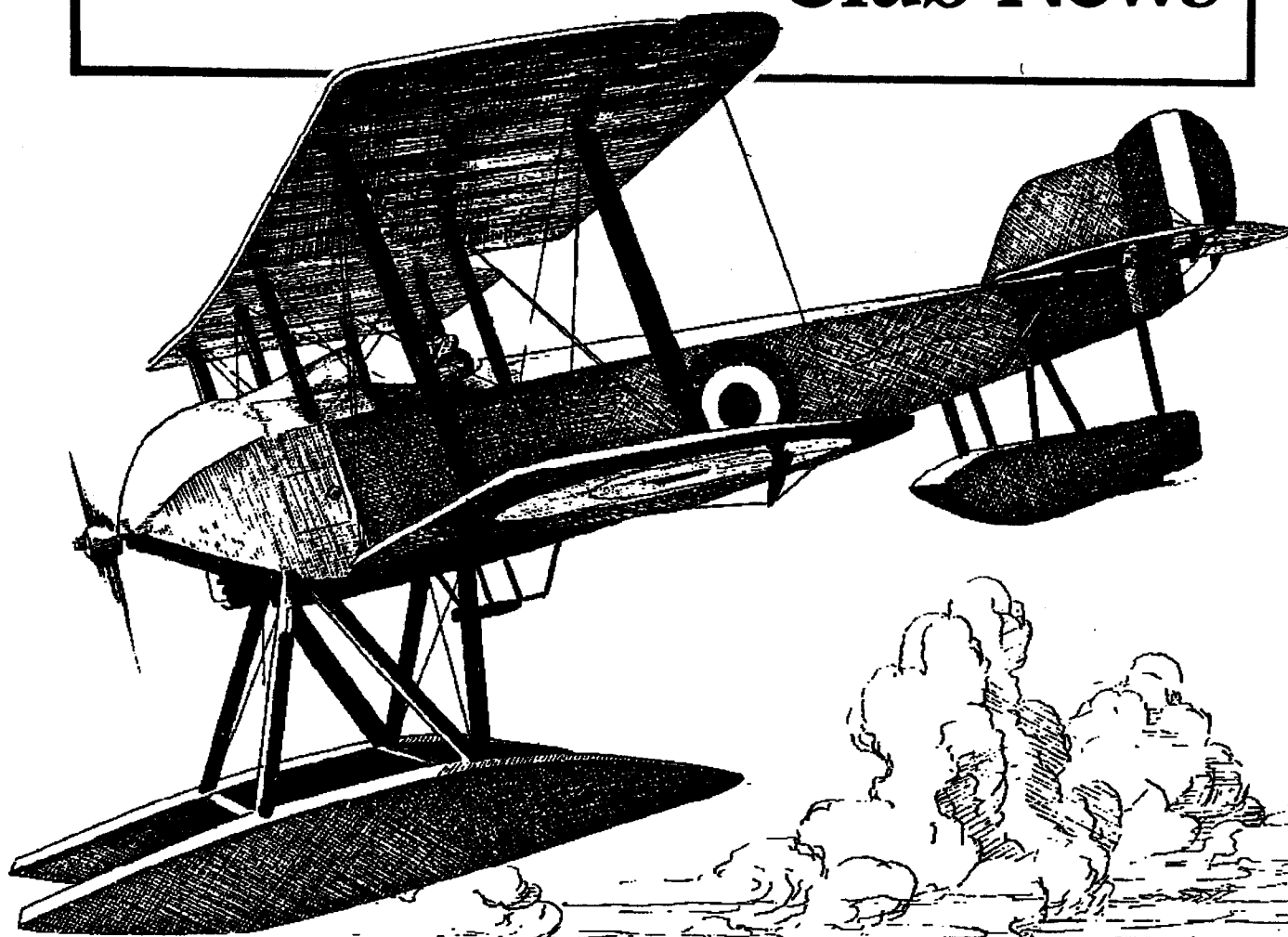


# FLYING ACES

ISSUE #231-157 Sept./Oct. 2006

## Club News





# NEWS ON THE WING!

**COVER STORY.....**Sopwith Baby Seaplane, The Sopwith Baby seaplane was produced by the Sopwith Aviation Co., in 1915, as a single-seater tractor biplane for patrol work. It was used extensively by the R.N.A.S. until the end of 1918. This machine was a development of the Sopwith Tabloid, a seaplane version of which won the Schneider Trophy for Great Britain in 1914. Different power units were used from time to time, the most common being the 100 h.p. Mono-Gnome and the 110-130 h.p. Clerget engines. (The cover drawing and story sent in by Tom Nallen, Sr.)

Thanks to all who contributed to this issue. The plans came from; Mike Nassise (Fairchild PT-19), John Blair (Loening M-8), and from our files (Vought Corsair and the Curtiss OC-2). Also included in the plan pack are the results of the FAC Outdoor Champs. A big thanks to Ralph Kuenz and his crew for putting on another great contest.

Funny but true! An FACer called the Quality Inn at Geneseo to see how wide the room doors were. He was shipping his models to the motel and wondered if his shipping box would fit through the door. When told the doors were not big enough he decided to ship it anyway and let the motel store it somewhere till he arrived. On arrival no one knew where his box was so he went to his room and there was the box. When inquiring at the desk how the box got into the room they said they went outside and took out the windows which were wide enough for the box to fit through!

We have several newsletters that have been returned to GHQ marked "temporarily away". If you have been away and you don't have all issues of your newsletter please contact GHQ.

Will the Clubster that purchased the Joe Ott plan of the Curtiss O-52 "Owl" while at Muncie on September 16 & 17 please contact GHQ as you only have half of the plan.

Build---Fly---Win.....EFF--AAA--CEEE!!!!!!! Col. Lin Reichel, CinC, FAC

*Lin*

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## The FLYING ACES CLUB

is a society of unique individuals with a common interest that at times borders on a passion. It is our intent to preserve and promote the traditional building and flying of free flight stick and tissue model aircraft. Although competitive at times, the sharing of innovations, assistance and camaraderie is second nature to all that believe in the unique spirit of the  
**FLYING ACES CLUB**

FAC FICTION FLYER SCALE		FLT.	FLT.	FLT.	SCALE	BONUS	BEST		FLY	
Contestant	Plane	# 1	# 2	# 3	SCORE	POINTS	TIME	TOTAL	TOTAL	PLACE
Rich Weber	Mystery Tailless	82	65	58	58	15	71	144		1
Tom Hallman	Smilin' Jack X-13	80			59	10	70	139		2
John Houck	Joy's Racer	45	46	61	55.5	10	60.5	126		3
Steve Griebing	Booth Ranger	49	49	48	57	15	49	121		4
Walt Farrell	Mystery Tailless	41	23	32	55	15	41	111	125.5	5
Ed Pelatowski	Joy's Racer	36	43		58	10	43	111	104	
Greg West	Scarlet Stormer	37	44		54	5	44	103		
Dave Niedzielski	Mystery Tailless	24	30	32	54.5	15	32	101.5		

Above is the Fiction Flyer event results which somehow were missing from the last issue, sorry.

## A LETTER TO THE MEMBERSHIP

The FAC NATS Mark XV is now part of history. To many the NATS is a magical time. To some it's a vacation they wouldn't trade for time anywhere else in the world. And to a few, it is a fifty two week labor of love. There is nothing like the FAC NATS and no one wants any errors to mar the pages of history any more than me, but the purpose of this letter is to admit that yes, errors were made.

After each NATS the results are checked before being published in the newsletter. Occasionally an error has been found. Most of these past errors have been minor and did not affect the final standings of the event. On very rare occasions, standings have been altered with those involved notified and corrective action taken.

This year after the newsletter went to press; GHQ received a letter questioning the results of the Scale Grand Champ. After checking and rechecking, the official result was again confirmed and the information passed on to the author of the letter.

This incident got GHQ to thinking about how to improve all postings and tabulations for the next NATS. We came up with a method and to test it we applied it to the results of all the non-scale events. To our utter amazement, it was then discovered the Non-Scale Grand Champ Trophy was awarded to Vic Nippert in error. Vic, please accept our most sincere apologies.

We also apologize to Don DeLoach to whom the trophy should have been awarded to in the presence of his fellow contestants. We congratulate you Don and hope this public letter helps reduce some of the disappointment you must feel.

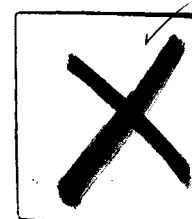
This issue came to light from one comment from one member. GHQ encourages such comments. Your input is valuable. You make up the FAC. You are the FAC.

As said at the banquet, "We strive for perfection. Once we obtain that perfection it will be someone else's turn to make it even more perfect."

Thank you one and all for your support and understanding.

Ross P. Mayo, Adjutant to the C.O., FAC

If the box on the right has the dreaded RED "X" in it, it is time to renew your membership which includes the newsletter. Cost is \$15.00 per year in the United States. Cost for Canada is \$20.00 per year. Overseas the cost is \$25.00 per year. All in U.S. dollars. Six issues per year, published approximately every other month. Please make checks payable to; Flying Aces Club. Send to; FAC-GHQ, 3301 Cindy Ln., Erie, Pa. 16506.



## FAC Outdoor Champs 2006

Once again another FAC Outdoor Champs is history. We ran a week later than usual, as mandated by the heavy AMA schedule this year. Actually it was a lucky break for us as it rained the prior weekend. My personal thanks goes out to the great help from Volunteers who really make the meet a success. The folks at the registration tent, Juanita Reichel (the First Lady of FAC) and Lynne and George Lewis, work two full days at processing. And I want to thank the individuals who helped with judging and running the mass launch events. It really is true that good people do good things.

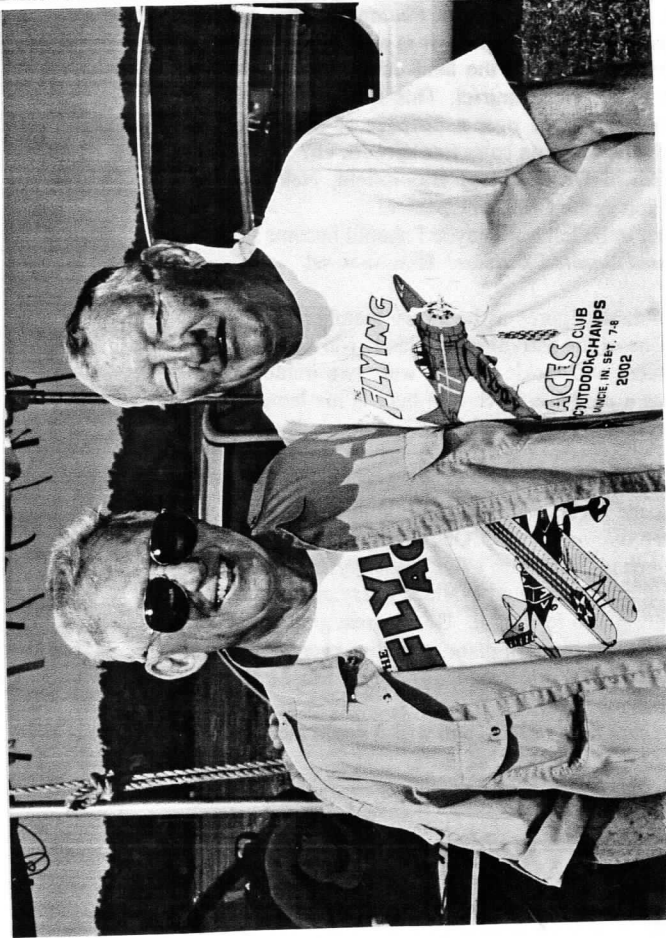
A little word about the theme aircraft for the meet, the Beechcraft "Bonanza.". Again, Bob Bojanowski did the artwork for the "T" shirts. (Bob is having some health problems and couldn't make the scene). The Cleveland plan of the aircraft was obtained from Cleveland Models for less than the printing cost. I had expected to see the owner of this company, John Jacox at the meet. Our well known member, the very artful and talented Steve Griebing, made the overlay sheets to include today's technique in rubber scale modeling. Build one for next year's meet. Thanks, Ralph

### Jim Detar was declared "Grand Champion".

FLYING ACES OUTDOOR CHAMPS MUNCIE INDIANA

September 16 - 17 2006

FAC Scale	2006 Outdoor Champs	Flt #1	Flt #2	Flt #3	ScPts	Bonus	Hi time	Total
C. Starleaf	1 Dash 8-300	97			60	25	76.75	161.75
P. Murray	2 Grum. Avenger	120			60	10	82.5	152.5
P. Boyanowski	3 Hannover	84			60	15	72	147
R. Miller	Fokker D-7	48	84	54	59	15	72	146
M. Welshans	Fleet 2	40	48	88	56	15	74	145
P. Bruning	Mitsubishi Pete	54	57		60	25	57	142
J. Reichel	Piper Clipper	120			58	0	82.5	14.5
R. Adams	Tony II	81			60	10	70.5	140.5
P. Azure	Vagabond PA-17	120			57.5	0	82.5	113
J. Tisinai	Navion	44	49	76	60	10	68	138
J. Bair	Aeronca L	36	31	71	59	10	65.5	134.5
M. Midkiff	Shinden	52	54		59.5	20	54	133.5
P. Bruning	Henshel P-75	54	48		60	15	54	129
D. Cornelius	Mr. Smoothie	72			58	5	66	129
J. Moses	P-51A	60	42	39	58.5	10	60	128.5
M. Welshans	Martin MO-1	47	35	73	57	5	66.5	128.5
D. Rees	Pander + Zonan	35			60	10	35	124
D. Driscoll	Poncelet	51			58	5	51	114
N. Becker	Great Lakes	41	25	41	58	15	41	114
O. Benton	Waco Special Custom	43			55	15	43	113
A. Backstrom	Curtiss OC-2	31	39		59	15	39	113
D. Niedzielski	Gloster Gladiator	38			60	15	38	113
D. Bubolz	Ryan YPT-16	40	31	40	59	10	40	109
P. Boyanowski	Spartan Executive	35			60	10	35	105
H. Frautschy	Fairchild PT-19	23			57	10	23	90
J. McGillivray	SE-5				60	15		
J. Tisinai	Lacey				59	0		
A. Backstrom	SE-5				55	15		
R. Moon	Miles Magister				57	5		
C. Starleaf	Mustang				60	35		
Les Burdsal	Antinov AN-2				59	18		
D. Rees	D.H. Fox Moth				60	15		



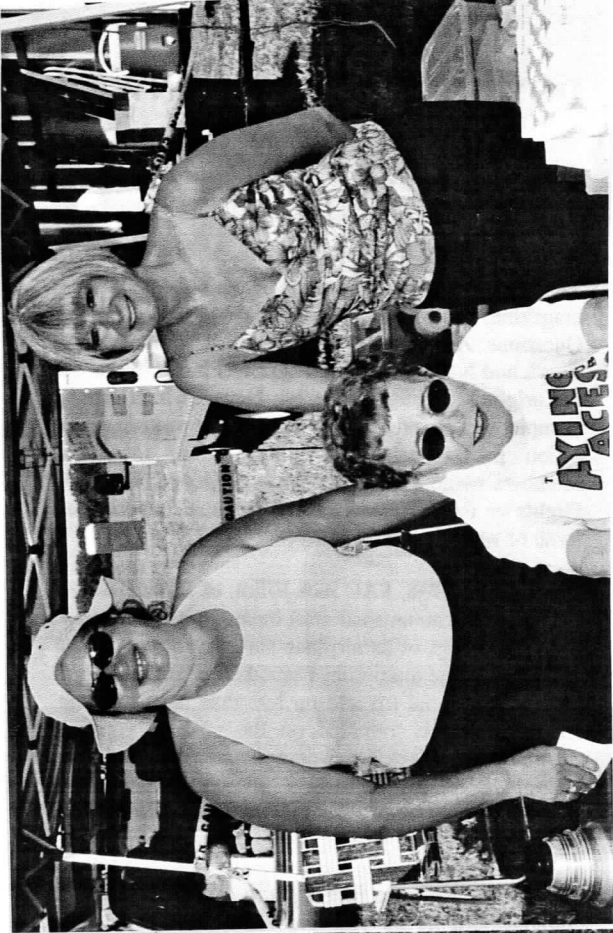
Two old Buddies meet for the first time in over 20 years at the 2006 FAC-Nats. Bob Schlosberg on the left and Tom Nallen, Sr. on the right. Bob sent us the photo.



Vet Thomas took this photo of Walt Kornrich and his Pitcairn Mailwing (Dime Scale) which flies great. Soon to be a kit by the CAMCO Co.



Here is Fred Wunsche with his Miss Canada. Fred is one of our finest photographers.



Three lovely ladies who kept some sanity at the FAC headquarters tent during the recent nats. Sue Starleaf on the left, Diane Courtney, right, Juanita Reichel seated in front. Bottom photos by Fred.

## DOWN MEMORY'S RUNWAY READERS WRITE IN.

By Dave Stott



There were many departments in the old Flying Aces magazine to which a reader could write. "All Questions Answered", "You Said It", "Workbench Tips", and News of the Modelers". Finally, there was the original "Flying Aces Club News" which usually occupied about one and a half of the customary 96 action packed pages of Flying Aces magazine. Members wrote in to tell of the activities of their FAC Flights or FAC Squadrons and personal experiences, some of which are related here.

In August of 1938, FAC Jack Elliot, of Santa Barbara, Cal. describes an unusual craft being built out his way. It has the wings of an airplane and control gondola of an airship. The aluminum framed ship contains a gas bag for additional lift and no less than seven motors, one of which is mounted on the nose to create a vacuum! (?) Jack's un-named shop instructor is building it on a field originally owned by pioneer aviator, Earl Ovington. One wonders what became of this endeavor.

In the same issue we find a photo of a model airport diorama built by 20 year old Henry Ruscin and his brother, of Tresckow, Pennsylvania. It features hangars, administration and passenger building, radio shack and towers, and an airship mooring mast. Overhead flies a fifty inch Taylor Cub and a large model of the Hindenburg dirigible. This is one of many such efforts by FACs of those times which were displayed in public places such as theater lobbies, and department stores. (Remember them?) One thing Hank left out was the airport water tower which was responsible for much melodramatics in Hollywood's view of aviation.

In the may, 1937 issue of FA, Brian Murphy, CO of Ireland's FAC Squadron No. 1 complains that a good number of the lads in his squadron have followed the ancient Irish tradition of being unable to keep out of a scrap. "They have gone to Spain to fly there in the Spanish Civil War. The problem is that some are fighting for the Loyalists, while others for the Rebels!"

In the November, 1937 issue we read of 20 year old FAC Gail Mishler, of Akron, Ohio, who already has had aero adventures to rival those of Major Fred Lord, of whom we read in the Nov/Dec 2004 issue of the FAC News. Gail started out as a model builder, got into 'chute jumping, began flying at 15, now holds a transport pilot rating, and served with the Nationalist Air Corps in the skies over war torn China. Alas, he gives no details. Now, here is a guy you will never be able to keep down on the farm again! There is a photo of Mishler looking quite the man of the world in the slicked down hair style of those times and wearing a very dark overcoat with turned up collar

In an ongoing unofficial contest to see who could make the smallest model airplane, the matter was finally settled in the June, 1941 issue when a photo of a NA-33 "Wirraway" built by John Clarke of Victoria, Australia which spanned a mere 1/8 inch was published.

In the same issue, Ross Smyth, of Toronto, Canada, tells of how being an FAC lead him into aviation. He tells of his position as Dispatch Clerk for Trans-Canada Air Lines. His chief duty lies in supervising the loading of all cargo, which includes handling of the Libra scope instrument. The scope computes the gross weight and CG location of the loaded aircraft. (In U.S. service, Ross would be known as a "Loadmaster".)

### THE FAC "ZOO"

In 8/39, Bill Mickelsen, of Racine, Wisconsin wants to be known as the *Raven*.

In 7/38, J.H. Dickson of Glasgow, Scotland calls himself the *Black Hawk*.

In 10/38, Harry McDuff, of Richmond, Victoria, Australia has become the *Flying Phalanger*. Now, just what in a bent strut is a *Phalanger*, you are justified in asking? Well gang, it is a small possum-like quadruped, native to the land down under, with the habits of a flying squirrel. This little critter can glide from tree to tree over a distance of some 250 feet! Maybe he dines on balsa tree sprouts, eh?

In 1/39, Edwin De LaRoi of Bloomfield, Nebraska joined the zoo as the *Crimson Cockerel*.

Not wanting to be left out, maybe I should become the *Drop-chested Garbled Warbler*! Haw-w-w-w!

Enlisting notable figures as honorary members in the FAC was one of the activities practiced. Movie actors Wallace Beery and Jackie Cooper were two inducted. Cooper was a model builder, and here is his letter of acceptance.

