# THE HANGAR PILOT

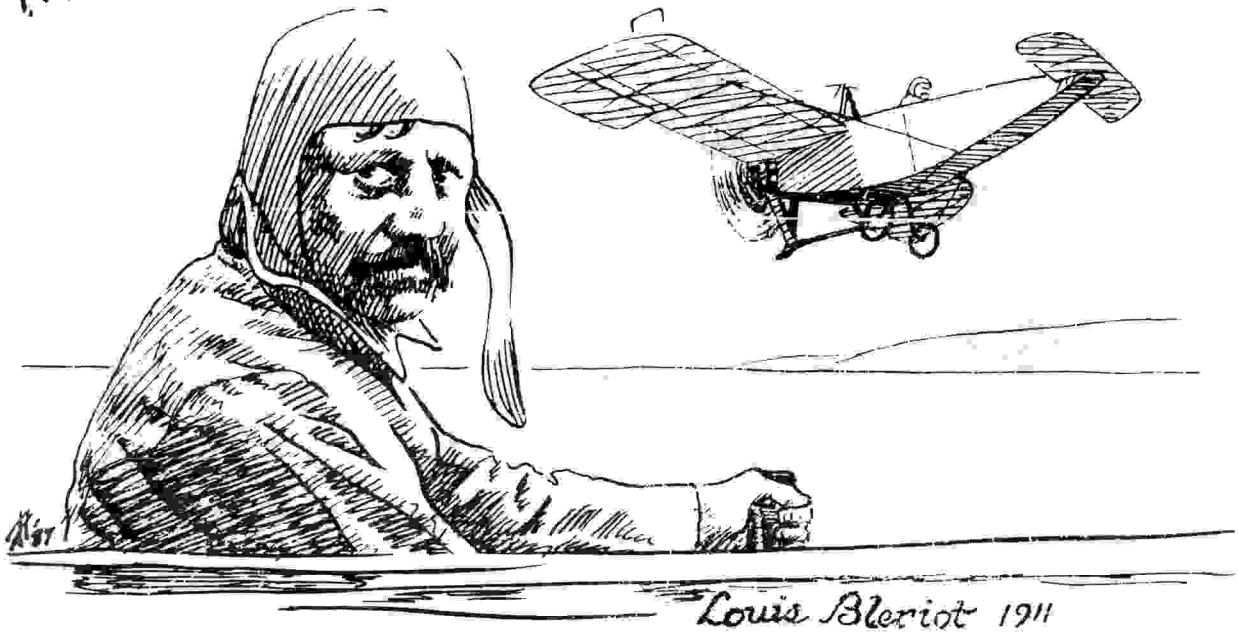
EVER ENTHUSIASTIC

17TH YEAR OF PUBLICATION

ISSUE 119 1988

MIAMI INDOOR AIRCRAFT MODEL ASSOCIATION — MIAMA

- RESULTS OF KING ORANGE MEET WITH SEVEN NEW STATE RECORDS
- CHARLES SLATER ARTICLE 'CMOS REVISITED'
- A 1934 MAN KAWASAKI & A CZECH PISTACHIO
- H.K. WEISS' ANTOINETTE MONOBLOC PEANUT
- JOHNSON CITY INTERNATS SCHEDULE



Louis Bleriot 1911

COVER BY MARK ALLISON

## NEXT EVENT: SUN JAN 17

9-5 MIAMI DADE SOUTH COLLEGE FUN FLY.

## NEXT CONTEST: FEB 13, 14

MAC DILL AFB - MIAMA MEET #3

"LIKE A LETTER FROM HOME" - WHELAN


(1)



# THE HANGAR PILOT

Is published 8 (or 9) times a season for a bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association,) AMA Club 986, is the only active all indoor free flight club in AMA. Our Mottos: "It must be fun.", and "Indoor isn't for everyone." For $10.00 a year you will receive all copies. We solicit your contributions since we are always running out of material. Letters, plans, 3-views, articles, gripes, and Money to: Dr. John Martin Pres./Editor. 2180 Tigertail Ave. Miami, Fla. 33133 USA Phone: 305-858-6363 We want to hear from you!!! Send material!!!


## DELTA KING ORANGE MEET

JAN 1, 2, 3, 4 1988

Who said that New York indoor flyers don't support indoor events outside of their immediate area? (I think I did.) Well forget it because a contingent of at least seven Columbia Rotunda flyers fled South to Tampa to support the four day King Orange MIAMA meet and also to escape thesub-zero weather in the Big Apple. Check those results for these familiar names. We think it is a result of Charlie Slaters pilgrimage to Gotham last month to spread the word. It's nice to see new faces! I HOPE ALL YOU NEW YORKERS BOOKED YOUR FLIGHT ON DELTA...our genial host for the two days at theirMaintainance Hangar at Tampa Airport.

For the third year in a row we thank Mr, Ed Greene who OK'd the use of the Delta Hangar, and thank Curtis Bryant for supervising the meet. Guys, itis impossible to overestimate the value of the benifit of a company like DELTA AIRLINES that provides their facilities and personnel at no cost to our little indoor movement. We hope that we can reciprocate by our efforts on their behalf. There is no way we could afford to rent such facilities at cost...SO ONE MORE TIME...THANK YOU DELTA FROM THE INDOOR MODELING FRATERNITY.

While we are thanking people: The first two days of the meet were at MACDILL AIR BASE. Col. Bill Criss working with Capt. Dian Lawhon made all this happen on Fri.(New Year's Day) and Sat. Four days of flying is a LOT for a local AA meet. Elsie Becker and Gen Obarski helped Tony and Dick and Doc Martin all four days in running the meets. Nancy Beitz and Charlie Slater made MIAMA club T Shirts that were very popular.

As for the flying... We set seven new state records , mostly at the Delta Hangar. A new WORLD record in Federation ROG was set by Tom Iacobellis with "Bull Frog". He did 4:22 on a 25" loop of .055 FAI rubber. 10" motor stick, 8" boom. He told me he put 170 turns of his 16 to 1 winder !! That is over 3,700 turns ! Tern Aero plastic prop sanded tO 1½ gm. Built in his hotel before meet. What fun. How about sending me a piece of that FAI rubber, Tom? Dick Obarski set a new

- CONT. P. 13

# KING ORANGE MEET 2 RESULTS

PEANUT SCALE EVENT 9 entries, 4 flew!:

| | | Best 2 flights: | | Total: |
|---|---|---|---|---|
| 1.Rich MacEntee Ironsides | Static 84, | 82.0 | 82.0 | 166 |
| 2.Doc Martin Polish Canard | 82.8 | 60.2 | 54.0 | 139.9 |
| 3.Charles Slater Armstrong APE | 85.2 | 50.7 | 39.4 | 130.2 |
| 4.Millard Wells Farman Moustique | 63.2 | 100.9 | 111.0 Max | 126.4 |
| X C. Slater Sikorsky Sky Crane Heli | 95.7 | 25 | 29 | 122.7 |
| XM. Wells Cessna Airmaster | 60.0 | 39.7 | 31.9 | 95.5 |

Also entered Nancy Beitz (2), John Tudor,Tom Iacobellis,Bob Passerelli (2), George Leffler. DNF

FAC SCALE EVENT 10 entries , 7 flew:

| | | Best flight: | Total |
|---|---|---|---|
| 1. Doc Martin Polish canard | 79 Stat. | 64 | 143 ★ |
| 2.Dave Aronstein Farman moustique | 57 | 1:36 (76.5) | 133.5 |
| 3.Millard Wells Waco bipe | 69 | 58.2 | 127.2 |
| 4.George Leffler Hellcat | 58 | 1:13 (66.5) | 124.5 |
| 5.John Tudor,Curtiss Robin | 52 | 1:17 (68.5) | 120.5 |
| X Dave Aronstein BFW | 37 | 2:10 (82.5) | 119.5 |
| X Doc Martin Wildcat | 55 | 56 | 111 |

- RETIRED!

Also Entered:Nancy Beitz Cub,Bob Passerelli Avenger,Joe Nuszer,Dick Obarski

FEDERATION ROG EVENT 11 entries,9 flew:

| | |
|---|---|
| 1.Tom Iacobellis | 3:55 ★ |
| 2. Tony Becker | 3:43 |
| 3. Frank Barrera | 3:06 |
| 4.Joe Nuszer | 2:59 |
| 5.Mike Arak | 2:30 |
| 6.John Tudor | 2:29 |
| 7.Doc Martin | 2:26.2 |
| 8.Rich MacEntee | 2:14 |
| 9.Nathan Miller (Jr) | 1:26 |

Also Ed Berton,M. Wells

DID 4:22 on Monday! New State Record + World Record

EASY B EVENT.12 entries,9 flew:

| | |
|---|---|
| 1.Dick Obarski | 15.41 ★ |
| 2.Joe Nuszer | 13:24 |
| 3.Gary Underwood | 13:21 |
| 4.Ed Berton | 13.04 |
| 5.Charles Slater | 9:09 |
| 6.Millard Wells | 8:53 |
| 7.Walt Everson | 8:25 |
| 8.George Leffler | 3:56 |
| 9.Tony Becker | 3:03 |

MANHATTAN: Walt Everson 3:48

NOVICE PENNY EVENT. 10 entries,8 flew:

| | |
|---|---|
| 1.Tony Becker | 9:10 |
| 2.Charles Slater | 9:01 |
| 3.Gayle Wyman | 8:39 |
| 4.Ed Berton | 8:34 |
| 5.Tom Iacobellis | 8:09 |
| 6.Gary Underwood | 8:00 |
| 7.Walt Everson | 7.06 |
| 8.George Leffler | 4:44 |

