Emergency Airworthiness Directive

AD No.: 2017-0126-E

Issued: 21 July 2017

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:
SUKHOI CIVIL AIRCRAFT, JSC

Type/Model designation(s):
RRJ-95B aeroplanes

Effective Date: 25 July 2017

TCDS Number(s): EASA.IM.A.176

Foreign AD: None

Supersedure: None

ATA 55 – Stabilizers – Horizontal Stabilizer Rear Spar – Inspection

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Manufacturer(s):
Sukhoi Civil Aircraft, Joint Stock Company (JSC)

Applicability:
RRJ-95B aeroplanes, all serial numbers.

Reason:
Cracks were found on aeroplanes in service in the rear spar of the horizontal stabilizer between ribs 0, 1 and 2.

This condition, if not detected and corrected, could affect the structural integrity of the horizontal stabilizer.

To address this potential unsafe condition and prompted by these findings, Sukhoi Civil Aircraft developed a non-destructive testing (NDT) borescope inspection of the horizontal stabilizer.

For the reason described above, this AD requires repetitive borescope inspections of the horizontal stabilizer between ribs 0, 1 and 2 and, depending on findings, accomplishment of a repair.

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

Required as indicated, unless accomplished previously:

Repetitive NDT Inspections:

(1) Before exceeding 1 300 flight cycles (FC) since aeroplane first flight, or within 7 calendar days after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 300 FC, accomplish a borescope inspection of the horizontal stabilizer rear spar web cut-out between ribs 0-1 and 1-2 in accordance with the instructions of Sukhoi Civil Aircraft NDT Task 55-10-00-003, as specified in Appendix 1 of this AD.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any crack, fastener failure, or corrosion is detected, before next flight, contact Sukhoi Civil Aircraft for approved repair instructions for the affected area and accomplish those instructions accordingly.

Terminating action:

(3) None.

Ref. Publications:

Sukhoi Civil Aircraft NDT Manual, Task 55-10-00-003, as shown in Appendix 1 of this AD.

Sukhoi Civil Aircraft Service Letter 55-0486-17 Revision 1.

Remarks:

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

2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.

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

4. For any question concerning the technical content of the requirements in this AD, please contact: Sukhoi Civil Aircraft, JSC, Polikarpov Street 23b, 125284 Moscow, Russia Telephone +7 (495) 727 1988, Email: airworthiness@scac.ru.

Appendix 1 – Reproduction of Sukhoi Civil Aircraft NDT Manual, Task 55-10-00-03

TASK 55-10-00-003

Inspection of the Horizontal Stabilizer Rear Spar Web in the Area of the Cut-Outs Between Ribs 0-1 and 1-2

1. Inspection Purpose

   The present procedure is intended for inspection of horizontal stabilizer rear spar web for cracks, corrosion damage and paint coating damage.

   NOTE: Inspection procedure covers all RRJ-95 models.

2. Recommended Inspection Procedure

   A. Visual inspection ***(Ref. NDT 51-90-00)***

3. Alternative Inspection Procedure

   A. None.

4. Inspection area

   A. Horizontal stabilizer rear spar web from the inside.

5. Description of Detectable Flaws

   A. Mechanical damage (cracks, scratches, dents), loosened or damaged fasteners and damage to the paint coating.

   B. Corrosion damage in the inspection area.

6. References

   A. Visual inspection ***(Ref. NDT 51-90-00)***

7. Inspection Tools

   A. Video endoscope Olympus IPLEX FX, video endoscope EVEREST XLGo;

   B. Kit of objective lenses for direct, lateral view, stereoscopic measuring objective lens.

      NOTE: It is permitted to use other certified equipment with similar specifications which meets the requirements of this inspection.

8. Preparation for Inspection

   A. Do the operational test of the used video endoscope in accordance with the manufacturer's manual.

9. Inspection Procedure

A. Connect the objective lens to the video endoscope.

B. Bring the distal end of the video endoscope inside the horizontal stabilizer caisson part through the cut-outs between ribs 0-1 and 1-2 and do the inspection (Ref. ***Fig. 401, Sheet 1***, ***Fig. 401, Sheet 2***).

C. In case of flaw detection:

(1) Do the measurement of their length using the stereoscopic objective lens in accordance with the video endoscope Operating Manual.

