

**Air Tractor Inc.**

940-564-5616

P.O. Box 485

940-564-5612 (Fax)

Olney, Texas 76374

www.airtractor.com

**SERVICE INFORMATION LETTER No. 802-0118****REVISIONS:****Initial Release – 3/7/2025****SUBJECT**

AT-802 / AT-802A Inspection and Maintenance Requirements

**APPLICABILITY**

All AT-802 and AT-802A airplanes.

**SUMMARY:**

Recently a new version of the AT-802 / AT-802A Owner's Manual has been approved and published. The new version is dated 12/12/2024 and was published on 2/24/2025.

This new Owner's Manual version contains different language for inspection requirements.

This Service Information Letter provides background information about the changes and why they were made as well as recommendations on how to implement inspection and maintenance programs going forward.

The information in this Service Information Letter pertains primarily to operators in the United States. Operators outside of the United States should review the requirements of their airworthiness authority.

**BACKGROUND:**

The AT-802 / AT-802A Owner's Manual has always provided recommended inspections to be performed at certain hourly and calendar time periods. It was and remains Air Tractor's opinion that performing these inspections at the listed intervals is an effective way to ensure that the aircraft is maintained appropriately.

Most AT-802 and AT-802A aircraft are operated under 14 CFR Part 137. Part 137 does not provide aircraft maintenance or inspection requirements unless the aircraft is operated over congested areas as described in §137.53(c)(1)(i). In contrast, Part 135, Subpart J requires implementation of inspection and maintenance programs.

Because Part 137 does not generally provide applicable inspection and maintenance requirements, Part 91 and Part 43 become the applicable sources of maintenance and inspection requirements.



Most AT-802 and AT-802A operators and mechanics, FAA inspectors, and Air Tractor itself, have significant experience with smaller models of Air Tractors and other general aviation aircraft. For these aircraft, §91.409(a) states that:

*... 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 ...*

Simply put, for these aircraft, **an annual inspection is required**. By extension, **only an annual inspection is required** as long as the aircraft is not used for flight training or for some other purpose that has additional requirements.

Due to familiarity with these requirements and the similarity of the AT-802 / AT-802A with, for instance, the AT-502, it has been assumed throughout the industry that the requirements of §91.409(a) are applicable for the AT-802 / AT-802A.

It has recently been determined that this assumption was incorrect.

#### **CORRECTED INTERPRETATION OF REGULATIONS:**

Within the general definitions section in Part 1 (§1.1), a Large Aircraft is defined as follows:

*Large aircraft means aircraft of more than 12,500 pounds, maximum certificated takeoff weight.*

The AT-802 and AT-802A both have a maximum takeoff weight of 16,000 lb<sup>1</sup> so they are a large aircraft per the regulations.

Returning to Part 91, §91.409(e) becomes applicable for the AT-802 / AT-802A because they are large aircraft. §91.409(e) states in part:

*... No person may operate a large airplane ... unless the replacement times for life-limited parts specified in the aircraft specifications, type data sheets, or other documents approved by the Administrator are complied with and the airplane ... including the airframe, engines, propellers ... appliances, survival equipment, and emergency equipment, is inspected in accordance with an inspection program selected under the provisions of paragraph (f) of this section...*

---

<sup>1</sup> Unless it is being operated for the Special Purpose of Surveying and Patrolling. For this purpose, the maximum takeoff weight is 14,800 lb.



§91.409(f)(3) and §91.409(f)(4) provide the following program options:

- (3) A current inspection program recommended by the manufacturer*
- (4) Any other inspection program established by the registered owner or operator of that airplane...approved by the Administrator*

**Meaning that an AT-802 / AT-802A operator may select the Air Tractor Owner's Manual "program" or create their own which must be approved by the FAA.**

It was this additional understanding of the regulations that caused the changes to the inspection section in the 12/12/24 version of the Owner's Manual. As it was written, the hour-based time inspections would be required to be performed at the interval specified per §91.409(e) because they are part of the manufacturer's recommended inspection program.

Air Tractor recognizes that AT-802 / AT-802A's have been successfully maintained with an annual inspection program per §91.409(a). Therefore, the inspection portion of the manual has been reworded such that Air Tractor:

- Suggests performing all of the inspections at the specified intervals  
and
- Recommends that all of the 12-month, 100-hour, 200-hour and 300-hour inspections be performed at least once every 12 months

**The "recommended" action of performing the inspections at least once every 12 months becomes the required action per §91.409(e) and §91.409(f)(3) unless the operator uses another approved maintenance program per §91.409(f)(4).**



### **LOGBOOK ENTRIES AND TERMS:**

An interesting change to the language to be used concerning AT-802 and AT-802A's is that since the aircraft is not a candidate for "Annual" inspections per §91.409(a), the 12-month(s) inspection should no longer be called an "Annual" even though it is performed annually.

