



## Airworthiness Directive

**AD No.:** 2019-0016

**Issued:** 29 January 2019

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:

ASI AVIATION

### Type/Model designation(s):

F 406 aeroplanes

**Effective Date:** 12 February 2019

**TCDS Number(s):** EASA.A.109

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2015-0159R1 dated 24 August 2015.

## ATA 27 – Flight Controls – Rudder Control Pedal Torque Tubes – Inspection / Replacement

### Manufacturer(s):

Reims Aviation Industries, Reims Aviation, S.A.

### Applicability:

F 406 aeroplanes, all serial numbers.

### Definitions:

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

**The SB:** ASI Aviation Service Bulletin (SB) F406-104 Revision 1.

**Affected part:** Rudder control pedal torque tubes, Part Number (P/N) 5115260-1 (left-hand side) and P/N 5115260-2 (right-hand side).

**Serviceable part:** An affected part that is new (never installed on an aeroplane); or an affected part that, before installation, has passed a magnetic particle inspection (no defects detected) in accordance with the instructions of part B of the SB.



**Reason:**

An occurrence was reported where one pilot rudder control pedal of an F 406 aeroplane detached in flight. No change in aeroplane attitude occurred. The rudder was controlled using the co-pilot rudder pedals, and an uneventful landing was made. Investigation results determined that the affected rudder pedal torque tube had failed due to a crack.

This condition, if not detected and corrected, could lead to further cases of rudder pedal torque tube failure, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, ASI Aviation issued SB F406-104 to provide inspection instructions. Consequently, EASA issued Emergency AD 2015-0159-E (later revised) to require a one-time inspection of the rudder control pedal torque tubes, both left-hand (LH) and right-hand (RH), and, depending on findings, replacement with a serviceable part. That AD also required inspection of replacement rudder control pedal torque tubes before installation.

Since EASA AD 2015-0159R1 was issued, further occurrences were reported of finding cracks on rudder pedal torque tubes. Consequently, ASI Aviation issued the SB (as defined in this AD) to provide instructions for repetitive visual, dye- or fluorescent-penetrant, and magnetic particle inspections.

For the reason described above, this AD retains the requirements of EASA AD 2015-0159R1, which is superseded, and requires implementation of repetitive inspections of the affected parts and, depending on findings, replacement.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) Before next flight after 03 August 2015 [the effective date of EASA AD 2015-0159 at original issue], accomplish a visual inspection and a dye- or fluorescent-penetrant inspection of each affected part in accordance with the instructions of part A of the SB.
- (2) If, during the inspection as required by paragraph (1) of this AD, no crack is detected on an affected part, within 100 flight hours (FH) after 03 August 2015 [the effective date of EASA AD 2015-0159 at original issue], accomplish a magnetic particle inspection of that affected part in accordance with the instructions of part B of the SB.
- (3) During the next scheduled 600 FH maintenance check after the effective date of this AD, and, thereafter, during each scheduled 600 FH maintenance check, accomplish a visual inspection and a dye- or fluorescent-penetrant inspection of each affected part, in accordance with the instructions of part A or AA of the SB.
- (4) During the next scheduled 2 400 FH maintenance check after the effective date of this AD and, thereafter, during each scheduled 2 400 FH maintenance check, accomplish a magnetic particle inspection of each affected part in accordance with the instructions of part B of the SB.



**Corrective Action(s):**

- (5) If, during any inspection as required by this AD, any crack is detected on an affected part, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the SB.

**Credit:**

- (6) Inspection(s) and corrective action(s) accomplished on an aeroplane, before the effective date of this AD in accordance with the instructions of ASI Aviation SB F406-104 at original issue, are acceptable to comply with the initial requirements of paragraphs (1), (2) and (5) of this AD for that aeroplane.

**Terminating Action:**

- (7) None.

**Parts Installation:**

- (8) From 03 August 2015 [the effective date of EASA AD 2015-0159 at original issue], it is allowed to install on any aeroplane an affected part, provided it is a serviceable part, as defined in this AD.

**Ref. Publications:**

ASI Aviation SB F406-104 original issue dated 28 July 2015, and Revision 01 dated 14 December 2018.

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 20 December 2018 as PAD 18-183 for consultation until 17 January 2019. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: ASI Aviation, Aérodrome de Reims Prunay – 51360 Prunay, France, Telephone: +33 (0)3 26 48 46 65, Fax: +33 (0)3 26 49 18 57, website: <http://asi-aviation.fr>.

