

MAX - FAX

May - June 1992

Membership Information: Dues are \$15 per year in the USA, Canada, & Mexico. \$25 per year for all other countries. Expired dues will have a red X in the box at the top of this page. You will receive only one notice for renewal. Make checks payable to the D. C. Maxcutters and sent to the Treasurer. The D. C. Maxcutters meet the first Wednesday at 7:30 PM at College Park Airport, the world's oldest continuously operating airport.

CLUB OFFICERS

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 Damascus, MD 20872
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NEWSLETTER CONTRIBUTORS: Please send all correspondence and contributions for MAX FAX to the club President.
Please Note: Send all dues to the new Treasurer

UPCOMING EVENTS

May 9, 1992

FAC contest @ Columbia, SC (Contact Dave Smith
 Phone 803-765-1624) Note: Corrected date from last news letter.

May 10, 1992

Embryo Contest at (?)

May 31, 1992

Old Timer Contest at (?) (Mass Launch)

June 5, 6, 1992

FAC Contest at Johnson City, Tn. (Jim Miller, 827 Yorkhaven Rd.
 Cincinnati, OH 45240

June 21, 1992

Ten Center Contest at (?) (Max Wingspan 20")

July 10 - 12, 1992

FAC NATS @ National Warplane Museum in Geneseo, NY.

August 2, 1992

Any Scale Bi-Plane Contest at (?)

August 16, 1992

Any Plane powered with Micro-IV motor Contest at (?)

August 30, 1992

Any Amphibian or Float Plane Contest at (?)

September 12, 1992

Maxcutter's Summer Fun Fly @ (?) 9AM to 5 PM.

September 26, 1992

FAC contest, Raeford, NC (Contact Dave Rees - Phone 919-778-6653)

October 4, 1992

Old Timers Mini Contest @ (?)

Club News

Some Bad News

There is a question mark after each home club event listed above because at this time we are not sure where we will be flying. We received a letter from Comsat stating that "a new company policy allows for their property to be used only on COMSAT business or by COMSAT personnel." We have

written a letter requesting them to reconsider their decision. We have no clue as to how good our chances are. Probably nil! In the meantime, let us hear from any of you local people out there that know of a field that we could use for flying on Sunday afternoons and have our summer fun fly in September. - J.Paisley

How to get Rich and Famous

Actually we can't tell you how to get rich, but we wanted to get your attention. You can become famous by having your plans published in Max-Fax.

We are interested in rubber, CO₂, or electric powered scale models that have been built and flown successfully, and preferably are a little off beat or obscure aircraft.

Your plans should fit on two sheets 11" x 17". If this is not possible we will consider plans up to 17" x 22" on one sheet. The 11" x 17" is preferable because it's less expensive to print. Plan should be inked or a good clean zerox copy. If it's a peanut or Bostonian, the plan should fit 2 sheets 8 1/2" x 11".

We won't be able to return your plan and naturally we can't guarantee that we will use every plan that is sent. Please send all plans and contributing articles to the club president. - Bert Phillips

In This Issue

The full size fold-out plan of a Boeing XF7B-1 in this issue was sent to us by John Houck. This plan was originally presented on a sheet 27" x 34". Bill Ceresa did a "Sterling" job of redrawing the plan to fit on a standard 17" x 22" sheet and placing the front view and fuselage formers on two 8 1/2" x 11" pages.

Tom Schmitt is Hail & Hearty following his recent mild heart attack, so we have his usual First Class photo pages. You will also find a nifty Wittman "Buttercup" plan by Phil Cox, a No Cal Pitcairn PA-6 Super Mailwing by Walt Egaert, the results of the recent Pax-River contest, an article by Paul McIlrath on how to make foam wheels and finally an article by Roy Bourke describing several schemes for building a motor-loading jig. Read, build, fly, and enjoy!!

NAS/NATC Patuxent River Contest

Claude Powell put on the usual first class indoor contest on March 28. Good food and drinks were made available at a very nominal price by the Navy, every thing was well run, and we even had a freshly painted floor to fly from. Tom Schmitt helped run some of the events, compute the score sheets and Bill Ceresa did the art work on the buttons. 19 contestants entered events and a total of 76 official flights were made. Dave Rees was the Grand Champion of the meet with 4 first place finishes. We

enjoyed visiting with AMA District VP Howard Crispen who spent the day with us and helped pass out the awards. Donations to the Navy relief fund came to a generous \$75. We're looking forward to the next time, Claude!! - G. J. Paisley

We have a New Treasurer

Scott Paisley has retired as our treasurer. Frank Rowsome asked a couple of questions about the job and was nominated and elected before he knew what happened. Welcome aboard Frank and thanks to Scott for a job well done. .

Boeing XF7B-1 Feature Fold out Plan

This model was based on a Paul Matt three view drawing lifted from "American Modeler" dated September 1967.

The body was built up using a jig arrangement to hold the formers in place while stringers are added. Half shell construction could also be used. Cowling was built up by laminating balsa sheet over a cardboard tube (a powdered drink mix container perhaps). This makes an extremely strong nose and you can use the weight up front anyway.

Laminate curved portions of wing and tail surfaces. Wing uses split rib construction. There is no top rib on center line of wing. Do not cover center of top of wing between ribs bent along fillet line.

When assembling wing and body, formers #2 & #3 rest on the 1/16 square at bottom center of wing with #3 against back of rear spar.

Landing gear is represented in retracted position with half of wheel below wing. If you want to have gear extended, wing will require beefing up. - John Houck

A Sad Note from Claude Powell

Leonard "Pat" Berg, From Lexington Park, Maryland, passed away in March 1992 following a short illness. He had been a Maxecuter for five years and flew with the Patuxent River group. He looked forward to the Pax River indoor meets and could always be relied upon to show up at our local school flying nights. He enjoyed and greatly treasured the friends he made in the short time he flew with the Maxecuters. - Claude Powell

Pax River Spring Fly 3-28-92 Contest Results

FAC Rubber Scale							
Name	Aircraft	Static Bon.	Flight Times			Grand Total	
			Fit.1	Fit.2	Fit.3		
Dave Reese (1)	Porterfield 65	60.3	0	90	60	135.3	
Steve Hales (2)	Piper Vagabond	38.3	0	81	73	84	110.3
Steve Hales	DeHaviland Beaver	36.3	0	73	73	75	103.8
Brian Koppenhaver (3)	F4U Corsair	47	10	39	46		102
John Houck	F6F-3 Hellcat	49.6	10	35			94.6
Bill Bell	Martin T4M-1	57.5	15	17	19		91.5
John Houck	Loening M-81	50	5	35			90
Bill Bell	Great Lakes kTr.	56	15	12	14		85

FAC Power Scale							
Name	Aircraft	Static Bon.	Flight Times			Grand Total	
			Fit.1	Fit.2	Fit.3		
Mark Houck (1)	Baby Ace	54.6	3	33	68	71	121.8
Terry Pittman (2)	Belanca Crusier	56.3	10	43	31	46	112.3
Steve Hales (3)	Sopwith Tabloid	25.3	15	74	62		99.8

Coconut Scale							
Name	Aircraft	Static Bon.	Flight Times			Grand Total	
			Fit.1	Fit.2	Fit.3		
Dave Reese (1)	Piper J4E	69	0	90	115		140.3
Jerry Paisley (2)	Piper J4E	50.6	0	121	67		133.1
Carson (3)	Dayton Wright	31	5	70			101

14 gram Bostonian					
Name	Aircraft	Flight Times (sec.)			
		Fit.1	Fit.2	Fit.3	Best
Doug Buchanan (1)	Square "1"	108	79	112	112
Mike Moskow (2)	Phat One	90	89	103	103
Jerry Paisley (3)	Pumpkin	84	94	95	95

No-Cal					
Name	Aircraft	Flight Times (sec.)			
		Fit.1	Fit.2	Fit.3	Best
B. Carson (1)	Caesna CR3	150	155		155
Rich Gillie (2)	Waterman Goeling	68	80		80
John Krouse (3)	Solar Challenger	68			68
Bill Powell	Porter	55	61		61
Maitre	Farman	59	52		59
John Krouse	Rumpler Taupolev	57			57
Brian Coppenhaver	Caesna Cardinal	43			43

Novice Penny Plan					
Name	Aircraft	Flight Times (sec.)			
		Fit.1	Fit.2	Fit.3	Best
Glen Simperts (1)	2 cents worth	398			398
Frank Roweome (2)	Blue	360			360
B. Carson (3)	Dyn-o-mite	330			330

Consolation Mass Launch					
Name	Aircraft	Round Eliminated			
		1	2	3	Place
Paul Preiregen	Fairchild 24				1
Mark Houck	Nieuport 12				2
Rich Gillie	Harlow				3
Jerry Paisley	Stinson 105			X	
Terry Pittman	Martinsyde			X	
Bill Bell	T4M-1		X		
John Houck	Boeing Monomail		X		
Randy Kleinert	F6F	X			
Glen Simperts	T-Craft	X			

Bogus Scale Bostonian						
Name	Aircraft	Flight Times (sec.)				Best
		Fit.1	Fit.2	Fit.3		
Scot Paisley (1)	Sky Farer	64	75	75		75
B Carson (2)	Corben Cabin	70				70
Rich Gillie (3)	Citabria	59	69			69
Frank Roweome	Beech Stroganoff	42				42

Old Time Kit Mass Launch				
Name	Aircraft	Round Eliminated		
		1	2	3
B. Carson	Wiley Post			1
Jerry Paisley	Stinson 105			2
Rich Gillie	Harlow			3
Scot Paisley	Taylorcraft		X	
Doug Buchanan	Allied Sport		X	
Bill Bell	Corben Super Ace	X		
Mark Houck	Allied Sport	X		
John Houck	GB-D	X		
Paul Spreiregen	Fairchild 24	X		

World War I Mass Launch				
Name	Aircraft	Round Eliminated		
		1	2	3
Dave Reese	Martinsyde S1			1
Mark Houck	Newport 12C-2			2
Terry Pittman	Martinsyde			3
Bill Bell	Fokker D-VII		X	
Frank Roweome	Foker D-VII	X		
Jerry Paisley	Albatros	X		

Navy Scale Mass Launch				
Name	Aircraft	Round Eliminated		
		1	2	3
Brian Koppenhaver	F4U Corsair			1
Randy Kleinert	F6F			2
Bill Bell	Martin T4M-1		X	3
John Houck	M81	X		

