EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0114R2 **[Correction: 16 December 2013]** **Date: 13 December 2013** 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.

This AD is issued in accordance with EU 748/2012, Part 21.A.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].

Design Approval Holder's Name:	**Type/Model designation(s):**
GE Aviation Systems Limited, trading as DOWTY PROPELLERS	R408/6-123-F/17 propellers

TCDS Number:	EASA.P.002
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2009-0114R1 dated 12 December 2012 (including the correction dated 13 December 2012).

ATA 61	**Propellers – Backplate Assembly – Sealant Application**
Manufacturer(s):	Dowty Propellers
Applicability:	Model R408/6-123-F/17 propellers, all serial numbers (s/n), except Hub, Actuator and Backplate Assembly Line Replaceable Units s/n DAP0927 and higher. These propellers are known to be installed on, but not limited to, Bombardier DHC-8-400, DHC-8-401 and DHC-8-402 aeroplanes. **Note:** Transport Canada AD CF-2009-01, applicable to Bombardier DHC-8 Series 400 aeroplanes, was issued on 19 January 2009 for the same unsafe condition that is addressed by this AD.
Reason:	Friction or contact between a propeller de-ice bus bar and the backplate assembly can cause failure of the bus bar and a consequent intermittent short circuit. Such a short circuit can cause a dual AC generator shutdown that, particularly in conjunction with an engine failure in icing conditions, could result in reduced controllability of the aeroplane. To address this potential unsafe condition, EASA issued AD 2009-0114 to require initial and repetitive application of sealant between the propeller bus bar assemblies and the backplate assembly. Since that AD was issued, Dowty developed a new harness, installation of which makes the re-application of sealant redundant. For the reason described above, this AD is revised to provide an optional

	terminating action for the repetitive sealant applications required by this AD. Revision 2 of this is issued to extend the compliance time for sealant re-application from 10 000 flight hours (FH) to 10 500 FH. This AD is re-published to correct typographical errors in paragraph (5) and in the section Ref. Publications.
Effective Date:	Revision 2: 13 December 2013 Revision 1: 26 December 2012 Original issue: 11 June 2009
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 5 000 FH after 11 June 2009 (the effective date of the original issue of this AD), apply sealant between the bus bar assemblies and the backplate assembly in accordance with the instructions of Dowty Propellers Alert Service Bulletin (ASB) D8400-61-A66. (2) All affected Hub, Actuator and Backplate Assembly Line-Replaceable Units (LRU) with s/n DAP0347 and higher have received the initial sealant application prior to delivery/installation and are therefore already compliant with the requirement of paragraph (1) of this AD. (3) Prior to accumulating 10 500 FH after the initial sealant application as required by paragraph (1) of this AD and, thereafter, at intervals not to exceed 10 500 FH, re-apply sealant between the bus bar assemblies and the backplate assembly in accordance with the instructions of Dowty Propellers ASB D8400-61-A66. (4) After modification of all propellers on an aeroplane as required by paragraph (1) of this AD, do not install any Dowty R408/6-123-F/17 propeller on that aeroplane, unless sealant has been applied between the bus bar assemblies and the backplate assembly of that propeller in accordance with the requirements of this AD. (5) Modification of a propeller by fitting a new harness in accordance with the instructions of Dowty Service Bulletin (SB) D8400-61-94 Revision 2, or later revision, constitutes terminating action for the repetitive sealant applications required by paragraph (3) of this AD for that propeller.
Ref. Publications:	Dowty Propellers ASB D8400-61-A66 Revision 7, dated 01 December 2011, or Revision 8 dated 31 October 2013. Dowty Propellers SB D8400-61-94 Revision 2, dated 29 August 2012, or Revision 3, dated 23 October 2012. The use of later approved revisions of these documents is acceptable for compliance with requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: Dowty Propellers, Anson Business Park, Cheltenham Road East, Gloucester GL2 9QN, The United Kingdom Tel +44 (0) 1452 716067 – Fax +44 (0) 1452 716001 E-mail Mike.Towkan@ge.com.