



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Part 135: Additional Maintenance
Requirements for Aircraft Type
Certificated for Nine or Less
Passenger Seats

Date: 3/28/08

AC No: 135-7A

Initiated by: AFS-330

Change:

1. PURPOSE.

a. This advisory circular (AC) provides information for establishing methods acceptable to the Administrator for compliance with the additional maintenance requirements of Title 14 of the Code of Federal Regulation (14 CFR) part 135 for certain air carriers and commercial operators.

b. This AC gives part 135 certificate holders an acceptable means to complying with the regulations; however, it is not the only means. This AC is not mandatory and does not constitute a regulation. When this AC uses mandatory language (e.g., “must” or “may not”) it is paraphrasing a regulatory requirement or prohibition. When this AC uses permissive language (e.g., “should” or “may”) it describes an acceptable means, but not the only means, for complying with regulations. If you use the methods described in this AC to comply with a regulatory requirement, you must follow them in all respects.

2. APPLICABILITY. The information in this AC applies only to 14 CFR part 135 certificate holders that use aircraft that are type certificated for nine or less passenger seats, excluding the pilot seat.

3. CANCELLATION. AC 135-7, FAR 135: Additional Maintenance Requirements for Aircraft Type Certificated for Nine or Less Passenger Seats, dated October 24, 1978 is canceled.

4. DEFINITION. The term “maintenance,” as used in this AC and in 14 CFR part 135, § 135.421, means inspection, overhaul, repair, preservation, and the replacement of parts. The definition excludes preventive maintenance, as defined in 14 CFR part 1.

5. RELATED CFR REFERENCES.

- Title 14 CFR parts 1, 23, 25, 27, 29, 33, 35, 43, 91, 119, and 135.
- Federal Aviation Administration (FAA) Order 8900.1, Flight Standards Information Management System (FSIMS), Volume 3, Chapter 18, Operations Specifications.

6. BACKGROUND. The FAA amendment to part 135 became effective on December 1, 1978. The amended part 135 requires certificate holders using aircraft that are type certificated with nine or less seats (excluding any pilot seat) to comply with additional maintenance requirements

for each aircraft engine, propeller, rotor, and each item of required emergency equipment. Title 14 CFR part 119, § 119.49(c)(9), as amended, requires operators of those aircraft to list the additional maintenance requirements on their operations specifications (OpSpecs). Prior to the amendment, part 135 only required an aircraft to be inspected in accordance with the provisions of part 91 or an approved inspection program under part 135. In addition to the inspection requirements, the amended rule sets forth maintenance requirements that may include the overhaul and replacement of parts at specific time intervals.

7. DISCUSSION. Part 135, § 135.421 sets forth additional maintenance requirements for each item of required emergency equipment and each aircraft engine, propeller, and rotor. The manufacturer of an aircraft, aircraft engine, propeller, or rotor is required by 14 CFR part 21, § 21.50 to make available manuals or instructions that it considers essential for proper maintenance of its product. Section 135.421 requires a certificate holder to maintain equipment in accordance with a maintenance program recommended by the manufacturer. It also allows a certificate holder to use a program other than the manufacturer's, if approved by the Administrator. This provision allows an operator to use its experience from maintaining equipment to adjust inspection and overhaul times different than those recommended by the manufacturer of the referenced products. (Refer to 8900.1, Volume 3, General Technical Administration, Chapter 38, Evaluate Part 135 (Nine or Less) Approved Aircraft Inspection Program, paragraph 3-3733 for details.)

a. The maintenance requirements in part 135 are additional to the requirements in 14 CFR parts 43 and 91. Certificate holders may accomplish the additional maintenance requirements in accordance with other maintenance required by the regulations. The additional requirements are not intended to duplicate any existing inspection requirements. In most cases, the manufacturer's recommended maintenance program frequencies may be the same as those required by a specific regulation (e.g., part 91, § 91.409 requires an aircraft to have a 100-hour inspection when it is used to carry persons for hire). If a manufacturer's program recommends a 100-hour inspection, certificate holders may perform the inspection of the additional maintenance and work items concurrently with the 100-hour inspection.

b. After coordinating with the FAA certificate-holding district office (CHDO), the certificate holder may substitute the following inspection periods for those required by the manufacturer:

- (1) A progressive inspection program established under § 91.409(d).
- (2) An inspection program required by § 91.409(e).
- (3) An approved aircraft inspection program under part 135, § 135.419.

c. If time deviations are involved, the CHDO may approve the programs in lieu of the manufacturer's recommended program if the operator supplies the proper justification with its request. The CHDO usually bases its acceptance on satisfactory service or industry experience, and a determination that the deviation will not adversely affect the airworthiness of the aircraft.