P-Nut Scale Mass Launch					
Name	Aircraft	Round Eliminated			
		1	2	3	Place
Paul Spreiregen	Fike				1
Rich Gillie	Pottier P100TS				2
John Houck	Boeing Monomail				3
Dave Reese	Martinsyde S1			X	
Doug Buchanan	Lacey		X		
Maitre	Bede III		X		
Terry Pittman	Pilatus PC-9	X			
Bill Powell	Ganagobie	X			

Golden Age Mass Launch				
Name	Aircraft	Round Eliminated		
		1	2	Place
Dave Reese	Gen'l Aristocrat			1
Glen Simperts	Taylorcraft			2
Paul Preiregen	Fairchild 24			3
B. Carson	Farman		X	
John Houck	Rearwin Speedster		X	
Doug Buchanan	HL-2	X		
Bill Bell	Monocoupe 90-A	X		
Jerry Paisley	Piper J4E	X		
Mike Moskow	T-Craft	X		

PHOTO PAGES

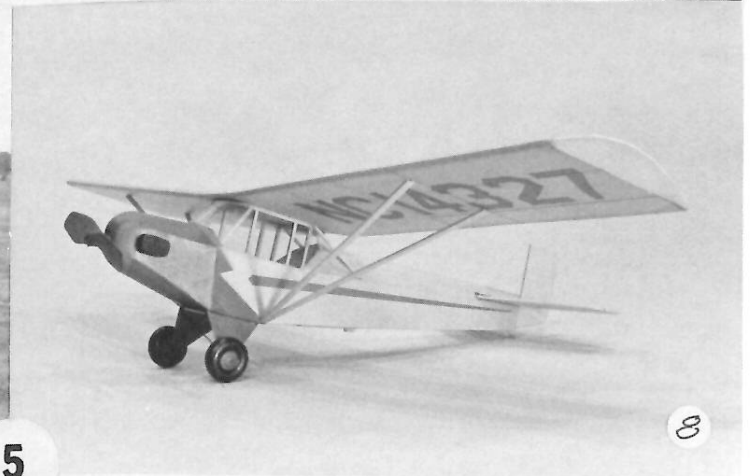
1. The full size plan of a Boeing fighter for this issue is by John Houck, shown here with another of his creations a Sperry Messenger in U.S. Army colors. How about that one also John?
2. John's son Mark is also a MAX-FAX plan designer; here is a model of his Nieuport 12, beautifully done by one of our readers Dick Hawes way out in Omaha, Nebraska. Great photo Dick; keep them coming!
3. Phil Cox provided the other full size plan in this issue and the photo of his nifty Wittman "Buttercup". Phil has built four versions; PEANUTS for rubber and CO2; and two more rubber versions at 18 and 24 inch wingspans. Phil tells us all were great flyers, but we have never seen one of Phil's aircraft that did not look and fly great.
4. Another beautiful model (and photo) by that indefatigable Bob Schlosberg: this time a Flyline "Aristocrat" with a Cox O2 utilizing a Davis CO2 conversion with a 20 cc tank. Jane will get equal time in the next MAX-FAX.
5. We have learned via the grapevine that our good friend and model aircraft builder extraordinaire Bob Wetherell may attend this years FAC Nats. Bob here with his terrific twin CO2 Dragon.
6. Mr. Personality himself, Doug Buchanan with one of his many high-flying aircraft.
7. Walt Eggert with his Fairchild; this is a delightful little model and a great flyer also.
8. Don Srull's little Taylor Cub powered by the Hi Line MICRO-4 electric motor system; a terrific combination.
9. Another beautiful model and photo from one of our readers way off in Japan, Jiro Sugimoto. This is his PEANUT version of Dave Rees NB-3. Jiro tells us it weighs 9 grams and flies 30 to 40 seconds.
10. Tom Hallman also used Dave's plan to build his nifty NB-3, only to be lost in the wilds of "Shangrila"; but since found and meticulously restored to life by Tom.
11. John Tudor, one of our readers down in sunny Florida powered his Megow Corben Super Ace (from Golden Age Reproduction plans) with the Hi Line MICRO-4 electric motor system and won 1st place in the FAC POWER event at the this year's Spring-Opener contest in Palm Bay, Florida.
12. Now this is an ambitious model construction project by Emmanuel Fillon but very typical of his many aircraft over the past half century or more. His "hydro coque bi moteur" was built and flown in 1941, and was rubber powered by a single motor in the hull with gear driven flexible drives out to the nacelles.
13. Sorry "free-flighters", but just could not resist including this photo from John Fogg in Minnesota (note tall grass in his photo). This a COCONUT size R/C powered by the Hi Line MINI-6 electric motor with a (4) 150mah battery and has rudder and elevator controls; Futaba system with micro servos. It weighs only 5.7 oz. ready to fly; can not help but dream of all those COCONUTS out there waiting to be converted.
14. We are looking towards the FAC NATS this summer and more original creations by that great innovative and fun-loving bunch of model builders that inhabit the PINKHAM field area. Mark Fineman is one of the regulars up there and his JUMBO B-17 turbo-prop test aircraft is typical of the creations we expect to see from the Connecticut group.
15. Al Lidberg continues to produce plans of interesting aircraft. How about this relatively obscure Golden Age subject, the Vulcan American Moth! Al drafted the plans in one inch scale, a good size for rubber, CO2 or electric power. The plans are available from Al for \$7.00 postpaid which includes a 3-view, xerox photo of the full scale aircraft and his usual complete comprehensive instructions. Throw in another dollar and you will get his complete catalog also. Write --- A. A. Lidberg Model Plan Service - 614 E. Fordham - Tempe - Arizona - 85283.
16. For a change of pace why not build the "Island Flyer" by Clive M. Wienker. Clive believes in thorough test programs as evidenced by his neat photo of at least 4 of his 11 prototypes. The "Island Flyer" has a 22 inch wingspan and and is a good introduction to the art and craft of building and flying "stick-and-tissue" models. It is distributed nationwide as a complete kit for \$13.95. If your Hobby Shop does not have it, write directly to the kit manufacturer --- R/N Models - 15421 Red Hill Ave. - Suite A - Tustin - California - 92680.

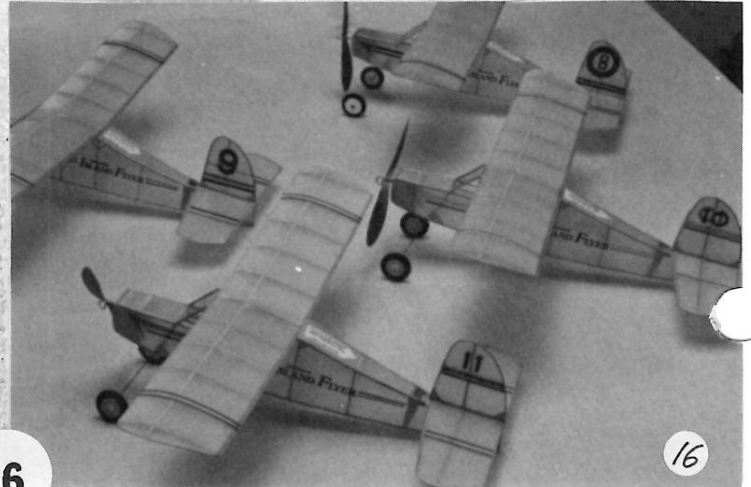
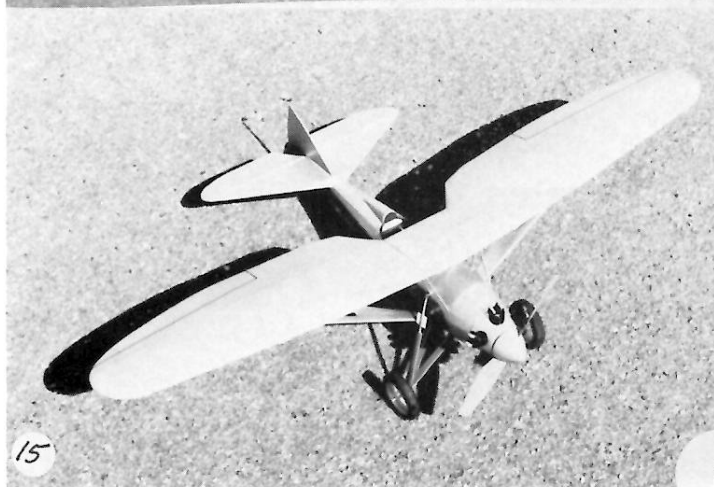
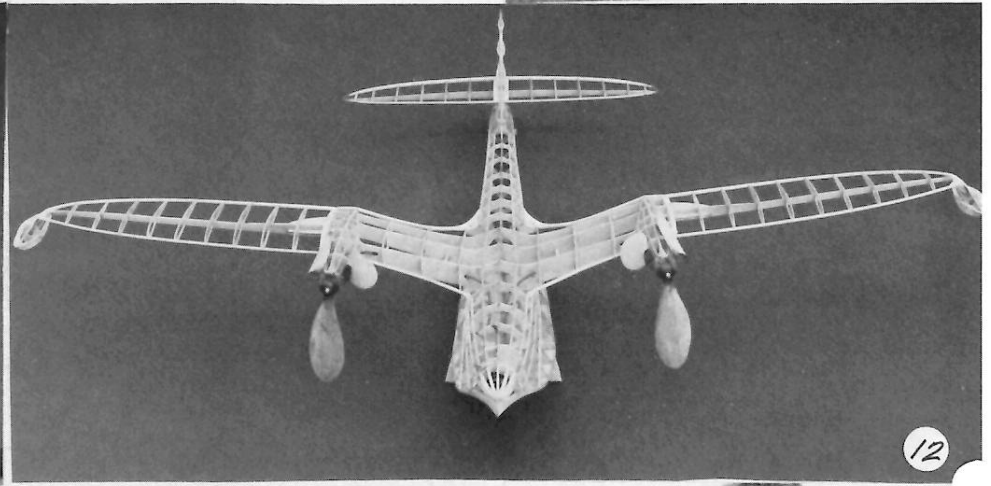
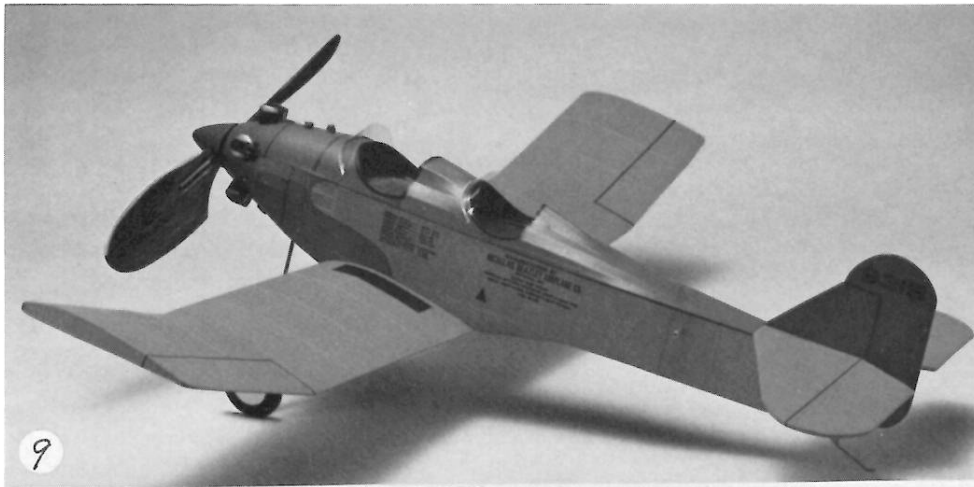
Indoor News and Views

