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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. 2000-NM-101-AD; Amendment 39-13577; AD 2004-08-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Gulfstream Model G-IV Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Gulfstream Model G-IV series airplanes. For certain airplanes, this AD requires installation of an additional indicator located on the pilot's instrument panel in primary view of the flightcrew. The indicator will inform the flightcrew that the airplane main batteries are powering the direct current (DC) essential bus, which supplies power to vital communication and navigation equipment. For certain other airplanes, this AD will require the EICAS (Engine Instruments/Caution Advisory System) to be used for this indication. This action is necessary to ensure that the flightcrew is aware that an electrical system failure has occurred and that the airplane main batteries are powering the essential DC bus. If the flightcrew is unaware of this situation, action to stop depletion of the airplane batteries will not be taken, and critical communications and navigation equipment could fail. This action is intended to address the identified unsafe condition.

**DATES:** Effective May 24, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 24, 2004.

**ADDRESSES:** The service information referenced in this AD may be obtained from Gulfstream Aerospace Corporation, P.O. Box 2206, M/S D-10, Savannah, Georgia 31402-9980. 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, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Neil Berryman, Aerospace Engineer, ACE-116A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6098; fax (770) 703-6097.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Gulfstream Model G-IV series airplanes was published in the Federal Register on October 12, 2000 (65 FR 60591). For certain airplanes, that action proposed to require installation of an additional indicator located on the pilot's instrument panel in primary view of the flightcrew. The indicator would inform the flightcrew that the airplane main batteries are powering the direct current (DC) essential bus, which supplies power to vital communication and navigation equipment. For certain other airplanes, that AD proposed to require the EICAS (Engine Instruments/Caution Advisory System) to be used for this indication.

## **Comments**

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.

## **Changes to Service Information in This Final Rule**

The proposed AD references Gulfstream GIV Customer Bulletin 102A, dated February 1, 2000; and Gulfstream IV Aircraft Service Change 327B AM1, dated August 28, 2000; as two of the appropriate sources of service information for the accomplishment of the actions required by this AD. Since the issuance of the proposed AD, the FAA has reviewed and approved Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Gulfstream GIV Aircraft Service Change 327B Am2, dated January 26, 2004. We have determined that Gulfstream GIV Customer Bulletin 102B and Gulfstream GIV Aircraft Service Change 327B Am2 add no new requirements, but provide clarification of some instructions, which will assist operators in accomplishing the requirements of this final rule. We have revised paragraphs (a) and (b) of this final rule to reference these new documents as appropriate sources of service information, and to revise the corresponding references to the Modification Instructions of the new service information.

## **Changes to Cost Impact Table in This Final Rule**

The cost information for the proposed AD did not include figures for an airplane that does not have Gulfstream IV Aircraft Service Change 327 or its production equivalent installed, and does not have Gulfstream IV Aircraft Service Change 327A installed. The cost impact table of this final rule has been changed to include these figures. Also, since the table in the proposed AD referenced but did not provide figures for an airplane that does have Gulfstream IV Aircraft Service Change 327A installed, the reference to this condition has been deleted from the table in this final rule.

## **Clarification of Requirements of This Final Rule**

Paragraphs (a)(2), (a)(3), (b)(1), (b)(2), and (b)(3) of this final rule have been changed to clarify that the required actions are dependent upon which service changes have been installed on an airplane, rather than which service changes an operator has performed.

## **Conclusion**

We have determined that air safety and the public interest require the adoption of the rule with the changes previously described. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

## Changes to 14 CFR Part 39/Effect on the AD

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. However, for clarity and consistency in this final rule, we have retained the language of the NPRM regarding that material.

### Change to Labor Rate Estimate

After the proposed AD was issued, we reviewed the figures we use to calculate the labor rate to do the required actions. To account for various inflationary costs in the airline industry, we find it appropriate to increase the labor rate used in these calculations from \$60 per work hour to \$65 per work hour. The economic impact information, below, has been revised to reflect this increase in the specified hourly labor rate.

