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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0827; Directorate Identifier 2010-CE-029-AD; Amendment 39-16552; AD 2010-17-18 R1]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are revising an existing airworthiness directive (AD) for Air Tractor, Inc. (Air Tractor) Models AT-802 and AT-802A airplanes. That AD 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, and changes the safe life for certain serial (SN) ranges. This AD retains the actions of AD 2010-17-18 and reduces the applicability from all serial numbers beginning with SN-0001 as required by the previous AD to SN-0001 through SN-0269. This AD was prompted by our evaluation of a comment from David Ligon, Air Tractor, and our determination that we should reduce the applicability from that already required by the previous AD. 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 is effective January 14, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of September 9, 2010 (75 FR 52255, August 25, 2010).

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of April 21, 2006 (71 FR 19994, April 19, 2006).

We must receive any comments on this AD by February 14, 2011.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; e-mail: andrew.mcanaul@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On August 11, 2010, we issued AD 2010-17-18, amendment 39-16412 (75 FR 52255, August 25, 2010), for all Air Tractor Models AT-802 and AT-802A airplanes. That AD 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, and changes the safe life for certain SN ranges. That AD resulted from the FAA's evaluation of service information issued by Air Tractor and our determination that we needed to add inspections, add modifications, and change the safe life for certain SN ranges. We issued that 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.

Actions Since AD was Issued

Since we issued AD 2010-17-18, we have evaluated a comment from David Ligon, Air Tractor, and determined that we should reduce the applicability from all serial numbers beginning with SN-0001 as required by the previous AD to SN-0001 through SN-0269. Airplane SN-0270 and subsequent wing main spar components are life limited at 11,700 hours time-in-service as described in Air Tractor, Inc. AT 802/802A Airworthiness Limitations, Pages 6-i, 6-1, and 6-2, dated: September 16, 2009.

Relevant Service Information

We reviewed the following service information from Snow Engineering Co.:

- Service Letter 80GG, revised December 21, 2005;
- Service Letter 284, dated October 4, 2009;
- Service Letter 281, dated August 1, 2009;
- Service Letter 245, dated April 25, 2005;
- Service Letter 240, dated September 30, 2004;

- Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002;
- Drawing Number 20995, Sheet 3, dated November 25, 2005;
- Drawing Number 20995, Sheet 2, Rev. D., dated November 25, 2005; and
- Drawing Number 20975, Sheet 4, Rev. A., dated January 7, 2009.

The service information describes procedures for the following actions:

- Inspection (repetitively) of the two outboard fastener holes in both of the wing main spar lower caps at the center splice joint for cracks;
- Repair or replacement of any cracked spar cap; and
- Modification option to extend the safe life limit.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires accomplishing the actions specified in the service information described previously. The AD also requires sending the inspection results (if cracks are found) to Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the public has already had the opportunity to comment on the actions of this unsafe condition. This action only reduces the applicability from that already required by the previous AD. Therefore, we find that notice and opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments before it becomes effective. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2010-0827 and directorate identifier 2010-CE-029-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD affects 121 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Eddy current inspection	$500 to $800	Not Applicable	$500 to $800	$60,500 to $96,800
Spar cap replacement (two spars)	495 work-hours X $85 per hour = $42,075	$39,100 (two spars)	$81,175	$9,822,175

We estimate the following costs to do any necessary center splice plate installation that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this center splice plate installation:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Center splice plate installation	185 work-hours X $85 per hour = $15,725	$4,300	$20,025

We estimate the following costs to do any necessary extended splice block installation that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this extended splice block installation:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Extended splice block installation	70 work-hours X $85 per hour = $5,950	$3,200	$9,150

We estimate the following costs to do any necessary cold-work lower spar cap fastener holes that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this cold-work lower spar cap fastener holes:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Cold-work lower spar cap fastener holes	$1,350	Not Applicable	$1,350

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 rulemaking action.

