ETERNALLY YOUTHFUL

THE HANGAR PILOT

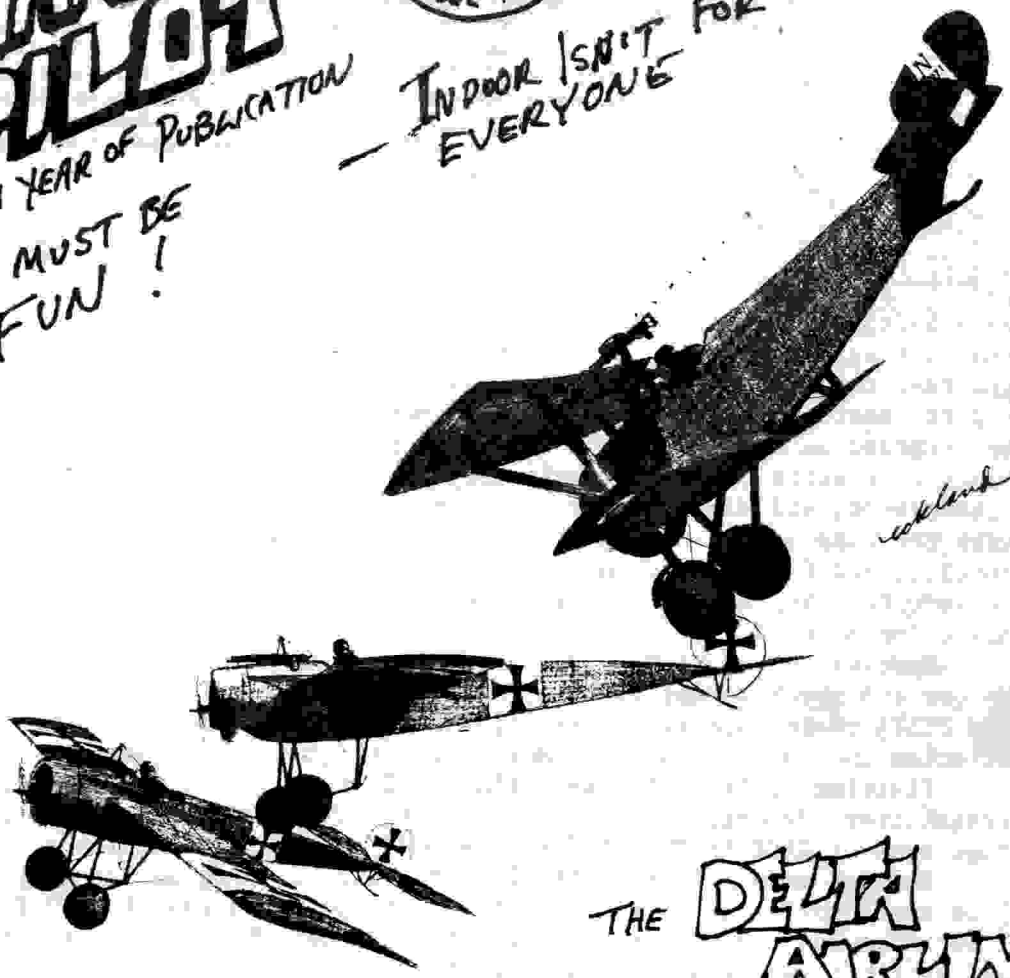
MIAMI INDOOR AIRCRAFT MODEL ASSOC. MIAMA

ISSUE 113
JAN/FEB 1987

15TH YEAR OF PUBLICATION

IT MUST BE FUN!

— INDOOR ISN'T FOR EVERYONE



THE DELTA AIRLINE

KING ORANGE ISSUE

NEXT MEET: MIAMA MEET #4 FEB 14+15 SAT & SUN

US COAST GUARD HANGAR, Clearwater/St. Pete Airport

SEE PAGE 14

"LIKE A LETTER FROM MOM" - WHELAN

(1)



THE HANGAR PILOT

Is published 8 (or 9) times a season for a bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association,) AMA Club 986, is the only active all indoor free flight club in AMA. Our Mottos: "It must be fun.", and "Indoor isn't for everyone." For $10.00 a year you will receive all copies. We solicit your contributions since we are always running out of material. Letters, plans, 3-views, articles, gripes, and Money to: Dr. John Martin Pres./Editor. 2180 Tigertail Ave. Miami, Fla. 33133 USA Phone: 305-858-6363 We want to hear from you!!! Send material!!!

THE DELTA AIRLINE MEET

Yeah, boys....Fly Delta. Our genial host and gracious sponsor for our indoor King Orange meet, and first Florida Annual Record Trials.. DELTA provided their magnificent new facility again this year for three days- and the meet was a big success. I remember when the meet results could be recorded on one page, and still have room for an ad. Now look! TWO pages of results (2&3) We feel sorry for the 3/4's of Hangar Pilot subscribers, and MIAMA members who are out of state and don't get to fly with the gang and have to get their kicks vicariously from reading event results, and flying solo in a little gym or park. When you vacation here be sure to bring a model or two, BOOK YOUR FLIGHT ON DELTA, and be prepared for some FUN..

Special thanks to Mr. ED GREENE, who OK'd the use of the Delta Hangar and spent monday with us, and to CURTIS BRYANT ,model enthusiast and DELTA representative on Friday and Saturday. Also Tony Becker who directed the contest, and Doc Martin who did the scale judging.

Visiting us from afar were KEN GROVES from Ontario, ROY WHITE, ornithopter advocate from California, GARY UNDERWOOD of New York who proxy flew some of DAVE ARONSTEIN'S planes, CHUCK MARKOS from Chicago.

We sure made a dent in the Florida State records in Catagory III. Nine new records were set. Remember that the DELTA HANGAR is37 feet lower than Westbaden where most of the national AMA Cat III records were set so don't expect a whole lot of AMA records to be sethere. On page 3 are the new record breakers.

The FLYING ACES mass launch featured pioneer models this time (Up to World War I), and they can sure fly a long time. Doc Martin had a 14 Bis that prevailed over Mike Arak in the finals. Next meet the subject will be RACEPLANES. We suggest you try this event...Fun.