"I am glad to join the Flying Aces Club, for I've read your magazine for a long time, and think it's keen. I always keep one on the set. One time when shooting "Treasure Island", I couldn't find my copy anywhere. After a long hunt, we found Wallace Beery sitting in a corner of the studio reading it. He's a great guy, and a flyer, too. He has his own plane, and flies everywhere in it, clear to New York from Hollywood. Maybe I'll be doing that some day."

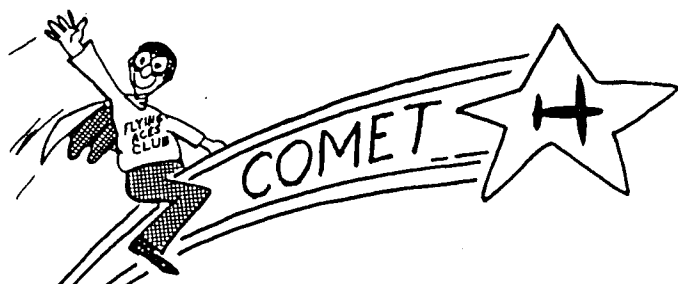
"I wish the club a lot of luck, and wish I could meet all of you fellows."

(Signed) Jackie Cooper.

Other honorary members include Jimmie Allen, Zack Mosley, Amos 'n' Andy, Matty Laird, Art Chester, Jack Northrop, Giuseppe Bellanca, Al Williams, Wiley Post, Eddie Rickenbacker, Billy Bishop, etc.



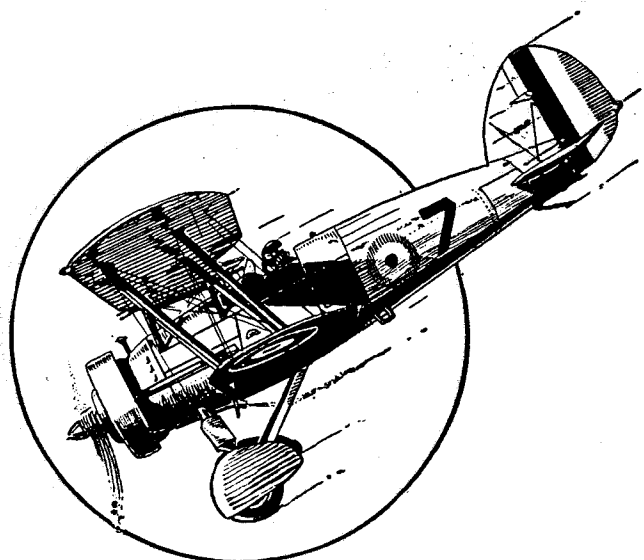
The FAC calendar for 2007 is now ready and the cost is \$20.00 each postpaid. Get one for yourself and one for your buddy for Christmas. Send your orders to; FAC, 3301 Cindy Lane, Erie, Pa. 16506.

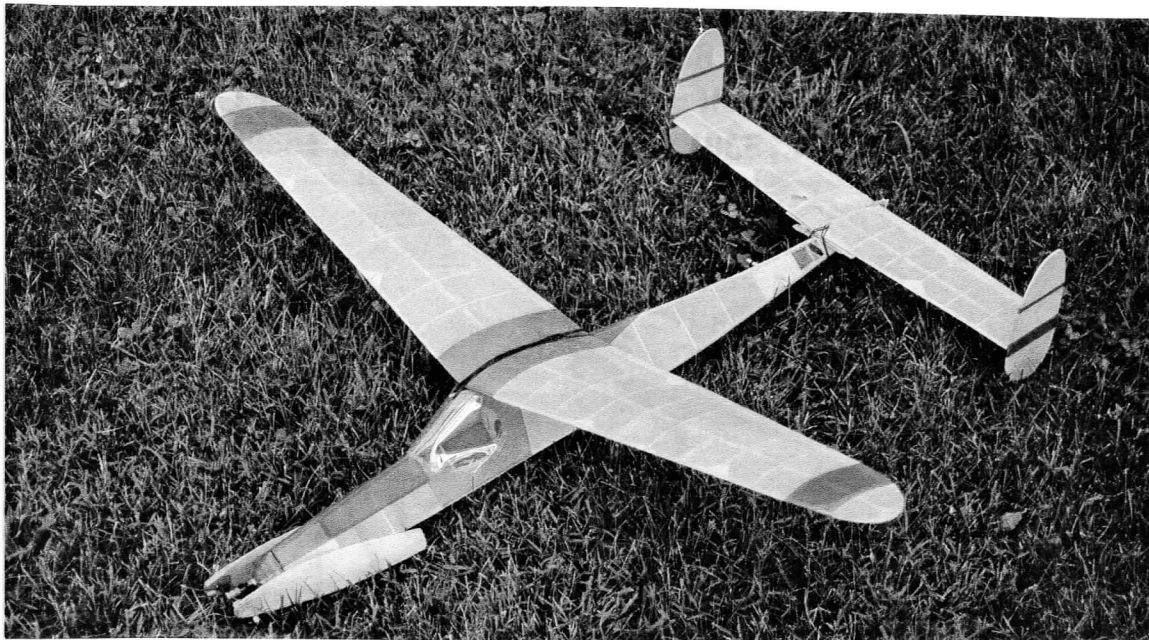


## THE COMET POSTAL IS BACK!

For those of you who have requested us to bring back the Comet Model Postal event your requests have *BEEN* answered. Fly all of your Comet models, regardless of size and send your times to FAC-GHQ. We will then add bonus points to your score. Contest times will also count. Enter as many models as you wish and any time you better a score with a particular model send in the time. The contest starts now and will end on October 29, 2006. Times postmarked after October 31, 2006 will not be eligible. Send your entries to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. P.S. Please give name and wingspan of your model.

Pilot	Aircraft	Time	Bonus	Total
1. Duke Horn	Lockheed P-38	71	30	101
2. John Stott	Curtiss Falcon	75	15	90
3. Anton Telford	Taylorcraft	48	0	48
4. Anton Telford	Monocoupe	22	0	22

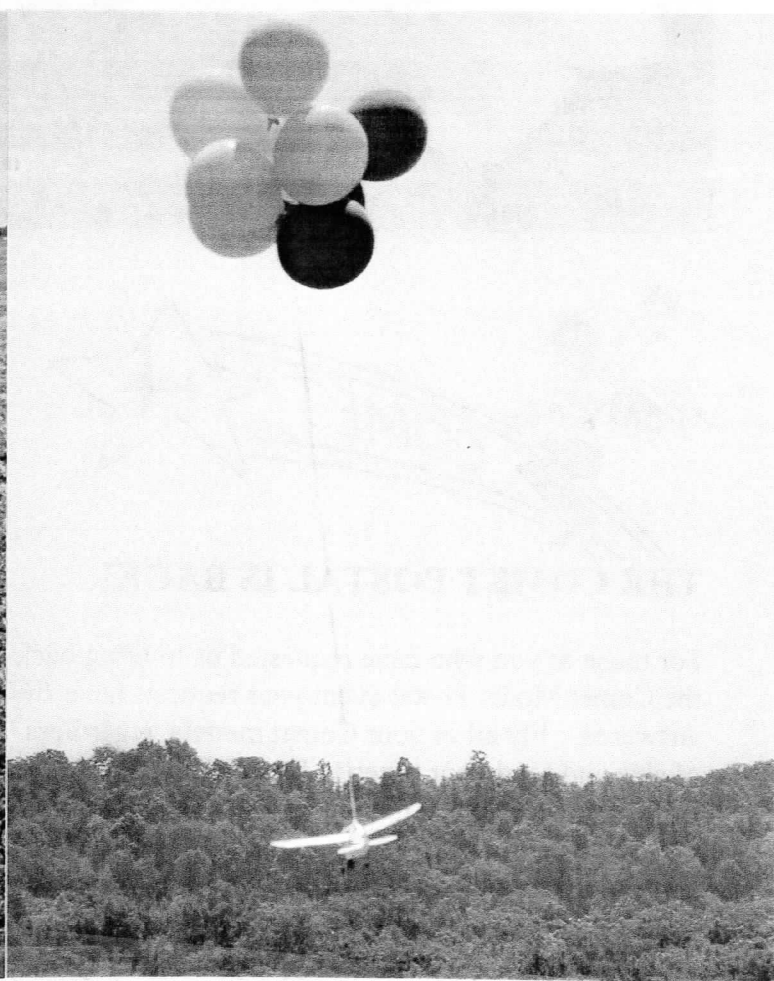




Mark Rzdca sent this pic of a model that was found after the FAC-Nats. No name on it. If you think it is yours contact Mark Rzdca, 17 High Point Trail, Fairport, N.Y. 14450. (585) 425-1640. [Rzdca@frontiernet.net](mailto:Rzdca@frontiernet.net)



Charlie Sauter displaying his Yak 11, Bob Schlosberg next to Charlie. Photo by Fred W.



Mark Rzdca also sent this photo of the annual balloon flight honoring our former members who have passed away since the last FAC-Nats.



## SECRETS OF FREE FLIGHT.....PART THREE

*As far as construction goes*, again, "make it light on yourself" -- build something easy. My fuselages are sheet balsa construction with some internal bulkheads to prevent buckling -- that's all. I build this because it is, I believe, lighter for its strength. These fuselages on gas models must be strong and resist twisting if you expect to hold any adjustment at all. Try this with your model: put it together as though you were going to fly it and have someone hold wing about half-way out on each side; then you grasp each side of the stab and twist. If, when you give it this "acid test", you can't move the wing and tail relationship with something like a one pound force for ".19" jobs it should be all right. This experiment will show that wing and tail platforms are holding the surfaces and that fuselage is not twisting. If you witness twisting anywhere, it is easy enough to correct it with your mechanical ability and imagination. The sheet balsa fuselage does not lend itself too well for round fuselage construction; however, round fuselages are very little, if any, more efficient than rectangular ones with the very small cross sections now in use. The wood used in my fuselage on ".19" and ".29" jobs is 1/8" medium soft balsa covered with silk or *Skylail*. Hard balsa for fuselages is not desirable because of the extra weight; the little added strength is not usually needed. Occasionally one of the local club members will use 3/16" soft balsa (almost indoor wood) and it does fine.

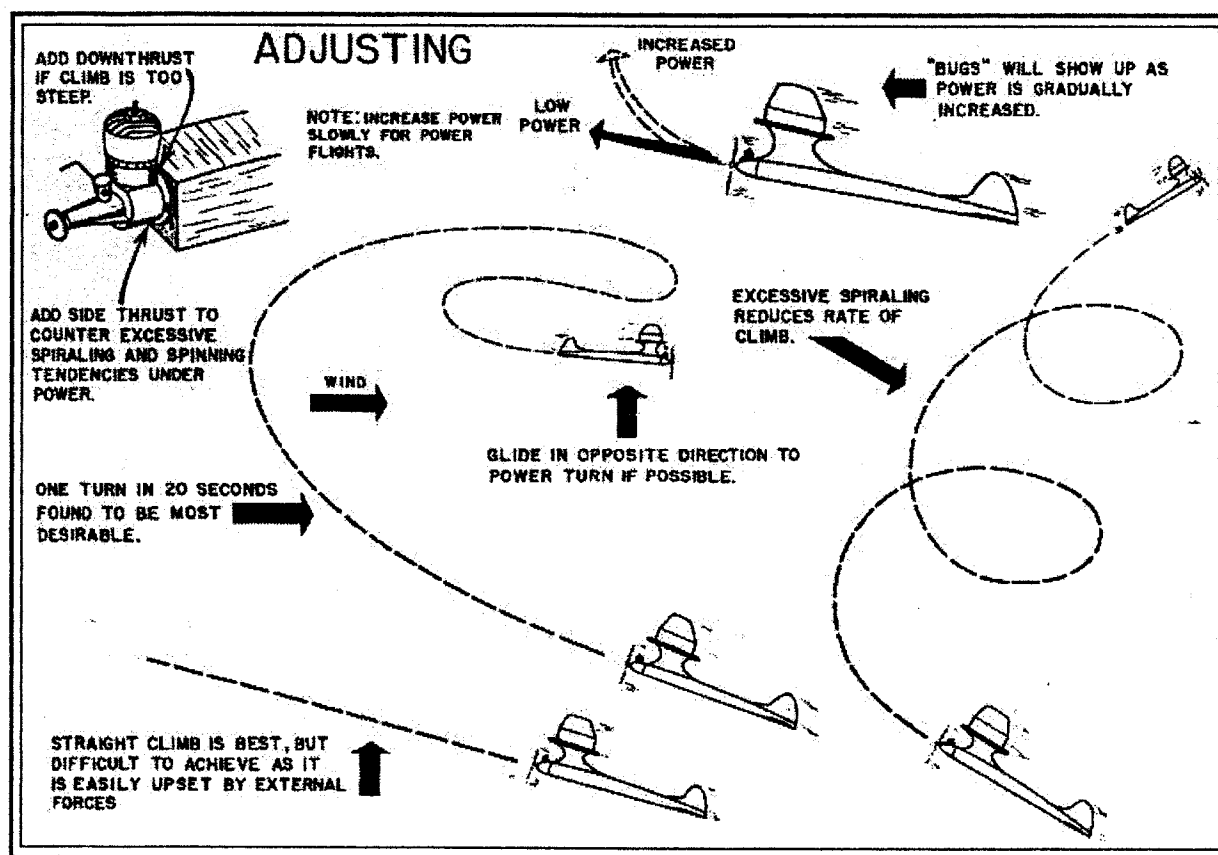
Another thought I would like to add at this point is that I cement rudder on fuselage permanently. The reason for this is that a more lasting rudder adjustment can be obtained. With a rudder built up on stab it is too easy to get it on a little "cocked" or bump the stab on take-off. With rudder on fuselage permanently, stab must slip through fuselage, be behind (or in front) of rudder (and on top of fuse), or be under rudder located on bottom of fuselage. I have tried all three locations and chose the bottom because the slip through system causes too many split fuselages and broken stabs, along with being weaker, as only the fuselage structure under stab can be used to hold the stab. The "staggered" tail group is all right but aerodynamically is not sound for model work. You either end up with rudder moment too short or stab moment too long, or vice versa. I don't say it can't be used; it can, but it should be done with care and some experimentation. If you care to try this "rudder ahead of stab" idea, let me suggest you start with a rudder a little larger than you would normally use and trim down if necessary; also, I would suggest a nose moment as short as possible, and a warning -- beware of "spiral dives" or "spin ins" with this arrangement.

Several times during the life of your model the wing may be called on to support more than five times the weight of the model. If you have a two-pound ship it means that the wing may be called on to withstand forces up to ten pounds and maybe more. For wings on the modern model it looks as if leading edge planking is a must, or a "multi-spar" arrangement. There are many good construction methods in use today, but final result rests with the builder. If you would like to have some figures for comparison, my wings weigh (all finished): 500 sq.in. = 6.25 oz.; 600 sq.in. = 8 oz.+ ; 430 sq.in. = 5.40 oz. These figures are representative of some 90 wings (no, I didn't build them all). (*This averages out to be 1.85 oz. per sq.ft.*) I can't say too much about stab construction except that by far the majority being flown are too weak. Build your stab like you would build a wing, but keep it light, if possible.

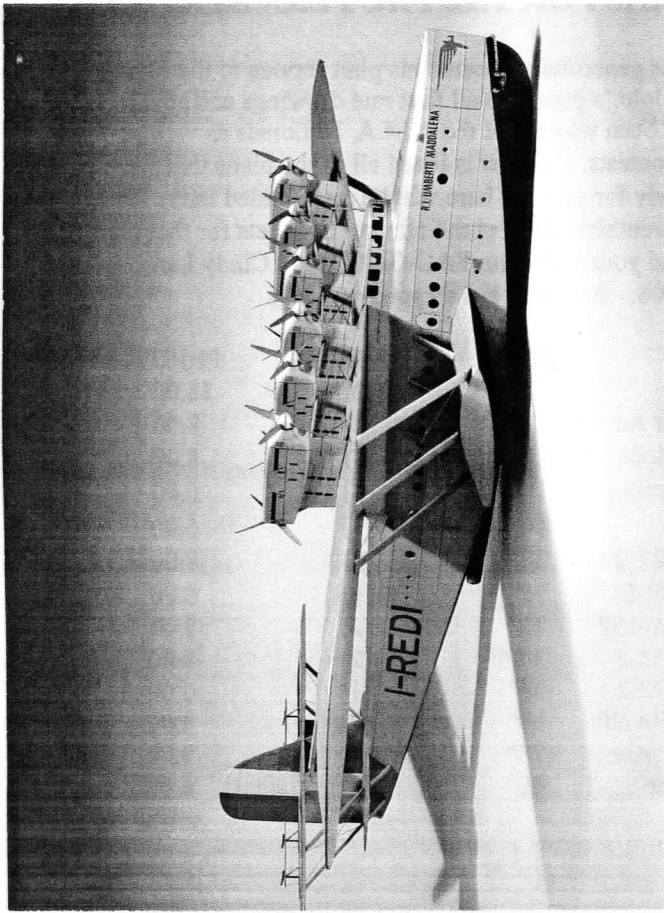
*Just a word or two about covering.* Jap tissue has become almost a thing of the past; you just can't get it any time you want to. I like Jap tissue on wings and stabs even for ships up to 900 sq.in. *Skysail* has been used in most places to replace Jap tissue. As far as silk is concerned, it's fine for most any ship, and here is a tip. Department stores sell ladies' pure silk scarves (one yard square) for about a dollar in solid colors or fancy jobs. These scarves are the same silk as the number one grade model silk; they are already colored and are cheaper -- what more could you want? While we are in the department store, they sell very light silk handkerchiefs for 39 cents which are 17" square and come in all colors. They make a swell parachute dethermalizer for ships from 400 to 800 sq. in.

When I finish a ship late at night, which is usually the case, I start off by sleeping late the next morning and going fishing or to a picture show or just anything to keep from flying it until I am mentally rested and have had a chance to recheck all alignments with a clear head. When I do get around to flying, it's done at the calmest time I can find, which is usually early morning or late evening. **Test flying starts** with a series of test glides until I am satisfied with the results. Here is what I try for in the glide: first, I keep adding incidence until I have a slightly noticeable mush and then add a little left turn with the rudder or by tilting the stab. I like to use a combination of both of these to obtain a glide turn. If all glide turn is obtained with the rudder, it may require more offset thrust to counteract the rudder, and if all turn is had by a tilted stab, there will be no rudder to offset the gyroscopic action. As far as the glide turn is concerned, I would like to use only the tilted stab as the turn is flat, and the danger of spiral dives in glides is minimized. Sure, the flat turn is not a perfect turn aerodynamically but, contrary to common belief, it results in a slower sinking speed. You may question the slight mush that I spoke of, so here is why. This "mush" was with model gliding straight so, when turn is put in, mush disappears. Did you ever stop to think that the angle of attack decreases in a turn, so a model that has a flat glide going straight might spiral drive in glide if turn is added without adding incidence?

