


«Approved»  
SSJ Program Chief Design

  
V.N. Lavrov  
«    » \_\_\_\_\_ 2022

### Technical Decision RRJ0000-OR-053-0015

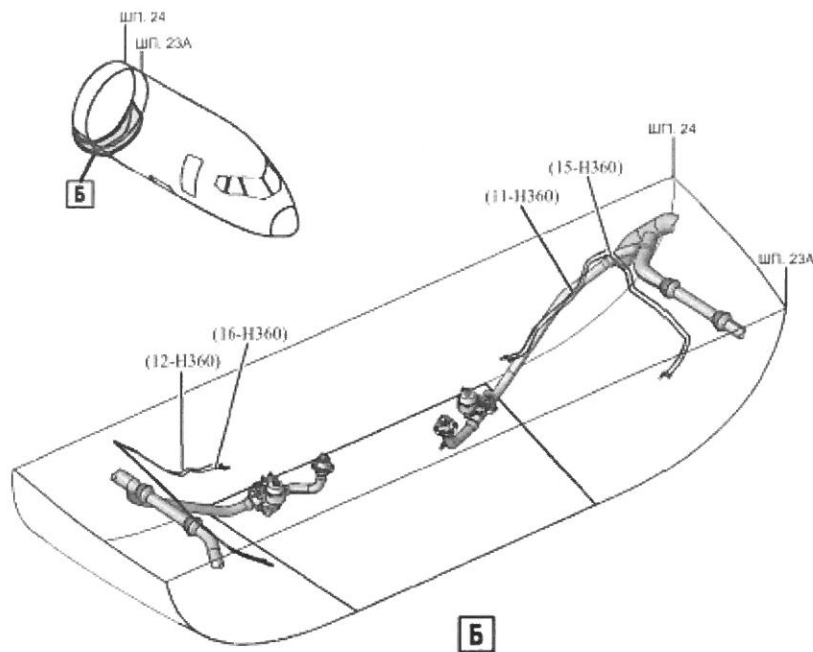
On checking the sensitive elements of the leak detection system on the RRJ-95 type aeroplane in operation

#### Status

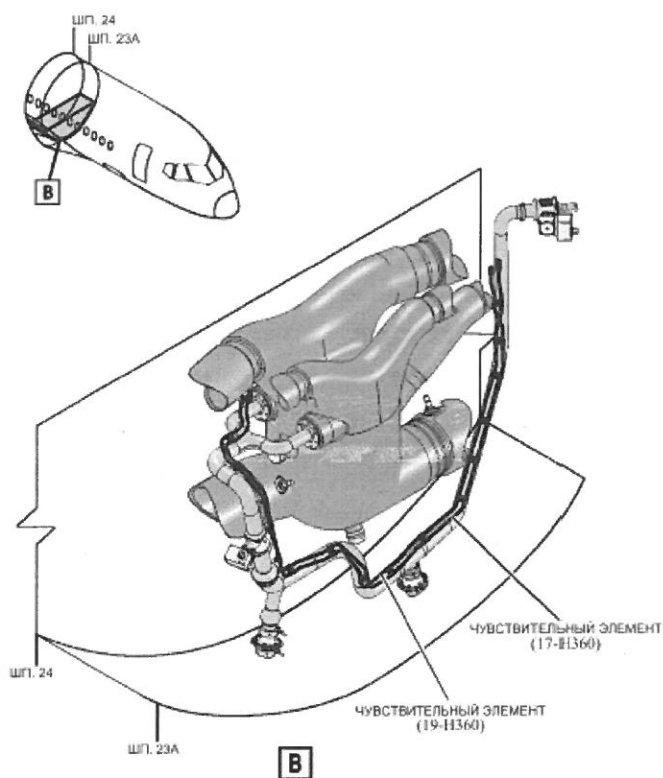
According to Collins Aerospace, the leak detection system (LDS) sensors manufacturer, about 1.95% of sensors manufactured and delivered between November 24<sup>th</sup>, 2004 and January 31<sup>st</sup>, 2021 may not correctly detect hot air leaks.

The fail-safe analysis of the impact of the potential inoperability of a part of the sensing elements of the LDS shows that it is necessary to perform a one-time check of the operability of the LDS sensing elements in three circuits (see AMM 36-22-00)

1. The contour along the left ACP (Air Cooling Pack) (Figure 1) - sensitive elements 11-H360 and 15-H360;
2. The contour along the right ACP (Air Cooling Pack) (Figure 1) - sensitive elements 12-H360 and 16-H360;
3. The contour along the mixing subsystem (Figure 2) - sensitive elements 17-H360 and 19-H360.



**Figure 1. The location of the sensitive elements of the LDS along the air cooling pipes**



**Figure 2. The Location of the LDS sensitive elements of the hot air admixture line**

Checking the performance of the above sensitive elements is a priority. Other sensitive elements may be faulty and are also subject to mandatory testing but with a low priority.

Based on the above, the following decision is taken:

### **DECISION**

1. Operators of aeroplane RRJ-95 not later than the next Maintenance Check multiple of 1500 FH after the approval date of the Technical Decision to check the prioritized sensitive elements of the Leakage Detection System (LDS) installed on the following circuit positions 11-H360, 12-H360, 15-H360, 16-H360, 17-H360, 19-H360 according to the methodology laid down in Appendix 1 to this Decision;
2. On the Maintenance Check multiples of 4 YE, check the remaining sensitive elements of the LDS installed on the following circuit positions 42-H360, 56-H360, 39-H360, 49-H360, 40-H360, 54-H360, 17-H360, 19-H360, 18 -H360, 20-H360, 61-H360, 51-H360, 44-H360, 58-H360, 57-H360, 55-H360, 53-H360, 62-H360, 63-H360, 64-H360, 66-H360 , 60-H360, 59-H360, 65-H360, 13-H360, 22-H360, 31-H360, 41-H360, 14-H360, 21-H360, 32-H360, 46-H360, 47-H360, 37-H360, 35-H360, 45-H360, 43-H360, 33-H360, 52-H360, 38-H360, 50-H360, 36-H360, 34-H360, 48-H360 according to the methodology laid down in Appendix 1 to this Decision;
3. Replacement of sensors rejected after checking according to clauses 1 and 2 shall be carried out at the expense of PJSC Irkut Corporation;
4. The results of the check stipulated by p.1 and 2 as well as the data on the sensitive elements replacement according to p.1 and 2 with the reference to drawings and serial numbers of the removed and installed components, aeroplane service hours and operating time of the sensitive elements at the time of replacement shall be sent to the Operational Situation center of PJSC Irkut Corporation – [customercare@ssj.irkut.com](mailto:customercare@ssj.irkut.com).

5. Appendix:

1. Methodology for checking the sensitive elements of the LDS as part of the aeroplane - 10 pages, 1 copy.