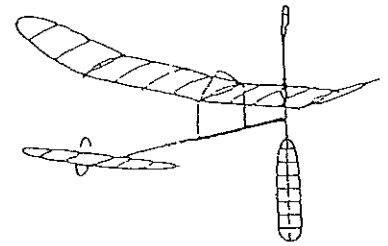


ISSUE # 137  
FINAL  
2012

**INDOOR**  
NEWS and VIEWS



## FROM THE EDITOR'S DESK

What do you write about when you end the life of a fairly old and well known newsletter, past editors?, past issues? This would be nice, but quite lengthy, so we will honor all past editors now. All volunteers, all burning with desire to get the word out to the indoor modeler. Enough about the editors, God bless them. Past issues? never get a winner. We love them all. So here's what I will write about. Two modelers that I think will have quite a bit of influence on our hobby for years to come. First, the young one, Brett Sanborn. Brett led our F1D team to a team First Place in the World Championships. Second, this July he set a new World Record for F1D of 42 minutes and 3 seconds. This is the Super Bowl and the World Series of Indoor Modeling. Brett did this the old fashion way, he earned it. Thanks to all that helped Brett on his journey. The next man is a bit older but no less relentless in his pursuit of getting the most out of an indoor model. Yuan Kang Lee is this man's name and his claim to fame? how about 38 minutes and 48 seconds with an EZ-B model. Kang is right there at the tippy top with Brett. I hope Kang gives F1D a try. Brett, Kang and John Kagan. nuf said. These guys need our support, show how you care with a check for the next go around.

What all we write about now? I plan to show you 8 pages of plans and talk a little bit about each one. These plans are not picked as world beaters but as help aids in getting others started or how about a change of pace. Even many times World Champ Jim Richmond likes to fly a helicopter now and then. Ever try to fly an Autogyro? The first one is sort of a world beater, it is an EZ-B by YK Lee. It no doubt an improvement of this model in the first plan. It gets you used to a smaller model with less parts. Check it out.

The second model is also an EZ-B, how Come? Maybe your not ready for YK's model. Try this more typical model, learn to trim, make props and how to get the most out of your rubber motor. This one is by Chuck Markos and is one good way to gain experience.

Third up, A Novice or as it is known now, Limited Penny Plane, (LPP). This model is your-step up to a big model. It has to weigh a minimum of 3.1 grams. Beware! as weight adds up fast. A prop can add that weight to your first model. This model was drawn up by Cezar Banks. This is a proven model and a great addition to your model stable.

Next up is another LPP this one by a former club mate of ours and a guiding influence in the model field, Bob Champine, now deceased. If you will look at the front view you will notice that the wing has polyhedral. When I asked Bob about this, he said, "stability". Never question an Aero Engineer, Test Pilot or someone with 60 years model experience.

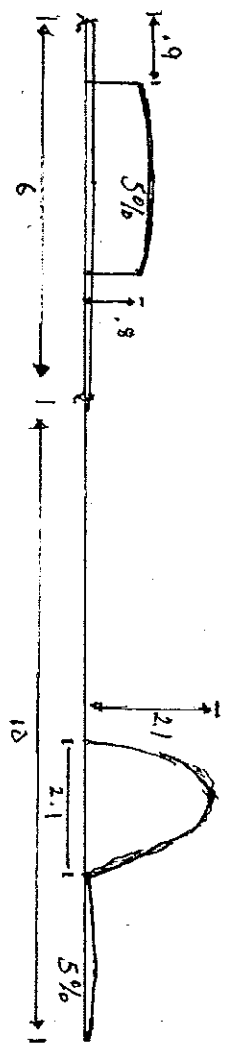
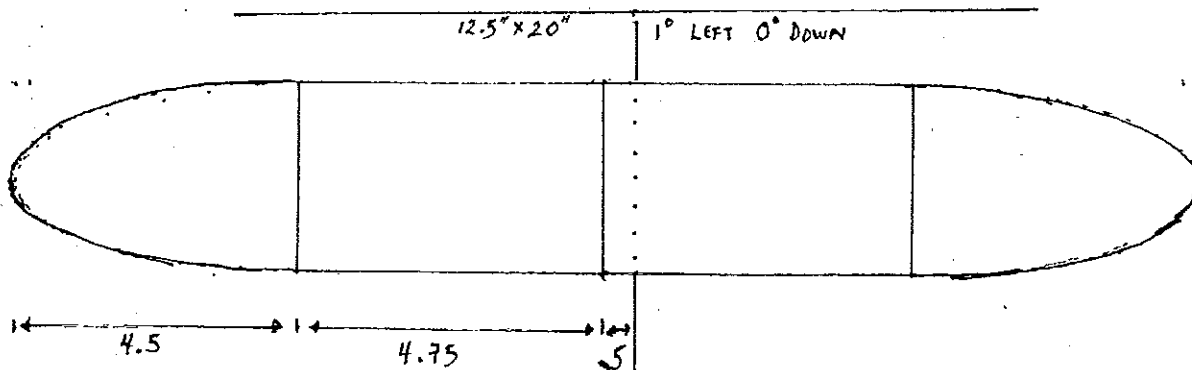
Now for a change of pace, a sort of scale fixed winged model. This is called a No Cal model. This model could lead you into scale stuff, watch out! Different building and flying techniques. It's called an education. Cover with tissue, more learning.

What the devil is this? It's an AUTOGYRO. Regular indoor building techniques, prop and all, add that rotor to the top and presto, an autogyro. Pay attention to detail.

Let's go back to normal indoor stuff, except you now have a weight requirement of 1.2 grams. once again you must pay attention to detail. check that stab, what's that stuff at the end of the wing? Tiplets? What's the size of the wood? Look at Chuck's model, it's a light F1L. Use that brain of yours.

