THE HANGAR PILOT

THE MIAMI INDOOR AIRCRAFT MODEL MANU.

MIAMI, FLORIDA USA

ISSUE 71

MAY 1981

AMA CLUB 986



MIKE ARAK'S ANNUAL OUT-DOOR MEET & BAR-B-QUE - JULY 5 TAMAMI PARK !

(1)

THE HANGAR PILOT

(2)



Is published 8 (or 9) times a season by Miami Indoor Aircraft Model Association (MIAMA) AMA Club 986, the only active all-indoor club publication in the AMA. For $5.00 a year you will receive all 8 editions, and an additional $5.00 makes you a member of MIAMA (Indoor isn't for everyone!) Send contributions, letters, plans, 3-views, articles, gripes, and MONEY to: MIAMA Dr. John Martin 3327 Darwin St. Miami, Fla. 33133

Pres./Editor: Dr. John Martin Jr.
Secy./Illustrator-Reporter: Dave Linstrum
Peanuteer: Carl Hedley
Overseas Correspondant: Butch Hadland UK
Technical Articles: Bill Hiscock
Scale Judge: Dan Kilgore
Awards and Archives: Terry Rimert
Retrieval: Jim Stewart, DON BAL
Youth Activities: Mike Arak, and Ernie Clark

FREE FLIGHT FLYING SCHEDULE

MAY 17 - LAST INDOOR MEET 9 TO 5
M/D JR COLLEGE - DAVE LINSTRUM CD

MAY 23 - REBEL RALLY - FRANK CARNEY JAX 904-751-1364
SPECIAL EVENT - RUBBER WW II MASS LAUNCH.

JUNE 14 - MIAMA AWARDS DINNER - AMADOR RESTAURANT 420 FISHERMAN ST. OPA-LOCKA - CALL DR MARTIN 858-6363 FOR RESERV.

JUNE 20 - START INDOOR WEEK - WEST BADEN

JULY 5 ARAK'S OUTDOOR MEET - SEE COVER

MIAMA CLUB has a Dodge Van with only 2 seats, but with bags of room for model boxes and other passengers,. At present ROMAN SZYMULA will pilot it to West Baden, and he will very probably be accompanied by BUTCH HADLAND of England. Any other MIAMA members who would like to make the trip in the Club Van should contact 858-6363. All members who are flying to the meet should arrange to have their model boxes carried in the Van, and also arrange to have it meet you at the airport in Louisville for the 60 mile trip to West Baden. PLAN NOW, DON'T WAIT.

APRIL 12 MEET 7 M/D SOUTH

O.K. you guys, getting used to the low ceiling? My 14-Bis got murdered in the Badminton net, and lost the entire front plane (Box-kite). Walt Everson hung up everything he brought, and DON BAL set yet another Cat. I indoor HL Glider record!!! You should see the new glider. WOW! Huge...24" span, 4" chord, and a stab and rudder SMALLER than the Elliptic 70 that appeared in issue 69. It transitions from launch to glide attitude without the loss of altitude (Good trim according to Don). I swear it looks like it CLIMBS a little as it comes out of launch. Check those times: 37.4, and 38.3 in a 27 foot ceiling !! How good can you get?

MILLARD WELLS got some documentation this time for his prolific peanut factory, and did a lot better...only he got lost going to the post meet dinner and bull session...missed the turn.

ROMAN SZYMULA, who has been missing of late showed up to win Penny and easy B. He was looking for some competitition from Dick Obarski, who was not at meet 7. Can't we get together, guys?

DAVE HAGAN had considerable success this meet as his Old Timer Baby ROG was proxy flown by Doc Martin to a new State record of 5:59.7 which is pretty darn close to six minutes. Everson Flew Dave's Penny to 2nd place. Congratulations!!

A nother proxy...Bill Hiscock's foam BD-4 ended up in 8th place in peanut, our best attended event. It needs 1/8" rubber, pretty stiff.

Another glider note....one of the oldest records on the books was broken by JUNIOR FLYER DAVID BAL. Our Cat I indoor Jr. HL Glider Record was bested by young Dave. His 21.7, 21.7 set a new record . The old one was set out at the Dade Youth Fair Exibition Hall.

