

# The SOARING TEST PILOT FLIES THE BABY ALBATROSS

by Dick Essery

When Woody Brown brought his newly completed Bowlus Baby Albatross to San Diego, it was my good luck to be available to help him test hop it. We decided that the beach just below our Torrey pines soaring site would be the logical place for that day as the tide was low and the cross wind was negligible, not being over 6 or 8 miles an hour. We timed ourselves on the set up time and were quite surprised when it took us only 15 minutes. Now, two men can easily set up in 8 minutes. We used only 200 feet of rope as we only intended to hop along the ground for a while, getting used to it first. To my surprise, after skimming the ground a few feet, Woody took it up to the top of the line, cut loose, made a 180, slid back to the starting place, 180ed, and made a perfect landing. I suppose all test hops go this way. We have good intentions of staying low but the thrill of being up overcomes our caution.

When I got back, Woody explained that the ship handled so nicely that he just simply took it up. He insisted that I take the next hop. He was so excited and pleased with the ship, he wanted me to share his enthusiasm. Of course I needed no great amount of encouragement, although I meekly suggested that he should get the flying in his own ship. I found it very easy to get in the ship as the cockpit is entirely in front of the leading edge. There was plenty of leg room and the seat was very comfortable, being slightly reclining and raised in front. Woody explained where the release and brake were, both being up on the dash at the left, easy to see and reach. The dep control worked surprisingly easily, and I could readily see the one advantage, at least, of not having to force the stick from side to side as is constantly necessary when circling in a rough thermal.

Woody started out with the car as I buckled the belt and closed the hood. The visibility was very good as the pod only comes up to the chest, and being round, it is just as easy to see forward as to the side. The hood is all one piece pycralin, no compound curves, and the 45 degree slant eliminated all refraction. Also because the neck is only as wide as the boom tail, it is possible to see directly behind.

I was somewhat concerned while the slack was being taken up because I had never flown with a wheel and I couldn't seem to tell just where neutral was on the ailerons. As the ship started to roll a little right rudder and aileron quickly picked up the left wing. We seemed only to roll a few feet, and then hopped into the air. Approximate speed of take off was 30 miles. I found no tendency of the ship to gallop, possibly because the stick could be moved back and forth 3 or 4 inches without greatly upsetting the longitudinal stability of the ship. The ship has been flown up to 110 miles per hour without showing any bucking qualities. This factor should be very helpful in training students. There is, however, plenty of flipper action as the ship will loop out of a spin if the stick is not held firmly forward.

I will admit that the dep control bothered me considerably on this first flight as I couldn't without looking at the wing tips, tell how far down the wing was. The pod being round in front gives no line to check the horizon. However, after an hour of soaring in the ship, I was able to make a turn without rolling over past vertical and giving the air speed a static test.

The ship climbed easily, and I pulled it up at 20 feet a second and cut loose at the top of the line. The ship flew along more or less by itself, in fact we have soared the ship along the cliffs for 10 minutes at a time without touching a single control.

The wings have 5° dihedral and the pendulum flippers are statically and dynamically balanced.

At the end of the cliff I made one of my afore mentioned gentle turns and slid back to the starting point, and here again was fooled by the different type of construction. I put her into a steep slip expecting to lose both altitude and speed. Well, I may have lost a little altitude, but the speed increased so rapidly that altitude ceased to be a factor in this landing. I only overshot the landing by a little more than half a mile. However, when at last I did get within landing distance of the ground, it set down nicely, and it was a simple matter to stay down at a high speed by holding the stick forward and applying the brake. We have discovered since that it is possible to lose altitude by slipping, providing you do a nose high slip.

Since that first hop, it has been my good fortune, through the generosity of Woody, to get over five hours of slope soaring and an equal number on thermal flying in the Pod. At first, I was inclined to fight against its extreme inherent stability. I have found that by letting the ship attain its own flying altitude it is less tiring than many of the other ships which I have flown. For example, after setting the pod in a spiral, it will continue this manoeuvre with hands off. As to sinking speed and gliding angle, I had ample opportunity to observe this characteristic in a one-hour glide from the top of a desert thermal toward the coast over a very definite inversion. I think Hawley is modest when he says the sink is 4½ feet per second, as during the whole hour in which I covered 30 miles against an estimated head wind of 10 miles, my variometer stood exactly at 2½ feet at the best sink, which I found to be 42 miles an hour.

I tried stalling the ship and found that the speed will drop to around 20 miles and then the nose will either drop slowly and pick up speed or it will fall off slowly on a low wing and do a half turn of a spiral and come out. There didn't seem to be any vicious spinning characteristics. I expected to find a tendency for the ship to hunt due to the small diameter of the boom tail but it is just as easy to keep on its course as any conventional ship. I have noticed a slight buffeting of the empennage at the stall point or in a vicious side slip, but as this did not increase with continued slipping, I have learned to disregard it. Although the pod is small, I found there was plenty of room for a chute, a large instrument, panel, maps, water, and a couple of chocolate bars. I know you fellows who are making or getting one of these pods will be pleased with it, especially after you get used to its model airplane characteristics.