

«APPROVED»

Deputy Chief Designer for operation—



Khakhalin A.V.

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DECISION № RRJ0000-OR-470-8879

on one-time hinge fitting elevator inspection with respect to the lack of hub (bush) p/n T7.92.5101.107.000.73/A.

During the aircraft RRJ-95 operation the elevator play (backlash) nonconformity events due to floating bush p/n T7.92.5101.107.000.73/A missing at the mounting bracket were revealed and as a consequence the bolt T7.92.5101.101.000.73/B galling (please, refer to fig. 1).

The elevator backlash symptom effect was inability for the autopilot to maintain the prescribed altitude (within 30-50 ft range altitude).

The lack of the bush T7.92.5101.107.000.73/A the elevator actuator mounting bracket (1-C273, 2-C273, 3-C273, 4-C273) is caused by non-compliance with Design Documentation performed during the manufacturing process. To reveal if the floating bush T7.92.5101.107.000.73/A is not installed at the elevator actuator mounting bracket it is decided to take the following actions

ACTIONS:

1. At their base airports all Operators' RRJ-95 fleet must be subjected to a one-time inspection of the elevator backlash in accordance with AMM 55-20-00-200-801 during the next maintenance check (WY-check) but no later than 03.08.2016.
2. If no out-of-design backlash result is found during the inspection in accordance with AMM 55-20-00-200-801, aircraft operation is allowed to be with no restrictions applied, provided that subsequently the elevator inspection is held in accordance with MPD and AMM.
3. If the elevator backlash is proved to be out-of-design limits as stated in the AMM 55-20-00-200-801, then the elevator actuator should be detached from the related brackets p/n T7.92.3220.131.001.73/D, T7.92.3220.131.002.73/D, T7.92.3220.129.001.73/C.T7.92.3220.129.002.73/C as required by the AMM 55-26-00-220-801 “ Detailed hinge inspection of fittings and elevator actuator bracket”. Close attention should be paid to detect if the bush p/n T7.92.5101.107.000.73/A is installed at the actuator bracket on the elevator.

3.1. If the lack of bush p/n T7.92.5101.107.000.73/A at the actuator mounting bracket is found, then the mount attachments inspections of, brackets should be held in order to reveal any damages, galling and make a NDT report containing the description (sizes, damages' nature, etc.) by performing the subsequent actions:

3.1.1. Detach elevator actuators.

3.1.2. Dismount bolts and washers.

3.1.3. Dismount the bush T7.92.3220.126.000.73/B.

3.1.4. Define deteriorations due to galling for each component:

a) for bolt p/n T7.92.5101.101.000.73/B define diameter and severity of galling (its depth).

b) for bush p/n T7.92.3220.126.000.73/B define internal and external diameter by two axes (at 90 degrees) to find the eccentricity.

c) for opening the bracket mount p/n T7.92.3220.126.000.73/B at the eye-ring of each elevator actuator bracket define their diameter on the two axes (each at 90 degrees) in order to asses if the eccentricity is found/not found.

d) for the external bush p/n T7.92.3220.127.000.73/B at the installation location of floating bush p/n T7.92.5101.107.000.73, measure the internal eccentricity in the two axes without dismounting.

3.2. If the bush p/n T7.92.5101.107.000.73/A at the actuator mounting bracket is installed, then the inspection of the mount attachments, brackets should be held in order to reveal any damages, galling and make a NDT report containing the issues identified (sizes, nature of deterioration, etc.) by performing the subsequent actions:

3.2.1. Measure the gap between the bushes at the mounting brackets and elevator hinge-bracket eye-rings.

3.2.2. Assess the galling on the mounting bracket and elevator hinge-bracket eye-rings.

4. The above results should be addressed to the aircraft design organization SCAC to the following addresses customercare@scac.ru and airworthiness@scac.ru.

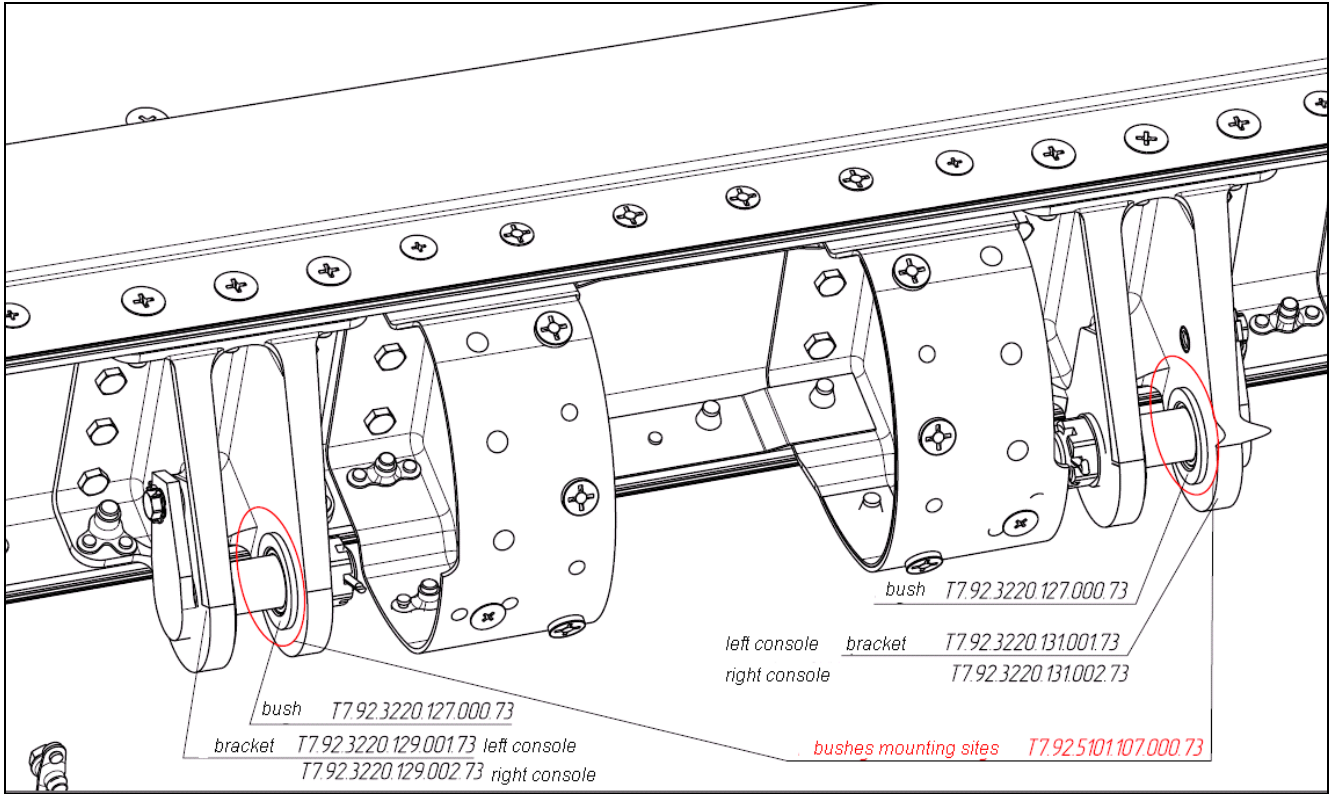


Figure 1