Best of THE HANGAR PILOT

COMPILED BY DAVE LINSTRUM 1995

24 YEARS OF INDOOR!

THE FINAL VOLUME

VOL 7: 1971-95

A 1993 READER SURVEY BY EDITOR DOC MARTIN SHOWS PREFERENCE FOR PLANS, SCALE DOCS, HOW-TO AND FUNKY FORMAT: DOC'S ORIGINAL LO-TECH DESKTOP PUBLISHING METHODS IN USE SINCE 1972!

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VOLUME UNBOUND TO EASE COPYING!

Best of the HANGAR PILOT

THE FINAL VOLUME
COVER SHOWN 90% TRUE SIZE
ARTIST: D. LINSTRUM

VOL 7: 1971-95

THE HANGAR PILOT

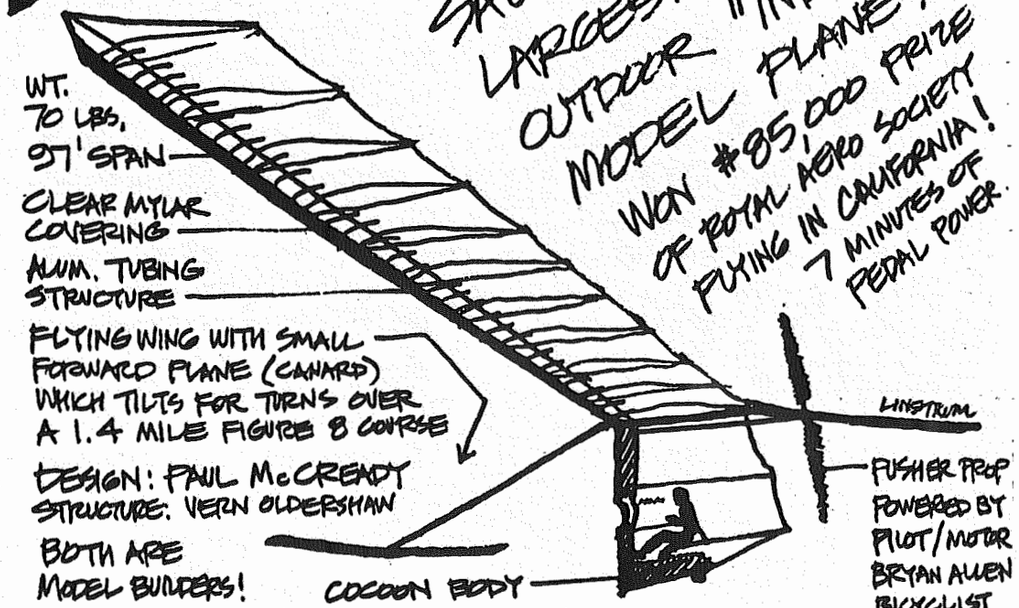
UNIQUE

MIAMI, FLORIDA USA

THE MIAMI INDOOR AIRCRAFT MODEL ASSOC. MIAMA

ISSUE #43
OCTOBER 1977
AMA CLUB 936
M.I.A.M.A.

"GOSSAMER CONDOR"
THE HANGAR PILOT
SALUTES THE WORLD'S
LARGEST MAN-POWERED
OUTDOOR "INDOOR"
MODEL PLANE!
WON $85,000 PRIZE
OF ROYAL AERO SOCIETY
FLYING IN CALIFORNIA!
7 MINUTES OF
PEDAL POWER

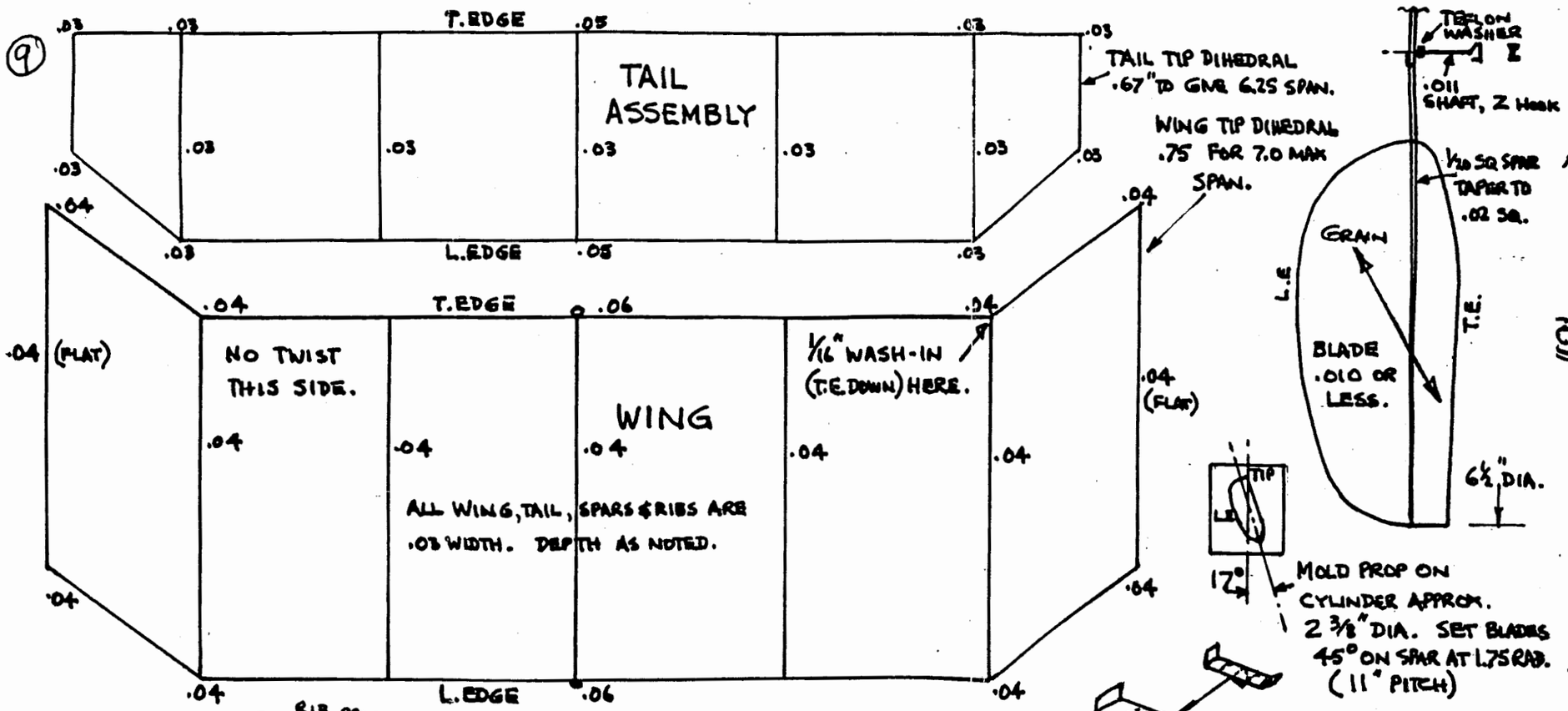


WINNER OF THE KREMER PRIZE AUGUST 23, 1977

A SUCCESSOR "GOSSAMER ALBATROSS" FLEW ENGLISH CHANNEL DOVER TO CALAIS!

AS A SENIOR, McCREADY WON 1ST PLACE IN MICROFILM AT AMA NATS! INDOOR!

(9)



ALL OUTLINES ARE OUTSIDE EDGE OF STRUCTURES.
USE APPROX 5LB. WOOD.
COVERING: ULTRA FILM ETC.
MOTOR: 12" LOOP .023 TAN 2. 2300 FOR 8½ MIN.

TIDDLY-WINK 2

MINI-STICK : JOHN BARKER NOV '93.

(6) JOHN BARKER HAS BEEN DEVELOPING THIS AT MAC DILL + DELTA MIAMA MEETS

(10) #163

Covering With Mylar--A Different View

Here's another way to adhere mylar films to balsa. This technique uses no spray cans, no rubber cement, no thinner, no smelly solvents. It was suggested by Joe Krush and I can testify to its effectiveness.

First, go to an art supply store, not a hobby shop, and buy a tube or jar of acrylic matte medium. This is a thick paste-like substance used by artists. It costs around $5. Also get a 6/0 or similar small artist's brush. You want a very small brush so that you don't add extra weight with the adhesive. That's all the supplies you need.

Dilute about a teaspoon of the matte medium with tap water in a jar lid or small medicine bottle. Use about 5 parts water to 1 part matte, or dilute until it looks like milk (very runny). Let the mixture stand for about an hour before using. It takes a while to dissolve completely.

For this procedure it is advisable to use a frame. The film must be taut and you need both hands to work with. Attaching the film to a frame solves both problems. Since you will be wetting your structure, it will warp if the film is not kept taut. Choose a warm day or cover in a warm room. The warmer, the better since the adhesive will dry quickly minimizing warping.

