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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0707; Directorate Identifier 2009-CE-035-AD; Amendment 39-16339; AD 2010-13-08]

RIN 2120-AA64

Airworthiness Directives; Air Tractor, Inc. Models AT-802 and AT-802A Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) to supersede AD 2006-08-09, which applies to all Air Tractor, Inc. (Air Tractor) Models AT-802 and AT-802A airplanes. AD 2006-08-09 currently requires you to repetitively inspect (using the eddy current method) the two outboard fastener holes in both of the wing main spar lower caps at the center splice joint for cracks and repair or replace any cracked spar cap. Since we issued AD 2006-08-09, we have determined we need to clarify the serial numbers (SNs) of the Models AT-802 and AT-802A airplanes affected by that AD. Additionally, we are adding an option of modifying the wing main spar lower caps to extend the safe life limit on the affected airplanes. Consequently, this AD would keep the actions of AD 2006-08-09, clarify the affected SNs, and add a modification option to extend the safe life limit. We are issuing this AD to detect and correct cracks in the wing main spar lower cap at the center splice joint, which could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

DATES: This AD becomes effective on July 28, 2010.

As of April 21, 2006 (71 FR 19994, April 19, 2006) the Director of the Federal Register approved the incorporation by reference of Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002; Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004; Snow Engineering Co. Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003; Snow Engineering Co. Service Letter 240, dated September 30, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 3, dated January 6, 2005; and Snow Engineering Co. Drawing 20995, Sheet 2, Rev. C, dated September 28, 2004, listed in this AD.

ADDRESSES: For service information identified in this AD, contact Air Tractor, Inc., P.O. Box 485, Olney, Texas 76374; telephone: (940) 564-5616; fax: (940) 564-5612; E-mail: airmail@airtractor.com; Internet: <http://www.airtractor.com>.

To view the AD docket, go to U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, or on the Internet at <http://www.regulations.gov>. The docket number is FAA-2009-0707; Directorate Identifier 2009-CE-035-AD.

FOR FURTHER INFORMATION CONTACT: Andy McAnaul, Aerospace Engineer, 10100 Reunion Pl., Ste. 650, San Antonio, Texas 78216; telephone: (210) 308-3365; fax: (210) 308-3370.

SUPPLEMENTARY INFORMATION:

Discussion

On July 31, 2009, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all Air Tractor Models AT-802 and AT-802A airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on August 6, 2009 (74 FR 39243). The NPRM proposed to supersede AD 2006-08-09 to clarify the SNs of the Models AT-802 and AT-802A airplanes affected by that AD. Additionally, we proposed to add an option of modifying the wing main spar lower caps to extend the safe life limit on the affected airplanes.

Comments

We provided the public the opportunity to participate in developing this AD. We received no comments on the proposal or on the determination of the cost to the public.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial corrections. We have determined that these minor corrections:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Costs of Compliance

We estimate that this AD affects 187 airplanes in the U.S. registry.

We estimate the following costs to do the inspection:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
\$500 to \$800	Not applicable	\$500 to \$800	\$93,500 to \$149,600

We estimate the following costs to do any necessary repairs for two spars that may be required based on the results of the inspection or the modification as an option. We have no way of determining the number of airplanes that may need this repair:

Labor cost (two spars)	Parts cost (two spars)	Total cost (two spars) per airplane
225 work-hours × \$80 per hour = \$18,000	\$7,500	\$25,500

We estimate the following costs to do any necessary spar cap replacement (two spars) that would be required based on the results of the inspection. We have no way of determining the number of airplanes that may need this replacement:

Labor cost (two spars)	Parts cost (two spars)	Total cost (two spars) per airplane
495 work-hours × \$80 per hour = \$39,600	\$39,100	\$78,700

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "Docket No. FAA-2009-0707; Directorate Identifier 2009-CE-035-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2006-08-09, amendment 39-14565 (71 FR 27784, May 12, 2006), and adding the following new AD:



2010-13-08 Air Tractor, Inc.: Amendment 39-16339; Docket No. FAA-2009-0707; Directorate Identifier 2009-CE-035-AD.

