FROM THE DESIGNER'S NEST

Fellow Osprey Builders,

Well at long last I was able to evaluate the long wing version of the Osprey 2.

This was done with the able help of Ernie Hummel and his virtually new Osprey 2. As many of you know Ernie has been rebuilding his bird from a basket case for the past three years.

The wing was extended one foot on each outboard wing panel. This extension adds ten square feet of wing area. The ailerons were left in the same location but the wing floats were moved outboard one foot or one wing bay. Wing spars were left the same size but one foot was added to the front and rear spars. The flight evaluation was done with my prototype flying about fifty yards from Ernies wing. Both aircraft were equipped with the same engine and prop. Ernies Osprey weighed 160 pounds more than the prototype due to more fuel and a heavier airframe.

The runway was wide so we made a loose formation take off to see who got off first. The second phase was a climb to 3,000 ft. at 90 MPH in a loose formation and hopefully keep each other in sight. Phase three would be a series of RPM changes, monitering airspeed at each change. The fourth phase would be side by side stalls, power off, and at the same angle of attack. Both aircraft were equipped with wing fences.

The take off showed both aircraft breaking ground at exactly the same time. I accelerated a bit faster at the start but never overtook Ernie. I retracted my gear as soon as Ernie did and we climbed out at full power. I was able to stay with him up to 2,000 ft and then ever so slowly he started to out climb me. Remember he was carrying 160 more pounds than I was! It was pretty warm, in the low 90 F. I was showing about 1,100 ft. per minute up to 2,000 ft. The speed runs at 3,000 ft. are as follows:

RPM	IAS (Ernie)	IAS (George)
2100	85MPH	85MPH
2300	95MPH	100MPH
2400	105MPH	112MPH
2500 Cruise	114MPH	120MPH

Full Throttle: Ernie 3000RPM, IAS 135MPH
George 2700RPM, IAS 132MPH

As you can see, my lighter Osprey did a little better in speed and it was not airspeed error. I would move ahead on each RPM change until we went to full throttle. Assuming our RPM gauges were close it seems that Ernie might have a stronger engine and perhaps as clean an airframe as the prototype. He was slowly pulling away at full throttle. Putting a 160 pound passenger in the prototype could change my higher speeds very close to Ernies. Ospreys are always slightly slower with two aboard due to the forward C.G. Another factor which would affect speed was a heavy left wing on Ernies Osprey.

Back on the ground I measured Ernies take off roll. He was off in 450 feet. This was a normal take off run, not a short field try. Not bad on a 90 degree day and no wind!