Sailplane model:		ATC No.
	H 301 Libelle und H 301 B	251
	Std.Libelle ,Std.Lib. 201 B, Std.Lib. 203	251
	Club Libelle 205 und Hornet	304
	Kestrel	276
	Glasflügel 604	281
	BS 1	

Subject : Glass fiber laminate covering the spar stub fittings

Affected : As listed above

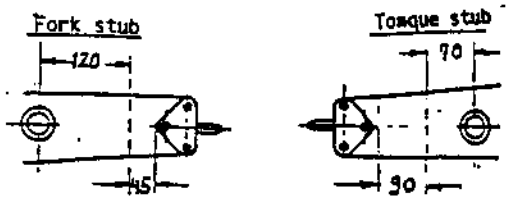
Urgency : Inspection for a separation of the laminate on the occasion of each annual inspection

Reason : Separation of laminate from wing attachment fittings allowing the ingress of moisture which in turn may lead to corrosion

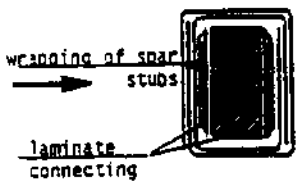
Actions :

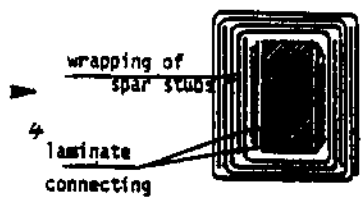
1. Inspection for a separation of the laminate at each annual inspection.
A separation of the laminate is recognized by gaps showing at the face of the spar stub(s).
If gaps are found, the fitting must be checked for corrosion by carefully lifting the laminate.
If the fitting is free from corrosion, the laminate must be rebonded to the fitting as follows:
Place wing leading edge down on trestles. Using thin wooden wedges force the gap to open and, with the aid of a syringe (internal diameter of needle to be 0.8 mm), carefully inject thickened resin into the cavity (Scheufler resin No. 285, mixed 100 :38 with hardener No. 285 and "Aerosil" added).
Next remove wedges and, using two clamps, two 8 mm hard core foam plates and two 16 mm wooden boards, press laminate against fitting and remove excessive resin. After curing and heat treatment (for 12 hours at 54° C) sand spar stub face and apply UP gelcoat (Schwabbellack).

2. If corrosion was found on the fitting, proceed as follows:
First remove gelcoat from spar stub (if such was applied by the manufacturer) and remove laminate as shown in the sketch (such preparing the area to be scarfed later on) -



make sure that the spar flange rovings and the laminate connecting the upper and lower stube halves are never been sanded. Furthermore remove any laminate adhering to the fitting.

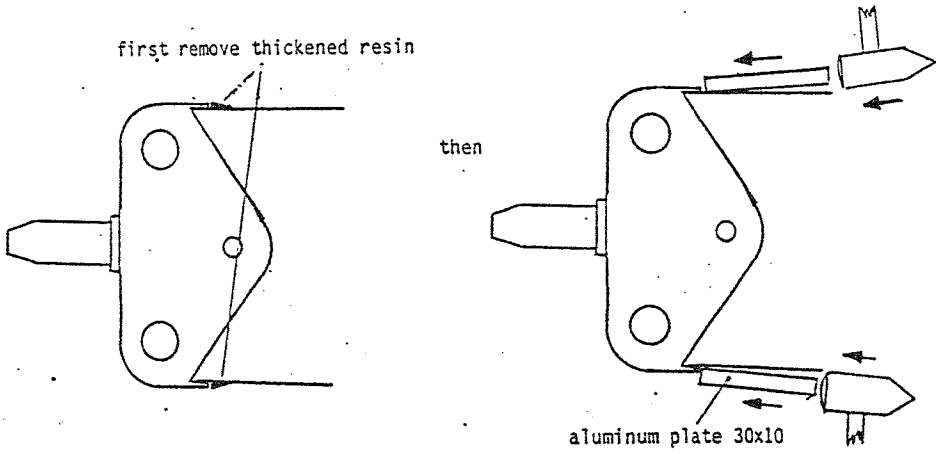




Next check whether the inner side of the latter has corroded.
This is recognized by a discolouring at the edges of the fitting and at the laminate next to it. If no so much damage is found and no change of the original condition can be assumed, clean the outer sides of the fitting (using a metal brush) and apply a fresh two component corrosion protection.

