THE HANGAR PILOT

27TH YEAR OF PUBLICATION
INDOOR ISN'T FOR EVERYONE

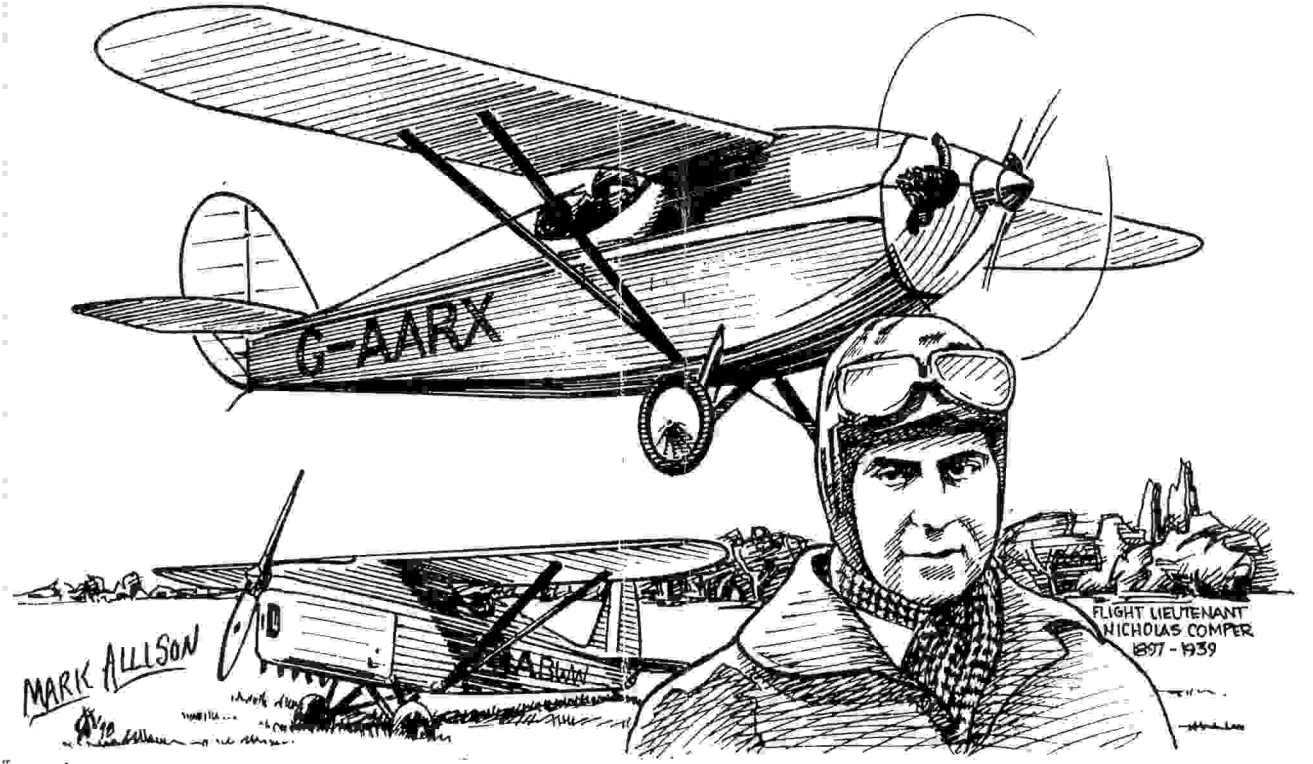
MIAMI INDOOR AIRCRAFT MODEL ASSOCIATION — MIAMA

ISSUE 198

- MIAMA RULES FOR OUR MEETS
- ARONSTEIN'S MODEL OF MODEL
- RESULTS OF USCG MEET 1

FAC LAST OUTDOOR MEET – SAM 46
PALM BAY NOV. 14, 15

- WHAT HANGAR PILOT HAS MEANT TO ME CONTEST P.8



NEXT MEET - CORRECTION – NOT NOV 7,8
MIAMA MEET 2 – IS NOV 21, 22 TAMPA ARMORY



FAC CLUB #11

"LIKE A LETTER FROM HOME" Whelan

THE HANGER PILOT

The Hanger Pilot, edited by John Martin Jr., who is solely responsible for its content, is published 8 or 9 times a season for bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association) - AMA club [redacted]. One of two active all indoor free flight clubs in AMA. For a mere $12.50 you will receive all of the published issues that year. We encourage reader contributions because, frankly, we need the material. Letters, plans, j-views, complaints, gripes and compliments to: Dr.John Martin Jr., President / Editor, 2180 Tigertail Ave., Miami, FL 33133 USA. phone: 305-858-6363.

3624

OCT 10,11 MIAMA MEET / USCG C/D DOC - OBARSKI

Like Dan Marino says in the NFL football commercial,"THESE GUYS ARE GOOD". Wow,lookit those scores! Everyone is off to a good start. I'm impressed by the ambition of many of our pilots who enter and fly in 5,6, or more events. Not only are these guys good, but they are continuously flying with little or no spare time between flights. Boy,you get tired!

GREAT GOING,PILOTS. and happy Kanones to you. As MIAMA adjundant BARNEY BAXTER once observed: " If you fly enough,you're sure to get better". Study the results for the trends, the stratagies, and the winning craft. and GO FOR IT. Outstanding Craft: Wormleys Clipped wing Cub,Dime Megow NieuporT& Struck's Deperdussin float plane,;Larson's Bleriot VII,,Barker's clipped Cub and Embryo Swordfish;Obarski's No-Cal Mr. Smoothie,Easy B,and and record holding Simple Eagle Legal Eagle (Plans in next Hangar Pilot).; MacEntee's peanut Lemberger ,Comet Dime Robin,& FAC Waco QIC bipe;Noriega's Penny, and Coconut General Aristocrat...all first class models.

Start Building now for that historic Tropicana Stadium Cat IV 231 feet high site. I have NO IDEA what an indoor model should look like to fly in a site like this.

- NEXT MEET NOV 21,22 TAMPA ARMORY c/o JOHN POLENTO
  MASS LAUNCH - GOLDEN AGE
- CONFIRMED TROPICANA MEET FEB 6,7 '99 CAT IV 231' HIGH. NEXT HANGAR PILOT WILL HAVE DETAILS - WHERE TO STAY. MAP OF SITE. MIAMA ANNUAL AWARDS BANQUET AT THIS MEET.

RESULTS MIAMA MEET 1 USCG ST PETE (2)

FAC PEANUT SCALE

		Scale Pts.		
1. Rich MacEntee	Lemberger	72	1:39	149.5
2.John Barker	Clipped Cub	59.5	1:41	137.5
3.Sid Gilbert	Lacey	55	1:25	127.5
4.Newt Bollinger	Cougar	61.2	1:10	126.2
5.Doc Martin	Seamew	69.5	:50.8	120.3
6.Don Brimmer	Ansaldo	72	:47	119
7.Charles Nelson	Pietenpol	48	:42	90

Choate, Larson: Did not fly

FAC RUBBER SCALE

1.L. Rich MacEntee	Waco QIC	71	1:23 142.5
2. Doc Martin	Vance Wing	73	1:09 137.5
3.Don Brimmer	Aeronca	61	1:02 122
4.Sidney Gilbert	Comper Swift	54	1:13 120.5
5.John Polento	Fokker D VII	61.5	:55 116.5
6.John Wormley	Deperssin	63.5	:36 99.5
7.Walt Schlesinger	Porter	55	:35 90

MIAMA PISTACHIO

1.Rich MacEntee	Lacey	1 1:36	1:26 1	2
2.Don Brimmer	Hi Max	1 :42	:28 3	4
3.Doc Martin	Windham	2 :40	:42 2	4
4..Sidney Gilbert	Dornier 4	3 :45	:21 4	8
X.Doc Martin	Stabiloplan	2 :25	:29.4 5	7
5.Walt Schlesinger	Cougar	3 :05	7	10
6.Charles Nelson		4 :19	:20 6	10

