Section 1 General Information

3-2286 GENERAL. Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (91K), 121, and 135 require the Administrator of the Federal Aviation Administration (FAA) to evaluate each applicant’s ability to conduct operations safely and in accordance with the applicable regulations before issuing an air carrier certificate, operating certificate, management specifications (MSpecs), or operating authority to the applicant. Title 14 CFR also requires the Administrator to determine that a certificate holder/applicant is capable of conducting operations safely and in compliance with applicable regulatory standards before authorizing the certificate holder to operate in an area or route(s). The structured methods used by the FAA to determine an applicant’s capabilities are proving and validation tests. Volume 3, Chapter 29, Sections 2 through 7 contain direction and guidance for inspectors to use for conducting proving tests, and Section 8 contains direction and guidance for conducting validation tests. Volume 4, Chapter 6, Section 2, contains direction and guidance regarding validation flights for Extended Operations (ETOPS). Proving and/or validation testing is usually accomplished in conjunction with an air operator’s initial certification. See Volume 2, Air Operator, Air Agency Certification, for additional guidance.

NOTE: The term “applicant” as used in this chapter means either a candidate applying for an air carrier certificate, an operating certificate, a certificate holder requesting additional operating authority, or an applicant requesting issuance of MSpecs under part 91K.

3-2287 PROVING TESTS. Title 14 CFR part 91, §§ 91.1019 and 91.1041; part 119, §§ 119.33 and 119.59; part 121, §§ 121.105, 121.123, and 121.163; and part 135, § 135.145 require applicants seeking authority to operate certain types of aircraft and/or new kinds of operations in revenue service to prove their capability before being granted operating authority. These applicants must conduct proving tests.

A. Testing Overview. Proving tests consist of a demonstration of the applicant’s ability to operate and maintain an aircraft new to the operator’s fleet, or the applicant’s ability to conduct a particular kind of operation, i.e., domestic, flag, supplemental, commuter, on-demand, or fractional ownership operations. Therefore, the applicant is required to operate and maintain the aircraft to the same standards required of a certificate holder who is fully certificated and who holds the necessary authorizations.

B. Comprehensive Testing Areas. Do not confuse proving tests with aircraft certification tests, which are tests conducted by the aircraft manufacturer to demonstrate the airworthiness of the aircraft. Proving tests are comprehensive in nature and focus on multiple areas. Examples of these areas include, but are not limited to, the following:

- Cabin safety,
- Operational control,
Abnormal procedures,
Minimum equipment list (MEL) management,
Ability to operate the aircraft in the National Airspace System (NAS), and
Ability to safely operate the aircraft at scheduled or unscheduled destinations.

NOTE: See Volume 3, Chapter 29, Sections 2 through 7 for further guidance.

3-2288 VALIDATION TESTS. Sections 91.1041, 119.59, 121.93, 121.113, 135.73, and 135.145 require applicants to demonstrate the capability to conduct operations over proposed routes or areas in compliance with regulatory requirements before being granted FAA authority to conduct those operations. Proving and validation tests satisfy different requirements, but both tests may be conducted simultaneously, when appropriate. The FAA requires the applicant to successfully complete validation testing. The following are some examples that require validation testing:

- The addition of an aircraft for which two pilots are required for operations under visual flight rules (VFR) or a turbojet airplane, if that aircraft and/or equipment combination, or an aircraft of the same make or similar design has not been previously proved or validated in that applicant’s operations;
- Operations outside U.S. airspace;
- Class II navigation (NAV) authorizations; and
- Special performance or operational authorizations.

NOTE: See Volume 3, Chapter 29, Section 8 for specific guidance on validation testing. See Volume 4, Chapter 6, Section 2 for specific guidance on ETOPS validation flights.

3-2289 TESTING METHODS ACCEPTABLE TO THE ADMINISTRATOR. Applicants must demonstrate to the Administrator that they can conduct flight and maintenance operations to the highest level of safety.

A. Evaluating Operations. Operations may vary in complexity. For example, an operation may involve an operator that possesses Caribbean authority, but is requesting authorization to expand operations to South America. The operator must develop the appropriate procedures and training to meet the new operational requirements to conduct the expanded operation.

B. Complex Operations. For the more complex operations (such as Class II NAV authorizations, Special Areas of Operation (SAO) authorizations, Category II Approach (CAT II) and Category III Approach (CAT III)); the methods acceptable to the Administrator (that an applicant may use to demonstrate compliance) have been published in advisory circulars (AC). Examples are the current editions of:

- AC 120-28, Criteria for Approval of Category III Weather Minima for Takeoff, Landing, and Rollout;
- AC 120-42, Extended Operations (ETOPS and Polar Operations); and
• AC 135-42,Extended Operations (ETOPS) and Operations in the North Polar Area.

C. Acceptable Methods. Operators may prove their competence as determined by the Administrator by using such methods as flight simulation, tabletop exercises, and document review. An applicant may use methods other than those specified in ACs, provided that the applicant can demonstrate:

• The validity and reliability of the testing method,
• The test results verify acceptable applicant performance, and
• The method used is acceptable to the Administrator.

NOTE: Due to the fact that the operational environment cannot be duplicated in the simulator, Special Areas of Operation (SAO) validations will be conducted in flight, utilizing a table-top exercise, using a combination of the two, or other acceptable method other than the simulator.

NOTE: The proving and validation test process follows the general process for approval or acceptance that is described in Volume 3, Chapter 1, Section 1.

RESERVED. Paragraphs 3-2290 through 3-2310.