INDOOR NEWS!

ONE AND ONLY!

THE HANGAR PILOT

MIAMI, FLORIDA USA

THE MIAMI INDOOR AIRCRAFT MODEL ASSN.

MIAMI

ISSUE 61
MARCH '80

CLUB 986

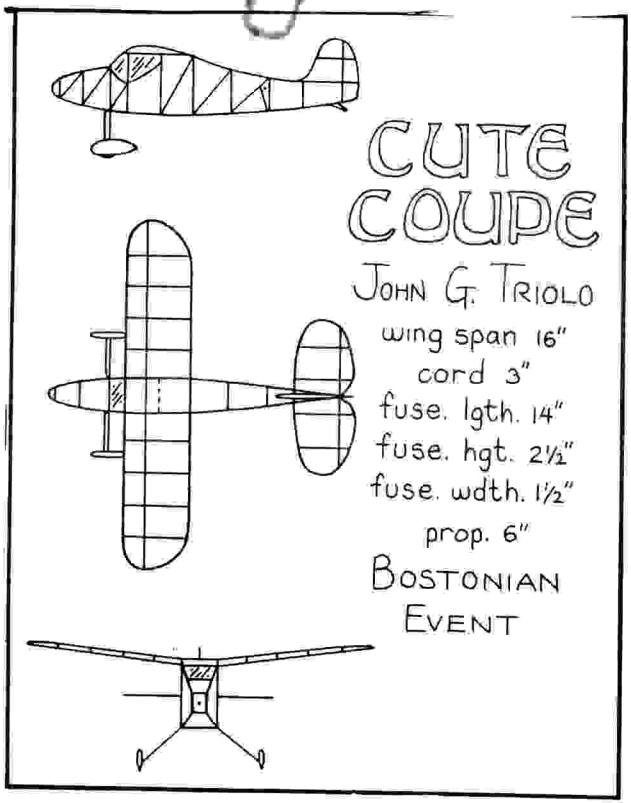
'E' FOR EXCELLENCE



ANYONE GOT A WINDING TUBE?
OR - QUIT ASKING ME QUESTIONS WHEN I'M COUNTING.

BOSTONIANS

FROM - ED WHITTEN

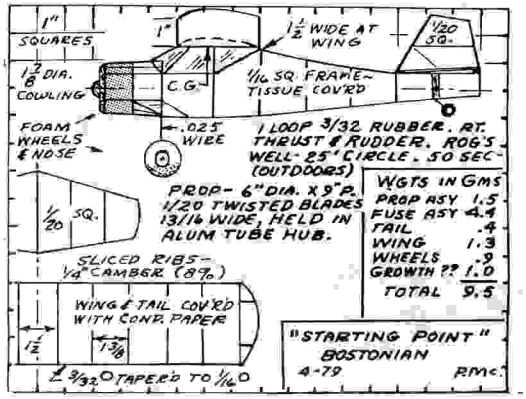


CUTE COUPE

JOHN G. TRIOLO

wing span 16"
cord 3"
fuse. lgth. 14"
fuse. hgt. 2½"
fuse. wdth. 1½"
prop. 6"

BOSTONIAN EVENT



BOSTONIAN RULES WERE PUBLISHED IN LAST H.P. (#60) AT 7 GRAMS THEY ARE A BIT HEFTY. TO BE FLOWN AT WEST BADEN - TRY ONE

THE HANGAR FLIGHT:

Is published 8 times a season by Miami Indoor Aircraft Model Association Club 986, the only active all indoor club publication. For $5.00 a year you receive all 8 issues. WE ARE ETERNALLY INDEBTED TO GOODYEAR TIRE AND RUBBER CO: FOR THE USE OF THEIR HANGAR FOR OUR MEETS:::: WE SUGGEST ALL INDOOR ORIENTED FOLKS REMEMBER THEM THE NEXT TIME YOUR CAR NEEDS A CHECK UP OR NEW TIRES ETC.

Pres./Editor Dr. John Martin Jr.
Secy./illustrator/Reporter..Dave Linstrum
Peamuteer: Carl Hedley
Archiveist: Terry Rimert
Scale Judge: Dan Kilgore
Properties and balloonist(Retrieval) Jim Stewart

PLEASE SEND CONTRIBUTIONS; 3 VIEWS; LETTERS, PLANS, AND MONEY TO:
MIAMA , 3227 DARWIN ST: COCONUT GROVE, MIAMI, FLA. 33133

MEET #5 GOODYEAR HANGAR - OPA-LOCKA (2)

FEB 17 1980 - CD ROMAN SZYMULA.