MIAMA DIME SCALE

		BONUS		
1.Rich MacEntee	Comet Robin	0	2:17	2:23 2:27
2.Dick Obarski	Comet D VII	30	1:54	1:53 1:54
3.John Barker	Comet Stratoplan	0	1:53	1:55 1:46
4.John Wormley	Megow Nieuport	30	1:06	1:09 1:13
5.Doc Martin	Curtiss SO3C-1	40	:44	:50 :44
6.Don Brimmer	Comet Cessna	0	:1:01	1:09 :42
7J.Wormley	Dallaire Morane 325	20	:42	:46 :54.6
8. Sid Gilbert	Comet Robbin	0	1:11	1::13
9.W.Schlesinger	Megow Nieuport	30	:20	:17 :11
10.J. Polento	Comet Stratoplane	0	:49	:13 :21
11.Charles Nelson	Comet Robin	0	:40	:42 -

MIAMA PISTACH MODEL OF A MODEL

1.Rich MacEntee Lil Mavis	1:12	1:04
2.Don Brimmer Boston Found	:59	:48
3.Charles Nelson Pussy Cat	:26	:24
4.John Polento Pussy Cat	:26	:11

MIAMA COCONUT SCALE

1.1.Ric Choate	General Aristocrat	1	1:45	2	3
2.Steve Noriega	Gen. Aristocrat	2	1:48	1	3
3.Rich MacEntee	N-211	1	1:36	4	5
4.John Polento	Turbo Porter	3	1:40	3	6
5. Doc Martin	Vance Wing	1	:23	6	8
6.John Wormley	Komet	3	1:31	5	8

AMA BOSTONIAN

		Charisma	
1.Rich MacEntee	Zippy	1.18	158
2.John Barker	Romulus II	1.03	330
3.N. Bollinger	Colt 48	1.05	313
4.;Sid Gilbert	7-Up	1.05	210
5..J. Polento	Sorta Korda	1.10	168

MIAMA LEGAL EAGLE

		3 FLIGHT TOTAL
1.Dick Obarski	Simple Eagle	10:34
2.Newt Bollinger	ProLong	9:54
3.John Wormley	White Bronco	8[54
4.John Barker	Jury Rig	7:22
5.Sidney Gilbert	Bronco	3:31
6.Charles Nelson		59

FAC NO-CAL

1.Dick Obarski	Mr. Smoothie	2:59
2.Newt Bollinger	Lacey	2:46
3.Doc Martin	Dayton-Wright	2:26

FAC EMBRYO

Best 3 of 4 flights ROG

1.John Barker	Swordfish I	7:19
2.Newt Bollinger	Colt 50	6:26
3.Dick Obarski	End Dust Winie	5:14
4.Sidney Gilbert	Colt 50	4:51
5.John Polento	Mr. Malcomb	4:06
6. Walt Schlesinger	Hornet	1:29

AMA PENNY

1.Steve Noriega	8:55
2.Dick Obarski	7:07

AMA LIMITED PENNY

1.John Barker	7:53
2.Steve Noriega	7:48
3.Dick Obarski	7:10
4.Charles Nelson	1:21

AMA Mini-Stick

1.Dick Obarski	6:25
2,Charles Nelson	:21

AMA Easy B

1.Dick Obarski	13:51
2.Charles Nelson	:54

AMA CATAPULT GLIDER

1,Charles Nelson	:24	:27

MASS LAUNCH EVENTS....

COCONUT SCALE M/L

1.Steve Noriega
2.Rich MacEntee
3.John Wormley

FLYING ACES WARPLANES

1.John Wormley
2.Doc Martin
3.Rich MacEntee

PEANUT MASS LAUNCH FAC

L. Ric Choate
2.Jake Larson
3..Sidney Gilbert
4,John Barker
5.John Wormley
6.Newt Bollinger 7.Doc Martin

③ FLYING THE MIAMA MEETS:

From October to May MIAMA conducts 7 indoor meets to determine State Champions- overall, and in classes. We count your best 5 meets, and best 5 events in these meets to determine overall standing. Class champs are scored from your best 5 meets.

We have a Summer FAC Season at Palm Bay from May to Nov. based on your best 4 meets of 5. Same scoring system as indoor. for FLA FAC CHAMP and event champs.

Outdoors we fly "Rule Book" FAC events. Indoors we modify a few rules. NAMELY: We allow a 9" overall length peanut and give a 10 sec. bonus for ROG. Our FAC models are allowed to fly in one judged event, and one non judged event. We use TOTALLY DIFFERENT DIME SCALE RULES.

INDOOR DIME SCALE RULES MIAMA.

→ THE ORIGINAL DIME SCALE RULES

Modified from Bob McDow's rules as used at Columbia U., N.Y. & elsewhere.
CONSTRUCTION: Model kit had to sell for $10 in the 30,s & 40,s. Plan is submitted with model, no other documents. NO structural changes from plan except as noted below. Single or double surface according to plans.
NOTE: Keep in mind if you also want to enter these planes in FAC SCALE all surfaces MUST be double covered. Japanese tissue covering only. Color scheme and all coloring, details, and marking as shown.

MODIFICATIONS ALLOWED:

1. 1/20" wood may be used instead of 1/16"
2. Tail may be enlarged.
3. Nose may be modified to provide ample removable section, and an improved thrust bearing.
4. Rear rubber attachment may be changed.
5. Stringers and tissue may be used instead of "Stiff paper" called for.
6. A spar on the bottom of a wing plan may be moved to the top of the wing.
7. Any size or type prop may be used.

MAXIMUM SPAN 16 ½". Those 20" span Comet kits must be reduced.

FLYING RULES: Unlimited flights, hand launched. Total of best 3 determine score. Model type gives bonus flight seconds, per flight.:

Bonus Points: Hi wing mono, with or without cabin,, shoulder, or parasol	.....0 Points
Mid or low wing	.....20 Points
Biplane	.....30 Points
Triplane or floatplane and twin motors	.....40 Points

MIAMA COCONUT SCALE RULES

1. Recognizable scale model with a wing span of at least 36" for monoplanes, and 30' for multiwings, rubber power.
2. Static points from Mooney type scale ranking from a distance of 10 feet.
3. Flight time is from R.O.G. Ranking points from best of three flights.
4. One once minimum weight, less rubber.
5. Tie breaker.. best scale ranking.

STOTT/MIAMA LEGAL EAGLE

THE LEGAL EAGLE EVENT.

DRAWING REQUIREMENTS

Drawing must fit on one side of one sheet of legal size (8½ x 14) paper.
No component parts drawing may be superimposed or overlap another and must clear one another and the edge of the paper by at least 1/8 inch.
Wing(s) and stabilizer must be drawn full span, tip to tip.
Fin(s) may be drawn where space allows and not necessarily attached to the side view.
Landing gear must be drawn in it's place on the side view showing it's full length.
No top or front view is required.
Drawing must be presented to C.D. on demand.

DESIGN REQUIREMENTS

1 x 1 1/2 x 3"

Smallest wood size to be 1/16 square.
Fuselage volume must contain a cube 1 x 1½ x 3 inches.
Fuselage must have a cabin or open cockpit with a raised windshield of at least 30°. Cockpit must be actually open, with a headrest or canopy.
Flight surfaces: Leading and trailing edges cannot parallel each other.
Tip outlines must have no straight lines except for stabilizer where a tail fin is used.
If twin fins, or two wings are used in the design, parts may be built in duplicate over the same drawing.
Jap tissue covering. No ultra light covering is to be used. Flight surfaces may be single or double covered.
Landing gear must use at least one 1" hardwood wheel.
Use of motor sticks or tubes O.K.

FLYING

Models must R.O.G. from ground, ice, table top, gym floor, or any solid place designated by C.D. on contest day.
Highest total of 3 flights wins. Delay timing at C.D. discretion.

