[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0651; Directorate Identifier 2014-NM-043-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 supersede Airworthiness Directive (AD) 2013-22-19, which applies to all Gulfstream Aerospace Corporation Model GV and GV-SP airplanes. AD 2013-22-19 currently requires inspecting to determine if fuel boost pumps having a certain part number are installed, replacing the fuel boost pumps having a certain part number, and revising the airplane maintenance program to include revised instructions for continued airworthiness. Since we issued AD 2013-22-19, we have determined that the maintenance or inspection program, as applicable, must be revised to include new service information. This proposed AD would continue to require revising the airplane maintenance program to include a fuel leak check of the fuel boost pumps, using new service information. We are proposing this AD to prevent fuel leakage in combination with a capacitor clearance issue, which could result in an uncontrolled fire in the wheel well.

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 Gulfstream, Triumph Aerostructures, and General Electric (GE) Aviation service information identified in this proposed 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.

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-2014-0651; 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: Darby Mirocha, Continued Operational Safety and Certificate Management, 102A, FAA, Atlanta Aircraft

Certification Office, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5573; fax: 404-474-5606; email: darby.mirocha@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2014-0651; Directorate Identifier 2014-NM-043-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

On October 25, 2013, we issued AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), for all Gulfstream Aerospace Corporation Model GV and GV-SP airplanes. AD 2013-22-19 requires inspecting to determine if fuel boost pumps having a certain part number are installed, replacing the fuel boost pumps having a certain part number, and revising the airplane maintenance program to include revised instructions for continued airworthiness. AD 2013-22-19 resulted from reports of two independent types of failure of the fuel boost pump with overheat damage found on the internal components and external housing on one of the failure types, and fuel leakage on the other. We issued AD 2013-22-19 to prevent fuel leakage in combination with a capacitor clearance issue, which could result in an uncontrolled fire in the wheel well.

Actions Since AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), Was Issued

Since we issued AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), we have determined that the maintenance or inspection program, as applicable, must be revised to include new service information. We became aware that the service information specified in paragraph (i) of AD 2013-22-19 cannot be used by operators and does not appropriately address the unsafe condition.

Relevant Service Information

We have reviewed the following Gulfstream Customer Bulletins, which describe procedures for inspecting and replacing the fuel boost pumps:

- Gulfstream V Customer Bulletin 197, dated April 11, 2012 (for Model GV airplanes);
- Gulfstream G500 Customer Bulletin 122, dated April 11, 2012 (for Model GV- SP airplanes designated as G500); and
- Gulfstream G550 Customer Bulletin 122, dated April 11, 2012 (for Model GV-SP airplanes designated as G500 or G550).

We also reviewed the following service information, which describes procedures for revising the airplane maintenance or inspection program, as applicable, to include a fuel leak check of the fuel boost pumps, and the inspection intervals:

- Table 18, “500 Flight Hours Scheduled Inspection Table,” in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks, of the Gulfstream V Maintenance Manual, Revision 23, dated June 20, 2013;
- Task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of chapter 28, Fuel, of the Gulfstream V Maintenance Manual, Revision 23, dated June 20, 2013;
- Table 20, “500 Flight Hours Scheduled Inspection Table,” in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks, of the Gulfstream G500 Maintenance Manual, Revision 23, dated June 20, 2013;

- Task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of section 26, Fuel Boost Pumps, of chapter 28, Fuel, of the Gulfstream G500 Maintenance Manual, Revision 23, dated June 20, 2013;

- Table 20, "500 Flight Hours Scheduled Inspection Table," in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks, of the Gulfstream G550 Maintenance Manual, Revision 23, dated June 20, 2013; and

- Task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of section 26, Fuel Boost Pumps, of chapter 28, Fuel, of the Gulfstream G550 Maintenance Manual, Revision 23, dated June 20, 2013.

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 retain all requirements of AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013). This proposed AD also includes new service information for Model GV-SP airplanes designated as Model G500 for the actions required by paragraphs (g) and (h) of this proposed AD.

Explanation of "RC" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directives Implementation Aviation Rulemaking Committee, to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The actions specified in the service information described previously include

steps that are labeled as RC (required for compliance) because these steps have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition. As noted in the specified service information, steps labeled as RC must be done to comply with the proposed AD. However, steps that are not labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the service information without obtaining approval of an alternative method of compliance (AMOC), provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC will require approval of an AMOC.

Costs of Compliance

We estimate that this proposed AD affects 357 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
Inspection to determine if a certain part number is installed [retained actions from AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013)]	1 work-hour X $85 per hour = $85	$0	$85	$30,345
Maintenance program revision [retained actions from AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013)]	1 work-hour X $85 per hour = $85	$0	$85	$30,345

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 aircraft that might need these replacements:

On-condition cost

Action	Labor cost	Parts cost	Cost per product
Replacement	24 work-hours X $85 per hour = $2,040	$7,600	$9,640

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 have 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 that the 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 removing Airworthiness Directive (AD) 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), and adding the following new AD:

Gulfstream Aerospace Corporation: Docket No. FAA-2014-0651; Directorate Identifier 2014-NM-043-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013).

(c) Applicability

This AD applies to all Gulfstream Aerospace Corporation Model GV and GV-SP airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Unsafe Condition

This AD was prompted by reports of two independent types of failure of the fuel boost pump with overheat damage found on the internal components and external housing on one of the failure types, and fuel leakage on the other. We are issuing this AD to prevent fuel leakage in combination with a capacitor clearance issue, which could result in an uncontrolled fire in the wheel well.

