14 CFR Part 39

[Docket No. 95–NM–02–AD; Amendment 39–9915; AD 97–03–09]

RIN 2120–AA64

Airworthiness Directives; Fokker Model F28 Mark 0100 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Fokker Model F28 Mark 0100 series airplanes, that requires repetitive checks to detect backlash in the elevator mechanical control system, and various follow-on actions. This amendment also provides for an optional terminating action for the repetitive check requirements. This amendment is prompted by a report indicating that corrosion was found on the pivot bolts and bushings of the backlash remover lever mechanism on the elevator booster control unit (BCU) of a Model F28 Mark 0100 series airplane. The actions specified by this AD are intended to prevent such corrosion, which could result in backlash in the elevator controls and reduced elevator control authority in the manual mode.

DATES: Effective March 19, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 19, 1997.

ADDRESSES: The service information referenced in this AD may be obtained from Fokker Aircraft USA, Inc., 1199 North Fairfax Street, Alexandria, Virginia 22314. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tim Dulin, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2141; fax (206) 227–1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Fokker Model F28 Mark 0100 series airplanes was published in the Federal Register on March 17, 1995 (60 FR 14395). That action proposed to require repetitive checks to detect backlash in the elevator mechanical control system, and various follow-on actions. That action also proposed an optional terminating action for the repetitive check requirements.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request To Defer Release of Final Rule

One commenter requests that the FAA defer the release of the final rule until a bolt replacement program can be developed to satisfactorily address the problems with corrosion. This commenter asserts that the proposed rule goes beyond what is needed to address the stated safety concern. Further, this commenter considers that, since both U.S. operators affected by this proposed rule already have instituted a maintenance program that includes applying corrosion inhibitor to the subject bolts, the FAA's interim safety objectives are being met. The commenter also notes that a similar problem of bolt corrosion occurred on the same system on a Fokker Model F28 series airplane, and the manufacturer simply recommended that a corrosion-resistant bolt be installed. The commenter maintains that, if the proposed rule is adopted without change, then the FAA will be mandating a very complex inspection program at operators' ''B''-check intervals, with little thought to actually correcting the unsafe condition. If there is a simple, cost-effective terminating action that could be introduced—other than the replacement of the elevator booster control unit (BCU) with an improved unit—then it should be considered prior to going forward with this AD.

The FAA does not concur with the commenter's request to delay the issuance of this AD until a ''bolt replacement program'' is developed, because such a ''program'' is already included in the AD as an optional terminating action. This AD provides for two optional actions, either of which could be accomplished in order to terminate the required repetitive inspections:

1. modification of the affected BCU by replacing the currently installed bolts with improved bolts that are corrosion-resistant; or

2. replacement of the currently installed BCU with a unit that already has the improved, corrosion-resistant bolts installed.

The FAA has provided the terminating actions as optional to operators, since the accomplishment of either terminating action is far more complicated and time-consuming than performing the required repetitive operational checks and inspections. For example, because it is physically impossible to replace one of the affected bolts while the BCU is still installed on the airplane, in order to perform either terminating action, the BCU must be removed; this procedure in itself is more labor-intensive that performing the required checks and inspections. However, the FAA maintains that the accomplishment of either action provided for in this AD—repetitive checks/inspections or terminating action—will adequately address the unsafe condition presented by corrosion.

The FAA cannot concur with the commenter's suggestion that the FAA's ''interim safety objectives are being met'' by operators' current practice of applying a corrosion inhibitor to the suspect bolts. The commenter provided no data to substantiate that the procedure will provide a level of safety equivalent to that provided by the actions required by this AD. However, under the provisions of paragraph (e) of the final rule, the FAA may approve requests for use of alternative methods of compliance if data are submitted to substantiate that such a method would provide an acceptable level of safety.

Request To Add ''Intermediate'' Step in Operational Check

One commenter requests that the proposal be revised to include the ''intermediate'' step of checking the position of the backlash remover lever, which is specified in the referenced Fokker Service Bulletin SBF100–27–052. This commenter notes that proposed paragraph (b), as written, would require an inspection of the elevator BCU backlash remover bolts for freedom of movement and corrosion if any backlash is detected during the operational check required by proposed paragraph (a). However, the referenced Fokker service bulletin specifies an intermediate step to inspect the position of the backlash remover to determine whether the bolt inspection is even necessary, or if troubleshooting for some other cause of the problem is necessary.

