ISSUE 109

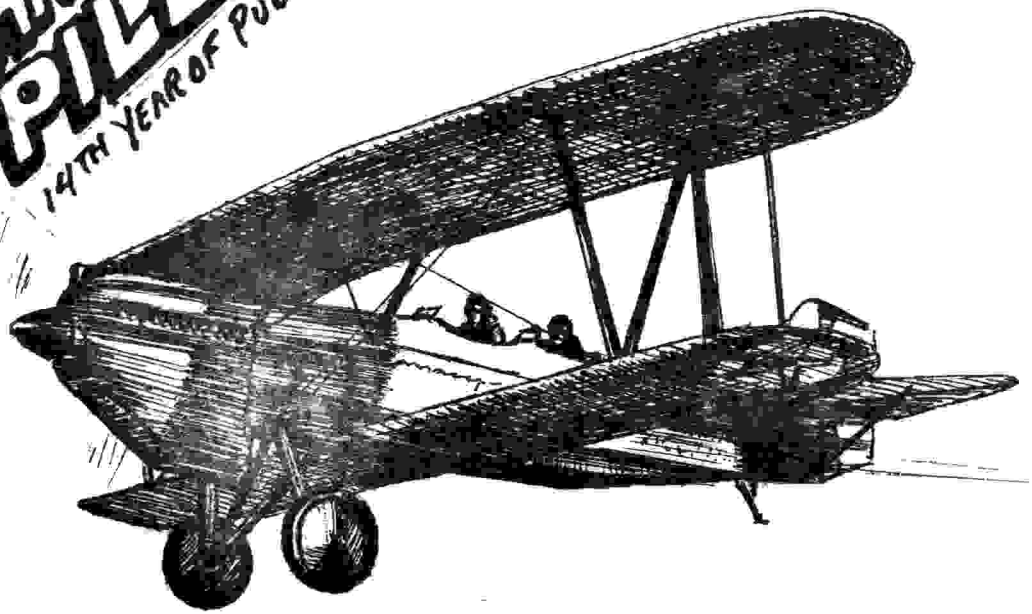
APRIL / MAY 1986

Nostalgic

THE HANGAR PILOT

14TH YEAR OF PUBLICATION

MIAMI INDOOR AIRCRAFT MODEL ASSN.



JERRY BOCKIUS '86

NEXT MEET: MAY 24+25 - MEMORIAL DAY WEEKEND - SAT + SUN - 9 TO 5 - MAC DILL AFB TAMPA FLA. CONFIRM (305) 858-6363

SAT NITE MAY 24 DINNER AT PEPE'S - PLANS FOR NEXT YR.

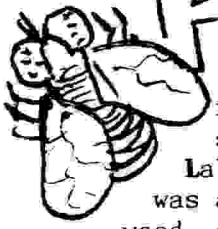
MIAMA ANNUAL DINNER: FATHER'S DAY 7:00 AT VICTORIA STATION - NW 36 ST.

SUNDAY JUNE 15



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!!!



FLY NOSTALGIA

UGH!

The forty-six year old article on the next page will be remembered by everyone who ever saw it in 1940. Funny how some things just stick with you. Ed Seay of Model Airplane Labs. contributed this bit of nostalgia to Hangar Pilot. Ed was at MacDill meet #6 with a bunch of fine supplies and balsa wood, and it was good to see him again. Check your old Hangar Pilots for his supply address.

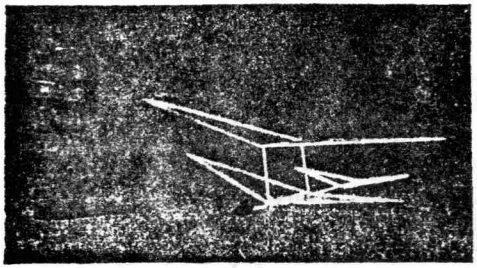
Your scribe did a little fly flying in his day and noticed aglaring omission in the article..how to handle the fly in order to mount his thrust line correctly. You must first place him, alive of course, in a Mason jar and then put it in your refrigerator. After about an hour bring out your "motor" and mount it. He is numb and you have about one or two minutes of working time before he thaws out and starts buzzing again. My mother always appreciated a jar of flies in her refrigerator. She threw out some of my most promising motors. Of course this was a long time ago before the FRA (Flies Rights Association). This practice is now considered cruel and barbaric and is outlawed in most states. ED.

MEET 7 MIAMA HQ.
EXPRESSWAY INN -
DALE MABRY RD. + GANDY BLVD.
1-813-837-1921
MAY 24+25.

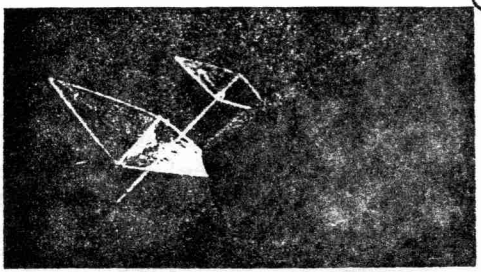
PECK-POLYMERS STILL FLYING

Sure, they were hurt badly by the fire; but you can't keep a good couple down. Sandy and Bob were meant to fly...and they have already found a new building for manufacturing and stocking supplies. Their telephone number is new, but the mailing address remains the same.

(2)



A battery shows size of fly-powered biplane



A microfilm job with its fly ready to go places

MODELS ON THE FLY



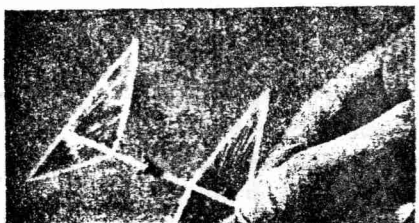
A New Source of Power for Your Model Planes—Flights of Three Minutes Have Been Made With Fly-Powered Planes of 2½ In. Wing Spread

By WILLIAM B. SCHWAB and JOE ELGIN

IF ANY of you were at the Detroit Nationals last year, you've probably found out that not all the fun was found on the flying field, but a great deal was found at the hotel where many of the contestants remained. When model (?) builders weren't busy putting airplane glue on elevator buttons, putting firecrackers in sand crocks and in shower rooms (Mr. Korda please take note), calling each other on the telephones all night, staging contests of their own (with paper planes going out of the windows), they were catching flies and gluing thin strips of Jap tissue on their tails and letting them go in the lobby of the hotel. People sitting in the lobby were amazed when they, looking up, saw a piece of red tissue cruising around in the air, first going one way then the other.