(2) Record the image of location of flaws in the inspection area with the help of the video endoscope in the "photo" or "video" mode.

10. Rejection Criteria

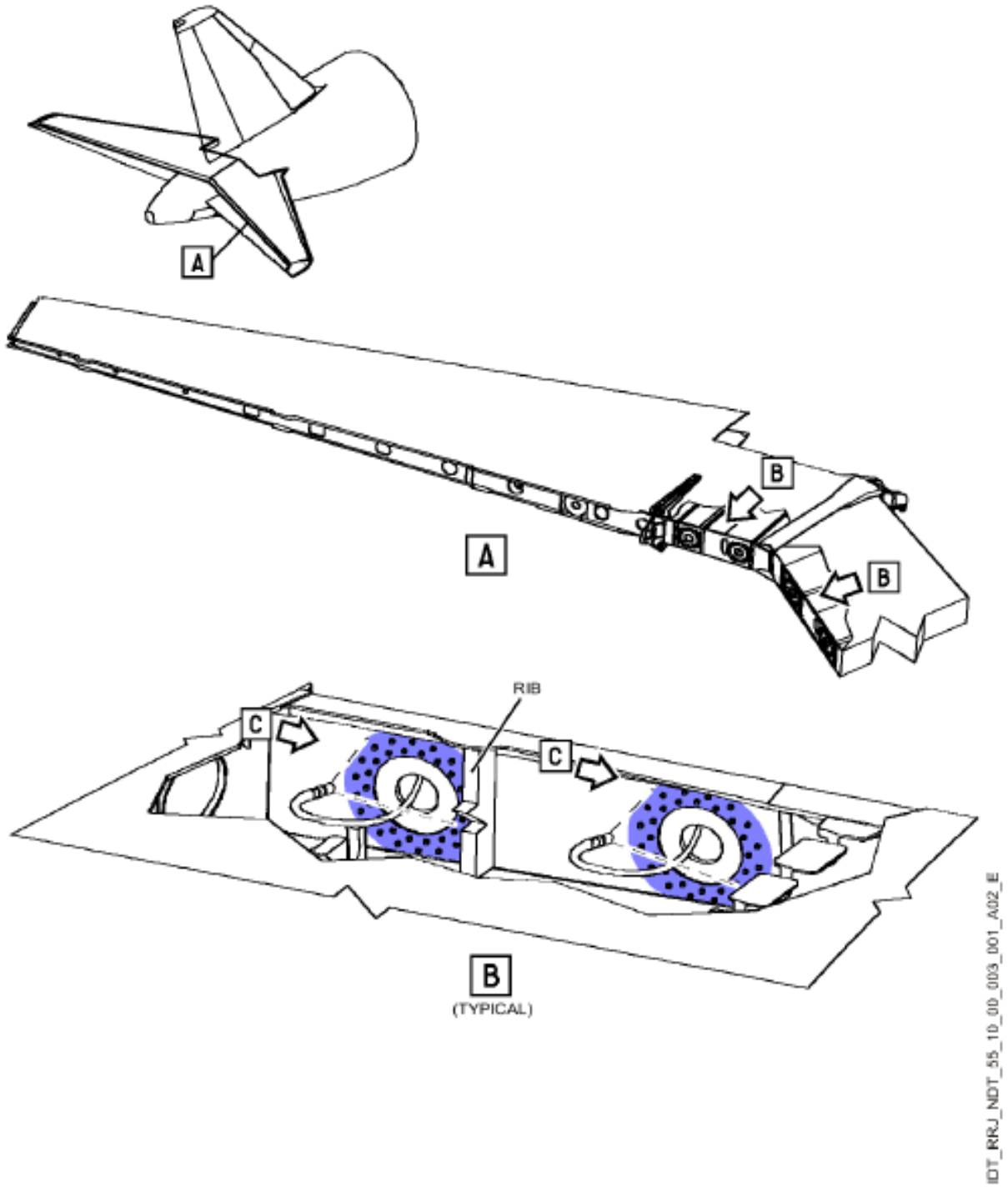
A. Presence of mechanical damage (cracks, scratches, dents) is not acceptable.

