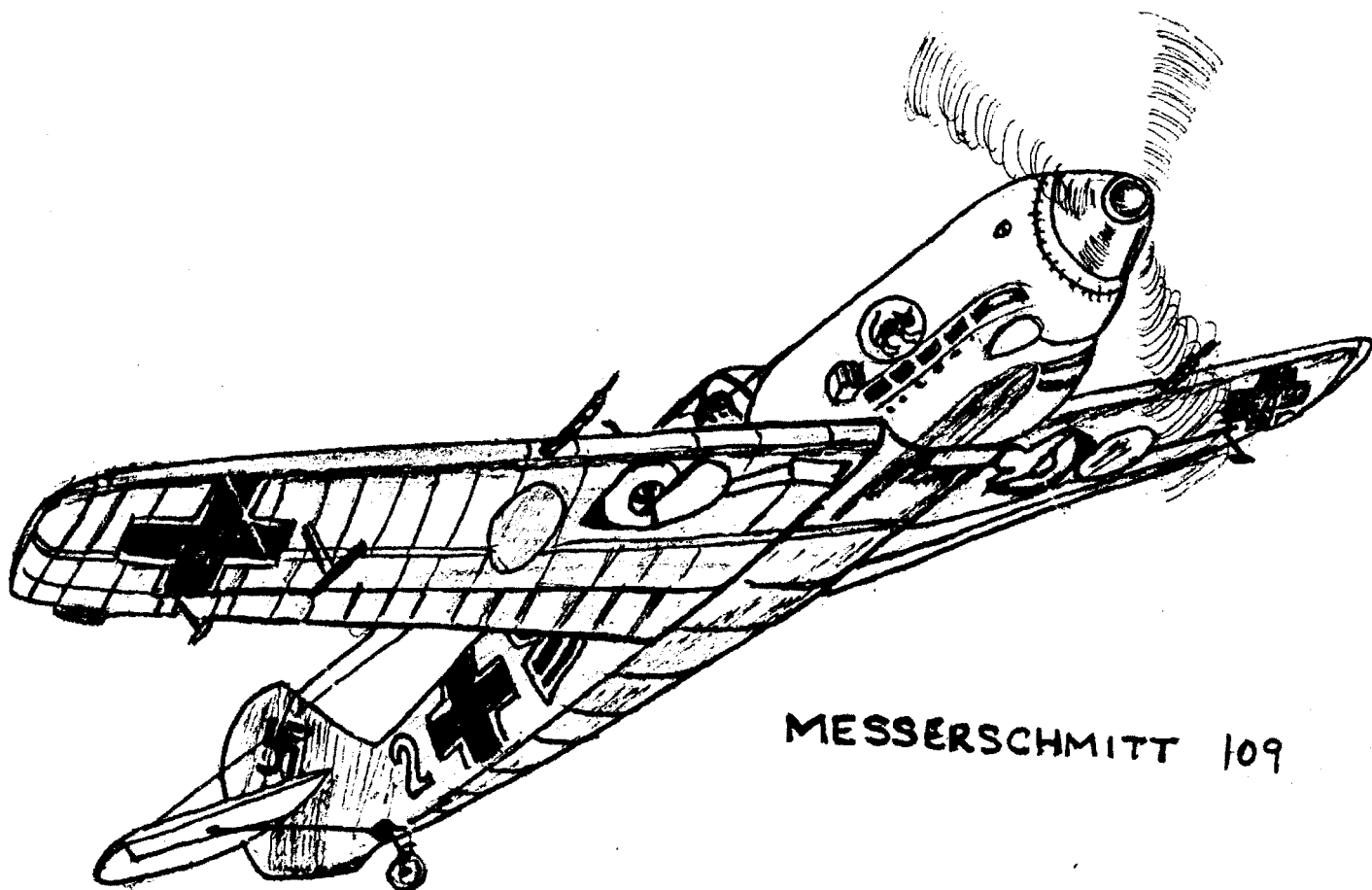


FLYING ACES

Club News

ISSUE #124-50 Nov./Dec. 1988



MESSERSCHMITT 109

NOW MORE PAGES



NEWS ON THE WING!

The big news for 1989 is the National Free Flight Society Outdoor Championships, of which the Flying Aces Club will be a part. The contest event schedule and other information, such as housing and maps you will find in this issue. This contest is actually three contests in one and each one has its own entry fee. The entry fee for the FAC events is \$10.00 up until June 10, after that date it will be \$12.00. Send your entry fee for the FAC events directly to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506 as soon as possible.

We have ten events scheduled, five each day. If the advance entry is large enough we will add more events. There will be an entry blank in the next issue. This should be a great time for all who attend. This also allows all you Clubsters in the Midwest that never had the opportunity to attend an FAC Nationals to see and participate in a large Flying Aces contest. We have already heard from 8 Clubsters who said they would be there. Make your plans now to attend and let us know soon.

Now to the cover drawing. It was sent in to us by Henry Schnell of Tona-wanda, New York. Henry said that a friend of his was the artist, but didn't mention his name, thank you, Henry.

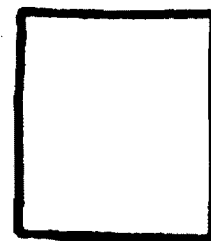
Also in this issue you will find that we once again have a plan by Pres Bruning. It has been a long time (too long) since we have had a plan from Pres. We have had many requests for his plans and maybe now Pres can offer one of his Gems to us more frequently. Dick Howard is also represented in this issue with another great flying model, this model has won numerous events for Dick.

There has been some talk going around about the use of undercambered air-foils being used on models of aircraft that did not employ that type of airfoil. This you may do if you wish, but remember if that model is entered in an FAC event it will not be eligible to win! See current rules, page 3 number 6.

You will note that there are more pages in this issue. Thanks to all of you Skysters staying with us when we were so far behind in putting out this rag, we have built up a little surplus in the old treasury and we can give you a little more for your money. We will continue to do this as long as you keep sending all those goodies in to GHQ. We could use some Embryo Plans as well as others along with your favorite yarns, etc.

BUILD--FLY--WIN EFF--AAA-CEEE!!!
Lt. Col. Lin Reichel, CinC-FAC

If the box on the right has an "X" in it, it is time to renew your subscription. Cost is NINE DOLLARS per year in the United States and Canada. Overseas cost is TWELVE DOLLARS. Six issues, published every other month. This is your last issue under your old subscription. Send to;
FLYING ACES NEWS
3301 Cindy Lane
Erie, Pa. 16506



JUNE 19 MONDAY	JUNE 20 TUESDAY	JUNE 21 WEDNESDAY	JUNE 22 THURSDAY	JUNE 23 FRIDAY
<u>NOSTALGIA</u>	<u>NOSTALGIA</u>	<u>SAM</u> ①	<u>SAM</u> ①	<u>SAM</u> ①
(J50) 1/4 A	(J50) 1/2 A	R/C 1/2 A TEXACO	R/C ANTIQUE C	R/C TEXACO
(J50) A	(J50) B	R/C A/B GLOW	R/C PURE ANTIQ.	R/C C GLOW
(J50) C	(J50) IGNITION	R/C C IGNITION	R/C A/B IGNITION	FF C PYLON
		FF 30 SEC. ANTIQ.	FF A/B PYLON	FF A/B FUSELAGE
		FF 020 REPLICA	FF C FUSELAGE	FF LG. RUB. ST.
		FF PRE 37 WAKE	FF LG. RUB. CAB.	FF SM. RUB. CAB.
		FF 4 L GLIDER	FF SM. RUB. ST.	FF RUB. SCALE
<u>NFFS</u>	<u>NFFS</u>	<u>NFFS</u>	<u>NFFS</u>	<u>NFFS</u>
(J50,0) 1/2 A PWR	(J50) A PWR	(J50) B PWR	(J50) C PWR	(J50) D PWR
(J50,0) P-30	(J50,0) HLG	(J50) F1A *	(J50) F1B *	(J50) F1C *
(J50) PAYLOAD	(J50) CO2	(J50) COUPE	(J50) A-1 TOWLINE	(J50) MULVIHILL
(J50) CATAPULT GLI.	(J50) CARGO	(J50) EMBRYO	(J50) ELECT. A	(J50) ELECT. B
(J50) RUB. SPEED	(J50) PEANUT SC.	(J50) ORNITHOPTER		
	(J50,0) PEE-WEE 30		<u>FAC</u> ②	<u>FAC</u> ②
			FAC PEANUT	EMBRYO
			FAC SCALE	P-NUT (HI-WING)
			WWI MASS L.	JUMBO SC.
			GREVE MASS L.	WWII MASS L.
			GOLDEN AGE SC.	THOMPSON MASS L.

* BY ROUNDS

Please get your entry fees in early if possible so that we can plan on what we need. Remember, the fee for the FAC events is separate and must be sent to GHQ. We will need timers and maybe some other volunteers, so if you are going to have a little time we would appreciate hearing from you.

6

4.

REQUEST FOR VINCENNES UNIVERSITY DORMITORY ACCOMMODATIONS, June 17-23, 1989

Send required information (bottom portion) to:

Mr. August Schultheis, Director
Conferences and Conventions
Vincennes University
Vincennes, IN 47591
Phone (812) 885-4139

Other Important Phone Numbers

Mr. Schultheis, - Home (812) 882-6735
Campus Housing (812) 885-4225
Campus Police (812) 882-1400

The charge for dorm accommodations is \$10.00/person per night regardless of the number of persons assigned to a room. Towels, linens and soap provided. Bring your own blankets and pillows. Room service is not available. Two, three and four person rooms available. Family accommodations available on special request. Please state requirements.

Shower and bathroom facilities available on each floor, dormitory style. All rooms are air conditioned. All liquor is prohibited on the school premises.

Breakfast accommodations will be available June 19 thru June 23 at the University Tecumseh Dining Center. Doors will be open from 6:40 to 8:00 AM.

All reservations will be acknowledged and at that time room/building assignments, phone numbers and a map will be provided.

Send no money now. Payment for the room accommodations to be made directly to the University at check-in.

Cut-----Cut-----Cut

DORMITORY ACCOMMODATIONS FOR THE UNITED STATES OUTDOOR CHAMPIONSHIPS
JUNE 19 -23, 1989

Please fill in the required information and send to the above address.

I/We will require a room with beds for _____ person/s for _____ nights.

I/We will arrive on _____ and depart on _____.

I will be attending by myself, but am agreeable _____ not agreeable _____ to room sharing.

