

RCMW-FSP

October 2017



GARRETT
MILLER
1982

IN THIS ISSUE
Struck SEA CAT
Saftig MINI-ZILCH
Bonner SMOG HOG
Pelanek DRIFTWOOD
Comet Sr. DIPPER
SHEIK Team Racer

Cover From MAN January 1983

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ON THE COVER

**Artist Garrett Miller provided this painting of the
1914 Etrich-Taube for the
January 1983 issue of Model Airplane News**

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Roland Friestad
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USA

For the Model Bulder and Flyer - October 2017 Issue



Full
Size
Plans



Well, the weather has finally cooled off a bit in this part of the world, which is very much appreciated because it's now comfortable to work in the garage workshop. We have a wide variety of plans including Radio Control Free Flight Sport, UC Stunt, Rubber Scale, UC Team Racer and a Radio Controlled Amphibian.

Also included in our monthly download of a full issue of a model magazine is a very rare find. All old time Air Trails readers are familiar with Bill Barnes and his SNORTER and other aircraft from the adventure stories. But how many know that there was also a Bill Barnes Comic Book? - Now officially there was only a single issue published in 1940, but through the assistance of Mike Russell, who specializes in researching old magazines known as "pulp", we have a copy of the only issue ever published for you to download. Be the first kid on your block to have one!!

The issue was in pretty bad shape but it's all there and it contains several comic book stories, a fairly lengthy Bill Barnes story and plans for three simple model airplanes.

There are also some building hints by William Winter from 1937 issues of Air Trails. As everyone knows, he was the long-time editor of several different model airplane magazines.

Also included is a Do-It-Yourself STOOGIE for U-Control flyers who can't find someone to help launch their models or who just prefer to fly alone.

And for the woodcarvers among us we include helpful ideas about carving your own pilot heads for that special model sitting on your bench just waiting for the finishing touch.

We have links to two videos for you this month, one modern and one pretty old. Who knew that AMF, the bowling machine people were also in the ready-to-fly model business, at least for a little while. We have a link to a blurry TV ad showing a U/C P-26 and a tether Race Car, both with throttle controls using a separate line. They also had a ground effect model that would run on land or water. All three were powered by WEN-MAC engines.

In a more recent vein, the SPACE X company funded by one of the California Silicon Valley billionaires has been having some success with their concept of a reusable rocket. But that sort of project also has some failures and growing pains. SPACE X also has enough of a sense of humor, (rather rare these days) to provide a compendium of clips of rather spectacular failures. Just like crashing model airplanes but much more expensive.

Keep 'em Flying,
Roland Friestad, Editor

SEA CAT

by HENRY STRUCK

Editor's Note - This beautiful amphibian by Struck appeared in the August 1954 issue of Model Airplane news and has always been on my own personal "I'd like to build that some day" list. The full size plans included in this issue would be your first step if you feel the same.

If you live near water you do not have a flying site problem. This RC or free flight amphib is a beautiful flier.

Are you looking for a mile square, level flying site? Well, there are plenty of them around, and no permits are required for their use. Of course, there are a few minor discomforts you must endure, such as spending days out in the warm sun away from crowds, poison ivy covered trees, rocky fields and housing developments.

All of which is just one way of saying that you haven't really enjoyed model flying until you have tried flying boats. To participate in this ultimate in sport, we present the Sea Cat, developed through the years. The original

configuration of hull and engine in pylon mounted wing was built and flown 'way back in 1941, with its water characteristics revealing the ignorance of its designer. However, in the air, it promised much. When in 1945 the NACA planing tail hull designs were developed, the basis of a really high performance flying boat became available.

These long, narrow, deep draft hulls, besides offering greatly reduced air drag, maintain an almost constant trim angle throughout the take-off run, eliminating the necessity of rocking up on the step.

Further, with the long tail of the hull in the water until sufficient air speed for control is reached, the tendency to yaw off course is reduced, and with two point planing, porpoising is eliminated.

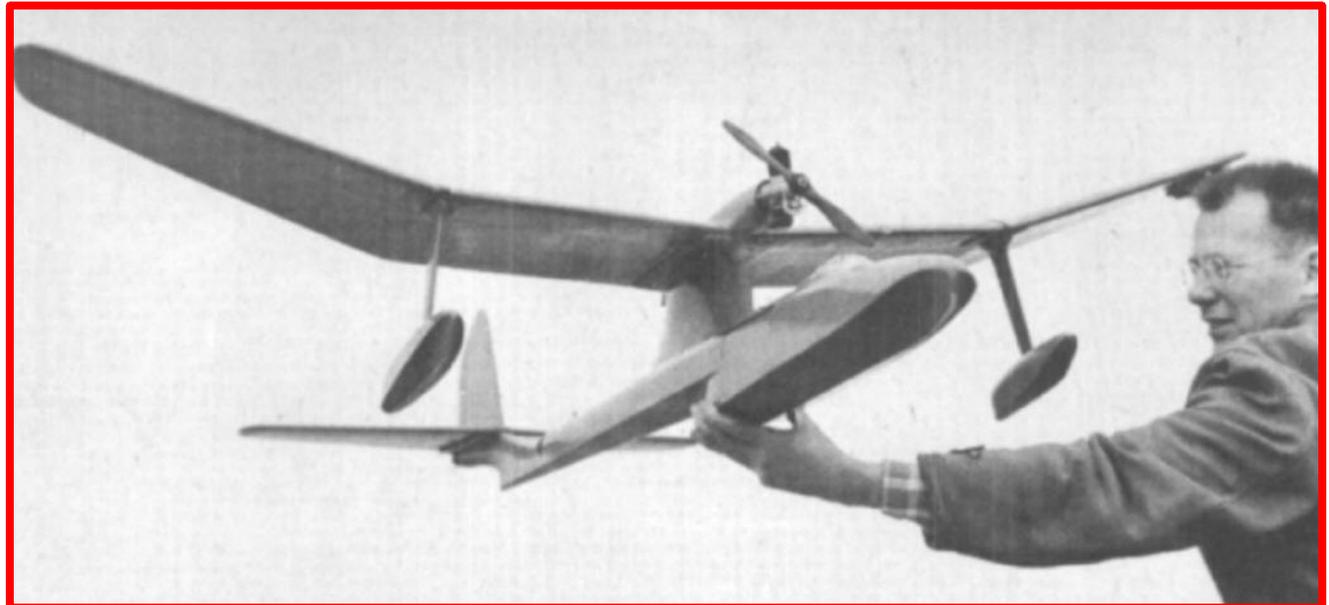
With these fine hull designs available, the next real problem was lateral stability on the water. Sponsons projecting from the hull seemed

to be the immediate answer but their small righting moment necessitated extreme large size. An added disadvantage was their rigid attachment to the hull.

So we came to the old reliable "tip float," which was not practical at the tip because of the large amount of dihedral a free flight flying boat would require. The compromise arrived at on the Sea Cat is to use very little center dihedral.

The rubber shock-mounted method developed makes the float assemblies virtually unbreakable and also permits them to be removed easily for land plane flying.

When a bid came from the sponsors of the Plymouth Model Plane Contests to design a plane to fly from the U.S. to Canada to advertise their annual meet, one more design change was necessary - to install radio gear! This had to be easily accessible and sealed from the water.



Our first attempt wasn't. When the ship failed to take off on its first flight, salt water poured in through the carefully fitted hatch and instantly ruined one RC installation. A foam rubber gasket was put around the hatch and since then no ducking has harmed the RC gear.

On the day of the International flight the wind, of course, swept through from Canada. Late in the day the attempt had to be made. To make certain the engine wouldn't cut out part way across while bucking the wind, we filled the pressure tank to capacity.

In about four minutes the ship was across the water, and over the landing spot. But the engine was still running, the ship climbing, and just barely holding against the strong wind! Ten minutes later, after several spin-downs and consequent loss of headway, the engine stopped, with the model far inland over Canada.

After many tense minutes we brought the speck back into plain view and seemed to be coming in for a successful landing in a small cove.

It was not to be, however, for we ran out of altitude and smacked into a large tree near the shore. But the first International radio controlled flight was accomplished.

Since then the Sea Cat has been flown many times, both from the water and land, in free flight and under radio control. Landings on grassy fields revealed an unexpected benefit as the ship slides smoothly into a landing without any of the usual nosing-over tendencies.

In the air, turns can be made easily with little tendency to spiral dive even with rudder held over for a complete turn, while stall recovery is extremely gentle.

These smooth handling characteristics have enabled us to win several places in competition against more conventional contest type radio control craft.

Construction is quite simple considering the advanced design of the model. Cut out the hull former halves of 1/8 sheet and cement at center

line, reinforcing with 1/4 sq. stiffeners. Note the 1/2 dia. holes in formers 5 to 10 to accommodate paper tube escapement rubber guide.

Cut fuselage sides from 1/8 sheet and mark position of formers. Attach bottom planks, moistening outside of forward planks to form sheets into concave section at bow. Bevel edges of top and side planks and add 1/4 corner plank. Reinforce side of tail boom with sheet applied with grain diagonal.

Cut upper and lower tail boom sections from 9/16 thick balsa. Join sections with 3/16 x 1/4 strips to form passageway for control rod. Fit tail boom assembly in hull.

Cement balsa blocks to nose and shape to blend with contours of hull. In sanding down the hull keep corners of bottom sharp to induce water to break from surfaces while ship is planing.

Shape the hatches of soft balsa, 1/2 thick. Fit hatches carefully, beveling edges to provide a good seat on gaskets.

The wing and tail are of rugged construction. Assemble the wing panels on the plan. Join the tip panels to the inboard panels. Note that filler blocks are fitted between the spars at dihedral break to keep wing watertight after drilling for tip float attachment rubber. Join the wing halves at center with gussets, blocking up tips to the correct dihedral while drying.

Cut firewall from 3/16 plywood and drill for engine mounting bolts. Insert bolts from rear of firewall and anchor with bent pins soldered into heads of screws.



Shape nacelle from medium balsa block and fit between center ribs. Cement firewall to front of nacelle and reinforce with fabric strip doped in place. Fill in bottom of wing with sheet balsa at outboard dihedral break to support tip float assembly.

Drill 1/4 hole through spar for float attachment rubber bands. Drill hole in leading edge and install 1/8 dowel to receive bands after they have been pulled through holes in spar. The stabilizer is similar in construction to the wing.

Assemble fin and hinge trim tab with soft wire. Hinge the rudder control tab and check for free operation. Cement fin assembly to stabilizer.

Assemble the tip floats, joining sides with formers as in the construction of the hull. Add bottom and top planks, soft balsa blocks to each end, and shape to finished contours.

Cut through top and insert struts of hard balsa. Fit platforms to upper ends of struts to match dihedral angle reinforcing joint with corner blocks. Apply several coats of cement and fit fillets of 1/16 sheet balsa.

Experience proved this rugged attachment to be necessary, with extremely high loads imposed on the strut root in spite of rubber shock mounting.

Sand the entire framework to remove all bumps that may show through the covering. Apply a coat of dope to the entire structure to prime the surfaces. Cover with silk, applied wet, to all surfaces, including those of sheet balsa. Brush on at least three coats of butyrate dope, to be sure the surfaces are completely sealed.

Hardwood spray strips may be cemented to the corners of the hull to provide the sharp chines essential to break the water cleanly from the bottom. These also protect the hull and can be easily replaced if damaged.

Install the forward control rod bearing in the former in escapement compartment. Form forward end of control rod and spring through passageway in tail boom. Add rear bearing and form crank in end of shaft. Mount escapement on 1/8 plywood, reinforcing with corner blocks.

Assemble receiver chassis and mount components. Lash hatches in place with rubber bands and test for leaks by submerging hull, increasing tension of bands if any water should find its way into the hull.

Drop the escapement rubber through the tube in the hull and install receiver chassis in the radio compartment.

Attach the stabilizer with rubber bands pulled through hole in boom and hooked at rear on dowel. Make a wire hook to facilitate pulling rubber bands through holes in nacelle and tail boom.

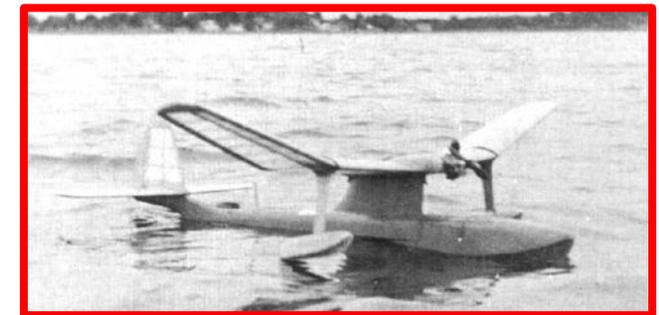
In flying the Sea Cat a few simple rules of procedure should be observed. Although the ship can be flown from the shore, a small power boat is desirable, since then the wind need not be "on shore" for take-offs and, should trouble develop in the equipment, the model can be quickly recovered.

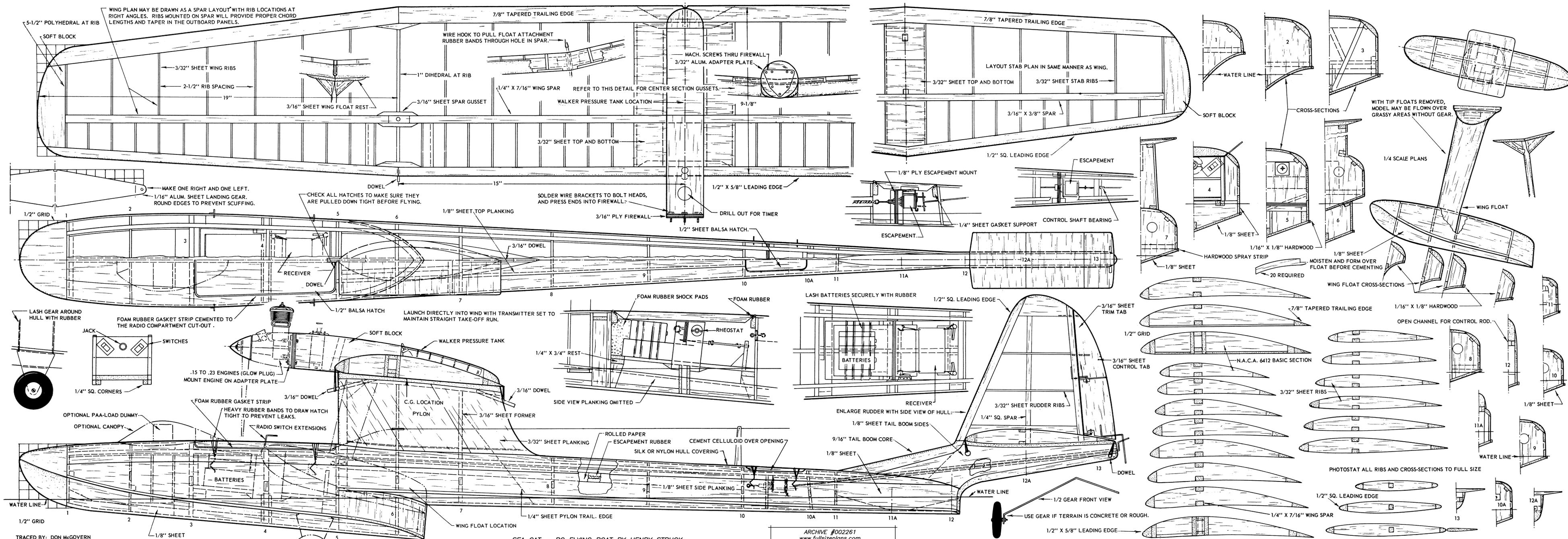
For takeoff, the ship should be launched directly into the wind, with the transmitter handy to give a quick beep if the ship should veer from a straight course in windy weather.

