

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-21357; Directorate Identifier 2005-CE-29-AD; Amendment 39-14136; AD 2005-12-20]

RIN 2120-AA64

Airworthiness Directives; The Lancair Company Model LC41-550FG Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Lancair Company (Lancair) Model LC41-550FG airplanes. This AD requires both visual and dye penetrant inspections of the elevator torque tube assembly for cracks. If a crack is found, this AD requires replacement with a modified assembly that incorporates a steel doubler. This AD also requires replacement of the modified elevator torque tube assembly every 300 hours time-in-service or 18 months (whichever occurs first). This AD results from cracks found in the weld area of the elevator torque tube assembly. We are issuing this AD to detect and correct cracks in the elevator torque tube assembly, which could result in failure of the elevator torque tube assembly and subsequent loss of control of the airplane.

DATES: This AD becomes effective on June 21, 2005.

As of June 21, 2005, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

We must receive any comments on this AD by August 10, 2005.

ADDRESSES: Use one of the following to submit comments on this AD:

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001.
- Fax: 1-202-493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

To get the service information identified in this AD, contact The Lancair Company, 22550 Nelson Road, Bend Oregon 97701; telephone: (541) 330-4191; e-mail: product-support@lancair.com.

To view the comments to this AD, go to <http://dms.dot.gov>. The docket number is FAA-2005-21357.

FOR FURTHER INFORMATION CONTACT: Mr. Jeffrey Morfitt, Program Manager, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW., Renton, Washington 98055-4065; telephone: (425) 917-6405; facsimile: (425) 917-6590.

SUPPLEMENTARY INFORMATION:

What events have caused this AD? Maintenance personnel found a large crack in the weld area on the elevator torque tube assembly during an elevator disassembly of a Lancair Model LC41-550FG airplane. The airplane had only 54 hours total time-in-service.

This incident prompted an inspection of the elevator torque tube assemblies held in inventory at Lancair. The inspection revealed 70 percent of the factory inventory had cracks.

A combination of design aspects and manufacturing flaws caused the cracks. These flaws lead to rapid fatigue failure of the elevator torque tube assembly.

What is the potential impact if FAA took no action? Cracks in the elevator torque tube assembly could cause the elevator torque tube assembly to fail. This failure could result in loss of control of the airplane.

Is there service information that applies to this subject? Lancair has issued Mandatory Service Bulletin No. SB-05-005A, dated May 20, 2005.

What are the provisions of this service information? The service bulletin includes procedures for inspecting, both visually and with dye penetrant, the elevator torque tube assemblies for cracks. The service bulletin also includes procedures for replacing and reworking cracked elevator torque tube assemblies.

FAA's Determination and Requirements of the AD

What has FAA decided? We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design.

Since the unsafe condition described previously is likely to exist or develop on other Lancair Model LC41-550FG airplanes of the same type design, we are issuing this AD to prevent failure of the elevator torque tube assembly. This failure could cause loss of control of the airplane.

What does this AD require? This AD requires incorporation of the actions in the previously-referenced service bulletin.

In preparing this rule, we contacted type clubs and aircraft operators to get technical information and information on operational and economic impacts. We did not receive any information through these contacts. If received, we would have included a discussion of any information that may have influenced this action in the rulemaking docket.

How does the revision to 14 CFR part 39 affect this AD? On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Comments Invited

Will I have the opportunity to comment before you issue the rule? This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments

regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2005-21357; Directorate Identifier 2005-CE-29-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us through a nonwritten communication, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the AD in light of those comments.

Authority for This Rulemaking

What authority does FAA have for issuing this rulemaking action? 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

Will this AD impact various entities? 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.

Will this AD involve a significant rule or regulatory action? 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 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 "AD Docket FAA-2005-21357; Directorate Identifier 2005-CE-29-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 adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: There is a typo in AD 2005-12-20, paragraph (c) of today's, June 20, 2005, Federal Register (FR), page 35371, third column. The correct affected model should read "LC41-550FG". We will issue a correction to the FR. We have corrected this copy.

2005-12-20 The Lancair Company: Amendment 39-14136; Docket No. FAA-2005-21357; Directorate Identifier 2005-CE-29-AD.

When Does This AD Become Effective?

