10.11 Average annual electrical standby mode and off mode energy consumption.

Calculate the annual electrical standby and off mode energy consumption ($E_{SO}$) in kilowatt-hours, defined as:

$$E_{SO} = \left( \frac{P_{W,SB}}{4160} \right) + \left( \frac{P_{W,OFF}}{4600} \right) * K$$

Where:

- $P_{W,SB}$ = furnace or boiler standby mode power, in watts, as measured in section 8.6 of this appendix
- $P_{W,OFF}$ = furnace or boiler off mode power, in watts, as measured in section 8.6 of this appendix
- $4,160 =$ average heating season hours per year
- $4,600 =$ average non-heating season hours per year
- $K = 0.001$ kWh/Wh, conversion factor for watt-hours to kilowatt-hours
- $BOH =$ total burner operating hours as calculated in section 10.4 for gas or oil-fueled furnaces or boilers. Where for gas or oil-fueled furnaces and boilers equipped with single-stage controls, $BOH = BOH_{SS}$; for gas or oil-fueled furnaces and boilers equipped with two-stage controls, $BOH = (BOH_{H} + BOH_{M})$; and for gas or oil-fueled furnaces and boilers equipped with stop-modulating controls, $BOH = (BOH_{W} + BOH_{M})$. For electric furnaces and boilers, $BOH = \frac{100 \times (2,080) \times 0.77 \times DHR}{E_{in} \times 3.412 \times AFUE}$

Where:

- $100 =$ to express a percent as a decimal
- $2.080 =$ as specified in 10.4.1 of this appendix
- $0.77 =$ as specified in 10.4.1 of this appendix
- $3.412 =$ conversion to express energy in terms of KBTu instead of kilowatt-hours
- $AFUE =$ as defined in 11.1 of ANSI/ASHRAE Standard 103–1993 (incorporated by reference, see § 430.3)
- $E_{in} =$ Steady-state electric rated power, in kilowatts, from section 9.3 of ANSI/ASHRAE Standard 103–1993 (incorporated by reference, see § 430.3).

This map is reasonably accurate for most parts of the United States but is necessarily generalized, and consequently not too accurate in mountainous regions, particularly in the rockies.

**FIGURE 1 - HEATING LOAD HOURS (HLH) FOR THE UNITED STATES**

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Alexander Schleicher GmbH & Co.

Segelflugzeugbau Sailplanes

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

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for all Alexander Schleicher GmbH & Co. Segelflugzeugbau Models AS –K13, Ka2B, Ka 6, Ka 6 B, Ka 6 BR, Ka 6 C, Ka 6 CR, K7, K8, and K 8 B sailplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority.
of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as misalignment of the automatic elevator control connection. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective October 4, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of October 4, 2013.


For service information identified in this AD, contact Alexander Schleicher GmbH & Co Segelflugzeugbau, Straße 1 D—36163 Poppenhausen, Germany; phone: ++49 (0) 6658/89–0; fax: ++49 (0) 6658/89–40; email: info@alexander-schleicher.de; Internet: http://www.alexander-schleicher.de/. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

FOR FURTHER INFORMATION CONTACT: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4165; fax: (816) 329–4090; email: jim.rutherford@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. The NPRM was published in the Federal Register on May 23, 2013 (78 FR 30791), and proposed to supersede AD 64–07–05, Amendment 701 (29 FR 3227, March 11, 1964) (“AD 64–07–05”). The NPRM proposed to correct an unsafe condition for the specified products.

Since we issued AD 64–07–05, the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, issued a new AD, AD No. 2013–0091, dated April 12, 2013 (referred to after this as “the MCAI”), to add additional sailplane models to the applicability and to add additional inspections of the elevator control connection. Alexander Schleicher GmbH & Co. Segelflugzeugbau has also issued revised service information to address the unsafe condition. The MCAI states:

A recent report has been received concerning a problem with the elevator control during take-off of an ASK 13 sailplane. The results of the technical investigation revealed a misalignment in the automatic elevator control connection, presumably caused by an incorrect repair or damage at the tail-plane area. In addition, similar elevator connection failure during early 1960’s which led to the issuance of LBA LTM 4/62. However, LTM 4/62 did not apply to ASK 13 and ASK 18 sailplanes coming later into production.

This condition, if not detected and corrected, could lead to failure of the automatic elevator control connection, possibly resulting in loss of control of the sailplane.

To address this unsafe condition, Alexander Schleicher GmbH issued a Technical Note (TN) (Ka 6 TN–Nr. 26; K 7 TN–Nr. 24; K 8 TN–Nr. 30; ASK 13 TN–Nr. 19; ASK 18 TN–Nr. 9) providing instructions for elevator control inspection and replacement and EASA issued AD 2012–0246 to require accomplishment of those instructions.

Since that AD was issued, Alexander Schleicher GmbH issued a revision of TN (K 6 TN–Nr. 26; K 7 TN–Nr. 24; K 8 TN–Nr. 30; ASK 13 TN–Nr. 19; ASK 18 TN–Nr. 9), dated 08 January 2013 to re-introduce a pushrod support modification for K 7 and K 8 sailplanes, previously required by LBA LTM 4/62, but no longer required by EASA AD 2012–0246, which superseded the LBA LTM.