Begin by laying the part to be covered upside down on the film. While holding the part in place with one hand, paint the diluted glue around the outside edge with the 6/0 brush, touching the wood and the mylar with the brush. Ribs are optional. I leave them alone. The adhesive will dry in about an hour.

The parts are very easy to cut free with a double-edge razor because there is no gooey rubber cement clogging up the blade. You'll find that the mylar is very securely adhered to the balsa. No loose spots. Unfortunately, the film cannot be repositioned.

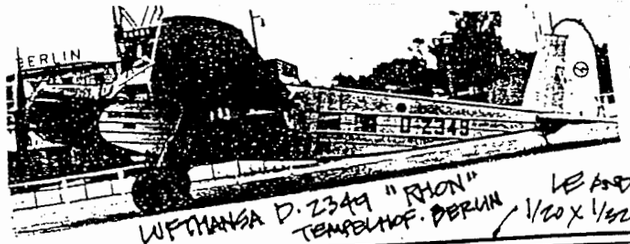
I just completed a wing, stab and rudder for a new EZB using this technique and none of the parts warped. This method is highly recommended.

(13) NEWS RELEASE

FROM DEFEATED NFFS VICE PRESIDENTIAL CANDIDATE DOC MARTIN, A TIMELY * STATEMENT CONCEDING THE ELECTION TO LOUIS JOYNER:

"DESPITE MY INTENSIVE CAMPAIGNING, MY BRILLIANT RECORD, AND THE MILLIONS I SPENT ON P.R. I HAVE BEEN REJECTED BY THE MEMBERSHIP OF NFFS FOR THE POST I SOUGHT"

* JUST BEFORE ANDREW TRASHED HIS ROOF. HE'S HAPPY HE LOST THE ELECTION.



LUFTHANSA D.2349 "RHON" TEMPELHOF. BERLIN

ACT. RUDDER WITH HORN

TEFLON TUBE + WASHER

BLACK MARKER NOSE (HATCHED)

FOAM COCKPIT

1/8 SQ PINE CARVE 45° FOR BLADE

.015 SHAFT

PROP
3.5" D 3" P

LE 1/32 SH

TRUE SIZE BLANK FOAM @ 15° ON 4" D CYLINDER

BLADE

PITCH 45° @ HUB

LE AND TE 1/20 X 1/32 → 1/32 □

NO RIB

1/32 □ RIBS

INK

D-A-M-E

1/32 X 3/32 OLED STRIP

COVER TOP ONLY

BLACK I.D. MARKER OR TISSUE

NO RIB

INK

1/32 □ WET FOAM TIPS

SCALE DOC: SIEGFRIED GLÖCKNER

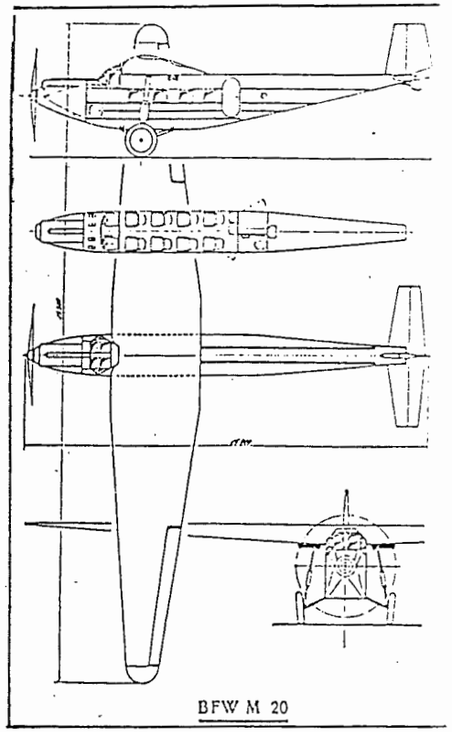
MID. THIRTIES 8 PASSENGER LUFTHANSA AIRLINER BY WILLY MESSERSCHMITT

1/32 SH GUSSETS

3/32 X 3/32 OLED BRACE

3/8" DIHEDRAL

TOP
#151



FRONT

MIAMA RULE 6" CAL BODY - 10" WINGSPAN PISTACHIO SCALE

3/32

FOAM

1/16

FOAM BLACK TIRE

ALL STRUTS 1/32 COLOR BLACK LINES

FOR BUILDING/FLYING HINTS SEE DOC'S ADVICE IN BILL HANNAN BOOK "PEANUTS + PISTACHIOS" BOX 210 MAGALIA, CA. 95954

COVER WITH PRE-SHRUNK WHITE JAPANESE TISSUE
BLACK MARKINGS: "SHARPIE" PEN
BLACK TISSUE SIDE WINDOWS

PROTOTYPE USED 17" LOOP .030 FAI TAN.

COVER TOP ONLY

INK

"DOC" MARTIN DESIGN

SLICE 1/32 RIBS

LE TE

1/32 PLY RIB PATTERN

PROTOTYPE USED 1/32 SH WHEEL

1/16 FOAM WHEEL

FLY TO RIGHT! TRIM FOR STEEP CLIMB

TAIL ALL 1/32 □

REAR HOOK SHAPE .015 MW

RUBBER

GLUE "L" TO BODY

STOOGE LOOP SKID

BALSA FROP

1/8 NOSE BLOCK + PLUG

FOAM

C.G.

RIB

BODY ALL 1/32 □

SIDE

COVER ALL SIDES

FIN IS ENLARGED

INK SEAMS

OLED

.015 HOOK

1/32 SH FAIL

BLACK NOSE HATCHED

5/8" FOAM WHEEL MARKER TIRE

BFW M 20

3-VIEW

1ST PLACE MIAMA MAY 91 2/92 1:20!

FULL SIZE PLAN BY DAVE "VTO" LINSTRUM

Bayerisch Flugzeugwerke

Pistachio Messerschmitt BFW M.20b

DocMartin © 1992
Hangar Pilot Plan

THE ULTIMATE INDOOR FILM

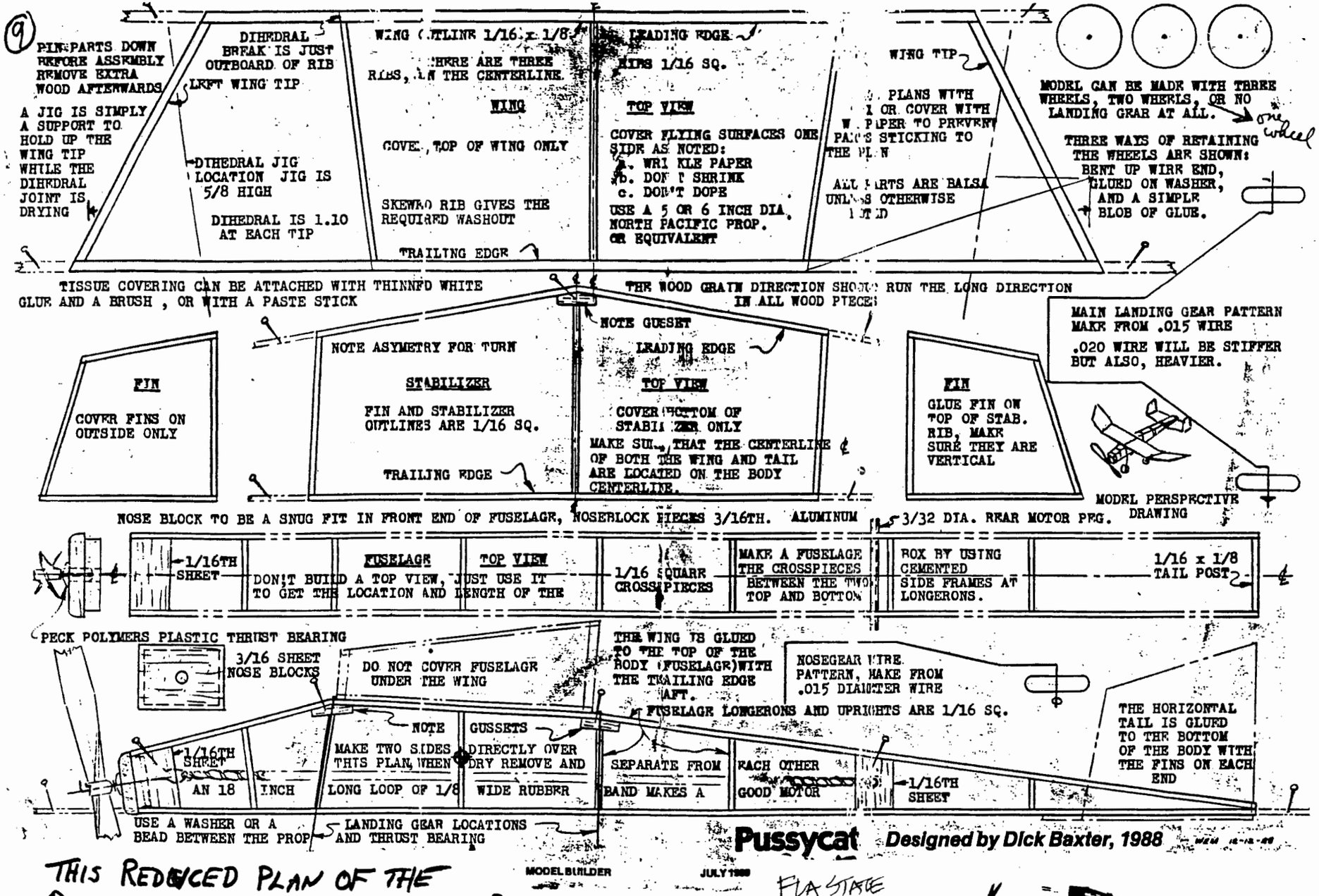
This is the thinnest mylar film produced to date. Compared to Ultra Film it is, on the average, 25% thinner and 23% lighter[1], yet, it is easier to handle and it does not display as much static electricity cling.