ONE MORE TIME...THANK YOU DELTA AIRLINES FROM THE INDOOR MODELING FRATERNITY

RESULTS MEET 3, MIAMI, FIRST F.A.R.T. C.D. TOM BECKER
& KING ORANGE, FLORIDA ANNUAL RECORD TRIALS
DELTA AIRLINE HANGAR, TAMPA. DEC. 27, 28, 29, '86

(2)

PEANUT EVENT:

	Stat.	Best two fly		Av. Fly	Total
1.Rich MacEntee, Old Ironsides	84	1:24.8	1:24.5	1:24.6	168.6
2.John Martin Polish Canard	85.3	1:13	1:18	75.5	160.8
3.George Leffler, P-51	92	51,	58	54.5	146.5
4.Mike Arak Alco Sport	90.0	1:02	49.5	55.7	145.7
6.Charlie King, Cougar	70.0	1:01.4	1:01.8	61.6	131.6
5.Millard Wells, Howard Pete	87.2	44.0	48.8	46.4	133.6
X.John Martin Nieuport X	85.3	45	43	44	125.9
7.Dave Linstrum Macchi Nieuport	85	33	36.5	35.7	120.7
X.Dave Linstrum, Pil. Porter	72.2	28	25	27.5	99.8

FLYING ACES SCALE:

		Best Flight	Total	
1.George Leffler, Grumman	58	65	123	
2.John Martin, Burgess/Dunne	92.0	24.8	116.8	
3.David Aronstein, Kaw. Tony	32.8	81(1:53.4)	113.8	No documentation
4.Rich MacEntee, Lacey M-10			107.1	
5.Mike Arak, Alco	61	45	106	
6.Millard Wells Stin. Reliant	53	47.5	100.5	
7.Dick Obarski, Curt. Robin	28	46	74	

PISTACHIO SCALE: 1.Millard Wells, Wee Bee 1:13.7 New record, Fla. State
2.David Aronstein, Ford Trimotor: 1:03.8
3.Frank Kieser, 8" Ornithop. 59.0
4. John Martin Dornier 212 43.8

ORNITHOPTER:
1.Frank Keiser 7:49 new record
2.Roy White 6:29 Old record 7:11

MANHATTAN:
1.Chuck Markos 9:22
New Fla. Record, Old Record 8:13

ROG STICK:
1.Dick Obarski 13.1 New Fla. Record

EASY B EVENT: Tie for first place.
1.Tony Becker 13:57
1.Dick Obarski 13:57
3.Chuck Markos 12:09
4.R. MacEntee 8:19
5.Geo Leffler 7:04
6.Mike Arak 5:29
7.Blake Oliver 3:51

PENNY PLANE EVENT: (Novice)
1.Chuck Markos 10:09
2.Tony Becker 9:59
3.Ken Groves 9:51
4.Mike Arak 7:32.8
5.Rich MacEntee 6:39.8
6.Blake Oliver. 5:58
7.George Leffler 5:41
8.Charles Shepherd 3:31

PENNY PLANE:
1.Ed Berton 9:19
2. Millard Wells 7:32

INTERMEDIATE STICK:
1.Dick Obarski 12:30

---- CONTINUED ON PAGE 3 ----

(3) RESULTS OF THE FIRST F.A.R.T.

The First Florida Annual Record Trials is now history, and nine times were our state records exceeded. Many other records were almost equalled, but those who did this well are not listed below. Only those who exceeded state records are noted. Chuck Markos came within 3 seconds of a National AMA Catiii Manhattan record, but no national records were broken. The "Index of Performance" compares the best flight of the entrant with the state record. Here are those who bettered Florida records....Congratulations!!

CAT III FLA. RECORDS

					OLD RECORDS	INDEX
1. Rich MacEntee	378, Record	274	Embryo End.			1.380
2. Nathan Miller	1:37	1:17	JUNIOR Glider			1.260
3. George Leffler	330	274	Embryo End.			1.2048
4. Ken Groves	301	250	Bostonian			1.2040
5. Chuck Markos	9:22	8:13	Manhattan			1.140
6. Dave Aronstein	293	250	Bostonian			1.132
7. Dick Obarski	13:12	11:47	ROG Stick			1.120
8. Frank Keiser	7:49	7:11	Ornithopter			1.088
9. Millard Wells	1:13	1:08	Pistachio			1.073

As the title says:"Annual"' so we will continue to hold trials at least once a year. Cat. I, or II, or III. These are reminiscent of the West Baden days and are a lot of fun, and that's the point. When there are no limits on the number of official flights it takes a lot of the pressure off. Also being able to fly anything officially is a plus for those who like the more obscure models..even Pistachio!!

THIRD MIAMA /KING ORANGE RESULTS.....CONTINUED:

EMBRYO INDOOR INDURANCE: Total of best 3 of 4 flights plus bonus pts.

1. Rich MacEntee	378	- New Fla. Record - Wins Index ☆
2. George Leffler	330	- Bettered old record of 274 set by Leffler
3. Chuck Markos	274	
4. Dave Linstrum	250	

BOSTONIAN EVENT: Total of two best flights x charisma factor.

1. Ken Groves	Bostonian Robin	(1.2)	301	New Florida Record
2. David Aronstein		(1.1)	293	Exceeds old Fla. record
3. George Leffler		(1.4)	255	Exceeds old Fla. record
4. Rich MacEntee	Red Bird	(1.2)	239	
5. Millard Wells	Wee Bee	(1.2)	226	
6. John Martin	Boston Bis	(1.4)	204	
7. Mike Arak	15 Bis	(1.4)	185	
8. Chuck Markos	Rearwin	(1.2)	176.4	
9. Charlie King	Howard	(1.1)	126	

H L GLIDER EVENT:

1. James Bayly	1:44.6
2. Phil Bayly	1:17.8

JUNIOR GLIDER:

1. Nathan Miller 1:37 ☆ NEW JUNIOR RECORD

FAC LOW-CAL PROFILE:
1. Ken Groves - Corbin Super Ace 3:28, 3:49

At the 1986 World Championships' Banquet, Jury Member Pierre Chaussebourg said:

"Sir Bernard, Ladies and Gentlemen,

In the good old days, there has been a Gliding World Championship in England, not far from here. At the opening ceremony, Lord Brabazon of Tara said, "With their intelligence men do what birds do with their instinct". Indoor models fly like butterflies, but with so much more intelligence in their flying: the intelligence of their builders. They fly the way we have trimmed them to fly.