BOY, DID WE HAVE FUN!!! Meet 5 saw a continuation of the battle depicted in the Nakashima cartoon shown here that was converted from outdoor to indoor completely without the permission of the cartoonist or of the NFFS DIGEST from which it was stolen:



The cartoon shows a couple of [redacted] indoor flyers at about 5:15 PM on Sun. Feb 17. They are viewing the carnage at the Blimp Hangar. They are about to go over to the FLIGHT'S END PUB and discuss the happenings of the day before setting out on a long trip back home. They are very happy 'cause the FLIGHT'S END PUB has decided to stay open on Sunday with their magnificent BLIMP BURGERS and TEXAS FRIES (Well done). We'll see You then at 5:16 on Sun. March 23th after meet Six!!

Mike Arak holds a slim 3 pt. lead over determined Ron Sharpton while 22 points behind lurk both Walt Everson, and Bill Smead who are tied for third place. What Fun!!

It was GREAT to see BILL HISCOCK out at a meet with his old "point Getter" Waco E biplane He brought it in a shoe box in a very uncompleted form, then finished building it at the meet, and scared old Doc with its fine performance...finished 2nd in Peanut.. Only one tenth of a second behind his Ansaldo SVA-3 interceptor!! Dan Kilgore has not missed a meet but he has not flown an official flight as yet. C'mon Dan, lets see a 5 Min. Manhattan. We gotta THANK DON PLOSKUNAK for helping us solve our retrieval problems by providing the gas for our balloons. Everson and Szymula did the rest, and we got three months of "hang ups" off the rafters last meet. THANKS!!

NEXT MEET: MARCH 23

RESULTS OF MEET NUMBER FIVE..

Feb. 17 1980, Opa Locka. R Szymula CD

PEANUT SCALE:

1. John Martin	2 Pts.	(Ansaldo SVA-3 31.5) 1 static, 1 flite	(51.3)(53.3)
R.J. Martin	5 Pts.	(Cessna AW 29.0) 2 static, 3 flight	(43.4)(48.8)
2. Bill Hiscock	5 Pts	(Waco E 28.3) 3 static, 2 flight	(51.5)(53.0)
3. Carl Hedley	9 Pts.	(Found 24.8) 5 static, 4 flight	(39.6)(34.9)
4. Mike Arak	10 Pts.	(Found 26.4) 4 static, 6 flight	(28.6)(37.9)
5. Walt Everson	13 Pts.	(Found 16.5) 8 looks, 5 flight	(30.0)(42.0)
6. Bill Smead	14 Pts.	(Cougar 19.8) 7 looks, 7 flight	(25.0)(23.4)
7. Jim Stewart	14 Pts.	(Church 22.0) 6 looks, 8 flight	(26.0)(23.0)
8. Dick Kelso	17 Pts.	(Vagabond 16.5) 8 looks, 9 flight	(18.2)(19.6)

SCALE:

1. John Martin	(MO-1 67.4 static)	67 flight	134.4
2. Mike Arak	(Found 86 static)	38.0	124.0
3. Jim Stewart	(Gugmunc 76 static)	23.2	99.2
4. Carl Hedley	Moustique 67 Static)	26.6	93.6
5. Dick Kelso	(Fairchild 24 70 static)	19.0	89.0
6. Bill Smead	(Fairchild 24 51 static)	08	59.0

GLIDER:

1. Ron Sharpton	(49.8)	(51.5)
2. Bill Smead	(44.3)	(48.6)
3. Terry Rimert	(46.8)	(44.2)
4. Mike Arak	(34.0)	(39.2)
5. Jim Stewart	(33.2)	(33.7)

MANHATTAN:

1. Walt Everson	5:02.2
2. Ron Sharpton	3:37.8
3. Carl Hedley	2:10.8

PENNY PLANE:

1. Ron Sharpton	9:11.2
2. Walt Everson	7:31.6
3. Mike Arak	3:06.2
4. Bill Smead	2:44.4
5. Carl Hedley	2:05.0

PAPER STICK:

1. Ron Sharpton	8:20.8
2. Mike Arak	6:15
3. Bill Smead	4:13.4
4. Jim Stewart	3:24

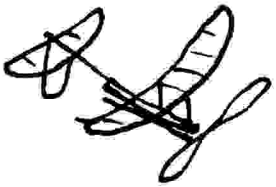
EASY B:

1. Ron Sharpton	9:26.8
2. Mike Arak	5:21.4
3. Bill Smead	4:16.6
4. Jim Stewart	2:57
5. Carl Hedley	2:06

Do you know what's REALLY NICE about an indoor meet? There are Two features that stand out. ONE is that the meet WILL be held no matter what the weather outside ...and there have been many days when we were the only game in town. SECOND is, there are enough different classes of models that there is bound to be a type to suit anyone..glider, Manhattan, scale, stick models, etc...take your pick.

