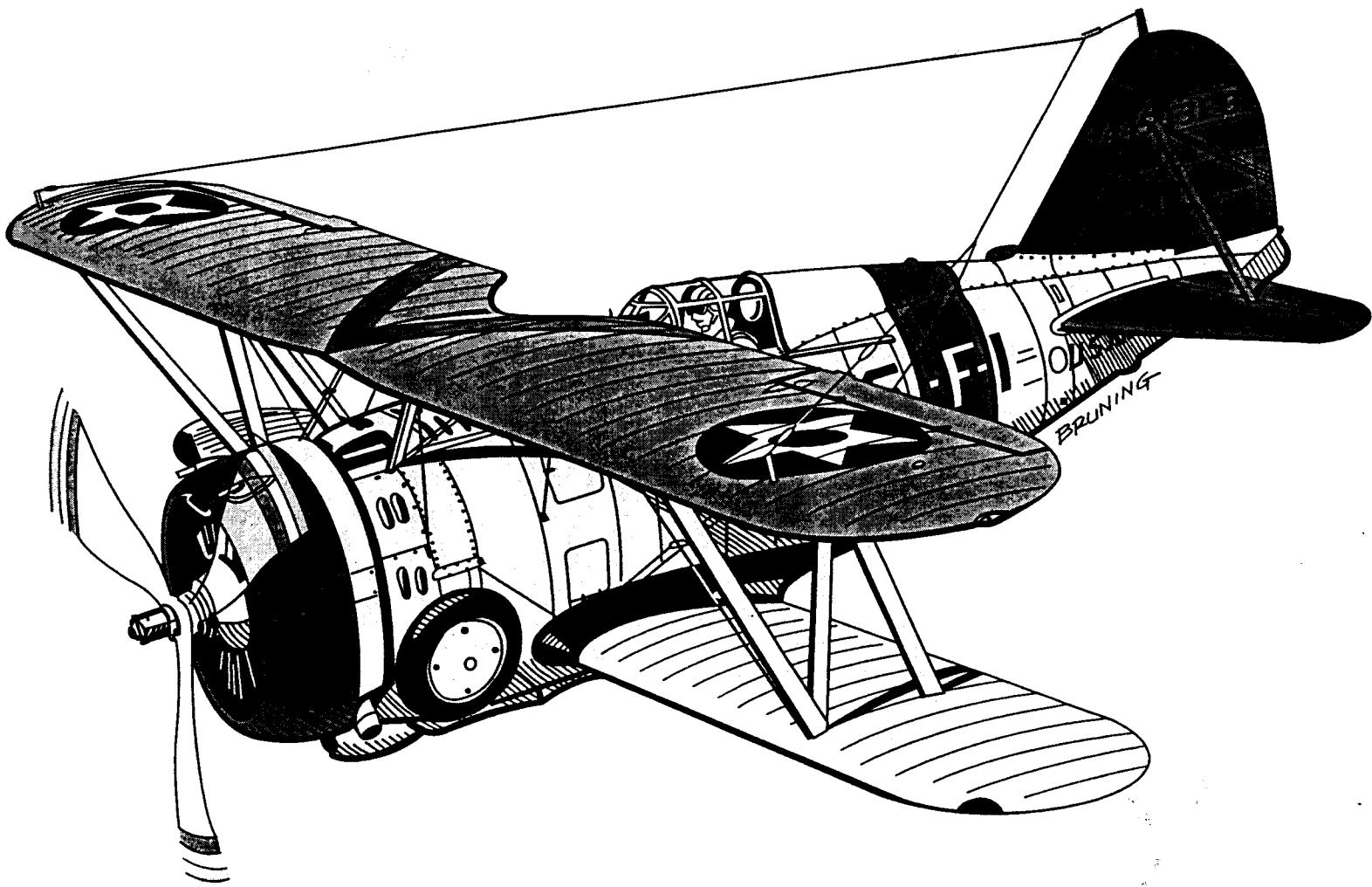
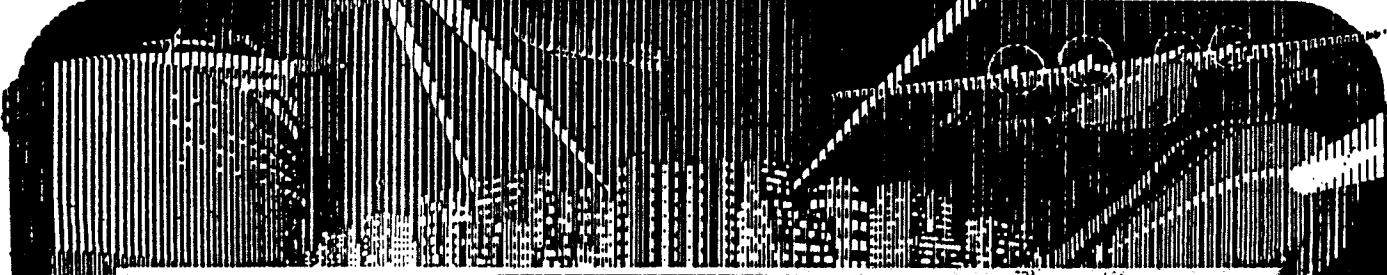


