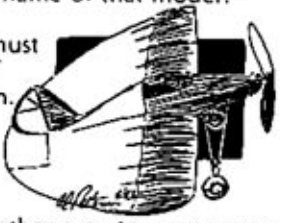
OLD TIMER Model of the Month

ARUP

Designed by: Gordon Englehart
Drawn by: Al Patterson
Text by: Bill Northrop

• "What's the name of that model?"



"Arup. . ."

"Wow! That must have been a good sandwich. Anyway, what's the name of the model?"

There's no other way to pronounce the name. And when you do it, you feel like saying, "Excuse me," and apologizing for not covering your mouth. Of course, if you were to say, real fast, "It's the Arup Flying Wing, designed by Dr. Snyder, South Bend, Indiana," you might get by with no more than, "Good grief, whatta name!"

The August, 1936 issue of *Popular Aviation* featured photos and a description of not this model, but the "new edition" of the Arup, with a five-cylinder, 70-horsepower Le Blond engine and trike gear, plus what appears to be an additional stab and elevator mounted about two-thirds of the way up the fin. The original aircraft, which we can only guess must have been created in late 1935 or early 1936, was powered by a Continental A-40, 40-horsepower, two-cylinder opposed engine, and was the basis for the model presented herein.

The 22-inch span rubber model of the Arup ('scuse me) was designed by Gordon Englehart, and published in the August 1936 issue of *M.A.N.* Although my memory is vague, I must have built one, as the somewhat crude pencil lines from tracing the full-size ribs can still be seen in my copy of the mag.

The wing has to be built first, as the fuselage is built onto it. And right away we have a problem. The drawing shows a flat top spar in the front view, with the bottom spar dihedraling (new word?) up to it. However, the text says to crack the top spar at both No. 1 ribs and raise it 3/8-inch at each tip. The photos of the model don't help in solving the problem. If it's any help, the photos of the "next edition" in *P.A.* indicate a fairly thick airfoil with the leading edge at zero dihedral all the way out, and the tips tapering up or down to meet the edge. I'd be tempted to follow the plan. In any event, use a building board and shims. The instructions sort of imply that the wing was assembled acapella, which is risky.

Balance point was not discussed in the flying instructions. "If the model stalls, add weight to the nose or turn the flippers down (the latter being preferred to get it trimmed, it should be fun to fly once it gets straightened out.

Hmmmm . . . let's see . . . throttle, rudder, elevator, "trimmer flaps", three times up to 66-inch span . . . make an interesting experiment for R/C! •