PENNY PLANE EVENT:

| | |
|---|---|
| 1.Joe Nuszer | 9:30 |
| 2.Ed Berton | 6:36 |

ORNITHOPTER:

| | |
|---|---|
| 1.Frank Kieser | 10:13 ★ |
| 2.Roy White | 7:27 |

BOSTONIAN EVENT: 9 entries:

| | |
|---|---|
| 1. Dave Aronstein | 400.4 ★ |
| 2.Rich MacEntee | 324.5 |
| 3.Dick Obarski | 273.0 |
| 4.Millard Wells | 270.4 |
| 5.Doc Martin | 210 |
| 6.George Leffler | 208.2 |

3 more DNF

★ = NEW FLA. STATE CAT. III RECORDS

MORE RESULTS P. 13

# 3 CMOS REVISITED!

CHARLIE SLATERS' MATH TO FLY BY
(Based on info stolen from INAV)

After an eight year lull in indoor modeling, I got the bug to build some new models and get into a little competition. The first thing I did was to dig out some old indoor publications such as the "Hanger Pilot" and "Indoor News And Views", to look for plans and other stuff to brush up on. During my research, I came upon the October 1976 issue of I.N.A.V. which had an article on two methods of wing placement. One called Instant Neutral Point (INP) and the infamous CMOS. These computations are best used on Novice Penny Planes and EZB designs. Of the two designs, the I.N.P. method by Hal Crane seemed to be easiest to use. What INP does is to tell you the Static Margin of Stability (SMOS) of a model, similar to Constant Margin of Stability (CMOS). With Novice Penny Plane, you want a SMOS of about 13%, with EZB you want a SMOS of about 15%, but this is only one mans opinion. None the less, you should opt for a SMOS of between 10%-16% for 90% of N.P.P. and EZB'S.

1. Now find all of these values in inches
   a. Cw= adv. chord of wing; (2.5-5in.)
   b. Ct= adv. chord of tail; (1-4in.)
   c. Aw= area of wing; (50-90sq. in.)
   d. At= area of tail; (15-48sq. in.)
   e. O.A.L.= over all length
   f. X= distance from very front to C.G.
2. Take model with everything on it, tail, prop, approx. rubber motor and find distance X.
3. With all of the above numbers, you now have to find the length of the tail moment called Lt. By definition Lt is the distance from 1/4 of the adv. chord of the wing to 1/4 of the adv. chord of the tail.
4. Now sketch a side view of your exsisting model (or design) and draw all of the dimensions you found in step 1 clearly on this sketch.
5. Draw the wing in place so that on P.P. the CG is at 70-80% of Cw, and on EZB'S the wing is at 90-110% of Cw. This is a Beginning Theorectical wing location.
6. Now with the completed drawing you can find Lt, which leads to the N.P., which tells you this design's SMOS.

Remember: Lt= the distance from Cw/4 to Ct/4.

7. Find Ltq this = Lt/Cw (usually 1-6).
8. Now you have all the varibles to find N.P.%(of Cw).
9. The N.P.%(of Cw) is defined by a simple equation (more accurate that a graph), that is:

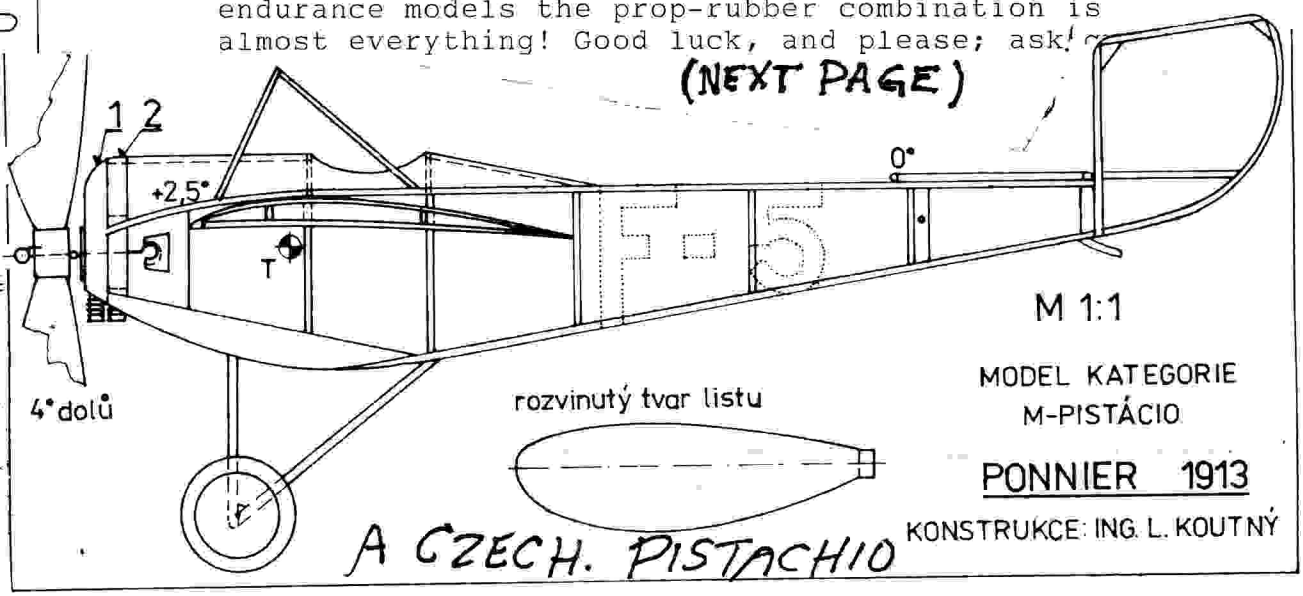
$$N.P.\%(\text{of Cw}) = 25 + \frac{100\ (Ltq)}{1+1.5(Aw/At)}$$

10. Now you can find the SMOS. This is defined by (the distance from the T.E. to the CG minus the distance from the T.E. to the N.P.) all divided by Cw then X 100. The N.P. should be behind the CG. The answer will be your model's SMOS%. Hopefully 10-16%.

$$SMOS\% = \frac{(C.G.\ \text{to}\ T.E.) - (N.P.\ \text{to}\ T.E.)}{Cw} \times 100$$

The examples shown are of my N.P.P. which has a 5x18" wing, a 4x12" tail and is 18" long. All examples have SMOS% of between 11.2%-14.8%, and are quite flyable, but I believe from my experience that N.P.P. should be close to 13% SMOS and EZB'S close to 15% SMOS. With my NPP set up like the last example, I was able to take 2nd place at the USIC with a 12:30 flight. The model landed with about 2 mins. worth of turns wraped around the rear hook, probably because I used 2 loops of .040" pirelli 23.5" long. This motor showed 7"/lbs. torque on 2000 turns, and swung a 12X25.5" jug prop very nicely. With INP tou can hope to have somewhat of a competative edge, but dont forget that in endurance models the prop-rubber combination is almost everything! Good luck, and please; ask!

(NEXT PAGE)



# 5 SLATER CONT.

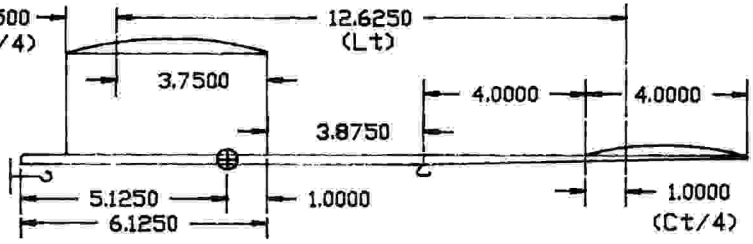
All models: 10" motor stick, 8" tail boom, 5x18 wing, 4x12 stab
Cw=5, Ct=4, Aw=90, At=48, Aw/At=1.875, O.A.L.=18", CG@ 5.125"

N.P.= 25 + 100(Ltq) / 1+1.5(Aw/At)  (In % Cw)

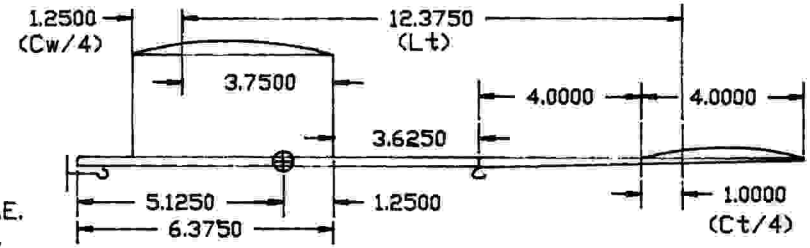
NP= 25+ (100(Ltq))/1+1.5(1.875)
NP= 25+ (100(Ltq))/3.8125 *

Static Margin Of Stability  SMOS%= ( The distance from the CG to the TE minus The distance from the NP to the TE / Cw )** X100

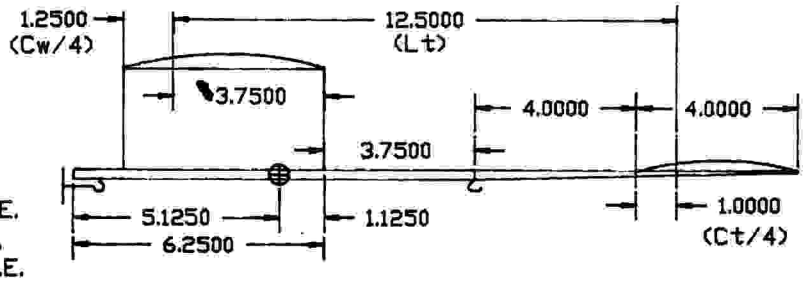
**CG@ 80% Cw**
Lt=12.625
Ltq=Lt/Cw
Ltq=12.625/5
Ltq=2.525
*NP=91%(Cw)
NP=4.55"fromL.E.
NP=.45"fromT.E.
CG=1"fromT.E.
**SMOS=11.2% ; A little low




**CG@ 75% Cw**
Lt=12.375
Ltq=Lt/Cw
Ltq=12.375/5
Ltq=2.475
*NP=89.9%(Cw)
NP=4.49"fromL.E.
NP=.51"fromT.E.
CG=1.25"fromT.E.
**SMOS=14.8% ; A little high




**CG@ 77.5% Cw**
Lt=12.5
Ltq=Lt/Cw
Ltq=12.5/5
Ltq=2.50
*NP=90.6%(Cw)
NP=4.52"fromL.E.
NP=.48"fromT.E.
CG=1.125"fromT.E.
**SMOS=12.9% ; Just right!



