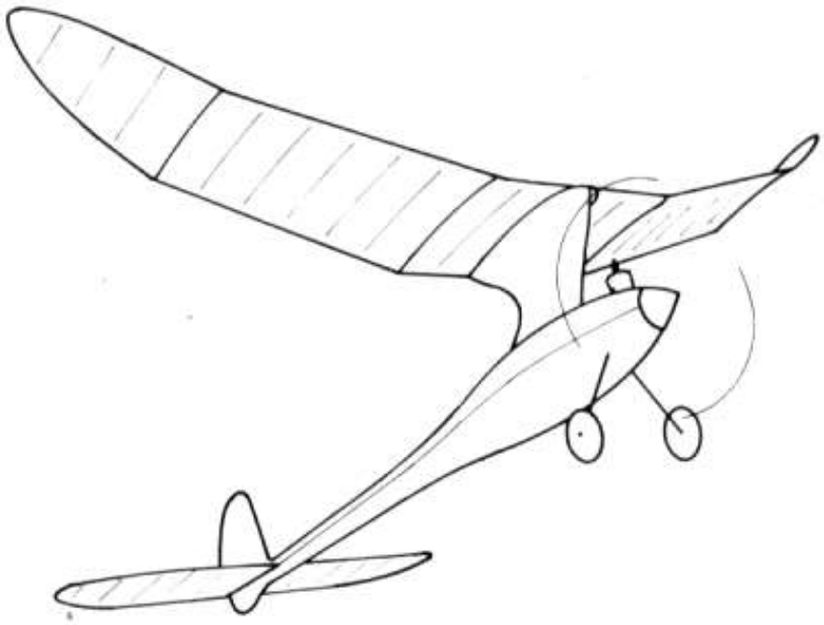
SNUFFY VI



OLD TIMER of the MONTH

Design by: **Bob Toft**
Text by: **Bill Northrop**

• 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 of 300 sq. in., designed around Ben Shereshaw'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

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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 or 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!

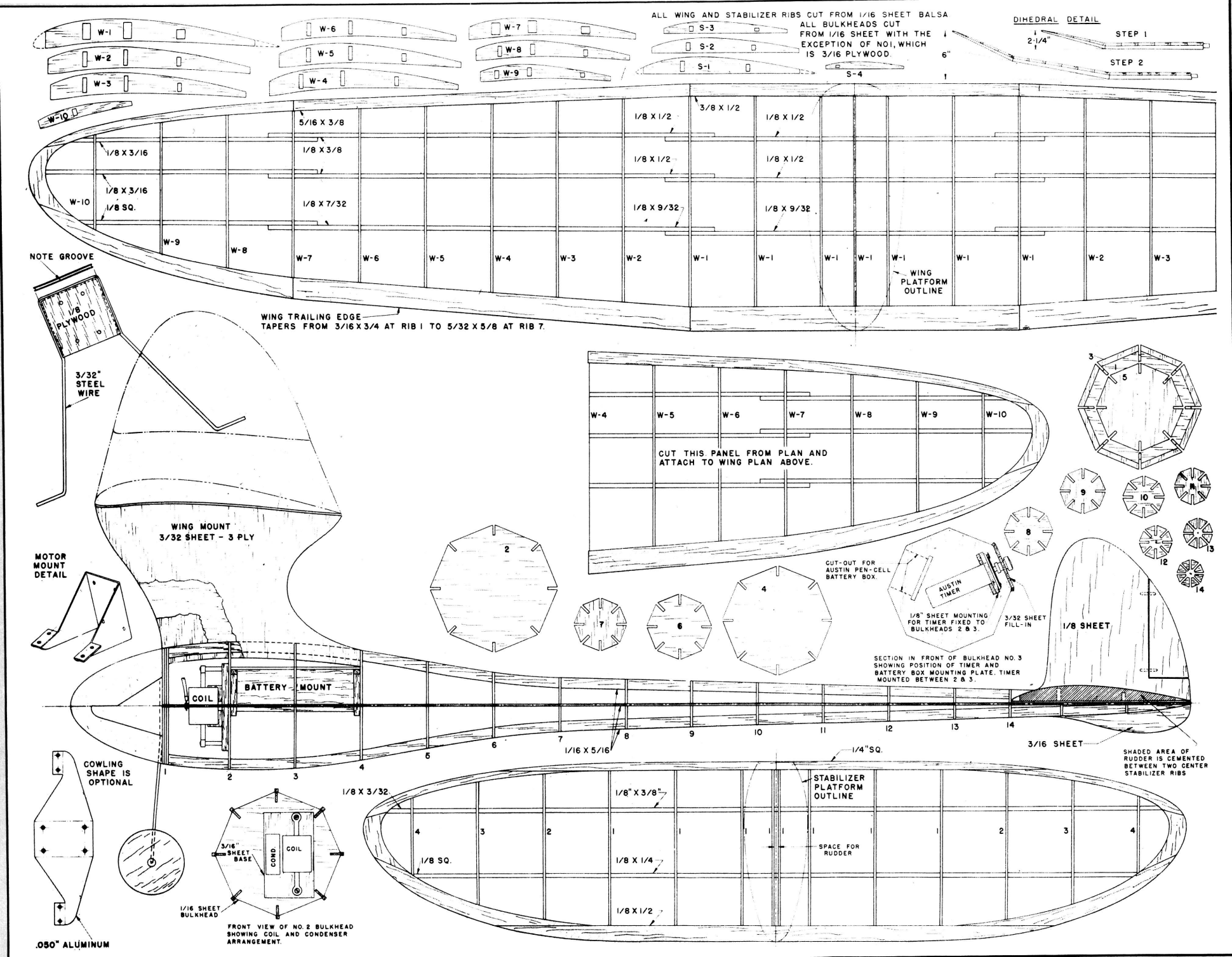
How about this! The text actually describes the balance point as being five inches aft of the wing's leading edge (at the center). Model can be trimmed to fly in either direction. Bob recommended climb and glide in the same direction, to eliminate dip. No down thrust was required. Side thrust applied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


