ZANY

THE HANGAR PILOT

20TH YEAR OF PUBLICATION

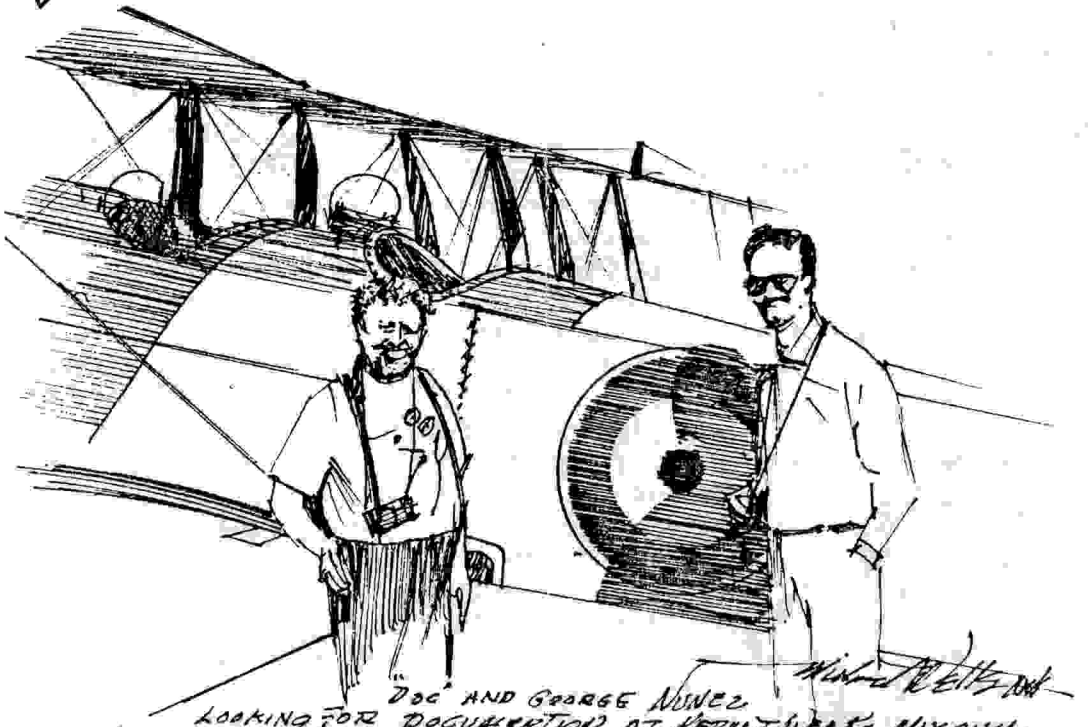
ENTERIAS NON ES OMNIBUS

MIAMI INDOOR AIRCRAFT MODEL ASSOCIATION

MIAMA

ISSUE 139

- RESULTS, MIAMA MEET 4
- INTRODUCING TOM VALLEE'S MINI-STICK EVENT - RULES AND PLANS.
- CIRCLE TRIM
- THE LINDY COCKTAIL



"DOC" AND GEORGE NUNEZ LOOKING FOR DOCUMENTATION AT KERMIT WEEKS MUSEUM.

WRONG DATE: NEXT MEET MARCH 16+17

NOT MARCH 23,24 MIAMA MEET #5

MACDILL AFB 9-5 HANGAR # 5 - (FIVE)

BRING AMA LICENCE CARD + PICTURE I.D. FLA. DRIVERS LICENCE

Joe Archibald, honorary FAC and creator of Phineas Pinkham, the fearless buzzard of the first big fuss shows us how Carbuncle would handle the current international crisis. Right on, Joe!



ON THE COVER: Millard Wells has been doing some pen and ink art of some local contemporary doings. Here's a scene from the Tamiami Airport at a recent vintage air show. We may not have the best newsletter, but we sure have the best COVERS with artists like Wells, Linstrum, and Allison!

REPORT ON MEET 4 USCOAST GUARD FEB16,17 1991

Well Pilots, despite the cares and concerns about the Gulf War, we sure appreciate the efforts of those who still put on model airplane meets. The U.S. Coast Guard Station in Clearwater had the confidence in MIAMA and gave Contest Director Dick Obarski the go ahead for Meet 4. Thanks to the C.O. Captain J.H. Heinz ,to all the crew who helped and spectated, and to Lieutenant Frey who opened an operations office for the contestants to thaw out. On Sat.was a record cold outside (The 30's in Tampa), with gusts to 50 MPH. Sunday was much better and we set three records.

Bill Criss has been working with the Commander at MacDill AFB and the dates of March 16 & 17, and May 18 & 19 have been confirmed...with the usual awareness of the chance of last minute changes.

The cold weather was so bad the Bass weren't biting so Jim Miller showed up with a PAMA Peanut built strictly for endurance. It did a great 1:42.5 that we"re sending along to Flying Aces for their postal meet. John Barker was back again..He was at King Orange too. It seems they have NO place to fly indoor in the Atlanta Area. Someone find a site in GEORGIA! Boy,old VTO Linstrum is really getting serious about his modelling...Guess who set TWO Catagory II Fla. State Records? Right..Dave! His big red Compte circled just under the girders for 1:25.4 in Coconut, and his NO-CAL Cassutt racer stayed up a full two and a half minutes. Obarski ran the meet but still had time to win three events and come in 2nd in another. Wayne Trivin smashed the old Cat. II Embryo record while winning three events,too. Walter Everson prevailed over Millard Wells with his Peanut Curtiss Robin in the finals of the FAC Golden Age Mass Launch. The Mass Launch for MIAMA Meet 5 will be any BIPLANE.

RESULTS MEET #4 US COAST GUARD FEB 16, 17 1991 (2)

Peanut event:	Plane	Static score	Best two flights		total
1.John Martin	Waco Seaplane	103.5	1:16.4	1:09.2	176.3
2.Wayne Trivin	14-Bis	111.6	1:01	58.0	171.1
3.Jim Miller	PAMA	81.5	1:33.8	1:42.5 (Max)	163.0
X.John Martin	Windham Tandem	86.0	1:07.1	1:06.6	152.8
4.Millard Wells	Curtiss P-40	93.0	48.6	53.6	144.2
X. " " " "	Micro Veloz	76.0	1:08.4	1:06	143.3
5. W.L. Stoutenburg	Cougar	70.6	:23		93.6

FAC Scale event:		Static score	Best fly	Total
1.Wayne Trivin	14-Bis	82	1:07.8	148.5
2.John Martin	Inflexible	83	1:02.5	144.2
3.Millard Wells	Waco E	69	1:14	136.0
X. " " " "	Fokker DVII	74	41.0	117.1

Pistachio Scale:

1.John Martin	Windham Tandem	48.4
2.Millard Wells	Wee Bee	47.5
3.Dave Linstrum	Kalinin K-5	34.8

NO-CAL Scale ★ NEW RECORD

1.Dave Linstrum	Cassutt	2:29.9
2.Wayne Trivin	14-Bis	1:58
3.John Martin	Hosler Fury	1:53.7

Embryo Endurance:

1.Wayne Trivin	433	★ NEW RECORD
2.John Martin	287	
3.Dave Linstrum	225	

Bostonian Event:

1.Dick Obarski	Orig.	1.10	381.1
2.Wayne Trivin	More Colors	1.11	357.4
3.John Martin	Skully square	1.15	245.3
4.Millard Wells	Wee Bost	1.12	244.1
5.John Barker	Orig.	1.10	222
6.Sidney Gilbert	7-Up	1.10	183.4

EZB Event:

1.Dick Obarski	10:40.6
2.John Barker	9:26

Novice Penny Plane:

1.Wayne Trivin	8:09
2.Dick Obarski	8:03.9
3.John Barker	7:36

Federation ROG:

1.Dick Obarski	4:57	★ Ties old record.
2.Wayne Trivin	4:34	

Intermediate Stick:

1.John Barker	6:45

Penny Plane:

1.Walt Everson	4:28 ★ NEW RECORD

Coconut Scale:

1.Dave Linstrum	Compte	1:25.4
2.John Martin	Beardmore	1:06
3.Millard Wells	Ford 2-AT	1:04

FAC MASS LAUNCH (4 entries)

1. WALT EVERSON - Curtiss Robin
2. MILLARD WELLS - PAMA

NEXT MEET: MAC DILL HANGAR 5 MARCH 16+17

NOT MARCH 23+24 AS PREVIOUSLY LISTED

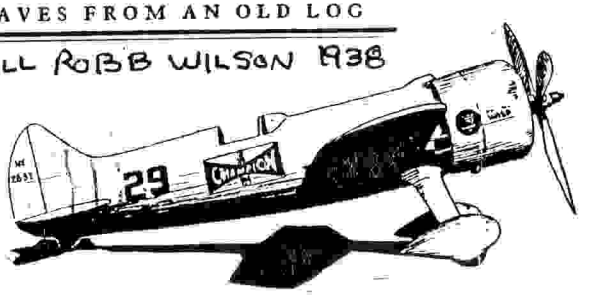
MEET #5 SAT+SUN 9 TO 5

BRING FLA. DRIVER LICENSE + AMA CARD

MASS LAUNCH - SAT 5PM ANY BIPLANE

CALL 305-858-6363

GILL ROBB WILSON 1938



RACE GEAR

A saddle on a motor
Burnin' dynamite for gas,
As little liftin' surface
As will hike it off the grass,
A thousand roweled horses
With a feather for a girth
Three hundred miles an hour
Fifty feet above the earth!

The breed o' man who rides 'em
Is an optimistic guy
With magic in his fingers
And a telescopic eye,
A throttle bendin' genius
With 'is neck upon 'is nose,
His nervous system sweetened
With intestinal repose.

An autumn day of shadows
With the wind across the lake,
A bonus for a record
And a fortune for a stake;
But hell is in the makin'
And the devil sets the pace
When they tangle out at Cleveland
In the Thompson Trophy Race!

THE BENDIX

Stabbin' exhausts in the morning,
Hangars at Burbank a'glow,
Fog rollin' in from the ocean,
Mechanics warmin' 'em slow,
Everyone wishing each other
Luck for the get-away climb,
And this is the race o' races
In speed and distance and time!

Spannin' the continent east'ard,
A'raisin' the Jersey shore,
Take all the gas you can carry,
Wish you could carry some more,
Ponder the tape for the latest
Temperature, dew point and glass,
Learnin' its instrument flyin',
Wonderin' when it will pass!

Always there's weather to battle,
Thunderheads crownin' the peaks,
Satan presides in the cockpit,
Static and headache and leaks,
Wind changes no one can tell you,
No place to land if she cuts,
And what you need for the Bendix
Is inexhaustible "guts!"

Nobody's luck of a minute
Can hurdle the nation's chest!
Only by bringing together
Elements worthy o' test,
The pilot, ship and the motor,
Radio, compass and fuel
Blended to finish or perish
Seeking the ultimate goal!

MIAMA PISTACHIO PROXY INTER-GNATS

ISSUE 132 HAS OUR RULES. - SUBMITTED TO AMA FOR PROVISIONAL (4) STATUS, BUT DIDN'T PASS.

PILOTS - WORLD ALERT - PACK UP YOUR PISTACHIO, INCLUDE DOCUMENTATION, INSTRUCTIONS TO PROXY FLYER, RETURN POSTAGE - AND - SEND TO MIAMA -

PARTICIPATE IN THE MIAMA INTER-GNATS

FAME + FORTUNE AWAIT YOU - YOUR NAME IN LIGHTS!
HAVE YOUR ENTRY HERE BY APRIL 26 1991
NO ENTRY FEE - NO CASH WINNINGS - JUST GLORY

REQUEST - OTHER NEWSLETTERS, PLEASE NOTE THIS!

NOT SINCE "HELLS ANGLES"... !
★★★ DOC MARTIN
HIGHLY RECOMMENDED

"STICK + TISSUE AT IT'S BEST"
M. WELLS

"ALMOST AS GOOD AS MIKE ARAK'S COVERAGE OF JOHNSON CITY"
M. ARAK

"WE NEED THE $"
D. McGINNES

"NOT SOLD IN STORES!!"

1990 Nats mk VII
The Video
Presented by the
SWAMP SQUADRON, FAC

TWO VHS Video Cassettes For Your Selection

1. FAC Nats mk VII
Exciting Highlights of the event. Mass Launches, Judging and Special awards, Personalities and Models, Models, Models, as they are displayed and flown for this, the premier Free Flight Flying Scale Event World-Wide. "It makes you feel as though you were there." (Bill Hannan)

2. Hanger Flying with The Flying Aces!!!
Tale-telling, Yarn-spinning Gadget-showing, and in general, modelers being themselves; on the field, in their rooms, etc. This tape takes you "up close and personal" to the modelers and their airplanes.

To order, send Check or Money Order to:
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$22.95
Postage is Included
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FAC Nats mk VII VHS Cassette ☐ Check Preference Hangar Flying VHS Cassette ☐

"REMEMBER, NOT SOLD IN STORES!!"

⑤ HOPE FOR ALL HANGAR PILOTS IN LA-LA LAND

Don't just sit there feeling sorry for yourself. Reading results about others flying in meets when there you are in La-La Land where nothing is happening, and no meets for hundreds of miles around. There are both Postal and Proxy meets you,too, can enter. The preceding page invites you to send your pistachios to MIAMA. You still have the problem of finding some gym or barn or warehouse, or church auditorium to trim them. When desperate you canalways use the living room. ENTER THE INTER-GNATS.. Here are some other meets you can enter: FLYING ACES is having their annual postal meet.

FAC PEANUT & NO-CAL contest both indoor and outdoor. Fly your model,time your model, and send to G.H.Q. 3301 Cindy Lane, Erie PA 16506 Include the date and the type model as many times as you wish and as many models as you wish. Also send in each improvement in time. If you are not receiving the fine FAC Club Newsletter, send $12.00 to Lin Reichel ,above address. Contest closes April 30th,1991.

PROXY MEETS

THE 4th SHONAI PEANUT POWER PARCEL POST PROXY CONTEST On Aug. 13-14-15 in Japan they will fly your peanut in Pioneer,WW I,Golden Age,WW II,Modern AND Bill Hannan BD-4 one design. Send MIAMA an SASE if you want details.

BELGIUM:On Aug. 23-24-25 in Flemalle modelers are invited to send their Peanut And/or Pistachios to the FIFTEENTH INTERNATIONAL CONTEST FOR INDOOR REDUCED MODELS OF AIRPLANES. Also known as the FICFIRMOA. The documents for this one go on for pages,so send a SASE with two stamps if you are interested in entering.

Here is a use for all those Mini-Stick plans in this issue. After you have had a ball with yours,SEND IT TO BURR STANTON to be proxy flown in the meets of the INDOOR MODEL ASSOC. OF RIVER CITY.. Mail 'em to Proxy, 9210 Darley Drive, Louisville,KY 40241 Give your proxy pilot the usual information, and send return postage if you want it back. By the way, if you are not getting the INMARC Newsletter, send $10.00 to the above address. If you like the Hangar Pilot you'll like INMARK. BEAT THE WINTER DOLDRUMS

INTERSCALE '91

One more proxy meet..Indoor Scale is the only widely flown class for which no truly international competition has been organised. If Interscale is successful it will be regarded as a precurser to a World Championship. The meet will be held in Nottingham, England in Sept. 21 and 22 Of the four classes, only Pistachio will be accepted.* Here's your chance to be in on the first ever indoor international meet. Send a SASE to: Dave Hanks, 90 Forest Road, Kingswood, Bristol, BS15 2EH ENGLAND

* FOR PROXY FLYING!

LETTERS TO MIAMA:

Hi Doc

It's my turn in the barrel. Enclosed is my check for $12.~~00~~ 50. The Hangar Pilot continues to be excellent.