OVERALL ANNUAL POINTS:

1. Mike Arak	87	8. Roman Szymula	30
2. Ron Sharpton	84	9. Dick Kelso	15
3. Walt Everson	62	10. Terry Rimert	9
3. Bill Smead	62	11. John Arthur	8
5. Jim Stewart	57	12. Bill Hiscock	7
6. John Martin	53	13. Jr/Sr Jeff Everson	7
7. Carl Hedley	48	14. Jr/Sr Billy Carney	6



HEY, YOU GUYS - JOIN UP - GOOD READING! (4)

MEMBERSHIP APPLICATION/RENEWAL BLANQUE

FLIGHTMASTERS

name

address

city zip'

phone (optional) AMA # (optional)

Enclosed find



$9.00 (associate membership, includes N/L) ☐

$10.00 FULL-FLEDGED MEMBER ☐

$2.00 If you'd like to get the Flightmasters West contest notification bulletins (FM West mostly indoor meets in W/LA area) ☐

_____ Donation, should you feel you'd like to share more in the group!

Send to our efficient and cheerful secretary:

Phyllis Warner
423C San Vicente Blvd.
Santa Monica, CA 90402

ANYONE FOR RUBBER SCALE?

NFFS MEMBERSHIP AND RENEWAL APPLICATION

Mail to
Bill Booth
P.O. Box 192
Carlsbad, CA 92008

Make checks payable to the National Free Flight Society

Subscription rates include 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. Subscriptions are not available without membership.

MEMBERSHIP FEES AND SUBSCRIPTION RATES (1 and 2 yr.)

Age 19 & over and residents of foreign countries	1 yr. $10.00 ($.50 membership fee plus $9.50 subscription)
	2 yr. $18.00 ($1.00 membership fee plus $17.00 subscription)
Age 18 & under	1 yr. $5.25 ($.50 membership fee plus $4.75 subscription)
	2 yr $9.50 ($1.00 membership fee plus $8.50 subscription)

Subscriptions are not available without membership.

Ages are as of July 1 of the current year. Please circle applicable fees.

New member ☐ **Renewal** ☐ **Address change** ☐

Current expiration date: Mo. ..... **Yr.**

Name AMA #

Address

City, State Zip

JIMMY CARTER NEVER BUILT A PEANUT

YES, Send me my subscription to FMA NEWS!
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National Indoor Model Airplane Society (NIMAS) was founded in 1961 to serve as the U.S. headquarters for Indoor model flying. Its monthly publication provides a focal point for both national and international Indoor model activity. Annual dues, including newsletter: $3.50. Send to NIMAS, Box 545, Richardson, Tex. 75080.

Name _____ AMA No. _____

St. Addr. _____

City _____ State _____ Zip _____

NEXT MEETS:

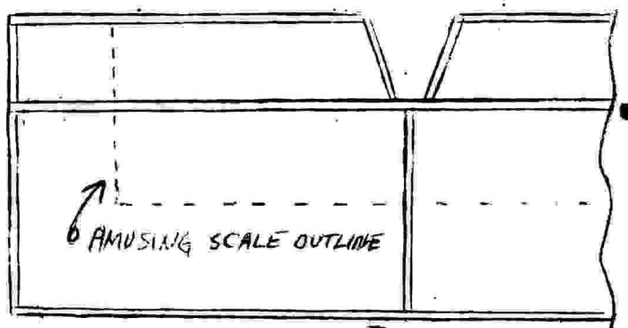
MARCH 23RD

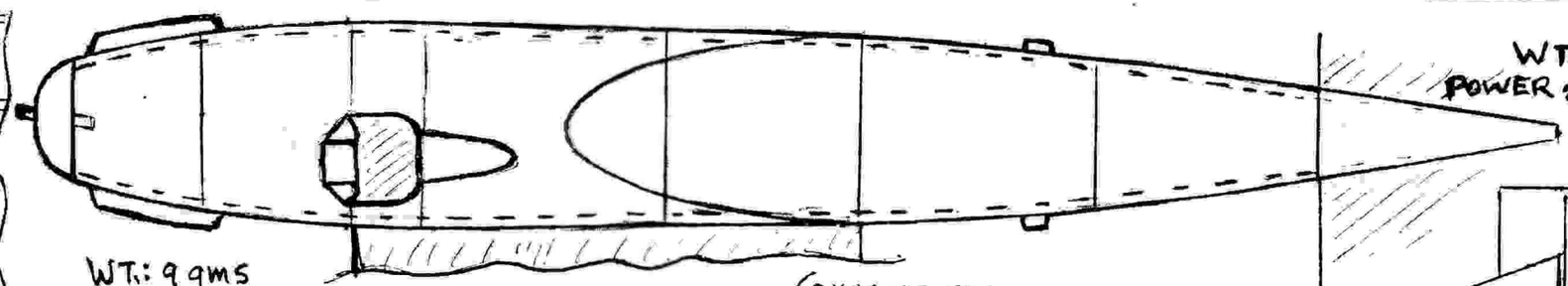
APRIL 20TH

MAY 18TH

F-AIBS

SCALE DATA - JANE'S 1927 ISSUE

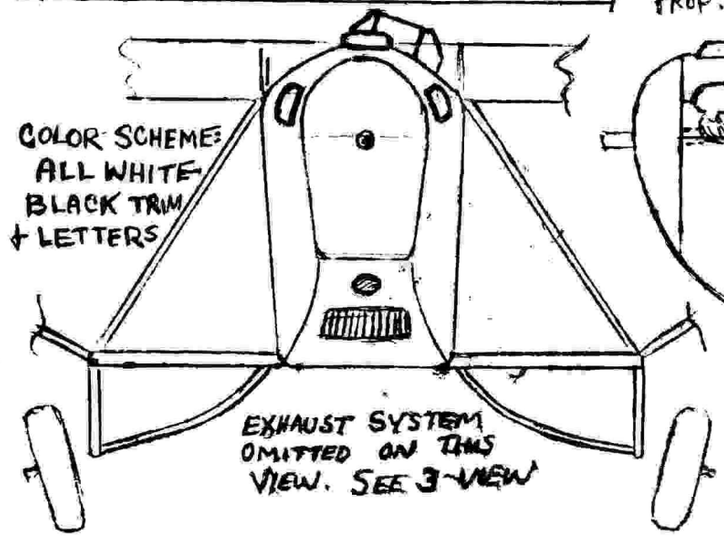




WT. 9.5gms.
POWER: 18" LOOP
3/32 FAI

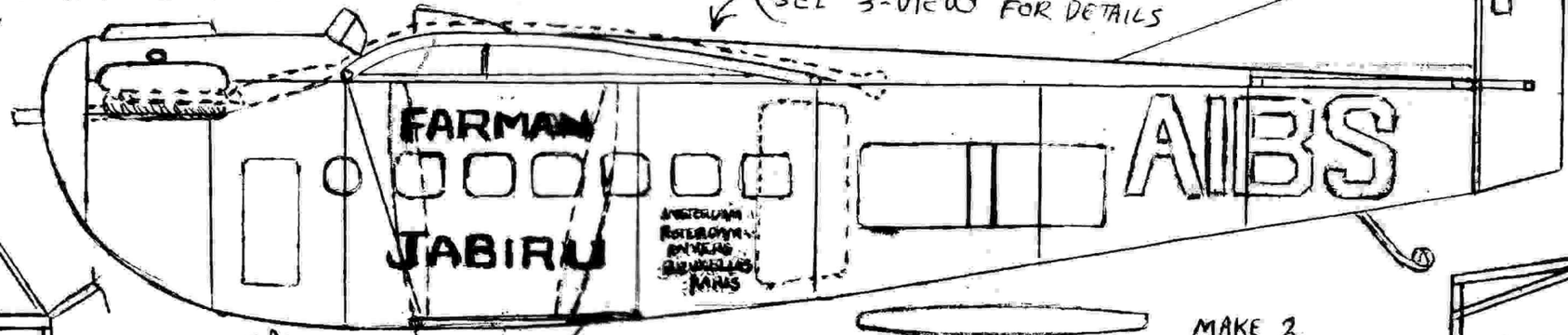
WT.: 9 gms
PROP: 2 SKEETER PLASTIC PROPS MADE INTO 4 BLADE

