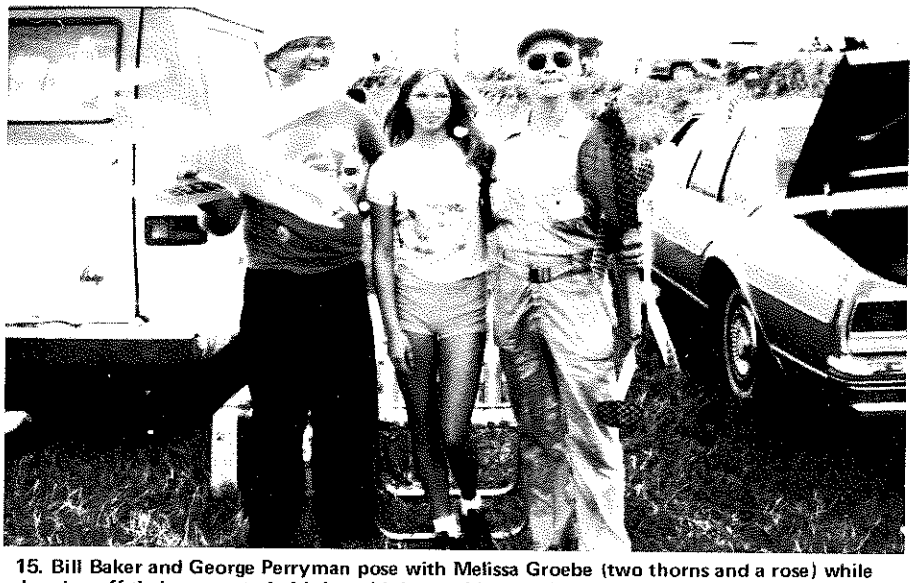

15. Bill Baker and George Perryman pose with Melissa Groebe (two thorns and a rose) while showing off their converted old timer biplane rubber models.

16. Yes maw! This twin pusher flies! John Pond at Mead Missile Base, 1982 Nats.

sion of the Madewell motor as produced by the Madewell Mfg. Co., 2901 E. 7th St., Oakland, California. We are indebted to Bill Simpson, who kindly loaned us a complete engine to copy. Matter of interest, this engine was originally in the Dave Brodsky collection.

Not too many old timers are aware of this motor manufacturing interest in the San Francisco Bay Area, as the large companies in the southern portion of California such as Ohlsson, Cyclone, etc., took up most of the publicity. Be it as it may, there was also a hot bed of engine manufacturers in the northern portion consisting of Madewell, Keener, Vivell, Brown, and a host of small manufacturers. We didn't mention Hornet motors as this is considered central California.

The motor illustrated this month is a follow-on to the original which featured a displacement of .147 cu. in. compared to the 1940 version at .140. This was made possible by reducing the stroke from 19/32 to 9/16, making it a "square" engine with a bore of 9/16 in. For its weight of four ounces, this Class A engine enjoyed a rating of 1/8 hp.

With an original price of $17.50, the advertisement in the January 1940 issue of *Model Airplane News* proudly announced the new Madewell version at $12.50. As their slogan went, "If it's a Madewell, it's well made", was certainly an improvement over the first model.

Among the features the Madewell people pointed out in their advertisement was the new enclosed timer, the option of radial or beam mounting, transparent tank, and a fabricated steel cylinder wherein it was claimed there were no trick covers to come loose and leak.

A Smith coil designed to run on 1.5 volts was claimed as an exclusive for Madewell motors. Other features, as designed by Jack Keener, were aluminum from permanent molds. Piston and cylinder were cast iron lapped to fit after the bypass intake and exhaust manifolds were brazed onto the steel cylinder. A final cut on the bore was then made assuring a perfectly round bore free from welding distortion. The aluminum head was fitted to the cylinder with only three screws. To go this one better, the

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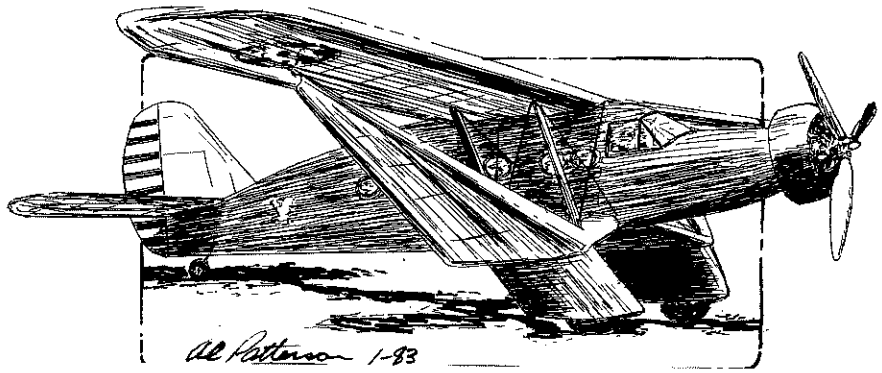


BELLANCA AIRCRUISER

OLD TIMER Model of the Month

Designed by: Joseph Kovel
Drawn by: Al Patterson
Text by: Bill Northrop

• How many times have you heard someone say, "I'm gonna build that model one of these days." Well, this writer has been harboring that thought about Joe Kovel's Bellanca Aircruiser ever since it first appeared almost 46 years ago, in the July 1937 issue of *Model Airplane News*. Back then, it was too complicated a project for this 15-year-old, who had only been modeling a few years and was still carving solid models and building simple, 10-cent Megow kits.

