



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0898; Project Identifier AD-2020-01284-T; Amendment 39-21320; AD 2020-23-04]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Gulfstream Aerospace Corporation (Gulfstream) Model GVII-G500 and Model GVII-G600 airplanes. This AD requires revising your existing airplane flight manual (AFM) and airplane maintenance manual (AMM) to include information pertaining to the fuel boost pump. This AD was prompted by a report of misassembled impellers onto the shaft of the fuel boost pump during production. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 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 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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 <https://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.

For service information identified in this final rule, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402; phone: (800) 810-4853; email: pubs@gulfstream.com; website:

<https://www.gulfstream.com/en/customer-support/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0898.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0898; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Jared Meyer, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5534; fax: (404) 474-5605; email: jared.meyer@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA was notified by Gulfstream of the possibility of misassembled impellers onto the shaft of fuel boost pumps used in the production of GVII-G500 and GVII-G600 airplanes. The supplier of fuel boost pumps discovered two misassembled fuel boost pumps on two different make/models of non-Gulfstream aircraft. The Gulfstream GVII-

G500 and GVII-G600 fuel boost pumps are very similar in design and are manufactured in the same facility using the same manufacturing processes, so the same condition could exist on the Gulfstream fuel boost pumps.

A misassembled fuel boost pump could result in a woodruff key becoming dislodged and causing friction between static and rotating components internal to the fuel boost pump. This friction could generate heat or sparks inside the fuel tank, which, if the pump were to run dry, could result in a fuel tank fire or fuel tank explosion.

The unsafe condition, if not addressed, could result in a potential source of ignition in the fuel tank and may lead to fire or explosion.

Related Service Information under 1 CFR part 51

The FAA reviewed the following AFM supplements, which contain new warnings about operating the boost pumps with empty fuel tanks for the Abnormal Procedures and Emergency Procedures sections of the AFM. These documents are distinct because they pertain to different airplane models:

- Gulfstream Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500 (Issue 1)-2020-05, dated September 8, 2020;

- Gulfstream Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500-2020-06, dated September 8, 2020; and

- Gulfstream Corporation GVII-G600 Airplane Flight Manual Supplement No. GVII-G600-2020-06 dated September 8, 2020.

The FAA also reviewed the following AMM documents, which contain revised maintenance procedures pertaining to the fuel boost pump. These documents are distinct since they apply to different airplane models. Although the documents have the watermarked words “advance copy” on each page of the document, these are not advance draft copies but final versions of temporary revisions to the AMM, pending incorporation into the AMM at the next revision.

- GVII-G500 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020;

- GVII-G500 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020;

- GVII-G600 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020;
- GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020;
- GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Removal/Installation, dated August 31, 2020; and
- GVII-G600 Maintenance Manual 28-26-05 Fuel Boost Pump Canister - Removal/Installation, dated August 31, 2020.

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

The FAA is issuing this AD because it evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of this same type design.

AD Requirements

This AD requires revising the existing AFM for your airplane by adding new warnings to the Abnormal Procedures and Emergency Procedures sections. Revising the existing AFM for your airplane is not considered a maintenance action and therefore may be performed by the owner/operator (pilot) holding at least a private pilot certificate. The pilot must record compliance in the aircraft maintenance records in accordance with 14 CFR 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417.

This AD also requires revising the existing AMM for your airplane by replacing maintenance procedures pertaining to the fuel boost pump.

Interim Action

The FAA considers this AD an interim action. The design approval holder is currently working on a modification that will address the unsafe condition identified in this AD. Once this modification action is developed, FAA-approved, and available, the FAA will consider additional rulemaking.

Justification For Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 et seq.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because misassembled fuel boost pump components could generate heat or sparks leading to a potential fuel tank explosion. If an operator or maintenance personnel were to run fuel boost pump dry, it could result in fuel tank fire or explosion. The FAA determined that the actions necessary to correct this condition must be accomplished within 14 days. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. The FAA invites you to send any written relevant data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include Docket No. FAA-2020-0898 and Project Identifier AD-2020-01284-T at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Jared Meyer, Aerospace Engineer, Atlanta ACO Branch, FAA, 107 Charles W. Grant Pkwy, Atlanta, GA 30354. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Costs of Compliance

The FAA estimates that this AD affects 80 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

| Action | Labor Cost | Parts Cost | Cost per product | Cost on U.S. operators |
|----------------|------------------------------------|-------------------|-------------------------|-------------------------------|
| Revise the AMM | 1 work-hour x \$85 per hour = \$85 | Not applicable | \$85 | \$6,800 |
| Revise the AFM | 1 work-hour x \$85 per hour = \$85 | Not applicable | \$85 | \$6,800 |

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.

