

* NOTE: BULK HEADS A, C, D, E, F & G ARE CORRUGATED CARDBOARD

* NOTE: FUEL TANK SIDES ARE REINFORCED BY THE MOTOR MOUNTS, REINFORCING TAPE & EPOXY. (OR RUBBER MNT'L.)

* NOTE: OFFSET RUDDER 3/8\"/>

AFTER STAB IS ASSEMBLED CONTROLS ARE SET UP & FILL W/ SCARP BALSAS & ADD 1/8\"/>

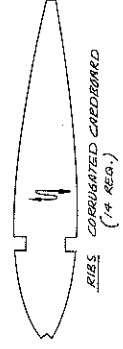
BOX BOY

DESIGNED & DRAWN BY: DAVE JESSEE
TRACED FOR M.B. BY: SA. FANTON

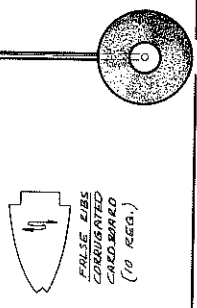
MODEL BUILDER magazine
SPECIAL ISSUE, MARCH 1967

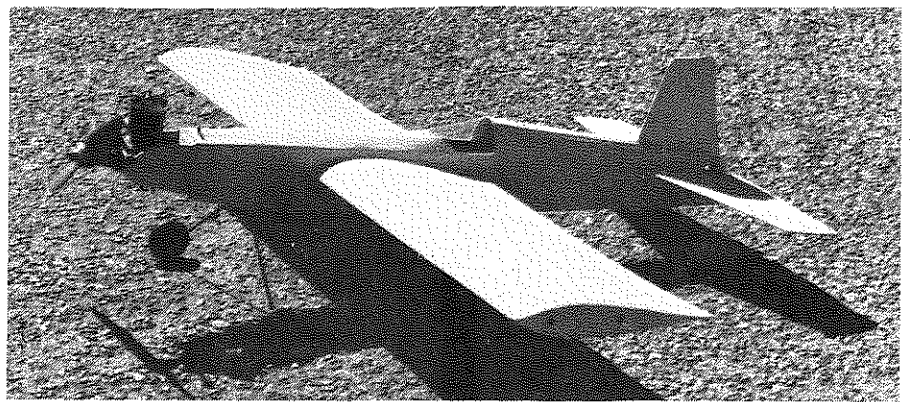
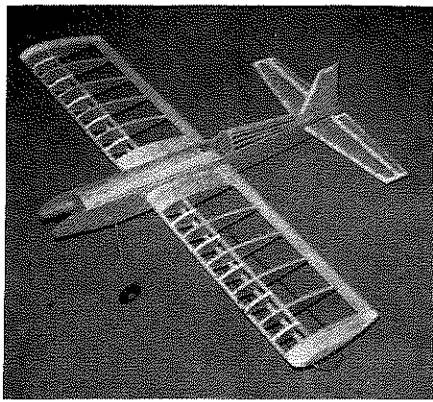
PLAN No. 4772

SPECS.	
SPAN AREA	39" 50A 2 1/4"
LENGTH	28" 28"
POWER	.25-15"



1-7/8" DIA. STEERPLANE WHEELS





"BOX BOY"

By DAVE JESSEE . . . Don't throw away that good corrugated cardboard box, it could supply most of the material for building your next model! Take a look at this one, and let your imagination do the rest.

MATERIALS

Fuselage sides: corrugated cardboard
 Bulkheads: corrugated cardboard
 Wing ribs: corrugated cardboard
 Tail surfaces: corrugated cardboard
 Wing spars: 2-1/4 x 1/4 x 36 spruce
 Wing L.E.: 1-1/4 x 1/4 x 36 balsa
 Wing T.E.: 1-3/8 x 1 x 36 balsa
 Gear mount bulkhead: 1/8 plywood
 Bellcrank mount: 1/8 plywood
 Elevator & stab spars: 1/8 x 3/8 spruce

Elevator & stab spars: 1/8 x 3/8 spruce
 Wing center section: 1/8 sheet balsa
 Cap strips: 1/8 x 1/4 balsa
 Fuselage top stringers: 1/8 x 1/4 balsa
 Tail surface edging: 1/8 sq. balsa
 Motor mounts: 3/8 x 1/2 hardwood
 Engine: Enya .29

Of course, the purpose of listing the materials first is to point out the fact that the major portion of this sport/stunt model is fabricated from ordinary corrugated cardboard. Only the 28 inch fuselage side pieces may cause a problem, as a fairly large, clean, uncreased chunk of cardboard is needed. (Hmmm . . . Is this the answer to the big, balsa-consuming ribs for our Mammoth Classic Scale ships?). If all else fails, your local paper supply house can probably sell you a 2x4 sheet for a buck or two. Don't

even *think* about comparing the price in balsa!

