


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2009-0180R1</b></p> <p><b>Date: 08 December 2010</b></p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation</p>	
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p><b>Type Approval Holder's Name :</b></p> <p>Gulfstream Aerospace Corporation</p>		<p><b>Type/Model designation(s) :</b></p> <p>GIV-X and GV-SP aeroplanes</p>
<p>TCDS Number : EASA.IM.A.070</p>		
<p>Foreign AD : FAA AD 2009-17-01; this EASA AD is identical in intent and required action(s) to the FAA AD, but applies to different serial number (s/n) aeroplanes.</p>		
<p>Revision : This AD revises EASA AD 2009-0180-E dated 24 August 2009.</p>		
<p><b>ATA 49</b></p>		
<p><b>Airborne Auxiliary Power – Auxiliary Power Unit (APU) Enclosure (Firewall) – Inspection / Limitation</b></p>		
<p>Manufacturer(s): Gulfstream Aerospace Corporation</p>		
<p>Applicability: Model GIV-X aeroplanes, s/n 4147, 4151 and 4153 through 4171 inclusive, and Model GV-SP aeroplanes, s/n 5205, 5218, 5220 through 5224 inclusive, and 5226 through 5249 inclusive.</p>		
<p>Reason:</p> <p>Gulfstream Aerospace has reported that an improper, flammable sealant has been used on the exterior of the APU enclosure (firewall) on G-IV, GIV-X, GV, and GV-SP aeroplanes. This condition, if not corrected, and under certain conditions such as an APU failure or an APU compartment fire, could lead to ignition of the exterior surfaces of the APU enclosure, possibly resulting in propagation of an uncontained fire to other critical areas of the aeroplane.</p> <p>FAA AD 2009-17-01 has been issued to address and correct this problem for certain aeroplanes of this type design and this AD has been adopted by EASA.</p> <p>However, EASA determined that the FAA AD does not apply to an additional group of aeroplanes on which this unsafe condition is likely to exist or develop. To address this additional group of aeroplanes, the FAA has updated TCDS A12EA (Revision 33) to list these aeroplanes and the required standard with which these should comply. European regulations require EASA to issue an AD when an unsafe condition has been determined.</p> <p>To address this unsafe condition, EASA issued Emergency AD 2009-0180-E to require, as an interim measure, for those aeroplane s/n that are not covered</p>		

	<p>by FAA AD 2009-17-01, a one-time inspection for sealant applied to the exterior of the APU enclosure, and, depending on findings, a revision of the Airplane Flight Manual (AFM) to prohibit operation of the APU during certain ground and flight operations.</p> <p>Since EASA AD 2009-0180-E was issued, Gulfstream have developed modifications that will remove the need for the limitations required by this AD. Gulfstream have issued Aircraft Service Change (ASC) documents, which have been approved by the FAA and EASA, describing these modifications to bring the affected aeroplanes back into conformity with the Type Design Standard.</p> <p>For the reasons describe above, this AD has been revised to incorporate those modifications as optional terminating action for the actions required by this AD.</p>										
<p>Effective Date:</p>	<p>Revision 1: 08 December 2010</p> <p>Original issue: 26 August 2009</p>										
<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Prior to the issuance of an EASA Certificate of Airworthiness, or within 21 days after 26 August 2009 [the effective date of the original issue of this AD], whichever occurs later, perform a general visual inspection of the exterior of the APU enclosure (firewall) to detect sealant on rivets or fillet seals on panel joints, in accordance with the Accomplishment Instructions of the applicable Gulfstream Alert Customer Bulletin (ACB) specified in Table 1 of this AD. Despite the fact that the individual aeroplane serial numbers to which this AD applies are not listed in the referenced Gulfstream ACB, the instructions contained in the model-specific ACB must be used to accomplish the required inspection. If no exterior sealant is found applied during the inspection, no further action is required by this AD.</p> <p><b>Note 1:</b> For the purposes of this AD, a general visual inspection is: “A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked.”</p> <p style="text-align: center;">Table 1</p> <table border="1" data-bbox="624 1496 1278 1733"> <thead> <tr> <th>Affected Aeroplanes</th> <th>ACB No.</th> </tr> </thead> <tbody> <tr> <td>GIV-X (G350)</td> <td>G350 ACB No. 8A</td> </tr> <tr> <td>GIV-X (G450)</td> <td>G450 ACB No. 8A</td> </tr> <tr> <td>GV-SP (G500)</td> <td>G500 ACB No. 9A</td> </tr> <tr> <td>GV-SP (G550)</td> <td>G550 ACB No. 9A</td> </tr> </tbody> </table> <p>(2) If exterior sealant is found applied during the inspection done in accordance with paragraph (1) of this AD, before further flight, revise the Limitations Section of the applicable Gulfstream JAA AFM, to include the information in the applicable Gulfstream AFM supplement specified in Table 2 or Table 3, as applicable to aeroplane model and s/n. These AFM supplements introduce limitations on the use of the APU during certain ground and flight operations. Thereafter, operate the airplane according to the limitations specified in the applicable AFM supplement.</p>	Affected Aeroplanes	ACB No.	GIV-X (G350)	G350 ACB No. 8A	GIV-X (G450)	G450 ACB No. 8A	GV-SP (G500)	G500 ACB No. 9A	GV-SP (G550)	G550 ACB No. 9A
Affected Aeroplanes	ACB No.										
GIV-X (G350)	G350 ACB No. 8A										
GIV-X (G450)	G450 ACB No. 8A										
GV-SP (G500)	G500 ACB No. 9A										
GV-SP (G550)	G550 ACB No. 9A										

**Note 2:** This AFM revision may be done by inserting a copy of the applicable AFM supplement into the applicable AFM, which are specified in Appendix 1 of this AD. When the supplement has been included in the general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in the applicable AFM supplement specified in Appendix 1 of this AD.

