

GYRO SKIPPER

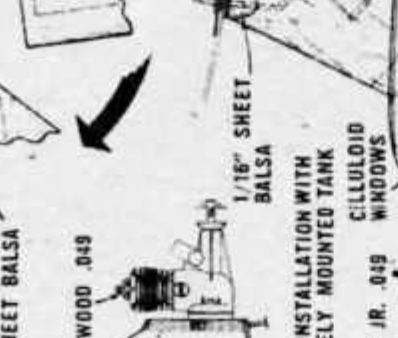
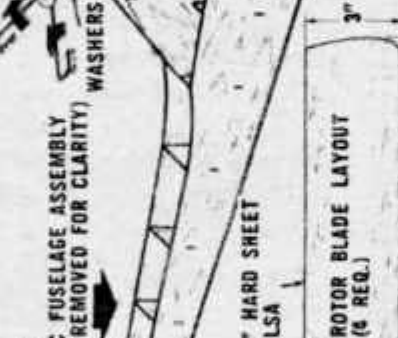
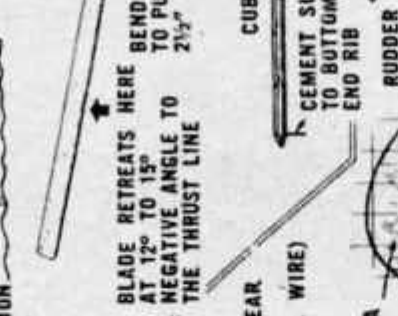
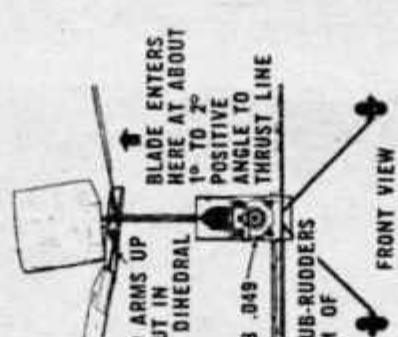
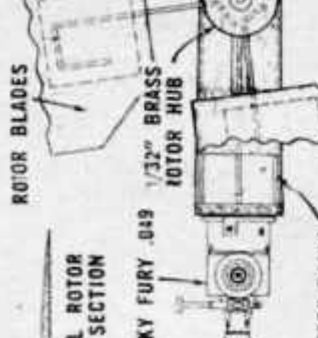
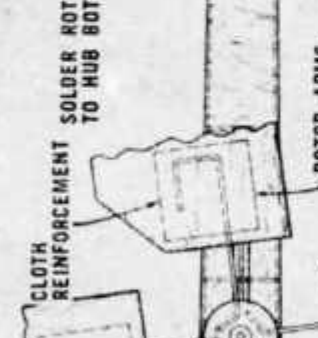
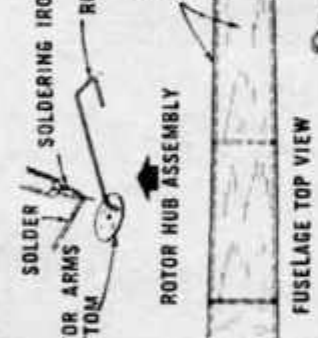
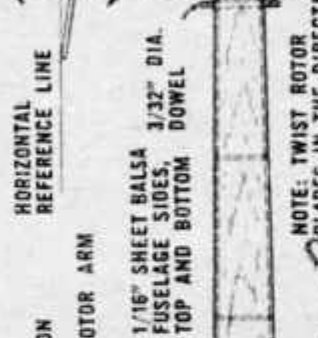
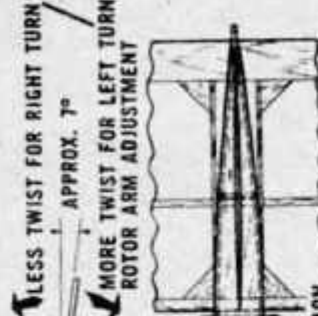
By Paul Del Gatto

THE autogyro, which differs from the helicopter in that the rotor blades spin freely and the power of the engine is translated through a conventional propeller, has always fascinated us. We've had considerable success with many models and this latest is our most successful. The performance is nothing short of spectacular and the ease with

Tired of building ordinary models? Then try your hand at making this whirlybird.