When we returned home from Detroit we wondered if it would be possible for a fly to pull up a very small glider. Well, we soon set to work building small all-balsa gliders from two to five inches in wing spread, the fly being attached to a thin strip of tissue, and in turn to the glider. We soon discovered, however, that the gliders were much too heavy; the fly buzzing in the air and the glider still sitting on the ground. Later developments resulted in a glider made from soft 1/32" squares and covered with Jap tissue. This time the plane was light enough to fly but no flights actually took place, because the towline just would not work. When the fly stopped buzzing he would drop, due to the drag of the glider and towline and the whole works would end up in a dive. Still later we built a ship five inches in wing spread from 1/64" soft sheet cut into as fine a strip as possible for wing and tail frames, the fuselage cut from the same sheet into 1/64" square, tapering towards the tail. The wing and tail was covered with microfilm and the fly attached directly to the fuselage or stick with a small drop of airplane cement. In this way we could get the plane to climb under power and then, when the fly cut off, the plane would continue on a slow glide. Nine times out of ten the fly would start up again before the plane landed and the flight was repeated.

Before we got our final product we experimented with bimotor and trimotor jobs, but to no avail. Our first drawback was finding flies of the same size and power, then, too, we found it's just impossible to get the engines synchronized; first one would start, then the other, each time resulting in a spin one way or the other. Course we've never tried them in tandem. On one of our latest developments we made a ship of only two and one-half inches in wing spread and powered it with a smaller fly. Believe it or not, the fly, being lighter, would deliver more horse (fly) power per weight than a large fly would. Result—a smaller plane with a smaller fly—a better climb and a better glide and flights of over three minutes duration indoors in our own living room, where the climb was limited. The flight ended when the fly managed to flip and land on the ceiling. On one occasion we took a ship outdoors in the evening and let it go, only to have it go out of sight overhead in about fifteen seconds. It's probably still flying, or maybe the fly is having lunch on some garbage can before he continues on his "flight."



The fly is attached to the stick between the tandem wings by an infinitesimal amount of cement

The construction of these little ships is very simple and needs no or little explanation. The cost of these ships is negligible, the main item being a small bottle of microfilm solution for covering.

In the accompanying drawings we have several types of ships which we have built and flown successfully. Although the instructions here will undertake explanation of only one ship, you can make your choice of which you want to build, the other ships being quite the same in construction. The plane shown in drawing number two (2) is the one which will be explained in the forthcoming paragraphs.

If you care to make your own microfilm use a one-ounce bottle of clear dope and add about five drops of castor oil as a plasterizer, or enough so that when the film is poured on the water it will spread out and keep stretched out, not spread out and then shrink back. Otherwise you'll have too heavy a sheet. Use a bottle cap from a one-ounce bottle for a measurer and fill it half-way with your microfilm solution. When pouring, don't pour your solution all in one spot, but quickly pour over a large area, about five to ten inches across the

CONT. ON P. 11

③ MEET 6 MAC DILL AFB

It was back to hangar five for MIAMA meet number six and a few new Florida state records were set.

We have to thank new Wing Commander Col. Ralston, and his new Deputy Commanderfor Material, ColStutz for the opportunity to return to the excellent facility at MacDill Air Base. Although we may list future meets here we are always cautioned to realise that the date may have to be cancelled at the last minute if the hangar is needed. We will set up a phone crew for these occasions.

Frank Kieser keeps getting better and better performance from his ornithopters. His latest effort was 5;11 His Fla. record is 5:18. Dick Obarski set a new Florida Class A ROG record of 11:47. Doc Martin scored 169.9 in Peanut for a new Florida record. This is the same score that Jim Miller had last month to set a new Cat. II record. Although hangar 5 is about ten feet higher than the Coast Guard hangar it is Cat. III. Both sites really spoil you if you are used to flying in a gymnasium.

Doc's record setting Peanut is a Voisin seaplane that is also a canard biplane and a big bonus pointer. He solved the problem of having a sea plane ROG by putting wire skids on the floats which results in a very realistic 30 foot take off run followed by a minute flight. Tony Becker won the steering pole for high time in Easy B donated by Obarski. Dave Linstrum is on a building binge and has been turning out more fine aircraft than Walt Mooney. He has a collection of Bostonians named "Gulf Ace" (A Gulf of Mexico version of the Pacific Ace) "Ziggy","Observer","Sorta Korda". Another wild Bostonian builder is Rick MacEntee. His Bostonian fleet is growing including some very charismatic machines..how about a Boston Burnelli? Millard Wells is also building a lot of good looking Bostonians. His Boston Mulligan is a real beauty. Come to think of it, this event is the most popular in recent years. We fly to a 7 gram min. weight, and don't add any weight penalty for biplanes. NFFS has a TWENTY GRAM biplane rule!! Talk about ridiculous..it's an indoor payload event! Try one.(Bostonian) I suppose we should make our biplanes 10 grams but certainly NOT double the weight. In the raceplane Flying Aces event, Doc Martin's Caudron outlasted John Tudor's Dayton Wright by less than a second in the final. Col. Bill Criss proxy flew Butch Hadland's Hughes racer to third place. Get your WW One multiplane ready for the last meet.

