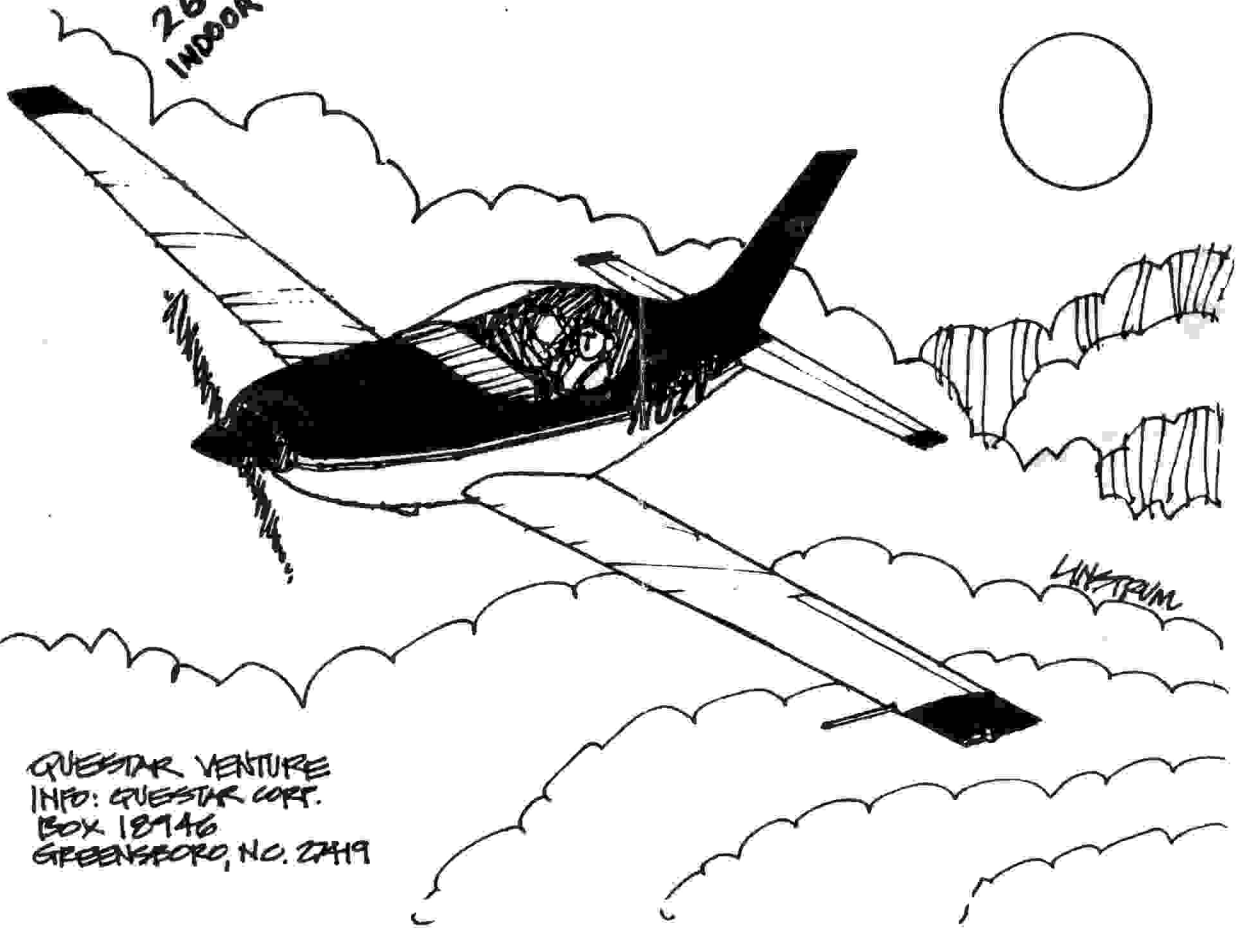
THE HANGAR PILOT

MIAMI INDOOR AIRCRAFT MODEL ASSOCIATION

26TH YEAR of PUBLICATION
INDOOR ISN'T FOR EVERYONE

ISSUE 188

- RESULTS - FAC MEET 2
- RESULTS - MIAMA INDOOR #4
- SMART'S PISTACHIO FOKKER SPIN
- RIDOTTO ALBATROS FIGHTER



QUESTAR VENTURE
INFO: QUESTAR CORP.
BOX 18146
GREENSBORO, N.C. 27419

NEXT MEET: WELL'S KEYS ROW SAT. JULY 26
MIAMA MEET #5 - SEE BACK PAGE FIRST LIGHT



"LIKE A LETTER FROM HOME" Whelan

THE HANGER PILOT

The Hanger Pilot, edited by John Martin Jr., who is solely responsible for its content, is published 8 or 9 times a season for bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association) - AMA club 986. One of two active all indoor free flight clubs in AMA. For a mere $12.50 you will receive all of the published issues that year. We encourage reader contributions because, frankly, we need the material. Letters, plans,]-views, complaints, gripes and compliments to: Dr.John Martin Jr., President / Editor, 2180 Tigertail Ave., Miami, FL 33133 USA. phone: 305-858-6361.