NO-CAL PROFILE SCALE - FAC (4)

1. A recognizable model of a full-scale aircraft, with a wingspan not exceeding 16".
2. The weight of the model (excluding the rubber motor) shall be no less than 6.2 grams (two pennies).
3. No fancy gadgets permitted -- plastic prop is permitted. Balsa and Jap tissue shall be the main construction materials. Use of hi-tech materials such as carbon fiber, boron, etc. is not permitted.
4. Model must have control surface outlines, window outline, and registration markings.
5. Win based on best single flight of five flights (20 second minimum and two attempts/ flight).
6. Model must have full landing gear as per full size aircraft. No profile gear allowed. Models of aircraft with retractable gear may be depicted with gear retracted.

Mini-Stick Model Rules

Monoplane, max span	7. 0 in.
Max wing chord	2.5 in.
Motor stick length	5.0 in.
Max model (less prop)	10.0 in
Stab (tail) area max	= 50% of wing
Covering	plastic/paper (no microfilm)
Propeller	Wood max dia. 7 0 in.
Minimum weight	(.430 grams) .015 oz

FAC OLDTIME RUBBER

1. Any non-scale endurance type model built from a kit or plan published before Dec. 31, 1945 is eligible.
2. Fuselage must be built up, no stick models, OR TUBES
3. Wingspan not to exceed 36 inches.
4. Must have fixed landing gear. Wheel diameter must be as per plan.
5. Propellor diameter must be as shown on plan or not more than 1/3 of the wingspan. No folding or feathering props allowed. Plastic props OK.
6. Structural changes may be made to incorporate a D/T.
7. Original airfoil must be used.
8. Original structure may be beefed up but not lightened. Same size wood and number of ribs, etc. as on plan. AREA-150 IN² MAX

FAC FAC OLDTIME STICK

Same as FAC OLDTIME RUBBER except delete item number four (4).

FAC GIANT SCALE

Same as Jumbo Scale except wingspan must be over 36 inches for multi-wing models and over 42 inches for monoplanes. Of course, if there is no Giant Scale event in a contest these giants can compete in Jumbo.

FAC PIONEER SCALE

Models of aircraft that were produced before 1914 regardless of size. If no Pioneer event then model may be flown in its regular category.

FAC OLDTIMER ELECTRIC GAS REPLICA

1. Any non-scale endurance type model built from a kit or plan published before Dec. 31, 1945. Model must have been gas powered originally.
2. No profile fuselages.
3. Wingspan not to exceed 30 inches.
4. Model must land within the confines of the flying field to be an official flight. All off-field flights will be considered an attempt. Unlimited attempts to score three official flights.
5. Model plans for these type of models may be reduced from the original plan to conform to the 30 inch wingspan rule.

FAC EMERYO ENDURANCE

1. For rubber powered models with not over 50 square inches of wing area for monoplanes. For biplanes, not over 70 square inches, with 45 square inches maximum for the largest wing area. Stab area not to exceed 50% of the wing area.
2. Fuselage volume to enclose a space 1.25 X 1.50 X 3.00 inches or larger.
3. Wing and tail to be built up, covered on both sides with Japanese tissue or equivalent.
4. Model must ROG from a card table top UNASSISTED from a three point rest.
5. Landing gear legs must be in a conventional configuration and have 3/4 inch diameter wheels or larger. (Example: two wheels on one landing gear is prohibited). Wheels must turn on their axles.
6. Unlimited attempts for three official rise above table top level flights.
7. A bonus for the following details will be given:
   5 seconds for a raised cabin or windscreen with open cockpit and headrest.
   3 seconds for 3-dimensional wheel pants.
   1 second for 3-dimensional exhaust pipes.
8. Highest flight total plus bonus points wins. Fly-off to break ties. Bonus points once again added to the flight points.

FLYING ACES RUBBER PEANUT JUMBO SCALE, ETC.

The intent of these rules is to offer the modeler the opportunity to exercise his skill in producing a good flying model which retains most of its scale appearance without being burdened by excessive scale requirements (scale rib-spacing, scale stab area, etc.) or too small a prop due to R.O.G. requirements. It is hoped that the bonus system will bring forth here-to-fore neglected subjects which have been considered non-competitive due to their complexity, design or lack of inherent flight qualities.

BASIC RULES:

1. Any two models built from published plans, kit plans or from original plans of any heavier-than-air, full size aircraft, built or proposed, may be entered. Model plans, kit or published, may be embelished and/or improved upon to make the model more closely resemble the real machine.
2. If the model is built from original plans, the builder must present a 3-view, photos, or any other material used in creating the entry.
3. Models must be accompanied by proof of scale which includes 3-views, photo etc., used by the builder. This material should aid the judges in verifying coloring, markings and details.
4. Tail surface area and dihedral may be increased moderately, but not to a point that the scale appearance of the model is destroyed. The general outline of all surfaces and fuselage cross sections must be retained.
5. All models must closely resemble the full scale aircraft with respect to outline and proportions. The opinion of the judges in this matter is final!
6. Undercambered airfoils are not allowed unless the full-sized aircraft utilized this feature.
7. All flights are hand launched. Consequently, there is no limit to prop diameter, and any landing gear may be represented in the up or down position. Full flush retracting gear may be represented by nothing more than ink lines or the like. Props will not be considered for scale or workmanship points except those on dummy engines.
8. All surfaces must be double covered, except where single surfaced on the full scale machine.
9. No extra points for exact scale rib spacing, tail area, or the like.
10. Any model of a prop driven, or jet propelled multi-engined aircraft with thrust provided by a single prop in a non scale position on the nose or tail of the fuselage may be entered. However, no extra bonus points will be awarded for location of propellor(s).
11. Motor sticks may be used on multi-engined models without penalty. Propellors must be in scale location on nacelles.

GOLDEN AGE SCALE

1. Models of any aircraft produced from 1920-1940, but excluding military aircraft produced from 1935-1940.
2. Retract gear planes must have gear in down position.
3. Planes eligible for race events are excluded.
4. No scale judging required, but the 50 minimum scale point criteria will apply.
5. Official flights are 20 seconds or more, and a three official flight total is the score. Highest total time is the winner. Fly-off to break ties.

BONUS POINTS	AIRCRAFT CHARACTERISTIC
0	High wing cabin monoplane types.
3	Parasol wing types.
3	For skis if they are scale in width and length.
5	Shoulder and mid-wing types.
5	Canards and tandem wings.
10	Low wing types.
15	Biplane and sesquiplane types.
20	More than two wings.
10 5	Seaplanes, flying boats and amphibians.
15	Unorthodox designs (flying wings, autogyros, etc.)
1	Each jet engine pod, regardless of how many engines were contained in it on the full scale machine.
5	For each dummy nacelle with a scale diameter free wheeling prop on it.
5	Single engine pushers.
	MULTI-ENGINED AIRCRAFT, EVEN NUMBER OF MOTORS
5	If any of the off-center motors are pushers or in tandem.
10	Centerline tandem engines, if both props are powered in such a manner as to contribute generously to the thrust and duration of motor run needed for flight. (example: Fokker D-XXIII
20	Off center-line twins.
10	Any additional pair of motors at different off-center locatic provided all are equally powered .
	MULTI-ENGINED AIRCRAFT, ODD NUMBER OF MOTORS
5	If any of the off-center motors are pushers or in tandem.
25	Tri-motors, provided the off-center motors contribute significant power.
10	Each additional pair of motors at a different off-center location provided all motors are equally powered.

MASS LAUNCH RULES COMMENTS

MINIMUM OF 45 FAC SCALE POINTS —

Repairs; Absolutely no repairs of any kind can be made to your model once the mass launches start, regardless of how the damage was done. This includes holding parts together with saliva! Don't laugh, it has been done.

Broken motors; Broken motors cannot be replaced, glued or tied, period!