With this language change, logging of inspections will need to be slightly different.

For instance, if you elect to perform the 100-hour, 200-hour and 300-hour inspections concurrently with the 12-month inspections, the logbook entry should resemble:

I certify that this aircraft has been inspected in accordance with the 12-Month, 100-hour, 200-hour and 300-hour inspections IAW AT-802/AT-802A Owner's Manual 03-0121, dated 12/12/24, and was determined to be in airworthy condition.

Such an entry should replace the typical Annual entries which have referenced Appendix D of Part 43.

If the aircraft is inspected at the intervals noted in the Owner's Manual, the 100-hour, 200-hour and 300-hour inspections will have their own entries throughout the year. They may of course be performed, even if not due, in conjunction with the 12-month inspection to reset their due times if it is convenient to do so.

The time-based inspections (400-hour, 800-hour, 900-hour, 1,000-hour, 1350/5000 hour, 2,000-hour, 2-Year) which are specified to occur at intervals that cannot be deferred and combined with the 12-month inspection, must be logged individually if they become due. They may also be performed in conjunction with the 12-month inspection to reset their due time but this must occur before they become due.



## **WHAT AM I ACTUALLY SUPPOSED TO DO TO BE IN COMPLIANCE?:**

### **1. Identification of Maintenance Program**

Assuming that the manufacturer's recommended program will be used, a logbook entry identifying the selected program must be added as follows:

This aircraft is to be inspected in accordance with the Air Tractor AT-802/AT-802A Owner's Manual 03-0121 Recommended Inspection Program, Section 3 – Scheduled Inspections, in accordance with 14 C.F.R. § 91.409(f)(3). (PERSON RESPONSIBLE'S NAME AND ADDRESS) is responsible for scheduling the inspections required by this program.

The person who will be responsible for tracking that the inspection program is being followed must be identified. Identification of this person does not need to be in the logbook itself. The logbook may reference another document that is suitably controlled and available.

### **2. Determine if the Aircraft Has Been Inspected in Accordance with the Program**

Firstly, if the aircraft has been inspected as described in the previous version of the Owner's Manual, specifically at the prescribed intervals, there is no additional action necessary. You are already in compliance with the requirements of the new Owner's Manual. You should verify that the logbook entries state that this is the case and that the latest return to service entry does not refer to an Annual Inspection per Appendix D of Part 43.

Otherwise:

Review the requirements of the inspection program in the Owner's Manual.

If your aircraft has recently had an "annual" inspection, compare what was inspected with what is required by the 12-month, 100-hour, 200-hour and 300-hour inspections in the Owner's Manual. Refer to the Section "COMPARISON OF ANNUAL AND 12-MONTH AIRFRAME INSPECTIONS" which shows how the two differently named inspections are practically the same inspection.



If it is determined that the previously performed “annual” inspection met the requirements of the 12-month, 100-hour, 200-hour, and 300-hour inspections, that logbook entry should be **corrected** to show that the Owner’s Manual inspections have been performed. This logbook entry should include the language described in the earlier section of this document. The entry should only be **corrected** by the individual who made the original logbook entry.

Is changing an entry like this illegal?

Air Tractor consulted with the FAA. The pertinent regulation is §43.12 which states:

*(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.*

The key word in each of these sections is **fraudulent**. The change to be made in this case is not fraudulent and is merely an administrative correction that brings the latest return to service entry into compliance with §91.409(e) and §91.409(f)(3) as they are now understood to apply to the AT-802 / AT-802A.

Review and determine if the inspections that cannot be deferred / combined with the 12-month inspection have been complied with. If it is determined that the aircraft is in compliance, verify that a suitable logbook entry exists for each.

### **3. Implement Program**

The manufacturer’s inspection program can be implemented in two ways.

- Combining the 12-month, 100-hour, 200-hour and 300-hour inspections and performing at least every 12 months. & Perform other inspections when specified.

Or

- Perform all inspections at the specified intervals.

Logbook entries should be made as described in this Service Information Letter to ensure that both in practice and documentation, compliance is maintained with §91.409.



**ENGINE, PROPELLER AND APPLIANCES:**

Air Tractor can only control our own documents and recommendations. Significantly, engine and propeller inspections are required at the intervals specified by the Pratt and Whitney Canada (PWC) and Hartzell recommended maintenance programs.