Just a couple of thoughts to pass on to you. After having several years of contests here at PAX RIVER, MD. several events, in addition to the regular mass launches, seem to be emerging as "very" popular. These are Coconut scale, Old Time kit scale and bogus scale Bostonian. Bud Carson originated Coconut scale here and it continues to gain supporters. Rather than having an old time "10 cent" scale (nobody is realy sure which kits were 10 cents), we tried Old Time kit scale with a maximum of 20" wing span. The original structure does not have to be exactly duplicated but we do try to retain the flavor. There are many Comet and Megow kit plans available in the 15" and 16" wing spans and the excellent Scientific "Hi-Flier" series at 20". Bogus scale Bostonian (not just any Bostonian) allows for scale-like models with good flying qualities, 14 gram minimum (West Coast rules).

In addition to our regular events we always try to have 1-3 "special" events. These are events which may or may not draw contestants. They may be any thing from hand launch glider to Penny plane to helicoptors. If enough interest is generated, we can use that event to replace a waning regular event. This is how we started the three events I mentioned earlier. For the most part, we are pretty heavy handed here, we don,t build the light stuff that you do. However the result is still the same, it's fun for all of us.

Stay in touch, at least 10 times a year.

Regards

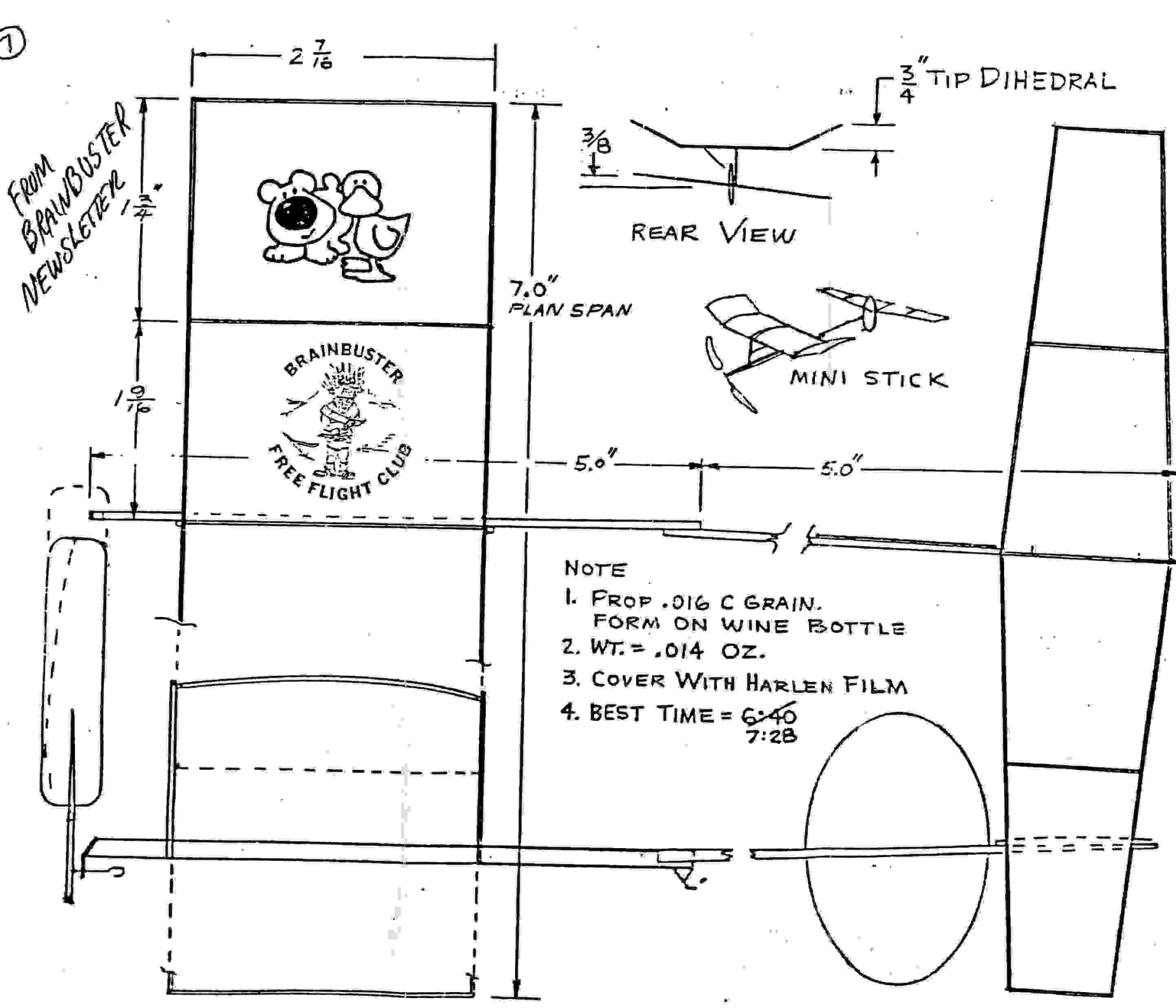
Claude Powell
P.O. Box 454
Ridge, Md. 20680

Best Rubber Break-In Method?

via Wingtips, Scott Smith, Ed.

Another thing that affects the life of a rubber motor is the initial break-in of a new motor. For the past year or so your editor has been using a stretch method instead of the previously used technique of winding a new motor a few times at low turns and gradually building up. The stretch method has the advantage that the rubber is not being twisted and therefore, not fraying the edges of the strands. Also, I find the stretch method to be easier than the multiple-winding approach.

To break in a motor, put one end over a dowel held in a vise or over a doorknob, etc., and stretch it out to three times its relaxed length for two minutes. Let it rest for 10 or 15 minutes. Then stretch again, this time to about 4-1/2 times its relaxed length and hold for five minutes. That's all there is to it.



MICRON - MINI STICK

By Tom Valla

FROM BURR STATION - A NEW EVENT. (8)

BUD TENNY'S INDOOR...

Column (Aug '90 Model Aviation) noted that T om Vallee was promoting a slick "living room " Mini Stick unofficial event that serves ex cellently as a builder-flyer-trainer class f or small flying sites--Tom holds contests in his own living room. Times have been on the order of 2:40 in that restricted site and wn en ceiling wasn't a problem like at the Mini Dome or at Lakehurst, times have reached an amazing 7:20!

Rules are simplicity itself: Max projected wing span 7 in.; max. chord 2 1/2 in.; max. length 10 in., with motor stick max. 5 in.; stab area not more than 50% of wing area; mon- oplane only; any covering except microfilm; all-wood prop.

Fly using AMA rules for indoor, except three 10-second steers are permitted.

We saw one of these cuties perform at Johnso n City--terrific! Simple to build and maint ain, negligible cost and time to construct, and not least, all necessary paraphernalia a nd the model are easily transported in a sho e box.

Good enough! We'll try for mass-launch cont ests for Mini Sticks--1st place (only) wins 10' Pirelli rubber stripped to your desired size.

Tom Vallee broke the existing indoor helicop ter record at the '90 USIC, so he knows what he's doing. Try one!

IN THIS ISSUE of Hangar Pilot we present 3 mini-stick plans that are useful for several pur- poses...(1) As an ideal demo model when you are trying to get an indoor site. (2) By reducing the span of these models to 7 inches they can be used for the Mini-Stick event described here that is especially fine for club meeting rooms, or your local school gym. No place is too small for indoor. Remember those SPEED rules published recently? Get to it ,pilots in all those snowy places, and keep try- ing to get an indoor site.

These uncertain war times we may have problems getting our favorite high ceiling sites so this event would be good in low ceilings, and even in the club meeting room.

Send us your times, weights, rubber and prop sizes, number of turns and other data. Maybe we can work up a postal meet,too.

START YOUR OWN CLUB!

