U.S. Department of Transportation
Federal Aviation Administration

Advisory Circular

Subject: Approved Aircraft Inspection Program

Date: 5/23/23 **AC No:** 135-10C
Initiated by: AFS-300 **Change:**

1 **PURPOSE OF THIS ADVISORY CIRCULAR (AC).** This AC provides information and guidance for a Title 14 of the Code of Federal Regulations (14 CFR) part 135, § 135.419, Approved Aircraft Inspection Program (AAIP). This AC is not mandatory and does not constitute a regulation. This AC describes an acceptable means, but not the only means, for a certificate holder (CH) to develop and obtain approval of an AAIP. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way, and the document is intended only to provide information to the public regarding existing requirements under the law or agency policies.

2 **AUDIENCE.** This AC applies to CHs who operate aircraft under part 135 that are type certificated for nine or less passenger seats, excluding any pilot seat (§ 135.411(a)(1)), and desire to maintain the aircraft under an AAIP in accordance with § 135.419.

3 **WHERE YOU CAN FIND THIS AC.** You can find this AC on the Federal Aviation Administration's (FAA) website at: https://www.faa.gov/regulations_policies/advisory_circulars/ and the Dynamic Regulatory System (DRS) at https://drs.faa.gov.

4 **CANCELLATION.** AC 135-10B, Approved Aircraft Inspection Program, dated June 8, 2016 is canceled.

5 **RELATED CFR PARTS.** Title 14 CFR parts 43, 91, and 135.

6 **RELATED READING MATERIAL.**

- FAA Order 8900.1, Volume 3, Chapter 18, Section 6, Parts D and E Maintenance Operations Specifications/Management Specifications/Letters of Authorization.
- FAA Order 8900.1, Volume 3, Chapter 38, Section 1, Safety Assurance System: Evaluate and Approve an Approved Aircraft Inspection Program.

7 **DISCUSSION.**

7.1 AAIP. Section 135.419 provides for an AAIP, when formally approved by the FAA. The AAIP applies to aircraft type certificated for nine or less passenger seats, excluding any pilot seat, which are authorized for operations under part 135. An AAIP benefits CHs by allowing them to develop and utilize inspection programs more suitable to aircraft in the CH's operating environment than the conventional 100-hour/annual inspections that

part 91 requires. An AAIP does not need to be complex, but it should be comprehensive enough to cover the entire aircraft, as configured.

7.2 Program Development. The AAIP allows CHs operating under § 135.411(a)(1) to develop a program tailored to its particular needs to satisfy aircraft inspection requirements. In developing the program, a CH who has aircraft subject to the 100-hour/annual inspection requirements of part 91, § 91.409(a) and (b) is able to develop a program that is comprised of phases or segments which have intervals that can be established to align with the utilization and availability of the aircraft between scheduled flight operations, rather than repeating all tasks at each 100-hour increment.

7.3 Meeting Part 135 Requirements. Whenever the FAA finds that the aircraft inspections required or allowed under part 91 are not adequate to meet part 135 requirements, or upon application by a CH, the FAA may amend the CH's operations specifications (OpSpecs) to require or allow an AAIP. While the manufacturer's recommended inspection program requirements of § 91.409(f) can be used to meet the regulatory requirements, the configuration of the aircraft and any additional equipment, modifications, or repairs to the aircraft after manufacture may nullify the adequacy of that manufacturer's recommended program. An AAIP provides the means whereby CHs can develop inspection procedures to include specific tasks necessary to mitigate risk, and the associated time intervals for the accomplishment of those tasks.

7.4 AAIP Evaluation. Prior to approving the program, the FAA will verify that the AAIP incorporates all of the instructions and procedures necessary to implement and administer the program, as well as confirming the inclusion of all of the inspection tasks necessary to ensure the entire aircraft and its associated components, accessories, and installed equipment are covered by the program.

7.5 AAIP's Purpose. The AAIP serves as the CH's specification for each segment of the inspection program. This is in contrast to the 100-hour/annual inspection wherein the performing mechanic or maintenance organization performs a comprehensive inspection that must meet the inspection scope and detail from part 43 appendix D. The program designates worksheets and other criteria that specifies the inspection work for each inspection segment. As provided in part 43, § 43.3, the inspections may only be performed by authorized persons, including, without limitation, a certificated mechanic or repairman, or a certificated repair station (CRS).

7.6 CH Responsibility. The CH is responsible for the AAIP content and intervals, and has the added responsibility of ensuring the program is followed in its entirety. This is in alignment with the responsibility § 135.413 assigns for airworthiness. A well-defined and monitored AAIP should result in a more efficient inspection program, reduce downtime, and be more cost effective when compared to the cost of a 100-hour/annual inspection system.

