EASA AIRWORTHINESS DIRECTIVE AD No.: 2011-0012 Date: 20 January 2011 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 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]. Type Approval Holder's Name : Type/Model designation(s) : GE Aviation Systems Ltd, R212 and R251 propellers trading as Dowty Propellers **TCDS Number :** United Kingdom (UK) 107 Foreign AD : Not applicable Supersedure : This AD supersedes EASA AD 2010-0256, published on 06 December 2010. Propellers – Hub and Driving Centre Assembly – Inspection / **ATA 61** Replacement Manufacturer(s): GE Aviation Systems Ltd, trading as Dowty Propellers (formerly Dowty Rotol Ltd., Dowty Aerospace Propellers, Dowty Aerospace Gloucester or Dowty Propellers) Model R212/4-30-4/22 propellers with hub and driving centre assembly Part Applicability: Number (P/N) 601022105, 601022211, 601022294, 601021426, 601021858, 601021859 and Model R251/4-30-4/49 propellers with hub and driving centre assembly P/N 660207202 and 660207203. These propellers are known to be installed on, but not limited to, BAE Systems (formerly British Aerospace, Hawker Siddeley) HS.748 aeroplanes. Reason: Reports have been received from a small number of HS.748 operators of finding cracks in the propeller hub port buttress threads of R212 and R251 propellers. The affected hubs had accumulated in excess of 6 000 flight hours. This condition, if not detected and corrected, could lead to propeller blade separation, possibly resulting in damage to the aeroplane and/or injury to persons on the ground. Initially, CAA UK issued AD 012-10-86 to require repetitive inspections and corrective actions as specified in the original Dowty Alert Service Bulletin (ASB) 61-1043. For the reason describe above, AD 2010-0256 superseded CAA UK AD 012-10-86 and required repetitive Non-Destructive Testing (NDT) inspections of the buttress threads in the propeller hub and driving centre assembly and, depending on findings, replacement with serviceable parts.

	 Since AD 2010-0256 was issued, ASB 61-1043 Revision 6 was published by Dowty Propellers. This AD retains the requirements of EASA AD 2010-0256, which is superseded, corrects the P/N's for affected propellers models and adds new P/N's of hub and driving centre assembly applicability.
Effective Date:	03 February 2011
Required Action(s) and Compliance Time(s):	 Required as indicated unless accomplished previously: (1) Within 500 flight hours (FH) after 20 December 2010 [the effective date of EASA AD 2010-0256] and thereafter at intervals not exceeding 500 FH, accomplish a Non-Destructive Testing (NDT) inspection of the buttress threads in the propeller hub and driving centre assembly in accordance with the instructions of Dowty Propellers Alert Service Bulletin (ASB) 61-1043 at Revision 6.
	(2) If, during any inspection as required by paragraph (1) of this AD, cracks are detected, before next flight, replace the hub and driving centre assembly with a serviceable assembly in accordance with the accomplishment instructions from the Dowty Propellers ASB 61-1043 Revision 6.
	(3) Replacement of the hub and driving centre assembly as required by paragraph (2) of this AD does not constitute terminating action for the repetitive inspection requirements of paragraph (1) of this AD.
	(4) From the effective date of this AD, do not install a propeller to which this AD applies on any aeroplane, unless the hub and driving centre assembly of that propeller has been inspected and, depending on findings, corrected in accordance with the requirements of this AD.
Ref. Publications:	Dowty Propellers ASB 61-1043 Revision 6, dated 05 January 2011.
	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
	 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 & Request Section, Certification Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>.
	 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, United Kingdom Tel +44 (0) 1452 716067 – Fax +44 (0) 1452 716001 E-mail <u>Mike.Towkan@ge.com</u>.