THE HANGAR PILOT

MIAMI, FLORIDA USA

THE MIAMI INDOOR AIRCRAFT MODEL ASSN.

ISSUE 70
APRIL 1981
AMA CLUB 986



VINTAGE D-1 PEANUT
FROM ENGLAND

NEXT MEET: APRIL 12 MIAMI DADE SOUTH COLL.
9 TO 5



THE HANGAR PILOT

Is published 8 (or 9) times a season by Miami Indoor Aircraft Model Association (MIAMA) AMA Club 986, the only active all-indoor club publication in the AMA. For $5.00 a year you will receive all 8 editions, and an additional $5.00 makes you a member of MIAMA (Indoor isn't for everyone!) Send contributions, letters, plans, 3-views, articles, gripes, and MONEY to:
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Retrieval: Jim Stewart, DON BAL
Youth Activities:
Mike Arak, and Ernie Clark

FREE FLIGHT FLYING

APRIL 11 & 12. FLORIDA STATE CHAMPS. Jacksonville. Contact Joe Mead 1339 Rensselaer St. Jacksonville 32205

APRIL 12 MIAMA INDOOR MEET No. 7 MIAMI/DADE SOUTH COLLEGE GYM 9 to 5

APRIL 25 & 26 SOUTH FLA. FREE FLIGHT MEET Markham Park near Ft Lauderdale CD Shirley Campbell 305-968-1045

MAY 17 LAST MIAMA INDOOR MEET Dave Linstrum CD. MIAMI/DADE COLLEGE SOUTH. 9 to 5 (INDOORS + OUTSIDE)

MAY 23, 24 REBEL RALLY U-CONTROL Frank Carney Jax 904-751-1364
Special event: World War II Mass launch.

JUNE 14 MIAMA ANNUAL AWARDS DINNER

JUNE 20 Start of INDOOR WEEK at West Baden. Send to AMA for your Indoor Nats Entry forms. Send to MIAMA for the rest of the week.

INDOORS ISN'T FOR EVERYONE

NEXT MEET APRIL 12
MIAMI DADE SOUTH

MARCH 15 MEETS M/D SOUTH

There were some new faces at meet six, and several new concepts about indoor meets are beginning to emerge.

One of the new concepts is the idea, in peanut, of the multiple entry. There were 7 entrants in peanut, and 13 entries. This seems to be the idea behind the whole thing..lots of flying, lots of fun. We are also getting more proxy flyers. We received a box from DAVE HAGAN that arrived a little the worse for wear. His old timer baby ROG was in pretty good shape, but the wing of his Penny Plane was totaled. We're rebuilding it, Dave, for next meet. Walt Everson is proxy flying Dave's entries.

MILLARD WELLS, of Islemorada made a first appearance at a MIAMA meet with a whole stable full of peanuts. He trims them in the dead calm of early morn, or dusk down in the Keys. Next time bring your 3-views, Millard, 'cause they fly real well.

If all the good glider folks in Fla. ever get together at one meet it will really be some occasion. This time we had HARRY GROGAN, who was flying a Don Bal design from last issue, and Blaine Miller. Harry nosed out Blaine by 1/10 sec., and DON BAL set yet another Cat I glider record at 35.9 and 36.2....Not bad with about 27' of usable ceiling!!

DAVE KIEFER won both peanut, and AMA scale events with the Hadland Lacey M-10. MIKE ARAK got his Volksplane flying very well, and DICK KELSO wasn't sick last meet..his wife was in a bowling tournament.

DICK OBARSKI won Easy B and is experimenting with a low ceiling device to limit the initial climb rate. It is an "O" ring device, which, I'm sure is successful he will share with fellow Hangar Pilots.

A reminder that the next meet will be at Miami Dade South College on April 12th from 9 to 5. Remember that their magnificent pool facility is open to the public (That's your wife and kids) on our contest days so they can have a good time swimming while you are getting hot and sweaty in the gym. Less contest resistance, more fun!

SAGE ADVICE FROM WORLD INDOOR CHAMP JIM RICHMOND ON P.12

LISTEN TO THE OLD MAESTRO! A MIAMA SCOOP.