Effective Date

- (a) This AD becomes effective on July 28, 2010.

Affected ADs

- (b) This AD supersedes AD 2006-08-09, Amendment 39-14565.

Applicability

(c) This AD affects Models AT-802 and AT-802A airplanes, all serial numbers (SNs) beginning with -0001, that are:

- (1) Certificated in any category;
- (2) Engaged in agricultural dispersal operations, including those airplanes that have been converted from fire fighting to agricultural dispersal or airplanes that convert between fire fighting and agricultural dispersal;
- (3) Not equipped with the factory-supplied computerized fire gate (part number (P/N) 80540); and
- (4) Not engaged in only full-time fire fighting.

Unsafe Condition

(d) This AD results from our determination that we need to clarify the SNs of the Models AT-802 and AT-802A airplanes affected by AD 2006-08-09. Additionally, we are adding an option to modify the wing main spar lower caps to extend the safe life limit on the affected airplanes. We are issuing this AD to detect and correct cracks in the wing main spar lower cap at the center splice joint, which could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

Compliance

(e) For Models AT-802 and AT-802A airplanes, SNs -0001 through -0091, do the following actions, unless already done, using the wing main spar lower cap hours time-in-service (TIS) schedule found in Table 1 of this AD to do the initial and repetitive inspections:

- (1) Install access cover plates following Snow Engineering Co. Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003.
- (2) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the right and left wing main spar lower caps following Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002.

Table 1–Inspection Times

SNs	Condition	Initially inspect:	Repetitively inspect thereafter at intervals not to exceed:
(i) AT–802 and AT–802A, SNs –0001 through –0091.	As manufactured	Upon accumulating 1,700 hours TIS after April 21, 2006 (the effective date of AD 2006–08–09) or within the next 50 hours TIS after April 21, 2006 (the effective date of AD 2006–08–09), whichever occurs later.	850 hours TIS.
(ii) AT–802 and AT–802A, serial numbers SNs –0001 through –0091.	Modified with cold-worked fastener holes following Service Letter #244, dated April 25, 2005.	If performing the cold-working procedure in Service Letter #244, dated April 25, 2005, it includes the initial eddy current inspection.	1,700 hours TIS.

(f) One of the following must do the eddy current inspections required in paragraph (e)(2) of this AD:

- (1) A level 2 or 3 inspector certified in eddy current inspection using the guidelines established by the American Society for Nondestructive Testing or MIL-STD-410; or
- (2) A person authorized to perform AD work and who has completed and passed the Air Tractor, Inc. training course on eddy current inspection on wing lower spar caps.

(g) If cracks are found during any inspection required in paragraph (e)(2) of this AD, repair or replace any cracked spar cap before further flight after the inspection in which cracks are found. For repair or replacement, do whichever of the following that applies:

(1) For cracks that can be repaired by incorporating the modification specified in paragraph (j) of this AD, do the actions following the procedures in paragraph (j) of this AD before further flight after the inspection in which cracks are found.

(2) For cracks that cannot be repaired by incorporating the modification specified in paragraph (j) of this AD, replace the lower spar caps and associated parts listed following the procedures identified in paragraph (h) of this AD before further flight after the inspection in which cracks are found.

(h) For all AT-802 and AT-802A airplanes, replace the wing main spar lower caps, the center joint splice blocks and hardware, the wing attach angles and hardware, and install the steel web splice plate (P/N 21106-1 for SNs -0001 through -0091, and P/N 20094-2 for all SNs beginning with -0092). Do the replacement upon accumulating the safe life hours TIS on the wing main spar lower caps as listed in Table 2 of this AD or within 50 hours TIS after April 21, 2006 (the effective date of AD 2006-08-09), whichever occurs later. For SNs -0001 through -0091, you may extend the safe life hours TIS of the wing main spar lower caps to 8,000 hours TIS before doing the replacement if you modified your wing as specified in paragraph (j) of this AD.

