

witch some were taken at our field. If you saw this model in person, I'm sure you would agree it was a true masterpiece of modeling excellence. CB



Chuck,
I put this together for the Tucson flyers on the PBJ – it provides an accurate perspective on the project and why it was so much rewarding fun. I'm glad I had a chance to fly it once there.
<http://flyingwiremadness.com/planes/b25/index.html>
David



He's My Brother - This is Priceless



Two young boys walked into a pharmacy one day, picked out a box of tampons and proceeded to the checkout counter.

The man at the counter asked the older boy, "Son, how old are you?"

"Eight," the boy replied.

The man continued, "Do you know what these are used for?"

The boy replied, "not exactly, but they aren't for me, they're for him. He's my brother. He's four. We saw on TV that if you use these you would be able to swim and ride a bike. Right now, he can't do either."

Optimizing Control Surfaces

by Geoff Burdon

Control surfaces enable us to maneuver our aircraft and maintain a controlled flight path. Too often these important devices are attached without proper consideration for their function. They can be miss-fitted, tight and binding, or without sufficient movement. Worse still, they can be laden with surface finishing and attached with loose or sloppy connections that make them flutter candidates. Some ARF aircraft have even shown up with no adhesive on the hinges.

Here are some considerations related to aerodynamics, control effectiveness, and aerodynamic flutter.

Ailerons consume some of the wing area and must be fitted to minimize the hinge gap to preserve effective wing area. The best option is to gap seal the joint, but it is not always worth the complexity on the average model. However, if you are working with a high wing loading (greater than 30 oz. per square foot) model, gap sealing is very desirable to stabilize the low speed environment. Gap sealing will reduce the aerodynamic drag and increase the control effectiveness, thus requiring less deflection for the same outcome. A simple gap seal can be achieved by laying a strip of adhesive tape over the joint while holding the control surface at full deflection to preserve its movement. Such a seal will require replacement from time to time as it will degrade during service.

Stabilizer control surfaces are not required to be snug-fitting unless you are dealing with a fast and slippery model. In some circumstances it is desirable to open the gaps to reduce control sensitivity. This may be the case on a training model. Some trainer-type models have a huge control surface gap on the rudder and elevator. The purpose of this gap is to provide a soft feel around the neutral position and a strong control response toward full deflection which results in the gap closing. This control response is analogous to an exponential-type movement available on most computer radio transmitters.