So many times I had the opportunity to explain what Free Flight is to spectators, the way we build the models, the way we fly them, our competition rules .... At the end the question comes, always the same, "Is it useful?" or "What does it prove?"

Nothing. It is not useful. It does not make money. It proves nothing. They would be disappointed if we do not add that this is life. There are still people who spend thousands of hours, putting together small pieces of balsa wood, microfilm, small wires, and winding rubber bands, just to meet in old balloon hangars, salt mines or famous halls, only for the pleasure to BE there and fly their models together.

"Yes, it is a sport: "Our gold medalists are the aviation's Olympic Champions", said Erv Rodemsky in Ron Williams' book, but when a sport reaches such a high level of skill, it becomes an ART."

"On behalf of FAI and the FAI jury I want to thank the organisers for such a successful World Championships. I want to thank the competitors for their sportsmanship, for the very high level of flying, for the improvements noticed since the last World Championships in Cardington 1978. Thanks to the timekeepers and their chief, George Lynn. Thanks to Ian Dowsett at the processing and thanks to Butch Hadland, the contest director, for a very well run competition and an excellent team managers' meeting. - Thanks to all those who did their best at all levels to make these World Championships so successful. I want also to add a special thanks to Mike Smart and Bob Smith for the very dangerous rescues in the catwalks.

"Now, there is another one I want to mention. You have met him everywhere during these days, carrying boxes, teaching steering during practise days, rescuing models, doing so many things for evryone, with all his best and all his heart.

"Laurie, I'll not thank you for that, it is impossible to thank somebody for doing so much and so well. Simply, I'll say, "Please, sometime, do it again!"

MEMORIES OF CARDINGTON

The above article is copied from INDOOR NEWS. I heard Pierre make this moving address & wished there were a copy of it, and here it is. I love the "It proves nothing" part. - Doc

No serious (or frivolous) indoor modeler should be without INDOOR NEWS: THE BEST!

Jørgen Korsgaard, Ed.
Ahornweg 5
D-2397 Ellund-Handewitt
W. Germany

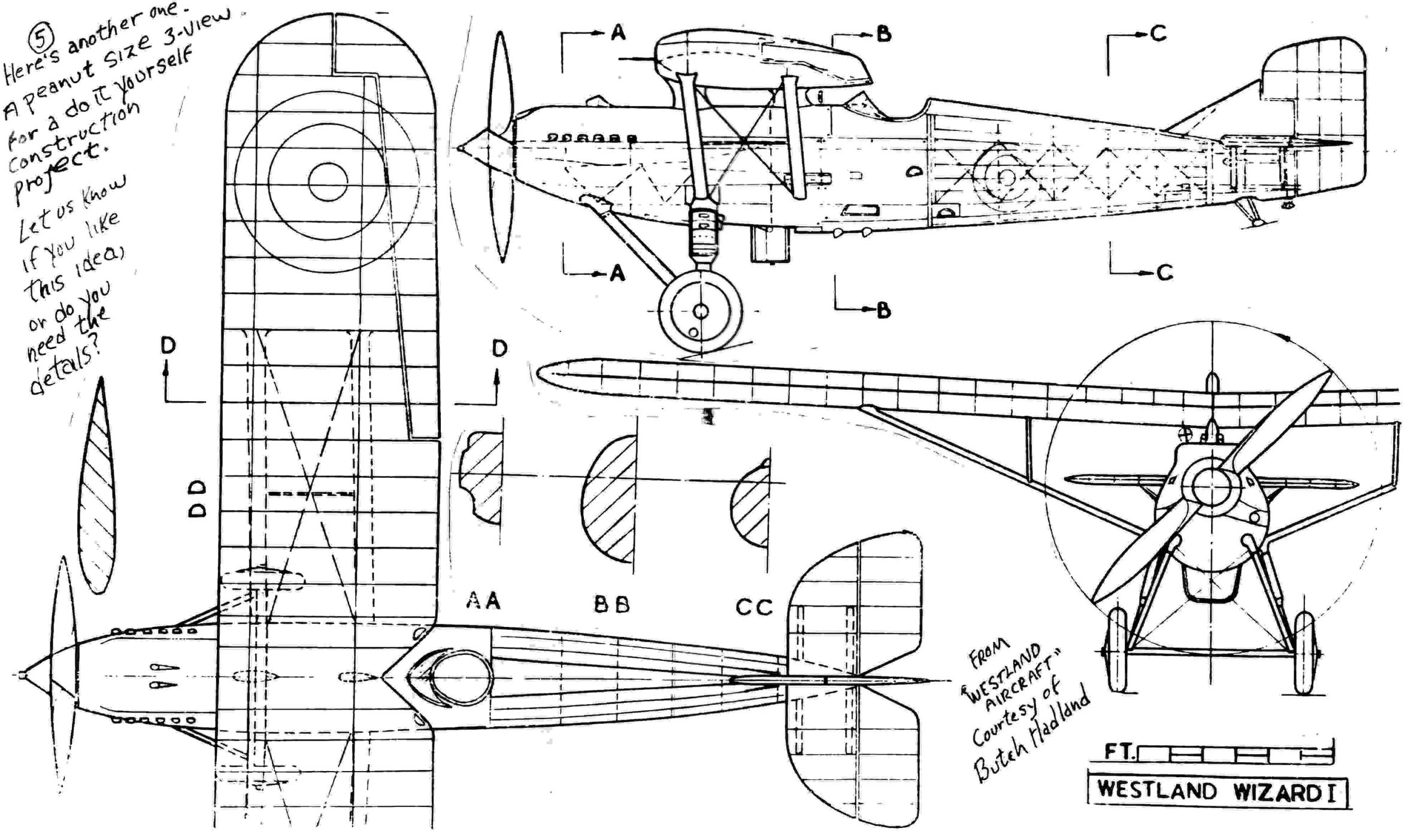
Phone: 04608-6899

3 issues a year, will appear around March, July and November.
Scandinavia 45,- Dkr.
Europe 50,- Dkr.
Airmail outside Europe 60,- Dkr.

NEXT EVENT
FUN FLY FEB 8
MMMI DADE SOUTH

(5) Here's another one. A peanut size 3-view for a do it yourself construction project.