FROM MAY 1934 MODEL AIRPLANE NEWS 6
FOR OUR SHONAI FRIENDS:

# Build the Kawasaki Fighter

## How You Can Build a Flying Scale Model of the Latest Japanese Fighting Plane. Information Direct from Japan Made These Plans Possible

By ELMER PILZER

JAPAN has shown startling advancement as a result of the Shanghai and Manchukuo fracas, and the far-sighted Nippon is now going in for all-metal construction. The plans to follow show you how to build one of their latest all-metal jobs.

At first glance you may mistake this airplane for the old Curtiss Hawk P-6, but upon closer examination you will notice the different and unusual single bay strut, the different landing gear and lastly the wings of equal span.

This Kawasaki KDK-5 type "92" is a single seat pursuit ship, powered with a 600 h.p. B.M.W. water-cooled engine, which is somewhat similar to the old Curtiss "Conqueror."

The special type outer bay strut gives an equal bracing support to the "Vee" and "N" struts, the latter of which is used on most modern fighting ships. Behind this strut is an aileron strut, which connects both ailerons that are on the upper and lower wings.

As for speed, this ship is well up in the 200 m.p.h. class, which all together makes a pretty formidable foe to be up against.

In order to produce a perfect flying scale model, it is advisable to work directly on top of the plans and to follow instructions closely.

### Fuselage

Before starting to build, obtain a soft smooth board to work on, a sheet of carbon paper and transparent wax paper.

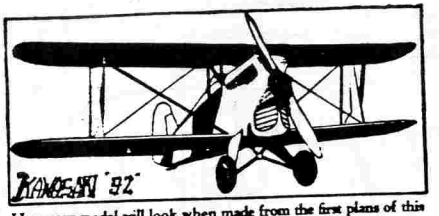
Join drawings No. 1 and 3 together and pin on board. Now pin wax paper over the drawings and start by making both sides of the fuselage. This is indicated by the very heavy lines. After letting these sides dry thoroughly, trace the formers on 1/16" sheet balsa.

All the tracing is done with carbon paper, then, according to the top view of the fuselage, cement in place all the formers, putting 1/16" sq. balsa on bottom of body. Now cement in place the stringers, and sandpaper the entire frame.

### Wings

Start by tracing all ribs on 1/16" sheet basis. If desired, the lightning holes may be left out, but in order to reduce unnecessary weight it would be advisable to go to the trouble of cutting out the holes. On drawing No. 2, you will find plans for making an upper and lower left wing. In order to make the upper and lower right wing, you may either draw it or trace it on another piece of transparent paper, and turn the paper over so the drawing is on the underside. It will then show through the paper as a right hand wing.

First pin down the rear spar and the leading and trailing edges. Now cement on a steamed piece of 1/32"x1/16" bamboo, for the wing tips. Then continue by cementing in all the ribs in their respective places, and finally the upper leading spar. Make the center section likewise. Let these surfaces dry on board overnight so as to prevent warping. When that is done, cement the upper left and right wings on to the center section, giving them a ¾" dihedral at both tips. When dry, sandpaper both wings.




How your model will look when made from the first plans of this ship to be published in America; given here

### Tail Surfaces

In order to increase the strength of the stabilizer, a piece of 1/16" sq. bamboo is put across it. Then with the aid of pins, carefully bend a piece of 1/32"x1/16" steamed bamboo halfway around the tail. Round off a piece of 1/16"x⅛" balsa for the leading edges and finally cement in the rest of the braces which are all of 1/16" sq. balsa. Make the rudder according to plan, and after both surfaces are left on the board to dry overnight, sandpaper them.

### Nose Block and Propeller

These are the parts which prove your model building abilities.

The nose block "B" is first shaped according to the side view, then the top view, and finally the front view. It is then cut in half from the top down and gouged or cut out until the walls are 1/16" in thickness all around. Now re-cement both parts together again.

Radiator block "C" and block "D" are done in the same manner and cemented in place on bottom of block "B." Block "A" is cut from ⅛" sheet balsa and an eyelet is cemented in the center of it.

The propeller is the heart of the airplane; therefore, utmost care should be taken in carving it out. Make a template of thin cardboard of half the front view. Trace that around on both ends of the block. Now cut away the lined section according to drawing No. 1. Do the same for the side view, and finally cut out the shape and twist of the blades, and sandpaper it. Do not forget to balance the prop after it is finished, so as to eliminate vibration.

Make the motor stick according to plan and put the wire prop shaft through the prop hanger, put on washers, then through the prop hub, and finally bend back and cement the small cone on front of the hub.

Study the plans closely and you'll get the whole arrangement of the motor stick.

### Struts and Assembly

Cut out and streamline all the struts. Cut notches on the nose block and cement in place. When dry, cement on the landing gear and center section struts. Now cement the whole top wing on the center section struts. Using banana oil for adhesive, cover every part that requires covering. When finished, cement both tail surfaces in place, being careful to line them up correctly.

You may now put on the lower wings and outer bay struts. After everything is thoroughly dry, you may put in all the scale effects, such as celluloid windshield, flying wires, reed pipe exhausts, lines for the radiator and big red circles for the insignia. The insignia are put on the top of the upper wing, the bottom of the lower wing and the sides of the fuselage.

The motor stick is now inserted in place (do not cement in), after being powered with four strands of ⅛" flat rubber, and the model is now ready to fly.

If you have made this model accurately according to the plans and instructions, there is no reason whatsoever why it will not take off and land perfectly after a beautiful long flight.

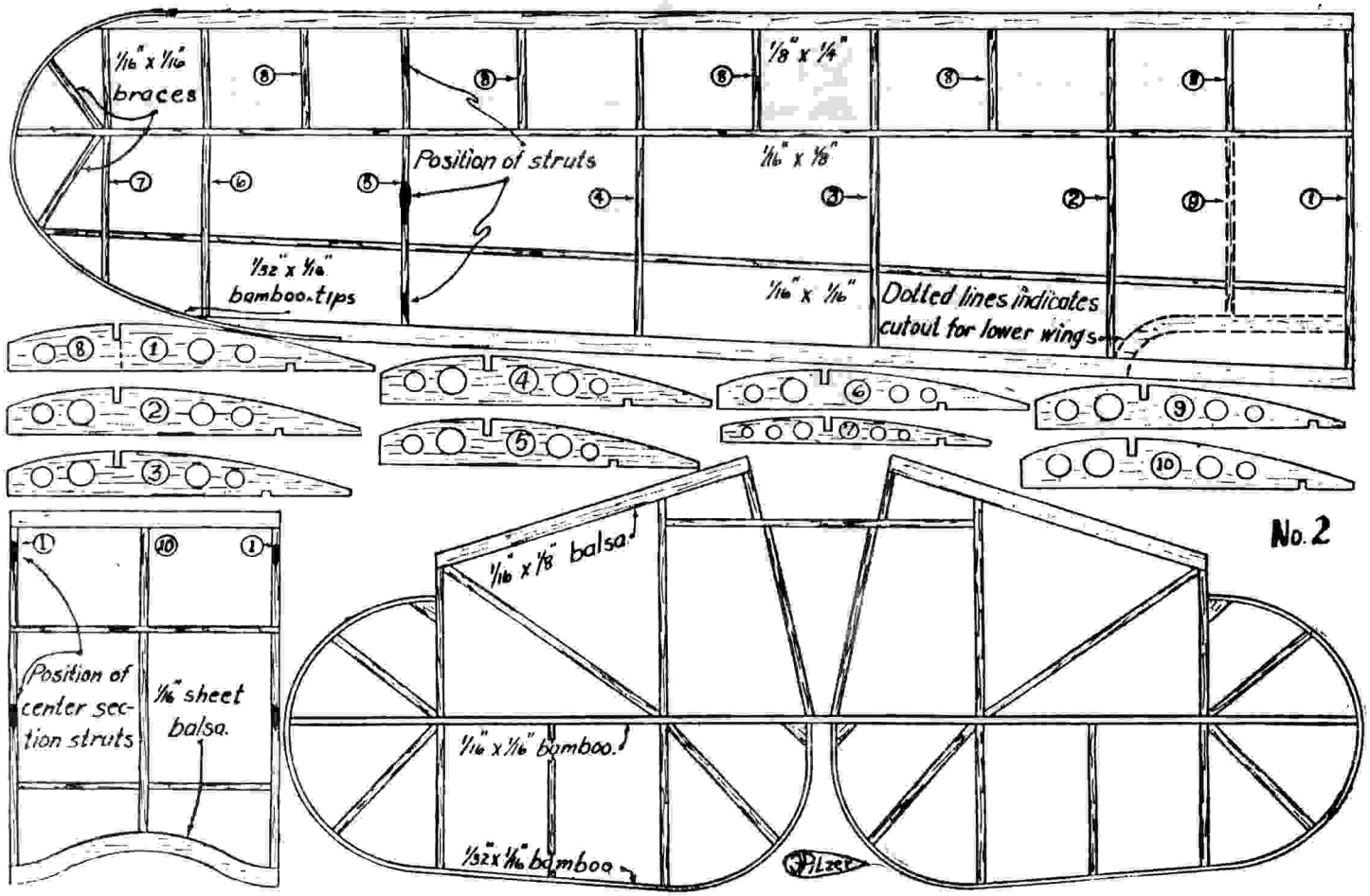
In order to have the model fly properly, add weight to the tail or nose as required in order to make it balance at the point marked (C.G.) on the side view of the fuselage plans. Doing this may save the model from a disastrous crack up. Minor adjustments may be made after a few flights, which will give you perfect balance in flight. Add to or take away a little more weight from the nose of the ship as may be required in such an event.