# FLYING ACES

ISSUE #225-151 Sept./Oct. 2005

## Club News





# NEWS ON THE WING!

Do you like the cover? Another one by Pres Bruning, this, of the Grumman F3F-3. Beautiful at any angle! Also the subject of one of this year's T-Shirts. (See ad in this issue) Thanks, Pres. We want to thank all who once again contributed to your newsletter. The plans this time came from John Blair, (Vickers "Viget") Bill Simpson (M-19 Flying Squirrel), John Polettis (Mitsubishi KI-51 "Sonia", John is a member from Australia), and Pete Kaiteris (Boeing Y1B9-A, This one has been done before but was such a poor rendition we let Pete's design stand as an official Pseudo Dime Scale plan)

The FAC calendar is now a reality! We hope that everyone buys one! It was the request of many that we do a calendar so let the sales begin! It features models of some of our finest builders and I am sure your workshop will look much better with one hanging on the wall. See ad in this issue.

This 'n that; We should have the dates for next year's FAC Nats in the next issue. Photo pages by Fred Wunsche are from this year's FAC Non-Nats. Parts sheet for the Fiat G-50bis are here, they were left out of the last issue. Complete article by John Koptonak "Ten Step Trimming" is here. This first appeared in the Eagle Squadron's newsletter, FAC #34. "Flightline" article by Tom Arnold came from the Scale Staffel newsletter. And, last but not least is the results from the FAC Outdoor Champs that were held at Muncie, In. on Sept, 10 & 11th. They are in the newsletter and in the plan packet. This contest continues to grow every year by one or two so we sort of set a record every year. You could not have asked for better weather or friendships than we had this time. Of course, it's the FAC!!!!!!

BUILD---FLY---WIN!!!!!!.....EFF--AAA--CEEEEE!!!!!!!



Col. Lin Reichel, CinC--FAC

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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

## **FLYING ACES CALENDAR FOR 2006**

Yes! The calendars are a reality! We had a great response from members with their photos and it was very difficult to select which ones to use. I want to thank all of you who sent photos and the ones not used we will keep for future use unless you want them back. The price for the calendars is \$20.00 each postpaid. The cost might seem kind of high but don't forget we are not dealing with a run of thousands of them. Besides, your purchase of them will help to keep the FAC dues where they are. Send your order to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Get yourself a Christmas present of a calendar and maybe a friend, too.



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 per year. Cost in 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. Send to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