Ballast; Ballast can be added or moved on your model provided there is no test gliding after this is done. This applies only after the model has flown in the event.

Contest Directors; Please take the weather and the contestant's ages into consideration when setting times between rounds of the mass launch events.

Send for AMA rule booklet for remaining events. Penny & Limited Penny, HL & Catapult glider, Bostonian,, Easy B

For a more comprehensive set of rules for all F.A.C. events, and a dynamite monthly newsletter, join the world famous FLYING ACES CLUB. Send your $15 annual dues (check payable to "Flying Aces") to:

FAC - GHQ
3301 Cindy Lane
Erie, PA 16506

NEW FAC POWER SCALE RULES

WE GET GREAT LETTERS AT MIAMA DEPT. :

David Aronstein
16620 S.W. 130th (6)
Rose Hill, Kansas
67133
[New address]

Doc,

Sorry I've been so bad about keeping up my subscription - you've kept sending me Hangar Pilot anyway - Consider the enclosed payment to be for past and/or future issues as you see fit (note new address).

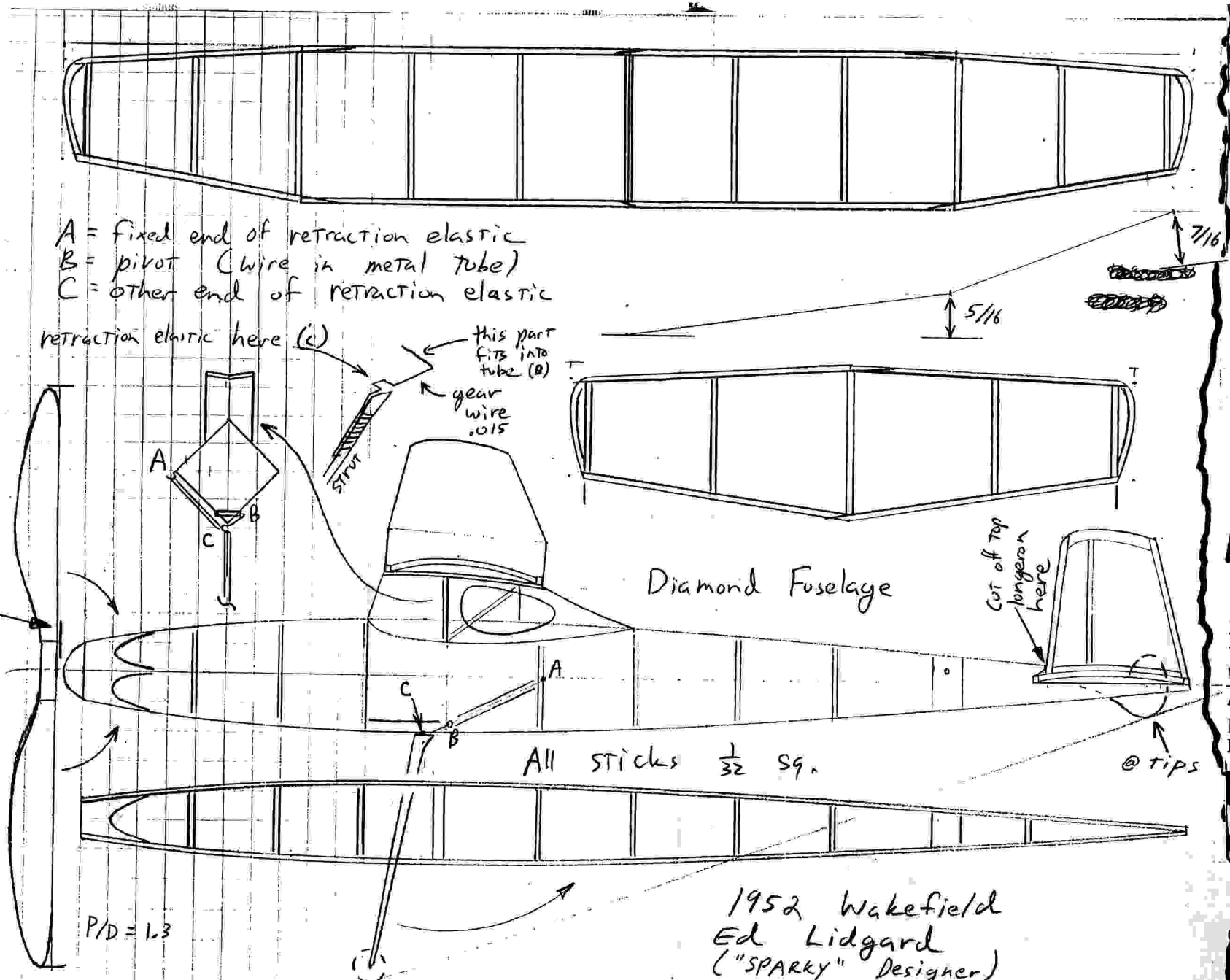
Making the Intergnats into a postal contest seems like a great idea - I just missed getting a flight into the 1998, but I will be ready for 99 - I'm building a model-of-a-model, 1941 Super Stuff 33" fuselage model - complete with retract gear & folding 1-blade prop! The 1950's Zaic books are another great source of M.O.M. candidates - I think they get overlooked a lot because they're not oldtimers. (M.O.M. plan of a Lidgard Wakefield enclosed). As you can see, I'm in Chilton's part of the country now - working in the advanced design group at Raytheon Aircraft (pronounced B-e-e-c-h-c-r-a-f-t) I will try real hard to get to USIC next spring - till then,

Take care!

Jim

(7)

PISTACHIO MODEL OF A MODEL

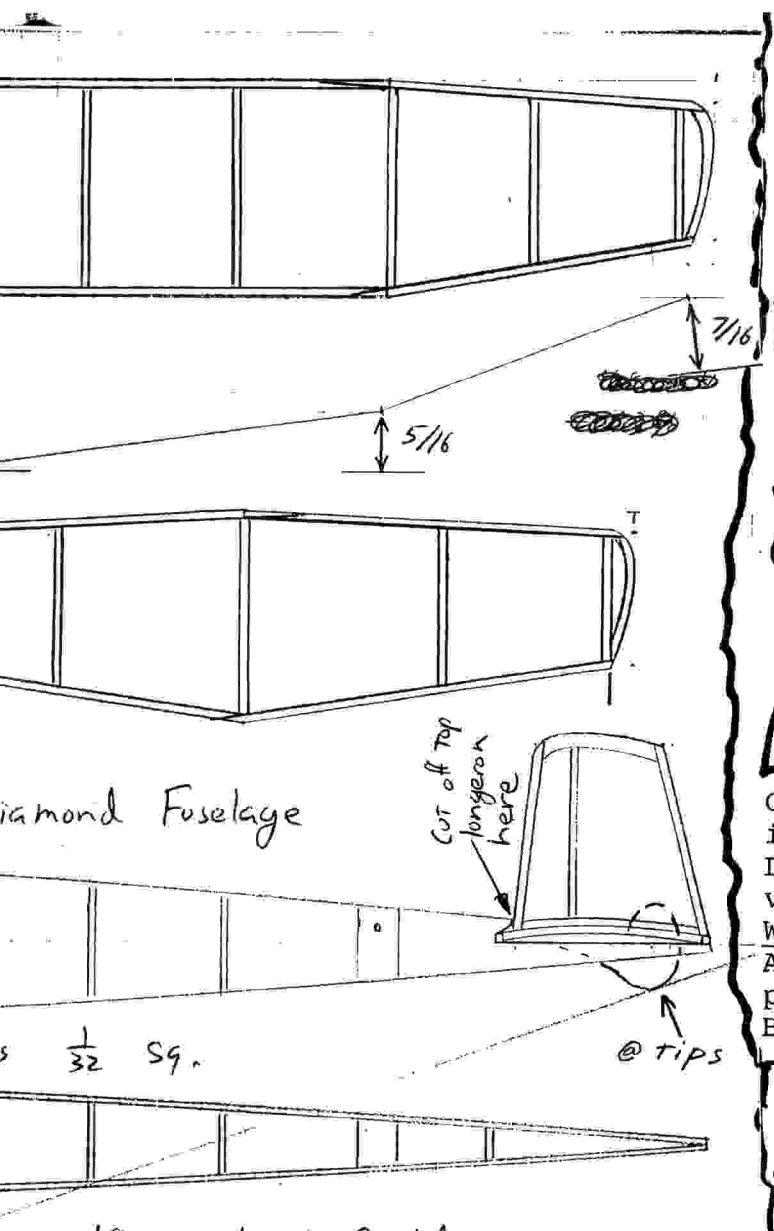


tissue hinge

1. cut part way thru from back
2. glue tissue to back face
3. Complete the cut
4. Work it back and forth before glue dries completely.