RESULTS: MEET 6

PEANUT SCALE EVENT:

1. Dave Kiefer 4Pts.(Lacey 29.8) 3 static,1 flight (54.1)(54.5)
2. Carl Hedley 6Pts.(Lacey 29.5) 4 static,2 flight (50.0)(50.0)
3. John Martin 8 Pts(14-Bis 32.0) 1 static,7 flight (26.5)(16.0)
   Dave Kiefer 8 Pts.(Pitts 31.5) 2 static,6 flight (32.0)(34.1)
   John Martin 8 Pts.(Dayton 27.5)5 static,3 flight (40.0)(37.6)
4. Mike Arak 10Pts. (Volksplane 25.8)6 static, 4 flight (34.0)(39.0)
5. Walt Everson 12Pts(Mustang 25.4) 7 static,5 flight (30.3)(38.5)
6. Dick Kelso 17 Pts(Found 19.5) 9 static, 8 flight (20)(21)
7. Millard Wells 18 Pts(Andreason16.0)12 static,6 flight(25.8)(24.7)
   Carl Hedlev 18Pts (CNA 23.5) 8 static,10flight (23.3)(16.7)
   Millard Wells 21Pts(Mon0 16.6) 10 static,11 flight(19.5)(14.2)
   Millard Wells 23 Pts(Gere 16.2) 11 static,12 flight(8.0)(17.0)
   Millard Wells 25 Pts(Pietenpol 16.0) 12 static,13 flight(24.0)

AMA SCALE EVENT:

1. Dave Kiefer	Lacey	76 Static	56.9 Flight	132.9
2. John Martin	Dayton	68 Static	45.0 Flight	113.0
3. Walt Everson	Waco E	80 Static	26.7 flight	106.7
4. Dick Kelso	Cessna	68 Static	22.4 flight	90.4

OLD TIMER BABY ROG

1. Walt Everson 4:42
2. John Martin 1:37
3. Dave Hagan 1:31 (Proxy,Everson)
4. Dave Linstrum :51.2

H.L. GLIDER:

1. Don Bal (35.9)(36.2) 72.1 ONCE MORE; NEW CAT I FLA: INDOOR RECORD!
2. Harry Grogan (24.6)(25.5) 50.1
3. Blaine Miller (25.5)(24.5) 50.0
4. Nathan Miller (Jr) (20.0)(19.0)

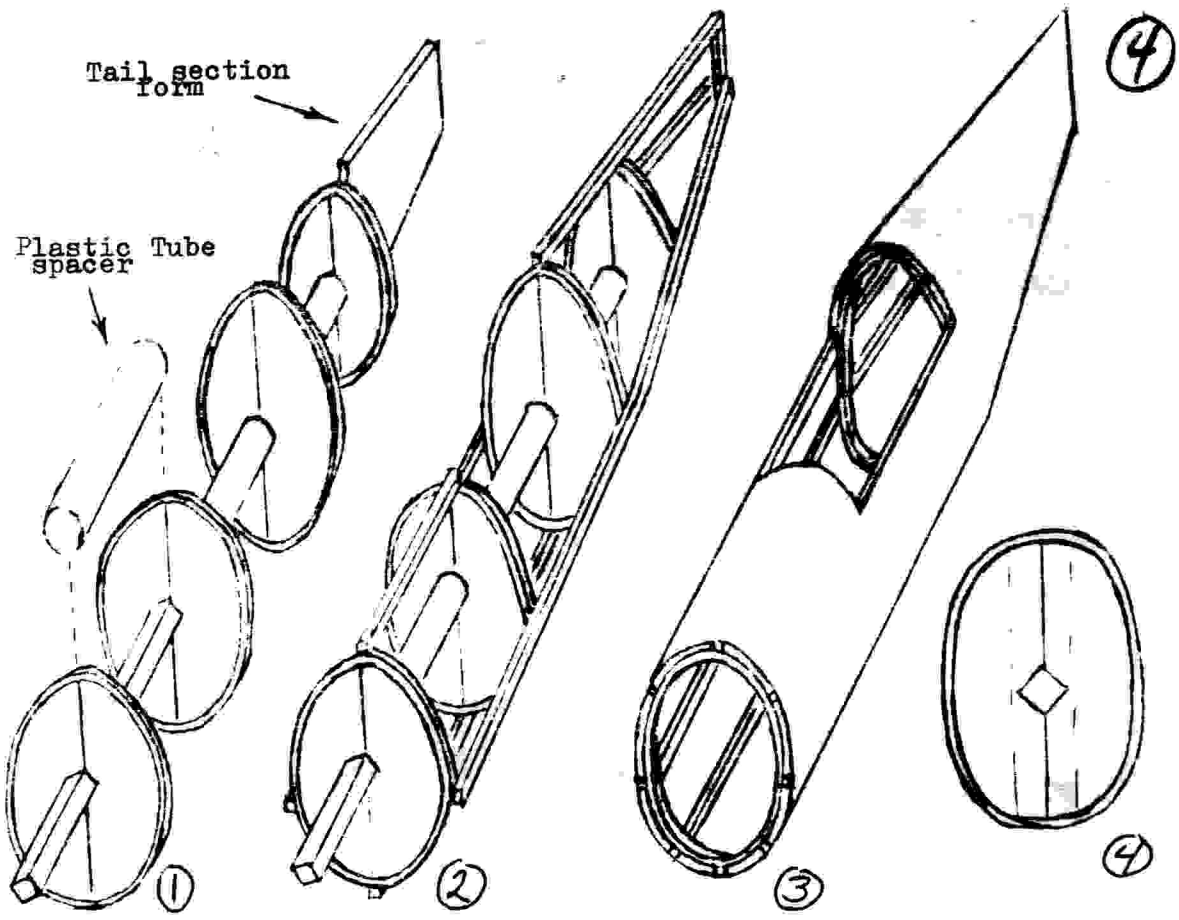
EZB: 1. Dick Obarski 9:18.6
2. Carl Linstrum(Jr)4:21

