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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0763; Directorate Identifier 2007-NM-301-AD; Amendment 39-16170; AD 2010-01-11]

RIN 2120-AA64

Airworthiness Directives; Fokker Services B.V. Model F.28 Mark 0070 and 0100 Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Excessive wear and tear of the backlash remover mechanism has been found several times on Goodrich Part Number (P/N) 23400-3B and P/N 23400-7 elevator booster control units (BCU), while corrosion has been found on some components in other BCU. The wear and tear may result in a (partly) blocked operation of the elevator system in the normal (hydraulic) mode, while any corrosion may result in deteriorated elevator control when the BCU is in MANUAL mode.

* * * * *

The unsafe condition is wear and tear, and corrosion of the backlash remover mechanism, which can cause a (partly) blocked operation of the elevator system in the normal (hydraulic) mode and deteriorated elevator control when the BCU is in MANUAL mode, which could result in loss of control of the airplane. We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective February 18, 2010.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 18, 2010.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 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 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on September 1, 2009 (74 FR 45139). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Excessive wear and tear of the backlash remover mechanism has been found several times on Goodrich Part Number (P/N) 23400-3B and P/N 23400-7 elevator booster control units (BCU), while corrosion has been found on some components in other BCU. The wear and tear may result in a (partly) blocked operation of the elevator system in the normal (hydraulic) mode, while any corrosion may result in deteriorated elevator control when the BCU is in MANUAL mode.

Fokker Services and Goodrich determined that modification of the affected elevator BCU in accordance with Goodrich Component Service Bulletin (CSB) 23400-27-27 would correct this situation. * * *

[I]t has been decided to require the inspection of aircraft fitted with BCU P/N 23400-3 and P/N 23400-5 (serial numbers MC-001 through MC-288) and the modification of these units in accordance with Goodrich CSB 23400-27-15 (P/N change from 23400-3 to 23400-3B, or from 23400-5 to 23400-7, as applicable).

Previously, CAA-Netherlands AD (BLA) 93-051/3 dated 29 April 1994 [which corresponds to FAA AD 97-03-09] was issued, which requires a periodic inspection of P/N 23400-3 and P/N 23400-5 elevator BCU that could be affected by corrosion, and allows modification of the BCU in accordance with Fokker Service Bulletin SBF100-27-061 (application of Goodrich CSB 23400-27-15) as (optional) terminating action for these inspections.

* * * In addition, this AD requires the eventual replacement of all affected elevator BCU with modified units.

This new AD does not cancel the repetitive inspection requirements of CAA-NL AD (BLA) 93-051/3 for BCU P/N 23400-3 and P/N 23400-5 as long as these remain installed on any in-service aircraft.

The unsafe condition is wear and tear, and corrosion of the backlash remover mechanism, which can cause a (partly) blocked operation of the elevator system in the normal (hydraulic) mode and deteriorated elevator control when the BCU is in MANUAL mode, which could result in loss of control of the airplane. The required actions include inspecting the backlash remover of the elevator booster control unit to determine the displacement of the pivot bolt; and if necessary, replacing the

elevator booster control unit. Depending on the measurement of the displacement, the compliance time for replacement ranges from before further flight to 3,000 flight cycles.

You may obtain further information by examining the MCAI in the AD docket.

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 revised this AD to identify the legal name of the manufacturer as published in the most recent type certificate data sheet for the affected airplane models.

Conclusion

We reviewed the available data, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a Note within the AD.

Costs of Compliance

We estimate that this AD will affect 2 products of U.S. registry. We also estimate that it will take about 13 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$80 per work-hour. Required parts will cost about \$189 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$2,458, or \$1,229 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 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); and
3. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 AD:



2010-01-11 Fokker Services B.V.: Amendment 39-16170. Docket No. FAA-2009-0763; Directorate Identifier 2007-NM-301-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective February 18, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Fokker Services B.V. Model F.28 Mark 0070 and Mark 0100 airplanes, all serial numbers, certificated in any category.

Subject

- (d) Air Transport Association (ATA) of America Code 27: Flight Controls.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Excessive wear and tear of the backlash remover mechanism has been found several times on Goodrich Part Number (P/N) 23400-3B and P[so]l]N 23400-7 elevator booster control units (BCU), while corrosion has been found on some components in other BCU. The wear and tear may result in a (partly) blocked operation of the elevator system in the normal (hydraulic) mode, while any corrosion may result in deteriorated elevator control when the BCU is in MANUAL mode.

Fokker Services and Goodrich determined that modification of the affected elevator BCU in accordance with Goodrich Component Service Bulletin (CSB) 23400-27-27 would correct this situation. * * *

[I]t has been decided to require the inspection of aircraft fitted with BCU P/N 23400-3 and P/N 23400-5 (serial numbers MC-001 through MC-288) and the modification of these units in accordance with Goodrich CSB 23400-27-15 (P/N change from 23400-3 to 23400-3B, or from 23400-5 to 23400-7, as applicable).

