

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2014-0111</b></p> <p><b>Date: 08 May 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>FOKKER SERVICES B.V.</p>	<p><b>Type/Model designation(s):</b></p> <p>F28 aeroplanes</p>
<p>TCDS Number: EASA.A.037</p>	
<p>Foreign AD: Not applicable</p>	
<p>Supersedure: This AD supersedes EASA AD 2011-0184 dated 23 September 2011.</p>	
<b>ATA 28</b>	<b>Fuel – Fuel Quantity Indication System – Inspection / Modification [Fuel Tank Safety]</b>
<p>Manufacturer(s): Fokker Aircraft B.V.</p>	
<p>Applicability: F28 Mark 1000 and Mark 1000C aeroplanes, serial numbers (s/n) 11003 through 11041 inclusive, and s/n 11991 and 11992.</p>	
Reason:	<p>Prompted by an accident of a Boeing 747-131 (flight TWA800), the Federal Aviation Administration (FAA) published Special Federal Aviation Regulation (SFAR) 88, and the Joint Aviation Authorities (JAA) published Interim Policy INT/POL/25/12.</p> <p>The review conducted by Fokker Services on the F28 design, in response to these regulations, revealed that on certain aeroplanes, an interrupted shield contact may exist or develop between the housing of an in-tank Fuel Quantity Indication (FQI) cable plug and the cable shield of the shielded FQI system cables in the main and collector fuel tanks which can, under certain conditions, form a spark gap.</p> <p>This condition, if not detected and corrected, may create an ignition source in the fuel tank vapour space, possibly resulting in a wing fuel tank explosion and consequent loss of the aeroplane.</p> <p>To address and correct this unsafe condition, Fokker Services published Service Bulletin (SB) SBF28-28-053 which provides instructions, for early production aeroplanes, for a one-time inspection to check for the presence of a by-pass wire between the housing of each in-tank FQI cable plug and the cable shield and, depending on findings, for the installation of a by-pass wire. In addition, SBF28-28-053 provides a Critical Design Configuration Control Limitation (CDCCL) item to make certain that the by-pass wire remains installed on those aeroplanes.</p>

	<p>On later production aeroplanes, an improved plug Part Number (P/N) 20P227-2 was introduced with a better shield connection to the housing of the plug. Therefore, SBF28-28-053 (original issue and Revision 1) also provided a CDCCL item to ensure that this type of plug remains installed on those aeroplanes.</p> <p>EASA issued AD 2010-0217 to require accomplishment of the instructions related to the by-pass wire and implementation of the CDCCL items as specified in Fokker Services SBF28-28-053 Revision 1, as applicable to aeroplane s/n.</p> <p>Since EASA AD 2010-0217 was issued, it was identified that P/N 20P227-1 and 20P228-1 plugs are also approved and can therefore be installed on the later production aeroplanes. Prompted by this finding, Fokker Services issued SBF28-28-055 to address the implementation of a CDCCL item to make certain that only approved plug types remain installed on the later production aeroplanes, while SBF28-28-053 Revision 2 was issued for early production aeroplanes to address the by-pass wire related actions only.</p> <p>Consequently, EASA issued AD 2011-0184, retaining the requirements of EASA AD 2010-0217, which was superseded, to require implementation of the related CDCCL items as specified in Fokker Services SBF28-28-053 Revision 2, or SBF28-28-055, as applicable to aeroplane s/n.</p> <p>More recently, Fokker Services published Revision 3 of SBF28-28-053, to eliminate the use of a heat gun in or near to the fuel tank, and prompted by a change to the definition of the related CDCCL item. Fokker Services also cancelled SBF28-28-055, due to the introduction of a revised definition of the CDCCL item that has been published in Fokker Services SBF28-28-050 Revision 2.</p> <p>For the reasons described above, this AD retains all the requirements related to SBF28-28-053 of EASA AD 2011-0184, which is superseded, but requires those actions to be accomplished in accordance with the instructions of Fokker Services SBF28-28-053 Revision 3 (R3).</p> <p>All the actions related to SBF28-28-055, as previously required through paragraphs (5) and (6) of EASA AD 2011-0184, are now addressed by EASA <a href="#">AD 2014-0110</a>.</p> <p>More information on this subject can be found in Fokker Services All Operators Message AOF28.038#02.</p>
Effective Date:	22 May 2014
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously.</p> <ol style="list-style-type: none"> <li>(1) At a scheduled opening of the fuel tanks, but not later than 84 months after 04 November 2010 [the effective date of EASA AD 2010-0217], inspect for the presence of a by-pass wire between the housing of each in-tank FQI cable plug and the cable shield in accordance with Part 1 of the Accomplishment Instructions of Fokker Services SBF28-28-053R3.</li> <li>(2) If, during the inspection as required by paragraph (1) of this AD, it is found that a by-pass wire is not installed, before next flight, install the by-pass wire between the housing of the in-tank FQI cable plug and the cable shield in accordance with Part 2 of the Accomplishment Instructions of Fokker Services SBF28-28-053R3.</li> <li>(3) CDCCL: After determining that by-pass wires are installed, as required by paragraph (1) of this AD, or after installation of by-pass wires, as required by paragraph (2) of this AD, as applicable, make certain that a by-pass wire remains installed between the housing of each in-tank FQI cable plug and the cable shield, in accordance with the information in paragraph 1.L.(1)(c) of Fokker Services SBF28-28-053R3.</li> </ol>

	<p>(4) Compliance with the requirement of paragraph (3) of this AD can be demonstrated by:</p> <p>(4.1) Revising as follows the approved aircraft maintenance programme on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane:</p> <p>incorporate the CDCCL item in accordance with the information in paragraph 1.L.(1)(c) of Fokker Services SBF28-28-053R3, and</p> <p>(4.2) Complying with the approved aircraft maintenance programme described in paragraph (4.1) of this AD.</p> <p>(5) Inspections and corrective actions, accomplished prior to the effective date of this AD in accordance with the Accomplishment Instructions of Fokker Services SBF28-28-053 original issue dated 22 June 2010, or Revision 1 dated 20 September 2010, or Revision 2 dated 22 June 2011, are acceptable to comply with the requirements of this AD. After the effective date of this AD, inspections and corrective actions must be accomplished in accordance with Fokker Services SBF28-28-053R3.</p>
Ref. Publications:	<p>Fokker Services SBF28-28-053 original issue dated 22 June 2010, or Revision 1 dated 20 September 2010, or Revision 2 dated 22 June 2011, or Revision 3 dated 09 January 2014.</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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 04 April 2014 as PAD 14-066 for consultation until 02 May 2014. No comments were received during the consultation period.</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: Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL, Hoofddorp, The Netherlands; Telephone +31-88-6280-350; Fax +31-88-6280-111; E-mail: <a href="mailto:technicalservices@fokker.com">technicalservices@fokker.com</a>. The referenced publication can be downloaded from <a href="http://www.myfokkerfleet.com">www.myfokkerfleet.com</a>.</li> </ol>