MEET 7: MAC DILL AIR BASE - TAMPA
HANGAR #5 [memorial day weekend]
SAT + SUN MAY 24 + 25 9 TO 5
CALL 858-6363 TO CONFIRM BEFORE YOU GO.
(305)

RESULTS - MIAMA MEET 6 MAC DILL AFB MAR 22/23 (4)

PEANUT EVENT: Static, plane, 2 best fly, Av. fly, total

1.	John Martin	101.2	Voisin	61.5 76.0	68.7 169.9 ★
2.	Rick MacEntee	87.5	J-3 Cub	74.6 73.0	73.8 161.3
X	John Martin	85.6	Ambrosini	63.5 60.0	61.1 147.3
X	John Martin	77.7	Drewswiecki	77.7 45.8	61.1 138.8
3.	Millard Wells	78.5	Mulligan	53 55	54.0 132.5
4.	Walt Everson	78	Waco E	48 54	51 129.0
5.	Bill Criss	65.5	Pilatus Porter	53.9 63.5	58.7 124.2
6.	Dave Linstrum	82.6	Ambrosini	31 50	40.5 123.1
DNF	MacEntee	P-51	Mustang	80.0	

KIT PLAN EVENT: Static 2 best flights ROG total

1.	John Tudor	Curtis Robin	88.5	72 73	233.5
2.	John Martin	Polish Canard	83	68 81	232.0
3.	Rick MacEntee	Contestar	91	61.0 58.6	210.6
4.	Dave Linstrum	Voyager	82	65 52	199.0
5.	Bill Criss	Pil. Porter	86	56 55	197.0
X	John Tudor	Corbin Super Ace	88	46 53	187.0
X	Dave Linstrum	Pil. Porter	90	39 31	160.0

CHAR.

Bostonian:

1.4	1. John Martin-Bost. Bis	232.5
1.5	2. R. MacEntee-Bob Cat	207.9
1.2	3. M. Wells-Wee Bost.	170.4
1.2	4. Dave Linstrum-Ziggy	166
1.2	X " " " "-Observer	165.2
1.1	5. W. Everson-Banned in B.	136.2
1.4	X. M. Wells-Mulligan	117.4
1.2	X. Dave Linstrum-Gulf Ace	163.4

Manhattan:

1. Millard Wells	5:36
2. Walt Everson	4:37

Easy Bee:

1. Dick Obarski	11:49
2. Tony Becker	10:33
3. Dave Linstrum	7:23
4. Millard Wells	4:23

Penny Plane:

1. Tony Becker	7:13

Novice Penny:

1. Walt Everson	10.17
2. Dave Linstrum	8:33
3. Millard Wells	7:47
4. Tony Becker	7:31
5. Terry Rimert	3:13

"A" ROG:

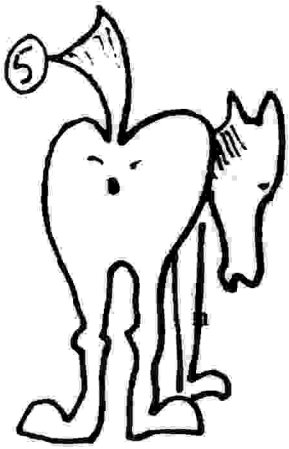
★1. Dick Obarski	11:47
2. John Martin	3:33

FLYING ACES RACE PLANES

1. Doc Martin Caudron
2. John Tudor Dayton Wright
3. Hadland/Criss Hughes
4. Dean McGinnes Waterman
5. Millard Wells Mulligan
6. Dave Linstrum Waterman

★ = NEW STATE CAT III RECORDS





FROM THE HORSES MOUTH

INTERGNATS REPORT: Next issue we will feature a full report on this year's Intergnats. It was held at the Pelota Room in the MIami Jai-Alai Fronton over a four day (evening) period. We were very fortunate to have Kevin Koffman,head of the Jai-Alai publicity dept.,allow us the use of this fine facility when the Miami/Dade South gym was unavailable. We flew in the back room while the game was going on out front. When you got bored with the toy airplanes you could step out front and have a beer while putting down a quinella wager.

MIAMA ANNUAL DINNER: We realize our club is not as social as it might be. We seem to do more flying and less meeting than most of the clubs we know. At any rate, we have booked the back room at Victoria Station for our annual Miama dinner. This place is on 36th St NW, and is across from the West end of Miami airport. We may not have a speaker as famous as Grover Loening, but we will have some fine entertainment for you so plan to be there on Father's Day June 15. Call Doc and tell him you are coming. Cocktails 7:00,Dinner 8:00,Entertainment 9:30. 858-6363

ANOTHER DINNER TO ATTEND: After the Saturday flying at MacDill in Hangar 5 on May 24th we will get together in Pepe's Restaurant in Tampa on Kennedy Blvd. at 8:00. After dinner we will plan next Fla. indoor season. We will discuss events, sites, rules, publicity, new members, youth , demos, social events, and special events, and anything else helpful to the health of the club. Bring YOUR bright idea. We had a dinner like this after meet #6 and the topic of discussion was "Penny Planes". We might have bored the wives in attendance, but the hangar pilots were very impressed with the material presented by Tony Becker,Dave Linstrum, and Dick Obarski. I learned a few things myself.

FIFTEENTH MIAMA SEASON DRAWS TO A CLOSE: We fly seven meets a year at Cat. I, Cat.II, and Cat.III heights. We fly 9 events: Novice and regular Penny Plane, Easy B, Peanut Scale, Kit/Plan scale,Glider, Bostonian,Manhattan and ROG Stick (Also called Baby ROG, Class A Rog, and Old Timer ROG.. choice of any two names). We don't give awards at meets but keep a point total for an awards banquet at the end of the season. The meets are held in the center of Fla. in the Tampa area..The Delta Maintainance Hangar at Tampa Int. airport, The Coast Guard Hangar at St.Pete/Clearwater,Hangar 5 at MacDill AFB, and also in the Miami area....Homestead AFB, the Miami Jai-Alai Fronton, and Miami/Dade South College gym. We sure thank all the above folks for making our meets possible. Our small club could never hope to rent such spaces.. we are eternally grateful for your generosity!!

THANKS TO MIKE ARAK - HERE IS EVERYONES ANNUAL POINTS IN EACH CLASS. ONE MEET TO GO.