The weight of the model necessitates about a 50-ft. run to become airborne, affording a most realistic sight. The ship has taken off many times as a free flight, unassisted by radio control. Should the model seem reluctant to leave the water, slip a shim under the trailing edge of the stabilizer to increase the negative incidence.

The original ship, finished with colored butyrate dope, weighed 64 oz. For contest work, from hard-surfaced runways, a sheet aluminum landing gear strapped to the hull affords beautiful take-offs.

For the experimentally inclined modeler, we feel the basic configuration of the Sea Cat, high thrustline, low center of resistance and moderate polyhedral, can be developed into exceptionally performing free flight as well as radio control designs operating from land or water.





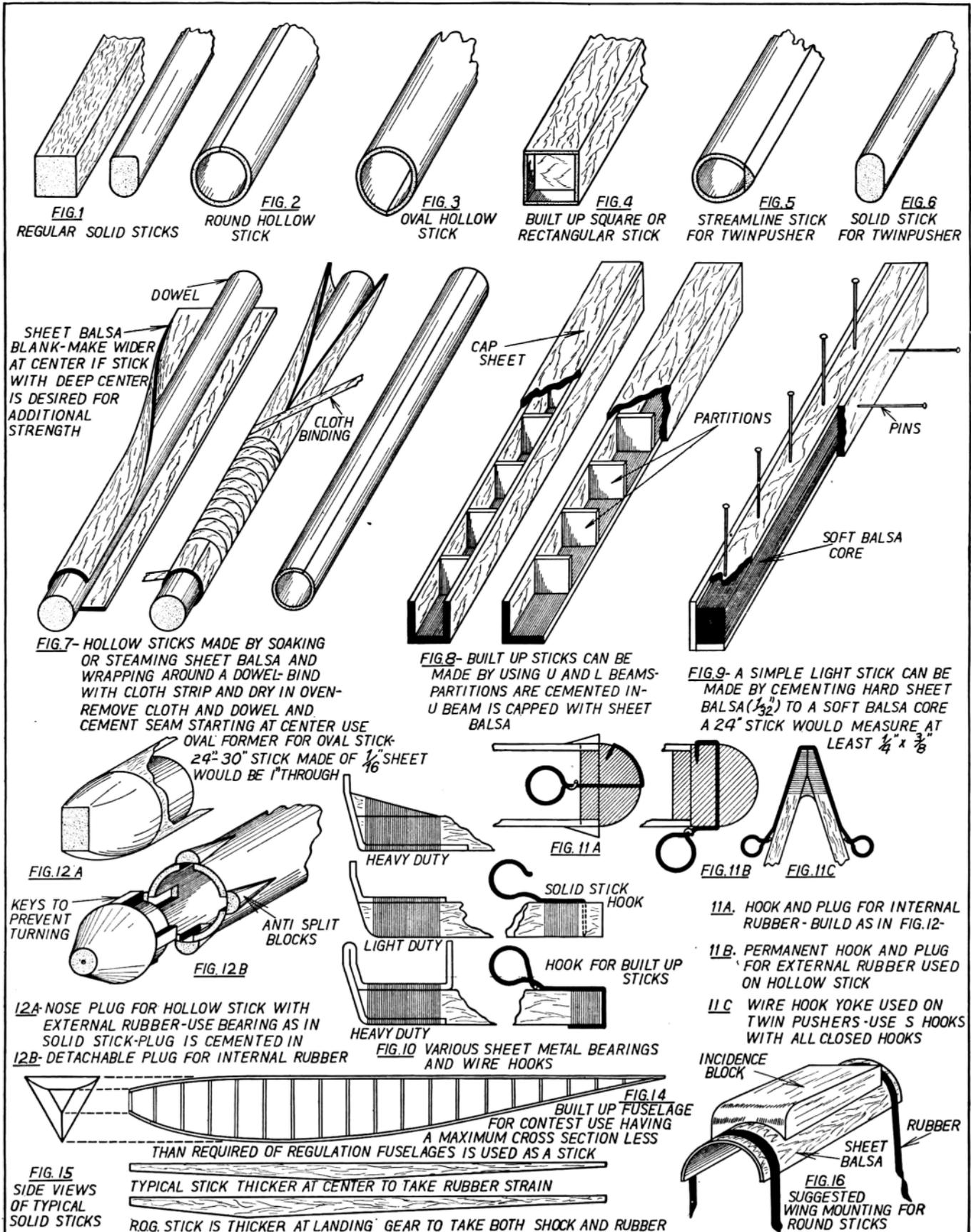
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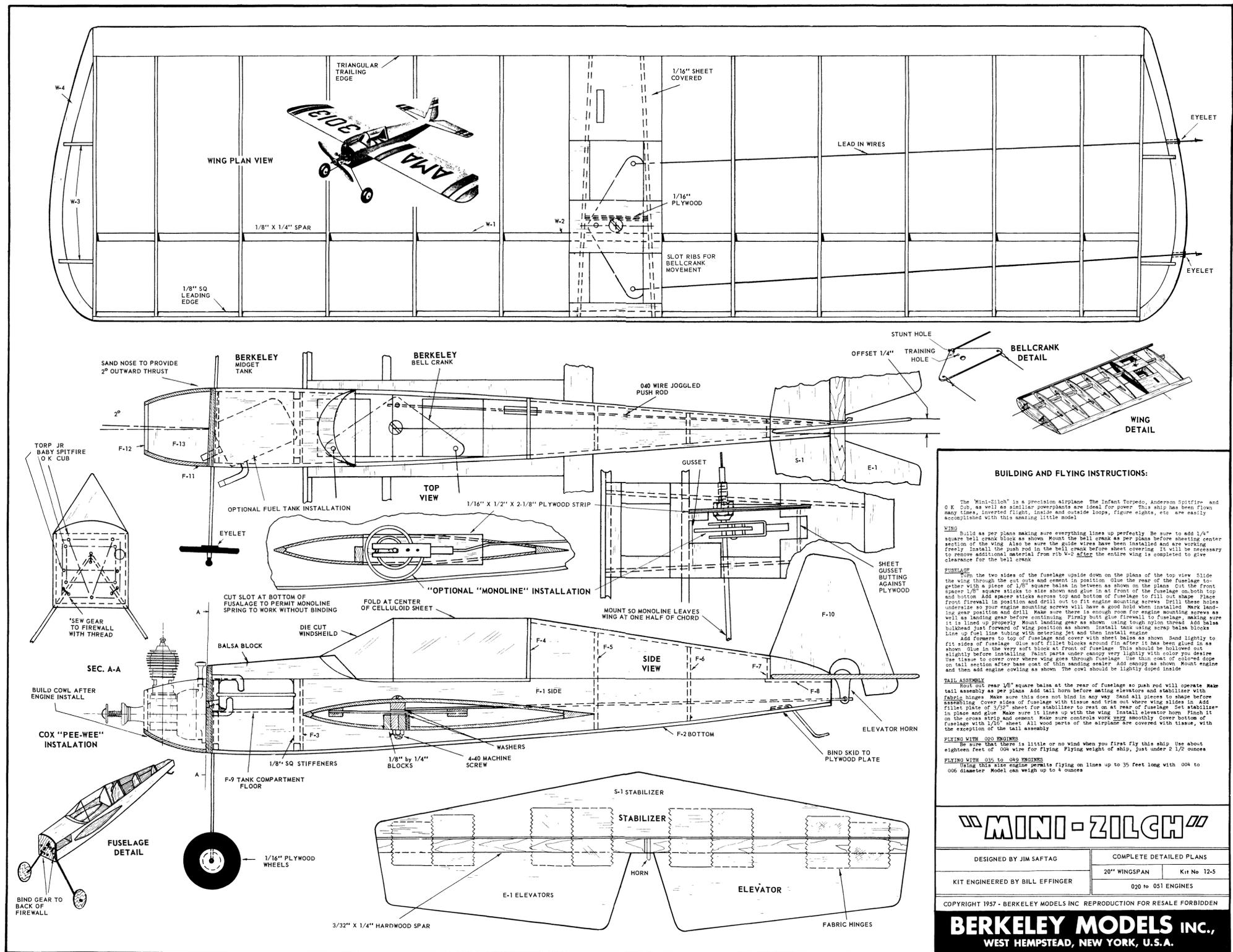
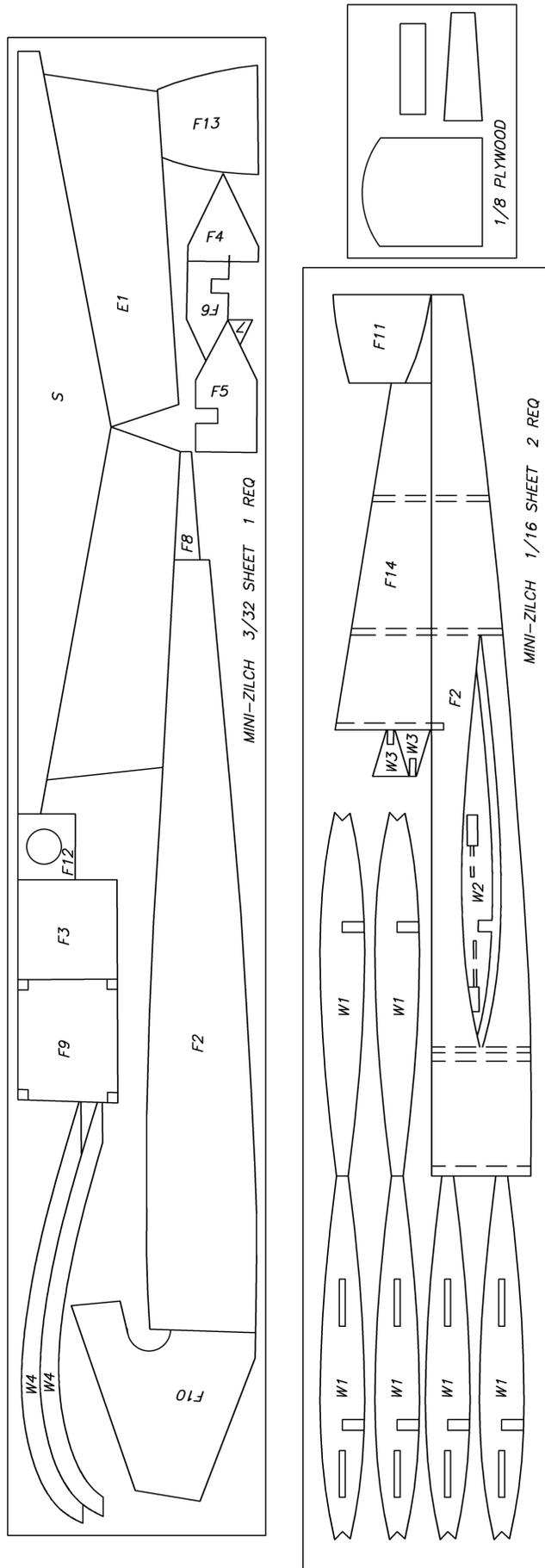
SEA CAT - RC FLYING BOAT BY HENRY STRUCK
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Builder's Guide

Sticks
by William Winter





BUILDING AND FLYING INSTRUCTIONS:

The "Mini-Zilch" is a precision airplane. The Infant Torpedo, Anderson Spitfire, and O.K. Cub, as well as similar powerplants are ideal for power. This ship has been flown many times, inverted flight, inside and outside loops, figure eights, etc. are easily accomplished with this amazing little model.

WING: Build as per plans making sure everything lines up perfectly. Be sure to add 1/4" square bell crank block as shown. Mount the bell crank as per plans before shearing center section of the wing. Also be sure the guide wires have been installed and are working freely. Install the push rod in the bell crank before sheet covering. It will be necessary to remove additional material from rib W-2 after the entire wing is completed to give clearance for the bell crank.

FUSELAGE: Turn the two sides of the fuselage upside down on the plans of the top view. Slide the wing through the cut outs and cement in position. Glue the rear of the fuselage together with a piece of 1/8" square balsa in between as shown on the plans. Cut the front spacer 1/8" square sticks to size shown and glue in at front of the fuselage on both top and bottom. Add spacer sticks across top and bottom of fuselage to fill out shape. Place front firewall in position and drill out to fit engine mounting screws. Drill these holes underside so your engine mounting screws will have a good hold when installed. Mark landing gear position and drill. Make sure there is enough room for engine mounting screws as well as landing gear before continuing. Firmly butt glue firewall to fuselage, making sure it is lined up properly. Mount landing gear as shown using tough nylon thread. Add balsa bulkhead just forward of wing position as shown. Install balsa using screw balsa blocks. Line up fuel line tubing with entering jet and then install engine.

TAIL ASSEMBLY: Roll out rear 1/8" square balsa at the rear of fuselage so push rod will operate. Make tail assembly as per plans. Add tail horn before making elevators and stabilizer with fabric hinges. Make sure this does not bind in any way. Sand all pieces to shape before assembling. Cover sides of fuselage with tissue and trim out where wing slides in. Add riler plate of 1/16" sheet for stabilizer to rest on at rear of fuselage. Get stabilizer in place and glue. Make sure it lines up with the wing. Install elevator horn. Pinch it on the cross strip and cement. Make sure controls work very smoothly. Cover bottom of fuselage with 1/16" sheet. All wood parts of the airplane are covered with tissue, with the exception of the tail assembly.

FLYING WITH 020 ENGINES: Be sure that there is little or no wind when you first fly this ship, the about eighteen feet of 008 wire for flying. Flying weight of ship, just under 2 1/2 ounces.

FLYING WITH 015 to 030 ENGINES: Using this size engine permits flying on lines up to 35 feet long with 008 to 006 diameter. Model can weigh up to 4 ounces.