I require family accommodations, separate quarters for female/s or other special requests. _____ Please fill in the details: _____

Print

Name _____

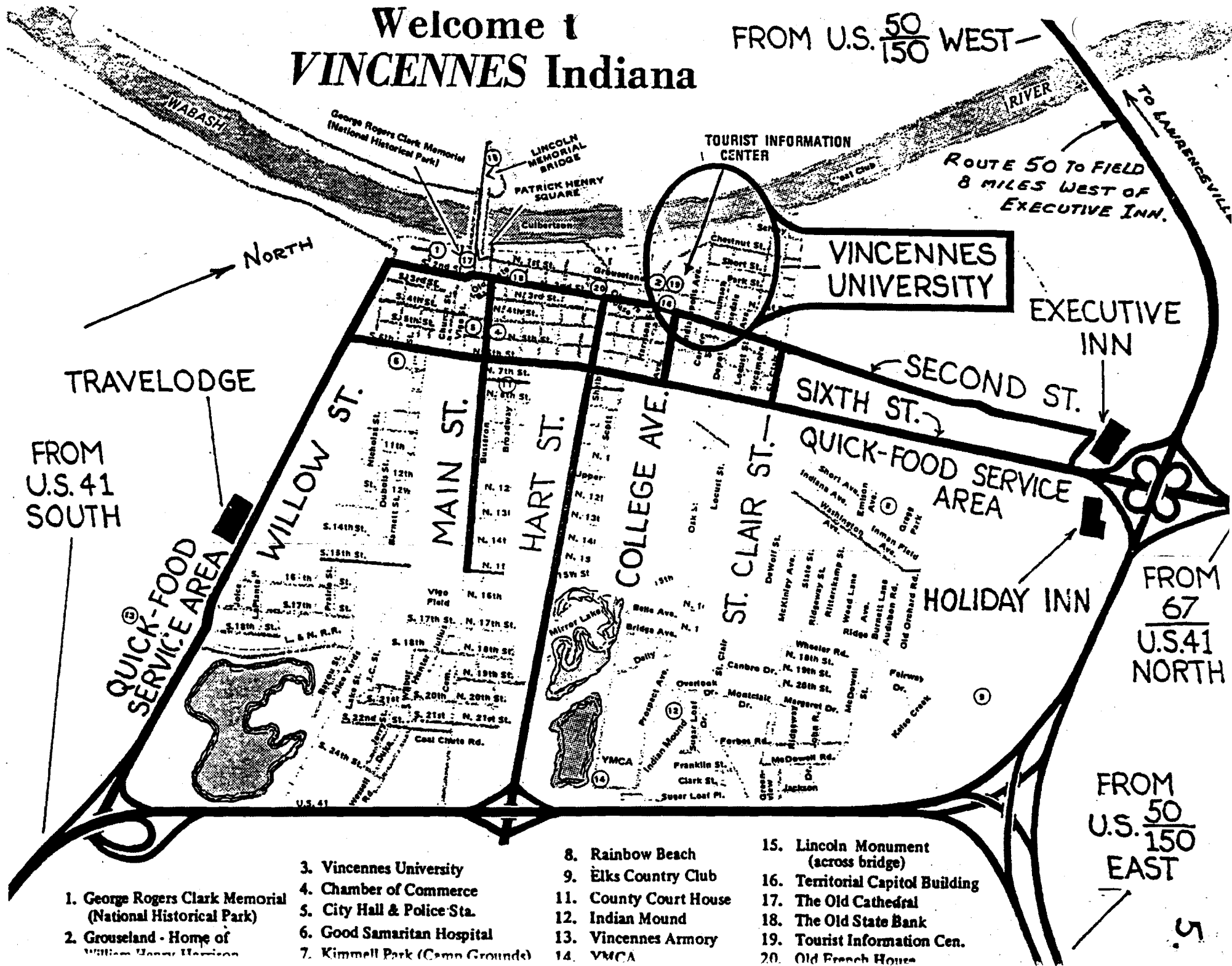
Address _____

City _____ State _____ Zip _____

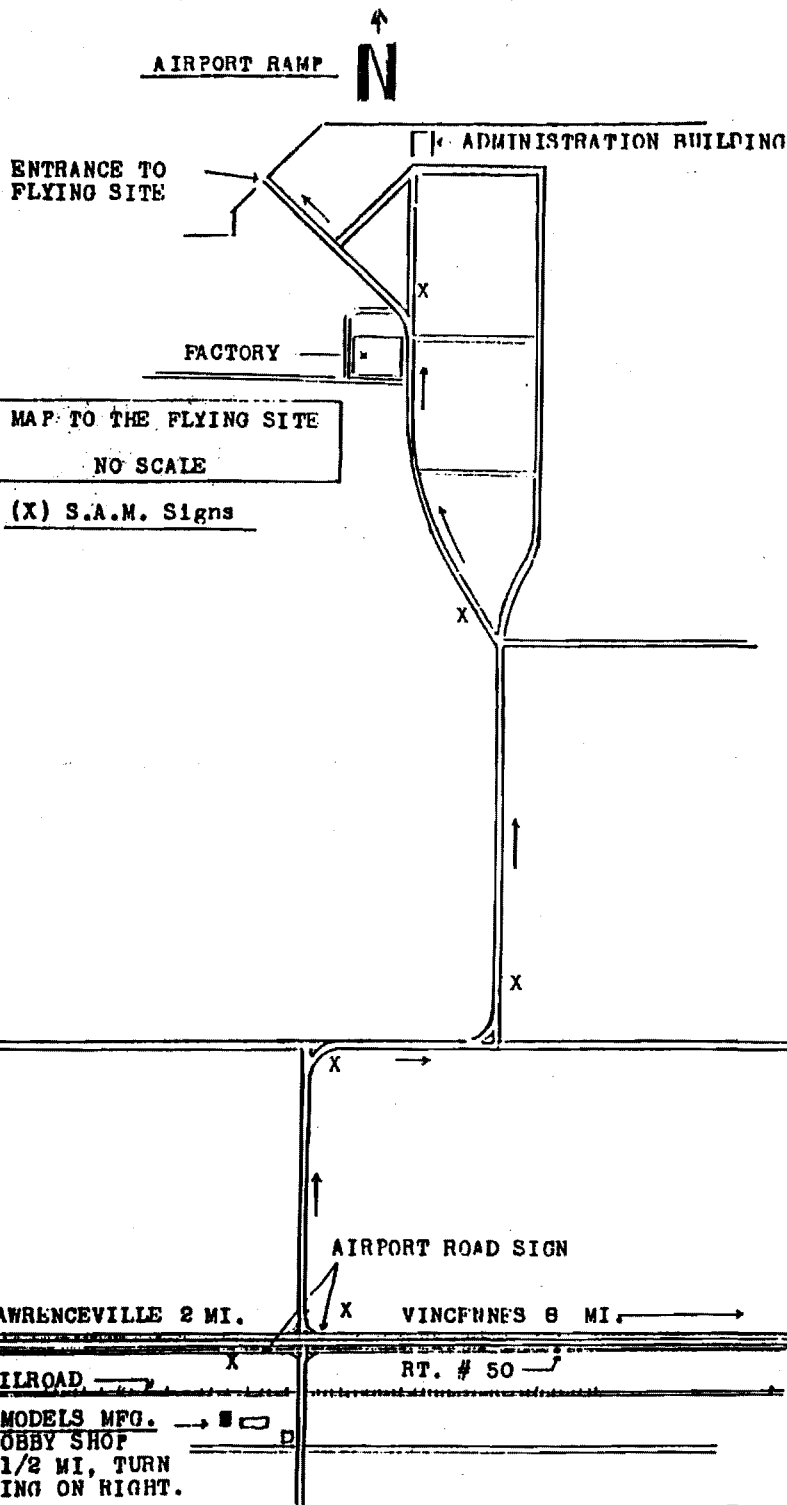
Phone Number _____

Welcome to VINCENNES Indiana

FROM U.S. $\frac{50}{150}$ WEST



FROM
U.S. $\frac{50}{150}$
EAST



MOTELS AND CAMPGROUNDS IN THE AREA

EXECUTIVE INN
JCT RTS 41 & 50
VINCENNES, IN 47591
812/886/5000
(Most popular choice)

HOLIDAY INN
JCT RTS 41 & 50
VINCENNES, IN 47591
812/886/9900

INN OF VINCENNES
2500 OLD DECKER RD
VINCENNES, IN 47591
812/882/2100

TRAVELODGE
1411 WILLOW ST
VINCENNES, IN 47591
R12/R82/1282

MR. K'S MOTEL
407 STATE ST
LAWRENCEVILLE, IL 62439
618/943/5112

GAS LITE MOTEL
RR# 1
LAWRENCEVILLE, IL 62439
618-943-2374

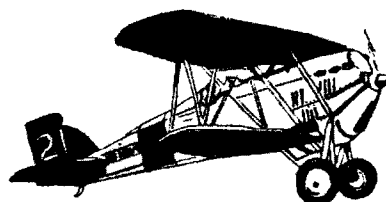
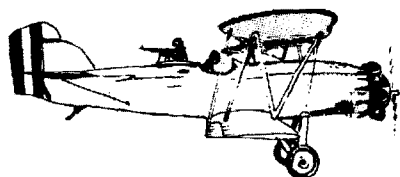
KIWANIS PARK
 E. STATE ST
 LAWRENCEVILLE, IL 62439
 FIRST COME BASIS
 HOOK-UP'S AND DUMP STATION

RED HILLS STATE PARK
RR# 2
SUMNER, IL 62466
618/936/2469
HOOK-UPS & DUMP STATION

CONTEST CALENDAR

April 30...13th Annual Snowbird Indoor Meet at McComb Fieldhouse, Edinboro, Pa.
 Sponsor Erie Model Aircraft Assn. FAC scale, FAC Peanut, Hi-Wing
 Peanut, WWI Dogfight, Bostonian 5 gram min. wgt., WWII No-Cal,
 Blatter "40", No-Cal scale 5 gram min. wgt., A-6. CD Vic Didelot
 4410 Lorna Lane, Erie, Pa. 16506 Ph. (814) 8383263

Send business size SASE for plans to the Blatter "40" and A-6 to
 Vic Didelot at address above.



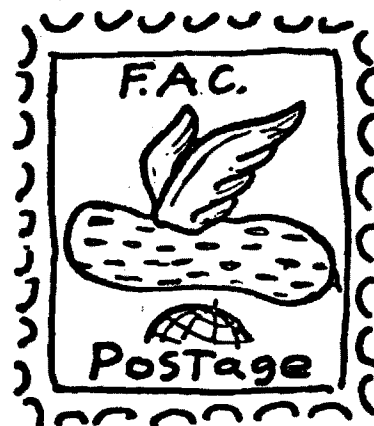
Peanut & No-Cal Scale Postal Meet

Get in on the action, Clubsters, things are heating up already! Contest lasts until April 30, 1989. Entries postmarked after May 1, 1989 will not be accepted.

There are four events or "Wings". They are as the standings below are listed. Every time you fly your ship send in the time to GHQ, along with the name of the model, the date you flew and the "Wing" you flew in.

Enter as many times as you wish with as many models as you wish. Every time you better a score with a particular model, send in the score.

This contest is open to all FACers everywhere. If you fly in a contest then that time will also be recognized. Winners get another "notch" on the "Kanone" list as well. We will also have some prizes for the winners. Let's go Clubsters, get in on the fun! BUILD...FLY...WIN!!! EFF--AAA-CEEEEE!!!!!!!!



