



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1313; Directorate Identifier 2012-NM-080-AD; Amendment 39-17651; AD 2013-22-19]**

**RIN 2120-AA64**

**Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation Model GV and GV-SP airplanes. 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. This AD 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. 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.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** 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](mailto:pubs@gulfstream.com); Internet [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](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, Washington. 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/#!docketDetail;D=FAA-2012-1313>; 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 address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Darby Mirocha, Aerospace Engineer, Propulsion and Services Branch, ACE-118A, 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](mailto:darby.mirocha@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM published in the Federal Register on December 26, 2012 (77 FR 75908). The NPRM proposed to require

doing an inspection to determine if fuel boost pumps having a certain part number (P/N) 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.

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.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (77 FR 75908, December 26, 2012) and the FAA's response to each comment.

### **Request to Revise the Precipitating Event**

Gulfstream Aerospace Corporation (Gulfstream) requested that the precipitating event in the SUMMARY section of the NPRM (77 FR 75908, December 26, 2012) be revised to provide clarity not provided elsewhere in the NPRM—namely, although two distinct failure types have been reported, there have been no reports of any fuel pump exhibiting both failure types.

We agree with Gulfstream's request. We agree that the failures in service were separate events and no single pump was found with both failure modes present. We have changed the SUMMARY section and paragraph (e) of this final rule to include language suggested by the commenter emphasizing the independent nature of the failure modes.

### **Request to Revise the Statement of Requirements**

Gulfstream requested that the statement of requirements in the SUMMARY section of the NPRM (77 FR 75908, December 26, 2012) be revised. Gulfstream

proposed to revise the wording to read, “This proposed AD would require doing an inspection to determine if fuel boost pumps having a certain part number are installed, replacing the fuel boost pumps having a certain part number with a later part number, and revising the airplane maintenance program to include revised instructions for continued airworthiness for airplanes with the later pump part number installed.” Gulfstream stated that the rewording increases the content clarity in the NPRM.

We disagree with Gulfstream’s request to refer to “later part numbers” because this language lacks clarity. This final rule requires specific part number replacements. Therefore, we would need to use specific part numbers to identify replacement parts. In addition, the intent of the SUMMARY section is to provide a brief explanation of the unsafe condition and corrective actions; therefore, we do not find it appropriate to include details regarding specific part numbers. We have not changed this final rule in this regard.

**Request to Revise the Discussion Paragraph of the NPRM (77 FR 75908, December 26, 2012)**

Gulfstream requested that the Discussion paragraph of the NPRM (77 FR 75908, December 26, 2012) be revised. Gulfstream proposed revising the wording to add, “Additionally, on one other fuel pump component, a damaged o-ring between the ‘wet’ and ‘dry’ cavities of the boost pump resulted in fuel ingress into the dry cavity and outside of the fuel pump via the electrical pigtail.” Gulfstream stated that the rewording clarifies that the component referred to is a fuel pump, and that there is one recorded incident; also additional information related to the discovery of the incident is provided.

We agree that the wording suggested by Gulfstream clarifies the Discussion paragraph of the NPRM (77 FR 75908, December 26, 2012), which was drawn entirely from paragraph I.B. “Reason,” of Gulfstream V Customer Bulletin 197, dated April 11, 2012; and Gulfstream G550 Customer Bulletin 122, dated April 11, 2012. However, that

portion of the Discussion paragraph is not carried over into this final rule; therefore, no change is necessary to this final rule in this regard.

#### **Request to Revise the Unsafe Condition**

Gulfstream requested that the unsafe condition identified in the NPRM (77 FR 75908, December 26, 2012) be revised. Gulfstream proposed to revise the wording to read, “If not corrected, the issue of the fuel leakage in combination with the capacitor clearance issue could result in an uncontrolled fire in the wheel well.” Gulfstream stated that the revised description is consistent with the field experience of independent failure types.

We agree with Gulfstream’s request since the rewording provides more clarity of the unsafe condition. We have revised the SUMMARY section, the Discussion paragraph, and paragraph (e) of this final rule to state that fuel leakage in combination with a capacitor clearance issue could result in an uncontrolled fire in the wheel well.