There was a "Battle of the Bands" Rock and Roll music session outside our meet on the campus all day. Dave Kiefer was very glad his wife, Muriel was NOT present and commented "Just give me one good mortar round". Old Doc has to admit that the music sounded really good when the gym doors were closed. Dave Linstrum was expected but never showed.

Young Susan Arak was back in action with entries in Easy B & Baby ROG

LAST MEET MAY 17

DAVE LINSTRUM C.D. M/D SOUTH

9 TO 5

③ RESULTS: MEET 7.

PEANUT SCALE EVENT:

1. John Martin 5 points(14 Bis 32.0) 1 static, 4 flight (35.0)(34.2)
2. Dave Kiefer 5 points(lacey 29.9) 3 static,2 flight (55.0)(52.1)
3. Carl Hedley 7 Points(Lacey 29.7) 4 Static,3 flight (50.0)(51.2)
   John Martin 9 Points(Dayton 27.5) 5 Static,4 flight (31.4)(34.0)
   Dave Kiefer 10 Pts. (Pitts 31.5) 2 Static,8 flight (24.2)(22.6)
4. Walt Everson 12 Pts. (Found 19.0) 11 Static,1 flight (1:09)(52.8)
5. Jim Stewart 14 Pts. (Eaglet 22.5) 8 static, 6 Flight (25.7)(29.5)
6. Bill Hiscock 15 Pts. (BD-4 22.0) 9 Static,7 flight (25.9)(26.5)
7. Millard Wells 16 Pts.(Waco E 25.7) 6 Static,10 Flight (15.0)(15.0)
   Millard Wells 19 Points (Andreason BA-7) (21.0) 10 Static, 9 Flite (22)(21.2)

AMA Scale: 1.Dave Kiefer Lacey M-10 80 Static,55.4 flight 135.4
2.John Martin Dayton 68 Static,36.0 Flight 104.0
3.Dick Kelso Cessna 68 Static, 20.1 Flight 88.1

OLD TIMER BABY ROG EVENT:
1.Dave Hagan 5:59.7 New Fla. Record. Proxy flown by Doc Martin ★
2.Walt Everson 4:45.3
3.John Martin 2:05
4. FIRST JUNIOR: Susan Arak :32

PENNY PLANE EVENT: 1.Roman Szymula 6:29.6
2.Dave Hagan 4:24.3
3.Carl Hedley 3:21
4.Walt Everson 2:17

EASY B EVENT: 1.Roman Szymula 9:09
2.Jim Stewart 5:30
3.Walt Everson 5:25.3
4.1st Junior :22 Susan Arak

3 NEW FLORIDA RECORDS ★

HL GLIDER EVENT: 1Don Bal (37.4)(38.3) NEW FLORIDA CAT I RECORD ★
2.Jim Stewart (22.0)(20.0) 42.0

★ JUNIOR: David Bal (21.7)(21.7) NEW FLORIDA CAT I JUNIOR RECORD

CLUB VAN TO WEST PALM BEACH

SHARE THE RIDE - SEE INSIDE FRONT COVER

ELLIPTIC '70' MC
&
A CURE FOR GIRDER FRIGHT

By: Don Bal

This version of the Elliptic glider series is designed for medium ceiling heights. A glider's particular weight, undercamber depth and launch velocity will determine its maxium launch height. The Elliptic '70' MC as shown on the next page with its 12.1 gm. weight and .064 in. undercamber depth has been launched to 60 foot heights. Throwing this glider to heights over 50 feet is quite strenuous because of its light weight and high drag from the deep undercamber and large wing area. To achieve launch heights in the 70 foot range, it is recommended that the weight and undercamber parameters be changed to 13.5 gm. and .050 in. respectively. Since the fuselage broke during a fierce launch, sending the glider immediately into the concrete floor demolishing it completely, it is suggested that the fuselage be constructed from stronger balsawood stock or reinforced with carbon fiber.

The Opa-Locka hangar is narrow for its 68 foot ceiling height. One can get girder fright from seeing how closely the girders stare at you. In trying to avoid them, I put a very tight turn pattern in the glide circle. By opening up this turn circle and precisely launching the glider, one would expect the glider's performance to improve.