Corrugated cardboard is easy to cut with an Uber or jigsaw, makes strong glue joints, accepts just about any type of dope or epoxy paint, and if properly used, will not make your model any heavier than if build entirely of wood.

GENERAL CONSTRUCTION

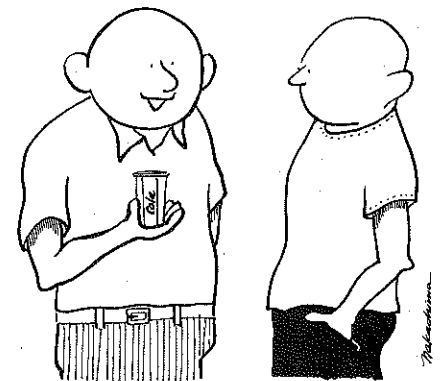
Building with cardboard is not that much different than building from wood. Be careful not to bend any parts to the point of creasing, as this destroys all of the strength.

Exposed edges, as for example the sheet tail surfaces, are covered with balsa and/or hardwood and sanded to shape. Reinforce the fuselage sides at the motor mounts with hinge cloth glued in place. Cap strips cover the exposed edges of the ribs.

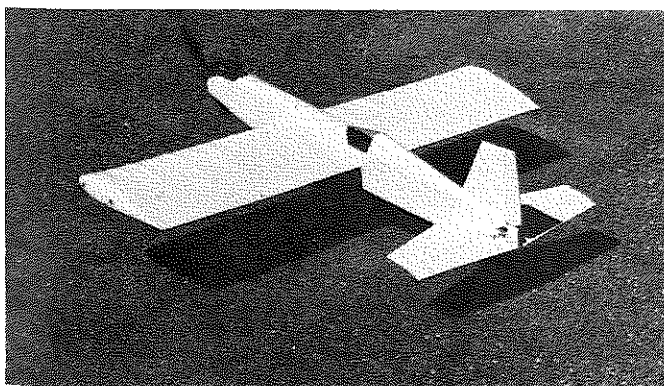
After final assembly, Box Boy's wing was covered with silkspan. All cardboard surfaces were then lightly sanded to provide a better bond for the dope. The original plane in the photos, now ten years old, was finished with Aero Gloss sanding sealer and yellow dope. Any of the modern epoxy finishes would be excellent.

Cardboard is not new to modeling. Remember Competition Models' "Paper

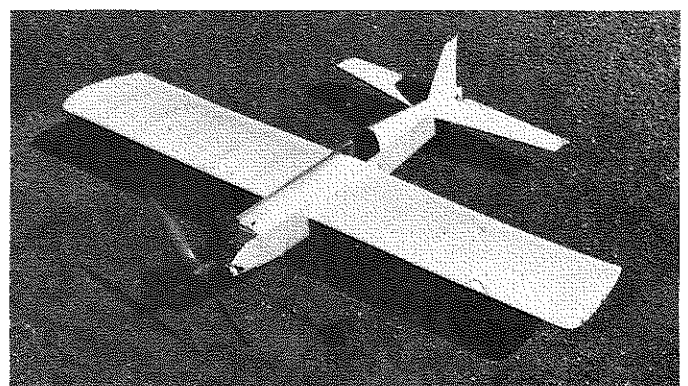
Tiger" pattern ship and the controversial "Westwind", by Jef's Friends. Of course, both were especially designed for cardboard construction. However, we can visualize many areas in every day model construction where corrugated cardboard could be substituted and be equal to or better than balsa for the particular situation. In addition, this would save the more expensive balsa for the areas where there is no substitute. Try as you might, balsa can't be replaced, but it's nice to know there's something that can pitch in and help.



"The paper cup . . . a remarkable strength-to-weight ratio."



Fuselage sides and bottom, all but one bulkhead, wing ribs, and sheet tail surfaces are all corrugated cardboard.



All exposed edges of cardboard are capped with balsa strips, such as the wing ribs, and the outside edges of the tail surfaces.