PENNY: 1.Carl Linstrum 3:47 (jr)
2.Walt Ever son 3:43

BOSTONIAN CABIN: 1.Walt Everson 38.5
2.Carl Hedley 35.7

DON BAL DID IT AGAIN!

DONT MISS "INDOOR WEEK" WEST BADEN INDIANA JUNE 20-27



(1) Sequence of assembly showing bulkhead forms made in two parts and hinged in center with plastic tape. B alsa strips are formed wet around forms. Check when dry for snug fit and that rings are not glued to f orms. Forms are threaded on sq. stick with plastic tube spacers.

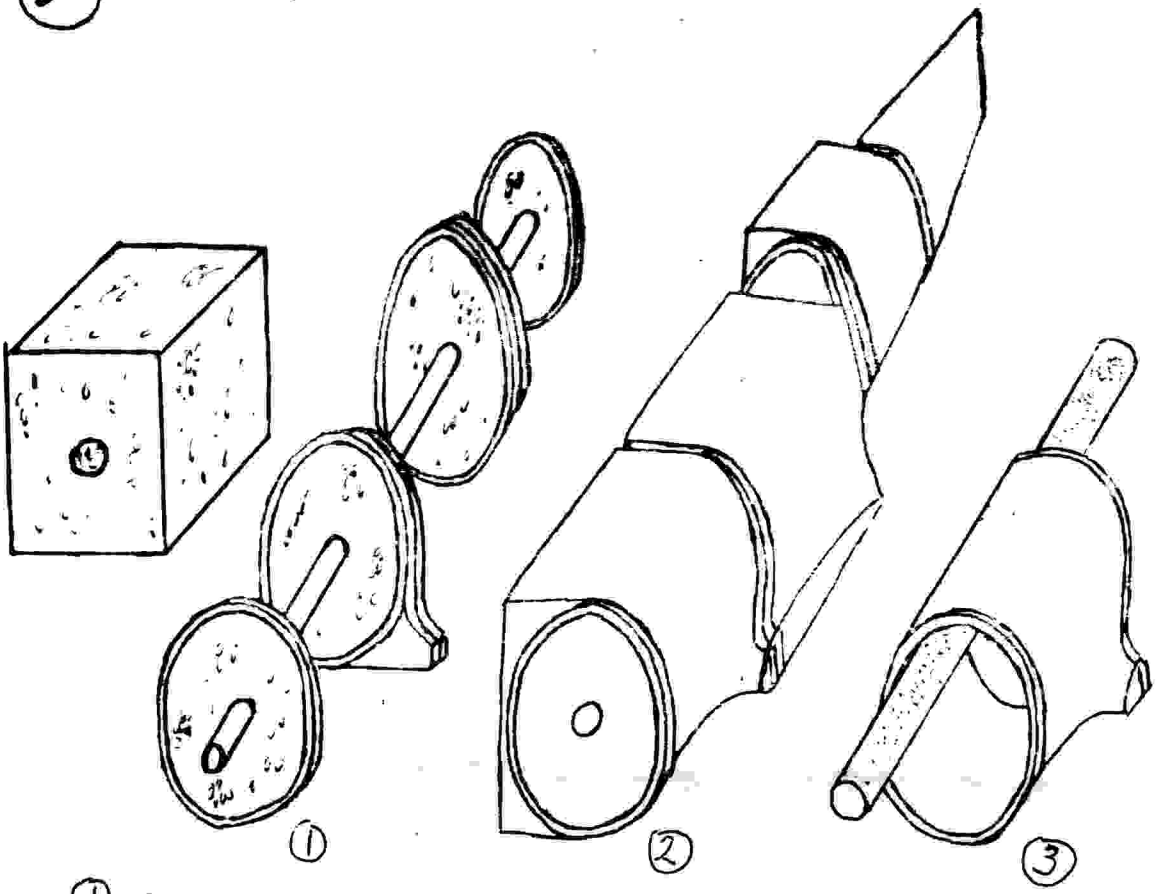
(2) The four main string ers are glued in place and aft section form is removed; Add remaining stringers make prov ision for rubber hook wing mounts ect. and cover.