MINI-ZILCH

DESIGNED BY JIM SAFTAG COMPLETE DETAILED PLANS

KIT ENGINEERED BY BILL EFFINGER 20" WINGSPAN Kit No. 12-5

020 to 031 ENGINES

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Builder's Guide

Fuselages
by William Winter

A REGULAR FUSELAGE

B KEEL TYPE

C MASTER STRINGER

D SMALL STRINGERS

E SLIDE OVER TYPE

F HOLLOW SHELL

REGULAR KEEL MASTER STRINGERS SLIDE OVER FAIRED BULKHEAD HOLLOW SHELL SEMI FAIRED

FUSELAGE TYPES TO OBTAIN PATTERNS OF KEEL OR MASTER STRINGER TRACE FUSELAGE OUTLINE ON SHEET BALSA

REGULAR 1. LAY OUT BOTH SIDES ON BOARD - WHEN DRY SEPARATE WITH DOUBLE EDGE BLADE 2. CEMENT WIDEST CROSS PIECES FIRST 3. DRAW ENDS IN POSITION 4. ADD REMAINING CROSS PIECES

STRINGER CONSTRUCTION (D)

(F) (1) CARVE BLOCK AND CUT IN HALF (2) HOLLOW EACH HALF UNTIL ELECTRIC LIGHT SHOWS THROUGH - WORK ON CLOTH TO PROTECT WOOD (3) JOIN THE HALVES WITH CEMENT

(1) CEMENT WIDEST BULKHEADS IN PLACE FIRST (2) DRAW ENDS IN AND ADD OTHER BULKHEADS

BOTH KEEL AND MASTER STRINGER TYPES ARE FINISHED AS IN STEP 3

ALTERNATE METHOD (D) BUILD TWO HALVES ON THE BENCH - MAKE ONE LEFT AND ONE RIGHT TO MATCH

CUT AWAY VIEW OF A BALSA FUSELAGE

INTERNAL LANDING GR. BRACE

OTHER BALSA TYPES HAVE A VARIETY OF CROSS SECTIONS - USE A FEW HEAVY BULKHEADS

A SHEET BALSA PATTERN WHEN WET AND BENT AROUND FORMER MAKES SIMPLE WOOD FUSELAGE - USE A FEW HEAVY BULKHEADS

(3) ADD REMAINING STRINGERS

BOARD INVERTED FRAME

INVERT TRIANGULAR FUSELAGE TO BUILD

SHAPING BLOCK

ONE CONTEST TYPE HAS A RECTANGULAR FUSELAGE AT FRONT CHANGING TO A TRIANGLE AT REAR - BUILD TOP AND BOTTOM FIRST - ASSEMBLE AS ABOVE

FRAME WORK IS USUALLY 1/8" SQ. HARD BALSA

BOOM IS BUILT AS HOLLOW STICK AND FITS AS PLUG

SHEET BRACING FRAME IS USUALLY 1/4" BAL.

SECTION OF INDOOR FUSELAGE SHOWING BRACING

TYPICAL GAS MODEL CROSS SECTION - COVER WITH SHEET, SILK, PAPER

TYPICAL INDOOR FUSELAGE SHOWING BOOM ARRANGEMENT OFTEN USED

DIAMOND TYPE IS SQUARE FUSELAGE ASSEMBLED TO WING ON ITS CORNER - IS DIAMOND IN APPEARANCE WHEN PLANE IS VIEWED FROM THE FRONT

the Smog Hog

The SMOG HOG design by R.E. Bowen and Howard Bonner appeared originally in the February 1957 issue of Model Airplane News and was a key transitional model between the old escapement operated way of flying R/C and the use of servos. It was a big winner during the mid-1960's and beyond until proportional control came into common usage and "pattern" models became the norm for competition.

Sensation of the radio event at the last Nationals was this great multi-channel winner. Outstanding are light weight, simple construction, terrific stunt ability.

The Smog Hog was the winner of the multi-class in the 1956 Nationals radio control event, and the California State Meet with a high score of 202 points. The design is the result of many months of designing and flight testing by Howard Bonner.

The primary objective of the Smog Hog design was ease in building, low maintenance, ability to perform all the maneuvers required and still have a light enough wing loading for doing these maneuvers tighter and quicker without excessive loss of altitude.

The airplane is simple enough for the beginner, but still lets the expert add his little changes. As the design stands now, it is a top notch contest performer.

Although a C.C. 5-channel receiver and the new Bonner servos were used for the winning flights at the NATS, it has gone through a full stunt pattern (inside and outside loops too) with a single channel Deltron receiver and Bonner's Vari Comps cascaded. This single-channel version won the "Mickey Mouse" Class of a recent LARK'S contest.

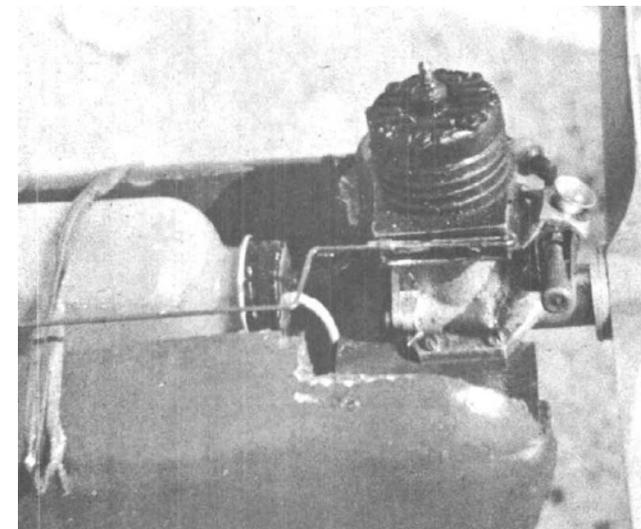
The Smog Hog is a fully stunable radio controlled model with hands-off recovery. This means you can relax when out for week-end pleasure flying, or you can wring it out in competition.

If you should ever become confused (and who hasn't) or get too excited during a maneuver, returning all controls to neutral will let the airplane recover itself.

The size of the fuselage cabin permits the installation of any receiver on the market today with plenty of room left for batteries, servos or escapements and your hands.

The latest ideas for a practical, easily maintained model have been used, such as a two-wheel knock-off type landing gear, an expandable engine mounting plate that permits quick engine changes in the field, or it will break before damaging the engine and fuselage in a crack-up.

Another unusual idea is a visual fuel supply in a crashproof 4 oz. plastic squeeze bottle (holds Wilhold Glue) that has been modified to function as a "clunk" tank.



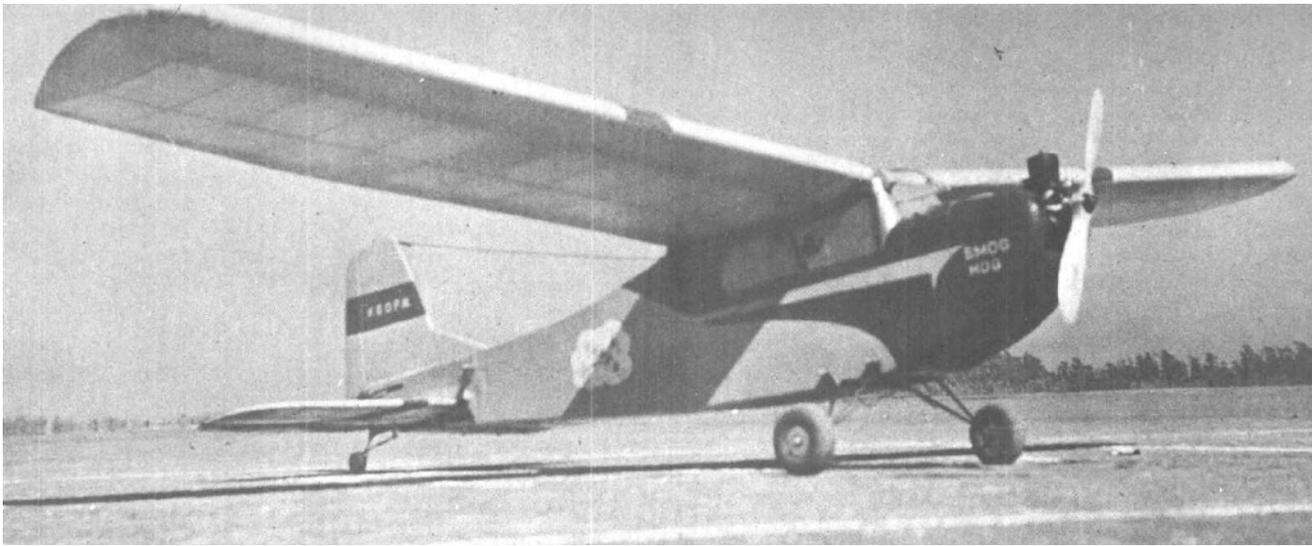
The tank is mounted outside the fuselage aft of the engine, where it can be easily removed for cleaning, and is held on with rubber bands.

Since construction details are clearly shown on the plans, it is not necessary to go into a detailed construction discussion. However, highlighting a few points will enable the less experienced modeler to duplicate this fine model and it's superb flight characteristics.

FUSELAGE

The fuselage is the conventional strong box-type with sheet-balsa sides, top, and bottom. Side uprights help prevent the sunken appearance so prevalent on slab sided models. The windshield and side windows are not cut out, but are painted on to increase the strength of the cabin area.

The flat windshield helps give some of the drag necessary to get a lower power-on and power-off speed differential. Parallel fuselage sides aid in squaring up the fuselage during the initial stages of fuselage assembly.



Careful alignment of the nose blocks is necessary to result in the 0 degree thrust line and the fit of the firewall (F -1).

Before planking the top and bottom aft of F -3, install and line up the push rods (servos) or torque rods (Vari Comps) and make sure they operate freely without any binds. A little time spent now on the torque rods (if escapements are used) will prevent a locked control surface later.

Use blind nuts to mount the Vari Comps on a bulkhead 1" ahead of F-3. The escapements should be mounted temporarily to check line-up of the torque rods, then removed, wired and installed when the fuselage is completed.

Cover the fuselage with nylon and dope. If additional strength is desired, the fuselage can be fibre-glassed on the lower side back to F -3.

Make the fuel tank tray fit snugly over the battery compartment. Be sure to fuelproof the nose and battery compartment thoroughly. Add steerable tailwheel bracket and cement firmly.

Install batteries required for your receiver in the battery compartment between F-I and F-2 and pack any spare space left with plastic sponge to prevent vibration and impact damage.

Vibration can work a well soldered joint until it breaks. Put a thick pad of plastic foam against F -2 and mount the receiver vertically against it if any other receiver than the "CG" 5-channel receiver is used.

Mounting of the "CG" receiver is shown on the plans. Note that the receiver is mounted high on F -2 to keep the center of gravity high and to provide accessibility. Follow the manufacturer's instructions on installing and wiring your receiver.

If servos are being used, mount the rudder and elevator servo on the servo mounting board which is screwed to the servo rails. Wire servos to the receiver as per the wiring diagram supplied with the servos and receiver. Drill any necessary holes for switches and test jacks.

Mounting the engine off center as shown on the plans will give straight flight with full throttle. A Bramco throttle is used on the engine and is operated by a Bonner SN escapement that gives two speeds.

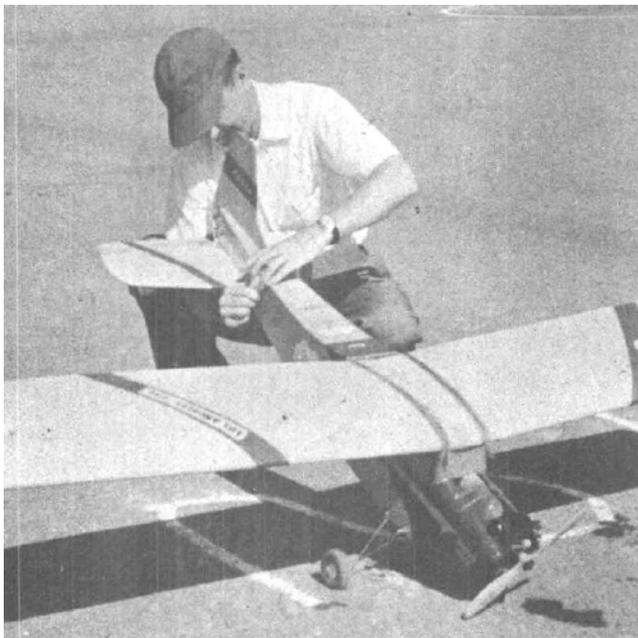
The escapement is mounted on the right side of the fuselage just behind the receiver box and operates the throttle via a 1/16" wire push rod. The rubber for the engine control is wound by a removable plug on the bottom of the fuselage.

WING

The wing construction is conventional with a few new wrinkles. The absence of heavy plywood dihedral braces may shock some of the old hands. However, there is a good reason. This is a case of when absence makes the wing grow stronger. The addition of plywood braces will cause stresses to center where the plywood ends, and could cause the wing to fold during a pull-out.

Center section strength is achieved by scarf splicing the 1/4" square spars, leading and trailing edges. The top and bottom pieces of the front and rear spars should be spliced in opposite directions. The leading and trailing edges should also be spliced opposite. This, with the spar webbing and 1/16" sheeting on the top and bottom of the center section, will result in a center section just as strong (or stronger) and lighter than one built with plywood dihedral braces.

The reinforcing wires on the leading and trailing edges prevent the hold down rubber bands from cutting into them in the advent of a bad landing.



The leading and trailing edges are unique in that they were designed to be cut on a table saw and thereby saving the cost of pre-shaped parts. The plans give the angles and sizes to cut the stock.

Only the leading edge will require final shaping after leading edge sheeting is in place.

The wing ribs, being all the same, are mass produced by first cutting blanks of sheet balsa, then stack and shape to final outline. The solid balsa tip is left solid for durability and also it helps to keep the weight high up where it should be.

If desired, a conventional shaped trailing edge can be used by notching the trailing edge at each rib station and changing the rib trailing edges to fit. However, you may get the pucker that is so prevalent in most wings where the ribs meet the trailing edge in a butt or slotted joint.

Building the wing shorter, as indicated by the dashed tip outlines, will increase the flying speed of the model a bit but won't change the flight characteristics noticeably.

Cover the wing with nylon for durability and strength. Check for warps before covering, because it is next to impossible to remove them once the wing is covered. Remember, covering will hide a lot of things, but not a crooked wing.

STABILIZER AND ELEVATOR

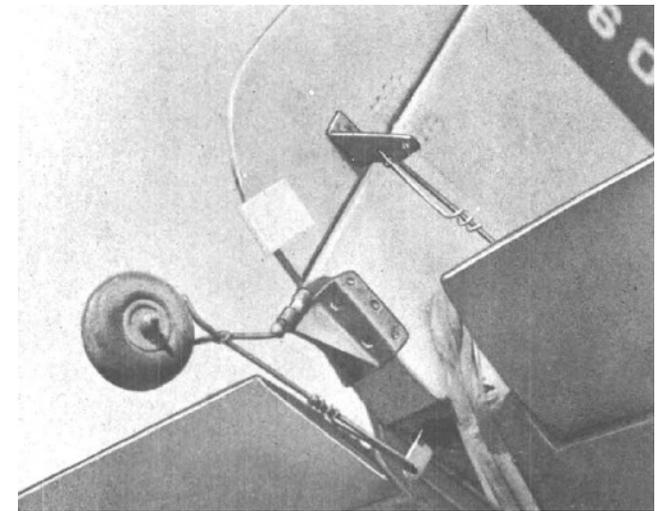
Simplicity and ruggedness are the keynotes in the stab construction. Basically, it is a flat 3/8" thick stab with spars added to the top and bottom for strength. The ribs are formed simply by adding rectangular pieces from the spars to the leading and trailing edges on both the top and bottom. These are sanded to a triangular shape when dry. The finished product is a strong symmetrical stabilizer section.

The top of the stab should be built complete and allowed to dry before removing from the plan to finish the other side. Sand to the shape indicated on the plans, cover with nylon and dope.

The conventional slab-type elevators are connected together by a musicwire connector which has a brass control horn soldered to it. Lace the elevator to the stab with heavy thread at the points shown on the plans. Follow a figure "8" pattern.

FIN AND RUDDER

There is nothing unusual about the fin and rudder construction. Sand to shape after gluing dorsal fin in place. Glue fillet blocks in place after shaping and make sure there is no off-set in the fin. Add control horn to rudder and lace to fin in figure "8" stitch.