### Flying

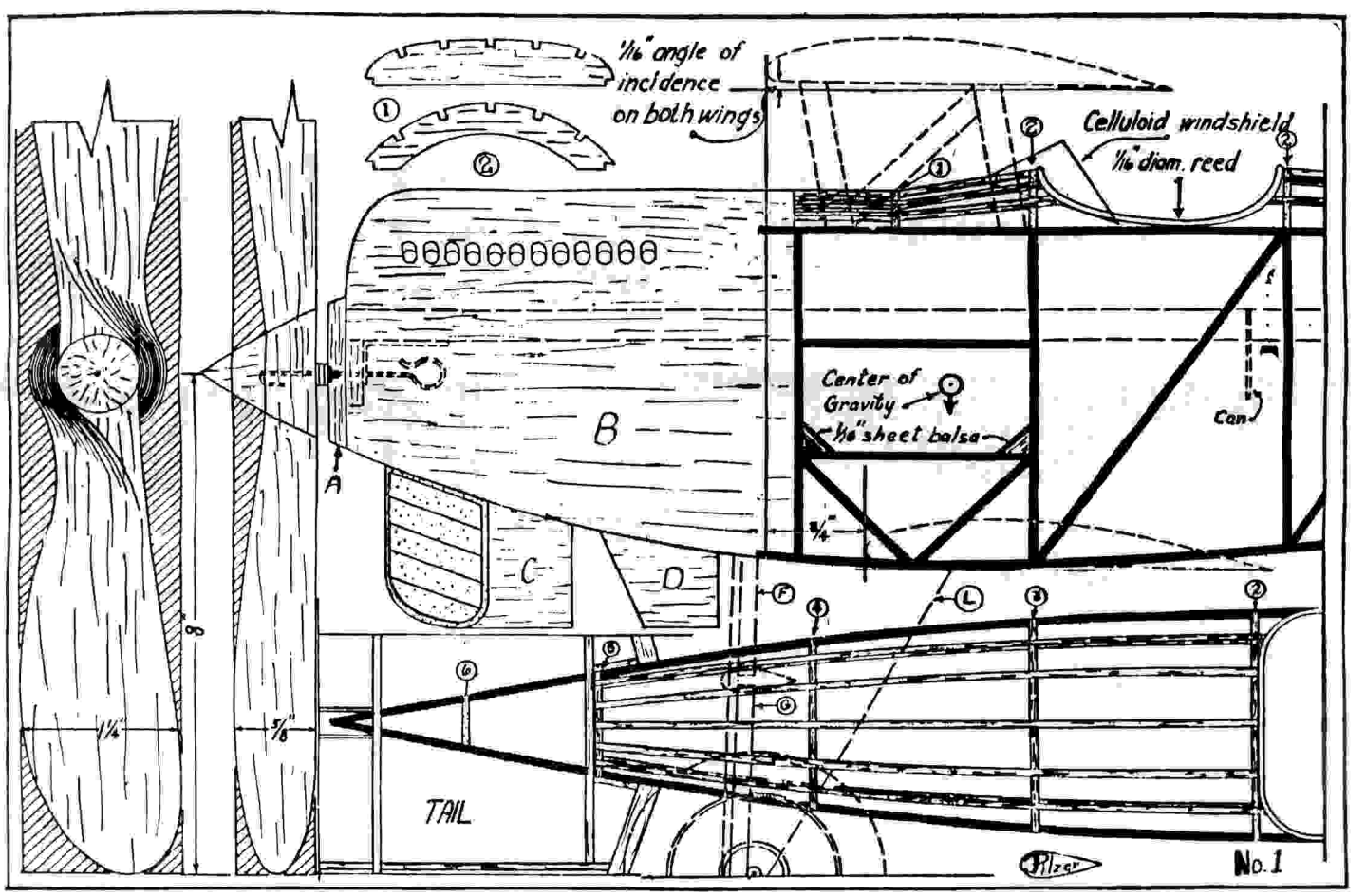
If in flight, the model dives, warp up the elevators slightly, but if it stalls, then warp them down.

Due to propeller torque, the model may tend to twist around on the line of thrust. There are a few ways to prevent this action. One is to warp the elevators, one up, and the other down, in the same manner as ailerons. Another way is to put a small weight on the end of the wing which goes up during flight. But the best way is to set the fin slightly over towards the wing which drops in flight, or give the wings a little more angle of incidence on the same side.

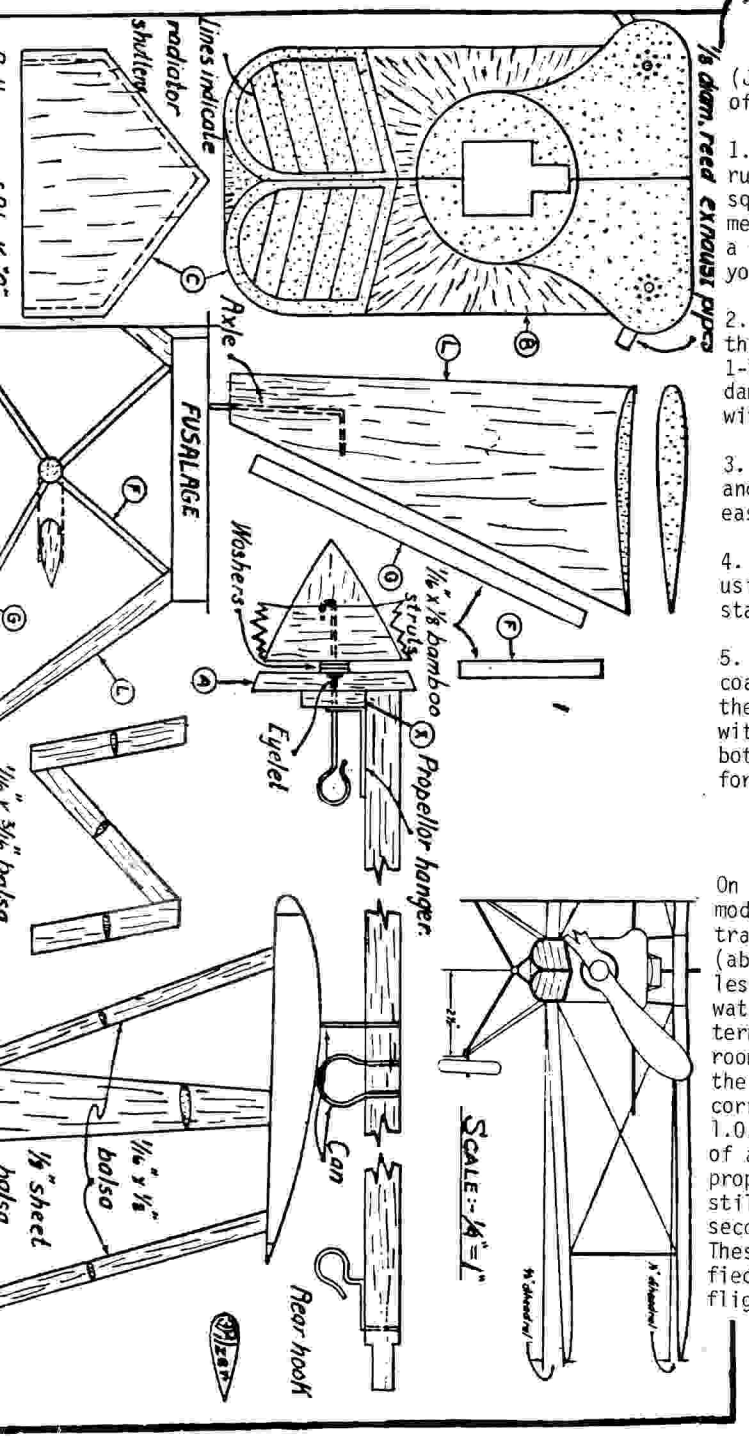
If, however, you have any difficulty in flying the model, kindly write to the editor in care of this magazine, and all your flying troubles will be gladly smoothed out.


1/16" x 1/16" braces
1/8" x 1/4"
Position of struts
1/16" x 1/8"
1/32" x 1/16" bamboo tips
1/16" x 1/16"
Dotted lines indicates cutout for lower wings
Position of center section struts
1/16" sheet balsa.
1/16" x 1/8" balsa.
1/16" x 1/16" bamboo.
1/32" x 1/16" bamboo
Pilzer
No. 2




1/16" angle of incidence on both wings
Celluloid windshield
1/16" diam. reed
Center of Gravity
1/16" sheet balsa
Can
B
C
D
A
8"
1 1/4"
5/8"
TAIL
Pilzer
No. 1

NEXT PAGE : H.K. WEISS 8




## MONOBLOC FLIGHT ADJUSTMENT

(Just in case your model doesn't fly straight off the butcher board)

1. Use a Williams Bros. 5 1/2" plastic (for rubber models) propeller, and cut off the tips square with a pair of scissors to reduce diameter to 4". (If you carve your own prop use a clipped Williams prop as a model and carve your prop from mahogany or other hard wood)