(1) Use the following service information for replacement:

(i) For Models AT-802 and AT-802A airplanes, SNs -0001 through -0091, follow Drawing Number 20975, Sheet 3, dated January 6, 2005; and Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004.

(ii) For Models AT-802 and AT-802A airplanes, SNs beginning with -0092, follow Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004; and Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004.

(2) The following presents the safe life and replacement times as required in paragraph (h) of this AD:

Table 2—Safe Life and Replacement Times

SNs	Wing spar lower cap safe life
AT-802-0001 through AT-802-0059.	4,132 hours TIS.
AT-802-0060 through AT-802-0091.	4,188 hours TIS.
All beginning with AT-802-0092.	8,163 hours TIS.
AT-802A-0001 through AT-802A-0059.	4,969 hours TIS.
AT-802A-0060 through AT-802A-0091.	4,531 hours TIS.
All beginning with AT-802A-0092.	8,648 hours TIS.

(i) After replacing the wing main spar lower caps and hardware, installing the web splice plate, and cold working the fastener holes by following Snow Engineering Co. Drawing Number 20975, Sheet 3, dated January 6, 2005 (SNs -0001 through -0091); or Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004 (all SNs beginning with -0092); and Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004, the new safe life for the wing main spar lower caps is as follows:

Table 3—New Safe Life for Wing Main Spar Lower Caps

SNs	Wing spar lower cap safe life
All beginning with AT-802-0001.	8,163 hours TIS.
All beginning with AT-802A-0001.	8,648 hours TIS.

(j) For Models AT-802 and AT-802A airplanes, SNs -0001 through -0091, in lieu of replacing the wing main spar lower cap at the safe life hours TIS listed in Table 2 in paragraph (h) of this AD, you may extend the safe life of the wing main spar lower caps by doing the following actions. Between 3,200 hours TIS and the safe life hours TIS for your airplane currently listed in Table 2 of this AD, do the following, unless already done:

(1) Modify the wing by installing P/N 20997-2 web plate and P/N 20985-1 and 20985-2 extended 8-bolt splice blocks following Snow Engineering Co. Drawing 20995, Sheet 2, Rev. C, dated September 28, 2004.

(2) Cold-work the outboard two fastener holes in both the left and right hand lower spar caps at the center splice following Snow Engineering Co. Service Letter 240, dated September 30, 2004.

(3) Do an eddy current inspection of the wing center splice joint outboard two fastener holes in both the right and left wing main spar lower caps for cracks at the time of modification following Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002.

(4) If, before July 28, 2010 (the effective date of this AD), an airplane has already been modified following paragraph (j)(1) of this AD but did not receive cold working in the outboard two fastener holes in both the left and right hand lower spar caps following paragraph (j)(2) of this AD, do the following:

(i) Initially do an eddy current inspection within the next 2,400 hours TIS after the modification, using the procedure in paragraph (j)(3) of this AD, and repetitively thereafter at intervals not to exceed every 1,200 hours TIS until the wing spar lower cap reaches 8,000-hour TIS safe life.

(ii) At any time after the modification, you may do the cold working in the outboard two fastener holes in both the left and right hand lower spar caps following paragraph (j)(2) of this AD to terminate the repetitive eddy current inspections required in paragraph (j)(4)(i) of this AD.

(5) If you have modified your airplane following paragraph (j)(1) of this AD prior to 3,200 hours TIS, you must do the following to reach the extended 8,000-hour TIS safe life:

(i) If you did not cold work the outboard two fastener holes in both the left and right hand lower spar caps following paragraph (j)(2) of this AD, you must do the repetitive eddy current inspections following paragraph (j)(4)(i) of this AD until you accumulate 4,800 hours TIS after the modification on the wing spar lower cap. Upon accumulation of 4,800 hours TIS after the modification on the wing spar lower cap, do the repetitive eddy current inspections at intervals not to exceed every 600 hours TIS until you reach the extended safe life of 8,000-hour TIS.