FINAL ASSEMBLY

Install radio receiver, servos and batteries according to the manufacturer's instructions. Solder all connections well, using rosin core solder and plenty of heat. (A cold iron will require that the iron be left on the joint longer, thereby heating up the components.)

To get a good solder joint, clean all areas to be soldered. A cold solder joint is a weak joint, and may come loose under vibration. If a pair of needle-nose pliers are used between the soldered joint and the part to be soldered, the excess heat will be pulled off before it can damage anything.

After equipment is installed and operating, align the wing and tail on the fuselage and strap it down with rubber bands. Put model on the floor and block up the tail until the stabilizer is parallel to the floor. Measure the distance from the center of the wing leading edge and trailing edge to the floor.

The center of the leading edge should be 7/16" higher than the trailing edge. Shim leading edge or trailing edge as necessary. After checking this important measurement, check for proper location of the center of gravity.

FLIGHT TESTING

Before leaving for the flying field, be sure your name, address, and phone number is inside and also outside in some obvious place. Don't forget, the fuselage is the most valuable component. Wings can be left up in a tree with the fuselage going all the way to the ground.

Bonner's method of flight testing is a very practical and safe way to make the first flight on any R/C model with engine control. There is no test gliding, which is impractical for any model of this size anyway, unless you are long legged and have a good set of lungs. This model has a respectable glide speed and would require a healthy shove to get flying speed.

Check the radio operation with the engine running and the model suspended off the ground by two rubber loops, one near each wing tip held by a couple of helpers. This will approximate the vibration that will occur in flight. Check all controls.

If all's well, you are ready for the first flight. Put only enough fuel in the tank for about 30 seconds engine run. Do not fill the tank completely, because a full tank coupled with a flyaway can result in a lost model.

The first flight should be an ROG with the engine running at about 3/4 speed. This way, low speed will keep the model on the ground or stop it completely.

Radio On. Head model into the wind and release. If you lose control during the take-off run (the model doesn't appear to be going to take-off), drop engine into low speed and taxi model back. Increase incidence of the wing and try it again. It should take-off with this power.

After the model is airborne, get altitude, don't try any maneuvers on this first flight but just concentrate on any adjustments that will be needed to give a straight smooth flight.

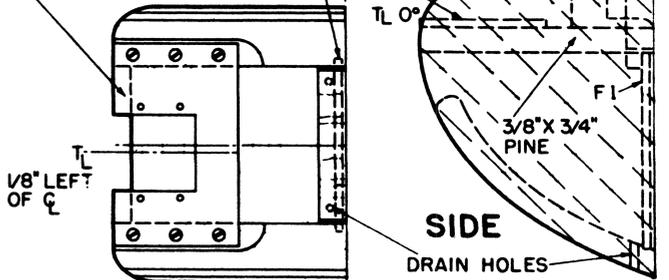
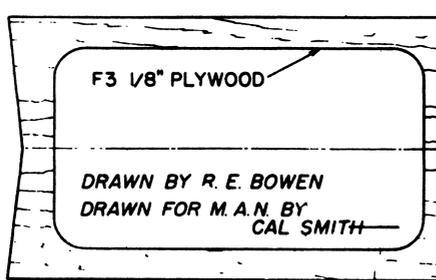
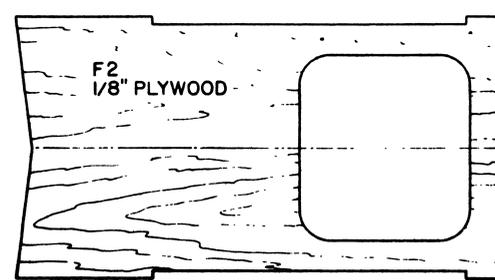
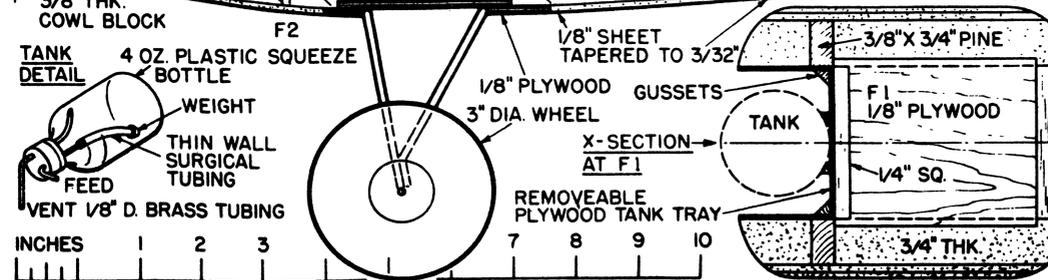
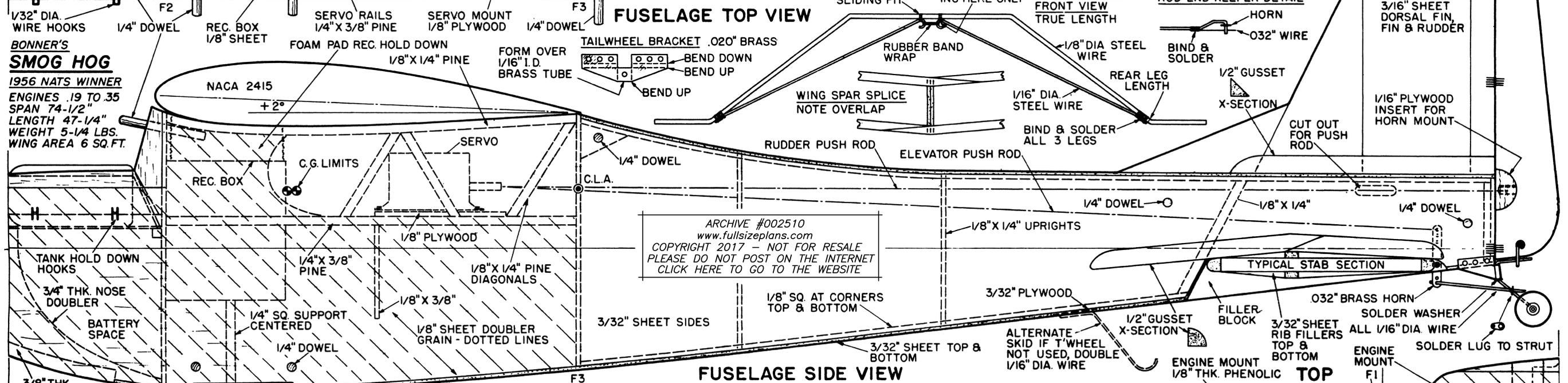
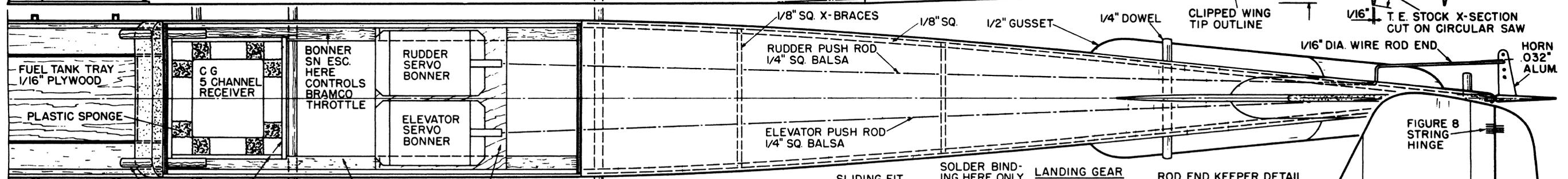
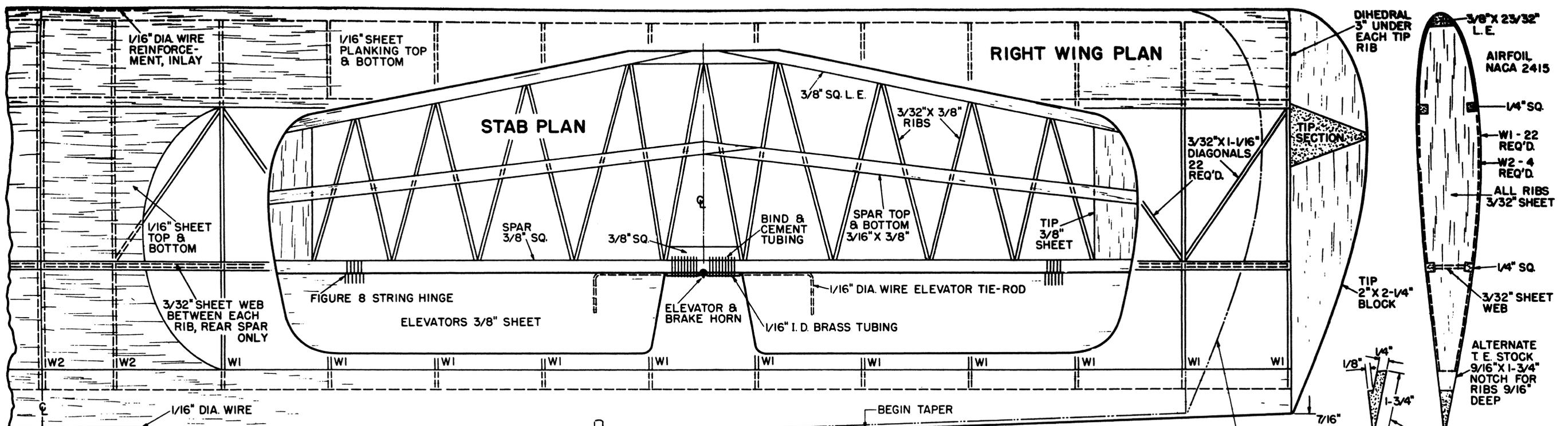
When the model is flying just the way you want it, fill the tank, start the engine and peak it out, switch the radio ON, taxi down wind and swing around into the wind. Pulse for high speed and you are in the air with one of the sweetest flying R/C models in the air today.



You can go through a complete stunt pattern, shoot touch-and-go landings, then make a low speed engine approach, land and taxi back to your tool kit. You will enjoy the ground handling characteristics of this model as well as the maneuvers it will perform in the air.

Remember, it will take practice to perform all maneuvers perfectly, but that is what it takes to win contests. See you in the winner's circle.





BONNER'S SMOG HOG
1956 NATS WINNER
ENGINES .19 TO .35
SPAN 74-1/2"
LENGTH 47-1/4"
WEIGHT 5-1/4 LBS.
WING AREA 6 SQ. FT.

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Builder's Guide

Cowls
by William Winter

A LAMINATED COWLS

- CUT EACH PLY FROM SHEET Balsa
- GLUE UP WITH ALTERNATING GRAINS USING C CLAMPS
- ROUND EDGES TO SHAPE
- SAW OUT OPENING, IF THE OPENING DOES NOT RUN RIGHT THROUGH CUT OUT EACH PLY
- SAND FINISHED COWL AND RUB WITH CEMENT TO

B Balsa OR PAPER COVERED COWL

C-OVAL COWL

- DRAW THREE VIEWS OF INTENDED COWL
- CUT OUT A FACE PLATE OR LAMINATE THE SAME AS IN A-1 TO 4
- TRACE SIDE, TOP, AND BOTTOM OUTLINES FOR PATTERNS OF THE 4 MAIN SPACERS
- INSERT TRIAL RECTANGLES TO OBTAIN PATTERNS OF ODD SHAPED SPACERS AND ASSEMBLE FLAT ON BENCH AS SHOWN
- FINISHED OVAL COWLING

D-SOLID COWLS AND ANTI DRAG RINGS

E-BUILT UP RINGS

- CUT TWO FORMERS FROM HEAVY SHEET Balsa
- USE AT LEAST 8 STURDY SPACERS TO ASSEMBLE
- BEND SHEET Balsa AROUND AS IN B-3
- SHAPE TO DESIRED CROSS SECTION AND CUT OPENINGS

F-LAMINATED RG.

G-MANUFACTURED ALUMINUM RINGS AND COWLS

B-1-LAMINATE AND SHAPE FACE PLATE AS IN A-1,2,& 3 ETC.

- AFTER CUTTING REAR BULKHEAD ASSEMBLE COWL ON BENCH USING 8 TO 12 SPACERS
- ALTERNATIVE MAKE SHEET Balsa BOX
- SOAK SHEET Balsa AND BEND AROUND OPENING-STIFF PAPER MAY ALSO BE USED

