THE HANGAR PILOT

FAC SQDN #11

MIAMI INDOOR AIRCRAFT SPORTS ASSOCIATION

ISSUE 182

NEW SEASON - FALL 1996 - #26

25TH YEAR of PUBLICATION
INDOOR ISN'T FOR EVERYONE



FAC GENERAL
WAYNE TRIVIN

NONPAREIL AIRCRAFT
MODELER + STATE CHAMP



"LIKE A LETTER FROM HOME" Whelan

THE HANGER PILOT

The Hanger Pilot, edited by John Martin Jr., who is solely irresponsible for its content, is published 8 or 9 times a season for bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association) - AMA club 986. One of two active all indoor free flight clubs in AMA. For a mere $12.50 you will receive all of the published issues that year. We encourage reader contributions because, frankly, we need the material. Letters, plans, 3-views, complaints, gripes and compliments to: Dr.John Martin Jr., President / Editor, 2180 Tigertail Ave., Miami, FL 33133 USA. phone: 305-858-6361.

TRIVIN MAKES IT SEVEN STRAIGHT

It wasn't easy. In the toughest battle of his indoor career, Wayne Trivin prevailed for his SEVENTH STATE CHAMPIONSHIP . Wayne won by a mere 3 points over runner-up John Barker and 6 other pursuers. Interest ran high the entire 25th season with Wayne way back in 4th place most of the year since he had missed the first meet. Although John Barker was three points behind he gave it a great try and won the Dime Scale, Embryo Endurance, and Bostonian events. Sidney Gilbert was 3rd overall, while placing in the top three in 9 events. Newt Bollinger came on strong late in the year and won Peanut Scale,Peanut mass launch, and Legal Eagle. Veteran Dick Obarski won four individual titles with first place wins in FAC No-Cal,Easy B,Mini Stick, and Penny Plane. He was also first in Legal Eagle at the Johnson City Nats with a record Performance. Ric Choate, Don Brimmer, and Doc Martin were next in overall standings withonly one point separating them. On these pages are all the points earned, and overall standings. MIAMA congratulates all the winners, and all those who flew with us this season. MacEntee and Martin spent a lot of time on these points. Come out to the annual awards dinner on Sat. night Oct. 26th at the 94TH Aero SQUADRON Near the USCG hangars in St. Pete/Clearwater Airport. COCKTAILS 6:30,Dinner 7:30, AWARDS 8:30. Order dinner from the menue.

IMPORTANT!

SECURITY HAS BEEN TIGHTENED !! If you are not SURE you are on the list of MIAMA members to be admitted at the MACDILL AFB gate call Col. Bill Criss 813-822-6394 or you may have trouble getting in. The ROW meet is THIS Sat.SEPT. 14 at Beach Club on MARINA DRIVE at first light.. After this is over it's back to Hangar 3 for a trim session. More flying again on Sunday SEPT. 15.

MIAMA MASS LAUNCH HALL OF FAME

COCONUT MASS LAUNCH

1.Ric Choate	24
2.Dave Linstrum	14
3.Doc Martin	12
4.W.Schlesinger	9
5.Geo. Nunez	4

FLYING ACES MASS LAUNCH

1.Doc Martin	19
2.Walt Schlesinger	12
3.Wayne Trivin	11
4.George Nunez	5
4.Sidney Gilbert	5
6..N. Bollinger	4
6.Rich MacEntee	4
6.Millard Wells	4
6.Dave Linstrum	4
10.Ric Choate	2
10.Dale Hogue	2

PEANUT MASS LAUNCH

1.Newt Bollinger	44
2. Ric Choate	43
3.Sidney Gilbert	33
4. Walt Schlesinger	20
5.Rich MacEntee	16
6.Dave Linstrum	13
7.Doc Martin	11
8.Bill Criss	10
9.Charles Nelson	8
10.Trivin	7
10.Dale Hogue	7
12. Don Brimmer	6
13. Steve Borona	5
13.Millard Wells	5
15.Dick Hardcastle	4
15 Jake Larson	4
17.Carl Hedley	3
17.Dustin Remsen	3
19.CHARLIE JOHNSON	1

MIAMA HALL OF FAME 25TH SEASON (2)

MIAMA TOP 15 OVERALL

1. WAYNE TRIVIN (Drop #7) 152
2. JOHN BARKER (Drop 6 & 7) 149
3. * SIDNEY GILBERT (6&7) 135
4. * Newt Bollinger (Dr. 6&7) 128
5. * Dick Obarski (Dr. 6&7) 124
6. * Ric Choate (Drop 4,7) 105
7. Don Brimmer 104
8. * Doc Martin (Drop 2 & 7) 103
9. * Dave Linstrum (3&6) 80
10. Carl Hedley 47
11. Charles Johnson 45
12. * Walt Schlesinger (Dr. 4, 7) 43
13. Geo. Nunez 30
14. Charles Nelson (Drop #3 24)
15. Jake Larson 18

COCONUT SCALE EVENT

1. Ric Choate 20
2. Dave Linstrum 14
3. Doc Martin 9
4. Walt Schlesinger 5

MIAMA PISTACHIO SCALE EVENT

1. Doc Martin 26
2. Ric Choate 24
3. Dave Linstrum TIE 16
3. Sidney Gilbert TIE 16
5. Don Brimmer 14
6. Walt Schlesinger 5

MIAMA PISTACHIO MODEL OF A MODEL

1. Charlie Johnson 16
2. Sidney Gilbert 15
3. Dave Linstrum TIE 14
3. Don Brimmer TIE 14
5. Walt Schlesinger 4

FLYING ACES EMBRYO ENDURANCE

1. John Barker 24
2. Wayne Trivin 21
3. Sidney Gilbert 13
4. Newt Bollinger 12
5. Don Brimmer 11
6. Carl Hedley 10
7. W. Schlesinger Tie 4
7. Earl Thomas Yie 4

