Canopy or Chin Cowl Final Fit

After you have installed the canopy or chin cowl there is often a gap between the fuse and those parts. Trying to sand that out is often time consuming and often impossible. Here's a little trick that will work every time and give a perfect fit. Fill the gap with epoxy and micro balloons.

If you are doing a glass airplane put the filler on the removable part. When joining a fiberglass part to a wood structure put the mixture on the wood. On the wood airframe this gives a little more protection to the airframe.

Here's an overview of the method. Place a divider that will not stick to epoxy between the parts, put an epoxy-microballoons mixture on one part then install the canopy/chin cowl on the airframe. The pressure between the parts will force the filler to perfectly fill the gap. Pretty simple, huh? I'm including photos of both a composite plane (Genesis) and a wood fiberglass model (Black Magic).

Start by sanding and cleaning the area where the



gets no filler. Don't try to curve the tape, it must be flat on the surface. Wide tape works best. Start with the outsides of the fuse or part then fill the center gap with





Before



After

filler will go. Then put clear mailing tape on the part that



a butt joint and cut the other side to fit. If you overlap the tape you will see the line at the lap. It will be just noticeable enough to be annoying. Now smear a little vase-



line along the tape where the epoxy will be.

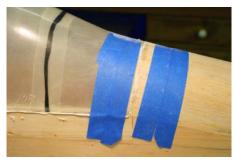
Mix some epoxy and micro balloons to a toothpaste consistency. Put a thin bead of this mixture along the edge of the part without the tape. Join the two parts and secure.

Check the micro balloon mixture to insure it has filled the gap completely. If not spread a little more in the void.





Let dry overnight separate the parts, remove the tape, re-install and sand to shape. Use masking tape on the fuse and canopy on the initial sanding to protect those areas not needing sanding. A perfectly fitted surface!



Here's the Black Magic being fitted (note the tape on the canopy this time).