My phobia of the girders munching on the helpless glider wings has caused me to think of ways of reinforcing the wing's leading edge without adding too much additional weight to the glider. The reinforcing technique I have discovered will cure the worst case of girder fright--glue bamboo and basswood to the wing's leading edge and your fears will be gone. These two materials are interdependent in this application: the bamboo has the hardness and basswood the mass. When combined they will have the strength to absorb the shock of a direct girder hit at launch speed. None of my glider wings have any nicks, not even the wing that was torn off from a high impact collision with a girder.

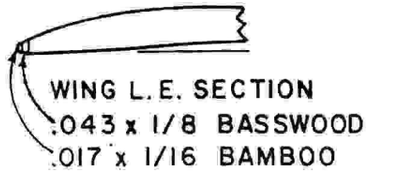
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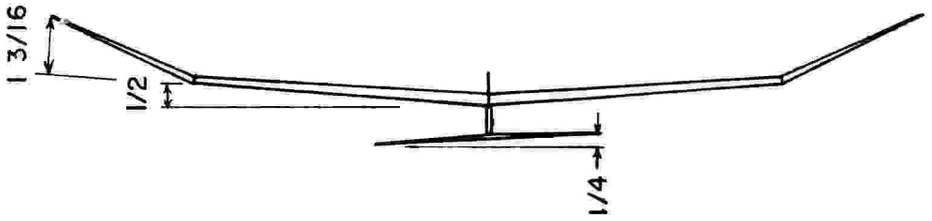
Elliptic '70' MC

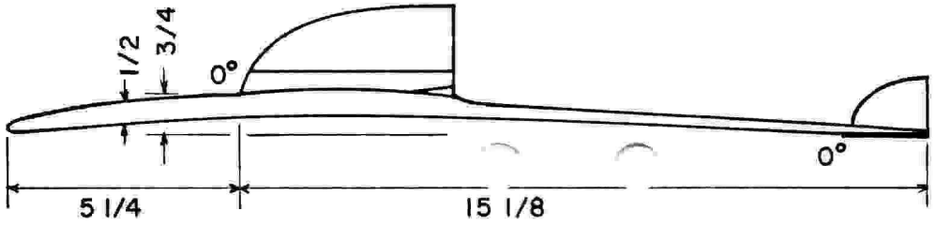
DESIGNED & DRAWN BY
DON BAL

FLORIDA STATE CAT. II IHLG RECORD

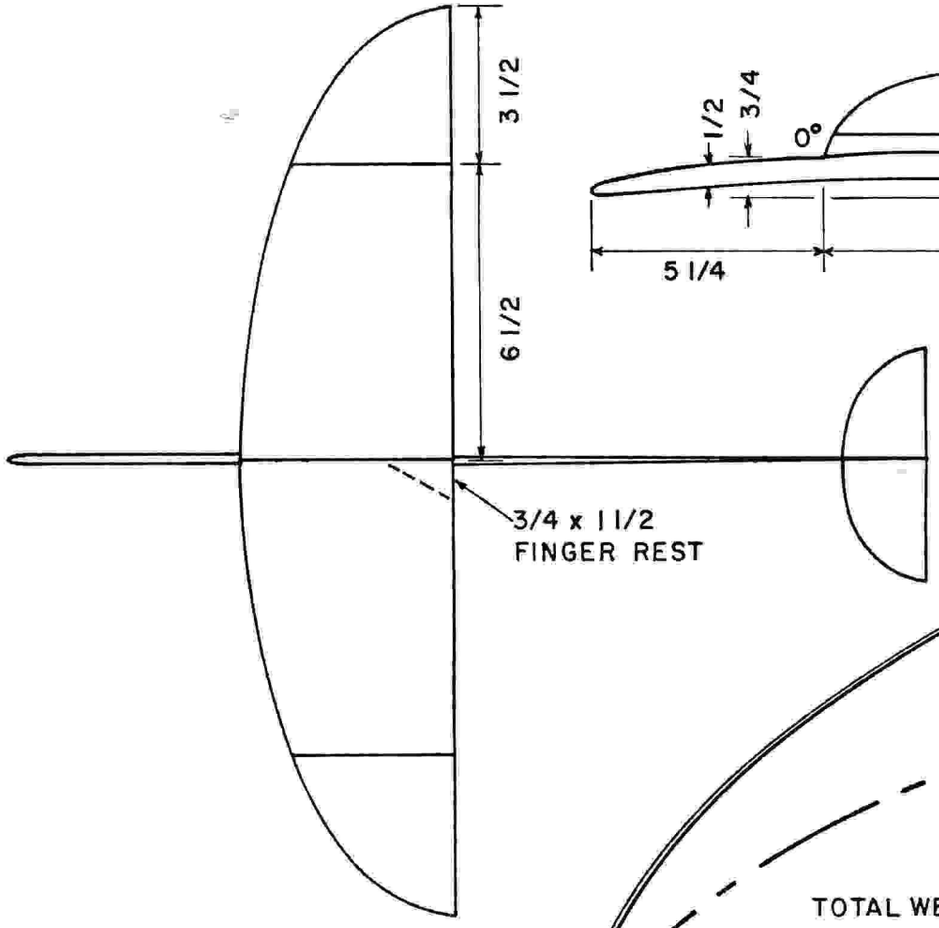
118.2 SEC. (59.3, 58.9) 1-4-81
CEILING HEIGHT – 68'





