
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Gulfstream (Grumman) G1159 and G-IV Series Aeroplanes**AD/G1159/42****DC Essential Bus Indication****8/2004**

Applicability: Model G-IV series aeroplanes, serial numbers 1000 through 1359 inclusive.

- Requirement:
1. For aeroplanes equipped with the SPZ 8400 Digital Integrated Flight Control System, accomplish the following, as applicable:
 - a. If the aeroplane has the production equivalent of Gulfstream IV Aircraft Service Change (ASC) 327, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, dated 26 January 2004, together with Modification Instructions A, J through L, and P through S of Gulfstream IV ASC 327B, dated 26 January 2000.
 - b. If the aeroplane has Gulfstream IV ASC 327 installed, but not Gulfstream IV ASC 327A, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B; Modification Instructions A through H of Gulfstream GIV ASC 327B Am2, dated 26 January 2004; and Modification Instruction P of Gulfstream IV ASC 327B.
- Note 1: Modification Instruction E in Gulfstream GIV ASC 327B Am2 is the same as Modification Instruction P in Gulfstream IV ASC 327B.*
- c. If the aeroplane has Gulfstream IV ASC 327A installed, ensure that all ground wires from connectors 95A1P2B and 95A2P2B are removed or rerouted in accordance with Gulfstream GIV Customer Bulletin 102B and Figure 6 of Gulfstream IV ASC 327B.
2. For aeroplanes not equipped with the SPZ 8400, accomplish the following, as applicable:
 - a. If the aeroplane does not have Gulfstream IV ASC 327 installed, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B; together with Modification Instructions A, B through I, and P through S of Gulfstream IV ASC 327B.
 - b. If the aeroplane has Gulfstream IV ASC 327 installed, install the new indicator light and the audible tone, in accordance with Gulfstream GIV Customer Bulletin 102B, together with Modification Instructions A, M through O, and P through S of Gulfstream IV ASC 327B.

Gulfstream (Grumman) G1159 and G-IV Series Aeroplanes

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- c. If the aeroplane has Gulfstream IV ASC 327A installed, ensure that wire P9052C22 is rerouted and reconnected in accordance with Gulfstream GIV Customer Bulletin 102B and Figure 7 of Gulfstream IV ASC 327B.

Note 2: Page 1 of Gulfstream IV ASC 327B incorrectly refers to Figure 5; Figure 7 is the correct figure.

Note 3: FAA AD 2004-08-08 Amdt 39-13577 refers.

Compliance: For Requirements 1 and 2 - Within 12 months after the effective date of this Directive.

This Airworthiness Directive becomes effective on 5 August 2004.

Background: This Directive requires either the installation of an additional indicator located on the pilot's instrument panel or the use of the EICAS (Engine Instruments/Caution Advisory System) to the flight crew that the aeroplane main batteries are powering the direct current (DC) essential bus. This action is necessary to ensure that the flight crew is aware that an electrical system failure has occurred and that the aeroplane main batteries are powering the essential DC bus. If the flight crew is unaware of this situation, action to stop depletion of the aeroplane batteries will not be taken, and critical communications and navigation equipment could fail.



James Coyne
Delegate of the Civil Aviation Safety Authority

23 June 2004