

Entries

43.5 Approval for return to service after Mx, prev. Mx, rebuilding, or alteration.

No person may approve for return to service any aircraft, airframe, aircraft engine, propeller, or appliance, that has undergone mx, prev. mx, rebuilding, or alteration unless—

- (a) The maintenance record entry required by 43.9 or 43.11 has been made;
- (b) Repair or Alteration form is executed
- (c) Revising operating limitations or flight data as required

Standards & Methods

43.13 Performance rules (general)

- (a) Each person performing maintenance, alteration, or preventative maintenance on aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's mx manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices.

How we do Inspections

43.15 Additional performance rules for inspections

- (a) **General.** Each person performing an inspection required by Part 91, 125, or 135 of this chapter shall—
 - (1) Perform the inspection so as to determine whether the aircraft, or portion(s) thereof under inspection, meets all applicable airworthiness requirements... [including ADs!]
 - (c) **Annual and 100-hour inspections**
 - (1) Each person performing an annual or 100-hour inspection shall use a checklist while performing the inspection... Must include scope and detail of the items contained in Appendix D.
 - (2) Each person approving a reciprocating-engine-powered aircraft... shall, before approval [run an engine(s) checks in accordance with mnfr recs]

Mx Record Entries (Non-Insp)

43.9 Content, form, and disposition of maintenance, preventative maintenance, rebuilding, and alteration records (except inspections)

- (a) **Maintenance record entries.** Except as provided in paragraphs (b) and (c) of this section, each person who maintains, performs preventative maintenance, rebuilds, or alters an aircraft, airframe, aircraft engine, propeller, appliance, or component part shall make an entry in the maintenance record of that equipment containing the following information
 - 1) A description of work performed (or reference to data acceptable to the Administrator)
 - 2) The date of completion of the work performed
 - 3) The name of the person performing the work if other than the person specified in paragraph (a)(4)
 - 4) If the work performed on the aircraft, airframe, aircraft engine, propeller, appliance, or component part has been performed satisfactorily, the signature, cert #, and kind of cert held by the person approving the work. The signature constitutes the approval for return to service only for the work performed...
- (d) In addition to the entry required by paragraph (a), major repairs and major alterations shall be entered on a form, and the form disposed of, in the manner prescribed in appendix B, by the person perf the work

Mx Record Entries (Inspections)

43.11 Content, form, and disposition of records for inspections conducted under Parts 91 and 125 and 135.411(a)(1) and 135.419 of this chapter

- (a) **Maintenance record entries.** The person approving or disapproving for return to service an aircraft, airframe, aircraft engine, propeller, appliance, or component part after any inspection performed in accordance with part 91, 125, 135.411(a)(1), or 135.419 shall make an entry in the maintenance record of that equipment containing the following information:
 - 1) The type of inspection and a brief description of the extent of the inspection
 - 2) The date of the inspection and aircraft total time in service
 - 3) The signature, the cert #, and the kind of cert held by the person approving or disapproving for return to service the aircraft, airframe, aircraft engine, propeller, appliance, component part, or portions thereof.
 - 4) Except for progressive inspections, if the aircraft is found to be airworthy and approved for return to service, the following or a similarly worded statement—"I certify that this aircraft has been inspected in accordance with (insert type) inspection and was determined to be in an airworthy condition."
 - 5) Except for progressive inspections, if the aircraft is not approved for return to service because of needed maintenance, noncompliance with applicable specifications, airworthiness directives, or other approved data, the following or a similarly worded statement—"I certify that this aircraft has been inspected in accordance with (insert type) inspection and a list of discrepancies and unairworthy items dated (date) has been provided for the aircraft owner or operator."

Life Limited Parts Disposition

43.10 Disposition of life-limited aircraft parts

- (c). Each person who removes a life-limited part from a type-certificated product must ensure that the part is controlled using one of the methods in this paragraph. The method must deter the installation of the part after it has reached its life limit. Acceptable methods include:
 - 1) Record keeping system that substantiates the part #, serial #, and current life status of the part
 - 2) Tag or record attached to part that includes the part #, serial #, and current life status of the part
 - 3) Non-permanent marking showing current life status
 - 4) Permanent-marking showing current life status
 - 5) Segregation ensuring physical separation
 - 6) Mutilation or any "Other" (approved methods)

Bad Behavior

43.12 Maintenance records: Falsification, reproduction, or alteration.

- (a) No person may make or cause to be made:
 - 1) Any fraudulent or intentionally false entry in any record or report that is required to be made, kept, or used to show compliance with any requirement under this part;
 - 2) Any reproduction, for fraudulent purpose, of any record or report under this part; or
 - 3) Any alteration, for fraudulent purpose, of any record or report under this part.
- (b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking the applicable cert(s)

Owner / Operator Maintenance Responsibilities

91.403 General.

- (a) The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an airworthy condition, including compliance with Part 39
- (b) Mx, prev. mx, and alterations must be done as per 91 & 43
- (c) You must comply with any airworthiness limitations as per mx manual or ICA
- (d) STC alterations require owning STC or written permission from the holder