If there is suspicion that there is corrosion on the inner side of the fitting, it has to be removed as follows:

Drive out hollow rivets imbedded in the spar flanges - but make sure that a counter weight is held against the driving force, Thereafter, w ith rivets removed, carefully loosen and extract the fitting with the aid of an alumin um plate - see sketch.



Next sandblast the fitting(Using only approved material) and apply a fresh corrosion pretection. Then carefully smooth the spar stub (using a 400 grid sand paper), apply a thin coat of resin, push fittig fully home and install hollow rivets. The step between fitting and stub and between connecting glass layers should be filled uo using thickened resin.

Finally the spar stub glass layers must be re-wrapped (note displacement of 15 mm) as shown in the sketch on page 1 (using Scheufler Epoxy resin No.285, mixed with hardener No. 285, laminate to be covered by Nylon cloth).

After curing and heat treatment, the aerea (depending on the sailplane model) is to be coated with white Schwabbellack (gelcoat).

Note: Laminate separated from the wing attachment fitting(s) may be rebonded by a qualified person having an appropriate authorization.

The renewal of the wrapped stub laminate may only be conducted by a certified repair station.

The proper accomplishment is to be checked by a licensed inspector and must be entered in the aircraft log book.

Material: All required materials may be obtained from

Hansjörg Streifeneder
Glasfaser-Flugzeug-Service GmbH
Hofener Weg
D-72582 Grabenstetten

Glass cloth No. 92125 may also be obtained from

Interglas GmbH
Benzstr. 14
D-89155 Erbach

Resin and resin hardener may also be obtained from

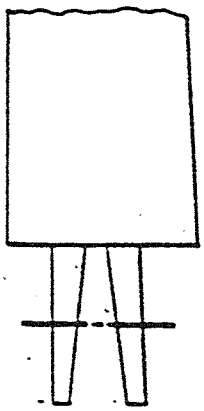
Martin G.Scheufler
Kunstharzprodukte GmbH
Am Ostkai 21/22
D-70327 Stuttgart

Grabenstetten, December 15., 1995

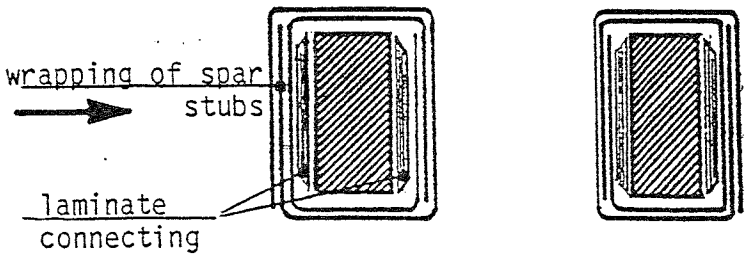
Issued: H. Streifeneder
(Streifeneder)

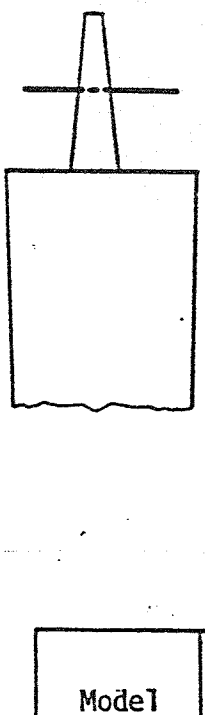
LBA-approved:

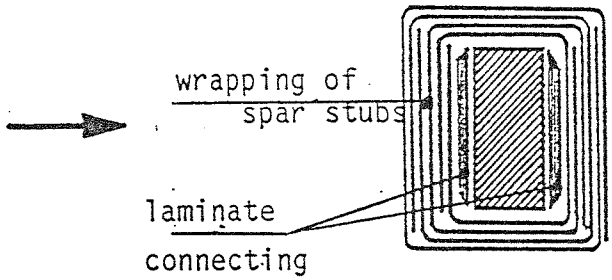
The German original of this Technical Note has been approved by the Luftfahrt-Bundesamt under the date of 08. Jan. 1996 and is signed by Mr. U. Kapp.
The translation into English has been done by best knowledge and judgement.