FROM MIAMA RESEARCH DEPT:

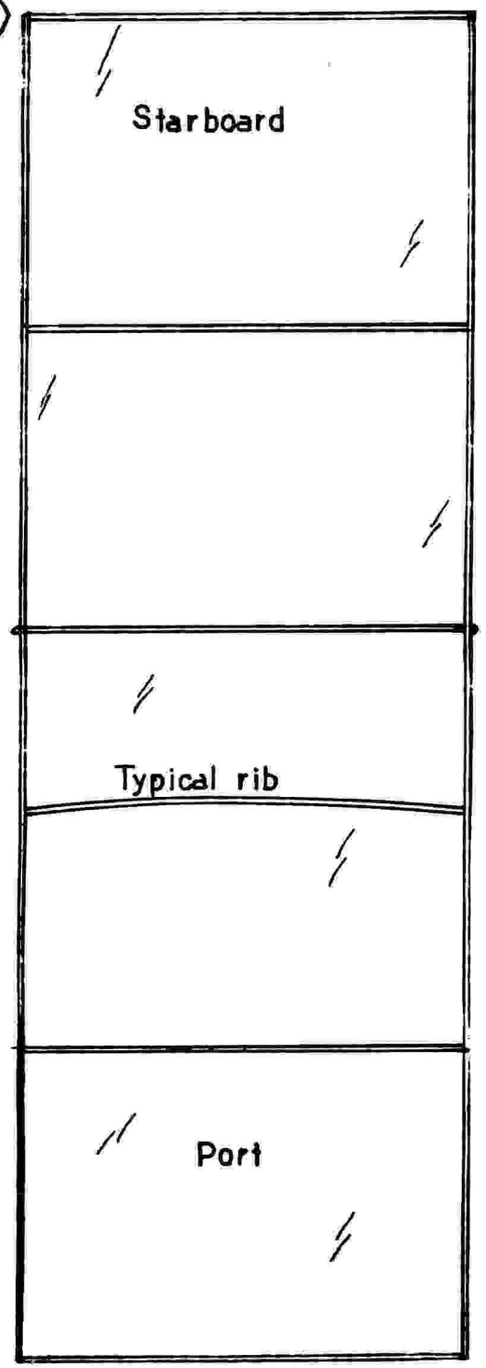
Any modelers out there celebrating? A kanone, a great flight,or just being alive? Back in 1927, after the sensational endurance flights of Lindbergh and Clarence Chamberlin, New York bartenders concocted these two drinks to honor the men and their planes and their achievements. It is only fitting, then, when modelers are celebratin we do it right:

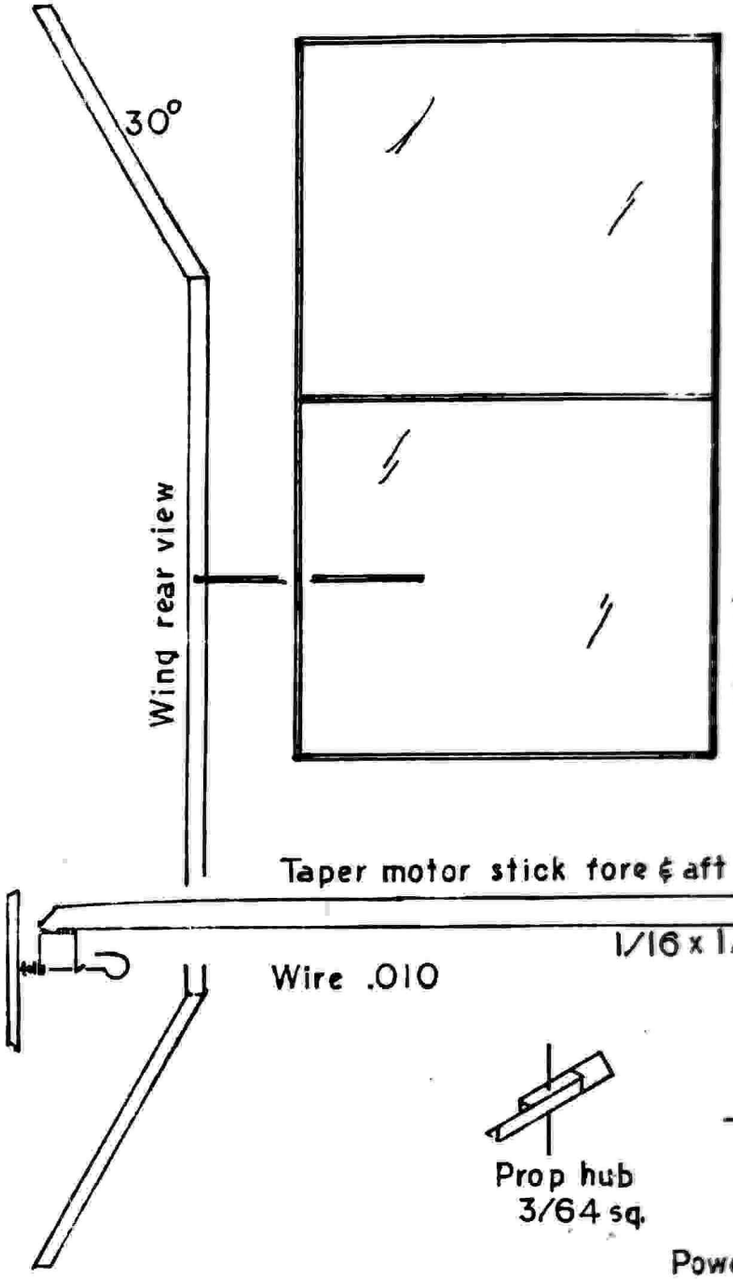
THE LINDY COCKTAIL:
- Kinnalillet 50%
- Gin 50%
- 2 dash Orange Juice
- Apricot & Lemon peel

(What the heck is Kinnalillet?)

THE CHAMBERLIN COCKTAIL :
- Vodka 65%
- Dry Sherry 25%
- Dubonnet 10%
- 2 dashes Angostura

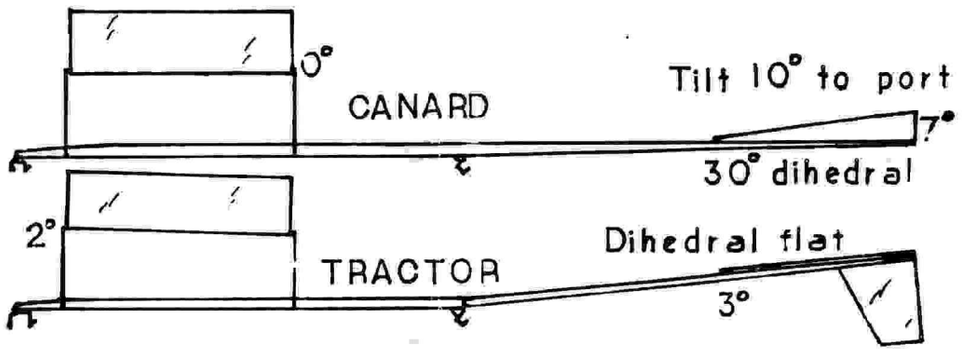
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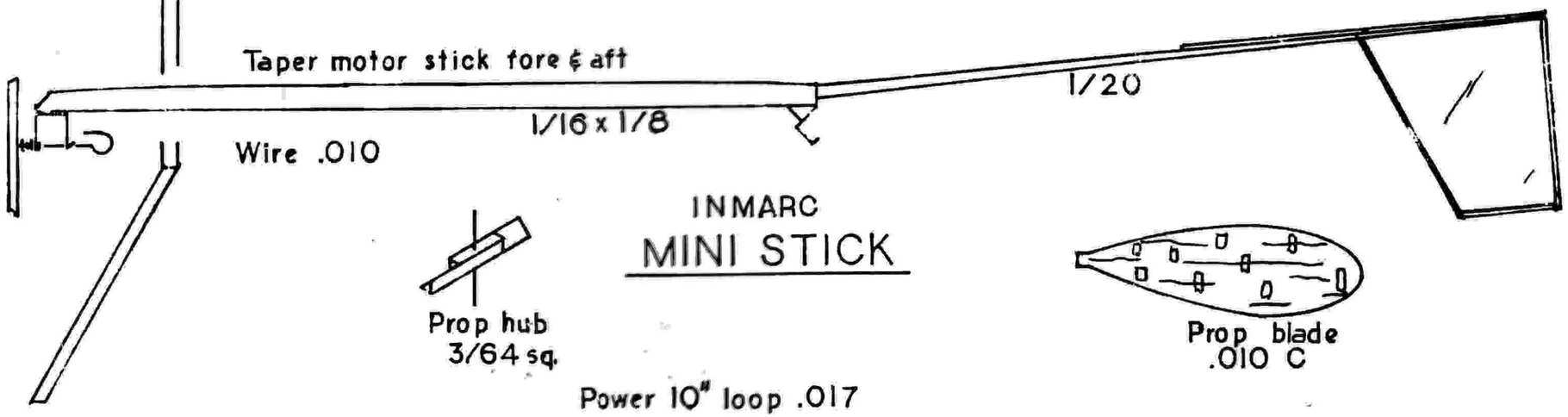