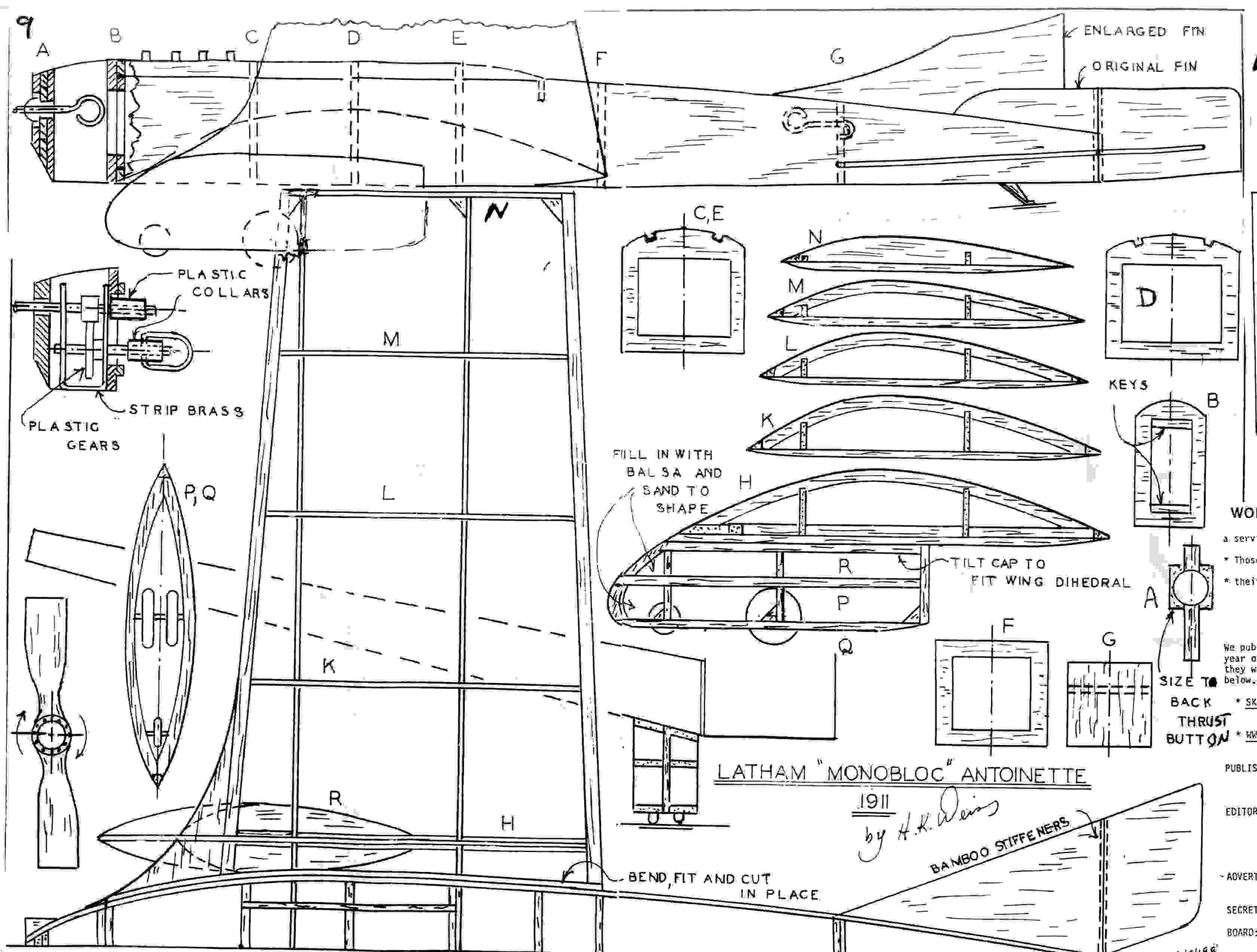
2. Warp both wings slightly and equally so that the tips have positive incidence (about $1\text{-}2^{0}$) relative to the root section. I simply dampened the tissue slightly and held the wing with a slight warp until it dried.

3. I found it convenient to attach elevators and rudder with soft wire to make adjustment easy.

4. Add modelling clay to the nose rather than using down elevator to counter tendency to stall.

5. To reduce drag, I gave the balso surfaces a coat of AeroGlass Balsa Fillercoat, then sanded them smooth. I covered the cockpit opening with a piece of cellophane, and covered the bottom of the "pants" with sheet balsa slotted for the wheels.

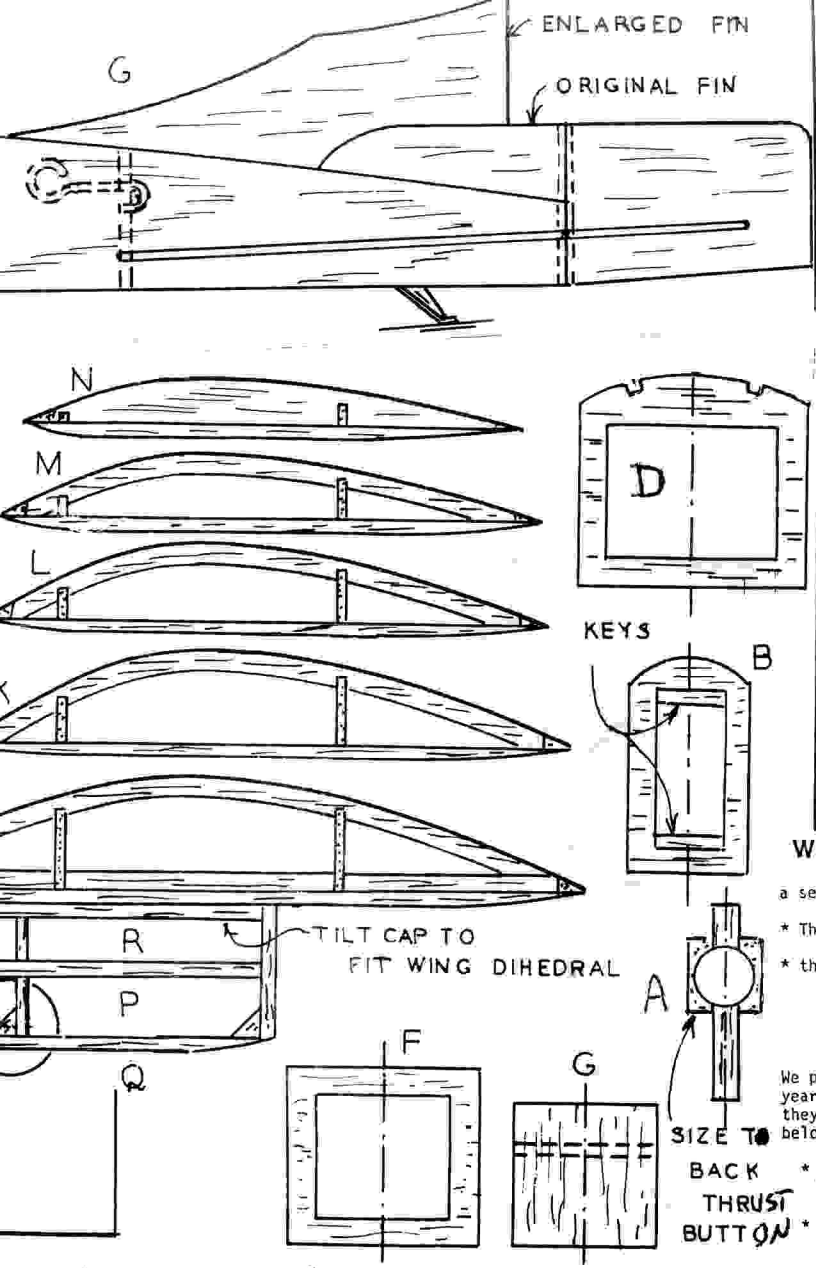
On 150 turns of an 8" loop of 1/8" rubber my model (which weighs 28 grams at present) traverses the mean free path in my back yard (about 40 ft straight run under the trees) in less time than it takes me to pick up a stop watch and start it after launch. Flight terminates when the model hits the living room window with a healthy bang. I estimate the flight velocity at 15-20 ft/second which corresponds to lift coefficients $C_L$ = 0.6 to 1.0. Using a winder one might input 600 out of a "theoretical" maximum 720 turns. The prop turns at about 40 turns per second, so still air flight time would be about 15 seconds, for a distance of 225 to 300 feet. These conservative estimates have to be verified overall, but suggest a lot of interesting flight potential.




# LATHAM "MONOBLOC" ANTOINETTE

1911

by H.K. Weiss




# H.K. WEISS

10

On these two pages: the fullsized original plan by Herbert K Weiss for his Antoinette Monobloc model- drawn especially for WWI AERO.

On the following double-page spread: the only photograph we have ever seen, courtesy of the Musee de l'Air, of the big Monobloc under construction. Note the massive frameworks for the wheel pants, the back-mounted engine and short driveshaft, the typical Antoinette wing construction with many light ribs. Tools, string, wire, dirt, loose ends everywhere...