B. Loosening of fasteners is not acceptable.

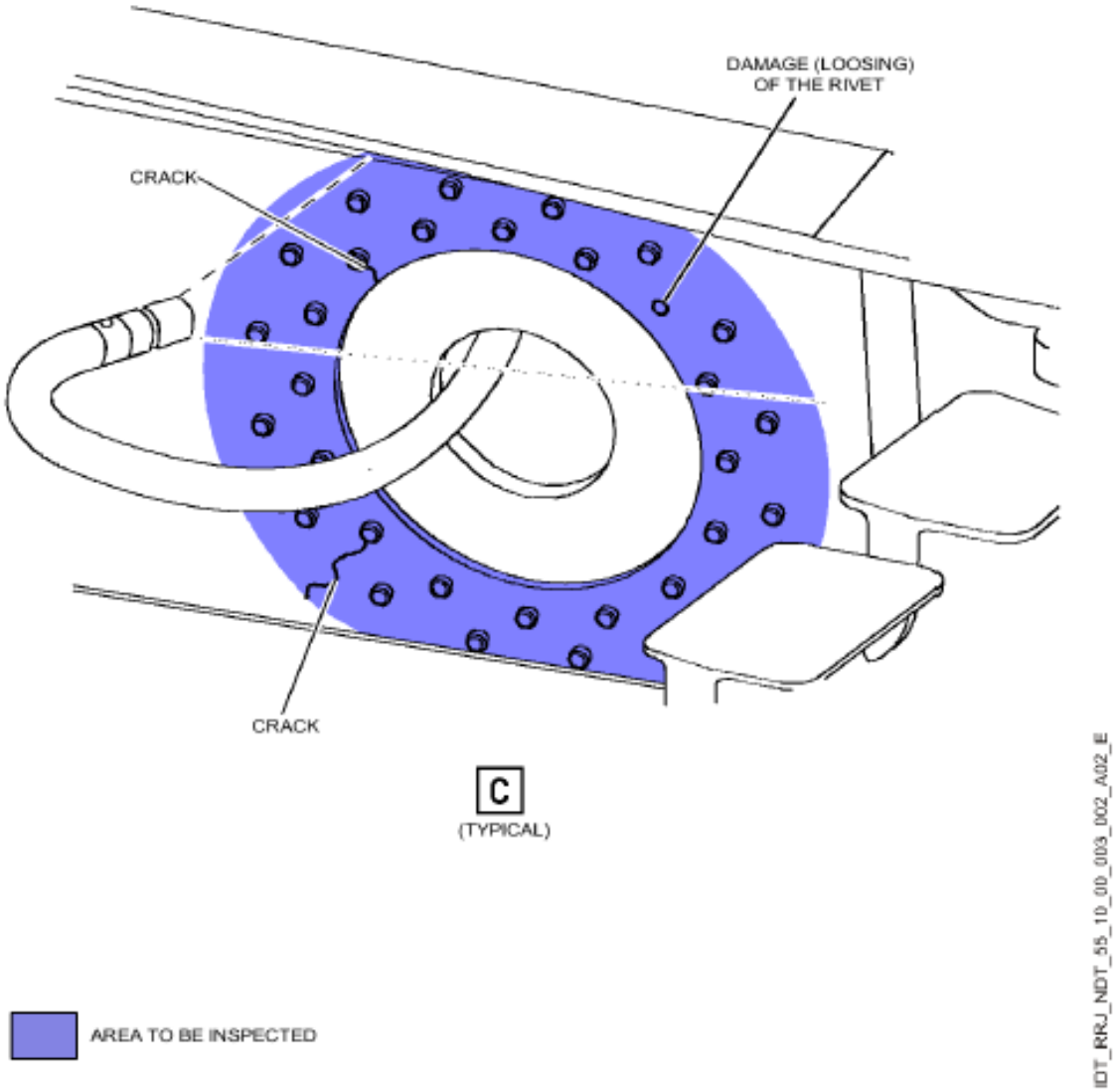
C. Corrosion damage and paint coating discontinuities are not acceptable.

11. Job Close-Up

A. None.



Inspection of the Horizontal Stabilizer Rear Spar Web in the Area of the Cut-Outs Between Ribs 0-1 and 1-2
Figure 401 (Sheet 1 of 2)



Inspection of the Horizontal Stabilizer Rear Spar Web in the Area of the Cut-Outs Between Ribs 0-1 and 1-2
Figure 401 (Sheet 2 of 2)