AMA CATAPULT GLIDER

1. Wayne Trivin 17
2. Don Brimmer 15
3. Charles Nelson 7
4. Carl Hedley 6
5. M. Chas. Johnson 3
6. N. Bollinger 2
6. TIE W. Schlesinger 2

AMA PEANUT SCALE

1. Newt Bollinger 32
2. Sidney Gilbert 30
3. Don Brimmer 23
4. Doc Martin 21
5. Ric Choate 17
6. Geo. Nunez 16
7. Wayne Trivin 14
8. W. Schlesinger 12
9. Jake Larson 8
10. Millard Wells 6
11. Earl Thomas 5
12. Chas. Nelson 4
13. Zack Remsen 3
14. Dustin Remsen 2

FLYING ACES SCALE

1. 1. Doc Martin 24
2. Don Brimmer 16
3. Sidney Gilbert 13
3. TIE W. Trivin 13
5. Geo. Nunez 12
6. Ric Choate 10
7. W. Schlesinger 6
8. Jake Larson 5

FLYING ACES NO-CAL

1. Dick Obarski 36
2. Wayne Trivin 30
3. Sid Gilbert 24
4. N. Bollinger 23
5. Don Brimmer 11
6 W. Schlesinger 10
6. TIE C. Hedley 10
6. J. TIE Voorhees 10
9. Joe Nuszer 9
10. Chas. Johnson 6
11. Tom McCoy 4
12. Dave Linstrum 3

AMA EASY B

1. Dick Obarski 11
2. John Barker 6
3. D. Hardcastle 5
3. TIE C. Johnson 5
5. Chas. Nelson 4
5. TIE Roy Ehite 4
7. W. VanGorder 2

MINI STICK

1. Dick Obarski 16
2. J. Barker 11
3. Chas. Johnson 7
4. W. VanGorder 5
5. Bob Eberle 4
6. D. Hardcastle 3
7. Roy White 1

MIAMA DIME SCALE

1. John Barker 44
2. Ric Choate 33
3. Sid Gilbert 27
4. Doc Martin 23
5. Dick Obarski 20
6. Don Brimmer 17
7. D. Linstrum TIE 17
8. Chas. Johnson 13
9. Wayne Trivin 14
10. W. Schlesinger 10
11. Carl Hedley 9
12. N. Bollinger 2

AMA BOSTONIAN

1. John Barker 35
2. Wayne Trivin 30
3. Sid Gilbert 24
4. N. Bollinger 18
5. Don Brimmer 14
6. 6. Carl Hedley 12
7. 7. Dick Obarski 11
8. 8. W. Schlesinger 6
9. Jake Larson 3

MIAMA LEGAL EAGLE

1. N. Bollinger 41
2. W. Trivin 34
3. John Barker 30
4. D. Brimmer TIE 19
4. S. Gilbert TIE 19
6. D. Obarski 18
7. Dave Linstrum 13
8. C. Hedley TIE 9
8. Geo. Nunez TIE 9
10. Chas. Nelson 6
11. W. Schlesinger 3
12. Dick Remsen 2

AMA LIMITED PENNY

1. D. Obarski 13
2. J. Barker 11
3. Ward Riffe TIE 5
3. W. Trivin TIE 5
5. W. VanGorder 4
6. 6. W. Everson TIE 3
6. W. Carney TIE
8. N Bollinger 2
9. B. LeBlanc 1
9. J. Voorhees 1

* FLEW IN ALL SEVEN MEETS



(3)

FROM ENGLAND'S SAM 1066 CLARION

IN MY WORKSHOP

Grant Carson

WHO GOT IT FROM SOMEWHERE ELSE

Dihedral measurement: In my workshop, there are four increments. From least to most, they are: the height of a small dope bottle lying flat, the height of a small dope bottle on its side, the height of a small dope bottle standing upright, and the height of a big dope bottle. Anyone who needs a more incremental system is pretentious.

Weight of balsa: In my workshop, there are three weights. There is that so stiff that it can't be cut with a razor knife. When I find that kind, I use it for shims to level furniture. There is that so light that it tears with the blade of a used razor knife, and one has to use a new blade. That's the best stuff. And then there's the rest, which is most of what I have.

Size of balsa sticks: In my workshop, 3/32 square is the universal size. Anything smaller, I put my fingers through the structure several times before it's finished. Anything larger, I can glue some 3/32 together. Why buy odd sizes?

Size of working surface: In my workshop, a one foot square area. That's not what I would prefer, but the way Fate has decreed. If I'm about to build a big model, I clear my workbench. But within an hour of starting, the workbench is so littered with tools, dope bottles, beer cans, and so on, there I am again working in a one foot square area.

Rate of building: In my workshop is a variable, depending upon whether there is a Spaghetti Western, Arnold Swartzenegger, or Australian Road Warrior movie on the tube. If I removed the TV, I would build a lot more, but what's the point? I already have the garage ceiling filled with dogs that don't have the grace to fly away.

Length of sticks cut to fit: In my workshop, there is only one length, but two approaches to achieving it. The first is to cut the piece too short at the outset. The second is to cut the stick too long and then sand it too short. With either approach, the length of a stick cut to fit in my shop is too short.

Gluing with cyanoacrylate: In my workshop, I'm safe if I glue parts pinned to the building board. But if I try to glue parts held in my hand, there are two possible outcomes. One is my fingers glued together. The other is my fingers glued to the airplane. In the latter case, I usually destroy a goodly piece of the airplane getting my fingers free. I consider the result skillful if only my fingers are glued together.

Keeping CyA from clogging in the tube: In my workshop, I have followed a dozen tips concerning how to keep CyA from clogging in the tube, but I've never managed to completely empty a bottle, except for the time that I damned well was going to get that last bit out, and I did, all at once in the middle of the building project.