For the reasons described above, this AD retains the requirements of EASA AD 2012–0246, which is superseded, and additionally requires, for K 7 and K 8 sailplanes, verification of embodiment of pushrod support modification, and depending on finding, pushrod support modification.

You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 30791, May 23, 2013) 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 (78 FR 30791, May 23, 2013) for correcting the unsafe condition; and

• Do not add any additional burden upon, public than was already proposed in the NPRM (78 FR 30791, May 23, 2013).

Costs of Compliance

We estimate that this AD will affect 127 products of U.S. registry. We also estimate that it will take about .5 work-hour per product to comply with the new inspection requirements of this AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the initial inspection required in this AD on U.S. operators to be $5,397.50, or $42.50 per product.

We have no way of determining the number of repetitive inspections an owner/operator will incur over the life of the sailplane.

In addition, we estimate that any necessary follow-on actions will take about 1 work-hour and require parts costing $119, for a cost of $204 per product. We have no way of determining the number of products that may need these actions.

We also estimate that it will take about 2 work-hours per product to comply with actions retained from AD 64–07–05 for Models Ka2B, Ka 6, Ka 6 B, Ka 6 BR, Ka 6 C, Ka 6 CR, K7, K8, and K 8 B sailplanes in this AD, which affects 112 products of U.S. registry, and may require parts costing $103, for a cost of $273 per product.

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 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, on the distribution of power and responsibilities among the various levels of government.
For the reasons discussed above, I certify 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.

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 the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office is 1200 New York Avenue, NW, Washington, DC 20590; email: jim.rutherford@faa.gov.

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

§ 39.13 [Amended]

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 Amendment 701 (29 FR 3227, March 11, 1964) and adding the following new AD:


(a) Effective Date

This airworthiness directive (AD) becomes effective October 4, 2013.

(b) Affected ADs

This AD supersedes AD 64–07–05, Amendment 701 (29 FR 3227; March 11, 1964).

(c) Applicability


(d) Subject


(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as misalignment of the automatic elevator control connection. The European Aviation Safety Agency (EASA) has issued a new AD to add additional sailplane models to the applicability and to add additional inspections of the elevator control connection. Alexander Schleicher GmbH & Co. Segelflugzeugbau has also issued revised service information to address the unsafe condition. We are issuing this AD to prevent failure of the automatic elevator control connection, which could result in loss of control.

(f) Actions and Compliance Retained From AD 64–07–05, Amendment 701 (29 FR 3227, March 1, 1964)

Unless already done, do the following actions specified in paragraphs (f)(1), (f)(2), and (f)(3) of this AD:


(2) For Models Ka2B, Ka 6, Ka 6 B, KA 6 BR, KA 6 C, KA 6 CR, K7, K8, and K 8 B: If any discrepancy is found during the inspection required in paragraph (f)(1) of this AD, before further flight, make any necessary repairs or modification.

Note to paragraph (f)(2) of this AD: For guidance on making the necessary repairs or modification required in paragraph (f)(2) of this AD, you may refer to FAA Civil Aeronautics Manual (CAM) 18, Maintenance, Repair, And Alteration, Of Airframes, Powerplants, Propellers, And Appliances, dated December 15, 1959, which can be found on the Internet at: http://rga.faa.gov/Regulatory_and_Guidance_Library/rgcCab.nsf/0/41df[277f2dce0e86257bc005112b]/SF/PDF/CAM_18_1959.pdf, without handwritten annotations, as revised through November 15, 1962.


(g) New Actions and Compliance

Unless already done, do the following actions specified in paragraphs (g)(1) and (g)(2) of this AD:

(1) For all models: Within 90 days after October 4, 2013 (the effective date of this AD) and repetitively thereafter at intervals not to exceed 12 months, inspect the elevator control rod in the tailplane following the Action section in Alexander Schleicher Technische Mitteilung (English translation: Technical Note) TM–Nr. 13 for Ka 2 and Ka 2b, TM–Nr. 26 for Ka 6, TM–Nr. 24 for K 7, TM–Nr. 30 for K 8, TM–Nr. 19 for ASK 13, and TM–Nr. 9 for ASK 18, all Berichtigung 1 (English translation: Revision 1), all dated January 8, 2013.

(2) For all models: During any inspection required in paragraph (g)(1) of this AD, if any bend and/or misaligned elevator control connection is detected, before further flight after the inspection, replace the elevator control connection with a serviceable part. Do the replacement following the Action section in Alexander Schleicher Technische Mitteilung (English translation: Technical Note) TM–Nr. 13 for Ka 2 and Ka 2b, TM–Nr. 26 for Ka 6, TM–Nr. 24 for K 7, TM–Nr. 30 for K 8, TM–Nr. 19 for ASK 13, and TM–Nr. 9 for ASK 18, all Berichtigung 1 (English translation: Revision 1), all dated January 8, 2013.

