



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0906; Product Identifier 2017-NM-039-AD; Amendment 39-19252; AD 2018-07-21]**

**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 superseding Airworthiness Directive (AD) 2005-12-16, which applied to all Fokker Services B.V. Model F28 Mark 0100 airplanes. AD 2005-12-16 required an inspection to determine the part number of the passenger service unit (PSU) panels for the PSU modification status, and corrective actions if applicable. This new AD requires an inspection of the PSU panels and the PSU panel/airplane interface connectors for discrepancies, and corrective actions if necessary. This AD also removes airplanes from the applicability. This AD was prompted by reports of smoke in the passenger compartment during ground operations and in-flight, and a determination that the modification actions required by AD 2005-12-16 might not have been implemented correctly. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is 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].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of July 20, 2005 (70 FR 34642, June 15, 2005).

**ADDRESSES:** For Fokker 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](mailto:technicalservices@fokker.com); Internet <http://www.myfokkerfleet.com>. For Grimes Aerospace service information identified in this final rule, contact Grimes Aerospace Company, Product Support Group, 240 Twain Avenue, Urbana, OH 43078; phone 513-653-5225; fax 513-652-2322. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0906.

### **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-2017-0906; 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 regulatory evaluation, any comments received, and other information. The 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 Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2005-12-16, Amendment 39-14132 (70 FR 34642, June 15, 2005) (“AD 2005-12-16”). AD 2005-12-16 applied to all Fokker Services B.V. Model F28 Mark 0100 airplanes. The NPRM published in the Federal Register on November 3, 2017 (82 FR 51172). The NPRM was prompted by reports of smoke in the passenger compartment during ground operations and in flight, and the determination that the modification actions required by AD 2005-12-16 might not have been implemented correctly. The NPRM proposed to continue to require an inspection to determine the part number of the PSU panels for the PSU modification status, and corrective actions if applicable. The NPRM also proposed to require an inspection of the PSU panels and the PSU panel/airplane interface connectors for discrepancies, and corrective actions if necessary. We are issuing this AD to detect and correct overheating of the PSU panel due to moisture ingress, which could result in smoke or fire in the passenger cabin.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive

2017-0043, dated March 6, 2017 (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 F28 Mark 0100 airplanes. The MCAI states:

Reports were received of burning smell and smoke in the passenger compartment during flight as a result of overheating of passenger service units (PSU). These were attributed to moisture ingress into the interface electrical connectors of an unsealed PSU panel.

This condition, if not detected and corrected, could lead to further incidents of smoke in the passenger compartment, possibly resulting in injury to occupants.

To address this potential unsafe condition, Grimes Aerospace Company, the PSU manufacturer (currently Honeywell) issued SB 10-1178-33-0040 and SB 10-1571-33-0041, and Fokker Services issued SBF100-25-097, to provide instructions for installation of improved sealing of the PSU and its interface electrical connectors. Subsequently, CAA-NL [Civil Aviation Authority - The Netherlands] issued AD (BLA) 2004-022 [which corresponds to FAA AD 2005-12-16] to require modification, cleaning and sealing of the affected PSU.

Since that [CAA-NL] AD was issued, following a new occurrence of burning smell and smoke in the passenger compartment during disembarking of the passengers, the investigation revealed that, on several aeroplanes, the modification instructions of Honeywell and Fokker Services (SB listed above) were not, or not correctly, implemented. Prompted by these findings, Fokker Services published SBF100-25-128, providing inspection instructions to detect non-accomplishment and any discrepancy with the original modification instructions.

For the reasons described above, this [EASA] AD retains the requirement of CAA-NL AD (BLA) 2004-022, which is superseded, and requires a one-time inspection [for discrepancies] of the PSU panels and their interface with

the aeroplane, and, depending on findings, the accomplishment of applicable corrective action(s).

Discrepancies include incorrect application of the sealant on the PSU panels, uninstalled gaskets, inability to properly lock the connectors, and incorrectly applied sealant on the connectors. Corrective actions include restoring the sealing of the affected PSU panel, repairing the PSU panel, or installing a new PSU panel with a replaced receptacle, and installing gaskets; making sure the connector can properly lock; and applying sealant on the connector.

The MCAI also revised the applicability by specifying certain line numbers and excluding airplanes on which certain modifications were done. 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-2017-0906.

### **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.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed except for 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**

Fokker Services B.V. has issued Fokker Service Bulletin SBF100-25-128, dated July 21, 2016. This service information describes procedures for inspection of the PSU panels and the PSU panel/airplane interface connectors for discrepancies, and for incorrectly applied sealant on the connectors, and corrective actions.

Grimes Aerospace has issued Service Bulletin 10-1178-33-0040, dated October 15, 1993; Service Bulletin 10-1178-33-0040, Revision 1, dated March 25, 1996; and Service Bulletin 10-1571-33-0041, dated October 15, 1993. This service information describes procedures for inspection of the PSU panels and the PSU panel/airplane interface connectors for discrepancies, and corrective actions. This service information is distinct since it applies to different part numbers.

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 8 airplanes of U.S. registry.

The actions required by AD 2005-12-16, and retained in this AD take about 5 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$6 per product. Based on these figures, the estimated cost of the actions that are required by AD 2005-12-16 is \$431 per product.

We also estimate that it would take about 13 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$8,840, or \$1,105 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

### **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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

## **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 removing Airworthiness Directive (AD) 2005-12-16, Amendment 39-14132 (70 FR 34642, June 15, 2005), and adding the following new AD:

**2018-07-21 Fokker Services B.V.:** Amendment 39-19252; Docket No. FAA-2017-0906; Product Identifier 2017-NM-039-AD.

**(a) Effective Date**

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

**(b) Affected ADs**

This AD replaces 2005-12-16, Amendment 39-14132 (70 FR 34642, June 15, 2005) (“AD 2005-12-16”).

