

# Rules and Regulations

Federal Register

Vol. 61, No. 5

Monday, January 8, 1996

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 95–NM–260–AD; Amendment 39–9480; AD 96–01–04]

#### Airworthiness Directives; Saab Model SAAB SF340A and SAAB 340B Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that is applicable to certain Saab Model SAAB SF340A and SAAB 340B series airplanes. This action requires revising the Airplane Flight Manual (AFM) to require verification that the auto-ignition system is operational; to define icing conditions at higher ambient temperatures; and to provide the flight crew with limitations and procedures to aid in the avoidance of engine power interruptions. This amendment is prompted by a report of complete power loss of the left engine and power fluctuations on the right engine as a result of build up of ice and/or slush in the engine inlet and subsequent ingestion into the engines; the auto-ignition system of the left engine had failed, which prevented automatic restart of the engine following power interruption. The actions specified in this AD are intended to prevent failure of the auto-ignition system to re-light the engine in the event of power interruptions due to the ingestion of ice and/or slush into the engine, which could result in engine flameout and subsequent shutdown, and to provide the flight crew with guidance to aid in avoidance of such occurrences.

**DATES:** Effective January 23, 1996.

Comments for inclusion in the Rules Docket must be received on or before March 8, 1996.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 95–NM–260–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

The information concerning this amendment may be obtained from or examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Ruth E. Harder, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–1721; fax (206) 227–1149.

**SUPPLEMENTARY INFORMATION:** The FAA has received a report indicating that an unsafe condition may exist on certain Saab Model SAAB SF340A and SAAB 340B series airplanes. Recently, an incident occurred on a Model SAAB 340B series airplane during which, shortly after exiting icing conditions, the left engine of the airplane shut down abruptly and the right engine experienced multiple power interruptions.

Subsequent investigation revealed that shutdown of the left engine occurred due to ingestion of ice and/or slush into the engine from the inlet. In addition, the auto-ignition system had failed on that engine; therefore, engine re-light did not occur. Failure of the auto-ignition system, which is a component of the engine Digital Electronic Controller (DEC), was the result of a broken fuse. This fuse failure also caused the engine turbine (or Np) overspeed protection system to be inoperative.

The interruptions of power to the right engine also were caused by ingestion of ice and/or slush into the engine; however, the auto-ignition system for the right engine was operational and engine re-light occurred. In addition, failure of the auto-ignition system can exist concurrently such that engine re-light does not occur. These conditions, if not corrected, could result in engine flameout and subsequent shutdown.

Although single event power interruptions have occurred previously

on this airplane type, recent occurrences of multiple power interruptions demonstrate a need to increase the safety margin for flight in icing conditions. Activation of the engine anti-icing system at higher ambient temperatures will reduce the ice/slush build-up within the engine inlet and will improve the engine surge margin.

In light of the information discussed previously, the FAA finds that certain limitations and procedures should be included in the FAA-approved Airplane Flight Manual (AFM) to:

- provide the flight crew with procedures to verify that the auto-ignition system is operational;
- expand the current definition of icing conditions by increasing the temperature at which those conditions exist from +5 degrees Celsius to +10 degrees Celsius; and
- alert the flight crew to certain icing conditions during which power to an engine may be interrupted, and provide the flight crew with guidance to aid in avoidance of such occurrences.

The FAA has determined that such limitations and procedures currently are not defined adequately in the AFM for these airplanes.

This airplane model is manufactured in Sweden and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the Luftfartsverket (LFV), which is the airworthiness authority for Sweden, has kept the FAA informed of the situation described above. The FAA has examined the findings of the LFV, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, this AD is being issued to prevent failure of the auto-ignition system to re-light the engine in the event of power interruptions due to the ingestion of ice and/or slush into the engine, which could result in engine flameout and subsequent shutdown; and

to provide the flight crew with guidance to aid in avoidance of such occurrences.

This AD requires the following:

- revising the Limitations Section of the AFM to require verification that the auto-ignition system is operational;
- revising the Limitations Section of the AFM to define icing conditions at higher ambient temperatures;
- revising the Normal Procedures Section of the AFM to alert the flight crew to certain icing conditions during which power to an engine may be interrupted, and to provide the flight crew with limitations and procedures to aid in avoidance of interruptions of power to an engine.

For Model SAAB 340B series airplanes having an auto-ignition system that is found to be inoperative, this AD requires a test of the Np overspeed system to ensure that it is operative, and repair, if necessary.

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

#### Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by

interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 95-NM-260-AD." The postcard will be date stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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, 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 USC 106(g), 40101, 40113, 44701.

#### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

96-01-04 SAAB Aircraft AB: Amendment 39-9480. Docket 95-NM-260-AD.

*Applicability:* Model SAAB SF340A series airplanes, serial numbers 004 through 159 inclusive; and Model SAAB 340B series airplanes, serial numbers 160 and subsequent; 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 use the authority provided in paragraph (c) of this AD to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition; or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any airplane from the applicability of this AD.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent failure of the auto-ignition system to re-light the engine in the event of power interruptions due to the ingestion of ice and/or slush into the engine, which could result in engine flameout and subsequent shutdown; and to provide the flight crew with guidance to aid in avoidance of such occurrences; accomplish the following:

(a) Within 10 days after the effective date of this AD, revise the FAA-approved Airplane Flight Manual (AFM) to include the text contained in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD, as applicable. This may be accomplished by inserting a copy of this AD into the AFM.

(1) For Model SAAB SF340A series airplanes: Insert the following sub-section in the Limitations Section of the AFM:

#### "IGNITION SYSTEM

Prior to each flight, before engine start, perform a check of the auto-ignition system.

