
BOEING-STEARMAN
"KAYDET"
SCALE 1½"=1" BY DON CARKHUFF
NAVIGATION LIGHT
INSTRUMENT PANEL
CENTER STRUTS TRUE VIEW
SCALE PROP
SCALE
BALANCE
NOTE-ENTIRE AIRPLANE COVERED WITH SILK
ALL STRINGERS 1/8 X 1/4 MED. BALSA
BOTTOM KEEL
TOP KEEL, 1/8 VERY HARD BALSA
REMOVE THIS SECTION AFTER STRINGERS & PLANKING ARE GLUED IN PLACE
BOTTOM KEEL 1/8 VERY HARD BALSA
NOTE-RUDDER GLUED IN PLACE AS SEPERATE ASSEMBLY
NOTE-CUT ALL BALSA RIBS FROM HARD SHEET
AILERONS GLUED IN PLACE AS SEPERATE ASSEM.
SAME WRAPPING METHOD AS INTERPLANE STRUTS
LEADING EDGE JOINER
MAIN SPAR JOINER
REAR SPAR JOINER
FRONT SPAR
REAR SPAR
COTTER PIN
HOLES FOR COTTER PIN
LEADING EDGE JOINT

Our builder-flier-author, brother-in-law of the designer, assumes usual proud pose and self-conscious grin with his well built and finished scale-liner complete with many fine scale details.

STEARMAN PT-17 KAYDET

SCALE CONTROL LINER OF ONE OF WORLD WAR II'S TRAINERS THAT PUT PLENTY OF OUR FLEDGLING FLIERS INTO THE AIR. LIKE ALL BIPES OUR TRAINER HAS ALL THE EXCITEMENT AND GLAMOUR FOR GOOD SCALE FLYING.

On the ready line—or is it, full scale craft are tied down but Stearman ready to go.

by DON CARKHUFF & EDWARD L. PRICE

► We'll leave the multi-engined, bomb dropping, gear retracting ships to the fellows that can endure this type of frustration. We like them simple and easy to fly and believe that it is better to build a small ship to a large scale than vice-versa. In this way we do not all have to be watchmakers to get the small detail, and our ships are not huge models that are difficult to transport.

Our Stearman falls in this category: An airplane reasonably simple to construct and fly. One that looks good on the ground as well as in the air.

The original model was sealed from two Stearmans that have been kept at one of our local airports. This then accounts for some of the differences in the construction detail between the photos and the drawings. These ships were probably rebuilt several times, and I confess that the original model suffered a crackup at the 1960 Mirror Meet and was also rebuilt. The mishap was due to the builders' inexperience in control-line flying and by a slippery runway.

The drawings for the model show the construction as the airplane would have appeared factory-built back in 1942-1944.

The Kaydet was the last biplane built for the Army and Navy and was the standard primary trainer for these Services. At that time, its color scheme was all silver. Other color schemes were yellow wings and tail with blue fuselage for Army, all yellow for the Navy ("Yellow Peril" as it was named) and of course, any color scheme for the surplus.

The radial engine was first intended to be covered by a cowl to hide the K&B head. However, it was found that the cylinders from Monogram plastic kit of the Curtiss Wright radial engine were practically to our scale. Parts of this kit were used to build a radial engine (Lycoming) that provides a "spectacular" front end for the Kaydet, even with one oversize K&B head protruding.

The original model had only a detailed rear cockpit, the front houses the bellcrank, which was camouflaged by the use of half the figure of a modified plastic jet pilot making for further realism in the over-all picture.

All full scale flying and control cables were made of 1/2A flexible lead-out wire. These wires were spring-loaded to prevent any possibility of sagging. Wing tip lights were taken from a ship model—very convenient and real. All details are fully described and covered in the full-size plans, per se—exact size of N struts, type of material to use, etc. Adherence to the plans will result in a sturdy, good flying, exact scale-ship. One point to remember, do not take the chance of damaging or destroying your labors by (Continued on next page)

Note: even with the Torp sticking up its head the scale engine details are very outstanding.

Bolt on wing struts add authenticity, also attention to rivet details give it extra scale points.

Cockpit details are real point getters—note rivet detail for cockpit coaming and instrument panel.

Stearman PT-17 . . . Continued

flying a tail heavy biplane; bring that nose down by adding the required weight to secure the proper CG. The winter 1961-1962 edition of Air Progress magazine can give the builder additional scale detail.

