

**VOLUME 3 GENERAL TECHNICAL ADMINISTRATION****CHAPTER 38 EVALUATE PART 135 (NINE SEATS OR LESS) APPROVED AIRCRAFT INSPECTION PROGRAM****Section 1 Safety Assurance System: Evaluate and Approve an Approved Aircraft Inspection Program**

**3-3731 REPORTING SYSTEM(S).** This section is related to Safety Assurance System (SAS) Element 4.2.1, (AW) Maintenance/Inspection Requirements.

**3-3732 OBJECTIVE.** This chapter describes how to evaluate and approve a Title 14 of the Code of Federal Regulations (14 CFR) part 135 (nine seats or less) Approved Aircraft Inspection Program (AAIP).

**3-3733 GENERAL.** The AAIP is used in lieu of the aircraft inspection requirements of 14 CFR part 91, § 91.409. An AAIP allows each operator to develop a program tailored to their particular needs to satisfy aircraft inspection requirements. A well-defined and monitored AAIP should result in a more efficient inspection program.

**3-3734 AAIP REQUIREMENTS.**

**A. AAIP Regulatory Requirements.** Part 135, § 135.419 lists the regulatory requirements for an AAIP. The operator's Policy and Procedures Manual (PPM) must contain the AAIP. The Federal Aviation Administration (FAA) approves the AAIP and authorizes the use of that approved program through the issuance of operations specifications (OpSpecs). The operator may request to use an AAIP, or the FAA may find the operator's current program inadequate and require the operator to develop an AAIP.

**B. AAIP Contents.** The AAIP must contain the following:

1) Instructions and procedures for the conduct of aircraft inspections (which must include necessary tests and checks), setting forth in detail the parts and areas of the airframe, engines, propellers, rotors, and appliances, including emergency equipment, that must be inspected.

2) A schedule for the performance of the aircraft inspections expressed in terms of the time in service, calendar-time, number of system operations, or any combination of these.

NOTE: The operator must follow the schedule for the performance of the FAA-approved aircraft inspection. Partial inspections are not allowed. "Partial" refers to an AAIP inspection segment or phase inspection that is started, but the aircraft is operated before completing that segment or phase inspection. When partial inspections are performed and the aircraft is operated, this constitutes an "incomplete inspection."

3) Instructions and procedures for recording discrepancies found during inspections and correction or deferral of discrepancies, including form and disposition of records.

**3-3735 COORDINATION REQUIREMENTS.** The principal maintenance inspector (PMI) and principal avionics inspector (PAI) are required to conduct coordination to review the AAIP for completeness and adequacy. Completeness is established if the AAIP covers the entire aircraft in its present configuration with all associated equipment and components being addressed in the AAIP. Adequacy is determined by verifying that the scope and instructions for performing the inspections are well defined in the program.

**3-3736 REFERENCES, FORMS, AND JOB AIDS.**

**A. References (current editions):**

- Title 14 CFR Parts 39 and 119.
- Title 14 CFR Part 43, § 43.11.
- Title 14 CFR Part 91, §§ 91.409(c)(2) or (f)(2), 91.415, and 91.417.
- Title 14 CFR Part 135, §§ 135.415, 135.417, 135.419, 135.421, and 135.422.
- Title 49 of the Code of Federal Regulations (49 CFR) Part 180.
- Advisory Circular (AC) 135-7, Part 135: Additional Maintenance Requirements for Aircraft Type Certificated for Nine or Less Passenger Seats.
- AC 135-10, Approved Aircraft Inspection Program.
- OpSpec D073, Approved Inspection Program.

**B. Job Aids.** Job Task Analysis (JTA) 3.3.163, Evaluate 14 CFR Part 135 (9 or Less) Operator's/Applicant's Approved Aircraft Inspection Program (AAIP)/Revision.

**3-3737 PROCEDURES.**

**A. Plan and Coordinate the Task.**

- 1) Advise the operator/applicant of regulatory requirements and policies.
- 2) Determine whether the aircraft meets eligibility requirements.
- 3) Review the operator/applicant's file to identify any information concerning the initial AAIP or revision. Inspectors should become thoroughly familiar with the operator/applicant's operation, and should give special attention to the following items:
  - Operating environment;
  - Type of aircraft (size and complexity);
  - Maintenance/inspection organization, as applicable;
  - Operating history; and
  - Aging aircraft inspection requirements.
- 4) Remind the operator that the AAIP or revision must be included in his or her PPM.
- 5) Review the operator/applicant's PPM to ensure that it meets all other maintenance requirements relating to AAIP policies and procedures.

