

VOLUME 6 SURVEILLANCE

CHAPTER 2 PART 121, 135, AND 91 SUBPART K INSPECTIONS

Section 21 Safety Assurance System: Training Program Inspections for Parts 121 and 135

6-624 GENERAL. This section contains direction and guidance to be used by principal inspectors (PI) for conducting training program inspections. The inspector's objective is to ensure that the operator's training program complies with regulatory requirements and instructional methods are effective. This section is related to Safety Assurance System (SAS) Elements: 2.1.1 (OP), Training of Flight Crew Members; 2.1.2 (OP), Training of Check Airmen and Instructors; 2.1.3 (OP), Simulators/Training Devices; 2.1.4 (OP), Outsource Crewmember Training; 2.1.5 (OP), Appropriate Airmen/Crewmember Checks and Qualifications; 2.1.6 (OP), Advanced Qualification Program (AQP); and 3.1.1 (OP), Training and Qualifications of Dispatchers and Flight Followers.

NOTE: As part of the approval process, inspectors must conduct training program inspections in phase four of the initial approval process of a training program (see Volume 3, Chapter 19, Section 2, for more information).

A. Training Program Inspection Areas. Training program inspections involve much more than simply observing training in progress. Flight Standards Service (AFS) has identified five primary inspection areas to be observed during training program inspections:

- Training curriculums,
- Courseware,
- Instructional delivery methods,
- Testing and checking methods, and
- Specific topics (identified from Program Tracking and Reporting Subsystem (PTRS) archived data or other sources).

B. Annual Inspection Plan. PIs and aircrew program managers (APM) in Aircrew Designated Examiner (ADE) programs must develop annual inspection programs. For certificate holders with ADE programs, principal operations inspectors (POI) and APMs should follow the guidance in Volume 13, Chapter 2, Section 2. Training programs vary in their complexity depending on the operator's size, aircraft fleet diversification, number of crewmembers and dispatchers, training locations, and scope of operation. PIs may find that a single annual inspection is sufficient to verify the effectiveness of a simple operator's program. Inspection of a complex operator, however, requires a modular approach in which specific program components or locations are identified and inspected in progressive increments.

6-625 TRAINING PROGRAM INSPECTION PRACTICES AND PROCEDURES.

Before beginning a training program inspection, inspectors must become thoroughly familiar with the contents of Volume 3, Chapter 19. There are many methods of curriculum development and training methods that an operator may use. To obtain approval of a program, the operator must demonstrate that the program or program segment is in compliance with regulatory requirements and that it effectively prepares crewmembers and dispatchers to perform duties in

revenue service. The guidance contained in Volume 3, Chapter 19, has been developed for this purpose. Inspectors should be aware of the competitive economic incentives operators have to improve the quality of, and to reduce the cost of, their training. Operators have great latitude in developing training programs tailored to their needs, and PIs have great latitude in approving individualized programs.

A. Preparation. Before conducting an inspection of a particular training program area, the inspector should first obtain a copy of the operator's approved training program outline from the PI and become familiar with it. The inspector should review the outline for regulatory compliance and for adequate subject coverage. Should the inspector discover a discrepancy that requires a modification of the outline, a report must be made to the PI by means of the SAS automation. Should the inspector discover a serious discrepancy, the inspector shall notify the PI by telephone.

B. Onsite Activity.

1) On arriving at the training site, inspectors should introduce themselves to the person conducting the training, present their Federal Aviation Administration (FAA) credentials, and state the purpose of the inspection.

2) Inspectors shall refrain from active participation in the training being conducted and shall make every effort not to influence the training environment or the instruction in the subject matter.

3) Should an inspector have comments on any of the areas of training, the inspector may communicate this information to the appropriate individual(s) in private. The inspector will reserve comments for debriefing of the instructor until after the training session or during an appropriate break in training.

NOTE: This does not alleviate the need to include the comments in SAS.

4) Inspectors should be aware that approved training hours are measured by curriculum segments and that each hour of training normally contains a reasonable break time of 10 minutes.

C. Courseware Inspection. While observing the training, inspectors should evaluate the courseware. Inspectors should also evaluate whether or not the courseware and the instructor are effective in communicating the essential points of the lesson.

1) **Instructor Courseware.** The inspector must observe whether or not the operator's instructor guides and lesson plans follow the approved outline. During observation, inspectors must also ensure that instructor guides and lesson plans adhere to the following criteria:

- Instructor courseware should be clearly titled for the appropriate curriculum segment.
- The instructor must be able to conduct detailed instruction for each subject area.

- Instructional material should be presented in a logical manner and in a sequence that is easy to use and comprehend.
- Courseware should provide references to applicable manuals of the operator.
- The instructor should use some means of determining that the students are properly assimilating the material (such as responder panels, multiple-choice questions, or in-class exercises).

2) Student Courseware. The inspector must evaluate various self-teaching training media, such as video tapes, audiovisual (carousel-type) slide presentations, computer-based training (CBT) presentations, programmed learning publications, and home-study materials, to ensure that they satisfy the requirements of the approved outline. Training media must adhere to the following standards:

- The information must agree with the operator's manual and other publications.
- The material must have sufficient detail to ensure that students comprehend the applicable subject area.
- The courseware should include some means of testing student assimilation of information presented.

D. Instructional Delivery Methods. This inspection area consists of the following inspection modules:

1) Training Facilities/Environment Inspection. The inspector must ensure that the operator's training facilities and the instructional environment are conducive to learning. An inspector must ensure that the facilities meet the following standards:

- Provide adequate seating space for students;
- Provide storage areas for training materials;
- Provide area for instructors to prepare their lessons; and
- Are free of distractions that adversely affect instructional delivery (such as excessive temperatures, extraneous noise, poor lighting, and cramped classrooms and/or work spaces).