(3) Fuse lage may be doped and finished before remov ing jig.

(4) Typical bulkhead

by Bill Hiscock

PART III Form Construction



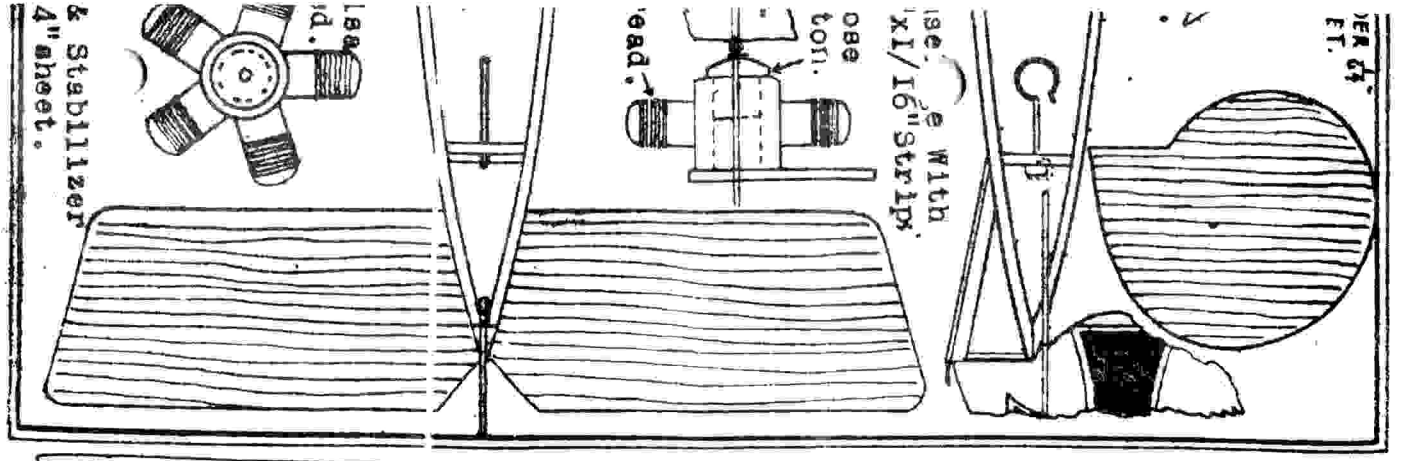
1. B ulkheads made of foam and bordered with balsa (double at seams).foam blocks and forms have hole at center line to provide proper alignement.Doubled forms are glued foam to foam.avoid glueing balsa at seams so that sections may be se pera ted after shaping outside.

2. Blocks and forms a re glued together and outside is shaped

3. Sections are seperated at seams and hollo wed out using balsa as thickness guide.

These drawings show the method used.the number of bulkheads seams and there actual locations va ry with each design.

FOR TEXT - SEE PAGE 10



Leading Edge I/I6"xI/I6"Strip Balsa

Main-Spar I/I6xI/I6 Balsa.

Root RibS I/I6" Sheet.

Wingtips I/I6"x3/32" Balsa.

Trailing Edge I/I6"x3/32"Balsa

Trace And Cut IO Ribs From I/32" Sheet.

REPRINTED FROM 1937 JAN. AERO-MODELLER

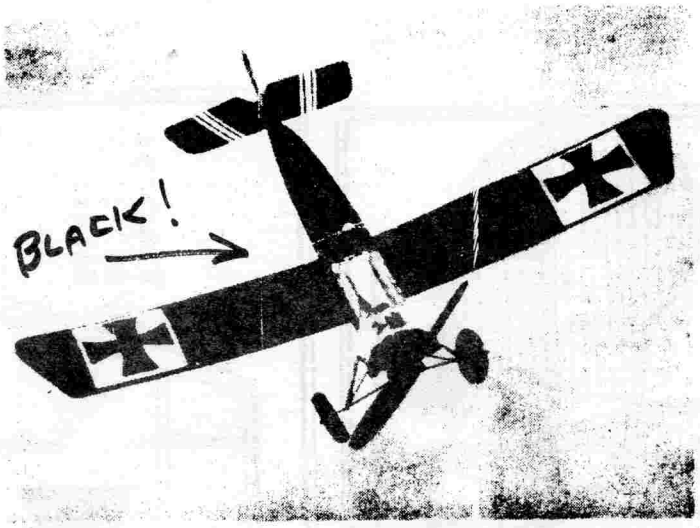


Photo By courtesy of Assoc. Scottish Newspapers Ltd

Immelmann's Fokker D.I

By WILLIAM CLARKE HALL Jnr.