#### **Request to Change the Title of Certain Service Information**

Gulfstream requested that we change the title of certain service information in the NPRM (77 FR 75908, December 26, 2012). Gulfstream stated that the correct title for the Gulfstream service information should be referred to as “customer bulletins.” Gulfstream also stated that the Model GV-SP airplanes include G500 and G550 airplane types, so a G500 Customer Bulletin reference should be added.

We acknowledge Gulfstream’s request to correct citations for certain service information. We agree that the referenced bulletins should be referred to as “customer” bulletins; we have revised document citations throughout this final rule accordingly. However, although we agree that G500 and G550 airplanes are both included in the Model GV-SP designation, we do not agree to add a reference to a customer bulletin for G500 airplanes because doing so violates Office of the Federal Register (OFR) regulations for approval of materials “incorporated by reference” in rules. (See

1 CFR 51.1(f.) In general terms, we may not include elements in a document citation that are not clearly specified on the document. Therefore, although we agree that Gulfstream G550 Customer Bulletin 122, dated April 11, 2012, also applies to G500 airplanes, we do not agree to revise the document citation in this regard.

**Request to Clarify the Differences Between the Proposed AD and the Service Information Paragraph of the NPRM (77 FR 75908, December 26, 2012)**

Gulfstream requested clarification of the Differences Between the Proposed AD and the Service Information paragraph of the NPRM (77 FR 75908, December 26, 2012) to highlight that the proposed 36-month compliance time will result in a slightly later completion date than the compliance time specified in referenced Gulfstream customer bulletins, and that the compliance time in the proposed AD takes precedence over that of the referenced Gulfstream customer bulletins. Gulfstream stated that it acknowledges a difference in compliance time, but stated that the NPRM does not provide an explanation on the effect on the completion date.

We partially agree with Gulfstream's request. We agree that this AD has a slightly different compliance time than that provided in the service information. In developing an appropriate compliance time, we considered the safety implications, parts availability, and normal maintenance schedules for timely accomplishment of the actions in this AD, while still maintaining an adequate level of safety. We arrived at the compliance time with the manufacturer's concurrence. In addition, the Differences Between the Proposed AD and the Service Information paragraph of the NPRM (77 FR 75908, December 26, 2012) is not restated in this final rule. We have not changed this final rule in this regard.

### **Request to Clarify Certain Part Numbers**

Gulfstream requested that the part numbers in the NPRM (77 FR 75908, December 26, 2012) be clarified. Gulfstream stated that the word “Gulfstream” should be added in front of P/N 1159SCP500-5 and P/N 1159SCP500-7 since the fuel pumps also contain GE part numbers.

We agree with Gulfstream’s request. When referencing P/N 1159SCP500-5 and P/N 1159SCP500-7, we have added the word “Gulfstream” in front of the part number in paragraphs (g), (h), and (i) of this AD.

### **Request to Change the Compliance Time**

Gulfstream requested that we change the compliance time in paragraph (h) of the NPRM (77 FR 75908, December 26, 2012). Gulfstream proposed to revise the compliance time for the replacement of the fuel boost pump from “before further flight” to “within 36 months after the effective date of this AD.”

Gulfstream stated that approximately 2,250 fuel pumps having Gulfstream P/N 1159SCP500-5 require an upgrade to Gulfstream P/N 1159SCP500-7. Gulfstream stated that there are a limited number of “seed” fuel pumps to support this effort. Gulfstream stated that the Gulfstream-managed program matches customer airplane availability with supplier shop loading and seed unit availability, which allows for an upgrade of all affected fuel boost pumps within a 42-month committed timeframe without undue burden onto operators in terms of aircraft downtime and missed trips. In addition, Gulfstream stated that a risk assessment was presented to the FAA in 2010 that supported a change-out interval of 48 months through a Gulfstream-managed program starting in October 2011. Gulfstream stated that, based on the risk assessment, Gulfstream V Customer Bulletin 197, dated April 11, 2012 (for Model GV airplanes); and Gulfstream G550 Customer Bulletin 122, dated April 11, 2012 (for Model GV-SP airplanes); were

issued to recommend replacement of certain fuel pumps within 42 months since issuance of the service information.