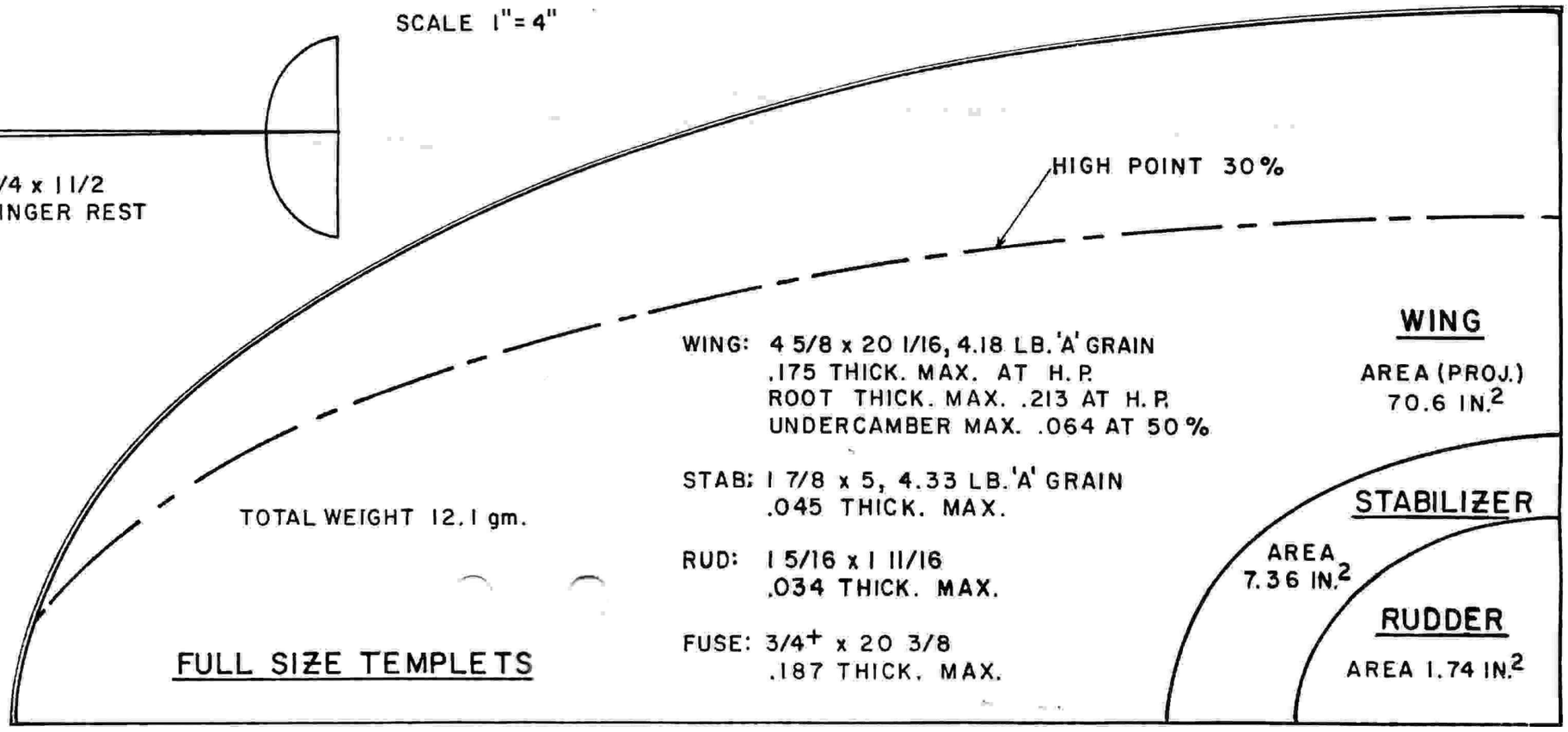


SCALE 1"=4"



LAUNCH – SLIGHT RIGHT
TURN – LEFT

ALL MEASUREMENTS
IN INCHES



TOTAL WEIGHT 12.1 gm.