Fork stubs

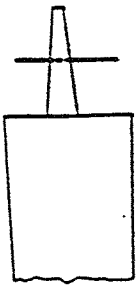


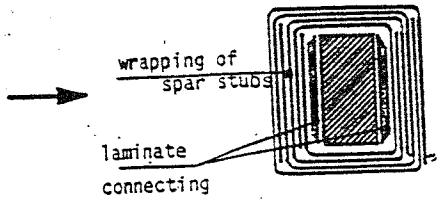




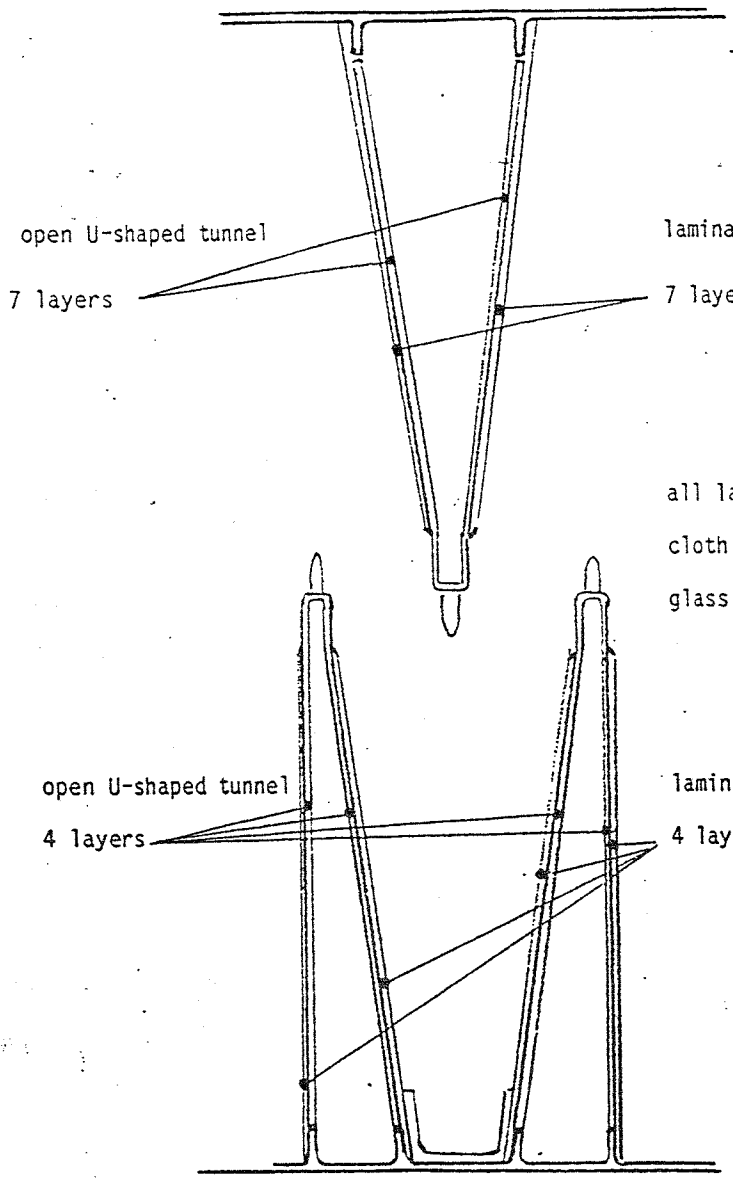
Torque stub

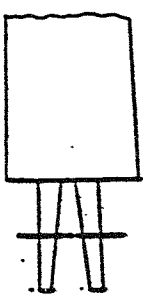
Model	Wrapping (diagonally) of spar stubs
201 205 206 301 401	Interglas 92 125 ※





Torque stub





Fork stubs