

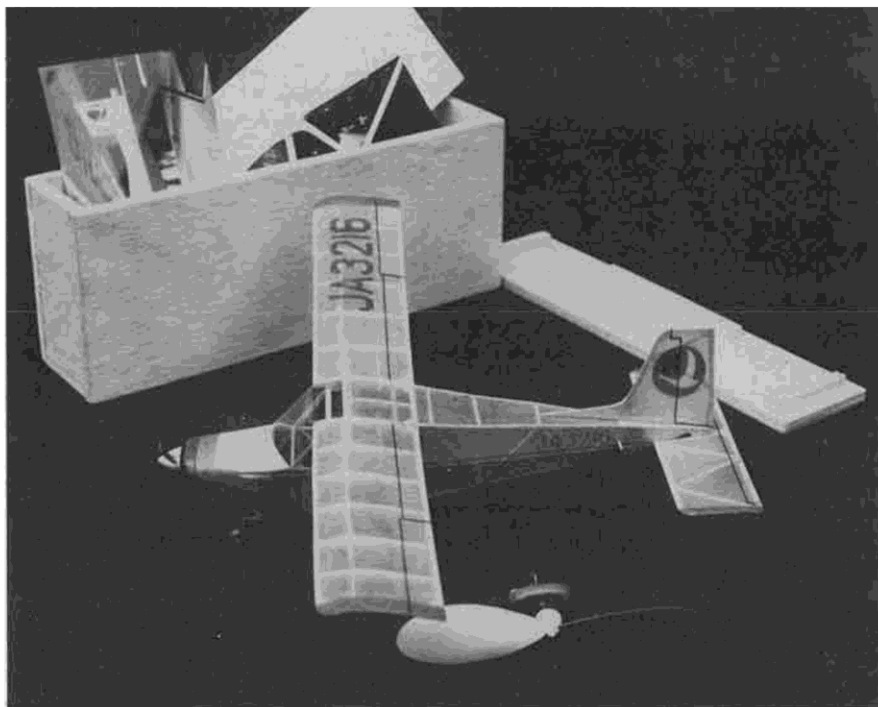
ITOH 62-160

• Postal Proxy Peanut contests, originally conceived by the editor/publisher of *Model Builder*, have caught on in several parts of the world. They present an easy way to have your models take part in international competition. Making a container strong enough to survive the mails intact, while carrying a completed Peanut, and paying the postage on that sort of package presents somewhat of a challenge. This is one response to the challenge: Make the model so it can be assembled for flight at the contest site, and fit in a relatively small box (shipping crate) that can be made strong and still light enough so the postal fees are not beyond your budget.

The shipping crate built for the ITOH 62-160 cost \$2.16 for a sheet of 1/4x4x36 balsa and a dime or so for cement to assemble it. The 4x9-1/2x2-1/4-inch balsa box has adequate strength, will hold the model, documentation, three-views and photos, and the Post Office will charge less than \$4.50 to send it from San Diego, California to Japan by airmail, with an enclosed letter.

The ITOH is a relatively simple, good flying design and uses standard building techniques throughout, with the exception of design details to enable it to be taken apart. This disassembly for transportation is commonplace with the larger models but has not often been done with Peanut Scale models.

Two materials are used to facilitate assembly. They will not be required if the model is not to be broken down for shipping. One thirty-second diameter, round bamboo is used for the wing spar carrythru, strut leading edge, and rear spar pin. The bamboo is available from Peck-Polymers (see advertisement in this magazine). The other item is thin, one-sixteenth diameter plastic tubing to accept the carrythru, and strut ends. The material used in the model came from a plastic place mat. To the first 100 people sending me a



By WALT MOONEY . . . This Peanut version of a 1960's Japanese lightplane is designed to break down for shipping to Postal Proxy Peanut contests. Plans show how to make a shipping box from a single sheet of 1/4-inch balsa.

self-addressed, stamped envelope and one dime, I will send enough of this tubing to make a couple of models. After 100, I will send the dime back. Walt Mooney, P.O. Box 231192, San Diego, California 92123. If plastic tubing is unavailable, make paper tube over .045 piano wire. Use tissue and model cement over an oiled length of wire.

The basic model structure does not require a lot of explanation if previous Peanut models have been built, so only things required for breakdown and assembly will be covered in this article.