FAC SUMMER MEET #2 PALM BAY JULY 5,6 1997

Now we're getting somewhere. The Summer series fo FFFAC(Florida Federated Flying Aces Clubs) meet #2 was a success. Unlike our blow out on tne first meet, the second meet on fourth of July week end was one of the best contest week ends in a long time.. flyable even for peanuts all morning. Horrible squall Sat. at 2 PM HAIL,but Sun. was great.. This was the FLORIDA STATE FREE FLIGHT CHAMPS which was also well attended. Eight FAC events had enough entrants to warrent Kanones. We need more entries in Old Time Rubber, No-Cal, Old Time Power, and Power Scale to make up a field. Everyone flew officials in every event entered. Nine skysters flew 35 events. Good lift and light breeze.. some lost models. The Flying Aces are alive and well in Florida.

FAC mmeet #3 is coming up with the DIXIE NATS at Palm Bay on Aug, 16,17.
Mass Launch is Sat. 9 AM WW I, and 11 AM is is Golden Age.

FLYING ACES PEANUT

		Static	Fly	
*1.George Nunez	Hanriot bipe	74	68	142
XX G. Nunez	Turbo Beaver	59	82.5	141.5
2.R. MacEntee Float	Turbo Beaver	65	58.2	123.2
X G. Nunez	Zippy	60	65.5	125.5
3.John Tudor	Dayton-Wright	60	64	122
4. Doc Martin	Lemberger	69	52.4	121.4
5. Don Reed	Cougar	57	59	116
X Doc Martin	Andreason bipe	57	47.3	104.3
6. John Polento	Hardly Ableson	59	33	92
7.Charles Nelson	Pietenpol	48	24	72

FAC SCALE

*1. Doc Martin	Me 109	64	77.2	141.2
2. Rich MacEntee	Douglass Obervation	64.5	73.1	137.6
3.George Nunez	Fairchild 24	60.5	76	136.5
4. Don Reed	Curtiss Robin	58	61.2	119.2
X.Doc Martin	Dornier Komet	58	74.1	132.1
5. J. Nunez Sr.	Float Ryan ST	73	30	103
X.Rich MacEntee	Waco SRE	71	30.3	101.3
6.John Polento	Fokker D-VII	61.5	39	100.5

FAC JUMBO

*1.J. Nunez Sr.	Puss Moth	51	74.2	125
2. George Nunez	Taylorcraft	50	74	124
3.John Polento	Rearwin Speedster	45	66.5	111.5
4.Rich MacEntee	Bird Dog	60.5	49.3	109.8
X " " "	Cub	58	33.3	91.3

FAC DIME SCALE

*1.Doc Martin	Megow Nieuport Baby	200
2.Rich MacEntee	Comet BF 109	119.9
3.C, Nelson	Comet Curtiss Robin	67

GOLDEN AGE

		1	2	3
*1. Doc Martin	Komet	88.4	62.4	92.8
2.Rich MacEntee	Douglas	86.2	56.7	43.6
3.J. Polento	Rearwin	60	59	57
4.Don Reed	Robin	39	62.5	58.8

EMBRYO ENDURANCE

*1.Don Reed	Honey Bee	68.5	91.8	3:24
2.Charles Nelson	Pup	40.1	36.0	29.7
3.Rich MacEntee	Skinny Minnie	60	-	-

OLD TIME RUBBER

1.John Polento	Red Flash	2:02	1:37

OLD TIMER CO2 and Electric

1.Dick Ross	1:38

BOSTONIAN

1.John Polento	79	55	~~35~~
2. C. Nelson	~~30~~	34	36

MASS LAUNCH EVENTS

*BIPLANES 1.Doc Martin Nieuport baby
2.John Polento D-VII
3.R. MacEntee Waco E

*WARPLANES 1.Doc Martin Me 109
2.John Polento Fokker
3.R. MacEntee BF 109

* FAC KANONE

MIAMA MEET 4 JULY 12,13 '97 CD DICK OBARSKI

MIAMI DADE SOUTH COLLEGE

(2)

AMA PEANUT SCALE ☆ scale New State Record

1.Rich MacEntee	14-Bis	☆	108.3	:51.4	:54.5	161.1
2.Doc Martin	Ford 2AT		80.6	1:09	1:20	155.1
3.George Nunez	Turbo Beaver		86.8	1:07.7	1:03	152.1
4.Millard Wells	Clipped Cub		83.5	1:00	1;03	145.2
X.M. Wells	Huntington H-12		72.6	1:12	1:14	144
X M. Wells	Rose Parakeet		87.6	42.6	:50.3	134
5. J. Nunez Sr.	J-3 Cub		83.0	:46.6	:43	127.5
X.M. Wells	Brewster Buffalo		75.4	:37.7	:40.1	113.7
6.Charles Nelson	Pietenpol		67.2	:12	:21	84.7