[1] Tests were conducted using precalibrated digital instruments at Tool & Die Supply Co. and scales at the University of South Florida Chemistry Department.

$20.00 for 20" x 12" plus $2.50 shipping anywhere in the U.S.

Make check or M.O. payable to:
Wayne B. Trivia
7408 W. Hanna Ave.
Tampa, FL 33615

WAYNE WAS 1991-92 MIAMA CUB CHAMP. HE HOPES THE CUB MINI-STICK RECORD OF 7:34 UNDER 6S' CEILING SET 9/30/92 WITH A MODEL COVERED WITH "ULTIMATE FILM".



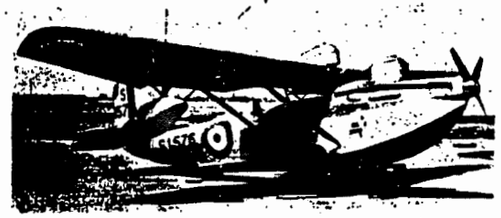
THIS REDUCED PLAN OF THE PUSSYCAT FROM JULY 89 MODEL BUILDER MAKES A GREAT PISTACHIO "MODEL OF A MODEL". #164

FLA STATE RECORD 1:55 SIDNEY GILBERT 3/95 MAODIL



Prawn with engine in take-off setting. (*Imp. War Museum Photo.*)

PLANES WORTH MODELING
Submitted by MIKE CONKLING



Prawn (*S1576*) with engine lowered in flight position. (*Alan R. Bedford*)

BRITISH FLYING BOATS + AMPHIBIANS 1909-1952

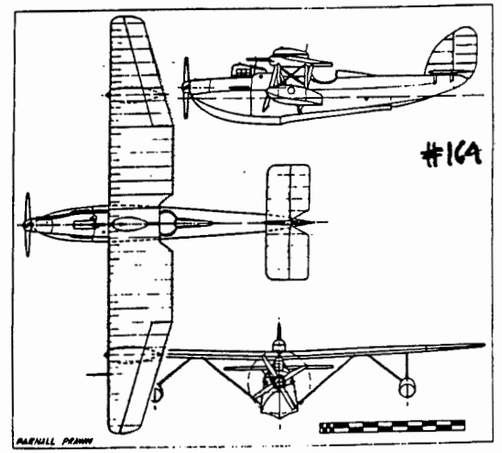
Parnall Prawn (1930)

Between the First World War and the early nineteen-thirties the firm of George Parnall and Co. of Bristol were prolific builders of small aircraft for both service and civil use, all of which had names prefixed by the letter 'P' and were designed by Harold Bolas. Most of these machines are well documented, but the Prawn falls into the category of those aircraft on the Secret List which vanished from the scene for various reasons before the ban on information was lifted, and therefore little data can be traced.

The Prawn, completed in 1930, was a single-seater military flying-boat built for the Air Ministry. The smallest British machine of the type, smaller than even the tiny Short Cockle, the Prawn had a parasol, strut-braced monoplane wing, with an all-metal hull and wing-tip floats, the mainplane and tail unit being of wooden construction and fabric covered. The pilot's cockpit lay aft of the mainplane, and was provided with a streamlined headrest. The most interesting feature of the Prawn, however, was its unusual power unit arrangement, the engine being a 65 h.p. A.C.–Ricardo–Burt, actually a spare auxiliary engine from the *R.101* airship. Fitted with a diminutive four-bladed propeller of 4 ft 3 ins diameter, the power unit was encased in a metal-cowled nacelle forming a self-contained 'power egg' which was pivot-mounted to a recess in the hull top. For take-off, the whole nacelle could be mechanically canted upwards fifteen degrees to clear the propeller from spray, and when in flight, lowered to the normal position with the thrust line at the top of the bows. A large radiator was mounted on the nacelle, and flexible connections carried engine controls and the fuel supply between hull and nacelle, the fuel tank being positioned externally above the mainplane centre section. Serialled *S1576*, the Prawn was at Felixstowe for testing in mid-1930, but its performance details and eventual fate are not known.

SPECIFICATION

Power Plant: One 65 h.p. A.C.–Ricardo–Burt
Span: 28 feet 5 inches
Length: 20 feet 4 inches
Weight Loaded: 1,100 pounds approx.
No further details available



ISSUE 147

PLANES WORTH MODELING

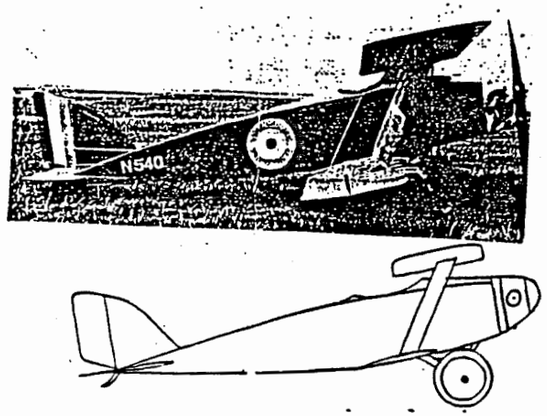
WORLD WAR 1 Aeroplanes, INC.

15 Crescent Road, Poughkeepsie, NY 12601, USA (914) 473-3679

EASTCHURCH KITTEN

In #119:40 we ran a photo of the partly-finished fuselage of the Sneesby Port Victoria PV.8- known as the Eastchurch Kitten- repro. It is being built from dwgs done by John Sizer (69 The Avenue, Lowestoft, E Suffolk NR33 7LH, UK), who sent us a copy, reprinted on the next page. The original machine was designed not by the Port Victoria staff, but by Lt G H Millar of the Experimental Flight at Eastchurch, under Sqdn Cdr Harry Busteed; it was to have used a 45 hp geared Gnat, which turned out not to be available, so a 35 hp ungeared Gnat was used instead. It appeared originally with no fixed tailplane, but proved longitudinally unstable, and the necessary stabilizer was fitted. The landing gear was unsprung, depending only on the large diameter tires; the lower ends of the main flying wires ran down directly to the axle-tips. The machine proved quite effective- it was sometimes referred to, erroneously, as the Sopwith Kitten

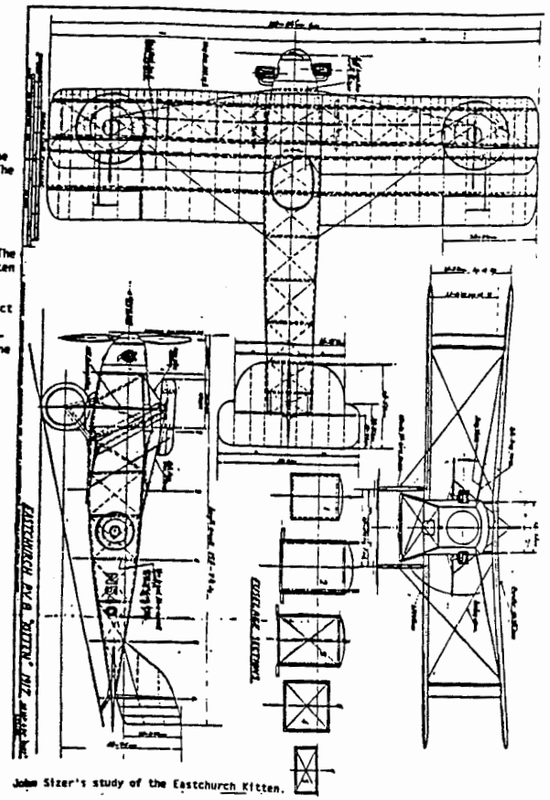
John Sizer writes of his dwg: The Kitten dwg was done with far from accurate information, and can only be regarded as tentative with a capital T. Most areas of construction await more exact definition, and I am hoping this will be forthcoming as more and more folk get to know about one's efforts. For example, I haven't the faintest idea what the bulge under the forward fuselage may be. A fuel tank? (Thus implying a header tank in the top centre-section!) I think one can guess a fair amount of wing structure, but all exact detail would be preferred.



