#### More Back Seat Comfort

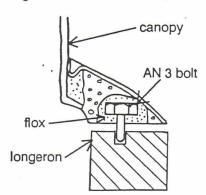
Ken Miller (VA) - Get rid of that arrow ock in the back of the canopy. Ask anyone who rides in the back seat; it's a pain in the neck! I added two locator pins in the canopy rails just forward of the aft corner of the canopy.

This was accomplished by drilling up from the bottom face of the canopy rail about 2" forward of the corner. I used a 1/2" drill and went in about 1/2" into the soft 2 pound density foam. Opposite this hole, I inserted an AN3 bolt about 1/4" - 3/8" into the longeron. Its threads were cut off, and it was rounded. The bolt, when in place, should stick up about 3/4" above the longeron, so that when you close the canopy, its head will fit into the 1/2" hole drilled in the canopy rail.

Remove the bolt, duct tape over the hole, re-insert the bolt into the longeron through the duct tape, then close the canopy. Editor note: It might be a good idea to Vaseline the portion of the bolt that extends into the longeron to insure no leaking epoxy will "glue" the canopy shut.

After cure, open the canopy. The bolts will be firmly potted into the canopy rail. The duct tape acts as a release. Now you can saw out those silly braces with no fear that the canopy will spread at the back in flight.

PS: The tip of the rounded bolt shouldn't go into the longeron more than 1/4" to 3/8". Any deeper than that on the hinge side of the canopy will crack the longeron if you don't elongate the hole!



# Heard at the Rutan OSH Forum

Several builders have reported a dead zone of elevator effectiveness on their Roncz canard. This means you can move the stick **slightly** forward and aft, near the neutral point, and have no aircraft pitch change.

The canard's elevator is really a type of slotted flap. If the slot is too large the air flow can reverse direction, in the slot, when the elevator is moved. Some builders have located their elevator too low thus creating an oversize slot. The resultant air flow reversal causes a loss of elevator effectiveness.

On an other item; it is important to remember that the IAS must be 20 mph above stall to provide enough energy to make a round out and reduce the rate of descent before touchdown.

This procedure is most critical if one has an engine failure and has to make an unexpected landing. Stretching the glide usually reduces IAS more than we expect. Your canard may not be stalled at 60 knots but that low airspeed leaves very little energy to arrest the high rate of descent. Hitting the ground at 1,000 FPM is like bending over in front of a car going 12 mph. The mortician will have to pull your head out of your hip pocket.

#### **Need Switches?**

Recently I came across a catalog of all kinds of switches, relays, and circuit breakers. If you are looking for something specific you might want to call Wes-Garde Components Group, Inc. at 800-275-7090.

You might want to tell them you are an aircraft manufacturer. They aren't a Radio Shack type operation.

## **Electric Landing Brake Update**

Ken Miller (VA) - In the electric landing brake plans, I contributed to the April 92 CSA newsletter, I included a microswitch to drive a yellow light to show when the bellyboard was deployed.

I encourage anyone with the system to include the warning light. All incidents involving failure to retract the speedbrake have occurred in aircraft without the enunciator.

I also strongly suggest using a DPDT, on - off - momentary on toggle or rocker switch with the momentary on being the position that extends the speedbrake. It takes a conscious effort to hold the switch in the momentary position to lower the brake. In the "on" position, the brake would retract automatically for the goaround.

### Wing Attach Bolt Ventilation

Phil Moscatiello - CP #74 reminded me of a problem I had back in 1991 and I thought I should pass it along.

When I built my Long-EZ I adopted the ventilation mod as shown on page 6. First flight was July 1, 1987. I removed the wings in November 1991 and found the top outboard bolts badly corroded. The interesting part of this is the airplane has always been hangared.

I decided to ventilate the top covers as well, hoping to eliminate the corrosion problem. I'm sure that people who tie down outside will not like this idea because of rain water entrance.

I wonder if anyone has this problem or if there is a better solution.

Atta girl Polly!
Raise the roof