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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2006-25271; Directorate Identifier 2006-NM-067-AD; Amendment 39-14903; AD 2007-02-16]**

**RIN 2120-AA64**

### **Airworthiness Directives; Saab Model SAAB-Fairchild SF340A (SAAB/SF340A) and SAAB 340B Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD), which applies to certain Saab Model SAAB-Fairchild SF340A and SAAB 340B airplanes. That AD currently requires repetitive inspections for wear of the brushes and leads and for loose rivets of the direct current (DC) starter generator, and related investigative/corrective actions if necessary. This new AD requires installing new, improved generator control units (GCUs). Installing the GCUs ends the repetitive inspection requirements of the existing AD. This AD results from reports of premature failures of the DC starter generator prior to scheduled overhaul. We are issuing this AD to prevent failure of the starter generator, which could cause a low voltage situation in flight and result in increased pilot workload and reduced redundancy of the electrical powered systems.

**DATES:** This AD becomes effective March 1, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 1, 2007.

On April 1, 2005 (70 FR 9215, February 25, 2005), the Director of the Federal Register approved the incorporation by reference of Saab Service Bulletin 340-24-035, dated July 5, 2004, including Attachment 1 (Goodrich Service Information Letter 23080-03X-24-01), dated July 1, 2004.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC.

Contact Saab Aircraft AB, SAAB Aircraft Product Support, S-581.88, Linköping, Sweden, for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Examining the Docket**

You may examine the airworthiness directive (AD) docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2005-04-12, amendment 39-13984 (70 FR 9215, February 25, 2005). The existing AD applies to certain Saab Model SAAB-Fairchild SF340A and SAAB 340B airplanes. That NPRM was published in the Federal Register on July 6, 2006 (71 FR 38311). That NPRM proposed to continue to require repetitive inspections for wear of the brushes and leads and for loose rivets of the direct current (DC) starter generator, and related investigative/corrective actions if necessary. That NPRM also proposed to require installing new, improved generator control units (GCUs), which would end the repetitive inspection requirements.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been received on the NPRM.

### **Request To Change Incorporation of Certain Information**

The Modification and Replacement Parts Association (MARPA) states that, typically, airworthiness directives are based on service information originating with the type certificate holder or its suppliers. MARPA adds that manufacturer service documents are privately authored instruments generally having copyright protection against duplication and distribution. MARPA notes that when a service document is incorporated by reference into a public document, such as an airworthiness directive, it loses its private, protected status and becomes a public document. MARPA adds that if a service document is used as a mandatory element of compliance, it should not simply be referenced, but should be incorporated into the regulatory document; by definition, public laws must be public, which means they cannot rely upon private writings. MARPA is concerned that the failure to incorporate essential service information could result in a court decision invalidating the AD.

MARPA adds that incorporated by reference service documents should be made available to the public by publication in the Docket Management System (DMS), keyed to the action that incorporates them. MARPA notes that the stated purpose of the incorporation by reference method is brevity, to keep from expanding the Federal Register needlessly by publishing documents already in the hands of the affected individuals; traditionally, "affected individuals" means aircraft owners and operators, who are generally provided service information by the manufacturer. MARPA adds that a new class of affected individuals has emerged, since the majority of aircraft maintenance is now performed by specialty shops instead of aircraft owners and operators. MARPA notes that this new class includes maintenance and repair organizations, component servicing and repair shops, parts purveyors and distributors, and organizations manufacturing or servicing alternatively certified parts under section 21.303 (parts manufacturer approval) (PMA) of the Federal Aviation Regulations (14 CFR part 21). MARPA adds that the concept of brevity is now nearly archaic as documents exist more frequently in electronic format than on paper.

Therefore, MARPA asks that the service documents deemed essential to the accomplishment of the NPRM be incorporated by reference into the regulatory instrument, and published in the DMS.

We understand MARPA's comment concerning incorporation by reference. The Office of the Federal Register (OFR) requires that documents that are necessary to accomplish the requirements of the AD be incorporated by reference during the final rule phase of rulemaking. This final rule incorporates by reference the service information necessary for the accomplishment of the requirements mandated by this AD. Further, we point out that while documents that are incorporated by reference do become public information, they do not lose their copyright protection. For that reason, we advise the public to contact the manufacturer to obtain copies of the referenced service information.

Additionally, we do not publish service documents in DMS. We are currently reviewing our practice of publishing proprietary service information. Once we have thoroughly examined all aspects of this issue, and have made a final determination, we will consider whether our current practice needs to be revised. However, we consider that to delay this AD action for that reason would be inappropriate, since we have determined that an unsafe condition exists and that the requirements in this AD must be accomplished to ensure continued safety. Therefore, we have not changed the AD in this regard.

### **Request To Reference PMA Parts**

MARPA also states that type certificate holders in their service documents typically ignore the possible existence of PMA parts. MARPA states that this is particularly true with foreign manufacturers where the concept may not exist or be implemented in the country of origin. MARPA points out that the service document upon which an airworthiness directive is based frequently will require removing a certain part-numbered part and installing a different part-numbered part as a corrective action. According to MARPA, this runs afoul of part 21 of the Federal Aviation Regulations (14 CFR part 21), section 21.303, which permits the development, certification, and installation of alternatively certified parts.