- Select batteries ON (external power ON or OFF).
- Check that IGN switches are in NORM position.
- Advance PLs above FLT IDLE and verify the IGN lights in the Flight Status Panel (FSP) illuminate. In bright sunlight, shade FSP to ensure IGN lights are visible when illuminated.
- Retard PLs to GND IDLE. (IGN lights should go out.)

• If an IGN light fails to illuminate when PLs are above FLT IDLE, the auto-ignition system is considered to be inoperative.

If the auto-ignition system is inoperative:

- BEFORE ENTERING ICING CONDITIONS, SET IGNITION TO CONT. Maintain ignition in CONT until touchdown, even if icing conditions cease to exist."

(2) For Model SAAB 340B series airplanes: Insert the following sub-section in the Limitations Section of the AFM:

**"IGNITION SYSTEM**

After each engine shutdown, perform a check of the auto-ignition system.

- Adjust Ng to approximately 75%–77%; minimum is 75%.

- Shut down the engines (CL to FUEL OFF).

- Verify the IGN lights in the Flight Status Panel (FSP) illuminate while Ng is above 62%. In bright sunlight, shade the FSP to ensure that lights are visible when illuminated.

- If an IGN light fails to illuminate, the auto-ignition system is considered to be inoperative.

- Retard PLs to GND IDLE.

- If the auto-ignition system is inoperative:

- BEFORE ENTERING ICING

CONDITIONS, SET IGNITION TO CONT.

Maintain ignition in CONT until touchdown, even if icing conditions cease to exist."

(3) For all airplanes: Insert the following in the Limitations Section of the AFM, under Icing Conditions:

"Icing conditions exist when visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet, ice crystals) or standing water, slush, or snow (hard packed snow excluded) is present on the ramps, taxiways, or runways and the OAT or SAT is +10 degrees C and below during ground and flight operation."

(4) For all airplanes: Insert the following in the Normal Procedures Section of the AFM, under Operation in Icing Conditions:

**"CAUTION**

Engine power interruptions may occur at ISA to ISA +20 degrees Celsius temperature and in light (or undetected) icing conditions, or shortly after exiting these conditions. Engine function will normally be recovered by the auto-ignition system before any serious loss of power. To aid in avoidance of these occurrences:

- Engine anti-ice systems must be activated prior to entering icing conditions, and maintained ON for at least 5 minutes after exiting icing conditions."

(b) For Model SAAB 340B series airplanes: If an auto-ignition system is found to be inoperative, prior to further flight, perform an Np overspeed test to ensure that the Np overspeed system is operative, in accordance with the procedures specified in General Electric Maintenance Manual SEI-576. If the Np overspeed system is found to be inoperative, prior to further flight, repair in accordance with the procedures specified in General Electric Maintenance Manual SEI-576.

(c) 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 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(d) 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.

(e) This amendment becomes effective on January 23, 1996.

Issued in Renton, Washington, on January 2, 1996.

Darrell M. Pederson,

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 96-188 Filed 1-5-96; 8:45 am]

**BILLING CODE 4910-13-U**

**14 CFR Part 71**

**[Airspace Docket No. 95-AWP-35]**

**Amendment of Class E Airspace; Globe, AZ**

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

**ACTION:** Final rule.

**SUMMARY:** This action amends the Class E airspace area at Globe, AZ. The development of a Global Positioning System (GPS) Standard Instrument Approach Procedure (SIAP) to Runway (RWY) 27 has made this action necessary. The intended effect of this action is to provide adequate controlled airspace for Instrument Flight Rules (IFR) operations at Globe-San Carlos Regional Air Facility Airport, Globe, AZ.

**EFFECTIVE DATE:** 0901 UTC February 29, 1996.

**FOR FURTHER INFORMATION CONTACT:** Scott Speer, Airspace Specialist, System Management Branch, AWP-530, Air Traffic Division, Western-Pacific Region, Federal Aviation Administration, 15000 Aviation Boulevard, Lawndale, California, 90261, telephone (310) 725-6533.

**SUPPLEMENTARY INFORMATION:**

**History**

On November 1, 1995, the FAA proposed to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) by amending the Class E airspace area at Globe, AZ (60 FR 55502). This action would provide adequate controlled airspace to accommodate a GPS SIAP to RWY 27 at Globe-San Carlos Regional Air Facility Airport, Globe, AZ.

Interested parties were invited to participate in this rulemaking

proceeding by submitting written comments on the proposal to the FAA. No comments to the proposal were received. Class E airspace designations are published in paragraph 6005 of FAA Order 7400.9C dated August 17, 1995, and effective September 16, 1995, which is incorporated by reference in 14 CFR 71.1. The E airspace designations listed in this document will be published subsequently in this Order.

**The Rule**

This amendment to part 71 of the Federal Aviation Regulations (14 CFR part 71) amends the Class E airspace area at Globe, AZ. The development of a GPS SIAP to RWY 27 has made this action necessary. The intended effect of this action is to provide adequate airspace for aircraft executing the GPS RWY 27 SIAP at Globe-San Carlos Regional Air Facility Airport, Globe, AZ.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. Therefore, this proposed regulation—(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 10034; February 26, 1979); and (3) does not warrant preparation of a Regulatory Evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 71**

Airspace, Incorporation by reference, Navigation (air).

**Adoption of the Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

**PART 71—[AMENDED]**

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389; 14 CFR 11.69

**§ 71.1 [Amended]**

2. The incorporation by reference in 14 CFR 71.1 of the Federal Aviation Administration Order 7400.9C, Airspace Designations and Reporting Points, dated August 17, 1995, and effective