Previously, CAA-Netherlands AD (BLA) 93-051/3 dated 29 April 1994 [which corresponds to FAA AD 97-03-09] was issued, which requires a periodic inspection of P/N 23400-3 and P/N 23400-5 elevator BCU that could be affected by corrosion, and

allows modification of the BCU in accordance with Fokker Service Bulletin SBF100-27-061 (application of Goodrich CSB 23400-27-15) as (optional) terminating action for these inspections.

* * * In addition, this AD requires the eventual replacement of all affected elevator BCU with modified units.

This new AD does not cancel the repetitive inspection requirements of CAA-NL AD (BLA) 93-051/3 for BCU P/N 23400-3 and P/N 23400-5 as long as these remain installed on any in-service aircraft.

The unsafe condition is wear and tear, and corrosion of the backlash remover mechanism, which can cause a (partly) blocked operation of the elevator system in the normal (hydraulic) mode and deteriorated elevator control when the BCU is in MANUAL mode, which could result in loss of control of the airplane. The required actions include inspecting the backlash remover of the elevator booster control unit to determine the displacement of the pivot bolt; and if necessary, replacing the elevator booster control unit. Depending on the measurement of the displacement, the compliance time for replacement ranges from before further flight to 3,000 flight cycles.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) For airplanes equipped with booster control unit P/N 23400-3B, 23400-7, 23400-3, or 23400-5, within 12 months after the effective date of this AD, perform a one-time inspection of the elevator booster control unit in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-27-088, dated June 4, 2007.

(2) At the time specified in Table 1 of this AD, and depending on the result of the inspection required by paragraph (f)(1) of this AD, replace the elevator booster control unit with a modified unit having P/N 23400-3B or P/N 23400-7, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-27-088, dated June 4, 2007. The replacement part must be modified in accordance with Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007.

Table 1 – Replacement Parameters

Dimension A	Replace within
$A < 0.12$ millimeters (mm)	Not applicable
$0.12 \text{ mm} \leq A < 0.5 \text{ mm}$	3,000 flight cycles
$0.5 \text{ mm} \leq A < 1.0 \text{ mm}$	2,000 flight cycles
$1.0 \text{ mm} \leq A < 1.5 \text{ mm}$	1,000 flight cycles
$1.5 \text{ mm} \leq A < 2.0 \text{ mm}$	500 flight cycles
$2.0 \text{ mm} \leq A < 2.5 \text{ mm}$	125 flight cycles
$A \geq 2.5 \text{ mm}$	Before further flight

(3) Within 60 months after the effective date of this AD, replace all remaining unmodified elevator booster control units having P/N 23400-3B or P/N 23400-7 with modified units, in

accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-27-088, dated June 4, 2007. The replacement part must be modified in accordance with Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007.

(4) Within 60 months after the effective date of this AD, replace all remaining elevator booster control units having P/N 23400-3 or P/N 23400-5 with modified units having P/N 23400-3B or P/N 23400-7, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-27-088, dated June 4, 2007. The replacement part must be modified in accordance with Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007.

(5) As of 12 months after the effective date of this AD, no person may install a Goodrich P/N 23400-3B, P/N 23400-7, P/N 23400-3 or P/N 23400-5 elevator booster control unit on any airplane, unless the conditions of paragraph (f)(5)(i) or (f)(5)(ii), as applicable, are met.

(i) The unit has been inspected in accordance with paragraph (f)(1) of this AD, and the applicable action(s) required by paragraph (f)(2) is accomplished at the time specified in that paragraph.

(ii) The unit having P/N 23400-3B or P/N 23400-7 has been modified in accordance with Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007.

(6) As of 60 months after the effective date of this AD, no person may install a Goodrich P/N 23400-3 or P/N 23400-5 elevator booster control unit on any airplane.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0032, dated February 17, 2009; Fokker Service Bulletin SBF100-27-088, dated June 4, 2007; and Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007; for related information.

Material Incorporated by Reference

(i) You must use Fokker Service Bulletin SBF100-27-088, dated June 4, 2007; and Goodrich Service Bulletin 23400-27-27, Revision 1, dated September 14, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For Fokker service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252 627 211; e-mail technicalservices.fokkerservices@stork.com; Internet <http://www.myfokkerfleet.com>.

(3) For Goodrich service information identified in this AD, contact Goodrich Corporation, Landing Gear, 1400 South Service Road, West Oakville L6L 5Y7, Ontario, Canada; telephone 905-825-1568; e[dash]mail jean.breed@goodrich.com; Internet <http://www.goodrich.com/TechPubs>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.

(5) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on December 28, 2009.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.