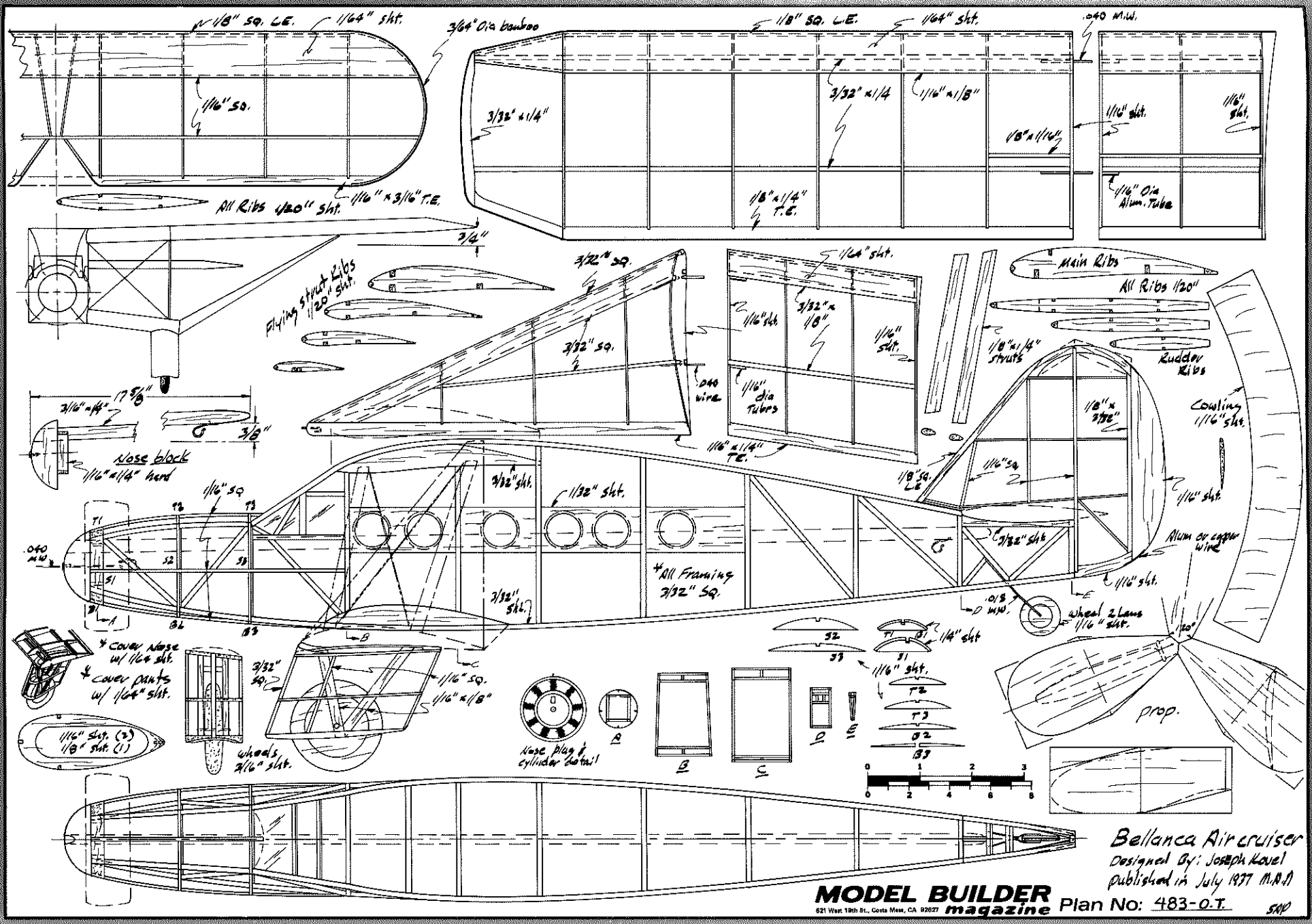
In later years, the model was still appealing to me, but now with the idea of enlarging it for free flight gas scale. The next time around, the mid-'60s, I thought about R/C scale, but I was unable to find the necessary documentary back-up material. In recent years, it began to look good again, as a giant sport scale model (lightweight, of course) for the Technopower radial.

Now, at last, we're back to square one, and the original "someday" comes closer, as I turned the full size plan project over to Al Patterson. The original magazine plan was in six plates, with many components drawn full size. Only the fuselage and wing had to be enlarged.

The original model employed a motor stick, still popular in the mid-'30s but rapidly disappearing. Unless you're a super-purist for duplicating the original, we'd suggest going to 3/32 square spruce or 1/8 square balsa for the main fuselage structure and mounting a rear peg to hold the rubber motor. Incidentally, the original model must have been real light, as only four strands of 3/16 flat were recommended for power.

The original model was covered with tissue, in military colors: blue for the fuselage, and all the rest in yellow. The text called for balancing the model 1/3 of the wing chord back from the leading edge.

Don't wait 46 years to build yours! •



Bellanca Aircruiser
Designed By: Joseph Kovel
published in July 1977 M.A.M

MODEL BUILDER magazine Plan No: 483-O.T.
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SAP