8 REGULATORY REQUIREMENTS.

8.1 Obtaining FAA Approval. The AAIP, as described in the context of this AC, is an inspection program developed by a CH under part 135. After developing the program, the CH submits it to the FAA for approval and once approved, is authorized to use that program by issuance of OpSpec D073, Approved Aircraft Inspection Program (AAIP).

Note: Part 135 provides a higher level of safety than part 91 or 91 subpart K (part 91K). An Aircraft Inspection Program (AIP) that may have been approved for aircraft being strictly operated under part 91 or 91K may not be synonymous with a part 135 AAIP.

8.2 AAIP Eligibility. The AAIP is approved for a specific aircraft make, model, and series (M/M/S). Section 135.419(a) denotes a determining factor that establishes the basis for eligibility to use an AAIP. The AAIP is allowed for any make and model aircraft of which the CH has exclusive use of at least one aircraft. This exclusive use requirement is defined in § 135.25(b).

9 PROGRAM REQUIREMENTS.

9.1 Essential Elements. The AAIP is an aircraft-specific inspection program that encompasses the total aircraft, including all avionics equipment, emergency equipment, cargo provisions, aftermarket modifications and alterations, etc. A CH authorized to utilize a variety of aircraft types would require a separate AAIP for each aircraft make and model. Essential elements of the AAIP include:

1. Administrative/implementation procedures and instructions,
2. Schedule of inspections,
3. Inspection worksheets/checklists, and
4. Discrepancy recording procedures and forms.

9.2 Program Instructions. The administrative procedures should provide well-defined instructions that describe:

1. How the program is to be administered, and the duties and responsibilities of personnel involved in administering the program.
2. How the program is to be controlled, how revisions to the program are made, and how required FAA approval of any revisions are obtained and reflected in the program prior to implementing revisions.
3. How aircraft are to be placed into, or taken out of, the inspection program.
4. How to make accommodations for variations in equipment and configurations between aircraft in the CH's fleet.
5. How to make arrangements with contract agencies for performing inspections.
6. How the aircraft is approved for return to service following the inspection.

7. How each inspection is to be scheduled, performed, and documented.
8. How to report errors and other problems found within the AAIP.

9.3 Incorporating Instructions Into the AAIP. Instructions for accomplishing each task must satisfy § 43.13(a) regarding methods, techniques, practices, tools, and equipment. The instructions should also provide standards regarding dimensions and tolerances and should include adequate information in a form suitable for use by the person performing the work. The instructions may be incorporated into the program by a number of methods, such as:

1. The instructions may be printed directly on the work forms.
2. The instructions may be included in a section of the AAIP document/manual in a format that can be cross-referenced to items on the inspection checklist/form.
3. The references from specific chapters, sections, or paragraphs of a manufacturer's manual or other pertinent instructions can be incorporated on the form or in the section of the CH's manual containing the AAIP.

9.4 Schedule of Inspections. The schedule of inspections provides the time interval in terms of hours/cycles or calendar-days for the performance of each inspection task. Inspection tasks may be grouped together based on a specific zonal area or system of the aircraft (wings, fuselage, engines, empennage, landing gear, etc.). Other inspection programs utilize sequential, alphanumeric nomenclature, which progressively indicates a greater scope and detail of the inspections (A-Check, B-Check, C-Check, or No. 1 Inspection, No. 2 Inspection, etc.). These groups or checks may also be comprised of segments that are divided into smaller groupings of tasks and identified as an inspection segment or phase. In addition to depicting the inspection task intervals, the schedule of inspections describes the scope of each group within the program, as well as depicts the number of segments or phases that comprise an entire group. The schedule of inspections establishes the frequency for sequentially performing individual tasks or groups of tasks that results in the completion of an entire inspection program cycle, upon which after completing, the cycle begins again. When performing the inspections, individual tasks and frequency of performance can be outlined on work forms or checklists. The work forms can also identify the appropriate report form(s), which may need to be completed for each task(s) performed.

9.5 Unscheduled Events. The schedule of inspections should also address unscheduled events that require specialized structural inspections. These include events such as hard landings, overweight landings, lightning strikes, aerodynamic upsets, engine overspeed/overtorque, bird strikes, and ground/prop strikes. Additionally, the schedule of inspections should include an aircraft low-utilization inspection schedule.