The FAA is 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 Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

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, and
- (2) Will not affect intrastate aviation in Alaska.

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:

2020-23-04 Gulfstream Aerospace Corporation: Amendment 39-21320; Docket No. FAA-2020-0898; Project Identifier AD-2020-01284-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Gulfstream Aerospace Corporation Model GVII-G500 airplanes, serial numbers 72001 through 72064, and Model GVII-G600 airplanes, serial numbers 73001 through 73043, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2822, Fuel Boost Pump.

(e) Unsafe Condition

This AD was prompted by a report of misassembled impellers onto the shaft of the fuel boost pump during production. The FAA is issuing this AD to prevent the ignition of flammable vapors in the fuel tank as a result of frictional heating or sparks caused by a dislodged woodruff key inside the fuel boost pump. This unsafe condition, if not addressed, could result in a potential source of ignition in the fuel tank and consequent fire or explosion.

(f) Compliance

You must comply with this AD within 14 days after the effective date of this AD, unless already done.

(g) Required Actions

(1) Revise your existing airplane maintenance manual (AMM) by replacing the procedures listed in paragraphs (g)(1)(i) through (vi) of this AD, as applicable for your model airplane.

(i) GVII-G500 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020;

(ii) GVII-G500 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020;

(iii) GVII-G600 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020;

(iv) GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020;

(v) GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Removal/Installation, dated August 31, 2020; and

(vi) GVII-G600 Maintenance Manual 28-26-05 Fuel Boost Pump Canister - Removal/Installation, dated August 31, 2020.

(2) Revise your existing airplane flight manual (AFM) by including in the AFM the airplane flight manual supplement (AFMS) listed in paragraph (g)(2)(i), (ii) or (iii) of this AD that is applicable to your model airplane. Using a later AFM revision with information identical to that contained in the AFMS specified for your airplane is acceptable for compliance with the requirement of this paragraph.

(i) Gulfstream Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500 (Issue 1)-2020-05, dated September 8, 2020;

(ii) Gulfstream Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500-2020-06, dated September 8, 2020; or

(iii) Gulfstream Aerospace GVII-G600 Airplane Flight Manual Supplement No. GVII-G600-2020-06, dated September 8, 2020.

(3) The action required by paragraph (g)(2) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR

43.9(a)(1) through (4), and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (i) 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.

(i) Related Information

For more information about this AD, contact Jared Meyer, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5534; fax: (404) 474-5605; email: jared.meyer@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500 (Issue 1)-2020-05, dated September 8, 2020.

(ii) Gulfstream Aerospace GVII-G500 Airplane Flight Manual Supplement No. GVII-G500-2020-06, dated September 8, 2020.

(iii) Gulfstream Aerospace GVII-G600 Airplane Flight Manual Supplement No. GVII-G600-2020-06, dated September 8, 2020.

(iv) GVII-G500 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020.

Note 1 to paragraph (j)(2)(iv): Although the documents in paragraphs (j)(2)(iv) through (ix) have the watermarked words “advance copy” on each page of the document, these are not advance draft copies but final versions of temporary revisions to the AMM, pending incorporation into the AMM at the next revision.

(v) GVII-G500 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020.

(vi) GVII-G600 Maintenance Manual 12-13-01 Defueling Procedure - Defuel, dated August 31, 2020.

(vii) GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Prime, dated August 31, 2020.

(viii) GVII-G600 Maintenance Manual 28-26-04 Fuel Boost Pump - Removal/Installation dated August 31, 2020.

(ix) GVII-G600 Maintenance Manual 28-26-05 Fuel Boost Pump Canister - Removal/Installation, dated August 31, 2020.

(3) For Gulfstream Aerospace Corporation service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402; phone: (800) 810-4853; email: pubs@gulfstream.com; website: <https://www.gulfstream.com/en/customer-support/>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(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 go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on October 27, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-24808 Filed: 11/6/2020 8:45 am; Publication Date: 11/9/2020]