The FAA concurs with the commenter's request. While this ''intermediate'' step was not specified in the proposal, the FAA's intent was to require operators to accomplish all of the check and inspection procedures specified in Fokker Service Bulletin SBF100–27–052. The final rule has been revised to indicate that operators are to perform this intermediate step to determine if the bolt inspection is

necessary, rather than immediately performing the bolt inspection in all cases. Since this addition to the final rule is relieving in nature (i.e., operators may not have to accomplish a more complicated inspection immediately, as was proposed), it will not increase the economic burden on any operator, nor will it increase the scope of the AD.

Request To Allow Deferment of BCU Replacement Requirement

One commenter requests that the proposal be revised to include the option to defer the replacement of the elevator BCU prior to further flight if the backlash remover bolts are found to be frozen or corroded. The commenter states that the backlash remover bolts are neither torqued nor subjected to high shear loads; therefore, operators should not be required to remove the BCU prior to further flight, provided that the bolts can be freed and lubricated, and the backlash operational check is subsequently accomplished successfully. If removal and modification of the BCU (in accordance with Fokker Service Bulletin SBF100–27–061) could be deferred so that operators could schedule it during a regular maintenance interval, the amount of downtime and additional expenses could be minimized.

The FAA concurs with the commenter's request. If the bolt having part number NAS6204C22D can be freed so that it rotates and slides freely, and is lubricated; and if the backlash operational check is subsequently accomplished and is successful; then the FAA agrees that the replacement of the elevator BCU can be deferred somewhat. The FAA considers an appropriate deferral interval to be 10 days. Paragraph (b) of the final rule has been revised to specify this deferral provision.

However, for the bolt having part number NAS6204C13D, the FAA has determined that its replacement cannot be deferred if it does not rotate and slide freely, or if there are any signs of corrosion; under those conditions, that bolt must be replaced prior to further flight. The FAA considers this action both appropriate and warranted, since that bolt is readily accessible on the airplane.

Request To Add Optional Repetitive Inspections

One commenter requests that the proposal be revised to include the option to conduct periodic inspections of the backlash remover mechanism and to apply corrosion preventative lubrication on the subject backlash remover bolts at 1,800-flight cycle intervals. The commenter requests that operators be permitted to accomplish these actions in lieu of the proposed operational checks to detect backlash. This commenter does not consider the proposed backlash check from the flight deck to be a good solution to the problem of corroded or frozen backlash remover lever bolts because:

1. the check is subjective, since it requires a sense of feel that may vary from person to person; and

2. the check procedures are ill-defined in the referenced Fokker Service Bulletin SBF100–27–052.

In addition, this commenter states that the Fokker service bulletin does not provide any instructions that will prevent the existing bolts from corroding.

This commenter, a U.S. operator, indicates that it already has implemented a program that includes periodic inspection and lubrication of the subject bolts at 1,800-flight cycle intervals; the commenter considers its program to be a more proactive approach to addressing the unsafe condition.

The FAA does not concur with the commenter's request. In consultation with Fokker and the Netherlands airworthiness authority (RLD), the FAA has determined that the operational check is not ''subjective,'' as suggested by the commenter: there will be a clear indication of backlash if the mechanism is stuck, and the referenced Fokker service bulletin provides objective standards of approximately 2 inches of freeplay. In addition, the commenter has not provided any technical data to prove that inspection and lubrication of the bolts at 1,800-flight cycle intervals will provide at least the same level of safety as that provided by the operational check at 500-flight cycle intervals. While an inspection and lubrication may help to prevent sticking of the mechanism, it may not provide the necessary safety margins. Paragraph (e) of the final rule, however, does provide for the use of alternative methods of compliance with the AD, provided that sufficient justification is presented to the FAA.

Further, the FAA agrees that Fokker Service Bulletin SBF100–27–052 does not provide instructions to prevent corrosion, other than inspection and lubrication of the bolts whenever backlash is detected during the operational check. However, this AD provides for two optional terminating actions for the checks: either modification of the existing BCU by replacing the currently-installed bolts with corrosion-resistant bolts (as described in Fokker Service Bulletin SBF100–26–061); or by replacement of the affected elevator BCU with a unit that already has corrosion-resistant bolts installed. Such replacement of the bolts positively addresses the problem of galvanic corrosion.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

The FAA estimates that 112 Fokker Model F28 Mark 0100 series airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is $60 per work hour. Required parts will be supplied by the manufacturer at no cost to the operators. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be $6,720, or $60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules

Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

97–03–09 FOKKER: Amendment 39–9915. Docket 95–NM–02–AD.