91.405 Maintenance Required.

Each owner or operator of an aircraft:

- (a) Shall have that aircraft inspected and have discrepancies repaired
- (b) Shall ensure mx personnel make entries in the mx records
- (c) Shall have any inoperative equipment by 91.213(d)(2) repaired, replaced, removed or inspected
- (d) Placard inop equipment as per 43.11

91.407 Operation after Mx, prev. Mx, rebuilding, or alteration.

- (a) No person may operate an aircraft that has undergone Mx, Prev Mx, rebuilding, or alteration unless:
 - (1) It has been approved for return to service by a person authorized under 43.7 and
 - (2) The Mx Record entry required by 43.9 or 43.11 (as applicable) has been made

Inspection Requirements

91.409 Inspections.

- (a) Except as provided in para (c) of this section, no person may operate an aircraft unless, within the preceding 12 calendar months, it has had—
 - 1) An annual inspection in accordance with Part 43 of this chapter and has been approved for return to service by a person authorized by 43.7 of this chapter; or
 - 2) An inspection for the issuance of an airworthiness certificate in accordance with Part 21 of this chapter. No inspection may be performed under paragraph (b) of this section may be substituted for any inspection required by this paragraph unless it is performed by a person authorized to perform annual inspections and is entered as an "annual" inspection in the required mx records
- (b) Except as provided in para (c) of this section, no person may operate an aircraft carrying any person (other than a crewmember) for hire, and no person may give flight instruction for hire in an aircraft which that person provides, unless within the preceding 100 hours of time in service the aircraft has received an annual or 100-hour inspection and been approved for return to service in accordance with Part 43 of this chapter or has received an inspection for the issuance of an airworthiness certificate in accordance with Part 21. The 100-hour limitation may be exceeded by not more than 10 hours while en route to reach a place where the inspection can be done. Excess time must be included in computing next 100 hrs
- (c) Paragraphs (a) and (c) do not apply to... [special flight permits; AAIP under 125/135; aircraft subject to (d) or (e) or turbine-powered rotorcraft under (e)]
- (d) Progressive inspection...
- (e) Large airplanes (to which part 125 is not applicable), turbojet multiengine airplanes, turbopropeller-powered multiengine airplanes, and turbine-powered rotorcraft
- (f) Selection of inspection program under (e)
 - 1) Continuous airworthiness inspection program (CAMP)
 - 2) An approved aircraft inspection program (AAIP)
 - 3) A current inspection program recommended by the mnfr
 - 4) Inspection program approved by Administrator under (g)
- (g) Inspection program approved under (e) of this section

Altimeter Test & Inspection

91.411 Altimeter system and altitude reporting equipment tests and inspections

- (a) No person may operate and airplane, or helicopter, in controlled airspace under IFR unless
 - (1) Within the preceding 24 calendar months, each static pressure system, each altimeter instrument, and each automatic pressure altitude reporting system has been tested and inspected and found to comply with appendices E and F of part 43

ATC Transponder Test & Inspection

91.413 ATC transponder tests and inspections

- (a) No person may use an ATC transponder that is specified in 91.215(a), 121.345(c), or 135.143(c) of this chapter unless, within the preceding 24 calendar months, the ATC transponder has been tested and inspected to comply with Appendix F of Part 43

Maintenance Record Requirements

91.417 Maintenance records.

- (a) Except for work performed in accordance with 91.411 and 91.413, each registered owner or operator shall keep the following records for the periods specified in para (b)
 - (1) Records of the mx, preventative mx, alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft. The records must include—
 - i. A description of the work performed (or reference to data acceptable to the Administrator); and
 - ii. The date of completion of the work performed; and
 - iii. The signature, and cert # of the person approving the aircraft for return to service.
 - (2) Records containing the following information:
 - i. The total time in service of the airframe, each engine, each propeller, and each rotor.
 - ii. The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.
 - iii. The time since last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis
 - iv. The current inspection status of the aircraft, including the time since the last inspection required by the inspection program under which the aircraft and its appliances are maintained.
 - v. The current status of applicable airworthiness directives (AD) and safety directives including, for each, the method of compliance, the AD or safety directive # and revision date. If the AD or safety directive involves recurring action, the time and date when the next action is required.
 - vi. Copies of the forms prescribed by 43.9(d) for each major alteration to the airframe and currently installed engines, rotors, propellers, and appliances.

ELT Inspection

91.207 Emergency locator transmitters.

- (a) No person may operate a US reg. civil airplane unless—
 - (1) There is attached to the airplane an approved automatic type ELT that is in operable condition...
 - (b) Each ELT required by para (a) must be attached to the airplane in such a manner that the probability of damage to the transmitter in the event of crash impact is minimized
 - (c) Batteries used in ELTs required by (a) and (b) of this section must be replaced (or recharged, if rechargeable) —
 - 1) When the transmitter has been in use for > 1 cum. hour
 - 2) When 50% of their useful life (or useful charge) has expired... The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitter and entered into the aircraft mx record
- (d) Each ELT required by (a) of this section must be inspected within 12 calendar months after the last insp.