MAMA ANNUAL POINTS 1985/86

PENNY	1	2	3	4	5	6
J. BECKER	3	-	-	-	1	1
R. MacENTEE	2	-	-	-	-	-
T. RIMERT	1	-	-	-	-	-
C. SOTICH	-	-	-	2	-	-
J. NOLIN	-	-	-	1	-	-
NOVICE PENNY	1	2	3	4	5	6
T. BECKER	3	-	-	2	3	2
R. MacENTEE	2	-	-	-	-	-
T. RIMERT	1	-	-	-	-	1
W. EVERSON	-	1	-	-	-	5
J. NOLIN	-	-	-	3	-	-
J. NASH	-	-	-	1	-	-
C. SLATER	-	-	-	-	2	-
D. LINSTRUM	-	-	-	-	1	4
M. WELLS						3
A" DOG	1	2	3	4	5	6
M. ARAK	3	4	-	-	-	-
W. EVERSON	2	3	1	-	3	-
T. BECKER	1	-	-	-	-	-
J. MARTIN	-	1	2	1	2	1
M. WELLS	-	2	-	-	-	-
D. OBARSKI	-	-	-	2	-	2
B. OLIVER	-				1	

P-NUT	1	2	3	4	5	6
J. MARTIN	7	4	4	7	7	6
G. LEFFLER	6	-	-	-	-	-
M. ARAK	5	3	-	-	-	-
W. EVERSON	4	-	2	-	4	3
R. MacENTEE	3	2	3	4	5	5
D. McGINNES	2	-	-	-	-	-
C. SHEPARD	1	-	-	-	-	-
M. WELLS	-	1	-	-	3	4
D. KELSO	-	-	1	-	-	-
D. LINSTRUM	-	-	-	1	-	1
T. BUCHER	-	-	-	2	-	-
C. LINSTRUM	-	-	-	3	2	-
B. CRISS	-	-	-	6	-	2
B. HADLAND	-	-	-	5	-	-
J. MILLER	-	-	-	-	8	-
K. SMITH	-	-	-	-	6	-
C. SLATER	-	-	-	-	1	-

KIT PLAN	1	2	3	4	5	6
J. MARTIN	4	2	4	2	4	4
G. LEFFLER	3	-	-	-	-	-
J. TUDOR	2	-	-	-	3	5
C. SHEPHERD	1	-	-	-	-	-
R. MacENTEE	-	1	2	-	-	3
W. EVERSON	-	-	3	-	1	-
D. KELSO	-	-	1	-	-	-
B. CRISS	-	-	-	1	-	1
D. LINSTRUM	-	-	-	-	2	2

MANHATTAN	1	2	3	4	5	6
W. EVERSON	3	-	-	-	1	
M. WELLS	2	-	-	-	2	
R. SHARPTON	1	-	-	-	-	

BOSTONIAN	1	2	3	4	5	6
G. LEFFLER	6	-	-	-	-	
R. MacENTEE	5	2	2	3	5	4
J. MARTIN	4	3	3	2	4	5
M. WELLS	3	-	-	-	3	3
W. EVERSON	2	-	1	-	-	1
J. TUDOR	1	-	-	-	-	
M. ARAK	-	1	-	-	-	
G. PERRYMAN	-	-	-	4	-	
C. PURDY	-	-	-	1	-	
D. LINSTRUM	-	-	-	-	2	2
T. BUCHER	-	-	-	-	1	
	-	-	-	-	3	

E.Z.E.	1	2	3	4	5	6
M. WELLS	6	-	-	-	3	1
T. BECKER	5	-	-	2	5	3
D. LINSTRUM	4	-	-	1	-	2
M. ARAK	3	-	-	-	-	
R. MacENTEE	2	1	1	-	-	
W. EVERSON	1	-	2	-	1	
D. OBARSKI	-	-	-	4	6	4
D. LINSTRUM	-	-	-	1	-	
J. NOLIN	-	-	-	3	-	
S. CHILTON	-	-	-	-	-	
C. SLATER	-	-	-	-	-	
E. OLIVER	-	-	-	-	2	

HL GLIDER	1	2	3	4	5	6
R. SHARPTON	1	-	-	-	-	-
D. BAL	-	1	1	3	2	-
C. PURDY	-	-	-	2	-	-
B. AVERA	-	-	-	1	-	-
D. BAL	-	2	2	2	1	-
S. BAL	-	1	1	1	-	-
J. AVERA	-	-	-	-	-	-

Junior

Overall Standing (# of Meets)

J. MARTIN 65 (4)
D. MACENTEE 48 (4)
W. EVERSON 44 (4)
T. BECKER 35 (4)
M. WELLS 30 (4)
D. LINSTRUM 19 (3)
M. ARAK 19 (2)
D. OBARSKI 18 (3)
G. LEFFLER 15 (1)
J. TUDOR 11 (3)
B. CRISS 10 (2)
J. MILLER 8 (1)
S. CHILTON 7
D. BAL 7
J. NOLIN 7
C. SLATER 7
K. SMITH 6
B. HADLAND 5
G. PERRYMAN 4
B. OLIVER 3
T. BUCHER 3
D. McGINNES 2
C. SHEPHERD 2
D. KELSO 2
C. SOTICH 2
R. SHARPTON 2
C. PURDY 2
T. RIMERT 2
B. AVERA 1
J. NASH 1