The Fokker D.1 was one of the first really effective machines to appear in the Great War. It was used by the great German Ace Immelmann, after whom the well-known stunt turn is known, and was one of the first machines to be fitted with a synchronised gun firing through the propeller.

The model, if constructed carefully, will give an exceedingly good performance. One of the test models was fitted with an imitation revolving engine, but we advise the builder to make a fixed engine, as the flywheel motion of the other engine is harmful to the flying performance.

BEGIN the construction of the fuselage by placing waxed paper over the drawing to protect it. Place the top and bottom longerons on plan, using straight pins to keep in place. We advise you to build two sides together, one on top of the other for exactness.

When fuselage sides are dry lift off plan and wind thread lightly round the tail.

Commence putting in top and bottom fuselage cross pieces, winding thread round fuselage at each section until cement is set.

You can now cut out B, C and D, and cement in place covering where indicated with smooth paper. The rearhook should be shaped from 20 s.w. gauge wire. Proceed to cover whole fuselage with black tissue, with the exception of the panel under the rearhook and cockpit. Attach cross insignia.

Build engine as shown in plans carefully and fit nose button. The whole unit should be painted a dull black and cemented to bulkhead B. Cut out two pieces of A from $\frac{1}{16}$ in. sheet balsa to form a two-ply cowl front. Cement a band of stiff paper round the cowl and round forward end with fine sandpaper to a finish. Now dope and lacquer white or yellow.

The machine gun is carefully shaped from a piece of soft balsa and attached to fuselage with bamboo pins. Dope and lacquer black and white. Attach windscreen and build kingpost and tailskid from $\frac{1}{16}$ in. square bamboo. *Note:* Small hook on top of kingpost for bracing wires.

The undercarriage should be built from $\frac{1}{16}$ in. square bamboo. The ends forming the fuselage must be carefully sanded and embedded into holes. The wheels can now be made up and attached to undercarriage. Dope and lacquer undercarriage yellow and black.

The tailplane and rudder can now be traced, and cut from a sheet of soft $\frac{1}{64}$ in. balsa sheet. Cover rudder on each side with white tissue and add insignia. The tailplane should be covered on topside only with black tissue. Cement both units to fuselage where indicated.

The construction of the wings is quite straightforward. The mainspars and tips should be pinned in place and the ribs traced and cut from $\frac{1}{32}$ in. balsa, with the exception of the root ribs, which are cut from $\frac{1}{16}$ in. sheet balsa. Cover with black tissue all but the panels where insignia is placed, as these panels are covered with white tissue.