INDOOR NO-CAL

Pilot	Model	Time
1. John Marett	Citabria	225 sec.
2. D. Slusarczyk	Spitfire	218 "
3. D. Niedzielski	Fike	181 "
4. C. Slusarczyk	Stormovik	160 "
5. Padre Anderson	Piper J-3	81 "
6. Dan McDonald	Ord-Hume	72 "
7. Roy Biddle	Sweepa	25 "

OUTDOOR NO-CAL

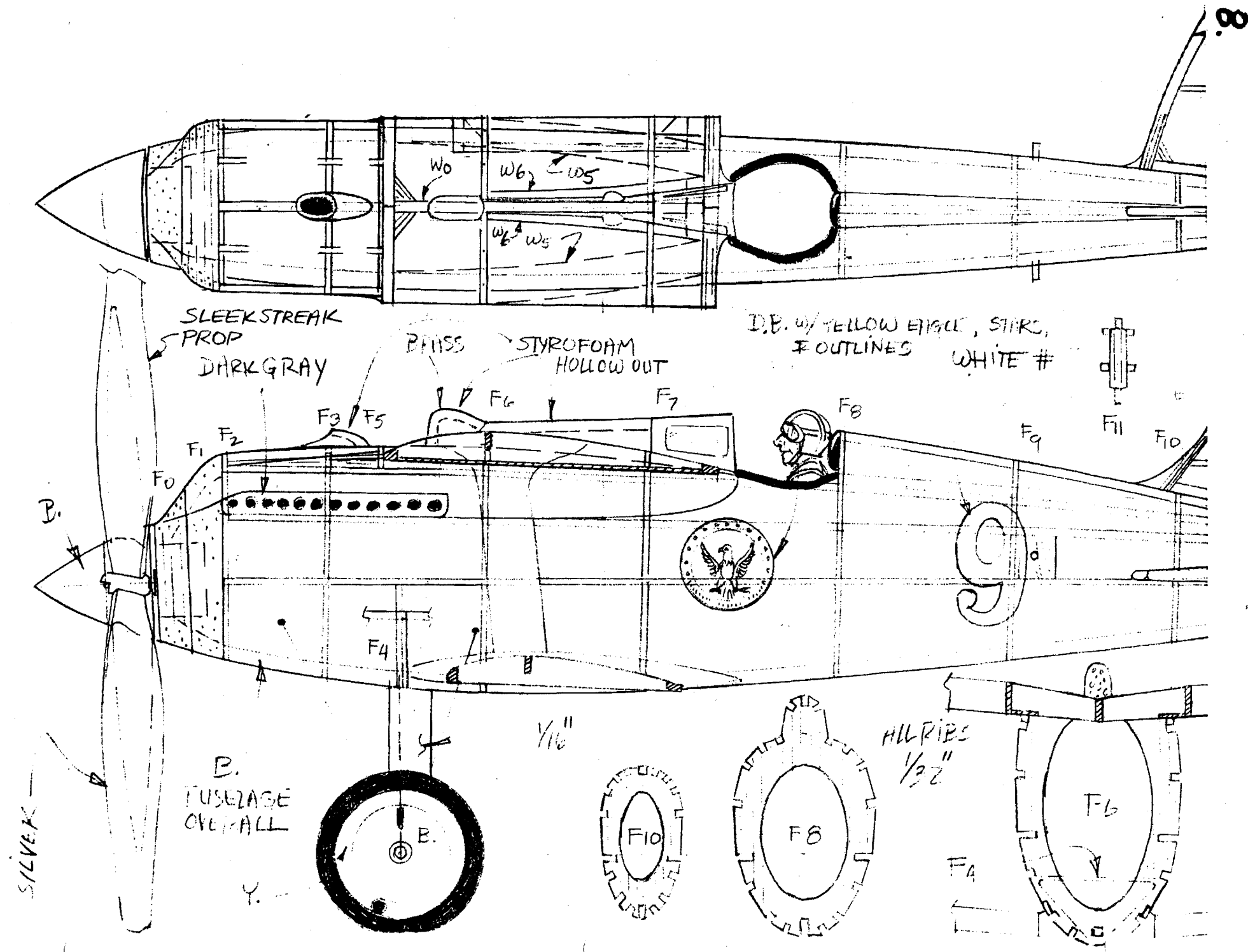
Pilot	Model	Time
1. Dave Stott	Bellanca Yo-50	196 sec.
2. Bob Thompson	F2G Corsair	97 "
3. John Stott	Chambermaid	62 "
4. John Stott	Fleetster	58 "
5. Walt Leonhardt	Corben Sup. Ace	30 "
6. Walt Leonhardt	Piper J-3	29 "

INDOOR PEANUT

Pilot	Model	Time
Vic Peres	Fike	70 sec.
2. Larry Loucka	DH-6	67 "
3. D. Niedzielski	Fike	63 "
4. D. Slusarczyk	Lacey	62 "
5. Padre Anderson	Piper Vag.	50 "
6. Vic Peres	Fokker D-7	42 "

OUTDOOR PEANUT

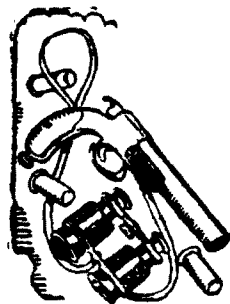
Pilot	Model	Time
1. Carl Loehle	Lacey	431 sec.
2. Eric Anderson	Fike	114 "
3. Bob Leishman	SE5-a	66 "
4. Dave Stott	Fairchild 24	63 "
5. Walt Leonhardt	Nes. Cougar	23 "



FRENCH RECCE BIPE

by Pepe LePiquer.

Charles Weymann, american pioneer aviator flying in France in the very early days of aviation decided to stay in that country. He formed his own company and produced many and varied prototype machines right into the 1930s. His designs never found favor with the french military, so those types never progressed beyond prototype stage. This is one of those.



The CTW-100 was first flown in June of 1933. It bore the civil registration shown on the drawing later in the year, more or less after having been rejected by the military. It was unique in that the poor bloody observer was treated to more comfort than before or since has been the custom. His station was in that glazed portion of the fuselage between the engine (a 750 HP Gnome-Rhone 9 Kfr "Mistral") and the pilot. There is a position for a third crew member in an open cockpit immediately behind the pilot, and equipped with a scarf ring. This position is shown covered over in the 3-view drawing.

Coloring is not known. The only thing as to a hint is the fact the fuselage, cowl, and struts show up dark in the lone black and white photo available, while the wings and stab are light, but lacking the reflective characteristic of silver. One other thing...every Weymann design I have ever seen has this odd design feature....the balance portion of the elevator has that rectangular portion uncovered, so modelers beware! Don't forget to incorporate that oddity in your crate lest some knowledgeable judge fine you for your laxity!

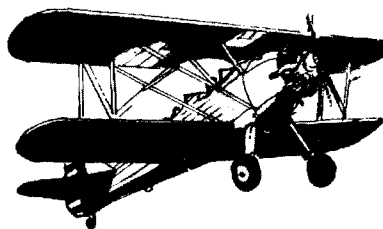
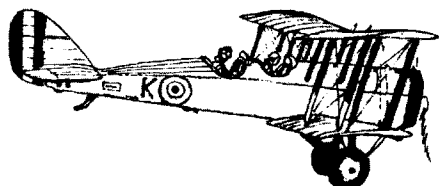
The ship has proportions that spell out stability. A good dihedral angle, wings set a bit aft so that no balast need be carried in the nose. Yep stringer benders, this looser might just become a winner on your tarmac!

Ref: AviMag 761 (1-9-79) (ed. note; Who is Pepe LePiquer?)

CONTEST CALENDAR

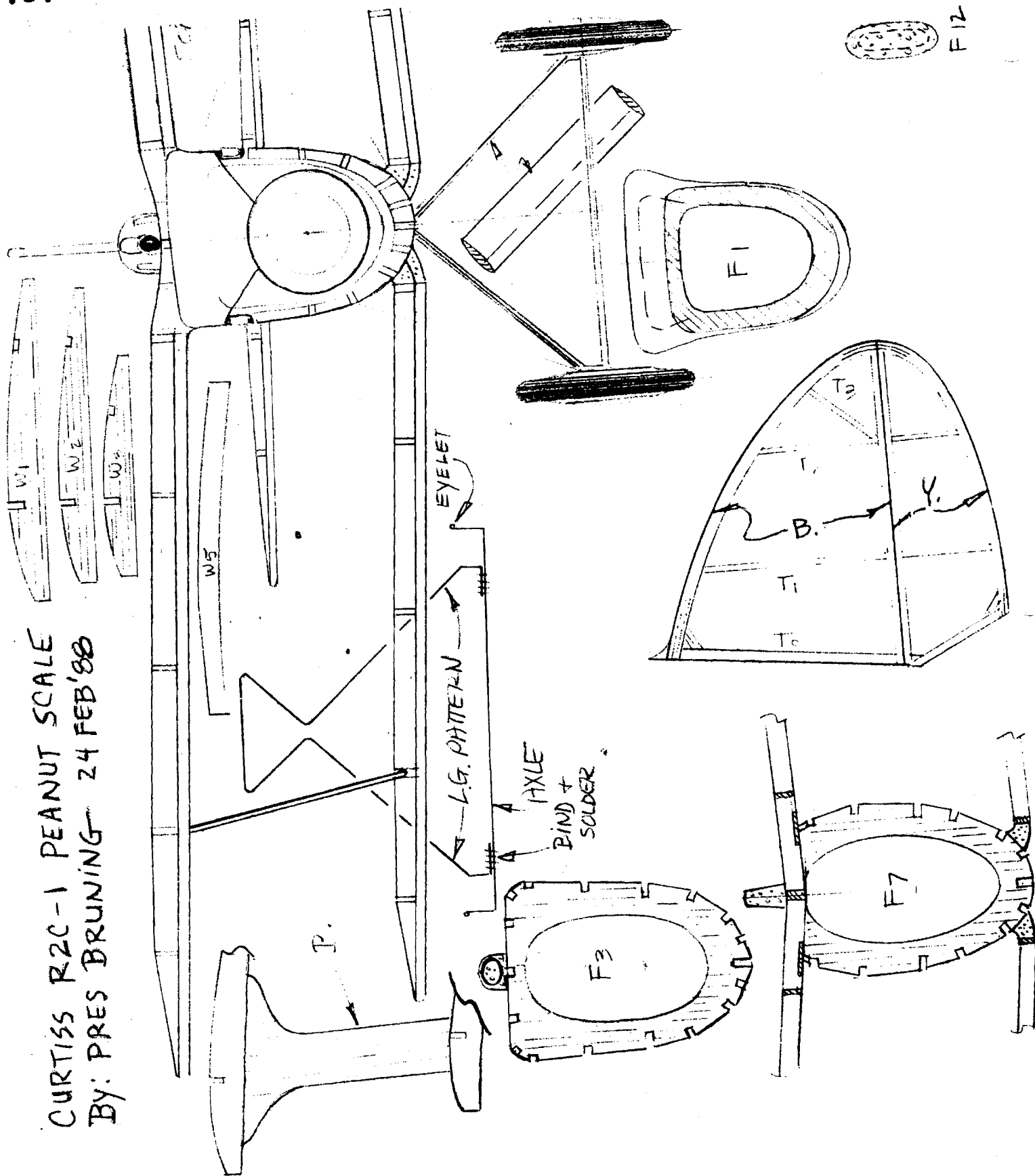
March 12...CFFS INDOOR MEET at Normandy High School, Parma, Ohio. EZB, No-Cal scale, FAC Peanut scale, Hi-Wing Peanut scale, WW I Peanut Combat, WW II No-Cal Combat, Jetco ROG. CD Russ Brown, 4909 No. Sedgewick. Lyndhurst, Ohio 44124 Ph. (216) 382-4821