The social aspects of my workshop: In my workshop, I am King! I can escape my responsibilities and do un-social things, like watching an Australian Road Warrior movie while I glue myself together. Except that my family uses my workbench for putting away anything that needs putting away in the garage, because that one foot square area is the only free horizontal space in the garage. And, except that we installed an intercom (bad idea). Ah, me! Well, at least in my workshop I am king when I've cleared the rubbish from my one foot square space and the family is asleep. Then I can watch an Australian Road Warrior movie and glue myself together. Then life is sweet!

MIAMA COMPETITION RULES: (4)

We currently fly 7 indoor meets a season from October to May. We have 14 scored events, and three Mass Launch events per meet. For Overall points for the State Championship. Points are totaled each meet, and the best 5 meets are used to figure scores. We count the best 5 events of these 5 meets for overall point score. For event standings we count every event you fly in these 5 meets. No points are awarded for Mass Launch events for overall score.

BOSTONIAN, PENNY PLANE, CATAPULT GLIDER, MINI-STICK ANDPEANUT are all AMA events so I refer you to the AMA rule book
COCONUT, PISTACHIO, PISTACH. MODEL OF A MODEL, LEGAL EAGLE,,
DIME SCALE are MIAMA events.
EMBRYO, NO-CAL, FAC SCALE, AND FAC MASS LAUNCH are Flying Aces events

MASS LAUNCH:COCONUT MASS LAUNCH IS A ONE TIME DEAL ROG and last man down wins Proxy flying is allowed. Flown Sunday at 2:00
FLYING ACES SCALE M.L.:Flown to FAC rules. Flown Sat. at 5 Broken motor- you're out. Repairs- none allowed. No holding up launch time. Ideally flown in 4 rounds depending on number of contestants. Must have 50 FAC scale points Landing gear may be in up position. No foam flying surfaces. All sizes OK.
AMA Peanut- H.L.: Flown in rounds, must have L.G. Flown Sat. at 2:00

MINI-STICK, EASY-B, PENNY PLANES, NO-CAL,COCONUT (ROG), all best flight of 5 flights. → TOTAL OF 3 OF 4 OFFICIAL FLIGHTS.
LEGAL EAGLE, EMBRYO ENDURANCE: Total of ONLY 3 flights,ROG. Less than 20 sec. is an Attempt. Re-enter for $1.00 if you can do better.
DIME SCALE:H.L. total of 3 best of unlimited flights plus bonus points for type of plane.
PISTACHIO,GLIDER: Best 2 of 9 flights. PEANUT: Same but 10 sec bonus ROG.
BOSTONIAN: Best 2 of 5 flights ROG times charisma factor.

BOSTONIAN NOTICE: . When I CD a meet in the future there is a MAX CHARISMA I'm applying to Bostonians. As you know you can get up to 20% added to your flight time according to CHARISMA. I don't find high wing monoplanes charismatic,particularly the flying flounder type that dominates all competition,hence,from me,the MAX CHARISMA will be: High wing mono; 5%, High wing mono with fuselage on it's side 3%, Recognizable simulation of an actual aircraft 12%, Biplane 15%, Triplane or any complex airframe 20%. I doubt this will encourage innovation but it's a try on my part.

NO-CALNOTICE: Certain GROSS exagerations will not be eligible.Namely motor sticks or tubes that protrude well beyond the nose outline as in several Farman Postales, Turbo Porters, and a particularly ugly Lacey. . Also stabs that look like another wing. "Recognizable' will be applied better than in the past.

(5)

DIME SCALE RULES MIAMA

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	.....40 Points

FOR COMPLETE FAC RULES SEND $2.00 & SASE TO LIN REICHEL 3301 CINDY LA. ERIE, PA. 16506. SEND AN EXTRA 1.50 FOR THE FAC NEWSLETTER - GREAT!

MIAMA INDOOR MODS TO FAC EVENTS:
1. NO-CAL MIN. WT. 6.2gm
2. EMBRYO MIN. WT. 10gm

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"

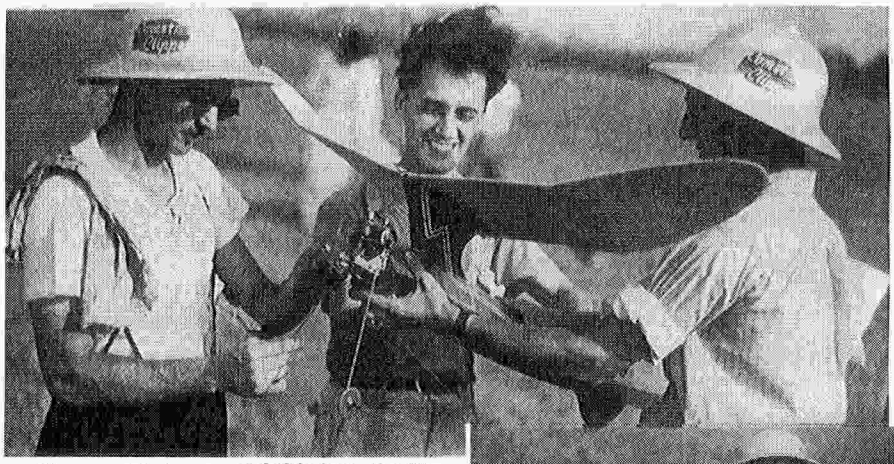
Smallest wood size to be 1/16 square.
Fuselage volume must contain a cube 1 X 1½ X 3 inches.
Fuselage must have a cabin or open cockpit with a raised windshield of at least 30°. Cockpit must be actually open, with a headrest or canopy.
Flight surfaces; Leading and trailing edges cannot parallel each other.
Tip outlines must have no straight lines except for stabilizer where a twin 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 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 H 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.

FROM ALEX IMRIE'S COLUMN IN MODELLER AERO →

OUR BOY DICK OBARSKI 58 YEARS AGO!



