



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0710; Product Identifier 2019-CE-037-AD

RIN 2120-AA64

Airworthiness Directives; Air Tractor, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Air Tractor, Inc. (Air Tractor) Models AT-250, AT-300, AT-301, AT-302, AT-400, AT-400A, AT-401, AT-401A, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-502B, AT-503, AT-503A, AT-504, AT-602, AT-802, and AT-802A airplanes. This proposed AD was prompted by reports of cracks in the flap torque tube actuator attachment brackets that may cause the flap actuator to detach from the flap torque tube. This proposed AD would require repetitive visual and dye penetrant inspections of the flap actuator attachment bracket welds for cracks and replacement if cracks are identified. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Air Tractor, Inc., P.O. Box 485, Olney, TX 76374: telephone: 940-564-5616: email: info@airtractor.com: internet: <https://airtractor.com/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust St, Kansas City, MO 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 <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0710; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Kenneth A. Cook, Aerospace Engineer, Fort Worth ACO Branch, AIR-7F0, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: 817-222-5475; email: kenneth.a.cook@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0710; Product Identifier 2019-CE-037-AD” at

the beginning of your comments. The FAA will consider all comments received by the closing date and may amend this proposed AD because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments we receive, without change, to <https://regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact it receives about this proposed AD

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to [insert name and address of aerospace engineer listed above]. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

The FAA has received multiple reports of cracks in the brackets attaching the flap actuator motor to the flap torque tube on several models of Air Tractor airplanes.

One of the reports was on a Model AT-802A airplane where the brackets separated from the torque tube at the welds. The flaps suddenly retracted while maneuvering, and the pilot temporarily lost control of the airplane. The pilot was able to

regain control of the airplane before it impacted the ground. Since then, there have been 13 reported airplanes with cracks in the flap torque tube attachment brackets.

The design of the flap actuator motor brackets on the Model AT-802A airplane is the same as on Models AT-250, AT-300, AT-301, AT-302, AT-400, AT-400A, AT-401, AT-401A, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-503, AT-503A, AT-504, AT-602, and AT-802 airplanes.

This condition, if not addressed, could result in the flap actuator attachment brackets detaching from the flap torque tube and lead to an uncommanded retraction of the flaps with consequent loss of airplane control.

Related Service Information under 1 CFR part 51

The FAA reviewed Air Tractor, Inc. Service Letter #347, Revision A, dated December 9, 2019 (Air Tractor SL #347, Rev A). The service letter contains procedures for repetitive visual inspections and dye penetrant inspections of the flap torque tube brackets for cracks and instructs operators to replace the torque tube as necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

The FAA is proposing this AD because it 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.

Proposed AD Requirements

This proposed AD would require, within 300 hours time-in-service (TIS) after the effective date of this AD and thereafter at intervals not to exceed 900 hours TIS, performing a dye penetrant inspection by following Air Tractor SL #347, Rev A. Within 300 hours TIS after the first dye penetrant inspection and thereafter at intervals not to

exceed 300 hours TIS, this proposed AD would require performing a visual inspection by following Air Tractor SL #347, Rev A.

Differences Between this Proposed AD and the Service Information

Air Tractor SL #347, Rev A provides an allowance (plus or minus 15 percent) for the 300-hour visual inspections, and this proposed AD would not. Air Tractor SL #347, Rev A specifies performing the dye penetrant inspection within 900 hours TIS, and this proposed AD would require the initial dye penetrant inspection within 300 hours TIS. Air Tractor SL #347, Rev A specifies replacing a cracked torque tube, while this proposed AD would require replacing a cracked torque tube with a torque tube that has zero hours TIS. Air Tractor SL #347, Rev A specifies reporting any cracked welds identified during the inspections to Air Tractor, and this proposed AD would not.

Costs of Compliance

The FAA estimates that this proposed AD affects 1,662 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Dye penetrant inspection	4 work-hours X \$85 per hour = \$340 per inspection cycle	Not applicable	\$340 per inspection cycle	\$565,080 per inspection cycle
Visual inspection	.5 work-hour X \$85 per hour = \$42.50 per inspection cycle	Not applicable	\$42.50	\$70,635 per inspection cycle

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. The FAA has no way of determining the number of aircraft that might need this replacement.

