
CHAPTER 212 SERVE AS A MEMBER OF A FLIGHT STANDARDIZATION BOARD

Section 1 Background

1. PTRS ACTIVITY CODE: 1812

3. OBJECTIVE. This chapter gives guidance to inspectors requested to serve as members of a Flight Standardization Board (FSB).

5. GENERAL.

A. *Definitions.*

(1) *Aircraft Evaluation Group (AEG).* AEG's are established in specific Flight Standards Divisions (FSD's) for regions that have aircraft certification responsibility. The FAA coordinates FSB's through AEG's.

(2) *Base Aircraft.* Base aircraft are specific aircraft that have characteristics common to a new or modified aircraft being evaluated by an FSB. The base aircraft is compared to the aircraft being evaluated, and the differences between the two are used to determine the type ratings and training requirements for the new or modified aircraft.

(3) *Flight Operations Evaluation Board (FOEB).*

An FOEB is a council of technically qualified specialists responsible for Master Minimum Equipment List (MMEL) matters related to a type of aircraft.

(4) *Flight Standardization Board (FSB).* An FSB is a designated group of operations inspectors who determine type rating, certification, and training requirements for new or modified aircraft.

(5) *FSB Report.* The FSB issues a report after evaluating any new or modified aircraft. This report becomes the basis for approval of the training, certification, proficiency, and currency program requirements approved by FAA district offices.

B. Purpose and Duties of an FSB. FSB's vary widely in purpose and scope. The following are typical FSB functions.

(1) An FSB determines the type rating requirements for new and modified aircraft.

(2) The board develops the requirements for training, certification, proficiency checks, and currency programs for aircraft crew members operating under FAR Parts 121 and 135. These requirements include instruction in all of the procedures and maneuvers needed to operate the aircraft evaluated by the FSB. The board also identifies any aircraft characteristics that must be addressed in an operator's training program, and publishes the guidelines for approval of the air carrier's training programs for that aircraft. The FSB's report establishes the minimum standards for training, proficiency, and currency programs.

(3) FSB members may obtain a type rating for a new aircraft during the evaluation. Once rated, board members may administer practical tests or flight checks to the manufacturer's pilots, air carrier pilots, or FAA personnel.

C. FSB Membership. An FSB is usually limited to five members. These members may be operations inspectors from district offices or representatives from AFS-200 or AFS-800, as appropriate. Any of these members may serve as alternate chairperson.

(1) **Chairperson.** The chairperson is appointed by the manager of the regional AEG. The chairperson is an AEG operations specialist assigned to the aircraft certification project.

(a) The chairperson normally schedules FSB meetings. However, any FSB member may request a meeting. As appropriate to the area of responsibility, AFS-200 or AFS-800 may also direct the board to meet.

(b) The chairperson schedules and coordinates the initial meeting that begins the process. Because of the complexity of the evaluation process, the initial meeting should be held well in

advance of the date that the aircraft will go into service. The schedule should permit adequate time for development of training programs before introduction of the aircraft into service.

(2) **Members.** FSB members should be proficient in the base aircraft, if appropriate. Inspectors should be chosen from those regions having certification responsibility for the operators planning to use the aircraft being evaluated. As appropriate, AFS-200 or AFS-800 inspectors may also serve as board members.

(3) **Technical Advisors.** The chairperson may invite technical advisers to attend FSB meetings. These advisers may include FOEB members or FAA Academy flight instructors.

D. Development of Type Ratings. When an aircraft type rating is issued, it is placed on a pilot certificate. This rating is assigned to a specific make and model of aircraft, but may be extended to include modifications which do not change that aircraft's handling or flight characteristics. Only an FSB may determine if variations from a base aircraft's characteristics make a new type rating necessary. The FSB identifies significant differences between the base aircraft and the aircraft being evaluated, and determines how these differences relate to flight crew knowledge, skills, and other factors that effect flight safety. The FSB then establishes a new type rating, or determines that the base aircraft's rating may be used for the new or modified aircraft.

E. Development of Training Requirements. The FSB establishes the new or modified aircraft's training requirements for FAR Part 121 and 135 training programs. These requirements may involve both ground and flight training. The board should consider all available sources of information in establishing these requirements, including industry and special interest group suggestions pertinent to the training program.

(1) The board evaluates the new or modified aircraft to identify training requirements. This is done by comparing the base aircraft to the new or modified aircraft. Factors such as design, procedures, operation, automation, and systems are included in this evaluation.

(2) To identify training requirements, FSB members fly the subject aircraft and review materials such as technical data, aircraft flight manuals, manufacturers' flight crew operating manuals, equipment operating manuals, and any previous FSB reports that are pertinent. Training requirements are also determined by the flight and operational characteristics of the new or modified aircraft.

F. Examples of FSB Tasks. Since the purpose and scope of FSBs vary, this chapter cannot possibly cover all the tasks a board member may be asked to perform. However, some tasks are common to most FSBs. Members are usually asked to provide insight based on personal experience, and to make recommendations to the chairperson in an advisory capacity. Other standard FSB member tasks include:

(1) Determining the requirement for aircraft type ratings for new and modified aircraft.

(2) Assisting in the development of FAR Part 135 training requirements and programs.

(3) Participating in pilot type rating determinations and conducting initial pilot type rating flight checks.

(4) Evaluating ground and flight training programs developed by the manufacturer or other training provider.

(5) Submitting written recommendations and evaluations to the chairperson for use in FSB reports.

(6) Assisting in subsequent investigations of an accident or incident involving the subject aircraft.

G. Regional Responsibilities. Upon request, the Regional Flight Standards Division Manager shall provide qualified inspectors from either the region or the FSDO to serve on the FSB.

