



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0831; Project Identifier 2019-CE-031-AD]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation (Gulfstream) Model GV airplanes. This proposed AD was prompted by notification of corrosion present in floor beam support links. This proposed AD would require inspecting the right butt line 6 floor beam inboard support links and bushings for corrosion. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA 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 <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: 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;

phone: (800) 810-4853; fax: (912) 965-3520; email: pubs@gulfstream.com; internet: <https://www.gulfstream.com/en/customer-support/>. You may view this referenced 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.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0831; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Ronald “Ron” Wissing, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5552; fax: (404) 474-5606; email: ronald.wissing@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites 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-2020-0831; Project Identifier 2019-CE-031-AD” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, 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 proposal 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 NPRM.

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 NPRM 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 NPRM, 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 NPRM. Submissions containing CBI should be sent to Ronald “Ron” Wissing, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA was advised of a failed floor beam support link at right butt line (RBL) 6 on a Gulfstream Model GV airplane. The failed support link resulted from seizure of the retaining sleeve and bushing at the lower attachment point due to undetected corrosion. The floor beam support links at RBL 6, fuselage stations (FS) 499, 531, and 569.5 have a two-piece installation with straight bushings rather than spherical bearings in the inboard link lower end. Design of the support links allows floor beam movement when the cabin is pressurized. Seizure of the lower bushing will not allow the link assembly to move as designed, resulting in bending stress and potential failure of the link, which may compromise the integrity of the pressure vessel floor.

Gulfstream determined that the procedures for the existing Aircraft Maintenance Manual (AMM) inspection does not reliably detect corrosion in the floor beam support link lower bushings. Accordingly, Gulfstream has revised the airworthiness limitation requirements to the AMM by adding a detailed inspection with an initial and repetitive inspections at intervals of 96 months and including references for removal and installation instructions for RBL 6 Floor Beam Support Links.

This condition, if not addressed, could result in link failure, which can compromise the integrity of the pressure vessel floor and lead to loss of pressurization to the airplane.

Related Service Information under 1 CFR part 51

The FAA reviewed Gulfstream GV Customer Bulletin Number 231, Revision A, dated July 30, 2019 (Gulfstream CB 231A). The service information contains procedures for the inspection of the RBL 6, FS 499, 531, and 569.5, and the bushing in the lower end of the link and all attachments for corrosion.

The FAA reviewed Gulfstream GV AMM, Section 05-10-10, Revision 51, dated February 28, 2020. The service information identifies tasks for a recurring detailed inspection of the floor beam and wing links FS 465 through FS 576.

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 NPRM after determining that 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 a one-time inspection of the RBL 6 floor beam inboard support links and bushings for corrosion along with any repairs necessary. This proposed AD would require a recurring inspection of the floor beam support links. This proposed AD also recommends sending the inspection results to Gulfstream.

Differences Between this Proposed AD and the Service Information

Gulfstream CB 231A requires reporting the results of the inspection to Gulfstream and this proposed AD would not.

Costs of Compliance

The FAA estimates that this proposed AD would affect 148 airplanes of U.S. registry.

The FAA estimates 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 per the Customer Bulletin, all 3 locations	120 work-hours X \$85 per hour = \$10,200	Not applicable	\$10,200	\$1,509,600
Revise the AMM	1 work-hour X \$85 per hour = \$85	Not applicable	\$85	\$12,580

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. The FAA has no way of determining the number of airplanes that might need these replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement of all 3 links	40 work-hours X \$85 per hour = \$3,400	\$316	\$3,716

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. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all costs in this 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.

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 Findings

The FAA 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) Will not affect intrastate aviation in Alaska, 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.

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:

Gulfstream Aerospace Corporation: Docket No. FAA-2020-0831; Project Identifier 2019-CE-031-AD.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Gulfstream Aerospace Corporation Model GV airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 53: Fuselage Structure.

(e) Reason

This AD was prompted by a report that current inspection procedures of floor beam support links, which can fail due to corrosion, are inadequate. The FAA is issuing this AD to detect and correct corrosion on a floor beam support link lower bushing. This condition, if not addressed, could result in link failure, which can compromise the integrity of the pressure vessel floor and lead to loss of pressurization of the airplane.

(f) Actions and Compliance

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

(g) Action

(1) Within 24 months after the effective date of this AD, inspect the right butt line 6 floor beam inboard support links at fuselage stations (FS) 499, 531, and 569.5 for corrosion by following the Accomplishment Instructions, steps A through M, of Gulfstream GV Customer Bulletin No. 231, Revision A, dated July 30, 2019 (Gulfstream CB 231A). Where Gulfstream CB 231A specifies contacting Gulfstream for procedures if any corrosion is found, you must replace the support link in accordance with a method approved by the Manager, Atlanta ACO Branch, FAA, before further flight. For a method to be approved by the Manager, Atlanta ACO Branch, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

(2) Within 24 months after the effective date of this AD, revise the airworthiness limitations section of your maintenance manual or inspection program to incorporate the airworthiness limitations specified in Table 13: Fuselage Inspection Table, of Gulfstream GV Aircraft Maintenance Manual, Section 05-10-10, Revision 51, dated February 28, 2020. Thereafter, except as provided in paragraph (h) of this AD, no alternative

inspection intervals may be approved for the fuselage floor beam and wing link FS 465-FS 576.

(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)(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 (g) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the following provisions 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. 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.

(i) Related Information

(1) For more information about this AD, contact Ronald "Ron" Wissing, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5552; fax: (404) 474-5606; email: ronald.wissing@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;

phone: (800) 810-4853; fax: (912) 965-3520; email: pubs@gulfstream.com; internet:
<https://www.gulfstream.com/en/customer-support/>. You may view this
referenced 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.

Issued on December 2, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-27059 Filed: 12/9/2020 8:45 am; Publication Date: 12/10/2020]