(h) Credit for Actions Done Following Previous Service Information

This AD provides credit for the initial inspection required in paragraph (g)(1) of this AD and any necessary replacement required in paragraph (g)(2) of this AD if already done before the effective date of this AD following the Action sections in Alexander Schleicher Technische Mitteilung (English translation: Technical Note) TM–Nr. 13 for Ka 2 and Ka 2b, TM–Nr. 26 for Ka 6, TM–Nr. 24 for K 7, TM–Nr. 30 for K 8, TM–Nr. 19 for ASK 13, and TM–Nr. 9 for ASK 18, dated August 30, 2012.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4165; fax: (816) 329–4099; email: jim.rutherford@faa.gov. Before using any approved AMOC on any sailplane 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.
(2) **Airworthiness Product**: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) **Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2013–0091, dated April 12, 2013, which can be found in the AD docket on the Internet at http://www.regulations.gov; FAA Civil Aeronautics Manual (CAM) 18, Maintenance, Repair, And Alteration, Of Airframes, Powerplants, Propellers, And Appliances, dated December 15, 1959, which can be found on the Internet at: http://rgl.faa.gov/Regulatory_and_Guidance_Library/racgcc.nsf/0/414df2772dcfe5ee86257bcf005112bf/$FILE/CAM_18_1959.pdf, without handwritten annotations, as revised through November 15, 1962; and Alexander Schleicher Technische Mitteilung (English translation: Technical Note) TM–Nr. 13 for Ka 2 and Ka 2b, TM–Nr. 26 for Ka 6, TM–Nr. 24 for K 7, TM–Nr. 30 for K 8, TM–Nr. 19 for ASK 13, and TM–Nr. 9 for ASK 18, dated August 30, 2012, which can be obtained from the manufacturer at the address specified in paragraph (k)(4) of this AD, for related information.

(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 the AD specifies otherwise.

(3) The following service information was approved for IBR on October 4, 2013.


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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**


**RIN 2120–AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

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

**ACTION**: Final rule.

**SUMMARY**: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC–9–400 series airplanes. This AD was prompted by reports of advance pneumatic detectors (APDs) for engine fire/overheat detector assemblies failing to reset after activation due to permanent deformation of the detector switch diaphragm after being exposed to high temperatures. This AD requires replacing all three APDs with new detector assemblies. We are issuing this AD to prevent a continued engine fire indication in the cockpit after the actual fire has been extinguished, which is misleading and might influence the pilot to conduct a potentially hazardous “off-airport” landing.

**DATES**: This AD becomes effective October 4, 2013.

**ADDRESSES**: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garrett Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416–375–4000; fax 416–375–4339; email ibd.query@ aero.bombardier.com; Internet http://www.bombardier.com.


**SUPPLEMENTARY INFORMATION:**

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Note 1 to paragraphs (k)(3)(i) through (k)(3)(vii) of this AD: Alexander Schleicher Technische Mitteilung (English translation: Technical Note) TM–Nr. 13 for Ka 2 and Ka 2b, TM–Nr. 26 for Ka 6, TM–Nr. 24 for K 7, TM–Nr. 30 for K 8, TM–Nr. 19 for ASK 13, and TM–Nr. 9 for ASK 18, all Berichtigung 1 (English translation: Revision 1), all dated January 8, 2013, are co-published as one document. This service information contains German to English translation. EASA used the English translation in referencing the document from Alexander Schleicher GmbH & Co. Segelflugzeugbau. For enforceability purposes, we will cite references to the Alexander Schleicher GmbH & Co. Segelflugzeugbau service information as it appears on the document.

Note 2 to paragraph (k)(3)(vii) of this AD: This service information contains German to English translation. EASA used the English translation in referencing the document from Alexander Schleicher GmbH & Co. Segelflugzeugbau. For enforceability purposes, we will cite references to the Alexander Schleicher GmbH & Co. Segelflugzeugbau service information as it appears on the document.

Note 3 to paragraph (k)(4) of this AD: For Alexander Schleicher GmbH & Co. Segelflugzeugbau service information identified in this AD, contact Alexander Schleicher GmbH & Co Segelflugzeugbau, Straße 1 D–36163 Poppenhausen, Germany; phone: ++49 (0) 6658/89–40, email: info@alexander-schleicher.de; Internet: http://www.alexander-schleicher.de.

Note 4 to paragraph (k)(4) of this AD: For Alexander Schleicher GmbH & Co. Segelflugzeugbau service information identified in this AD, contact Alexander Schleicher GmbH & Co. Segelflugzeugbau, Straße 1 D–36163 Poppenhausen, Germany; phone: ++49 (0) 6658/89–40, email: info@alexander-schleicher.de; Internet: http://www.alexander-schleicher.de.

Note 5 to paragraph (k)(4) of this AD: You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Note 6 to paragraph (k)(4) of this AD: 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 Kansas City, Missouri, on July 31, 2013.

James E. Jackson,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013–21075 Filed 8–29–13; 8:45 am]

BILLING CODE 4910–13–P