Let us know if you like this idea or do you need the details?



Indoor Modeling



From NFFS Digest

ADJUSTING INDOOR RUBBER POWERED MODELS
by Charlie Sotich
from The Okie Flyer

The real trick to getting the best time out of an indoor rubber model is finding the best combination of propeller and rubber motor. The only way to find this combination is through a lot of test flying. If you intend to do any contest flying, don't wait until the day of the contest to try out a new model. It will probably be too late then. You can have the lightest and best built model at the meet, but if you don't have the right prop and rubber to match it, the model can't give its best performance.

The basic steps in adjusting the flight trim are as follows:

1. Locate the C.G. in the correct position relative to the wing with the motor in place. (Adding weight to the nose of the model may be necessary).
2. Set the wing incidence. (It should be adjustable).
3. Have the fin set for left turn. (Build it into the model).
4. Have wash-in in the left wing. (Build it into the model).
5. Make a test flight with the motor wound to about 1/2 of maximum turns to check the wing incidence and fin setting.

8

After you launch the model, walk slowly behind it on the inside of its circle. By staying close to the model you will be in a good position to catch it if it should start to dive or stall. Observe the model as you follow it to see what adjustments are necessary to improve it. Reduce the wing incidence if it stall, give it more left rudder if the turn is too wide, etc.

Some models may seem very sensitive to a slight change in wing incidence. A very slight increase causes the plane to stall, while a slight reduction results in a dive. To overcome this difficulty, add some weight to the nose (either clay or a piece of tape is handy) to move the center of gravity forward. When you build your next model, try to keep the tail end lighter or place the wing farther back.

As you make successive flights, keep increasing the number of turns by 100 to 200 with each flight. The best flights are usually made when a model climbs to the maximum possible altitude and has only about 10% of the turns left after it descends. Observe how high the model climbs and how many turns are left in the motor after each flight.

1. If the model will not climb high enough and
   (a) has many turns left - shorten the motor and/or use a larger size rubber.
   (b) has very few turns left - lengthen the motor and use a larger size rubber.
2. If the model climbs to the ceiling and
   (a) has many turns left - shorten the motor and use a smaller size rubber.
   (b) has very few turns left - lengthen the motor or use a smaller size rubber.

The rate of climb and altitude reached can be controlled to some extent by the winding procedure. By unwinding some turns (50 to 100) when you finish winding, you can eliminate some of the power burst at the start of the flight. Since the initial torque of a rubber motor is several times greater than the cruising torque, backing off some turns will cut down the altitude the model will reach. It will also reduce the stresses placed on the model at the start of the flight. Using this procedure, you can fly on a larger rubber size than necessary if the correct size is not available.

The size of the circle a model turns in depends on a number of factors, namely:

1. The size of the building and available floor space.
2. Drifting due to air currents.
3. The shape of the building near the ceiling and the location of obstructions such as lights, girders, etc.

From a performance standpoint, a model probably loses some of its efficiency as the size of its circle is decreased. A model with a smaller circle, however, is less likely to be seriously affected by changes in its direction of flight if it hits an obstruction, stalls, etc. Obviously a model flying in the largest possible circle in a building, will soon be in trouble if any change occurs in its flight path.

A model with a small circle can safely wander over a larger area than one with a larger circle. If you fly in a drafty building, a small diameter circle may increase the amount of time the model can fly before drifting into obstructions. When you make your test flights, observe which way the model drifts so that it can be launched from the best location. Also, check to see if the drift is the same at all levels and at all locations on the floor.

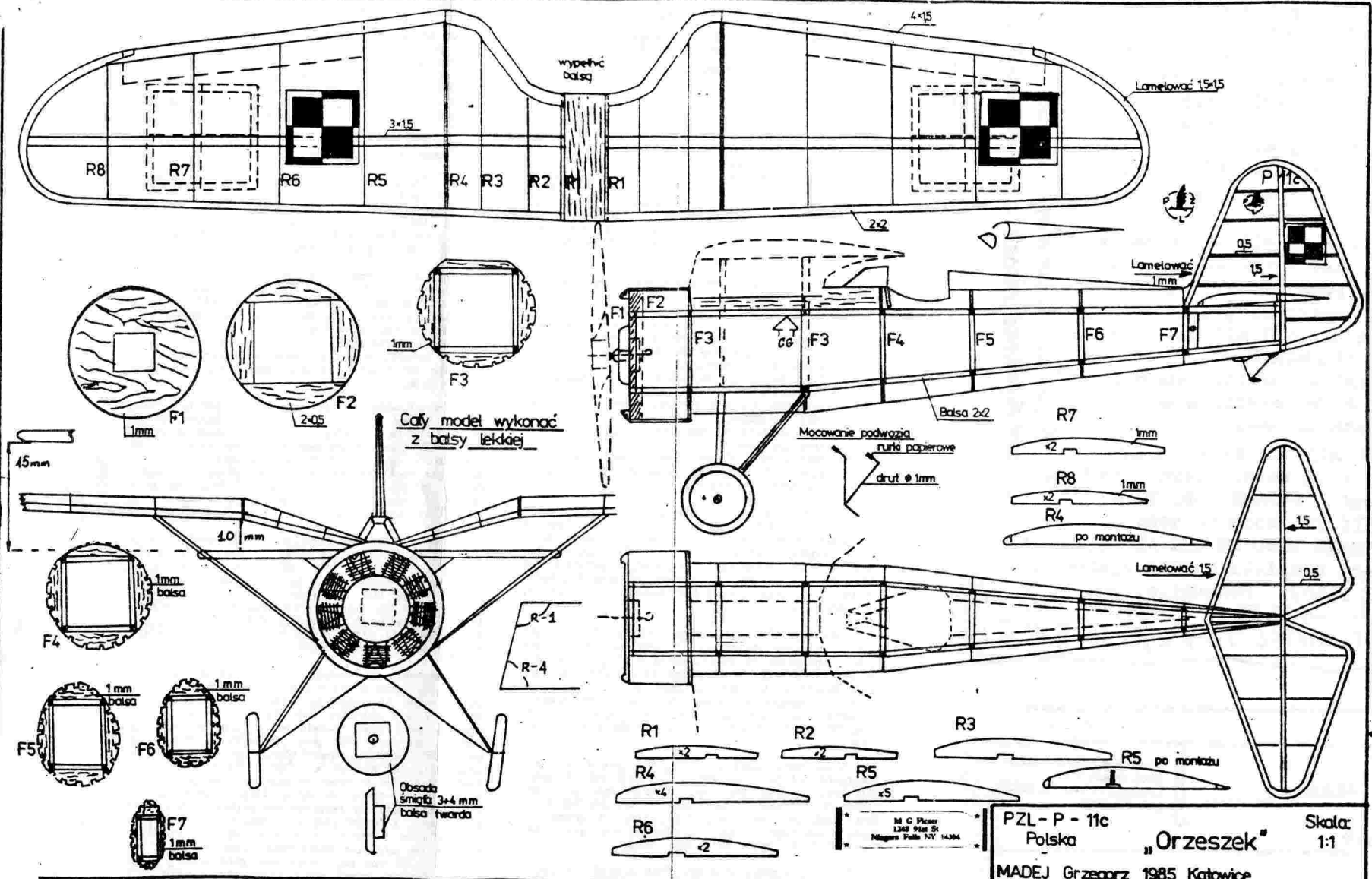
Some models, when flown with full turns, have a tendency to fly straight ahead, losing most of their normal left turn. This phenomenon is caused by insufficient rudder area to counteract the torque effect. (See IMAC Newsletter, Oct. 1961, Theoryous Topics). If the rudder is replaced by a larger one, this tendency to go straight can be eliminated, and the model will stay in its normal path during the initial phase of its climb.