1952 Wakefield
Ed Lidgard
("SPARKY" Designer)
Adapted to 8' David Aronstein 9/98

PLAN ON ATTENDING KING ORANGE INDOOR FEB 6, 7 '99
TROPICANA FIELD ST. PETE (AT IV TWICE AS HIGH AS JOHNSON CITY!



1952 Wakefield
Ed Lidgard
("SPARKY" Designer)
Adapted to 8" David Aronstein 9/98

OOR FEB 6, 7 '99
GH AS JOHNSON CITY.!

WE GET GREAT (8) LETTERS HERE AT MIAMA DEPT.-

FREE HANGAR PILOT SUBSCRIPTION- TO BEST LETTER

COMING SOON.....

HISTORIC

ISUE 200!

Calling all pilots. We are soliciting your comments for our "GREAT LETTERS" column. Be as brief or verbose as you wish. TOPIC: What Hangar Pilot has meant to Me. All comments welcome, trivial or profound. We've slung a lot of Bull in our day. SLING BACK

LAST FAC 'SUMMER SERIES' MEET—

DON BRIMMER'S SAM 46 MEET PALM BAY

NOV 14,15 SAM EVENTS FAC EVENTS

MASS LAUNCH - WARPLANES

MORE ON RETRACTS FROM DAVE A.

Note on retracts: The whole key is the relationship between the pivot point and the anchor points of the retraction elastic. Tension decreases as it retracts so the mechanical advantage - the moment arm of the elastic about the hinge point - needs to increase from nearly zero, in the extended position, to a maximum in the retracted position. That way the retraction force, measured at the wheel, is very light when extended so the weight of the model holds it extended; and very positive when retracted. Requires some care to set up, but it's really neat when it works!

MID 1940'S - S.O.S. !

DOC HAS HAD NO LUCK FINDING THESE MEGOW N-SERIES DIME SCALE MODEL PLANS: CAN YOU HELP?

N-1 LOCKHEED P-38
N-2 AIRCOBRA
N-3 REPUBLIC GUARDI
N-4 GRUMMAN SKYROCKET
N-5 SPITFIRE
N-6 SWIFT
N-38 GULFHAWK JR
N-45 CURTISS PURSUIT
N-48 CURTISS XSOC-1

THESE ARE RARE ONES

SEND TO DOC - ANY OTHER N ??



SUBMITTED BY NEWT BOLLINGER

DADE COUNTY

(10)

Steering and snaring LARRY KRUSE

Whether flown indoors or out, our models have a peculiar attraction to the highest, most inaccessible reaches of the flying venue we happen to be using at any given time; hence, the need for a retrieval or steering pole to keep them out of harm's way. Don Slusarczyk, a name well known in indoor circles, is now marketing a collapsible fiberglass pole, which can be used either indoors or outdoors as both a steering and retrieval pole. It should be noted, of course, that for indoor flying a judicious use of the pole for its first purpose should preclude the need for its second purpose. Outdoors? You're on your own.

Don's product collapses to a length of just under 44 inches and has six tapered telescoping sections that friction-fit into each other. Sections can be removed if the need arises by way of a threaded base cap, and a rubber cap on top and inside the threaded base absorbs shock and protects the sections during travel. Each pole comes in its own plastic protector bag and can be purchased in red, green, blue and yellow colors, subject to availability.

Now let me emphasize that these poles are not the flexible, cheapy jobs that can be bought in the fishing section of any discount store. Those poles are subject to whipping and can destroy a plane during a critical retrieval. What Don is offering for $40 plus $6 shipping are the best poles available for both indoor and outdoor use. Order yours from Don at 868 Eaglewood Drive, Willoughby, OH 44094. Tell him F/F SPORT sent you.

For those purely outdoor folks who can count on at least one ugly retrieval from the tallest thorn tree on the field at each contest, a firm called the Midwest Rake Company may have a product for you. Advertised as an "airplane retriever," a 9-inch nylon loop fitted to a telescoping aluminum pole is touted to gently nudge your plane loose from its roost and bring it down safely by the prop or wheels. The ad doesn't say how long the pole is nor how much the apparatus costs, but it does have a toll-free number that you can call to get all of the details. Phone 1-800-815-7253 and ask for Dave and the "airplane retriever."

NFFS MEMBERSHIP AND RENEWAL APPLICATION

Make checks payable to: National Free Flight Society

Mail to: **NFFS** Membership Office
3317 Pine Timbers Drive
Johnson City, TN 37604-1404
e mail: txtimer@tricon.net

Subscription rates include mandatory annual fee of $.50 for membership in the National Free Flight Society.

The balance of the fee in each category is for Subscription to FREE FLIGHT, the NFFS Digest.

Ages are as of July 1 of the current year.

MEMBERSHIP FEES AND SUBSCRIPTION RATES

Age 19 & over (US only)	1 yr. **$20.00** ($.50 membership fee plus $19.50 subscription)
	2 yr. **$39.00** ($1.00 membership fee plus $38.00 subscription)
Age 18 & under. (US only) PROOF OF AGE REQUIRED	1 yr. **$7.50** ($.50 membership fee plus $7.00 subscription)
	2 yr. **$13.50** ($1.00 membership fee plus $12.50 subscription)
All Non-US Residents	1 yr. **$24.00** ($.50 membership fee plus $23.50 subscription)
	2 yr. **$47.00** ($1.00 membership fee plus $46.00 subscription)
Life Membership US Residents	**$450.00**
Life Membership Non-US Residents	**$500.00**

Include payment in US dollars and this form–please circle applicable fees.

☐ New member ☐ Renewal ☐ Address change

Current expiration date: Mo._____ Yr._____

PLEASE NOTE: SUBSCRIPTIONS ARE NOT AVAILABLE WITHOUT MEMBERSHIP.

Name AMA # (US only)

Address Telephone # (US only)

City, State Zip

Send ***all*** renewals, change-of-address, new applications, and membership questions to the Membership Office.

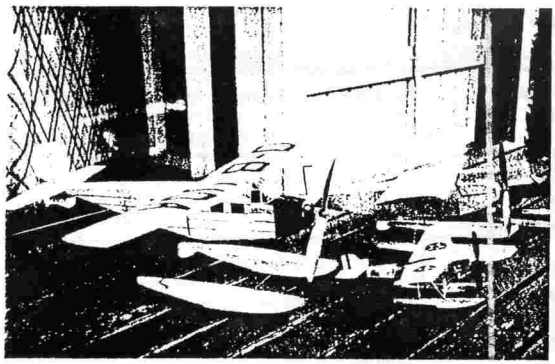
NFFS NEEDS + DESERVES YOUR MEMBERSHIP

MIAMA THANKS RICH MACENTEE FOR HIS EFFORTS TO C D THE PALMETTO FAC ROW MEET. OBTAINED THE SITE, THE CHASE BOAT, ETC. A DIS-APPOINTING RAIN OUT. THANKS RICH.!

