

REDWING
 DESIGNED BY: ALAN ORTHOF
 PUBLISHED IN THE MAY MODEL
 BUILDER'S MONTHLY. THE
 DESIGN FOR THIS KIT IS A
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**MODEL
 BUILDER
 magazine**

PLAN No. 278-01



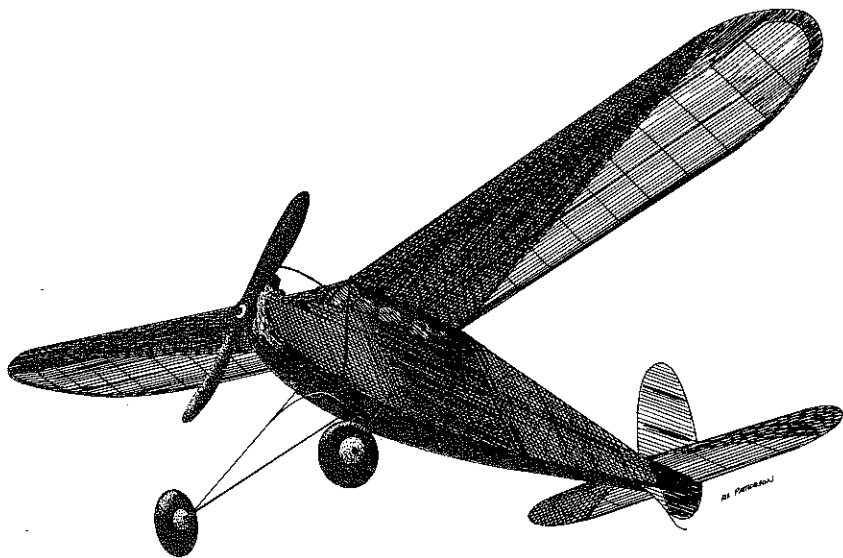
Text by: Bill Northrop

Redrawn by: Al Patterson

Alan Orthof's "REDWING"

• "Ship is balanced by moving wing back and forth on top of the fuselage." Other than a warning that flying surfaces must be lined up and free from warps, the above warning constitutes the entire set of trimming instructions for this very basic 1938 design by Alan Orthof, published in "MODEL BUILDER'S HANDBOOK NO. 1", copyright 1939.

With a structural design and outline very reminiscent of Herb Greenberg's famous Red Zephyr, the "Redwing" is an extremely simple model to build, and no special hints are needed. Designed around the popular Ohlsson "23" engine, the wing has about 325 sq. in. area on a 48 inch span. If you're in a hurry to get an Old Timer gas job together, this is it.



The connecting rods in this case were not aligned, but remained straight, with one behind the other. The designers of the motor evidently did not realize that a dynamic couple would be set up this way and would create a serious weakness.

This was evident when the firm attempted to produce a glow engine. The engines ran very unsatisfactorily, with connecting rods constantly "going out". Later on, bronze rods were substituted to help alleviate the problem, but only to a small degree. No question about it, the glow plug sounded the death knell of still another engine.

For the technically minded, the Wasp Twin weighed 10-1/2 ounces and came with two Champion sparks, but no other ignition accessories. A bore of .740 inches and stroke of .702 gave a piston displacement of .60 cubic inches. Height was 2-1/4 inches, length 4-3/16, and width was 6-9/16 (just right for a scale Piper



"Tent City" at the 1947 Nationals, in Minnesota. A little different from the plush motor homes and campers seen at the Nats these days! Photo by Brad (Li'l DUBLR) Shepherd.

Cub!).

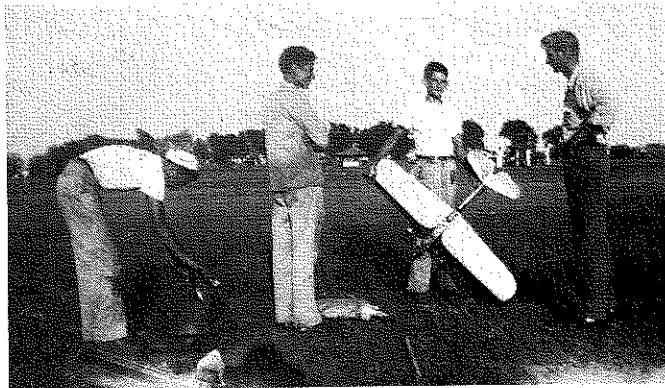
Crankcase (as noted before) was aluminum alloy, with each cylinder and one-half of the lower case as an individual unit (the two cylinders, when fitted together, were properly offset for connecting rod bearing clearance).

Pistons were stamped steel, hardened and ground to a high finish. An unusual feature of the two-piece I-beam connecting rod was the fact that it had a lower cap reminiscent of full-size automobile practice. The bearing caps could be removed

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Wally Wallick, with Dooling powered speed ship, at the 1947 Minnesota Nationals. Brad Shepherd photo.



West coast ukie stunt fliers at the '47 Nats (l to r): Don Gulotta, Bud Jamison, Jack Gilroy, and J.C. Yates (Madman himself!).