EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	PAD No.: 15-085 **Date: 19 June 2015** Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.

Design Approval Holder's Name :	**Type/Model designation(s) :**
GE AVIATION SYSTEMS Ltd, trading as DOWTY PROPELLERS	R352 and R410 propellers

TCDS Number:	United Kingdom (UK) TC No. 105 & 110
Foreign AD:	Not applicable
Supersedure:	None

ATA 61	**Propellers – Rear Half Hub Dowel Holes – Inspection / Replacement**
Manufacturer(s):	GE Aviation Systems Ltd, trading as Dowty Propellers (formerly Dowty Rotol Ltd, Dowty Aerospace Propellers, Dowty Aerospace Gloucester or Dowty Propellers)
Applicability:	Model R352/6-132-F/1, R352/6-132-F/2 and R410/6-123-F/35 propellers, all serial numbers. These propellers are known to be installed on, but not limited to, Fokker F27 Mk 050, F27 Mk 0502 and F27 Mk 0604 aeroplanes.
Reason:	Cracking around the hub location dowel holes in the face of the rear hub half have occurred sporadically. Previous investigations found no manufacturing defects in cracked hubs and concluded that the hub cracking was caused by damage to the dowel holes during propeller installation. Nonetheless, Dowty Propellers issued Service Bulletin (SB) F50-61-165 to recommend the installation of liners in the hub location dowel holes, in the face of the rear hub half, to reduce the risk of cracks and to extend the serviceable life of the hub assembly. Since that SB was issued, three hubs have been found to have cracking around the location dowel holes. The hubs were all found to be cracked within a short period of time and all had low time since new. This condition, if not detected and corrected, can adversely affect the structural integrity of the propeller hub, with possible damage to the propeller and to the aeroplane. Prompted by these findings, SB F50-61-165 was revised and re-issued as an

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	alert service bulletin (ASB). For the reason described above, this AD requires identification and inspection of potentially affected propeller hubs, and, depending on findings, accomplishment of applicable corrective action(s).
Effective Date:	[TBD: 14 days after final AD issue date]
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) During the next removal of the propeller from the aeroplane, or within 7 500 flight hours, whichever occurs first after the effective date of this AD, inspect the propeller to determine whether the hub Part Number (P/N) is listed in Table 1 of this AD, and if so, whether it has been repaired in accordance with Dowty Propellers component maintenance manual (CMM) 61-10-34, Repair No.53. A review of the propeller maintenance records is acceptable in lieu of the inspection, provided that the propeller configuration and maintenance history can be conclusively determined from that review. **Table 1 – Affected Hub Part Numbers** 660715201 660720217 660720252 660720288 660715255 660720241 660720260 (2) If, during the inspection as required by paragraph (1) of this AD, a hub, having a P/N listed in Table 1 of this AD, is found installed and which have not been repaired in accordance with CMM 61-10-34, Repair No.53, before next flight, install liners into the hub location dowel holes and re-identify the hub P/N in accordance with the instructions of Dowty Propellers ASB F50-61-A165 Revision 1. (3) If, during the inspection as required by paragraph (1) of this AD, a hub, having a P/N listed in Table 1 of this AD, is found installed and which have been repaired in accordance with CMM 61-10-34, Repair No.53, before next flight, re-identify the hub in accordance with the instructions of Dowty Propellers ASB F50-61-A165 Revision 1. (4) Inspection and, depending on finding, modification and hub re-identification of a propeller, accomplished before the effective date of this AD in accordance with the instructions of Dowty Propellers SB F50-61-165 at original issue, is acceptable to comply with the requirements of this AD for that propeller.
Ref. Publications:	Dowty Propellers SB F50-61-165 original issue dated 19 November 2012, or ASB F50-61-A165 Revision 1 dated 12 May 2015. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks :	1. This Proposed AD will be closed for consultation on 17 July 2015. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: Dowty Propellers, Bishops Cleeve, Evesham Road, Cheltenham, GL52 8SF, United Kingdom Telephone: +44 (0) 1452 716097, Fax: +44 (0) 1452 716001 E-mail technicalsupport@dowty.com

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