 456(c), the Initial Operating Experience required will be under the supervision of a Check-Airman.

4.5.5.4 For the first 4 takeoffs and landings, the check airman will occupy a pilot's seat.

| | | |
|---|---|------------------------|
| OPS 1.1.033 |  | OPS Inspector Handbook |
| Training Programs Special Curriculum Segments | | Revision 3 |
| | | 26 FEB 2014 |

5. Task Outcomes

- 5.1. Using this directive results with acceptable approved special curriculum segments for the Operator.
- 5.2. As with standard training curriculum, an Initial Authorisation is given until the inspector can assess the training in progress and Issue the Final Authorisation.