ROTOR PYLON LAMINATED FROM TWO 3/32" SHEET BALSA SIDES AND 1/16" SHEET BALSA CENTER



NOTE: TWIST IN BLADES INDUCES AUTO-ROTATION

NOTE: PIN DOWN SPAR, LEADING AND TRAILING EDGES

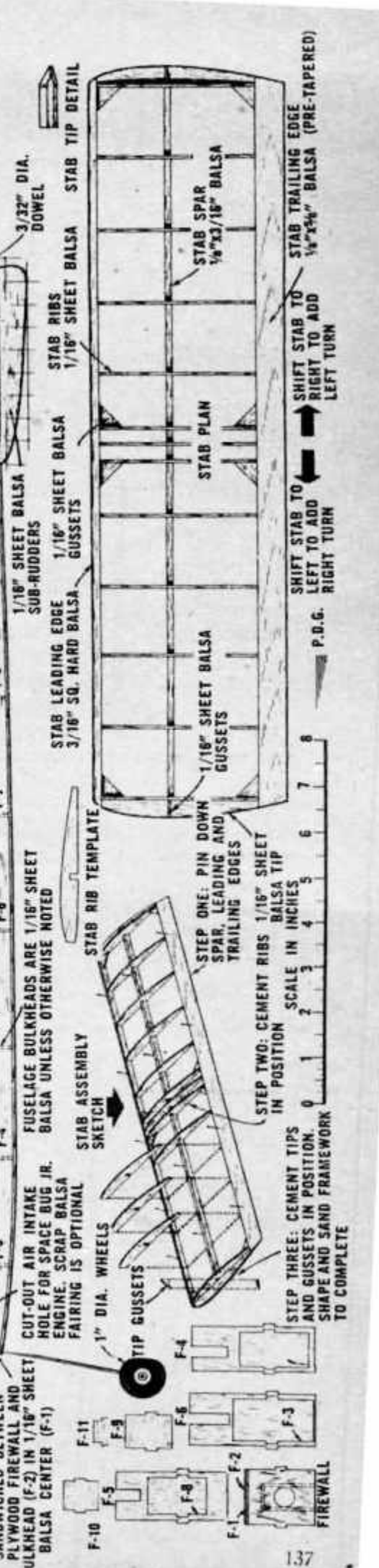
STEP ONE: PIN DOWN SPAR, LEADING AND TRAILING EDGES

STEP TWO: CEMENT RIBS IN POSITION

STEP THREE: CEMENT TIPS AND GUSSETS IN POSITION

SCALE IN INCHES

TO COMPLETE





LAUNCH MODEL with the rotor blades spinning rapidly; use gentle forward motion.

which it can be adjusted leaves us beaming.

Gyro Skipper can be trimmed in several ways, but the arrangement we favor most is a tight right spiral climb and a vertical descent in the glide. In this manner we can fly the model out of small areas. On a full tank of gas, we've had it climb to great heights and descend only a few hundred yards from the launching point. However, if there is plenty of room, it can be trimmed much in the same manner as a conventional free-flight model.