ASK FOR ISSUE #112




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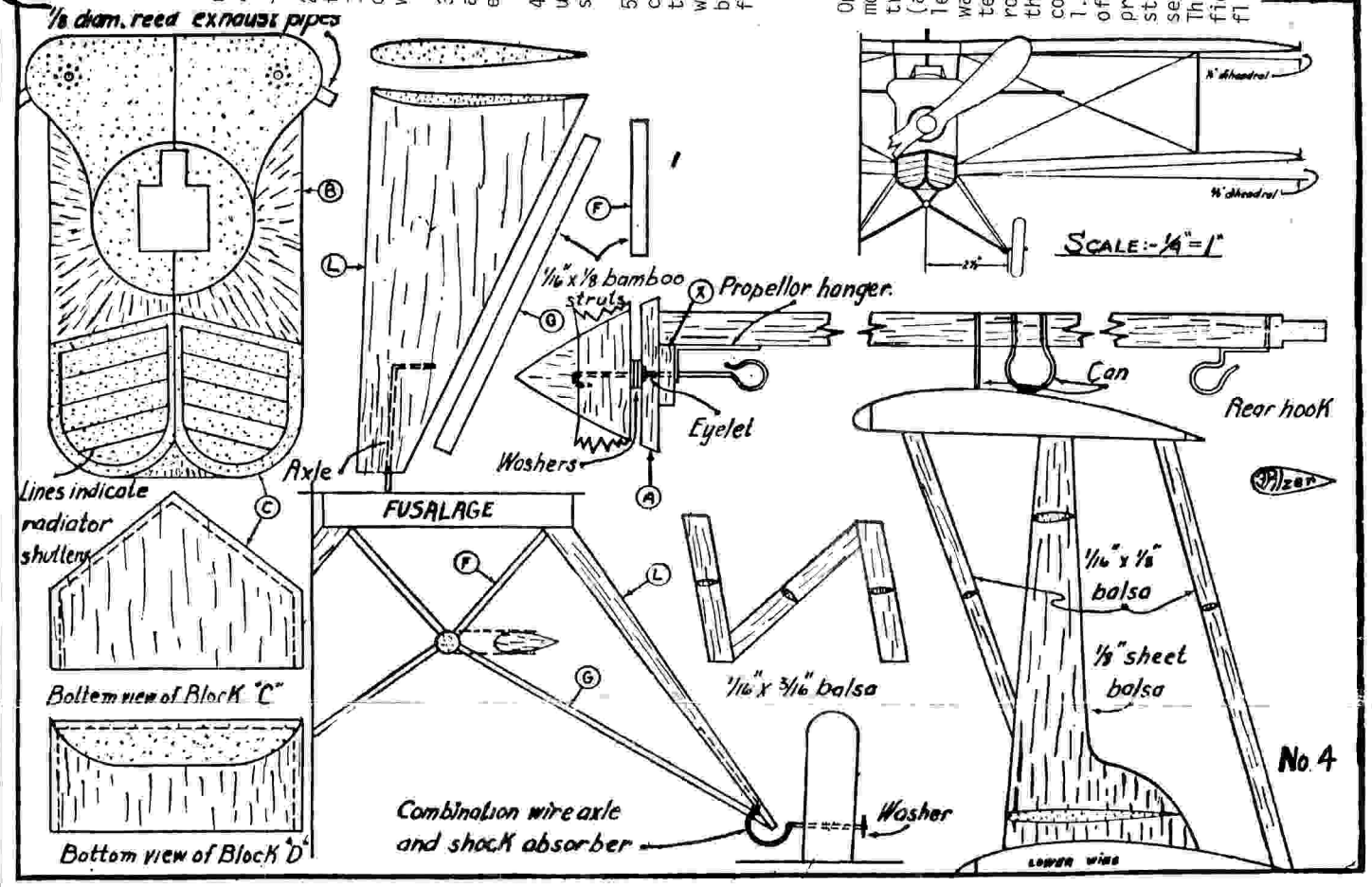
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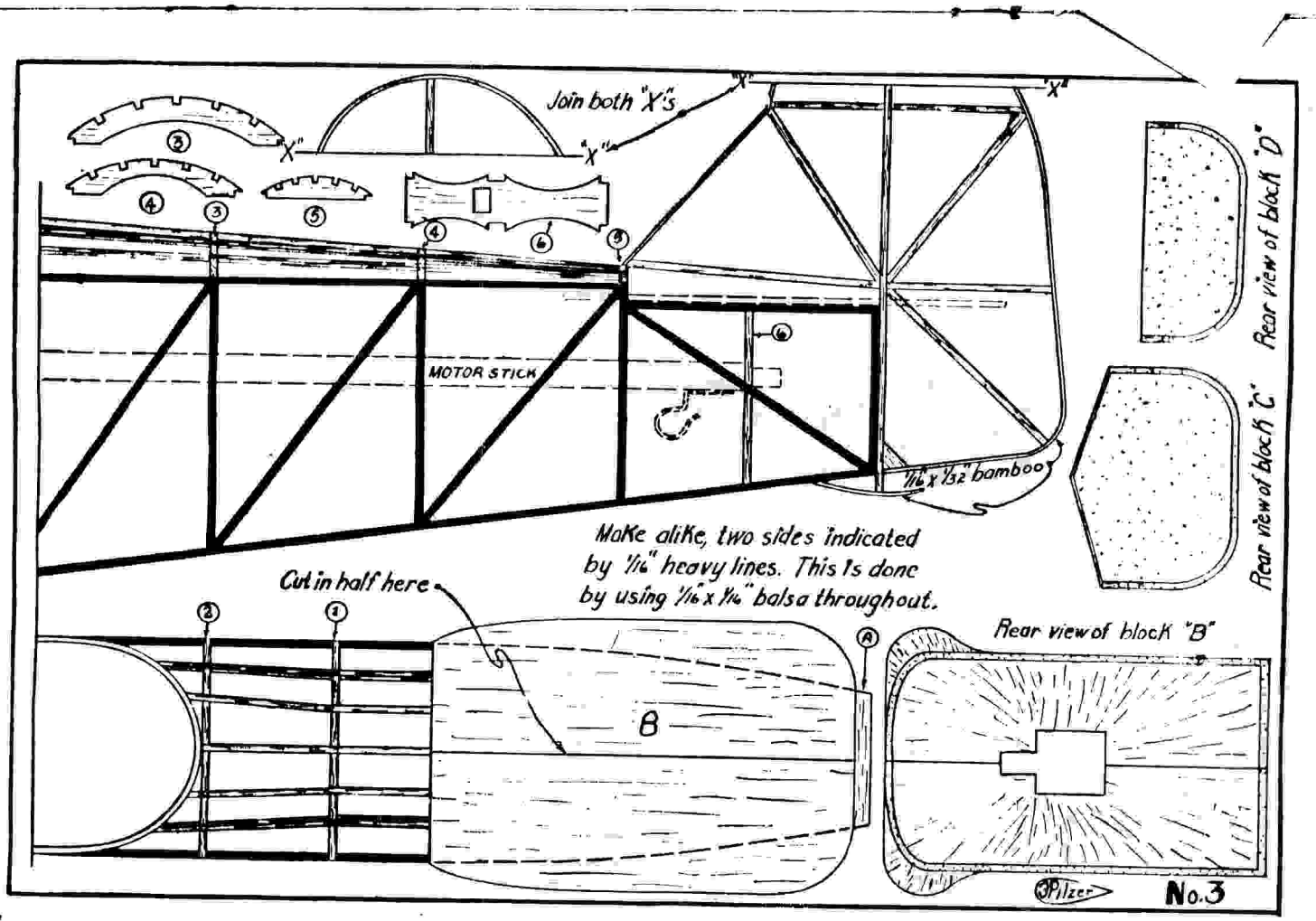
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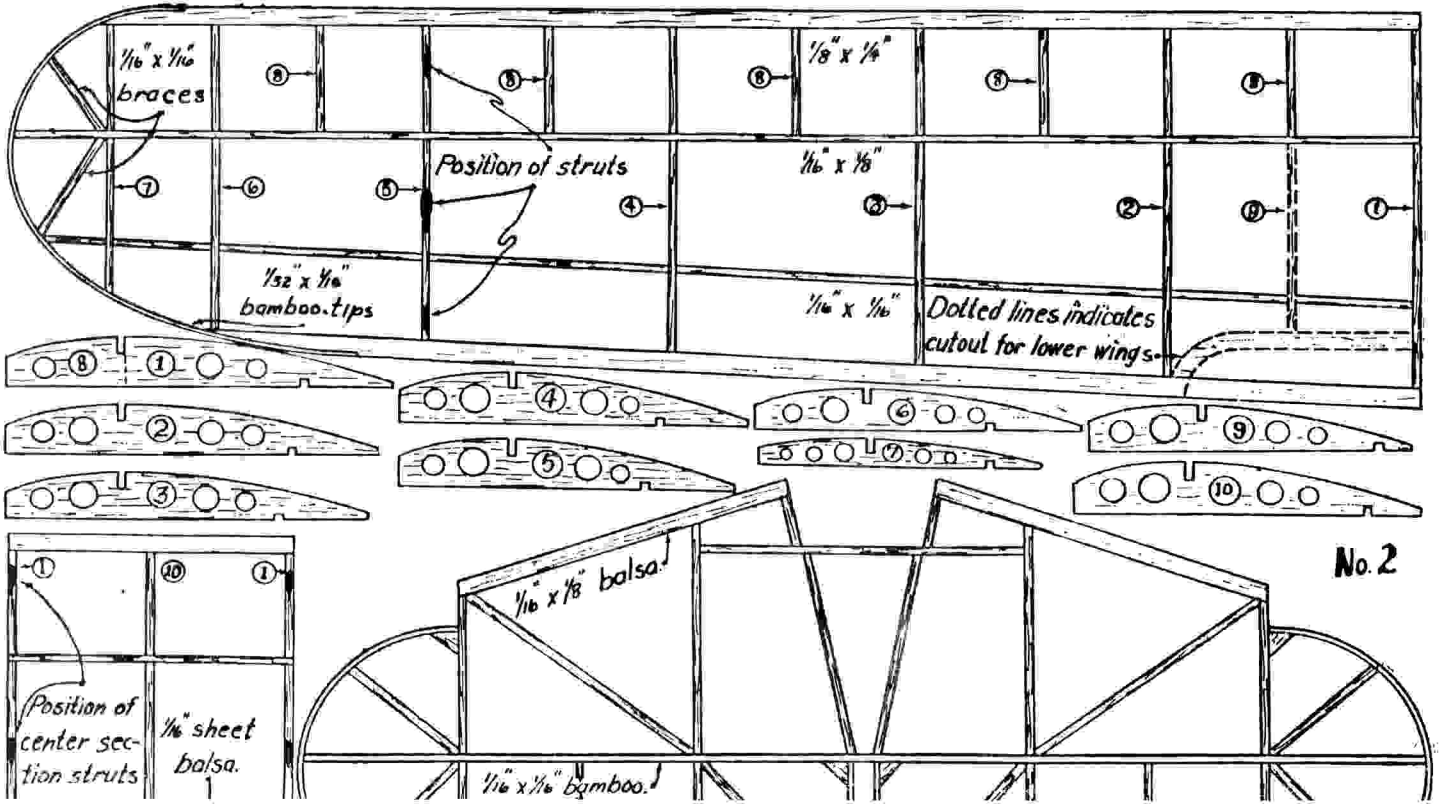