Above: We have used this fine Joe Ott photo before and make no excuse for using it again. Left to right: Frank Nekimken, Carl Goldberg and Dick Obarski with the latter's diamond fuselage Zipper at the Midwestern States Contest on 4 August 1938.



Dick Obarski with his Baby Cyclone powered prototype Zipper, his first power model finished on the morning of the competition which it won - the first of the Zipper's successes.

The original Dime Scale rules

Jack Fike, the proprietor of Scale Flight Model Airplane Co., 1219 S Washington St., Bloomington, IN 47401, was very interested in our discussion of the divergent Dime Scale rules now being promulgated by at least two different entities. Says Jack, "I am the originator of 'Dime Scale' and here are the original rules."

1. The model kit had to sell for 10 cents in the '30s and '40s.
2. The model must be built of the same size wood shown on the plans—or can be larger, but not smaller.
3. No laminated tips or outlines.
4. Wing can be single or double covered.
5. Wing spar may be moved to the top of wing rib.
6. Japanese tissue covering only. No condenser paper or film.
7. Tail may be enlarged.
8. Kit plan must be shown for judging only. No three-view required.
9. Must use same size wheels as plan calls for.
10. Stringer and tissue may be used instead of "stiff paper" covering on noses and turtle decks.
11. Any prop size.
12. Rear peg may be relocated.
13. Nose block may be changed.

In closing his letter to me, Jack was fairly definitive about how the event came to be as he said, "I thought of 'Dime Scale' and these rules so I could sell my reproduction of 10-cent kits in 1977." So much for altruism.

PISTACHIO POSTAL INTER-GNATS

~ PLEASE COPY, OTHER CLUBS ~

After 13 years of PROXY contests we're going to make it a LOT easier. Starting now and over Jan. 19, 1997. Pistachio rules in this issue. Fly indoors and send in your best time. . Send a photo of your entry, and it's weight without rubber. We plan to have a photo page of all the entries. Get going on those pistachios, Pilots. On the back of your photo: your name, address model, weight, and time..Lets go!

WELLS STUDIO GALLERY

POST OFFICE BOX 152

ISLAMORADA, FLORIDA 33036

PHONE: 305 852-4783

10th ANNUAL FLORIDA KEYS R.O.W. (Rise off water) MEET 1996

Saturday, July 27th - First Light to 10:AM

This years Millard Wells, R.O.W. Meet was attended by 12 Flyers and families. Seventeen airplanes with pontoons were entered - all FAC types. Pistachio - P.Nut and Coconut Scale.

Scale Judging: Was done after the fact. Rank Style - 1 to total number of entries - example: If there are 10 entries the highest scale score was 10 - etc...
Planes were judged only after successful flights. No R.O.W. - NO SCORE.

Flight Judging: Total of 2 best times R.O.W. Chrisma Points were given on take-off pattern Olympic style. Judges decision final. Assisted take-offs DISQUALIFIED - NO SCORE.

Upon arrival at the shallow F.Y.H. Bay we were greeted with 20 MPH winds.

All sorts of take-off patterns were tried - downwind, upwind, Lea wind, shallow water into shore seemed to be about the best of all winds. Once take-off was achieved and the model gained altitude it was carried down wind and out to deep water where it was rescued by Joe Miklas and Shelly Smith in their fast Bone fish skiff.

The most remarkable thing about this year's meet was 17 take-offs in 15 to 20 MPH winds with times from 1:24 to 20 seconds. R.O.W. in itself a major accomplishment. Many flights were trashed by high winds after take-off. "Rotation" was the word of the day... long flat rear float tips prohibit the aircraft from gaining take-off speed! See diagrams much published in the "Hanger Pilot".

Among our special guests were Charlie Slater and Karin Kelts. Charlie was a pioneer contestant with the Round the World Flyer Bi-planes way back when almost no one got off the water.

First time, in person, VTO Linstrum had three successful take-offs. Carl Hedley had two R.O.W.s. John (Doc) Martin wowed everyone with three separate R.O.W.s. Daughter, Lila came along as crew-chief. Don Brimer and Chief Hydro-Mechanic, Walt Schlessinger stole the show with four R.O.W.s.

Big flight of the day was Juergen Kortenbach with a Turbo-Porter. Very high climb out and then downwind and lost out of sight at 1.24 seconds. Later the Coconut Porter was found mangled in the Mangroves - GREAT FLIGHT!! - BAD LANDING!!

The most important parameter of the four is the last one, which measures the torque corresponding to the cruise portion of a flight. Some batches have high maximum torque when fully wound, but low cruise torque. It occurred to me that this would be a quick way to select rubber size for a given airplane – see how it flies with the motor backed down to 50% of max winds. If it sinks go to a stronger motor.