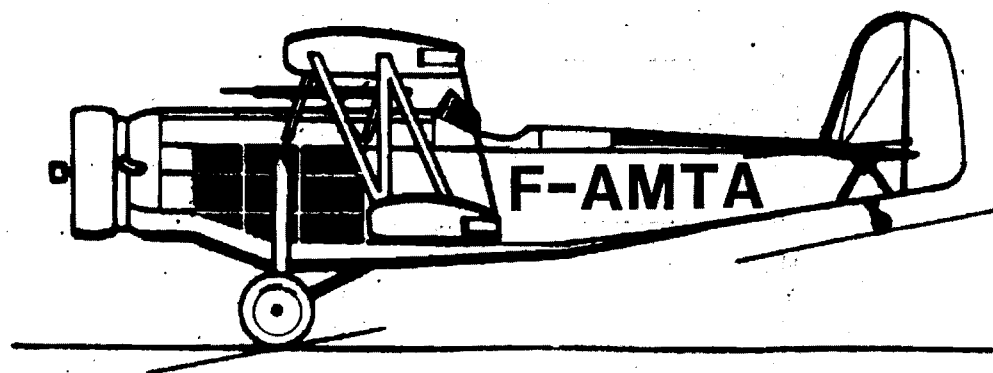
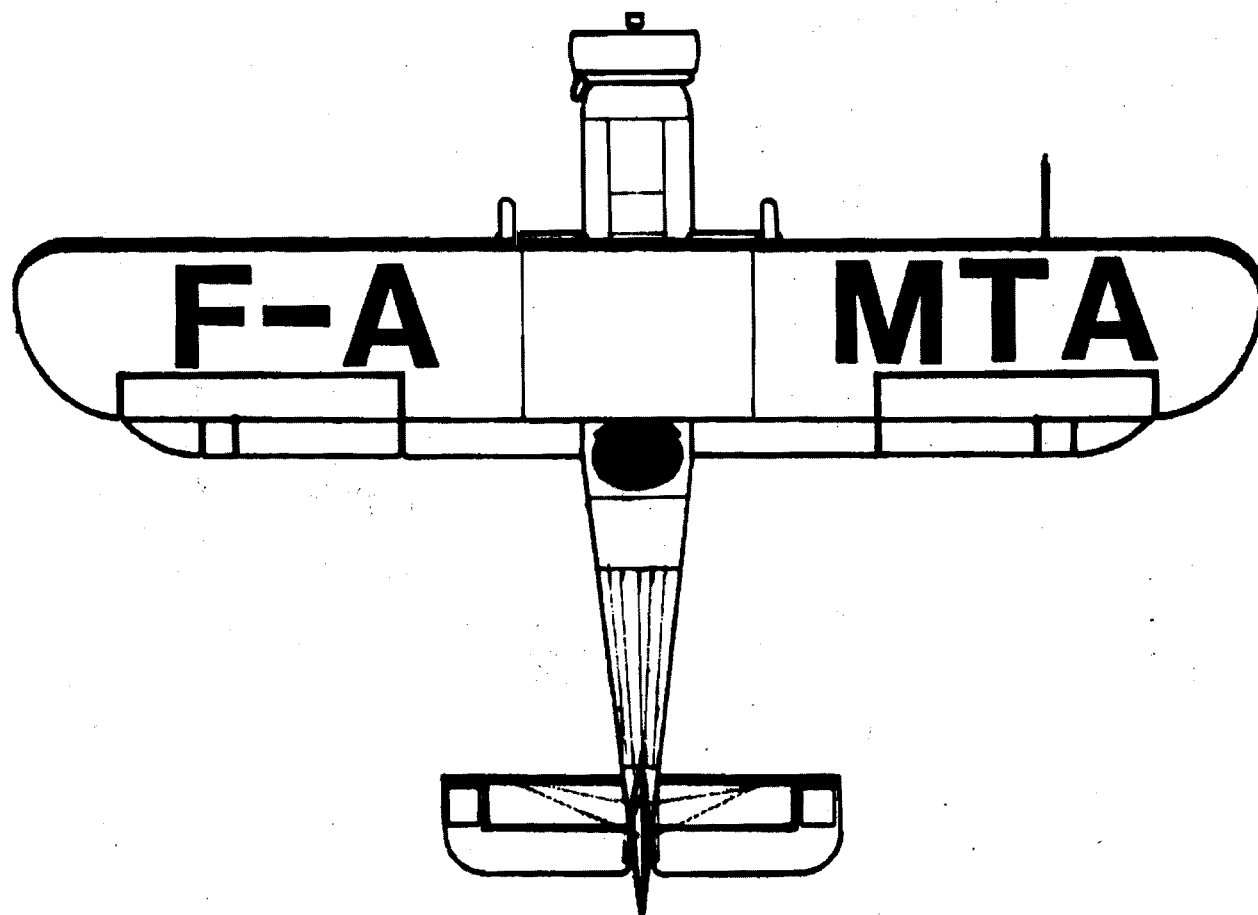
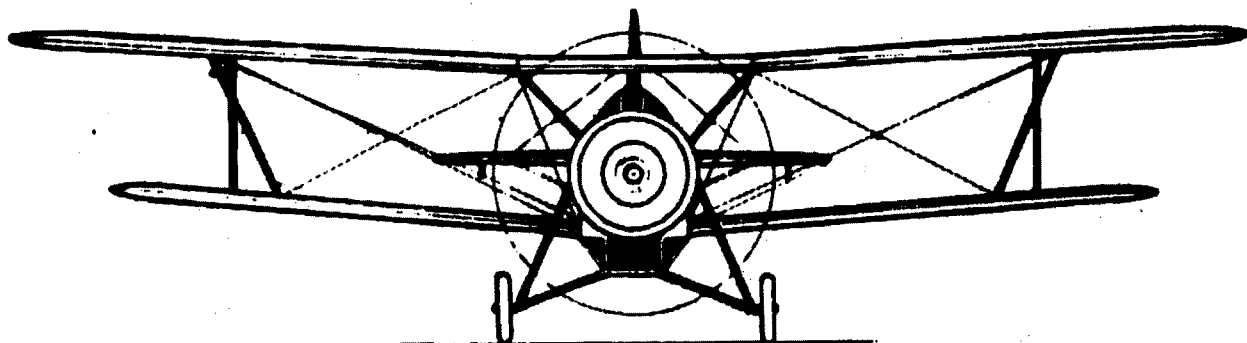
March 25...Maxecutors Indoor at Lexington Park, Md. 5 mass launch events, 4 other events, 2 Special events. CD Allan Schanzle (301) 840-5884.



10.

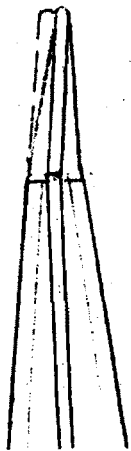
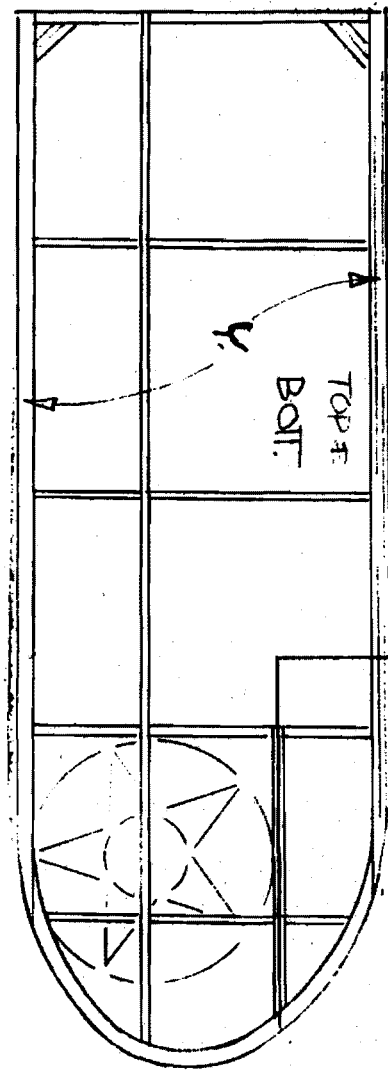
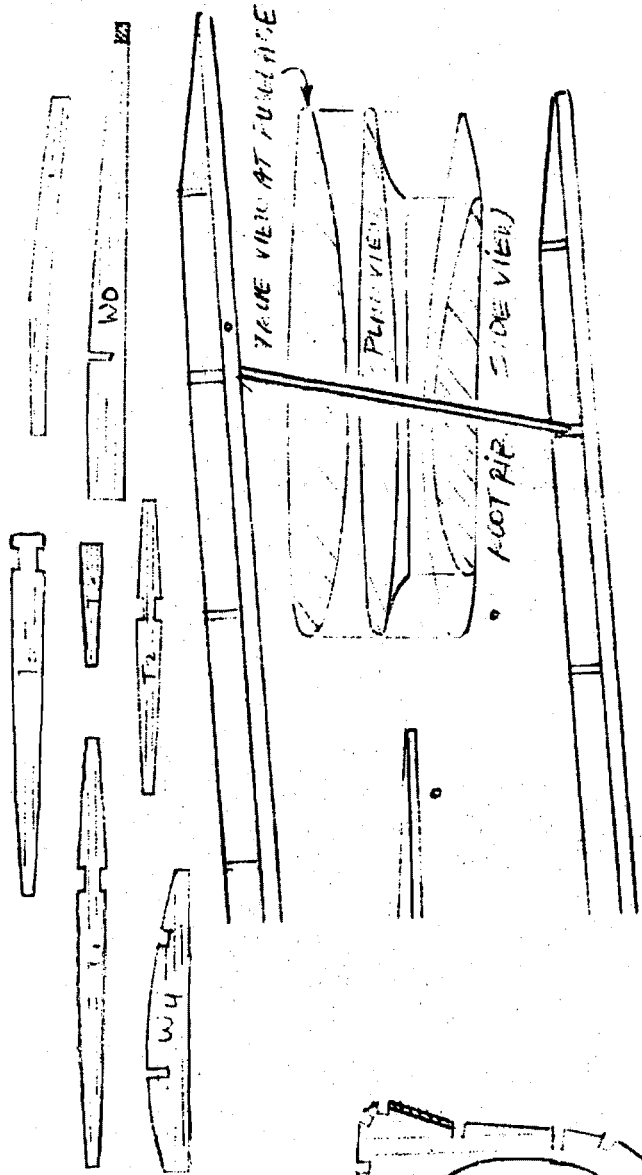
CURTISS R2C-1 PEANUT SCALE
 BY: PRES BRUNING 24 FEB'88