(11) Water Wings Trophy

FROM UK'S AEROMODELLER

Charlie Jeffereys reports on last years annual postal competition for free flight waterplanes...



A selection of scale floatplanes by Doc Martin. 3rd from the left in silver trim is his 23" span 'Dornier Falke', which gained 2nd place.



John Godden's 21" span 'Halifax Commando' proves itself too big for the bird bath! It reached 3rd place; uses floats from APS L'il Auk.

The Water Wings Trophy (WWT) is a postal precision competition for F/F waterplane models. It has been held annually since 1994, and runs from June to September. Three consecutive flights are required, all to exceed 20 seconds. The first flight duration provides the target for the next two. There are two categories, Rise Off Water (ROW) and Hand-Launched (HL). All models entered must be capable of sustained flotation, in a realistic attitude.

In the 1997 event there were 18 entries, including 5 from overseas.



Orville Olm's P30 class 'Foamy Olmy 3' makes a dramatic getaway.



John Cooke's twin electric 'Grumman Widgeon' prepares for ROW at Middle Wallop.

GENUINE R.O.W....

Congratulations to Rich MacEntee and John "Doc" Martin, from Florida, who secured the top 2 ROW places. They both flew small rubber-powered scale floatplanes, quite a challenge to trim for a reliable performance. Rich's 15" span D.H.Turbo-Beaver flew from rain puddles at the Miami Youth Fair last June. Between the 2nd & 3rd flights, they sat in the van for a 2 hour "rain delay"! Doc reported that "The third flight never got more than 8 feet high. Amazing that it got 23 seconds - you gotta be lucky, sometimes!"

Doc made his own flights the previous week, having some trouble getting 3 good take-offs, and observed that "Fresh water take-offs seem more difficult than salt water".

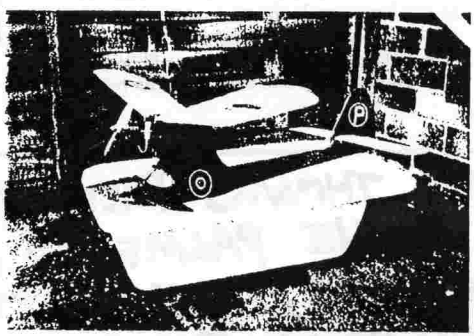
The highest U.K. entry was John Godden's Halifax Commando, a charming model that clearly performs well. John's WWT times were all over 2 minutes, as he was also taking part in the Middle Wallop waterplane duration event.

Orville Olm from Canada entered his all-foam P30 class 'Foamy Olmy 3', using a central pontoon of foam piping. He describes how, with an 8 strand 10 gram motor, it "literally leaps off the surface and goes into an almost vertical climb to about 70 feet, and then circles up from there."

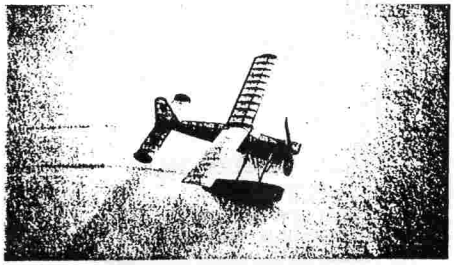
Former winner Colin Croucher reached 5th place with a very pretty cabin model: "I found the Solitaire quite tricky to trim initially, and even now its behaviour is a bit erratic. So far we've had about 30 ROWs and each set of 3 has resulted in 2 good flights and 1 oddball. But still good fun, and I'm looking forward to next year".

Ted Smales and Mike Parker have recently been deprived of their favourite watering hole, the murky "Black Lagoon" at Brough, due to MOD restrictions. Not to be defeated, Ted's 'King Harry' ROW'd from a 2 gallon seed tray tank, and insisted on catching a thermal every 3rd flight. "It finally put an end to this nonsense by being carried off by a change in the wind direction and landing high in a tree, where it remains to this day!". Ted's trousersoaking account of transporting the tray and water supplies with mike concluded that "It is really just a last resort, until the Black Lagoon welcomes us back to its smelly embrace"!. Recent news is quite hopeful.

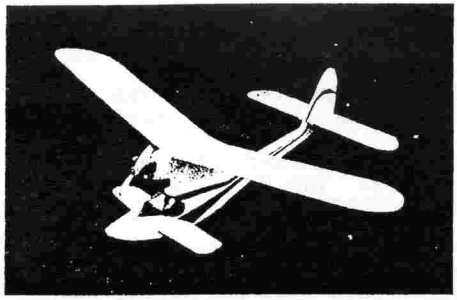
John Cooke's Grumman Widgeon scale twin was the only electric entry, also, the only flying boat in the ROW category. This impressive model made good use of the 11 foot water tank at Middle Wallop, for its take-offs. Typical duration is about 3 minutes, with an attendant risk of fly-aways. John comments as follows: "I have now settled on an electronic timer to shorten the motor run when the air is lively. For ROW the wing floats have to be removed, as any slight tilt on take-off slews the run. Without them, the contra props ensure a straight course".



Ted Smales' dependable 'Sea Nymph' undergoes a flotation test!



Trevor Watkins' trusty Hobbies Seaplane, a veteran of several WWT contests, including the first in 1984, shown here during a cold spell!



John Taylor's colourful Mills-powered 'Sea Nymph'.

The final ROW entry was Michael Ridout who entered his C.A.Rippon 'Air Cadet', using floats adapted from the Bim-Bam design. "It was good fun. All flights were made from Peter Giggle's pond at Middle Wallop. The trouble was, it kept flying better than the previous flight, despite changing to a smaller motor".

HAND-LAUNCHED ENTRIES

Leading the hand-launched section were a couple of diesel-powered flying boats. Charlie Jeffreys' 'Moses' was flying very consistently with some favourable Old Warden weather. Ted Smales' 'Sea Nymph' also flew very steadily. It followed its tightly turning climb with a wide glide circle, that insisted on circumnavigating one of 2 trees in his field.

In 11th place was regular entrant Trevor Watkins, who had hoped to enter his new BM-1 floatplane. It was not fully trimmed in time (this year perhaps?), so he reverted to the faithful Hobbies' Cabin Seaplane design once again. Continuing the rubber floatplane theme was Fernando Haro Martinez, flying his twin-finned 'Postiguet' design from Alicante Beach in sunny Spain. John Taylor's Gollywok, also rubber-powered is a regular ROW performer, but with limited opportunities he too resorted to hand launches this time. (His local "water supply" at Beaulieu tends to dry up in the summer). John's 'Sea Nymph' was hand-launched for the same reason, reaching 15th place.

John Close and Mike Parker contributed to the healthy representation of flying boats, John with his canard 'Flying Punt', and Mike with his 'Moses'. Mike's score was compromised by re-trimming during the 3 flights, due to a breakage on the 5" x 3" three-bladed prop, and replacement with a two-bladed 6" x 4".

Lindsey Smith found a challenging subject in the 'Cleveland Amphibion', a twin-rubber vintage scale design, so it was good to receive a set of times, even though recorded after the deadline: "I may be too late, but the weather was super and I managed to get 3 consecutive flights in. I have been trying to do this all summer, but either the motors break, or the model crashes. The last time I tried, I made one good flight but on the second, the model decided to fly out of our meadow, between 2 houses, and down the road for about 70 yards before crashing into a third house and falling into a bucket of water - springing all its struts in the process!". A remarkable effort.

The final entry was Jim Moseley's 'Merbaby', hastily completed as the deadline loomed: "I made sure it floated in the sink, and then awaited suitable flying weather - which didn't arrive". During an outing to a local park, Jim obtained a set of times rudely abbreviated by a case of tree magnetism. "I have no doubt it can fly longer when worked out, and in a larger area in better air. Maybe next year".



