

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2011-0184 Date: 23 September 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 : Fokker Services B.V.	Type/Model designation(s) : F28 aeroplanes
TCDS Number:	EASA.A.037
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2010-0217 dated 21 October 2010.
ATA 28	Fuel – Fuel Quantity Indication System – Inspection / Modification [Fuel Tank Safety]
Manufacturer(s):	Fokker Aircraft B.V. (and predecessor companies)
Applicability:	F28 Mark 1000, 1000C, 2000, 3000, 3000C, 3000R, 3000RC and 4000 aeroplanes, all serial numbers (s/n).
Reason:	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. The review conducted by Fokker Services on the Fokker F28 type 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. 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. To address and correct this unsafe condition, EASA issued AD 2010-0217 to require, for certain aeroplanes, 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, the installation of a by-pass wire. In addition, AD 2010-0217 required the implementation of a task to make certain that the by-pass wire remains installed. On later production aeroplanes, an improved plug was introduced with a better

	shield connection to the housing of the plug. For those aeroplanes, EASA AD 2010-0217 required the implementation of a task to make certain that this type of plug remains installed. Since EASA AD 2010-0217 was issued, it was identified that, although the AD only identified Souriau Part Number (P/N) 20P227-2 as the improved plug, Souriau P/N 20P227-1 and 20P228-1 plugs with the improved shielding are also approved and can therefore be installed on the affected aeroplanes. For the reasons described above, this AD retains the requirements of EASA AD 2010-0217, which is superseded, and introduces a corrected task for the later production aeroplanes.
Effective Date:	07 October 2011
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously. (1) For F28 aeroplanes, s/n 11003 through 11041 inclusive, and s/n 11991 through 11994 inclusive: At a scheduled opening of the fuel tanks, but not later than 84 months after 04 November 2010 [the effective date of 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 Service Bulletin (SB) SBF28-28-053 Revision 2 (R2). (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 SBF28-28-053 R2. (3) After determining that by-pass wires are installed, as required by paragraph (1) of this AD, or after the 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 compliance with the requirements of this AD. (4) Compliance with the requirement of paragraph (3) of this AD can be demonstrated by: (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: incorporate the CDCCL item in accordance with the information in paragraph 1.L.(1).(c). of Fokker Services SBF28-28-053 R2, and (4.2) Complying with the approved aircraft maintenance programme described in paragraph (4.1) of this AD. (5) For F28 aeroplanes, s/n 11042 through 11241 inclusive: From 3 months after the effective date of this AD, make certain that Souriau P/N 20P227-1, P/N 20P227-2 or P/N 20P228-1 plugs, as applicable, remain installed at all in-tank FQI cable plug positions. (6) Compliance with the requirement of paragraph (5) of this AD can be demonstrated by: (6.1) 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: incorporate the CDCCL item in accordance with the information in paragraph 1.L.(1).(c). of Fokker Services SBF28-28-055, and (6.2) Complying with the approved aircraft maintenance programme

	described in paragraph (6.1) of this AD. (7) Inspections and corrective actions accomplished prior to the effective date of this AD, in accordance with Fokker Services SBF28-28-053 Revision 1 dated 20 September 2010, or in accordance with Fokker Services SBF28-28-053 original issue dated 22 June 2010, 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 SBF28-28-053 R2.
Ref. Publications:	Fokker Services SBF28-28-053 Revision 2 dated 22 June 2011. Fokker Services SBF28-28-055 dated 22 June 2011. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 24 August 2011 as PAD 11-094 for consultation until 21 September 2011. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical aspects of the requirements in this AD, please contact: Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, The Netherlands; telephone +31 (0)252-627-350; facsimile +31 (0)252-627-211; e-mail: technicalservices@fokker.com. The referenced publications can be downloaded from www.myfokkerfleet.com