AMA EASY B

L.Dick Obarski 13:16 ☆
2.Charles Nelson :21
New State Record

AMA PENNY PLANE

1.M. Wells 4:57
2.Charles Nelson :18

10 NEW RECORDS!

FAC SCALE ☆ New State Record

1.Rich MacEntee	14 Bis	81.5	:52.8	134.3
2.George Nunez	Fairchild 24	57.5	1:10	122.5
3.Doc Martin	ME-109	67	:44	111
4.J.Nunez Sr.	Corbin Ace	63	:41.5	104.5
5.M. Wells	Staggerwing Beach	67.5	26.3	93.8

AMA CATAPULT GLIDER ☆ New AMA National Record

1.Wayne Trivin	39.2	45.6
2.Carl Hedley	18	19
3.Charles Nelson	15	15

UNLIMITED CATAPULT GLIDER ☆ New AMA Record

1. Wayne Trivin 39.2 45.6

MIAMA COCONUT New State Record

☆1.Rich MacEntee M20b 1:26.5
2.George Nunez Potez 1:14

MIAMA DIME SCALE

1.Dick Obarski	Comet Robin	5:11 311	☆ New State Record
2.Rich MacEntee	Comet Curtiss Mailplane	280	
3.Doc Martin	Megow Nieuport baby Scout	247	
4.J.Nunez Sr	Megow Corbin Super Ace	127	
5.Carl Hedley	Megow Polish Fighter	55	
6.Charles Nelson	Comet Curtiss Robin	33	

FLYING ACES NO-CAL

1.Doc Martin Windham :50
2.Carl Hedley Mustang :46

EMBRYO

1.Charles Nelson Pup 62

Pistachio 1.Doc Martin Windham :40

Model of Model

1.Dustin Remson Tubby 1:08

MIAMA LEGAL EAGLE ☆ New State Record

1. Dick Obarski	Simple Eagle	641
2.Rich MacEntee	Loophole	481

AMA BOSTONIAN ☆ New State Record

1.Dick Obarski	Pull no push	1.16	342.2
2.Rich MacEntee	T-6	1.18	254.8
3.Charles Nelson	Pup	1.05	45.0

☆**MINI STICK** 1. Dick Obarski 6:05 New State Record

WE MURDERED THE RECORD BOOK

* FAC KANONE

The first major meet in Dade county in a decade brought out great flying,old friends, and new prospects. Lots of kids in Dade and it's great to see at least 10 junior flyers and interested parents to bring them out to meets. Orange Blossom continues to stock kits for rubber power free flight...see them. Ask for Les MacDonald.

TEN RECORDS were smashed in Cat. I at MIAMA meet 4 at Miami Dade South college. Wayne Trivin set two AMA national records in catapult glider. Dick Obarski entered 5 events and grabbed 5 records...Mini stick from Trivin,Dime scale from Brimmer Leagle Eagle from Hedley,Bostonian from Trivin,and Easy B from Chilton. MacEntee scored 3 records..Peanut from Wells, Coconut from John LeBlanc, and FAC Scale from Linstrum. Congratulations to the super flyers of MIAMA who excelled at this meet.

Millard Wells back in action after a long hiatus. He said he's finished his famous water color painting for the first place award at his contest THIS WEEK. (JULY26). He said "It came out great". When asked "What's the subject?" he replied -"It's a secret". Come on down to Islamorada to watch or compete for this award. CarlHEDLEY WAS ALSO BACK IN ACTION AMID REQUESTS FOR MORE PLANS FOR HIS BASIC designs.

ONE MORE MEET IN THE 26th SEASON ON ?? AT ?? Plans for a much smoother season #27 are in the works commencing in October.

Junior Dustin Remson kept Warren Bishop active by flying his TUBBY model of a model to 1st in pistachio model of a model.

MASS LAUNCH EVENTS: FAC LOW WING:1.MacEntee Caudron,2.Wells,Buffalo, 3. Doc Me 109 PEANUT:1. Nunez Jr.,2.Nunez Sr., 3.Doc,4.Wells 5.JJ Nunez,, 6.Charles Nelson

FROM: Indoor News

USE WITH SKIDS

ROG

THAT'S MORE LIKE IT!

PROP DETAILS.
EXPERIMENT WITH PITCH
MINE FLEW AT ABOUT 45°

TISSUE 'COVERING' IS SANDWICHED BETWEEN SPARS (BELOW) & RIBS ABOVE.

FIRST JOB IS TO SPRAY THE HAKERS NAME!

ADDITIONAL RIGGING LOOK GOOD IN FINE LYCRA.
BUT THINK ABOUT ALL THAT DRAG!!

1/16" BRACES.

1/32" □

• PLAN •

'FUSELAGE' SCHEMATIC!

LIES 1/32" □
SPARS 1/20" □

TISSUE COVER TO SHADED AREAS ONLY

YES!! DIHEDRAL IS SCALE.