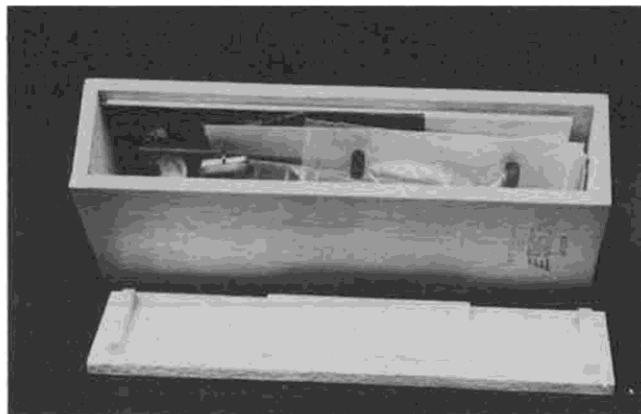
The fuselage has several details which need coverage: The wing centersection is attached to the fuselage as a fixed item.

Continued on page 68



Left: The ITOH in its completely broken down state, ready for packing in its balsa box. Scale documentation goes in there too.

Below: Sure enough, it all fits! A small box like this is much cheaper to ship than a large one containing a fully assembled model.



The spar carry-thru tubing goes across the center section near the top, just behind the main spar. Note the location of this and the holes for the drag pins in the 'R-1' ribs. Be sure to make one extra 'R-1' to be cut down for the centerline rib in the wing center section.

There is a tail notch at the aft end of the fuselage to accept the horizontal tail. It does not go all the way to the leading edge of the tail, but it accepts the notch in the leading edge of the tail.

The rudder sockets in the fuselage are just holes in the balsa to accept the short lengths of pin that extend down from the front and rear of the vertical tail. The aft pin sticks down through the horizontal tail and keeps it in place. Strut tubes are located at each lower longeron just forward of the landing gear. Notice the crosspiece that leans forward like the strut. Two cross-pieces that lean aft accept the main landing gear. When installing them in the fuselage frame, put a piece of matchbook cover, or equivalent, between them to allow for the thickness of the gear wire.

The nose gear merely plugs into a balsa block built into the bottom center at the proper location. Where wires simply plug into holes in balsa, the holes can be hardened by the application of a little thin cyano adhesive. If done very carefully, the surrounding balsa is hardened without the holes being filled.

The wing panels have tubes to accept the carrythru, a bamboo drag pin and tubes to accept the upper end of the struts. Note that the tube hole in the 'R-2' rib is lower than in the 'R-1' to allow for the wing dihedral. The bamboo drag pin penetrates 'R-1' and extends to 'R-2' and is cemented to it at the 'X.' The drag pin should extend from the panel root about a quarter of an inch. Make a smooth point on the free end of the pin so it will penetrate the center section 'R-1' rib easily.

The struts are made with a round bamboo leading edge long enough to extend into the fuselage strut tube at the bottom, and the wing strut tube at the upper end. The balsa part completes the streamlined strut and is made to fit between the fuselage side and the wing panel bottom surface. The bamboo at the upper end of the strut may have to be bent to align with the wing tube. A little misalignment will not hurt because it tends to make friction between the bamboo and the tube and thus more secure struts.

The particular ITOH 62-160 modeled, JA3216, has a blue and white color scheme. The model was completely covered with white tissue which was water shrunk and given two coats of thin dope. The blue color was achieved by double covering with blue tissue, carefully cut to the pattern on the plan. Registration numbers are also blue tissue. Surface outlines were made with a fine, permanent felt pen. There is a black "N" in the circular blue sky surrounding the swan on each side of the vertical tail.

Thin, clear acetate sheet (.003) was used for the windshield. The pattern shown is a good starting place, but all models vary a little, so first cut one out of paper for a trial fit.

The side windows are simulated with black tissue. Pilot and passenger silhouettes are cut out of the black tissue, thus leaving white silhouettes when the tissue is doped over the white tissue. Pilot and passengers were then drawn in with colored felt pen, with just a touch of white correction fluid for the pilot's shirt collar.

Two nose block and propeller assemblies were made, one with a big propeller for flying and the other with a scale propeller for judging. This may not garner additional scale judging points, but the model looks better when it is sitting on the shelf.

The ITOH is a nice flying model. Ballast it as necessary, to get the balance point where shown on the plans. The tail notch can be widened at the aft end if up or down elevator is required. Both wings on the model pictured were warped to give about 3/32nd of trailing edge up (washout) at the tip and this appears to be about right.

The model in the photos weighs 8.5 grams without rubber. ●