6) If this task is performed as part of an original certification, review the Schedule of Events (SOE) to ensure that the evaluation can be accomplished according to the schedule.

### **B. Evaluate the Proposed Inspection Program Procedures.**

1) Evaluate the procedures for scheduling inspections. The program must list inspection intervals for each inspection task and should describe personnel responsibilities for scheduling, performing, and documenting inspections.

2) Ensure the AAIP includes information that defines the program and includes instructions on the administration and implementation of the program. The procedures for amending or revising the program must be included, and should state that any revisions to the program require resubmission to the FAA for approval.

3) The program can include procedures to ensure that properly certificated, qualified, trained, current, and authorized personnel perform inspections.

4) Evaluate procedures for reporting and correcting discrepancies. The program must include detailed instructions, procedures, and the necessary forms and documents for the recording and repair of discrepancies. These instructions, procedures, and forms may appear elsewhere in the company's PPM, but their location must be referenced in the AAIP.

5) When reviewing an AAIP, the PMI/PAI should review the inspection requirements from the Maintenance Review Board Report (MRBR) and Maintenance Planning Document (MPD), if published, to ensure that the owner/operator incorporates these inspection requirements into its AAIP. If MRBR and/or MPD documents have not been published for the particular make/model aircraft, the PMI/PAI's verification should be based on the manufacturer's recommended inspection times/intervals and instructions/procedures.

6) The program may identify, by title, the person responsible for ensuring that personnel accomplishing inspections under the AAIP meet regulatory requirements.

7) The operator should have procedures in place to ensure that their aircraft is returned to service in an Airworthy condition after the completion of an inspection. This would include compliance with all applicable Airworthiness Directives (AD), airworthiness limitation items (ALI), and life-limited parts.

8) Ensure the AAIP includes instructions and procedures for adding or removing aircraft from the AAIP.

### **C. Evaluate the Proposed Inspection Program or Revision.**

1) The PMI/PAI evaluating and approving an inspection program or revision must have an in-depth knowledge of the requesting operator's airframe, engine, propeller, rotor, and emergency equipment, along with its operational environment. If necessary, the certificate-holding district office (CHDO) should consult with the regional specialists, appropriate Aircraft Evaluation Group (AEG), or appropriate Aircraft Certification Office (ACO) to resolve any technical issues.

2) The AAIP must encompass the entire aircraft, and should contain instructions, procedures, and standards for conducting inspections for the following areas:

- Airframe;
- Aircraft engines;
- Propellers (if installed);
- Rotors (if installed);
- Appliances;
- Survival and emergency equipment; and
- Areas that include instructions for continued airworthiness (ICA) inspections that are applicable due to configuration modifications, alterations, or repairs.

3) While the manufacturer's recommended inspection program can be used as the basis of the AAIP, the configuration of the aircraft and any additional equipment, modifications, or repairs to the aircraft after manufacture would nullify the adequacy of that manufacturer's recommended program. The AAIP typically uses the manufacturer's program as the basis for the program, to which are added all of the inspection elements that are not covered in the manufacturer's program. Approving a singular inspection segment that covers only a portion of the aircraft or its equipment alone as the AAIP under § 135.419, such as an avionics inspection segment that the operator performs in addition to the manufacturer's recommended program under § 91.409(f)(3), is not permitted per § 91.409(f), which requires the owner/operator to select, identify in the aircraft records, and use a program for the inspection of the aircraft. There cannot be two programs associated with the same aircraft.

4) The operator can develop their own AAIP. This type of program is developed and published in its entirety by the operator. It must include methods, techniques, practices, and standards necessary for the proper accomplishment of the program. If the operator chooses to develop their own program, the PMI/PAI's standard for approval should be based on a comprehensive evaluation of all aspects of the AAIP, and it must provide the same level of safety as the manufacturer's recommended inspection program.

5) The avionics and instrument systems are not always installed by the aircraft manufacturer and may not be included in their recommended inspection program. The avionics and instrument system inspections should be based on the equipment manufacturer's recommendations or instructions and must be included in the AAIP.

6) If the operator chooses to incorporate the manufacturer's recommended maintenance program for the (applicable) engines, propellers, rotors, and items of emergency equipment, as required under § 135.421(a), the overhaul periods should correspond to the time in service intervals that are authorized in OpSpecs D101, Additional Maintenance Requirements—Aircraft Engine, Propeller, and Propeller Control (Governor), and D102, Additional Maintenance Requirements—Rotorcraft.

7) The program must include the inspection criteria as provided in any applicable ICA, including those that pertain to any repairs or alterations previously accomplished.