It should be noted that product and appliance overhauls at the OEM recommended TBO are not required. This is because §91.409(e) only requires **inspections** to be performed and that **life limited parts** listed in an approved Airworthiness Limitations section or document be replaced. The corollary to this is that Hot Section Inspections are required to be performed at the interval recommended by PWC. More discussion about the differences between inspections and overhauls can be found in FAA Order 8900.410 "*Clarification of Inspection and Overhaul Requirements Under Part 91*" which was issued in 2017 and later incorporated into FAA Order 8900.1, Volume 3, Chapter 15, Section 3-595 "*Overhaul*".

**CONCLUSION:**

This subject is complicated but can be simplified into the following main points:

- Inspections are to be performed per the AT-802/ AT-802A's Owner's Manual, 03-0121 unless an alternate inspection program is approved by the FAA per §91.409(f)(4).
- Annual Inspections per §91.409(a) and Appendix D of Part 43 are not applicable to the AT-802 / AT-802A.
- A Progressive Inspection program per §91.409(d) is not required because the inspection and maintenance program provided in the Owner's Manual is *a current inspection program recommended by the manufacturer* per §91.409(f)(3).
- All of the 12-month, 100-hour, 200-hour and 300-hour inspections provided in the Owner's Manual must be performed at least every 12 months, even if the aircraft has not been operated for more than the specified hours. (example: if the aircraft was operated for 250 hours in a year, it must still have the 300-hour inspection items inspected)
- Engine, propeller and appliance inspections must be performed at their OEM specified intervals.
- Engine, propeller and appliance overhauls are not required to be performed at the OEM specified intervals<sup>2</sup> (TBO) unless the aircraft is operated for a purpose that otherwise requires adherence to TBO.

---

<sup>2</sup> Refer to FAA Order 8900.410, Section (b).





**APPENDIX**

**COMPARISON OF ANNUAL AND 12-MONTH AIRFRAME INSPECTIONS:**

The scope and detail of an annual airframe inspection is defined by Appendix D to Part 43. This section provides a comparison between the 12-month inspection program provided in the 12/12/24 Owner’s Manual and Appendix D to Part 43.

Owner’s Manual inspections are not numbered definitively between subsections, so the following abbreviation notation is used. Inspections that are specified at intervals that cannot be combined with the 12-month inspection are highlighted as they should be performed at the noted interval.

<b>Sub Section</b>	<b>Inspection Number</b>	<b>Abbreviation</b>
General	1	G1
Propeller	1	P1
“”	2	P2
“”	3	P3
“”	4	P4
“”	5	P5
“”	6 (1000 hours)	P6
“”	7	P7
Engine and Mount	1	EM1
“”	2	EM2
“”	3	EM3
“”	4	EM4
“”	5	EM5
“”	6	EM6
“”	7	EM7
“”	8	EM8
“”	9	EM9
“”	10 (2 Years)	EM10
“”	11 (2 Years)	EM11
“”	12	EM12
“”	13	EM13
Electrical System	1	ES1
“”	2	ES2
“”	3	ES3
“”	4	ES4
“”	5	ES5
“”	6	ES6
“”	7	ES7
“”	8	ES8
“”	9	ES9
“”	10	ES10
Fuel System	1	FS1
“”	2	FS2
“”	3	FS3
“”	4	FS4



Sub Section	Inspection Number	Abbreviation
“”	5	FS5
“”	6	FS6
“”	7	FS7
“”	8	FS8
“”	9	FS9
“”	10	FS10
“”	11	FS11
“”	12	FS12
Oil System	1	OS1
“”	2	OS2
“”	3	OS3
“”	4	OS4
“”	5	OS5
“”	6	OS6
“”	7	OS7
“”	8	OS8
Power and Propeller Speed Coordinating System	1	PPS1
Induction System	1	IS1
“”	2	IS2
“”	3	IS3
“”	4	IS4
“”	5	IS5
Main Landing Gear and Brakes	1	MLG1
“”	2	MLG2
“”	3	MLG3
“”	4	MLG4
“”	5	MLG5
“”	6	MLG6
“”	7	MLG7
“”	8	MLG8
Tail Gear	1	TLG1
“”	2	TLG2
“”	3	TLG3
“”	4	TLG4
“”	5	TLG5
“”	6	TLG6
“”	7	TLG7
“”	8	TLG8
Fuselage Frame	1	FF1
“”	2	FF2
“”	3	FF3
“”	4	FF4
“”	5	FF5
Fuselage Fixed Skins	1	FFS1
“”	2	FFS2



