


<b>EASA</b>	<b>NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE</b>
	<p><b>PAD No.: 15-035</b></p> <p><b>Date: 08 April 2015</b></p> <p>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.</p>
<p>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.</p>	
<p><b>Design Approval Holder's Name:</b> SIRS NAVIGATION LTD.</p>	<p><b>Type/Model designation(s):</b> Magnetic Standby Compasses</p>
ETSO Authorization: EASA.21O.1008 Rev A	
Foreign AD:	Not Applicable
Supersedure:	None
<b>ATA 34</b>	<b>Navigation – Standby Compass Electrical Lead Assembly – Inspection / Replacement</b>
Manufacturer(s):	SIRS Navigation Ltd. (SIRS), formerly Smiths Industries.
Applicability:	<p>SIRS Magnetic Standby Compasses, having a Part Number (P/N) as identified in Appendix 1 of this AD.</p> <p>These compasses are known to be installed on, but not limited to, aircraft manufactured by a company as identified in Appendix 1 of this AD.</p>
Reason:	<p>An odour of smoke, followed by smoke and small flames requiring the use of an extinguisher were reported from the lead assembly feeding the illumination of the magnetic standby compass on a Bombardier DHC-8-402. Subsequent investigation found that the insulation of the lead assembly exhibited insufficient resistance.</p> <p>This condition, if not detected and corrected, could lead to smoke and fire in the cockpit, possibly affecting the flight crew, consequently resulting in reduced control of the aeroplane.</p> <p>To address this unsafe condition, SIRS published Service Bulletin (SB) CE2-A26-34-001, now at Revision 02 (hereafter referred to as 'the SB' in this AD), to provide instructions to inspect and test the conductivity of the affected electrical lead assemblies.</p> <p>For the reasons described above, this AD requires a temporary Aircraft Flight Manual (AFM) amendment, inspection and testing of each P/N CE2-A26, P/N CE2-A26E, P/N CE2-A26L, P/N CE2-A52-2, and P/N CE2-A52-3 electrical lead assembly, and, depending on findings, replacement of the lead assembly.</p>

