


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2014-0023</b></p> <p><b>Date: 20 January 2014</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 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].</p>	
<p><b>Design Approval Holder's Name:</b></p> <p>GE Aviation Systems Ltd, trading as DOWTY PROPELLERS</p>	<p><b>Type/Model designation(s):</b></p> <p>R175, R184, R193, R201, R212, R251 and R257 propellers</p>
TCDS Numbers:	United Kingdom No.104, 107
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0276 issued on 21 November 2013
<b>ATA 61</b>	<b>Propellers – Blade Bearing Preload – Inspection</b>
Manufacturer(s):	GE Aviation Systems Ltd, trading as Dowty Propellers (formerly Dowty Rotol Ltd, Dowty Aerospace Propellers, Dowty Aerospace Gloucester, Dowty Propellers)
Applicability:	<p>Models R175/4-30-4/13E, R184/4-30-4/50, R193/4-30-4/50, R193/4-30-4/61, R193/4-30-4/63, R193/4-30-4/64, R193/4-30-4/65, R193/4-30-4/66, R201/4-30-4/20, R212/4-30-4/22, R251/4-30-4/49 and R257/4-30-4/60 propellers, all serial numbers.</p> <p>These propellers are known to be installed on, but not limited to, BAE Systems (formerly Hawker Siddeley) HS748, Fokker F27, Maryland Aircraft Industries (formerly Fairchild, Fairchild-Hiller) F27 and FH227, and Gulfstream G-159 aeroplanes.</p>
Reason:	<p>French national air accident investigation board (BEA) informed Dowty Propellers of a recent occurrence where a R193 propeller blade, installed on a Fokker F27 aeroplane, detached from its hub. The blade entered the pressurised cabin and exited through the opposite side of the fuselage. A preliminary finding of the investigation was that the detachment of the blade was due to fatigue failure of a bolt, securing the propeller blade to its blade root bearings.</p> <p>This condition, if not detected and corrected, could lead to further occurrences of propeller blade release, possibly resulting in damage to the aeroplane and injury to occupants.</p> <p>For the reason described above, this AD requires a one-time inspection of the blade root bearings for condition and verification that the correct blade bolt torque has been applied.</p>
Effective Date:	03 February 2014

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within the compliance time as specified in Table 1 of this AD, as applicable, accomplish a one-time inspection of the propeller in accordance with the instructions of Dowty Propellers Alert Service Bulletin (ASB) 61-A1152.</p> <p style="text-align: center;">Table 1</p> <table border="1" data-bbox="571 398 1444 757"> <tr> <th>Propeller time in service (on the effective date of this AD) since last overhaul, or since mid-life bearing inspection (see Note)</th><th>Compliance time</th></tr> <tr> <td>1 000 flight hours (FH) or more</td><td>Within 100 FH after the effective date of this AD</td></tr> <tr> <td>Less than 1 000 FH</td><td>Before exceeding 1 100 FH since last overhaul, or since mid-life bearing inspection, whichever occurs later</td></tr> </table> <p>Note: The mid-life (or half-life) inspection principles are explained in Dowty Rotor Service Bulletin (SB) 61-985 and SB 61-825.</p> <p>(2) If, during the inspection as required by paragraph (1) of this AD, signs of grease leakage on the blade bearing are detected, before next flight, remove the propeller from the aeroplane, accomplish a detailed inspection of the affected blade(s) in accordance with the instructions of Dowty Propellers ASB 61-A1152 and, depending on findings, before release to service of the propeller, accomplish all applicable corrective actions in accordance with the instructions of Dowty Propellers ASB 61-A1152.</p>	Propeller time in service (on the effective date of this AD) since last overhaul, or since mid-life bearing inspection (see Note)	Compliance time	1 000 flight hours (FH) or more	Within 100 FH after the effective date of this AD	Less than 1 000 FH	Before exceeding 1 100 FH since last overhaul, or since mid-life bearing inspection, whichever occurs later
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<p>Ref. Publications:</p>	<p>Dowty Propellers ASB 61-A1152 initial issue dated 20 November 2013.</p> <p>Dowty Rotor SB 61-985 dated 06 December 1982.</p> <p>Dowty Rotor SB 61-825 Revision 4 dated 03 January 1989.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>						
<p>Remarks:</p>	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>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.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>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 <a href="mailto:Mike.Towkan@ge.com">Mike.Towkan@ge.com</a>.</li> </ol>						