ON SMALL MODELS A PAPER RING IS USED

GLUE REAR FORMER AND FACE PLATE TO BOX

PLUGS AND MOTORS SHOWN IN BLACK

VARIOUS LAMINATED COWLS A

SOLID SCALE

CROSS SECTION SHOWING CORED SOLID COWL

EVEN TOP OF SHOE POLISH CAN WILL MAKE A COWL

AN APPROPRIATE COWL FOR THE GAS JOB CAN BE HAD BY SCOURING THE 5 & 10 FOR ALUMINUM POTS OF THE REQUIRED SIZE

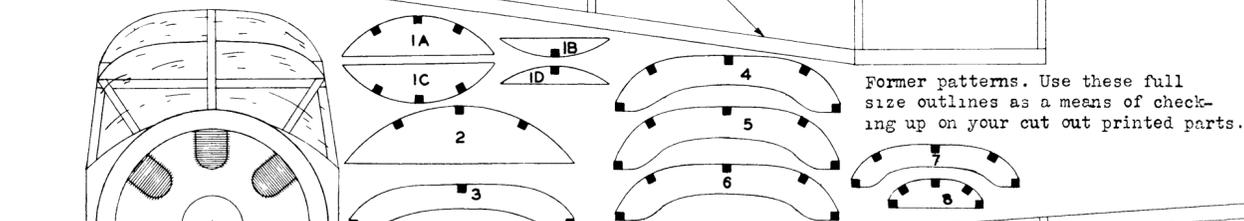
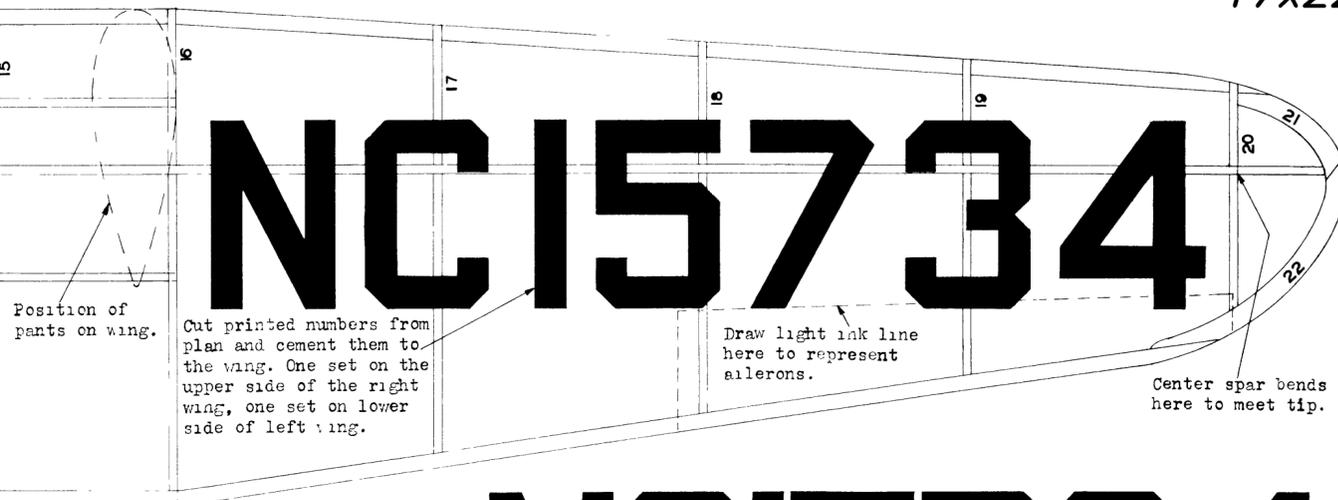
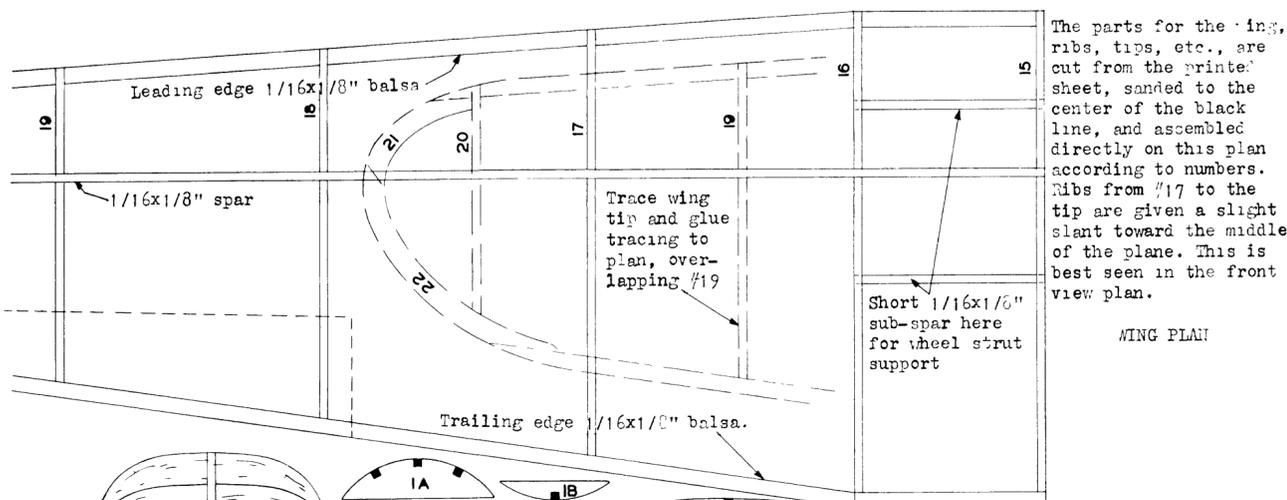
BY COATING MILK BOTTLE WITH MANY COATS OF DOPE COWLS HAVE BEEN MADE. SLIDE SHELL OFF BOTTLE

VARIETIES OF HINGED COWLS FOR GAS MODELS MADE OF LIGHT SHEET ALUMINUM

COWLS ARE NOW MANUFACTURED FOR GAS JOBS

NC15734

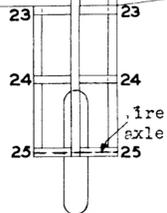
NC15734



Sand trailing edge to a sharp edge as seen in the side view of wing rib. Wingtips and edges of tail surfaces should be sanded half round.

Cut dummy cylinders from the plan and cement to the front of the turned balsa cowl in kit.

FRONT VIEW



COLOR SCHEME. Cover the entire model with yellow jap tissue. Cover all outside surfaces of balsa with paper to hide the grain. Cut black numbers and stripes from the plan and cement them with tissue cement in the positions noted in the instructions.

GENERAL INSTRUCTION NOTES

All dimensions on this plan are exact. Measure the parts to find the wood sizes needed, or compare with the material.

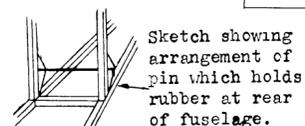
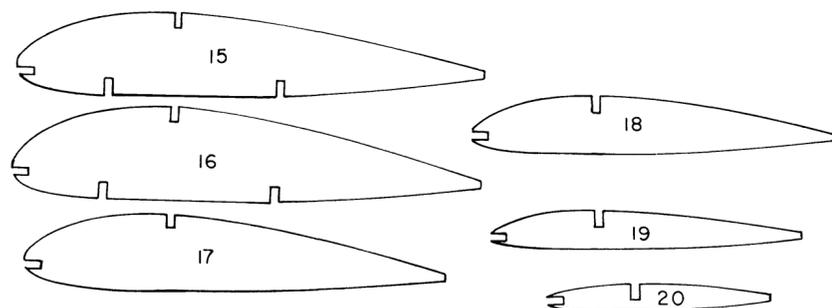
Build the fuselage according to instructions below the side view.

The wing and tail surfaces are built directly on the plan; use a sharp razor blade slid under the wood to remove the parts from the paper. Make two halves of the stabilizer on the same outline. Turn one of these over for the left side. Use the right side as is drawn. Cut a scrap balsa piece to the same angle as the ribs from #17 to 20 are slanted, and use this to set the angle on these parts. The leading and trailing edges are each carefully cut to the exact angle shown on the plan at rib #16. When the center spar is glued in, the dihedral angle, or the angle the wing makes with the fuselage will be correct.

Cover the wing first. The upper side may be covered in one piece from ribs #16 to #20. Use separate pieces for the tip and from #15 to #16. The grain on the wing runs from tip to tail, and from nose to tail on the body. Cover the fuselage in one piece for the flat side, one for the bottom from the tail to the front of the landing gear, but use separate small pieces for the irregular shaped top and front.

As noted, cover all exposed wood parts with colored tissue.

Use a medium brush for the tissue cement, and trim all parts with a sharp razor blade. Always cover all parts and add all details such as license numbers, dashboard, windshield, rear rubber pin, etc., before assembling the model.



Windshield pattern. Cut these from the plan and use as a template in cutting the cellophane.

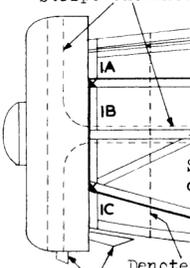
Nose bearing



Special turned balsa cowl.

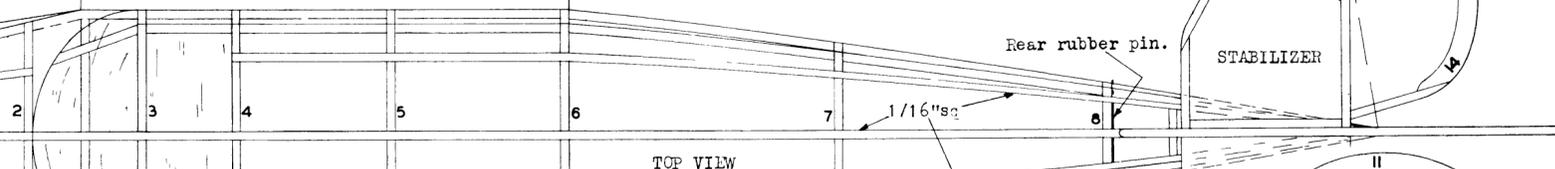
Sand the propeller and assemble with nose bearing and two washers in the shaft. Bend the outer end of the shaft as shown and force into prop.

Stripe outline.



Exhausts, cut from scrap balsa. Denotes fine ink lines to represent breaks in metal cowlings.

Dashboard. Cut out and cement to #2.



TOP VIEW

Position of wing on fuselage.

Only a small quantity of cement is needed to make a good joint. Use an opened paper clip as a spatula for applying the cement.

Cut numbers from plan and glue to both sides of rudder.

Aeronca insignia glued to fin.

Make rear pin support from 1/16x1/8 scrap.

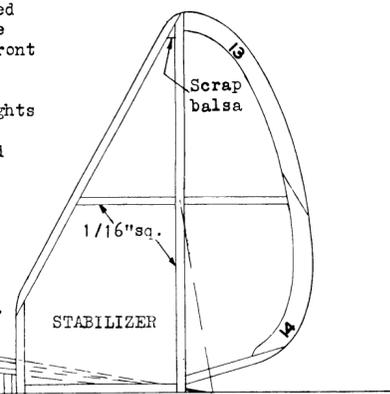
Flare tubes Paper discs

Set cross braces noted below at points marked "X" in fuselage side.

Make tail wheel fork of 1/16" sq. balsa. Wheel is printed out.

Leave open for changing rubber

FLYING NOTES. Assemble the propeller as noted. The hardwood nose bearing fits into the nose of the cowl. Sling the rubber between the front and rear hooks. Weights may be glued behind the cowl if you find that upon gliding the model, it stalls or noses up. Make test flights into tall grass, making adjustments as necessary until the plane flies steadily. Wind the prop with a mechanical winder or use a wire hook chucked in a hand drill. Do not wind over 200 turns by hand.



STABILIZER

NC 15734

RUDDER AND FIN

NC 15734

AERONCA LOW WING 24" WING SPAN FLYING MODEL

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Links to some interesting films

On the left are clips from a WEN-MAC TV ad circa 1960's [CLICK HERE](#)

On the right are Clips from SPACE X rocket tests from early failures to first successful landing in the ocean [CLICK HERE](#)



Driftwood



By PAUL J. PALANEK

This attractive sport Free Flight model is from the January 1954 issue of Model Airplane News. As Palanek mentions in his text, it should reduce the broken prop problem quite a bit.

So all pylons look alike-the heck you say! For everyday sport flying, here's a job that's simple, interesting to build. No loss in flying ability, either.

In Driftwood we tried for a different look in pylon configuration. The engine mounted 'way up the pylon means fewer broken props. The profile design of the fuselage with pylon and integral part results in a very simple arrangement.

Buildtime is reduced considerably. The fuselage lends itself nicely to concealing the nose wheel. Engine mounting permits a low slung design with a simple tri-cycle gear.

The Clark Y airfoil was used because Driftwood is strictly a sport flier. Correct balance is important. Take notice of the CG position. An angle of 2 degrees positive incidence is built into the pylon with 1 degree negative in the engine.

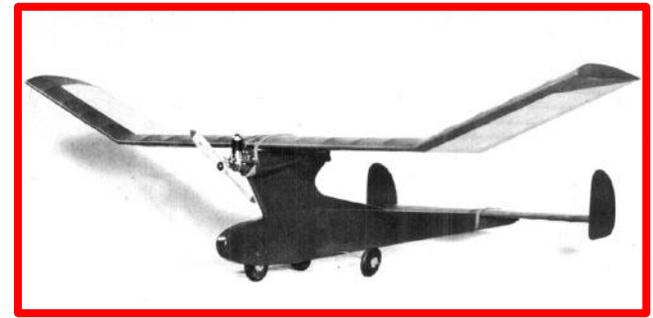
Along with minor field adjustments, the above is necessary.

Total span is 42 in., resulting in 294 sq. in. of wing area. With careful trimming a Cub .074 can be substituted for the .049 shown. However, the .049 should be used since the model is intended for sport flying only.

The fuselage sides are 1/16 x 3 sanded sheet balsa, with the aft end carrying a frame work of 1/8 x 3/4 in. strip balsa. The pylon consists of three layers of 1/8 sheet stock cross laminated for maximum strength. Place the pylon between the fuselage sides, space with 1/8 x 3/16 strips. This will fill the void between the sides and at the same time space the pylon.

Both gears are installed prior to mounting the pylon. A block 3/4 thick is used fore and aft. Both the wing and tail rests are next installed. Take notice of grain direction.

The firewall is 1/8 ply, 1-1/2 in. in dia. For added reinforcement a wood screw is used to secure the firewall to the pylon. A fairing ties in the pylon, firewall and wing rest.

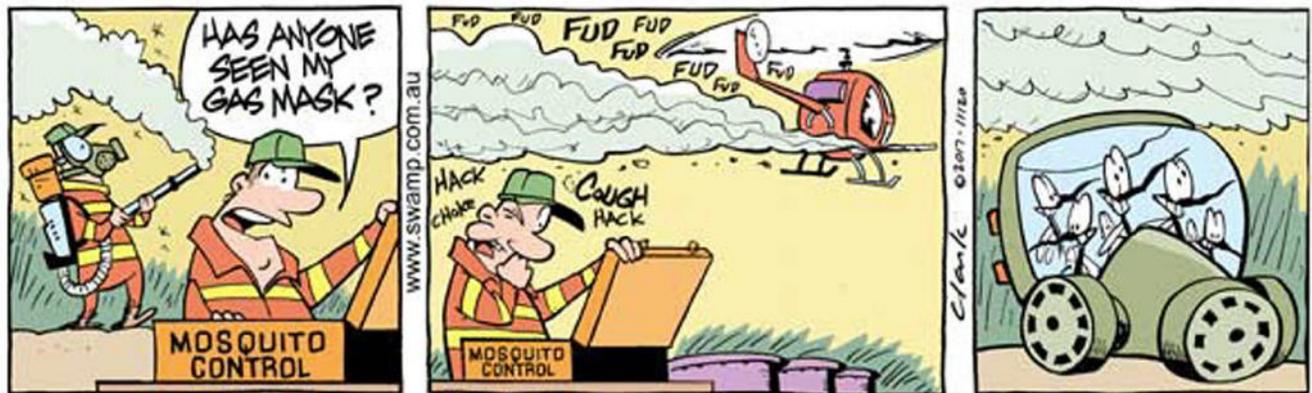


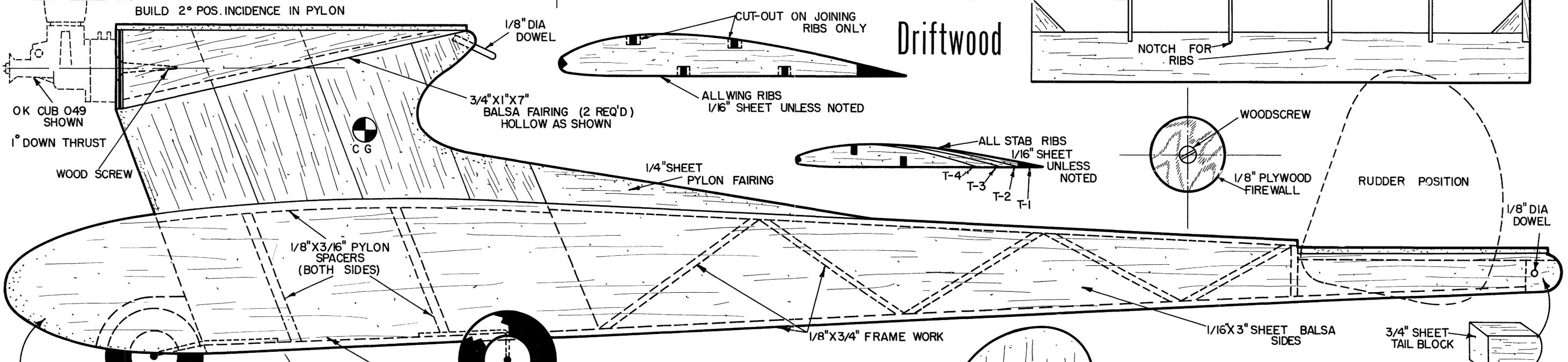
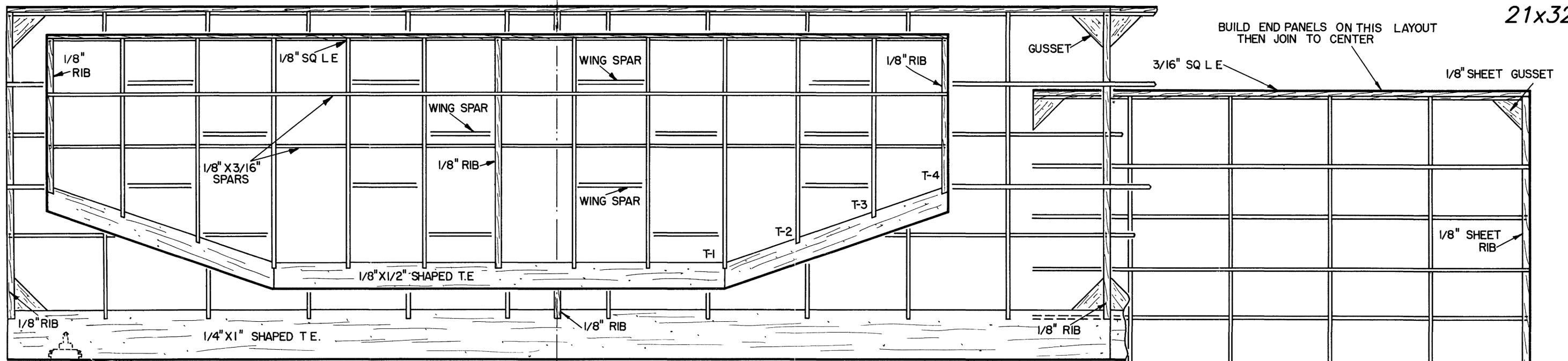
The wing selection is of conventional design, excepting the method of joining the spars. Extend the spars beyond the joining dihedral ribs, then lap cement them in place to the ribs. Build the outer panels with 4 in. Dihedral.

