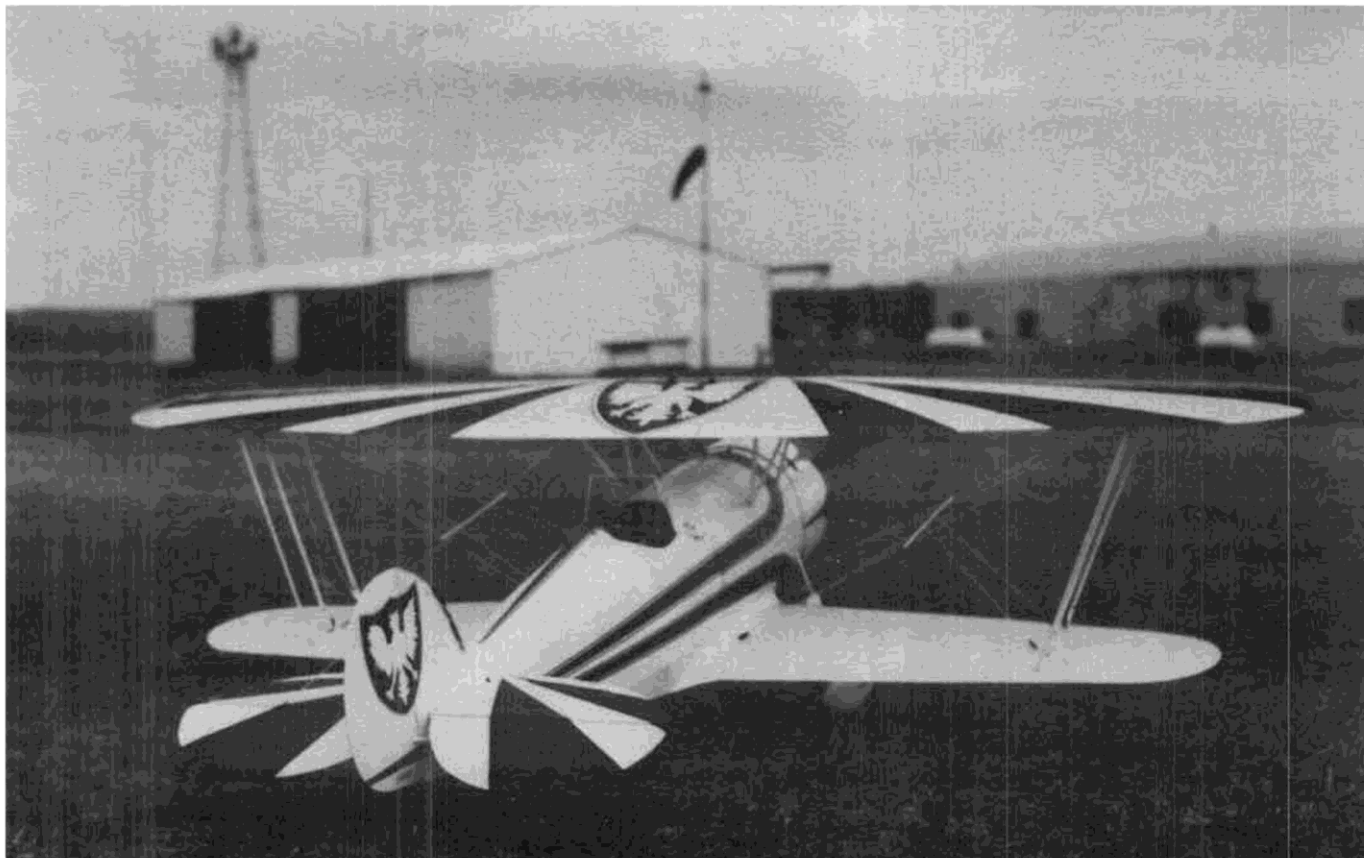




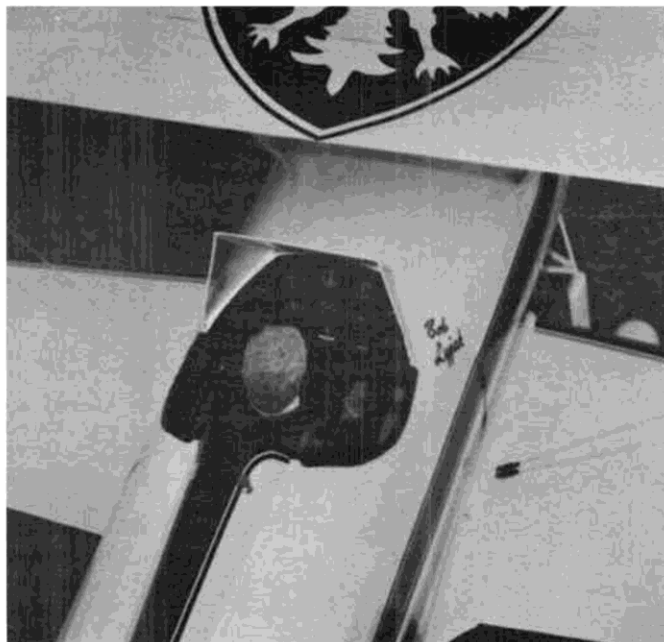
WACO CTO

Beautiful Quarter-Scale biplane from the Golden Age of aviation. The Waco Taperwing was, and still is, one of the most popular airplanes among aerobatic pilots. This one is modeled after Bob Lyjack's, seen in recent years at the famous Oshkosh, Wisconsin Fly-In.

