

permanently bond the F15 and F16 former in place.

### **Step 16a.**

For the Century tail gearbox, bond the F16 former onto the F15 former. Place the formers (still referred to as F15) into the cavity and reposition. Bond the brass housing and the rudder pushrod housing in place using slow CA, or Epoxy using the information collected in Step 15. Attach the unassembled left gearbox half (w/o the tail bellcrank mount) to the F16 former using socket head bolts and lock nuts (not included).

Choice: 1. Cut the top off the fiberglass tail to install the gearbox assembly then reattach the top of the elevated tail.  
2. Use a heat gun to soften the top section, flex the opening to allow installation of the gearbox. Once the gearbox is inside, let the fiberglass cool to return to the original shape.

### **Step 16b.**

Once the left half of the gearbox is inside the top of the elevated tail, move the gearbox with the F15 former into the final position. This position corresponds with having direct access to all the hex bolts that secure the right gearbox half in place. Using the preferred method to bond formers, permanently glue the F15 former into the tail section using Epoxy or Stabilit.

### **Step 16c.**

Slide the flexible cable out through the end of the brass housing and attach the cable to the tail coupler shaft (this can be done outside) that is assembled onto the tail gearbox input shaft. Slide the shaft assembly into the tail and engage the ball bearings while mating the tail output shaft. Grease the gearbox at this stage.

### **Step 16d.**

Re-attach the right gearbox side and tighten the three hex bolts. Check for smooth operation.

### **Step 17.**

*If another tail gearbox assembly is being installed*, read the previous step to become familiar with the process before final positioning and permanently bonding the formers in place.

### **Step 18.**

Using a ruler, estimate the center of the tail output shaft and make pencil marks on the edge of the opening. Match the tail cap and transfer the marks. Using the ruler, mark the center of the shaft and drill or grind out a 1/4" diameter hole. Further enlarged to include clearance for the tail pitch lever and the tail pitch plate as required.

### **Step 19.**

Install the pitch plate assembly with the tail pitch lever. Re-attach the rudder pushrod ball link to the tail pitch lever.

### **Step 20.**

Before installing the F13 former (corresponding to F7 on the full size plans), glue the brass housing to the F14 former and the pushrod housing to its matching former. Also reinforce the former by forming a fillet of Epoxy around the edge of the former and the fiberglass wall. Permanently bond the F13 former in place and repeat the reinforcing.

### **Step 21.**

Take the time to reinforce the tail wire mount prepared in Step 10, using fiberglass cloth (not included) cut and bond a section of cloth over the plywood mount and extend 3/8-1/2" away from the mount. A good method to reduce the vibration of the brass housing is to fill expandable foam around the brass housing between the formers. This method has been proven to effectively dampen vibration. However, care must be taken to cleanly apply the foam and remember to have permanently bonded formers prior to this step.

### **Step 22.**

Insert and slide the F12 former (corresponding to the F6 former on the full size plans) into final position and permanently bond in place using the chosen method. Remember to reinforce the edge with a fillet to the fiber-