

# SERVICE LETTER No. L 136-Rev.4

DATE:

May 15, 2023

TO:

Sault College Aviation Technology

**MODEL AFFECTED:** 

Z 242 L aircraft, S/N: 0682, S/N 0685, S/N 0745

SUBJECT:

Aircraft manufacturer instructions for detected cracks and defects

and repair instructions.

### NOTE:

Based on Service letter Nr. L134 from  $8^{th}$  December 2021 the service life of the aircraft fuselage S/N 0682 is extended up to 21 000 flight hours.

Based on Service letter Nr. L114 from  $30^{th}$  March 2014 the service life of the aircraft fuselage S/N 0685 is extended up to 18 000 flight hours.

Based on Service letter Nr. L119 from  $26^{th}$  October 2018 the service life of the aircraft fuselage S/N 0745 is extended up to 18 000 flight hours.

The operator reported the cracks disclosed during the regular servicing of the airplane's structure. The reported findings were considered by the Commission of Airworthiness and Reliability of ZLIN AIRCRAFT a.s. and its conclusion is that the cracks are repairable with no impact on airplane's airworthiness:

The reported cracks were detected as follows:

1) Second rib from both the left- and right-wing root. The length of the cracks is 4, resp. 2 mm (see Fig. 1 and 1A and No. 2).

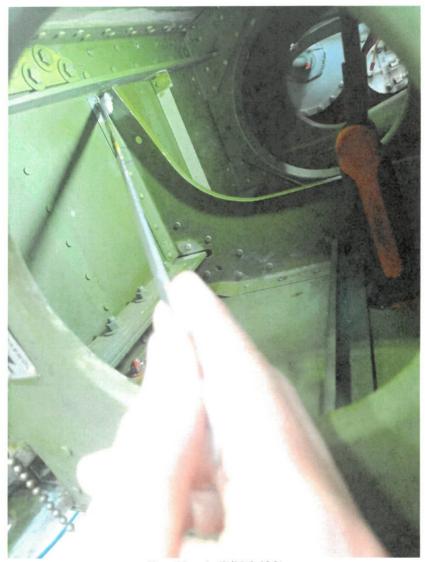


Fig. No. 1 (S/N 0682)



Fig. No. 1A (S/N 0685)



Fig. No. 2 (S/N 0682)

2) The rear part of the left root rib. The length of the crack is 3 mm (see Fig. No. 3 and No.



Fig. No. 3 (S/N 0682)



Fig. No. 4 (S/N 0682)

3) The sheared head of the technological rivet connecting the lower and upper plate of the main wing attachment point was found (see Fig. No. 5 and No. 6.).



Fig. No. 5 (S/N 0682)

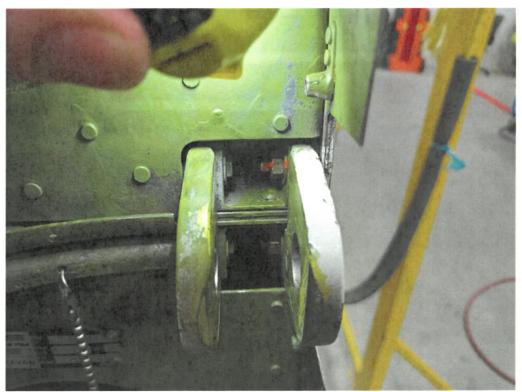


Fig. No. 6 (S/N 0682)

TIME OF COMPLIANCE:

Upon receiving of this letter perform the repairs as described in accordance with operator's schedule repair plan

**PROCEDURES:** 

For corrective actions recommended by the manufacturer follow the repair procedures recommended by the FAA document AC-43.13-1B, issued on 8 SEP 98 as follows:

1. Repair the rib cracks as described on pages 4-17 and 4-33 of the above-mentioned document. The final state of the repaired rib is as follows:

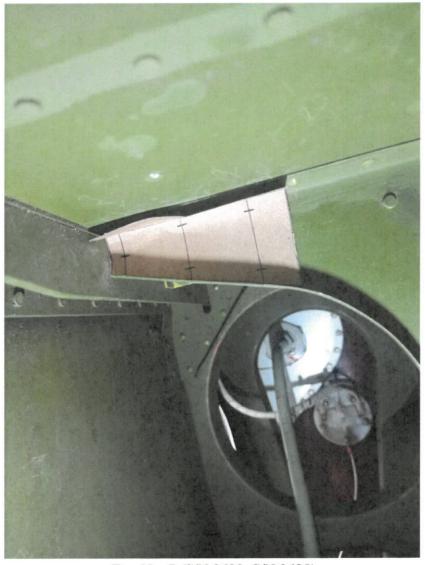


Fig. No. 7 (S/N 0682, S/N 0685)

2) Repair the rib cracks as described on pages 4-17, 4-30 and 4-37 of the above mentioned document. The final state of the repaired rib is as follows:

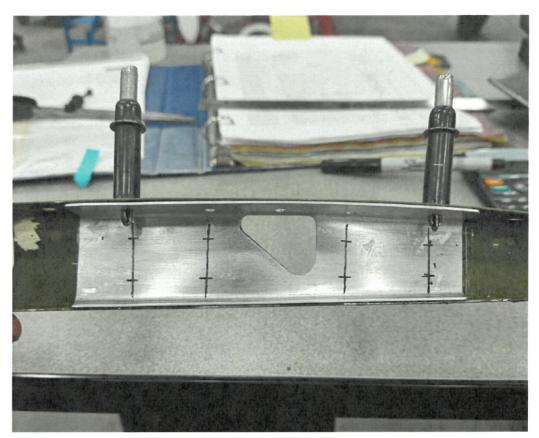


Fig. No. 8 (S/N 0682)

3) Replace the sheared rivet by the bolt as described in Service Bulletin Z242L/20a issued by ZLIN AIRCRAFT a.s. on 6<sup>th</sup> June 1996.

The rivet replacement for the screw must be performed on both wing attachments.

## **RECOMMENDATION:**

The aircraft manufacturer recommends to perform the rivet condition inspection (if installed) for all aircraft of the operator's fleet.

### **RECOMMENDATION:**

The aircraft manufacturer recommends using EMFIMASTIC glue to insure the riveted joint.

### **CAUTION:**

PERFORM REGULAR VISUAL CHECKS OF REPAIRED SPOTS (POINT 1, 2, 3) AT EVERY 500 FLIGHT HOURS. RECORD THE RESULTS OF CHECKS IN AIRPLANE TECHNICAL DOCUMENTATION.

Letiště 1887

## **CAUTION:**

THE SAULT COLLEGE AVIATION MAINTENANCE FACILITY BEARS A FULL RESPONSIBILITY FOR THE QUALITY OF THE ALL WORK PERFORMED, COMPLIANCE WITH THE APPROVED REPAIR PROCEDURES AND REGULATIONS, USE OF THE PRESCRIBED MATERIAL AND THE AIRCRAFT FINAL RELEASE TO SERVICE ON WHICH THIS SL HAS BEEN APPLIED.

#### **CAUTION:**

Repair procedure (especially removing rivets from rear strut) defined in this Service letter, can be performer only once. If this situation occurs again, operator must contact the manufacturer.

### **NECESSARY MATERIAL:**

- provided by the operator 1), 2)
- the bolt M5x20 ONL 3120.24 together with 3) washers 5,3 ČSN 02 1702.14 and nut M5 ONL 3247 will be provided by the airplane manufacturer

**ENCLOSURES:** 

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Head of Office of Airworthiness