All structure 1/32 sq. except motor stick & boom

(10)





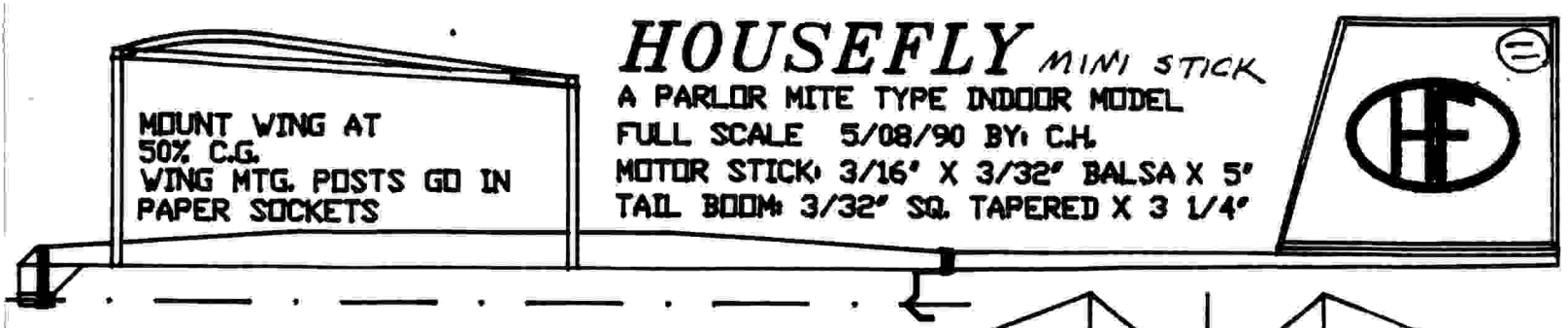
INMARC

MINI STICK

Power 10" loop .017

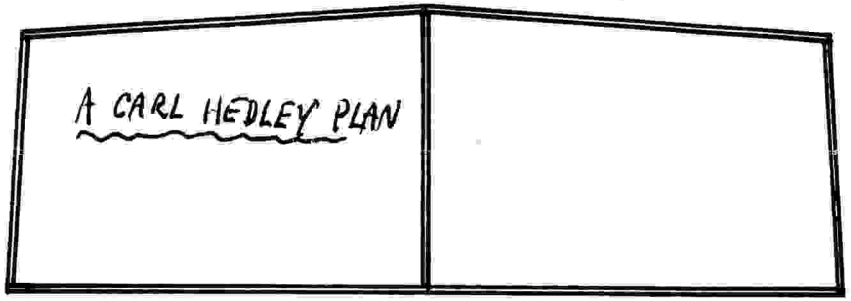
HOUSEFLY MINI STICK

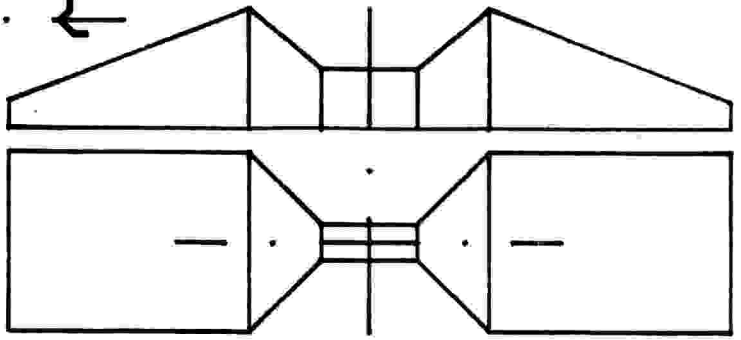
A PARLOR MITE TYPE INDOOR MODEL
FULL SCALE 5/08/90 BY: C.H.
MOTOR STICK: 3/16" X 3/32" BALSA X 5"
TAIL BOOM: 3/32" SQ. TAPERED X 3 1/4"



