

[Federal Register Volume 76, Number 191 (Monday, October 3, 2011)]
[Rules and Regulations]
[Pages 61036-61038]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2011-24683]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0646; Directorate Identifier 2010-NM-224-AD; Amendment 39-16814; AD 2011-20-04]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace LP Model Galaxy and Gulfstream 200 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Cracked nuts * * * were found on aircraft's production line during routine post assembly inspection. Investigation revealed that the cracks resulted from hydrogen embrittlement combined with high hardness. Non-conformity with certified mechanical properties of this fastener can potentially lead to an unsafe condition.

The unsafe condition is cracked nuts in multiple locations (including aileron fittings, rudder tab assembly and mounting structure for power drive units) could result in failure of affected locations and consequent reduced controllability or reduced structural capability of the airplane. We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective November 7, 2011.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of November 7, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 29, 2011 (76 FR 38062). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Cracked nuts (P/N [part number] MS-21042L3) were found on aircraft's production line during routine post assembly inspection. Investigation revealed that the cracks resulted from hydrogen embrittlement combined with high hardness. Non-conformity with certified mechanical properties of this fastener can potentially lead to an unsafe condition.

The unsafe condition of cracked nuts in multiple locations (including aileron fittings, rudder tab assembly and mounting structure for power drive units) could result in failure of affected locations and consequent reduced controllability or reduced structural capability of the airplane. The required actions include replacing nuts having P/N MS21042L3, and in certain locations, a one time radiographic inspection for cracked nuts and replacing any cracked nuts. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (76 FR 38062, June 29, 2011) or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect 2 products of U.S. registry. We also estimate that it will take about 227 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Where the service

information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$38,590, or \$19,295 per product.

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

We 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 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 regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (76 FR 38062, June 29, 2011), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 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:



2011-20-04 Gulfstream Aerospace LP: Amendment 39-16814. Docket No. FAA-2011-0646; Directorate Identifier 2010-NM-224-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 7, 2011.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Gulfstream Aerospace LP Model Galaxy and Gulfstream 200 airplanes, certificated in any category, serial numbers 219 through 231 inclusive.

Subject

- (d) Air Transport Association (ATA) of America Code 51: Standard Practices/Structures.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Cracked nuts * * * were found on aircraft's production line during routine post assembly inspection. Investigation revealed that the cracks resulted from hydrogen embrittlement combined with high hardness. Non-conformity with certified mechanical properties of this fastener can potentially lead to an unsafe condition.

The unsafe condition is cracked nuts in multiple locations (including aileron fittings, rudder tab assembly and mounting structure for power drive units) could result in failure of affected locations and consequent reduced controllability or reduced structural capability of the airplane.

Compliance

- (f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Actions

- (g) Within 12 months after the effective date of this AD, do the applicable actions specified in paragraphs (g)(1) and (g)(2) of this AD, in accordance with the Accomplishment Instructions in Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010.

(1) For all airplanes: Replace nuts having part number (P/N) MS21042L3 in the applicable areas identified in Steps 4, 5, 6, and 7 of the Accomplishment Instructions of Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010.

(2) For airplanes having serial numbers 224 through 231 inclusive: Do the actions in paragraphs (g)(2)(i) and (g)(2)(ii).

(i) Replace nuts having P/N MS21042L3 at the location specified in Step 8.H. of the Accomplishment Instructions of Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010.

(ii) Do a radiographic inspection for cracking of nuts having P/N MS21042L3 at the location specified in Step 8.J. of the Accomplishment Instructions of Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010. Before further flight replace all cracked nuts.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(h) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 International Branch, send it to ATTN: Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

Related Information

(i) Refer to MCAI Civil Aviation Authority of Israel (CAAI) Airworthiness Directive 57-10-06-18, dated July 27, 2010; and Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010; for related information.

Material Incorporated by Reference

(j) You must use Gulfstream Service Bulletin 200-51-366, dated March 30, 2010, including Appendix A: Israel Aircraft Industries Document IS951400E, Radiographic Inspection of Self-Locking Nut P/N MS21042L3, Revision A, dated January 25, 2010, to do the actions required by this

AD, unless the AD specifies otherwise. The document number specified on pages 1 through 14 of Appendix A of this document is identified as "IS951400."

(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 Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D-25, Savannah, Georgia 31402-2206; telephone 800-810-4853; fax 912-965-3520; e-mail pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington on September 16, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.