## **CLASSIC AIRCRAFT MODEL CO.**

**(CAMCO)**

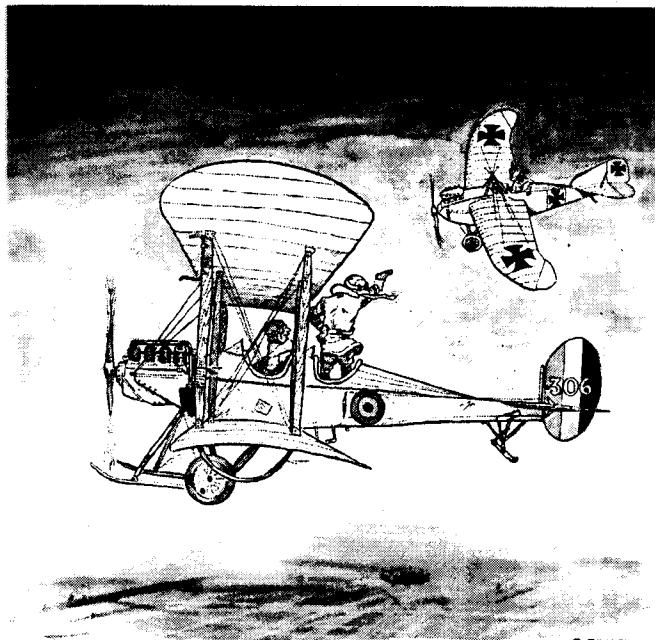
**3301 Cindy Lane, Erie, Pa. 16506**

Kit #CA01 Rearwin Cloudster, 16" wingspan.  
Designed by Dave Stott for FAC Dime Scale.

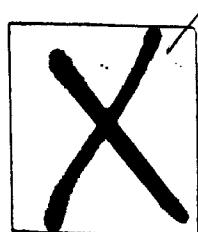
Kit # CA02 Hamilton Metalplane, 20" wing-span. Designed by Dave Stott for FAC Golden Age Scale.

Each Kit \$14.00 plus shipping. One kit \$4.00, each additional kit add \$1.00.

LATEST KIT, The Jimmie Allen Special has a wingspan of 20" and is eligible for 4 FAC events, Jimmie Allen, Old Time Rubber, O.T. Two-Bit Rubber and also FAC Embryo. This model features a high wing and open cockpit, a real cutie! Price is \$15.00 each. See above for shipping costs.



"A larger pistol, Percy; revolutionize this business, I should think."



Contestant	Model	Flt 1	Flt 2	Flt 3	Total	Place
Mark Rzadca	Kiwi	120	120	120	360	1
Stu Cummins	Original	118	88	102	308	2
George White	Hornet	120	93	63	276	3
Walt Farrell	Square Eagle	65	120	62	247	
Don Lang	Original	57	74	104	235	
Harrison Knapp	Souper 30	68	69	56	193	
Dan Driscoll	Hot Box	67	60	42	169	

## Old Time Kit Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Bonus	Total	Place
Walt Farrell	Arado 96	96	100	52	30	278	1
Dan Kane	Arado 96	71	65	87	30	253	2
Walt Farrell	Curtiss Robin	71	83	96	0	250	
Mike Zand	Allied Sport	53	75	45	30	203	3
Phil Cox	Taylorcraft	46	41	113	0	200	
Jack Kane	ME-109	63	60	27	30	180	
Jack Kane	Fokker D-7	39	32	20	45	136	
John Houck	D.H.Leopard	85	*	*	0	85	

## 2005 Flying Aces Outdoor Championships

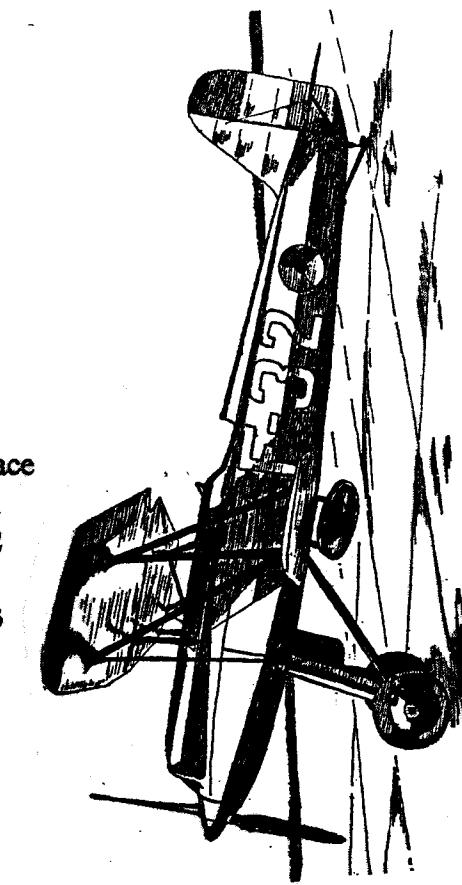
This meet is now a part of the continuing successful history of the Flying Aces Club. I have to say that I feel proud and honored to have had the opportunity to be a part of the festivities. There was some concern on my part that the greed of the petroleum lords might put a dent in our attendance. Not so. The FAC came in even greater numbers to this extended family gathering and flew REAL model airplanes under a warm (hot) favoring sky. (68 contestants flew 569 official flights).