On-condition costs for Model AT-802 and AT-802A (Potential 485 Airplanes)

Action	Labor cost	Parts cost	Cost per product
Replacement of torque tube	3 work-hours X \$85 per hour = \$255	\$1,292	\$1,547

On-condition costs for Model AT-602 (Potential 236 Airplanes)

Action	Labor cost	Parts cost	Cost per product
Replacement of torque tube	3 work-hours X \$85 per hour = \$255	\$1,140	\$1,395

On-condition costs for Models AT-501, AT-502, AT-502A, AT-502B, AT-503, AT-503A, and AT-504 (Potential 512 Airplanes)

Action	Labor cost	Parts cost	Cost per product
Replacement of torque tube	3 work-hours X \$85 per hour = \$255	\$955	\$1,210

On-condition costs for Models AT-250, AT-300, AT-301, AT-302, AT-400, AT-400A, AT-401, AT-401A, AT-401B, AT-402, AT-402A, and AT-402B (Potential 429 Airplanes)

Action	Labor cost	Parts cost	Cost per product
Replacement of torque tube	3 work-hours X \$85 per hour = \$255	\$927	\$1,182

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.

The FAA is 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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, 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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 adding the following new airworthiness directive (AD):

Air Tractor, Inc.: Docket No. FAA-2020-0710; Product Identifier 2019-CE-037-AD.

(a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Air Tractor, Inc. (Air Tractor), Models AT-250, AT-300, AT-301, AT-302, AT-400, AT-400A, AT-401, AT-401A, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-502B, AT-503, AT-503A, AT-504, AT-602, AT-802, and AT-802A airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) of America Code: 2750, TE flap control system

(e) Unsafe Condition

This AD was prompted by reports from Air Tractor that the flap actuator attachment brackets can crack and detach from the torque tube. The FAA is issuing this AD to detect and correct cracks in the flap actuator attachment brackets. The unsafe condition, if not addressed, could lead to the brackets detaching from the torque tube, which could result in an uncommanded retraction of the flaps with consequent loss of airplane control.

(f) Compliance

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

(g) Actions

(1) Within 300 hours time-in-service (TIS) after the effective date of this AD and thereafter at intervals not to exceed 900 hours TIS, perform a dye penetrant inspection of

each flap torque tube actuator attachment bracket for cracks in accordance with steps 4B(2) through (7) of Air Tractor, Inc., Service Letter #347, Revision A, dated December 9, 2019 (Air Tractor SL #347, Rev A).

(i) If there is a crack, before further flight, replace the flap torque tube with a flap torque tube that has zero hours TIS.

(ii) If there are no cracks, before further flight, complete the actions in steps 4B(9) and (10) of Air Tractor SL #347, Rev A.

(2) Within 300 hours TIS after the inspection required by paragraph (g)(1) of this AD and thereafter at intervals not to exceed 300 hours TIS, visually inspect each flap torque tube actuator attachment bracket for cracks in accordance with steps 4A(1) through (3) of Air Tractor SL #347, Rev A. If there is a crack, before further flight, replace the flap torque tube with a flap torque tube that has zero hours TIS.

(3) Replacing a flap torque tube does not terminate the repetitive visual inspections or dye penetrant inspections required by this AD.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, of the Fort Worth ACO Branch, AIR-7F0, has the authority to approve AMOCs for this AD, if requested using the procedures found in 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 certification office, sent it to the attention of: Kenneth A. Cook, Aerospace Engineer, Fort Worth ACO Branch, AIR-7F0, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: 817-222-5475; email: kenneth.a.cook@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector (PI), or lacking a PI, your local Flight Standards District Office.

(i) Related Information

For more information about this AD, contact Kenneth A. Cook, Aerospace Engineer, Fort Worth ACO Branch, AIR-7F0, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: 817-222-5475; email: kenneth.a.cook@faa.gov.

Issued on July 22, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service

[FR Doc. 2020-16209 Filed: 7/27/2020 8:45 am; Publication Date: 7/28/2020]