- (3) After modification of an aeroplane by installing thermal barrier insulation in the APU enclosure, in accordance with the appropriate ASC as listed in Table 4 of this AD, as applicable, the temporary Flight Manual Restrictions on APU use in Flight, as required by paragraph (2) of this AD, may be removed from that aeroplane.

Table 4

Affected Aeroplanes	ASC No.
GIV-X (G350)	G350 ASC 065
GIV-X (G450)	G450 ASC 065
GV-SP (G500)	G500 ASC 090
GV-SP (G550)	G550 ASC 090

**Note 3:** For the aeroplanes affected by FAA AD 2009-17-01, the expected FAA approval of these modifications as Alternative Method of Compliance (AMOC) to the requirements of that AD will be the closing action.

That FAA AMOC approval will be valid for aeroplanes registered in Europe, in accordance with the provisions of ED Decision 2004/04/CF, Article 4. Details on the FAA AMOC approval can be obtained from the Gulfstream Aerospace Corporation.

## Ref. Publications:

Gulfstream Alert Customer Bulletins (ACB) G350 No. 8A, G450 ACB No. 8A, G500 ACB No. 9A, and G550 ACB No. 9A, all dated June 30, 2009.

Gulfstream Aircraft Service Change (ASC):

G350 ASC 065 and G450 ASC 065, both dated 30 August 2010, and Amendment 1 (AM1) to those ASC, both dated 08 October 2010.

G500 ASC 090 and G550 ASC 090, both dated 30 August 2010, and AM1 to those ASC, both dated 10 September 2010.

## Remarks :

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this EAD.
- The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.
- Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
- For any question concerning the technical content of the requirements in this AD, please contact:  
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**APPENDIX 1**

For GIV-X series (G450/G350) aeroplane serial numbers 4147, 4151, and S/N 4153 through 4171, the Gulfstream Airplane Flight Manual Supplements (AFMS) noted in Table 1 below must be attached to the applicable JAA G450 AFM, or the applicable JAA G350 AFM:

Table 2

<b>S/N</b>	<b>AFMS Nr.</b>	<b>S/N</b>	<b>AFMS Nr.</b>
4147	G450-2009-04-4147	4162	G450-2009-04-4162
4151	G450-2009-04-4151	4163	G450-2009-04-4163
4153	G450-2009-02 or G450-2009-04-4153	4164	G450-2009-04-4164
4154	G450-2009-02 or G450-2009-04-4154	4165	G450-2009-04-4165
4155	G450-2009-02 or G450-2009-04-4155	4166	G450-2009-04-4166
4156	G450-2009-02 or G450-2009-04-4156	4167	G450-2009-04-4167
4157	G450-2009-02 or G450-2009-04-4157	4168	G450-2009-04-4168
4158	G450-2009-04-4158	4169	G450-2009-04-4169
4159	G450-2009-04-4159	4170	G450-2009-04-4170
4160	G450-2009-02 or G450-2009-04-4160	4171	G450-2009-04-4171
4161	G450-2009-04-4161		

For GV-SP series (G550/G500) aeroplane serial numbers 5205, 5218, S/N 5220 through 5224, and S/N 5226 through 5249, the Gulfstream AFMS noted in Table 2 below must be attached to the applicable JAA G550 AFM, or the applicable JAA G500 AFM:

Table 3

<b>S/N</b>	<b>AFMS Nr.</b>	<b>S/N</b>	<b>AFMS Nr.</b>
5205	G550-2009-02 or G550-2009-05-5205	5235	G550-2009-05-5235
5218	G550-2009-05-5218	5236	G550-2009-05-5236
5220	G550-2009-02 or G550-2009-05-5220	5237	G550-2009-05-5237
5221	G550-2009-02 or G550-2009-05-5221	5238	G550-2009-05-5238
5222	G550-2009-02 or G550-2009-05-5222	5239	G550-2009-05-5239
5223	G550-2009-02 or G550-2009-05-5223	5240	G550-2009-05-5240
5224	G550-2009-05-5224	5241	G550-2009-05-5241
5226	G550-2009-02 or G550-2009-05-5226	5242	G550-2009-05-5242
5227	G550-2009-02 or G550-2009-05-5227	5243	G550-2009-05-5243
5228	G550-2009-02 or G550-2009-05-5228	5244	G550-2009-05-5244
5229	G550-2009-02 or G550-2009-05-5229	5245	G550-2009-05-5245
5230	G550-2009-02 or G550-2009-05-5230	5246	G550-2009-05-5246
5231	G550-2009-05-5231	5247	G550-2009-05-5247
5232	G550-2009-05-5232	5248	G550-2009-05-5248
5233	G550-2009-05-5233	5249	G550-2009-05-5249
5234	G550-2009-05-5234		