D. C. Maxecuter, Plenny Bates is the Editor of the new newsletter INAV. It is devoted to indoor flying and will contain "how to" info and indoor plans in addition to regional news. The fee for 4 issues / year is \$8.00 U.S. (USA, CANADA, MEXICO). Write to Plenny Bates, 2505 White Eagle TRL SE, Cedar Rapids IA 52403

CO2 Motors

Thomas Ogden is trying to compile a list of people using CO2 motors. The list will be used for, buying, selling, trading motors and to exchange plans & info on the use of these motors, and lend the collective voices to the inclusion of CO2 in more contests. If you are interested, send a brief description of your interests along with your Name and address to - Thomas G. Ogdon, 27 Cortland St. Norwich, NY 13815-1317. A copy of the list will be sent to all who respond.





Bill Hannan Does It Again

Bert Phillips puts it so well - "God has blessed Bill Hannan with the ability to make really nifty little books about airplanes." Hannan's latest is "Stick & Tissue International" in which he reviews the evolution of rubber-powered models, presents a varied selection of model construction drawings including a delightful R.O.G., a couple of Pistachio-sized Peanuts, a semi-scale Fokker D.VII with the flavor of "old time" ten-cent kits, plus a trio of Bostonian models.

Send \$9.95 + \$2.00 postage to Hannan's Runway, Box 210, Magalia, CA 95954. - G. J. Paisley

Making Foam Wheels By Paul McIlrath

Very Light, realistic wheels up to about 1-1/2" dia. can be made from two layers of supermarket food tray foam. Foam sands fast and before-assembly, painting is easy with colored ink or foam-compatible paint. Use paper axle washers indoors and metal or ply outdoors.

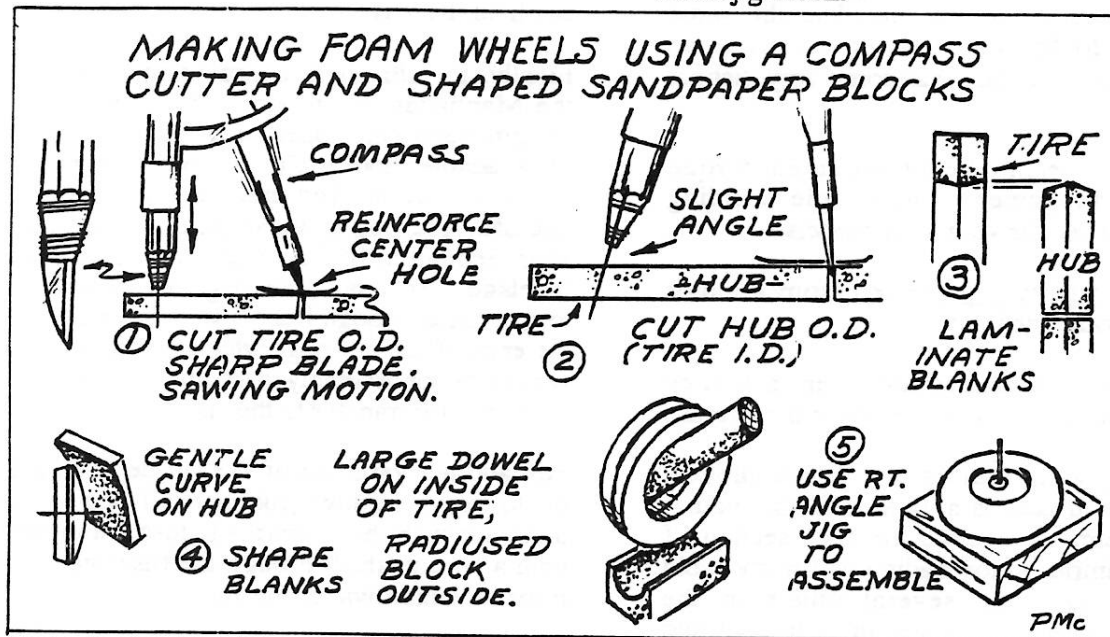
1. Pierce center hole in foam sheet and reinforce with tape. Bind & glue a chip from a single edge razor blade in the pencil from a cheap compass - 1/4" projection. Cut tire O.D. (two blanks per wheel) with compass blade vertical. Use sawing motion to prevent gouging.

2. Cut I.D. of tire (O.D. of hub) with compass blade at slight angle.

3. Assemble blanks separately as shown. Use glue stick (sands easily) or white glue. Dry overnight. A bit of ink or graphite in adhesive makes glue line visible for easy sanding reference. Repeat: Match blanks as shown for snug hub/tire fit.

4. Round inside of tires with large dowel sandpaper block. Sand outside with radiused block. Shape hub with large radius block. More sanding details: SANDPAPER - MODEL AVIATION, Nov, '91.

5. Paint parts before assembly. Glue hub in tire and washers on hub (white glue or RC 56) using a dummy axle wire held in accurately drilled hole in wood jig block.

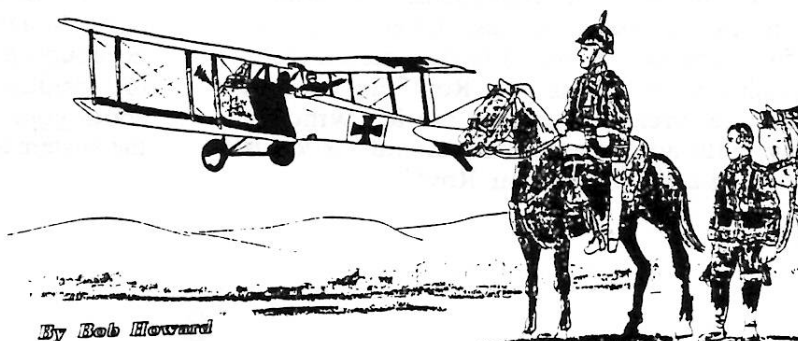


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By Bob Howard

The following article from SAM 86 Speaks was sent in by Marty Schindler.

A Motor-loading Jig For Scale Models

by Roy Bourke - Markham Indoor Group

The usual method of winding the rubber motor of a scale or other model aircraft with a full fuselage is to leave the motor in the fuselage while winding. To protect the aircraft from a motor which breaks during winding a "blast tube" must be used, which sometimes is too much of a bother to install, and which also necessitates an extension on the winder to allow removal of the tube. If a torque meter is used it is usually mounted onto the spinning shaft of the winder. All in all, the winding system is a complex and rather awkward arrangement.

Wouldn't it be nice if you could wind the motor of a cabin model externally of the fuselage, and transfer the fully wound motor to the model in the same manner as you do for stick and no-cal models? Winding the motor externally has some very distinct advantages:

You can use the same bench-mounted torque meter/stooge arrangement and simple winding equipment as you use for your stick models;

The model is completely protected from a motor which breaks during winding;

You can examine the wound motor easier, re-arrange knots, etc., before mounting the motor in the aircraft.

Well, you can wind motors for cabin models externally. All you need is a jig to load the wound motor into the aircraft through the nose section. I started using a simple motor loading jig for my cabin models a year ago, and several others in the Markham group have since picked up on the idea and have developed their own innovations. The system is very simple to use, and has saved many an aircraft from destruction from a broken motor. Alex Pafiolis calls his the "Thank you, Roy!" jig, because each time he breaks a motor while winding externally, with no damage to the aircraft or to his composure, he says "Thank you, Roy!"

The loading jig is a device which will allow the transfer of a fully-wound motor, with nose block and prop on one end and a small adapter hook on the other, from the winding equipment to the aircraft. The loaded jig is inserted through the nose until the adapter hook can be hooked over the tail-peg of the aircraft. (the jig is built long enough so that there is still a half-inch or more protruding from the nose). Then the nose block is removed from the jig and held to one side, and the jig withdrawn leaving the adapter hook in the aircraft. Finally, the nose plug is fitted to the aircraft, ready for flight.

