Airworthiness Directive

AD No.: 2020-0204

Issued: 23 September 2020

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

POWERJET S.A.

Type/Model designation(s):

SaM146 engines

Effective Date: 07 October 2020

TCDS Number(s): EASA.E.034

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Low Pressure Turbine – Inspection

Manufacturer(s):

SAFRAN Aircraft Engines, formerly SNECMA; and UEC Saturn, formerly OAO NPO Saturn

Applicability:

SaM146-1S17, SaM146-1S17C, SaM146-1S18 and SaM146-1S18C engines, all serial numbers up to 146527 inclusive.

These engines are known to be installed on, but not limited to, Sukhoi RRJ-95B aeroplanes.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: PowerJet S.A. Service Bulletin (SB) 72-0241.

Reason:

Incorrect assembly of a low pressure turbine (LPT) stage 3 disc was identified during borescope inspection of in-service engines, which is understood to have resulted from an incorrect mounting of the LPT stage 3 disc during module assembly.

This condition, if not detected and corrected, could lead to LPT stage 3 disc separation, possibly resulting in release of high energy debris, with consequent damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, PowerJet S.A. published the SB to provide instructions for inspection of the LPT rotor assembly.

For the reason described above, this AD requires, for certain engines, a one-time inspection of the LPT rotor assembly and, depending on findings, accomplishment of corrective action(s).

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Inspection:

(1) Within 30 days after the effective date of this AD, inspect the LPT rotor assembly in accordance with the instructions of section 3 of the SB.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, as applicable, any discrepancy, as identified in the SB, is detected, before next flight, remove the engine from service, contact PowerJet for approved corrective action instructions and, before release to service of the engine, accomplish those instructions accordingly.

Credit:

(3) An engine for which, before the effective date of this AD, photographic evidence has been collected allowing to confirm that the LPT rotor assembly meets the acceptability criteria of the SB, as defined in this AD, is not affected by the inspection requirement of paragraph (1) of this AD.

Engine Installation:

(4) From the effective date of this AD, it is allowed to install an engine on any aeroplane, provided the engine has been inspected as required by paragraph (1) of this AD and, depending on findings, corrective actions have been accomplished on that engine as required by paragraph (2) of this AD.

Ref. Publications:

PowerJet S.A. SB 72-0241 original issue dated 24 July 2020.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. This AD was posted on 21 August 2020 as PAD 20-123 for consultation until 18 September 2020. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: PowerJet Customer Support Centre, Telephone: +33 1 64 14 81 46, Fax: +33 1 64 14 80 89, E-mail: powerjet.csc@safrangroup.com.