Newcomers to indoor flying frequently have difficulty getting their models to climb. This can usually be overcome by changing the propeller design. Most articles and plans of indoor models concern very light models which just barely move through the air. The prop and rubber combinations which work well on these models are almost always unsuitable for heavier versions. The heavier model must fly faster in order to stay up. We can get the extra flying speed by using larger rubber and a different prop. By reducing the diameter, pitch and blade area, a faster prop will result. It is a good idea to make a few extra props of various sizes and compare the way your model behaves as the props are changed. If you have only one prop when you go flying and the model won't climb, try cutting off the tips of the blades.

While it may sound strange to suggest using a faster prop for an indoor model, it can easily lead to a great increase in duration. This is a result of several factors:

Continued next page

(7) A FAMOUS OLD FIGHTER FROM THE GOLDEN AGE IN PISTACHIO SIZE. SUBMITTED BY MATT FICNER NIAGARA FALLS

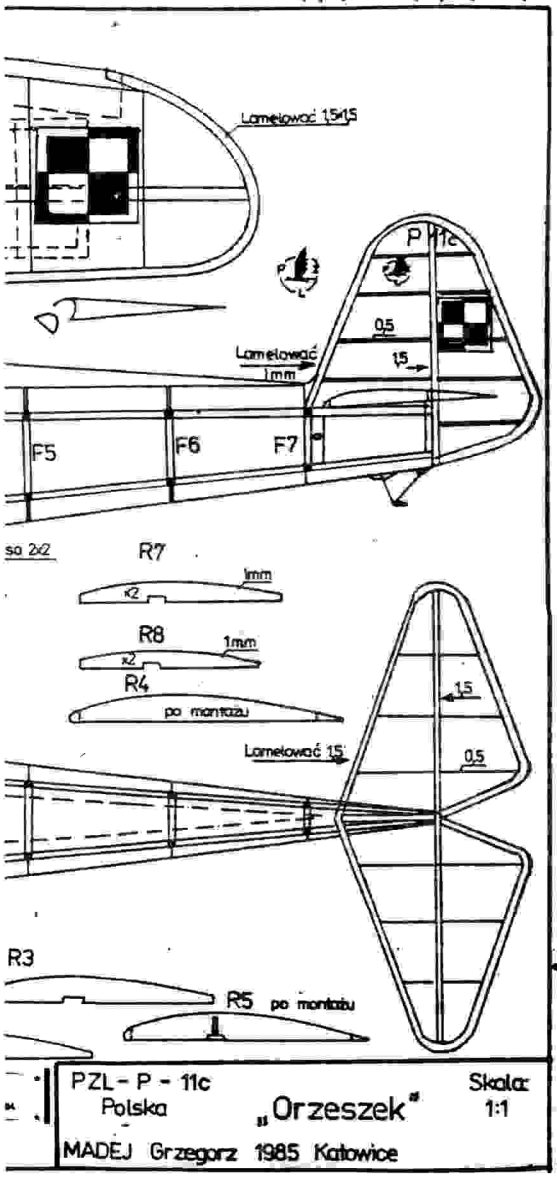


MODELARZ 2'88

NEXT FUN FLY: FEB 8TH - SUNDAY
MIAMI DADE SOUTH COLLEGE 9705

MODELARZ 2'88

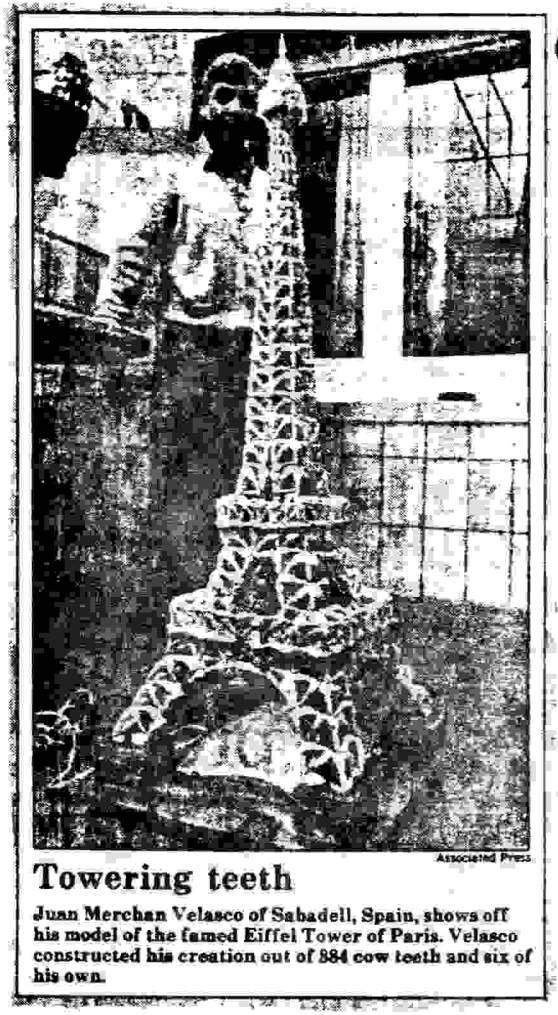
SUBMITTED BY MATT FICNER NIAGARA FALLS



- SUNDAY

MODELARZ 2'88

E SOUTH COLLEGE 9705



Associated Press

Towering teeth

Juan Merchan Velasco of Sabadell, Spain, shows off his model of the famed Eiffel Tower of Paris. Velasco constructed his creation out of 884 cow teeth and six of his own.