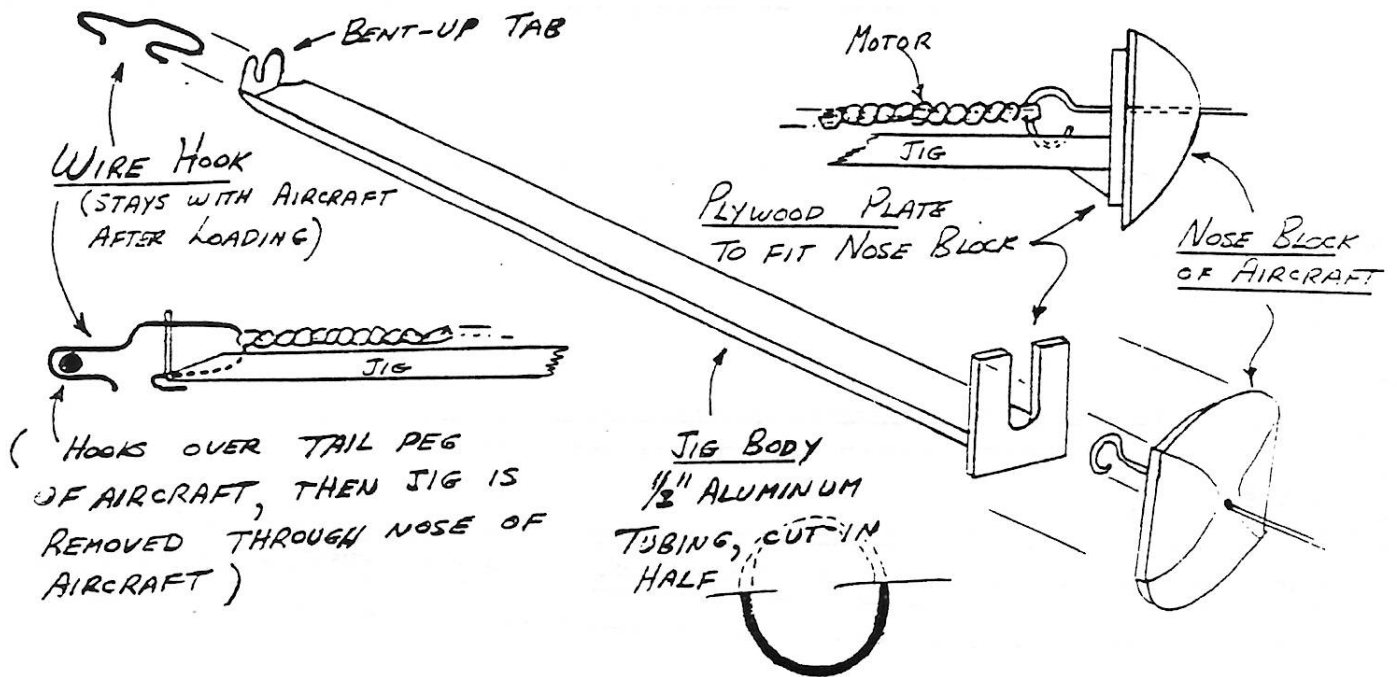
The attached sketches show the first jig that I tried, using a half-cylinder of aluminum as a jig body (made from 1/2" aluminum TV antenna tubing). This rig works well, but the bent-up tab used to hold the wire adapter hook sometimes gets caught while withdrawing the jig from the aircraft. Alternative I is a variation developed by Barry Fletcher, using a simple stick for the jig body, which allows for easier withdrawal because there is nothing on the Jig to catch on the way out.

Finally, for ultra-light competition aircraft (such as the Manhattan cabin, etc.) alternative 2 shows an arrangement which does not require the extra weight of an adapter hook. The jig holds the tail-peg itself, which can be hooked into slotted peg holes in the aircraft. The peg is wider than the aircraft, but still short enough to fit diagonally through a rectangular fuselage. To adapt the peg to a bench mounted torque meter/stooge I use a wire hook (inserted into the ends of the tail-peg) which is removed when the wound motor assembly is mounted to the jig ready for transfer to the aircraft.

Still another variation of the tail-peg version would be to use a hollow (tubing) tail-peg or bobbin, narrower than the aircraft, and fasten it in the aircraft with a wire pushed through the fuselage and bobbin prior to withdrawal of the Jig.

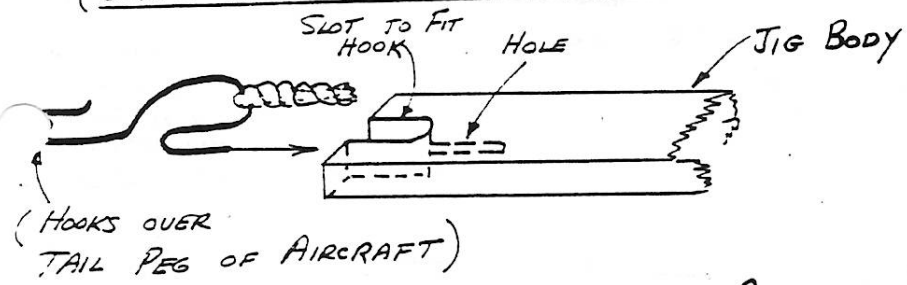
So far, the jig idea has worked like a charm for those in the Markham group who have tried it. There are, no doubt, many other variations and innovations of the loading jig. I would be interested in hearing about your innovations and experiences if you give the system a try.

LOADING JIG FOR WOUND MOTORS



ALTERNATIVE 1

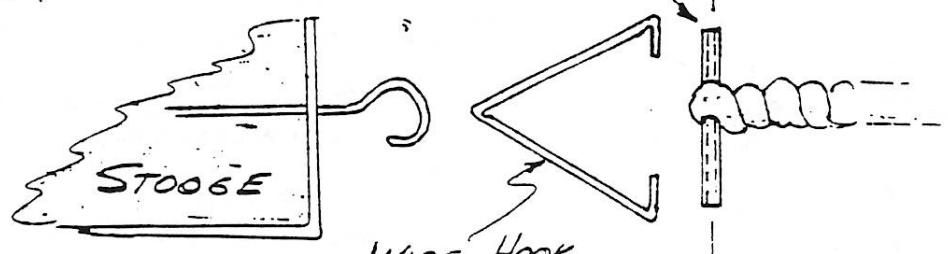
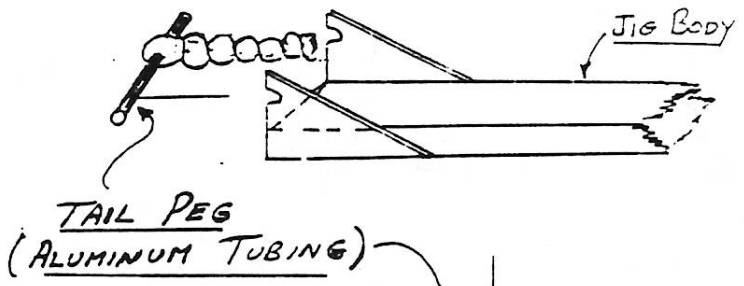
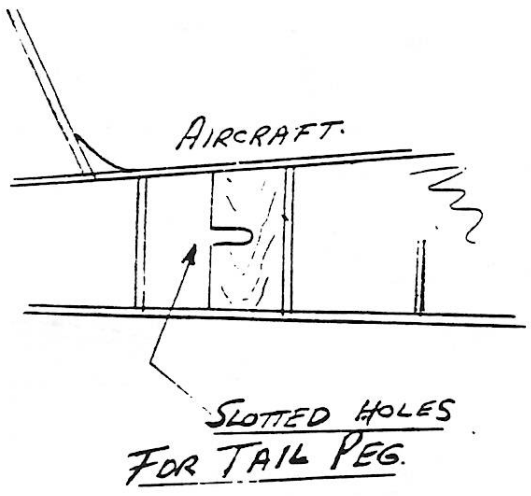
(USING A STICK FOR A JIG BODY)



NOT TO SCALE

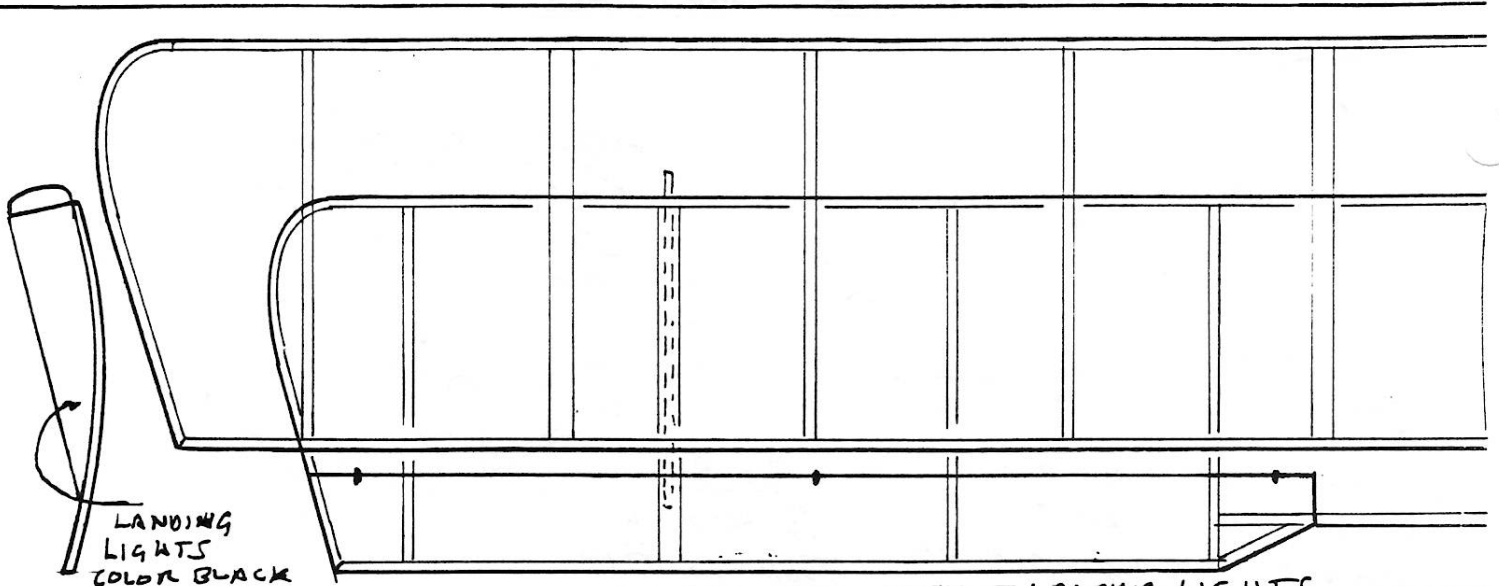
ALTERNATIVE 2

(USES THE ACTUAL TAIL PEG OF THE AIRCRAFT)



(TO ADAPT TAIL PEG TO TORQUE METER/STOGE)

Roy Bourke
MARKHAM INDOOR GROUP



NOTE - NO MAILPHONE WOULD BE SEEN DEAD WITHOUT LANDING LIGHTS

MOTOR STICK $3/32 \times 3/16 \times 9 3/8$ LONG
GLUE TO LEFT SIDE AFTER
COVERING THE FUSELAGE
ON LEFT SIDE

NOT
ALL TIP
EDGES
LAST 1'