Gulfstream stated that its proposed change to the compliance time is consistent with the risk assessment, the intent of the managed program, and the wording of the Gulfstream and supplier service information. Gulfstream stated that, in contrast, the requirement to change out Gulfstream P/N 11598SCP500-5 before the next flight is unnecessary according to the Gulfstream risk assessment, and has the potential to severely affect the Gulfstream-managed program, since needed planning information will not be available to Gulfstream.

We agree with Gulfstream's request to revise the compliance time in paragraph (h) of this final rule to 36 months for the reasons provided by the commenter. We have revised paragraph (h) of this AD accordingly.

#### **Request to Revise Compliance Time for Leak Check Inspection**

Gulfstream requested we revise paragraph (i)(2) of the NPRM (77 FR 75908, December 26, 2012) to require the initial inspection before 500 flight hours have elapsed since installation of the Gulfstream P/N 1159SCP500-7 pump, or before further flight if 500 flight hours have elapsed since installation of the Gulfstream 1159SCP500-7 pump and an initial fuel leak inspection has not been accomplished.

Gulfstream stated that the inspection referred to in paragraph (g) of the NPRM (77 FR 75908, December 26, 2012) determines the part number of the fuel boost pump; therefore, a requirement for a leak check inspection before further flight is inconsistent with the FAA-accepted Instructions for Continued Airworthiness, and is only required if the initial inspection interval of 500 flight hours has been exceeded since installation of the Gulfstream P/N 1159SCP500-7 standard pump and an initial leak check inspection has not been accomplished.

We partially agree with the commenter's request. We agree that mandating the leak check inspection at the same time as the part number inspection could cause the leak check to be done before 500 flight hours has elapsed since the installation of the Gulfstream P/N 1159SCP500-7 pump, because the Gulfstream P/N 1159SCP500-7 installation might have just recently been done. However, we disagree with changing the AD in this regard because the simplicity of the leak check, in addition to the airplane already being under inspection in the area, places minimal burden on the operator. We have not changed this AD in this regard.

#### **Request to Revise Parts Installation Prohibition**

Gulfstream requested we revise paragraph (k) of the NPRM (77 FR 75908, December 26, 2012) to prohibit replacing a fuel boost pump having Gulfstream P/N 1159SCP500-7 with a fuel boost pump having Gulfstream P/N 1159SCP500-5. Gulfstream stated that this is to allow a fuel boost pump having Gulfstream P/N 1159SCP500-5 to be replaced by a fuel boost pump of the same part number within 36 months after the effective date of the AD, if a Gulfstream P/N 1159SCP500-7 pump is not available, and to require that any Gulfstream P/N 1159SCP500-5 pumps installed for that reason must be replaced with a Gulfstream P/N 1159SCP500-7 pump within 36 months after the effective date of the AD.

Gulfstream stated that its risk assessment supports a replacement at intervals of 48 months from April 2012, and remains unaffected if a Gulfstream P/N 1159SCP500-5 pump is replaced with a Gulfstream P/N 1159SCP500-5 pump, since the total number of Gulfstream P/N 1159SCP500-5 pumps in service at any time is unchanged. Gulfstream stated that its request is intended to avoid a situation where an airplane is grounded because a Gulfstream P/N 1159SCP500-5 pump requires replacement for cause and a Gulfstream P/N 1159SCP500-7 pump is unavailable, but a Gulfstream P/N 1159SCP500-5 is available.

We disagree with Gulfstream's request to revise paragraph (k) of this AD. In cases where a part is known to be unairworthy, such as when it creates an unsafe condition, we might determine that, as of the effective date of the AD, such a part is not allowed to be installed on an airplane. "Parts Installation Prohibition" paragraphs (like paragraph (k) of this AD) are intended to prevent an operator from knowingly installing an unairworthy part on an airplane.