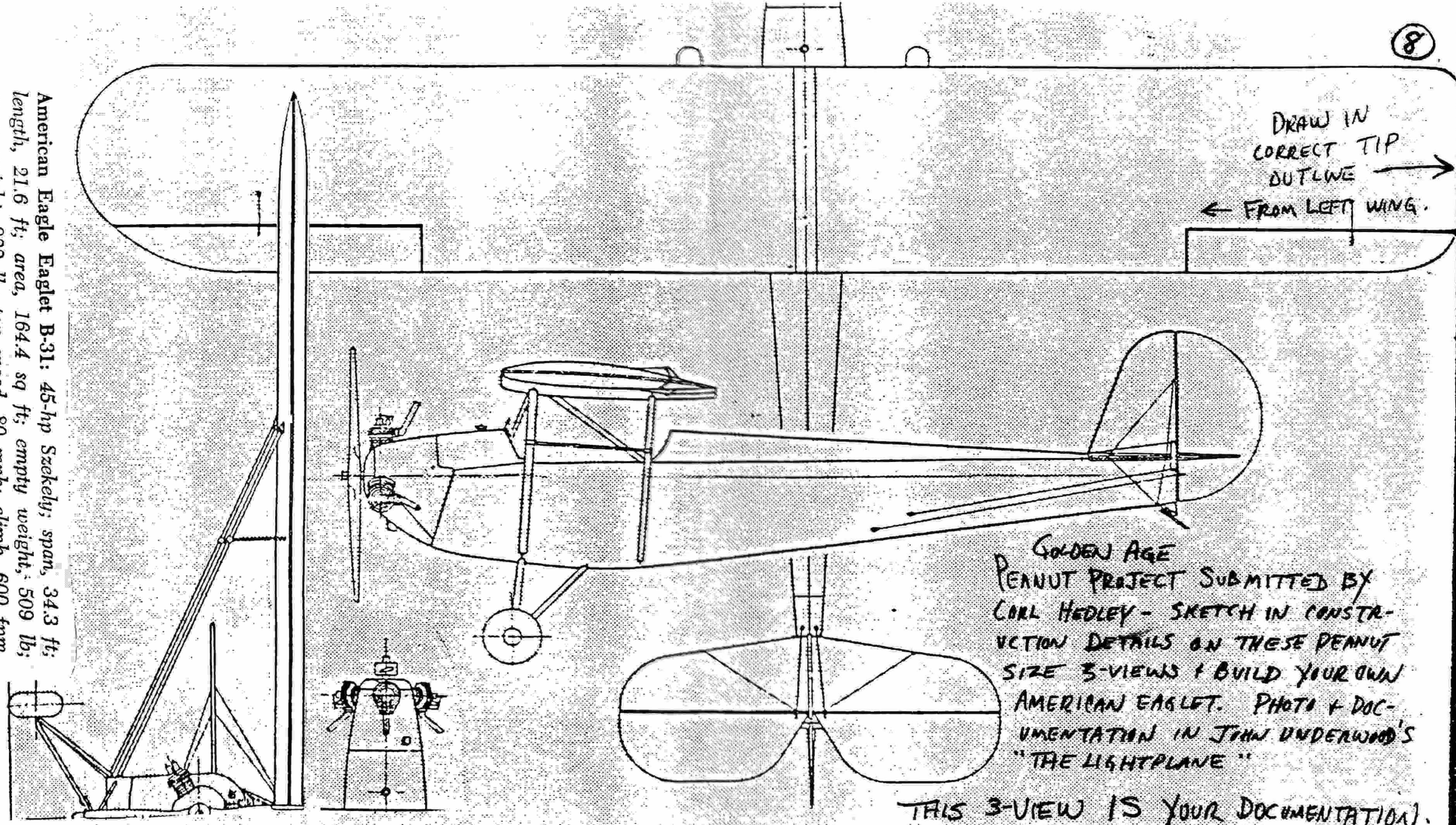
Junior

D. BAL 7
S. BAL 5
J. AVERA 1

FRANK KIESER 5

(7)

(8)



American Eagle Eaglet B-31: *45-hp Szekely; span, 34.3 ft; length, 21.6 ft; area, 164.4 sq ft; empty weight, 509 lb; gross weight, 922 lb; top speed, 80 mph; climb, 600 fpm.*

American Eagle Eaglet B-31: *45-hp Szekely; span, 34.3 ft;*

HEADQUARTERS, SWAMP SQUADRON
FLYING ACES CLUB
5275 William Clark Road
Lakeland, Florida 33809

(9)

GUEST EDITORIAL:
BELOW DEAN MCGINNES EXPRESSES HIS OPINION ON NEXT YEAR'S SEASON. BE ON HAND AT PEPE'S RESTAURANT ON MAY 24TH FOR A LIVELY DISCUSSION OF SEASON 16

In Favor of FAC Rules @ MIAMA Events

The Flying Aces Club Rules have been a major factor in the "revival" of Free Flight Scale activity in the United States. Indeed, their "invention" of Peanut Scale has crossed national boundaries. I would like to go on record as a MIAMA member, recommending the adoption of the FAC rules system for Free Flight Scale competition during the MIAMA indoor season. There are several reasons for this.

First, the FAC rules have been adopted across the board for Scale competition in nearly all AMA-Sanctioned contests held in Florida, the only exception being one contest held annually in Pensacola. In addition, there is increasing FAC activity in Georgia and the Carolinas. Adopting these rules would bring us in line with other contests. This is especially useful at King Orange time where it seems that we may be able to continue, for a time, both an indoor and outdoor contest. Competitors will not have to build to two sets of rules, and the same models would be eligible to fly both indoors as well as outdoors. This would build the entry at both sites.

Second, you can't argue with success. Look at the FAC Nats as compared to the AMA Nats. There are considerably more entrants at the former than the latter. Also, more and more clubs are putting on FAC events. The Scale Staffel and Flightmasters are a couple of the better known on the west coast that have "converted".

Furthur, these rules, with their bonus system encourage exploration of unusual designs and obscure aircraft, and make them competitive with more conventional types. This automatically puts the high wing cabin guaranteed-to-fly designs in their place. Kit plan scale, in my opinion, isn't "real scale". It has evolved to a few guaranteed winners. FAC rules would encourage wider selection of flyable entries, while not penalizing excessively the kit-plan-built entries.

While FAC specifies hand launch, we could still give a 10-second ROG bonus. It is silly for a P-51 to fly around with it's wheels down!! At the same time, a fixed gear model needs a little help to be competitive with a retractable. I really don't see any need for furthur change. Judging is much more objective, and much simpler that AMA rules. This eases the strain on the much over-worked CD. Incidently, for our Outdoor contests, we use the same rules for Peanut as Rubber Scale, the GHQ (or origional) Peanut rules are a little unwieldy.