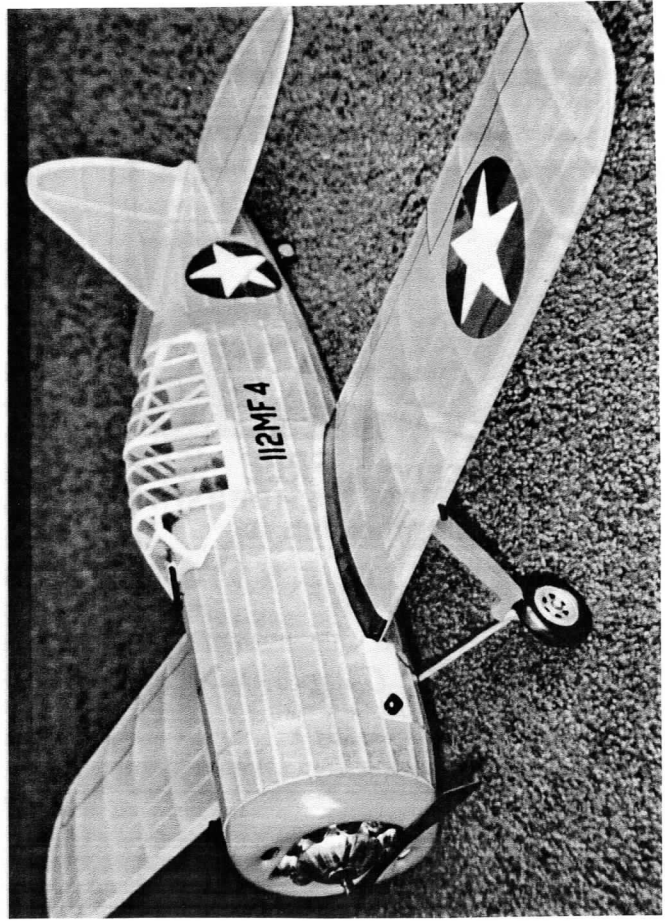
The hand glide is not conclusive in itself because you can't release the model at its exact gliding speed. Just for example, I can take one of my ships, take out all incidence and turn, and with a very hard throw make it glide from my hand. I can also put in too much incidence and glide the model too slow, and it



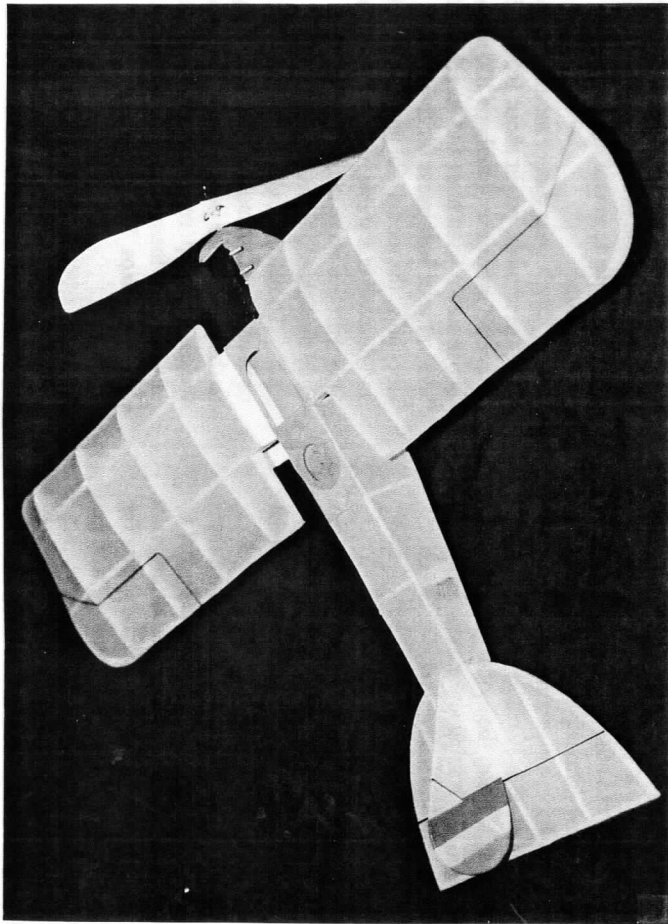
will still glide. It's my belief that many modelers can't "feel" the model, and there isn't any way I can explain just how it should be done. The system I use is to run into the wind with model in a flying attitude and nose down slightly until I can feel it lift, then give it a push. This procedure is repeated time and time again until the "Push" feels and looks right. Beware of "ballooning" your model when hand gliding it; this seems to be the number one trouble with most of us. So when my arm is tired of "toting" this "box" I check mechanical gadgets for operation "just in case". The first power flight is made at very low power. Low power can be had by plugging the opening in your intake down to a very small air inlet.



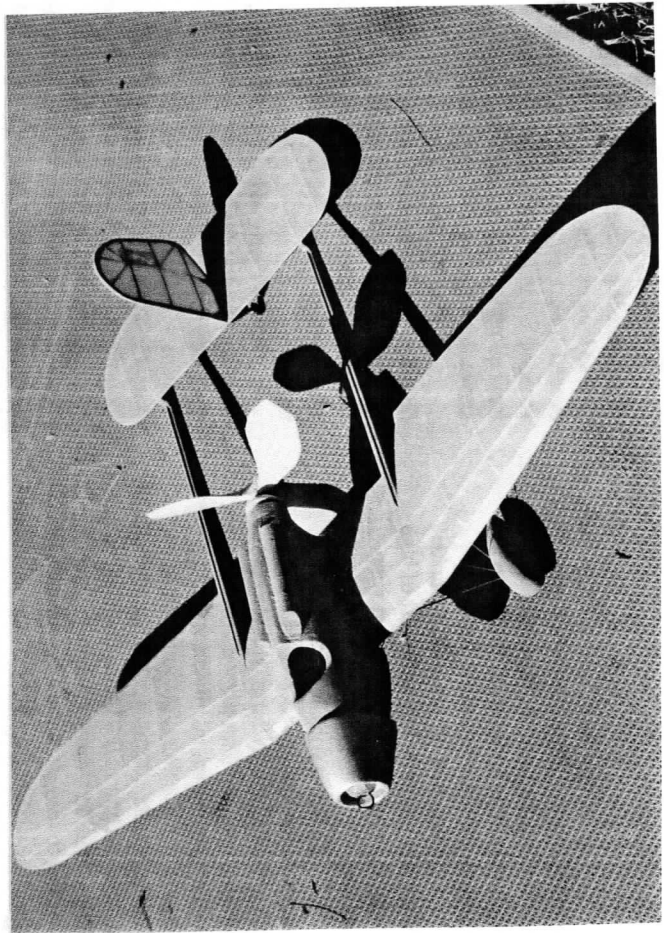
A 27" span rubber powered Dormier DO-X by Tom Hallman. Big bonus with all those dummy props. (Prop on the nose for flying)



Our own Mike Ditrach from GHQ built this Brewster Buffalo from a Dumas kit. Mike says parts fit great, a nice kit. Not flown yet.



Another Pseudo Dime Scale by John Blair Plan in this issue. Should be a good flyer.



Bruce Grayling, one of our Clubsters from Australia sent a pic of his Hanriot-Biche. Bruce says it looks great when/if in flight.

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## NEW PLANS FOR THE FAC PLAN SERVICE

John Blair has generously donated his plan service to the Flying Aces Club. John's plans are all first rate drawings and several of them have been winners at the A.M.A. Nationals as well as many other contests. Below is listed all of the plans that we now have ready for sale. There will be more added later. The number in parenthesis denotes the number of sheets for that plan. As usual, send your orders to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. All Plans are shipped postpaid.

AIRCRAFT	SPAN	SHEETS	PRICE
Cessna AW	30"	(2)	\$8.00
Corben Super Ace	27"	(2)	8.00
Stinson Jr. Model S	26"	(2)	8.00
Pietenpol Aircamper	19.5"	(1)	6.00
SE-5	17"	(1)	6.00
Great Lakes 2T-1A	20"	(2)	8.00
Porterfield CP-65	25"	(1)	6.00
Howard DGA-15P	25"	(2)	8.00
Stinson Jr. SM-2	30.5"	(2)	8.00
Stinson Jr. SM-2	26"	(1)	6.00
Piper Pacer PA-20	29"	(2)	8.00
E.A.A. Baby Ace	25"	(2)	8.00
Buhl Bull Pup	23"	(1)	6.00

strength that leads to the clunker.

When are we in clunker territory? Model size is pertinent, but usually all is well so long as wing loading doesn't exceed 1.5 grams/sq.in. The total range of acceptable wing loading numbers runs from about 0.4 to 1.5 grams/sq.in. Once above this range, we're in trouble.

Within this range, model size favors the Jumbos -- they are better able to handle larger wing loading numbers than Peanuts. Even so, a smaller wing loading is always better -- even for Giant sized models.

Given a large wing loading model, what is to be done? First, do the obvious thing and remove whatever is possible -- perhaps you don't really need prop spinners, skis, bombs, pontoons, etc. If you have covered it with a heavy shrink type of plastic, consider recovering with tissue.

Once lightened, the usual advice is to start flight testing with hand glides, but I find clunkers to be too sensitive to launch speed and attitude to reveal much in a hand glide. As the wrong speed or attitude may lead to trouble, I think its best to try some power in the hope that a bit of altitude may help the model to reveal its nature in a safer fashion.

Check your rubber motor and prop. Using hand turns, put in about 10% of the estimated max turns -- perhaps 100 or so. Chose a zero wind hour and launch dead level, at your best guess for flying speed. Hopefully, the model will gain a few feet and descend in a stable, if too fast fashion. Stay with this stage until all seems well. Only then should turns be increased.

To extend flight time, there are two options available: more power and changes to the prop. More power means still more weight and prop. redesign smacks of a lot of work. Are these changes worthwhile? Perhaps. More next time.

\* \* Clunker Rehab \* \*

Mumbo Jumbo #127 from the Glue Guru

As sure as death and taxes, to each of us will come the clunker -- a model leaden in spirit, nasty in maneuver and a bane to our very existence. What can be done about these miserable things?

First, how do you spot a clunker? We make use of its key trait, that of high weight, in turn leading to a great wing loading.

To know wing loading, we need measure the model's total dead weight when in ready to fly form, and also the total wing area. With the weight in grams and the area in sq. in., divide weight by the area. For example, a Jumbo might carry 100 grams on 200 sq.in. of wing, yielding a wing loading of 0.5 gm/sq.in. This happens to be a desirably low number; one leading to long duration and genteel flight characteristics.

Low numbers for wing loading are the ones wanted -- the lower the better. Implied by a low number is a modest lift load carried by every bit of wing area. In turn, the speed necessary to develop enough lift to offset the model's weight can be low. Moving at a low speed, less energy is spent overcoming drag. The energy saved is available for climb. With altitude in hand, the model can extend duration by trading any excess height for a longer glide. Finally, the lower speed makes for a more friendly model -- one less headstrong.

With all these advantages coming from light wing loading, why do we have heavy models? To some extent they exist because of the catches in low number construction. These are: a structure that is likely to be weaker than desirable, and a too plain finish, lacking in necessary paint and trimmings. It is our natural desire for scale-like quality, taken together with great

AVIATION ARTISTS, MANY ON DUTY WITH THE

RAF, BRING HOME VIVID MEMORIES TO MAKE THESE

STIRRING PAINTINGS OF VARIED AIR COMBATS.

## Air Mail

Allan Schanzle  
6394 Sunset Light  
Columbia, MD 21045

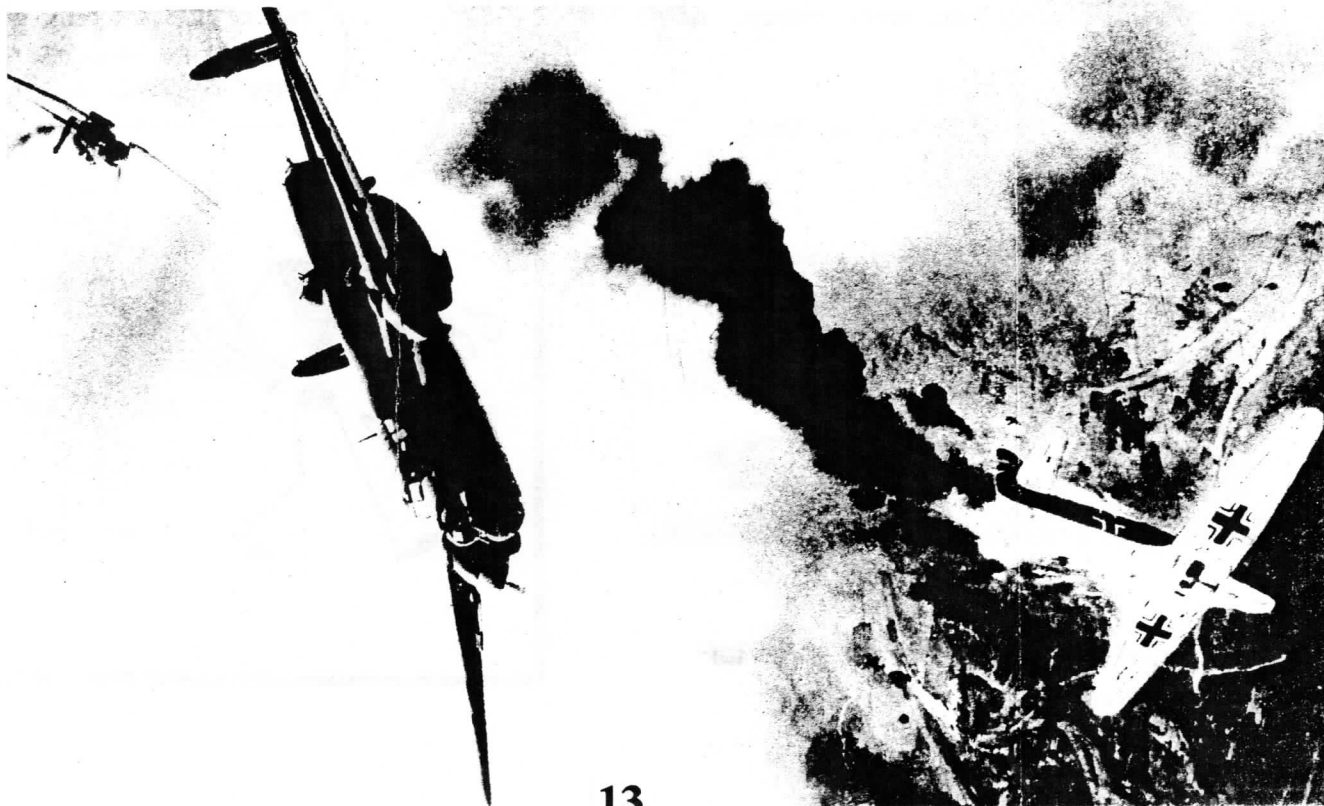
May 8, 2006

Lin,

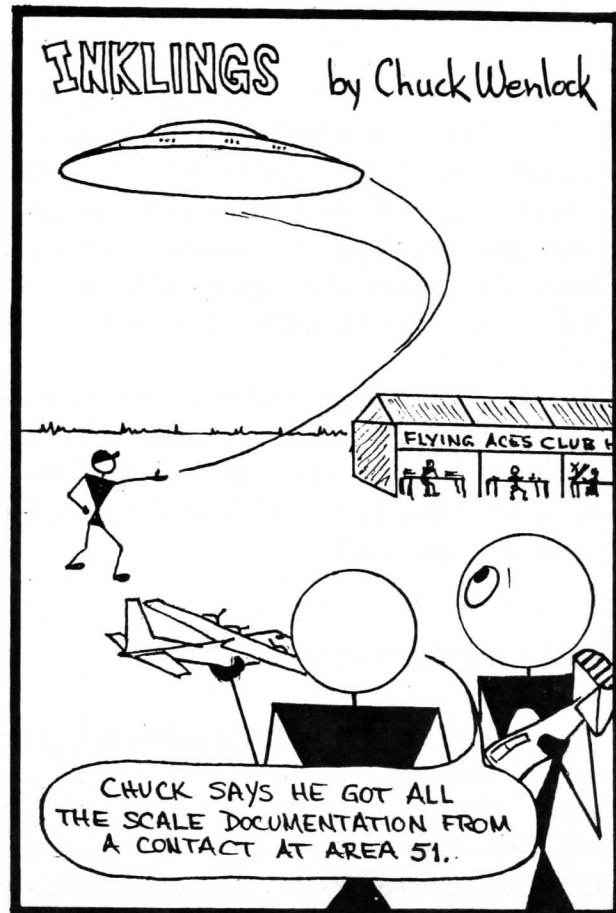
While scanning some old magazines, I noticed the enclosed page in the January 1943 *Air Trails Pictorial*. It has a copy of a "painting" of a Heinkel 113 (a.k.a. Heinkel 100) being shot down. According to the Hi-Lited text, this painting is based on the memory of an artist that served in the RAF. It states that both Heinkel planes were shot down, suggesting that this is really a "memory", not just something he imagined that would make a good painting.

The only justification I know of that prohibits the He 100 from WW-II Combat is an opinion found in print. Doesn't the enclosed give equal "circumstantial evidence" that the plane was indeed in combat? Perhaps some consideration should be given to retracting the exclusion of this plane from the mass launch event. Besides, the aircraft certainly falls into the "Spirit of the FAC", and I don't know of any special advantage that the configuration has over other WW-II planes.

(Ed. Note; Thanks Alan, your finding this article and your views are good enough for us here at GHQ. I think I still have my 20 something years old HE-100 somewhere, I'll have to dig it out!)



One down, one to go. This painting graphically illustrates the attack by two Heinkel 113s upon a Manchester over enemy territory. Both were shot down





## FAC OUTDOOR CHAMPS T-SHIRT AND PLAN

The Cleveland Model & Suppl Co. has generously donated their plan of the Beech Bonanza as the theme aircraft of the FAC Outdoor Champs for 2006. It is also the subject for the Champs t-shirt which was once again done by Bob Bojanowski. The plan also has up-dated material by Steve Griebing that will help to make this a good flyable model.

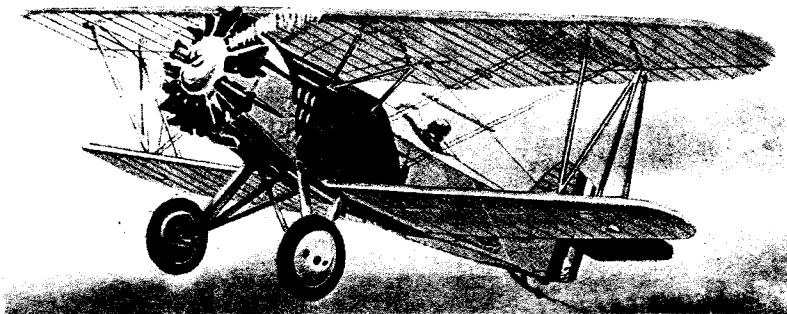
All sizes of the t-shirt are in stock at the present time (small through XXX-L). The price of the shirts are \$15.00 each and the plan is \$6.00, both items are post-paid. Send orders to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

## FAC T-SHIRT SALE

We still have some t-shirts for sale that we must move to make some space here at GHQ for our new stock. They are priced at just \$10.00 each postpaid. ME-109----large & extra large, Spartan----small & large, Seversky SEV-2----small & medium, Curtiss P-6E----large, Hall Bulldog----small, Cessna Phantom----Medium, large, extra large, xx-large. Youth sizes only, Boeing F4B-4----medium & large.

Still available at \$15.00 each postpaid is the Grumman Wildcat in all sizes from small through triple x.

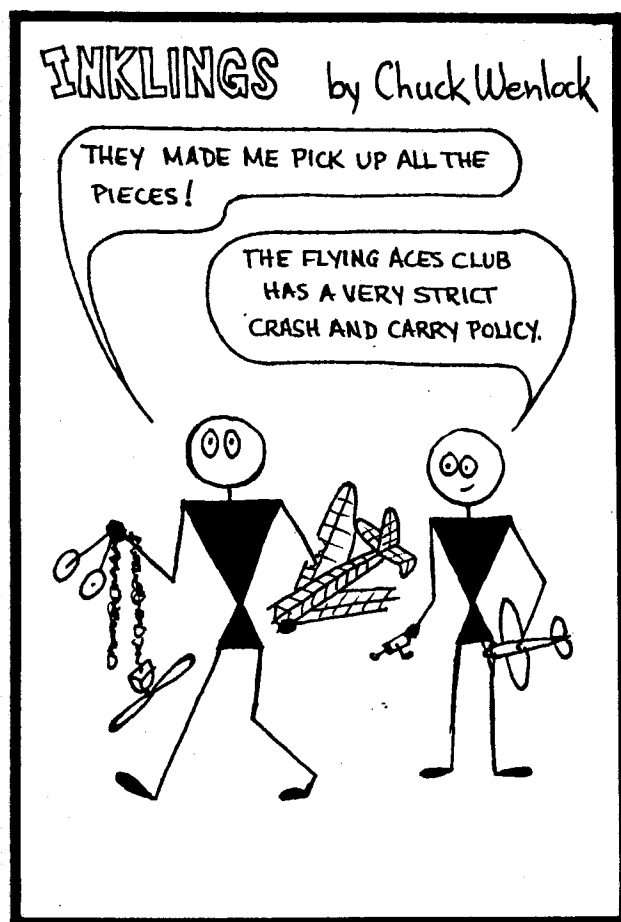
Send your orders to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



**WANTED;** Guillows plan of their Single Motor Transport, 32 inch wingspan. Will pay for same. Edward Carson, Tjornevej 5, DK-6330 Padborg, Denmark.

## KIT REVIEW

We have had the pleasure of reviewing the Dumas kit of the Waco YMF-5, wingspan of 35 inches. The kit includes the following; cad drawn plan, instruction booklet, press-on decals, tissue, excellent die-cut lightweight balsa parts and strip wood, wheels, vacuum formed cowl and wheel pants, rigging thread, Etc. This kit is designed for RC and free flight and is light enough to be built for rubber power. Overall, A great kit! See your local dealer or send to; Dumas Products, Inc., 909 East 17<sup>th</sup> St., Tucson, Az. 85719. Sorry, no price.



## X - AIRCRAFT

by  
Fran Ptaszkiewicz

It first appeared in the sky's over Stratford, Connecticut during 1943, eventually making over 200 test flight's. Notable test pilot of that period, Boone T. Guyton was at the controls during much of the testing and there are reports that Charles Lindberg among others also flew this novel aircraft from time to time, as designer Charles Zimmerman was seeking input regarding its flight characteristics from other pilots.

Vought Model V-173 was the forerunner of the XF5U-1 and as such provided much valuable information on an airplane which had an almost circular wing planform, somewhat similar to an early 1930's design called the "Arrup".