9.6 Work Forms. The inspection worksheets and checklists provide a means of controlling and managing the performance and documentation of each task within the inspection segment. Work forms designate these tasks or groups of tasks with a signoff provision for each. The tasks can be arranged or consolidated according to the complexity of the program, the type of aircraft involved, and the character of the maintenance entity

performing the work (e.g., the work forms for an inspection of a complex aircraft by a large departmentalized maintenance facility should be subdivided to accommodate that situation). The forms also serve to coordinate and control work in progress. They may be developed by the CH or adopted from another source.

9.7 Recording Discrepancies. The discrepancy recording procedures and forms provide instructions and procedures for all recordkeeping requirements associated with the AAIP. The procedures establish a system for recording discrepancies and their correction. If the program authorizes a deferral of discrepancies through an approved minimum equipment list (MEL), the conditions and limitations, per the CH's MEL management program required by OpSpecs authorizing an MEL and prescribed under § 135.179(a)(5), must be followed.

9.8 Work Form Requirements. The instructions related to recordkeeping should provide a means of accounting for all work forms, to include inspection forms and discrepancy sheets, upon completion of the inspection. These forms are used to satisfy § 91.417, so they should be complete, legible, and identifiable as to the aircraft and specific inspection to which they relate. In some cases, the forms may also serve to satisfy the regulatory requirements of § 43.11.

9.9 Airworthiness Directives (AD). The program should include procedures for ensuring compliance with applicable ADs and safety directives that provide for the recordation of the method of compliance, the AD, or safety directive number and revision date (§ 91.417). An AD may be incorporated into AAIP inspection intervals and may require an alternate means of compliance for the compliance interval to match the AAIP inspection intervals.

10 INSPECTION PROGRAM DEVELOPMENT. An AAIP may be developed from one of the following:

10.1 Adoption of the Manufacturer's Inspection Program. Under this arrangement, the manufacturer's program (including methods, techniques, practices, standards for its accomplishment, and inspection intervals) is adopted in its entirety. The manufacturer, in this case, includes the airframe, engine, propeller, avionics, and other installed equipment or components, as applicable. While the recommended inspection requirements for the aircraft are generally covered in the aircraft manufacturer's maintenance manual, it should be noted that the manufacturer's program alone will not be approved as an AAIP. Similarly, a document that only references the manufacturer's inspection program as the AAIP will not be considered for approval. Typically, the purpose for which the AAIP was deemed necessary was because the aircraft manufacturer's program does not encompass avionics, emergency equipment, appliances, and related installations. In addition, it may not fit the CH's operations and aircraft configuration. Therefore, the CH will usually need to add to, or modify, the manufacturer's program to incorporate these additional inspection requirements into the AAIP to create a unique and individualized inspection program. If the manufacturer's program affords options such as particular inspections that need to be done during the winter in cold climates, the CH's AAIP should designate when those items need to be accomplished. Likewise, if the

manufacturer's program provides for the use of "windows" to avail the CH with greater flexibility in scheduling the inspections, the CH may also use these options.

10.1.1 The program submitted to the FAA for approval should be re-identified as the CH's program because it no longer reflects the manufacturer's current program. By default, instructions incorporated by reference are "frozen-in-time" as of the date the AAIP is submitted for approval. In this method, the AAIP should reference the specific revision of the manufacturer's instructions being referenced. The use of a subsequent revision to the referenced instructions would need to be separately approved by the FAA through a revision to the AAIP. The CH would need to ensure that they retain access to the specified version of the instructions so they can provide those to maintenance providers, as needed. They would also need to ensure the AAIP procedures included providing instructions to maintenance providers to use the approved version of the maintenance instructions, which may not necessarily be the most recently published by the manufacturer.

10.1.2 Another option available to the CH is referencing these instructions in an "as revised" state. Meaning, if the manufacturer updates their procedures for the performance of the referenced inspection, the AAIP owner can follow the new instructions without needing further review and approval by the FAA. The logic behind this is, while the entire program (to include the instructions) is technically "FAA Approved," and therefore subject to review, the FAA will almost always accept an unchanged manufacturer's procedure without further review. Therefore, the use of this option would save both the CH and the FAA a lot of needless administrative effort if a CH always intends to follow the latest manufacturer's instructions. The FAA will typically find that following the latest version of the manufacturer's instructions to be in the best interest of safety. This might also be desirable when a CH has multiple aircraft on an AAIP and wants to keep the inspections "in-sync" rather than possibly having slightly different programs for each one (due to the differences in the manufacturer's programs at the various times of submission). Note, however, this option might not be appropriate if there was some logical reason why the manufacturer's process would be inadequate given a CH's specific circumstances or when the manufacturer's instructions for a particular inspection have been modified for use in the AAIP.