1/8 diam. reed exhaust pipes
Lines indicate radiator shutters
Bottom view of Block "C"
Bottom view of Block "D"
FUSALAGE
Axle
Washers
1/16" x 1/8 bamboo struts
Propellor hanger.
Eyelet
Can
Rear hook
1/16" x 1/8" balsa
1/8" sheet balsa
1/16" x 3/16" balsa
Combination wire axle and shock absorber
Washer
SCALE:- 1/4" = 1"
No. 4




Join both "X's
MOTOR STICK
1/16" x 1/32" bamboo
Rear view of block "D"
Rear view of block "C"
Make alike, two sides indicated by 1/16" heavy lines. This is done by using 1/16" x 1/16" balsa throughout.
Cut in half here
Rear view of block "B"
No. 3


12
HI!
DO YOU COME HERE OFTEN?
© 1956 United Feature Syndicate, Inc.




1/16" x 1/16" braces
1/8" x 1/4"
Position of struts
1/16" x 1/8"
1/32" x 1/16" bamboo tips
1/16" x 1/16"
Dotted lines indicates cutout for lower wings
No. 2
Position of center section struts
1/16" sheet balsa. 1
1/16" x 1/8" balsa
1/16" x 1/16" bamboo

# 13 DELTA MEET - CONT.

Easy B record 15:41. His old record was 15:27. Dave Aronsteins 400.4 beat Ken Groves old Bostonian record of 301. Frank Kieser's super flight of 10:13 wiped out his old ornithopter record of 7:49. I think this is a new AMA record as well. Nathan Miller flew his HL Glider 105.5...was 97.0. Mike Araks Alco pistachio flew 1:25 to oust Millard Wells 1:13.7 old record. Doc Martin's canard (Retired after 2 wins) did 143 in FAC Scale ..was Leffler's 127.7. Nice going !

More flying in the form of those popular mass launch events: Golden Age had a field of nine. Dave Aronstein's old German airliner BFW outlasted John Tudor's Curtiss Robin in the final. Federation ROG saw Tony Becker prevail when the "Bull Frog" blew a motor winding for the final. (6 entries) Doc Martin's Earl Stahl Wildcat beat Charles Slater's helicopter when both Wells and Everson blew motors in their P-51s. FAC canones to you. (6 entries)

EMBRYO ENDURANCE EVENT:

| | |
|---|---|
| 1.Rich MacEntee | 348 |
| 2.George Leffler | 329 |
| 3.Dave Aronstein | 262 |

PISTACHIO EVENT

| | | |
|---|---|---|
| L.Mike Arak | Alco Sport | 1:25 ★ Retired |
| 2.Millard Wells | Wee Bee | 1:04 |
| 3.Nancy Beitz | Farman Bipe | 30.0 |
| Model of Model: F. Kieser | | 1:11 |

HAND LAUNCHED GLIDER:

1. Nathan Miller (Jr) 105.5 ★

INTERMEDIATE STICK:

1.Ed Berton 11:42

22 Contestants flew in 84 events. CDs- DOC MARTIN + TONY BECKER

# HERE COMES THE BIGGIE ! GET BUILDING GANG.

JOHNSON CITY WORLD CHAMPS SCHEDULE

Sat. May 28 to Monday May 30: AM practice for F1-D models and PM two rounds of flying . 3 days, 2 rounds per day,

Tue. May 31 & Wed. June 1 : F1-D Open Internats Two more days of the world class model. Two days, 3 rounds per day.

Thurs. June 2: First day of NFFS US Champs. 8 to 2 Easy B flown to both the AMA rules and the European 1.2 gm. rules. International B !! 2 to 6 Peanut (AMA), AMA Scale, and MIAMA PISTACHIO GRAND PRIX. 6 to 9: HL and Catapult Glider. Also Pistachio Grand Prix will continue until 9:30 and include many mass launch fly offs!!

JOHNSON CITY WED TH F 1 2 3

Fri.June 3: 9 to 1. Manhattan,Bostonian, and indoor speed events. 1 to 4:30. No-Cal,Ornothopter,Autogiro,Helicopter. 7:30 Banquet

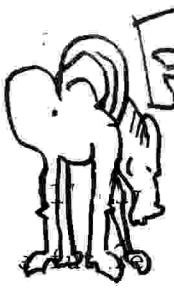
GAT SAT SUN 4 5

Sat. June 4: 8 to 2 Both Penny Planes. 2 to 7 AMA Stick,Old Timer, Class A ROG.

MORE INFO: TONY ITALIANO

1655 Revere Drive
Brookfield, WI 53005

(414) 782-6256 (after 7 P.M. Milwaukee tim



# FROM THE HORSES MOUTH + OTHER ORIFICES

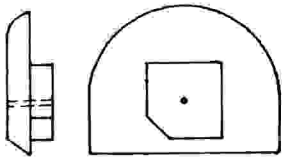
It all came to me during a phone call to me from Charles Slater on Dec. 10. The essence of it all... a real breakthrough....a picture of indoor modeling of the future. Charles had been to New York, and took some models to fly with the group at the Columbia U. Rotunda. He had a great time. but Charles did something that had not occurred to the guys from the Big Apple.After the meet he flew his Novice Penny Plane in GRAND CENTRAL STATION. Yes, that's right...the giant RR station. That had never occurred to the New York modelers. The Station closes at about 1:30 when the last Long Island train departs. Police, the night crew, and a few spectators cheering him on as his model spiralled to the top. We present the above spectacle as an example of the fact that there are plenty of places that indoor can be flown WITH A LITTLE IMAGINATION. Our big problem is that all large halls want to RENT us their facility for about three grand a day. This will never happen because ten guys can't come up with ten grand. As alternatives I suggest we promote other sites at hours that are a little unusual. Hotel rotundas and courtyards, College Atriums, Bus Terminals, Hangars, Warehouses, RR Stations, Auditoriums, Shopping Malls,Exhibit Halls,,and boxing or wrestling gyms. The point is that we can use these places when no one else wants them. 1:00 AM to 6:00 AM!! So, you take a nap after dinner, get up at midnight, and go out for an ALL nighter model meet. What's wrong with THAT? The airlines use their hangars all night for maintainance, but a LOT of the above named locations ARE available. I want to fly at the CONTEMPORARY Hotel (150') at Disney World. If you can cope with the potted palms it is a winner at 3 AM, right Charlie? Look around, enquire, and send your sneaky indoor site to MIAMA.....Do some checking!! Why do we always do stuff by the numbers?

DR ALLAN SCHANZLE puts great pride and emphasis on the undenied quality of his newsletter, MAX-FAX. He credits the original work that makes it "a far surperior product to practically every other free flight publication." We now present the following cadre of those we have either plagerized or received contributions this past year to Hangar Pilot. Our strength is in stealing only quality stuff. THANKS TO ALL YOU HANGAR PILOT CONTRIBUTORS!: Don Mace, Jorgen Korsgaard, Jim Richmond,Jim Miller, R. Ennis, Hal Stewart, Joe Wachter,Butch Hadland, Ed Seay,Norm Purdy, Dave Aronstein, Herb Weiss,Matt Ficner, Jerry Bokius,Mark Allison, Charles Slater,Carl Hedley,Ed Whitten, Dick Obarski, Millard Wells, Terry Rimert, Dave Linstrum, Charlie King, Wm. Salzwedel, Burr Stanton, Jim McNeill, Les Garber,George James, and publications like Aeromodeler, FAC News, Okie Flyer, NFFS ,plus many other newsletters and other names. With a distinguished list of people like this it is no wonder that our readers are happy. THANKS GUYS and HAPPY NEW YEAR TO ALL.

15

8

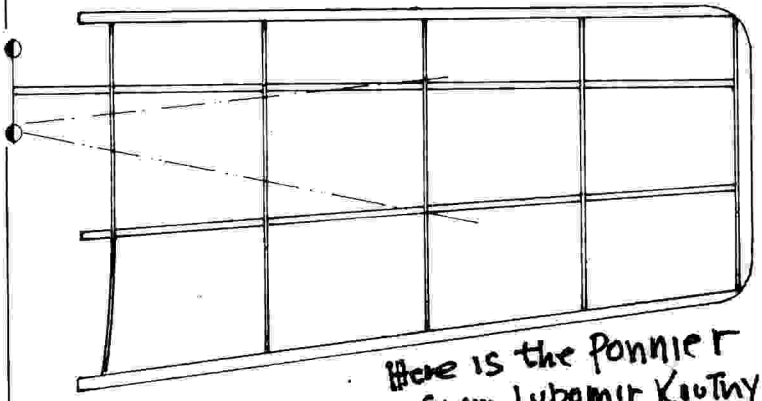
# The First E. European Pistachio



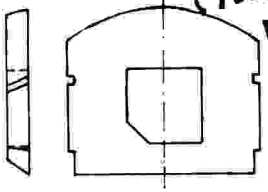
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MODELÁŘ · 10/1987 · 293

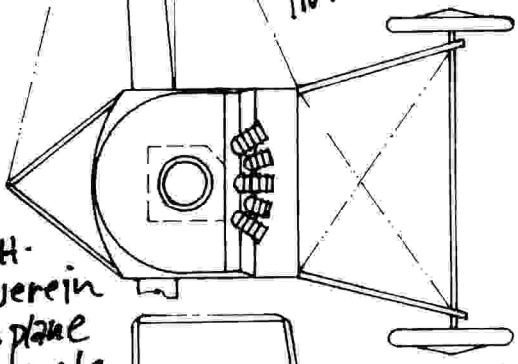
Try one for the INTER GNATS



Here is the Pannier from Lubomir Kloutny in MODELAR - CZECH. The 3-Views were in H.P. #118 + His plane 2 went to Flemmale + was in Hannan's Hangar (Photo)