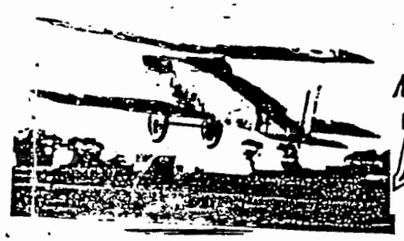
The photo above shows the Kitten with no stabilizer; serial number moved forward with later tail. (:Imperial War Museum)

The drawing below it is reduced and reversed from John's dwg on the following page. There seem only very slight discrepancies.

Photo (R) from Ray Rimell's new book WORLD WAR I IN THE AIR, reviewed elsewhere this issue; fr Bruce/Leslie Collection.



John Sizer's study of the Eastchurch Kitten.



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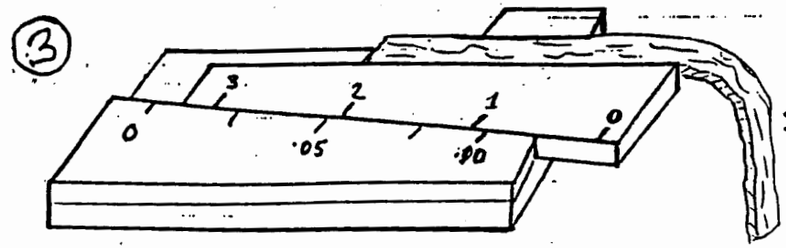
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CAMPBELL MODEL SUPPLY COMPANY

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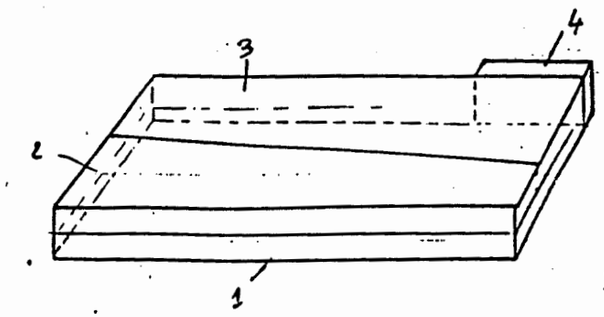
CHECK/M.O. ON U.S. BANK ◆ FREE PEANUT PLAN W/ORDER

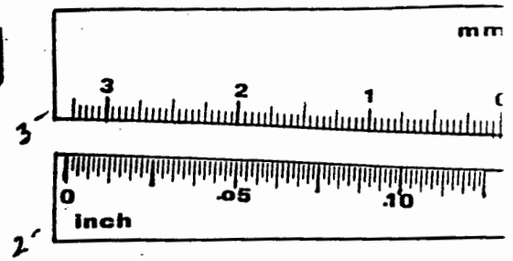
MICHIGAN RESIDENTS ADD 6% SALES TAX



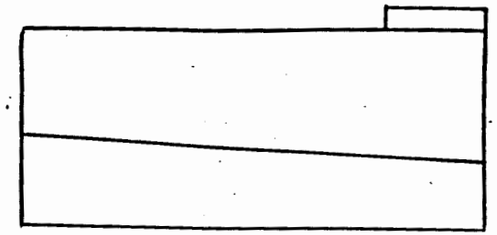
ACTUAL SIZE PL
SLIDE-CALIPERS
WON'T SQUASH
RUBBER

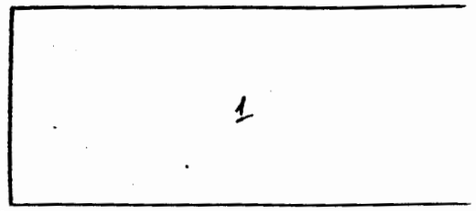
#161





4





1

A plan of a handy and easy to build slide calipers for check rubber thickness. It is not really a new idea. I am inspired J.Jones's excellent balsa stripper. You can use hard wood, alum PVC for construction.

I am specially inrerested by very small model scale (pla with span less than 6 to 5 inches). I have seen an exquisite ph of your Redotto Elias Airsport in Hannan's Peanuts & Pistach and I am very please if you can send me the plan of your model.

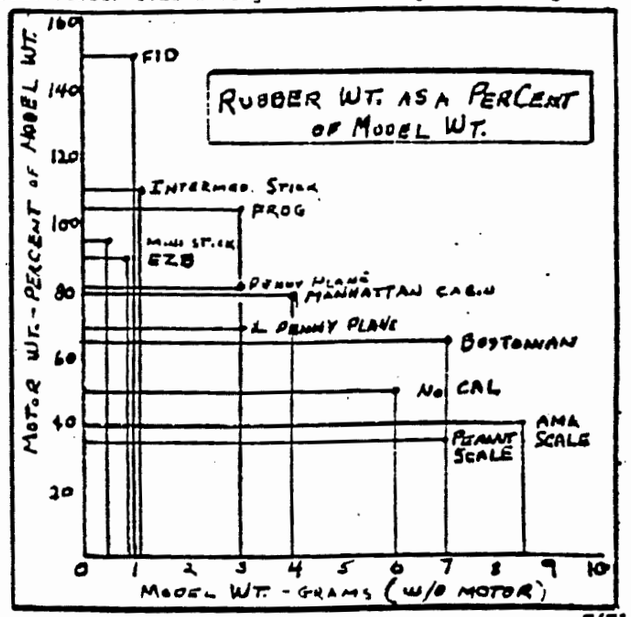
Best wishes for you and your family.

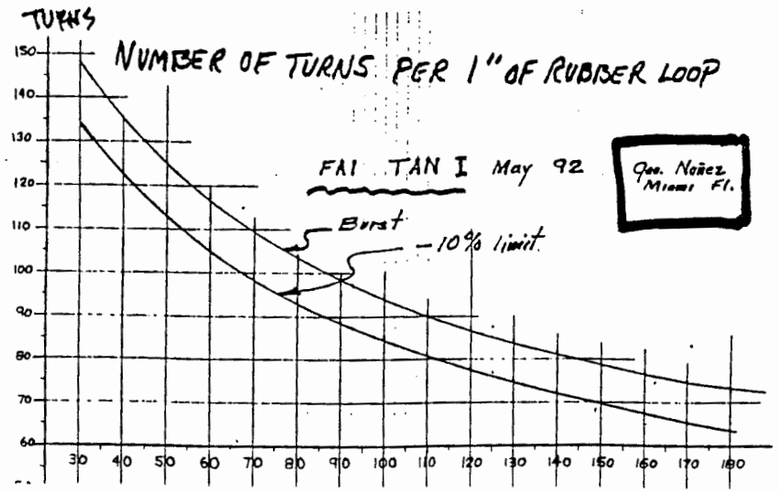
SUBMITTED BY MIAMA MEMBER
TRUNG HUA NGOC
135, ALLEE DE LA FORÊT
33600 PESSAC/FRANCE

SEND HIM SOME TINY SCALE MODEL PLANS!

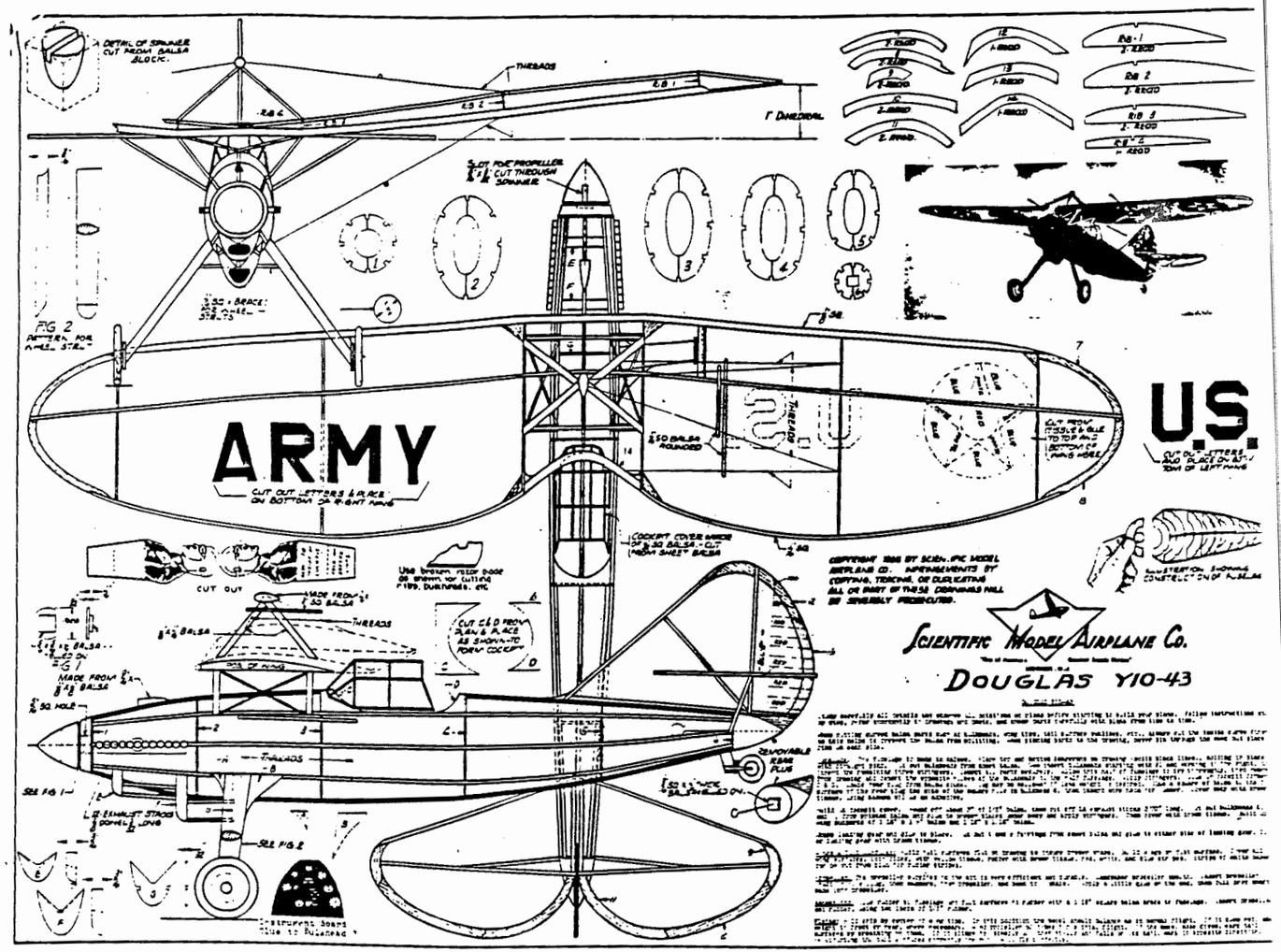
)) MODEL WGT. vs % OF RUBBER WGT., by Burr Stanton ((