ADJUST ME
FLY PLANE
 $1/16$ WASH IN
 $1/16$ WASH IN

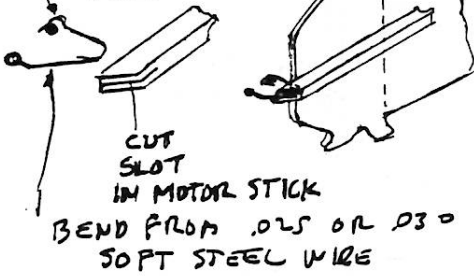
WING
MOUNTING
PLATE
TACIC TO
FUSELAGE THAN
APPLY TOP WING

REMOVE AFTER
APPLY CAB ONE STRUTS

CG



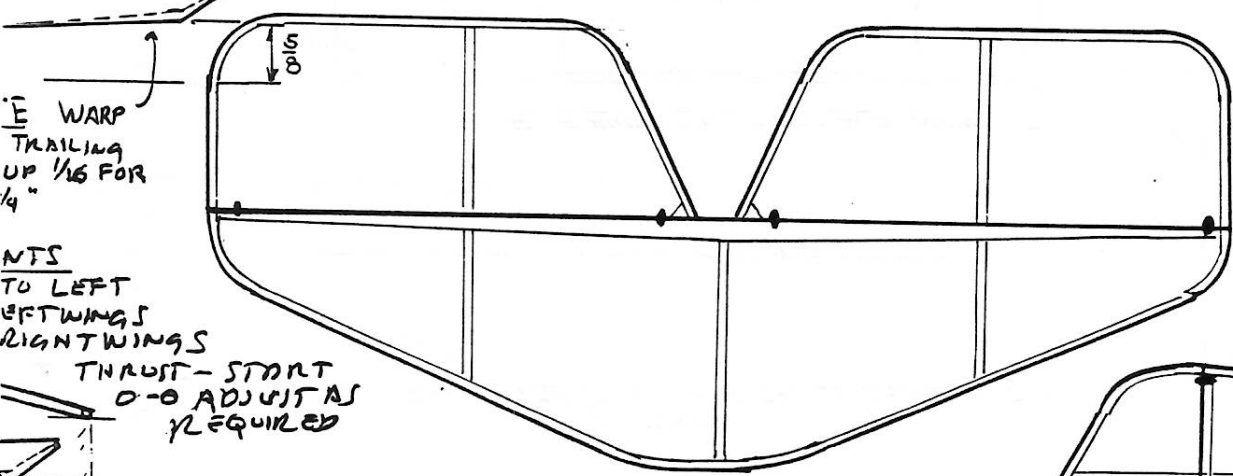
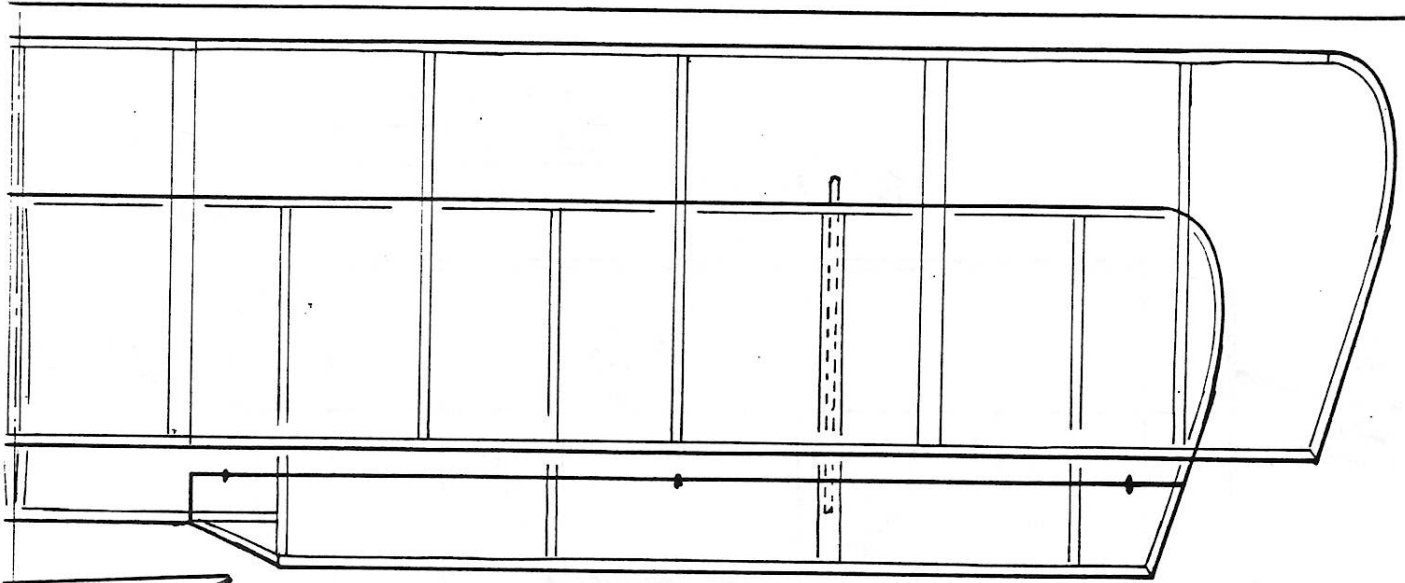
PIG TAIL PERMITS
REMOVING OR CHANGING
PROP



COLORS

- WINGS - STAB - RUDDER CHROME
- FUSELAGE - BLACK MARKINGS CHROME
- MOTOR GUN METAL GRAY
- EXHAUST SILVER
- STRUTS BLACK
- WHEELS CHROME YELLOW
- STAIN WOOD TO MATCHING
- COLOR BEFORE COVERING

(DO NOT SOAK
WOOD IN WATER)



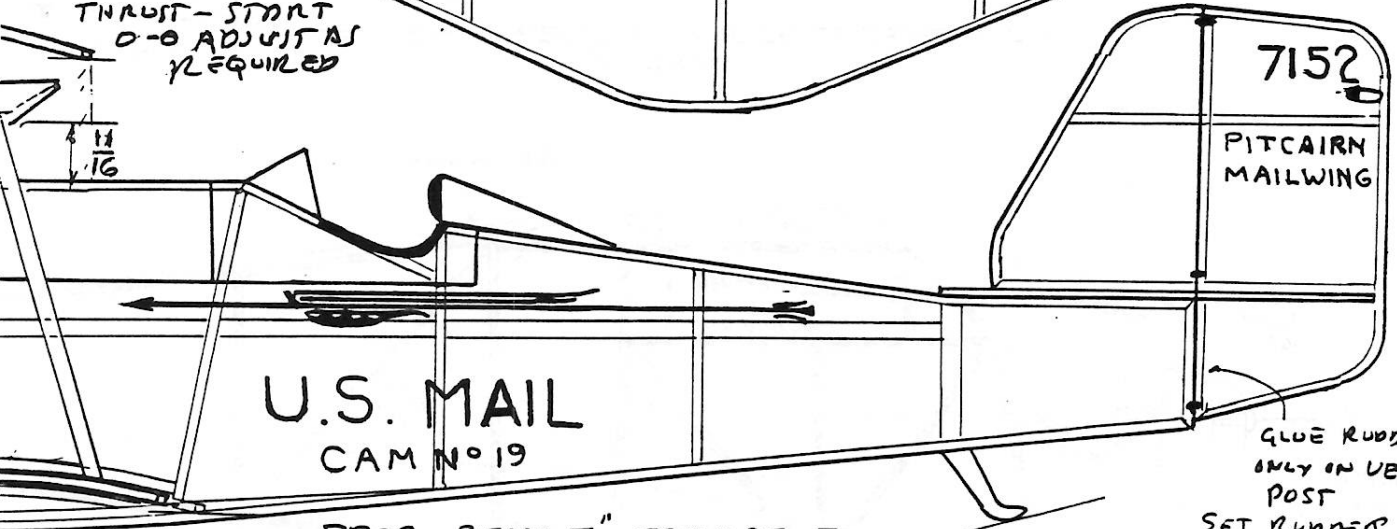
E WARP
TRAILING
UP 1/16 FOR
1/4"

NTS
TO LEFT
LEFTWINGS
RIGHTWINGS

THRUST - START
D-O ADJUST AS
REQUIRED

AFTER ASSEM
SAND STAB &
RUNNER TO
ABOUT .035 TO
.040 THICKNESS

11
16



U.S. MAIL
CAM NO 19

7152
PITCAIRN
MAILWING

GLUE RUDDER
ONLY ON VERTICAL
POST

SET RUDDER
APPROX 1/16 LEFT
ADJUST AS
REQ

WING HALVES FIT
TO SLOT
WIRE
SHOCK
ABSORBER LANDING
GEAR FITTING

PROP - PECK 7" SCRAPE TO
REDUCE WT AND FOR BALANCE
MOTOR - START WITH .100 TO .105 WIDTH
FAIR TAN LENGTH OF MOTOR 20" REDUCE
MOTOR LENGTH AS REQ WHEN
TESTING TO OBTAIN

