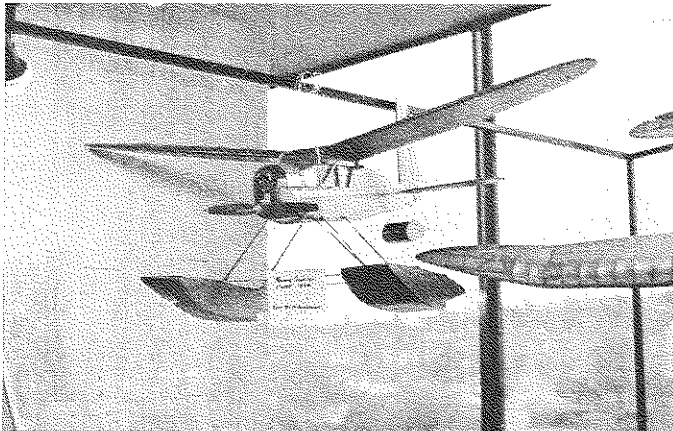




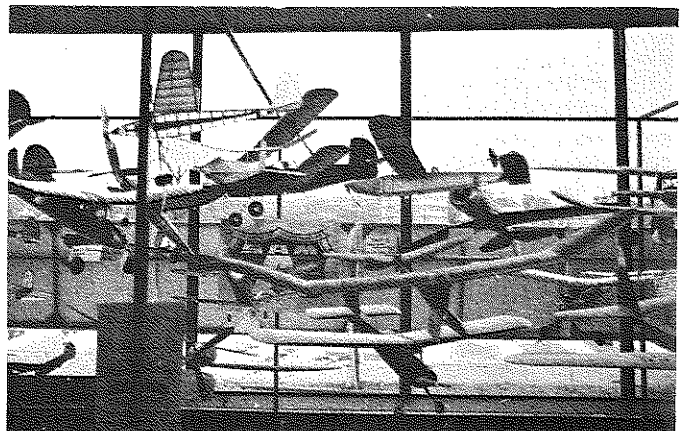
12. Bruce Chandler, SCIF, SAM 3, with a Canadian(Ontario) Wasp powered by a Black Knight 24.



13. George Stephenson of England is real pleased with the performance of his Smith Mulvihill Stick winners.



14. A well-built Bunch Scorpion on display at the Annual English Engineering and Model Show.



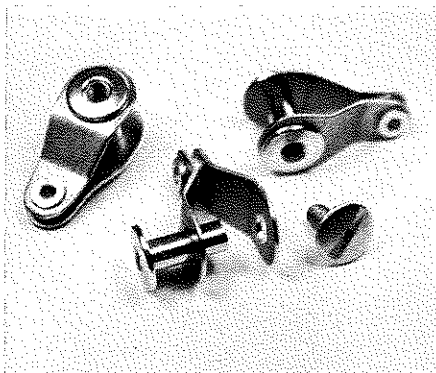
15. A good shot of the typical amount of old timers represented at the English Engineering and Model Show.

this article goes to press.

This would be followed by the two-cylinder version, probably at the end of the year. To bring everyone fully up to date on the engines being sold by Striegler, here is the following list:

Type	Price	Delivery	Comments
Diesels			
Elfin 2.49 cc	\$75.00	30 days	SAM approved
Valkyrie 5.3 cc	\$140.00	60-90 days	SAM approved
Orwick 29	\$129.96	60-90 days	Unique, N/A
Oliver Battleaxe	\$95.00	60-90 days	SAM approved
Ignition			
Mechanair 5.9 cc	\$150.00	60-90 days	SAM approved
Viking 5.3 cc	\$145.00	60-90 days	Beauty! N/A
Orwick 29	\$150.00	In stock	SAM approved
Orwick 32	\$150.00	30-60 days	SAM approved
Orwick 64	\$199.95	In stock	SAM approved
Orwick 73	\$209.95	In stock	SAM approved

Continued on page 95

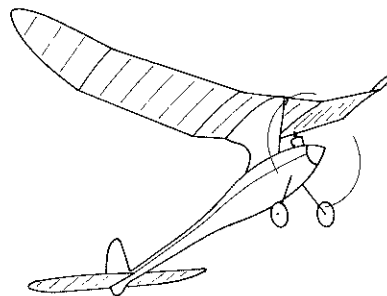


16. Mik's Models are now offering these Maxwell Rubber Motor Winding Stirrups. No rubber man should be without one!

SNUFFY VI

OLD TIMER of the MONTH

Design by: Bob Toft
Text by: Bill Northrop



of 300 sq. in., designed around Ben Shershaw's potent Bantam .19. This original model won the 1941 Minneapolis Model Aero Club Nationals Eliminations with flights of 4 minutes, 12 seconds and 8 minutes, 15 seconds (O.O.S.).

When published in *Air Trails*, the magazine had just recently begun offering full-size plans (for ten cents!), and to be sure of plans sales, carefully eliminated all references to dimensions on the drawings. Dirty pool!