By LARRY SCOTT
Text by Bill Northrop

PHOTOS BY LARRY SCOTT & JIM TILLER

- When it came to submitting material for this construction project, Larry Scott was quick to point out that he is an Iowa farmer and model builder . . . not a writer. However, we could not pass up the opportunity to present this beautiful model, and as far as we're concerned, if



Flying and landing wires are primarily decoration, as wings are one-piece and very rigid.



Stab trim slot is real . . . for screw-adjusted stab trim. Note realistic panel separations. The fine touches count.

you need detailed instructions for scratch building a model of this caliber, ya should'n oughtta try it! Actually, none of the construction is unusual, there's just lots of it, and as for bending that quarter-inch landing gear wire . . . farm the job out to Lou Ferrigno, the "Incredible Hulk"!

Larry's Waco CTO Taperwing was designed after aerobatic flier Bob Lyjack's Waco, which was featured in two consecutive issues of *M.A.N.* in 1975. Fine detailed Pete Westburg scale views of the ATO, which was the same airplane, but fitted with a Wright J5 "Whirlwind", 220 hp radial instead of a Wright J6, 250 hp, or larger, were featured in the August 1975 issue of **Model Builder**. Write to Pete at 834 Seventh St., No. 6, Santa Monica, CA 90403 for prints of his 1 inch = 1 ft. originals of these drawings.

The model is powered by a Kawasaki 3.15 engine, weighs around 28 pounds, and at quarter-scale, spans 91 inches. Larry got plenty of thrust from a Zinger 22x10 prop, and had equal results from a 22x8 Zinger and a 20x10 Dynathrust. A Higley smoke system has also been installed.

The radio in Larry's Waco is a Kraft Gold Spectrum 6, using KPS-15 servos throughout. After initial flight tests, however, Larry added another KPS-15 to the elevator control, when pull-outs proved to be a little slow using one! A KPS-20H would probably handle the load. Oh yes, one servo each for left and right ailerons.

The Waco is covered with Super Coverite and finished with Randolph aircraft dope. Larry has made female molds for the cowl and wheel pants, so these fiberglass parts will be available from him on a direct sale basis. Send your inquiries to him at Box 86, Kirkman, IA 51447. Prices may be included with the additional construction notes that will be supplied with the drawings. See last paragraph.

The model has done pretty well for itself in competition. It took First Place at a static display in Waterloo, Iowa in March of '81, and a "Best of Bipes" at Council Bluffs in April. When the flying season opened, Larry flew the Waco to First Place at Lincoln, Nebraska (Sport and Giant mixed) in May, and First again



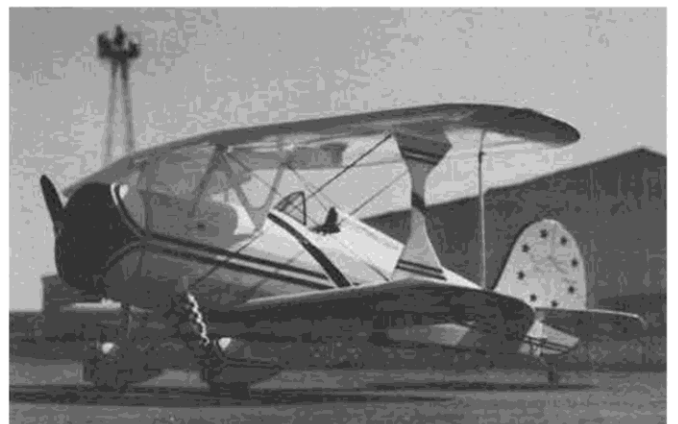
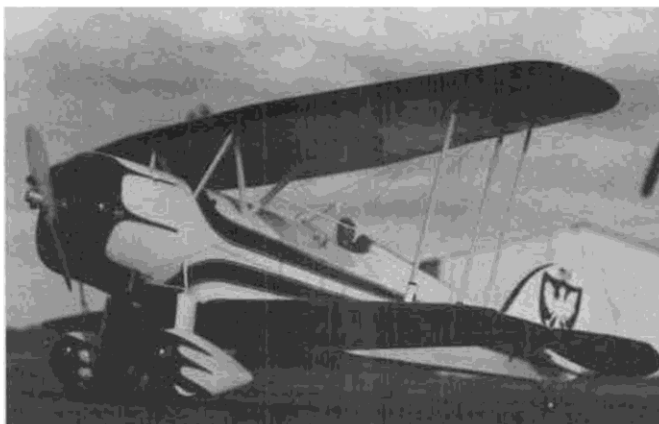
Larry certainly knows how to put on a nice finish! Fiberglass cowl and wheel parts are available from him, direct. See text. Dummy engine from Air Design.

in Giant Scale at Kansas City in June. At the Sig IMAC contest in June, he was one point out of 244 behind 2nd and 3rd, which was a tie, in Giant. At the Milwaukee Pattern/Giant Scale meet in July, the Waco took First, and in August, at the Omahawks Pattern/Scale meet, it took Second.

Larry is putting together some notes on the way he solved some of the special construction problems involved in completing the Waco, such as outer-plane strut connection, stabilizer trimming, wing attachment, aileron linkage, etc. These notes will be included with the three huge sheets of drawings prepared

by Al Patterson, which will be available soon after publication of this issue (see page 100).

Not far downstream, we'll be presenting Larry's Krier Great Lakes in quarter scale . . . once he gets another one built! The one shown in this article was in a mid-air collision with a Byron Pitts, yet both planes were landed safely! The Great Lakes lost about 1/3 of the top right wing, and the Pitts lost the *entire* bottom right wing, however, both survived . . . a miracle. Larry sold this one, and is building another, with some further modifications in the construction. Watch for it in coming months. •



Larry's Waco and Krier Great Lakes look totally real as posed in front of hangars at local airport. The Great Lakes will be presented in a future issue. His next project is a mind-boggler. Stay tuned!