Sub Section	Inspection Number	Abbreviation
“”	3	FFS3
“”	4	FFS4
“”	5	FFS5
Control System	1	CS
“”	2	CS
“”	3	CS
“”	4	CS
“”	5	CS
“”	6	CS
“”	7	CS
“”	8	CS
“”	9	CS
“”	10	CS
“”	11	CS
“”	12	CS
“”	13	CS
“”	14	CS
“”	15 (900 hours)	CS
“”	16	CS
“”	17	CS
“”	18	CS
“”	19	CS
Wings	1	W1
“”	2	W2
“”	3	W3
“”	4 (1000 hours)	W4
“”	5 (2000 hours)	W5
“”	6 (2000 hours)	W6
Ailerons	1	A1
“”	2	A2
“”	3	A3
“”	4	A4
“”	5	A5
Flaps	1	F1
“”	2	F2
“”	3	F3
“”	4 (400 hours)	F4
“”	5	F5
“”	6	F6
“”	7	F7
“”	8	F8
Empennage	1	E1
“”	2	E2
“”	3	E3
“”	4	E4
“”	5	E5
“”	6	E6



Sub Section	Inspection Number	Abbreviation
“”	7	E7
“”	8	E8
“”	9	E9
“”	10	E10
“”	11	E11
“”	12	E12
“”	13	E13
“”	14	E14
“”	15	E15
“”	16 (1350 or 5000 hours)	E16
Cockpit	1	C1
“”	2	C2
“”	3	C3
“”	4	C4
“”	5	C5
“”	6	C6
“”	7	C7
“”	8	C8
“”	9	C9
Dispersal Equipment	1	DE1
“”	2	DE2
“”	3	DE3
“”	4	DE4
“”	5	DE5
“”	6	DE6
“”	7	DE7
“”	8	DE8
“”	9	DE9
“”	10	DE10
“”	11	DE11
“”	12	DE12
“”	13	DE13
“”	14	DE14
“”	15	DE15
“”	16	DE16
“”	17	DE17
“”	18	DE18
“”	19	DE19
“”	20	DE20
Air Conditioning System	1	AC1
“”	2	AC2
“”	3 (800 Hours)	AC3
“”	4	AC4
Fire Gate Gen II	1 (6 Months)	FRDS2-1
“”	2 (6 Months)	FRDS2-2
“”	3 (6 Months)	FRDS2-3
“”	4 (3-5 Years)	FRDS2-4



Sub Section	Inspection Number	Abbreviation
“”	5 (3-5 Years)	FRDS2-5
Fire Gate Gen III	1	FRDS3-1

Traceability for specific items listed in Appendix D to Part 43 to inspection in the Owner’s Manual are shown below.

Appendix D to Part 43	12/12/24 Owner’s Manual
(a) Each person performing an annual or 100-hour inspection shall, before that inspection, remove or open all necessary inspection plates, access doors, fairing, and cowling. He shall thoroughly clean the aircraft and aircraft engine.	P2, EM1,IS1,W1,F1 It is also obvious and necessary to remove side skins and cow1 skins to perform practically every inspection task. Cleaning of the airplane and engine should be done much more often than once every year.
(b) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the fuselage and hull group:	definition
(b)(1) Fabric and skin—for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.	EM1, EM4, FFS2, FFS3, FFS4
(b)(2) Systems and components—for improper installation, apparent defects, and unsatisfactory operation.	EM1-8, ES1-10, FS1-12, OS1-6, PPS1, IS1-5, MLG1-9, TLG1-8, CS1-14 & 16-19, F1-8, E4, E5, E11, E12, E13, E14, E15, C2, C3, C7, C8, C9, DE1-20,AC1-4, FRDS2-1-5
(c) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the cabin and cockpit group:	definition
(c)(1) Generally—for uncleanliness and loose equipment that might foul the controls.	CS12
(c)(2) Seats and safety belts—for poor condition and apparent defects.	C5, C6, C9
(c)(3) Windows and windshields—for deterioration and breakage.	C1
(c)(4) Instruments—for poor condition, mounting, marking, and (where practicable) improper operation.	C7, C8
(c)(5) Flight and engine controls—for improper installation and improper operation.	EM3, CS1-9, CS11-13, PPS1
(c)(6) Batteries—for improper installation and improper charge.	ES1
(c)(7) All systems—for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.	EM1-8, ES1-10, FS1-12, OS1-6, PPS1, IS1-5, MLG1-9, TLG1-8, CS1-14 & 16-19, F1-8, E4, E5, E11, E12, E13, E14, E15, C2, C3, C7, C8, C9, DE1-20,AC1-4, FRDS2-1-5



