everything looked great, but I had no rudder deflection with the elevator in the up-atop position. I checked specs and re-checked specs over and over, and looked at other sets of plans, both earlier and later than mine, and finally called George who advised me to relieve and radius the elevator spar 1/4" more rudder travel. I finally rebuilt the entire elevator spar, reinforcing the area in question, and built around the problem, with the result of maximum deflection of rudder in all elevator positions, and a stronger elevator spar.

I wasn't pleased with the water rudder cable passing through the fin spar and rudder spar without some protection, so I used a hollow brass rivet installed in the rear fin spar to allow the cable to pass through without undue wear on the plywood. I also re-designed the area around the water rudder in the rudder to allow the water rudder to be removed without destroying the air rudder. Rather than include any drawings, I mention this as possibly a solution should the water rudder require any future maintenance or adjustment.

My plans call for a rectangular hole to be bored out in the rear wing spar to allow passage of the elevator push rod. I suggest that this hole not be bored until the rear spar is in position, and the bellcranks at Sta. 86 and Sta. 172 are in place temporarily, as some shifting of the bellcrank at Sta.. 86 may be required to allow smooth, non-binding movement of the elevator pushrod. I had heard of this potential problem before I bored the rear spar, or mine would not have worked without tearing out the bellcrank at Sta. 86 or making the hole in the rear wing spar dangerously larger. After the elevator pushrod was installed and working smoothly, the idler pulleys were then installed.

After receiving a ride in the prototype at Oshkosh in 1978, I knew I would have trouble with my big feet on those closely-spaced rudder pedals, so I re-designed my rudder pedals, eliminating the need to do any welding after the bushings were installed and gaining a couple of inches of spacing to boot. This was accomplished by eliminating the rudder horns completely, and welding tabs to the rudder pedals. It was also necessary to change the position of the steering horns because the retract rod would not pass by the rudder pedal assembly. In doing so, the design of the steering horns was also altered somewhat,to allow me to remove slack in the steering cables and adjust the alignment of the nose wheel. (see drawing #3) by adding or subtracting washers on the clevis bolts at "A". This setup requires 2 cables for steering instead of 1 as called for in the plans, but eliminated a lot of flexing of the steering cable. The rudder cables are routed in plastic tubing. I mounted the steering cable pulleys upside-down on the wet box and eliminated the cable keepers. (see drawing #4). I have since seen where these pulleys were eliminated altogether by other builders with good results, so it's a matter of choice. The use of heat shrink tubing over the cable ends is worth repeating as it makes for a much neater looking setup, and snagging nylons, etc. I was able to move the rudder pedal assembly forward about an inch and a half for a little more leg room.

I already had my gas tank constructed when wing tanks came about, but had not yet installed my main spars, so I spent alot of time trying to decide which was the better way to go. I finally opted for the wing tanks for safety reasons and more room in the cabin. But I'm left with