Regulatory Findings

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 DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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 FAA 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) 2010-17-18, amendment 39-16412 (75 FR 52255, August 25, 2010) and adding the following new AD:

2010-17-18 R1 Air Tractor, Inc.: Amendment 39-16552; Docket No. FAA-2010-0827; Directorate Identifier 2010-CE-029-AD.

Effective Date

(a) This AD is effective January 14, 2011.

Affected ADs

(b) This AD revises AD 2010-17-18, Amendment 39-16412.

Applicability

(c) This AD affects Air Tractor, Inc. Models AT-802 and AT-802A airplanes, serial numbers (SNs) -0001 through -0269, 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.

Subject

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57: Wings.

Unsafe Condition

(e) This AD was prompted by our evaluation of a comment from David Ligon, Air Tractor, and our determination that we should reduce the applicability from the all serial numbers beginning with SN -0001 as required by the previous AD to SN -0001 through SN-0269. 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

(f) Comply with this AD within the compliance times specified, unless already done.

(g) To address this problem for Models AT-802 and AT-802A airplanes, SNs -0001 through -0091, you must do the following, unless already done:

Table 1—Actions, compliance, and procedures

Actions	Compliance	Procedures
(1) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps.	Initially inspect upon accumulating 1,700 hours time-in-service (TIS) or within the next 50 hours TIS after April 21, 2006 (the effective date of AD 2006-08-09), whichever occurs later, and repetitively thereafter at intervals not to exceed 800 hours TIS. If, before September 9, 2010 (the effective date of AD 2010-17-18), you installed the center splice plate and extended 8-bolt splice blocks, use the inspection compliance times found in paragraph (g)(5) of this AD.	Follow 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.
(2) If you find any cracks as a result of any inspection required in paragraph (g)(1) of this AD, do the following actions: (i) For cracks that can be repaired, repair the airplane by doing the following actions: (A) Install center splice plate, P/N 20997-2, and extended 8-bolt splice blocks, P/N 20985-1 & -2, and cold-work the lower spar cap fastener holes; and (B) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the modification and is separate from the inspections required in paragraph (g)(1) of this AD. (ii) For cracks that cannot be repaired by incorporating the modification specified above, do the actions to replace the lower spar caps and associated parts listed following the procedures identified in paragraph (g)(3) of this AD.	Before further flight after the inspection where a crack was found. If, before the airplane reaches a total of 3,200 hours TIS, you repair your airplane following paragraph (g)(2)(i) of this AD, you must do the eddy current inspections following the compliance times found in paragraph (g)(5) of this AD. If, at 3,200 hours TIS or after, you repair your airplane following paragraph (g)(2)(i) of this AD, this repair terminates the inspection requirements of paragraph (g)(1) of this AD.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; 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. Drawing Number 20995, Sheet 2, Rev. D., dated November 25, 2005; and Snow Engineering Co. Service Letter #240, dated September 30, 2004.