(Color: SILVER) BLACK TRIM





A CLASS II MODEL FOR THE INTER-GNATS - OR JOHNSON CITY

1

4°

THE 1987 LYMPNE MODEL AIRPLANE TRIALS. Watford Leisure Centre 10/18/87
This competition was for Static points, endurance points, and points for precision flight around a closed course..Butch Hadland contest dir.

| | | | |
|---|---|---|---|
| 1. | Bill Warner USA | HP Sayers Monoplane | 14 points |
| 2. | Sigfried Glockner W.Germ. | Cranfield CLA-3 | 14 |
| 3. | Derek Knight G.B. | Supermarine Sparrow | 15 pts. |
| 4. | Derek Knight | Avro 560 | 15 pts. |
| 5. | Chris Hutchinson G.B. | Bristol Brownie | 15 pts. |
| 6. | Peter Frostick G.B. | Westland Widgeon | 17 pts. |
| 7. | Nick Peppiatt G.B. | Glostershire Gannet | 20 |
| 8. | Bill Grigg G.B. | Short Satellite | 20 pts. |
| 9. | Doc Martin USA | Supermarine Sparrow | 21 pts. |
| 10. | Chris Hutchinson G.B. | Glosteshire Gannet | 22 pts. |
| 11. | Bill Grigg G.B. | Westland Woodpigeon | 22 pts |

# PISTACHIO NOTES

MIAMA PISTACHIO RULES: SAME AS AMA PEANUT RULES WITH THESE EXCEPTIONS:
1.Model may be built to either 8 inch span or 6" overall length.(Not including prop.)
2.Single surface covering permitted without penalty.
3. No bonus points for ROG (H.L. flying)
4.No limit on flight time. AMA rules specify average of two best flight times of 9 and documentation of a 3-view, photo and color reference. Multiple entries and re entry permitted.

For a large field of entries we have five classes:
Class I- up to 2 grams. Class II-2 to 3 grams Class III- over 3 grams
Ridotto class- Smallest span model to fly 30 seconds.
Model of a model class- Fuselage model of any type outdoor free flight mod.

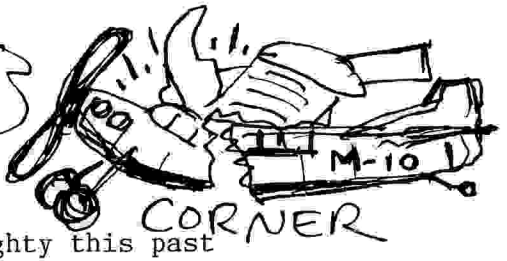
# FUTURE PISTACHIO EVENTS-

MAY 21,22 WORLD INTER GNATS.....Proxy international meet All classes.
JUNE 2- JOHNSON CITY.....MIAMA PISTACHIO GRAND PRIX. All classes and mass launch events
AUG 19,20 FLEMALLE BELGIUM- Proxy international meet. Not MIAMA rules.
ALL MIAMA INDOOR MEETS HAVE A PISTACHIO CLASS EVENT.

We recommend Walt Mooney's Bag #6 of 36 pistachio plans. Send $5.00 to Walt at P.O. box 231192 San Diego,Calif. 92123

NEXT MEET-MIAMA #3 MAC DILL FEB 13,14
CD DICK OBARSKI 813-634-8683
MASS LAUNCH- SAT. MODERN AGE 5:00
SUN. FERERATION ROG 4:00

# THE IGNOCLASTS CORNER

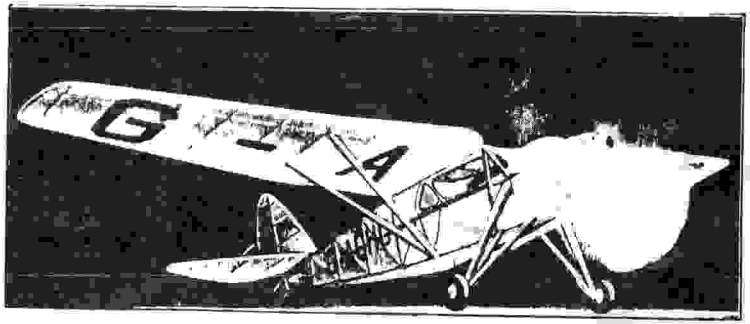



MIAMA members have distinguished themselves in recent world proxy meets.

Doc Martin had a real romp in Old Blighty this past Summer. He got an Earl Stahl plan from Charlie King reproduced from a 1942 AIR TRAILS of Earl's Grumman F4F Wildcat. He built this small (20" span) unlovely plane to take to England for several meets. At one ounce....Boy, DID IT FLY !! It didn't look like a winner but it WAS. On Bank Holiday in Aug. at Old Warden it outlasted a field of 26 low wing Earl Stahl models in a Flying Aces Type mass launch event. Doc spent most of the day in a corn field adjacent to where the Shuttleworth collection field terminated. The Wildcat, with the aid of a 20 MPH wind kept disappearing over the fence and into the corn on each launch. A SAM plaque, and a beautiful Hawker Hurricane cast bronze trophy are mementoes of this occasion. Dick Sherman of USA was 2nd with a Blackburn Skua, and Mike He therington 3rd with a Curtiss SO3C. The following week the Wildcat was in action again...this time at the SMAE Nats at RAF Barkston Heath. A rubber scale mass launch event found ol' Doc's Stahl model once more prevailing in 1st with Mark Hinton 2nd in a large field. This time the prize was a bottle of Liebfraumilch...very welcomed.

MIAMA members sent in 4 peanuts in one light weight weight cardboard box. Bill Hiscock's Waco E (I've got to build one of them some day) Mike Arak's Alco Sport,and Doc's Caudron 360 racer, and Ambrosini pursuit to the Proxy Peanut meet in Japan. Dispite wood reinforced sides the postal authorities managed to squeeze the center of the box almost flat resulting in destruction of all 4 models. Undaunted, the kindl y Shonoi Peanut Powers Club REBUILT these planes in spite of great damage. As a result BILL HISCOCK won Modern Class over a large field with a best flight of 1:54! Bill Hannan was 2nd, and Soichi Uchida was 3rd. There were FIVE Caudron 360 racers... a popular choice. Doc's Caudron was 8th, and Arak's Alco 18th. Millard Wells Fokker Triplane was FIRST in WW I class with a 40 second best flight...unheard of. Tomaji Nishina was 2nd and Uchida's SE-5 was 3rd. Remember I warned you that the beautiful KAMAKIZE endurance plane was a lousy flyer. Well, there were fourteen entries of this plane in Nagoya, and the BEST FLIGHT was a snappy 26 seconds from veteran peanuteer Immanuel Fillon....I hate to say I told you so. On the other hand how do you fly a Fokker Tripe?? I got my rebuilt planes back from Nagoya in a new box and GUESS WHAT?? My planes were totally crushed again. Even the peanut plaque that was Only 2" high had been condensed to 1"! We need more thinking here, or a whole new postal system. Thanks, guys , for all your efforts to get our squashed models back in the air....Too bad they were flattened again.

# George D. Wanner's BARGAINS IN FAMOUS FLYING MODELS!



**. . . all parts, plans, and photos included in this remarkable BARGAIN OFFER.**

LIQUIDATED MOTH. D. H. 85. The very latest of the Deliverland "Moths." Due to its superior performance, cruising speed 120 M.P.H., fuel consumption less than 8 gallon per hour at 30 miles per gallon it replaces the popular "Tiger Moth."

Winner of the 1933 King's cup race, average speed 130.5 miles per hour for 803 miles.

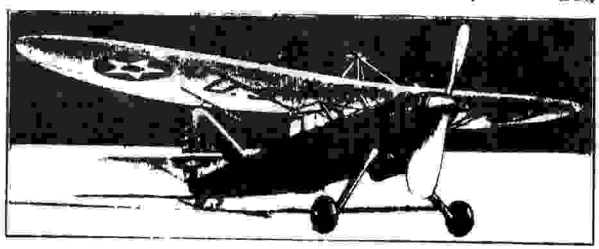
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## PLANS FOR EACH PLANE INCLUDE PHOTOS!

All plans include actual photographs showing all details of construction and views of complete plane. Balsa wood is printed ready to cut out. Complete with all parts, covering, cement, rubber motor, propeller, cowls, banana oil, washers, etc.

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# WHAT'S GOING ON ?

JAN 17 Miami Dade South College 9-5 MIAMA Club Fly for fun day. This is confirmed.
FEB 13, 14 Two day MIAMA INDOOR MEET #3 , MacDill Air Base, Tampa..unconfirmed.
MARCH 27 9-5 MIAMA fun fly at Miami Dade South College..Confirmed.
APRIL 16,17. Two day MIAMA INDOOR MEET #4 MacDill Air Base, Tampa Unconfirmed.
APRIL 30-May 1 GREAT FLA KEYS RISE OFF WATER OUTDOOR FF MEET Details next issue.
MAY 21-22 PISTACHIO INTER GNATS Miami Dade South College. Confirmed.
MAY 28 - 31 WORLD F1D CHAMPS Johnson City Tenn. Confirmed.
JUNE 1-4 US Indoor Champs (Possibly to include AMA Nats) and maybe a return to the famous 24 hours of peanut and pistachio!!
JUNE 25, 26 MIAMA INDOOR MEET #5. Final meet to determine 1987/88 Champions. Tentative.
JULY 9,10 FAC Nats Geneseo,NY (MacDill AFB)

ON ALL UNCONFIRMED MEETS..CALL 305-858-6363 THE NIGHT BEFORE THE MEET FOR CONFIRMATION.

# M.I.A.M.A. INDOOR MEET # 3 MACDILL FEB 13,14 CALL 305-858-6363 ON FEB 12, PM, TO CONFIRM.

## THE HANGAR PILOT

EDITOR: DR JOHN MARTIN, JR
2180 TIGERTAIL AVE MIAMI FLA.
33133

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