Start construction with the fuselage. Cut out all the bulkheads and then bend

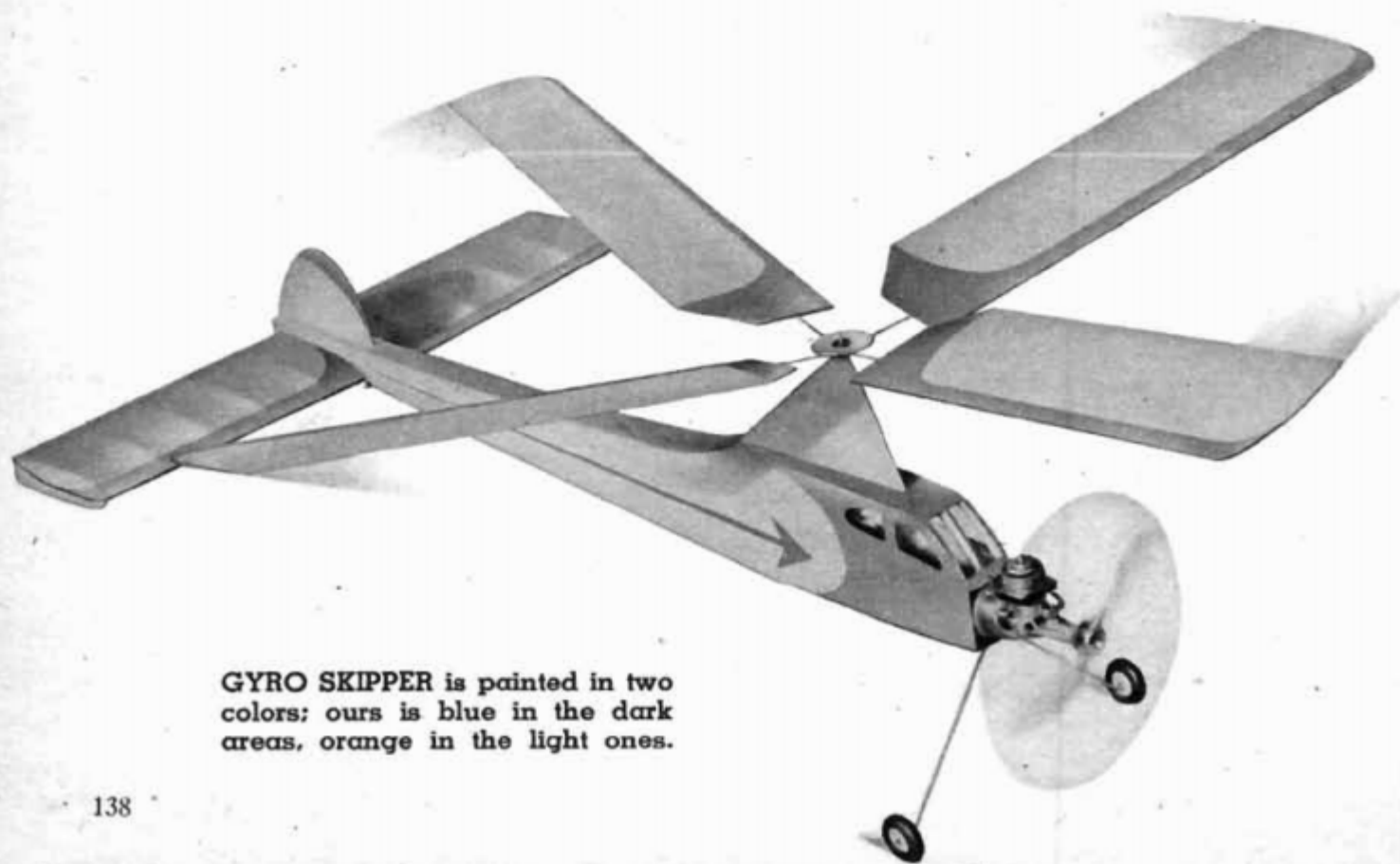
KIT OR PLAN AVAILABLE

A kit, complete except for engine and propeller, is available. Send \$2 to MI Kit Service, Box 419, Huntington, N. Y. For full-scale plans, send 50 cents to MI Plans Service, Fawcett Place, Greenwich, Conn. Specify Plan No. 244, Gyro Skipper.

the landing gear strut to shape and cement it in place. Next cut the sides and cement the $\frac{1}{16}$ -in. sheet balsa nose doublers to the inside of each. The sides are then assembled with bulkheads F-3, F-4 and F-5. When the cement has dried, add the remaining bulkheads and the firewall-landing gear assembly.

The rotor pylon is laminated as shown in the drawing, with the rotor mast cemented in a groove in the center piece. The complete unit is then cemented into the notches provided in the bulkheads. Be certain that the angle of the rotor mast, when the pylon is installed, is very close to that indicated on the plan. When the installation is complete, add the top and bottom sheets to the fuselage.

The fin and the stabilizer are made and installed next. Cover the stabilizer with Silkspan or [Continued on page 158]



GYRO SKIPPER is painted in two colors; ours is blue in the dark areas, orange in the light ones.

Gyro Skipper

[Continued from page 138]

tissue paper. Silkspan can be dampened before it is applied but tissue paper must be applied dry and then sprinkled with water to remove the wrinkles.

The rotor assembly, while not difficult, requires care because the model's performance will depend on how well it is done.

To fly the model it may be necessary to start the rotors spinning in unusually calm weather; in any event, they should be spinning rapidly when the model is launched. Do not launch it with a great deal of speed; instead, ease it out of your hand with a slight forward motion. If there are exaggerated turning tendencies, the angles of the rotor arms probably need adjustment. Suppose, for instance, that the model were to turn sharply to the right. This would mean that there was too much lift on the blades as they entered the air stream on the left as viewed from the rear. You can correct this by increasing the angle of twist in the rotor arms. •