A demonstration to the U.S. Navy using a radio-controlled model, created enough interest to justify the construction of a full-scale wood and fabric experimental version late in 1941. Powered by two Continental A-80 engines of 80 hp, with large three bladed propellers it was felt this unusual airplane would be able to take-off and land in very restricted areas and seemed like a good design for use on aircraft carriers. A V.S.T.O.L. ahead of its time.

The first flight was made on November 23, 1942, taking off from the Bridgeport, Connecticut Airport. It lasted approximately 13 minutes. With over 131 hours of test flying and the ability to reach speeds of 135 mph and a landing speed of 31 mph, it was found the Zimmermann design handled very well and also turned out to be spin-proof.

As a result of this information the U.S. Navy in July 1944 placed an order for two prototypes initially identified as Company Model VS-315 which the Navy designated XF5U-1.

It's configuration was somewhat similar to the original Model V-173. However metal would be used in the assembly of this airframe from a new material called "Metalite" consisting of some very thin sheets of balsa wood that were placed between layers of aluminum, creating a sandwich effect and thus formed the skin of the aircraft.

Pratt & Whitney R-2000-7 engines of 1,350 hp each were actually buried in the wing on either side of the pilot and drove the propellers through extension shafts and a very complicated transmission system. Cooling was provided by two very large air intakes located in the leading edge of the wing. The propellers which were 16 feet in diameter being specially designed by Hamilton Standard were made of wood that was compressed, impregnated and attached to steel shanks then operated similar to a helicopter, in that they were articulated, meaning the forward moving blade has a positive angle of attack and the rearward moving blade to have an angle creating no lift and therefore, little or no drag.

This feature was to permit the XF5U-1 to almost stand on its tail in mid-air and hover like a helicopter.

The airframe was completed in August of 1945, however, it was not until 1947 that the specially built propellers and hubs were ready for installation. As a result of unanticipated delays in propeller delivery, testing began in late 1947 and continued in a tethered mode thru 1948.

The pilots compartment was located in the leading edge of the wing and a bubble canopy was used that could be ejected during an in-flight emergency. A standard twin-engine fighter type control panel was utilized with the addition of a pitch control mechanism for the helicopter prop operations.

The landing gear was fully retractable with novel dual wheels on the main gear as well as on the tail wheel. Interestingly, due to the large diameter props, the airplane sat on the tarmac in an unusually steep angle when in the three point position.

Some dimensions on this circular wing fighter were; span over the elevators of 32 ft 6 in., a length of 28 ft 7 in and a height in the three point attitude of 16 ft 11 in from the ground to the tip of the prop.

Twin rudder's with all moving elevators outside of the basic wing planform provided control while flaps were located between the tailplanes.

Proposed armament would have either six .50 cal. machine guns or four 20 mm cannon. Two racks were provided under the main wing/fuselage for a 1,000 lb bomb on each or two 150 gallon fuel drop tanks. The range of anticipated speeds was interesting in that it was expected to have a low-speed of 40 mph with a top speed of 425 mph. Water injection could boost the top speed to approximately 500 mph.

With transporting the ship to Edwards Air Force Base for initial flight testing via a trip thru the Panama Canal, from Connecticut to California being considered another delay, the Navy decided to terminate the project on March 17, 1949 and scrap the XF5U-1 before it made its first flight. Thus this airplane nicknamed "Zimmers Skimmer" or the "Flying Pancake" showed much promise. Yet sadly the end result of a full blown flight test regime would never be known. Once again as with many X-Aircraft being developed under wartime conditions, numerous delays in procuring specialized equipment that was either not forth coming or late in delivery to the point of jepordizing the entire program. In this case the special propellers and controllable pitch hubs were the culprits.

My research has shown that although two aircraft were ordered it appears that only one was actually completed but never flown.

The final color scheme of this completed airplane was midnight blue all over with light blue and white lettering. The propellers were dull black with yellow warning areas on the tips.

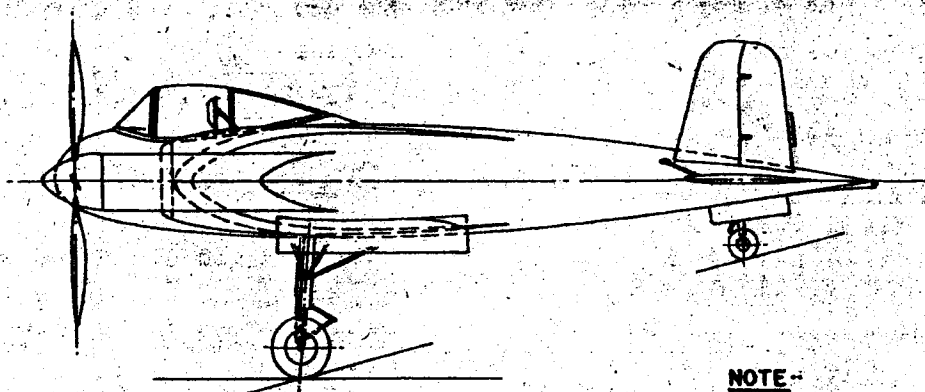
The three view included is from the January 1947 issue of Model Airplane News. A much more detailed three view of the XF5U-1 drawn by E. Tage Larsen can be found in the April / May 1984 issue of Air Progress and a very fine rubber powered model plan of the early preliminary design of the V-173 is available from plan provider Mike Morrow in Seattle, Washington. I have a copy and it looks good with tips by Mike on adjusting and flying the finished model.

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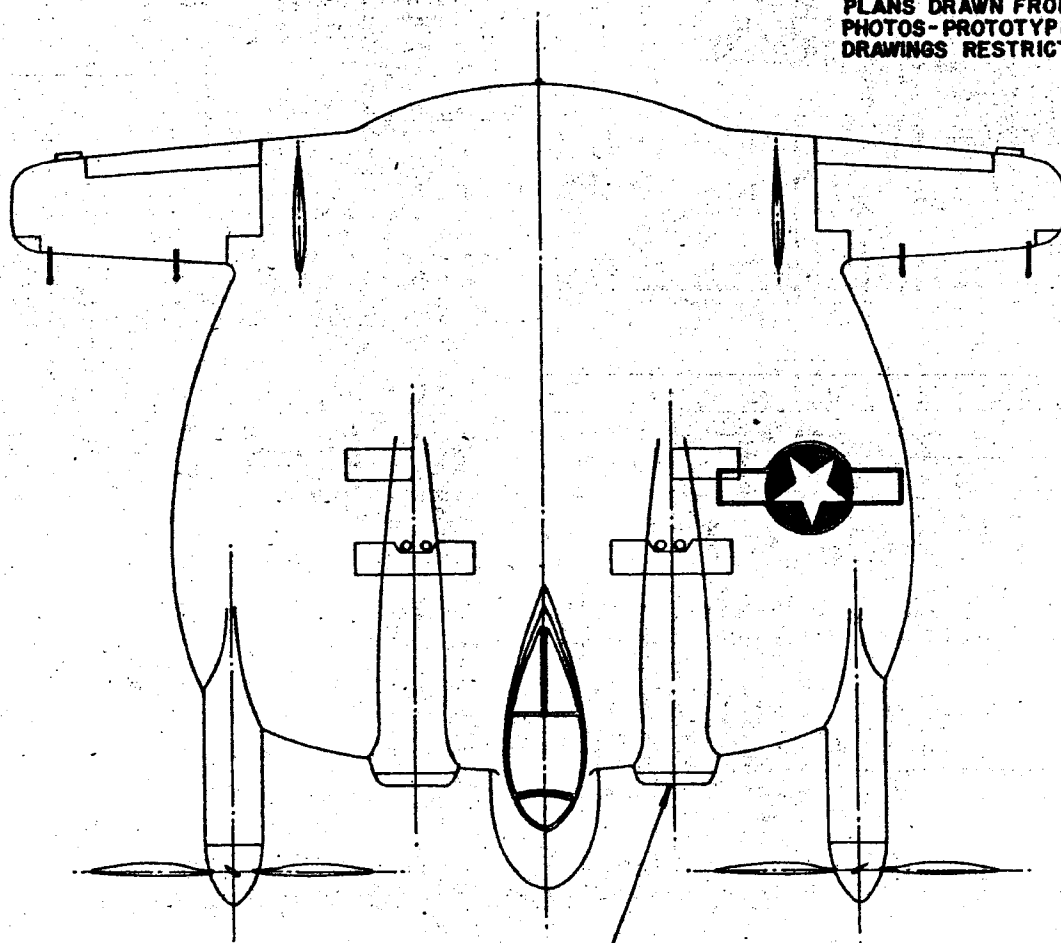
**S.O.S.** Wanted; plans & info on the following aircraft; Beech 18, C-47 (DC-3), DC-6 and Fokker F-27. Need for research of the early years of Philippine Air Lines and the aircraft used. Photos in that airline's livery would be great. I would also like to start an FAC squadron in my area. Anyone nearby me can contact me Jack Sarhage, 24 Canterbury Ct., Piscataway, N.J. 08854, E-mail: [jacknmel@optonline.net](mailto:jacknmel@optonline.net)

# CHANGE - VOUGHT XF5U-1

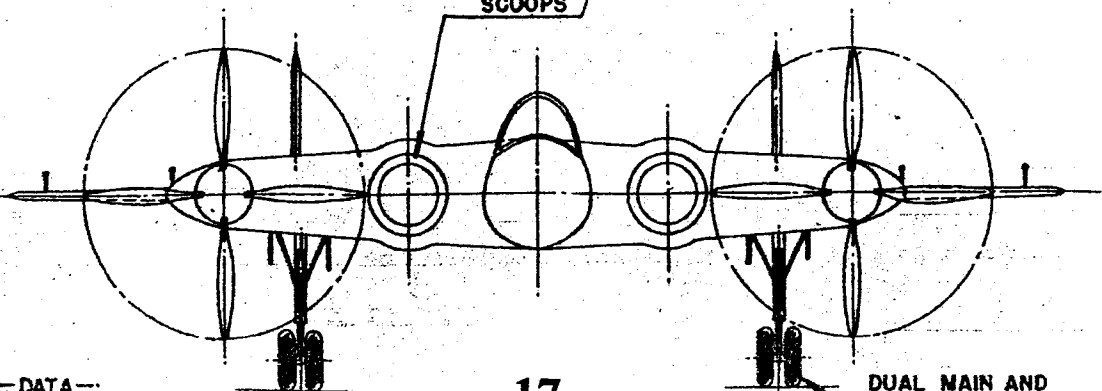
DRAWN BY-  
A.V. SIGNORELLI



NOTE--  
PLANS DRAWN FROM  
PHOTOS-PROTOTYPE  
DRAWINGS RESTRICTED



ENGINE AIR  
SCOOPS



DATA--  
ENGINES-----R-2000-2  
SPEED-----40 TO 425 MPH

DUAL MAIN AND  
TAIL WHEELS-

# Flightline

Airy musings by Tom Arnold

Competition spurs me to action. I am never so motivated as when I look at the calendar and see the FAC Nats coming up. I get blind with excitement and my world shrinks down to balsa and rubber. I go through a ritual months in advance as I plot and plan my strategy that will knock those guys at Geneseo on their tails. It consists of trying to figure out what airplanes will be my best candidates for a Kanone in my favorite events. First I go through the rule book and look for loopholes that I could shamelessly exploit.....I never find them but I do get a good rules refresher. Next I read past FAC newsletters that give the report on the past Nats and Non-Nats and try to glean something from the top entries. Then I pour through old books, magazines, newsletters, photos, 3-views etc. to see if there is a subject that just jumps out and grabs me. Finally, a few do and I am off and running.

That's the drill; however, I have noticed a very distinct trend as far as the winners of FAC Scale at the Big One. That is, the bonus points are extremely important. The top placers are all up in the 160 point range which means, working backwards, that if you get a 55 in scale points (a gentleman's average) and even fly for 2 looooooong minutes and get 82.5 flying points, you are STILL short 23 points that can only be made up with bonus points. If you fly for a minute, which is still not chopped liver, you are now 45 bonus points short. Jeez, Louise, no wonder I picked a low-winged, four-engine, push-pull, monstrosity as my FAC scale entry. If I could only put floats on it. The problem is pretty soon you run out of odd ball stuff and some of them are OK for a run on a kanone but maybe you don't even LIKE them. Now what? You are stuck as the bonus points are vital. As much as I want to build a Nakajima "Frank" for FAC scale as a simple low wing, single engine subject and no matter how long it flies, it is just not going to hack it as far as a kanone. Luck is nice to have, but not as contest strategy.

I think we have come to the place in FAC maturity that the rules have been delightfully outrun by some very creative and fabulous builders and pilots to the benefit of us all. Remember when Don Srull brought out his Voison for the first time? Conventional wisdom was the thing would dork or make a short, merciful flight. 2 minute flights are the norm with that thing now and everybody says "Oh, yeah, the Voison is just naturally a great flyer" as if it was so obviously apparent from the git-go. And then there was the Messerschmitt P-13 that has won for a number of people (another Srull world beater). Most guys would not have touched a twin-engine flying wing with a 10 foot pole. Twins now are as common as brown sparrows and it takes Dennis Norman's 4-engined fleet to get a stir going. The point is, that thanks to the bonus point system, we have seen an amazing horde of aircraft fly well and win over the years but now we have painted ourselves into a corner. Odd ball and complex aircraft are now de rigeur for winning and I think we have left a lot of good subjects behind and a lot of morale as well. So how do we keep pushing the envelope and yet still give a Rearwin Speedster or a Corsair a shot at a kanone?

Talking with master modeler Bob Schlosberg of Arizona about this, and he had a suggestion that the more I thought of it, the better I liked it. A solution would be to split Rubber Scale into 2 categories based on bonus points. 20 and below would be in one class and 21 and above would be in another. There is nothing sacred about those numbers but I pick it because biplanes get 15 and twins get 25 and that seems like a natural break point. With the spread sheets used on a PC at the big contests, it is a snap to figure the winners out in a second. Small contests can handle it equally easily with pencil and paper.

Whether this would work over the long haul is to be seen but we know what we will get without it—more of the same. This would be exactly the type of thing that would fit into last month's FAC Rules Process I discussed. Another thing to keep in mind is that nothing is permanent—if it does not work after an honest run, change it back. Or, perhaps a trial run, like at the Non-Nats, and gauge the reaction from the participants. What's to lose?



## FLYING ACES PLAN SERVICE

These plans are from the FAC contests at Geneseo N.Y. and Muncie, In.

Aircraft	Span	Designer	Price
Erie Times O.T.	24"	Engstrom	3.00
Westland Lysander	25"	Studiette	4.00
Northrop Gamma	36"	Bruning	5.00
Fairchild PT-19	24"	John Low	4.00
Curtiss Gulfhawk	24"	Wilkey	4.00
Boeing P-26	18"	Wilkey	3.00
Waco C-7	22"	Boyanowski	5.00
Laird Solution	14"	Tom Nallen, Sr.	4.00
Waco "D"	24"	Bruning	4.00
Lockheed Orion	24"	Tom Nallen, Sr.	6.00
Monocoupe	24"	Canada M.C.	3.00
Seversky SEV-2	22"	Tom Nallen, Sr.	6.00
Gee Bee QED	24"	Tom Nallen, Sr.	6.00
GRUMMAN WILDCAT 15"		WHITMAN	2.00



# AIR MAIL

July 26, 2006

Dear Lin,

I've been home over a week now from Geneseo and to say I'm still on a high would be understated I think. I had such a damn good time being there and seeing so many people I haven't seen in years and meeting people I've known of but have never met for the first time was the most fun I've had in many years. For the past 20 years I've been running FAC contests out here in the desert and competing at the same time so I've never had much time to socialize with the "guys" who do come. Gene Smith said it all when he told me I could see you were having a good time because you had a permanent smile on your face walking up and down the flight line.

Still, with all the people who attended there were some I didn't get to see because they didn't come, Dave & Marie Rees, and Tom Schmitt to name a few. I guess Marie was not feeling well and they had to turn back. I hadn't seen Tom Nallen, like yourself, since the early 80's at a WRAM's show and I finally hooked up with him on Sunday. The photo enclosed shows that it was a good meeting as I've always admired him and the family he's brought to the FAC. Same with the Stott family, and the two younger boys from both families were perfect gentleman and seemed genuinely interested in meeting me.

19 For the two days that I walked the flight line the modelers there I met were all so friendly, gracious and complimentary that I was getting embarrassed at so many compliments made to me, along with the surprise that I was actually there. I don't think I've ever had so many pictures taken of me with someone else. It was beyond flattering. Maybe in a few weeks my hat size will return to normal

I had a short talk with Ross in the middle of the WW II mass launches about the problems of being a CD that was no different even in a small contest. He was having trouble with the talkers who pay no attention when you're trying to get them to listen up, and contestants who seem oblivious to written instructions. I thought he handled it well and I made a few mental notes for myself on how he handled it with humor. I sometimes am little heavy handed, as in: "will you guys shut up"!

I watched you walk that flight line several times and marveled at how well you were moving in all that heat and humidity when I needed a chair and the shade supplied by a tent to help me be a little more comfortable and rest my weary legs. The humidity was relentless!

Having now seen Geneseo up close and personal I don't know how you can sustain the energy to do that year after year. I remember you telling me once on the telephone that you enjoyed doing it. It has to be a labor of love.

I wonder how many there can even begin to understand the effort it takes to run a contest that size, and also wonder how many there really appreciate that you do it so they can have a good time. In my conversation with Ross he remarked that the whole year is mostly taken up with the planning of the major FAC contests there, Muncie, and the business of running the club on the day to day basis. Little is done in the area of building a model. I'm not surprised. You are certainly one of the "givers" to modeling, along with your crew of helpers.

Being inducted to the FAC Hall of Fame is an honor that I could never have envisioned for myself at anytime in my modeling life. It just wasn't a conceivable thought or possibility to me. I've had a lot of good things happen to me in my lifetime (and a few bad things also, as do all of us) but this honor in this small group of people who fly model airplanes is at the top of a short list of achievements that I will always cherish. I will always remember the honor, the applause, the handshake and the eye contact when I received the plaque personally from you. It doesn't get any better than that! I also owe you a big thank you for giving me the chance to show up to receive the award. It's inconceivable to me now that I almost didn't come due to health reasons. I do have some knee and back problems that make my life very uncomfortable 24/7 as they say, but thank God I thought twice about it and changed my mind. I sure hope you didn't think I wasn't giving the HOF honor respect, far from it, but I guess it might have looked that way.

As a final to this letter I would like to talk to you about sponsoring the awards for Power Scale on the even years, 2008, 2010 etc. and how you go about doing that. I would like to contribute to the organization for all that it's done for me if that's not being too forward or egotistical.

Best personal regards,

Bob Schlosberg



23 July, 2006

Hi Lin,

Thanks for another fabulous FAC Nats! It was terrific to be out there again with so many of the old gang. Memorable!

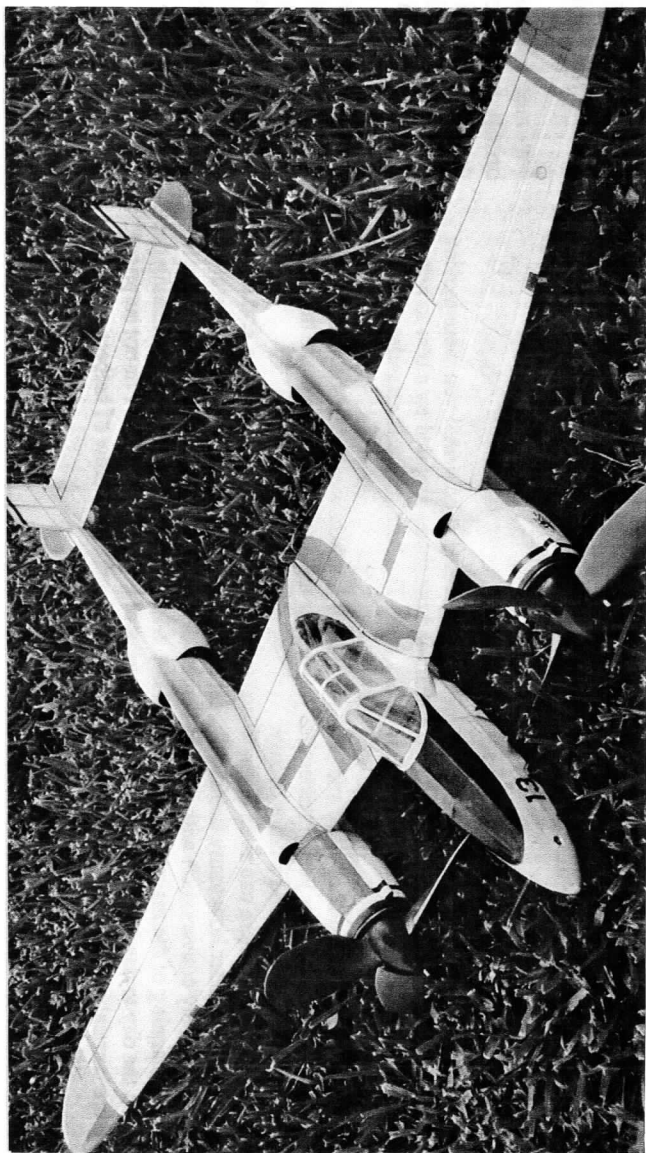
I wanted to pass along a few comments re the old time rubber events we discussed briefly up in Geneseo. First off, I personally really liked the ROG requirement now used for both Jimmy Allen and FAC old time rubber events. All of the other flyers I talked to also liked it. It helps replicate what these grand old models were intended to do - and designed to do: TAKE OFF! As a kid, more than half the fun was seeing a model actually take off the ground and fly! Let's keep it.