So there you have it. Adopt FAC rules, and join the rest of the country "where it's at" in Free Flight Scale.

Schticks Und Tizzue Uber Alles!!

Dean C. McGinnes
Lt. Col FAC

Q: WHAT HAS FEATHERS AND GLOWS IN THE DARK?

A: CHICKEN KIEV

(BOB ANDREWS)





GUEST EDITORIAL #2
ED WHITTEN N.Y.I.T.

INDOOR CONTEST BOARD - LEADER OR FOLLOWER

INDOOR ACTIVITY, being on the increase, needs a strong leader. The ICB (Indoor Contest Board) can do the job; but the Board appears to prefer to sit on its hands and be a follower rather than a leader. The ICB prefers to wait until it is pushed into making a decision. At present, the ICB continues to consider its job to be that of reviewing contest rules change requests every two years, sorting them out, and instituting some of them. That is not enough!

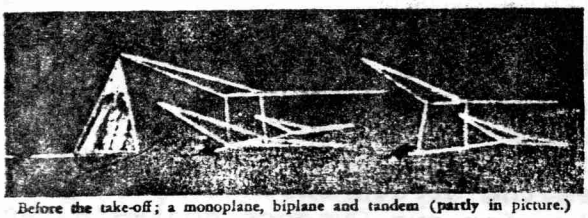
The ICB, being a body of knowledgeable indoor modelers, should promote needed rules changes, not wait for them to come from contestants. The ICB should be the spearhead of the indoor contest movement, should initiate rule refinements and changes, even new events, if warranted.

The ICB should investigate new materials and keep modelers advised, should prompt manufacturers and suppliers to make them available, and should work with manufacturers in developing new kits when needed.

To just wait until prodded into doing something is an utter waste of a great opportunity. Of course, the ICB's set-up is clumsy. At present, the Vice President of each AMA district appoints a member to the Board. This system does not always select an effective or representative member. Twelve members are too many for quick communications and prompt action; there are at least seven members too many.

Obviously, I would like to see changes in the ICB's structure...not easily accomplished. I would like to see the present members made aware of the possibilities they hold in their hands. This is definitely possible, but questionable that the opportunity will be grasped.

Your comments...pro or con...are wanted.



Before the take-off; a monoplane, biplane and tandem (partly in picture.)



Fly-powered biplane ready for flight

water: then you'll give the film more chance to spread out. We find that the bath tub is just about the best place for making our film. We once heard of a fellow going down to his model shop and buying a two-ounce bottle of microfilm solution and pouring the whole two ounces into the bath tub, resulting in hours of work for his mother, cleaning it out.

Fill your tub with lukewarm water about two inches in height. When the water is perfectly still, fill your bottle-cap half-way with microfilm solution and quickly spread it over the water. Watch and see that it spreads enough; if not, add more oil; if too much, add more dope. Allow the film to dry for about a minute, then take a wire hoop (an old clothes hanger works very well) and either slip is under the film or carefully lay it on top of the film and flip the edge of the film over the wire, then carefully slip, not lift, it from the surface of the water. If you try lifting it straight up the film might break due to cohesion of the water and film. Hang the film up and let it dry. Try and get a blue film, or green and red, but don't use a colorless one, as it will be too heavy and weak.

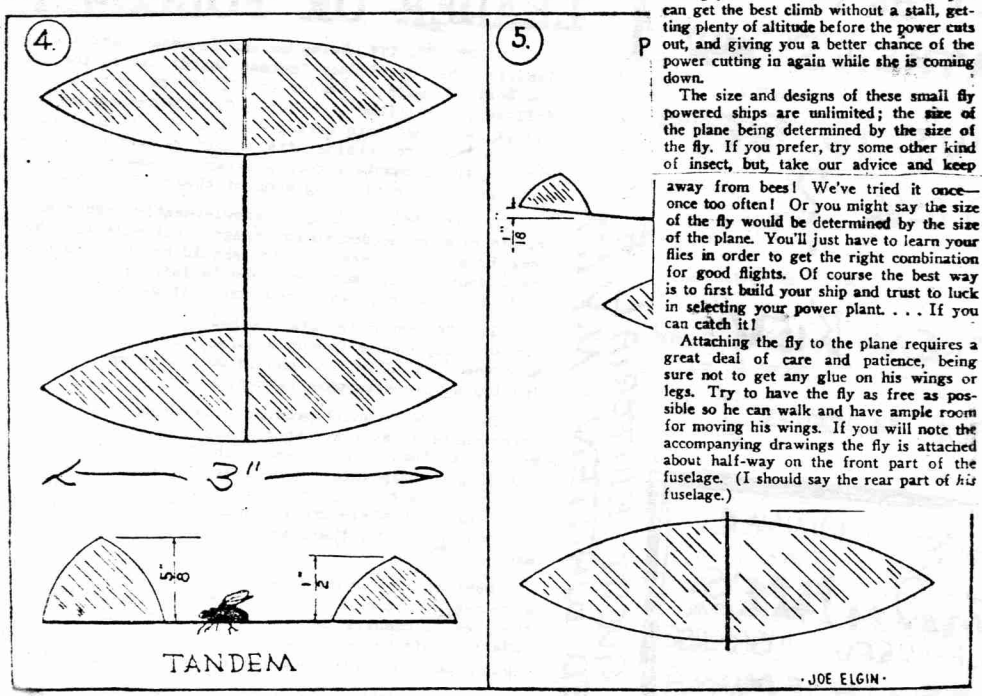
In building the wing and tail select a piece of soft white balsa 1/64" thick, and cut it into strips as fine as possible, but be sure that it has enough strength to support the microfilm covering. Pin the strips over the wing and tail drawings and put small drops of glue on the joints. After the wing and tail are dry, remove them from the plans with a sharp razor. By this time your microfilm should be ready. Wet your wing and tail frames and lay them carefully on your microfilm sheet. Then carefully, using a hot wire, "cut" away your film from the wing frame. Leave a very small section of the film holding the wing to the film sheet, until the entire wing covering has been cut away, so your covered wing will not drop down when cutting around it. After your wing and tail are covered, use a fine razor and cut in your dihedral, then apply a very small drop of glue to the joints, being careful not to touch the microfilm covering with the glue stick. You will note that there is no rudder on this particular model, instead we have the "V" type stabilizer to help make a lighter tail section.

