

[Federal Register: June 13, 2008 (Volume 73, Number 115)]  
[Rules and Regulations]  
[Page 33663-33665]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr13jn08-3]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2007-0290; Directorate Identifier 2007-NM-250-AD; Amendment 39-15557; AD 2006-16-18 R1]**

**RIN 2120-AA64**

**Airworthiness Directives; Sandel Avionics Incorporated Model ST3400 Terrain Awareness Warning System/Radio Magnetic Indicator (TAWS/RMI) Units Approved Under Technical Standard Order(s) C113, C151a, or C151b; Installed on Various Small and Transport Category Airplanes**

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

**ACTION:** Final rule.

---

**SUMMARY:** The FAA is revising an existing airworthiness directive (AD) that applies to Sandel Avionics Incorporated Model ST3400 TAWS/RMI units as described above. The existing AD currently requires installing a warning placard on the TAWS/RMI and revising the Limitations section of the airplane flight manual (AFM). The existing AD also requires installing upgraded software in the TAWS/RMI. This new AD allows installing later revisions of the software described in the existing AD. This AD results from a report that an in-flight bearing error occurred in a Model ST3400 TAWS/RMI configured to receive bearing information from a very high frequency omnidirectional range (VOR) receiver interface via a composite video signal, due to a combination of input signal fault and software error. We are issuing this AD to prevent a bearing error, which could lead to an airplane departing from its scheduled flight path, which could result in a reduction in separation from, and a possible collision with, other aircraft or terrain.

**DATES:** This AD is effective July 18, 2008.

On September 25, 2006 (71 FR 48461, August 21, 2006), the Director of the Federal Register approved the incorporation by reference of Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004.

**ADDRESSES:** For service information identified in this AD, contact Sandel Avionics Incorporated (Sandel), 2401 Dogwood Way, Vista, California 92081.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 the Document 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:** Ha A. Nguyen, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5335; fax (562) 627-5210.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA proposed to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) with an airworthiness directive (AD) to revise AD 2006-16-18, amendment 39-14718 (71 FR 48461, August 21, 2006). The existing AD applies to Sandel Avionics Incorporated (Sandel) Model ST3400 terrain awareness warning system/radio magnetic indicator (TAWS/RMI) units approved under Technical Standard Order(s) C113, C151a, or C151b; as installed on various small and transport category airplanes. The proposed AD was published in the Federal Register on March 13, 2008 (73 FR 13498) to require installing a warning placard on the TAWS/RMI, revising the Limitations section of the airplane flight manual (AFM), and installing upgraded software in the TAWS/RMI.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We received no comments on the NPRM or on the determination of the cost to the public.

### **Conclusion**

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

### **Costs of Compliance**

This AD describes the installation of later revisions of software than those specified in AD 2006-16-18; however, this change imposes no new costs on operators. Costs are repeated here for operator convenience only.

This AD affects about 300 airplanes of U.S. registry. The actions take about 1 work hour per airplane, at an average labor rate of \$80 per work hour. Based on these figures, the estimated cost of the AD for U.S. operators is \$24,000, or \$80 per airplane.

### **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 39-14718 (71 FR 48461, August 21, 2006) and adding the following new airworthiness directive (AD):



**2006-16-18 R1 Sandel Avionics Incorporated:** Amendment 39-15557. Docket No. FAA-2007-0290; Directorate Identifier 2007-NM-250-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective July 18, 2008.

**Affected ADs**

(b) This AD revises AD 2006-16-18.

**Applicability**

(c) This AD applies to Sandel Avionics Incorporated (Sandel) Model ST3400 terrain awareness warning system/radio magnetic indicator (TAWS/RMI) units approved under Technical Standard Order(s) C113, C151a, or C151b; as identified in Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004; as installed on various small and transport category airplanes, certificated in any category, including, but not limited, to the airplane models listed in Table 1 of this AD.

**Table 1 – Manufacturers/Airplane Models**

<b>Manufacturer</b>	<b>Airplane model(s)</b>
Airbus	A300
Avions Marcel Dassault - Breguet Aviation (AMD/BA)	Falcon 10
Boeing	727, 737, 747
Bombardier (LearJet)	24, 35, 36, 55
British Aerospace (Operations) Limited	Jetstream Series 3101
Cessna	208, 208B, 421C; 501, 525, 550, 560, 650, S550
Embraer	EMB-120
Dassault-Aviation	Mystere-Falcon 50, Mystere-Falcon 200
Gulfstream	G-I, G-1159A (G-III)
Israel Aircraft Industries (IAI)	1124, 1125 Westwind Astra
McDonnell Douglas	DC-10
Piper	PA-31T2

Raytheon	58; 1900D, 400; A36; BAe.125 Series 800A; HS.125 Series 600A/700A; Hawker 800-XP; 200, 300, 350; A200, B100, B200, B300, C90, C90A, C90B, E90, F90; MU-300-10
Sabreliner	60 (NA-265-60)
Twin Commander	500-A, 695A
Viking Air Limited	DHC-6

### **Unsafe Condition**

(d) This AD results from a report that an in-flight bearing error occurred in a Model ST3400 TAWS/RMI unit configured to receive bearing information from a very high frequency omnidirectional range (VOR) receiver interface via a composite video signal, due to a combination of input signal fault and software error. We are issuing this AD to prevent a bearing error, which could lead to an airplane departing from its scheduled flight path, which could result in a reduction in separation from, and a possible collision with, other aircraft or terrain.

### **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.

### **Installing Placard**

(f) Within 14 days after September 25, 2006 (the effective date of AD 2006-16-18): Install a placard on the TAWS/RMI which states, "NOT FOR PRIMARY VOR NAVIGATION," in accordance with Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004.

### **Revising Airplane Flight Manual (AFM)**

(g) Within 14 days after September 25, 2006: Revise the Limitations section of the applicable AFM to include the following statement: "Use of ST3400 TAWS/RMI for primary VOR navigation is prohibited unless the indicator has 3.07 or A3.06 software or later." This may be done by inserting a copy of this AD into the AFM.

### **Updating Software**

(h) Within 90 days after September 25, 2006, in accordance with Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004: Field-load the TAWS/RMI with updated software having revision 3.07 (for units having serial numbers (S/Ns) under 2000) or revision A3.06 (for units having S/Ns 2000 and subsequent). Revisions of software later than revision 3.07 or A3.06, as applicable, are considered acceptable for compliance with the requirements of this paragraph. The placard and AFM limitations revision installed as required by paragraphs (f) and (g) of this AD may be removed after the software upgrade required by paragraph (h) of this AD has been accomplished.

### **Parts Installation**

(i) As of 90 days after September 25, 2006, no person may install, on any airplane, a Model ST3400 TAWS/RMI unit, unless it has been modified in accordance with Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004.

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

(j)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

## **Material Incorporated by Reference**

(k) You must use Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register previously approved the incorporation by reference of Sandel ST3400 Service Bulletin SB3400-01, Revision B, dated September 15, 2004 on September 25, 2006 (71 FR 48461, August 21, 2006).

(2) For service information identified in this AD, contact Sandel Avionics Incorporated (Sandel), 2401 Dogwood Way, Vista, California, 92081.

(3) You may review copies of the service information that is incorporated by reference at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or 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/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 June 3, 2008.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-13165 Filed 6-12-08; 8:45 am]