Effective Date:	[TBD: 14 days after final AD issue date]									
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) For aircraft that have a P/N CE2-A26, P/N CE2-A26E, P/N CE2-A26L, P/N CE2-A52-2, or P/N CE2-A52-3 lead assembly installed on the magnetic standby compass, within 30 days after the effective date of this AD, amend the Emergency Procedures Section of the applicable AFM as indicated in Table 1 of this AD, inform all flight crew and, thereafter, operate the aircraft accordingly.</p> <p>Amending the AFM can be accomplished by inserting a copy of this AD into the Emergency Procedures Section of the applicable AFM.</p> <p style="text-align: center;">Table 1 – AFM Procedure</p> <table><tr><td>In case of smell of burning or smoke in the cockpit,</td></tr><tr><td><ul style="list-style-type: none"><li>• Apply the appropriate emergency procedure,</li><li>• Check the standby compass,</li><li>• If the standby compass is confirmed to be the origin of smell and/or smoke, remove power from standby compass.</li></ul></td></tr></table> <p>(2) Within 6 months after the effective date of this AD, visually inspect the P/N CE2-A26, P/N CE2-A26E, P/N CE2-A26L, P/N CE2-A52-2, or P/N CE2-A52-3 lead assembly, as installed on the compass, to determine whether a marking is present, and for those without the marking, determine that the condition of the part does not exceed certain criteria, in accordance with the instructions of the SB.</p> <p>(3) If, during the inspection as required by paragraph (2) of this AD, it is determined that no marking (as defined in the SB) is present, before next flight, or before reconnection of the lead assembly, as applicable, accomplish a 500V test in accordance with the instructions of the SB.</p> <p>(4) If, during the inspection as required by paragraph (2) of this AD, it is determined that the condition of the part exceeds the criteria (as defined in the SB), or if, during the test as required by paragraph (3) of this AD, it is determined that the resistance is less than 20 MΩ, within the compliance time specified in Table 1 of this AD, as applicable, replace the lead assembly with a serviceable part (see paragraph (6) of this AD), in accordance with the instructions of the SB.</p> <p style="text-align: center;">Table 1 – Replacement of Lead Assembly</p> <table><tr><th>Test / Inspection Results</th><th>Compliance Time</th></tr><tr><td>Part condition exceeds criteria</td><td rowspan="2">before next flight</td></tr><tr><td>Resistance is less than 70KΩ</td></tr><tr><td>Resistance is equal to, or more than 70 KΩ, but less than 20 MΩ</td><td>within 10 days after the test</td></tr></table> <p>(5) A resistance test on a magnetic standby compass lead assembly, or replacement of a lead assembly, accomplished before the effective date of this AD in accordance with the instructions of SIRS SB CE2-A26-34-001 at Revision 01, is acceptable to comply with the test and/or replacement requirements of this AD for that magnetic standby compass.</p>	In case of smell of burning or smoke in the cockpit,	<ul style="list-style-type: none"><li>• Apply the appropriate emergency procedure,</li><li>• Check the standby compass,</li><li>• If the standby compass is confirmed to be the origin of smell and/or smoke, remove power from standby compass.</li></ul>	Test / Inspection Results	Compliance Time	Part condition exceeds criteria	before next flight	Resistance is less than 70KΩ	Resistance is equal to, or more than 70 KΩ, but less than 20 MΩ	within 10 days after the test
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	<p>(6) For the purpose of this AD, a serviceable lead assembly is a P/N CE2-A26, P/N CE2-A26E, P/N CE2-A26L, P/N CE2-A52-2, or P/N CE2-A52-3 lead assembly that has passed the inspection/test in accordance with the instructions of the SB, or a lead assembly with a different P/N, such as P/N CE2-A26N, P/N CE2-A26LN, P/N CE2-A26EN, P/N CE2-A52-2N, or P/N CE2-A52-3N.</p> <p>(7) From the effective date of this AD, it is acceptable to install on any aircraft a SIRS magnetic standby compass having a P/N as identified in Appendix 1 of this AD, or to install a replacement lead assembly on a compass, provided it is determined, prior to installation, that each lead assembly is a serviceable part as defined in paragraph (6) of this AD.</p> <p>(8) After determining that the lead assembly on an aircraft is a serviceable part, or after replacement on that aircraft of the lead assembly, as required by paragraph (4) of this AD, the AFM amendment as required by paragraph (1) of this AD can be removed from that aircraft.</p>
Ref. Publications:	<p>SIRS SB CE2-A26-34-001 Revision 02 dated 02 April 2015.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks:	<ol style="list-style-type: none"> <li>1. This Proposed AD will be closed for consultation on 06 May 2015.</li> <li>2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>3. For any question concerning the technical content of the requirements in this PAD, please contact: SIRS Navigation Ltd., Compass House, Bowes Estate, Wrotham Road, Meopham, Kent DA13 0QB, United Kingdom Telephone +44 (0) 1474-816320, or +44 (0) 7710480020, Fax +44 (0) 1474-816321, E-mail: <a href="mailto:support@sirs.co.uk">support@sirs.co.uk</a>.</li> </ol>

**Appendix 1 – Affected Standby Compasses and  
Manufacturers of (known to be) affected Aircraft**

P/N	Aircraft Manufactured by
KCA0104W	Beechcraft Corporation (formerly Hawker Beechcraft, Raytheon Aircraft Company, Beech Aircraft Corporation)
KCA0104FY	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
KCA0105W	<ul style="list-style-type: none"> <li>- Airbus (formerly Airbus Industrie)</li> <li>- Sukhoi Civil Aircraft, JSC</li> <li>- Bombardier (formerly De Havilland Canada)</li> <li>- BAE Systems (Operations) Ltd (formerly British Aerospace)</li> <li>- Dassault Aviation (formerly Avions Marcel Dassault – Breguet Aviation)</li> </ul>
KCA0106W	Fokker Aircraft B.V.
KCA0112W	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
KCA0113W	
KCA0113FY	
KCA0116W	Bell Helicopters Textron, Inc.
KCA0114W	BAE Systems (Operations) Ltd (formerly British Aerospace)
KCA0120W	Embraer S.A.
WL1001KCA1	<ul style="list-style-type: none"> <li>- Bombardier (formerly De Havilland Canada, Canadair)</li> <li>- Dassault Aviation (formerly Avions Marcel Dassault – Breguet Aviation)</li> <li>- 328 Support Services (formerly Dornier)</li> <li>- RUAG Aerospace Services (formerly Dornier)</li> <li>- Pilatus Aircraft Ltd.</li> <li>- Beechcraft Corporation (formerly Hawker Beechcraft, Raytheon Aircraft Company, Beech Aircraft Corporation)</li> </ul>
1007KCA1	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)