ALL WING AND STABILIZER RIBS CUT FROM 1/16 SHEET BALSA
ALL BULKHEADS CUT FROM 1/16 SHEET WITH THE EXCEPTION OF NO1, WHICH IS 3/16 PLYWOOD.
DIHEDRAL DETAIL
STEP 1
STEP 2
2-1/4"
6"
W-1
W-2
W-3
W-4
W-5
W-6
W-7
W-8
W-9
W-10
S-1
S-2
S-3
S-4
5/16 X 3/8
1/8 X 3/8
1/8 X 3/16
1/8 SQ.
1/8 X 7/32
1/8 X 1/2
3/8 X 1/2
1/8 X 9/32
WING PLATFORM OUTLINE
WING TRAILING EDGE TAPERS FROM 3/16 X 3/4 AT RIB 1 TO 5/32 X 5/8 AT RIB 7.
NOTE GROOVE
1/8 PLYWOOD
3/32" STEEL WIRE
CUT THIS PANEL FROM PLAN AND ATTACH TO WING PLAN ABOVE.
WING MOUNT 3/32 SHEET - 3 PLY
MOTOR MOUNT DETAIL
CUT-OUT FOR AUSTIN PEN-CELL BATTERY BOX.
AUSTIN TIMER
1/8" SHEET MOUNTING FOR TIMER FIXED TO BULKHEADS 2 & 3.
3/32 SHEET FILL-IN
SECTION IN FRONT OF BULKHEAD NO. 3 SHOWING POSITION OF TIMER AND BATTERY BOX MOUNTING PLATE. TIMER MOUNTED BETWEEN 2 & 3.
1/8 SHEET
COIL
BATTERY MOUNT
1/16 X 5/16
3/16 SHEET
SHADED AREA OF RUDDER IS CEMENTED BETWEEN TWO CENTER STABILIZER RIBS
COWLING SHAPE IS OPTIONAL
.050" ALUMINUM
3/16" SHEET BASE
COND
COIL
1/16 SHEET BULKHEAD
FRONT VIEW OF NO. 2 BULKHEAD SHOWING COIL AND CONDENSER ARRANGEMENT.
1/4"SQ.
1/8 X 3/32
1/8" X 3/8"
STABILIZER PLATFORM OUTLINE
1/8 SQ.
1/8 X 1/4
1/8 X 1/2
SPACE FOR RUDDER