We based the compliance time of 36 months specified in paragraph (g) of this AD on a risk assessment of the Gulfstream Aerospace Corporation Model GV and GV-SP fleet performed in August 2010. The risk assessment did not consider the possibility that additional fuel boost pumps with Gulfstream P/N 1159SCP500-5 would be introduced into the fleet during the 36-month compliance time. Therefore, we determined that the "Parts Installation Prohibition" paragraph must prohibit installation of the affected part as of the effective date of this AD. We have not changed this AD in this regard. However, under the provisions of paragraph (l) of this AD, we may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 75908, December 26, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 75908, December 26, 2012).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

**Costs of Compliance**

We estimate that this AD affects 357 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection to determine if a certain part number is installed	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$30,345
Maintenance program revision	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 inspection. We have no way of determining the number of aircraft that might need these replacements:

**On-condition cost**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
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**

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),
- (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.

### **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 airworthiness directive (AD):

2013-22-19 **Gulfstream Aerospace Corporation**: Amendment 39-17651; Docket No. FAA-2012-1313; Directorate Identifier 2012-NM-080-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(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 2822, Fuel boost pump.

#### **(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) Inspection to Determine the Part Number (P/N)**

Within 36 months after the effective date of this AD, inspect the fuel boost pumps to determine whether Gulfstream P/N 1159SCP500-5 is installed, in accordance with the Accomplishment Instructions of Gulfstream V Customer Bulletin 197, dated April 11, 2012, including the service information specified in paragraphs (g)(1) and (g)(2) of this AD (for Model GV airplanes); or Gulfstream G550 Customer Bulletin 122, dated April 11, 2012, including the service information specified in paragraphs (g)(1) and (g)(2) of this AD (for Model GV-SP airplanes). 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) Triumph Aerostructures Service Bulletin SB-TAGV/GVSP-28-JG0162, dated August 30, 2011.

(2) GE Service Bulletin 31760-28-100, dated February 15, 2011.

**(h) Replacement**

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 the effective date of this AD, replace the fuel boost pump with a serviceable pump having Gulfstream P/N 1159SCP500-7, in accordance with the Accomplishment Instructions of Gulfstream V Customer Bulletin 197, dated April 11, 2012, including the service information specified in paragraphs (h)(1) and (h)(2) of this AD (for Model GV airplanes); or Gulfstream G550 Customer Bulletin 122, dated April 11, 2012, including the service information specified in paragraphs (h)(1) and (h)(2) of this AD (for Model GV-SP airplanes).

(1) Triumph Aerostructures Service Bulletin SB-TAGV/GVSP-28-JG0162, dated August 30, 2011.

(2) GE Service Bulletin 31760-28-100, dated February 15, 2011.

**(i) Maintenance Program Revision**

Within 500 flight hours after the effective date of this AD, revise the airplane maintenance program to include Gulfstream Document GV-GER-0003, Instructions for Continued Airworthiness, Fuel Boost Pump with Leak Check Port, dated November 24, 2010.

(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 inspection 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 program, as required by paragraph (i) of this AD, the initial inspection is required before further flight after doing the inspection required by paragraph (g) of this AD.

**(j) 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 (l) of this AD.

**(k) Parts Installation Prohibition**

As of the effective date of this AD, no person may install a fuel boost pump having Gulfstream P/N 1159SCP500-5 on any airplane.

**(l) 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 (m) 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.

**(m) Related Information**

For more information about this AD, contact Darby Mirocha, Aerospace Engineer, Propulsion and Services Branch, ACE-118A, FAA, Atlanta ACO, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5573; fax: (404) 474-5606; email: [darby.mirocha@faa.gov](mailto:darby.mirocha@faa.gov).

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Gulfstream V Customer Bulletin 197, dated April 11, 2012.

(ii) Gulfstream G550 Customer Bulletin 122, dated April 11, 2012.

(iii) Triumph Service Bulletin SB-TAGV/GVSP-28-JG0162, dated August 30, 2011.

(iv) General Electric Service Bulletin 31760-28-100, dated February 15, 2011.

(v) Gulfstream Document GV-GER-0003, Instructions for Continued Airworthiness, Fuel Boost Pump with Leak Check Port, dated November 24, 2010.

(3) For Gulfstream, Triumph Aerostructures, and General Electric 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](mailto:pubs@gulfstream.com); Internet [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm).

(4) You may view this 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.

(5) You may view this 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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 25, 2013.

Jeffrey E. Duven,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-28860 Filed 12/02/2013 at 8:45 am; Publication Date: 12/03/2013]