FULL SIZE TEMPLETS

WING: 4 5/8 x 20 1/16, 4.18 LB. 'A' GRAIN
.175 THICK. MAX. AT H.P.
ROOT THICK. MAX. .213 AT H.P.
UNDERCAMBER MAX. .064 AT 50%

STAB: 1 7/8 x 5, 4.33 LB. 'A' GRAIN
.045 THICK. MAX.

RUD: 1 5/16 x 1 11/16
.034 THICK. MAX.

FUSE: 3/4+ x 20 3/8
.187 THICK. MAX.

WING
AREA (PROJ.)
70.6 IN.^{2}

STABILIZER
AREA
7.36 IN.^{2}

RUDDER
AREA 1.74 IN.^{2}

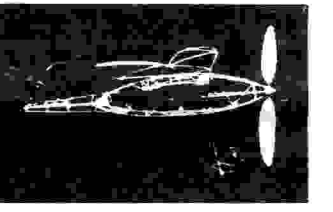
(7)

The bamboo and basswood are glued on the wing before the airfoil shape is sanded. (see the plans on the next page for the recommended thicknesses). Since the leading edge reinforcement in the wing tip area doesn't have to be as strong as in the center wing panels, the basswood is thinner near the wing tips facilitating its bending. Bamboo is split to rough size the way a log is split, usually halfing its size with each split. Bamboo can be scraped and sanded to final thickness easily. I have only used the outer layer (shiny side out) for reinforcing balsawood. I suspect the inner layers are sufficiently hard enough to be used also. The bamboo and basswood, one at a time, are adhered to the wing with Ambroid cement. Masking tape holds the pieces in place until the glue is dry. The bamboo and basswood will easily conform to the sanded airfoil shape without too much extra work.

INDOOR ISN'T FOR EVERYONE !

Building and Flying Indoor Model Airplanes

By Ron Williams



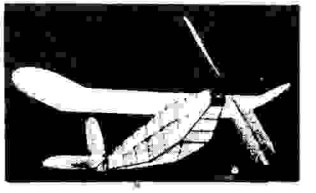
SIMON and SCHUSTER
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This first-ever, definitive book on a burgeoning hobby covers in thorough detail every topic beginners through advanced builders need to know.

Fully illustrated with over 200 diagrams, full-scale plans, photographs, and step-by-step instructions, this comprehensive volume will delight every model hobbyist. Detailed information is given on tools, sources of materials, plans, techniques, carrying boxes, contest rules, indoor spaces, and much more. The collections of photographs of models and flying spaces—from libraries and dirigible hangars to Rumanian salt mines—will fascinate any reader.

Ron Williams, a professor at Columbia University, teaches drawing to architecture students.

MARCH, $12.50 (paper),
$19.95 (cloth)
0-671-41366-X (paper)
0-671-43142-0 (cloth)
264 pages, 8½ x 11
Over 200 illustrations,
Appendices, Index





ANNUAL POINTS - 1 MEET TO GO: (8)

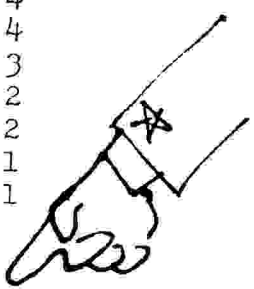
REMEMBER HANGAR PILOTS: WE ONLY COUNT POINTS FROM YOUR BEST 5 MEETS
The list below shows total points, and the number of meets that the points have been earned. There will be trophies for all classes as well as overall trophies. You may be earning one of these, altho the class leaders are not listed here. Don't miss the last meet May 17 to earn a few more points, and have a lot of fun.

