

## SERVICE BULLETIN No. 300-2-93

### Compliance mandatory

Subject: Wing Root Rib / Auxiliary Spar Attachment

Models affected: EA-300 EA-300/S

Serial numbers affected: V1,01 through 45 01 through 12

Purpose: Life-cycle testing revealed potential delamination and crack areas. Similar damages are not known from in service conditions until now. The provisions of this SB are precautionary.

Approval: The technical content of this Service Bulletin have been approved by LBA.

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Compliance: Execute inspections as described below after first 250 flight hours, then recurring as mandatory part of the 100h inspection.

Make appropriate entry of compliance with this Service Bulletin in aircraft logbook.

For first execution of the recurring inspection and/or in case cracks or delaminations are found file the attached form and send to Extra Flugzeugbau GmbH.

Instructions:

The instructions in this SB are divided in two parts: I for inspections and potential repair of the wing composite components, II for fuselage steel constructions respectively.

## I. Composite Structure:

### 1.) Inspection:

- Check wing-root rib (composit and wooden part) to shell and to auxiliary spar bondings for cracks and/or delaminations. Use a boroscope or equivalent means to check from the inside via the removed LEXAN<sup>®</sup> window on the lower wing shell. For the purpose of inspecting the rear side of the auxiliary spar a hole need to be drilled in the trailing edge part of the root rib (wooden part). Maximum approved diameter of the hole is 25mm (1inch).
- Particular attention shall be payed to the thickened resin glue joint between the composite root rib and the auxiliary spar. Possible cracks are visible as  $\pm 45^\circ$  degree lines. In case of doubt remove the black color on the outside of the composite root rib by a paint solvent or corrosive agent (do not sand to remove color!).
- Delaminations of the shell to auxiliary spar glue joint are likely to be detected by coin tapping close to the shell edge. Delaminations and cracks which make the retrofit as described below necessary are seen as fine lines along the edge of the glue joint.
- In case delaminations are existent between the root rib webs and root rib sandwich core they are visible as "white" areas.

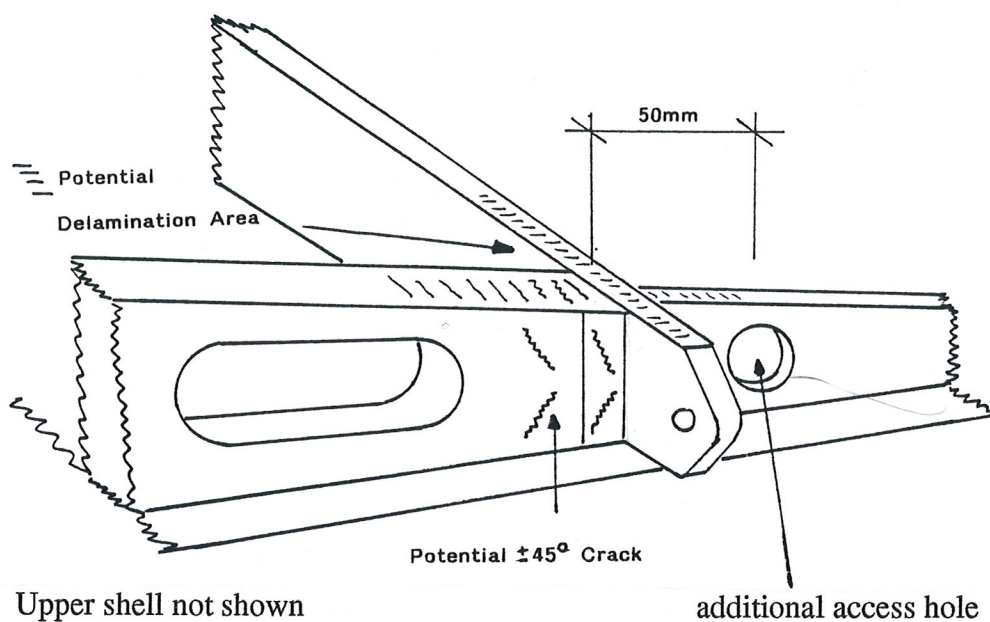


Fig.: Potential Delamination Areas

- In case cracks or delaminations are found in this area contact Extra Flugzeugbau GmbH for advise.

2.) Root rib joint structural retrofit:

- The structural retrofit is necessary in case cracks and delaminations are found. The retrofit is being life cycle tested.
- Order Extra Part N°: PC-13105.8 for EA-300 or PC-14105.8 for EA-300/S and install according to assembly instruction AI-300-1-93 or AI-300/S-1-93 respectively.

**II. Fuselage Structure:**

1.) Inspection

- Check auxiliary spar attachment area on fuselage side for cracks.
- In case cracks are found in this area contact Extra Flugzeugbau GmbH for advise.
- Customers and Operators are herewith reminded of the mandatory check of the main and auxiliary spar attachment (bolt wear or play, cracks) every 100h.
- Check proper bolt torque:

Auxiliary spar bolt	16Nm (142in.lbs)
Main spar safety bolt	15Nm (133in.lbs)

2.) Structural repair of fuselage:

- Refer to FAA AC43-13-1A manual.
- For structural repair of the fuselage steel tubing the use of grade 1.7734.4 steel and tig-welding technique is mandatory. If the required material is not available contact Extra Flugzeugbau GmbH.



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**Service Bulletin**  
**EA-300 & EA-300/S**

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**Appendix:**

**Inspection approval note:**

Aircraft:             EA300                      Total Airtime: .....hours  
                          EA-300/S  
Serial No:            .....                      Registration:            .....

The aircraft above has today been inspected according to the provisions of this Service Bulletin.

Damage has not been found                       Damage has been found

Description of Damage (if possible draw supporting sketch):

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Aircraft inspector: .....            Date: .....

Depending on the description Extra Flugzeugbau GmbH will advise structural repair or retrofit.

Send approval Note to:                      Or FAX  
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Checked:



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