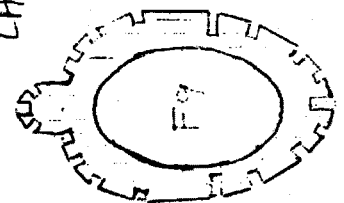
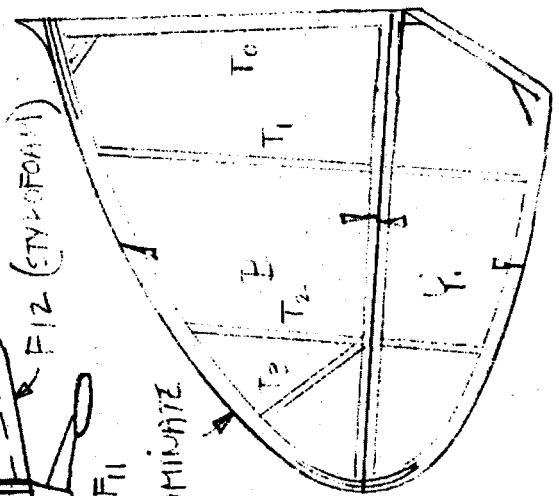
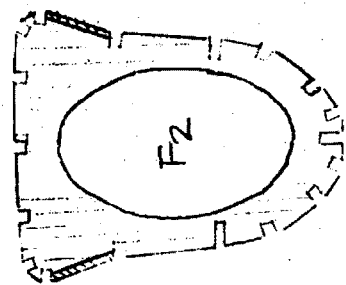
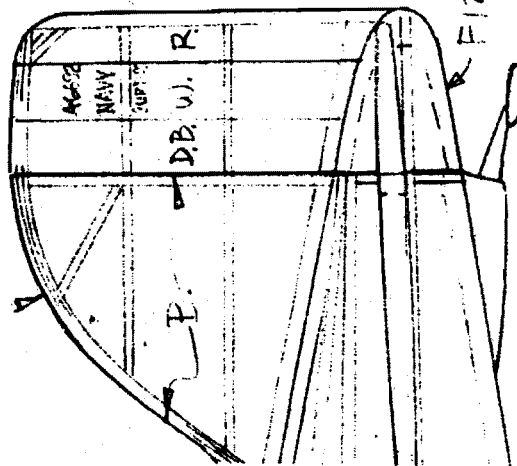


WEYMANN CTW-100

12.



LAMINATE



Answers to Questions I Really Got Asked
Mumbo Jumbo #35 from the pen of the Glue Guru

Salutations, disciples! Today we shall ponder more real questions of the type that haunt us all. While edited, combined and sharpened, the questions are genuine at the core. The answers are straight.

Q: Gears must necessarily weigh something. Next, they must cost something in the form of an efficiency loss. Yet you claim that gears can increase rubber scale endurance. How can added weight and reduced efficiency combine to increase performance, you moron?

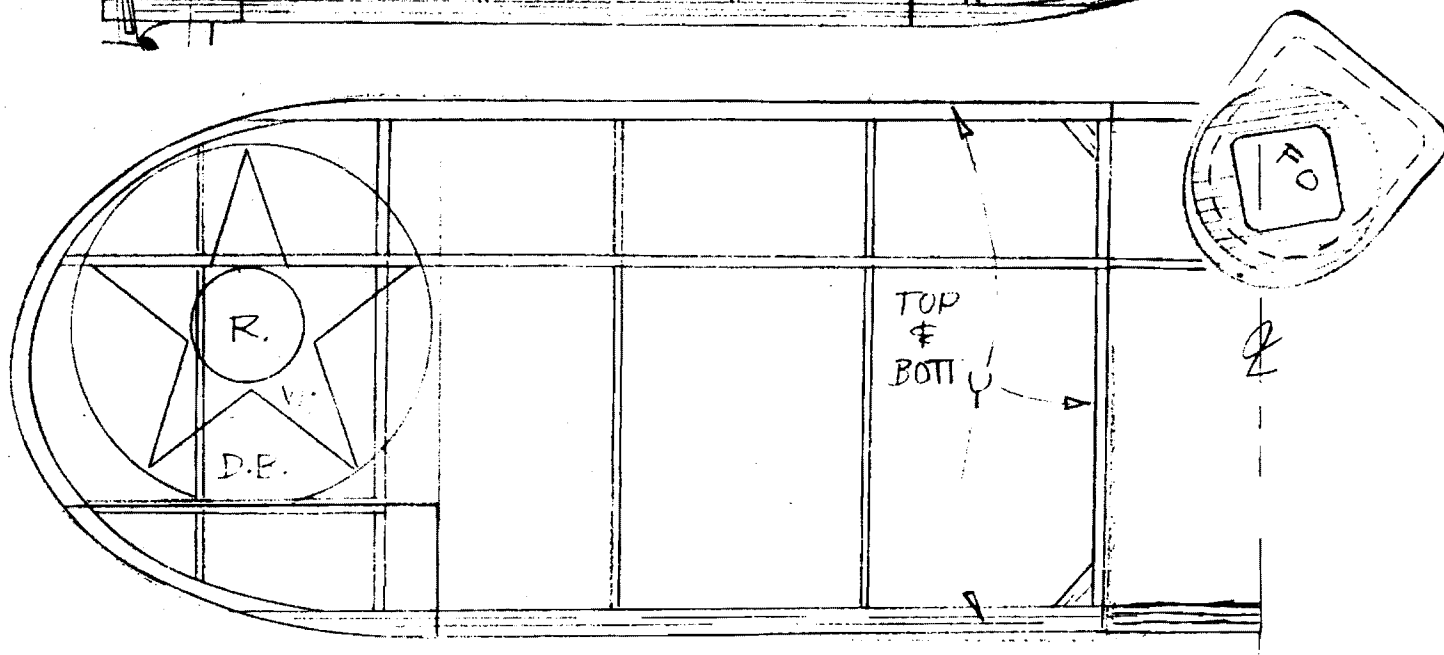
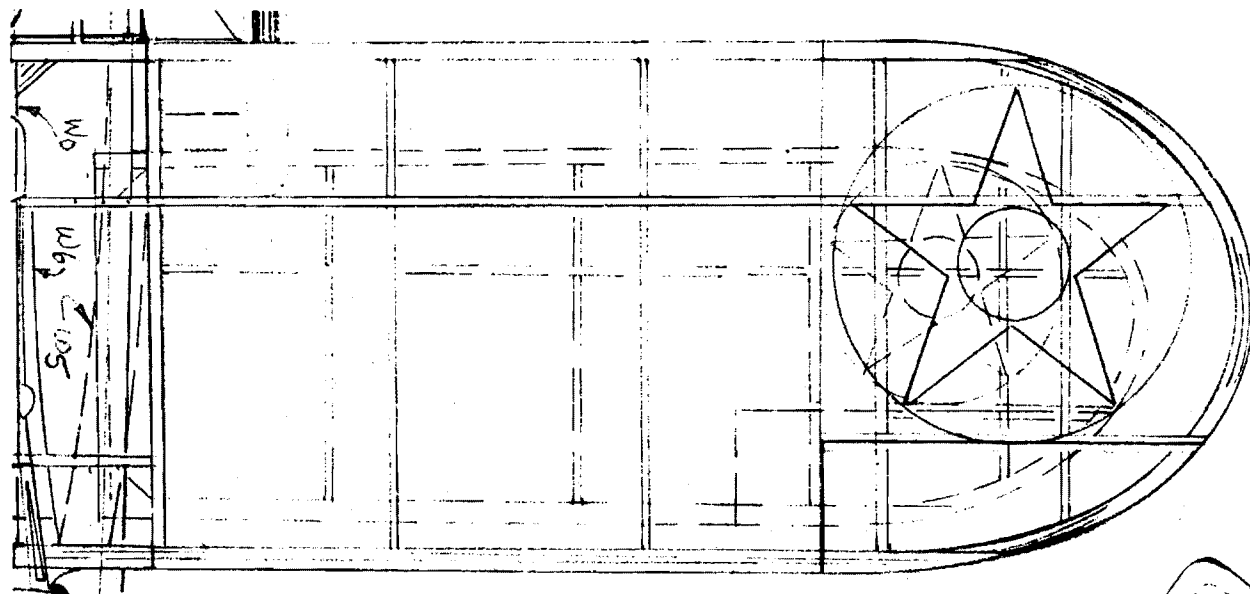
A: Gears most certainly add weight to a model. They also decrease the delivered power of the rubber motor. There is no question about these negative aspects of gears. However gears have offsetting advantages. One of these is the ability to cope with an enormous amount of rubber, an amount beyond the wildest dreams of scale modelers. To most of us, any amount of rubber beyond 10 or 15 % of the all-up weight is a lot of rubber. With gears, it is possible to fly with as much as 54% of the all-up weight in the form of rubber. This sort of thing was done routinely back in the early 1950's, back in the days of unlimited amounts of rubber for Wakefield. So laden, standard performance exceeded 4.5 minutes, dead air. Gears fell into disfavor when the permissible amount of rubber was restricted. At the current low limit of 40 grams of rubber for 8 ounces of model, there really is no point in gears. But when rubber quantity is unrestricted, as in scale, there is an enormous endurance profit to be made by simply pigging out on rubber. The reason that we currently do not pig out is that we have no practical way of matching fat motors to our props or of housing extremely long motors in our fuselages. Gears, while not easy, solve both the matching and accommodation problems. The performance gain possible through pigging out is so great that the twin taxes accompanying gear usage (added weight and reduced efficiency) are minor by comparison. As an analogy, consider a contest for gas model duration that has some strange rules - no limits on engine run or on board gas volume. Use as much as you like. A good strategy would consist of filling the model with extra tanks and gas. Now it's true that the extra weight would lower the efficiency of the model, forcing an increase in the fuel consumption rate, but on balance going to more gas is a winning move. Ditto rubber scale.

But isn't there some point where pigging out becomes counter-productive? Yes. There is a point beyond which additional rubber no longer produces a performance gain. However that point is on the far side of the 50% rubber to all-up weight point. This condition is so remote from current design practice that we need not worry about it. Maybe some day we'll bump up against this ceiling some day, but there are many years of pigging out to enjoy first.