Secondly, when you reword the rules regarding old timer and Jimmy Allen props, I suggest you use wording that does not prevent someone using the prop diameter shown on the original plan. For example, the Jimmy Allen rule 4-A. could read: "The prop diameter can be as explicitly shown on the plan, or if not shown, not to exceed 33% of the wing span."

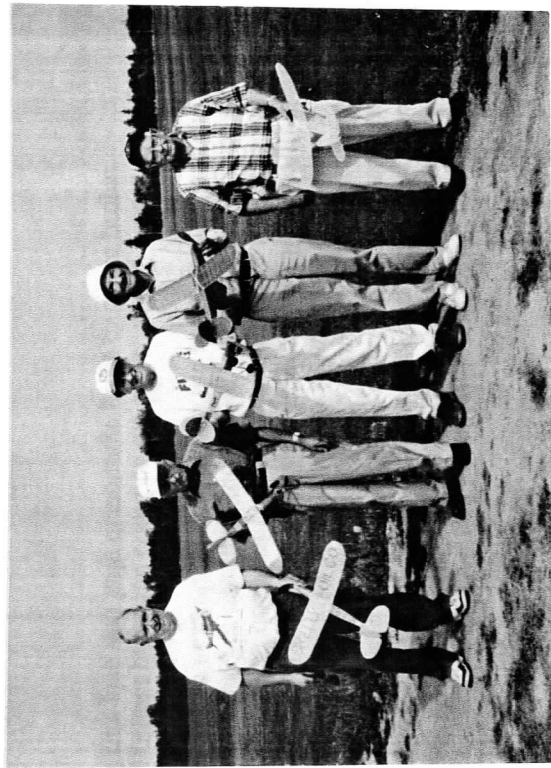
The FAC old time rubber prop rule could be the same. In any case, I think you are right that the ROG rule also will help discourage gross oversize props.

All the best,





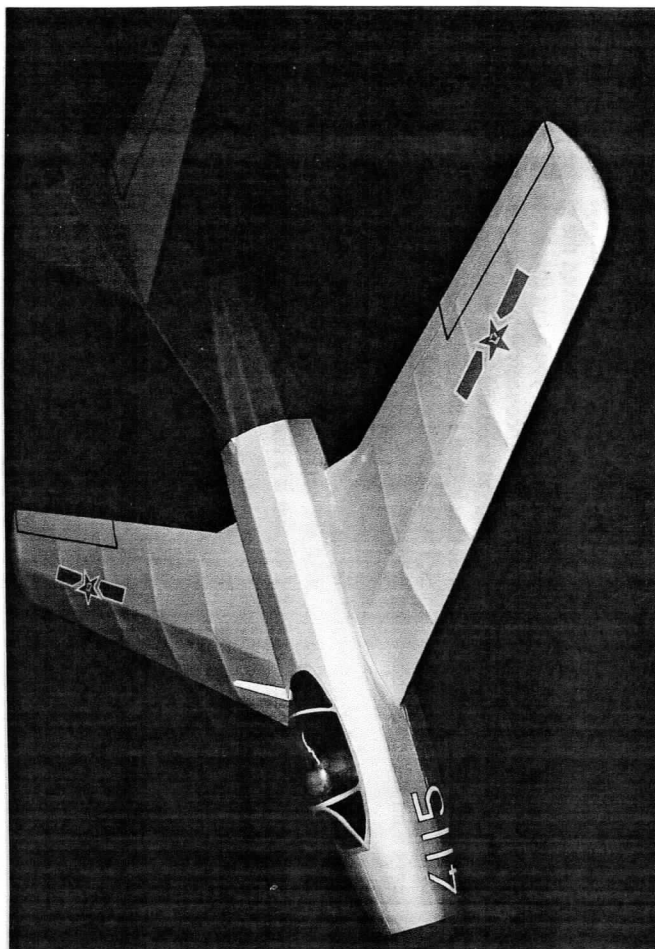
Duke Horn sent this pic of his Comet P-38. Nice job, entered the FAC Postal contest with 71 seconds.



Jimmie Allen team from Canada. L-R, Terry Jenkins, Ted Toth, Sam Burke, Mike Thomas Richard Fahey. All flying Skokies. Pic by Fahey

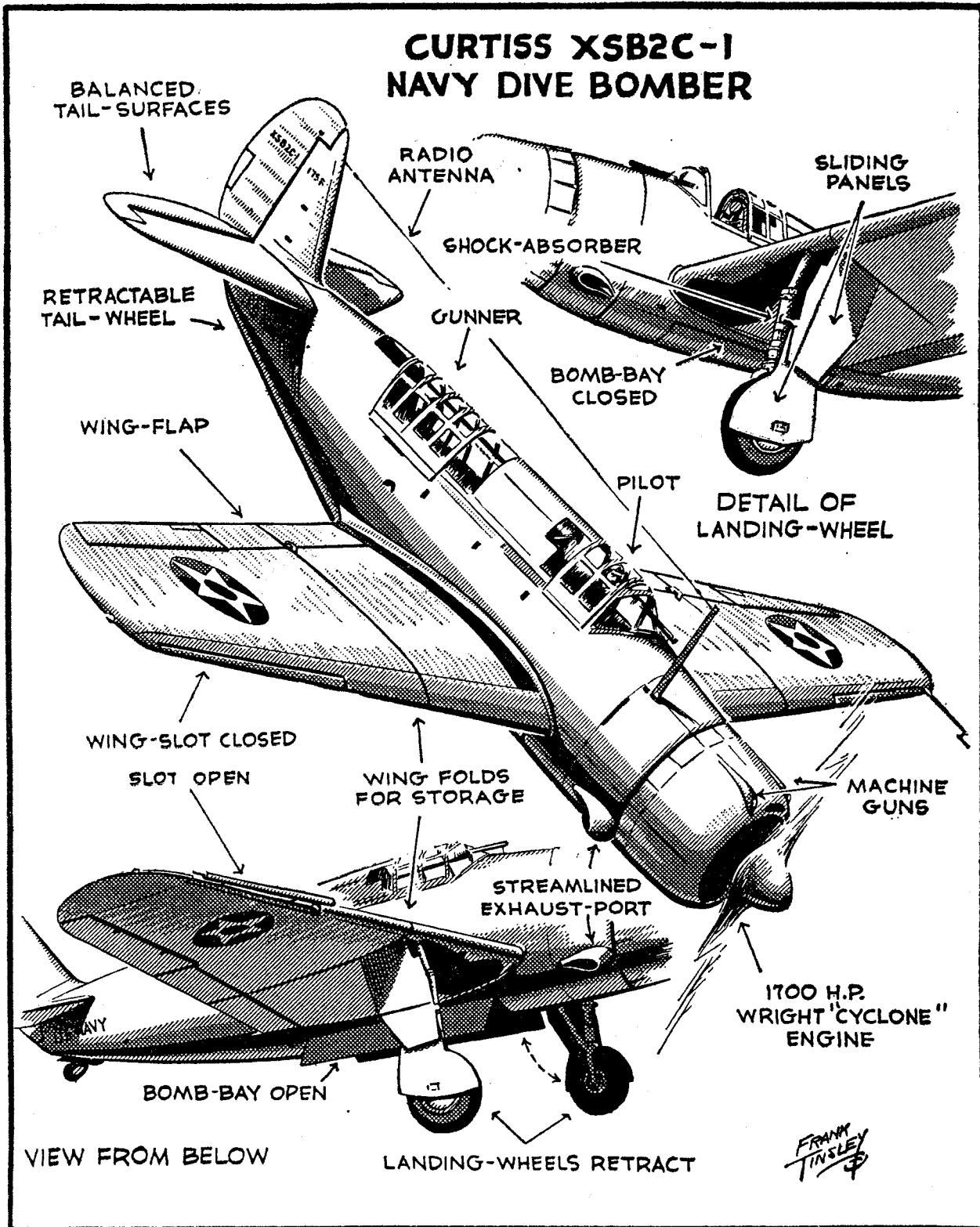


From England comes the bottom two photos by Nick Peppiat. On the left is his Chambermaid (fine flier) scaled to 16 inches from a Steve Griebbling peanut plan. On the right is Nick's Mig 15 built from a short kit by Replikit, 15 inch span. Powered by a Czech Rapier unit.



# Portfolio of War Planes

BY FRANK TINSLEY



Greater striking power for the U. S. Navy is Curtiss' latest gift to American defense. The XSB2C-1 is an ultra-modern dive bomber whose performance exceeds that of any other ship of its type. Engineered for mass production, the XSB2C-1 features a radical increase in speed, range and armament. Powered with a 1,400 h.p. Wright engine, driven by a Curtiss electric prop, the new model is said to be 100 m.p.h. faster than any other dive bomber. Exact performance details are secret.

## 1941 H.A.G. MUSEUM FLYING ACES CONTEST

The weather forecaster's missed the mark again, but in our favor this time. They called for rain for the morning and then thunder showers in the p.m. A few times we did get a slight mist that only lasted a couple of minutes and then it rained quite hard just as we were wrapping things up at the end of the contest. Unfortunately, the forecast kept the attendance down as only 8 adventurous Clubsters show up. But we all had a good time and some fairly good flights were put up as there was very little wind to contend with. Most events were not able to be run because of the low turnout but the ones we did run are listed below.

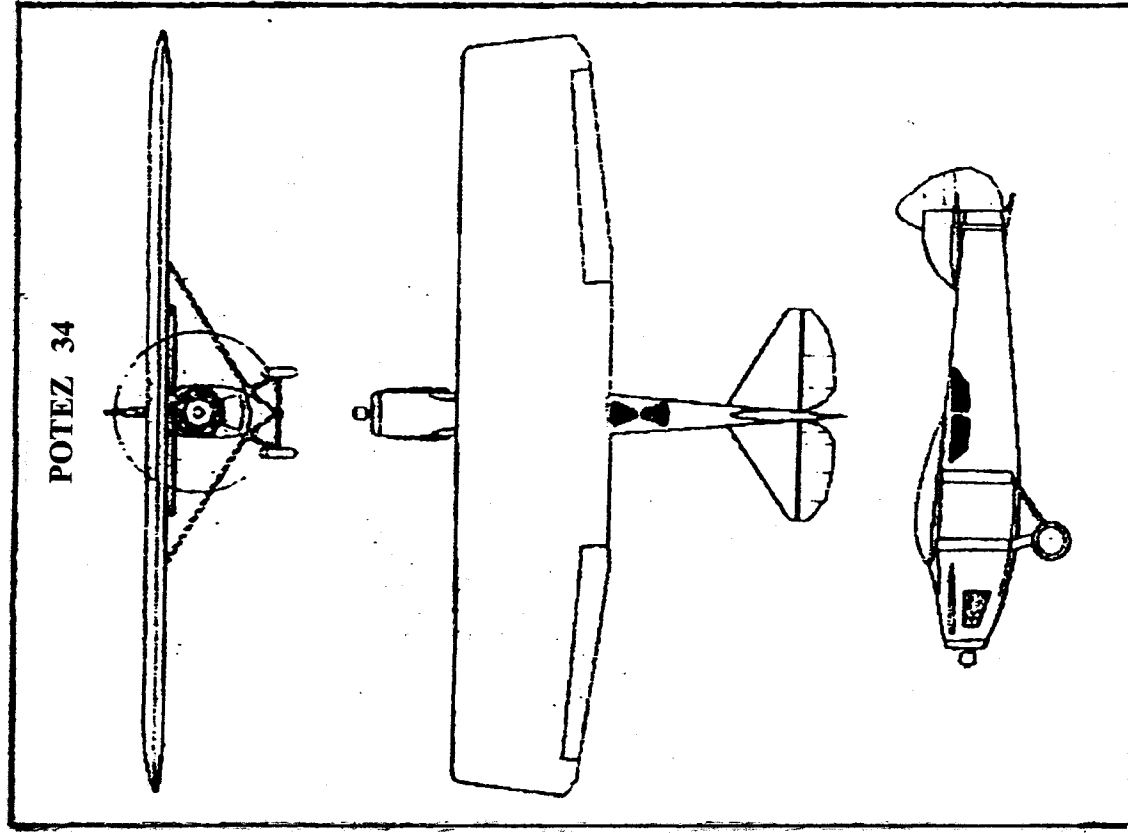
FAC SCALE---	Pilot	Aircraft	Best Time	Scale Points	Bonus Points	Total
	Bob Clemens	Porterfield Collegiate	69	59	0	128
	Jim Detar	Grumman Guardian	64	57	5	126
	Walt Kornrich	Piper Pawnee	53	57	10	120
	Juanita Reichel	Piper Clipper	61.5	53	0	114.5

22

DIME SCALE---	Pilot	Aircraft	Flt. Times	Total Flt.	Bonus Total	Grand Total
	Walt Kornrich	Pitcairn Mail	96--55--23	174	45	219
	Mark Rzacda	Great Lakes	57--54--31	142	45	187
	Richard Miller	Fokker D-7	21--28--64	113	45	158
	Mark Rzacda	Curtiss Robin	40--36--34	110	0	110

EMBRYO---	Pilot	Aircraft	Flight Times	Bonus Total
	Jim Detar	Debut	90--120--66	9 285
	Mark Rzacda	Puma	86--89--78	9 262
	Rich Miller	Hornet	52--36--dnf	9 97

TWO BIT O.T. RUBBER---	Pilot	Aircraft	Flight Times	Total
	Jim Detar	FA Moth	95--86--75	256
	Garry Hunter	Achilles	83--60--86	229
	Mark Rzacda	FA Moth	43--dnf--dnf	43

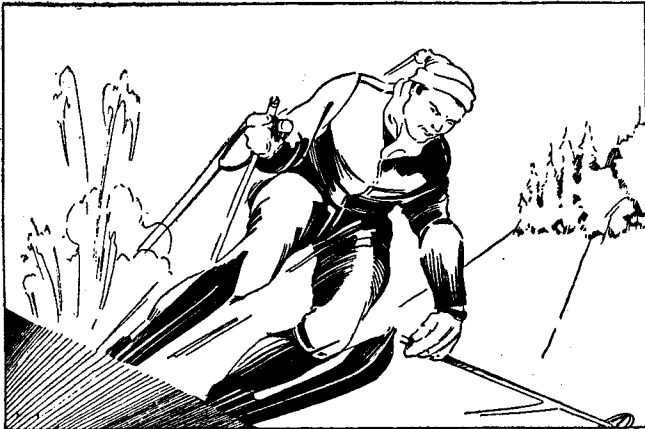


Tom Nallen II sent us this 3-view of the Potez 34. This 3-view goes with the plan by Tom that was published in the August 2006 of "Flying Models" magazine.

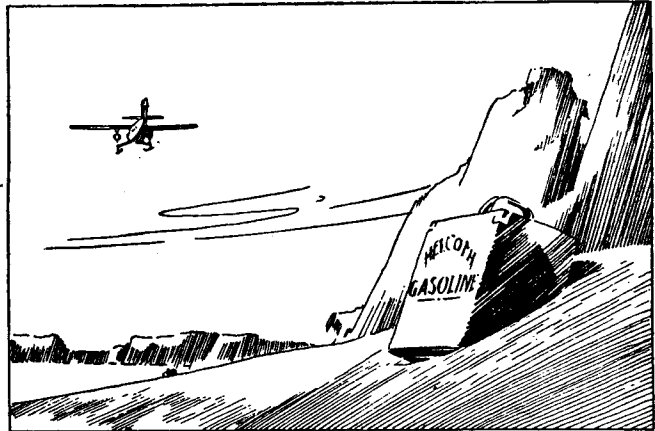
# They Had What It Takes

## XIII—BERNT BALCHEN—VIKING OF THE SKIES

By ALDEN McWILLIAMS



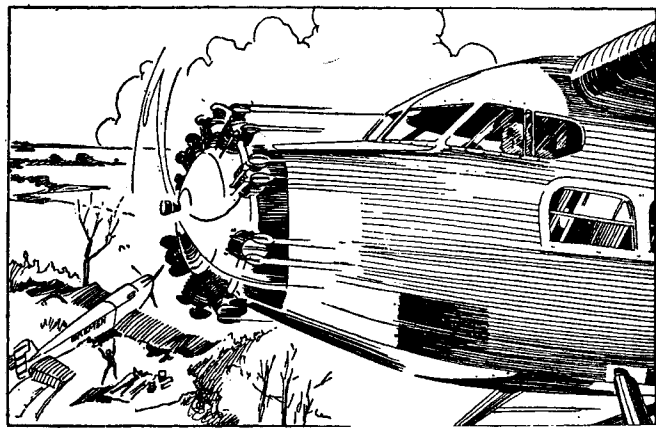
1—Bernt Balchen was born in Norway in 1899. After taking an engineering degree at Sweden's University of Haermirand, he became active in sports, winning Norway's amateur middle-weight boxing crown and some thirty ski meets as well. Then aviation called, and from 1918 until 1926 he flew with the Norwegian Air Service, attaining the rank of Flight-Lieutenant.



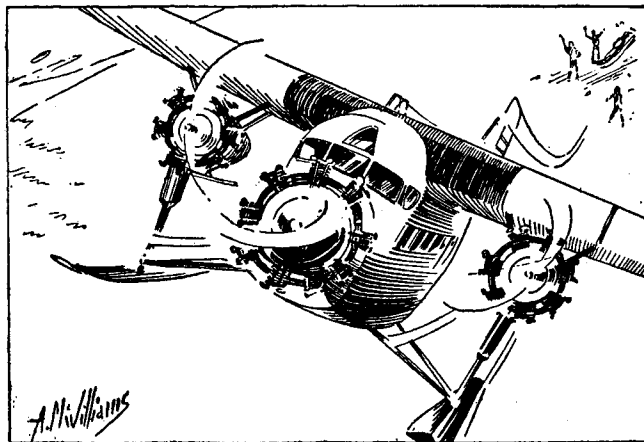
2—In 1925, this skyman of the north was a member of the party which searched for the then-lost dirigible *Norge* carrying Amundsen, Ellsworth, and Nobile over the North Pole. The following year, Balchen won world acclaim when he piloted Richard Byrd to the Pole. On this dash he ingeniously blazed his route for the return journey by dropping red-painted gas cans.



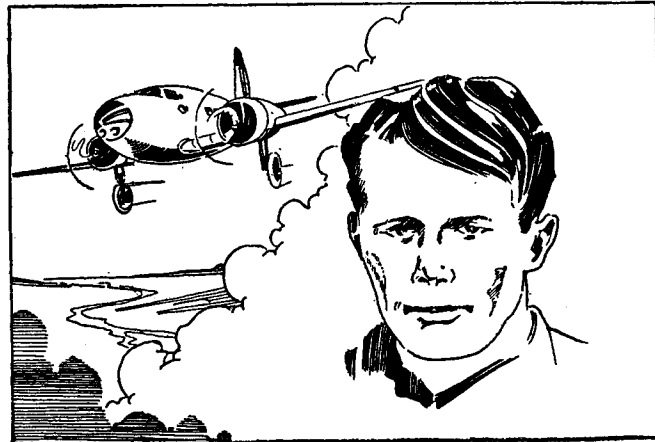
3—It was Balchen who did the lion's share of the piloting when in 1927 he flew with Byrd, Acosta, and Noville from New York to France in the Fokker *America*. On gaining the other side, the flyers circled blindly through dense fog. Then, off Ver sur Mer, France, there came a sudden glimpse of whitecaps—and they crashed into the water. Luckily all were saved.



4—Again Balchen's name made news when in 1928 Kohl, Fitzmaurice, and von Huenefeld completed the first westward crossing of the North Atlantic in the Junkers *Bremen*. After the plane was forced down in wild Labrador, Fitzmaurice fought his way to civilization. Then, with this intrepid Irish airman as his guide, Balchen flew north and rescued the two Germans.



5—Next the expert Scandinavian flyer went to Antarctica with Byrd, and in November 1928 he piloted the famed explorer over the South Pole after skilfully hurdling a 15,000-foot mountain range. Only the jettisoning of weighty supplies enabled the Ford plane to clear the lofty ridge. Then, after returning to America, Balchen became active in commercial aviation.

