

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 97-NM-19-AD; Amendment 39-10069; AD 97-14-13]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Model G-159 (G-I) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Gulfstream Model G-159 (G-I) airplanes, that currently requires repetitive inspections to detect chafe wear on the upper diagonal engine mount tube, and replacement or repair, if necessary. This amendment requires the installation of chafe guards at the engine mounts, which terminates the currently required inspections. It also requires that the chafe guards then be repetitively inspected for chafe wear. This amendment is prompted by the development of a modification that will provide better protection of the subject area against future chafe wear. The actions specified by this AD are intended to prevent excessive chafe wear in the area of the upper diagonal engine mount tubes and trusses; if not detected and corrected, such wear could result in failure of the engine mount assembly and possible separation of the engine from the airplane.

DATES: Effective August 15, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 15, 1997.

ADDRESSES: The service information referenced in this AD may be obtained from Gulfstream Aerospace Corporation, Technical Operations Department, P.O. Box 2206, M/S D-10, Savannah, Georgia 31402-2206. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, Small Airplane Directorate, Campus Building, 1701 Columbia Avenue, Suite 2-160, College Park, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Christina Marsh, Aerospace Engineer, Airframe and Propulsion Branch, ACE-

117A, FAA, Atlanta Aircraft Certification Office, Small Airplane Directorate, Campus Building, 1701 Columbia Avenue, Suite 2-160, College Park, Georgia 30337-2748; telephone (404) 305-7362; fax (404) 305-7348.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 67-17-05, amendment 39-511 (32 FR 7248, May 16, 1967), which is applicable to certain Gulfstream Model G-159 (G-I) airplanes, was published in the **Federal Register** on March 6, 1997 (62 FR 10226). The action proposed to superseded AD 67-17-05 to continue to require repetitive visual inspections to detect chafe wear of the engine mount tube, and repair or replacement of the tube(s), if necessary. These inspections would be required to continue until (1) a one-time inspection is performed to detect chafe wear of the upper diagonal truss, and (2) chafe guards are installed. (Once chafe guards are installed, the previously required visual inspections of the engine mount tubes would be terminated.) The action also proposed to require that, after the chafe guards are installed, an inspection of the chafe guards be conducted at intervals of 2,500 hours time-in-service.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 146 Gulfstream Model G-159 airplanes of the affected design in the worldwide fleet. The FAA estimates that 72 airplanes of U.S. registry will be affected by this AD.

The actions that are currently required by AD 67-17-05 take approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$17,280, or \$240 per airplane, per inspection.

The installation of the chafe guards that is required by this AD action will take approximately 40 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$152 per airplane. Based on these figures, the cost impact of the

requirements of this AD on U.S. operators is estimated to be \$183,744, or \$2,552 per airplane.

The inspections of the chafe guards that are required by this AD action will take approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$17,280, or \$240 per airplane, per inspection.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (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); 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing amendment 39-511 (32 FR 7248, May 16, 1967), and by adding a new airworthiness directive (AD), amendment 39-10069, to read as follows:

97-14-13 Gulfstream Aerospace Corporation (formerly Grumman): Amendment 39-10069. Docket 97-NM-19-AD. Supersedes AD 67-17-05, Amendment 39-511.
Applicability: All Model G-159 (G-1) airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent excessive chafe wear of the engine mount tube and upper diagonal truss, which could lead to failure of the engine mount assembly and possible separation of the engine from the airplane, accomplish the following:

(a) For airplanes on which chafe guards, part number (P/N) 159WP10017-11, *have not been* installed on each upper diagonal truss prior to the effective date of this AD: Accomplish paragraphs (a)(1), (a)(2), and (a)(3) of this AD:

(1) *Restatement of Requirements of AD 67-17-05:* Within 100 hours time-in-service after May 16, 1967 (the effective date of AD 67-17-05, amendment 39-511), visually inspect to detect chafe wear of the lower half of the upper diagonal engine amount tubes having P/N 159W10172-11 (left engine) and P/N 159W10172-13 (right engine).

(i) If no chafe wear is detected: Repeat this inspection thereafter at intervals not to exceed 200 hours time-in-service until the requirements of paragraph (a)(2) are accomplished.