Appendix D to Part 43	12/12/24 Owner's Manual
(d) Each person performing an annual or 100-hour inspection shall inspect (where applicable) components of the engine and nacelle group as follows:	definition
(d)(1) Engine section—for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks.	P2, EM2, EM5
(d)(2) Studs and nuts—for improper torquing and obvious defects.	P3, EM4, EM7
(d)(3) Internal engine—for cylinder compression and for metal particles or foreign matter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances.	N/A
(d)(4) Engine mount—for cracks, looseness of mounting, and looseness of engine to mount.	EM8
(d)(5) Flexible vibration dampeners—for poor condition and deterioration.	EM7
(d)(6) Engine controls—for defects, improper travel, and improper safetying.	EM3, PPS1
(d)(7) Lines, hoses, and clamps—for leaks, improper condition and looseness.	EM2, OS2
(d)(8) Exhaust stacks—for cracks, defects, and improper attachment.	EM1
(d)(9) Accessories—for apparent defects in security of mounting.	ES4, FS5, OS4
(d)(10) All systems—for improper installation, poor general condition, defects, and insecure attachment.	EM1-8, ES1-10, FS1-12, OS1-6, PPS1, IS1-5, MLG1-9, TLG1-8, CS1-14 & 16-19, F1-8, E4, E5, E11, E12, E13, E14, E15, C2, C3, C7, C8, C9, DE1-20, AC1-4, FRDS2-1-5
(d)(11) Cowling—for cracks, and defects.	EM1
(e) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the landing gear group:	definition
(e)(1) All units—for poor condition and insecurity of attachment.	MLG1-8, TLG1-8
(e)(2) Shock absorbing devices—for improper oleo fluid level.	N/A
(e)(3) Linkages, trusses, and members—for undue or excessive wear fatigue, and distortion.	MLG5-8, TLG5-8
(e)(4) Retracting and locking mechanism—for improper operation.	N/A
(e)(5) Hydraulic lines—for leakage.	MLG2-4
(e)(6) Electrical system—for chafing and improper operation of switches.	N/A



Appendix D to Part 43	12/12/24 Owner's Manual
(e)(7) Wheels—for cracks, defects, and condition of bearings.	MLG2
(e)(8) Tires—for wear and cuts.	MLG1, TLG1
(e)(9) Brakes—for improper adjustment.	MLG2, MLG3
(e)(10) Floats and skis—for insecure attachment and obvious or apparent defects.	N/A. Not equipped from Factory. See Supplements if equipped.
(f) Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components of the wing and center section assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, and insecurity of attachment.	W3
(g) Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components and systems that make up the complete empennage assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.	E1-15
(h) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the propeller group:	definition
(h)(1) Propeller assembly—for cracks, nicks, binds, and oil leakage.	P1
(h)(2) Bolts—for improper torquing and lack of safetying.	P3
(h)(3) Anti-icing devices—for improper operations and obvious defects.	N/A
(h)(4) Control mechanisms—for improper operation, insecure mounting, and restricted travel.	PPS1
(i) Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the radio group:	definition
(i)(1) Radio and electronic equipment—for improper installation and insecure mounting.	ES6
(i)(1) Wiring and conduits—for improper routing, insecure mounting, and obvious defects.	ES5
(i)(1) Bonding and shielding—for improper installation and poor condition.	N/A. Not equipped from factory. See Supplements if equipped.
(i)(1) Antenna including trailing antenna—for poor condition, insecure mounting, and improper operation.	N/A. Not equipped from factory. See Supplements if equipped.



Appendix D to Part 43	12/12/24 Owner's Manual
(j) Each person performing an annual or 100-hour inspection shall inspect (where applicable) each installed miscellaneous item that is not otherwise covered by this listing for improper installation and improper operation.	All

From this analysis, it is clear that the scope and detail of an annual inspection per Appendix D of Part 43 is practically the same as the Owner's Manual 12-month, 100-hour, 200-hour, and 300-hour inspections.

Similar to Appendix D to Part 43, Section J, Air Tractor recognizes the importance of a trained and qualified mechanic using their experience and knowledge to ensure that the aircraft is properly inspected and maintained. Air Tractor encourages maintainers to perform any and all inspections and maintenance they deem to be necessary regardless of whether or not it is listed in the recommended maintenance program.