A DENTIST MODELER'S DELIGHT

SOTICH. (CONT.)

1. With a faster prop, the model should climb higher.
2. Many of the turns that the model formerly landed within the rubber motor will now be used.
3. A longer motor than otherwise possible may now be used thereby permitting more turns to be stored.
4. A model with a faster prop is not easily upset, so it is not as likely to lose altitude due to stalls or encountering turbulent air.

©EVERYONE INVITED ° R.S.V.P.

So you think the Olympics was big? Wait till we fly the 4TH World Pistachio Proxy Inter-Gnats.... MAY 16+17 1987

Pistachio Scale models are like peanuts, only smaller. They are a bit harder to build and trim. You have to use tweezers sometimes. The tiny bit of rubber power is hard to get. Try a golf ball, or the inside of shock cord (Bungee) if you can't cut down on your rubber. .030" to .050 size and 3 inch propellers or a bit bigger.

There are many plusses: Cheap to build, cheap to mail, durable in the slam-bang world of postal services, small enough to trim in your own home, little time expended, lots of fun.

We will provide trophies, and publish a list of all who enter so we can see where our flying friends come from, and their addresses. Also you will be informed of the complete meet results, even if you are last. We realise that there are a limited number of people who are interested in this sort of thing, but at least we will all get to know each other. PISTACHIOS FOREVER: SIC SEMPER PISTACHIOS.

There is a great tentation to build unusual aircraft- canards, triplanes, autogyros, etc. What can you lose? A few evenings work. 3-views, and maybe a photo are the only documentation needed.

WE ARE SENDING THIS ISSUE OF HANGAR PILOT TO ALL THE KNOWN MODEL AIRPLANE PUBLICATIONS IN THE WORLD; plus many club newsletters. We hope that this will truly be an internation al event. PLEASE COPY THIS INVITATION if you are a n ewsletter editor. If you know of some obscure publication that has not gotten the word, PLEASE SEND US THE ADDRESS. Bill Hannan has given us a list, but it is not complete...HELP, please.

For any more information write to HANGAR PILOT. Meanwhile, get building and testing. CLASS I - UNDER 2 GM. CLASS II 2-3 GM. CLASS III OVER 3 GM. RIDOTTO: SMALLEST MODEL TO FLY 30 SEC.

ALSO: "MODEL OF A MODEL" CLASS FOR ANY FUSELAGE MODEL EXCEPT "MIKE" INVOLVE

INTER-GNATS ENTRY NAME _____

ADDRESS _____ TO:

_____

NAME OF PLANE: _____ CLASS: _____

John B. Martin Jr., D.D.S.
2180 Tigertail Ave.
Coconut Grove, FL 33133
305-856-6363

WEIGHT (Grams) _____ SOURCE OF PLAN _____

SOURCE OF DOCUMENTATION: _____

PROP SIZE: _____ X _____ X _____

TYPE PROP: Carved block, laminated, bent wood, plastic, other _____

POWER: _____ INCH LOOP OF _____ (SIZE) Rubber Company _____

BEST FLIGHT: _____ SECONDS ON _____ TURNS OF RUBBER



FROM THE HORSES MOUTH AND OTHER ORIFICES

COMMENTS ON INDOOR SITES. Looking through a recent issue of indoor news and views I made an interesting observation. There were 26 indoor contests listed in the calendar of events. Listed were 12 gymnasiums, 3 community/civic centers 4 armories, 1 aircraft hangar, 2 blimp hangars, 1 library rotunda, 1 exhibit hall, and 1 ball room.Obtaining sites is the most difficult task that confronts any indoor club. It is a world wide problem, and the club members who go out of their way to locate, and obtain these sites are by far the most valuable members that any club can have. MIAMA would like to salute BILL CRISS,TONY BECKER,ELLIS OGLESBY, DICK OBARSKI, AND PHIL BAYLY as being particularly active in this regard. We encourage each and every member to be on the alert for new sites. Don't just rely on the efforts of others. We can't have too many sites because, by using many we won't "wear out our welcome". In addition to the above sites ,we have flown in a boxing arena,a Jai Alai Fronton, and a fertilizer warehouse. Got any great ideas? Pursue them!

JOHN CAMPBELL OF Hamilton,Ohio, and JOE WACHTER have shared some of their old rubber scale plans with us. We want to thank them and all you other pilots who sent in 3-views, publishable material, and words of encouragement with your membership renewal. Don't get sore if you don't see your contribution in print for a while. For a change we have a small back log of stuff which is a newsletter editor's idea of heaven.

DAVE PLATT writes that he's going to build an indoor AMA scale model to be ready for the Lincoln Nats.. We hope he tries it out in some of the future MIAMA meets.

Now that THE SEARCH FOR H.K. WEISS has been happily concluded we want to find some more of his contemporaries. Where is: NICK LIMBER, ALAN BOONTON, AVUM ZIER, and ED LIDGARD? Send information to Hangar Pilot, Dept. of missing modelers.

ENGLISH LANGUAGE COMMENT DEPT. O.K. or Okay, used to mean something that is good or at least all right. Not any more. "OKAY?" is used nowadays to conclude any sentence at all, usually in a rude, rebellious, or arrogant fashion. Example:"I think you're a big jerk,okay? It is also used at the end of a statement that is definitly not okay. Example: "So I've got a heroin habit and AIDS, and I'm gonna die in a year,okay?" Sounds okay to me. My trouble is I'm just not with it when it comes to modernese,okay?

