

'HI DUMMY'

By ED ELIOT . . . A current Open National Record holder in Pay Load, this model has just won in its class at the United States Free Flight Championships, at Taft, California.

• Easy to build and fly, "Hi Dummy" reflects the current state of development of the Pay Load class model. This airplane can win for you this year and next. Because it builds easily and is easy to trim, it is an excellent design for a beginner's first gas powered model.

Hi Dummy currently holds the Open National Record in its class. To do this, it made consecutive flights of 3, 3, 3, 4, 5, 6, 7, and 8 minutes for a total of 39 minutes. These flights were made in a time-span of about 3 hours on a fairly windy day at Taft. It was no fluke day, and the model performed consistently throughout the contest. This time was high time for that day of any class model. Hi Dummy's most recent contest win was at the Free Flight Champs, this year.

My design criteria for any class model is that first and foremost, the airplane must be capable of consistent performance. This means that the model be so engineered that the power pattern is the same every flight. And *no stalls* allowed during the flight. To achieve these goals, the model must be designed with enough inherent stability to fly well in the wind. Hi Dummy meets the above objectives without special warps, gadgets, secret trimming techniques or an exceptional engine. My Cox 020's all turn a Cox Grey 5 x 2 prop trimmed to 4-1/2 x 2 at about 20,000 or so. This model will do about 2 minutes in the mythical "dead air".

If you are interested, get a set of plans or two and let's begin construction. A hint here . . . two airplanes build just about as quickly as one and give more than twice the enjoyment. Most all the cut-out parts in this model are from one sheet of 1/20th balsa. You will use it in the fuselage and on all ribs in the wing except those at the dihedral joints. The sheet that I used was quarter grained

8 lb. stock. The ribs in the stab are cut from 1/16th "A" grained sheet. I use Titebond glue for all joints except the firewall, dihedral joints, and the stab mount, where a slow-drying epoxy is recommended.

CONSTRUCTION

Following are some general notes on constructing the model. It is my intent to present a set of plans which are sufficiently detailed that you will be able to construct this model without any problems. If this is your first model, find a modeler in your area who can help you with the project, if you can. This modeler will be found at a local hobby shop or flying field.

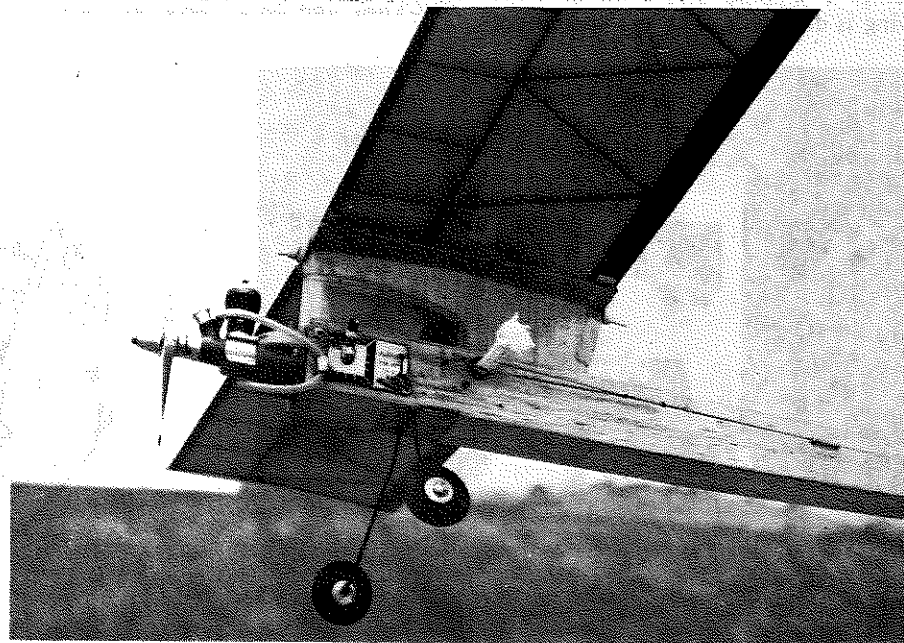
DUMMY

The dummy may prove to be the hardest part of this model to construct. Mine is built from 1/16th sheet by cutting out the profile front and back and then piecing them together with additional pieces of 1/16th balsa for the tops and bottom. The dimensions shown on the plans are the minimum sizes for this class model. If you make your dummy larger, be sure to increase the size of your fuselage proportionally. Leave the bottom of the dummy open until you have put lead or shot inside. The finished weight of the dummy must be at least 1 ounce.

FUSELAGE

Cut out the sides and bulkheads. Note that the grain on the bulkheads is horizontal. Use epoxy to glue in the firewall and the bulkhead which has the wheels on it. The landing gear is sewn to the bulkhead which carries it, and a coat of glue rubbed in over the stitching.

Use fishing line or a good grade of thread. Don't forget to use gauze on the firewall. The windshield pattern on the plan is a little oversize. This should allow you to get a good custom fit on



Close-up of the engine timer installation and the DT fuse set-up. Light-weight ships such as this should have the fuse near the balance point, as the fuse weight can be critical.