[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9437; Directorate Identifier 2016-NM-131-AD]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation Model G-IV airplanes. This proposed AD was prompted by a report indicating that the G-IV gust lock system allows more throttle travel than was intended and could allow the throttle to be advanced to reach take-off thrust. This proposed AD would require modification of the gust lock system, and a revision of the maintenance or inspection program to incorporate functional tests. We are proposing this AD to address the unsafe condition on these products.

DATES: We 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 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: 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 Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9437; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Gideon Jose, Aerospace Engineer, Systems and Equipment Branch, ACE-119A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5569; fax: 404-474-5606; email: Gideon.jose@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-9437; Directorate Identifier 2016-NM-131-AD” at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed 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 proposed AD.

Discussion

We have received a report indicating that the G-IV gust lock system allows more throttle travel than was intended and could allow the throttle to be advanced to reach take-off thrust. The intended function of the gust lock system is to restrict throttle lever movement to a maximum of 6 degrees of forward travel, which provides an unmistakable warning to the pilot that the gust lock system is still engaged, prohibiting the use of the primary flight control surfaces. This condition, if not corrected, could result in the aircraft reaching near take-off thrust and high velocities without primary flight controls (aileron, elevator, and rudder) that can cause a failure to rotate and high-speed runway overrun.

Related Service Information under 1 CFR part 51

We reviewed Gulfstream IV Customer Bulletin Number 236A, dated August 8, 2016; Gulfstream G300 Customer Bulletin Number 236A, dated August 8, 2016; and Gulfstream G400 Customer Bulletin Number 236A, dated August 8, 2016. The service information describes procedures for modifying the gust lock system by doing a retrofit of the gust lock throttle interlock. These documents are distinct since they apply to different airplane models.

We reviewed Gulfstream IV Maintenance Manual Temporary Revision (TR) 27-3, dated April 29, 2016; Gulfstream IV MSG-3 Maintenance Manual TR 27-3, dated

April 29, 2016; Gulfstream G300 Maintenance Manual TR 27-3, dated April 29, 2016; and Gulfstream G400 Maintenance Manual TR 27-3, dated April 29, 2016. The service information describes procedures for a functional test of the throttle lever gust lock protection. These documents are distinct since they apply to different airplane models.

We reviewed Gulfstream IV Maintenance Manual TR 5-7, dated April 29, 2016; Gulfstream IV MSG-3 Maintenance Manual TR 5-6, dated April 29, 2016; Gulfstream G300 Maintenance Manual TR 5-3, dated April 29, 2016; and Gulfstream G400 Maintenance Manual TR 5-3, dated April 29, 2016. The service information describes an airworthiness limitation (certification maintenance requirement) task to do functional tests of the throttle lever gust lock protection. These documents are distinct since they apply to different airplane models.

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

We are proposing 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 same type design.

Proposed AD Requirements

This proposed AD would require modification of the gust lock system, and a revision of the maintenance or inspection program to incorporate functional tests of the throttle level gust lock protection.

Costs of Compliance

We estimate that this proposed AD affects 425 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification and Maintenance or Inspection Program Revision	109 work-hours X $85 per hour = $9,265	$9,080	$18,345	$7,796,625

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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 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) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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):

G**ulfstream Aerospace Corporation**: Docket No. FAA-2016-9437; Directorate Identifier 2016-NM-131-AD.

(a) Comments Due Date

We 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 all Gulfstream Aerospace Corporation Model G-IV airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Unsafe Condition

This AD was prompted by a report indicating that the G-IV gust lock system allows more throttle travel than was intended and could allow the throttle to be advanced to reach take-off thrust. The intended function of the gust lock system is to restrict throttle lever movement to a maximum of 6 degrees of forward travel, which provides an unmistakable warning to the pilot that the gust lock system is still engaged, prohibiting the use of the primary flight control surfaces. We are issuing this AD to prevent the throttle lever movement from advancing more than 6 degrees of forward travel, which could result in the aircraft reaching near take-off thrust and high velocities without primary flight controls (aileron, elevator, and rudder) that can cause a failure to rotate and high speed runway overrun.

