

16 TAIL BRACE WIRES

Tail braces of some sort are required for the Super Flyin' King, primarily to strengthen the attachment of the fin and to resist flexing of the stabilizer. No braces are included with the basic kit, because there are several options available for builders to choose from. What's shown here is the cable-style braces that are now on the prototype. They do the job and are holding up well. Still, I might replace them in the future with sturdier (and more expensive!) steel flying wires, particularly if I get to the point of wanting to do some aerotowing.

Photo 1 shows the bottom of the stabilizer where the fin post comes through. Balsa triangle braces were added to each side of the fin post. The fin should be firmly glued to the top of the stabilizer. If the tail on your SFK is not removable, the fin front should also be glued into the fuselage slot. Still, that's not a lot of gluing area for the fin on a bird this size, so the tail braces add tremendously to the strength of the fin.

Photo 2 is the top of the fin. Metal landing gear straps are used as the attachment at every end of the wires. The metal straps are bent to the proper angle and bolted to the fin and stabilizer with 3-48 screws and nylon insert lock nuts. The nylon-coated cables are looped through the straps and the crimp tubes were squeezed with pliers to hold the wires. It's hard to see, but the cables actually pass through the crimps three times because I also looped the cable around the outside of the crimp and back through. The wires don't need to be "banjo" tight - just tight enough so there's no slack.

Photo 3 is the bottom of the fuselage, where the forward wires attach. I made special aluminum tabs for my fuselage, although the landing gear straps would have worked just fine. The tabs are screwed into hardwood pads that were built into the fuselage. Since my tail is removable, the cables must be able to disconnect. The cable ends at the fuselage use a 2-56 threaded cable connector and a clevis. I isolated the metal clevis from the metal tab with a short nylon strap. Maybe a nylon clevis would have accomplished the same thing, but I wasn't sure the nylon clevis pin would hold up over time.

-SFK

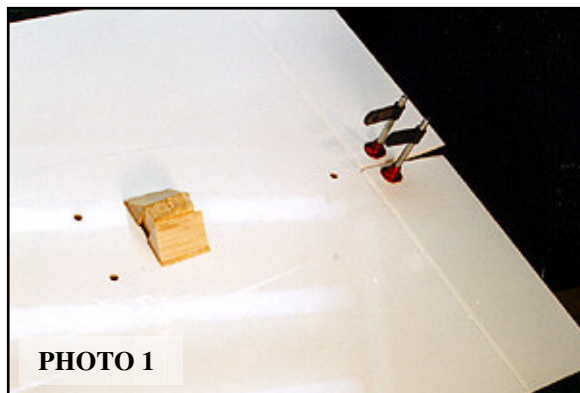


PHOTO 1

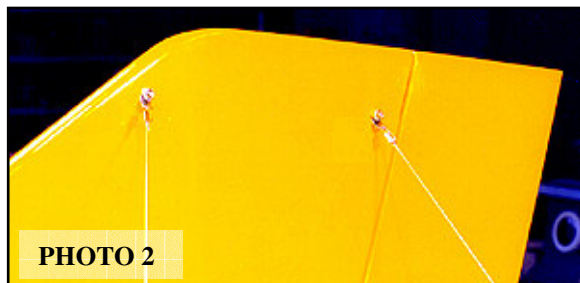
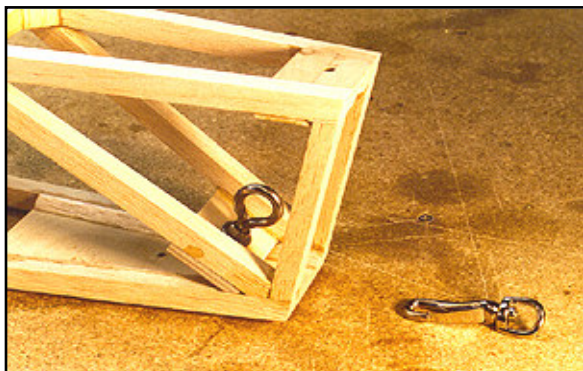


PHOTO 2



PHOTO 3



Speaking of "Tail Braces"

*Here's a little safety feature that was built into the prototype. The eyelet isn't for towing banners, it's an attachment point for a rope to hold the model during starting. Normally, I would prefer to have someone hold the model, but there may be times in the future when nobody is available. Of course, some would argue that flying alone is unsafe too, but I'll leave that up to you. The eyelet is bolted to a 1/4" plywood plate and is accessible through the opening in the rear of the fuselage. The metal clip on the table is tied to the rope, making rope removal a "snap." **Note:** Chock the main wheels so the model can't roll backwards while flipping the prop to start.*