MIAMA INDOOR CONTEST SEASON. We are about midwy through our meets and they have never been so well attended . As you can see from the calendar on the back page we will have 5 official meets instead of the planned 7. Attendance in Miami at the Gym got so low that these "meets" were converted to FUN FLYS. Conversley the two day meets in the Tampa area got more and more popular, so we will score the best 4 of the 5 meets.

MEMORIES OF CARDINGTON by Doc

THE WORLD INDOOR CHAMPS in Aug. '86.How often does a defending champ of anything ever repeat the second time? Almost never. Jim Richmond did. He's World Champion again.

I've been watching Jim Richmond for years. It's fun. Talk about cool hand Luke, or Agent 007, or Minnasota Fats all rolled into one,.. it's Jim the Unflapable. Mr. Cool.

I was there. Let me tell you my obversations on his world record flight on day 2. It was pouring rain outside the hangar, and little drops were falling inside too. It was obvious that noone was going to do well today. Oh, yeah?

I was timing a Romanian flight and kept glancing over at Jim's effortswhich were full of excitement and crowd noise.Hangar 2 is cluttered with crates, structures, testing frames, and equipment on the floor to test fire resistance of all kinds of products and structures for the Fire Dept. So on this cluttered floor Jim launched away and his model went straight for about 100 yards or more. It was supposed to turn left. Eventually it did after almost clobbering half the stuff on the floor, and began a wide left turn full of near misses and excitement.(It has been conceded that Jim has his share of luck). In a couple of minutes the model settled down to a normal left turn, and a climb to the rafters. This is where the fun really started,amid the drops of water. How well can you steer at 125 feet in dim light/? Jim had to do it many times, and once it was his last chance..either a contact with the plane or a hang up..it was that close, and ,sure enough, Jim snagged it and led it back to safety. He led it back by walking between a series of crates while looking up and weaving in and out of the narrow spaces in the floor clutter with his plane on the balloon. His elapsed time of this flight was over 50 minutes but about three minutes of steering time had to be deducted. To add to the excitement some of us thought he was going to be disqualified! The rules allow"only one assistant on the floor",but Jim hadwell wishing, and well intentioned spectators yelling "look out", and "Go this way Jim", or"Go that way,Jim" to the point that officials had to warn the crowd not to help. Well, it landed OK, and a lot of applause, and all that. I'm going to ask Jim to write his account of this record flight because I won't forget it, and he won't either!

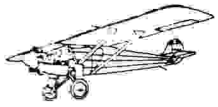


NEWS ITEM: Malpractice insurance for health professionals in Dade County Fla. are the highest premiums in the nation.

We suggest the Doctors form a special committee to check on the accounts of every attorney who is "taking care" of wealthy widows. We will audit the expenses of these caring attorneys who are taking care of their wealthy widow clients to see if there are any Robin Hoods among them. We feel that this is only fair since there are a whole bunch of malpractice attorneys who do nothing but check on doctors to see if they are being good boys, and doing good work and all that.

(13)

SKYWAYS



THE JOURNAL OF
THE AIRPLANE 1920-1940

No. 1 Jan. 1987

SIGN UP NOW

We are starting on the basis of 4 issues/yr, with the same contribution system as with WWI AERO: members contribute what they think best, starting with a minimum of $20. Payments can be made in conjunction with or separate from payments made for WWI AERO- checks can be made to SKYWAYS, WWI AERO, or WWI Aeroplanes Inc, and sent to the NY address- but money sent to California will arrive OK just the same...

We hope to collect a good nest-egg with which to cover start-up costs- so sign up now!

Editorial Office: Box 3366, Glendale, CA 91201, USA
Publishing Office: 15 Crescent Rd, Poughkeepsie, NY 12601, USA

FIRST ISSUE

OUR NEW JOURNAL- Kenn Rust, Editor

As its full title suggests, SKYWAYS will be concerned with the airplanes of the 20s and 30s, and to provide the greatest possible assistance to those interested in restoring, reproducing, or scale-modeling such aircraft. It will also be a forum where men and women share their knowledge and materials.

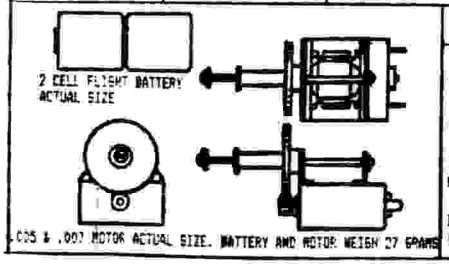
Each issue will have two or three main articles, plus a number of departments. One of these, to run through the first 8-10 issues, will be Chronology Highlights for each of the years in SKYWAYS' period, to establish the character of the period through the important events and machines which moved aviation forward, and to inspire builders of every scale to take on projects they might not have considered before.

SKYWAYS, like WWI AERO, will be a publication of and for its members, to interest, assist, and encourage them. It covers the two-decade period when the airplane came to full life and transformed our planet into one world, where its people live more closely together, for better or worse, than ever before.

FERRELL ENTERPRISE - 300 W. LINCOLN #82 - ORANGE CA. 92665

ELECTRIC FREE FLIGHT MOTORS FOR 18 TO 28 IN. WING SPAN MODELS

MOTOR TYPE	5 1/2 IN. CO2 PROP SPEED	MAX POWER TIME	WING SPAN	AIR BORN SYS. WEIGHT	ALL UP WEIGHT
.005 2 CELL	2500 RPM	120 SEC.	18-22 IN.	27 GRAMS	2 OZ.
.007 2 CELL	2800 RPM	90 SEC.	18-26 IN.	27 GRAMS	2 1/2 OZ.
.007 3 CELL	3500 RPM	90 SEC.	24-28 IN.	33 GRAMS	3 OZ.