(3) Replace the wing main spar lower caps, the web plates, the center joint splice blocks and hardware, and the wing attach angles and hardware, and install the steel web splice plate. This replacement terminates the repetitive inspections required in paragraph (g)(1) of this AD.	(i) Do the replacement at whichever of the following compliance times occurs first: (A) Before further flight when cracks are found that cannot be repaired by incorporating the modification in paragraph (g)(2)(i) of this AD; or (B) Before or when the airplane reaches the wing main spar lower cap safe life of a total of 4,100 hours TIS or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later. (ii) After this replacement the new spar safe life is 11,700 hours TIS. If, before September 9, 2010 (the effective date of AD 2010-17-18), an airplane main spar lower cap was replaced with P/N 21083-1/-2, the spar safe life for that P/N spar cap is 8,000 hours TIS until the main spar lower cap is replaced with P/N 21118-1/-2. The new spar safe life for P/N 21118-1/-2 is 11,700 hours. (iii) To extend the initial 4,100 hours TIS safe life of the wing main spar lower cap to a total of 8,000 hours TIS, you may incorporate the optional modification specified in paragraph (g)(4) of this AD.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; Snow Engineering Co. Service Letter #80GG, revised December 21, 2005; Snow Engineering Co. Drawing Number 20975, Sheet 4, Rev. A, dated January 7, 2009.
(4) To extend the safe life of the wing main spar lower cap to a total of 8,000 hours TIS, you may incorporate the following optional modification. This modification terminates the repetitive inspections required in paragraph (g)(1) of this AD, unless you performed the modification before the airplane reaches a total of 3,200 hours TIS to repair cracks: (i) Install center splice plate, P/N 20997-2, and extended 8-bolt splice blocks, P/N 20985-1 & -2, and cold-work the lower spar cap fastener holes; and	Modify at whichever of the following compliance times occurs first: (A) Before further flight after any inspection required in paragraph (g)(1) of this AD where a crack is found. If you modify your airplane before the airplane reaches a total of 3,200 hours TIS to repair cracks as required in paragraph (g)(2)(i) of this AD, you must do the eddy current inspections following the compliance times found in paragraph (g)(5) of this AD. (B) Between 3,200 hours TIS and 4,100 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; 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. Drawing Number 20995, Sheet 2, Rev. D., dated November 25, 2005; and Snow Engineering Co. Service Letter #240, dated September 30, 2004.

(ii) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the modification and is separate from the inspections required in paragraph (g)(1) of this AD.		

(5) If, before September 9, 2010 (the effective date of AD 2010-17-18) or as a result of performing the repair for cracks following paragraph (g)(2) of this AD, you installed the center splice plate and extended 8-bolt splice blocks, use the following table for compliance times to do the eddy current inspections required in paragraph (g)(1) of this AD. If you find any cracks as a result of any inspection following the compliance times in the following table, you must do the replacement action in paragraph (g)(2)(ii) of this AD:

Table 2—Eddy current inspection compliance times

Condition of the Airplane	Initially Inspect	Repetitively Inspect Thereafter at Intervals Not to Exceed
(i) If the airplane has already had the center splice plate and extended 8-bolt splice blocks installed at or after 3,200 hours TIS but the fastener holes have not been cold worked, at any time you may cold work the fastener holes to terminate the repetitive inspection requirements of this paragraph.	When the airplane reaches a total of 2,400 hours TIS after the modification or within the next 100 days after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later.	1,200 hours TIS until the 8,000 hours TIS spar replacement time.
(ii) Before reaching 3,200 hours TIS, the airplane had the center splice plate and extended 8-bolt splice blocks already installed but the fastener holes have not been cold worked.	When the airplane reaches a total of 2,400 hours TIS after the modification or within the next 100 days after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later.	1,200 hours TIS. Upon reaching 4,800 hours TIS after the modification, inspect repetitively thereafter at intervals not to exceed 600 hours TIS until the 8,000 hours TIS spar replacement time.
(iii) Before reaching 3,200 hours TIS, the airplane had the center splice plate and extended 8-bolt splice blocks installed and the fastener holes have been cold worked.	When the airplane reaches a total of 4,800 hours TIS after the modification or within the next 100 days after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later.	600 hours TIS until the 8,000 hours TIS spar replacement time.

(h) To address this problem for AT-802 and AT-802A airplanes, SNs-0092 through -0101, you must do the following, unless already done:

Table 3—Actions, compliance, and procedures

Actions	Compliance	Procedures
(1) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps.	Initially inspect upon accumulating 1,700 hours TIS or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later, and repetitively thereafter at intervals not to exceed 800 hours TIS. If the center splice plate, P/N 20994-2, is installed as specified in paragraph (h)(4) of this AD, do the repetitive inspections at intervals not to exceed 2,000 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; and 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.
(2) If you find any cracks as a result of any inspection required by paragraph (h)(1) of this AD, do the following actions. This repair modification terminates the repetitive inspections required in paragraph (h)(1) of this AD: (i) For cracks that can be repaired, repair the airplane by doing the following actions: (A) Install the 9-bolt splice blocks and cold-work the lower spar cap fastener holes; (B) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the repair and is separate from the inspections required in paragraph (h)(1) of this AD; and (C) Install the center splice plate, P/N 20994-2, per paragraph (h)(4) if not already installed. (ii) For cracks that cannot be repaired by doing the actions in paragraph (h)(2)(i) of this AD, replace the lower spar caps and associated parts listed following the procedures identified in paragraph (h)(3) of this AD.	Before further flight after the inspection where a crack was found. This repair modification in paragraph (h)(2)(i) of this AD extends the safe life of the wing main spar lower cap to a total of 8,000 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; and 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. Service Letter #281, dated August 1, 2009; and Snow Engineering Co. Drawing Number 20995, Sheet 3, dated November 25, 2005.

(3) Replace the wing main spar lower caps, the web plates, the center joint splice blocks and hardware, and the wing attach angles and hardware, and install the steel web splice plate. This replacement terminates the repetitive inspections required in paragraph (h)(1) of this AD.	(i) Do the replacement at whichever of the following compliance times occurs first: (A) Before further flight when cracks are found that cannot be repaired by incorporating the modification in paragraph (h)(2)(i) of this AD; or (B) Before or when the airplane reaches the wing main spar lower cap safe life of a total of 4,100 hours TIS or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later. (ii) To extend the initial 4,100 hours TIS safe life of the wing main spar lower cap to a total of 8,000 hours TIS, you may incorporate the optional modification specified in paragraph (h)(4) of this AD. (iii)After replacement of the old spar with the new lower spar cap, P/N 21118-1/-2, the new spar safe life is 11,700 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; Snow Engineering Co. Service Letter #80GG, revised December 21, 2005; Snow Engineering Co. Drawing Number 20975, Sheet 4, Rev. A, dated January 7, 2009.
(4) To extend the safe life of the wing main spar lower cap to a total of 8,000 hours TIS, you may incorporate the following optional modification: (i) Install center splice plate, P/N 20994-2, if not already installed as part of a repair, and cold-work the lower spar cap fastener holes; and (ii) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the modification and is separate from the inspections required in paragraph (h)(1) of this AD.	Before the airplane reaches a total of 4,100 hours TIS. After installation of the center splice plate, P/N 20994-2, do the repetitive inspections required in paragraph (h)(1) at intervals not to exceed 2,000 hours TIS. If as of September 9, 2010 (the effective date of AD 2010-17-18) you have already exceeded the 4,100 hours TIS threshold for extending the safe life to 8,000 hours TIS, you may be eligible for an alternative method of compliance following paragraph (n) in this AD.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; 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. Drawing Number 20975, Sheet 4, Rev. A., dated January 7, 2009; and Snow Engineering Co. Service Letter #245, dated April 25, 2005.

(5) If you find any cracks as a result of any repetitive inspection required by paragraph (h)(4) of this AD, do the following actions. This repair modification terminates the repetitive inspections required in paragraph (h)(4) of this AD: (i) For cracks that can be repaired, repair the airplane by doing the following actions: (A) Install the 9-bolt splice blocks and cold-work the lower spar cap fastener holes; and (B) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the repair and is separate from the inspections required in paragraph (h)(1) of this AD. (ii) For cracks that cannot be repaired by doing the actions in paragraph (h)(5)(i) of this AD, replace the lower spar caps and associated parts listed following the procedures identified in paragraph (h)(3) of this AD.	Before further flight after the inspection where a crack was found.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; and 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. Service Letter #281, dated August 1, 2009; and Snow Engineering Co. Drawing Number 20995, Sheet 3, dated November 25, 2005.