10.1.3 The CH may also use program content that is "mixed-and-matched," meaning that some instructions can be "as revised" where others are not, as long as this is clearly identified in the AAIP. Whichever method is used, it should be clearly defined and described in the description of the AAIP and clearly identified whenever the instructions have been incorporated by reference.

Note: Only the inspection procedures can be covered under the "as revised" provisions mentioned above. The specific inspection time intervals are always defined and approved as part of the inspection program and cannot be changed without submitting an AAIP revision to the FAA.

10.1.4 AAIPs that incorporate the manufacturer's recommended inspection program should describe how manufacturer's Service Bulletins (SB) will be determined to be applicable

and accomplished. SBs that require maintenance are not considered mandatory by the FAA unless they are otherwise indicated to be so through an FAA-issued AD, or other FAA rule. However, SBs that require inspections may be applicable if they were issued on or before the date the manufacturer's program was incorporated into the AAIP. If the entire manufacturer's recommended program is incorporated by reference into the AAIP, the instructions in that manufacturer's program would become mandatory, unless the CH instructions and procedures in the program provide information to address SB applicability. (Refer to AC 20-77, Use of Manufacturers' Maintenance Manuals, for more information on this subject.)

10.1.5 For equipment and systems not covered under the aircraft manufacturer's inspection program, the AAIP should provide for a detailed inspection of the installed components, wiring, placards, and related hardware to ensure integrity of the equipment and/or systems.

10.1.6 A thorough, indepth inspection may require an operational check. These checks are appropriate for systems where failures are not normally detectable without the use of test equipment or where accuracy or quality of operation is not normally evident to a flightcrew.

10.1.7 Items of emergency equipment may require inspections in accordance with the CH's OpSpecs and/or by the manufacturer, and as applicable in 14 CFR. These standards may require the equipment to be inspected by the equipment manufacturer or by a person authorized under 14 CFR parts 43 and 145.

10.1.8 Unlike a Continuous Airworthiness Maintenance Program (CAMP), the AAIP is not a program that covers both inspection and maintenance. As such, maintenance tasks that fall outside the scope of inspection would not be included in the AAIP. The AAIP would not require the use of manufacturer's recommended inspection programs that include recommended maintenance tasks, such as overhaul or replacement requirements. However, should the CH elect to incorporate these maintenance tasks, as well as those required by regulation (refer to § 135.421) and any applicable airworthiness limitations (AL), they would not be prohibited from including these tasks.

10.1.9 The program must include the inspection criteria as provided in any applicable instructions for continued airworthiness (ICA), including those that pertain to any repairs or alterations previously accomplished (§ 43.13(a)). The current editions of the following documents contain information about ICAs:

- AC 43-210, Standardized Procedures for Obtaining Approval of Data Used in the Performance of Major Repairs and Major Alterations.
- FAA Order 8100.17, Field Approval Delegation Handbook.
- FAA Order 8300.16, Major Repair and Alteration Data Approval.

10.2 Modified Manufacturer's Programs. The CH may modify manufacturer's inspection programs to suit their needs. The modifications can be done to work forms, published

methods, techniques, practices, standards, or to maintenance/inspection intervals. Modifications to manufacturer's instructions should be clearly identified and provide an equivalent level of safety to those in manufacturer's recommended programs.

10.3 CH-Developed Program. The CH develops and publishes this type of program in its entirety. It must include methods, techniques, practices, and standards necessary for proper accomplishment of the program (§ 43.13). An existing progressive inspection program (§ 91.409(d)) may be converted to an AAIP. If electing to use "windows" in its program, the CH may adapt scheduling procedures to allow for windows for no more than (plus or minus) 20 flight-hours, 20 flight (or component) cycles, or 1 calendar-month, as appropriate.

11 CORROSION CONTROL. All aircraft are prone to some degree of corrosion. Corrosion-prone areas are susceptible to finish damage, moisture entrapment, or both. The basic corrosion prevention philosophy is to conduct periodic inspections to ensure that the protective finishes remain intact and that all drain holes and pathways remain open. The FAA strongly recommends that Corrosion Prevention and Control Programs (CPCP), structural modification programs, and supplemental structural inspection type programs be included in the inspection program. If a manufacturer's program does not exist for corrosion control, the CH may elect to develop their own program.

12 MANUFACTURER'S SERVICE PUBLICATIONS. Refer to AC 20-77 and FAA Order 8620.2, Applicability and Enforcement of Manufacturer's Data. These documents list situations when SBs would be regulatory.