The late Burr Stanton, Editor of the INMARC ML. compiled data from **Winning Indoor Designs** for this chart. His conclusion was: the lighter the model the greater the % of rubber.. the greater % of rubber to model weight the higher the flying time. He felt fliers worry to much about rubber size & length & not enough about weight.





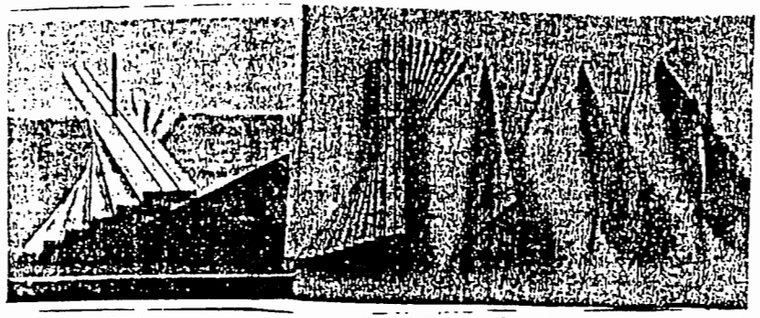
Here is one of those SCIENTIFIC planes you read about on page 9...the FAC postal contest. They were originally all 20" span and sold for 50¢. Very light and good flyers, they make good FAC Scale models. In addition to this Douglas Observation there are many fascinating others. GOLDEN AGE REPRODUCTIONS has the full line. See page 11 for their $ 2.50 catalog





CARTOON BY DOC

FROM AN OLD MODEL BUILDER: #164 (10)



Stack of 1/8-inch slats on the spindle with tip angle guide. Tip angle of 28° gives a P/D ratio of 1.67. (see chart at end of article).

The basic stages of constructing a laminated slat prop. Finished prop has been fitted with a slot-clutch bearing.

Blade Tip Angle and P/D

ANGLE	P/D	ANGLE	P/D
20	1.14	33	2.04
21	1.21	34	2.12
22	1.27	35	2.20
23	1.33	36	2.28
24	1.40	37	2.37
25	1.46	38	2.45
26	1.53	39	2.54
27	1.60	40	2.64
28	1.67	41	2.73
29	1.74	42	2.83
30	1.81	43	2.93
31	1.89	44	3.03
32	1.96	45	3.14

FOR CO_2 USE HARD BALSA & 30 MIN EPOXY TO LAMINATE (TRY ADDING A LITTLE BROWN FLOQUIL THINNED WITH THINNER TO THE EPOXY TO MAKE A DISCERNABLE SEAM.)

LAMINATED SLAT PROPS

By FRED HALL . . . Borrowing from techniques used in making full-size props, the author presents a step-by-step explanation on how to make your own. The appearance and performance can't be beat.

• This article describes a technique for building a type of carved propeller that was used back in the pioneer days. Very little balsa is used and much less carving is required than with conventional carved props. The result is a strong, helical prop that has visible laminations. Soft, medium, and hard balsa, and even basswood have been used with equal success.

I started building props this way after looking through Bert Pond's 50th Nationals booklet. An illustration showed a pile of slats that pivoted at the hub and twisted until 360 degrees of rotation was covered. This was used to illustrate pitch. I wrote to Bert for his comments. The return letter indicated that the pioneers did indeed build props this way and he offered the following guidelines: "Shape the backside completely and also shape the tips before doing any carving at the front or leading faces."

Bert's first point proved to be very important, because I had problems obtaining undercamber or even keeping the trailing faces flat on those props whose leading faces were carved first. However, the tips have been shaped last with no noticeable problems. Maybe Bert will elucidate on this. The simple blade tip angle technique is used as described in my booklet on indoor flying, and the chart is included in this article. The term P/D is the pitch-diameter ratio of the prop, and is independent of the prop diameter. Setting the tip angle in the manner shown in the photo results in the associated P/D ratio in the chart.

To construct this laminated slat prop, strip some 1/16 sheet to 3/8 inch wide or 1/8 sheet to about 1/2 inch wide. Whatever thickness is chosen, the slats must be wide enough so that the overlap allows adequate stock for the blade after the steps have been carved away. Cut the lengths to the desired diameter. For 1/16 sheet, use nine to twelve slats, and for 1/8 sheet, use six to nine slats, depending on the blade width desired. Stack them evenly and drill a 1/16 inch hole down through the center of the pile. Make the hole true, as this will be the hub.

On the top and bottom slats, draw lines on each side of the hub hole to define the area to remain after rough carving. Place the pile on a vertical shaft (1/16 inch diameter) that is 90 degrees to a flat surface. Spiral the slats (in the proper direction) so the tips make contact with the tip angle guide. Draw lines with a pen to mark the area for gluing on each slat below. This also aids setting the proper angle when reassembling.

Remove all slats (except the bottom one) and do not disturb their order. Paint the bottom slat with full-strength Elmer's glue and place the next slat on top of it, using the ink line to set the proper position. Of course, it is not necessary to have glue on areas not in contact. A cotton swab can be used to remove any glue that squishes out. Continue with the rest of the slats, making sure that they stay glued against each other. As the pile forms, confirm the tip angle using the guide. Allow three or more hours drying time before carving; overnight drying is best.

Carve the trailing faces by removing the steps, then carving up to the lines that define the middle portion. Leave this area uncarved until last. Carve some undercamber into the trailing faces as desired. Round the tips (per Bert Pond) or carve the leading faces next. The prop should look like the rough-carved prop in the photo.

From this point on, the finishing is no different than with any other carved prop. A bit of care is needed when shaping the egdes on a softwood prop as the glued joints are harder than the balsa, and there is likely to be a scalloping effect.

Although this type of prop does not have as deep a hub as other types, some depth may be removed at the hub as shown in the photo of a finished prop. A one-inch or larger sanding dowel is handy for final shaping and smoothing the undercambered area. A small, hand-held piece of fine sandpaper can be used to give the blades a finished look. Depending on the weight needed up front on the model, thinned dope can be used, followed by more concentrated dope with sanding in between. I fit these props with the same slot-clutch bearing illustrated in the indoor booklet.

If mahogany sheet or some other soft, dark wood can be obtained, a more beautiful laminated prop can be made by alternating the dark wood with basswood slats. Sanding bass is a treat if you haven't tried it (ask Fernando). Be sure to put the dark wood at the top and bottom slat positions.

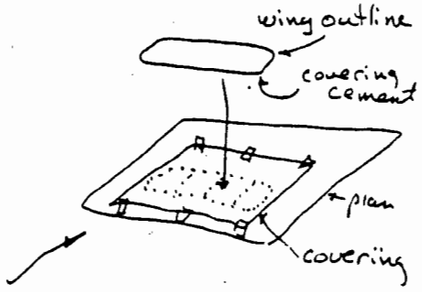
(12) #171

COVERING WITH PLASTIC FILMS

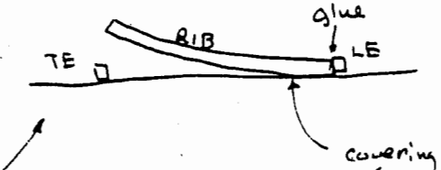
Hassle-free indoor construction – For most builders covering indoor structures with plastic film coverings is pretty frustrating. Static cling makes the stuff fold up onto itself and stick to the building board, making you feel like the proverbial one-armed paper hanger. The standard method for dealing with the stuff is to first stick it to some kind of frame while it's flat, and then lay the frame over the structure to be covered. I've found this method to be helpful but still challenging. Here's an even simpler way (I think) to build certain indoor structures, like a ministick wing. The method essentially eliminates the covering operation alltogether. It's like building a fiberglass boat, where you apply the gel coat to the mold first. I tried this recently and it produced a very smooth covering job automatically.