(i) To address this problem for AT-802 and AT-802A airplanes, SNs -0102 through -0178, you must do the following, unless already done:

Table 4—Actions, compliance, and procedures

Actions	Compliance	Procedures
(1) Do an initial eddy current inspection for cracks of the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. After this initial inspection, you may do the optional cold-working of the lower spar cap fastener holes to increase the hours TIS between repetitive inspections required in paragraph (i)(2) of this AD.	Before the airplane reaches a total of 5,500 hours TIS or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later.	Follow 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. Service Letter #245, dated April 25, 2005; and Snow Engineering Co. Service Letter #284, dated October 4, 2009.

(2) Repetitively eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps.	(i) For fastener holes that are cold-worked: After the initial inspection, repetitively thereafter inspect at intervals not to exceed 2,200 hours TIS. (ii) For fastener holes not cold-worked: After the initial inspection, repetitively thereafter inspect at intervals not to exceed 1,100 hours TIS.	Follow 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. Service Letter #284, dated October 4, 2009; and (optional) Snow Engineering Co. Service Letter #245, dated April 25, 2005.
(3) If you find any cracks as a result of any inspection required by paragraphs (i)(1) and (i)(2) of this AD, do the following actions. This modification terminates the repetitive inspections required in paragraph (i)(1) and (i)(2) of this AD: (i) For cracks that can be repaired, repair the airplane by doing the following actions: (A) Install the 9-bolt splice blocks and cold-work the lower spar cap fastener holes; and (B) Eddy current inspect for cracks the center splice joint outboard two fastener holes in both the left and right wing main spar lower caps. This eddy current inspection is required as part of the repair and is separate from the inspections required in paragraphs (i)(1) and (i)(2) of this AD. (ii) For cracks that cannot be repaired by doing the actions in paragraph (i)(3)(i) of this AD, replace the lower spar caps and associated parts listed following the procedures in paragraph (i)(4) of this AD.	Before further flight after the inspection where a crack was found.	Follow Snow Engineering Co. Service Letter #281, dated August 1, 2009; and Snow Engineering Co. Drawing Number 20995, Sheet 3, dated November 25, 2005.

(4) Replace the wing main spar lower caps, the web plates, the center joint splice blocks and hardware, and the wing attach angles and hardware, and install the steel web splice plate. This replacement terminates the repetitive inspections required in paragraphs (i)(1) and (i)(2) of this AD.	(i) Do the replacement at whichever of the following compliance times occurs first: (A) Before further flight when cracks are found that cannot be repaired by incorporating the repair in paragraph (i)(3)(i) of this AD; or (B) Before or when the airplane reaches the wing main spar lower cap safe life of a total of 8,000 hours TIS or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later. (ii) After this replacement the new spar safe life is 11,700 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; Snow Engineering Co. Service Letter #80GG, revised December 21, 2005; Snow Engineering Co. Drawing Number 20975, Sheet 4, Rev. A, dated January 7, 2009.

(j) To address this problem for AT-802 and AT-802A airplanes, SNs -0179 through -0269, you must do the following, unless already done:

Table 5—Actions, compliance, and procedures

Actions	Compliance	Procedures
Replace the wing main spar lower caps, the web plates, the center joint splice blocks and hardware, and the wing attach angles and hardware, and install the steel web splice plate.	By the 8,000 hours TIS safe-life or within the next 50 hours TIS after September 9, 2010 (the effective date of AD 2010-17-18), whichever occurs later. After this replacement the subsequent new spar safe life is 11,700 hours TIS.	Follow Snow Engineering Co. Service Letter #284, dated October 4, 2009; Snow Engineering Co. Service Letter #80GG, revised December 21, 2005; Snow Engineering Co. Drawing Number 20975, Sheet 4, Rev. A, dated January 7, 2009.

(k) Report any crack from any inspection required in paragraphs (g), (h), or (i) of this AD within 10 days after the cracks are found on the form in Figure 1 of this AD.

(1) Send your report to Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (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 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.