PITCAIRN PA-6
SUPER MAILWING

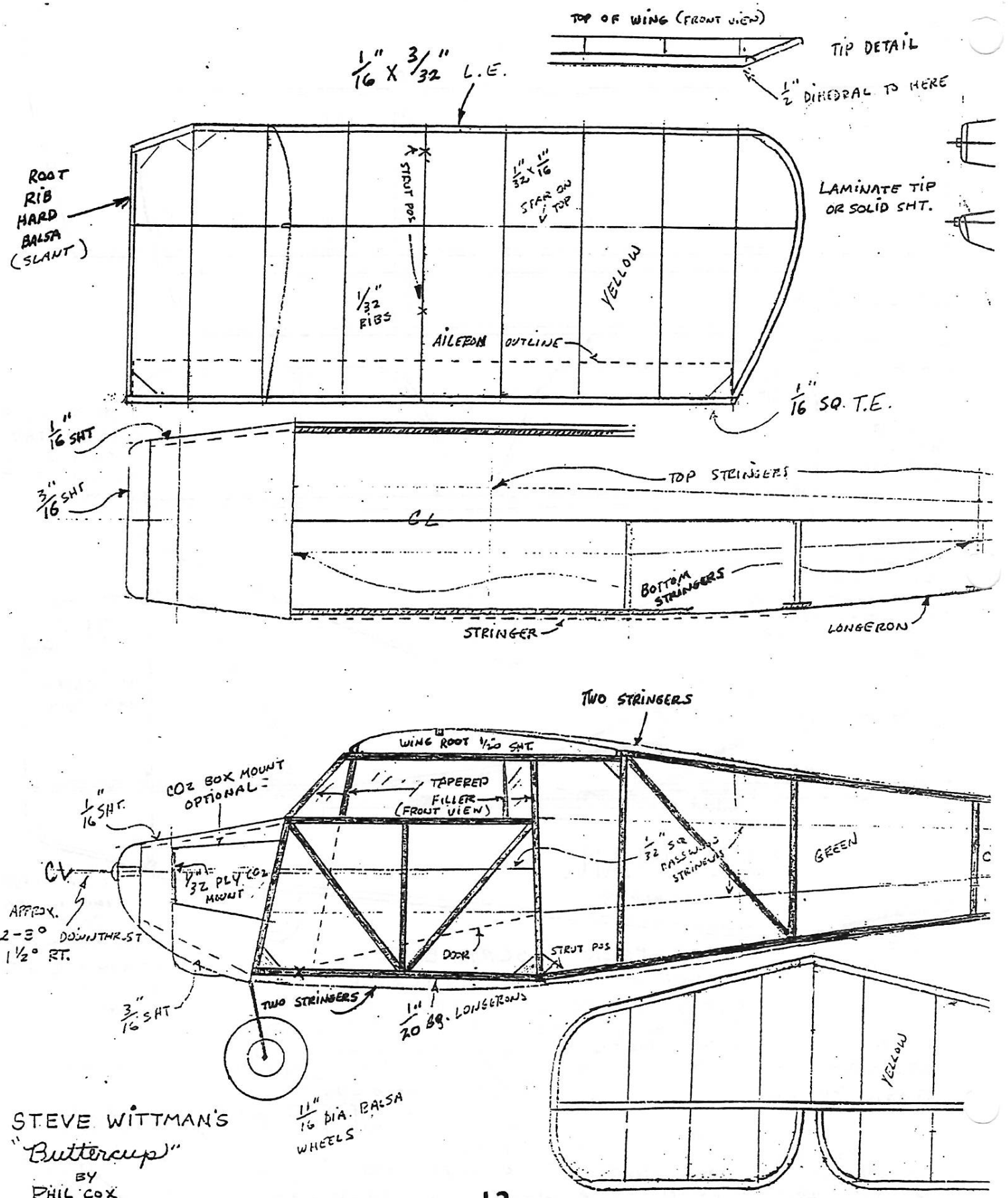
DESIGN USES BENT WOOD
SE A HEAVY DUTY IRON
SET WOOD LOCALLY TO BEND
NOT OVER NET THE WOOD

USE SLB
BALSA ON TAIL
AND 6 LB ALL
OTHER PLACES
USE 1/2 THICK ALL AROUND NO CAL
KEEP LIGHT

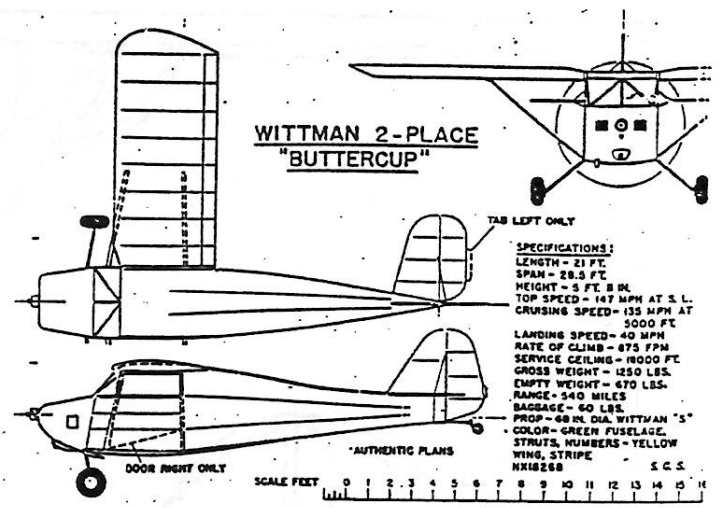
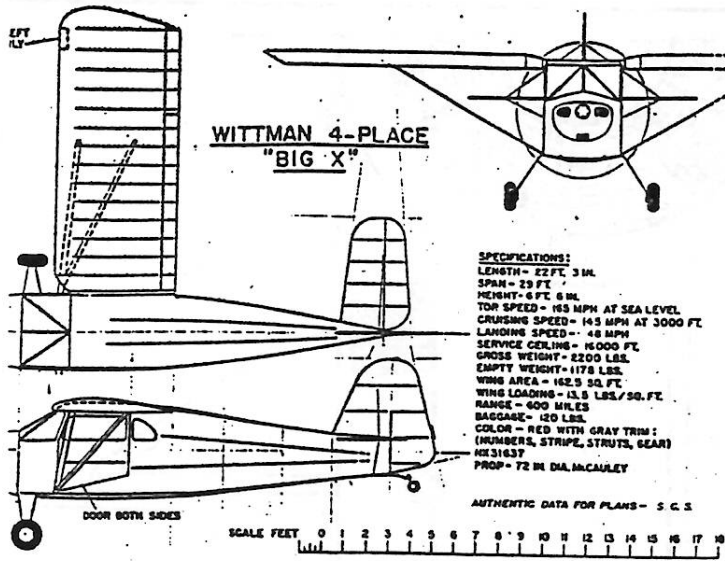
GOOD CRUISE
NO CAL W EGAERT

11 12-12-90

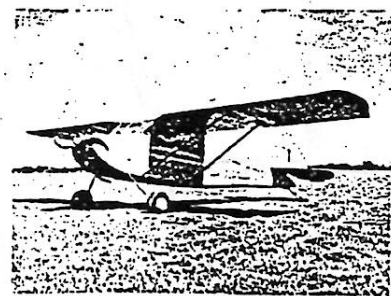
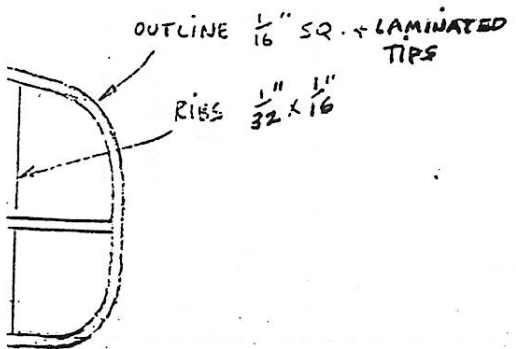
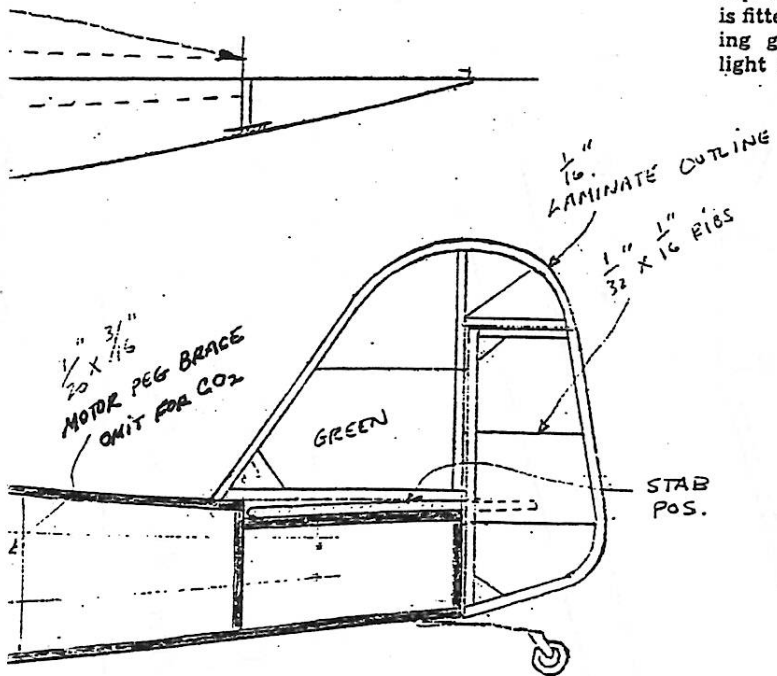
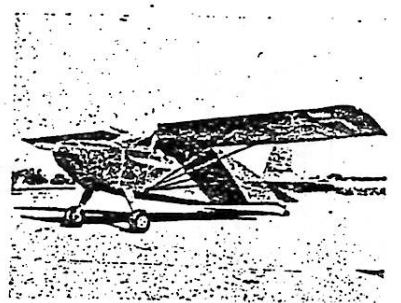
WGA



STEVE WITTMAN'S
"Buttercup"
BY
PHIL COX

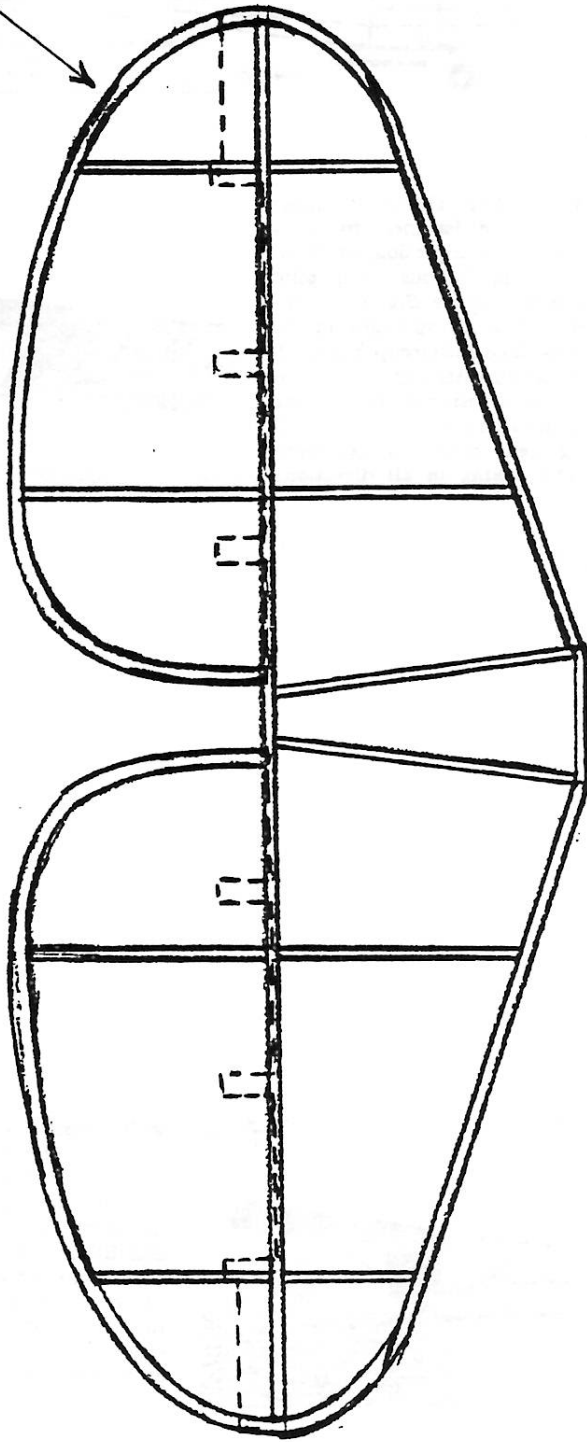


■ The two airplanes shown here were designed and built under the direction of Steve Wittman, famous race pilot. The four place *Big X* is powered by a 150 hp Franklin; the two-place *Buttercup* has an 85 hp Continental engine. *Buttercup* was designed in 1937 and is fitted with a tube-type landing gear which is extremely light flexing in all directions.