If you look close at the numbers, our Mother event, Flying Aces Scale, carried 27 entries, and the most official flights, (59). The spirit of FAC was with us on the field.

The morning of the first day is always busy. I make the rounds with a smile on my face shaking hands. This is generally the prelude to requests for judges, event directors, and on this particular weekend, even canopies and tables for the HQ staff. As usual, all requests were graciously answered. Thank you all.

The Vic Didelot trophy for 2005 is awarded to Chris Starleaf.

Through it all, I had the distinct pleasure of working with the Chief Controller and First Lady of the FAC, Juanita Reichel. Our Judges were Al Yunker, Dan Kane, Jack McGillivray, Stew Meyers, Phil Cox, and Jerry Komp. The Mass Launch event directors were Pete Azure, Dave Bubolz, Wally Farrell, and Les Burdsal. Our Commander, Lin Reichel was on hand to keep us on track and Roy Courtney offered a helping hand. And remember, If you guys didn't put your talent into building those fantastic model airplanes this weekend would not have happened. It will happen again the weekend after Labor Day in 2006. Ralph Kuenz



## Greve Race

Contestant	Model	Place
Mel Roth	Chambermaid	1
Chris Starleaf	Chambermaid	2
Dave Rees	Mr. Smoothie	3
Frank Rowsome	Chambermaid	
Stu Weekerly	Mr. Smoothie	
Walt Farrell	Mr. Smoothie	
Bob McLellon	Chester Goon	
Bob Bojanowski	Chester Jeep	
Dan Kane	Mr. Smoothie	
John Houck	Bumble Bee	
Bob Isaacs	Chambermaid	
Paul Boyanowski	Chambermaid	
Michael Zand	?	
Rich Miller	?	
Don Lang	Mr. Smoothie	
George White	Chambermaid	
Jack McGillivray	Mr. Smoothie	
Conrad Ruppert	Chambermaid	

## Old Time Rubber Stick

Contestant	Model	Place
Jack Tisinai	Ritz	1
Mark Rzadca	Gollywock	2
George Lewis	96 Korda	3
Fred Wunsche	Gollywock	
Stu Cummins	Gollywock	
Bob Isaacs	Gollywock	
Michael Zand	Gollywock	
Dan Driscoll	Thermal Bagger	227

## Old Time Gas Replica

Contestant	Model	Place
Buzz Trabbic	CAVU	1
Ted Alebone	Interceptor	2
Mark Rzadca	Zipper	3
Phil Cox	Diamond Demon	

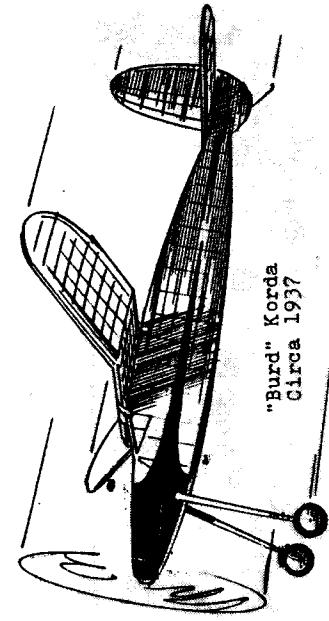
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## Modern Military

Contestant	Model	Place
Walt Farrell	Skyraider	1
John Houck	Bell P-59	2

## Fairchild 24 Mass Launch

Contestant	Place
Buzz Trabbic	1
Chris Starleaf	2
Don Lang	3
Bob Bojanowski	
Jack Moses	