TWO NEW RUBBER TESTS: TRY 'EM

FROM HANK COLIE VIA MCCOY REC'D 9/28/96 (8) RUD

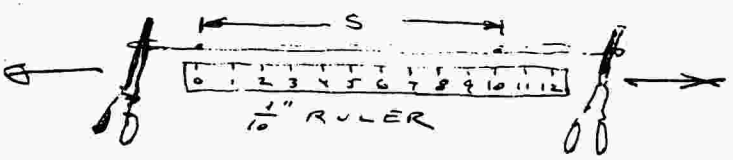
QUICK RUBBER TEST

EQUIPMENT:
- 2 FORCEPS
- GRAM SCALE
- 1/10" RULER

1. CUT 12 INCH SAMPLE
2. MARK OFF 1 INCH WITH PEN

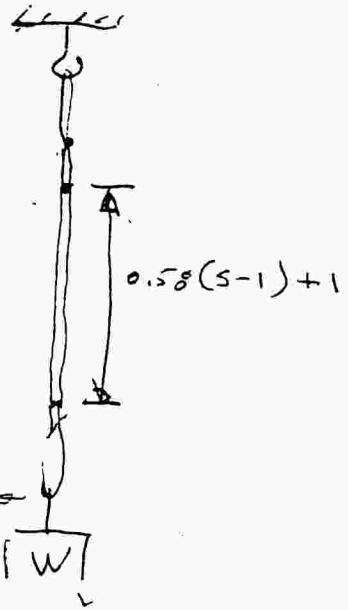


3. GRIP FREE ENDS WITH FORCEPS, ROLL UP END ON FORCEPS, AND PULL HARD 2 TO 3 TIMES TO FIND MAXIMUM STRETCH



FOR TAN II S = 10 TO 12

4. TIE LOOPS IN ENDS AND LOAD RUBBER TILL STRETCH IS $0.58(S-1)+1$



5. WEIGH SAMPLE (wt.) WEIGH W

6. ENERGY = $\frac{W(S-1)}{wt}$ V

NOTE: W & wt MUST BE IN SAME UNITS GRAMS OR OUNCES

TYPICAL NUMBERS

wt = 1.0 gm 10X

W = 537 gm

$E = \frac{(537)(10-1)}{} = 4647$

wt = WEIGHT OF 12" SAMPLE OF RUBBER

ENERGY SHOULD BE BETWEEN 3800 & 4500

FROM BOING HAWKS

Rubber testing – John Leuderman emphasized the need to test different batches of rubber, as well as different samples from the same batch, if you are trying for maximum performance. For each sample to be tested he cuts a .040 strip and ties a 3 inch loop. He records four parameters:

1) the maximum stretched length,
2) the maximum number of turns,
3) the torque at max turns, and
4) the torque when the sample is unwound to one-half max turns.

These parameters are measured on two successive days, and compared in order to select the best rubber batch. The most important parameter of the four is the last one, which measures the torque corresponding to the cruise portion of a flight. Some batches have high maximum torque when fully wound, but low cruise torque. It occurred to me that this would be a quick way to select rubber size for a given airplane – see how it flies with the motor backed down to 50% of max winds. If it sinks go to a stronger motor.

(9)

FASHION NOTE - WHAT THE WELL DRESSED MIAMA / FAC MODELER IS WEARING THIS FALL



YOUR STANDARD T
$15 POST PAID



← 3 3/4" →

CLASSY EMBROIDERED JACKET PATCH.
$8.50 POST PAID



LONG SLEEVE T-SHIRT
HANES $20.00 P.P.

The standard T shirt is all yellow with the Logo in dark brown/
The Jacket patch is gold with embroydered brown lettering/
This is suitable for sports coat pockets, shoulder of jackets, etc.
The long sleeve T Shirt is white with a pocket, and the gold and brown Jacket patch on the pocket. Fine for outdoor flying without sun screen on arms, and for evening wear under sports coat.
ALL SHIRTS X-LARGE ONLY...SHOW YOUR CLUB COLORS !!

SEND ORDERS TO MIAMA HQ. OVERSEAS - ADD $3.00.

WELLS ROW MEET RESULTS

HERE'S HOW THEY PLACED:

			SCORE
1 - Juergen	Turbo-Porter	1ST COCONUT	99.0
2 - Linstrum	Super Cub	1ST FAC	46.5
3 - G. Nunez, Sr.	Stinson SR.5		43.8
4 - Don Brimer	J-3 Cub		41.9
5 - G. Nunez, Sr.	Canuck		36.0
6 - Doc Martin	Dornier FAC		34.5
7 - Doc Martin	Messer M-203		31.5
8 - Rick MacEntee	Turbo Beaver		28.0
9 - Doc Martin	Dornier	Falke 1ST PEANUT	27.8
10 - Carl Hedley	Super Cub		26.9
11 - Robert Eskridge	No Class (Rubber Piper Playboy Gas Job)		22.0

Juergen won the 10th Annual Trophy Watercolor painting of the 'Flight Bay" by C.D. Millard Wells, A.W.S.

The always gracious Plantation Yacht Harbor served Omelets to order and Waffles with all the fixings for the Awards Breakfast.

PISTACHIO : MIAMA (10)

Here are the MIAMA PISTACHIO rules. They try to encourage the broadest field of tiny scale models possible. Tow line scale gliders, catapult launched or propeller powered jets are all possible in addition to conventional rubber power, and CO2 or electricpower. The sky's the limit. No weight limit. No lighter than air.

GENERAL: Recognizable model of a full scale,man carrying,aircraft. Exception: Model of a model class which is a pistachio sized model of an outdoor free flight model with a built up (Not stick or profile) fuselage.
SIZE: Built to either a 8 inch span or a 6inch overall length (Excluding prop)

CONSTRUCTION: No restrictions on materials, type construction, or power. Get thinking.

SCALE JUDGING: Mooney type ranking points based on realism, color and marking, complexity of type, workmanship, and quality of documentation.) One (or preferably more than one) judge ranks the field of entries from best to least. Best gets 1 point, second gets 2 and so on. Judges can also enter contest.Any number of entries are allowed, but only best entry countsModel may be reentered.

DOCUMENTS: Full quality of documentation consideration given to entry who supplies a 3-view and at least one photo. Color documentationshould ideally be a color photo, but if no photo a color reference should be included.

FLYING: Best 2 of 9 flights, hand launched. Ranking points awarded from best to least as in scale judging.

FINAL STANDING: Low point total of scale and flight points. Best SCALE SCORE IS tie breaker.

CATAGORIES: Model of a Model..see "General". RIDOTTO: The smaller the better. Awarded to the smallest span model to achieve a 30 second flight.

COCONUT:

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.