MARPA further states that installing a certain part-numbered part to the exclusion of all other parts is not a favored general practice. MARPA states that such an action has the dual effect of preventing, in some cases, the installation of a perfectly good part; while at the same time prohibiting the development of new parts permitted under § 21.303. According to MARPA, such a prohibition runs the risk of taking the AD out of the realm of safety and into the world of economics, since prohibiting the development, sale, and use of a perfectly airworthy part has nothing to do with safety. MARPA states that courts could easily construe such actions as being outside the statutory basis of the AD (safety) and, as such, unenforceable. MARPA adds that courts are reluctant to find portions of a rule unenforceable since they lack the knowledge and authority to re-write requirements, and are thus generally inclined to simply void the entire rule.

In response to the commenter's statement regarding running afoul of part 21 of the Federal Aviation Regulations (14 CFR part 21, under which the FAA issues PMAs, this statement appears to reflect a misunderstanding of the relationship between ADs and the certification procedural regulations of 14 CFR part 21. Those regulations, including § 21.303, are intended to ensure that aeronautical products comply with the applicable airworthiness standards. But ADs are issued when, notwithstanding those procedures, we become aware of unsafe conditions in these products or parts. Therefore, an AD takes precedence over design approvals when we identify an unsafe condition, and mandating installation of a certain part number in an AD is not at variance with § 21.303.

The AD provides a means of compliance for operators to ensure that the identified unsafe condition is addressed appropriately. For an unsafe condition attributable to a part, the AD normally identifies the replacement parts necessary to obtain that compliance. As stated in § 39.7 of the Federal Aviation Regulations (14 CFR 39.7), "Anyone who operates a product that does not meet the requirements of an applicable airworthiness directive is in violation of this section."

Unless an operator obtains approval for an AMOC, replacing a part with one not specified by the AD would make the operator subject to an enforcement action and result in a civil penalty. No change to the AD is necessary in this regard.

### **Request to Stop Using Alternative Method of Compliance (AMOC)**

MARPA also believes that the practice of requiring an AMOC to install a PMA part should be stopped. MARPA states that this is somehow tantamount to stating, illogically, that all PMA parts are inherently defective and require an additional layer of approval when the original equipment manufacturer (OEM) part is determined to be defective. MARPA suspects that the FAA personnel who labored diligently to certify the PMA part might disagree with such a narrow, OEM-slanted view. MARPA states that if the PMA part is defective, then it must be deemed so in the AD, and not simply implied by a catch-all AMOC requirement. MARPA states that this is why it has repeatedly requested that we adopt language to trap such defective parts, and suggests that the FAA's Transport Airplane Directorate adopt the language used by the Small Airplane Directorate to accomplish this.

We infer that MARPA would like the AD to permit installation of any equivalent PMA parts so that it is not necessary for an operator to request approval of an AMOC in order to install an "equivalent" PMA part. Whether an alternative part is "equivalent" in adequately resolving the unsafe condition can only be determined on a case-by-case basis based on a complete understanding of the unsafe condition. The Transport Airplane Directorate's policy is that, in order for operators to replace a part with one that is not specified in the AD, they must request an AMOC. This is necessary so that we can make a specific determination that an alternative part is or is not susceptible to the same unsafe condition.

### **Request for Compliance With FAA Order 8040.2/Agreement on Parts Replacement**

MARPA points out that this AD, as written, does not comply with proposed FAA Order 8040.2 (AD Process for Mandatory Continuing Airworthiness Information (MCAI)), which states in the PMA section: "MCAI that require replacement or installation of certain parts could have replacement parts approved under part 21 of the Federal Aviation Regulations (14 CFR part 21), section 21.303, based on a finding of identity. We have determined that any parts approved under this regulation and installed should be subject to the actions of our AD and included in the applicability of our AD." MARPA points out that the Small Airplane Directorate has developed a blanket statement that resolves this issue. The statement includes words similar to that in the proposed Order 8040.2.

The FAA recognizes the need for standardization on the issue of addressing PMA parts in ADs, and currently is in the process of reviewing it at the national level. The Transport Airplane Directorate considers that to delay this particular AD action would be inappropriate, since we have determined that an unsafe condition exists and that replacement of certain parts must be accomplished to ensure continued safety. Therefore, no change has been made to the final rule in this regard.

The NPRM did not address PMA parts, as provided in draft FAA Order 8040.2, because the Order was only a draft that was out for comment at the time. After issuance of the NPRM, the Order was revised and issued as FAA Order 8040.5 with an effective date of September 29, 2006. FAA Order 8040.5 does not address PMA parts in ADs.

### **Conclusion**

We have carefully reviewed the available data, including the comments that have been submitted, and determined that air safety and the public interest require adopting the AD as proposed.

## Costs of Compliance

This AD affects about 170 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this AD.