Last but not least, we have an A-6, this started out as a beginners model and has evolved to this. Read all the rules or get with your local expert. The model must weigh 1.2 grams and weight will dictate how yours will fly. It's a small model and will teach you many tricks, pay attention

Now it's good by, farewell. an end of an era. Indoor life will go on **1**

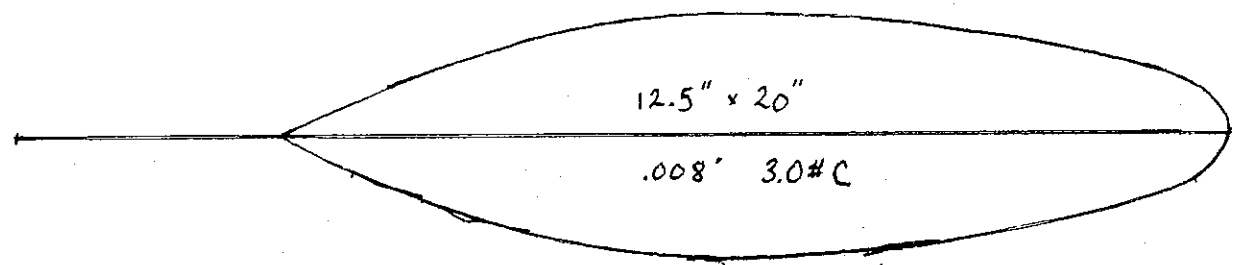
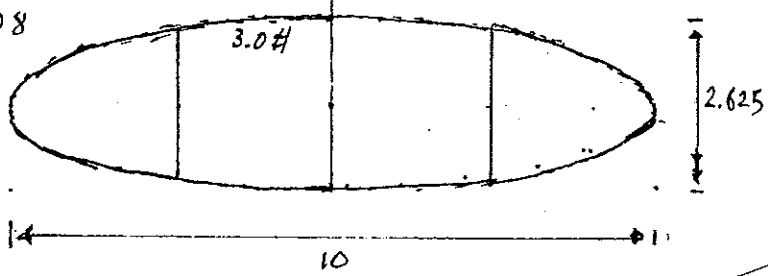


WING

SPAR	.024 x .070 (C)	5.4#
	.024 x .045 (DIH)	
TIPS	.015 x .039	5.7#
RIBS	.022 x .045	4.8#C
STAB		
SPAR	.015 x .030	3.7#
RIBS	.015 x .030	4.8#C
PROP		
SPAR	.060 x .045	5.1#
	.030 x .030	
BLADES	.008	

STICK

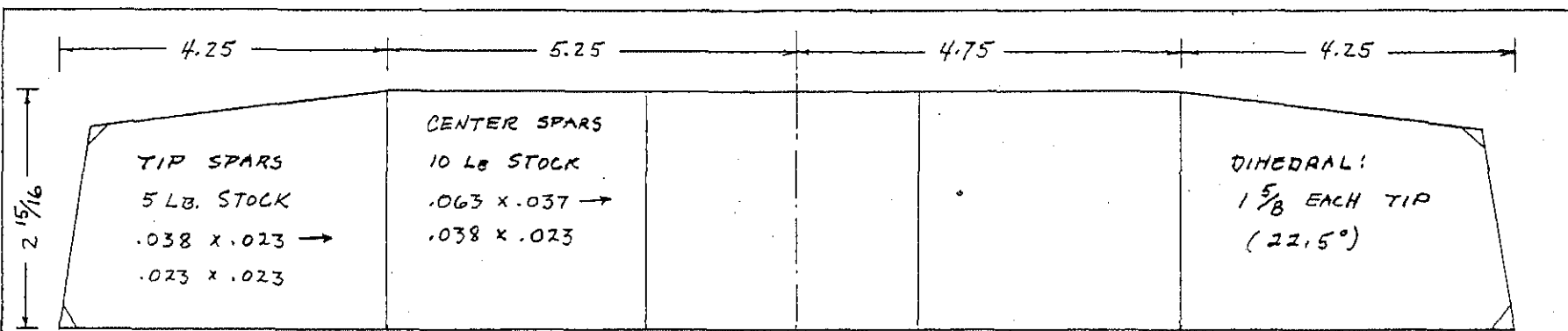
MOTOR STICK	.095 x .150 (F)	3.5#
	x .145 (C)	
	x .105 (E)	
POST	.050 DIAMETER	7.3#
BOOM	.040 x .070	6.0#
	.030 x .025	



WING	.105
PROP	.102
FUSE ASSMBLY	.167
TOTAL	.374g

MINIB EZB BY YUAN KANG LEE

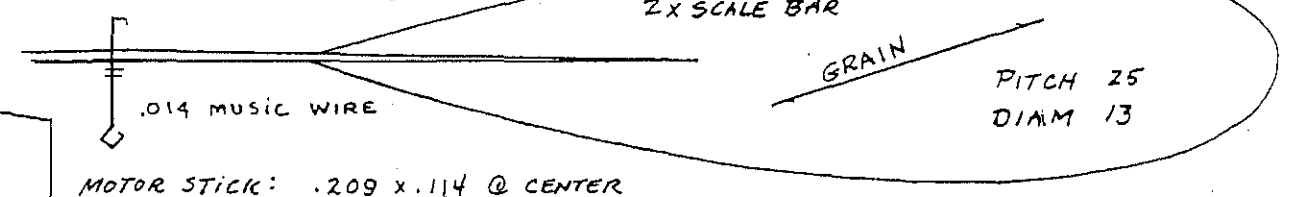
30:00 SEPT 19, 2010 LAKEHURST  
 .016 9/16 (.024") x 12" x .38g  
 3/02 TAN II



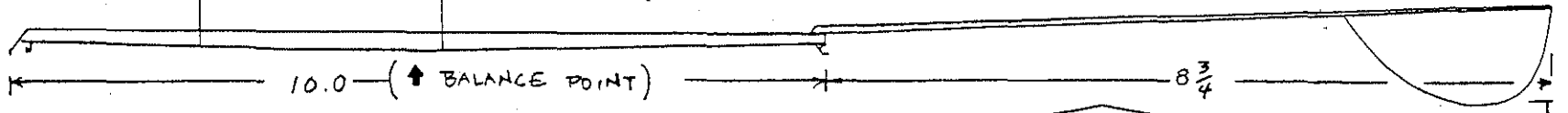
COVERING: 0.00006" Mylar

PROP SPAR  
.062 x .036 12 LB.