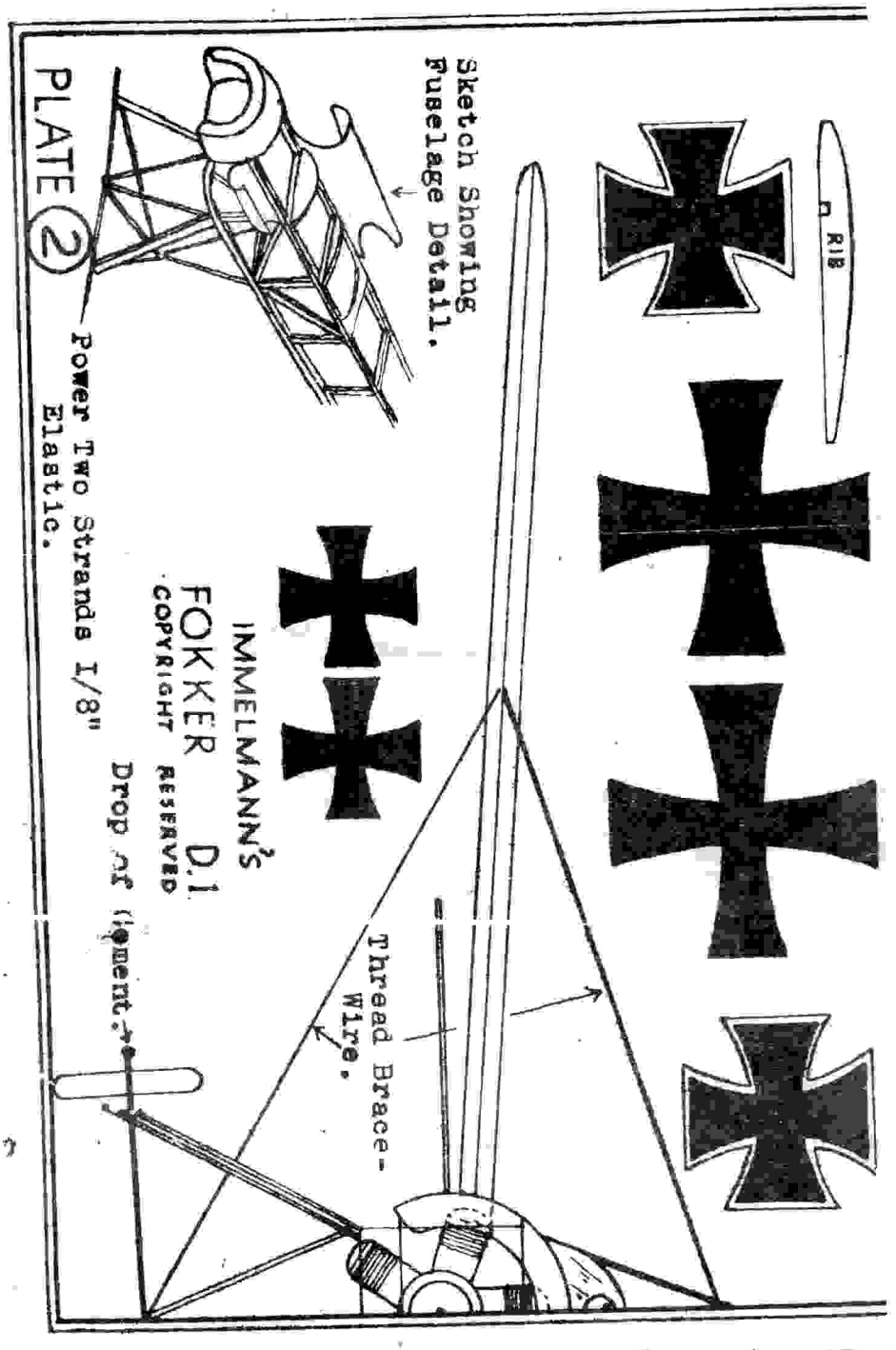
Wings must be carefully cemented to fuselage, and the bracing wires threaded and cemented through.

Carve the propeller from a medium piece of balsa, and sand, stain and dope to a mahogany finish. Attach hook and nose button. Note to use two small washers and bead which act as bearings. Make a loop of $\frac{1}{8}$ in. elastic and thread through fuselage to rear hook.

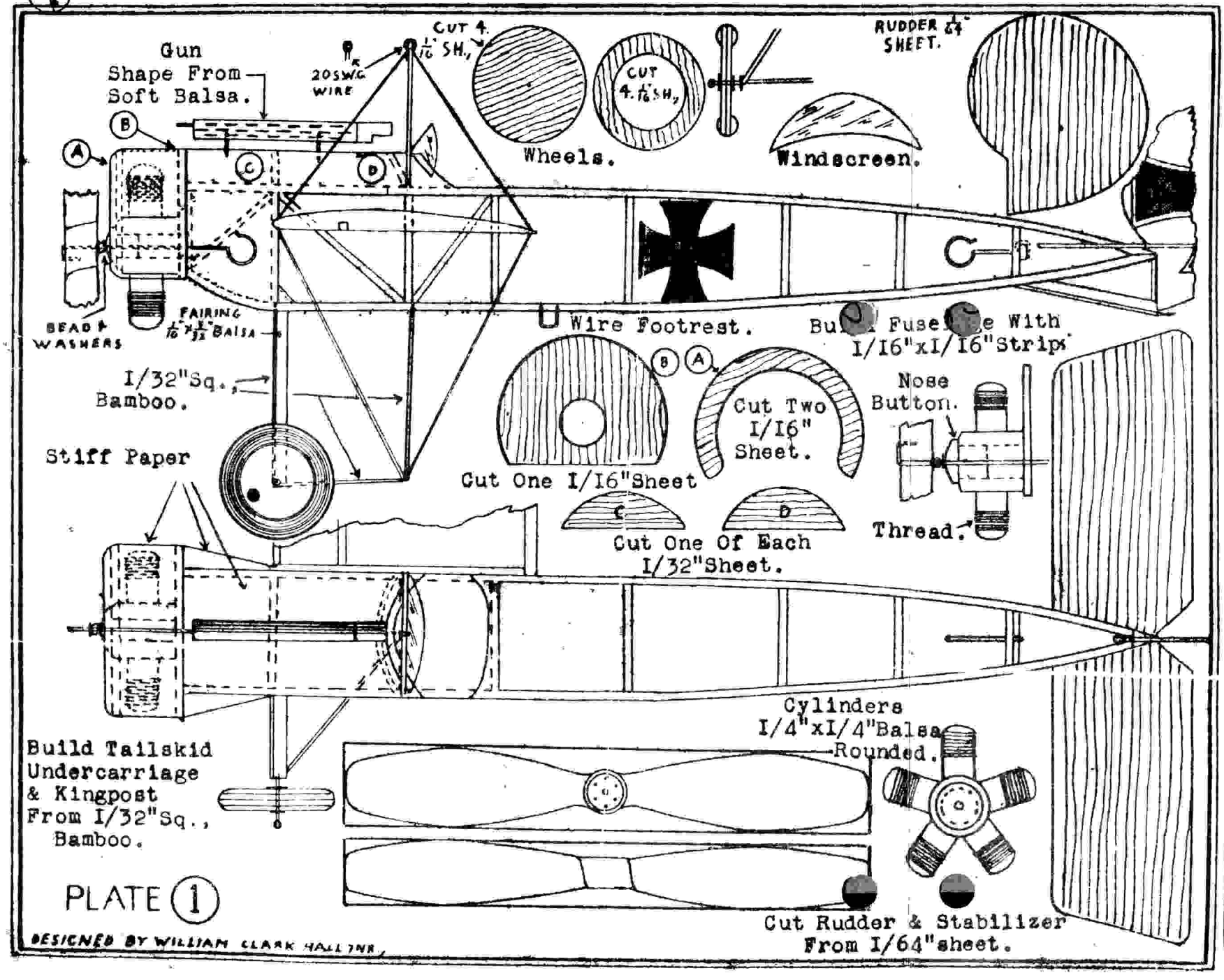
Glide model, and if it dives bend up elevator slightly. However, if model stalls bend down slightly, or add a small weight to the nose.

