

1/8" SPRUCE OR BASS SAAR BRACES

1/8" SQ. L.E.

1/16" X 1/4"

1/32" X 3/32" DIAGONALS - BOTTOM ONLY

1/16" X 3/16"

1/8" SHEET TIPS

3/32" SHEET - BOTTOM ONLY

1/32" SHEET - TOP ONLY

1/16" X 3/16" TAPER TO 1/16" SQ. AT TIPS

1/16" X 9/16" T.E.

3/32" SQ. L.E.

1/16" X 3/16"

1/8" SHEET TIPS

STABILIZER RIBS - 1/32" SH.

NOTE: PYLON IS SHEETED WITH 1/32" SHEET (NOT SHOWN).

1/32" X 3/32" - BOTTOM ONLY

1/16" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

1/8" SH.

1/32" X 1/8" TAPER TO 1/16" SQ. AT TIPS

1/32" X 5/16" - BASSWOOD

2 1/4"

DIHEDRAL DETAILS - NOT TO SCALE

4/8"

3/4"

FALSE RIB OUTLINE - 1/32" SH., IS REQ'D

MAIN WING RIBS - 1/4" OUT OF 1/32" SH.

4 OUT OF 1/16" SH.

TIP RIBS - 2 OUT OF 1/32" SH.

1

2

3

4

5

3/32" X 1" X 2" BASSWOOD WING MT. SCRAP Balsa FILL-IN

1/4" Δ BRACES

1/8" PLY FIREWALL

B 3/32" SH.

C 3/32" SH.

3/64" MAX. STRUT BIND & EPOXY TO FIREWALL

1/8" DIA. STREAMLINE WHEEL

0 1 2 3 inches 4 5 6

MODEL BUILDER / magazine

1932 D.C. Div. Dept. Arts, Williamsport, PA

Plan No: J273-07.

020

MINI-CHEPTER

SCALED 75% ORIGINAL 1941

COMET INTERCEPTOR

DESIGNED BY CARL GOLDBERG

DRAWN BY W. CAIN

TRACED BY PAUL BERHARDT

FULL SIZE PLANS AVAILABLE -- SEE PAGE 72



Old Time Eagles President, Woody Woodman, starts engine on Play-Boy Sr. for Bob Shaw, with transmitter. Woody will CD SAM Nats.



Cox .010 powered Micro-Models "Cavalier" built by Daniel Walton. Famous original design by Ben Shereshaw had 9 foot span.



Bob Oslan and his good looking "Old Ruler" design. New ship built to old rules.

contest model.

Anyway, back to the contest. Dunno who won, but in a fun situation like this, who cares?? The writer has nothing but high praise for this type of meet. Does it ever work wonders on the home front!

CONTESTS

Old timer contests have been coming so thick and fast lately, the writer has been remiss in attending any of the late ones. Hate to make this column sound like a gripe session, but the North-South meet did suffer heavily from lack of publicity. The idea of this meet is simply great, with the Yankees and Rebels having at it. Unfortunately, notices of the meet date did not come out until the week of the contest. Certainly didn't leave much time to plan for attendance.

Continued on page 68



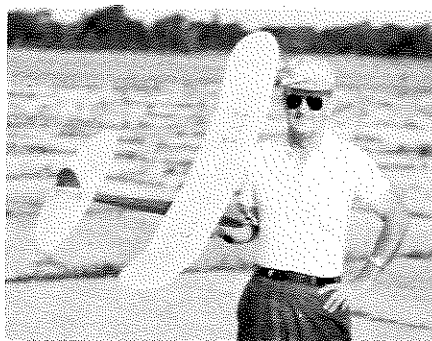
Red Barrows with his OS .15 powered Megow Quaker Flash.

GOLDBERG INTERCEPTOR .020 REPLICAS

Interceptors come in all sizes with Wayne Cain, ranging from Cox .020 power, to .049, to .09 engines. Wayne has been coming to the Nationals for years with his assortment of Interceptors. In short, Cain likes that Carl Goldberg design! Might also mention that Cain is no Johnny-come-lately to the game, having started modeling back in the thirties. He has had a rather varied career in modeling all the way from hobby dealer to salesman. His interest in modeling has never quite subsided.

