

CHAPTER 9. PROVING AND VALIDATION TESTS

SECTION 2. THE PROVING AND VALIDATION TEST PROCESS

1565. PHASE ONE. Phase one of the proving and validation test process begins when an applicant requests authorization from the FAA to conduct an operation for which proving or validation is required. The term, “applicant,” as used in this section, means either a candidate applying for an operating certificate or a certificate holder requesting additional operating authority. When an applicant’s request requires proving or validation, the following steps apply:

NOTE: A general purpose job aid is included as figure 3.9.2.1., which may be adapted to proving or validation tests, as required. The proving and validation test process follows the general outline of the five-phase approval process that is described in volume 1, chapter 4, section 6.

A. FAA Test Team. The Certificate Management Office (CMO) manager or Flight Standards District Office (FSDO) manager (in the absence of a CMO manager) shall organize a test team.

(1) *Team Leader.* The team leader should normally be one of the principal inspectors assigned to the applicant and shall be responsible for the conduct, coordination, and evaluation of the test. In addition, the team leader will be the spokesperson for the Administrator on all matters pertaining to the test.

(2) *Team Personnel.* The FAA test team should include the following personnel, as required:

- The team leader
- All assigned principal inspectors
- An aviation safety inspector (ASI) (operations) qualified on the equipment
- ASI’s (maintenance and avionics) trained on the installed equipment
- A cabin safety specialist when, in Part 121, aircraft of 10 or more passenger seats are involved; or, in Part 135, when aircraft of 20 or more passenger seats are involved (If a cabin safety specialist is not available, the team should include an ASI with experience in cabin safety issues.)

- A representative from the Civil Aviation Security Field Office (CASFO)

(3) *Familiarization.* All members of the FAA inspection team must become familiar with the pertinent parts of the applicant’s general operations manual (GOM), procedures, and policies.

NOTE: If qualified inspectors are not available within the CMO or FSDO, the manager must request assistance from the Regional Flight Standards Division (RFSO).

B. Preliminary Coordination. The FAA test team and the applicant must reach a common understanding of what the applicant must do, what role the FAA will play, and what reports and documents must be prepared during the testing process. Both the test team and the applicant must research applicable regulatory and advisory material. If the test concerns any of the operations listed in figure 3.9.8.1., then the test team should consult an FAA navigation specialist early in phase one at either of the two following locations: San Francisco (SFO) International Field Office (IFO) at (415) 876-2765 or New York (NYC) FSDO-15 at (718) 553-1848. The navigation specialist can provide advice on testing requirements. Test team leaders involved in validations that require special performance authorizations or special operational authorizations shall consult the operations section of AFS-510 at (703) 661-0333 (see paragraph 1657 of this volume).

C. Program Tracking and Reporting Subsystem (PTRS) Entry. When the test team is formed, the team leader shall ensure that a PTRS record is opened for the applicant. This PTRS entry will remain open until the team completes its assignment. The record number of this entry shall be entered in the “Miscellaneous” field in all subsequent PTRS entries associated with the project. This procedure will create a complete record of proving and validation and will eliminate the need for a manually written report. (See section 6 of this chapter for step-by-step instructions for developing the PTRS record.)

1567. PHASE TWO. Phase two is initiated when the applicant submits the test plan to the FAA for

evaluation. During this phase, the team leader must ensure that the plan is complete and in an acceptable format before a thorough review and analysis can be conducted.

1569. PHASE THREE. Phase three is initiated when the team starts an in-depth review and analysis of the applicant's test plan for regulatory compliance, safe operating practices, logic of sequence, and other areas (such as training programs, crew and dispatcher qualifications, acceptable participants, and schedules). During this phase, the FAA must plan to coordinate its activities with the demonstrations that the applicant will conduct during phase four.

A. Team Leader. The team leader's responsibilities include the following:

- Notifying the RFSD of proving flight dates, times, and locations (The RFSD shall notify other RFSD's affected by the proposed proving flights and any resulting scheduled operations proposed by the applicant.)
- Assigning appropriate sections of the test plan to inspectors or specialists for review and comment
- Coordinating with the office of aviation security (as necessary) to obtain security inspector assistance for evaluating specific areas, such as hazardous materials and passenger screening
- Ensuring that administrative requirements such as visas and diplomatic clearances are obtained in a timely manner

B. Team Members. Team members are responsible for performing assigned tasks, keeping the team leader informed of all actions, and ensuring that the team leader concurs with all agreements made with the applicant. In addition, team members are responsible for recording each activity accurately and completely in the PTRS and placing the assigned number in the "Miscellaneous" field.

1571. PHASE FOUR. Phase four is the major phase of the test process. For proving flights, the applicant will conduct the en route flight segment and the maintenance test portion of the proving plan. In the case of validation tests, the applicant will conduct specific operations to collect data for either validation or FAA observation purposes. Phase four is concluded when the test team is satisfied that all test objectives have been achieved or that the applicant is unable to complete them satisfactorily. Before concluding phase four, the team leader shall obtain the concurrence of the CMO/FSDO manager and the RFSD.