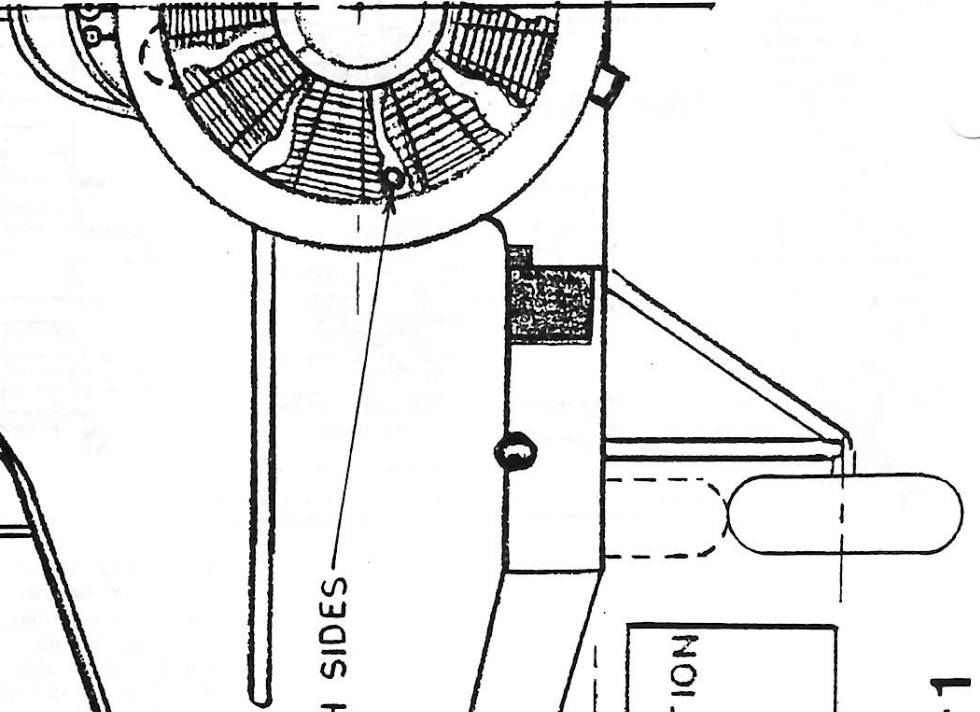


■ Wittman has his lightplane serve as accessory trucks for the two midgets, *Buster* and *Bonzo* which are flown to and in racing events by Steve and Bill Brennand. Since different type props are used on the two racers in cross country travel than in the actual speed dashes either *Buttercup* or the *Big X* carry the racing props, extra wheels, tools, spare parts.

JOHN HOUCK SUGGESTS INCREASING SIZE OF HORIZONTAL STABILIZER
TO HELP FLIGHT CHARACTERISTICS.



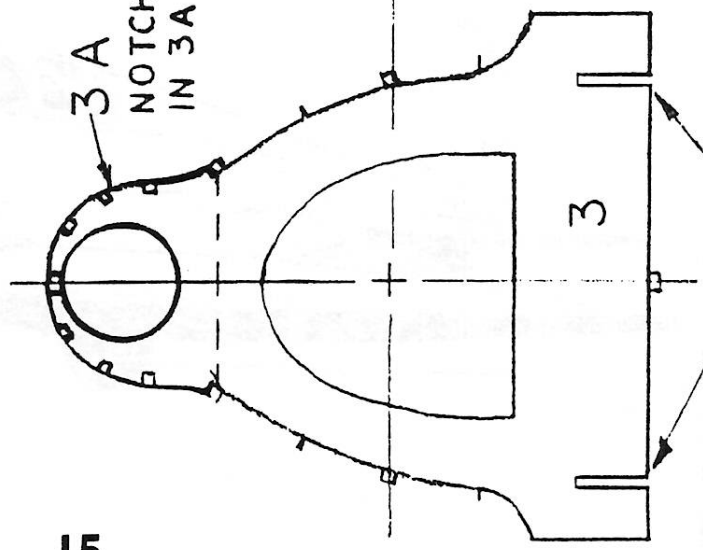
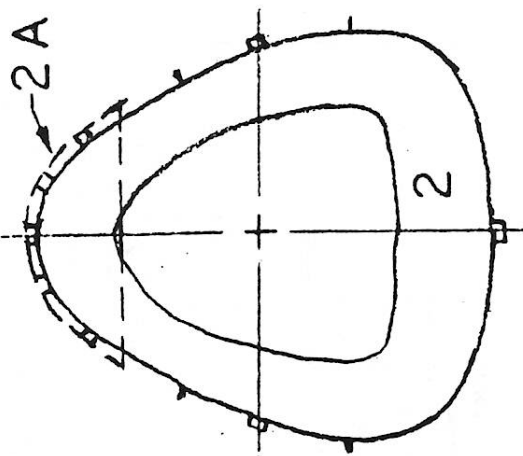
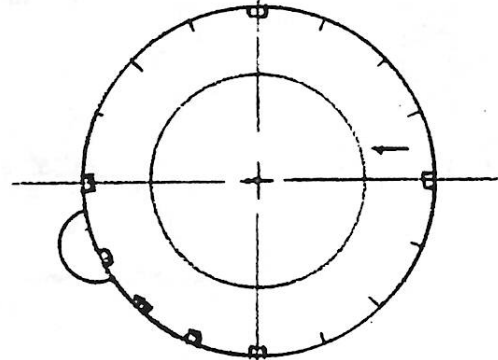
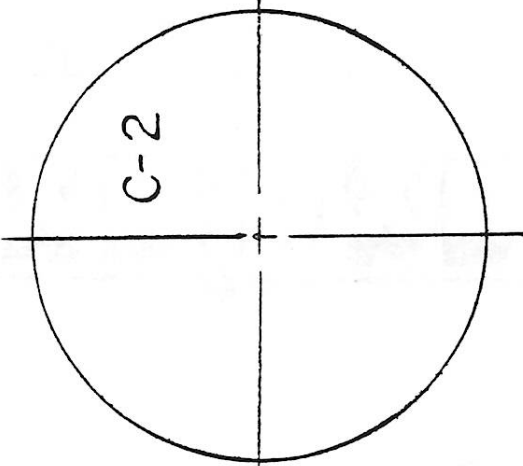
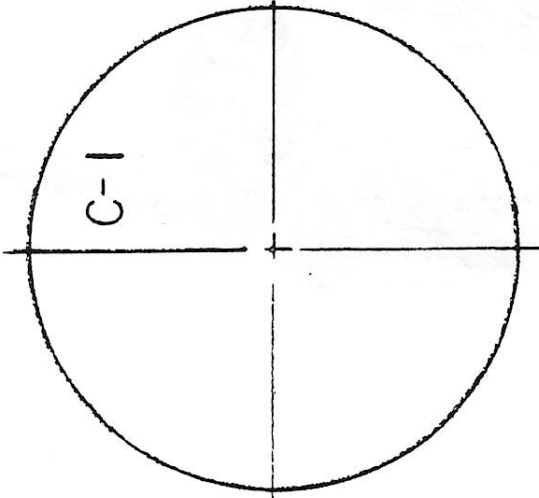
MACHINE GUN BOTH SIDES



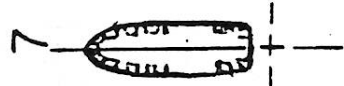
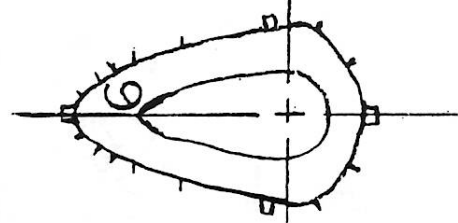
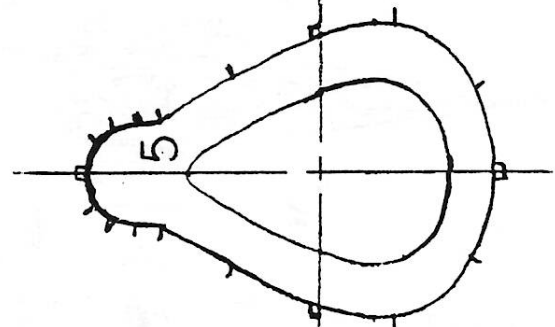
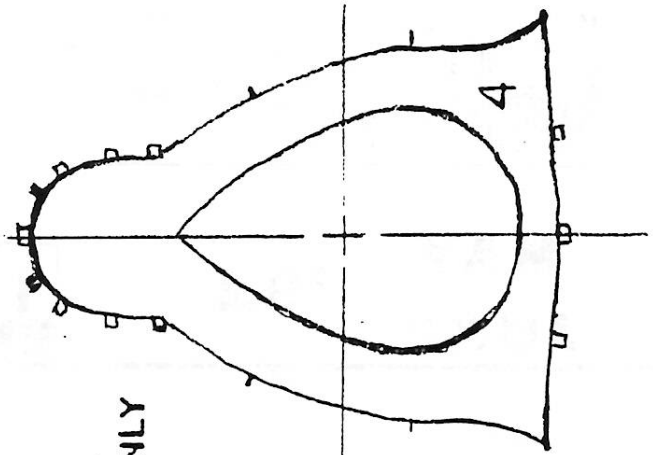
REF. 3 VIEW BY PAUL R. MATT & HISTORICAL AVIATION
ALBUM 1967
AMERICAN MODELER SEPT. 1967

BOEING XF7B-1

FUSELAGE: BUILD UP ON JIG OR USE HALF SHELL.