Not to be denied the opportunity to offer this slick design to our readers, we noted the trailing edge stock size for the constant-chord center-section of the wing to be 3/16 x 3/4. Marking this width on the edge of a piece of paper, we compared it with the rib spacing and determined that Bob had selected two inches between

• According to designer Bob Toft, as written in the March, 1942 issue of *Air Trails*, where the complete construction article appeared, the "Snuffy" series was started in 1937, all featuring the pod-and-boom fuselage configuration. "Snuffy II" was built in 1938 and won two firsts and one third in three contests entered. The fourth, fifth, and sixth of the series were built in 1940. Snuffy IV was Atom powered, with 190 square inches wing area. Snuffy V was a large Class C version powered by an Ohlsson 60.

Snuffy VI, our O.T. of the Month, was finished in August 1940 to a Class A size

Continued on page 91



The TENTH ANNUAL MODEL HOBBY TRADE SHOW

INDUSTRY MEMBERS ONLY — FRIDAY, JANUARY 9, 10AM-6PM
GENERAL PUBLIC — SATURDAY, JANUARY 10, 10AM-6PM
GENERAL PUBLIC — SUNDAY, JANUARY 11, 10AM-5PM

Pasadena Center, Pasadena, California

HOME OF THE FAMOUS ROSE PARADE & ROSE BOWL

300 East Green Street (Corner of Green & Marengo) Pasadena, CA 91101

SEE THE LATEST PRODUCTS AND VISIT
WITH MAJOR MANUFACTURERS AND DISTRIBUTORS OF:

- MODEL AIRCRAFT
- MODEL ENGINES
- MODEL BOATS
- RADIO CONTROL SYSTEMS
- MODEL CARS
- MODELING ACCESSORIES

***GIANT RAFFLE!**
***SWAP SHOP!**

BEST in the WEST!

ADMISSION: Adults - \$5.00, under 13 - \$3.00, under 6 - free, if with an adult. Discount tickets worth 50 cents at most hobby shops within 500-mile radius of Pasadena, California.

STATIC DISPLAY COMPETITION IN MANY CATEGORIES

SEE INDOOR R/C AIRCRAFT, BLIMP, BALLOON, CAR, AND BOAT DEMONSTRATIONS

INTERNATIONAL MODELER SHOW OFFICE: P.O. Box 10127, Costa Mesa, CA 92627 Ph: (714) 548-4700 or 645-8830

producing rubber strip was inability to achieve the consistency modelers wanted. And he said, in part, "...the two Italians that are now trying to make Pirelli-type rubber are still trying to find the right combination."

Considering the much larger markets for other rubber products, such as golf balls and garment elastic, rubber manufacturers can scarcely be expected to devote much time or money to the hobby market.

Experiments conducted by Walt Rozelle over a period of three years, and reported in the National Free Flight Society Symposium confirm that rubber continues to vulcanize and improves with age.

The firm manufacturing Champion and FAI rubber is doing a remarkably good job, all things considered. To keep the costs to a minimum and reduce the number of splices per pound, they process 1000-pound rolls of rubber at once in microwave autoclave ovens. The difficulty is in properly cooking such a large mass. With insufficient cooking there is very low energy return; with excessive cooking the batch may be ruined because it breaks easily or won't stretch properly. Even with careful quality control procedures, there are unavoidable variations in individual batches.

Again quoting George Schroedter directly: "This is only part of the story. There are a number of other factors that affect quality, but in general they are being controlled reasonably well. It is the above problem that defies solution."

We think George has rendered a true service to the modeling community in helping to remove some of the mystery from what appears to be the simplest form of power, but what is a chemically complex product, never completely predictable. But then, perhaps that is part of its fascination?

SIGN-OFF TIME

We close with this anonymous quotation supplied by Ken Hamilton: "Most people are in favor of progress. It's the changes they don't like."

Snuffy 6th. . . Continued from page 38

ribs, making a span of 50 inches. Now a scale ruler could be constructed, and to check out our detective work, we calculated the wing area to be approximately 300 square inches, which is what the text says was the area of this model. Whaddya know. . .the mag plans were 1/3 full size!

Examination of the construction text brought out a couple of hints. Make a pattern of the fuselage outline and cut eight stringers from 1/16 sheet, using the same technique as for cutting indoor model ribs, i.e., make one cut along the pattern, then slide pattern down 5/16 inch and make another cut along pattern. . .voila. . .a stringer. Fuse is then built on the half-shell system, adding Former 1 after first half is removed from plan.

When it comes time to cover the fuselage, Bob suggested making a cardboard pattern of one of the eight equal sides,

fold covering material (silkspan) into eight layers, and cut all eight covering sections at once. Neat and fast!

How about this! The text actually describes the balance point as being five inches aft of the wing's leading edge (at the center). Model can be trimmed to fly in either direction. Bob recommended climb and glide in the same direction, to eliminate dip. No down thrust was required. Side thrust applied to get power circle in same direction as best glide circle.

Like it? Try it!

Spark Ignition. Continued from page 41

is a scary merry-go-round to get on.

With a four-stroke, it is difficult to force more fuel through it than the engine can use simply to assist in cooling, as is done with modern two-stroke model engines. Exhaust transfer in a two-stroke takes place before the stroke is complete, and allows raw fuel to be spewed out of the exhaust port, along with the burned, exhausted fuel. This makes a ratio of the fuel a coolant rather than a fuel. Not being able to force large amounts of fuel through a four-stroke engine because there is no exhaust transfer part way through the stroke also contributes to the engine's tendency to overheat. This is true even though it is firing half as often at a given rpm than a two-stroke engine. But on the plus side these are the reasons why a four-stroke engine gets much better fuel economy than