(f) Compliance

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

(g) Modification

Within 36 months after the effective date of this AD, modify the gust lock system by doing a retrofit of the gust lock throttle interlock, in accordance with the applicable service information specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD.

(1) Gulfstream IV Customer Bulletin Number 236A, dated August 8, 2016.

(2) Gulfstream G300 Customer Bulletin Number 236A, dated August 8, 2016.

(3) Gulfstream G400 Customer Bulletin Number 236A, dated August 8, 2016.

(h) Maintenance or Inspection Program Revision to Include a Functional Test

Within 90 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate a functional test of the throttle lever gust lock protection specified in the applicable temporary revision (TR) identified in paragraphs (h)(1) through (h)(4) of this AD. The initial compliance time for the functional test is within the applicable time specified in paragraphs (h)(1) through (h)(4) of this AD, or within 90 days after the effective date of this AD, whichever occurs later. The functional test must be done in accordance with the applicable service information specified in paragraphs (i)(1) through (i)(4) of this AD.

(1) For Gulfstream IV Maintenance Manual TR 5-7, dated April 29, 2016: Within 12 months or 4,500 flight hours, whichever occurs first after accomplishing the modification required by paragraph (g) of this AD.

(2) For Gulfstream IV MSG-3 Maintenance Manual TR 5-6, dated April 29, 2016: Before the next 1C maintenance check or within 4,500 flight hours, whichever occurs first after accomplishing the modification required by paragraph (g) of this AD.

(3) For Gulfstream G300 Maintenance Manual TR 5-3, dated April 29, 2016: Before the next 1C maintenance check or within 4,500 flight hours, whichever occurs first after accomplishing the modification required by paragraph (g) of this AD.

(4) For Gulfstream G400 Maintenance Manual TR 5-3, dated April 29, 2016: Before the next 1C maintenance check or within 4,500 flight hours, whichever occurs first after accomplishing the modification required by paragraph (g) of this AD.

(i) Service Information for the Functional Test of the Throttle Lever Gust Lock Protection

The functional test of the throttle lever gust lock protection specified in paragraph (h) of this AD must be done in accordance with the applicable service information specified in paragraphs (i)(1) through (i)(4) of this AD.

(1) Gulfstream IV Maintenance Manual TR 27-3, dated April 29, 2016.

(2) Gulfstream IV MSG-3 Maintenance Manual TR 27-3, dated April 29, 2016.

(3) Gulfstream G300 Maintenance Manual TR 27-3, dated April 29, 2016.

(4) Gulfstream G400 Maintenance Manual TR 27-3, dated April 29, 2016.

(j) No Alternative Actions and Intervals

After the maintenance or inspection program has been revised as required by paragraph (h) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (m) of this AD.

(k) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the applicable service information identified in paragraph (k)(1), (k)(2), or (k)(3) of this AD.

(1) Gulfstream IV Customer Bulletin Number 236, dated June 1, 2016.

(2) Gulfstream G300 Customer Bulletin Number 236, dated June 1, 2016.

(3) Gulfstream G400 Customer Bulletin Number 236, dated June 1, 2016.

(l) Exception for Reporting and Return of Parts

Although the service information identified in paragraph (g) of this AD specifies to submit certain information to the manufacturer and to return parts to the manufacturer, this AD does not include those requirements.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta Aircraft Certification Office (ACO), 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 manager of the ACO, send it to the attention of the person identified in paragraph (n)(1) of this AD.

(2) 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.

(3) Except as required by paragraph (l) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (m)(3)(i) and (m)(3)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(n) Related Information

(1) For more information about this AD, contact Gideon Jose, Aerospace Engineer, Systems and Equipment Branch, ACE-119A, FAA, Atlanta ACO, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5569; fax: 404-474-5606; email: Gideon.jose@faa.gov.

(2) For service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; Internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on November 25, 2016.

John P. Piccola, Jr.,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
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