ABOVE RULES USED FOR ALL MIAMA EVENTS + JOHNSON CITY GRAND PRIX

SEND FOR AMA RULES BOOKLET FOR REMAINING EVENTS. THE PEANUT SCALE SCORE SHEET IS REPRODUCED ON NEXT PAGE BECAUSE IT WAS LEFT OUT OF THE 1996 AMA RULE BOOK.

THIS SAT. SEPT. 14 ROW MEET MACDILL 7:00AM FAC ROW PEANUT JUMBO FAC SCALE

MORE REQUESTS FOR MIAMA CONTESTANTS IN THE NEW SEASON:
Continue to be courteous by leaving floor after you launch,being very careful when using your balloon, and only launch into a clear area on the floor. Remember , many events MUST ROG.
The CD can't possibly process 20 contestant's for 14 events. Make every effort to conform to rules, areas,weights, etc.
VARY TIMERS!! Please don't use the same timer all the time. Use Criss, Eileen Gilbert, Doc, Choate, MacEntee, VTO. Obarski,Brimmer,Schlesinger. Eschew self-timing. OLD SCALE MODELS ARE REJUDGED EACH SEASON.

(11)

MEET I
OCT 26,27
MAC DILL
—
AWARDS
DINNER
94TH
AERO
SQDN.
OCT 26
6:30
Y'ALL
COME!

GUEST
SPEAKER
DICK
OBARSKI

PEANUT SCALE
Events 501, 505

SCORE SHEET

NAME _____ AMA NO. _____

ADDRESS _____

TYPE OF AIRCRAFT _____

Scale Score Judging Criteria

A. Workmanship

Great	5.0
Good	4.5
Better than average	4.0
Average	3.5
Below average	3.0

B. Authentic Color and Markings

Excellent	3
Good	2
Lax	1
No 3-view or photo	0

C. Details and Accessories

All there	3
Mostly there	2
A few there	1
No 3-view or photo	0

D. Flying Surfaces

All double-covered	3
Made from solid sheet	1
Any single-covered surface not on original	0

E. Type Covering

Clear or color-doped tissue	4
Undoped tissue	3
Colored condenser paper	2
Uncolored condenser paper or Microlite	0

Microfilm prohibited

F. Landing Gear

Scale length	3
Enlarged no more than 1/4"	2
Enlarged more than 1/4" or no 3-view	1

G. Dihedral

Scale	3
Slight increase	2
Gross increase	1
No 3-view	0

H. Outline of Wings, Stabilizer, and Vertical Tail

Scale	3
Enlarged	2
No 3-view	0

I. Bonus Points for Type of Aircraft

Low wing or canard	1
Biplane	2
More than one working propeller	3
Flying boat or floats	3
More than two wings	4
Helicopter or autogiro	5

J. Minus Points. Deviations from scale to aid flying performance, i.e., lengthening nose or tail moments, moving wing back, grossly simplifying fuselage cross section or outline, leaving off struts or flying wires, and all other nonscale aids. Each -2

Scale Score

Item B through I, minus J _____ x Workmanship _____ = Total Scale Score _____

Flying Section

1	2	3	4	5	6	7	8	9

Total Scale Score _____

Average of two best flights (May not exceed scale score) _____

Total Points _____

Rev. 6/90 SC501,505/NCR2

LOCAL + DADE COUNTY FLYING
MIAMI - DADE SOUTH COLLEGE
SEPT 22 AND OCT 13
9 TO 3

(12)

CAMPBELL MODEL SUPPLY CO.

37742 CARSON STREET, FARMINGTON HILLS, MICHIGAN, 48331
TELEPHONE (810) 478-7846

PRESS RELEASE

"GLENN CAMPBELL OF CAMPBELL MODEL SUPPLY HAS RECENTLY ANNOUNCED SIGNIFICANT RESULTS FROM VARIOUS EXPERIMENTS USING A SMALL MABUCHI MOTOR TO POWER HIS INDOOR MODEL "TOMBOU"

THE AIRCRAFT FLOWN AT JOHNSON CITY,TENNESSEE,HAD A 17.5 INCH WINGSPAN AND WEIGHED APPROXIMATELY 15 GRAMS.EXPERIMENTS WERE CONDUCTED WITH BOTH CAPACITOR POWER AND SMALL NICAD BATTERIES.

WITH 3.8 to 1 GEARING AND DRIVING A 4 1/2 INCH PLASTIC PROP,THE PLANE WAS ABLE TO CONSISTANTLY TURN IN FLIGHT TIMES OF 1 MINUTE POWERED BY THE CAPACITOR.

AFTER SWITCHING TO A SMALL NICAD BATTERY AND NO OTHER MODIFICATION TO PLANE OR MOTOR,3 MINUTE PLUS FLIGHTS WERE QUICKLY AND CONSISTANTLY ACHIEVED.THE LAST DAY OF TESTING BROUGHT A HIGH TIME OF 4 MINUTES AND 22 SECONDS!

CAMPBELL MODEL SUPPLY BELIEVES THAT WITH OPTIMIZATION OF THE MOTOR UNIT DESIGN,MORE EFFICIENT CHARGING,AND LIGHTER AIRFRAME WEIGHT,13-18 INCH WINGSPAN SCALE MODELS MAY TAKE TO THE AIR FOR EXTENDED DURATION.

CAMPBELL MODEL SUPPLY CURRENTLY OFFERS A NUMBER OF PRODUCTS TO INCLUDE THE UNION MODEL'S CONDENSER(CAPACITOR)PLANE FOR $29.95 PLUS $3.00 POSTAGE AND HANDLING,MOTOR UNIT AND CHARGER ONLY FOR $21.95 PLUS $2.00 POSTAGE AND HANDLING.FOR EXPERIMENTERS,THE MOTOR ALONE IS AVAILABLE FOR $4.95 PLUS $2.00 POSTAGE AND HANDLING.THESE UNITS ARE DIRECT DRIVE."