Method I. (Covering on top surface, wing built upside-down)

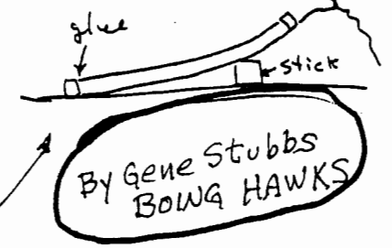
0. Make a mirror image version of your wing plan (bottom view), since you will be assembling the wing upside-down.
1. Cover plan with waxed paper as usual.
2. Build the wing outline, remove it from the plan when dry.
3. Lay covering film over the waxed paper (over plan). Stretch it smooth and tape it down at several places.
4. Apply covering cement to wing outline and position it over the plan (on covering film). Weight it down with pennies. If you like to use the solvent activation technique let the cement dry on the outline and then activate it with solvent after it is positioned on the plan.



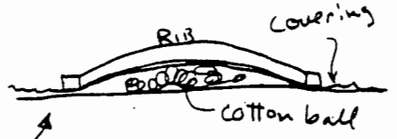
4.5 If using solvent-activating covering cement (rubber cement, shellac, dope) apply some to the top surfaces of the ribs and allow to dry.



5. Glue one end ribs to leading edge spar (upside-down).
6. When dry, cut or untape covering material on leading edge side.
7. Prop up wing outline leading edge by sliding a balsa stick under the covering. Trailing edge is still weighted down.

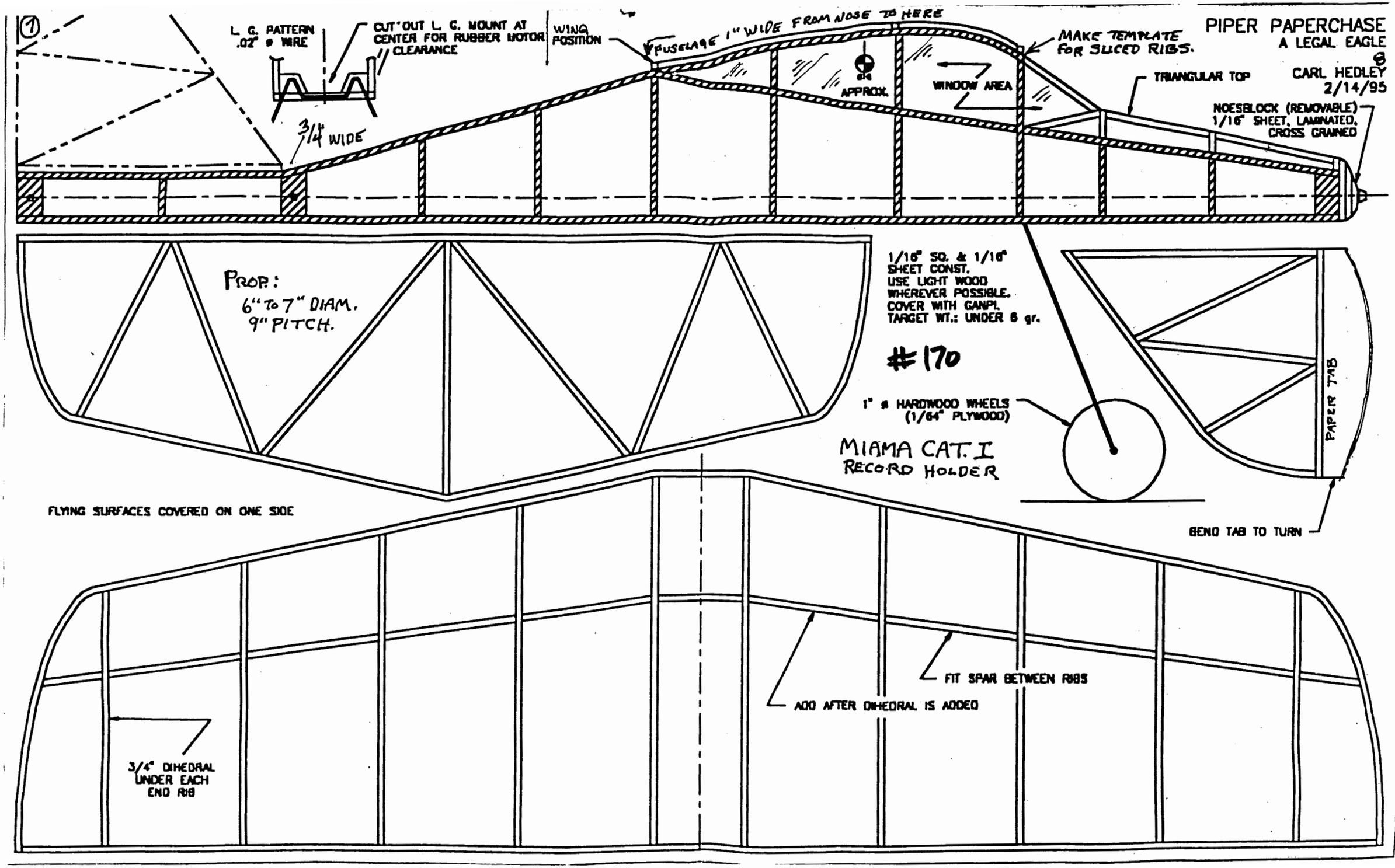


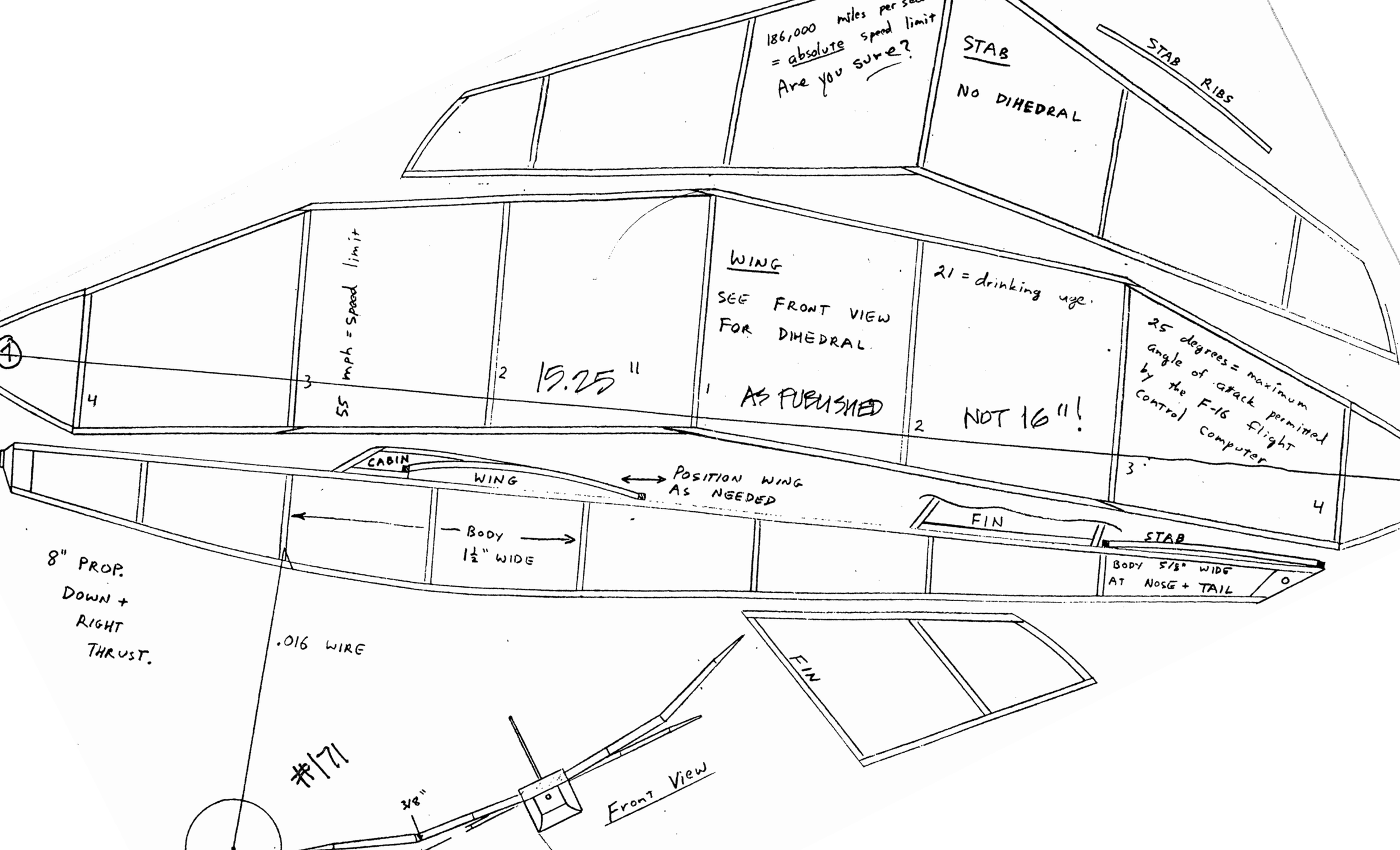
8. Glue rib trailing edge joints to wing TE spar. Hold down with weights.
9. Apply covering cement to ribs if needed or activate previously applied cement with solvent.
10. When dry remove structure and trim edges of covering using a sharp razor or cautery.