FRONT BEARING: 1/16" DIA. ALUM TUBE
REAR HOOK: .020 DIA. MUSIC WIRE
BIND TO MOTOR STICK WITH THREAD & GLUE

STAB & RUDDER CONST: 1/32" SQ. BALSA

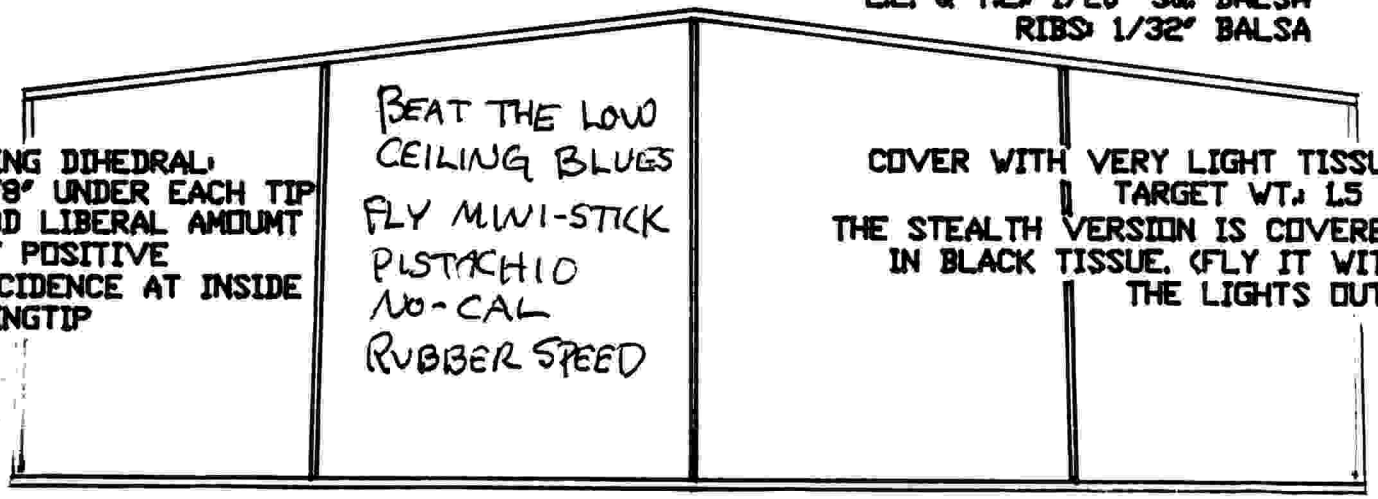




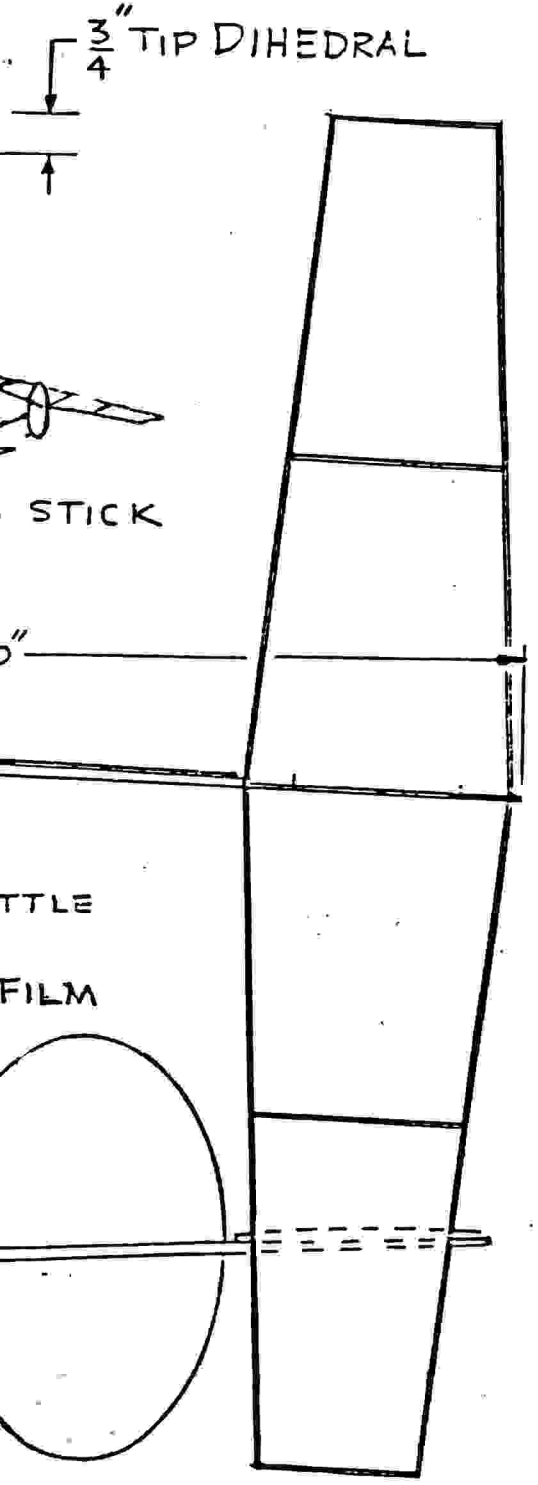
PROP BLANK
CARVE FROM LIGHT BALSA
3 3/4" DIA. X 2 1/2" PITCH

WING CONSTRUCTION:
L.E. & T.E.: 1/20" SQ. BALSA
RIBS: 1/32" BALSA

WING DIHEDRAL:
5/8" UNDER EACH TIP
ADD LIBERAL AMOUNT
OF POSITIVE
INCIDENCE AT INSIDE
WINGTIP



COVER WITH VERY LIGHT TISSUE
TARGET WT.: 1.5 g.
THE STEALTH VERSION IS COVERED
IN BLACK TISSUE. (FLY IT WITH
THE LIGHTS OUT.)



MICRON - MINI STICK
By Tom Valles

NEXT EVENT -
FLY-IN MIAMI/DADE
SOUTH COLLEGE
MARCH 10 9 to 12:30

NEXT MEET
MARCH 16, 17
MACDILL AFB 9-05
BIPLANE MASS LAUNCH
CONFIRM FRI NITE -
305-858-6363

EASTERN AIRLINES
1927 - 1991
R.I.P.

THANKS FOR THE KIND WORDS,
DICK

About Blimps . . .

(The following letter was addressed to Geoffrey Styles, AMA Marketing Director. It was dated November 6, 1990)

Dear Mr. Styles; It was very kind of you to send your letter of October 31, commending Goodyear and Columbia Chief Pilot L.J. Nicolary for our flyover of the Great Pumpkin Fun Fly in Los Angeles last week.

We are well aware, and firmly believe, that the vast majority of aeromodelers are careful, responsible individuals who take great pride in practicing their avocation safely. Our flyby was simply a restatement of that fact.

However, we do appreciate your very thoughtful letter, and wish you and your many members clear skies and happy flying in the years to come.

All best wishes.
/s/ Dick Sailer, Manager
Airship Public Relations
The Goodyear Tire and Rubber Company

(13)

Superior Props

Dear Club President;

The enclosed samples are a gift from Superior Props, to introduce your club members to our quality line of balsa machine carved props now being marketed. Please feel free to invite all modelers in your club who fly rubber power planes to examine, and/or try them on their models.

All freewheeling props and prop blades are cut on a special machine from a solid block of balsa, can be cut in any helical pitch, right or left hand, and come in a wide varity of sizes. We also make some sizes in 3 & 4 blade.

Folding prop blades can be cut in any helical pitch, as well as many pitch distrubutions, such as schwartzbach, maxwell, ect. in Coupe and Wakefield sizes, and come complete with a Z-Bar that does not require soldering.

We also offer a special prop for Gollywock models, with the hub machined so hinge can be installed easily, and a single blade folder for Korda models.

In addition to the items listed in our brochure, several new things will soon be available. High aspect ratio props for Coupe, and a lightweight montreal stop, (only 7½ grams). And freewheeling props in larger sizes, (up to 24" Dia.)

Anyone wanting more information can call or write us at the address below.

Thank You,

Ed Wickland, Superior Props

E Wickland

Hangar Pilots - Nice looking props! I'll have them at meet 5th on March 16+17 - Have a look - Doc

2412 Tucson Avenue • Pensacola, FL 32526 • (904) 944-1972

GEARBOXES FOR PISTACHIOS, LIGHT & MULTI-ENGINE PEANUTS

by Mark Allison BISHOP, CA 93514 ROUTE 1, BOX K-4, SPACE 37

12:6 gearbox: for pistachios, small peanuts, multi-engined peanuts. Box can be built to .4" height x .375" width x .25" thick. Use .020" music wire shafts (.015" for pusher installation).

9:6 gearbox: for small pistachios where 12:6 doesn't fit. Gives 1.5:1 ratio. Can be built to .35"ht. x.33" w. x .25" thick. Use .020" music wire shafts.

SEND SASE

18:9 gearbox: for light, larger peanuts. Where there's room for this one, it's a more durable choice at a small weight penalty. Can be built to .6" ht. x.52" w. x .25" thick. Use .025" music wire shafts.

18:6 gearbox: for short nacelles on multi-peanuts. Good building is critical for smooth running. .54" ht. x.54" w. x .25" thick. Use .025" for the 18 gear, & .020" for the 6 gear.

Since there are several price combinations and options, I would suggest a stamped, self-addressed envelope to Mark at Mark Allison Graphics, Route 1, Box K4, Bishop, CA 93514. Also, Mark tells me he is looking for 3-views and photos of the following aircraft: Burgess-Dunne AH-7 or AH-10; the Northrop N-9m; and the Hanriot HD14. Help him out if you can, won't you?

 VIA · OAKLAND CLOUD DUSTERS (14)

CIRCLE TRIM

by Aaron Petersen

For several years I've been exploring the Circle Trim flight adjustment system for rubber-powered (and now electric) sport and scale models. To begin with, I wanted a scheme that would (a) give a good, solid, predictable procedure, (b) allow me to fly in confined spaces when desired -- gyms, armories, city parks, schoolyards, etc., and (c) produce good contest results indoors and out. All objectives have been met. I can trim most new models quickly and efficiently. I can fly in small spaces (when the wind is down). Using Circle Trim, I have won 10 straight local outdoor Embryo Endurance events and have attained a 97.8-second contest flight under a 30-foot ceiling with an Ord-Hume 7 Walnut model that weighs 20 gm. without rubber. Maximum climb or steady low cruise: it works for both.

The basics of Circle Trim: (1) wing wash (vs. turn) to control bank angle, (2) rudder offset to establish the cruise/glide turn, (3) forward CG and matching (usually generous) decalage, and (4) thrust offset to control power climb and turn as necessary. This system is hardly new. The 1933 Jimmie Allen Bluebird plan shows about ¼-inch of wing wash to offset torque -- the keystone of the whole idea. One can find good references all through modeling literature -- Dick Korda, Henry Struck, Butch Hadland, Bill Warner, Wm. McCombs, Tonda Alfery -- all these experts (and many others) have laid it out at one time or another. Power fliers use washin to stabilize climb turn. The famous Square Eagle P-30's success is partly based on Circle Trim. Many of you are now using Circle Trim, even if it's a matter of pasting a drag flap onto a wing T.E. So -- I have invented nothing, but maybe I can offer a few little slants on the subject that might be of use. One thing's sure -- I'm sold on it!