	ANNUAL POINTS	NUMBER OF MEETS TOTALLED:
1. Walter Everson	72	5
2. John Martin	64	5
3. Carl Hedley	48	5
4. JIm Stewart	46	5
5. Dave Kiefer	45	5
Roman Szymula	16	2
8. Don Bal	15	5
9. Dick Kelso	12	5
10. Dave Hagan	8	2
11. Fred McCallum	4	2
12. Lee Campbell	4	1
13. Dick Obarski	4	1
14. Bill Hiscock	3.	2
15. Dave Linstrum	3	2
16. Millard Wells	2	2
17. Harry Grogan	2	2
18. Shirley Campbell	1	1
19. Blaine Miller	1	1

6. MIKE ARAK 42 5meets

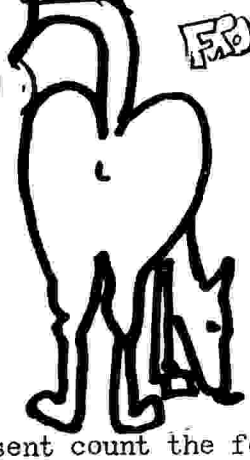
JUNIORS:

1. John Houtenbrink	5	2
2. Cliff Shaw	4	2
3. Carl Linstrum	4	2
4. David Bal	3	3
5. Steven Bal	2	1
6. Sue Arak	2	2
7. Tara Campbell	1	1
8. Nathan Miller	1	1



WHO WILL WIN:
EASY B?
BOSTONIAN?
PEANUT?
AMA SCALE?
GLIDER?
OLD TIMER ROG?
FIRST JUNIOR?

REMINDER: DEADLINES ARE COMING FOR ENTRIES AT WEST BADEN.: AMA INDOOR NATS - JUNE 1
(TENNY) → SNART TIME TRIALS - MAY 31
(ARAK) → PEANUT GRAND PRIX - MAY 15!



FROM THE HORSES MOUTH + OTHER ORIFICES

Cheer up, gang, it looks like BUD TENNY will be CD for the SNART, which is the SIXTH NIMAS time trial....where has the time gone?? Boy, the time really flies when you are having FUN. 6 Years!!

Whether or not BUTCH HADLAND will CD the 2nd World Peanut Grand Prix is still conjectural. Morelater.

There are all sorts of plans being made to get to West Baden. MIAMA is going to have a VAN to carry model boxes to the college, and to meet ourmembers as they arrive at the Louisville airport. At the present count the following MIAMA members will be making the trek: JMartin CARL HEDLEY Walt Everson, Mike and Karen Arak, Dave Kiefer, Don Bal, Roman Szymula.. quite a good representation, to say nothing of our far flung MIAMA members who will be there in June. Any one planning to attend, and who wouldlike t be met at the airport by the Van should get in touch. Miami to Louisville round trip as follows: Eastern Airlines Supercoach $278.00, DELTA Day $258.00 Night $238.00 9:30 PM to 11:37 (4 Hrs.) Connection at Atlanta. Piedmont: $177.00 Hopscotch (Day or Night) Leave 5:45 ,arrive 10:32 (5 Hrs.) More information later as to when club Van will leave with our model boxes.

DEAN C. McGINNES is working very hard to develop a FLYING ACES type outdoor scale club. He sponsored a FAC WW11 combat event at the Rebel Rally May 24th. We support, and await with interest his latest efforts in promoting this FUN type event. More news in the near future.
To get news of this movement write 5275 William Clark Road. Lakeland, Fl 33805.

BILL HANNAN suggests that our World Peanut Grand Prix be submitted for a World Championship Class, CIAM. Again this year we will surely have more than six nations competing. We have not pursued this thought, although it is a great idea. Perhaps next year.

The NFFS requests support of all free flighters to fund their annual Symposium report.. an expensive undertaking. Suggested amounts are: Patron $25.00, Donor $10.00. All contributions gratefully accepted. Send to Chris Matsuno 8576 Ginger Dr. St. John MO 63114 VERY WORTHY

CONTEST NOTE: Yound DAVID BAL , who set the Cat.I State Glider record is only seven years old!! He was flying a 4.6 gram model that was a small version of his Dad Don's Eliptic glider. Dave's model was a 50 sq. inch version of the record settin "70". Congratulations, DAVE!

