

MARCH 85

#28

FROM THE
DESIGNER'S
NEST



Fellow Osprey Builders,

Since I got back from Oshkosh this year I have spent most of my spare time de-bugging my GP-4. It's coming but I have learned one lesson. The faster you go the more problems you have with a new design.

I have had time to give Ernie Hummel a hand with his re-building job. As most of you know Ernie had an engine failure at Ogden, Utah with extensive damage to his bird. I try to work with Ernie a couple of days each month.

Ernie is installing new Derrick wing tanks and we found that the center aileron hinge block on the rear spar is in the same bay as the tank. This leaves very little room for the bolts that hold the hinge. Starting from the inboard butt rib the hinge is bolted to the inboard side of the 5th rib. (see dwg no. 32)

The block should be on the outboard side of the 5th rib close to the corner of the spar and rib which is just next to the push rod. This means that the aileron spar must have it's center hinge block moved to mate the hinges. This will now allow you to bolt up the hinges using a wrench on each side of the rear wing spar. If you have your spar already completed just leave the blocks in and add additional blocks to the spars.

I ran some numbers on this mod and it should reduce the stall speed about 3 to 4 mph and improve take off distance and possibly climb. It may not reduce the cruise speed but only time will tell on this. It could be a very good trade off in cruise if your empty weight is 1050 lbs or more.

I believe the prototype would not benefit nearly as much as it's empty weight is 970 lbs. and the added drag of the long wing would not be a good trade off. We expect Ernie's new empty weight to be about 1050 lbs. A complete flight test report will be in the newsletter, perhaps in May of this year.

Ernie made his outboard spars 1 foot longer and added one more rib. The ailerons were left in the same place and not moved outboard. The wing float was moved outboard one bay to enhance floatation leverage. Plywood must then be added under the float to glue the fabric around the float. (see dwg no.32)

Several Osprey builders have called or written to me about the long wing. My advice at this stage is to work on other parts and leave the spars until we can make a flight report. If your outboard spars are completed you can scarf (10 to 1) on the 1 ft necessary if you decide on the long wing.

The spars do not require any beefing up to carry the extra 10 square ft.

Anyone interested in the Clear Lake Fly-in I wrote about in the last newsletter (Vol. 5, No. 1 & 2) is covered somewhat in the February issue of Kit Planes, Vol. 2 No. 2.

Fancy Publications Inc. 5509 Santa Monica Blvd, Los Angeles, Ca 90038.

Regards to all,

George