(f) Compliance

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

(g) Retained Inspection To Determine the Part Number with Revised Service Information

This paragraph restates the actions required by paragraph (g) of AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), with revised service information. Within 36 months after January 7, 2014 (the effective date of AD 2013-22-19), inspect the fuel boost pumps to determine whether Gulfstream part number (P/N) 1159SCP500-5 is installed, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD; including Triumph Aerostructures Service Bulletin SB-TAGV/GVSP-28-JG0162, dated August 30, 2011; and GE Service Bulletin 31760-28-100, dated February 15, 2011. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the fuel boost pumps can be conclusively determined from that review.

(1) For Model GV airplanes: Gulfstream V Customer Bulletin 197, dated April 11, 2012.

(2) For Model GV-SP airplanes designated as G500: Gulfstream G500 Customer Bulletin 122, dated April 11, 2012; or Gulfstream G550 Customer Bulletin 122, dated April 11, 2012.

(3) For Model GV-SP airplanes designated as G550: Gulfstream G550 Customer Bulletin 122, dated April 11, 2012.

(h) Retained Replacement with Revised Service Information

This paragraph restates the actions required by paragraph (h) of AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), with revised service information. If the inspection required by paragraph (g) of this AD reveals a fuel boost pump with Gulfstream P/N 1159SCP500-5: Within 36 months after January 7, 2014 (the effective date of AD 2013-22-19), replace the fuel boost pump with a serviceable pump having Gulfstream P/N 1159SCP500-7, in accordance with the applicable service information identified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD; including Triumph Aerostructures Service Bulletin SB-TAGV/GVSP-28-JG0162, dated August 30, 2011; and GE Service Bulletin 31760-28-100, dated February 15, 2011.

(1) For Model GV airplanes: Gulfstream V Customer Bulletin 197, dated April 11, 2012.

(2) For Model GV-SP airplanes designated as G500: Gulfstream G500 Customer Bulletin 122, dated April 11, 2012; or Gulfstream G550 Customer Bulletin 122, dated April 11, 2012.

(3) For Model GV-SP airplanes designated as G550: Gulfstream G550 Customer Bulletin 122, dated April 11, 2012.

(i) New Revision of the Maintenance or Inspection Program

Within 500 flight hours after the effective date of this AD, revise the airplane maintenance or inspection program, as applicable, to include the fuel leak check inspection of the fuel boost pumps specified in the applicable task identified in paragraph (j) of this AD.

(1) For airplanes on which fuel boost pump Gulfstream P/N 1159SCP500-5 has been replaced in accordance with paragraph (h) of this AD: The initial compliance time for the leak check inspection specified in the applicable task identified in paragraph (j) of this AD, is within 500 flight hours after doing the replacement specified in paragraph (h) of this AD.

(2) For airplanes on which the inspection required by paragraph (g) of this AD reveals that a fuel boost pump with Gulfstream P/N 1159SCP500-7 has been installed: After revising the airplane maintenance or inspection program, as applicable, as required by paragraph (i) of this AD, the initial compliance time for the leak check inspection specified in the applicable task identified in paragraph (j) of this AD, is within 500 flight hours after doing the inspection required by paragraph (g) of this AD.

(j) Service Information for Maintenance Program Revision

Use the applicable service information specified in paragraph (j)(1), (j)(2), or (j)(3) of this AD to revise the airplane maintenance or inspection program, as applicable, as required by paragraph (i) of this AD.

(1) For Model GV airplanes: Use table 18, “500 Flight Hours Scheduled Inspection Table,” in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks; and task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of chapter 28, Fuel; of the Gulfstream V Maintenance Manual, Revision 42, dated June 20, 2013.

(2) For Model GV-SP airplanes designated as G500: Use task 28-26-01, Fuel Boost Pumps – Fuel Leak Checks, in table 20, “500 Flight Hours Scheduled Inspection

Table," in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks; and task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of section 26, Fuel Boost Pumps, of chapter 28, Fuel; of the Gulfstream G500 Maintenance Manual, Revision 23, dated June 20, 2013.

(3) For Model GV-SP airplanes designated as G550: Use task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, in table 20, "500 Flight Hours Scheduled Inspection Table," in section 05-20-00, of chapter 5, Time Limits/Maintenance Checks; and task 28-26-01, Fuel Boost Pumps – Fuel Leak Check, of section 26, Fuel Boost Pumps, of chapter 28, Fuel; of the Gulfstream G550 Maintenance Manual, Revision 23, dated June 20, 2013.

(k) No Alternative Actions or Intervals

After accomplishing the revision required by paragraph (i) 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 in accordance with the procedures specified in paragraph (m) of this AD.

(l) Parts Installation Prohibition

As of January 7, 2014 (the effective date of AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013)), no person may install a fuel boost pump having Gulfstream P/N 1159SCP500-5 on any airplane.

(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) AMOCs approved for AD 2013-22-19, Amendment 39-17651 (78 FR 72554, December 3, 2013), are approved as AMOCs for the corresponding provisions of this AD.

(4) If the service information contains steps that are labeled as RC (Required for Compliance), those steps must be done to comply with this AD; any steps that are not labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the specified service information without obtaining approval of an AMOC, provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC require approval of an AMOC.

(n) Related Information

(1) For more information about this AD, contact Darby Mirocha, Continued Operational Safety and Certificate Management, 102A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5573; fax: 404-474-5606; email: darby.mirocha@faa.gov.

(2) For Gulfstream, Triumph Aerostructures, and General Electric (GE) Aviation 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 September 20, 2014.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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