13 PROGRAM EVALUATION AND REVISION.

13.1 AAIP Revisions. Procedures and instructions for making any revisions to the AAIP shall be present in the program. These procedures would be utilized whenever the CH, or the FAA, determines that revisions to the AAIP are necessary and requires that the CH make the appropriate changes (refer to § 135.419(f)). The CH should evaluate the inspection program or revision prior to submitting it to the FAA for review and approval.

13.1.1 This evaluation should establish, at a minimum, that the program applies to the aircraft make, model, configuration, and modification status, and that it encompasses the avionics installation and all aircraft equipment.

13.1.2 The program should also be evaluated for its suitability with regard to the geographic location of the CH. Evaluation should include climate, stage length (flight time between landings), and the provisional inspections for special purpose operations.

13.1.3 The basis for revision to a program, in preparation for initial FAA approval or for an ongoing AAIP, may be service experience, tests, or inspections to determine serviceability or condition, disassembly analysis, modifications, and changes in environment.

13.1.4 Revisions predicated on tests, inspections, and disassembly analysis should be coordinated with the FAA to accommodate its observation of the conditions under analysis. The CH should provide historical data for revisions based on service experience.

13.1.5 The program should have procedures to ensure that the inspection is not broken up or "segmented" once an inspection phase or check has been started. The inspection should be completed and the aircraft approved for return to service prior to resuming flight operations.

13.2 Web-Based Programs. CHs that choose to utilize web-based contracted computerized maintenance/inspection programs may do so, but recognize that the FAA does not approve the contract vendor's program. The computerized database is used to support the documentation and recordation of inspections that are accomplished in accordance with the CH's approved program. The procedures unique to these computerized programs, such as security to prevent unauthorized modifications of records, protection of data, etc., should be integrated into the procedures and instructions for administration of the program.

14 CH'S MANUAL. The regulations require that the CH include the AAIP in its manual (§ 135.419(e)). The CH's manual should include a section or appendix that is clearly identified as the approved program. The CH's manual procedures for discrepancy recordation, correction, and document retention should coincide with the procedures for recordkeeping contained in the AAIP. The CH's manual should provide instructions that serve to facilitate administration of the program by the CH and to direct its accomplishment by mechanics or repair stations. It should include copies of the work forms and schedule of maintenance/inspection intervals, or it should identify and reference the forms and schedule if they are located elsewhere in the CH's manual system. The CH's manual should also include or reference instructions for methods, techniques, and practices to accomplish the maintenance/inspection tasks. The manual should also contain the task standards as well as a list of the necessary tools and equipment needed to perform maintenance/inspection.

Note: In the case of a single pilot operator that is not required to have a manual per § 135.21, the AAIP should be submitted as a standalone document.

15 PROGRAM APPROVAL.

15.1 FAA Approval. The responsible Flight Standards office will identify the program as FAA-approved through use of an approval stamp and signature on the control pages of the program. Typically, the control pages, referred to as the List of Effective Pages (LEP), will identify each page and the revision number and date of that page. The stamping of approval and the signature of the reviewing FAA inspector provides a positive means of revision control and FAA approval.

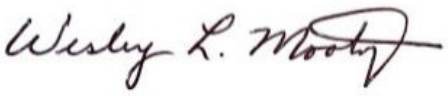
15.2 Individual Approval. Individual approval is required for each CH and for each aircraft. There is no provision for an individual approval for all make/model aircraft used by one

CH or for approval of a specific program for use by several CHs. Therefore, the AAIP cannot be transferred from one entity to another.

15.3 AAIP Authorization. Following the approval of the program, the FAA and the CH will sign the electronic OpSpec D073, which authorizes the use of the AAIP for the listed aircraft identified by serial number and registration number. These OpSpecs are required documents that authorize the CH to operate aircraft that are inspected under an AAIP.

15.4 Additional Maintenance Requirements. If the additional maintenance requirements are incorporated into the AAIP, the OpSpecs and program description should state this. FAA approval is required prior to use.

16 AC FEEDBACK FORM. For your convenience, the AC Feedback Form is the last page of this AC. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this AC on the Feedback Form.



Wesley L. Mooty
Acting Deputy Executive Director, Flight Standards Service

Advisory Circular Feedback Form

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by contacting the Flight Standards Directives Management Officer at 9-AWA-AFB-120-Directives@faa.gov.

Subject: AC 135-10C, Approved Aircraft Inspection Program

Date: _____

Please check all appropriate line items:

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows:

_____

_____

☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

_____

_____

☐ Other comments:

_____

_____

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____