

SERVICE INFORMATION NO. SI 20-078

NOTE: SI's are used **only**:

- 1) To distribute information from DAI to our customers.
 - 2) To distribute applicable information / documents from our suppliers to our customers with additional information.
- Typically there is no revision service for SI's. Each new information or change of that will be send along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

all DV 20 airplanes

1.2 Subject:

FAA AD 2016-23-06 Rotax 912 A series engines - float replacement
ATA-Code: 73-00

1.3 Reason:

FAA has issued Airworthiness Directive No. 2016-23-06 mandating the replacement of certain floats due to a possible partial separation of the outer skin.

1.4 Information:

For detailed technical information refer to FAA Airworthiness Directive No. 2016-23-06 which is applicable without any further additions or restrictions.

II. OTHERS

FAA Airworthiness Directive No. 2016-23-06 is attached to this SI.

In case of doubt contact BRP-Rotax GmbH & CO KG.

[Federal Register Volume 81, Number 223 (Friday, November 18, 2016)]

[Rules and Regulations]

[Pages 81660-81663]

From the Federal Register Online via the Government Publishing Office [www.gpo.gov]

[FR Doc No: 2016-27444]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9000; Directorate Identifier 2016-CE-027-AD; Amendment 39-18713; AD 2016-23-06]

RIN 2120-AA64

Airworthiness Directives; Various Aircraft Equipped With BRP-Powertrain GmbH & Co KG 912 A Series Engine

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for various aircraft equipped with a BRP-Powertrain GmbH & Co KG (formerly Rotax Aircraft Engines) 912 A series engine. 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 a manufacturing defect found in certain carburetor floats where an in-flight engine shutdown and forced landing could occur when the affected cylinder had reduced or blocked fuel supply. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective December 23, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 23, 2016.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9000; or in person at 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 service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria; phone: +43 7246 601 0; fax: +43 7246 601 9130; Internet: www.rotax-aircraft-engines.com. You may view this 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. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2016-9000.

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 by adding an AD that would apply to various aircraft equipped with a BRP-Powertrain GmbH & Co KG (formerly Rotax Aircraft Engines) 912 A series engine. The NPRM was published in the Federal Register on September 8, 2016 (81 FR 62037). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. The MCAI states:

Due to a quality escape in the manufacturing process of certain floats, Part Number (P/N) 861185, a partial separation of the float outer skin may occur during engine operation. Separated particles could lead to a restriction of the jets in the carburetor, possibly reducing or blocking the fuel supply to the affected cylinder.

This condition, if not detected and corrected, could lead to in-flight engine shutdown and forced landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, BRP-Powertrain published Alert Service Bulletin (ASB) ASB-912-069/ASB-914-051 (single document, hereafter referred to as 'the ASB' in this AD), providing instructions for identification and replacement of the affected parts.

For the reasons stated above, this AD required identification and replacement of the affected floats with serviceable parts.

This AD is republished to correct one typographical error in Table 2 of Appendix 2, and to include reference to revision 1 of the ASB in the Referenced Publications.

You may examine the MCAI on the Internet at <https://www.regulations.gov/document?D=FAA-2016-9000-0002>.

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

We reviewed BRP-Powertrain GmbH & CO KG Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1/ASB-914-051R1 (co-published as one document), Revision 1, dated July 22, 2016. The service information describes procedures for identifying and replacing defective carburetor floats. 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 of this AD.

Costs of Compliance

We estimate that this AD will affect 65 products of U.S. registry. We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$100 per product.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$17,550, or \$270 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, or 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> by searching for and locating Docket No. FAA-2016-9000; 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 (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 AD:



2016-23-06 Various Aircraft: Amendment 39-18713; Docket No. FAA-2016-9000; Directorate Identifier 2016-CE-027-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 23, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all serial numbers (S/N) of the airplanes listed in table 1 of paragraph (c) of this AD, certificated in any category, that incorporate one of the following:

(1) A BRP-Powertrain GmbH & Co KG (formerly Rotax Aircraft Engines) 912 A series engine having a serial number with a carburetor part number (P/N) and S/N listed in table 2 of paragraph (c) of this AD, installed as noted, in cylinder head position 1 through 4; or

(2) an engine that, after May 8, 2016, has had an affected float, P/N 861185, installed in service as part of the airframe. Affected floats were initially delivered between May 9, 2016, and July 17, 2016, and do not have three dots stamped on the surface, as shown in paragraph 3.3) of the Accomplishment/Instructions in Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1/ASB-914-051R1 (co-published as one document), Revision 1, dated July 22, 2016. A certification document (e.g., Form 1), delivery document or record of previous installation of the float are acceptable to determine an initial delivery on or before May 8, 2016.

Table 1 of Paragraph (c)–Affected Airplanes

Type certificate holder	Aircraft model	Engine model
Aeromot-Indústria; Mecânico-Metalúrgica Ltda	AMT-200	912 A2
Diamond Aircraft Industries	HK 36 R “SUPER DIMONA”	912 A
DIAMOND AIRCRAFT INDUSTRIES GmbH	HK 36 TS and HK 36 TC	912 A3
Diamond Aircraft Industries Inc.	DA20-A1	912 A3
HOAC-Austria	DV 20 KATANA	912 A3
Iniziativa Industriali Italiane S.p.A.	Sky Arrow 650 TC	912 A2
SCHEIBE-Flugzeugbau GmbH	SF 25C	912 A2, 912 A3

Table 2 of Paragraph (c)–Affected Carburetors

Engine	Cylinder position	Carburetor P/N and S/N
912A1, 912A2, 912A3, 912A4	1 or 3	P/N 892500—S/Ns 161138 through 161143, 161483 through 161490, 161493 through 161507, 161516 through 161518, and 161526.
	2 or 4	P/N 892505—S/Ns 162193, 162194, 162196 through 162199, and 162205.

(d) Subject

Air Transport Association of America (ATA) Code 73: Engine–Fuel and Control.

(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 a manufacturing defect found in certain carburetor floats. We are issuing this AD to require actions to prevent the fuel supply to the affected cylinder from becoming reduced or blocked, which could cause an in-flight engine shutdown and result in a forced landing and damage to the airplane or injury to the occupants.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Within the next 25 hours time-in-service after December 23, 2016 (the effective date of this AD) or within the next 30 days after December 23, 2016 (the effective date of this AD), whichever occurs first, replace all affected floats with a serviceable float following paragraph (3) Accomplishment/Instructions in Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1/ASB-914-051R1 (co-published as one document), Revision 1, dated July 22, 2016.

(2) As of December 23, 2016 (the effective date of this AD), do not install a float, P/N 861185, that does not have three dots stamped on the surface, as shown in paragraph (3.3) of the Accomplishment/Instructions in Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1/ASB-914-051R1 (co-published as one document), Revision 1, dated July 22, 2016.

(g) 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) 329-4090; email: jim.rutherford@faa.gov. 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.

(2) Airworthy 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.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2016-0144, correction dated July 25, 2016, and BRP-Powertrain GmbH & CO KG Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069/ASB-914-051 (co-published as one document), dated July 14, 2016, for related information. You may examine the MCAI on the Internet at <https://www.regulations.gov/document?D=FAA-2016-9000-0002>.

(i) 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) Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1/ASB-914-051R1 (co-published as one document), Revision 1, dated July 22, 2016.

(ii) Reserved.

(3) For Rotax Aircraft Engines BRP service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria; phone: +43 7246 601 0; fax: +43 7246 601 9130; Internet: www.rotax-aircraft-engines.com.

(4) You may view this 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. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9000.

(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 Kansas City, Missouri, on November 7, 2016.

Pat Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.