



INTERNATIONAL
LIMITED

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Specifications

- * Wing Span: 61 in (1550 mm)
- * Length: 38 in (960 mm)
- * Engine: 2-stroke .19-.32 (6.5-8.5cc)
OS .40 FP used
- * 4 Servos required

The Airsail DHC-1 Beaver comes very well packaged with the wood bundles neatly banded together and the hardware packages grouped according to function. ABS cowling, wheel struts, wing tips, tailpiece, and various other parts are included, as is the pre-bent and drilled heavy-duty aluminum landing gear. Plans consist of two large rolled sheets and an instruction book with several small pictures detailing the building process. The instruction sheet is more of a series of notes. My one complaint is that these notes would be okay if the plans were sufficiently detailed. But alas, that is not the case. Although the kit is not difficult to build, it might be a handful for the novice. The ply and balsa provided was of excellent quality and the parts cleanly separated from the sheets. I was particularly impressed with the New Zealand balsa, which is quite nice.

The building proceeds very conventionally: fuselage, tail feathers, and wing. The processes used yield a straight fuselage and wing halves. The incorporation of the ABS belly pan, wing center section, tailpiece, etc makes the construction more tedious. In addition, care must be exercised in later steps when sanding, so as not to scratch the plastic.

The wing construction is the basic D-tube arrangement. The wing utilizes bell cranks and pushrods to activate the ailerons. Spend a little extra time here and make sure that the linkages are slop-free. Also, make sure that you test fit the intended servo and make up the pushrods before you cover the wings. You will probably have to solder the connectors on the pushrods. I couldn't get the supplied nylon ball-connectors to adjust without breaking something.

The ABS cowl and wheel struts were cut out and test fitted. The fitting of the cowl around the engine nearly drove me off the deep end. In all fairness, the engine that I chose to use is oversize for the project. However, you have very little room to accommodate the engine (which sits at a 135 degree angle). The idea is that utilizing this mounting angle allows the muffler to point down and be partially hidden by the lower fuselage. When the fit of the wheel struts was satisfactory they were glued with CA.

I chose to power the Beaver with an old OS 40FP and a 10 x 6 Zinger wood prop. Don't forget to make provision for filling the fuel tank. I used a GP EZ Fueler and fashioned a bracket next to the engine so that the filler would mount flush with the cowl. A Dremel makes short work of shaping the openings. I added squares of glass cloth to the inside of the cowl at the attachment holes for strength.

The plane was sanded and filled with a lite filler compound and then covered in Dark Red Monocote with black stripping trim. The cowl was spray-painted using Top Flight matching Lustrekote Black paint and wheel struts were spray painted using Top Flight matching Lustrekote Dark Red paint.

The final assembly consisted of attaching the cowl, wheel struts, wheels, cabin windows (with RC56 glue), installing the radio equipment, and setting the recommended control surface throws. The plane balanced without the addition of any extra weight by positioning the battery and radio appropriately. This was a pleasant surprise because this is one of the few planes that I have built that didn't require extra weight, somewhere.

The trusty old OS 40FP was installed and then I headed to the field. I adjusted the idle, double checked the control surface directions, and taxied out. There was a good breeze coming about 45 degrees from my left as I started my take off roll from right to left. As I applied power, the Beaver became totally uncontrollable! I stopped the plane and brought it back to the pits for some re-work. A crew gathered about, each offering sage advice. To make a long story short, none of the suggestions worked. Back to the workshop! All the surfaces were tested for being true; incidences were all checked and re-checked. The balance was carefully checked, as was the CG's location as per the plans.

Back to the field. I adjusted the idle, double checked the control surface directions, and taxied out again. As I applied power, the Beaver became totally uncontrollable again! I forced it into the air out of frustration only to find that I couldn't turn the plane due to the induced yaw. I was lucky to get it back on the runway in one piece. I turned the plane over to the most respected and skilled pilot/builders in the club. They worked on it and then attempted to fly it. They had the same success that I did! We still do not know what is wrong with the plane other than it refuses to fly.

The Airsail DHC-1 Beaver is a quality airplane kit and this New Zealand kit is refreshingly different. I chose this 40 size plane because I wanted something a little different (i.e. not a J3 cub!), looks great, and yet be small enough to stash in the trunk of my car without having to buy a truck to transport. Unfortunately, I could never get this plane to fly (nor could any of the expert pilots with whom I have a great deal of confidence). This is particularly annoying to me, since in all my years of aero modeling I have never built a plane that wouldn't fly!