EXHAUST SYSTEM - DOTTED LINES
SEE 3-VIEW FOR DETAILS

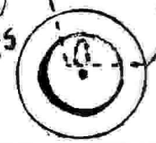


COLOR SCHEME:
ALL WHITE
BLACK TRIM
+ LETTERS

EXHAUST SYSTEM OMITTED ON THIS VIEW. SEE 3-VIEW



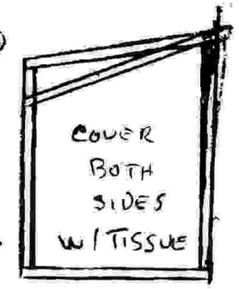
A M.I.A.M.A.
PEANUT BY
J.B. Martin
REF. "JANES
1927



← LG: 1/16 SHEET

TAPERED WING STRUTS ♂ 1/16"
MAKE 4 EACH ♀

MAKE 2
LANDING GEAR
"WINGLETS"
5/16 SQ HARD →



(7)

REPRINTED FROM MAY '76

(tech topics)

FREE FLIGHT DIGEST

INDOOR PROPS--VARIABLE PITCH AND VARIABLE DIAMETER

by Hewitt Phillips

Ever since the days of hand-carved balsa indoor props, attempts have been made to build in a distribution of area and structural stiffness which would allow the blade to "flare" at the start of the flight to slow down the climb and prop R.P.M. during the initial kick of the rubber motor. The slower climb was especially beneficial in low ceilings, but as performance of indoor models improved, it was found that under good conditions, models without a flaring prop would climb too high for even the tallest dirigible hangars. Thus, most all modern microfilm props are designed to increase pitch at the start of the flight.

The conventional prop with flexible spars is definitely limited in the amount of flare that can be provided. If the spars are made too flexible or the prop area is centered too far forward, a disastrous type of instability sets in under full power. One blade will diverge to a full high pitch condition, but this will slow the R.P.M. to a point that the other blade will twist to low pitch. The resulting unbalance will usually shake the model out of the air.

Several prop designs have been suggested and tried in past years which allow much greater pitch change without the instability. These systems usually added some weight, which, for models without a minimum weight rule, almost always outweighed any advantage that might be obtained from the device. In the case of FAI models, Pennyplane, etc., in which the minimum weight is specified in the rules, a device weighing a few thousandths of an ounce can frequently be accomodated without exceeding the specified weight. In fact, a weight at the nose may often be beneficial from the stability standpoint. The interest in variable-pitch propellers is therefore growing.

A variable-pitch propeller was described in an article by Jeff Annis in the 1975 Symposium volume of the NFFS. The feature of this propeller which allows a greater pitch change than that of a conventional flaring prop is that the change in pitch of the two blades is kept equal through a linkage. Another prop design incorporating this principle has been proposed by Bob Meuser (figure 1). Both these prop designs should prove very beneficial whenever the ceiling height is less than that of the very biggest hangars.

Theoretically, more efficiency could be obtained by increasing the prop diameter rather than the pitch at the start of the flight. A larger diameter prop acts on a larger volume of air, thereby losing less energy in slipstream velocity. Also, a blade stall may occur if the pitch increases excessively. A method of increasing prop diameter was proposed many years ago by John P. Glass, and was tried by the author in several different versions.

The method of varying prop diameter is shown in figure 2. The propeller blades are synchronized through a parallelogram linkage, and the blade position is determined by balancing the torque against the tension of a thin rubber band wrapped around a pulley. By changing the shape of the pulley from a circle to an arbitrary cam shape, most any climb profile for the model may be obtained. For example, the model may climb rapidly to 20 feet altitude, then cruise at this altitude for the rest of the flight until the propeller reaches its minimum diameter. So long as the propeller is in this "regulating" condition the climb of the model is not affected by changes in motor torque. The effect of reduced torque due to breaking in the rubber is therefore eliminated. To offset these advantages, however, the

propeller spars have high drag and the overall efficiency is generally less than that of a conventional prop. A final possibility that may be mentioned is to change both pitch and diameter simultaneously by skewing the hinges of the blades.