"Burd" Korda  
Circa 1937

Contestant	Flt 1	Flt 2	Flt 3	Total	Place
Dennis Ruhland	293	159	92	544	1
Frank Rowsome	87	146	162	395	2
Dave Niedzielski	128	93	94	315	3
Dan Driscoll	77	93	77	247	
John Houck	79	40	91	210	
Harrison Knapp	77	57	70	204	
Roy Courtney	54	64	58	176	
J.B. Griner	26	33	74	133	
Dave Bubolz	28	25	27	80	



Photos by Fred Wunsche. Top left, here are two of the hardest workers in the FAC. We don't know what we would do without them at Geneseo. You know them as Dianne & Roy Courtney. On the right is "The Storkmeister" Jack Moses with a Jimmie Allen "Skokie". Bottom photo is Fran Ptasziewicz on the left and Bob Blair scale judging a Curtiss Robin for Jumbo Scale.



## AIR MAIL

Dear Lin, Ross, GHQ,

Here I am at 30,000 feet in an Airbus 320 coming from a gig after having been away from the house for 10 days. It's been a bit of a whirlwind summer, and I finally now have a chance to think. There are songs to write and record, things to do around the house, a few planes to repair, and I have this box at home in the dining room that I have to do something about. It contains the Victor G. Didelot Memorial Spirit of the FAC Award, and I'm awash in the thoughts that come with the honor of being given that award.

I came up "urban - then suburban" tough in Philadelphia. Alcoholism and it's itinerant abuses were ever present in my house. Racism was ever present outside of it. While I can never remember being in want of a meal, there were stretches of my later teenage years that I actually spent homeless, spending 3 weeks at one point camping in a tent on the lawn of a friend. Model building, music, tennis, and humor were my escapes from the day to day uncertainty of that upbringing. And here I am now, with a family, a house, a career, - and an enduring hobby.

I can't begin to count the couches and guest rooms of FAC families I have haunted while plying my trade as a musician. All across this country and Canada FACers have provided me with bed, food, comfort, camaraderie, family, and support. More than once over the last 15 years the bare few at a very lightly attended show would be a handful of dutiful Flying Aces. Truly we are more a family than a club

Yesterday morning I had breakfast with Arlo Guthrie. A few months back I was giggling backstage with Richie Havens. A month and a half ago Jay Leno came to my dressing room to tell me he liked my opening set. I've opened numerous shows for Aretha Franklin, Joan Baez, and the Temptations (they had the coolest yellow suits and shoes!!). Truly, none of that compares with pictures I have taken with and sent to me by Earl Stahl. None of that compares to a letter sent to me from Henry Struck some 13 years ago proclaiming my planes to be "the best scale models I have ever seen". None of that compares to overhearing Dave Stott refer to me while speaking to some stranger as "my other son".

This wonderful trophy has 4 sides, with six brass plates per side. There are 23 un-engraved plates remaining on this trophy. I truly wish there were many more plates, just filled with the names of everyone in the FAC. This award had to have a first recipient, but it really does indeed belong to you all.

Thanks, Flying Aces Club,

Vance Gilbert

### FOR SALE--FAC GENESEO 2004 VIDEO TAPES

Two video tapes of the FAC Non-Nats at Geneseo for 2004. Tape #1 which runs for 1 hour & 50 min is \$15.00 and tape #2 which runs for 1 hour & 5 min is \$12.00. Both tapes are postpaid. Send your order to; Dennis Ruhland, 9933 Randolph St., Crownpoint, In. 46307.

### PLAN SERVICE FOR SALE

Do to a death and an illness, Yesteryear Plan Service is for sale. Over 200 master vellums in the collection. Any reasonable offer accepted. For more information contact Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