.005 & .007 MOTOR ACTUAL SIZE. BATTERY AND MOTOR WEIGH 27 GRAMS

PRICE LIST

.005 MOTOR WITH 4 1/2-1 GEAR REDUCTION ONLY.....$28.00
.007 MOTOR WITH 4 1/2-1 GEAR REDUCTION ONLY.....$28.00
.005 OR .007 MOTOR, HARNESS, 2 CELL FLIGHT BATTERY PACK & 2 CELL BATTERY CHARGER.....$35.00
.007 MOTOR, HARNESS, 3 CELL FLIGHT BATTERY PACK & 3 CELL BATTERY CHARGER.....$38.00

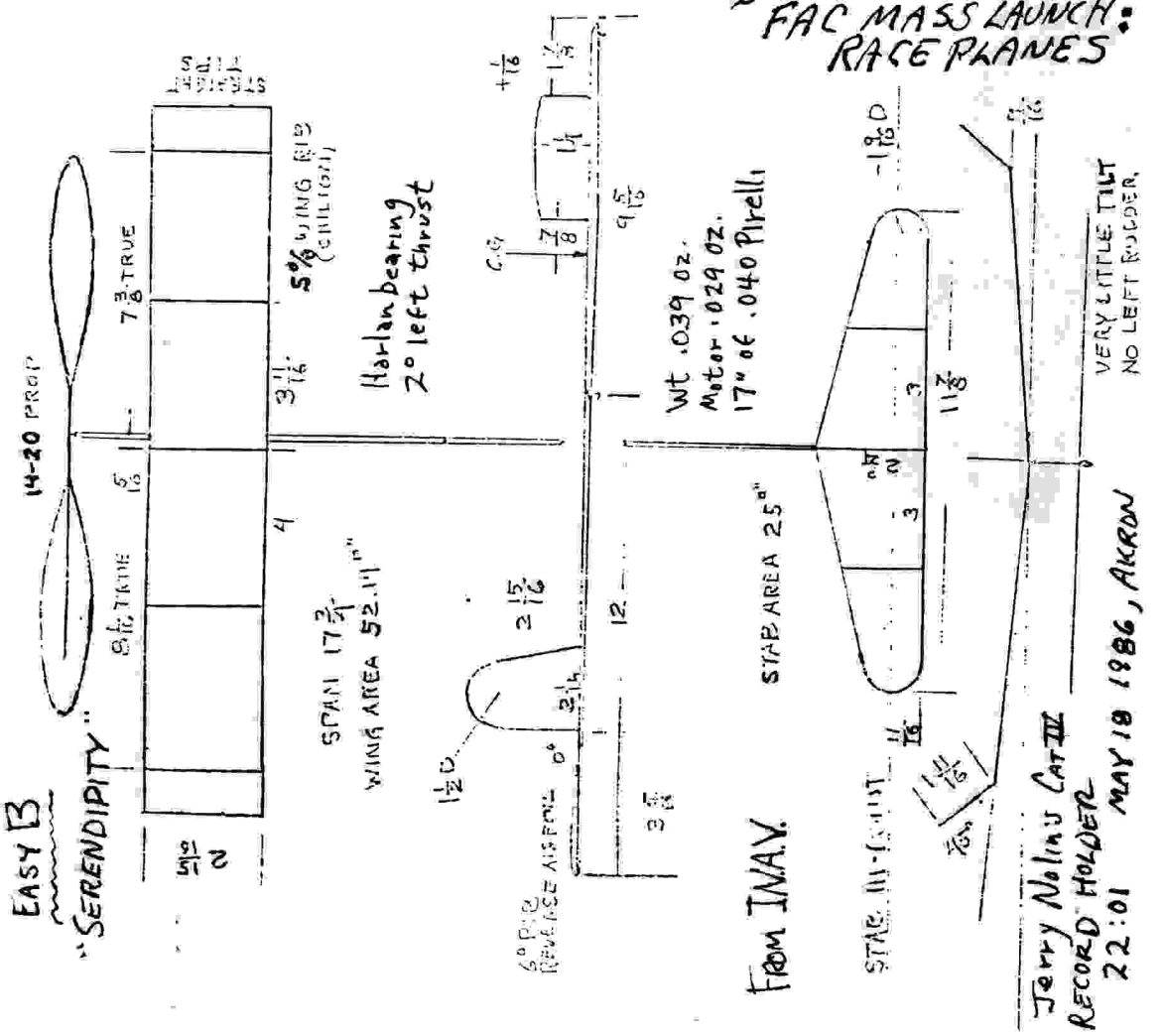
Ferrel Papic has flown the .005 elec. motor indoors 202. is a bit of a load, boys. Looks a LOT BETTER OUT-SIDE.

MOTOR SIZE ABOVE HAS BEEN REDUCED 1/3.

ANNOUNCING NEXT BIG INDOOR MEET Sat./Sun. Feb 14+15

COAST GUARD HANGAR CLEARWATER-ST PETE AIRPORT 9-5
ROUTE I-4, TAMPA, BECOMES ROUTE 275. GO WEST AND AT END OF HOWARD FRANKLYN BRIDGE TURN RIGHT ON ULMERTON RD. RIGHT ON 686 ROOSEVELT BLVD. GO PAST CLEARWATER-ST. PETE AIRPORT AND GO RIGHT AT TRAFFIC LIGHT. IN 400 YDS. RT. AGAIN + CHECK IN AT GUARD HOUSE

FAC MASS LAUNCH: RACE PLANES



WHATS GOING ON?: FEB 8 FUN FLY MIAMI DADES. COLLEGE 9-5
FEB 14 & 15 MIAMA MEET #4. COAST GUARD HANGAR CAT II
SAT & SUN 9 TO 5 CD TONY BECKER 813-634-8572 ST PETE/CLEARWATER
AN OUTSTANDING SITE - DETAILS ON PAGE 14
MARCH 15 - FUN FLY - MIAMI DADE SOUTH COLLEGE 9-5
MARCH 29 - 1987 PEACH STATE INDOOR CHAMPS - CUMMING GA.
APRIL 11+12 - MEET #5 - TENTATIVE - MAC DILL AIR BASE
MAY 16+17 - INTER GNATS PISTACHIO MEET MIA/DADE S.
JUNE 5, 6, 7 - NFFS U.S. INDOOR CHAMPS. EAST TENN. STATE U.
JOHNSON CITY, TENN. CAT III - **122 FEET!** MIAMA
PEANUT & PISTACHIO GRAND PRIX - CD TONY ITALIANO 414-782-6256
AUG? PROXY PEANUT MEET - JAPAN S. UCHIDA 3-24 ASANAKA OSAKI-SHI
503 JAPAN

THE HANGAR PILOT

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

MIAMI, FL
JAN 27
PM
1987

USA
22

JIM MILLER
827 YORKHAVEN RD
CINCINNATI, OH 45240