EASA AIRWORTHINESS DIRECTIVE AD No.: 2009-0168 Date: 03 August 2009 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 : Type/Model designation(s) : Fokker Services B.V. F28 Mark 0070 and Mark 0100 aeroplanes TCDS Number : EASA.A.037 Foreign AD : Not applicable Supersedure : This AD supersedes EASA AD 2008-0193 dated 21 October 2008. Engine Controls – Fuel Fire Shut-off Valve Actuator – **ATA 76** Replacement Manufacturer(s): Fokker Aircraft B.V. F28 Mark 0070 and Mark 0100 aeroplanes, all serial numbers, if an actuator Part Number (P/N) 9409122 or P/N 53-0013 is installed on one or both fuel Applicability: fire shut-off valves. Due to their position on the aeroplane, fuel fire shut-off valve actuators P/N 9409122 are susceptible to freezing, which has an adverse effect on the operation of the valve. Also, due to various causes, the failure rate of actuator P/N 9409122 is higher than expected. Failure or freezing of the actuator may prevent the flight crew to close the fuel fire shut-off valve in case of an engine fire. Aeroplanes serial numbers 11244 through 11441 were delivered from the production line with actuators P/N 9401037 ("chimney type") installed. However, on some aeroplanes, these actuators have subsequently been replaced in service with actuators P/N 9409122 (using mounting blocks P/N Reason: 7923505) on one or both fuel fire shut-off valves. As a result, those aeroplanes are also affected by this unsafe condition. To address and correct this unsafe condition, EASA issued AD 2008-0193, requiring the replacement of all P/N 9409122 fuel fire shut-off valve actuators with new actuators developed by the manufacturer Eaton Aerospace, P/N 53-

0013, which have improved reliability and are less susceptible to freezing.
 Following the introduction of actuator P/N 53-0013 in service, Eaton
 Aerospace reported manufacturing and design errors on actuators with P/N
 53-0013. As a result of these errors, the top-cap of the actuator may become
 loose, possibly leading to actuator failure. Eaton Aerospace has eliminated

| | these problems by introducing a new actuator P/N 53-0027 and Fokker |
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| | Services have published SBF100-76-020 to introduce these improved actuators on aeroplanes. |
| | As a consequence of EASA AD 2008-0193, both P/N 9409122 and P/N 53- 0013 fuel fire shut-off valve actuators are currently installed on aeroplanes affected by this AD. |
| | For the reasons described above, this EASA AD supersedes AD 2008-0193 and requires the installation of new P/N 53-0027 actuators. This AD also prohibits the installation of P/N 53-0013 actuators in accordance with SBF100-76-018 (which has been cancelled), as previously required by EASA AD 2008-0193. |
| Effective Date: | 17 August 2009 |
| Required Action(s) and Compliance Time(s): | Required as indicated, unless accomplished previously: |
| | (1) Within the next 15 months after the effective date of this AD, accomplish either paragraph (1.1) or (1.2) below, as applicable to aeroplanes configuration: |
| | (1.1) For aeroplanes in pre-SBF100-76-018 configuration: Remove each fuel fire shut-off valve actuator with P/N 9409122 from the aeroplane and replace it with a fuel fire shut-off valve actuator P/N 53-0027 and accomplish the associated modifications in accordance with Part 1A or 1B, as applicable, of the Accomplishment Instructions of Fokker Services SBF100-76-020. |
| | (1.2) For aeroplanes in post-SBF100-76-018 configuration: Remove each fuel fire shut-off valve actuator with P/N 53-0013 from the aeroplane and replace it with a fuel fire shut-off valve actuator P/N 53-0027 in accordance with Part 2 of the Accomplishment Instructions of Fokker Services SBF100-76-020. |
| | (2) After the effective date of this AD, do not install a P/N 53-0013 fuel fire shut-off valve actuator on any aeroplane. |
| | Note: After installation of P/N 53-0027 fuel fire shut-off valve actuators on an aeroplane, the requirements of EASA AD 2007-0122 no longer apply to the fuel fire shut-off valve actuators installed on that aeroplane. |
| Ref. Publications: | Fokker Services SBF100-76-018 dated 31 July 2008, which has now been superseded and cancelled by SBF100-76-020 dated 20 April 2009. |
| | The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD. |
| Remarks : | If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. |
| | The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. |
| | Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>. |
| | 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 231, 2150 AE Nieuw-Vennep, The Netherlands; telephone +31 252 627 350; facsimile + 31 252 627 211; e-mail: <u>technicalservices.fokkerservices@stork.com</u> The referenced publication can be downloaded from <u>www.myfokkerfleet.com</u> |