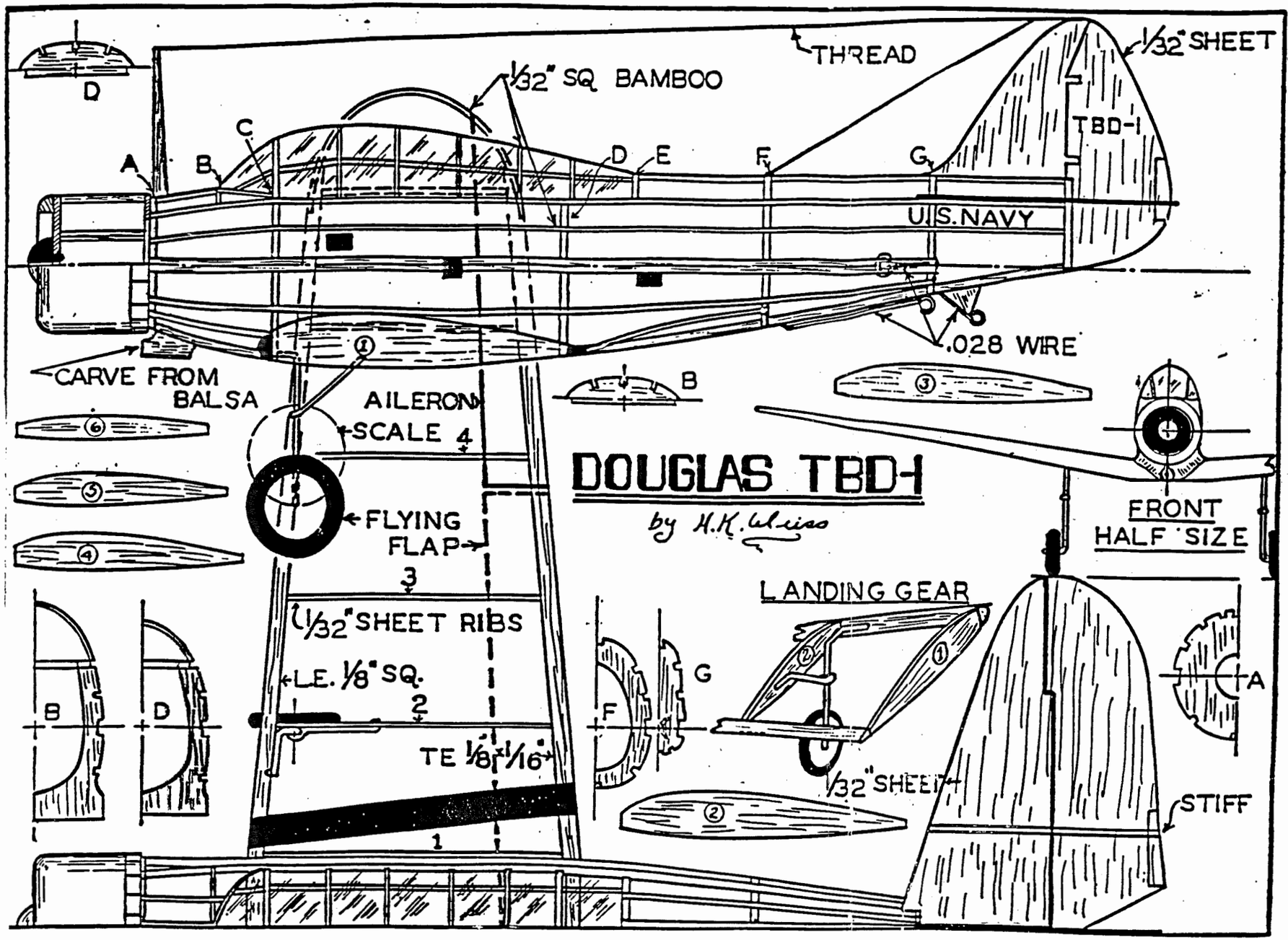


Method II. (Covering on bottom surface, wing built right side up)

As above except glue in both ends of ribs as usual. Remove from board and cement covering to underside of ribs while pushing covering from below (eg. cotton balls under rib locations).


PIPER PAPERCHASE
A LEGAL EAGLE
CARL HEDLEY
2/14/95
L. G. PATTERN .02" ø WIRE
CUT OUT L. G. MOUNT AT CENTER FOR RUBBER MOTOR CLEARANCE
WING POSITION
FUSELAGE 1" WIDE FROM NOSE TO HERE
MAKE TEMPLATE FOR SLICED RIBS.
TRIANGULAR TOP
WINDOW AREA
APPROX.
3/4" WIDE
NOSEBLOCK (REMOVABLE) 1/16" SHEET, LAMINATED, CROSS GRAINED
PROP: 6" TO 7" DIAM. 9" PITCH.
1/16" SQ. & 1/16" SHEET CONST. USE LIGHT WOOD WHEREVER POSSIBLE. COVER WITH GANPL TARGET WT.: UNDER 6 gr.
#170
1" ø HARDWOOD WHEELS (1/64" PLYWOOD)
MIAMA CAT. I RECORD HOLDER
PAPER TAB
BEND TAB TO TURN
FLYING SURFACES COVERED ON ONE SIDE
3/4" DIHEDRAL UNDER EACH END RIB
ADD AFTER DIHEDRAL IS ADDED
FIT SPAR BETWEEN RIBS


186,000 miles per sec
= absolute speed limit
Are you sure?
STAB
NO DIHEDRAL
STAB RIBS
55 mph = speed limit
15.25"
WING
SEE FRONT VIEW FOR DIHEDRAL
AS FURNISHED
21 = drinking age.
NOT 16"!
25 degrees = maximum angle of attack permitted by the F-16 flight control computer
CABIN
WING
POSITION WING AS NEEDED
BODY 1½" WIDE
FIN
STAB
BODY 5/8" WIDE AT NOSE + TAIL
8" PROP. DOWN + RIGHT THRUST.
.016 WIRE
#171
3/8"
Front View
FIN



ISSUE #142

Building the Douglas Torpedo Bomber

(Continued from page 21)

and can be obtained at any model counter.

The plan shows the correct number of cockpit formers. Some may be omitted for simplicity. Make the formers from 1/32" square bamboo.

Assembly and Covering

Sand the fuselage and wing carefully so that there will be no projections to spoil the covering. Cover the model carefully with white tissue, using small strips on the curved parts of the fuselage. The landing gear is attached to the wing before covering, and the tissue is cut to fit. All wire parts are .028 wire.

Spray the model lightly with water, and when it is dry, sand off the fuzz which will appear at the leading and trailing edges of the wing and at sharp corners on the fuselage. Give the model one coat of clear dope which has been mixed with thinner in about a half to half ratio. Dope the cowl and other parts, but *do not dope the tail surfaces.* Sand any roughness which may appear, and then cement the tail surfaces in place. To insert the stabilizer, slit the tail post with a razor, push the stabilizer into position and cement it, then re-cement the tail post.

Add as much detail as may be desired. The model has a standard navy insignia, including stars on top and bottom of each wing tip.

Propeller

Carve the propeller from hard balsa, using a block 4-3/4" x 7/8" x 1/2", or use any medium pitch prop of that size that you may have. *Do not use a high pitch prop,* for the torque will make the model difficult to control laterally.

Flying

The model should balance just about right if hardwood wheels are used. Test it by gliding it. If it stalls, check the tail attachment, and if there is any perceptible negative incidence cut the stabilizer loose and readjust it to zero incidence. If the model still stalls, sand the tail surfaces. Add weight to the nose only as a last resort. If the model dives warp

...e elevators up slightly or use lighter hooks.

If the model spiral dives under power, warp the trailing edge of the inside wing down slightly.

Use two strands of 1/8" flat rubber, lubricated, with about a half inch of slack. For long flights after the model is adjusted, use a winder..

ANOTHER IN THE H.K. WEISS SERIES.
SEND IN YOUR TIMES TO MIAMA BY THE END OF 1991

BUILD LIGHT - CAN YOU EXCEED THE ORIGINAL "25 SECONDS"?