ALL DIMENSIONS = IN.

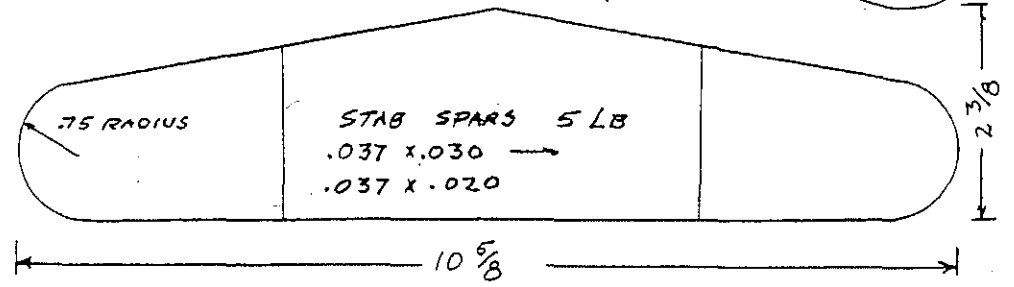


MOTOR STICK: .209 x .114 @ CENTER  
415 LB C-GR .161 x .085 @ ENDS



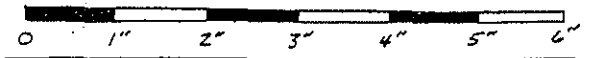
RIB TEMPLATE (13.5 RADIUS)  
2X SCALE BAR

WING 0.050 x 0.025 5 LB.  
STAB 0.025 x 0.020 5 LB.



WEIGHTS: FUSELAGE 0.353 GR.  
WING 0.240  
PROP 0.226

POWER: .040 x 15 PIRELLI (1981)



EASY B, 1st OPEN 1989 USIC  
TIME - 22:01  
CHUCK MARKOS, DEERFIELD IL

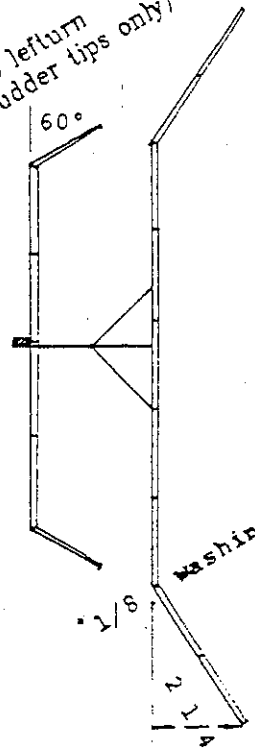
# NOVICE PENNYPLANE

REV Jan '90

## WING:

LE 1/16 sq-round nose  
 TE 1/16 sq  
 TIPS 1/16 sq to .04  
 RIBS 1/32 x 1/16  
 with 12" arc  
 POSTS 1/16 Round

• 1/8 leftturn  
 (rudder tips only)



## STAB:

LE .05 x .04 -round nose  
 TE .05 x .04  
 TIPS .05 x .04 taper to .03  
 RIBS 1/32 x .05, 18" arc

## STICK:

3/16 x 1/4; taper both  
 ends to 1/8 x 3/16

## BOOM:

3/16 x 1/8 taper to 1/16 sq

## PROP:

12" Dia, 22" Pitch,  
 HUB: 4", 1/8 round, taper  
 to 1/16  
 BLADES: 1/32 sheet, thinned  
 out at tips  
 WIRE .020" or .025"

## COVER:

Microlite or any thin plastic  
 film - thinned rubber cement

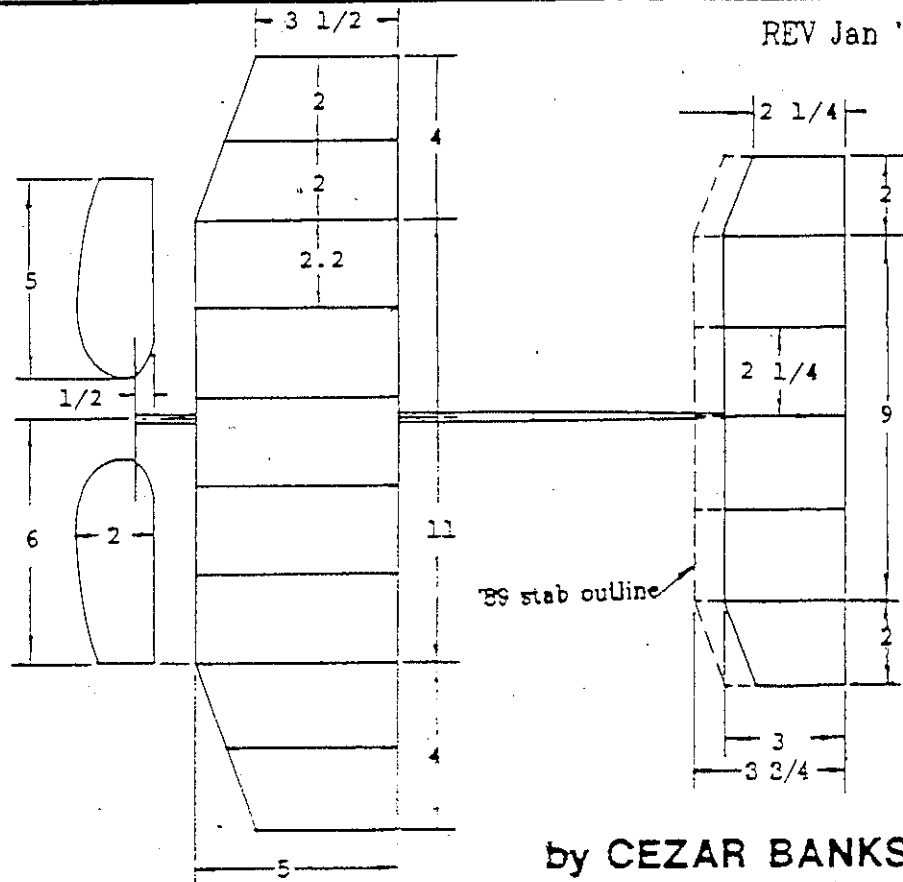
## WEIGHTS:

Wing .031  
 Prop .023  
 Rest .058  
 Total .112 oz

RIBS & PROP BLADES ARE  
 SOFT BALSAs; ALL ELSE IS  
 MEDIUM.

NOTE: soak/form/  
 bake blades on one  
 gallon glass jug  
 at angle of 17°.  
 Glue to hub so that  
 at 3.5" radius, 45°  
 angle is formed.

Drawn by Keith Varnau

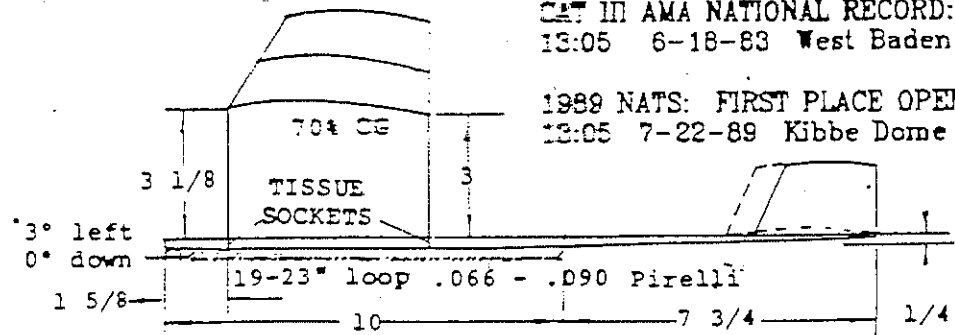


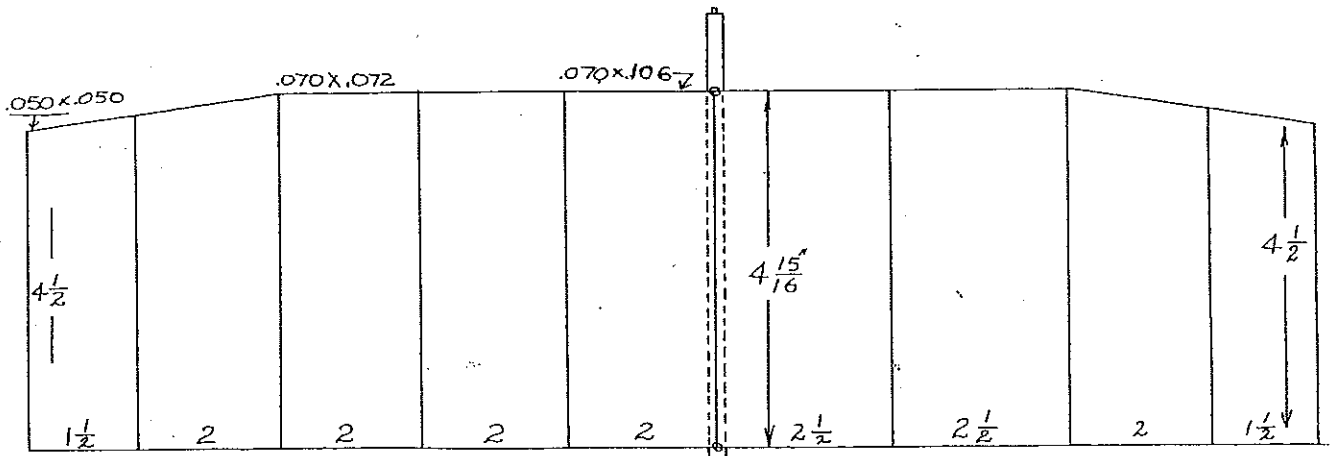
IMPORTANT ADJUSTMENTS

by CEZAR BANKS  
 NOVICE PENNYPLANE