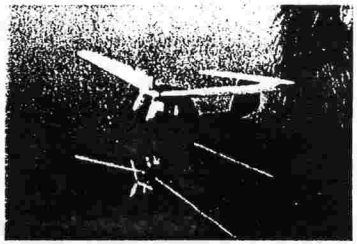
Timekeeper Maribel poses with 'Postiguet' at Alicante Beach, the smaller model was designed & built by Fernando Haro Martinez.



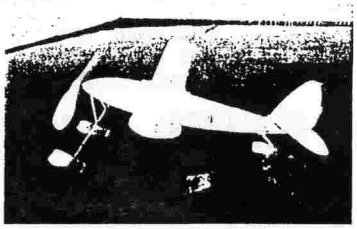
Struts, floats, rubber motors & everything else, hang together just long enough to capture this fly-past by Lindsey Smith's Sikorsky S38.

Many thanks to all of the 1997 participants. See "What's On" for details of the 1998 event. Here are some concluding thoughts from Ted Smales, after he and Mike Parker failed to recover Ted's King Harry from the trees:

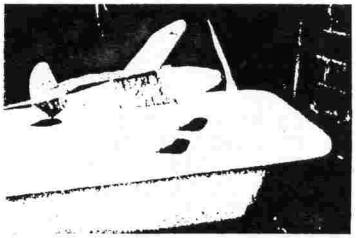
"We had a discussion as to why people remain aeromodellers. We decided that it wasn't just the pleasure of building a model, or the even greater pleasure of seeing it fly well, but a perversity of nature which welcomes problems and setbacks, and enjoys the challenge of trying to overcome them. Hence, no doubt, the popularity of the WWT!". *AM*



Mike Parker's 'Moses' shows off its reflection.



Michael Ridout's 'Air Cadet' in the pond at Middle Wallop.



Ted Smales' 'King Harry' takes to the bath!

RESULTS

Position	Name	From	Model	Type	Target (secs)	Error (secs)
Rise off water						
1	R. MacEntee	Florida	DH Beaver	float(rubber)	23.8	1.65
2	Doc Martin	Florida	Dornier Falke	float(rubber)	23.4	4.7
3	J. Godden	Leeds	Commando	float(rubber)	137	6
4	O. Orm	Saskatoon, Can	Foamy Olmy 3	float(rubber)	71	6
5	C. Croucher	Plymouth	Solitaire	float(rubber)	30	7
6	T. Smales	East Yorks	King Harry	float(rubber)	51	12
7	J. Cooke	Falmouth	Grumman Widgeon	f/boat(electric)	167	25
8	M. Ridout	Wimborne	Air Cadet	float(rubber)	52	32
Hand-launch						
9	C Jefferys	H/Hempstead	Moses	f/boat(diesel)	23.4	2.6
10	T. Smales	East Yorks	Sea Nymph	f/boat(diesel)	54	3
11	T.Watkins	Hereford	Hobbies Seaplane	float(rubber)	21	4.5
12	E H. Martinez	Alicante, Spain	Posiquet	float(rubber)	20	6
13	J.Taylor	Bournemouth	Gollywock	float(rubber)	50.7	8.5
14	J. Close	Stockport	Flying Punt	f/boat(diesel)	37	15
15	J.Taylor	Bournemouth	Sea Nymph	f/boat(diesel)	32	22.5
16	Mike Parker	Hull	Moses	f/boat(diesel)	40	25
17	L. Smith	Andover	Sirkorsky S38	f/boat(rubber)	28	Non-qual.
18	J. Moseley	Ontario, Can	Merbaby	float(rubber)	23	Non-qual.

45TH KING ORANGE INTERNATIONALS
PALM BAY, FLORIDA
DEC. 29 - 30 - 31

SPONSORED FLORIDA MODELERS ASSOCIATION

RAY COMBS - CONTEST DIRECTOR

BILL STALEY - ALT. C.D. — JIM BRADLEY - FAI DIR
FRANK CARNEY O.T. DIR. — STEVEN BACOM - FAC DIR.
BILLY CARNEY O.T. DIR. — NORMAN ROSENSTOCK - TEX. DIR.

** AAA-AMA CATEGORY III ** ** AMERICA'S CUP CONTEST **

ENTRY FEE: $15.00 (Sr.-Op.) FOR FIRST EVENT, PLUS $2.50 EACH ADDITIONAL EVENT (UNLIMITED ENTRY $20.00). JUNIORS (UNDER 16) $5.00 only ! 1998 AMA LICENSE REQUIRE.

AWARDS: ONE TROPHY WILL BE AWARDED TO EACH WINNING CONTESTANT THROUGH THIRD PLACE. PLATES FOR EACH ADDITIONAL WIN, HIGH POINT TROPHY AND SEVERAL PERPETUAL TROPHIES.

RULES: ALL EVENTS WILL BE CONDUCTED ACCORDING TO THE MOST CURRENT EDITION OF THE APPROPRIATE RULES, AMA, FAC, SAM, FAC, AND NFFS NOSTALGIA. THE FLIGHT LINE FOR ALL EVENTS WILL BE 100 FEET DOWNWIND OF SPECTATORS AND AUTOMOBILE PARKING.

HIGH POINT: DECLARES SIX (6) EVENTS. 1 GLIDER, 1 POWER, 1 RUBBER, 3 OF CHOICE. 3 X 2 MIN. MAXES EACH EVENT. NO SINGLE FLIGHT EVENTS COUNT, FAI 1st 3 FLIGHTS COUNT UP TO 120 SEC. EACH FLIGHT. POINTS AWARDED FOR TOTAL FLIGHT TIME ALL SIX(6) EVENTS.

TIMING OF FLIGHTS: ALL FLIGHTS MUST BE RECORDED AFTER EACH FLIGHT, FAILURE TO DO SO MAY RESULT IN DISQUALIFICATION FROM THE EVENT. TWO TIMERS REQUIRED FOR FLYOFF'S.

TU. DEC. 29 7 A.M.-5 P.M.	WED. DEC. 30 7 A.M.-5 P.M.	TH. DEC. 31 7 A.M.-2 P.M.
A GAS	C GAS	½ A GAS
D GAS	CATAPULT GLIDER J/SO	B GAS
HLG J/SO	PAYLOAD	MULVIHILL
F1A GLIDER (1)	F1H A1 J/SO (2)	ELECTRIC A/B
F1B WAKEFIELD (1)	O.T. COMM. RUBBER	P-30 J/SO
F1C POWER (1)	O.T. RUBBER CABIN (LG.)	ROCKET
F1J ½ A (2)	O.T. B GAS FUSELAGE/PYLON	F1C COUPE J/SO (2)
O.T. .020 REPLICA P/C	O.T. RUBBER STICK (SM.)	O.T. C GAS FUSELAGE/PYLON
O.T. A FUSELAGE/PYLON	NOS ½ A GAS	O.T. H.L.G.
O.T. RUBBER CABIN (SM.)	MOFFETT	NOS C GAS
O.T. RUBBER STICK (LG.)	SLOW OPEN POWER	NOS EARLY
R.O.W. RUBBER (3)	DAWN UNL. RUBBER (4)	DAWN UNLIMITED GLIDER (4)
NOS A/B	SUNRISE SHOOTOUT (4)	OPEN GLIDER
OLD RULER	FAC OLDTIME STICK	FAC RUBBER SCALE
GREVE/THOMPSON TROPHY	FAC WW I MASS LAUNCH	FAC POWER SCALE
FAC O.T. GAS (ELEC./CO2)	FAC PEANUT	FAC DIME SCALE
FAC O.T. RUBBER	FAC JUMBO SCALE	FAC WW II MASS LAUNCH
FAC NO CAL SCALE	FAC GOLDEN AGE	FAC GIANT SCALE
FAC EMBRYO ENDURANCE	SUPER D GAS (5)	FRANK EHLING EVENT (6)
½ A TEXACO (OPEN)	O.T. ½ A TEXACO (7)	A TEXACO (7)

