



13. Bob Stalick sends this shot of John Rossello launching his nice-flying American Ace. Near Albany, Oregon.

der at \$5 each.

The Skylark was aimed at the machinists and students taking machine shop practice. The semi-finished kit was exported as a good deal for pleasure and profit. The company claimed the finished engines would find a ready sale among their friends. The company recommended using a regular auto coil and battery for testing to avoid the more costly coil which was also offered.

For the neophyte machinist, a complete set of assembly and working drawings were provided showing every operation quite clearly and simply. Fortunately, for the newcomer, finished parts in the kit included: cylinder assembly, piston pin, piston ring, spark plug, timer spring, ignition parts, and gas lines.

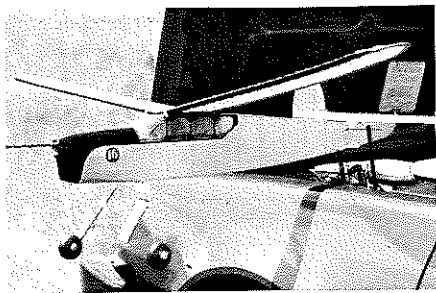
To top things off, all materials and castings necessary to complete the engine were provided. This also included bolts, nuts, and gaskets. Spark coils would have to be purchased separately.

For those who were interested in saving a buck, for 75¢ less you could do your own brazing of the cylinder attachments. However, the trick was that you had to hone the cylinder after welding.

The directions for running the motor called for six parts of gasoline to one part of SAE 70 oil. The description of how to hook up the motor (without a wiring diagram) was rather sketchy. Unless you knew your ignition setup, this writer could see problems for the beginner. One interesting fact was gleaned, and that was a setting of .010 gap for the ignition points. Good info!

For those collectors who have missed out on getting one of these engines complete, the cylinder was made of special steel tubing with the manifold and port housing brazed to the cylinder. After welding, the unit was heat treated (stress relieved), bore reamed, and honed to finish fit.

Cooling fins attached to the cylinder were pressed-on aluminum. The engine featured a silicone alloy piston; other parts were a piston ring of gray iron, a hardened and lapped steel piston pin (hollow), a connecting rod of light-

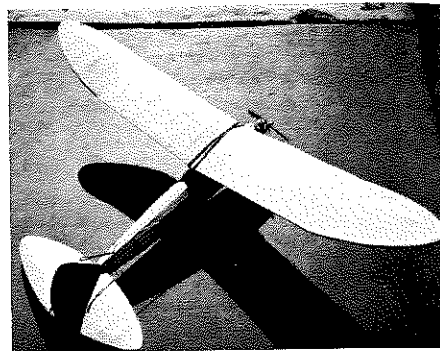


14. Simply gorgeous Miss World's Fair being wound by Tom Alden. Note holding jig on inside of fender.

weight dural with phosphor-bronze bushings, a crankshaft of hardened and lapped steel, and a balanced dural web. The crankcase was made up of split aluminum castings utilizing phosphor-bronze main bearings.

A dural timer of "banjo" design, employed auto ignition type adjustable points with the breaker cam and propeller washers made from dural. The carburetor was quite simply an Austin type needle valve with a choke quite reminiscent of the Brown Jr. engine.

Running instructions revealed that the engine was rated from 400 to 5000 rpm, propeller size not specified. Interestingly enough, when starting the



15. Dave Saso of SAM 21 really likes this 1/2A Texaco version of the Eastern States Gas Champ.

engine with the spark lever perpendicular (so that the spark would occur at top dead center of the piston travel), it was claimed the engine would do equally well in either direction. This meant you advanced the timer against the direction of the propeller rotation. How about that?

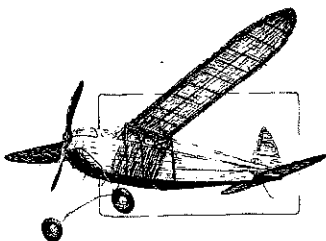
The last bits of technical dope would be the bore at 7/8 in. with a stroke of 7/8 in. giving .67 cu. in. displacement. Rated horsepower was 1/5, either air or water cooled. Weight of the air cooled version

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Shrimpo

OLD TIMER Model of the Month

Designed by: Malcolm Abzug
 Drawn by: Al Patterson
 Text by: Bill Northrop



• We've mentioned on several occasions that many old-timer designs were published without names . . . Lanzo's Record Breaker and Ehling Contest Winner are good examples. At first glance, it appeared that we had another one for this month. The title for the construction article for this old-timer, in the November, 1937 issue of *M.A.N.* was as follows, "How to Build a Pee Wee Gas Model." But luck was with us this time. In the second sentence of the first paragraph, the author casually mentions that, ". . . in a few months, the first *Shrimpo* was dodging pop flies at the local ball park." In the next sentence, he said, ". . . and the third *Shrimpo*, the present one, was designed and completed at the end of last fall."

Okay . . . so far so good . . . *Shrimpo* it is . . . or is it? In the second paragraph, we are told about (what might have been, as it happened in late 1936) the first gas model to be flown indoors, and quite possibly the first one to be flown on a tether, G-line style, or R.T.P. ('round the pole). But now the author writes, "With engine barely popping over and set for a run of 45 seconds, the S-3 rolled along the polished (gym) floor

and gaining speed, picked up." And from here on, the model was called the S-3.

Now then . . . the byline for the article gave two names . . . Malcolm Abzug and Richard Wachtell. Did Abzug design it, or did Wachtell? The drawings were done by Abzug. Maybe Abzug designed it and Wachtell wrote the article. Or maybe Wachtell built the model from Abzug's plans.

Hmmm . . . S-3 . . . Didn't we do an S-4 old timer a little while back? Yup . . . in October 1980, we published Malcolm Abzug's plans from January '39 *M.A.N.* for a 36-inch span gas model called the S-4. Looks like Abzug gets design credit for the S-3, doesn't it? If anyone can confirm it, let us know.

Anyway, the *Shrimpo* . . . or S-3, is a clean little model with a 44-1/2-inch span. Just right for an .049 or an .09, depending on whether you like 'em cool or hot. It should also be just right for 05 electric power and three-channel lightweight radio. The article calls for balancing at one-third of the wing chord back from the leading edge.

Enjoy your *Shrimpo* S-3 Pee Wee gas model!