Twin rudders are shaped from 4 in. wide, 1/16 sheet balsa and mounted to a conventional lifting stab.

Both wing and tail surfaces are covered with light weight Silkspan in your choice of color.

If you have followed carefully the angular settings mentioned earlier in the text, little further trimming will be necessary. A good glide is first obtained, then a few powered flights for full familiarization, and after that - away we go!

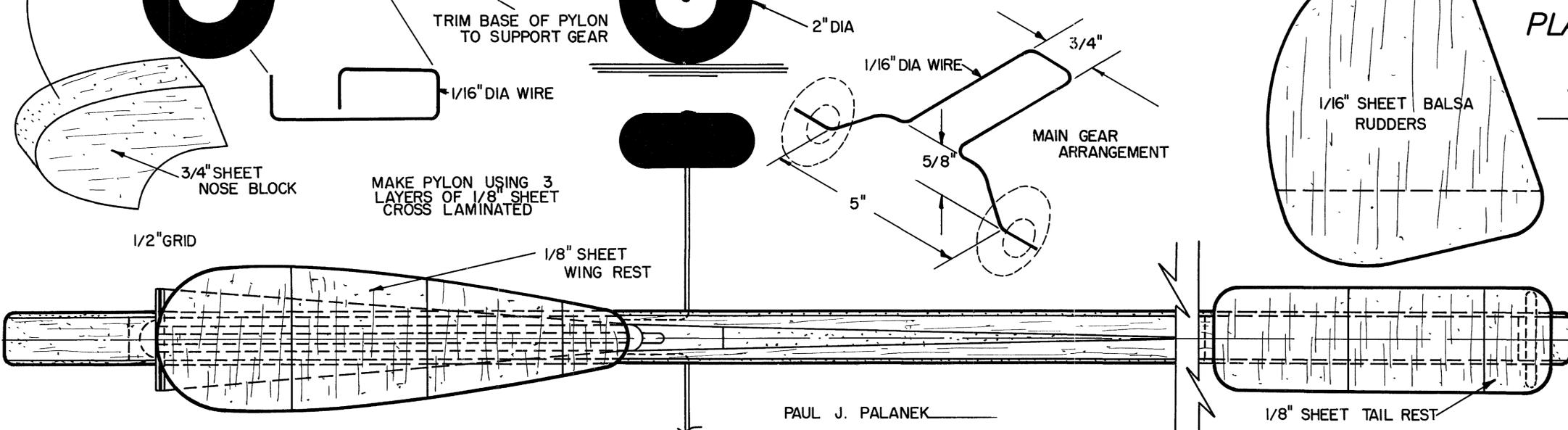




PLAN FROM DAVE SHIPTON

MODEL AIRPLANE NEWS
JANUARY 1954

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PAUL J. PALANEK

THE STOOGES

by Charles A. Felton

How many times have you cancelled plans to fly control line because you couldn't find anyone to help launch the models? Or maybe you enjoy flying by yourself, away from the crowds. Well, end your frustration by building this control line stooage.

The launcher was designed to be simple, inexpensive, easy to build and, above all, reliable. Well, simple it is, with only one moving part. It's inexpensive, since the parts you don't have lying around your workbench will cost only about \$1.00. (1975, remember - Editor)

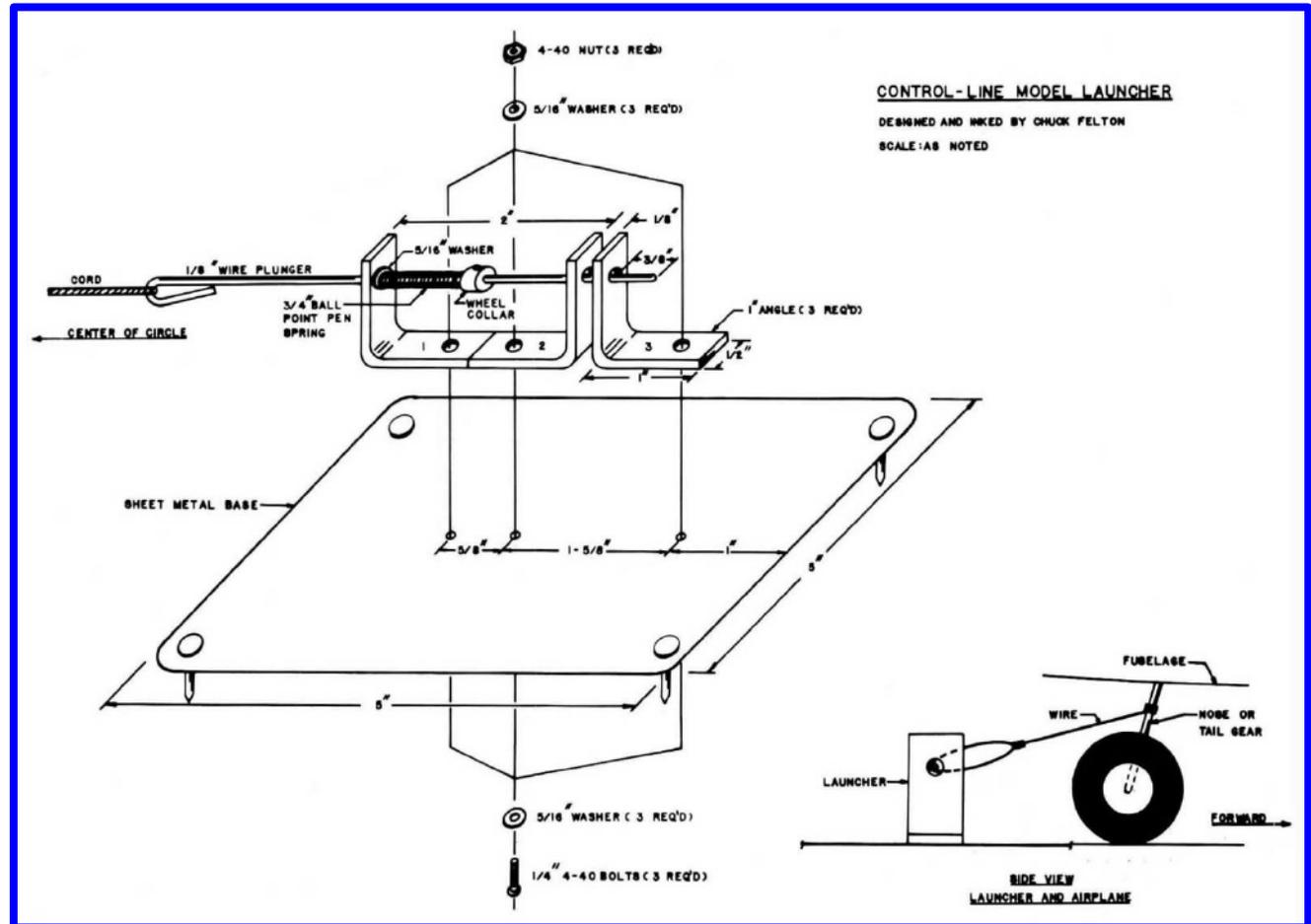
The fact that it uses readily available parts with only one part to make (the wire plunger) makes for easy building. Over four years of launching my scale CL models without a failure attests to its reliability.

The launcher is simple to use, too. First, fix the sheet metal base to the ground. For flying on grass, drive 8-10" nails into the ground at the four corners of the base. I generally fly on asphalt or concrete, so I use 1" nails made especially for penetrating hard surfaces.

Once the base is nailed down, layout the release cord to the center of the circle, and the launcher is ready for operation.

The drawing shows the general arrangement of launcher and model. A piece of heavy wire is attached to the nose or tail gear of the model, with a loop formed in the other end of the wire. The plunger is pulled back and the loop is inserted in the 1/8" space between the angles.

Start your engine as usual, walk to the middle of the flying circle, pick up the control handle, check up and down elevator, give a slow, steady pull on the release cord, and you're off and flying.



From March 1975 Air Trails

CALL FOR EPHEMERA

by Editor

So you say, "What the heck is EPHEMERA?"

Well, it's just a 50 cent word to describe things that are sort of "here today and gone tomorrow". Things like newspapers, magazines, and books are ephemera because after a while they generally disappear except for those held by collectors and floating around in closets, basements and used bookstores.

One of the goals of RCMW is to try to preserve plans, books and magazines related to model airplanes and other aviation related items. That's why we are digitizing, cleaning up and reprinting old classic model plans, articles and kits.

There isn't much except advertising in current model publications and as time goes by there will probably be even less content and more ads. It is our goal to try to preserve as much of this old model stuff as possible and make it available as inexpensively as possible to those who still want to build models.

That's why we are digitizing these old documents, because once they have been converted to high resolution digital files they are not subject to deterioration and other ways of becoming lost.

One example of this is the downloadable issue on page 29 this month. I had never heard of a Bill Barnes Comic before a few weeks ago. Then an acquaintance, Mike Russell, who is involved in the preservation of old "pulp" magazines found this stashed away in an internet archive and made it available.

It's not in very good condition but there are surely not very many of them out there. It even has plans for three simple model airplanes in the issue.

Now a lot of folks would just say, who cares about all that old junk? - The same thing could be said about those who collect model train stuff, matchbooks, beer cans, old license plates and any number of other things. Sure, it may not be practical but then it will keep you off the streets and out of the bars. Unless you are collecting whiskey and beer advertising signs.

So you say, "Where do I come in here?" Well, most model builders have a lot of old magazines, plans and even kits sitting around in case they get a roundtuit and can build them someday in the future.

If you fit that category and would like to share with other modelers, give us a shout. We are always looking for plans that are not in our current archives that can be reprinted so that others can look at them and maybe even bring forth some memories of a model built long ago or seen on a flying field that they have always wanted to build.

We will digitize them and make them available. We don't sell plans, but include them in the subscription to RCMW. The plans in each issue are full size and can be printed by any copy shop or office supply store that can handle PDF files.

Plans that have been previously reprinted are also available free on request to subscribers.

If you're like me, getting along in age and wondering how to get rid of all my modeling stuff so my wife doesn't have to worry about it, let's talk.

For me the answer is to convert it to computer files and then future modelers will have the benefit.

Contact me at cardinal.eng@grics.net
Roland Friestad, editor

THE SHEIK



By **KEN JOHNSON & ANDY WALSH**

Tried and true team racer, developed in several seasons of competition, proved itself a rugged and consistent airplane.

10 point - Captions

Two versions were built in 1952, one with a built-up silk covered wing, the other with the wing planked. No. 73 has been flown with all types of props and fuel and the following data gives a hint as to its capabilities:

8-9 Power Prop - Thimble Drome Fuel - 93 mph - 36 laps

8-9 Power Prop - Power Mist Fuel - 87 mph - 55 laps

9-8 Power Prop - Power Mist Fuel - 83 mph - 55 laps

10-6 Power Prop - Tiger "A" Fuel - 63 mph - 72 laps

8-9 Power Prop - O & R Econ. No.4 - 75 mph - 60 laps

The above times are with venturi restriction. The McCoy .29's only modification is a restricted throat. It starts very easily, with the average pit stop being less than 30 seconds to refuel and be airborne again.

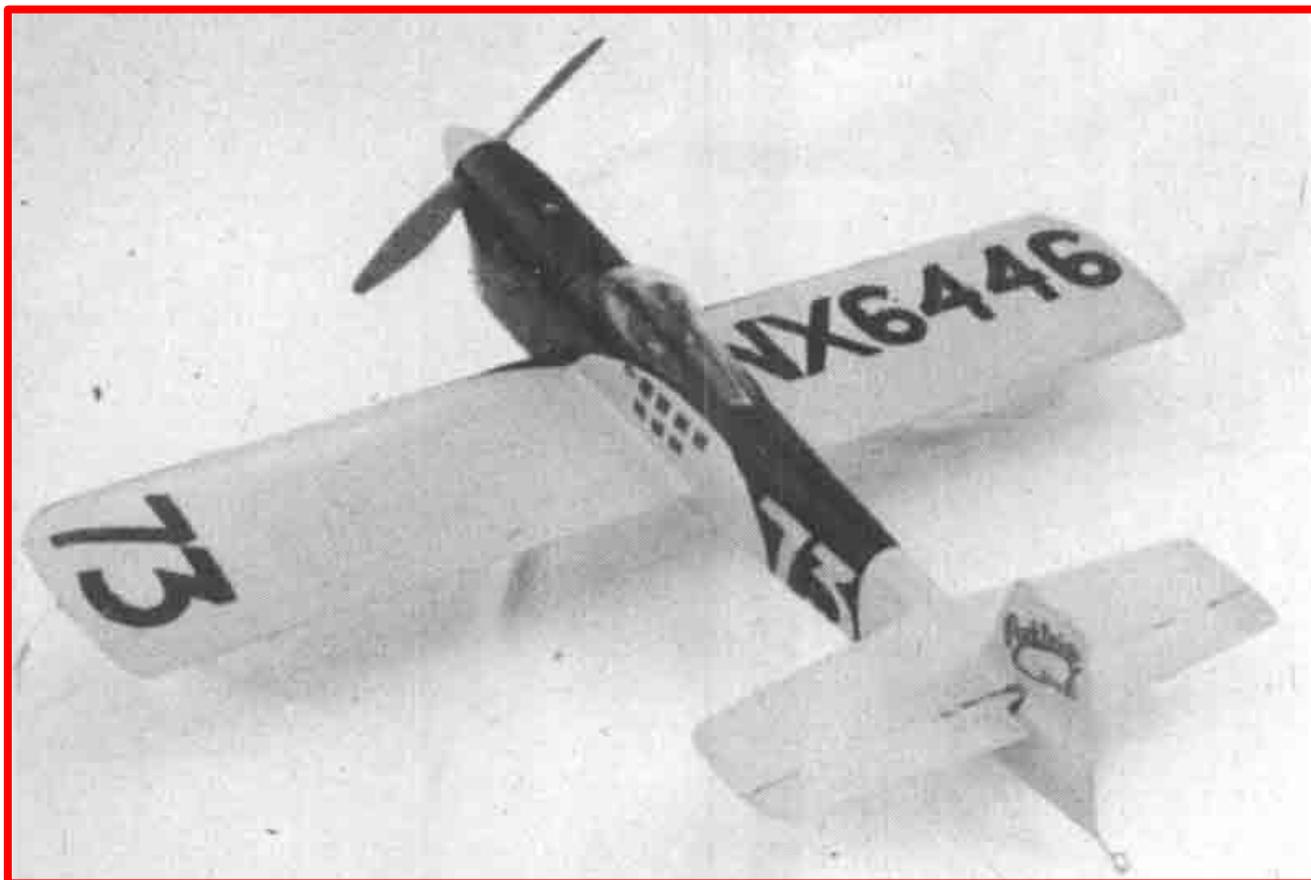
We feel that we have a novel idea in our landing gear, as it is sprung forward to force the wheels to move ahead at all times. The reason for this is that all our flying is done in grass covered flight areas, and a nose-over would lose a race.

