DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0177; Directorate Identifier 2007-CE-093-AD; Amendment 39-15499; AD 2008-09-18]

RIN 2120-AA64

Airworthiness Directives; Taylorcraft, Inc. Models A, B, and F Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA adopts a new airworthiness directive (AD) for certain Taylorcraft, Inc. Models A, B, and F series airplanes. This AD requires you to inspect the wing strut attach fittings for corrosion or cracks and requires repair or replacement if corrosion or cracks are found. This AD results from data collected from an accident involving a Taylorcraft Model BF12-65 airplane. The wing separated from the airplane after the wing strut attach fitting failed due to corrosion. We are issuing this AD to detect and correct corrosion or cracks in the wing strut attach fittings, which could result in failure of the wing strut attach fittings and lead to wing separation and loss of control.

DATES: This AD becomes effective on June 6, 2008.

On June 6, 2008, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

ADDRESSES: To get the service information identified in this AD, contact Taylorcraft Aviation, LLC, 2124 North Central Avenue, Brownsville, Texas 78521; telephone: 956-986-0700.

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-2008-0177; Directorate Identifier 2007-CE-093-AD.

FOR FURTHER INFORMATION CONTACT: Andy McAnaul, Aerospace Engineer, SAT-MIDO-43, 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; telephone: (210) 308-3365; fax: (210) 308-3370.
SUPPLEMENTARY INFORMATION:

Discussion

On February 12, 2008, 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 certain Taylorcraft, Inc. Models A, B, and F series airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on February 20, 2008 (73 FR 9239). The NPRM proposed to require inspection of the wing strut attach fittings for corrosion or cracks and to require repair or replacement if corrosion or cracks are found.

Comments

We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment:

Comment Issue No. 1: Additional Wording

The Experimental Aircraft Association and four other commenters ask for us to add wording to the final rule to allow repairing the fitting/fuselage structure in accordance with FAA Advisory Circular (AC) 43.13-1B. The commenters believe the Taylorcraft fuselage structure, comprised of welded steel tubing and flat plate fittings, is well within the scope of repair practice for an Airframe and Powerplant (A & P) mechanic experienced in maintaining aircraft of that vintage. They comment that it is reasonable to expect an experienced mechanic to have sufficient information and means available to rebuild the fitting area with guidance from AC 43.13-1B.

We agree that repair of the Taylorcraft fuselage welded structure is within the scope of repair criteria and guidance provided in AC 43.13-1B. We will add language in paragraph (e)(3) of the AD to allow for repair of the attach fitting and the associated fuselage structure in accordance with AC 43.13-1B.

Comment Issue No. 2: Requirements Already Exist

Marc Fries and four other commenters believe the AD is redundant and that requirements already exist to accomplish inspections of the attach fittings. The commenters believe that 14 CFR part 43, Appendix D already provides sufficient annual/100-hour inspection requirements to inspect the wing strut attach fittings. Some of the commenters cite poor maintenance practice as the root cause for the corrosion related fitting failure in the fatal accident airplane. One commenter additionally mentioned that AD 47-16-03 already covers inspection of Taylorcraft wing attach fittings.

We do not agree with the commenters. AD 47-16-03 only addressed inspection of wing strut attach fittings for cracks or evidence of poor welds in Taylorcraft Models BC, BF, and BL series aircraft. The AD was issued for a potential manufacturing quality issue. The AD did not address corrosion and required an immediate one-time compliance.

We are not changing the final rule AD action based on this comment.
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 the change previously discussed and minor editorial corrections. We have determined that this change and 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 3,119 airplanes in the U.S. registry.

We estimate the following costs to do the inspection:

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Total cost per airplane</th>
<th>Total cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 work-hours × $80 per hour = $160</td>
<td>Not applicable</td>
<td>$160</td>
<td>$499,040</td>
</tr>
</tbody>
</table>

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of airplanes that may need this repair/replacement:

<table>
<thead>
<tr>
<th>Labor cost per fitting</th>
<th>Parts cost per fitting</th>
<th>Total cost per airplane (for two fittings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 work-hours × $80 per hour = $2,400</td>
<td>$200</td>
<td>$5,200</td>
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</table>

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-2008-0177; Directorate Identifier 2007-CE-093-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. FAA amends § 39.13 by adding a new AD to read as follows:

Effective Date

(a) This AD becomes effective on June 6, 2008.