SO LONG, DR SEUSS - WE'LL BE SEEING YOU IN SOLLA SOLLEW!



(11) SEE PG. 299 CURTISS AIRCRAFT 1907-1947 PETE BOWERS

A COMET DIME SCALE KIT American Modelcraft Co - A Division of COMET (4)

FROM 1936

COLOR SCHEME
FUSELAGE - KHAKI
WINGS & TAIL ASSEMBLY - YELLOW

WINGS ARE SINGLE SURFACED

RIB SECTION (MAKE 6)

CENTER SECTION RIB (MAKE 1)

CENTER SPAR CEMENTED IN PLACE AFTER WING IS REMOVED FROM PLAN.

CUT FROM THE PRINTED SHEET

1/16" SQ. LEADING EDGE

1/16" SQ. CENTER SPAR

MORE STRINGERS MAY BE ADDED TO FUSELAGE IF DESIRED.

1/16" SQ. TRAILING EDGE

CUT INSIGNIA FROM PLAN AND GLUE TO UPPER WING.

REDUCED 74%

CUT FROM PRINTED SHEET

THREAD REPRESENTS AILERONS

CUT FROM PRINTED SHEET

ENLARGE TO 16" SPAN

1/16" SQ. LEADING EDGE

RIB SECTION (MAKE 6)

1/16" SQ. CENTER SPAR

FOR ONE HALF OF LOWER WING USE SOLID LINES. FOR THE OTHER HALF USE THE BROKEN TIP, AND OMIT THE OTHER.

1/16" SQ. TRAILING EDGE

ALL STRUTS ARE FULL SIZE.

BODY SPACERS

FUSELAGE FORMERS

WINDSHIELD PATTERNS ARE CUT FROM PLAN AND GLUED IN POSITION ON COCKPIT COWLING.
PENCIL ROLLED OVER 1/16" SQ. FORMS THIS CURVE.

RAZOR BLADE BROKEN TO ABOVE SHAPE WITH AID OF PLIERS MAKES A GOOD TOOL FOR CUTTING RIBS, ETC.

CUT FROM PRINTED SHEET

CUT INSIGNIA FROM PLAN AND GLUE TO SIDES OF FUSELAGE.

INSTRUMENT PANELS ARE CUT FROM PLAN AND GLUED TO FORMERS 3 & 4

1/16" SQ. STRIPS

1/16" SQ. BALSA

ELEVATOR SLOT

PIN DOTS

CRACK LONGERON HERE

CUT FROM PRINTED SHEET

PIN HOLDS RUBBER MOTOR

* USE 4" MACHINE CUT PROP.

BEAD

BUILD ELEVATOR IN ONE PIECE OVER PLAN AND GLUE INTO SLOT AT REAR OF FUSELAGE

FRONT

COCKPIT COWLING PATTERN

CUT FROM PRINTED SHEET

3/8" DIHEDRAL

1/16" SQ. LANDING GEAR STRUTS

CUT RADIATOR GRILL FROM PLAN AND GLUE IN POSITION INDICATED BY ARROW.

THREAD BRACE WIRES

1/16" SQ. "X" BRACE

1" WHEEL

FRONT VIEW

CURTISS FALCON

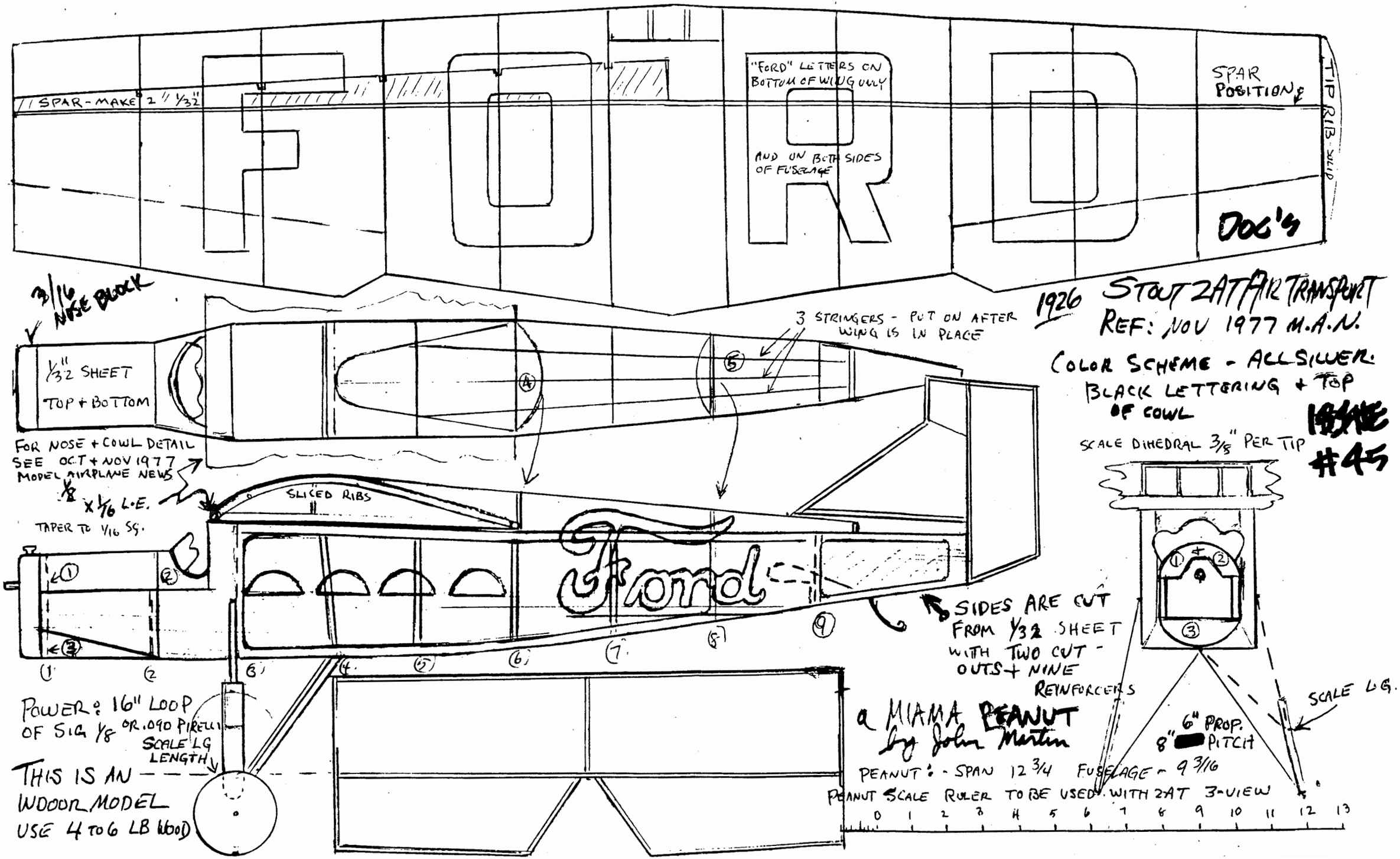
UNITED STATES ARMY ATTACK PLANE

WINGSPAN-16" LENGTH-10-5/8"
DIHEDRAL-3° WING AREA-
KIT NO. A-141

1/31/36

AMERICAN MODELCRAFT CO.

#162


SPAR - MAKE 2 // 1/32"
"FORD" LETTERS ON BOTTOM OF WING ONLY
AND ON BOTH SIDES OF FUSELAGE
SPAR POSITION
TIP RIB
Doc's
3/16 NOSE BLOCK
1/32 SHEET TOP + BOTTOM
3 STRINGERS - PUT ON AFTER WING IS IN PLACE
1926 STOUT 2AT AIR TRANSPORT
REF: NOV 1977 M.A.N.
COLOR SCHEME - ALL SILVER. BLACK LETTERING + TOP OF COWL
SCALE DIHEDRAL 3/8" PER TIP
ISSUE #45
FOR NOSE + COWL DETAIL SEE OCT + NOV 1977 MODEL AIRPLANE NEWS
1/8 X 1/16 L.E.
TAPER TO 1/16 SQ.
SLICED RIBS
Ford
SIDES ARE CUT FROM 1/32 SHEET WITH TWO CUT-OUTS + NINE REINFORCERS
POWER: 16" LOOP OF SIG 1/8 OR .090 PIRELLI
SCALE LG LENGTH
THIS IS AN INDOOR MODEL USE 4 TO 6 LB WOOD
a MIAMA PEANUT by John Martin
PEANUT: - SPAN 12 3/4 FUSELAGE - 9 3/16
PEANUT SCALE RULER TO BE USED WITH 2AT 3-VIEW
0 1 2 3 4 5 6 7 8 9 10 11 12 13
6" PROP. 8" PITCH
SCALE LG.

(5) #53

Fokker CVD
Carl Hedley 3/1/79

5 ft.

317

REF.: PROFILE PUB. # 87

COLOR: ALL SILVER W/RED & WHITE SWISS INSIG.

(6)