**(c) Applicability**

This AD applies to Fokker Services B.V. Model F28 Mark 0100 airplanes, certificated in any category, serial numbers 11244 through 11527 inclusive, except those airplanes modified in service as specified in Fokker Service Bulletin SBF100-25-070, or Fokker Service Bulletin SBF100-25-109, or Fokker Modification Report FS-N545 or FS-N571.

**(d) Subject**

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

**(e) Reason**

This AD was prompted by reports of smoke in the passenger compartment during ground operations and in flight, and a determination that the modification actions

required by AD 2005-12-16 might not have been implemented correctly. We are issuing this AD to detect and correct overheating of the passenger service unit (PSU) panel due to moisture ingress, which could result in smoke or fire in the passenger cabin.

**(f) Compliance**

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

**(g) Retained Inspection and Corrective Actions, with Clarified Note**

This paragraph restates the requirements of paragraph (f) of AD 2005-12-16, with clarified note. Within 36 months after July 20, 2005 (the effective date of AD 2005-12-16), inspect to determine if Grimes Aerospace PSU panels having part number (P/N) 10-1178-( ) or P/N 10-1571-( ) are installed and the PSU modification status if applicable, and do any corrective actions if applicable, by doing all of the actions specified in the Accomplishment Instructions of Fokker Service Bulletin SBF100-25-097, dated December 30, 2003.

Note 1 to paragraph (g) of this AD: Guidance on modifying the PSU panel can be found in Fokker Service Bulletin SBF100-25-097, dated December 30, 2003, which refers to Grimes Aerospace Service Bulletin 10-1178-33-0040, Revision 1, dated March 25, 1996 (for PSU panels having P/N 10-1178-( )); and Grimes Aerospace Service Bulletin 10-1571-33-0041, dated October 15, 1993 (for PSU panels having P/N 10-1571-( )).

**(h) Retained Parts Installation Limitation, with No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2005-12-16, with no changes. As of July 20, 2005 (the effective date of AD 2005-12-16), no person may install a PSU panel having P/N 10-1178-( ) or P/N 10-1571-( ) on any airplane, unless it

has been inspected and any applicable corrective actions have been done in accordance with paragraph (g) of this AD.

**(i) New Affected PSU Identification**

For the purpose of this AD, Grimes (Honeywell) PSUs having P/N 10-1178-( ) with a serial number below 4000, and PSUs having P/N 10-1571-( ) with a serial number below 1000, are referred to as affected PSUs in paragraphs (j) through (l) of this AD.

**(j) New Inspections**

Within 24 months after the effective date of this AD: Do the actions required by paragraphs (j)(1) and (j)(2) of this AD.

(1) Do a general visual inspection of the panel of each affected PSU for incorrect application of the sealant, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-25-097, dated December 30, 2003; and, as applicable, Grimes Aerospace Service Bulletin 10-1178-33-0040, dated October 15, 1993 (for PSUs having P/N 10-1178-( )); Grimes Aerospace Service Bulletin 10-1178-33-0040, Revision 1, dated March 25, 1996 (for PSUs having P/N 10-1178-( )); or Grimes Aerospace Service Bulletin 10-1571-33-0041, dated October 15, 1993 (for PSUs having P/N 10-1571-( )).

(2) Do a general visual inspection of the electrical connectors of each affected PSU panel for discrepancies; i.e., uninstalled gaskets, inability to properly lock the connectors, and incorrectly applied sealant on the connectors; in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-25-128, dated July 21, 2016.

**(k) Corrective Actions**

If, during any inspection required by paragraph (j) of this AD, any discrepancy is found, before further flight, restore the sealing of the affected PSU panels and accomplish all applicable corrective actions to correct the PSU panel interface, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-25-128, dated July 21, 2016. Do all applicable corrective actions before further flight.

**(l) Parts Installation Limitation**

As of the effective date of this AD, an affected PSU panel may be installed on any airplane, provided that before further flight after installation, it has been inspected in accordance with paragraph (j) of this AD and all applicable corrective actions have been done in accordance with paragraph (k) of this AD.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Section, Transport Standards Branch, 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 Section, send it to the attention of the person identified in paragraph (n)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2005-12-16 are approved as AMOCs for the corresponding provisions of this AD.

**(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 Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Fokker Services B.V.'s Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2017-0043, dated March 6, 2017, 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-2017-0906.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

**(o) 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.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Fokker Service Bulletin SBF100-25-128, dated July 21, 2016.

(ii) Grimes Aerospace Service Bulletin 10-1178-33-0040, dated October 15, 1993.

(iii) Grimes Aerospace Service Bulletin 10-1178-33-0040, Revision 1, dated March 25, 1996.

(iv) Grimes Aerospace Service Bulletin 10-1571-33-0041, dated October 15, 1993.

(4) The following service information was approved for IBR on July 20, 2005 (70 FR 34642, June 15, 2005).

(i) Fokker Service Bulletin SBF100-25-097, dated December 30, 2003.

(ii) Reserved.

(5) For Fokker 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](mailto:technicalservices@fokker.com); Internet <http://www.myfokkerfleet.com>. For Grimes Aerospace service information identified in this AD, contact Grimes Aerospace Company, Product Support Group, 240 Twain Avenue, Urbana, OH 43078; phone 513-653-5225; fax 513-652-2322.

(6) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) 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 Des Moines, Washington, on March 30, 2018.

Chris Spangenberg,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

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