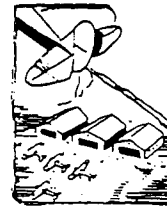


6—A master aero mechanic as well as a top-notch flyer, Bernt Balchen has won international renown as a first-rank all-around airman. Hailed as the "Viking of the Skies," he has been awarded the Cross of St. Olaf by the King of Norway—an honor equivalent to knighthood. And now America proudly claims this Norseman as her own, for he had become a U.S. Citizen.





**GLASTONBURY MODELERS**  
**NO. 2 SQUADRON, FLYING ACES CLUB**  
**TURKEY FLY NOV. 19, 2006**  
**WHITES FARM, DURHAM, CT**  
**9:00 to 3:30**



ENTRY FEE: \$3.00 AMA MEMBERSHIP REQUIRED

EVENTS

1. Tow Line Scale\*: 36" span limit. Best 3 of 6. Line length TBD.
  2. Pinkham Field Stick: No max, fly all day, highest single fit. wins.
  3. Catapult Jet\*: Use fixed or hand held catapult.
  4. Handi-Rep Scale: Like FAC Scale except all flight time divided by 3, so Get all three in. Model will be judged. Bring your documentation.
  5. Old Time Kit Scale: Bring your plan for compliance check.
  6. Legal Eagle: New ships need compliance check. Bring plan.
  7. BLURRACE!: See below.
  8. Flying Aces Sport: 10% bonus if built from plans in Flying Aces mag.
  9. GHQ Peanut Scale: Model will be judged. Bring documentation.
- (\*) means no scale judging for so marked events



The BLURRR was well attended last year, so we thought you Clubsters would want to have at it again under the same rule. No model built expressly for the Blur is allowed!! Only models flown in previous Thompson, Greve, or Midget races are allowed. Rubber rule applies: SIX (6) Grams. Prop can be changed. All other rules apply.

WEAR WATERPROOF BOOTS

NOTES

When you register, don't forget to fill out an address label LEGIBLY and note if you are an FAC on the corner of it to receive Kanone credit. You will find answers to most of your questions posted at the CD table. Certificates to second place in all events except Pinkham field stick. Got questions? Nine out of ten times you can get the answers by reading the FAC Rule Book or the Pinkham Field Handbook.

PAUL STOTT, C.D. (203) 929 5139



# 2006 CACTUS SQUADRON EARL STAHL CONTEST

AT CACTUS SQUADRON SKYLINE FIELD

07:30 - 13:00 SUNDAY NOVEMBER 26

CONTEST DIRECTOR - BOB SCHLOSBERG (480-941-8778)

FOUR EVENTS - FAC RULES APPLY TO ALL EVENTS:

NOTE: NO ENLARGING OR REDUCING SCALE PLANS.

NOTE: ANY ONE MODEL CAN ONLY BE ENTERED  
IN A MAXIMUM OF TWO EVENTS.

ONE FAC JUDGED EVENT (NEED DOCUMENTATION):

ANY EARL STAHL SCALE MODEL

ONE MASS LAUNCH EVENT: MINIMUM 45 SCALE POINTS.

ANY EARL STAHL SCALE MODEL

ONE THREE FLIGHT TIMED EVENT: MIN. 45 SCALE POINTS.

(DOCUMENTATION NOT REQUIRED)  
ANY EARL STAHL SCALE MODEL

ONE OLD TIME RUBBER EVENT: MUST BE EARL STAHL DESIGN  
MIN. 30" & MAX. 36" PROJECTED WINGSPANS - THE OLDTIME  
RUBBER LARGER MODELS CAN BE REDUCED TO MEET  
THE 36" PROJECTED WINGSPAN LIMIT

**NO AMA LICENSE REQUIRED!**

ENTRY FEES: \$ 5.00 PER EVENT - MAX ENTRY FEE - \$ 10.00

ALTERNATE CONTACT:

JOE MCGUIRE 480-924-4313

2006 Outdoor Champs

1	Mr. Smoothie
2	Chaimbermaid
3	Mr. Smoothie
	Chaimbermaid
	Folkerts SK-3
	Kieth Rider
	K-R Bumble Bee
	Caudron 460
	Keith Rider R-4
	K-R Jack Rabbit
	Chaimbermaid
	Mr. Smoothie
	Chester Goon
	Mr. Smoothie
	Mr. Smoothie
	Caudron
	Mr. Smoothie
	Mr. Smoothie

Greve Race

J. McGillivray
M. Roth
J. Detar
O. Benton
D. Franks
B. Gourdon
J. Houck
J. Tisinai
C. Starleaf
F. Wunsche
P. Boyanowski
w. Farrell
R. L. Butsch
D. Rees
R. Miller
L. Burdsal
D. Cornelius
D. Niedzielski

2006 Outdoor Champs

Judy
Grumman Avenger
Judy
Fairey Battle
Kl-61 Tony
TA-152
Kl-61 Tony
A6M3 Zeke
N.A. Mustang P-51B
B.P. Defiant
Bell P-39
Swiss GKW-C-3603
Stormovik IL-2
Fairy Barracuda
Curtiss Heldiver
Heinkel 112
N.A. Mustang
Kl-61 Tony
Stormovik IL-2
Kl-61 Tony
Judy
Judy
Gloster Gladiator
Grumman F4F
Kl-61 Tony

WW-II Combat

S. Weckerly
P. Murray
D. Norman
J. McGillivray
C. Hill
L. Burdsal
R. Adams
B. Finley
W. Farrell
D. Rees
P. Boyanowski
J. Moses
J. Tisinai
O. Benton
J. Detar
R. Miller
M. Midkiff
N. Becker
J. Houck
C. Sauter
D. Norman
D. Kane
D. Niedzielski
H.G. Frautschy
D. Franks

Thompson Race

W. Farrell
D. Rees
R. Moon
P. Boyanowski
L. Burdsal
J. Tisinai
O. Benton
N. Becker
C. Sauter
Robert Butsch
M. Roth
D. Franks

2006 Outdoor Champs

1	Lockheed Altair
2	Hawks Time Flies
3	Marcoux Bromberg
	Lockheed Altair
	Cessna CR-3
	Laird
	Lockheed Altair
	Cessna CR-3
	Marcoux Bromberg
	Marcoux Bromberg
	Cessna CR-3
	Marcoux Bromberg

WW-I Dogfight

C. Starleaf
Walt Farrell
M. Roth
J. Houck
J. Tisinai
D. Cornelius
O. Benton
D. Snull
R. Miller
P. Boyanowski
C. Rupert
D. Rees
J. Detar
D. Norman

2006 Outdoor Champs

1	Fokker D-7
2	Fokker D-7
3	Fokker D-7
	SE-5
	Nieuport 28
	Grain Kitten
	Domier D-1
	Fokker D-7
	Fokker D-7
	Hannover CL-3a
	Fokker D-7
	Martinsyde Elephant
	Fokker D-7
	Fokker D-7

Power Scale

T. Allebone
R. Adams
M. Midkiff
T. Allebone
D. Rees
C. Starleaf
D. Rees
R. Meixell
R. Meixwll
M. Roth
P. Cox

2006 Outdoor Champs

1	Supermarine Walrus
2	SE-5A
3	PV-2
	A-W FK-8
	Domier Dolphin
	DH -4 Dragon
	Colibri
	Taylor J-2
	Maachi M5
	Waterman
	DH-6

A =	Best Flt	tot.	sec.	unfact	ored	120	max.
B =	Bonus pts.						
C =	A + B						
D =	C factored						
E =	Scale Score						
F =	Complexity poin	ts (	1/10 of B)				

O.T. Stick

T. Teach
M. R zadka
S. Cummins
F. Wunsche

2006 Outdoor Champs

1	Gollywock
2	Gollywock
3	Gollywock
	Gollywock

Dime Scale

D. Kane
r. Miller
J. Detar
S. Weckerly
J. Houck
D. Driscoll
C. Rupert
J. Coffin
M. R zadka
D. Olah
W. Farrell
L. Burdsal
P. Bruning
N. Becker
N. Becker
P. Boyanowski
W. Farrell
J. Moses
O. Benton

2006 Outdoor Champs	Flt#1	Flt#2	Flt#3	Flt pts	Bonus Tot/Bonus Total
1	Tiger Moth	92	79	120	291
2	Fokker D-7	77	90	83	250
3	Arado	58	93	85	236
	Fokker D-7	103	49	50	202
	DH Puss Moth	116	53	63	232
	AR-96	37	78	76	191
	Boeing P-12E	53	62	51	166
	Comet Aeroneer	41	61	69	171
	Great Lakes Trainer	51	47	54	152
	Martin MO-1	62	55	59	176
	Curtis Robin	74	62	49	185
	Martin MO-1	46	63	61	170
	Fairchild PT-19	51	37	50	138
	Arado 96	40	44	41	125
	Curtiss Falcon	32	40	32	104
	Supermarine Spitfire	43	50		93
	Arado 96	37	43		80
	Fairchild PT-19	55			55
	Farman 400	53			53

AMA P-30

E. Vargo
R. Shields
D. Snull
Knapp
D. Driscoll

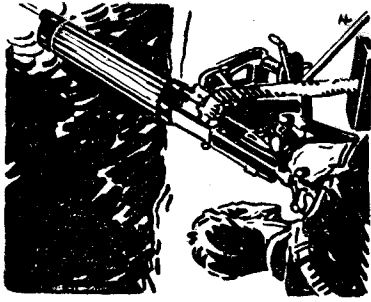
2006 Outdoor Champs

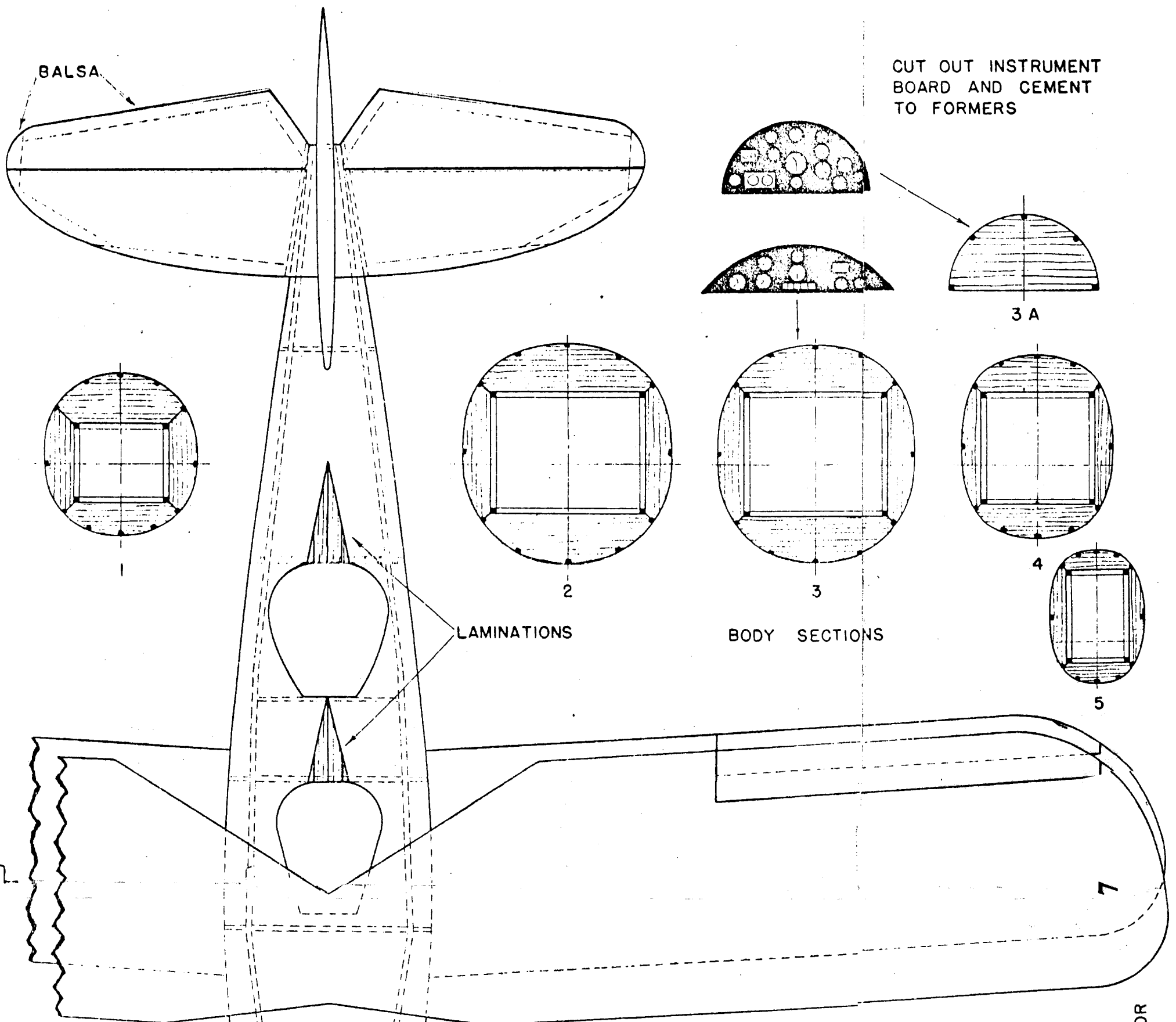
1	Majestyk
2	Majestyk
3	Cloodge
	Souper 30
	Dan DooDoo

OT Kit/Plan Sc.

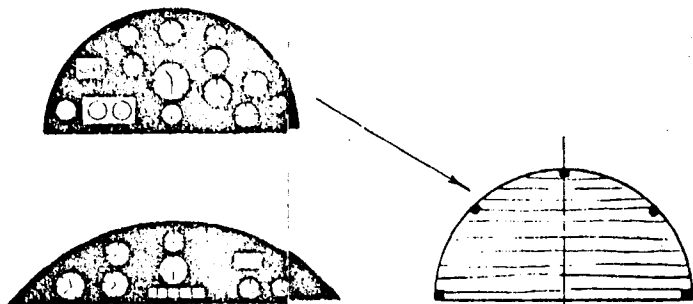
J. Detar
J. Houck
W. Farrell
W. Farrell

2006 Outdoor Champs	Flt#1	Flt#2	Flt#3	Tot Flt	Bonus Tot Bonus Total
1	Megow Fairchild 24	86	89	85	260
2	Comet Fairchild 45	91	73	53	217
3	Waco	49	66	60	175
	Miles Majester	54	48	60	162

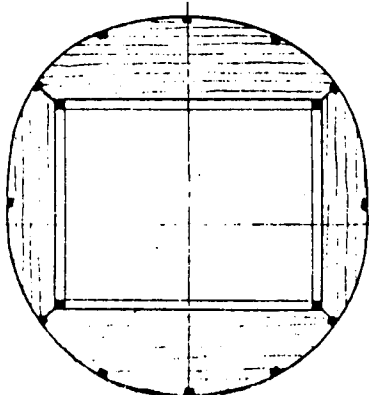
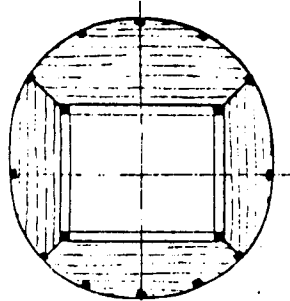




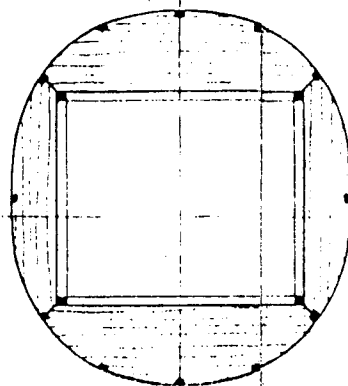
CUT OUT INSTRUMENT BOARD AND CEMENT TO FORMERS



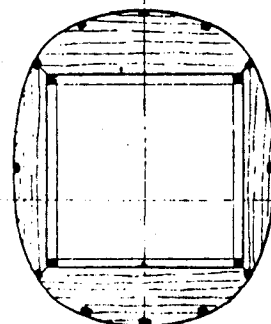
3 A



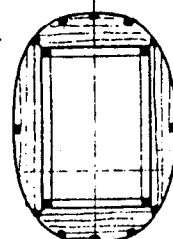
2



3



4



5

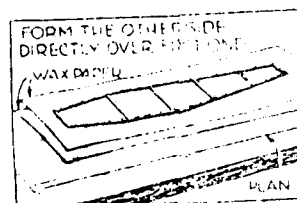
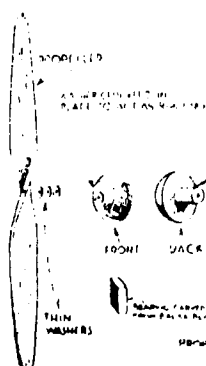
LAMINATIONS

BODY SECTIONS

TOP VIEW

REAR OF COWL  
BALSA SPACER  
BOND PAPER  
FRONT OF COWL

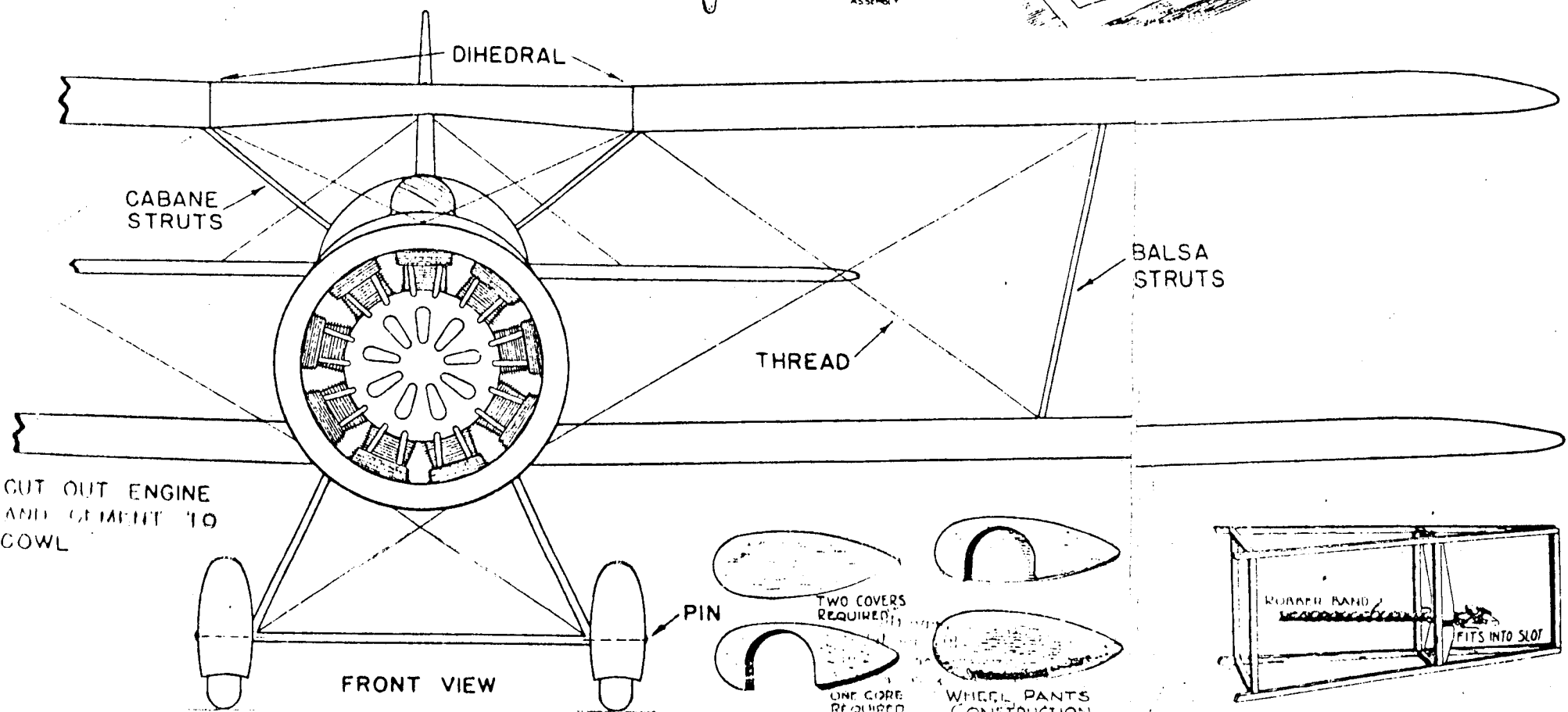
LAMINATIONS



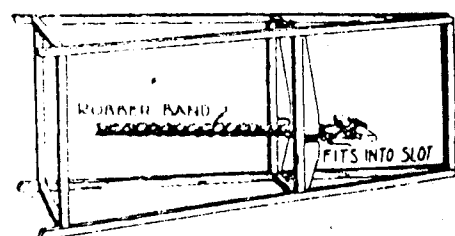
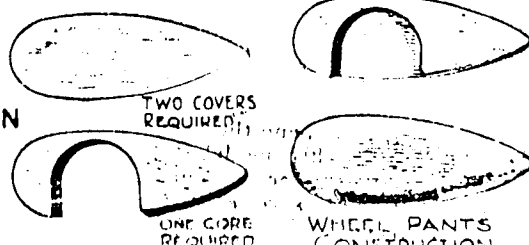
BODY SIDES ... CUT EACH BRACE CEMENT IN PLACE AND LET DRY ...