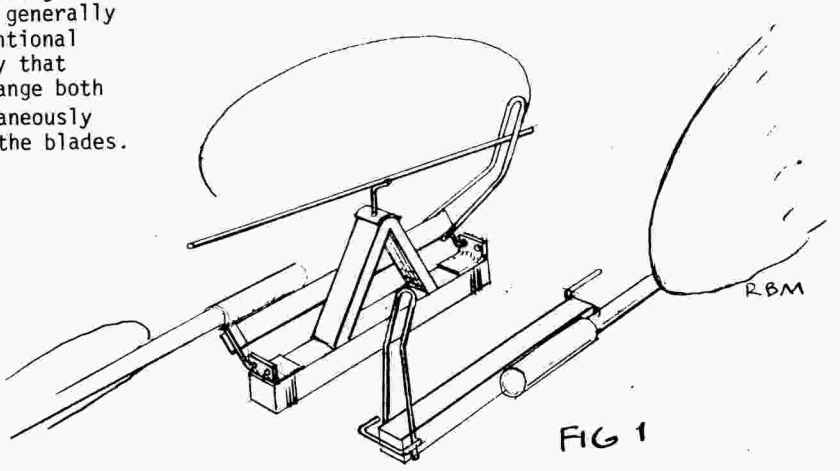


FIG 1

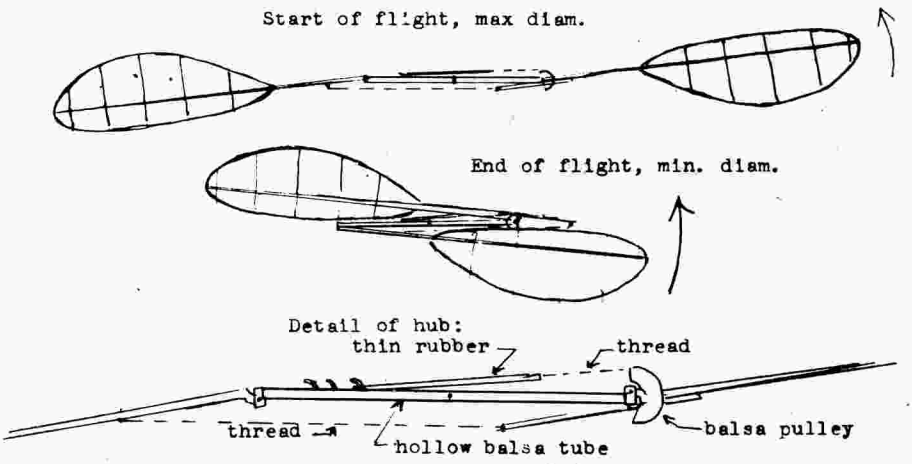


Fig. 2 - Variable -diameter indoor prop.

⑨ SCHEDULE OF EVENTS:

NEXT MEET(NUMBER SIX) Sun. March 23 Opa Locka Blimp Hangar 9 to 5
Confirm by calling 1-305-858-6363
SPECIAL ONE DESIGN PECK POLYMER R.O.G. & R.O.W. EVENT Sponsored by Dave Linstrum. Kits available at the Hangar.

April 5 & 6 FLORIDA STATE CONTROL LINE AND FREE FLIGHT CHAMPS
AAA Site: Whitehouse Navy Aux. Field. CD Parmenter

APRIL 20 MEET NUMBER SEVEN Opa Locka 9 to 5 DAVE LINSTRUM, C D

MAY 18th LAST INDOOR MEET Opa Locka 9 to 5

MAY 24,25,26 REBEL RALLY (FF,CL,RC) AAA Site: Whitehouse Field
CD Wally Kirk 7090 Exline Rd. Jax Fla 32222

JUNE 15th FATHER'S DAY ANNUAL MIAMA AWARDS DINNER. Details later.

JUNE 20 to 28 WORLD'S GREATEST INDOOR MEET West Baden Indiana
Plan your vacation around this one. Details in issue 60 or write Hangar Pilot.

AUGUST 10-17 AMA Nats Site:Wilmington,Ohio THIS IS THE LATEST WORD FROM HARRY GROGAN (2/17/80) Who ought to know.

CEILING, ANYONE? If you are not bored to death with the ceiling height "tempest in a tea pot" here is the latest. We have submitted a request for an EMERGENCY RULING to have AMA decide Whether the Atrium is 98 feet high, or 108 feet high. It is certainly not BOTH, there are merely two ways of measureing it..... the correct way, and the AMA way. We can't understand why we have to measure to a "ceiling" that an airplane can not fly to.

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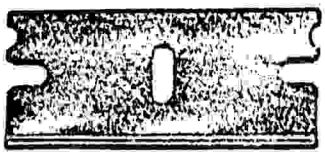
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DOUBLE BEVEL

ONE DESIGN EVENT - MAY 23

(10)



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THE LATEST INDOOR NEWS INSIDE

THE HANGAR PILOT

EDITOR: DR. JOHN B. MARTIN MIAMA
3227 DARWIN ST. MIAMI FLORIDA 33133

TO:

THANK YOU GOODYEAR FOR BLIMP HANGAR!



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