Affected ADs

(b) None.

Applicability


Note: This AD applies to all Taylorcraft models listed above, including those models not listed in Taylorcraft Aviation, LLC Service Bulletin No. 2007-002, dated November 8, 2007. If there are any other differences between this AD and the above service bulletin, this AD takes precedence.

Unsafe Condition

(d) This AD results from data collected from an accident involving a Taylorcraft Model BF12-65 airplane. The wing separated from the airplane after the wing strut attach fitting failed due to corrosion. We are proposing this AD to detect and correct corrosion or cracks in the wing strut attach fittings. This condition, if not corrected, could result in failure of the wing strut attach fittings and lead to wing separation and loss of control.

Compliance

(e) To address this problem, you must do the following, unless already done:

(1) Initially inspect the left and right wing lift strut attach fittings, part number (P/N) A-A11, for corrosion or cracking following Taylorcraft Aviation, LLC Service Bulletin No. 2007-002, dated November 8, 2007, using the following compliance times:

   (i) For airplanes that have never been equipped with floats or snow skis: Within the next 90 days after June 6, 2008 (the effective date of this AD).

   (ii) For airplanes equipped with or that have ever been equipped with floats or snow skis: Within the next 30 days after June 6, 2008 (the effective date of this AD).

(2) If the airplane is equipped with floats or snow skis at the time of the initial inspection required by paragraph (e)(1) of this AD or at any time after the initial inspection required by
paragraph (e)(1) of this AD, you must repeat the inspection required in paragraph (e)(1) of this AD as follows:

<table>
<thead>
<tr>
<th>If the following exists:</th>
<th>Then:</th>
</tr>
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<tbody>
<tr>
<td>(i) The airplane is equipped with floats or snow skis at the time of the initial inspection required by paragraph (e)(1) of this AD.</td>
<td>Inspect no later than 48 months following the initial inspection and repetitively inspect thereafter at intervals not to exceed 48 months. Continue these repetitive inspections until removal of floats or snow skis, at which time you must follow paragraph (e)(2)(ii) of this AD.</td>
</tr>
<tr>
<td>(ii) You remove floats or snow skis at any time following the initial inspection required by paragraph (e)(1) of this AD.</td>
<td>Inspect no later than 48 months following the last inspection. After the inspection following removal of floats or snow skis, no further inspections are required unless floats or snow skis are re-installed at a later date, at which time you must follow paragraph (e)(2)(iii) of this AD.</td>
</tr>
<tr>
<td>(iii) You install floats or snow skis at any time since the initial inspection required by paragraph (e)(1) of this AD.</td>
<td>Inspect no later than 48 months following the last inspection or before further flight after installation of floats or snow skis, whichever occurs later, and repetitively inspect thereafter at intervals not to exceed 48 months. Continue these repetitive inspections until removal of floats or snow skis, at which time you must follow paragraph (e)(2)(ii) of this AD.</td>
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(3) If you find cracking or material loss due to corrosion during any of the inspections required in paragraph (e)(1) or (e)(2) of this AD, before further flight, do the following:

(i) Contact Taylorcraft Aviation, LLC at 2124 North Central Avenue, Brownsville, Texas 78521; telephone: 956-986-0700 to obtain an FAA-approved repair scheme or replacement procedure; or refer to FAA Advisory Circular AC 43.13-1B CHG 1, dated September 27, 2001; and

(ii) Repair or replace the left and/or right wing lift strut attach fitting(s), P/N A-A11.

Alternative Methods of Compliance (AMOCs)

(f) 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. Send information to ATTN: Andy McAnaul, Aerospace Engineer, SAT-MIDO-43, 10100 Reunion Place, Suite 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.

Material Incorporated by Reference

(g) You must use Taylorcraft Aviation, LLC Service Bulletin No. 2007-002, dated November 8, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Taylorcraft Aviation, LLC, 2124 North Central Avenue, Brownsville, Texas 78521; telephone: 956-986-0700.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration.
Issued in Kansas City, Missouri, on April 23, 2008.

David R. Showers,
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-9397 Filed 5-1-08; 8:45 am]