A reminder about MIKE ARAK'S ANNUAL MEET. Come on out for a day of outdoor flying, and be prepared to have a good appetite for the cook-out that is a feature of the day. JULY 5th, FIU COLLEGE GROUNDS...Tamiami Park. Scal Peanut, HLG, Peck ROG, A-1 Towline, Rubber Endurance (Any rubber ship up t 30") Six events....Grand Champion Jr., Sr/Open...High point in FIVE events.

LET THE SUNSHINE IN (10)

A COLUMN BY OUR MAN OUTSIDE THE HANGAR — MIAMA'S TERRY RIMERT

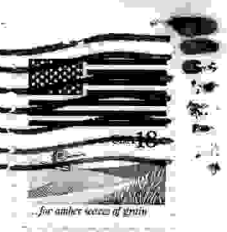
Two things have come up during the NFFS survey about a separate Free Flight Nats site. One is that we have a small field Nats, with events that can be flown on small fields, and the other is that everyone would have to qualify for the Nats before they could enter, with the feeling being that it would make the Nats a more prestigious affair, and more people would work to qualify, and go, than go now. Neither of these proposals were dealing with the problem of holding Free Flight Nats at a suitable site, so they probably won't get much mention at the NFFS site meeting at the Nats this summer. Both proposals have some merit, and both have some drawbacks. Holding a small field Nats and only having small field events could be very limiting. The only true small field events in Free Flight are not even official AMA events. Rubber Speed and Cargo are the only events I know of that can be held on small fields. Both of these events are real crowd pleasers, but don't draw many contestants. Gas Scale could be held on fields that were not too big, and it is also a real crowd pleaser, but also a real low entry event. Rubber Scale and Peanut Scale have too high a performance to fly on small fields, (depending of course on what you call a small field.) P–30, Coupe, Hand Launched Glider, Payload, A-1, and other events need quite a bit of room, and are handicapped by the fields we are holding the Nats on now. What would they be like if we told the AMA we could fly them on a small field? Requireing people to qualify to enter the Nats would have to be a sort of psycological thing more than a true qualification, or we would have very few people going to the Nats at all. How tough should the qualification requirements be? How about people who don't live where they can go to more than one or two class A meets during the year, but still show up at the Nats pretty regularly? I have a friend in Guatamala who used to come to the Nats every year, how would he qualify? Still if everyone had to qualify to enter the Nats, it would definatly cause a pick up in local contests. Some people mignt even hold their own meets just so they could qualify. This increase in entrys at local meets couldn't hurt anything. Not only would more people enter local events, but they would enter a lot more events, in order to qualify for all the events they might want to enter at the Nats. Trying to qualify for a bunch of events at a two day meet, so you can stay busy at a 6 day meet could be kind of hectic.

Anyone who has anything they want to say about holding the Free Flight events sep rate or with RC and CL at the Nats, or where we should hold the Nats, combined or not, or how big a field we need, and what else there has to be at a field to qualify it for a Free Flight Nats sight should get hold of me or Bill Mathews before the Nats this summer and let us know what you want. Maybe since most of the events that can be held on small fields are such good spectator events, it should be called a show off Nats rather than a small field Nats?

2 BLOCKS FROM THE GOODYEAR BLIMP HANGAR, AKRON, OHIO
NEXT DOOR TO THE FAMOUS "FLIGHT'S END PUB."
THE AMADOR RESTAURANT FOR OUR AWARDS DINNER
FAMOUS GUEST SPEAKER, MOVIES, OR BOTH. SEE PAGE 1

JULY 5. MIKE ARAKI'S ANNUAL OUTDOOR MEET + BAR-B-QUE. TAMIAMI PARK 8 TO ?
5 EVENTS ① A 1 GLIDER ② HL GLIDER ③ AMA SCALE
④ PEANUT SCALE ⑤ ANY RUBBER JOB UNDER 30" (INCLUDES
THERMAL + DELTA DARTS, EMBRYO, P-30, BECK ROG, PHANTOM FLASH)
HI-POINT FOR BEST 4 EVENTS: SR/OPEN, + ~~JR~~.
1ºº PER EVENT $2.00 BAR-B-QUE

THE LATEST INDOOR NEWS INSIDE
THE HANGAR PILOT
EDITOR: DR. JOHN B. MARTINI MIAMA
3227 DARWIN ST. MIAMI FLORIDA 33133



TO: Jim Miller
827 Yorkhaven Rd
Cincinnati, OH 45240

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