(1) THREE 90 MIN. ROUNDS STARTING 12:30 P.M. TU., 4-90 MIN. ROUNDS STARTING 8:15 A.M. WED
(2) FIVE 90 MIN. ROUNDS (30 MIN. OVERLAP) STARTING @ 8:00 A.M.
(3) KING CATFISH PERPETUAL TROPHY SPONSOR: GEORGE PERRYMAN & RON SHARPTON
(4) LAUNCH WINDOW: 7:30 A.M. TO 7:45 A.M. (RUBBER) 7:45 A.M. TO 8:00 A.M. (GAS)
(5) SUPER D GAS-.60 CID ENGINE OR LARGER AND 1000 SQ. IN. OF WING AREA OR LARGER
(6) EHLING EVENT, EHLING DESIGN, NFFS RULES, SPECIAL $5.00 ENTRY FEE/CHECK FLYER
(7) FL. RULES: ½A, ½A OPEN, 6cc TANK, A-14 cc TANK. BEST FLIGHT SCORE OF THREE ATTEMPTS

CIRCLE HIGH POINT EVENTS

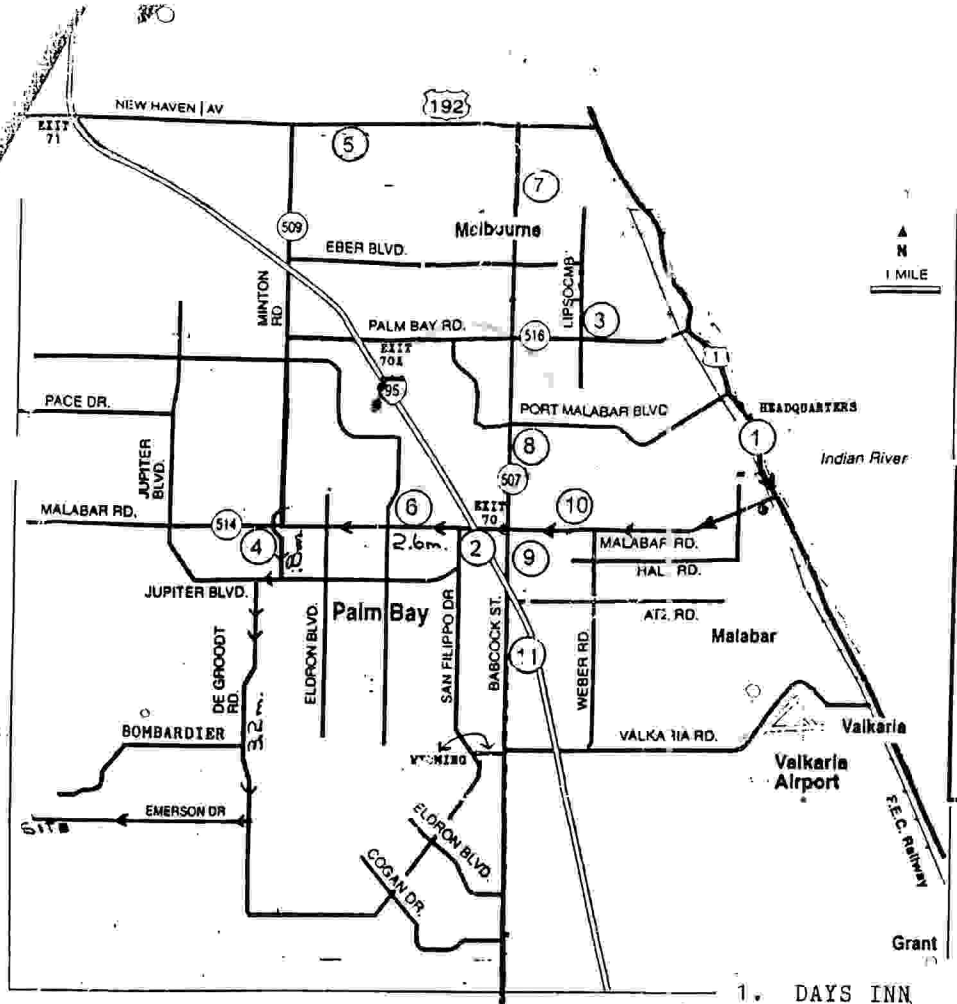
RELEASE: I, THE UNDERSIGNED CONTESTANT/PARENT, DO HEREBY RELEASE ANY AND ALL ORGANIZATIONS CONNECTED WITH THIS MEET, FROM ALL CLAIMS WHICH MAY ARISE WITH SAID MEET. I CERTIFY THAT I AM THE BUILDER OF ALL MODELS ENTERED AND FLOWN BY ME AS COVERED BY CURRENT AMA/FAI RULES.

NAME_____ SIGNATURE_____

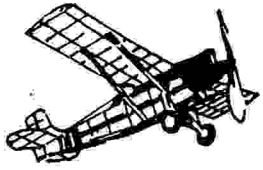
ADDRESS_____ AMA #_____ CONTESTANT #_____ AGE_____

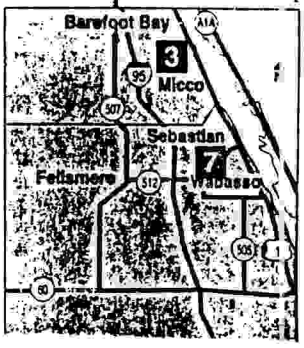
CITY & STATE_____ ZIP_____ J SO_____ ENTRY FEE PD._____

(14)



45th King Orange 1998
Palm Bay, Florida





1. DAYS INN HEADQUARTERS
2. MOTEL 6
3. RAMADA INN
4. SUPERMARKET, K-MART MC DONALD'S
5. WOODY'S BAR-B-Q
6. WOODY'S BAR-B-Q
7. RYAN'S BUFFET
8. KENTUCKY FRIED CHICKEN
9. LOS TAPATIOS (MEXICAN)
10. HOSPITAL
11. ACE HARDWARE #729-6690

BACK WAY FROM SITE TO DAYS INN:
TURN RIGHT FROM EMERSON ONTO DEGROODT RD., FOLLOW AROUND TO WYOMING (WATCH FOR FIRE STATION ON LEFT) TURN RIGHT, GO ACROSS 507 (BABCOCK) TO WEBER RD., TURN LEFT. WEBER TERMINATES AT MALABAR RD., HANG A RIGHT! BOY! AIN'T WE SMART! GOOD ROADS AND ONE RED LIGHT.

WHAT'S ON IN FREE FLIGHT?

OCT 31-Deadline for Moseley Vintage Postal meet.See Hangar Pilot 196
NOV 21 22 TAMPA FLA.,ARMORY MIAMA MEET #2 ([redacted] Confirmed) Mass LaunchGolden Age
NOV. 14,15 LAST FAC SUMMER SERIES, PALM BAY.DON BRIMMER's SAM 46 Old Timer Meet 813-525-6667
DEC.26.27-TAMPA,FL Delta Airline Hangar MIAMA MEET #3 Mass Launch- Modern Age
DEC. 28,29,30- PALM BAY-OUTDOOR KING ORANGE.
FEB. 6,7 ST. PETERSBURG,FL MIAMA MEET #4 AND KING ORANGE. HISTORY MAKING INDOOR FLYING . TROPICANA FIELD. 231 feet Catagory IV Site Mass Launch:Low Wing
March 31- MIAMA Inter-Gnats. Deadline for annual Pistachio Postal

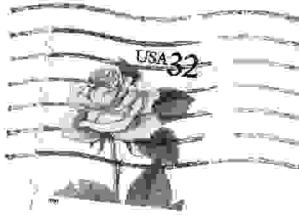
NOV 14,15 PALM BAY - LAST "SUMMER" FAC SERIES - MASS LAUNCH WW II
SAM 46 DON BRIMMER MEET

OCT 17,18 GEO. JAMISON MEM. CONTEST PALM BAY
904.767.6138 C/D RON SHARPTON

THE HANGAR PILOT

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