FROM BOING HAWKS

Stuck on Yourself

THE FOLKS at BeautiControl Cosmetics, a Texas mail-order house have a simple solution for clothes th won't stay put.

That solution comes in the form o Body Glue, a water-soluble adhesiv packaged in a roll-on applicator. If you bra strap insists on flopping down o your strapless dress won't behave, jus roll a little Body Glue onto your skin, si still for three minutes, and go out an face the world brimming with, uh, con fidence. According to the package, Body Glue is ideal for use on shoulder pads collars, cuffs, bustiers, wigs and toupees. bathing-suit bottoms and even earrings.

For those who truly want to bond with their wardrobes, here's a way to be tacky in two ways at once.

–PAUL LUKAS, *New York* magazine

CAN YOU GET INTO MACDILL AFB?

TIGHTENED SECURITY!

SEE PAGE ONE

ARPA pursues pocket-sized pilotless vehicles

BY STACEY EVERS
WASHINGTON DC

A pocket-sized unmanned aircraft could be built under proposals by the Pentagon's Advanced Research Project Agency (ARPA).

The development of the Micro Unmanned Aerial Vehicle would be a technological feat so radical that it would push the state of the art in flight control, navigation, communications and propulsion.

The US Department of Defense could use it for missions such as surveillance in extraordinary situations.

The tiny drones, no more than 15 cm in span or length, could scout inside buildings, for example, collect biological-chemical samples, or attach themselves to structures and equipment to act as listening or video posts.

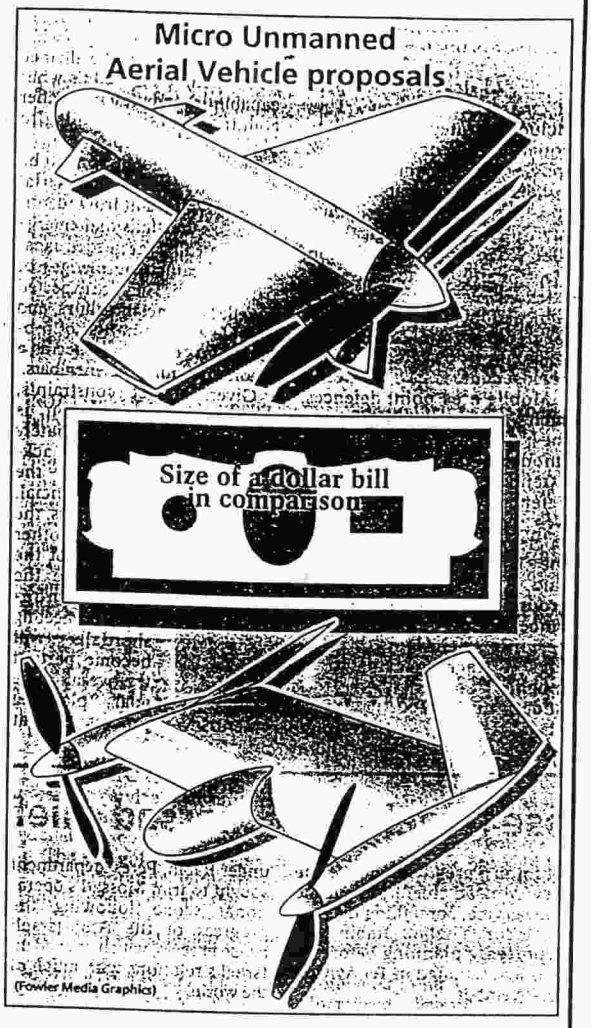
No specific application has drawn engineers to the project, however. Confident that technologies like microsensors and micro-electromechanical systems will continue being developed for other programmes, their primary aim is to make a small-scale aircraft fly.

"We don't know how to mechanize flight at those scales," Col Mike Francis, programme manager of ARPA's Advanced Systems Technology Office, said. "We're at the edge of something that is so different it may be enough to not answer the question of what is it going to do."

Last year a study workshop concluded that it would be possible to build a hand-sized UAV that could fly for an hour and travel 16 km. ARPA is seeking FY96 funds for a more formal study and plans a conference later this year.

Design integration, flight control and navigation pose the toughest challenges. Today's smallest GPS antenna would be too big to fit on a Micro UAV, and a gust of wind could roll the so-called "airplane on a [computer] chip" onto its back.

Communications, power and propulsion will also be difficult issues, but their miniaturization is further advanced. Much work has been done to miniaturize battery technology, and a microturbine engine has been developed. "The way it was put to me is that if I have 1400 [microturbine engines] on my kid's skateboard, he could actually leave the surface," Col Francis said.



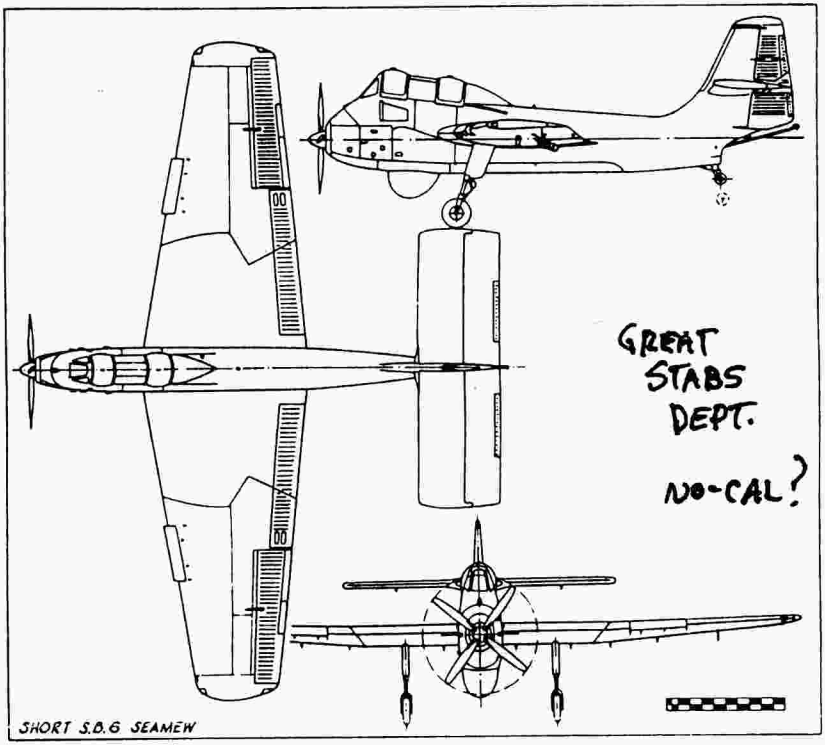
ARPA picked the dimension of 15 cm to stress technology, knowing that this size "represents the scale at which nature starts to operate differently in the air. In very large scales – the typical ones we operate in with manned aircraft – the air around us is predominantly turbulent. There are classes of insects for which the flow is never turbulent," said Col Francis.