Many construction articles (and some kit instructions) admonish you to build everything straight and to steam out any and all warps. On that point they are clear, but when it comes to flight trimming, things muddy up very quickly. Often it seems given that if the precious model is only built "correctly," it will fly with little or no trouble at all. We all know <u>that</u> is not the case! Indeed, a normal sort of model can be trimmed to fly OK in a large circle or in a large "S" pattern just by getting it balanced properly, maybe giving it some downthrust, and tweaking the rudder to the right to offset torque. Maybe some hot breath on the stab. But those aren't the kinds of patterns I want, indoors or out. They take up way too much room, and the model either hits a wall or grows smaller and smaller in the distance as it heads for the trees. I like to <u>see</u> my outdoor planes fly, especially the scale jobs. I want them close at hand, overhead, with the sun shining through the tissue. (Not that an efficient high-powered model like an Embryo can't get really high in a hurry with Circle Trim. It most certainly can.)

Circle Trim starts in the building phase. Several factors ought to be incorporated right in the structure. The first thing to decide is which way you want the model to turn -- left or right. Indoors, I definitely believe that left is better. Right turns get* you to the ceiling too fast. Outdoors, I don't think it makes any big difference, at least for high-wing models. I've flown sport models and old-timers that had big climbs, nice glides, and good thermaling behavior in both directions, right and left. Supposedly

* RIGHT TRIM IS GOOD FOR JOHNSON CITY - YOU NEED THE ALTITUDE.

EVERY NOW AND THEN A REALLY FINE TRIM ARTICLE APPEARS - REMEMBER BUTCH HADLAND'S? . . . AND NOW AARON PETERSEN.

it's better to fly a freewheeler to the right, though I've seen no proof of that in my own models. Because of torque effects a right-hand pattern will require less sidethrust than a lefthand pattern. Some lefthand models require huge amounts of right thrust. Anyhow, once you decide which way to go, something has to be done to the wings to oppose that turn direction. You can wash-in the inside wing. You can wash-out the outside wing. You can make the airfoil of the inside wing 15% thicker than that of the outside wing. All these devices work. But there's another way, a refinement that I prefer above the others: differential washout. We know, of course, that washout is desirable for stability, indoors and out. Washin can shoot you down (via tip-stall) if you hit a ceiling or a gust. (Never wash-in both wings!) Wash-out each wing, but to differing degrees. On a Peanut flying to the left, wash-out the left wing 1/16" and the right wing about 5/32". On a Bostonian, make it 1/16" and 1/4". On a 24-inch model, make it 1/8" and 7/16". My Howard GH-1 (32" span) has a 1/16" 1/2" setup. A heavy model might require a bit more differential. It's not critical. Just so you have that good solid influence vs. The Spiral, yet not so much that your rudder has to be offset unduly to overpower the wingwash in the glide, thus requiring even more sidethrust to offset the rudder in the climb, etc. It all works together, you see, keeping a nice steady circle all the way up and all the way down. A hinged rudder (or tab) is a big help in all this, possibly even essential. Glue it fast when the final set is found.

With a new model, use rudder offset, CG, and decalage to set the desired turn and glide. (Hand-toss or fly under low power.) Then slowly build up in power, working thereafter almost solely with thrustline (noseblock) offsets to control the climb and/or cruise. Use downthrust to stop zooms or to stay away from the ceiling. Use sidethrust to maintain the turn radius. Remember: a change in turn always affects climb angle, and vice versa. Take your time, no more than 100+ turns per flight. Work up to maximum power desired, and there you have it. Just don't rush things, and all will be cool.

So how do you build in the wing wash? The best way is to make a wing-size (oversize, actually) 1/8" sheet balsa platform jig that sits atop your regular building board, with the root-rib end and the leading edge border pinned down, and with a wing-length wedge of the proper size glued to the bottom of the trailing edge border. Build your wing on top of this platform, and it will have the correct angle set into it. (Shrink your covering on this jig also.) Another way is to build flat as per usual, then when the glue is dry, wedge up the T.E. as desired, leaving root + LE tightly pinned down. Saturate the structure with water spray, let dry for 24 hours, then re-glue main joints and let dry. The least desirable method is to cover a flat wing structure, spray it, pin it down, wedging the T.E. This way you depend on the tissue alone to hold the wash. Under ordinary conditions this works OK, but let some sag get into that tissue, and you are flirting with a Death Spiral. Always be cautious with Circle Trim models in humid conditions. Those with good structural integrity will be OK; others may not. Lots of dope will help avoid sag if you do fly in humid conditions a lot.

Some will tell you that those "warped" wings either look funny or downright ugly. It's in the eye of the beholder. All I know is, they sure look good in the air, up there on them "rails" they're flyin' on!

John: LETTERS TO MIAMA:

Here is my cure for the ***DREAD RED X***, (My check for $25.00)

Please sign me up for another two years of the ***HANGER PILOT***.

John,

You asked for news, here's some. I am a member of the Blacksheep Exhibition Squadron, a Southern California all discipline, family oriented club. We fly indoor once a month at the Luther Burbank Junior Highschool Gymnasium (Burbank, Calif.). Among other events, we have a thirty inch meet twice a year---September and March. These have been held at Taft in the past, and will probably continue to be held there until the proposed jail contruction forces us out.

The principal event at these meets is the P-30, but there are a host of others also---like E-30 and E-30X. These are electric powered P-30 dimension models with a total minimum weight of 60 grams. The motor is an HY70* with no modifications allowed. The batteries are two 50mah for the E-30 and three 50mah for the E-30X.

For the first time last September we added the SP-30 event. This is a scale model P-30. Same model and rubber motor weights as the P-30, but not the commercial plastic propeller restriction. Propellers may not be folders, however. I was fortunate enough to take a first in this event with *Big Jody*, a 30 inch version of Bill McCombs' plan for the Bebe Jodel Peanut. My best flight was 3 minutes 40 seconds. Wow, what a thrill for me.

This is a great group with an abundance of the free flight spirit. We are competitive, but don't hesitate to help our arch rival. Our mentors are Addie and Tony Nacarato. Model chasing is often done by our younger members; who have a ball riding through the Taft brush on motor bikes.

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*VL PRODUCTS

David

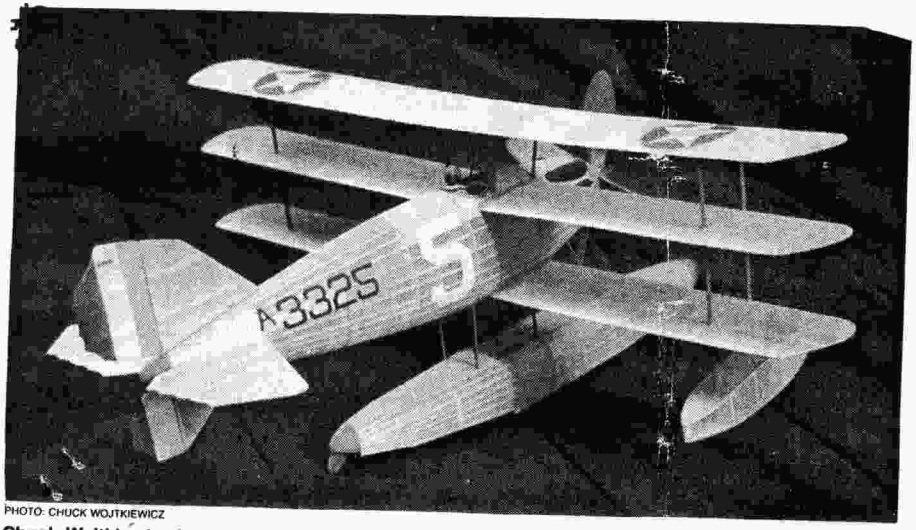


PHOTO: CHUCK WOJTKIEWICZ

Chuck Wojtkiewicz is certainly in the craftsman ranks judging from this excellent Curtiss 18T-1 triplane. Built from Noonan plans, Chuck says it hasn't flown because he's still not sure how to trim it.