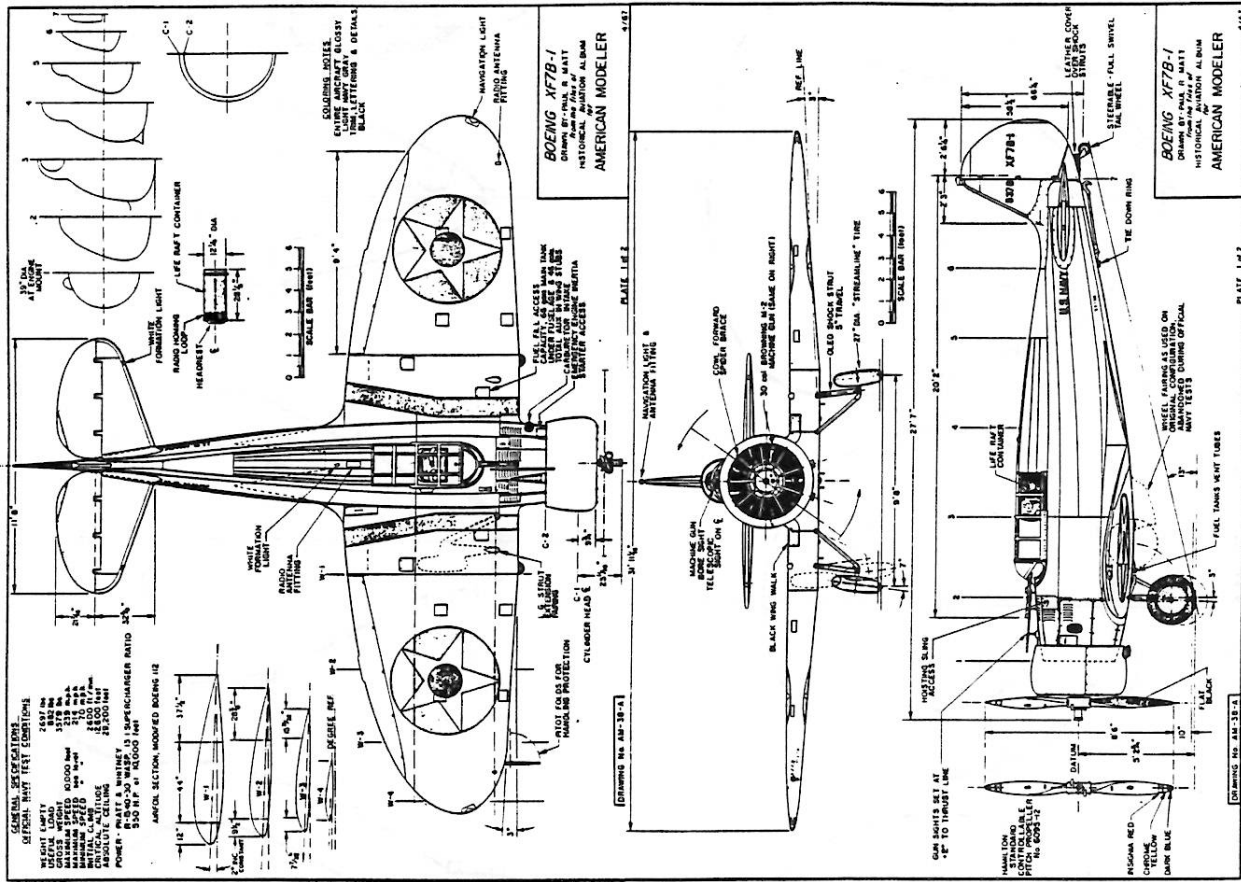


3 A
NOTCHES
IN 3A ONLY



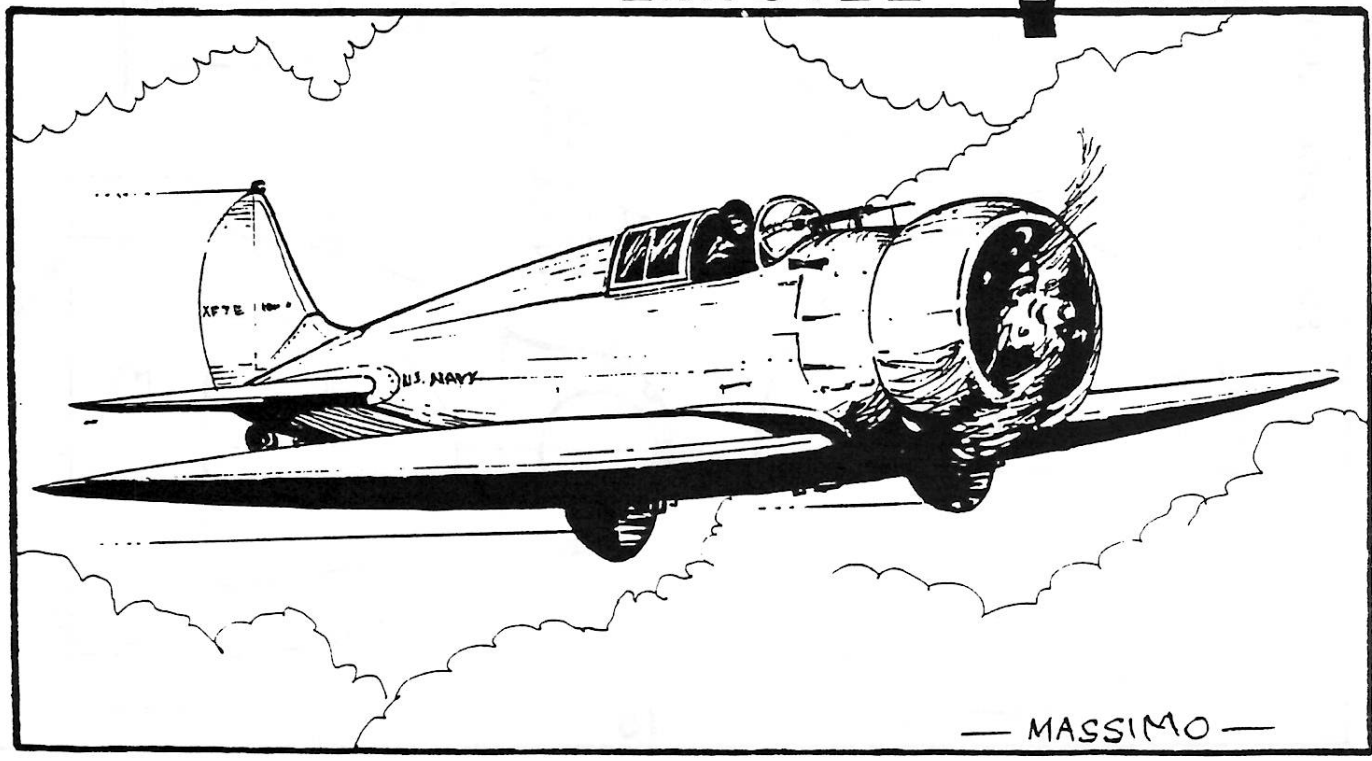
CUT TO FIT OVER WING RIBS

BOEING XF7B-1



MAY '92
JUNE

max-fax



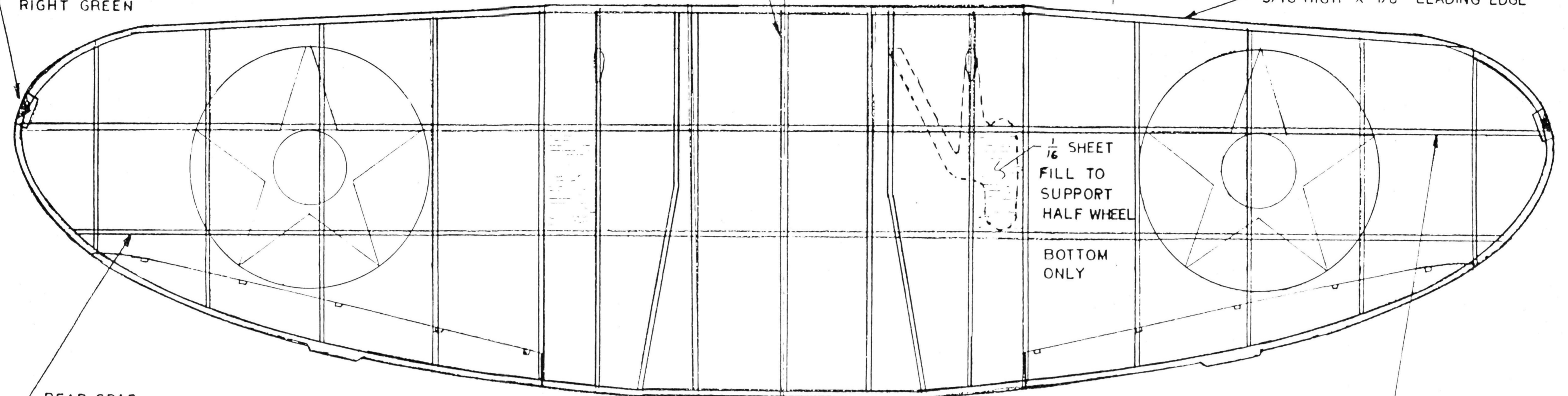
— MASSIMO —

NAVIGATION LIGHTS LEFT RED
RIGHT GREEN

NO UPPER RIB ON WING CENTER

FORMERS 2 & 3 REST ON THIS 1/16 SQ.

3/16 HIGH X 1/8 LEADING EDGE



1/16 SHEET
FILL TO
SUPPORT
HALF WHEEL

BOTTOM
ONLY

REAR SPAR
1/16 Balsa

MAIN SPAR
1/16 Balsa

1/16 SQ. FILL
UNDER MAIN
SPAR TO SUPPORT
LAMINATED WING TIP

C-1

C-2

MACHINE GUN BORE SIGHT
TELESCOPIC SIGHT

LIFE RAFT CONTAINER

SPLIT RIB WING CONSTRUCTION

1/16 SQ. BELOW SPAR - 1/16 TOP OF SPLIT RIB

NAV. LIGHT
WHITE

2

3

4

5

6

2A

3A

9378

XF7B-1

U.S. NAVY

TAIL CONE
SOFT Balsa

2° DOWN & 2° LEFT
THRUST
USE 8" PLASTIC PROP.

BOND PAPER SCOOP



BLACK WING WALKS

COLORING

ENTIRE AIRCRAFT GLOSSY LIGHT NAVY GRAY
TRIM, LETTERING, & DETAILS, BLACK

LIFE RAFT CONTAINER
FORM FROIA
BOND PAPER
MOUNT THRU
FORMERS # 3 & 3A

Balsa HEADREST

BOEING XF7B-1

DRAWN BY
JOHN HOUCK
DATE: NOV. 1990