### FOR SALE "ARMCHAIR AVIATOR"

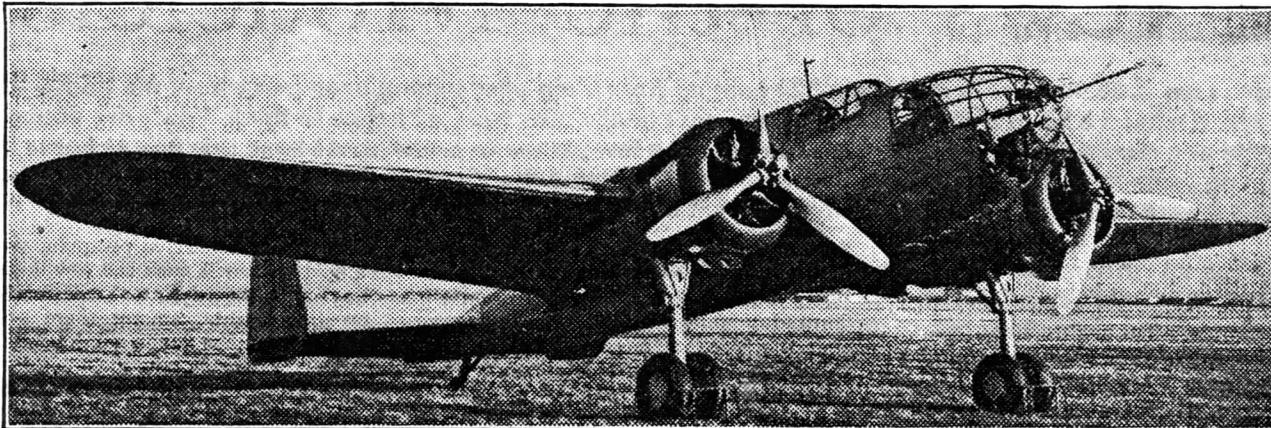
Vol.1 #1 Oct. 1972  
Vol.1 #3 Dec. 1972  
Vol. 2 #2 Feb. 1973  
Vol. 2 #4 May 1973  
Vol. 2 #6 July 1973

Vol. 1 #2 Nov. 1972  
Vol. 2 #1 Jan. 1973  
Vol. 2 #3 Mar./Apr. '73  
Vol. 2 #5 June 1973

\$10.00 each or the whole set for \$75.00 postpaid.  
All volumes are in excellent condition. Lin Reichel,  
3301 Cindy Lane, Erie, Pa. 16506.

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# THE SHIP ON OUR COVER—POLAND'S P. Z. L. P-37



By Leonard Wieczorek

**B**Y NOW, you fellows have probably read the story behind our cover, which depicts what might happen if Nazi troops plunged into the Polish Corridor, and which gives you considerable info on Poland's P.Z.L. P-37 fighter, shown above. So now we'll go right on to tell you how to build a miniature of this streamlined speedster (see plan on opposite page).

First, trace the side view of the fuselage onto a block of soft balsa and carve to shape. Then clearly mark out the top view of the fuselage and trim, giving the body the proper curvature by frequently testing with the cross sections given in the plans. Sand the body to a smooth finish, using varying grades of paper.

Now, trace one section of the wing onto a sheet of medium balsa. Shape exactly as shown, then invert the panel and trace the other section of the wing. Carve to

a tapering airfoil section and sand it to a smooth finish.

Make the motor nacelles, rudders, elevator, and landing gear from hard balsa. Shape them as shown and lay aside for assembly. Glue the motors firmly in place, filleting with plastic wood or paste, and then attach the panels. Slit the rear of the fuselage and slip the elevator in place, cementing firmly. Attach the rudders.

The color scheme is all silver with markings as given on our cover. Form the pitot tube and aerial mast from a sliver of hard balsa, glue it in place, and attach a bit of thread for an aerial. Incidentally, rivets may be marked on the fuselage of your model with India ink or with pin heads.

Such things as celluloid covered pits, machine guns, and retractable wheels are left to the discretion of the individual builder. It may take a little extra time to make these units, but the model will look more realistic if they are added.

This article first appeared in the Aug. 1939 issue of the "Flying Aces" magazine.  
Len Wieczorek is still with us and doing fine. We missed you at Geneseo, Len!  
Which one of you Skysters will blow this one up for rubber/electric power? Looks like she may be a good one!

---

To: FAC HQ Staff  
From: Art Collard  
re.: The first awarding of the "Big Cats' Ass Trophy"

I wonder if Hung might have had something to do with the (multiple) events which were the basis for your decision to award me the plaque. If I could have gotten my Dime Scale model of "Udet's Racer" (Mike Heinrich's design) to climb better I could have avoided the whole situation last Sunday.