(ii) If you did cold work the outboard two fastener holes in both the left and right hand lower spar caps following paragraph (j)(2) of this AD, upon accumulation of 4,800 hours TIS after the modification on the wing spar lower cap do the repetitive eddy current inspections at intervals not to exceed every 600 hours TIS until you reach the 8,000-hour TIS safe life.

(6) For the initial and repetitive eddy current inspections required in paragraphs (j)(3), (j)(4)(i), (j)(5)(i) and (j)(5)(ii) of this AD, follow the instructions as specified in Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002. For any cracks found, follow the instructions for repair or replacement as specified in paragraph (g) of this AD.

(k) If any cracks are found as a result of any inspection required in paragraphs (e)(2), (j)(3), (j)(4)(i), (j)(5)(i), and (j)(5)(ii) of this AD, report any cracks you find within 10 days after the cracks are found or within 10 days after April 21, 2006 (the effective date of AD 2006-08-09), whichever occurs later.

(1) Include in your report the aircraft SN, aircraft hours TIS, wing spar cap hours TIS, crack location and size, corrective action taken, and a point of contact name and phone number. Send your report to Andy McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; telephone: (210) 308-3365; facsimile: (210) 308-3370.

(2) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act and assigned OMB Control Number 2120-0056.

Special Permit Flight

(l) Under 14 CFR part 39.23, we are allowing special flight permits for the purpose of compliance with this AD under the following conditions:

- (1) Only operate in day visual flight rules (VFR).
- (2) Ensure that the hopper is empty.
- (3) Limit airspeed to 135 miles per hour (mph) indicated airspeed (IAS).
- (4) Avoid any unnecessary g-forces.
- (5) Avoid areas of turbulence.
- (6) Plan the flight to follow the most direct route.

Alternative Methods of Compliance (AMOCs)

(m) The Manager, Fort Worth Airplane Certification Office, ASW-150, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Andy McAnaul, Aerospace Engineer, ASW-150, FAA San Antonio MIDO-43, 10100 Reunion Pl., Ste. 650, San Antonio, Texas 78216; telephone: (210) 308-3365; fax: (210) 308-3370. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(n) AMOCs approved for AD 2006-08-09 are not approved for this AD.

Related Information

(o) To get copies of the service information referenced in this AD, contact Air Tractor, Inc., P.O. Box 485, Olney, Texas 76374; telephone: (940) 564-5616; fax: (940) 564-5612; E-mail: airmail@airtractor.com; Internet: <http://www.airtractor.com>. To view the AD docket, go to U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, or on the Internet at <http://www.regulations.gov>.

Material Incorporated by Reference

(p) You must use Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002; Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004; Snow Engineering Co. Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003; Snow Engineering Co. Service Letter 240, dated September 30, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 3, dated January 6, 2005; and Snow Engineering Co. Drawing 20995, Sheet 2, Rev. C, dated September 28, 2004, to do the actions required by this AD, unless the AD specifies otherwise.

(1) On April 21, 2006 (71 FR 19994, April 19, 2006), the Director of the Federal Register approved the incorporation by reference of Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002; Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004; Snow Engineering Co. Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003; Snow Engineering Co. Service Letter 240, dated September 30, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 3, dated January 6, 2005; and Snow Engineering Co. Drawing 20995, Sheet 2, Rev. C, dated September 28, 2004, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Air Tractor, Inc., P.O. Box 485, Olney, Texas 76374; telephone: (940) 564-5616; fax: (940) 564-5612; E-mail: airmail@airtractor.com; Internet: <http://www.airtractor.com>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri on June 15, 2010.

Sandra J. Campbell,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.