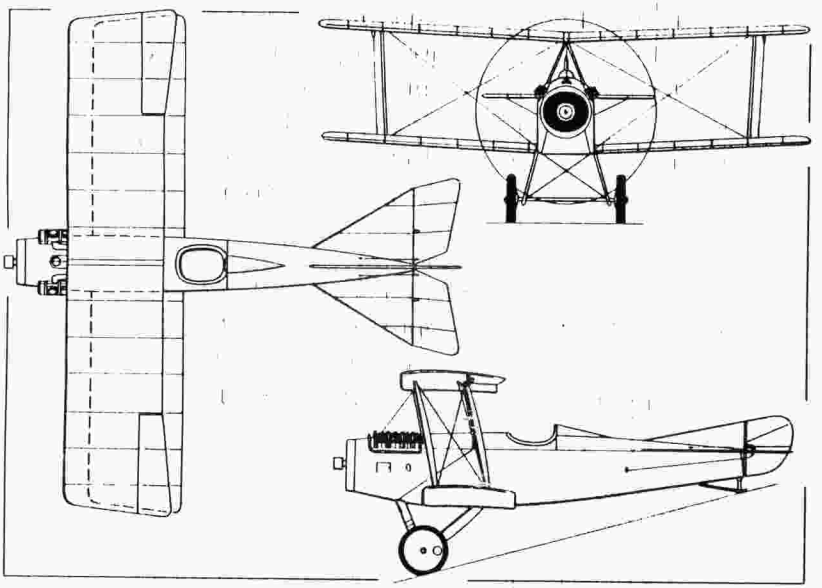
WOW! AN FAC BONUS BABY.

20 PTS - TRIPE
15 PTS - SEAPLANE

WILL IT DO THE NECESSARY 20 SEC. FLIGHT?

LET US KNOW, CHUCK!

(17)



The sole example of the Curtiss S-1 (above and below) was the precursor of the long line of Curtiss fighting biplanes.

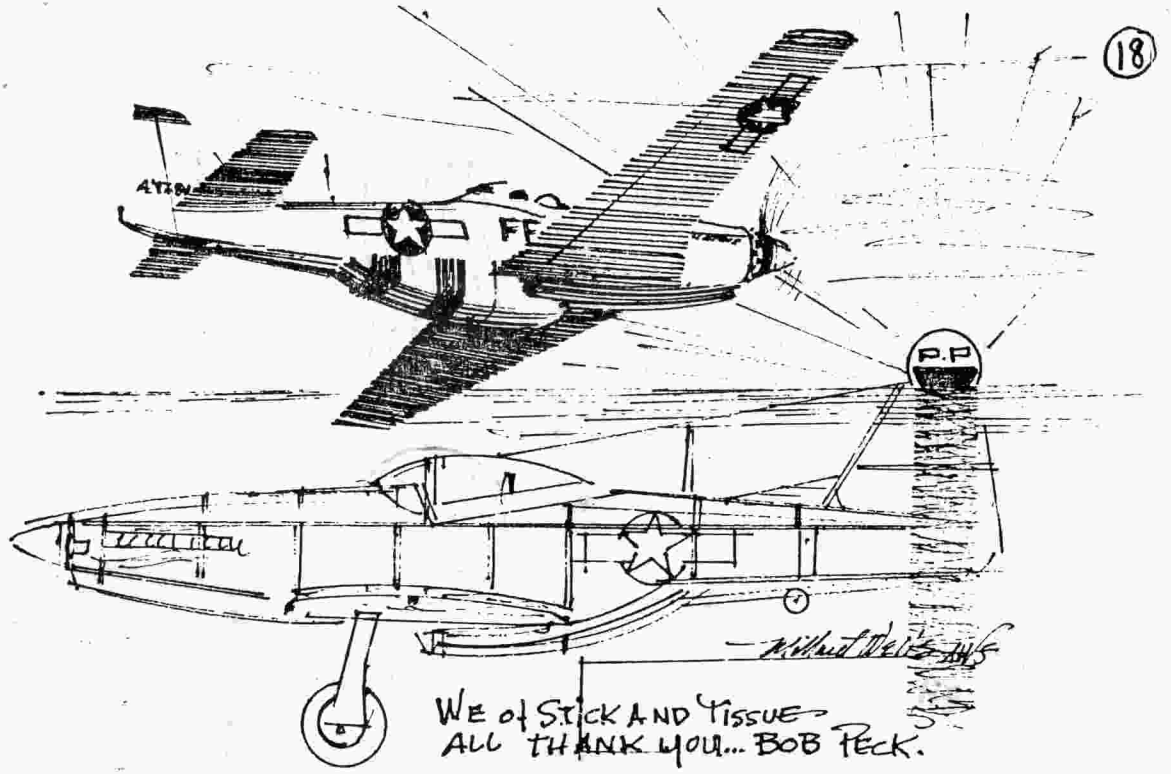


CURTISS S-1 **USA**

Known contemporaneously also as the 'Speed Scout', the S-1 represented the first attempt on the part of the Curtiss Aeroplane Company to produce a single-seat fighting scout. Of thoroughly conventional construction, the S-1 represented the smallest possible aircraft that could be designed around a 90 hp water-cooled eight-cylinder Vee Curtiss OX engine. A single-bay biplane spanning only 20 ft (6,10 m), the S-1 was flown in 1916 and demonstrated unsuccessfully to the US Army. A level speed of 100 mph (161 km/h) was attained but the aircraft obviously possessed insufficient wing area. The span of the upper wing was accordingly increased and V-type struts were introduced, but the characteristics of the modified S-1 did not display sufficient improvement to warrant further development of the design and the type was abandoned in favour of the S-2.

NANCY BEITZ BUILT THIS FOR THE 1988 JOHNSON CITY CHAMPS.

REMEMBER THE FAMOUS RED HAIRED PILOT FIGURE?



BOB PECK 1933-1991

STAND BY!

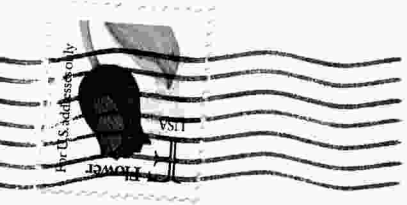
It's icin' up in many a heart!
The skies are rough and gray!
The pressure's on! It's instruments!
Old Bob took off today!
That gallant, laughing, homely mug
Has gone upstairs to stay!

God give him wings of chord and span
And service ceiling too!
God treat him white! A real top hand
Is on his way to You!
And let him bunk with old time friends
As he would want to do!



Bob Peck displays the second model in a series of Peanut Scales being produced by him and marketed by Aurthur D. Way. Of course, it's the 1931 Pietenpol "Air Camper." Ain't that cute?

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THE HANGAR PILOT

WHAT'S ON IN FREE FLIGHT ?:

March 9 & 10: Palm Bay — Outdoor FF Spring Open Meet
March 10: Miami Dade South College - Fly in 9 to 12:30
MARCH 16 & 17 Tampa. MIAMA MEET #5 - MACDILL AFB 9 to 5 Confirm Fri.nite 3
April 20 & 21 Palm Bay SAM 46 meet
April 27 & 28 Miami Dade South College Two day MIAMA Pistachio Inter Gnats and fly-in
MAY 19 & 19 TAMPA, MIAMA MEET #6 MACDILL AFB 9 to 5
JUNE 6,7,8,9 THE BIGGIE! Johnson City,TN Indoor Nats.
June 15,16 Pensacola, Fiesta of Five Flags
July 13,14 Geneseo,NY. FAC Annual Meet
July 6,7 Palm Bay 2 day outdoor FF meet.
Aug. 13-15 Shonai,Japan Peanut Proxy meet..deadline July 30

AUG. 3. SAT. DAWN, ISLEMORADA FL.
FAMOUS MILLARD WELLS ROW MEET