## Service Bulletin 156 - Mandatory

**Subject:** Resin Coating of Glasair III Wing Fuel Bays

**Applicability:** Kits 3390 and 3391 only, mandatory

**Discussion:** Glasair Aviation has recently implemented a new manufacturing process, which utilizes a different application and mixture of resin in the fabrication of Glasair composite wing panels that results in a stronger and lighter weight structure. The resin supplier has informed us that the new process has a lower corrosion resistance (as it relates to continued immersion in fuel products) than our previous process. Therefore, we have decided to add a post-production step of coating the wing **skin** surfaces, which will be continually exposed to fuel with a generous resin coat.

**Required Action:** All of the **skin** surfaces within the wing's fuel bay must be treated with 3 coats of 470-300 fire retardant resin to ensure proper fuel corrosion protection properties. Note: the surfaces of the ribs and spars within the fuel bay and the wing tip extensions need not be coated as these are manufactured with a different process/resin mixture.

The following steps will ensure compliance with this service bulletin:

- If standard wing kit: Inside the fuel bay areas forward and aft of the main wing spar, sand <u>all</u> exposed wing skin surfaces with minimum 80 grit sand paper per the preparation sanding techniques described in your Manual. Be careful not to sand through any layers of glass.
- 2. If Pre-Built (or Jump-Start) wing kit: Inside the fuel bay areas <u>forward</u> of the main wing spar, sand <u>all</u> exposed wing skin surfaces with minimum 80 grit sand paper per the preparation sanding techniques described in your Manual. Sand the skin surfaces right up to any Q-cell fillets common to the front spar and ribs. **Be careful not to sand through any layers of fiberglass**. Note: the ribs and wing spar need not be sanded and painted with resin. Also, the fuel bay areas aft of the wing spar need not be sanded/painted with resin as this area was treated with resin coating at the factory.

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- 3. Following sanding, completely vacuum or blow off all the dust and debris from the surfaces, then wipe the sanded surfaces with an acetone rag or cloth.
- 4. Cut the supplied peel ply to overlap the sanded areas by a minimum of 1". Remove the peel ply and keep organized and ready to apply to the resin coated surfaces.
- 5. Catalyze the supplied resin at a minimum 2% by weight.
- 6. Coat all previously sanded surfaces with a liberal amount of resin. Apply the peel ply and allow resin to cure until dry to the touch. (This will take approximately two hours depending on temperature and humidity.)
- 7. Remove all peel ply and sand any sharp edges with 80 grit paper. Clean the surface again as described above but do not saturate the surface with acetone.
- 8. Brush another liberal coat of resin over the complete surface. When this coat becomes tacky, apply the third and final coat of resin over the surface.
- 9. Perform a final cleanup by sanding any rough edges.

Materials required for the above process:

- (2) Peel ply, 23' x 20" (rolled)
- (1) Peel ply, 54" x 60" (rolled)
- (1) 470-300 resin, gallon
- (1) 2" brush
- (4) 80-grit sand paper
- (1) Catalyst, 4 oz.

Note: You will not need the entire gallon of resin to perform the above process.