### Estimated Costs

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Fleet cost
Inspections (required by AD 2005-04-12)	1	\$80	\$0	\$80, per inspection cycle	\$13,600, per inspection cycle
Installation (new action)	1	\$80	\$7,598	\$7,678	\$1,305,260

## 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 have 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 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. See the ADDRESSES section for a location to examine the regulatory evaluation.

## 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 Federal Aviation Administration (FAA) amends § 39.13 by removing amendment 39-13984 (70 FR 9215, February 25, 2005) and by adding the following new airworthiness directive (AD):



**2007-02-16 Saab Aircraft AB:** Amendment 39-14903. Docket No. FAA-2006-25271; Directorate Identifier 2006-NM-067-AD.Effective Date

(a) This AD becomes effective March 1, 2007.

### **Affected ADs**

(b) This AD supersedes AD 2005-04-12.

### **Applicability**

(c) This AD applies to Saab Model SAAB-Fairchild SF340A (SAAB/SF340A) airplanes having serial numbers 004 through 159 inclusive, and Model SAAB 340B airplanes having serial numbers 160 through 367 inclusive; certificated in any category; on which Saab Modification 2533 has not been implemented.

### **Unsafe Condition**

(d) This AD results from reports of premature failures of the direct current (DC) starter generator prior to scheduled overhaul. We are issuing this AD to prevent failure of the starter generator, which could cause a low voltage situation in flight and result in increased pilot workload and reduced redundancy of the electrical powered systems.

### **Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

### **Restatement of the Requirements of AD 2005-04-12**

#### **Inspections for Wear of the DC Starter Generator Brushes and Leads**

(f) For generators overhauled in accordance with Maintenance Review Board (MRB) Task 243104: Before 800 flight hours since last overhaul, or within 100 flight hours after April 1, 2005 (the effective date of AD 2005-04-12), perform a general visual inspection for wear of the DC starter generator brushes and leads, in accordance with Saab Service Bulletin 340-24-035, dated July 5, 2004.

Note 1: For the purposes of this AD, a general visual inspection is: “A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked.”

Note 2: Saab Service Bulletin 340-24-035, dated July 5, 2004, references Goodrich Service Information Letter 23080-03X-24-01, dated July 1, 2004, as an additional source of service information.

(1) If the tops of the brush sets are above the top of the brush box, repeat the inspection thereafter at intervals not to exceed 800 flight hours until paragraph (i) of this AD is done.

(2) If the tops of the brush sets are below the top of the brush box, before further flight, measure the brushes and determine the amount of brush life remaining, in accordance with the service bulletin.

(i) If the brush wear is within the limits specified in the service bulletin, repeat the inspection thereafter at intervals not to exceed 800 flight hours until paragraph (i) of this AD is done.

(ii) If the brush wear is outside the limits specified in the service bulletin, before further flight, replace the starter generator with a new or serviceable starter generator, in accordance with the service bulletin.

### **Inspections for Loose Rivets**

(g) For generators overhauled in accordance with MRB Task 243104: Before 800 flight hours since last overhaul, or within 100 flight hours after April 1, 2005, whichever occurs later, perform a general visual inspection of each leading wafer brush for loose rivets, in accordance with Saab Service Bulletin 340-24-035, dated July 5, 2004. Repeat the inspection thereafter at intervals not to exceed 800 flight hours until paragraph (i) of this AD is done. If any rivet is loose, before further flight, replace the DC starter generator with a new or serviceable starter generator, in accordance with the service bulletin.

### **MRB Task 243103 or 243101**

(h) For generators overhauled or with brush replacement accomplished in accordance with MRB Task 243103 or 243101, no action is required by paragraphs (f) and (g) of this AD.

### **New Requirements of This AD**

#### **Installation**

(i) For all generators: Within 36 months after the effective date of this AD, install new improved generator control units (GCUs) in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-24-026, Revision 03, dated December 20, 2004. Installing the GCUs terminates the repetitive inspection requirements of paragraphs (f) and (g) of this AD.

## **Alternative Methods of Compliance (AMOCs)**

(j)(1) The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

## **Related Information**

(k) Swedish airworthiness directive 1-197, effective November 5, 2004, also addresses the subject of this AD.

## **Material Incorporated by Reference**

(1) You must use Saab Service Bulletin 340-24-026, Revision 03, dated December 20, 2004; and Saab Service Bulletin 340-24-035, dated July 5, 2004, including Attachment 1 (Goodrich Service Information Letter 23080-03X-24-01), dated July 1, 2004; as applicable; to perform the actions that are required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Saab Service Bulletin 340-24-026, Revision 03, dated December 20, 2004, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On April 1, 2005 (70 FR 9215, February 25, 2005), the Director of the Federal Register approved the incorporation by reference of Saab Service Bulletin 340-24-035, dated July 5, 2004, including Attachment 1 (Goodrich Service Information Letter 23080-03X-24-01), dated July 1, 2004.

(3) Contact Saab Aircraft AB, SAAB Aircraft Product Support, S-581.88, Linköping, Sweden, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on January 11, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-901 Filed 1-24-07; 8:45 am]