AD 2010-17-18 R1 INSPECTION REPORT *(REPORT ONLY IF CRACKS ARE FOUND)*	
General Information	
1. Inspection Performed By:	2. Phone:
3. Aircraft Model:	4. Aircraft Serial Number:
5. Engine Model Number:	6. Aircraft Total Hours TIS:
7. Wing Total Hours TIS:	8. Lower Spar Cap Hours TIS:
Previous Inspection/Repair History	
9. Has the lower spar cap been inspected (eddy-current, dye penetrant, magnetic particle, or ultrasound) before? ☐ Yes ☐ No	If yes, an inspection has occurred: Date: _____ Inspection Method: _____ Lower Spar Cap TIS: _____ Cracks found? ☐ Yes ☐ No
10. Has there been any major repair or alteration performed to the spar cap? ☐ Yes ☐ No	If yes, specify (Description and hours TIS):
Inspection for AD 2010-17-18 R1	
11. Date of AD inspection: Inspection Results:	11a. Cracks found: ☐ Left Hand ☐ Right Hand
11b. Crack Length:_____ Location: _____	11c. Does drilling hole to next larger size remove all traces of the crack(s)? ☐ Yes ☐ No
12d. Corrective Action Taken:	

Send report (only if you find any cracks as a result of the inspection for AD 2010-17-18 R1) to: Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370

Figure 1

Paperwork Reduction Act Burden Statement

(m) A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

Alternative Methods of Compliance (AMOCs)

(n)(1) The Manager, Fort Worth Airplane Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your Principal Maintenance Inspector or Principal Avionics Inspector, as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(3) AMOCs approved for AD 2010-17-18 are approved as AMOCs for this AD.

Related Information

(o) For more information about this AD, contact Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; e-mail: andrew.mcanaul@faa.gov.

Material Incorporated by Reference

(p)(1) You must use the service information contained in table 6 of this AD to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register previously approved the incorporation by reference of the service information contained in table 6 of this AD on the date specified in the column "Incorporation by Reference Approval Date" of Table 6.

Table 6 – Material incorporated by reference

Document	Revision	Date	Incorporation by reference approval date
(i) Snow Engineering Co. Service Letter #80GG.	Not Applicable	December 21, 2005	September 9, 2010 (75 FR 52255, August 25, 2010).
(ii) Snow Engineering Co. Service Letter #284	Not Applicable	October 4, 2009	September 9, 2010 (75 FR 52255, August 25, 2010).
(iii) Snow Engineering Co. Service Letter #281	Not Applicable	August 1, 2009	September 9, 2010 (75 FR 52255, August 25, 2010).
(iv) Snow Engineering Co. Service Letter #245	Not Applicable	April 25, 2005	September 9, 2010 (75 FR 52255, August 25, 2010).

(v) Snow Engineering Co. Service Letter #240	Not Applicable	September 30, 2004	April 21, 2006 (71 FR 19994, April 19, 2006).
(vi) Snow Engineering Co. Process Specification #197:			April 21, 2006 (71 FR 19994, April 19, 2006).
page 1	Not Applicable	June 4, 2002	April 21, 2006 (71 FR 19994, April 19, 2006).
pages 2 through 4	Not Applicable	February 23, 2001	April 21, 2006 (71 FR 19994, April 19, 2006).
page 5	Not Applicable	May 3, 2002	April 21, 2006 (71 FR 19994, April 19, 2006).
(vii) Snow Engineering Co. Drawing Number 20995:			September 9, 2010 (75 FR 52255, August 25, 2010).
Sheet 2	Rev. D	November 25, 2005	September 9, 2010 (75 FR 52255, August 25, 2010).
Sheet 3	Not Applicable	November 25, 2005	September 9, 2010 (75 FR 52255, August 25, 2010).
(viii) Snow Engineering Co. Drawing Number 20975, Sheet 4.	Rev. A	January 7, 2009	September 9, 2010 (75 FR 52255, August 25, 2010).

(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: www.airtractor.com.

(3) You may review copies of the service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, 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 December 16, 2010.

William J. Timberlake,

Acting Manager, Small Airplane Directorate,

Aircraft Certification Service.