2) Criteria for Instructors. The inspector must ensure that the quality of instruction provided by instructors in both ground and flight training segments is effective. Instructors must create an effective environment for training. The instructor must be flexible and alert to individual needs of the students. The following guidelines apply to instructors and/or flight instructors. Instructors must follow these criteria where applicable.

a) Instructors:

- Must know the operator's training policies and procedures, know how to complete required training forms, and exhibit satisfactory instructional methods and techniques;
- Must be knowledgeable in the specific area of instruction and be able to present the material in a logical, clear, and organized manner;

- Must be aware of the minimum equipment required for each element of training and conform to the limitations imposed on the training element(s) by inoperative component(s); and
- Should follow the applicable lesson plans, guides, or other training aids to ensure that the material is properly presented as designed.

b) Flight Instructors:

- Must be competent in the operation of flight training devices (FTD) or flight simulators and be knowledgeable of the training elements that may be accomplished in that level of simulator or training device;
- Should provide a thorough preflight briefing on all maneuvers and procedures that will be accomplished; and
- Should provide a thorough postflight debriefing to review each student's performance during a training session.

E. Training Aids and Equipment. Inspectors must ensure that the operator's training aids and equipment are appropriate to the subject matter and that they operate properly. This includes audiovisual equipment, systems back mock-up boards, panel layouts, ground training devices (GTD), instructor station equipment, student responders (if applicable), and other related items.

1) All equipment used in the training program must operate and function in good working order. Replacement parts or components (such as slide projector lamps) should be readily available.

2) Any equipment designated to be used for self-teaching purposes, such as CBT platforms, must have clear operating instructions readily available for student use.

3) Systems panels, layouts, boards, or mock-ups (such as aircraft exit mock-ups) should accurately represent the designated aircraft.

F. Flight Simulator or Training Device Inspection Module. The inspector should ensure that the operator's flight simulators and FTDs are being adequately maintained and that they effectively replicate the associated aircraft.

NOTE: The National Simulator Team is responsible for conducting a flight evaluation of the training device or simulator. The inspector is responsible, however, for determining the general condition of the equipment and the operator's general ability to maintain the equipment to those same standards while training is in progress.

G. Testing and Checking. In the inspection of an operator's training program, the inspector must conduct observations of the elements that involve evaluation and qualification. These elements include, but are not limited to, check airman programs and activities, training records, failure rates, and testing and checking standards. The inspector must evaluate the following modules:

1) Check Airman Programs and Activities. The inspector should evaluate all elements that relate to check airman training and qualification, check airman records, and standardization programs (see Volume 3, Chapter 20, for specifics on check airman inspection programs).

2) Training Records. The inspector should evaluate the operator's training records for information regarding the overall effectiveness of an operator's training program. The testing and checking results available from the training records are an excellent source of information for PIs to establish positive or negative trends in the operator's training program.

3) Oral and Practical Tests. Inspectors should observe or conduct a number of airman certification evaluations as well as proficiency, competency, or line checks (as applicable) to determine the overall effectiveness of the operator's training program, check airman programs, and testing and/or checking standards. Inspectors should place specific emphasis on flight events that require repetition or excessive instruction and should evaluate them according to the following criteria:

a) Testing and checking standards must comply with the regulations, the safe operating practices, and the guidance contained in this order.

b) Testing and checking standards must be consistently applied throughout the operator's training organization by its check airman and instructor personnel.

NOTE: Testing and checking observations provide a direct measure of the effectiveness of courseware and instructional delivery methods.

4) Quality Control. The inspector shall observe the operator's quality control program to ensure that training effectiveness is continually monitored and that specific areas or items are corrected when necessary. The operator's quality control system must ensure that students do not proceed to the next module or training segment until satisfactory proficiency has been achieved. Additionally, training folders must be maintained by the operator while students are in a specific curriculum. Inspectors should review the information contained in these folders to identify any deficient trends. This information, coupled with the results of testing and checking, provides a quantifiable method for measuring training effectiveness.

H. Inspection Results. As a source of information about an operator's overall performance, inspectors can use archived PTRS data to evaluate inspections and investigations previously done on the operator. A high rate of satisfactory performance usually indicates a strong, effective training program. Repeated cases of unsatisfactory performance, however, often indicate deficiencies in an operator's training program.

1) Use of the PTRS. Archived PTRS data may be used by inspectors during the examination and analysis of information obtained from investigative and inspection reports. Standard and ad hoc reports can be generated by the system to search for inspector comment codes that specifically relate to or, through analysis, could lead to deficient areas in an operator's training program. Both standard and ad hoc reports should be generated through PTRS by using PTRS activity codes that relate to training program activities, including check airman inspections and the results of airman certification activities. For example, the inspector could pull up a

standard report (referred to as a comment code summary report) to obtain all the “U” and “P” comments submitted by inspectors during training program evaluations (PTRS activity code 1306). Inspectors should refer to the applicable PTRS user manual for both a detailed explanation of what types of reports are available and the procedure for using the system.

2) PI Review. The PI shall review results of inspection reports, incident and accident reports, enforcement actions, and other relevant information about the operator’s performance for indications of training effectiveness. For example, repeated reports of deficiencies, such as configuring too late, incomplete briefings, or incorrect use of the checklists, may be traceable to a lack of specific training or ineffective training in a particular area.

RESERVED. Paragraphs 6-626 through 6-640.