[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9000; Directorate Identifier 2016-CE-027-AD]

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: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt 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 proposed AD results from 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 proposed AD 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.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
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- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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 review 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.

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 this proposed AD, 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.

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:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-9000; Directorate Identifier 2016-CE-027-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No.: 2016-0144, correction dated July 25, 2016, to correct an unsafe condition for the specified products. 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 http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9000.

Related Service Information under 1 CFR part 51

BRP-Powertrain GmbH & CO KG has issued Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-069R1 / ASB-914-051R1 (co-published as one document), 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 NPRM.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

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

Based on these figures, we estimate the cost of the proposed 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

(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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

Various Aircraft: Docket No. FAA-2016-9000; Directorate Identifier 2016-CE-027-AD.

(a) **Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(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), 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
Iniziative 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 the effective date of this AD or within the next 30 days after 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), dated July 22, 2016.

(2) As of 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), 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 http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9000. For service information related to 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 review 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.

Issued in Kansas City, Missouri, on August 25, 2016.

David R. Showers,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

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