Assembling the model requires just about one large drop of glue, applied to the wing mount and the stabilizer. Check very closely to see that the wing is not warped and that the tail section is in line with the wing; otherwise the ship will spin in.

When test gliding the model, use a very small piece of balsa about 1/8" cube for weight in place of a fly; this weight can be attached by merely wetting it and placing it on the front of the plane. Or if you prefer, use an inactive fly, but be sure and get a fairly flat glide with the weight attached. You'll find in gliding, if the model turns any it will be caused by the tail being out of line with the wing. If under power your model stalls or dives you'll find it's the way in which the fly is sitting on the fuselage, or in other words our thrust line. Don't warp the tail section if the ship glides well, but warp the front of the stick down or up as the case may be, to counteract the stalls or dives, under power. By setting your thrust a little to the side you can get the best climb without a stall, getting plenty of altitude before the power cuts out, and giving you a better chance of the power cutting in again while she is coming down.

The size and designs of these small fly powered ships are unlimited; the size of the plane being determined by the size of the fly. If you prefer, try some other kind of insect, but, take our advice and keep away from bees! We've tried it once—once too often! Or you might say the size of the fly would be determined by the size of the plane. You'll just have to learn your flies in order to get the right combination for good flights. Of course the best way is to first build your ship and trust to luck in selecting your power plant. . . . If you can catch it!

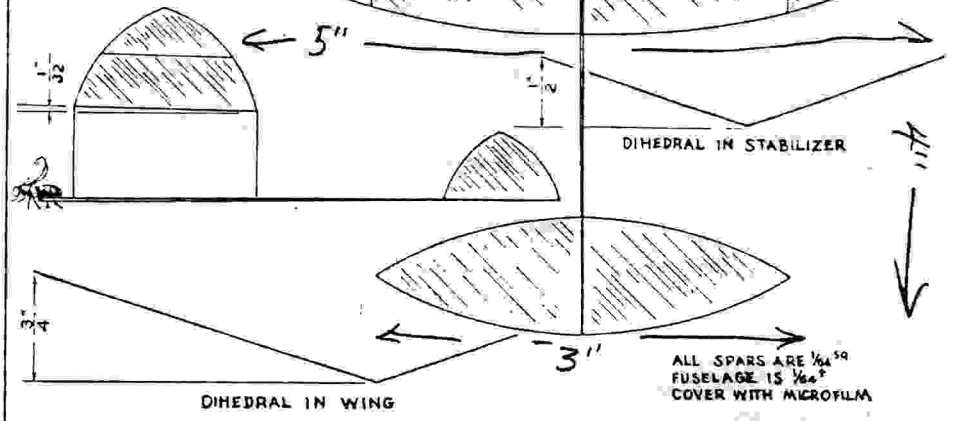
Attaching the fly to the plane requires a great deal of care and patience, being sure not to get any glue on his wings or legs. Try to have the fly as free as possible so he can walk and have ample room for moving his wings. If you will note the accompanying drawings the fly is attached about half-way on the front part of the fuselage. (I should say the rear part of *his* fuselage.)



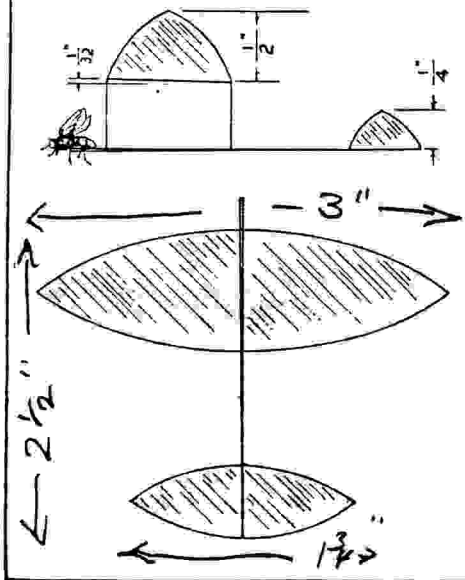
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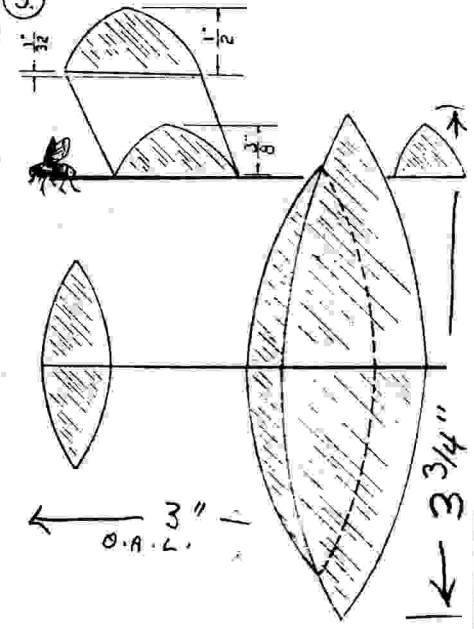
ISOMETRIC SHOWING MOUNTING OF FLY.



2.



3.