CAT III AMA NATIONAL RECORD:  
 13:05 6-18-83 West Baden

1989 NATS: FIRST PLACE OPEN  
 13:05 7-22-89 Kibbe Dome

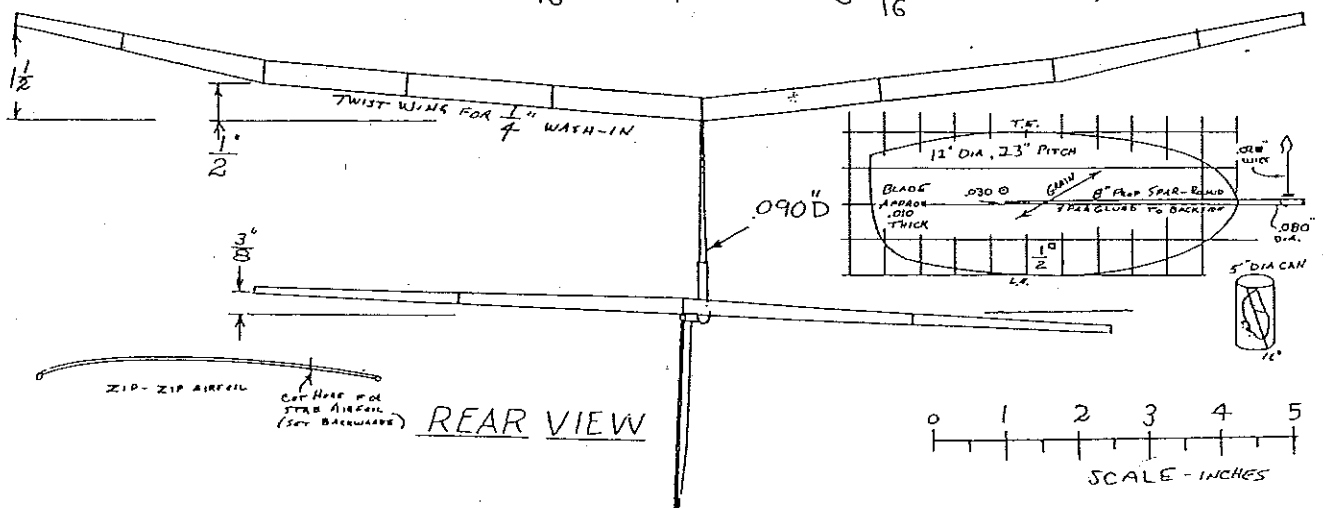
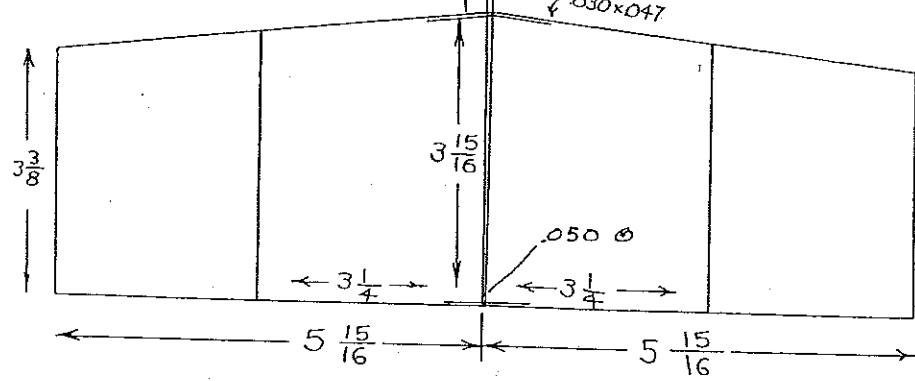
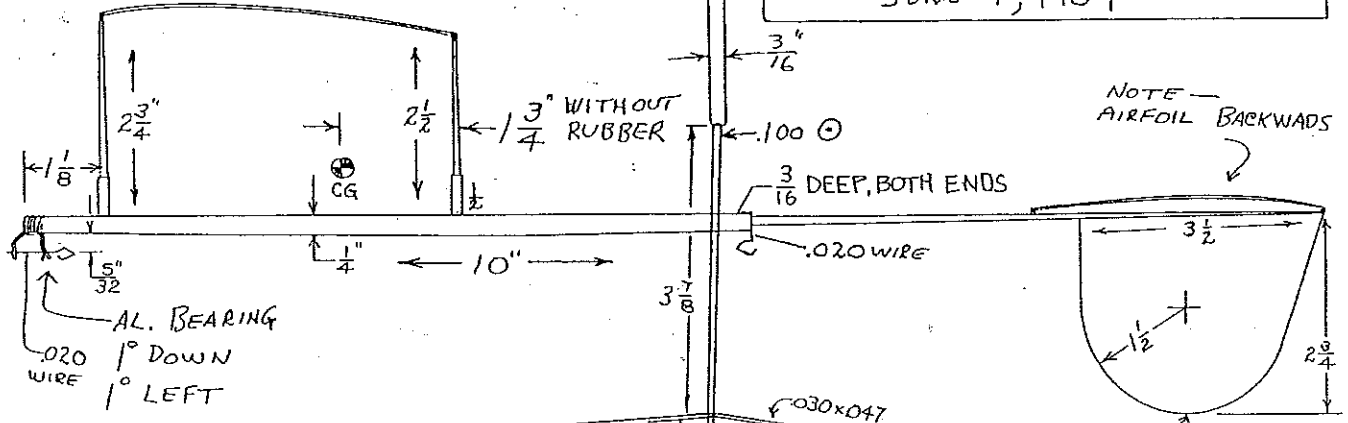




ULTRA FILM  
WT 3.11 GRAMS  
CIRCLE LEFT

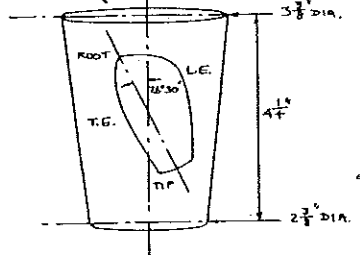
USED "TAN" RUBBER  
.080-18" LOOP  
? TURNS  $T_{QHAK} \sim 1.3" OZ$   
"ALMOST BROKE"