In reviewing the various models Cain has, the most surprising thing of all is the excellent flying qualities in each model and the close similarity of performance. Matter of fact, the outstanding flight characteristics of the Interceptors led to some rather hilarious high-lights.

Three years ago, Cain was quite taken by the consistency of his models, going so far as to say his model could attain three minute flights all day. The writer, who has seen many a "three minute" model, quickly offered to buy Cain a drink for every official three minute registered, and vice versa when the model failed to produce the desired result.



Wayne Cain at the Nats with a .049 version of the Interceptor. It's competitive with today's.

The writer had to admit it was with considerable trepidation that he placed the bet as he had viewed the unofficial test flights. But wouldn't you know it, just as soon as the contest got going, the first flight was a bummer. A little crest-fallen, Wayne offered the opinion that that flight was a fluke; something that just doesn't happen under normal conditions. On the second flight, panic really set in as the model now hit a granddaddy of a "downer." Wayne was down two drinks. Finally, when all seemed lost, the model finally attained one good "max" flight.

Next year, Cain was really laying in

Redesign by Wayne Cain
Text by John Pond

the weeds with careful attention to lightness and a considerable amount of flying time on the model. The unsuspecting writer was led to the slaughter as three straight max flights resulted! Eating crow is rough, as the feathers stick in your teeth!

Last year, Cain again confronted the writer with the same offer, but a bad case of gun-shyitis had set in. Bum hunch, as Cain had an abominable streak of luck. Starting by dorking his full size Interceptor, he suffered short engine runs, bad lift, and finally getting run over by a car (*Him, or the plane!? wcn*). It was indeed Bad day at Black Rock.

In summary, the wagering ended in a Mexican standoff as neither participant offered to bet this year. The Colonel should hear about those king sized Chickens! What will 1974 bring? Tune in for the next exciting adventure!

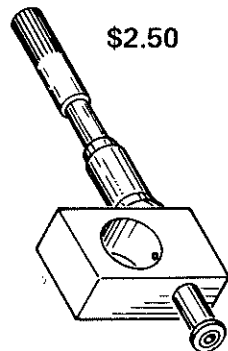
In discussing the model presented this month, no description of how to build it will be given, anyone contemplating this project should have built at least one Old Timer. If you have problems, let the writer know, we'll straighten you out!

Continued on page 66

FOR SERIOUS 1/2A FLYERS ONLY

Here are two items designed to keep your Cox Tee Dee .049 (or .051) in top running condition. Both have been thoroughly field tested and used by modelers to set several National AMA Records.

FRONT NEEDLE VALVE ASSEMBLY



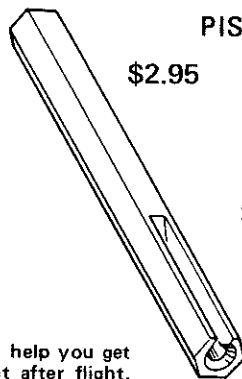
\$2.50

FEATURES:

1. 128 threads per inch for finer adjustments.
2. Nylon seal over threads and needle valve body which keeps air from sucking down the thread area. Prevents "false" needle settings.

This custom needle valve assembly will help you get more consistent engine runs . . . flight after flight.

PISTON/ROD REST TOOL



\$2.95

BENEFITS:

1. Assures peak engine performance.
2. Extends engine life.
3. Eliminates the possibility of breaking crankshaft when engine is run at high RPM.

Tool made from hardened steel.

SEND 10 CENTS FOR LIST OF OTHER 1/2A ITEMS.