Here are the results I missed from the AMA/USIC 1996 Nationals:

MIAMA Dime Scale				
Pl	Name	Model	Bonus	Bst 3 of 5
1.	R. Miller	Comet Taylorcraft 20"		5.53
2.	Doc Martin	Comet Arado 16"	20	5.35
3.	Jim Grant	Puss Moth 16"		4.56
4.	J. Koptonak	Comet Great Lakes 16"	30	4.25
5.	J. Blair	Comet Stinson 16"		4.05

MIAMA Legal Eagle			
Pl	Name	Model	Tot. 3 flts
1.	Dick Obarski	Simpleagle	17.51
2.	Ted Seaver	Double Eagle	16.23
3.	S. Gilbert	White Bronco	8.49
4.	Don Brimmer	Mod. Paper Chase	5.6

SOME BELATED JOHNSON CITY RESULTS FROM DAN O'GRADY SAM 86



Span 55 ft (16·75 m); length 41 ft (12·5 m); area 550 sq ft (59·2 m²); empty weight 9,795 lb (4,440 kg); all-up weight (normal) 14,400 lb (6,532 kg), (overload) 15,000 lb (6,804 kg); max speed 235 mph (378 km/h); range 750 miles (1,200 km).

Chevy Pilot Nominated For 'Darwin Award' (14)

FROM WINDING STOOGE

You all know about the Darwin Awards - It's an annual honor given to the person who did the gene pool the biggest service by killing themselves in the most extraordinarily stupid way. Last year's winner was the fellow who was killed by a Coke machine which toppled over on top of him as he was attempting to tip a free soda out of it. And this year's nominee is ... The Arizona Highway Patrol came upon a pile of smoldering metal embedded into the side of a cliff rising above the road at the apex of a curve. The wreckage resembled the site of an airplane crash, but it was a car. The type of car was unidentifiable at the scene. The lab finally figured out what it was and what had happened. It seems that a guy had somehow gotten hold of a JATO unit (Jet Assisted Take Off - actually a solid fuel rocket) that is used to give heavy military transport planes an extra "push" for taking off from short airfields. He had driven his Chevy Impala out into the desert and found a long, straight stretch of road. Then he attached the JATO unit to his car, jumped in, got up some speed and fired off the JATO!The facts as best could be determined are that the operator of the 1967 Impala hit JATO ignition at a distance of approximately 3.0 miles from the crash site. This was established by the prominent scorched and melted asphalt at that location. The JATO, if operating properly, would have reached maximum thrust within five seconds, causing the Chevy to reach speeds well in excess of 350 mph and continuing at full power for an additional 20-25 seconds. The driver, soon to be pilot, most likely would have experienced G-forces usually reserved for dog-fighting F-14 jocks under full afterburners, basically causing him to become insignificant for the remainder of the event. However, the automobile remained on the straight highway for about 2.5 miles (15-20 seconds) before the driver applied and completely melted the brakes, blowing the tires and leaving thick rubber marks on the road surface, then becoming airborne for an additional 1.4 miles and impacting the cliff face at a height of 125 feet leaving a blackened crater three feet deep in the rock.

WHAT'S ON IN FREE FLIGHT??
SEPT. 14, MACDILL AFB FAC ROW meet and indoor pre-season trimm session. First light. Later, trim session in Hangar #3
SEPT. 15 MacDill More trimming at Hangar #3
Sept. 15. PALM BAY. Time Trials and JIMMY ALLEN MEET.
Oct. 6 Palm Bay Record Trials
SEPTEMBER 22 MIAMI/Dade South College MIAMA LOCAL TRIM SESSION 9 to 3
OCTOBER 11-16 US SAM CHAMPS. PENSACOLA,FL. 904-939-3354 FAC Mass :GOLDEN
OCTOBER 26,27 St. Pete Clearwater Airport. MIAMA MEET #1 USCG Hangar 9-5
OCTOBER 26,,94th Aero Squadron Restaurant. 6:30 MIAMA AWARDS DINNER
NOVEMBER 16,17 PALM BAY (Not sure of date) SAM 46 Fall Meet with lots of FAC events. Call CD Don Brimmer 813-525-6667 for details
OCTOBER 13. MIAMI/DADE SOUTH COLLEGE Another local MIAMA trim Session 9-3
NOVEMBER 23,24 MACDILL AFB. MIAMA INDOOR MEET #2 FAC Mass Launch WW I
DECEMBER 28,29 TAMPA. DELTA AIRLINE KOI Indoor MIAMA Meet #3. FAC M.L. Bipe
DEC. 28,29,30 KOI Outdoor Internationals
JAN. 19 Last Day for POSTAL PISTACHIO INTER-GNATS

THE HANGAR PILOT

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





Jim - What do I charge this to your Waterbreak?
Don

JIM MILLER
107 Lorelei Drive
Fayetteville, OH 451