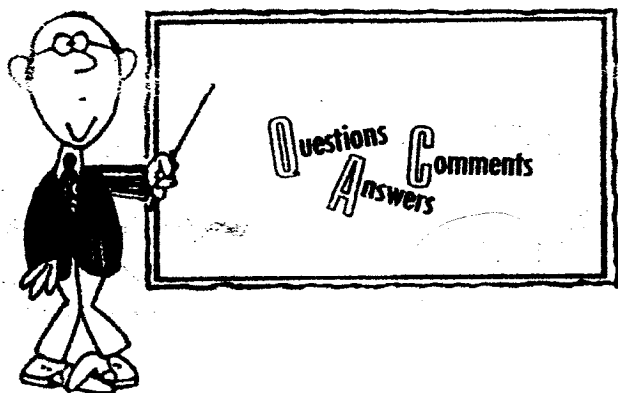




NEWSLETTER



Fellow Osprey Builders:

Continuing in the list of questions sent to Ken and Lynn, I will try to answer as follows.

QUESTION: Where can prefabricated parts be obtained? Derrick Industries. Stan and his father are both building Ospreys in their shop at Derrick Industries. One should fly in a few months. They are both all around craftsmen and really into the homebuilt movement.

ADDRESS: 3910 Marine Ave., Stockton, CA 95204
PHONE: 209-462-7381

Wicks Aircraft, in addition to selling a very fine material kit, have built a jig and press to laminate the dihedral in the center section spar caps. The builder then has to taper the caps and assemble the spar for the section. This saves a lot of work and I believe the labor is only \$45.00.

QUESTION: How about Kevlar rather than fiberglass? There are several types of light weight fabrics available for use with epoxy and polyester resins. With the exception of the hull bottom the Osprey 2 does not use any glass for structural integrity. If a builder really understands these lighter materials and understands how to apply them he may be able to save a few pounds.

QUESTION: Nylon break lines? I have never used them so I can't tell how well they perform. On the surface they would seem to solve some of the routing problems of removable wings and retractable gear since the line will flex, hence eliminating the need of several AN fittings and flex lines. Any of you builders who have experience with nylon break lines should pass the information on to Ken and Lynn.

QUESTION: What about Cabin ventilation and cabin heat? The side vents I used on the prototype are very effective even in very hot weather. Shown on Eng. 43. The only drawback is coming off the step on a slick landing you get a lap full of water if you forget them. A few of these and you start to remember to close them!

Cabin heat is a problem in this engine configuration. Custom Aircraft Parts have available a heat muff with an inlet at the top for ram air coming off the back baffle and an outlet at the bottom. The bottom outlet then requires a high temp hose to be routed through the cowl on through the cabin. It's necessary to modify the bottom carb. cowl and wiring cover that is attached to the cabin to take this hose along with the wire, fuel lines, etc. A heat box valve must then be devised to shut off the heat inside the cabin area. I don't have any drawings for this as yet but hopefully this brief explanation may help some of you with a heater. The stainless steel exhaust manifolds and mufflers are available from Custom Aircraft Parts, 1318 Gertrude St., San Diego, CA 92110. (717-276-6954).

QUESTION: How can the stall speed be lowered? Just recently a study was done on the use of flaperons for the Osprey 2. I designed a mixer that would give 90% differential to a full outboard span aileron. This means that both ailerons could be deflected down a maximum of 25 degrees and still have enough travel downward to be effective as ailerons. Any travel past 30 to 35 degrees in ailerons does not produce much lateral deflection and the control pressures are very high. I am sorry to say this but the flaperons would only produce about a 9% slower landing speed. There has to be a better and easier way to slow it down. We have an Osprey close to me under construction that should fly in late 83. We have already increased the wing area 10 sq. ft. and are doing some other things that we hope will improve performance. I insist that any changes designed will allow you builders to retrofit to a finished or partially finished Osprey 2. I am working on it and will keep you informed through the newsletter.

Since my typewriter is almost in flames with my speed typing --- if you believe that I have some land I want to sell you! -- I better sign off.

Regards to all,

George



FOR SALE: Fuselage frame, Main and Rear spars, Elev. Stabilizer. Almost all metal parts \$1,900.00. Boston-617-696-2537 (no collect calls). John Hessel, 16 Scughton Road, Milton, Mass. 02186.