What should we worry about in terms of gears and performance?(1) Many of our flying fields will accept only about one minute of duration. In pushing for more, we stand a good chance of losing our model. Gear systems require a good deal of work and a certain amount of hard cash. If the upshot of such an investment is an increased likelihood of losing it all, well...(2) Gear systems are certainly more complex than the conventional nose bushing and wire bending procedure. To an extent, they represent "high tech". Many of us were attracted to rubber scale precisely because of its "low tech" aspect. Whether a gain in performance is worth a loss of simplicity is a personal decision that some of us will find irksome. It is even true that access to a machine shop is helpful in putting together gear systems. Unhappily, Wakefield's road to ruin followed precisely such a discovery. In short, what price progress? Not an easy one, this.

What is the best use for gears? It may well be wiser to forgo the advantage of extra duration in order to tackle strange, unconventional models that will offer a limited and safe duration - say, one minute. For example, what about multi-prop systems, all geared together and running off a central motor via miniature timing belts? What about rubber powered fan jets? On paper, these can be done - with gears.

14.



NAMES OF FAME

by
Phil Cox

Listed are 21 last names of famous aircraft builders. The object is to give the first name of each one. I have researched them quite thoroughly and I think I have them all correct. The one I couldn't find the first name for was Ryan which was just an initial plus the middle name--so on that one the initial and the middle name are required. The answers should be sent directly to; Phil Cox, 3351 Highway Ave., Highland, Ind. 46322. The contest will end when the first correct list arrives. The winner will receive a Golden Age kit of the Bell P-39, which is a real beauty! Here you are gang--go for it!

Beech _____
Cessna _____
Fairchild _____
Heath _____
Lockheed _____
Ryan, *Tubal Claude*
Taylor _____

Bellanca _____
Curtiss _____
Fleet _____
Kinner _____
Piper _____
Stearman _____
Verville _____

Boeing _____
Douglas _____
Grumman _____
Laird _____
Porterfield _____
Stinson _____
Vultee _____

To sum up: gears can lead to a large performance gain. Whether it is wise to seek such a gain is something each of us must weigh independently.

Q: What kind of gears do you actually use?

A: I started with clockwork gears; they turned out to be worthless. The catch is that clocks don't require much torque - moving that big hand around slowly is almost effortless. Hence clockwork gears are not designed to run efficiently; they are designed to run precisely, which is not the same thing at all.

I then moved to flat stamped brass gears of the type featured in the Zaic handbooks as "Boston Gears". These too are worthless. It will never be clear to me as to how the old timers got these miserable things to work at all - much less fly models. Forget cheap stamped gears of any kind. Rotten.

I then moved on to precision machined gears of the type used in the aerospace industry. These are superb. Extremely efficient and strong, they're available in Alum., Brass, Steel and Stainless Steel. The local supplier (Winfred M. Berg, 499 Ocean Ave, East Rockaway, NY 11518) is interested in mail order and offers a catalog running to almost 600 pages. They're good people. Most of my gears were chosen from their listing "Precision Spur Gears - 96 pitch - 1/8 bore - 3/32 face" page 224.

Of these, the Stainless Steel sets are best, albeit heavy. I have had a problem running a mixed set (Alum + St. Steel); after 100 flights or so the Alum partner showed high wear; the St. Steel pinion was shaving the softer Alum. Admittedly, the system was run dry (no lube) and may or may not have been aligned properly. Whatever the problem, switching to all St. Steel effected a complete cure. Fellow enthusiast Bob Wetherell, using the same supplier, reports full satisfaction with running all Alum gear sets. (I haven't tried it.)

There is one catch with aerospace quality components - they're expensive. The average price per gear is about 6 bucks. Miniature ball bearings (the real thing, not thrust bearings) run about 5 bucks each. While these should last the life of the model, the cost is irksome. Recently I've been trying plastic servo gears running against extruded brass pinion wire. The latter consists of an endless gear - one about 3 feet thick, that you lop off as desired. The combination costs but pennies and seems to work well, with little wear over a full season. However access to a metal working lathe is essential to perform the lopping-off and center drilling operation. The catch here is obvious.

How to make a start? Get the Berg catalog. Get the Oct-Nov 1988 issues of Flying Models. Design a simple torque reducer (2 gear) system for insertion into an old model whose performance characteristics you know well. Buy all first class components until you have enough experience to judge where corners can be cut safely. Eschew solder. Try it. I can't say that you are certain to like it. Unless you are mechanically inclined and something of a tinkerer, you may well get to hate gears. Still, win or lose, it will be an interesting experience and at best - rubber powered fan jets, anyone?

Q: I'm trying to design a 17" J-2 Cub using Grant's book as a guide, but I can't get the Center of Lateral Area to come out right. Why not?

A: Grant's CLA theory seizes upon one of the many factors important to spiral stability (the distribution of side area) and treats that one factor as though nothing else matters. This is something like choosing a wife entirely on the basis of a pleasing profile. There's a whole lot more to it! Even if we concede that a good profile is significant (it is), Grant's system does not perform the weighting properly. As a practical matter, forget the whole CLA business and all Grant's stability work as well; time has treated this stuff harshly - it simply hasn't stood up. Instead go right ahead with your design, adhering to the basic scale profile, but increasing the dihedral to about 6 degrees per pinion. It should fly well.

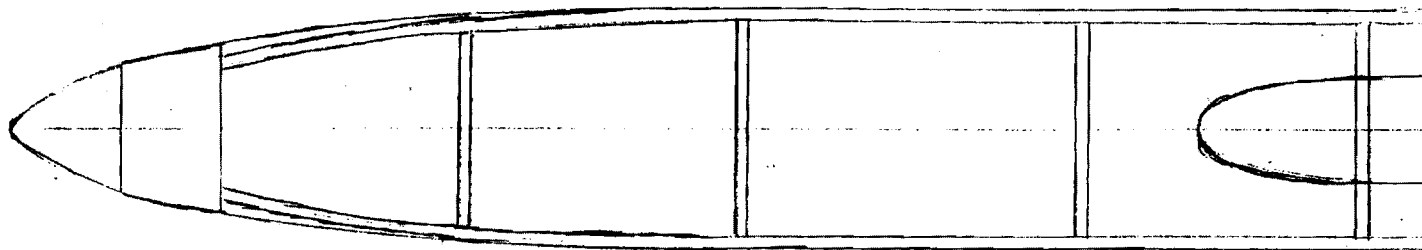
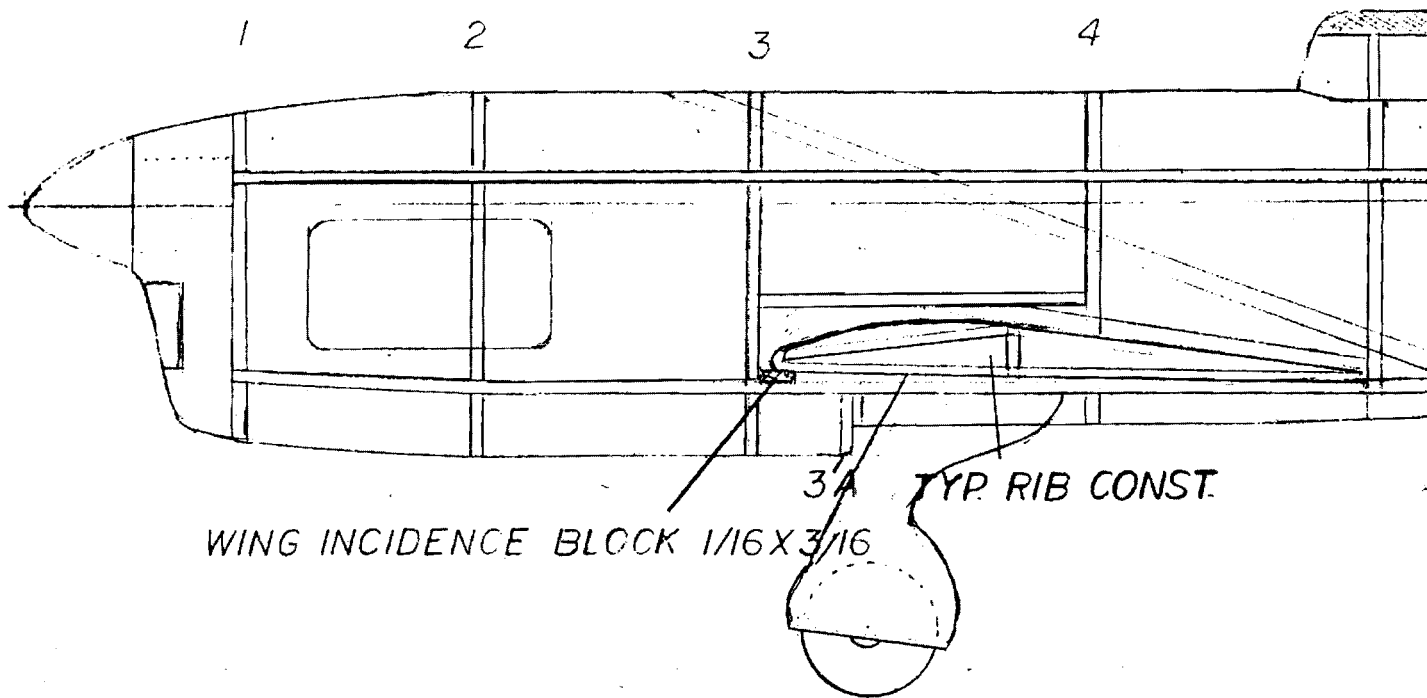
16.

CAUDRON C-460 1936 GREYE AND THOMPSON WINNER
PEANUT SCALE

BY
DICK HOWARD

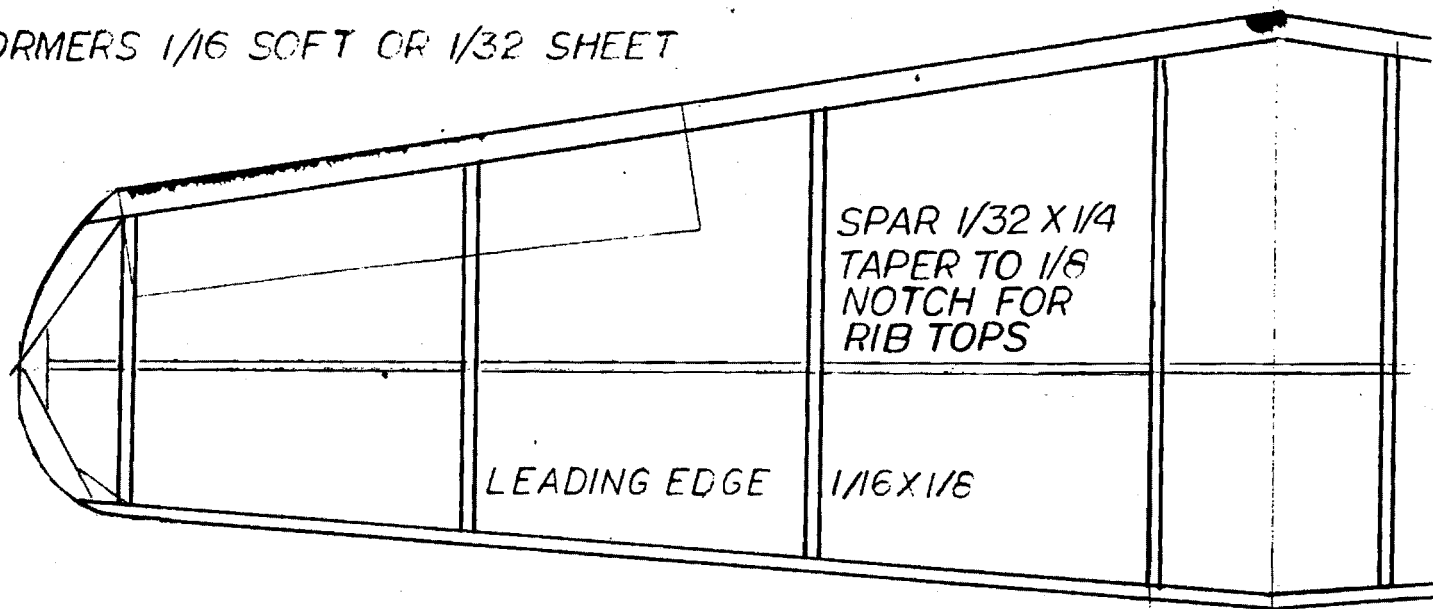
VACU-FORMED CANOPY

5



BASIC STRUCTURE 1/16 SQ.