H. FSDO Responsibilities. The FSDO/CHDO approves training programs after an FSB's decision is rendered. Before granting approval, the POI must ensure the operator's and air carrier's training programs comply with the requirements

of the FSB's report. This report often specifies minimum hours and specific procedures. Nonetheless, the POI should consider the adequacy of the base aircraft's training program and proposed revisions to determine if the FSB's safety recommendations will be met.

(1) Before a training program can be approved or proficiency checks accomplished, inspectors should consult the Aviation Safety Analysis System (ASAS) for FSB reports on aircraft for which they are assigned responsibility.

(2) The FSDO/CHDO must ensure that the assigned designated pilot examiners (DPE's) are advised of all pertinent FSB requirements.

I. **Availability of Board Findings.** After the FSB's report is prepared, reviewed, coordinated by AFS-800, and approved by AFS-200, the report becomes available to FAA field offices through the FSB subsystem of the FAA Aviation Safety Analysis System (ASAS).

Section 2 Procedures

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. **Prerequisites.** Membership on a Flight Standardization Board requires knowledge of regulatory requirements and FAA policies, and qualification as an Aviation Safety Inspector.

B. **Coordination.** This task will require coordination with an Aircraft Evaluation Group, AFS-200, AFS-800, an Aircraft Certification Office (ACO), the manufacturer, the regional Flight Standards Division, the operator, or the certificate holding district office (CHDO).

3. REFERENCES, FORMS, AND JOB AIDS

A. References.

- FAR Parts 1, 61, 91, 121, 125, and 135
- Order 8100.5, Aircraft Certification Directorate Procedures
- Order 8400.1, Air Transportation Operations Inspector's Handbook
- Order 8430.1, Air Carrier Operations Inspector's Handbook
- Order 8430.6, Air Carrier Operations Inspector's Handbook (Part 135)
- Order 8430.21, Flight Standards Division, Aircraft Certification Division, and Aircraft Evaluation Group Responsibilities
- Order 8700.1, General Aviation Operations Inspector's Handbook
- Order 1100.5, FAA Organization Field
- The appropriate practical test standards

B. Forms.

- Form 8710-1, Airmen Application Form
- Form 8060-4, Temporary Airman Certificate

C. Job Aids.

- None

5. PROCEDURES.

A. **Attend Technical Meetings.** Upon notification from the FSB chairperson, attend technical meetings as assigned.

(1) Open PTRS.

(2) Review all available information concerning the aircraft under evaluation. This could include the aircraft flight manual, FSB documents, and other sources of information.

B. **Conduct Operational Evaluations.** Conduct operational evaluations of any equipment or maneuvers that may require additional training, proficiency, or currency requirements. Examples of items that are evaluated are:

(1) TCAS.

(2) Autoland.

(3) HUD.

(4) Windshear.

(5) No-flap approach.

(6) Unusual flight characteristics.

(7) MMEL items.

(8) Handling characteristics.

(9) Crew workload.

(10) Emergency evacuation.

C. **Attend Training.** If assigned, attend a manufacturer's training session to acquire technical knowledge, skills, and abilities so that FSB determinations can be accomplished. Report to the chairperson on the session's strengths and weaknesses.

D. Evaluate Aircraft Operational Suitability and Compliance. Determine whether the aircraft complies with the operational requirements of FAR Parts 91 and 135. The chairperson provides a checklist for this purpose.

(1) Upon request from the chairperson, conduct a ground inspection of the aircraft. Identify any areas of non-compliance with the regulations.

(2) Conduct a flight evaluation by performing the maneuvers required in FAR Part 61, Appendix A.

(3) Identify any problems found and record your observations. Provide the chairperson with a report, including recommendations.

E. Contribute to Developing Training Requirements. Identify the characteristics of the new or modified aircraft that differ from the base aircraft and in which flight crews must receive training. Also review the original training program, if applicable. Comparisons to the base aircraft are made to determine the differences in design, procedures, tasks, operations, flight deck automation, aircraft systems, and checklist procedures. In developing training requirements, include the following:

(1) Any skills and knowledge needed by the crew and not specified in the practical test standards and in chapters 9 and 10 of this Handbook;

(2) Specific conditions (use of simulator, training device, aircraft, etc.) under which the crew could be asked to demonstrate the skills and knowledge required; and

(3) Additional standards the FSB may require if existing practical test standards fail to ensure mastery of the skills and knowledge required.

F. Participate in Determining Type Rating Requirements. Use the documentation provided by the chairperson to record evaluations and compari-

(1) sons made between new or modified aircraft and the base aircraft.

(2) Identify all significant differences between the base aircraft and the aircraft being evaluated.

(3) Determine how the differences between these aircraft relate to flight crew knowledge, skills, and other flight safety factors.

(4) Determine whether the new or modified aircraft will require a new type rating or share a common type rating.

(5) Determine whether additional testing is required.

G. Conduct Initial Pilot Type Rating Flight Checks. As directed by the chairperson, conduct type rating flight checks for manufacturer or FAA personnel. See chapter 9 of this Handbook, "Conduct A Pilot Type Rating Certification."

H. Attend Reconvened FSB. When the FSB is reconvened, attend the meeting and re-evaluate previous tasks, as assigned by the chairperson.

7. TASK OUTCOMES . Completion of this task results in one or more of the following:

A. Inspector's findings, conclusions, and recommendations submitted to chairperson.

B. FSB Report.

9. FUTURE ACTIVITIES.

A. Serve on another FSB.

B. In the event of an incident, accident, or recurring problem, the FSB may be reconvened to reassess their original determinations.