8) The AAIP cannot amend or extend retirement times for life-limited parts. Life limits must be expressed in one of the following measures:

- Number of cycles;
- Number of landings;
- Length of time in service;
- Calendar-time; or
- A combination of the above measures.

9) Unlike a Continuous Airworthiness Maintenance Program (CAMP), the AAIP is not a program that covers inspection and maintenance. As such, the AAIP would not include maintenance tasks that fall outside the scope of the inspection. Additional maintenance requirements that may be completed in conjunction with the AAIP can include: the test and inspection of the emergency locator transmitter (ELT), altimeter/altitude reporting system, air traffic control (ATC) transponder (ATCT) test, repetitive AD compliance, and ALIs.

10) The AAIP cannot override or alter the regulatory time intervals for any additional maintenance requirements.

11) The instructions, procedures, and standards must be clear and easily understood. They must identify the scope of each task and provide a detailed outline of each step that must be accomplished to perform the inspection and ensure that established performance standards are met.

12) Submission of a commercially available aircraft maintenance tracking program does not constitute an AAIP and is not to be approved as such. These tracking programs may be used to support the operator's development of their own program, but are not managed or controlled by the operator and are not to be approved as an AAIP.

13) The AAIP should include special inspections that must be accomplished after operational events, such as hard landing, landing in overweight condition, lightning strike, hail strike, bird strike, damage due to ground handling incidents, engine overspeed/overtorque, etc.

**D. Use of Scheduling Windows.** Scheduling windows represent a built-in inspection tolerance in an AAIP, which allows for scheduling flexibility. When provided for in the MRBR or manufacturer's recommendations, principal inspectors (PI) can approve the use of scheduling windows when contained in the particular aircraft's AAIP submission package.

1) Using windows should not significantly affect the target inspection interval. When starting a part of an inspection (e.g., panels opened), the operator should complete the inspection before placing the aircraft back in service. Do not consider using windows as justification for performing partial inspections, nor should they become permanent time extensions. PIs should ensure the use of windows does not allow for the accumulation of excess time between inspections, resulting in an overall escalation in an inspection interval.

2) When the operator's AAIP inspection intervals align with the airframe, engine, propeller, rotor, or appliance manufacturer's inspection program intervals, the operator may

include the manufacturer's published windows in their AAIP submission or propose smaller windows based on the specifics of the intended operation.

3) When the operator's AAIP inspection intervals are different from the aircraft, engine, propeller, or component manufacturer's inspection intervals, or when the operator develops their own AAIP, an operator may adapt scheduling procedures to allow for windows. No more than (plus or minus) 20 flight-hours, 20 flight (or component) cycles, or 1 calendar-month, as appropriate, can be used for the planned inspection type and the intended operation. The proposed procedures must also provide for a method to reduce the time to the next scheduled inspection when windows are used. For example, a recurring inspection scheduled for 200 flight-hours and accomplished at 215 flight-hours should result in the next inspection being due in 185 flight-hours from the time of completion, not 200.

4) Scheduling windows must not allow extensions of AD compliance times, ALIs, or life-limited part retirement times. The operator's policy and procedures for the use of scheduling windows must be in their PPM.

**E. Manufacturer's Service Publications.** Refer to the current edition of AC 20-77, Use of Manufacturers' Maintenance Manuals, and FAA Order 8620.2, Applicability and Enforcement of Manufacturer's Data. These documents list situations when Service Bulletins (SB) would be regulatory.

**F. OpSpecs.** The certificate holder's OpSpec D073 lists the registration number, serial number, and make, model, and series (M/M/S) of each aircraft that is subject to an AAIP. Each certificate holder who has an AAIP shall have each aircraft that is subject to the program inspected in accordance with the program.

**G. FAA-Initiated AAIP Revision.** Whenever the FAA finds that revision to an AAIP is necessary for the continued adequacy of the program, the operator must revise the AAIP following its documented policies and procedures.

1) After proper notification, the operator must make any changes to the program that the CHDO determines to be necessary. The notification should be in the form of official correspondence from the CHDO to the operator, and must state the reason for the program revision.

2) The operator may petition the CHDO to reconsider the notice to revise their AAIP. This should be in the form of written correspondence from the operator to the CHDO, and must be filed within 30 days after the operator receives the notice from the CHDO.

3) The CHDO must act on the operator's petition to reconsider the notice within a reasonable timeframe.

**H. Operator-Initiated AAIP Revisions.** It is the operator's responsibility to provide the CHDO with adequate information to justify all aspects of the proposed AAIP revision.