1573. PHASE FIVE. Phase five is accomplished after the successful completion or termination of the proving or validation tests. In this phase, the FAA team either grants approval and issues the appropriate operations specifications (OpSpecs) or sends a letter of disapproval to the applicant. In either case, the team leader's final action is to complete the report by closing the original PTRS record that was opened in phase one (see section 6).

1574.-1578. RESERVED.

**FIGURE 3.9.2.1.
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

OFFICIAL NAME OF THE AIRLINE		LOCATION ADDRESS		
MAILING ADDRESS (If different from location address)				
PTRS CODE	PHASE ONE. PREAPPLICATION	INSP.'S INITIAL	DATE	REFER- ENCE
	1. Statement of Intent			
	a. Date received in FSDO from the applicant			
	b. Date FSDO obtains a copy of MMEL			
	2. Preapplication meeting			
	a. Date preapplication meeting conducted			
	b. Date all applicable guidance material given to the applicant (Excerpts from HB 8300.10 and 8400.10)			
	c. Date that a copy of this job aid was given to the applicant			
	d. Date that any possible causes of delay in the certificate process were discussed			
	e. Date that the formal application process was discussed			
	3. Open PTRS Master Record			

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE TWO. FORMAL APPLICATION	INSP'S INITIAL	DATE	REFER- ENCE
	1. Formal Application Letter			
	a. Full and official name			
	b. Mailing address			
	c. Primary operating location of new aircraft (Principal Base of Operations)			
	d. Name and address of the applicant's Agent for Service			
	e. Key personnel management names			
	2. Formal Application Meeting (This meeting is not a requirement)			
	a. Date FSDO contacted to schedule the meeting			
	b. Date of the meeting			
	c. Evaluation of the Formal Application (S, U, or N/A)			
	1. Formal Application Letter			
	2. Designation of Agent for Service			
	3. Schedule of events, including the dates that the listed items will be ready for FAA inspection, or will be accomplished			
	3. Update PTRS Master Record			

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE TWO. FORMAL APPLICATION	INSP'S INI- TIAL	DATE	REFER- ENCE
	a. General Operating Manual			
	b. General Maintenance Manual			
	c. Company Flight Manual			
	d. Company Checklists			
	e. FAA-approved AFM for the New A/C			
	f. Maintenance Technical Manuals			
	g. Flight Attendant Manuals			
	h. Flightcrew Training Manual			
	i. Flight Attendant Training Manual			
	j. Dispatcher Training Manual			
	k. Security Program Manual			
	l. Dispatch or Flight Following Manual			
	m. Minimum Equipment List			
	n. Station Operations Manual			
	o. Aircraft Weight & Balance Manual			
	p. Aircraft Servicing Procedures Manual			
	q. Airport/Runway Analysis			
	r. Hazardous Materials Manual			
	s. Other Manuals			
	t. Company Deicing/Anti-Icing Program			
	u. Carry-On Baggage Program			
	v. Exit Seating Program			
	w. Noise Abatement Requirements			
	x. Operations Specifications			
	y. Basic Indocrination Training			
	z. Basic Indocrination Training			
	aa. Aircraft Systems Training			
	bb. Simulator Training			
	cc. Aircraft Flight Training			

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE TWO. FORMAL APPLICATION	INSP'S INI- TIAL	DATE	REFER- ENCE
	dd. Flight Attendant Taining			
	ee. Dispatcher/Flight Follower Training			
	ff. Maintenance Personnel Training			
	gg. Maintensnce Inspector (RII) Training			
	hh. Maintenance Facilities Ready for FAA Inspection			
	ii. Aircraft Ready for FAA Inspection			
	jj. Emergency Evacuation Demonstration			
	kk. Ditching Demonstration			
	ll. Proving Tests			
	mm. Proposed Operations to Begin			
	4. Proof that the new aircraft, facilities, and services will be available. Proof must be in the form of a proof of purchase, formal contract, lease agreement, or a letter of agreement for the following:			
	a. The new aircraft to be added to the certificate			
	b. Maintenance facilities services and programs			
	5. Issue Letter Accepting/Rejecting Application			