Applicability: Model F28 Mark 0100 series airplanes; equipped with Menasco Aerospace Elevator Booster Control Unit (BCU) having part number (P/N) 23400–3 or P/N 23400–5 with serial numbers MC–001 through MC–288 inclusive; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent backlash in the elevator controls and reduced elevator control authority in the manual mode, accomplish the following:

(a) Within 500 flight cycles or 60 days after the effective date of this AD, whichever occurs first, perform an operational check to detect backlash in the elevator mechanical control system, in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100–27–052, Revision 1, dated March 29, 1994. If no backlash is detected, repeat the check thereafter at intervals not to exceed 500 flight cycles or 60 days, whichever occurs first.

(b) If any backlash of the elevator mechanical control system is detected during any operational check required by paragraph (a) of this AD, prior to further flight, perform an inspection to determine whether the backlash remover lever and pistons are in the proper position, in accordance with Part 2 (paragraph I.) of Fokker Service Bulletin SBF100–27–052, Revision 1, dated March 29, 1994.

(1) If the backlash remover lever and pistons are in the proper position: Prior to further flight, perform appropriate trouble-shooting procedures in accordance with the Airplane Maintenance Manual.

(2) If the backlash remover lever and pistons are not in the proper position: Prior to further flight, perform an inspection to determine whether the elevator booster control unit (BCU) bolts, having part numbers (P/N) NAS6204C22D and P/N NAS6204C13D, rotate and slide freely; and to detect corrosion on the bolts of the backlash remover lever mechanism; in accordance with Part 2 (paragraph J.) of the Accomplishment Instructions of Fokker Service Bulletin SBF100–27–052, Revision 1, dated March 29, 1994.

(i) If no anomaly is detected, prior to further flight, perform appropriate trouble-shooting procedures in accordance with the Airplane Maintenance Manual.

(ii) Except as provided by paragraph (b)(2)(iii) of this AD, if any anomaly is detected, prior to further flight, replace the elevator BCU or bolts, as applicable, with serviceable parts, in accordance with the service bulletin.

(iii) If any anomaly is detected, replacement of the elevator BCU or the bolt having P/N NAS6204C22D, as applicable, may be deferred for a period of 10 days, provided that the three conditions specified below are met:

(A) The bolt having P/N NAS6204C22D can be freed so that it rotates and slides freely; and

(B) That bolt is lubricated subsequent to the inspection; and

(C) An operational check, as specified in paragraph (a) of this AD, is accomplished subsequent to lubrication and is successful.

Note 2: The deferral provision of paragraph (b)(2)(iii) of this AD does *not* apply to the bolt having P/N NAS6204C13D. Replacement of that part-numbered bolt, when necessary, cannot be deferred.

(c) Terminating action for the repetitive check and inspection requirements of this AD consists of the accomplishment of the actions specified in either paragraph (c)(1) or (c)(2) of this AD:

(1) Modification of the affected elevator BCU having P/N 23400–3 or –5, in accordance with Fokker Service Bulletin SBF100–27–061, dated March 2, 1994; or

(2) Replacement of any affected elevator BCU having P/N 23400–3 or –5 with a unit having a serial number other than MC–001 through MC–288 inclusive, in accordance with the Airplane Maintenance Manual.

(d) As of the effective date of this AD, no person shall install in any airplane a Menasco Aerospace BCU having P/N 23400–3 or P/N 23400–5 with serial numbers MC–001 through MC–288, inclusive.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(g) The actions shall be done in accordance with Fokker Service Bulletin SBF100–27–052, Revision 1, dated March 29, 1994; and Fokker Service Bulletin SBF100–27–061, dated March 2, 1994. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Fokker Aircraft USA, Inc., 1199 North Fairfax Street, Alexandria, Virginia 22314. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

(h) This amendment becomes effective on March 19, 1997.

Issued in Renton, Washington, on January 28, 1997.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 97–2608 Filed 2–11–97; 8:45 am]

BILLING CODE 4910–13–U

14 CFR Part 71

[Airspace Docket No. 97–AGL–3]

Modification of Class D Airspace; Minot, ND

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: This action modifies Class D airspace areas at Minot AFB and Minot International Airport, Minot, ND, by amending the areas' effective hours to coincide with the associated control tower's hours of operation. The intended effect of this action is to clarify when two-way radio communication with these air traffic control towers is required.

DATES: *Effective date*. 0901 UTC, March 27, 1997.

Comment date. Comments must be received on or before February 27, 1997.

ADDRESSES: Send comments on the rule in triplicate to: Manager, Air Traffic