BOB CHAMPINE'S  
NOVICE PENNY PLANE 12 MIN 27 SEC  
1<sup>ST</sup> PLACE USIC JOHNSON CITY TN  
JUNE 4, 1989

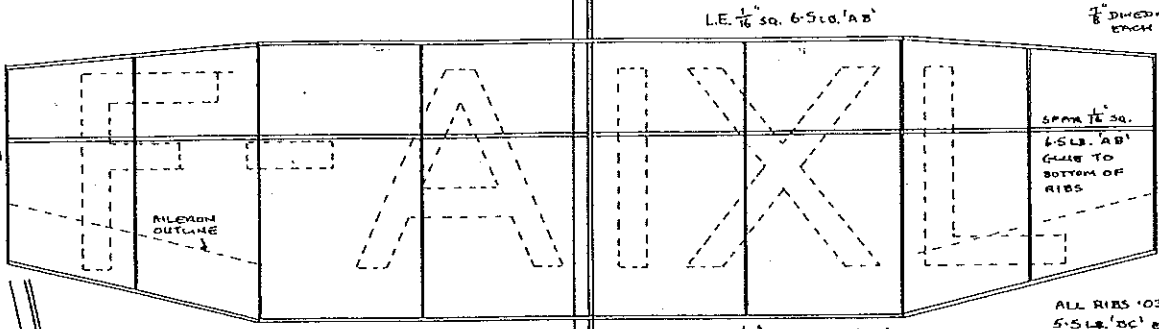


PROP HUB  $\frac{3}{16}$ " I.D. PAPER LAUNCH LUG (FOR MODEL ROCKETS) 1" LONG.  $3 \times \frac{3}{16}$ " O.D. BLD. 'B' BALSA SPAR. CENTRE  $\frac{1}{2}$ " GLUED IN PLACE IN CENTRE OF PAPER TUBE TO REINFORCE TUBE FOR .015" MUSIC WIRE PROP SHAFT WHICH HAS DRIVER HOOK CYANODED IN PLACE. REMAINING SPARS HAVE THIN SAW CUT  $\frac{1}{2}$ " LONG FROM OUTER END BEFORE ADDING TAPE. PLASTIC BLADES CYANODED INTO SAW SLOT. CHOOSE PITCH ANGLE AND LOCK IN PLACE WITH BEND OF WHITE GLUE AROUND ENDS OF PAPER HUB.

FLAT SHAPE OF BLADE CUT FROM 16 OZ. PLASTIC BEER MUG WITH UNRAISED .012" THICK WALLS. SEE DETAIL BELOW.



.015 M.W. WITH STANDARD 'Z' HOOK MOUNTED IN 'HAYLAN' PENNY PLANE THRUST BEARING



$\frac{3}{8}$ " DIMEDRAL UNDER EACH TIP

ALL RIBS .032" X .062" 5.5 LB. 'BC' EXCEPT CENTRE RIB WHICH IS FULL DEPTH .061" 5.5 LB. 'BC' 5% SIMPLY AIRFOIL

NOTE: DIMEDRAL NOT SHOWN TO SCALE

MOTOR STICK  $\frac{1}{8}$ " X  $\frac{1}{8}$ " 8 LB. 'B'

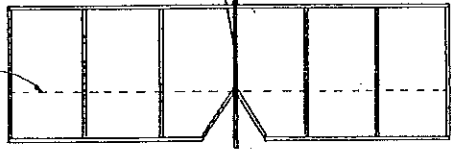
1/4" LETS .015 M.W. WITH  $\frac{1}{16}$ " X  $\frac{1}{32}$ " FININGS. COLOR BLACK

WHEELS FROM 2 SHEETS  $\frac{1}{32}$ " LAMINATED CROSS-GRAIN PAPER TUBE HUBS.

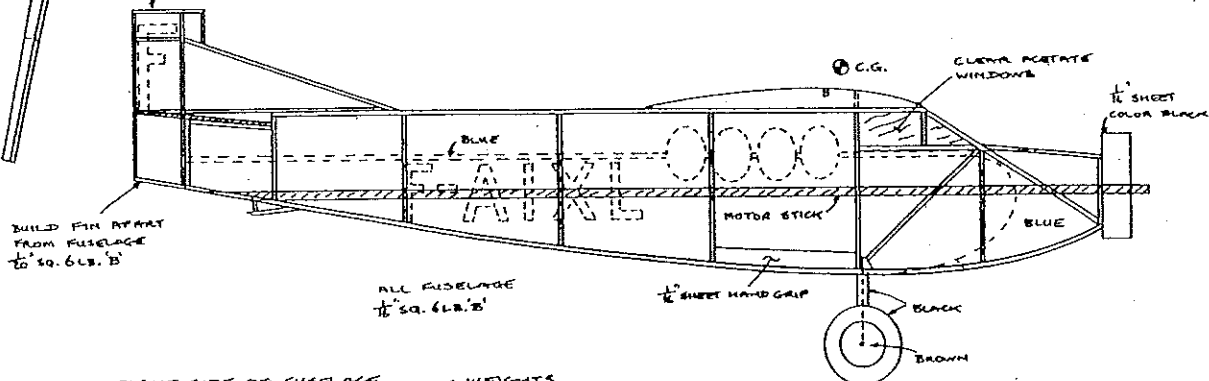
$\frac{1}{16}$ " X  $\frac{1}{8}$ " FOR MOTOR CLEARANCE. .020 MUSIC WIRE 'Z' HOOK

ALL STAB  $\frac{1}{16}$ " SQ. 6 LB. 'B'

ELEVATOR OUTLINE



USE RUBBER TO ADJUST TURN



COVER RIGHT SIDE OF FUSelage TOP OF WING & STAB WITH PRESHRUNK & PREDOPED WHITE JAP TISSUE

COLORS - OVERALL WHITE  
BLUE TRIM  
BLACK REGISTRATION LETTERS  
BLACK PORTHOLE'S  
BLACK CONTROL SURFACE OUTLINES

7" DIA. ADJUSTABLE PITCH PROPELLER MODEL HAS BEEN FLYING WITH 10" PITCH

WEIGHTS

COVERED STRUCTURE	3.70 GRAMS
PROP ASSEMBLY	1.88
NOSEWEIGHT	8.45
TOTAL	14.03

MOTOR 27" OF 0.070 FIRELLI 2640 - 30 TURNS

ORIGINAL MODEL FLEW RIGHT

DESIGNED BY: DAN DE LOACH, DALLAS, TEXAS  
DRAWN BY: W. HENDERSON

OPEN NO-CAL
FARMAN F190
3RD 1989 U.S.I.C. 3:40
W.HENDERSON - TORONTO, CANADA

# "Roulette" - INDOOR AUTOGYRO

BY FRED J. WEITZEL

AREAS: ROTOR 38" WT. .0365 oz.  
 WING 37" POWER .060 PIR.  
 TAIL 35.6"

PROP  
 FULL SIZE

WING  
 AND  
 STAB  
 SPARS  
 .040 x .030  
 5.5 # 8  
 RIBS  
 .030 #

ROTOR IS BUILT "FLAT"  
 - FLEXES TO BLADE PITCH  
 AND DIHEDRAL.