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE THREE. DOCUMENT COMPLIANCE	INSP'S INITIAL	DATE RETURNED TO APPLI	DATE RESUBMIT TO FSDO	DATE APPRV'D/ ACCEPT	REFERENCE
	1. Update PTRS Master Record					
	2. Evaluate Applicable Manuals - OPS/MAINT					
	a. General Operations Manual - O					
	b. General Maintenance Manual - M					
	c. Company Flight Manual - O					
	d. FAA-Approved Aircraft Flight Manual - O					
	e. Flightcrew Training Manual - O					
	f. Flight Attendant Manual - O					
	g. Flight Attendant Training Manual - O					
	h. Company Emergency Manual - O					
	i. Passenger Briefing Cards -O					
	j. Aircraft Servicing Procedure Manual - M					
	k. Security Program Manual - O					
	l. Dispatch Flight/Following Manual - O					
	m. Dispatcher/Flt. Follower Trng. Man. - O					
	n. Station Operations Manual - O					
	o. Aircraft Weight & Balance Manual - M					
	p. Airport Runway Analysis Manual - O					
	q. Cockpit Normal Procedures Checklist - O					
	r. Cockpit Emergency Procedures Checklist -O					
	s. Cockpit Abnormal Procedures Checklist - O					
	t. Hazardous Material Manual - O					
	u. Security Manual - O					
	v. Reliability Program Manual - O					
	w. Maintenance Technical Manuals - M					
	x. Configuration Deviation List - O/M					
	y. Minimum Equipment List - O/M					
	z. Flight Planning Procedures - O					

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE THREE. DOCUMENT COMPLIANCE	INSP'S INI- TIAL	DATE RETURNE D TO APPLI.	DATE RESUB- MIT TO FSDO	DATE APPRV'D / ACCEPT	REFERENCE
	3. Evaluate Applicable Training Programs					
	a. Crewmember Training					
	1. Emergency Training					
	2. Initial Ground Training					
	3. Transition Ground Training					
	4. Recurrent Ground Training					
	5. Upgrade Ground Training					
	6. Initial Flight Training					
	7. Recurrent Flight Training					
	8. Seat Dependent Task Training					
	9. Differences Training					
	10. Low Altitude Windshear Training					
	11. Special Training (Special Airports, Ect.)					
	12. Check Airman Training					
	13. Instructor Training					
	14. Prociency Check Curriculum					
	b. Dispatcher/Flt. Follower Trng.					
	1. Initial Training for the New Aircraft					
	2. Transition Training for the New Aircraft					
	3. Recurrent Training for the New Aircraft					
	c. Flight Attendant Training					
	1. Initial Ground Training for the A/C					
	2. Transition Ground Training for the A/C					
	3. Recurrent Ground Training for the A/C					

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE FOUR. DEMONSTRATION & INSPECTION	INSP'S INI- TIAL	DATE RETURNED TO APPLI	DATE RESUB- MIT TO FSDO	DATE APPRV'D/ ACCEPT	REFERENCE
	1. Update PTRS Master Record					
	2. Evaluate Applicant Training					
	a. Training Facilities					
	b. Training Schedules					
	c. Flight Crewmember Training Evaluation					
	1. Basic Indoctrination					
	2. Emergency Training					
	3. Ground Training					
	4. Flight Training (Simulator)					
	5. Flight Training (Aircraft)					
	6. Differences Training					
	d. Check Airman/Instructor					
	e. Cabin Crew					
	1. Basic Indoctrination					
	2. Emergency Training					
	3. Ground Training					
	f. Dispatcher/Flight Following/Locating					
	g. Hazardous Material					
	h. Security Training					
	i. Maintenance Training					
	1. Mechanics/Repairmen					
	2. Inspection Personnel					
	3. Ground Handling/Servicing					
	4. Station Personnel					
	3. Airmen Testing/Certification					
	a. Pilots					
	b. Flight Engineers					
	c. Dispatchers					
	d. Flight Attendants					

Remarks:

**FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID**

PTRS CODE	PHASE FOUR. DEMONSTRATION & INSPECTION	INSP'S INI- TIAL	DATE RETURNED TO APPL	DATE RESUB- MIT TO FSDO	DATE APPRV'D/ ACCEPT	REFERENCE
	4. Aircraft Conformity Inspection					
	5. Main Operations Base					
	6. Main Maintenance Base					
	7. Line/Station Facilities					
	8. Company Deicing/Anti-Icing Program					
	9. Carry-On Baggage Program					
	10. Exit Seating Program					
	11. Noise Abatement Requirements					
	12. Dispatch/Flight Following/Flight Locating					
	13. Recordkeeping (Addition of the new A/C)					
	a. Crewmembers					
	1. Training					
	2. Qualifications					
	14. Maintenance					
	a. Aircraft Records					
	b. Personnel Training					
	c. Inspector Training/Qualifications					
	15. Flight/Trip Records/Load Manifests					
	16. Emergency Evacuation Demonstration					
	17. Ditching Demonstration					
	18. Aircraft Proving Test					

Remarks:

FIGURE 3.9.2.1.—Continued
PART 121/135 PROVING AND VALIDATION TEST JOB AID

PTRS CODE	PHASE FIVE. CERTIFICATION	INSP'S INITIAL	DATE	REFERENCE
	1. Approve Operations Specifications			
	2. Present Operations Specifications to Cert. Holder			
	3. Complete PTRS Records			
	4. Complete/Close PTRS Master Record			

Remarks:

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