ATTACH RUBBER MOTOR BETWEEN X & Y



FRONT VIEW



Jumbo Scale	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Sc pts	Bonus	Fit pts	Total
C. Starleaf	1 B-24J	69			61	40	64.5	165.5
D. Rees	2 Cant 1007 Bis (A)	35	51		61	30	51	142
M. Midkiff	3 D.H.9	56			59	15	56	130
D. Kranis	Found 100	51	64	59	54	0	62	116
J. Tisinai	Bucker Jungman	43	23	38	53	15	43	111
L.Burdsal	AN-2 Colt	35						
R. Moon	Interstate Cadet				48	0		
C. Starleaf	DH Dash-8				58	25		
D. Franks	Fiat G594A				55	10		
M. Rzakda	Breguet XIV				57	15		

OT Gas Replica	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Total	*****
M. Rzakda	1 Zipper	120	120	120	360	56
B. Finley	2 Brooklyn Dodger	120	120	120	360	53
T. Allebone	3 Interceptor	120	120	120	360	21
P. Cox	Diamond Demon	74	86		160	
M. Rzakda	Viking	120			120	
O. Benton	Comet Clipper	117			117	
*****FLY-OFF						
Target Time 65 sec.						

Peanut Scale	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Sc Pts	Bonus	Hi	time	total
D. Snull	1 Voisin	42	55	77	60	35	68.5	163.5	
D. Cornelius	2 Mr. Smoothie	105			59	5	78.75	142.5	
J. McGillivray	3 Found 100	120			58	0	82.5	140.5	
B. Finley	Heinkel P-1077 Julia	45	43	84	61	7	72	140	
C. Rupert	Chaimbermaid	2	93	56	55.5	5	75.75	136.25	
B. Finley	Farman 190	58	60	87	61	0	73.5	134.5	
J.Houck	BeBe Jodel	35	57	45	61	10	57	127	
R. Adams	Mitsubishi A6M2	58			59	10	58	127	
A. Backstrom	Penguin	37	48	67	56	5	63.5	124.5	
H. Frautschy	Whittman Bonzo	47	38		69	5	47	121	
W. Farrell	Water,am Gosling	32	41	50	58	3	50	111	
P. Boyanowski	Akron Funk	45			61	0	45	106	
P. Murray	P-47 Thunderbolt	33	33	25	58	10	33	101	
P. Cox	Monocoupe 110	37			60	0	37	97	
W. Farrell	Piper Cub	32	32	25	59	0	32	91	
J. Bair	Aeronca Champ	27			59	0	27	86	
P. Bruning	Arado 198	52	52	53			53	53	
J. Tisinai	Lacey	36			59	5	36	36	
D. Niedzielski	Heinkel P-1077 Julia				59	28			
R. Adams	Arado 440V				41	15			
P. Murray	SE-5a				59	0			
R. Miller	Lacey								

Golden Age	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Total
P. Murray	1 Stinson 125	117	120	120	357
J. Detar	2 Interstate Cadet	101	120	120	341
J. McGillivray	3 Cessna C-38	82	120	120	322
J. Moses	Poncelet	80	120	120	320
O. Benton	Domier Falke	112	120	85	317
S. Weckerly	Martin MO-1	120	89	94	303
D. Snull	Mureaux	77	120	94	291
J. Houck	RWD-5 Bis	93	76	93	262
S. Cummins	Taylorcraft O-57	120	74	60	254
D. Rees	Nicholas Beasley	85	97	69	251
W. Farrell	Nicholas Beasley	85	97	69	251
W. Farrell	Vultee	61	75	50	186
P. Bruning	Fok Super Universal	55	53	56	164
D. Cornelius	Cessna C-37	56	51	53	160
M. Welshans	Fleet 2	37	57	54	148
D. Bubolz	Miles Magister	40	53	45	138
M. Midkiff	Avia BH-3	63	59		122
P. Bruning	Hawker Sp. Fury	32	41	43	116
P. Boyanowski	Porterfield Collegiate	77			77
R. Adams	Curtiss Jenny	28	41		69
M. Welshans	Martin MO-1	55			55
P. Azure	Waco SRE	49			49

Jumbo Scale	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Sc pts	Bonus	Fit pts	Total
C. Starleaf	1 B-24J	69			61	40	64.5	165.5
D. Rees	2 Cant 1007 Bis (A)	35	51		61	30	51	142
M. Midkiff	3 D.H.9	56			59	15	56	130
D. Kranis	Found 100	51	64	59	54	0	62	116
J. Tisinai	Bucker Jungman	43	23	38	53	15	43	111
L.Burdsal	AN-2 Colt	35						
R. Moon	Interstate Cadet				48	0		
C. Starleaf	DH Dash-8				58	25		
D. Franks	Fiat G594A				55	10		
M. Rzakda	Breguet XIV				57	15		

Embryo	2006 Outdoor Champs	Fit #1	Fit #2	Fit #3	Bonus	Total
S. Cummins	1 Debut	120	120	95	9	344
R. Butsch	2 Tomahawk	120	120	77	6	323
E. Vargo	3 Du Wak	120	120	63	9	312
J. Tisinai	Jabberwot	93	89	120	9	311
M. Rzakda	Puma	96	102	99	9	306
A. DeCook	Tomahawk	120	77	81	9	287
S. Grey	Debut (red)	69	76	120	6	271
D. Olah	Yellow Cab	68	76	120		264
R. Butsch Jr.	Tomahawk	53	120	43	9	225
D. Bubolz	Yellow Cab	50	100	55	9	214
D. Cornelius	Cadet	48	68	39		155
J. Griney	Prairie Bird	29	48	62	9	148

Modern Military	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Total
D. Snull	1 Mig 15	61	115	53	229
J. Detar	2 Grumman Guardian	74	84	60	218
W. Farrell	3 Douglas Skyraider	44	73	74	191
D. Franks	Fiat G 592a	57	37	60	154
D. Rees	Douglas Skyraider	40	52	35	127

O.T. Rubber	2006 Outdoor Champ	Fit #1	Fit #2	Fit #3	Total	Fly-off
T. Teach	1 Miss Canada	120	120	120	360	73
D. Driscoll	2 Wren	120	120	120	360	6
S. Cummins	3 Wren	114	120	120	354	
M. Rzakda	F.A. Moth	91	120	120	331	
F. Wunsche	Miss Canada	120	56	71	247	
P. Azure	Korda	82	120		202	
J. Tisinai	Hugzlet	98	85		183	
Knapp	Flying Aces Moth	89	71		160	
A. DeCoot	Jabberwock	56	78		134	
R. Shields	Flying Aces Moth	36	51	40	127	
D. Snull	Lanzo 30	120			120	
R. Shields	Korda Victory	110			110	

No Cal Scale	2006 Outdoor Champs	Fit#1	Fit#2	Fit#3	Total
M. Rzakda	1 Mr. Smoothie	162	191	119	472
J. Houck	2 Bell P-39 Airacobra	78	69	42	189
W. Farrell	3 Extra 400	26	51	83	160
J. Bair	Keith Rider R2	35	29	31	95
H. Frautschy	Aeronca Sedan	33	52		85
S. Cummins	Me-109	26	18		62
A. Frautschy	PHs Special	20			20



"I put up the stepladder, put down the drop cloths and stirred up the paint . . . you're all set . . . see ya later, honey."

## AIR MAIL

Dear Lin,  
The Mar/Apr issue of the FAC newsletter contains Mumbo Jumbo #124. It is a discussion of model launch speed relative to Earth during windy conditions. Once released into the air the only speed that matters is the model speed relative to the air. The Earth speed relative to the air or the model has no effect. If the wind speed relative to Earth equals the model's flying speed the model can simply can be released. The model does have momentum relative to the air.

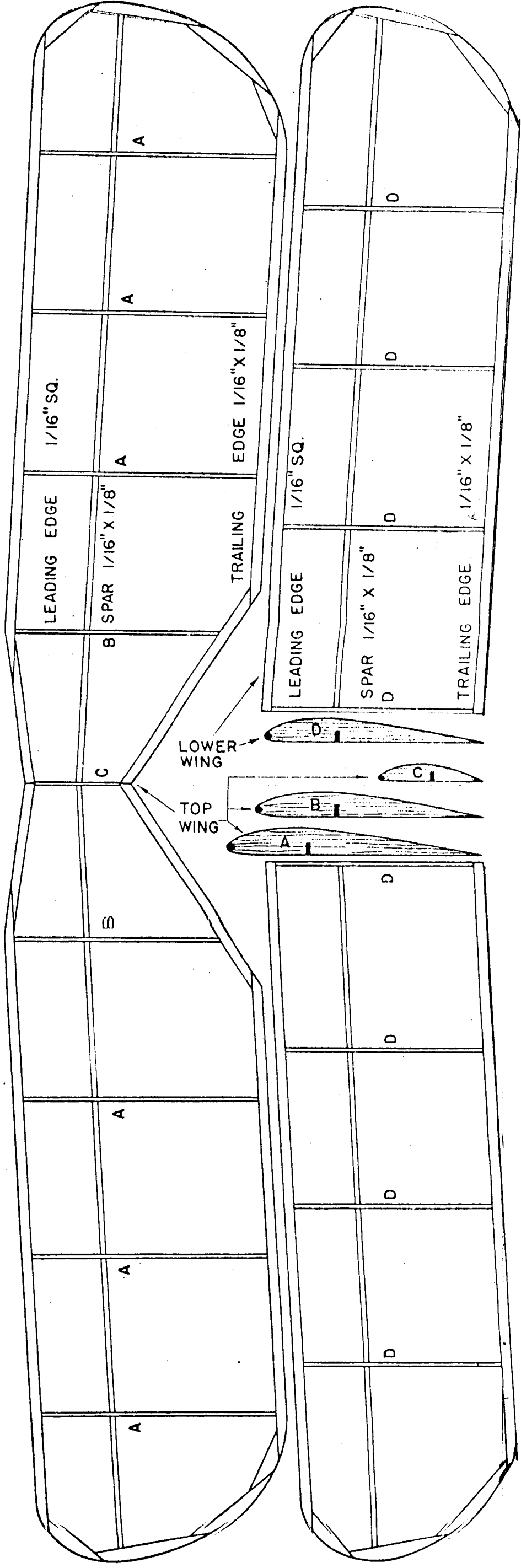
Some years ago it was very windy for the WW-2 mass launch. I usually don't fly under such conditions as I have enough problems on good days. However I had driven over 600 miles to get to Phoenix and we were launching in a soft alfalfa field. I had to guess but it felt like the wind speed was about equal to the p-51's flying speed. I held the model as level as possible and simply let go. The model climbed away just fine and we had to make three or four flights to complete the event. All went well.

The wind blew the models over to a cotton field making locating and retrieval difficult. Several Cactus Squadron members remained downwind to help with the retrieval-lucky for us!

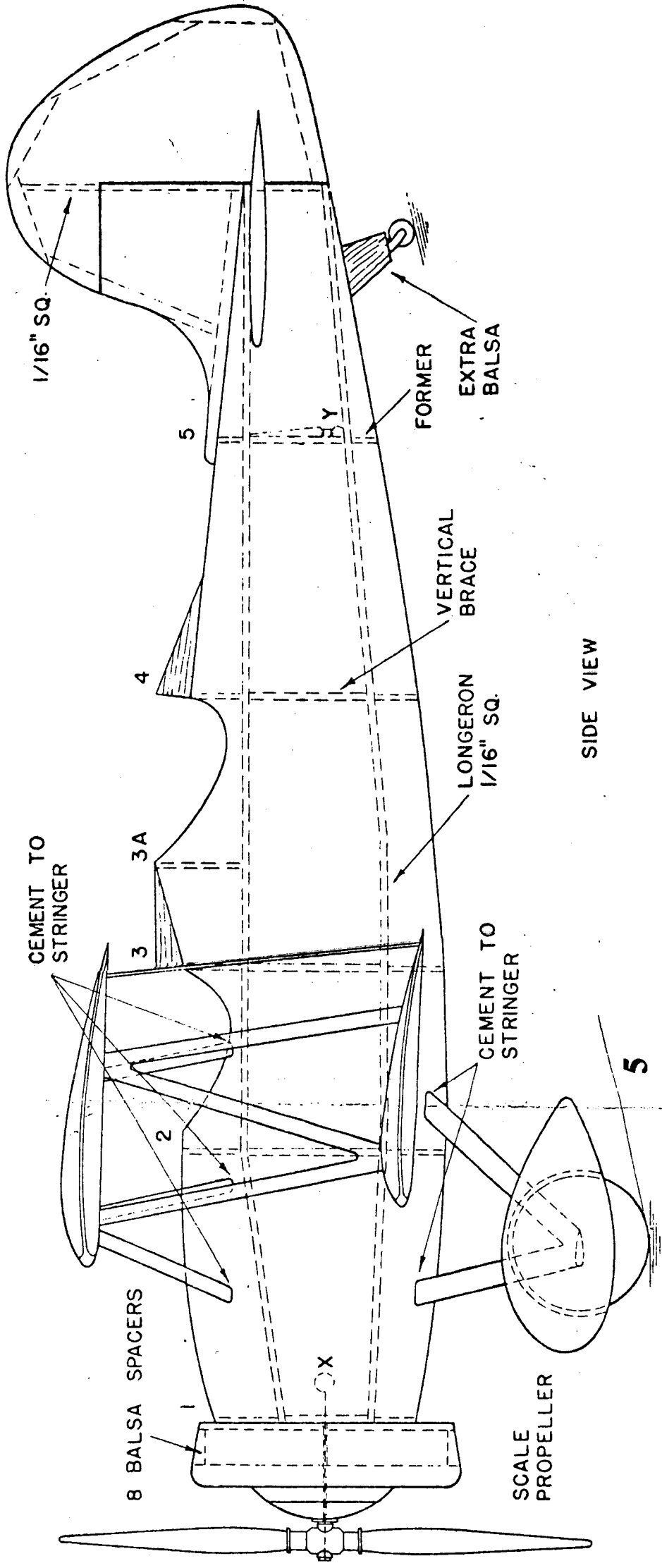
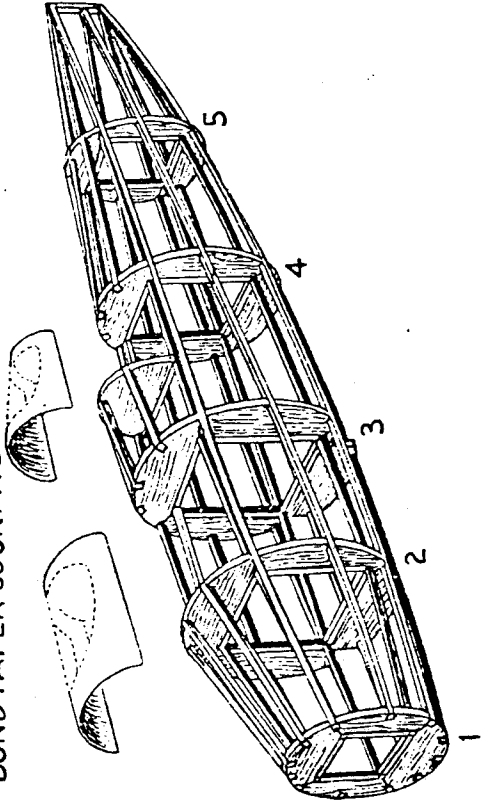
Thanks for putting out a super newsletter and all of the other things that you and your wife do for scale modeling.

Good Flying!

Clarence Mather



BOND PAPER COCKPITS



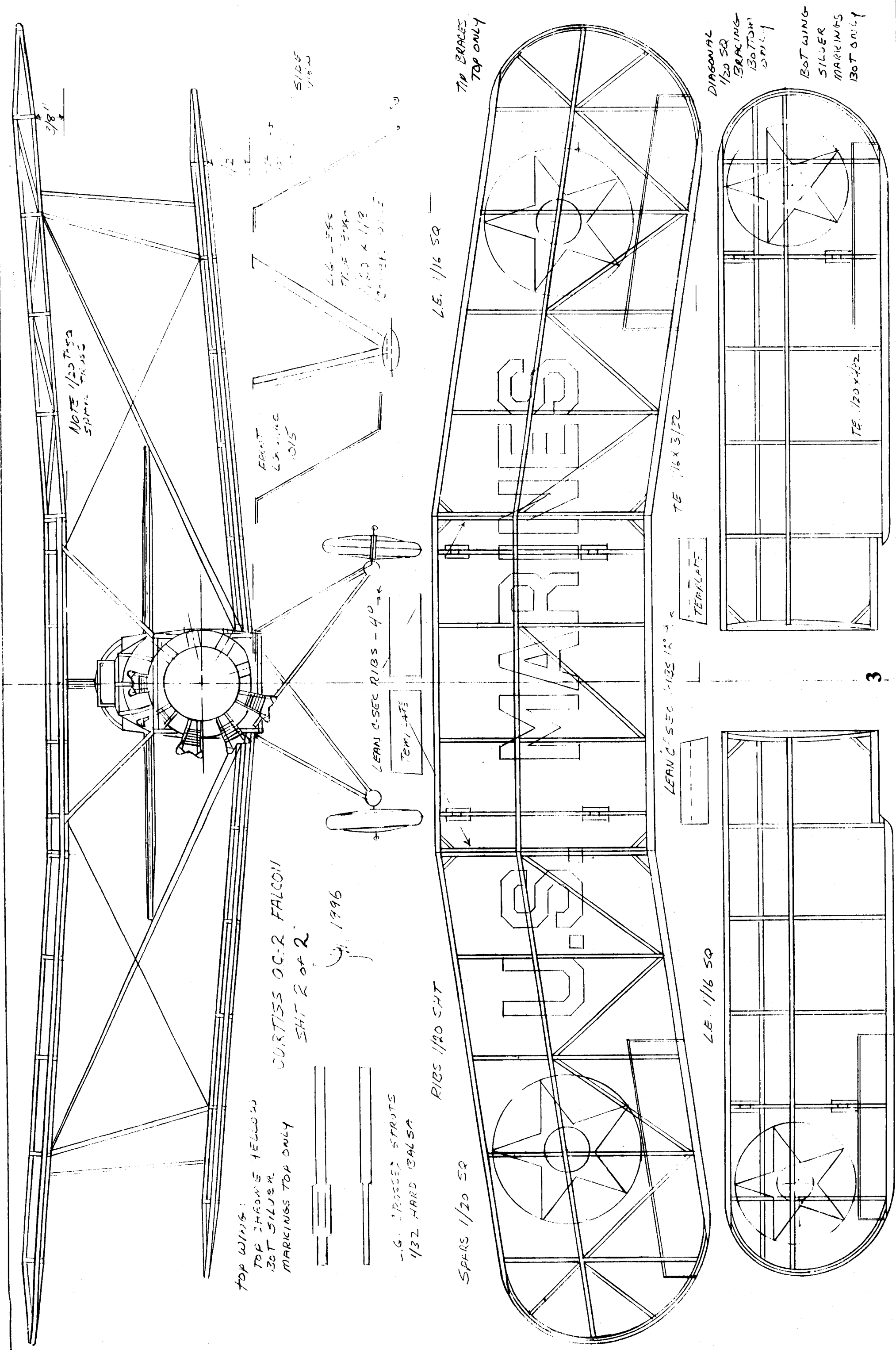
DONALD F DUNCAN INC., CHICAGO, ILL.