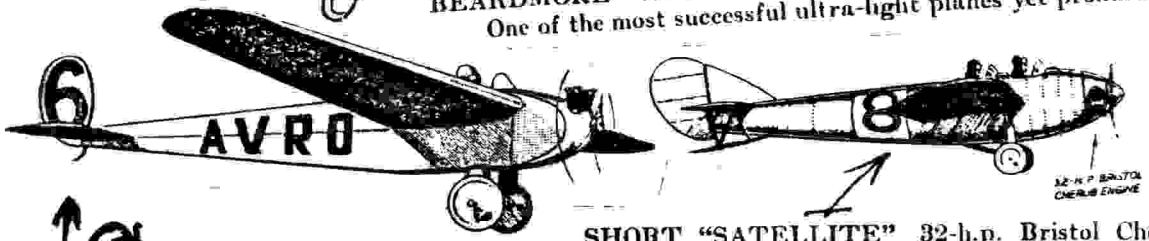


(13) A REMINDER - 1986 LYMPNE TRIALS (PROXY) SEPT 1986 - TO BE FLOWN IN CARDINGTON. BUTCH HADLAND 26 TI THE BARN DR. WINDSOR RD. BRAY, BERKS SL6 2DG. ENGLAND A MISUNDERSTANDING ABOUT PISTACHIO SIZE ENTRANTS IS NOW CLEARED UP - MIAMA WILL HAVE A TROPHY FOR THE WINNING PISTACHIO ENTRY.



Typical Lympne entry.

BEARDMORE "WEE-BEE 1" 32-h.p. Bristol Cherub engine.
One of the most successful ultra-light planes yet produced.



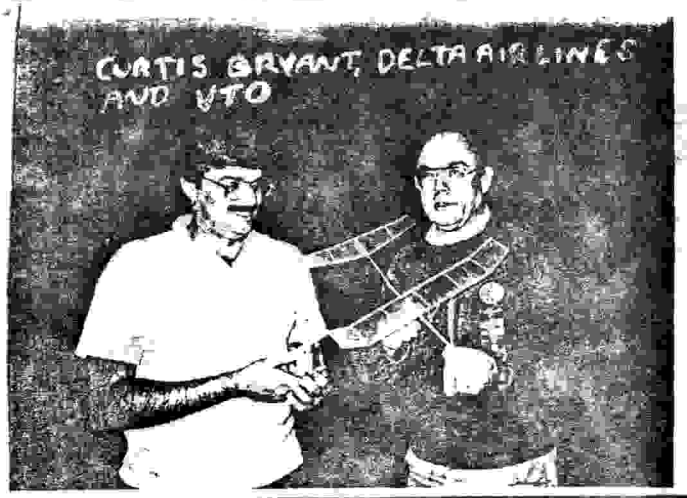
SHORT "SATELLITE" 32-h.p. Bristol Cherub

FROM 'STOLEN FLIGHTMASTERS'



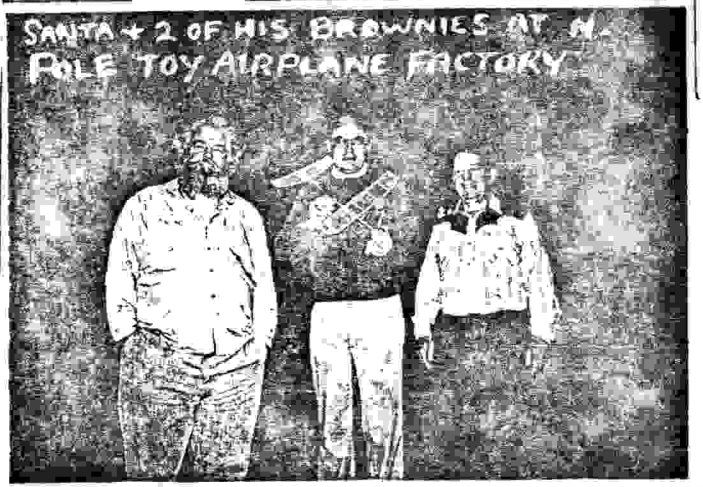
GREAT FUN!

NFFS UNOFFICIAL SCHEDULE for Lake Charles Nats.
Sunday 9am-3pm Bostonian, Autogiro, Helicopter, Ornithopter.
Monday afternoon Embryo Endurance, Rubber Biplane.
Tuesday afternoon Rubber Speed, 7-11 Rubber Distance, rubber powered Helicopter, Autogiro, and Ornithopter.
Wdnsday early morning Dick Korda Open Rubber, Team HLG
Thursday NFFS Nostalgia, ½A and Open
Friday Team Mulvihill CONTACT TERRY RIMERT 904-266-4759





'THIS OLD "AW" WILL NEVER FLY.'
DOC + KEVIN SMITH







"J'ACCUSE! DOWN WITH DOC"

INDOOR ISN'T FOR EVERYONE

WHAT'S ON: F F OUTDOOR MAY 24+25 JACKSONVILLE
AAA CL+FF REBEL RALLY. TERRY RIMERT 904-266-4759
*MEET 7- MIAMA FLA STATE INDOOR CONTEST MAY 24+25 9 TO 5
MAC DILL AIR BASE- HANGAR #5. CALL 305-858-6363 TO CONFIRM.
ALL EVENTS BOTH DAYS. FLYING ACES MASS LAUNCH WW I MULTI WING 4:30 SAT.
FATHER'S DAY SUN. JUNE 15. MIAMA ANNUAL DINNER - VICTORIA STATION
NW 36TH ST OPPOSITE MIAMI AIRPORT. GUEST SPEAKER. R.S.V.P. CALL DOC
NIAGARA FALLS JUNE 17,18,19 5TH US INDOOR CHAMPS + MIAMA GRAN PRIX
PENSACOLA - JUNE ? FIESTA OF 5 FLAGS FF AA
GENESEO, N.Y. JULY 18,19,20 5TH FLYING ACES NATS 1-716-392-3346
LAKE CHARLES, LA. JULY 27-AUG 3 AMA NATS - 50TH ANNIVERSARY
CARDINGTON, ENGLAND AUG 22-26 WORLD INDOOR CHAMPIONSHIP
* SUNDAY SOCIALITE MAY 24 AT PEPE'S - KENNEDY DR TAMPA 8:00 PM

THE HANGAR PILOT

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2180 TIGERTAIL AVE MIAMI FLA. 33133

MIAMI, FL
1PM
18 MAY
1986

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