• FRONT ELEVATION •

THE HEAVY DOTTED RIGGING IS FROM FINE FISHING NYLON. (BELIEVE ME, IT'S ESSENTIAL.)

"FLYING DUTCHMAN"

BALSA BRASS TANK.

BALSA DOWEL CYLINDERS.

V. FINE PIANO WIRE

1/20" SHT. CRANK CASE.

1/20" SG HUB.

MOTOR HOOK.

1/16" ST U

FRONT SPAR.

REAR SPAR

PAPER RADIATORS. BOTH SIDES.

1/32" □ TAIL OUTLINES

V. FINE PIANO WIRE

• SIDE ELEVATION •

OMIT THIS PART

A PISTACHIO BY PETER SMART

(3)

(7)

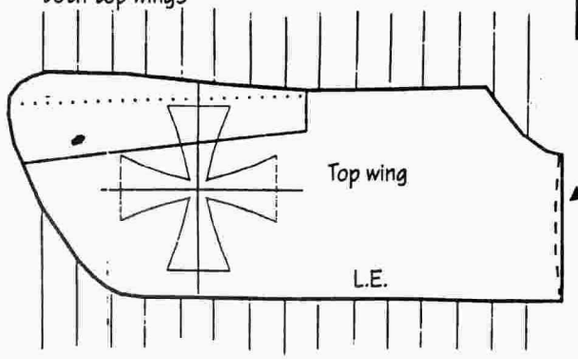
GOLDEN AGE REPRODUCTIONS

P.O. BOX 1685 ANDOVER, MA 01810



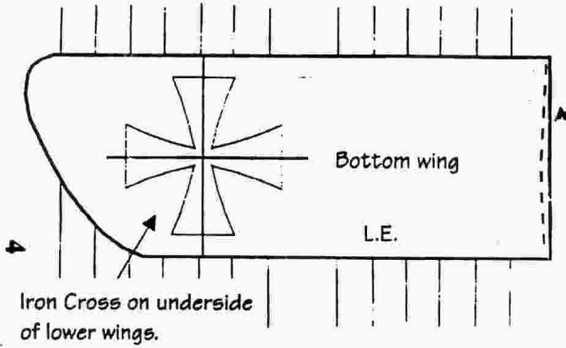
ILLUSTRATED CATALOG OF 32 KITS AND HUNDREDS OF PLANS: $3.00. KITS COME WITH FINEST GRADE BALSA, JAP TISSUE, VACUUM FORMED WHEELS AND CANOPY, PROP, RUBBER AND DECALS. P.O. BOX 1685, ANDOVER, MA 01810

Bend trailing egde up along dotted line about 1mm - both top wings



Trim to suit wing

Use these guide lines to draw on the ribs



Iron Cross on underside of lower wings.

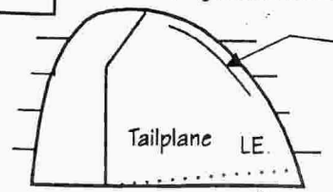
Trim to suit fuselage & ensure top and bottom wings are same length

Sand down parts using very fine (400) wet and dry - don't press down hard !

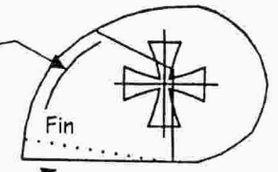
Paint parts before assembly using Humbrol Acrylic. Water down to avoid extra weight

All parts made from 2mm white insulation foam unless stated otherwise

Tailplane is bottle green on top and light blue underside



Tail and fin have red edge all round - top and bottom.



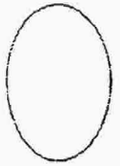
Trim to suit fuselage

Fin is bottle green

(4)

Tail and fin are cut from 2mm thick foam then carve / sand them down to 1mm thick

Fuselage is oval shaped



2mm sheet engine

Dark brown canopy edge

Use new blade to cut out template and insignia

Bottle green behind tail LE

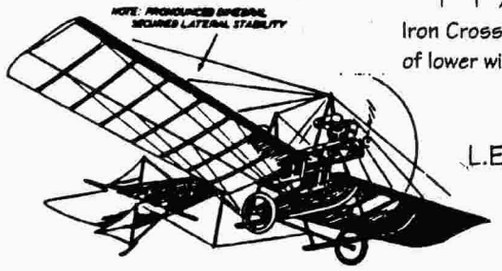


Chamfer edges top and bottom

Light grey

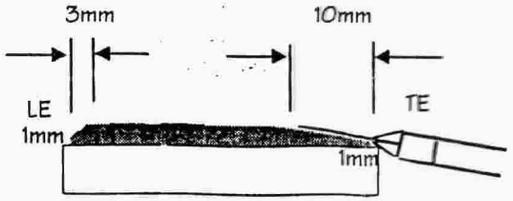
Tailplane leading edge

Rear half of fuselage can be sanded down to 1mm



The Fokker "Spider"

L.E = Leading edge



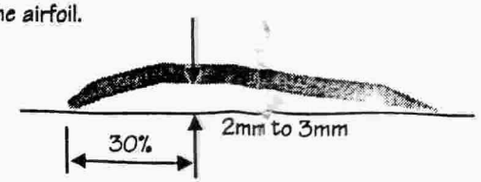
Arty SLAN Albatros

Use a loop of 0.025" SAMS flight rubber 160 mm long. Start with about 1000 revs and build up to about 1300 revs. ©

South Leicester Aero Nutz
1 Compton Road
Leicester England

£3 - helps fund flying in Leicester

Cut out the wings, fit a new blade and trim the leading and trailing edges and tips as shown bellow. Paint them and then fold in the airfoil.