- (a) This AD becomes effective on June 21, 2005.

Are Any Other ADs Affected by This Action?

- (b) None.

What Airplanes Are Affected by This AD?

- (c) This AD affects Model LC41-550FG airplanes, serial numbers 41001 through 41082, that are certificated in any category.

What Is the Unsafe Condition Presented in This AD?

- (d) This AD results from cracks found in the weld area of the elevator torque tube assembly. We are issuing this AD to detect and correct cracks in the elevator torque tube assembly, which could result in failure of the elevator torque tube assembly and subsequent loss of control of the airplane.

What Must I Do To Address This Problem?

- (e) To address this problem, you must do the following:

Note 1: The Lancair Company Certified Aircraft Mandatory Service Bulletin SB-05-005A, Model 400, dated May 20, 2005, allows the pilot to perform the visual inspection of the elevator torque tube assembly. The Federal Aviation Regulations (14 CFR 43.3) only allow the pilot to perform preventive maintenance as described in 14 CFR part 43, App. A, paragraph (c). These visual inspections are not considered preventive maintenance under 14 CFR part 43, App. A, paragraph (c). Therefore, an appropriately-rated mechanic must perform all actions of this AD.

Actions	Compliance	Procedures
(1) Visually inspect the area of weld joining the torque tube to the elevator end rib for cracks.	Before further flight after June 21, 2005 (the effective date of this AD), and before each flight until the action required in paragraph (e)(2) of this AD is done until a crack is found, whichever occurs first. It is acceptable to do the dye penetrant inspection and modification required in paragraph (e)(2) of this AD before further flight and eliminate the need for the visual inspection(s).	Follow Part 1 of The Lancair Company Certified Aircraft Mandatory Service Bulletin SB-05-005A, Model 400, dated May 20, 2005.
(2) Do a dye penetrant inspection of the area of weld joining the torque tube to the elevator end rib for cracks and modify the elevator torque tube assembly by installing a steel doubler.	Within 10 hours TIS after June 21, 2005 (the effective date of this AD). Doing the dye penetrant inspection and modification terminates the repetitive visual inspection required in paragraph (e)(1) of this AD. This modified elevator torque tube assembly has a safe limit of 300 hours TIS or 18 months after modification, whichever occurs first, and you must replace it at that interval.	Follow Part 2 of The Lancair Company Certified Aircraft Mandatory Service Bulletin SB-05-005A, Model 400, dated May 20, 2005, and Revision B to Chapter 4 of Maintenance Manual RC050001, dated May 25, 2005.
(3) Replace the elevator torque tube assembly with a new assembly that incorporates a steel doubler in the area of weld joining the torque tube to the elevator end rib.	Any time a crack is found during any inspection required in paragraphs (e)(1) and (e)(2) of this AD. You may do the replacement sooner if desired, in which case, you may discontinue the inspections in paragraphs (e)(1) and (e)(2) of this AD. The new replacement assembly has a safe life limit of 300 hours TIS or 18 months after replacement, whichever occurs first, and you must replace it at that interval.	Follow Part 2 of The Lancair Company Certified Aircraft Mandatory Service Bulletin SB-05-005A, Model 400, dated May 20, 2005, and Revision B to Chapter 4 of Maintenance Manual RC050001, dated May 25, 2005.

Note 2: The compliance times in this AD take precedence over the compliance times in the service information.

May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, Seattle Aircraft Certification Office, FAA. For information on any already approved alternative methods of compliance, contact Mr. Jeffrey Morfitt, Program Manager, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW., Renton, Washington 98055-4065; telephone: (425) 917-6405; facsimile: (425) 917-6590.

Does This AD Incorporate Any Material by Reference?

(g) You must do the actions required by this AD following the instructions in The Lancair Company Certified Aircraft Mandatory Service Bulletin SB-05-005A, Model 400, dated May 20, 2005. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact The Lancair Company 22550 Nelson Road, Bend Oregon 97701; telephone: (541) 330-4191; e-mail: product_support@lancair.com. To review copies of this service information,

go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-05-21357; Directorate Identifier 2005-CE-29-AD.

Issued in Kansas City, Missouri, on June 10, 2005.

Kim Smith,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-11880 Filed 6-17-05; 8:45 am]

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