1) If a manufacturer extends its recommended inspection interval, the operator may request approval to use the extension by submitting a revision to their AAIP. The manufacturer's

documented recommendation must accompany the request. The PMI or PAI should not automatically approve a manufacturer-recommended task interval adjustment. The inspector must consider the individual operator's aircraft use and experience, and should ensure that the task interval adjustment will not compromise safety.

2) The operator may request task interval adjustments based on past operating experience of their aircraft. The operator must have obtained the information from their own in-service reliability for that particular aircraft type, not from another operator's in-service experience with that same aircraft or aircraft type. Task interval adjustments must be based on demonstrated in-service reliability, proper justification, and risk analysis. For specific guidance on engine time in service interval extensions, see Volume 3, Chapter 64, Section 2, Evaluate and Approve a Part 135 or 91K (Nine Seats or Less) Operator's Proposed Engine Time In Service Interval Extension, Oil Analysis Program, and Engine Trend Monitoring Program, as well as the current edition of AC 120-113, Best Practices for Engine Time In Service Interval Extensions.

3) Amendments or extensions are not permitted for retirement times of life-limited parts, ALIs, and/or those intervals designated by ADs.

### **3-3738 TASK OUTCOMES.**

**A. Analyze Findings.** Determine if the AAIP/revision meets all regulatory requirements. Before meeting with the operator/applicant(s), discuss initial findings with appropriate FAA personnel to determine the content of the briefing. Depending on the findings, it may be necessary to coordinate with the Certificate Management Team (CMT), regional specialists, or other FAA personnel.

**B. Follow SAS Guidance for Modules 4 and 5.** See Volume 10, Safety Assurance System Policy and Procedures.

**C. Debrief Operator/Applicant.** Discuss results of the evaluation, including any deficiencies noted during the AAIP evaluation.

**D. Complete the Task.** Completion of this task will result in one of the following:

1) If the AAIP/revision is not acceptable, advise the operator/applicant(s) by letter that the program/revision is rejected. Give the reasons for the rejection. Return the program proposal and documentation to the operator/applicant.

a) If this review is performed as part of a certification, inform the applicant in the letter that the certificate will not be issued until the deficiencies are corrected. If necessary, advise the applicant to revise the SOE.

b) The letter must also accomplish the following:

1. Confirm and document all agreements made during the debriefing.
2. Identify the date the AAIP/revision was submitted.

3. Show the revision number and date, as applicable.
4. Identify and describe all deficiencies by chapter, section, page, etc.
5. Reference each deficiency to the appropriate regulation.
6. Request a revised SOE, if necessary.
7. If a revision, remind operator/applicant(s) that the revision is not acceptable.

2) If the program or revision meets all regulatory requirements, accomplish the following:

a) Ensure that the AAIP or revision has been fully coordinated between the PMI and PAI.

b) For a new or revised program, approval is granted by a stamp of approval and the PMI/PAI signature on the List of Effective Pages (LEP), or by some other official means of conveying approval. Put a copy of the approved LEP or Letter of Approval in the CHDO's air carrier certificate management files for retention.

c) After approval has been issued, prepare new or revised OpSpec D073, which authorizes the air carrier to use the AAIP.

d) Send the operator/applicant(s) a letter advising them that the AAIP is approved. The letter must accomplish the following:

1. Confirm and document all information given during the debriefing.
2. Indicate the submission date of the AAIP/revision.
3. Show the revision number and date, if applicable, and advise the operator that the revision may be implemented.
4. If the operator submitted a manual revision and it is acceptable, advise the operator of acceptance.
5. If the operator did not submit a manual revision, remind the operator to revise the manual to incorporate the program/revision.
6. Enclose the stamped, dated, and signed original AAIP.
7. Enclose the accepted manual revision, if appropriate.

e) Once the inspector approves the inspection program/revision, he or she should save and file all data used in the evaluation process in the operator's office file. Authorized persons may refer to this information in the event of any incident related to the program.

**E. Complete the SAS Record.****F. Document the Task.** File all supporting paperwork in the operator/applicant's file.**3-3739 FUTURE ACTIVITIES.****A. AAIP.** The AAIP should be reviewed on a periodic basis to ensure the current status of the operator's inspection program.**B. Spot Checks.** Perform spot checks of the operator's aircraft while undergoing an inspection to ensure that the tasks are being accomplished in accordance with the operator's program.**C. Follow SAS Guidance for Modules 4 and 5.** See Volume 10.**RESERVED.** Paragraphs 3-3740 through 3-3755.