### Cost Impact

There are approximately 359 airplanes of the affected design in the worldwide fleet. We estimate that 292 airplanes of U.S. registry will be affected by this AD, and that the average labor rate is \$65 per work hour. There will be no charge for required parts for the modification. The cost impact of this AD on U.S. operators depends upon whether the airplane has the SPZ 8400, whether the airplane has the production equivalent of Gulfstream GIV Aircraft Service Change 327, and whether the operator has performed earlier Gulfstream IV Aircraft Service Change 327 or 327A, as shown in the following table:

**COST IMPACT OF PERFORMING GULFSTREAM IV AIRCRAFT SERVICE CHANGE 327B OR 327B AM2**

<b>If—</b>	<b>And if SPZ 8400 is—</b>	<b>Then the work hour estimate is—</b>	<b>And the cost per airplane is—</b>
Change 327 and 327A have not been done	on the airplane	0	\$0
	not on the airplane	68	4,420
Production equivalent of Change 327 has been done	on	36	2,340
	not on	28	1,820
Change 327 has been done	on	24	1,560
	not on	28	1,820

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. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

### Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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 adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2004-08-08 Gulfstream Aerospace Corporation:** Amendment 39-13577. Docket 2000-NM-101-AD.

**Applicability:** Model G-IV series airplanes, serial numbers 1000 through 1359 inclusive, certificated in any category.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been 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 ensure that the flightcrew is aware that an electrical system failure may have occurred and that the main airplane batteries are powering the direct current (DC) essential bus, accomplish the following:

## Modifications

(a) Within 12 months after the effective date of this AD, for airplanes equipped with the SPZ 8400: Perform paragraph (a)(1), (a)(2), or (a)(3) of this AD, as applicable.

(1) If the airplane has the production equivalent of Gulfstream IV

Aircraft Service Change 327, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Modification Instructions A, J through L, and P through S of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

(2) If the airplane has Gulfstream IV Aircraft Service Change 327 installed, but not Gulfstream IV Aircraft Service Change 327A, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; Modification Instructions A through H of Gulfstream GIV Aircraft Service Change 327B Am2, dated January 26, 2004; and Modification Instruction P of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

**Note 2:** Modification Instruction E in Gulfstream GIV Aircraft Service Change 327B Am2 is the same as Modification Instruction P in Gulfstream IV Aircraft Service Change 327B.

(3) If the airplane has Gulfstream IV Aircraft Service Change 327A installed, ensure that all ground wires from connectors 95A1P2B and 95A2P2B are removed or rerouted in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Figure 6 of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

(b) Within 12 months after the effective date of this AD, for airplanes not equipped with the SPZ 8400: Perform paragraph (b)(1), (b)(2), or (b)(3) of this AD, as applicable.

(1) If the airplane does not have Gulfstream IV Aircraft Service Change 327 installed, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Modification Instructions A, B through I, and P through S of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

(2) If the airplane has Gulfstream IV Aircraft Service Change 327 installed, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Modification Instructions A, M through O, and P through S of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

(3) If the airplane has Gulfstream IV Aircraft Service Change 327A installed, ensure that wire P9052C22 is rerouted and reconnected in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; and Figure 7 of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000.

**Note 3:** Page 1 of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000, incorrectly refers to Figure 5; Figure 7 is the correct figure.

### **Alternative Methods of Compliance**

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

### **Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 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.

### **Incorporation by Reference**

(e) The actions shall be done in accordance with Gulfstream GIV Customer Bulletin 102B, dated January 26, 2004; Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000; and Gulfstream GIV Aircraft Service Change 327B Am2 dated January 26, 2004; as applicable. (Only the title page of Gulfstream IV Aircraft Service Change 327B, dated January 26, 2000, contains the date of the document.) 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, P.O. Box 2206, M/S D-10, Savannah, Georgia 31402-9980. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; at the FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**Effective Date**

(f) This amendment becomes effective on May 24, 2004.

Issued in Renton, Washington, on April 6, 2004.

**Kevin M. Mullin,**

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-8542 Filed 4-16-04; 8:45 am]

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