1st 1988 U.S.I.C. TIME 9:56  
 RON GANSER PITTSBURGH PA

AUTOGYRO

10" DIA. PROP  
 MED. PITCH - 15-18  
 NO THRUST OFF-SET

+4° WING INC.

ROTOR SPAR  
 .062 x .030 > .050 #  
 5.5 # 8 STOCK  
 REAR OUTLINE .030 x .018  
 RIBS FLAT .030 x .018

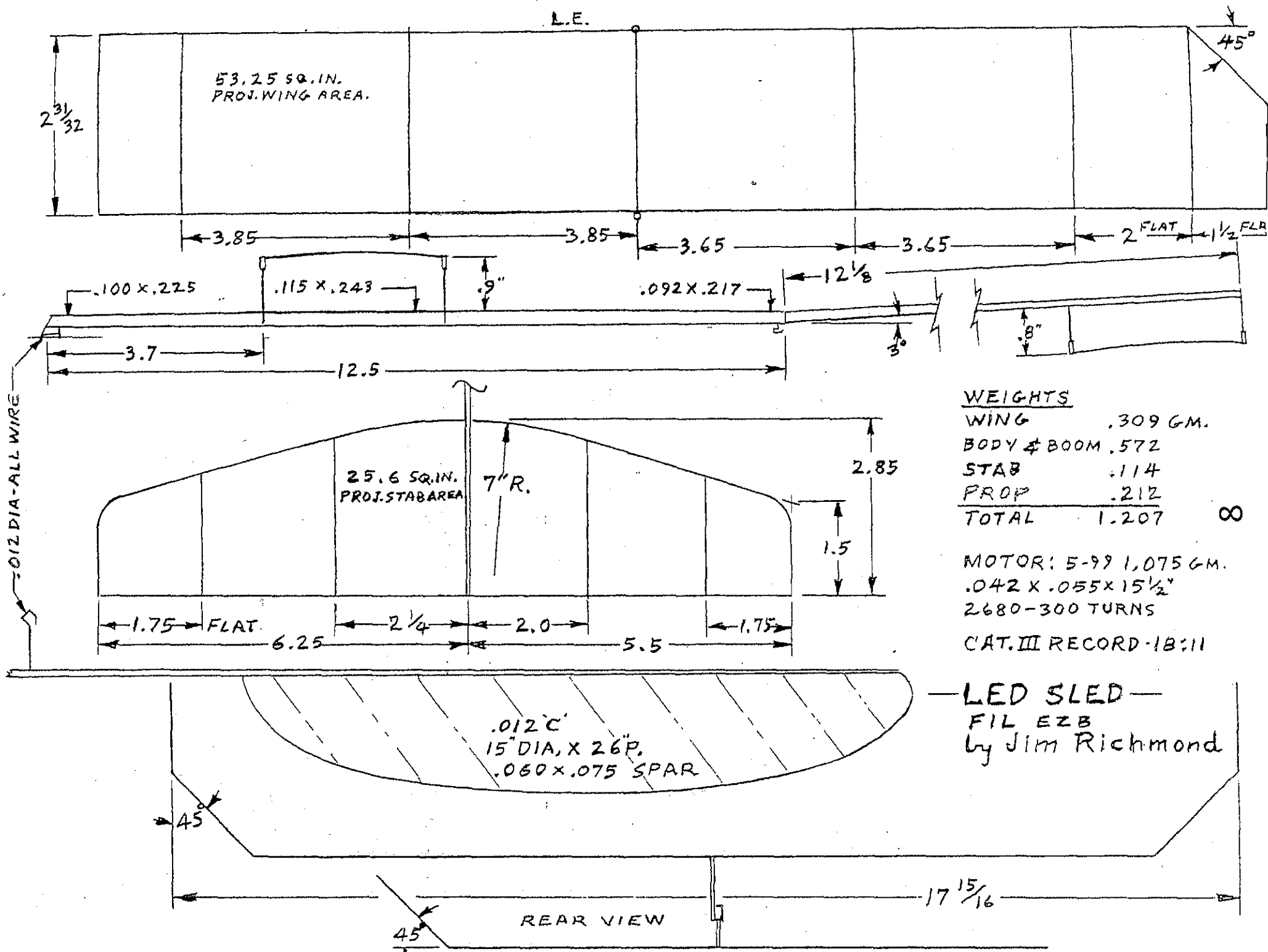
ROTOR INC.

NATURAL LEFT TURN  
 USED - NO TURN ADJ.  
 NEEDED.

TAIL BOOM AND  
 MAST  
 .010  
 4 #

FRONT VIEW

TAIL INC - 5°  
 RUDDER: 2 1/2 D.