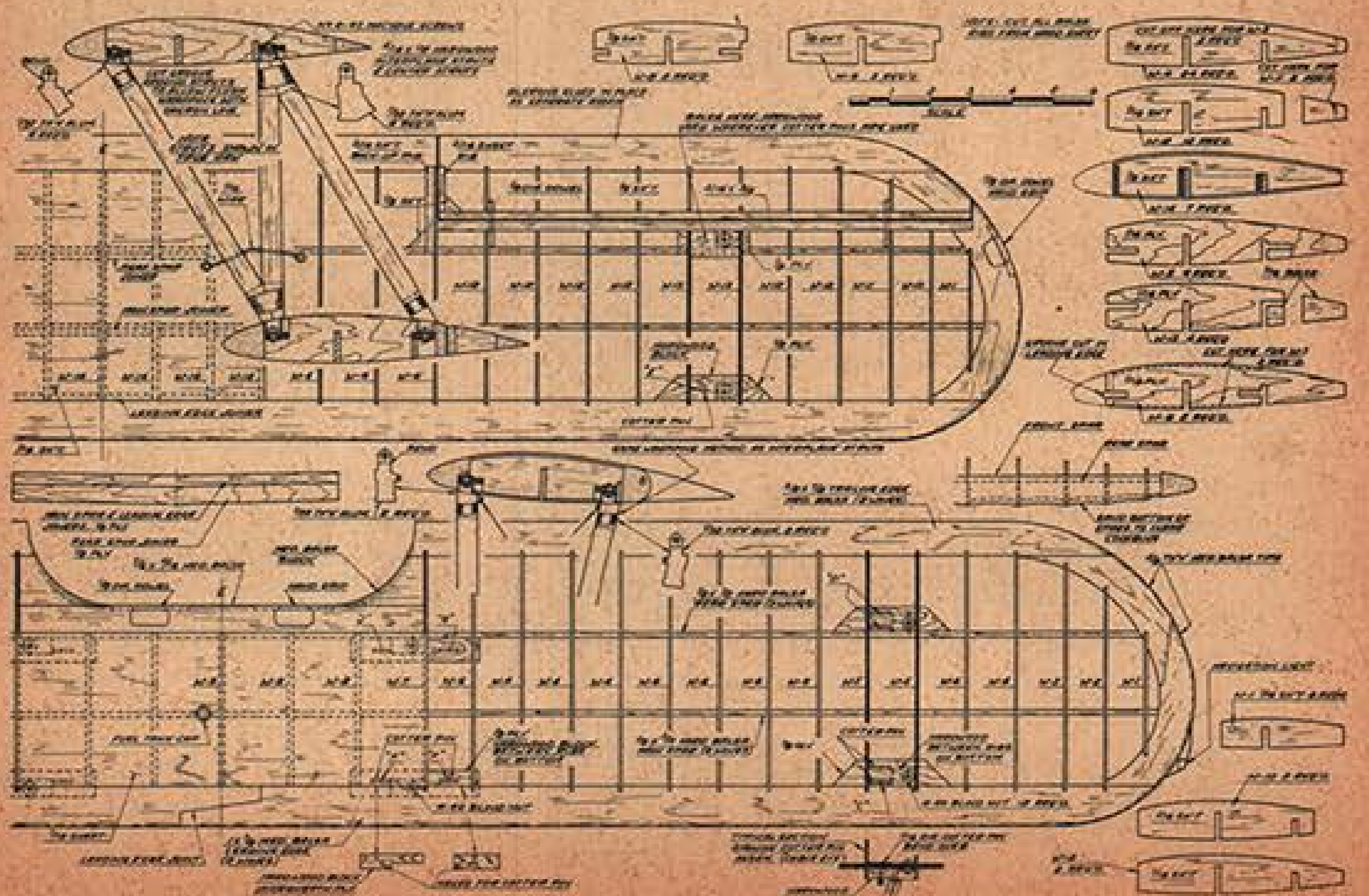
Construction

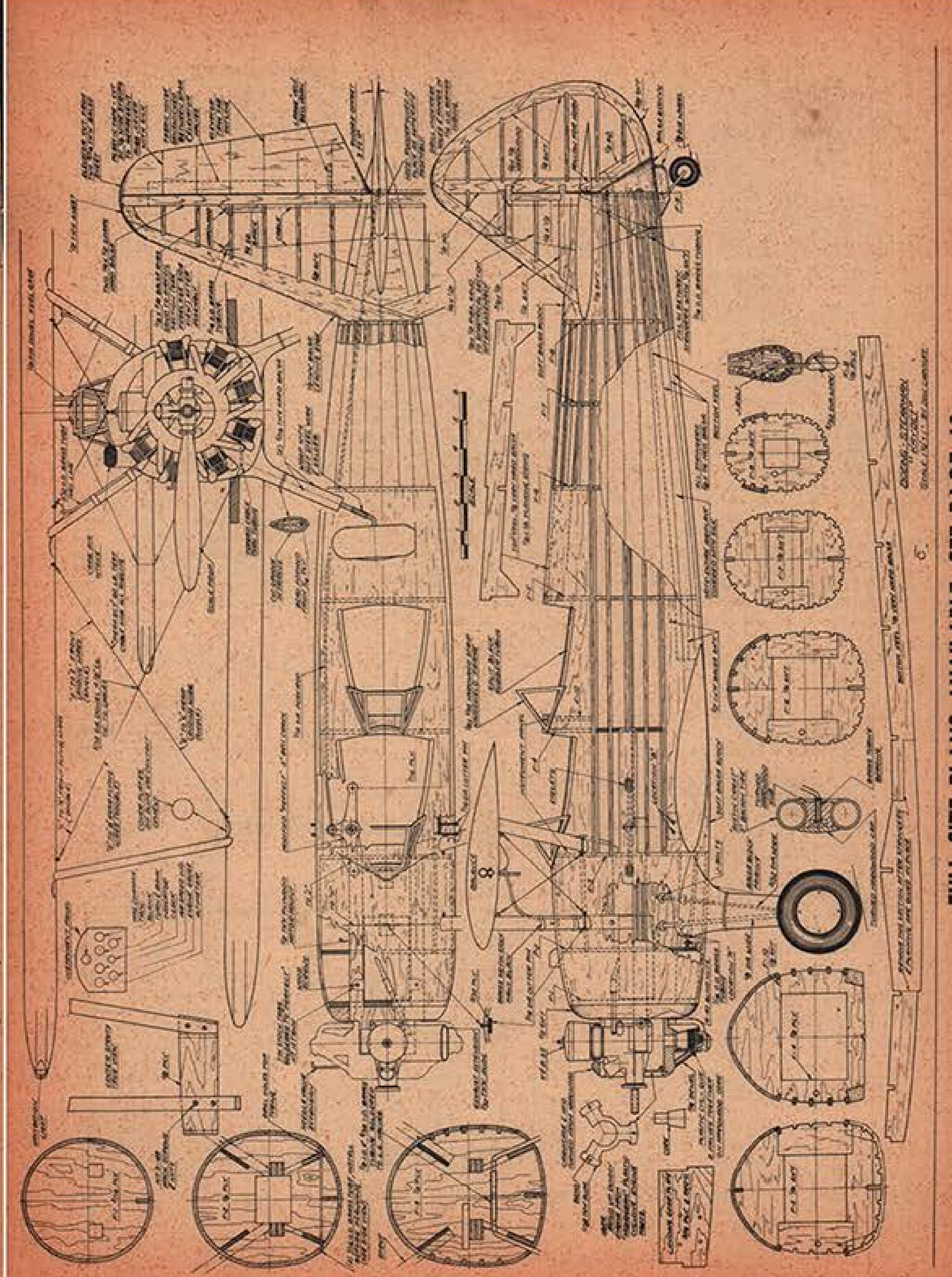
The construction of this model is not as difficult as it is time consuming, mainly for the reason that most biplanes designs depend on the cabane and interplane struts as the method of attaching the top wing, leaving the rigging as nothing more than scale decor. On our model, both the struts and rigging are used in the same manner as the Proto type. The struts align and locate the top wing (as well as securing it) and the rigging (in tension) tie the two planes and the fuselage together in a rigid unit. As you can see on the drawings, adequate means have been made throughout the air-frame for securing the rigging. These provisions, mainly cotter pins and the strut mounting fittings, are the only taxing part of the model. This arrangement has another virtue other than its strength; it provides a method of assembling the top wing, the rigging and interplane struts after the final finish has been applied.

Fuselage

Start by cutting out the ½ inch plywood motor mount (be sure to drill hole for bellcrank) and formers F1, F2 & F3. Cut these formers in two halves by cutting along the horizontal center line and gluing them together again with the motor mount in place. Install the fuel tank now. The landing gear and cabane strut plates are now added. Do not glue strut plates at this time and be sure to bevel landing gear plates so that they rest flush against motor mount. This unit should now be sanded or ground so that all the edges of the plates and formers are beveled to suit fuselage contour.

The strut plates are now removed and the cabane struts secured to them. The struts are now sanded to an airfoil shape with only the ends (Continued on page 52)





FULL SIZE PLANS AVAILABLE. SEE PAGE 62