Under camber detail

6 1/4" span flying machine

THIS IS A MIAMA PISTACHIO RIDOTTO CAN YOU GET A 30 SEC. FLIGHT? I DOUBT IT. HOW ABOUT 20 SEC.?

Bottle green
Dark purple
Bottle green

Ailerons on top wing only

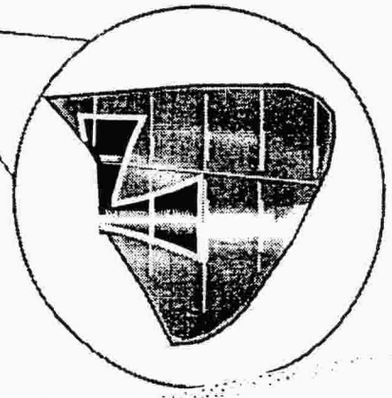
Radiator thingy

Bottle green

Black iron cross has white outline

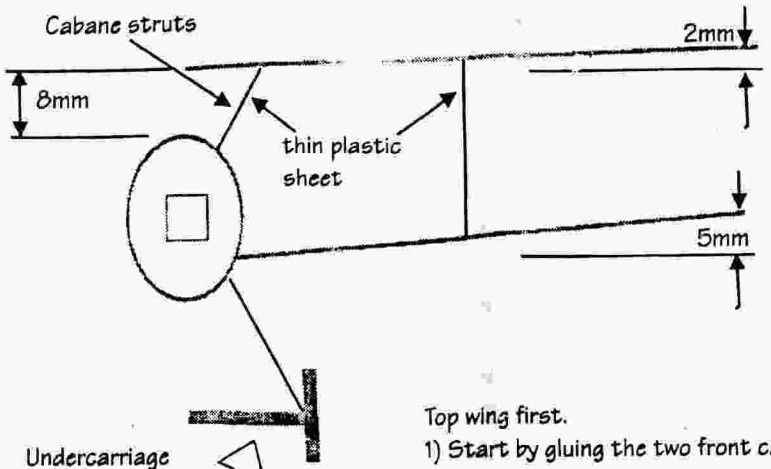
Dark purple

Top and bottom wings are light blue on underside. Iron cross on top of top wing and bottom of bottom wing.



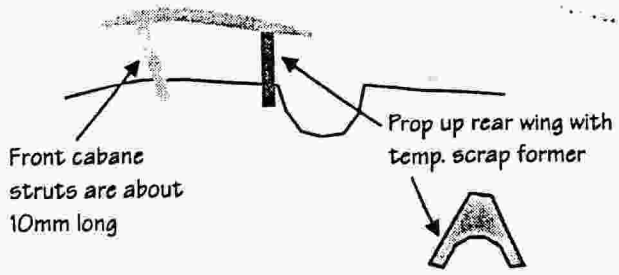
The Albatros paint schemes are colourful and varied. Try and get Flying Colours from your library. Make your first Albatros from plain white foam and get some experience of building and flying, then take your time and do a nice paint job. Try and get a little shine on the wings and pick out the ribs

FROM INDOOR NEWS



The most difficult part of the Albatros is getting the top wing glued on. Simon makes a jig while I just eye it up. Start by cutting some strips of thin plastic sheet into 2mm wide strips - best done with a new blade. Grade them into groups of the same width and then paint them same colour grey as the fuselage.





Undercarriage member is'made from 2mm sheet foam, 6mm wide. Carve it into an airfoil section and try to get it at 2 degrees incidence.

Top wing first.

1) Start by gluing the two front cabane struts onto the fuselage. Leave until the glue is completely dried hard (6 hours)

2) Prop up the rear of the wing with some scrap foam to get the correct incidence. Remove the wing and add some glue to the tips of the cabane struts, place the wing on the struts - unsure the wing is central, at 90 degrees to the fuselage and the dihedral is the same on both sides - simple ! Leave to dry for about 2 hours. 3) Remove the rear wing packing and add the two rear cabane struts, unsure the incidence is abcut 3 degrees.

4) Add the lower wings, trim the fuselage joint end to ensure they are the same length as the top wing and fit they fuselage nicely.