WEIGHTS

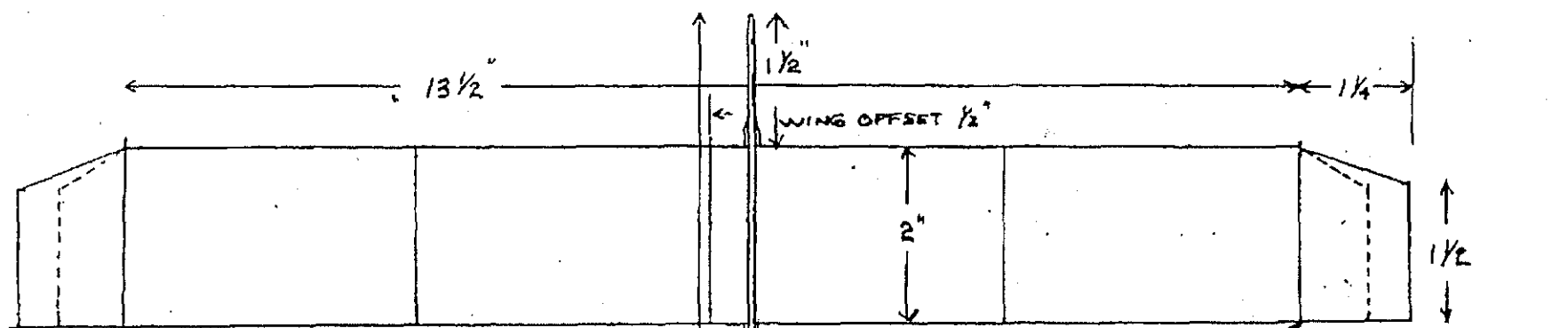
WING	.309 GM.
BODY & BOOM	.572
STAB	.114
PROP	.212
<b>TOTAL</b>	<b>1.207</b>

MOTOR: 5-99 1,075 GM.  
 .042 X .055 X  $15\frac{1}{2}$ "  
 2680-300 TURNS  
 CAT. III RECORD - 18:11

— LED SLED —  
 FIL EZB  
 by Jim Richmond



6

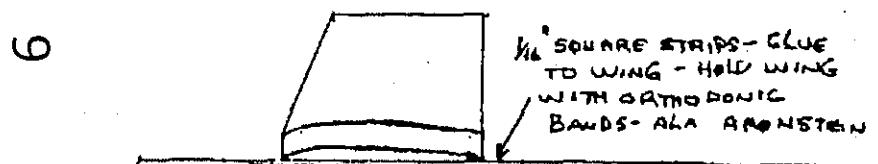


MODEL WEIGHT 1.8 GRAMS  
RUBBER SIZE .033 X 12"

DIBERAL  
1/4" EACH PANEL

RAISE TIPS TO  
MAKE 15" SPAN  
COVER TIPS  
AFTER RAISING

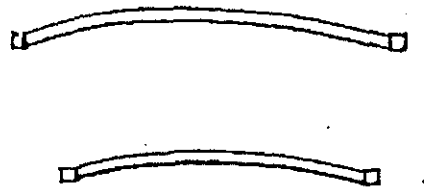
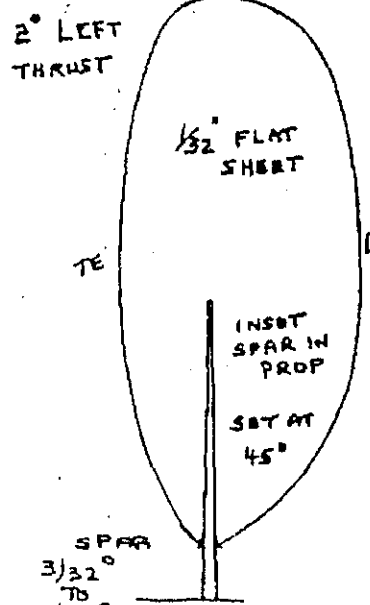
ALL STRIPS 1/16" SQUARE



.015 WIRE PIGTAIL FUSELAGE 3/32 X 1/16 .012 WIRE

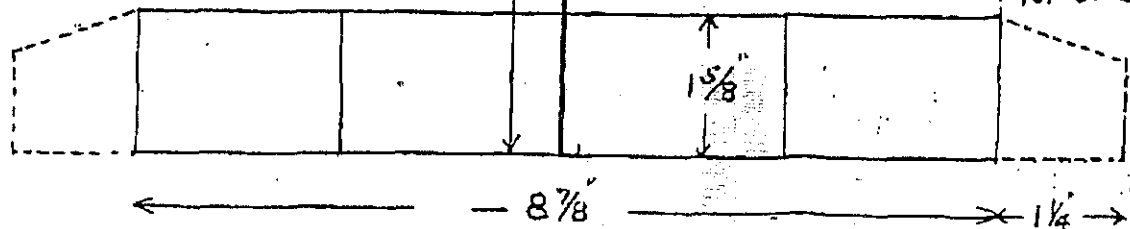
TAIL BOOM 1/8" TAPER TO 1/16 X 1/32"

BOOM SHOULD HAVE  
2° NEGATIVE  
INCIDENCE



BOOM 1/16" WIDE  
OFFSET 1/2" FOR  
LEFT TURN.

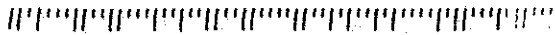
INTERNATIONAL A-6  
JOHN LEDEBERMAN  
JANUARY 1998



GLUE RUDDERS TO  
TOP OF STAB

SPARR  
3/32 TO 1/32  
PROP SHAFT  
1/32 STEEL WIRE

MODIFICATIONS TO #2:  
~~ORBIT~~  
3/4" WING PEGS .045  
MOUNTED ON PAPER TUBES  
TAILBOOM TO 7/16"  
STABILIZER - SHORTEN TO  
7/16" WITH 5 RIBS  
.012 WIRE PIGTAIL



37522+9134

ISSUE # 137  
FINAL  
2012



23602-4011  
NEWPORT NEWS, VA  
12 TILKERSON DR  
ABRAM VAN DOVER, EDITOR

NEWS and VIEWS  
**INDOOR**

FIRST CLASS



NORFOLK VA 235  
HAMPTON RECORDS  
28 SEP 2012 PM 4 T

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