(ii) If any tube is found to have wear depth greater than 0.030 inch (as measured from the outer edge of the tube): Prior to further flight, replace the tube with a tube of the same part number or with an FAA-approved equivalent part. After replacement, repeat the inspection required by this paragraph at intervals not to exceed 200 hours time-in-service until the requirements of paragraph (a)(2) are accomplished.

(iii) If any tube is found to have wear depth of 0.030 inch deep or less, as measured from the outer edge of the tube: Prior to further flight, either repair the tube in accordance with an FAA-approved repair, or replace the tube with a part of the same part number or

with an FAA-approved equivalent part. After repair or replacement, repeat the inspection required by this paragraph at intervals not to exceed 200 hours time-in-service until the requirements of paragraph (a)(2) are accomplished.

(2) *One-Time Inspection of Upper Diagonal Truss and Installation of Chafe Guards.*

Within 600 hours time-in-service after the effective date of this AD, perform a one-time visual inspection to detect chafe wear of the left-hand and right-hand upper diagonal truss, P/N's 159W10172-5 (left-hand nacelle) and P/N 159W10172-7 (right-hand nacelle), in accordance with Grumman Gulfstream Service Change No. 180, dated October 17, 1966. Once this inspection is completed, the repetitive inspections required by paragraph (a)(1) of this AD may be terminated.

(i) If there is no evidence of chafe wear on the truss; or if there is evidence of chafe wear and the depth of wear is .030 inch or less (measured from the surface of the tube): Prior to further flight, install a chafe guard, P/N 159WP10017-11, on the truss.

(ii) If there is any evidence of chafe wear and the depth of wear exceeds .030 inch measured (from the surface of the tube): Prior to further flight, install a new upper diagonal truss and install a chafe guard, P/N 159WP10017-11, on the truss.

(3) *Continuing Inspections of Chafe Guards.* Within 2,500 hours time-in-service after installation of the chafe guards required by paragraph (a)(2) of this AD, perform an inspection of the undersurface of each chafe guard for evidence of chafe wear, in accordance with Grumman Gulfstream Service Change No. 180, dated October 17, 1966.

(i) If no chafe wear is detected: Repeat the inspection at intervals not to exceed 2,500 hours time-in-service.

(ii) If any chafe wear is detected: Prior to further flight, replace the chafe guard with a new or serviceable part. After replacement, repeat the inspection for chafe wear of the chafe guard thereafter at intervals not to exceed 2,500 hours time-in-service.

(b) For airplanes on which chafe guards, P/N 159WP10017-11, *have been* installed on each upper diagonal truss prior to the effective date of this AD: Within 2,500 hours time-in-service after the last inspection of the chafe guard required by paragraph (c) of AD 67-17-05, repeat that inspection to detect chafe wear of the chafe guards in accordance with Grumman Gulfstream Service Change No. 180, dated October 17, 1966.

(1) If no chafe wear is detected: Repeat the inspection thereafter at intervals not to exceed 2,500 hours time-in-service.

(2) If any chafe wear is detected: Prior to further flight, replace the chafe guard with a new or serviceable part. After replacement, repeat the inspection thereafter at intervals not to exceed 2,500 hour time-in-service.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(d) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The actions shall be done in accordance with Grumman Gulfstream Service Change No. 180, dated October 17, 1966. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Gulfstream Aerospace Corporation, Technical Operations Department, P.O. Box 2206, M/S D-10, Savannah, Georgia 31402-2206. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, Small Airplane Directorate, Campus Building, 1701 Columbia Avenue, Suite 2-160, College Park, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on August 15, 1997.

Issued in Renton, Washington, on June 30, 1997.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 97-17560 Filed 7-10-97; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97-CE-47-AD; Amendment 39-10074; AD 97-14-16]

RIN 2120-AA64

Airworthiness Directives: Raytheon Aircraft Company (Formerly Beech Aircraft Corporation) Model 1900 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to all Raytheon Aircraft Company (Raytheon) 1900 series airplanes. This action requires repetitively inspecting the flap aft roller bearings and flap attachment brackets for indications of contact (wear), inspecting for elongation of the holes in the flap attachment brackets, and repairing or replacing any part showing wear. The actions specified by this AD