5) Add the wing joining struts

Note off set to keep rubber in line with prop shaft's right thrust

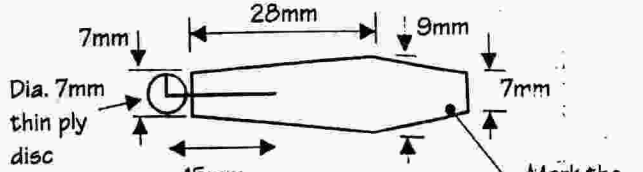


Glue 0.020" steel wire between two blocks of foam Not to scale



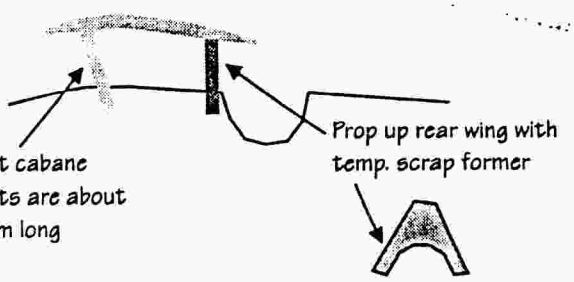
Typical tether point

Tips - Use Orange pack Bison glue. Use a toothpick to apply the glue, use a bent paper clip to gently push the struts into the correct place. when the strut is in the correct position it may not have much glue holding it together. Add some extra glue after it has all been left overnight to dry rock hard. When you glue the wing joining struts onto the wings don't go too close to the leading and trailing edge of the wing so you can shape the wing after assembly. Use tweezers to pick up and position the struts



Cut blades from SAMS 0.015" indoor quality sheet balsa (C grain 5.5 lbs)

Square off the strut ends



FROM ENGLAND VIA "INDOOR NEWS" - A TINY FOAM RIDOTTO ALBATROS

Leave until the glue is completely

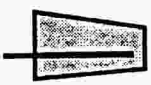
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Note off set to keep rubber in line with prop shaft's right thrust

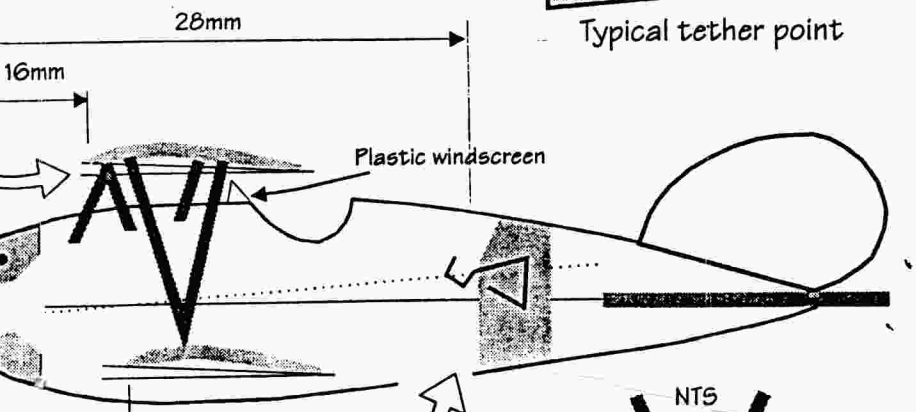


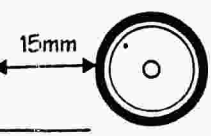
Glue 0.020" steel wire between two blocks of foam Not to scale