The construction is light, the ship weighing only 22 oz. It jumps away when released and flies -very smoothly.

We have been following the progress of team racing as indicated by the plans and data printed in the model magazines and the current team racing kits that are on the market.

We have found that something additional is necessary to be a consistent winner here in the Middle West and the Illinois Iowa Aeronautical Assn., of which our club (The Galesburg Model Airplane Club) is a member.

The Sheik has been developed over a period of several years, and we hope this is the answer. This team racer has proven itself in contests as a rugged competitor. It is powered by a McCoy .29 Red Head, uses stock propellers and stock fuel.



Cut the 1/16 in. sheet wing ribs as shown on the plans, and assemble on the 1/4 in. square hard wood spar. The trailing edge is placed on top and bottom of ribs. Be sure and taper for a thin sharp trailing edge. The front planking is applied the same way. Next, cap strip the ribs with 1/4 x 1/16 in. Medium balsa on both the top and bottom of the wing.

Mount the bell crank (small Veco) and flexible lead out wires, then install tips and shape as shown. Sheet the first section on each side of the center of the wing and sand entire wing smooth. Wing is covered after installation.

The fuselage is started by cutting the sides and formers as shown from 1/8 in. hard stock. Cement the motor mounts to the sides using a good strong fuel proof cement (we recommend Master Mender). Attach landing gear to the 1/4 in. plywood firewall either with "J" bolts or by sewing. Be sure to bend the gear to shape first with a vise and hammer: it's 1/8 in. piano wire.

Cut away motor mounts so that when engine is installed the fuselage will be 2 in. wide. Our McCoys had exhaust and fins filed away so engine would slide between motor mounts at installation.

Cement in firewall and formers, checking to make sure fuselage does not twist when drying. Make the tailskid and sew to plywood base, using plenty of cement, and attach to fuselage.

Tack cement top, bottom and front blocks and shape as shown. Remove blocks and hollow, making sure side walls are at least 3/16 in. thick. Measure 5-3/4 in. from front and saw. You now have a removable hatch with access to engine and tank.



Install 1 oz. tank. We build our tanks wedge shaped to fit between the motor mounts. A sketch is shown on the plans.

We installed a K&B shut-off. However, you can use your own favorite cut-off. Our hatch was bolted to a bracket fastened on rear of motor. The venturi was twisted to allow needle valve to project just above the motor mount on the left side of the plane.

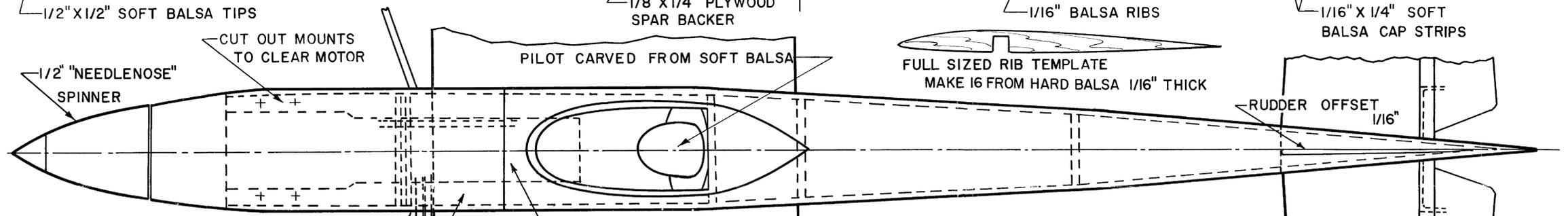
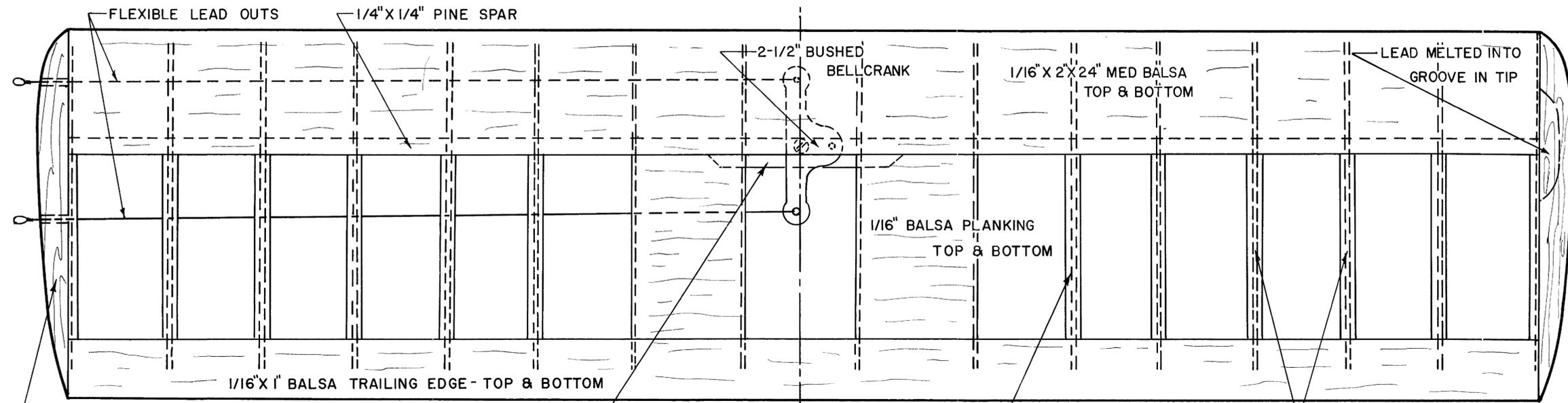
The tail assembly is of conventional construction, and should present no problems.

Attach push rod to bellcrank and bend to fit the control horn. Cement wing and tail assemblies in place. Cement top and bottom blocks in place.

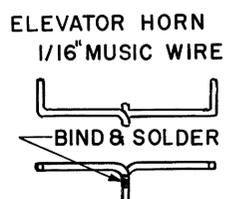
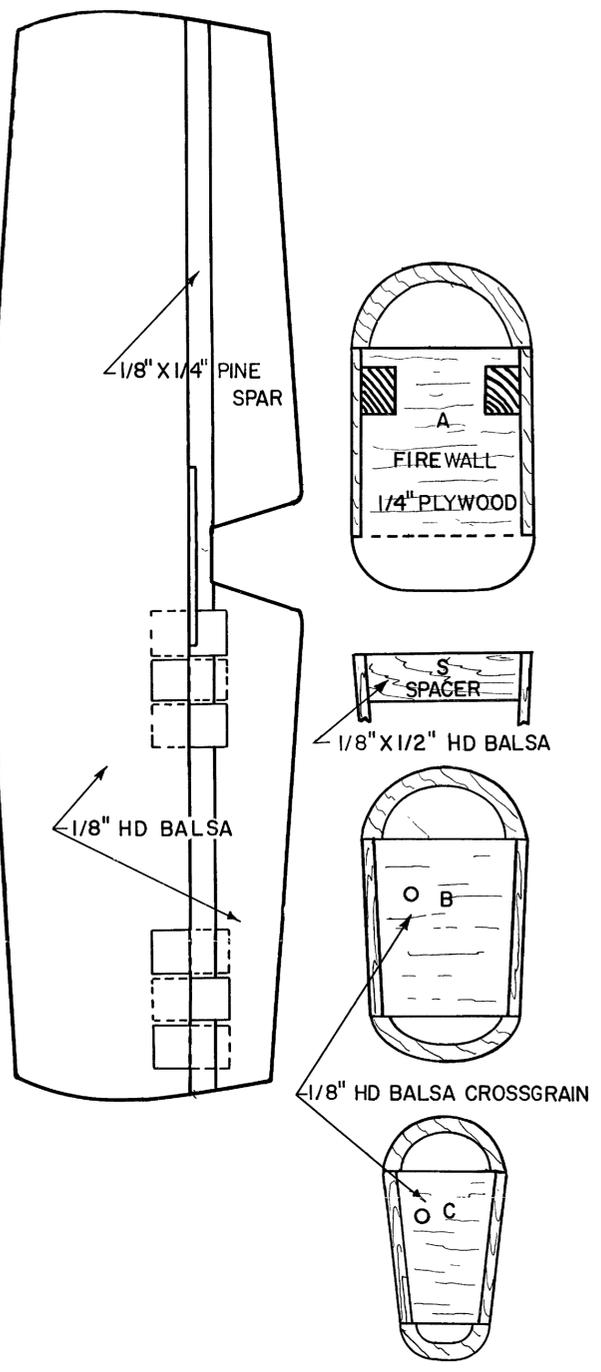
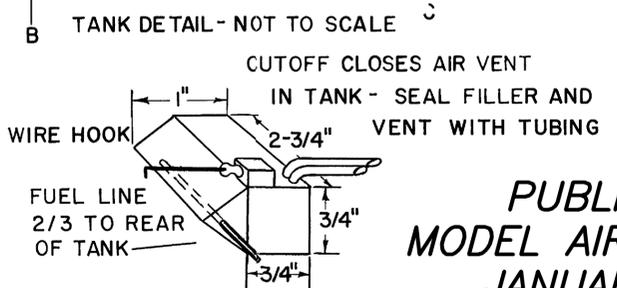
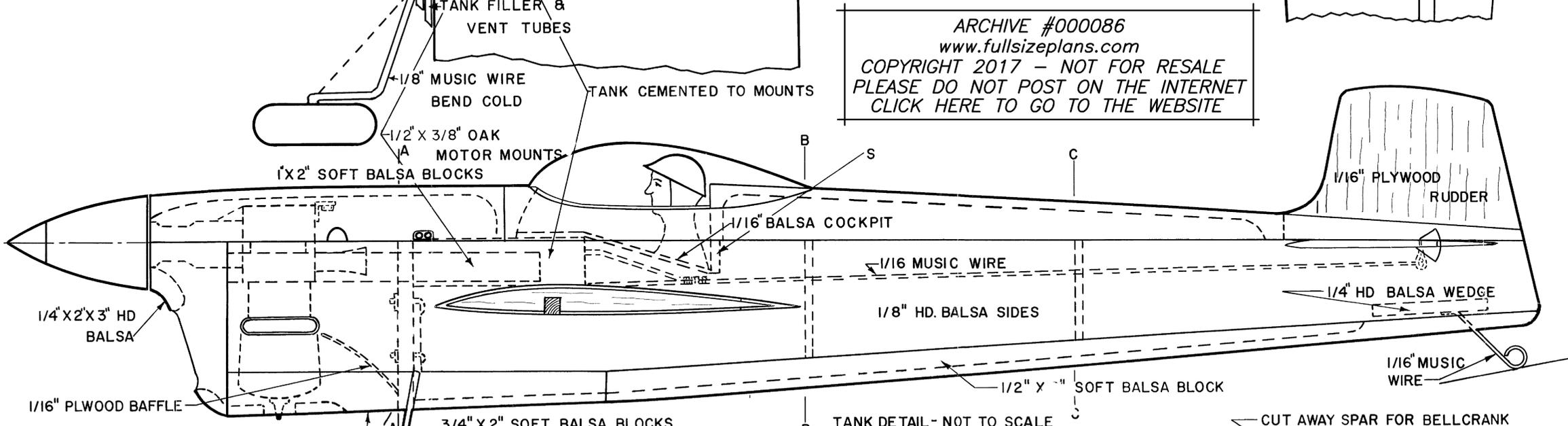
The rudder is of 1/16 in. plywood, slotted into the fuselage with a slight offset to hold plane tight on the lines.

Silk entire plane and finish using your own favorite sealer and fuelproof dope. We happened to use Aero Gloss. Our colors were olive drab and yellow on one, and lime green and black on the other. If stock colors do not suit you, try mixing your own.

Fly the Sheik on 60-ft. lines, When testing, be sure to have the engine wide open to insure a good smooth flight. Here's hoping the Sheik will put you in the winner's circle. During the 1951 and 1952 seasons, we placed first and second in every contest we entered together. No. 73 won the team race at Peoria's AAA meet two years out of three, and last year took all firsts with the exception of one third place.



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PLAN FROM DAVE SHIPTON

PUBLISHED IN
 MODEL AIRPLANE NEWS
 JANUARY 1954

"SHEIK"

MIDWEST TEAM RACER

WING AREA 132 SQ. IN
 POWER McCoy "29" R.H.

DESIGNED BY K.R. JOHNSON & ANDY WALSH
 DRAWN BY ANDY WALSH
 TRACED BY WOODY SMITH

" A FLYING MODEL
WITHOUT A PILOT IS
JUST NOT

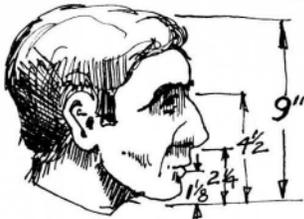
COMPLETE "....
ED SWEENEY

Pilot

WRITTEN BY PAT MARCH

ART / ALAN HOEWELER

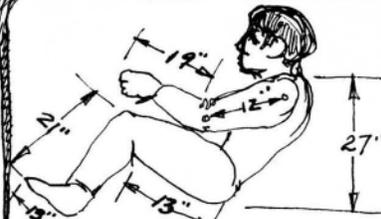
ED'S RIGHT; SPITFIRES JUST DON'T FLY THEMSELVES, THEY'VE GOT PILOTS, SO!...SO SHOULD YOUR MODELS. LET IT BE A SIMPLE PAPER PROFILE FOR PEANUT SCALE AND LIGHT OUTDOOR MODELS, BUT MORE ELABORATE MODELS DESERVE MORE ELABORATE PILOTS. SO - PAY ATTENTION TO THE OLD MODELER AND LEARN HOW TO MAKE PILOTS. G.I. JOE IS OK, BUT



IF YOU MAKE YOUR OWN HE CAN BE DOUG BADER, ED HEATH, STEVE CANYON, SNOOPY, OR EVEN YOU!