8. MANUFACTURER RECOMMENDED PROGRAMS.

a. A maintenance program might be recommended by either:

- (1)** The manufacturer of the aircraft;
- (2)** The manufacturer of each item of required emergency equipment; or
- (3)** The manufacturer of each aircraft engine, propeller, and rotor.

b. In most cases the aircraft manufacturer's maintenance manual contains the frequency and the extent of maintenance necessary for the aircraft engine, propellers, and rotors. It may also include the frequency of overhauls and the life limit of components that would require replacement.

c. If the aircraft manufacturer's maintenance manual does not contain all the maintenance and inspection requirements, then certificate holders should use the instructions issued by the manufacturer of the aircraft engine or propeller. Part 33, § 33.5 requires the manufacturer of the aircraft engine to provide instructions for the installation, servicing, and maintenance of its product; part 35, § 35.3 imposes the same requirement on the propeller manufacturer.

d. An emergency equipment manufacturer does not always have to provide maintenance programs with its equipment, but in most cases the manufacturer recommends a maintenance program for its product. This program may be acceptable for use by a certificate holder after review by the CHDO. Certain emergency equipment items are required by other rules or Federal regulations to be maintained, inspected, and tested at specific periods (e.g., emergency locator transmitter, high-pressure cylinders). Certificate holders should include those intervals in the maintenance program for emergency equipment.

9. PROGRAMS APPROVED BY THE ADMINISTRATOR. Section 135.421 allows for the use of a maintenance program other than one recommended by the manufacturer with approval from the Administrator. This provision allows a certificate holder to develop a program for each aircraft engine, propeller, rotor, and each item of emergency equipment.

a. A certificate holder may request approval to use only part of a manufacturer's recommended program. A certificate holder may request an increase in the time between overhauls, or may request an extension of specific inspection items to make those items compatible with an inspection program established for its aircraft.

b. The FAA normally considers changes in time limitations based on satisfactory service or industry experience (when sufficient justification can be furnished), and whether the change will adversely affect the aircraft's airworthiness.

c. The inspection period established for emergency equipment should ensure that it is serviceable, and that all components of the emergency equipment are complete. The emergency equipment is expected to remain in that condition until the next inspection or when an emergency situation arises.

d. Parts listed as life limited on the FAA type certificate data sheets, in the Aircraft Flight Manual, or in other documents, are not eligible for a time increase unless those items are revised by the FAA on the FAA-approved documents that set forth the times for the replacement of those life-limited parts.

10. OPSPECS—AIRCRAFT MAINTENANCE. Section 119.49(c)(9) outlines the requirement to show time limitations on OpSpecs for additional maintenance requirements. Section 135.421 requires that the certificate holder use a program that the manufacturer recommends, or use a program that the Administrator has approved. To comply with § 119.49(c)(9), the program that is used by a certificate holder should either be referenced or described on the certificate holder's OpSpecs. The certificate holder is responsible for providing the technical content for its OpSpecs and to submit them to the FAA. The FAA encourages certificate holders to have preliminary discussions with FAA inspectors during the development or amendment of its OpSpecs. In many instances, time and effort may be saved by informally resolving any items that could delay the formal approval of OpSpecs—aircraft maintenance. It is also acceptable to have the additional maintenance items that are included in accepted or approved inspection programs referenced on the certificate holder's OpSpecs. When a referenced inspection program does not include the entire manufacturer's recommended checks, inspections, and overhaul time periods, those items may be included on the certificate holder's OpSpecs. It is important that the documents and manuals that are referenced identify all of the required components.

11. PREPARATION OF OPSPECS. Using the automated OpSpecs system, principal inspectors prepare OpSpecs with information the certificate holder provides.

a. OpSpecs can either reference a manual (certificate holder manual, manufacturer's manual, progressive inspection manual, etc.) or it may list time limitations for overhaul, inspection, and checks of aircraft engines, propellers, etc.

b. When referencing a manufacturer's data, the manual or document should be identified by the manufacturer's code, symbol, chapter, and or pages, or by any traceable identifier.

c. A certificate holder developing its own maintenance program must show the checks, inspections, and overhaul time limitations to be used in the OpSpecs. The items can be listed by referencing the major components of the ATA-100 code for the purpose of standardization. As mentioned earlier in this AC, a certificate holder may request approval to deviate from specific parts of a manufacturer's program. In cases where a change has been justified, the approval must be shown on the OpSpecs.

ORIGINAL SIGNED by
John M. Allen for

James J. Ballough
Director, Flight Standards Service