**VOUGHT CORSAIR**

DRAWN BY L.H.DEUBLER





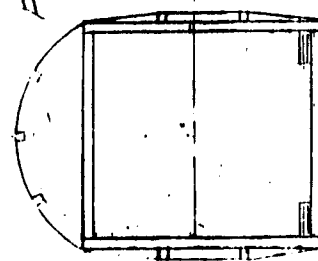
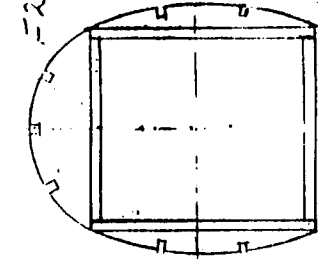
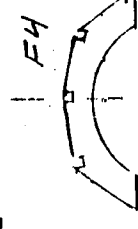
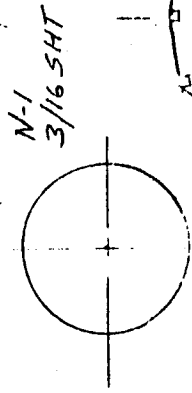
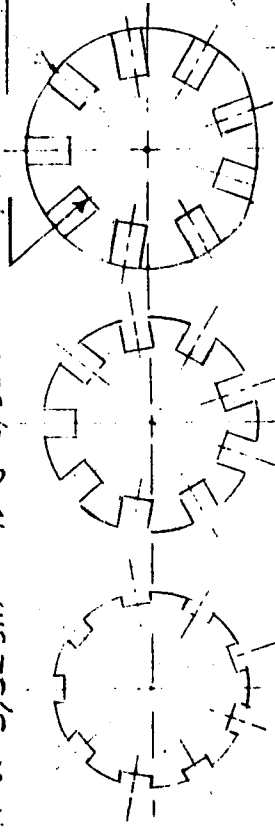


15 1/2' N.S.

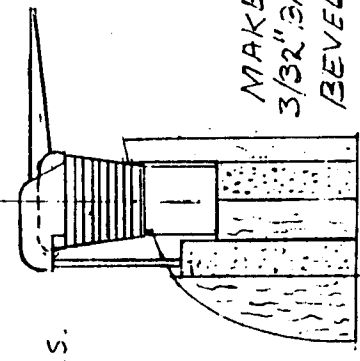
SHT 1 of 2

9661 m

N-2 3/32 SHT N-3 3/32 SHT N-4 3/32 - N-5 11/16 SHT

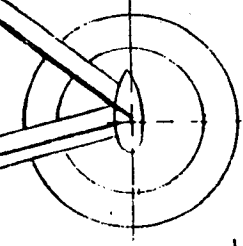


USE WHEELANDER 3/8" SCALE CYLS.  
CUT OFF TOP 2 FINS.  
MAKE 1/4" X 1/16" Balsa Stick,  
SAND 30° BEVEL 2 SIDES.  
CUT OFF ROCKER ARM BOXES  
FROM Balsa stick FORMED  
AS IN FRONT VIEW



MAKE EXH. SPIKE FROM  
3/32" Balsa Dowel - SAND FLAT  
REVEL ON 30T - BUSH BOARD 3

ENGINE 22X

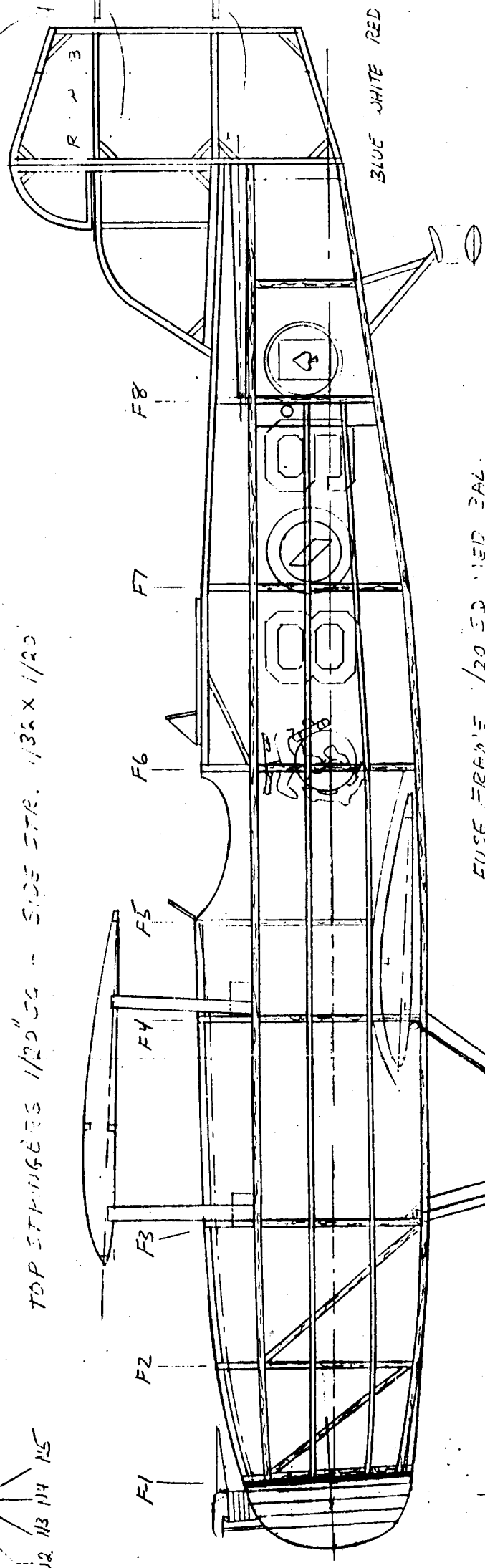


LEAH'S C 2/1 52914204 250F 77F

$FUSE = R_{FUSE} = 20 \Omega$   $V_{FUSE} = 1.5V$   $I_{FUSE} = 75mA$

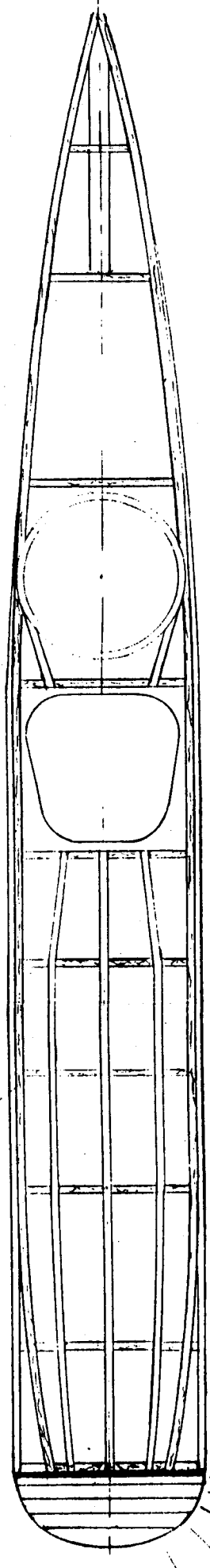


BLUE WHITE RED



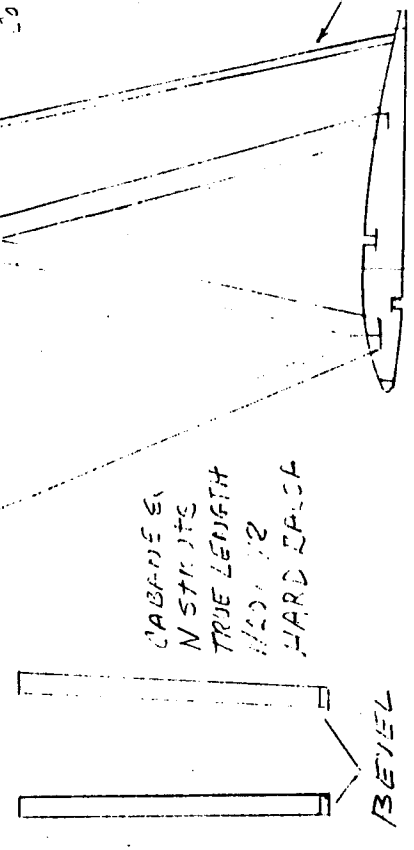
TOP STRINGS 1/20" CG - SIDE STR. 1/32" X 1/20"

BENJAMIN  
HINGEE



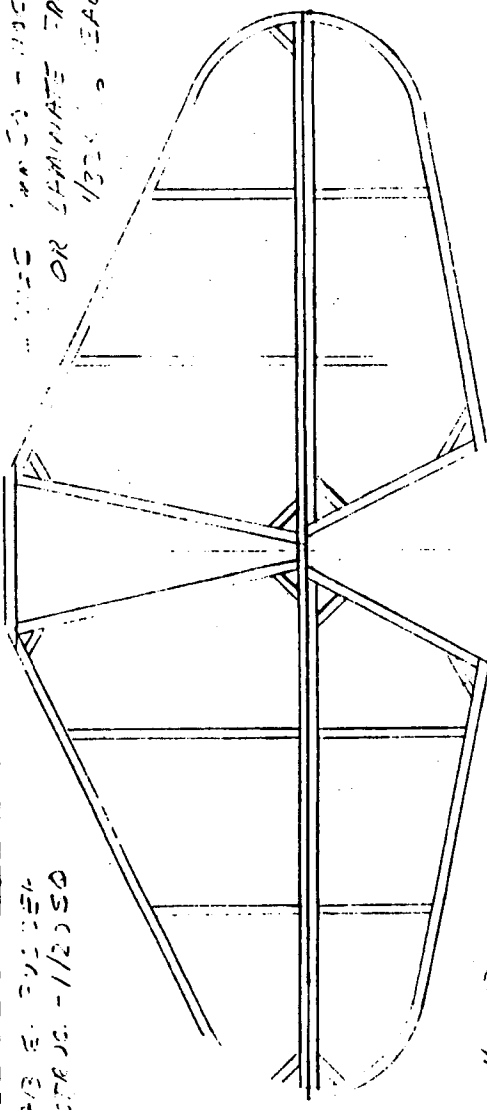
AIR. PUSH ROD 1/20 I.D.

301



WASH DC  
HARD LARCH  
TREE LENGTH  
N STATE  
CABINET

BEVEL

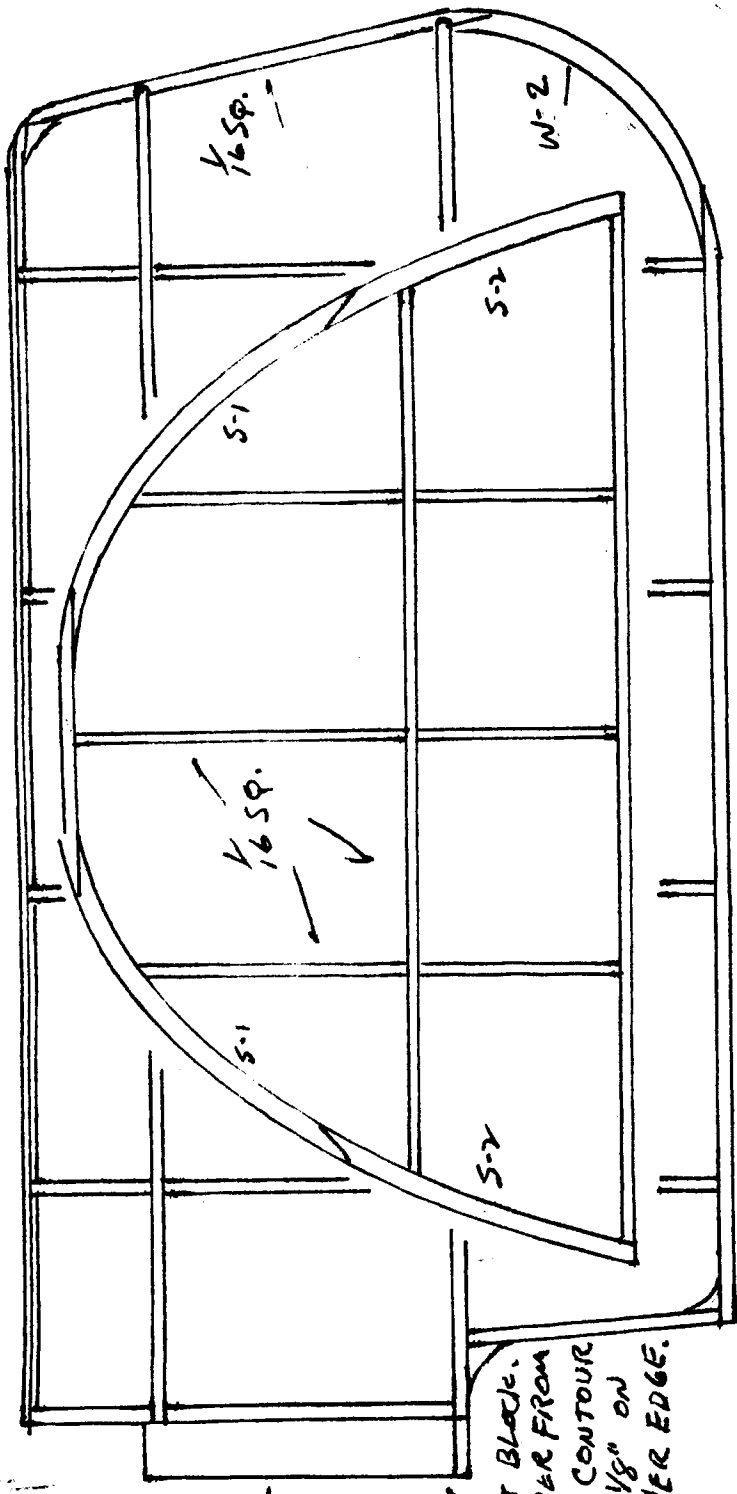
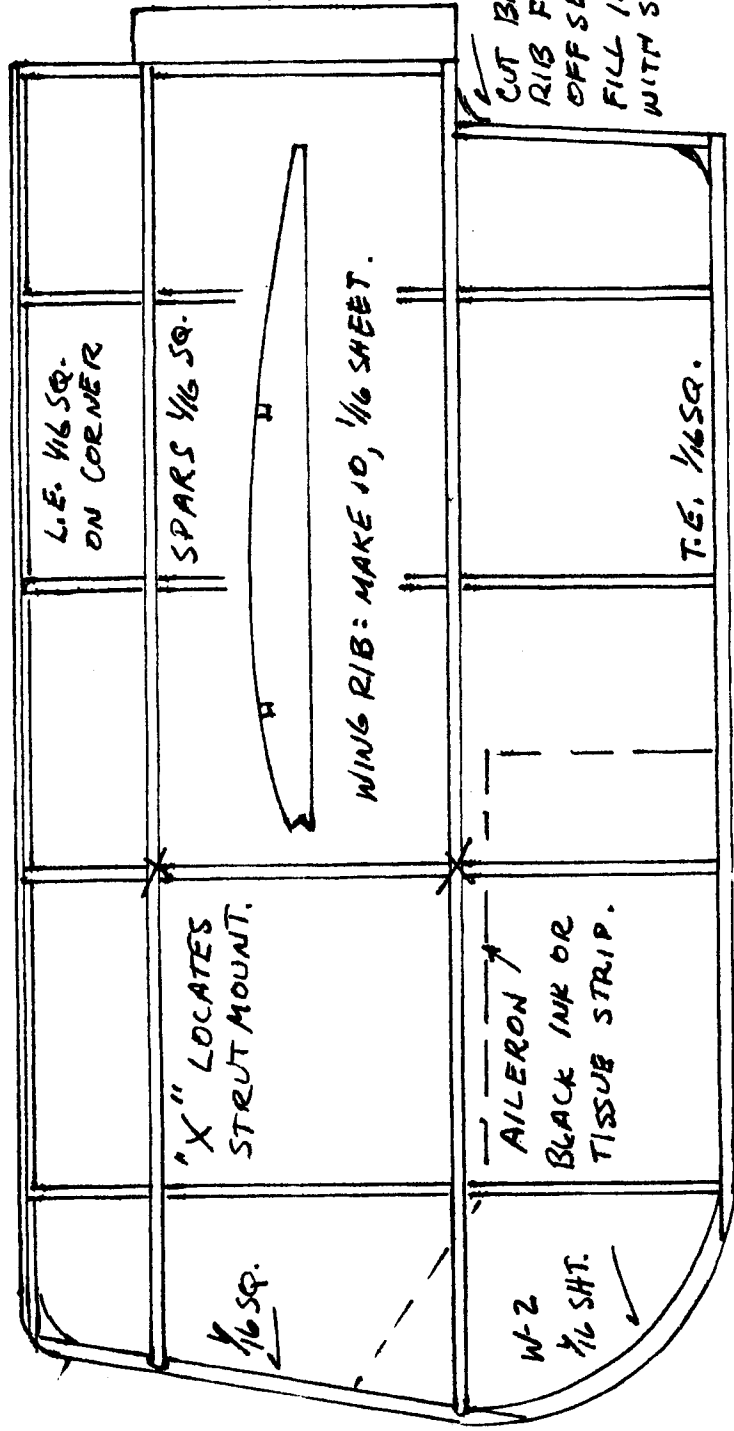


5743 E. 30th St.  
Denver, CO - 80230

تاریخ و روایت

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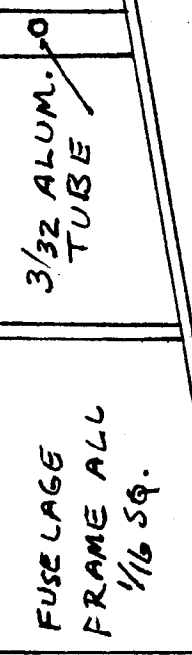
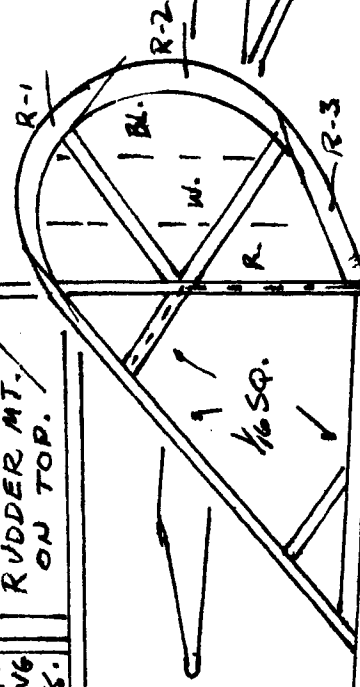
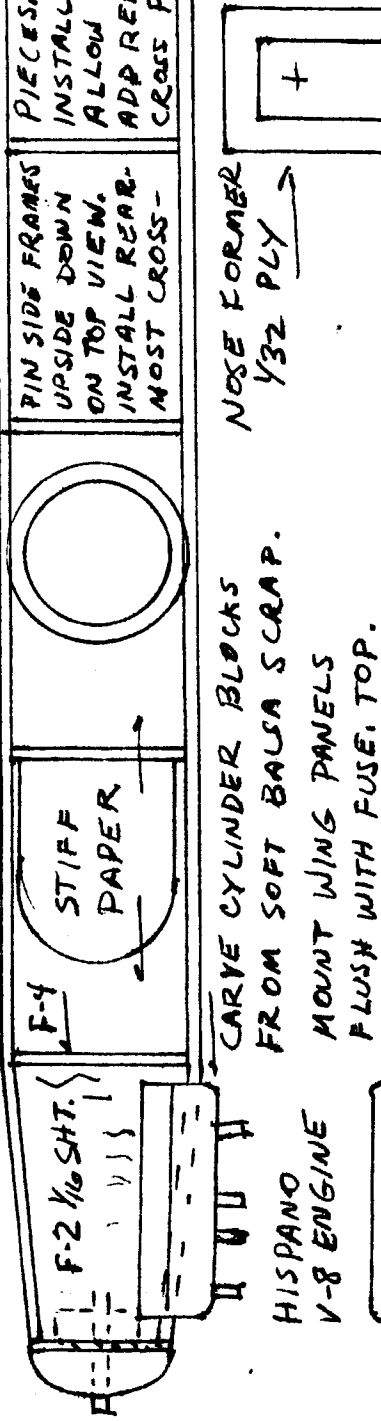


CUT BACK RIB FOR RIB CONTOUR OFF SET. FILL IN TO  $\frac{1}{8}$ " ON WITH SCRAP INNER EDGE.

COLOR SCHEME IS CLEAR DOPED FABRIC WITH OLIVE DRAB METAL PANELS. RED, WHITE, BLUE NATIONAL INSIGNIA ON RUDDER. MOUNT V-8 ENGINE BLOCKS ON F-2. ON WINGS. (NOT TO SCALE)

NOTE: MODEL IS QUITE SHORT-NOSED. PLENTY OF ENGINE DETAIL AND A PLASTIC PROP WILL REDUCE NEED FOR NOSE BALLAST.

NOTE THAT WING IS MOUNTED WITH POSITIVE INCIDENCE. STAB MAY NEED POSITIVE INCIDENCE ALSO.



LANDING GEAR LEG, TRUE LENGTH. HARD BALSA OR BASS  $\frac{1}{16}$  DOWEL AXLE.

**LOBBING**  
(WRIGHT-MARTIN) M-8  
SERIES: PSEUDO. KIT #13  
SPAN: 16". LENGTH: 11"

DRAWN BY: JOHN BLAIR

F-4.  $\frac{1}{16}$  SHEET.

MAKE WHEELS FROM 2 LAMS.  $\frac{1}{16}$  SHEET.  $\frac{1}{16}$  ALUM. TUBE BUSH. USE PIN FOR AXLE.

"LIFTING" WING STRUTS  $\frac{1}{16} \times \frac{5}{16}$  BALSA.

RADIATOR OPENING IS BLACK TISSUE DOPED ON.

DIHEDRAL IS  $\frac{5}{8}$ "