



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-5810; Directorate Identifier 2014-NM-116-AD; Amendment 39-18526; AD 2016-10-15]

RIN 2120-AA64

Airworthiness Directives; Fokker Services B.V. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Fokker Services B.V. Model F.28 Mark 0070 and 0100 airplanes. This AD was prompted by a design review that revealed that a wiring failure, external to the center wing fuel tank, could cause a hot short circuit to a maximum level sensor wire, and result in excessive heating of the maximum level sensor element. This AD requires modifying the wiring of the maximum level sensors in the center wing fuel tank, performing after-installation tests, and corrective action if necessary. This AD also requires revising the airplane maintenance or inspection program to incorporate fuel airworthiness limitation items and critical design configuration control limitations. We are issuing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone +31 (0)88-6280-350; fax +31 (0)88-6280-111; email technicalservices@fokker.com; Internet <http://www.myfokkerfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5810.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5810; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulation evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Fokker Services B.V. Model F.28 Mark 0070 and 0100 airplanes. The NPRM published in the Federal Register on November 27, 2015 (80 FR 74039) (“the NPRM”).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0138, dated May 30, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Fokker Services B.V. Model F.28 Mark 0070 and 0100 airplanes. The MCAI states:

* * * [T]he 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 70/100 design, in response to these regulations, revealed that a wiring failure, external to the centre wing fuel tank, causing a hot short circuit to a maximum (max) level sensor wire may result in excessive heating of the max level sensor element.

This condition, if not corrected, could create an ignition source in the centre wing fuel tank vapour space, possibly resulting in a fuel tank explosion and consequent loss of the aeroplane.

EASA issued AD 2012-0240 [http://ad.easa.europa.eu/blob/easa_ad_2012_0240.pdf/AD_2012-0240], to address this unsafe condition, which required installation of three fuses in the wiring of the max level sensor(s) in the centre wing fuel tank per Fokker Services Service Bulletin (SB) SBF100-28-073. After that AD was issued, it was found that this technical solution caused fuel spills during refueling and, consequently, EASA cancelled AD 2012-0240.

More recently, Fokker Services issued SBF100-28-078, which cancelled SBF100-28-073, to correct the unsafe condition without the risk of fuel spills.

For the reasons described above, this [EASA] AD requires removal of one fuse from post-SBF100-28-073 aeroplanes, and installation of only two fuses on pre-SBF100-28-073 aeroplanes and, subsequently, the implementation of the associated Critical Design Configuration Control Limitation (CDCCL) items.

More information this subject can be found in Fokker Services All Operators Message AOF100.186#03.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5810.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Explanation of Changes Made to this AD

We have made the following changes to this AD. These changes are for formatting purposes and do not affect the requirements of this AD.

- Added a new paragraph (j) to this AD to specify the required service information, and redesignated subsequent paragraphs accordingly.

- Revised paragraph (g) of this AD by referring to the document citations in paragraph (j) of this AD.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Fokker Service Bulletin SBF100-28-078, dated January 23, 2014, and Fokker Manual Change Notification MCNM-F100-166, dated January 23, 2014.

This service information describes procedures for modifying the wiring of the maximum level sensors in the center wing fuel tank, after-installation tests, and corrective action if necessary. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 15 airplanes of U.S. registry.

We also estimate that it takes up to 9 work-hours per product to modify the wiring of the maximum level sensors in the center wing fuel tank, as specified in this AD. The

average labor rate is \$85 per work-hour. Required parts will cost about \$1,700 per product. Based on these figures, we estimate the cost of this modification on U.S. operators to be up to \$36,975, or up to \$2,465 per product.

We also estimate that it takes about 1 work-hour per product to revise the maintenance or inspection program as specified in this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this revision on U.S. operators to be \$1,275, or \$85 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-10-15 Fokker Services B.V.: Amendment 39-18526. Docket No. FAA-2015-5810; Directorate Identifier 2014-NM-116-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Fokker Services B.V. Model F.28 Mark 0070 and 0100 airplanes, certificated in any category, equipped with a center wing tank.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by a design review which revealed that a wiring failure, external to the center wing fuel tank, could cause a hot short circuit to a maximum level sensor wire, and result in excessive heating of the maximum level sensor element. We are issuing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Wiring Modification

Within 24 months after the effective date of this AD: Modify the wiring of the maximum level sensors of the center wing fuel tank, as specified in paragraph (g)(1) or

(g)(2) of this AD, as applicable. Before further flight after accomplishing the modification, do all applicable tests and corrective actions, in accordance with Part 5 of the Accomplishment Instructions of the service information identified in paragraph (j) of this AD.

(1) For post-SBF100-28-073 configuration airplanes: Do the modification in accordance with Part 1 or Part 3, as applicable, of the Accomplishment Instructions of the service information identified in paragraph (j) of this AD.

(2) For pre-SBF100-28-073 configuration airplanes: Do the modification in accordance with Part 2 or Part 4, as applicable, of the Accomplishment Instructions of the service information identified in paragraph (j) of this AD.

(h) Revise the Maintenance or Inspection Program

Within 30 days after installing the modification specified in paragraph (g)(1) or (g)(2) of this AD, as applicable: Revise the airplane maintenance or inspection program, as applicable, to incorporate the fuel airworthiness limitation items and critical design configuration control limitations (CDCCLs) specified in paragraph 2.L.(1)(c) of Fokker Service Bulletin SBF100-28-078, dated January 23, 2014.

(i) No Alternative Actions, Intervals, and/or CDCCLs

After accomplishing the revision required by paragraph (h) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an alternative method of compliance in accordance with the procedures specified in paragraph (k)(1) of this AD.

(j) Required Service Information

Do the actions specified in this AD in accordance with Fokker Service Bulletin

SBF100-28-078, dated January 23, 2014, and Fokker Manual Change Notification MCNM-F100-166, dated January 23, 2014, as applicable.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Fokker B.V. Service's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(l) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0138, dated May 30, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5810.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Fokker Service Bulletin SBF100-28-078, dated January 23, 2014, including the attached required drawings specified in paragraphs (m)(2)(i)(A), (m)(2)(i)(B), and (m)(2)(i)(C) of this AD, as applicable.

(A) Drawing W41192, Sheet 052, Issue AW, “Retro-Fit Wiring Diagram, Tank Fueling/Defueling, Center Tank,” undated;

(B) Drawing W41192, Sheet 054, Issue AW, “Retro-Fit Wiring Diagram, Tank Fueling/Defueling,” undated; and

(C) Drawing W59520-405, “Cableloom Connection List,” Sheet 3, Issue F, dated May 12, 2011.

(ii) Fokker Manual Change Notification MCNM-F100-166, dated January 23, 2014.

(3) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone +31 (0)88-6280-350; fax +31 (0)88-6280-111; email technicalservices@fokker.com; Internet <http://www.myfokkerfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on May 12, 2016.

Suzanne Masterson,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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