FORMERS 1/16 SOFT OR 1/32 SHEET



Airmail Pals

17.

Lin,

I'd like a ruling on construction technique for mass launch event models.

If a model had a wing/fuselage joint that was accomplished with rubber bands as a shock absorbing consideration, (I am assuming the rubber bands are hidden in tubing etc.), would it be legal to straighten or reposition the wings after a flight?

This would be the system of "knock-off" wings to eliminate or reduce damage. We know that many jumbo models have a means of attaching the wings that are not permanent. This is usually to accomodate packing and transporting the larger models, and this arrangement can be used as an energy absorbing device.

I would just like your decision on whether or not it would be legal to attach the wings with rubber bands, keyed in place for alignment, expecting to have to realign the wings after landing. Would this disqualify me from flying another round the same as if my plane had to be fixed or repaired in order to fly again?

I'm really not trying to be difficult. I want to start on a good jumbo for the next nats and the method of attaching the wings is in the basic construction. I have plans drawn for a jumbo Caudron 714. The wings are rubber banded on, and I realized that they would shift on impact, unless I secured them very firmly.

Ralph Kuenz

(ed. note; Sounds good to me, Ralph, do it!)

Dear Lin,

Take this in the nature of applause for issue #121-47. I think I have mentioned before how much I enjoy the News. And I have become a fan of Dick Howard. I would write my appreciation to him, but I have no idea how to contact him.

In any case, I would assume that around here we are not as good at FAC scale as the general run of FACers. We have six active competitors, but I would estimate that half the aircraft we build do not make the twenty second minimum flight. My particular problem is that I started flying R/C because I was living in a restricted area for a while. R/C taught me so many bad habits that only after shelving my radios for five years am I just now getting back to the point where I can build LIGHT.

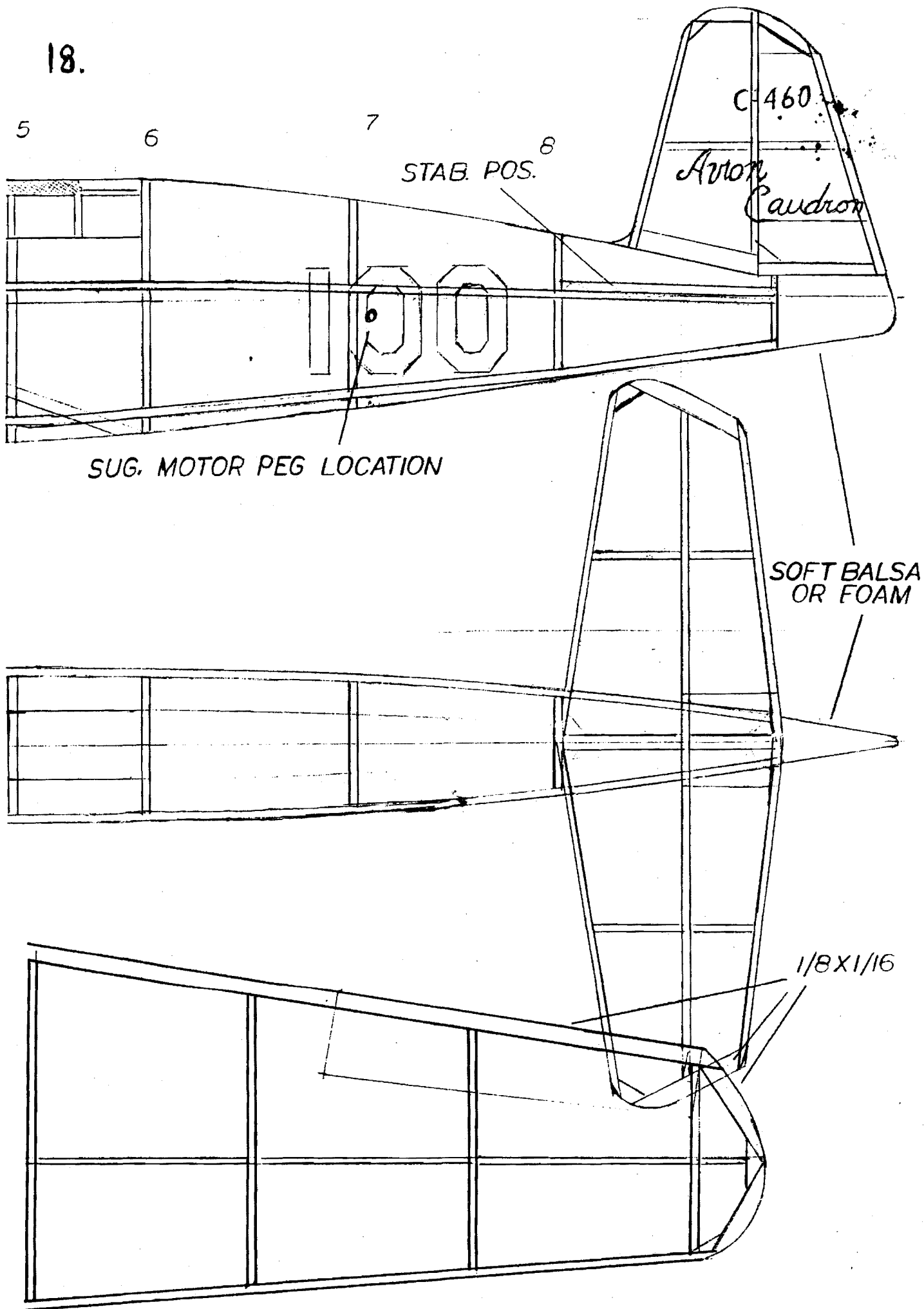
Anyway, on October 17, I got my FAC 121 in the mail and was inspired by the Mr. Smoothie that Dick Howard drew for the newsletter. I pulled out my race plane book and confirmed the details. On Tuesday after work, I enlarged the drawings to 20" wingspan and modified the structure a bit, extra ribs, stronger for the wind, etc. Wednesday evening I built and covered the aircraft in five hours. I test flew it in the park on Thursday. And, as I hadn't solved the problems with my Wedell Williams Model 22, I flew the Smoothie in our racer mass launch on Saturday. I finished a close second, close enough that the winner, for fun, insisted on a series of eight flyoffs which we split 4/4.

I have never had a scale aircraft fly this well so quickly. The Smoothie inspired one of our ex-scale flyers to start building scale again. So this is in the nature of thanks for you for the newsletter, and Dick Howard for designing. Now if only I could find his Tigercat drawings!

Thanks,
Rocky Russo

(Ed. note; Thanks for the nice words, Rocky. I am sure Dick Howard appreciates them as much as we do here at GHQ. As to Dick's Tigercat, I believe that he built that model from Dennis Norman's plan that appeared in Flying Models mag.)

18.



Advertiser's CONTACT

Interested in Jetex flying, plans, fuel and engines? Join the more than 200 already receiving the only newsletter designed to the promotion and preserving of Jetex flying. Subscribers as far away as Sweden. Issue #9 started off with full size plans and up to 28 pages of good stuff. Subscription rate in the states is \$8.00, Canada \$9.00 and overseas--Airmail is \$13.00 in brown envelopes and surface is \$10.00. Send replies to Roger Wathen, Sr., for sample copy send \$1.50 to 3242 N. DeQuincy, Indianapolis, Ind. 46218 USA. Ph. 1-317-547-5963.

Individuals, teachers, youth groups and libraries. I have the following model aviation mags for sale; M.A.N., M.B., A.M., A.A.M., F.M., A.T., and M.A. No complete set will run more than \$5.00 except A.T., A.M. and M.B. mags. Send large SASE (two stamps) to Roger Wathen, Sr., 3242 N. DeQuincy, Indianapolis, Ind. 46213 Ph. 1-317-547-5963.