When the machine glides evenly put a touch of oil in the propeller bearings and give 100 turns.

A VINTAGE PEANUT FROM UK (8)



43 YEAR OLD PEANUT


Gun
Shape From
Soft Balsa.
20SWG
WIRE
CUT 4.
1/16 SH.
CUT
4. 1/16 SH.
RUDDER 4
SHEET.
Wheels.
Windscreen.
A
B
C
D
BEAD &
WASHERS
FAIRING
1/16 X 1/32 BALSA
Wire Footrest.
Bu Fuse e With
I/16"xI/16"Strips
I/32"Sq.,
Bamboo.
Nose
Button.
Cut Two
I/16"
Sheet.
Stiff Paper
Cut One I/16"Sheet
Thread.
Cut One Of Each
I/32"Sheet.
Cylinders
I/4"xI/4"Balsa
Rounded.
Build Tailskid
Undercarriage
& Kingpost
From I/32"Sq.,
Bamboo.
PLATE 1
Cut Rudder & Stabilizer
From I/64"sheet.
DESIGNED BY WILLIAM CLARK HALLTNR.

PART III More Foam and Stuff by Bill Hiscock

Hopefully the drawings will clarify the foam construction I described before. The other method shown is for the least weight. It is a simple jig which falls apart so it can be removed after covering. The cowling can be built by the foam method. In either case accurate alignment is very important.

Under M.I.A.M.A. peanut scale rules a model that scores around 30 scale points and flys about 60 seconds R.O.G. is competitive. This is by no means optimum but a ballpark figure to keep in mind when designing and building a new plane.

The fine Folkerts racer by Kurt Enkinhouse is a good example of high flight performance by way of weight saving. It is a beautiful model and looks like a model rather than a small airplane. The magnificent little Ford tri-motor by Fulton Hungeford is the other side of the coin, in that it could be mistaken for the full sized plane in a photo.

Two models of this type flown under M.I.A.M.A. rules would probably tie in the scoring. If there were 10 entries the Folkerts might get 1 in flight and 10 in scale because of its lack of bonus points and not because of any failings in design or workmanship. The Ford on the other hand might score 1 in scale and 10 in the flight. As each has a total of 11 they tie. Because ties are broken by the higher scale points the Ford would place higher than the Folkerts. The winner, however, would probable be a guy with 2 in scale and 2 in flight for a total of 4 (low score

wins like golf). A little further speculation on this imaginary contest would conclude that the guy with the 4 points would probably be Doc. Martin. After all who understands the M.I.A.M.A. rules better than Doc?

If the rules were changed the results probably would not because the guy who builds to the rules is going to have the edge. Trying to change the rules to fit one or the other type of model is a waste of time. The best modelers will build for the rules. The only way to beat a guy with a rule book is to roll it up and smash his plane with it!

