



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0777; Product Identifier 2017-NM-050-AD; Amendment 39-19089; AD 2017-22-09]**

**RIN 2120-AA64**

**Airworthiness Directives;** Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems) Airplanes

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Saab AB, Saab Aeronautics Model SAAB 340B airplanes. This AD was prompted by reports of natural stall events in icing conditions, without prior stall warnings. This AD requires modifying the stall warning system, installing new stall warning computers, and activating the stall warning system. 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].

**ADDRESSES:** For service information identified in this final rule, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email [saab340techsupport@saabgroup.com](mailto:saab340techsupport@saabgroup.com); Internet <http://www.saabgroup.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 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-2017-0777.

**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-2017-0777; 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 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:** Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; 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 Saab AB, Saab Aeronautics Model SAAB 340B airplanes. The NPRM published in the Federal Register on August 15, 2017 (82 FR 38621) (“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 2017-0067, dated April 24, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Saab AB, Saab Aeronautics Model SAAB 340B airplanes. The MCAI states:

A few natural stall events, specifically when operating in icing conditions, have been experienced on SAAB 340 series aeroplanes, without receiving a prior stall warning.

This condition, if not corrected, could result in loss of control of the aeroplane.

To address this potential unsafe condition, SAAB developed a modified stall warning system, incorporating improved stall warning logic, and issued various Service Bulletins (SB) providing instructions to replace the Stall Warning Computer (SWC) with a new SWC, and instructions to activate the new SWC. The new system includes stall warning curves optimized for operation in icing conditions, which are activated by selection of Engine Anti-Ice.

Consequently, EASA issued AD 2014-0218 [which corresponds to FAA AD 2016-22-15, Amendment 39-18704 (81 FR 76843, November 4, 2016)] to require installation and activation of the improved SWC. That [EASA] AD excluded certain SAAB 340B aeroplanes by s/n [serial number].

Since EASA AD 2014-0218 was issued, SAAB developed a technical solution applicable for some of those previously excluded aeroplanes, and issued SB 340-27-117 and SB 340-27-118, providing instructions to modify and activate the new SWC.

For the reasons described above, this [EASA] AD requires installation and activation of the improved SWC.

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-2017-0777.

### **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 relevant 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**

Saab AB, Saab Aeronautics has issued Service Bulletin 340-27-117, dated January 23, 2017. This service information describes procedures for modifying the stall warning system.

Saab AB, Saab Aeronautics has also issued Service Bulletin 340-27-118, dated January 23, 2017. This service information describes procedures for installing new stall warning computers and activating the modified stall warning system.

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 4 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Modification, installation, and activation	78 work-hours X \$85 per hour = \$6,630	\$33,000	\$39,630	\$158,520

**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 adding the following new airworthiness directive (AD):

**2017-22-09 Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems):** Amendment 39-19089; Docket No. FAA-2017-0777; Product Identifier 2017-NM-050-AD.

#### **(a) Effective Date**

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

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems) Model SAAB 340B airplanes, certificated in any category, serial numbers 362, 363, 385, and 405.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Reason**

This AD was prompted by reports of natural stall events in icing conditions, without prior stall warnings. We are issuing this AD to prevent a natural stall event in icing conditions without any stall warning, which could result in loss of control of the airplane.

**(f) Compliance**

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

**(g) Modification**

Within 12 months after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (g)(2) of this AD.

(1) Install a provision for a modified stall warning system, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-27-117, dated January 23, 2017.

(2) Install new stall warning computers and activate the modified stall warning system, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-27-118, dated January 23, 2017.

**(h) Parts Installation Prohibition**

After modification of an airplane as required by paragraph (g) of this AD, no person may install a stall warning computer having part number (P/N) 20AK5 or P/N 0020AK5 on that airplane.

**(i) 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 (j)(2) of this AD. 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:** 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 Saab AB, Saab Aeronautics's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2017-0067, dated April 24, 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-2017-0777.

(2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149.

**(k) 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) Saab Service Bulletin 340-27-117, dated January 23, 2017.

(ii) Saab Service Bulletin 340-27-118, dated January 23, 2017.

(3) For service information identified in this AD, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email [saab340.techsupport@saabgroup.com](mailto:saab340.techsupport@saabgroup.com); Internet <http://www.saabgroup.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 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 October 19, 2017.

Jeffrey E. Duven,  
Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2017-23344 Filed: 11/3/2017 8:45 am; Publication Date: 11/6/2017]