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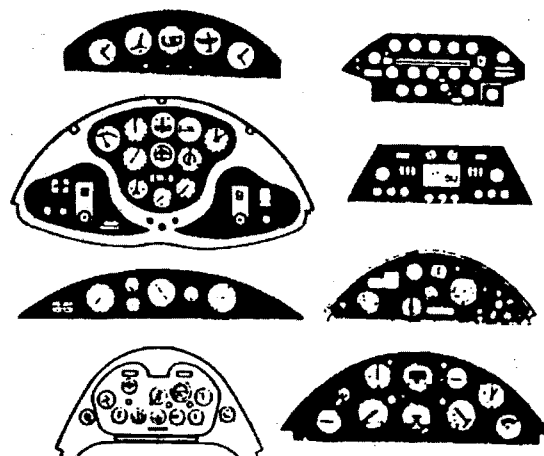
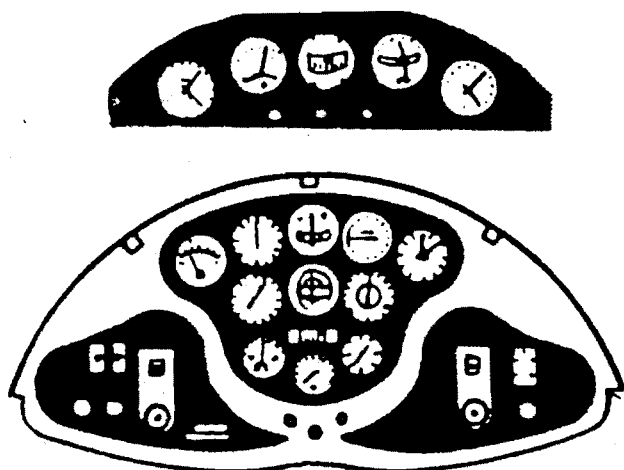
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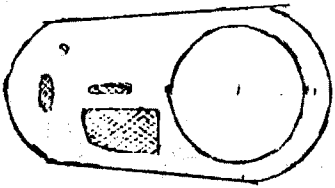
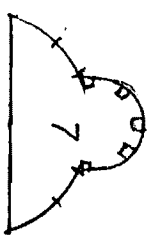
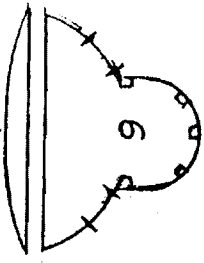
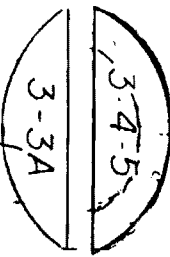
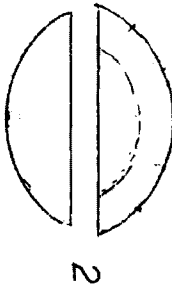
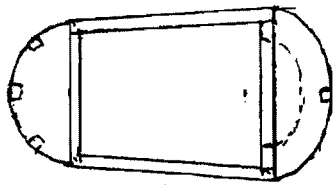
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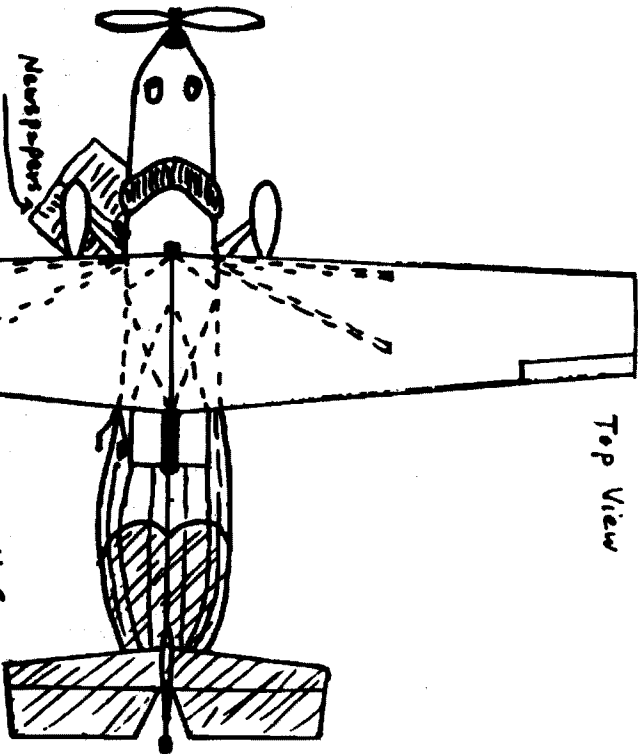
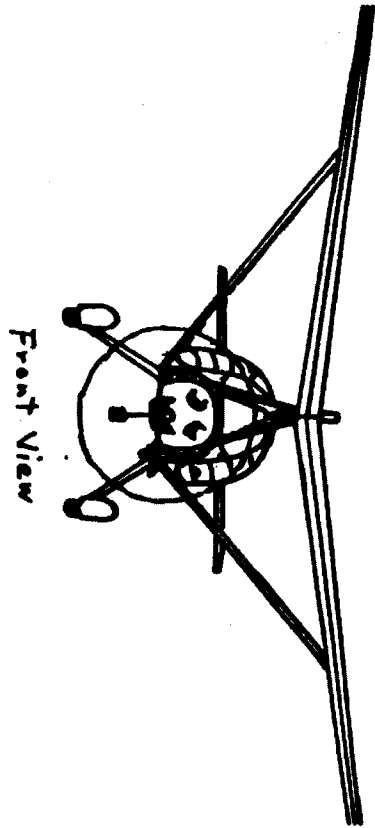
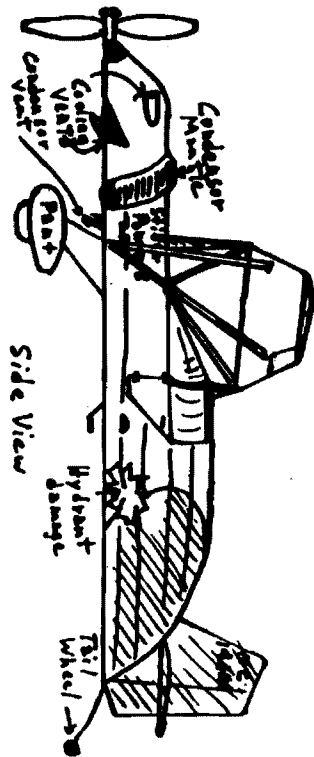
Did you get the latest kit from Dave Diels? This one is of the Douglas Devastator and she sure is a beauty! You can get yours from Dave for \$15.50 plus \$2.00 postage. She comes in 1/24 scale and a span of 25 inches. Decals, tissue, good balsa, etc.

Dave is also offering decals and canopies of some of his other kits as well. Send Dave a buck for his catalog of goodies, you won't be sorry! Send to; Diels Engineering, Inc. Box 101 Woodville, Ohio 43469





Knudsen's Helio-Mutt

Mutt Specs.

Span - 21 ft.

Length - 15 ft.

Height - 6 ft.

Weights - Empty - 1500 lb.

Gross - 1800 lb.

Power - oil-fired Stiller

Stream - hollow dyac

Color - Fud, fuzzy wing -

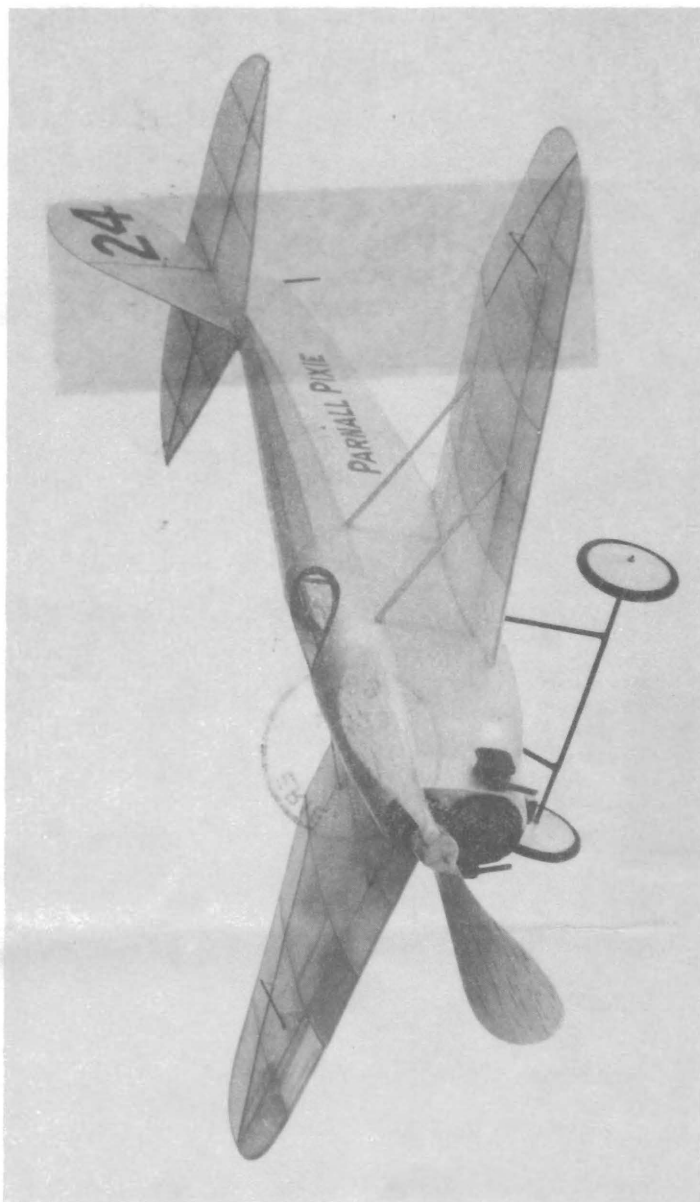
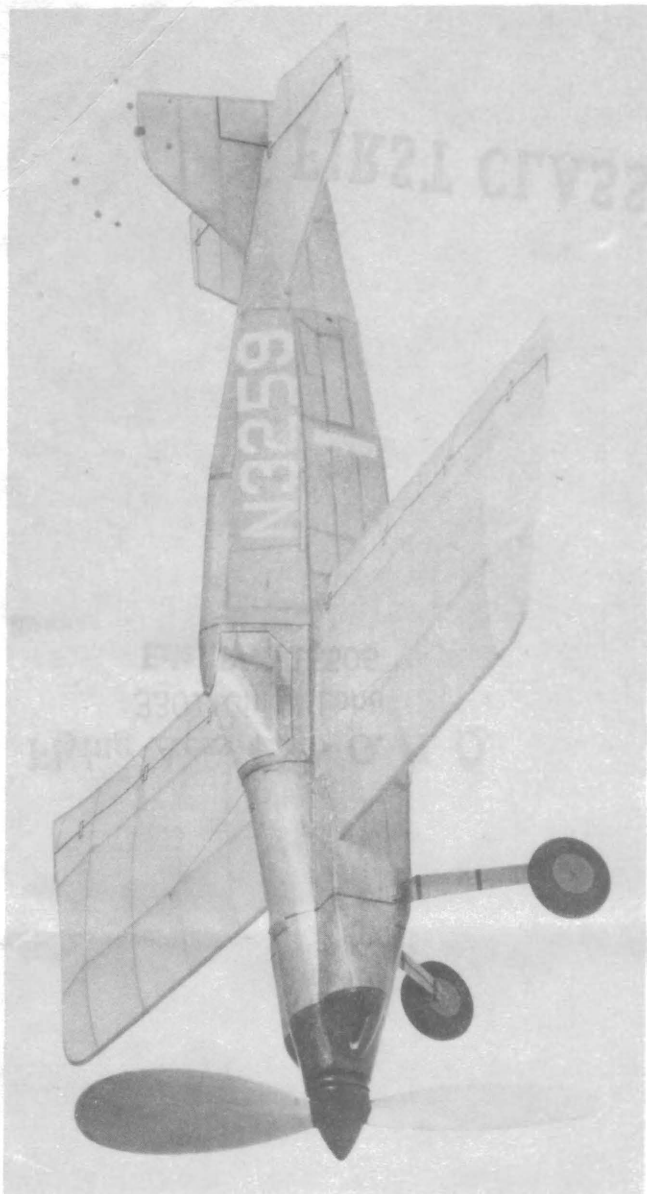
- Cellie Tail -

- Rear fin & Tail -

Laborer Red

Speed - NA, c rider

Do you Skysters remember the story of the Helio-Mutt way back in issue #99-25, Sept./Oct. 1984? Well, S. Bilder, the author of that little bit of fictional history has dug deep into his files and found this three-view of it for us to laugh at or whatever.



Three Peanut models by Clarence Mather. Top left, Witt's Vee, Top right, Parnall Pixie and on the bottom, the Comper Swift. Thanks, Clarence!