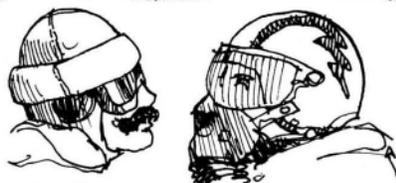
YOU'VE GOTTA LAY OUT THE PILOT LIKE A SCALE MODEL (WHICH HE IS). THESE PIX GIVE YOU LOTS OF AVERAGE FULL SCALE DIMENSIONS



BUT YOU DON'T NEED 'EM. SCALE YOURSELF DOWN AND USE A MIRROR TO WORK OUT DETAILS.

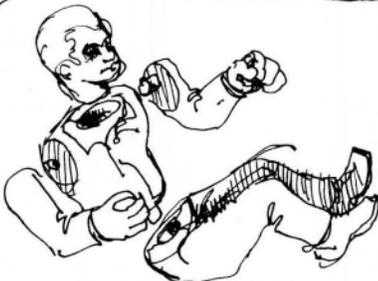


PILOT'S EQUIPMENT IS ALSO IMPORTANT, VARYING FROM SCARVES TO BREECHES TO ELECTRICALLY HEATED -G- SUITS.

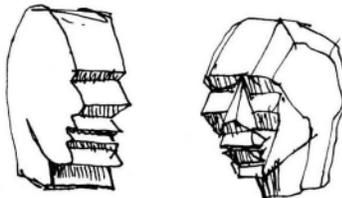


FOR EQUIPMENT DETAILS, YOU'LL HAVE TO DO SOME HOMEWORK. LIBRARIES AND AVIATION MAGS ARE GOOD SOURCES.

MATERIALS ARE IMPORTANT. FOR QUICKY OR ULTRA-LIGHT PILOTS, FOAM PLASTIC WILL SERVE. EXPANDED STYRENE IS OK, BUT URETHANE FOAM IS BETTER & EASIER TO WORK INTO SHAPE. URETHANE IS OBTAINED FROM: MODEL MATERIALS CO., 119 MARIPOSA, WAUKEGAN ILL.; ASK FOR "PRO FOAM".



FOR STILL BETTER RESULTS, PATTERN PINE IS GREAT. PINE HEAD COMBINED w/ FOAM BODY AND LIMBS COMES CLOSE TO BEING IDEAL. CHECK PHONE BK. FOR PATTERN SHOPS & SCROUNGE FOR SCRAPS.



LAY OUT AND START CARVING ON THE HEAD. DON'T BE SCARED, TO CARVE, IT'S JUST ANOTHER SCALE MODEL. ROUGH IT OUT, THEN REFINE IT USING YOURSELF AS A GUIDE. IF YOU GET REAL GOOD...



YOU CAN ADD EXPRESSIONS. PILOTS' DON'T MERELY SIT UPRIGHT LOOKING STRAIGHT AHEAD, THEY SQUINT, LOOK OVER THE SIDE AND BECOME SURPRISED, ANGRY, & EXCITED. AT LEAST TURN HIS HEAD AND TILT IT AWAY FROM RIGID ATTENTION.



HERE'S ED HEATH'S HEAD, AT 1"=1' SCALE BOY! HAS HE GOT EXPRESSION!

THE HEAD IS PINE, BUT EARS AND HAIR ARE BUILT UP OF STRINGS OF AMBROID. BODY & LIMBS ARE FOAM.



FOLDS IN CLOTHING ARE CUT IN WITH KNIFE & SANDPAPER - STUDY FOLDS IN YOUR OWN CLOTHES AS GUIDES



ED'S HANDS ARE ALSO PINE. HANDS ARE BITCHY TO MAKE, BETTER TO HIDE THEM SO THEY DON'T NEED TO BE TOO GREAT!!

ED ALSO HAS SHOES & SOX. Balsa DOES FINE FOR THESE.



BEFORE FINAL ASSEMBLY A PILOT SHOULD BE PAINTED. THE FACE IS THE HARDEST!

A FILLER PRIMER SHOULD BE USED, FOLLOWED BY AN ALL OVER COAT OF FLESH, THEN HIGHLIGHTS, SHADOWS REDNESS, EYE BALLS ARE PAINTED IN WITH A LIGHTENED FLESH COLOR (NOT DEAD WHITE) LIPS ARE NOT BRIGHT RED, BUT A REDDER SHADE OF FLESH. EYE BROWS AND LASHES ARE BEST ADDED WITH PENCIL OR FINE LINE FELT MARKER.



ACRYLIC PAINTS OR ARTIST OILS ARE SUPERIOR TO DOPE OR ENAMELS FOR FLESH COLORS.

PUPILS CAN BE PAINTED, OFTEN, HOWEVER THEY ARE BEST REPRESENTED BY PIN HOLES OR DRILLED HOLES. EXTREME CARE IS NEEDED IN LOCATING PUPILS TO AVOID A COCKEYED EXPRESSION.

ED'S GOGGLES ARE VAC-U-FORMED FROM THIN CLEAR PLASTIC. NO FINISH WAS APPLIED TO HIS COVERALLS.

HERE'S A PILOT WITH MORE ELABORATE COSTUMING THAN ED HEATH. HELMET IS CARVED INTEGRAL WITH THE HEAD. FUR COLLAR IS FLEXIBLE, FOAM. MAE WEST IS OF ORANGE PAPER TRIMMED WITH MONO-KOTE.



PARACHUTE HARNESS IS SHOE-LACE w/ PAPER CLIP & THUMB-TACK FITTINGS.



BODY IS URETHANE FOAM, PRIMED w/ DOPE-TASQUIN MIX. FINISHED WITH RAF BLUE DOPE



NOW! YOU KNOW AS MUCH ABOUT MAKING PILOTS AS THE OLD MODELER DOES..... SO GO TO IT!

VERY RARE Back Issue
MAGAZINE ARCHIVES
from the Digitek Books Collection

Well, we have found a very rare one for this month's download link. Many of the Old Timers at model building may remember the Bill Barnes stories appearing in the early issues of Air Trails. Actually there is a lot of history of the Bill Barnes and Air Trails magazines. We may cover that in future issues of RCMW.

But for now, we had never heard of a Bill Barnes Comic book until just recently. And here for you to download the only issue ever produced, Vol 1, No 1. It is not in the best condition but then there are probably only a few copies left in the world so we take what we can get. If any of you have a better copy please contact the editor and we can arrange to have it digitized and available for everyone.

The reason that there was only one issue ever printed is that the Street & Smith company changed the name after only the first issue. The new name ran for several more issues during WWII.

[-- CLICK ON THIS LINK PLEASE --](#)

This download link will expire on December 1, 2017, so if you'd like this issue for your own collection, better do it now.

**Because of the rarity of this issue we are
requiring a password to read it.
The password is "RCMW"**

As a note of interest, these issues are stored in the "cloud" that you see mentioned as one of the latest of the buzzwords used by the computer folks. We use a service called Mediafire which can easily handle very large files that would otherwise cause problems with downloading.



Back Issues of Model Airplane Magazines

If you're like me, you enjoy paging through model airplane magazines and plans, sometimes to find a project to build, to research a particular aircraft, or to just spend some pleasant time away from the daily grind.

If you like to build models, the magazines of today don't offer much since they are primarily expensive catalogs of ready-to-fly models. There's nothing wrong with RTF or ARF models but they don't offer much to interest model BUILDERS.

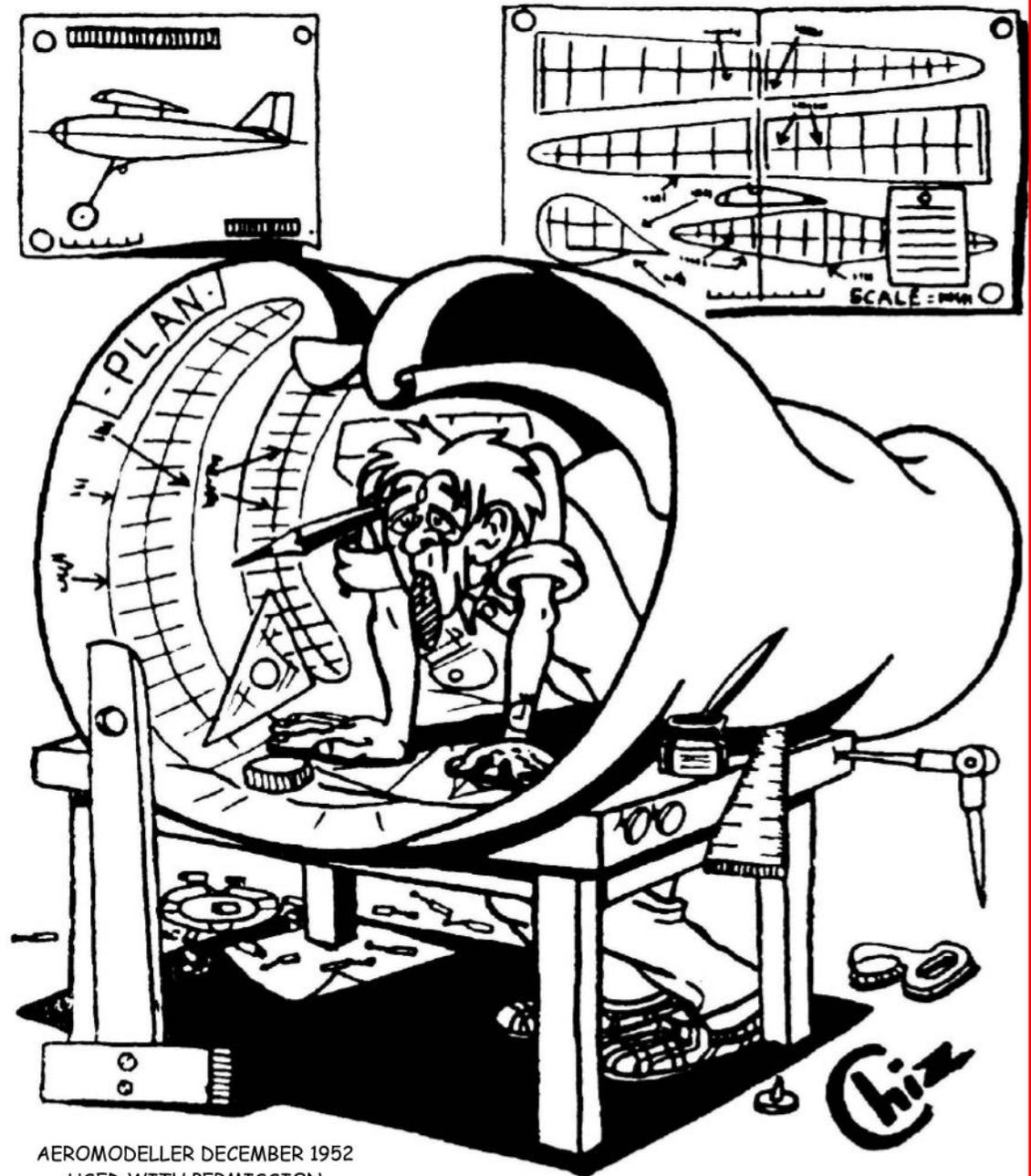
That's NOT the way it was in the past, when you had to build a model before you could fly it. If you're an old-timer, as I am, you have fond memories of Air Trails, Flying Models, Model Airplane News, Aeromodeller and many of the several other magazines available "way back when".

If you're a relative newcomer to modeling and want to learn how to build them, those old magazines can provide a wealth of useful information, plans and how-to-do-it articles.

There are several problems with those old magazines. They are sometimes hard to find, often in bad condition, and in many cases they are so fragile that they can fall apart just by turning the pages. This is because they were often printed on pulp paper, also known as newsprint. Newsprint is inexpensive, but has residual chemicals that cause it to deteriorate when exposed to the air and particularly to sunlight. Your wife or "significant other" might also ask "When are you going to get rid of all those smelly old magazines?"

I admit to being a bit of a "nut case" but have been collecting these magazine for over 50 years and now I am trying to digitize them to preserve them for other modelers. They are now available as digital PDF files. See the details on the next page.

Keep 'em Flying - Roland Friestad



AEROMODELLER DECEMBER 1952
USED WITH PERMISSION

Great Gifts for Modelers

Digital Magazines on USB Flash Drive Cards



AEROMODELLER, the premier British model airplane magazine is being digitized. **Ready now are all 240 issues from 1950 and 1960** including the full size plans that were sometimes included in each issue. On the left is a reproduction of the November 1935 cover of Vol 1, No 1. All of the earlier issues will also be available later in 2016

Catalog # D001033 - \$75 - Postage Paid

AIR TRAILS - This magazine went under several names. The final issue was published in March of 1975. There are 435 monthly issues included in the complete set and priced as follows ---

D001010 - January 1937 through December 1943 - 84 issues - \$50

D001011 - January 1944 through December 1950 - 84 issues - \$50

D001012 - January 1951 through December 1961 - 132 issues - \$50

D001013 - January 1962 through December 1971 - 96 issues - \$50

D001014 - January 1972 through March 1975 - 39 issues - \$25

AIR TRAILS ANNUALS -

D001009 - 1938 through 1969 - All 25 issues - \$30

D001015 - SPECIAL - Complete set including the annuals - \$200

MODEL AIRPLANE NEWS - The first issue of this magazine was published in July of 1929 and it is still being published. We have the following collections currently available ---

D001002 - July 1929 through December 1942 - 161 issues - \$50

D001004 - January 1943 through December 1952 - 120 issues - \$50

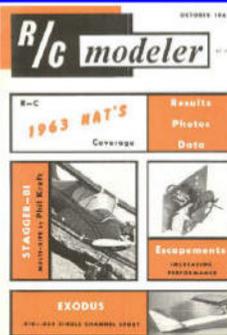
MODEL BUILDER - This magazine ran from the first issue of September~October 1971 through the final issue dated October, 1996 -

D001001 - The complete run - 295 issues - \$75

FLYING MODELS - The first issue of this magazine to use the name was published in June of 1947 and it is no longer published. We have the following collection currently available ---

D000013 - June 1947 through December 1963 - 123 issues - \$50

RC MICRO FLIGHT & RC MICRO WORLD - The complete run of RC Micro Flight, 1999 through 2004 and all issues of RC Micro World, 2005 through 2012 are available - D001016 - \$30



RC MODELER - Now available is the digital collection of the early issues of this magazine. The collection includes all issues from Vol 1, No 1 (October 1963) through December 1972. 109 issues all on a single USB Flash Drive.

D001017 - \$50 - Postage paid

All prices include postage paid worldwide

Send payment using Paypal to
cardinal.eng@grics.net

Or check or money order to
Roland Friestad
1640 N Kellogg Street
Galesburg, Illinois 61401
USA

Makes a Great Gift for Modelers
Circle your interests and give this sheet to
someone who has a hard time finding you a gift

Now Available!!
The early issues of
AEROMODELLER
 Computerized in High Resolution
 On Custom USB Flash Drives



Now, after several months and hundreds of hours of work, we have available high-resolution digital copies of the British Aeromodeller magazine starting with the very first issue dated November 1935, shown above, and through the December 1942 issue. These issues are extremely rare and hard to find. These early issues are from the late Ivor F collection in Australia, with thanks to his son Tahn Stowe.

Furnished on our custom made USB Flash Drives this collection is priced at only \$60 US, postpaid world-wide. PayPal, Money Order or check drawn on a USA bank. Catalog number - D001047 - 85 issues -

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P.S. - Don't forget to include your name and address - Sometimes people forget !!