Maybe you have a design with good flight characteristics and you could use a more realistic appearance for more scale points. The foam construction might be helpfull. On the other hand designs which have lot of bonus points could be built lighter to good advantage. The two methods shown may give you an idea or two and be helpfull in achieving that better model we all want to build.

In levying taxes and in shearing sheep it is well to stop when you get down to the skin.

- Austin O'Malley

RECORD BREAKING VS. CONTEST WINNING by JIM RICHMOND (12)

After Doc asked me to write about the difference between a contest model and a record trials model I was surprised to recall that I have only built two models in my whole life that were strictly intended for record trials.- the big "D" Starwalker and the AROG Atrium Insect (the large and the small of it).

Aside from the fact that these models were most rewarding fliers I also found them to be a lot of fun to build. You can give vent to your creative urges with record trials models mainly because it's no big deal if you fail to break a record right away. Also, the designs don't have to be so forgiving or reliable for you can keep trying as often as you like. The Atrium Insect was a real devil to get off the ground, with repeated flop-overs and stall-outs. Definitely not the sort of plane you would want for contest work. But it flew really nice once it was up. The Starwalker is so fragile that it can't take a tail slide or very rough air and always comes out the loser in a collision with another plane - but its super-light structure is just the ticket for record trials.

Contest models on the other hand have more stringent requirements. They must be strong and super reliable as well as being very good performers. It's that super reliable part that really separates the contest model from the record type. If you can't take your contest plane out of the box and go for it without testing -then you haven't arrived yet. Reliability also requires an extremely fail-proof construction. That is, the rear hook shouldn't rip out, the motor stick shouldn't break, the wing post shouldn't slip in the tube, the bracing wires shouldn't slip and the tail boom shouldn't break in a tail slide.

If all such things are well taken care of, then your plane can survive to a ripe old age while you learn to get the most out of it. Mostly, the way you insure against structural failure is to pay attention when something does fail and make sure you change that feature so it can't fail again. Some contest flyers now would be a much greater threat if they were to heed this advise. I won't name any names but you can hold up your hand if you are guilty: broken "O" rings, ripped out front bearings, slipped plug-in tail boom, and collapsed motor sticks.

So there you have it. Vive la difference!



FROM THE HORSES MOUTH, & OTHER ORIFICES -

ATTENTION , all you pilots out there in indoor land: here is the latest scoop from MIAMA Hq.

THE NATS INDOOR SCHEDULE, as published by AMA Hq. was a disaster when it came to allocation of time to the various classes. In an incredible blooper ,in four days of indoor Nats, AMA had scheduled four hours for BOTH AMA Scale and Peanut Scale, which would be TWO HOURS OF FLYING FOR EACH EVENT FOR THOSE WHO ENTERED BOTH (Practically everyone). Can you believe it? We did receive a letter from HOMER SMITH, Nats indoor director saying that scale hours would be extended to "Midnight if needed to accomodate the f d". Thank goodness West Baden has UNLIMITED flying time available.

We got a letter from Bill HISCOCK (Who also sent in part III of his foam cons truction series). He says "Hello" to all the gang, and hopes we enjoy proxy flying his foam BD-4. Hey,Bill, how about drafting up some peanut plans from those 3-views, especially that Albatross Racer?

This months peanut plan is a very old (1937) Fokker submitted to us by Pete Cameron of Sussex, UK. Thanks, Pete!

Our Man Outside, Terry Rimert, and Archives custodian for MIAMA, who is a little behind on the State Record Awards, sent in his column a bit late but it is always very provacative . Here are some excerpts: Terry made some observations on funding the NATS.Each R/C contestant cost $33(Which means they lose at least $2 on each entry), costs $25 for each FF entry (So they come out ahead $5 a head on FF contestanta),Control line costs them $40 per entry (A loss of $10 per entry),and indoor costs $ 38 bucks a person which is a loss of 8 bucks per entry. It seems they blow 10 Grand on the Indoor,CL,and R/C, and make a few dollars on FF. TERRY observes that FF subsideses the rest of the NATS, ank can't understand how we go in hock for so much money every year. Doc, and Terry are both interested in seeing hoe the separate indoor Nats makes out financially THIS YEAR with the very fine West Baden site. Yo GOTTA come out ahead?

bureaucracy: (byu-ra-kra-see) n. ...
3a. A system of administration marked by constant striving for increased functions and power, by lack of initiative and flexibility, by indifference to human needs or public opinion, and by a tendency to defer decisions to superiors or to impede action with red tape.

- Webster's Third New International Dictionary



The bureaucracies think they're doing a great job for you. But all they are really doing is taking more and more of your money, and giving in return less and less freedom.

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