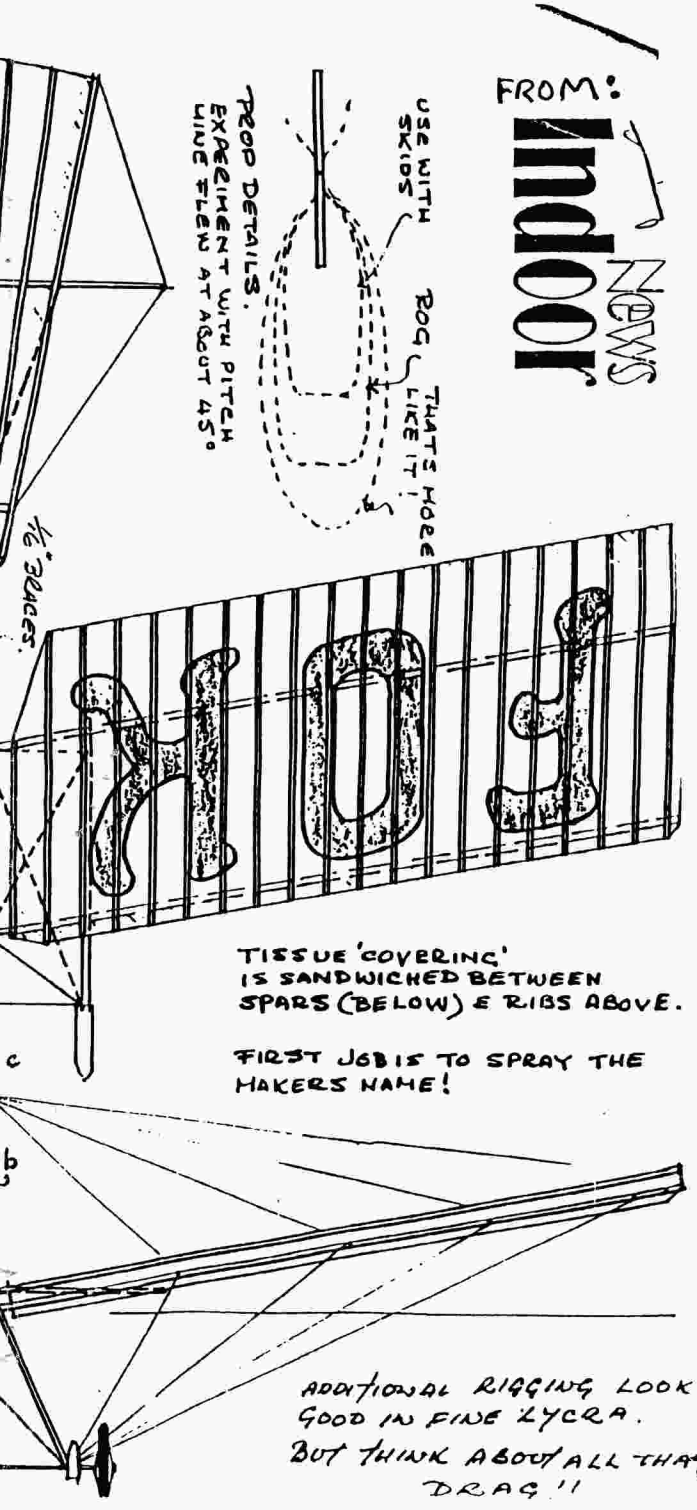
Typical tether point











THE FOKKER SPIN OF 1912
AN EXERCISE IN PISTACHIO LUNACY

(8)

by Peter Smart (GB)

I was first attracted to this strange aircraft when I saw it in Kenneth Munson's book "Pioneer Aircraft" but when a copy of a Czech publication entitled CESTA DO OBLAKOV came to me, via Sams, I found I was the proud possessor of a three view drawing and three view colour details plus, for me, two pages of totally unintelligible Czech text.

Why did I decide to interpret this design as a Pistachio model, I hear you cry? I can only put this down to the prevailing phase of the moon!

There is no way that any explanation of my own can possibly unravel the intricacies of the design now before your eyes. I can only direct you with a few pointers.

1. When I say FINE piano wire I really do mean it!
2. That dotted rigging really is essential unless you require ever increasing up elevator as the turns go on.
3. And now, the bit you have all been waiting for, THE WING. Select your tissue. I didn't use condenser paper, but you may. Cut a mask for the lettering, this is not as on the plan but is to be read from the underside of the aircraft, use the lowest tack mask you can obtain. Lightly spray in black cellulose. When dry, invert the covering onto the plan and using thin white glue attach the 1/32" ribs, over length. When this is dry lift or peel carefully from the plan and invert it with ribs down on the plan. NOW you can add the 1/20" square spars and trim the whole to outline. EASY. Now do the same for the tail.
4. I cannot tell you how to trim it bacause mine flew straight from the board and I believe in leaving well alone!
5. If you really want to make life easier, find a photo copier and blow it up to 13" span!

Anyway, thanks for your interest and lots of luck.

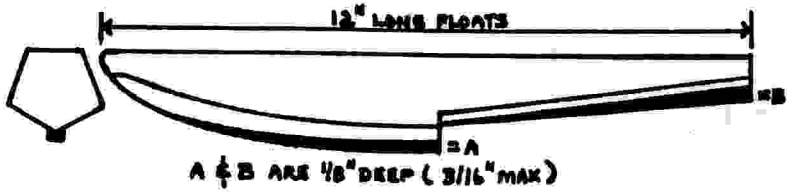
PETER SMART WAS CO AUTHOR OF THE FOAM ARTICLE IN H.P. #184
BOTH ORIGINAL IN INDOOR NEWS.

(9)

FLOAT DESIGN by Jake Larson

Back in September, I took my Hamilton Metalplane and a Curtiss Robin (both on floats) to MIAMA's ROW Contest at McDill AFB in Tampa, Florida. For my first ever try at ROW I used the Hamilton and it worked beautifully. With only 900 turns on the motor it lifted off from the water and put in a nice 29 second flight. I also got the Robin off on a good flight but the timer wasn't looking when I launched because he was talking to his wife. After a late start on the watch, I ended up with only 34 seconds for my efforts.

Both my planes track dead straight in the water, as if on rails. I attribute this to the special float design I use. The idea came from a course I took on boat building. A flat-bottom hull without keel tracks (wood strips attached to its bottom), or a regular keel, has no resistance to being blown sideways. So, I added a long external keel to each of my floats. The drawing below shows how this was done.



The longer the float length, the deeper the external keel, but you shouldn't have to go deeper than 3/16". The additional length adds more area to the keel, and this adds more power to track straight.

