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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0740; Directorate Identifier 2008-NM-077-AD; Amendment 39-15605; AD 2008-14-10]

RIN 2120-AA64

Airworthiness Directives; Lockheed Model 382, 382B, 382E, 382F, 382G, and 382J Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Lockheed Model 382, 382B, 382E, 382F, 382G, and 382J series airplanes. This AD requires, among other actions, an inspection to determine whether a certain upper engine mount bolt is installed, and replacement of any discrepant upper engine mount bolt with a new one. This AD results from a report indicating that several upper engine mount bolts manufactured by a certain supplier broke during installation. We are issuing this AD to prevent failure of the upper engine mount bolts, which could result in reduced structural capability of an engine mount, and possible separation of a strut and engine from the airplane during flight.

DATES: This AD is effective July 22, 2008.

We must receive comments on this AD by September 5, 2008.

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.

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 (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia 30349; telephone (770) 703-6131; fax (770) 703-6097.

SUPPLEMENTARY INFORMATION:

Discussion

We have received a report indicating that several upper engine mount bolts broke during installation. These bolts have part number (P/N) NAS 636 and have "AFC" or "A" (AirFasco of Canton, Ohio) stamped on the bolt head. Upper engine mount bolts are used to attach the quick engine change (QEC) to the truss mounts in a four-bolt pattern (two upper and two lower bolts). The failures occurred on military versions of Lockheed Model 382, 382B, 382E, 382F, 382G, and 382J series airplanes. The discrepant bolts were located in the upper two positions of the four bolt pattern (different bolts are installed in the lower two positions and are not interchangeable with the bolts in the upper two positions). Investigation revealed that Lockheed has not approved AirFasco as a supplier of these bolts. Material hardness testing also revealed that the discrepant bolts do not meet hardness requirements. The cause for the inadequate hardness is improper heat treatment.

Failure of the upper engine mount bolts could result in reduced structural capability of an engine mount, and possible separation of a strut and engine from the airplane during flight.

The upper engine mount bolts are commercially available. We do not know whether any of the discrepant bolts were sold to commercial operators by the supplier or an agent. Therefore, the discrepant bolts might be installed on Lockheed Model 382, 382B, 382E, 382F, 382G, and 382J series airplanes.

FAA's Determination and Requirements of This AD

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(se) same type design(s). This AD requires, among other actions, an inspection to determine whether a certain upper engine mount bolt is installed, and replacement of any discrepant upper engine mount bolt with a new one.

FAA's Justification and Determination of the Effective Date

It is not known when or if the discrepant upper engine mount bolts might have been installed on affected airplanes. The QEC-to-truss mount joint is designed to be failsafe for a single failed upper engine mount bolt. If both bolts in the upper position of an upper engine mount are discrepant, the ability for this joint to carry the QEC loads is compromised, and consequently one upper engine mount bolt could fail. If one bolt in the upper position of an upper engine mount fails, the other bolt in the upper position of the upper engine mount could also fail within a short amount of time. Failure to replace these discrepant bolts greatly increases the risk of operating with a QEC attachment system that might be incapable of handling design level loads. Because of our requirement to promote safe

flight of civil aircraft and the critical need to ensure the structural capability of an engine mount and the short compliance time involved with this action, this AD must be issued immediately.

Because an unsafe condition exists that requires the immediate adoption of this AD, we find that notice and opportunity for prior public comment hereon are impracticable 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 "Docket No. FAA-2008-0740; Directorate Identifier 2008-NM-077-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.

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), 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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 AD:

2008-14-10 Lockheed: Amendment 39-15605. Docket No. FAA-2008-0740; Directorate Identifier 2008-NM-077-AD.

Effective Date

(a) This airworthiness directive (AD) is effective July 22, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all Lockheed Model 382, 382B, 382E, 382F, 382G, and 382J series airplanes, certificated in any category.

Unsafe Condition

(d) This AD results from a report indicating that several upper engine mount bolts manufactured by a certain supplier broke during installation. We are issuing this AD to prevent failure of the upper engine mount bolts, which could result in reduced structural capability of an engine mount, and possible separation of a strut and engine from the airplane during flight.

Compliance

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

Access and Inspection

(f) Within 10 days after the effective date of this AD do the actions specified in paragraphs (f)(1), (f)(2), and (f)(3) of this AD.

(1) Make the airplane safe for maintenance in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA. Chapter 71-00 of the Lockheed Hercules Maintenance Manual is one approved method.

(2) Gain access to the upper engine mount bolts by opening the left and right cowling doors on each engine.

(3) Inspect the visible surface head of each bolt in the upper position of each upper engine mount to determine whether part number (P/N) "NAS 636" is stamped across the top, and whether the manufacturer's code "AFC" or "A" (i.e., AirFasco) is stamped across the bottom. All other manufacturers' codes are acceptable.

Replacement and Corrective Actions

(g) If any upper position bolt, P/N NAS 636, having "AFC" or "A" stamped across the bottom of the surface head is found during the inspection required by paragraph (f)(3) of this AD, before further flight, replace that bolt with a new bolt, P/N NAS 636, having a manufacturers' code other than

"AFC" or "A," in accordance with a method approved by the Manager, Atlanta ACO, FAA. One approved method is the following: To replace an engine mount bolt without removing an engine, do the actions specified in paragraphs (g)(1) through (g)(8) of this AD. If both bolts in the upper position of an engine mount must be replaced, the replacements must be done one at a time to prevent alignment problems.

(1) Shut down and disconnect external electrical power in accordance with a method approved by the Manager, Atlanta ACO, FAA. Chapter 24-40 of the Lockheed Hercules Maintenance Manual is one approved method.

(2) Attach a warning tag and close the external power receptacle door.

(3) Install the nacelle hoist sling on the power package.

(4) Lift the nacelle hoist sling enough to take up load. Warning: When "NO-LOADING" an engine with the sling, the intention is to transfer most of the weight of the engine from the airplane to the sling. This requires some judgment on the part of the technician. Under no circumstances should the sling be raised enough to lift the airplane.

(5) Remove the discrepant upper engine mount bolt and washer.

(6) Install the new upper engine mount bolt, P/N NAS 636, having a manufacturers' code other than "AFC" or "A," and washer, and torque to between 308 and 458 foot-pounds (3,700 to 5,500 inch-pounds).

(7) Remove the nacelle hoist sling from the power package.

(8) Once all discrepant bolts in the upper position of each upper engine mount have been replaced, restore the airplane to service in accordance with a method approved by the Manager, Atlanta ACO, FAA. Chapter 71-00 of the Lockheed Hercules Maintenance Manual is one approved method.

Note 1: It is the intent of the actions specified in paragraph (g) of this AD to allow replacement of individual upper engine mount bolts without having to do any other maintenance.

Parts Installation

(h) As of the effective date of this AD, no person may install a bolt, P/N NAS 636, having "AFC" or "A" stamped across the bottom of the surface head, in the upper position of any upper engine mount, on any airplane.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Atlanta ACO, FAA, ATTN: Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta ACO, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6131; fax (770) 703-6097; has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. 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

(j) None.

Issued in Renton, Washington, on June 24, 2008.
Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. E8-15181 Filed 7-3-08; 8:45 am]