DEALER INQUIRIES INVITED

KIRN-KRAFT • P.O. BOX 224 • ANAHEIM, CALIFORNIA 92805

and right is right. With a butterfly tail the movement is just opposite of what it would be if you pictured the ruddervators as ailerons. (If you're still not sure, double check Le Gray's article in the June 1972 issue of *MODEL BUILDER*. wcn) Give the Quasoar II a few good hard hand launches. Don't be afraid to really throw it. After you've gone through the initial testing, hook it to the towline, because you're going to need some altitude to find out anything else.

After the towline has dropped away, start to get the feel of it. Let it go hands off, see what it's doing, and correct accordingly. You'll find that the butterfly tail gives you a very positive turn. Also, don't let the speed get too slow, get the hang of flying a little faster than usual.

The spoilers/air brakes I am sure you'll find very valuable, and with some practice, you'll have the landings down to a science. Use the spoilers as you would throttle on a power plane. Don't jerk them all the way out and then retract them. Instead, gradually extend them as you need them and co-ordinate the use of elevator right along with the spoilers.

Well, there you have it. I hope I have made the construction clear to you. If not, contact me through *MODEL BUILDER*.

So, in the interest of soaring, I wish to leave you with the immortal words of Jonathon Livingston Seagull, who, after completing 287 consecutive loops, thus breaking his old record of 285, turned to his good friend Maynard Gull and said, "Squawk!" . . . because everybody knows seagulls can't talk.

Pull-Q Continued from page 43 this method, only a minimal amount of ballast will be necessary to trim the completed ship. Note that the pylon

extends to the keel in the body, and wood screws that secure the towhook penetrate the pylon. This directs towing loads to the pylon, rather than the fuselage, and allows a lighter body without sacrificing strength at this point

The original model was covered with light-weight Japanese tissue. We used an old trick with which may bear repeating here; use nitrate-based dope to prepare the frame work for covering with a minimum two coats on the underside of the wing ribs, and for applying the tissue. After careful water-shrinking, use *butyrate* dope for the finish coats, and the covering will not pull away from the underside of the wing ribs.

FLYING

Contest-tuning any towline glider is a long involved process, so stay with the machine and be certain that it is performing as well as possible.

The original Pull-Q is set up for "Solo" flying. The hook is located farther back than would be required for normal two-man flight, so the model will 'kite' up on a one-man launch from the reel. As a result, the model will tow docilely until all line is out. Thermal-searching with all line out is difficult because the ship tends to release too soon, so we hold back about twenty feet of towline. When the glider which normally stays at about eighty degrees in dead air, gets into lift and comes up directly overhead we let out the last of the towline before releasing it. This way, small 'bumps' won't disconnect it.

Make up a separate towline for your A/1's. The extra five or so feet allowed, (A/1 towlines are measured without tension applied), will many times spell the difference between a max and a short flight in marginal conditions.

The model is stable in both dead

and turbulent air, and the flexing-wing construction makes it pretty much goof-proof in windy weather. We hope you'll enjoy the success the machine is capable of achieving.

Interceptor . . . Continued from page 47

Historically, Goldberg first played around with this design in 1940 following on the heels of his outstanding success with the Zipper. The original development featured a much higher pylon that was finally settled upon in the production version. The design did undergo some changes in the post-war series, as Goldberg tried cutting the rudder away to the point where the model would do a half loop with a roll/out on the top; in short, a series of immelmans!

The same modification was made to his large size Sailplane, but in the long run, it was found the original rudder gave more reliability.

The kit was produced after it made a sensational debut at the Mississippi Valley Annual. Because of its size and ease of construction, Interceptors quickly dominated the Class A and Class B events. When Ray Arden came out with his famous Arden .19 after WW II, this, combined with an Interceptor, was unbeatable! Today, using Cox .049 engines, the boys can take this design using a glow engine with the short motor run handicap and still win handily. You should try one yourself!

Choppers Continued from page 15

easy, just like on the ground, and even rolling lift-offs created no "suction effect" as I had anticipated (from flying full size seaplanes). And the landings . . . wow! I never dreamed they could be so velvet-smooth, with the pontoons gently settling into the water!

Flight characteristics seemed to be about the same except that control