I didn't use water rudders on my floats, but if you feel you must have them, keep them scale size and set dead straight. I trimmed both my planes from a hand launch. When I was happy with their trim, I would place the models in the water, pointed into the wind and, zango, off they would go! Once they were in the air, they flew as trimmed, and I didn't have to play games or worry about the water rudders acting like air rudders and trying to compensate for them.

If you haven't tried ROW flying as yet, you're missing out on a lot of fun. Give it a go, I know you'll like it, especially if the floats on your model are working with you.

FROM MIKE NASSISE + TAILSPIN

The Lowdown on "High Flight"

I have discovered that some of the most memorable lines of John Gillespie Magee Jr.'s oft-quoted sonnet, "High Flight" ("The Annotated 'High Flight,' " Aug./Sept. 1996), contain the work of other poets.

It is my guess that Magee had read the poems he borrowed from in the book *Icarus, An Anthology of the Poetry of Flight*, which was published in 1938, three years before Magee wrote "High Flight."

In the following list, I compare, respectively, Magee's phrasings with wording in poems appearing in *Icarus*.

"surly bonds of Earth"
"earth fetters and the shackling sea"
(from "New World" by G.W.M. Dunn)

"danced the skies"
"danced the streets of heaven"
(from "The Blind Man Flies" by Cuthbert Hicks)

"on laughter-silvered wings"
"on laughter-silvered wings"
("New World")

"shouting wind"
"shouting of the air"
("New World")

"with silent, lifting mind"
"hushed limbs and the lifting mind"
("New World")

"untrespassed sanctity of space"
"unpierced sanctity of space"
("Dominion Over Air" by C.A.F.B.)

"and touched the face of God"
"And touched the face of God"
(last line of "The Blind Man Flies")

To be fair, Magee's sonnet is very much of its time; references to eagles, silence, halls or vestibules, and God abound in many poems of the era. Even Magee's "footless halls of air" was not necessarily inspired by Frederick V. Branford's "footless levels of the night" (from the poem "Night Flying"). The word "footless" was simply more common back then.

We shall presumably never know whether Magee was conscious of his plagiarisms. "High Flight" was written quickly, and that rapidity could account for some unconscious plagiarism. But so much?

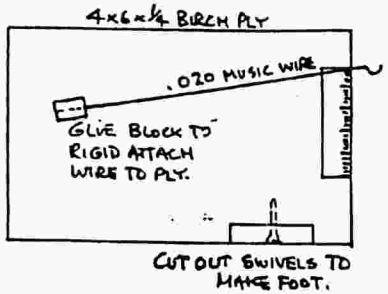
—Tony French
Dunkeswell, Devon, United Kingdom

Editors' note: More information on French's research appears in the March 1997 issue of the British magazine Pilot.

...AND I (10) THOUGHT HANGAR PILOT STOLE A LOT OF STUFF.

SUBMITTED BY MAMA'S FOREIGN CORRESPONDENT - RIC CHOATE

Weight recording. you should get in the habit of weighing parts as you go along. You can jot them down on the wing template. Do not rush out and buy expensive scales. I made one like that described in Ron Williams excellent book (Alas,not available). It looks like this:



When finished you must calibrate it. A NEW penny weighs very close to 2.50 grams. The old copper ones were 3.1 grams , from which the Pennyplane gets its name. Use a very small piece of thread and sticky tape to hang the new penny on the wire hook. Measure EXACTLY how much the wire deflects at the edge of the wood (C in.). Remove the thread and tape and Hang this on and measure the deflection (D in. not much).

Make a paper scale C - D in. long graduated linearly from 0 to 2.5 and paste it along the ply edge. Tweak the wire if necessary to sit on zero. The use of a linear scale (equal length divisions) is not quite accurate but will do for now until you can locate some accurate 0.50 gram weights. Beware , some mail order weights are way off. Like I said , weigh the bare wing and later covered. Do this for every part of the plane. For future models this will indicate where you need to reduce weight or add material for more stiffness.

FROM BRAINBUSTERS

WHAT'S ON IN FREE FLIGHT

MEET 5 MIAMA INDOOR SEASON 26 (1996-97) LATE AUG OR SEPT
LAST MEET - SITE + DATE NOT DETERMINED. YOU'LL BE NOTIFIED BY FLIER OR PHONE

AUG. 16,17 PALM BAY Dixie Nats AMA Free Flight Champs AND MEET #3 of FAC/MIAMA Summer Series MASS LAUNCH 9 - WWI 11 - GOLDEN AGE
SEPT. 6,7 PALM BAY Digt. V Champs and MEET #4 of the Flying Aces Summer Series.
DEC. 27,28 TAMPA Indoor King Orange
DEC. 28,29,30 PALM BAY OUTDOOR KING ORANGE

MASS LAUNCH 9 - RACE PLANES
11 - WWII

JULY 26 THE ANNUAL MILLARD WELLS FAC ROW MEET
ISLAMORADA FLA - 305-[redacted]-852-4783

SEASON 27 STARTS - OCTOBER 1997

FIRST LIGHT
MILE MARKER
87

THE HANGAR PILOT

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