Udet was known as a highly skilled aerobatic pilot and my model certainly performed as though he were in the cockpit! On the flight which first caught your attention the model managed to circle above the HQ tent and then flew right through the southern end of the tent and around the scoreboard kiosk before landing. (I shall always remember the women's screams as it flew past their heads!)

However, it was most certainly the next flight which caught Ross Mayo's attention as Udet circled way overhead and then circled right through the standing group of WW II flyers, seeking to hit Ross square in the belt buckle. (He did not acknowledge this at the time as I sneaked in to pick up my Udet's Racer.)

(So I guess I can no longer remain an anonymous member of FAC.)

The more important thing: THANK YOU ALL FOR YOUR DEDICATION TO THE COMPETITORS AT THE FLYING ACES CLUB NATIONALS. All of us owe you a debt of gratitude.

Much thanks.

P.S. How's this for my engraved plate?

"Art Collard  
Strafed HQ Tent"

Thermals,

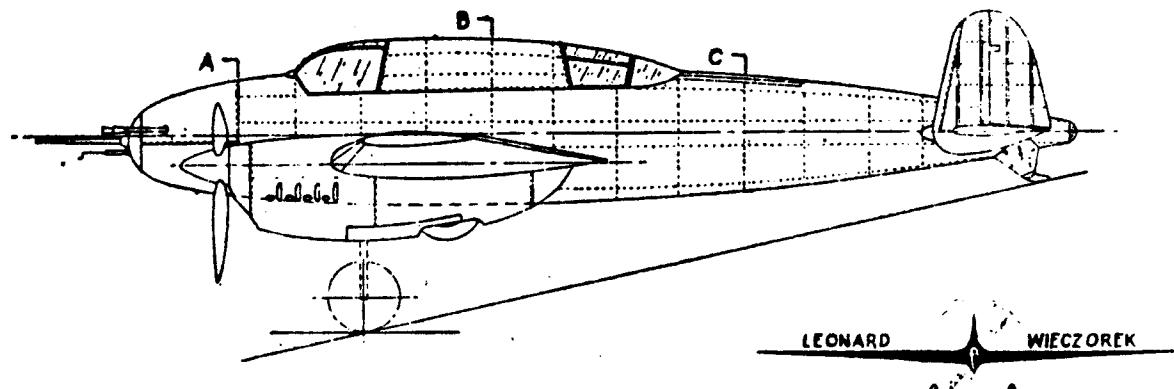
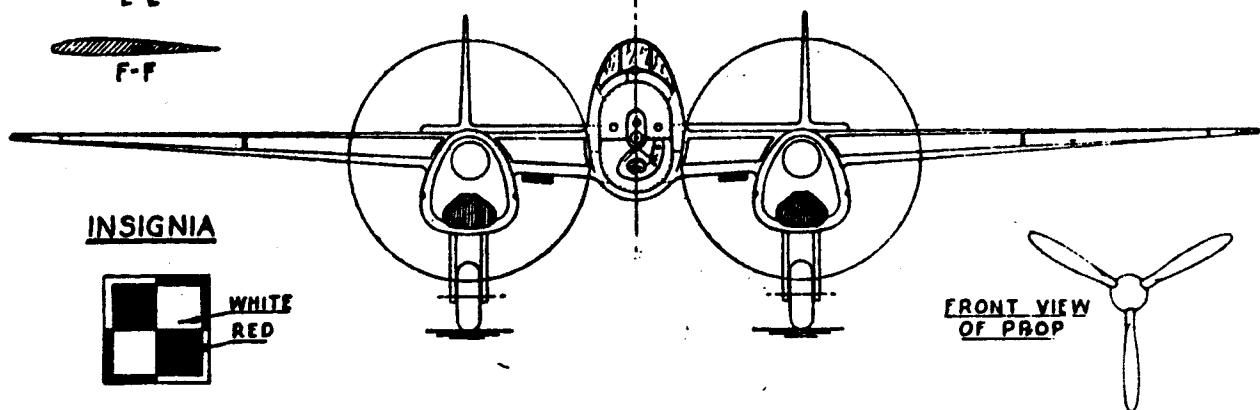
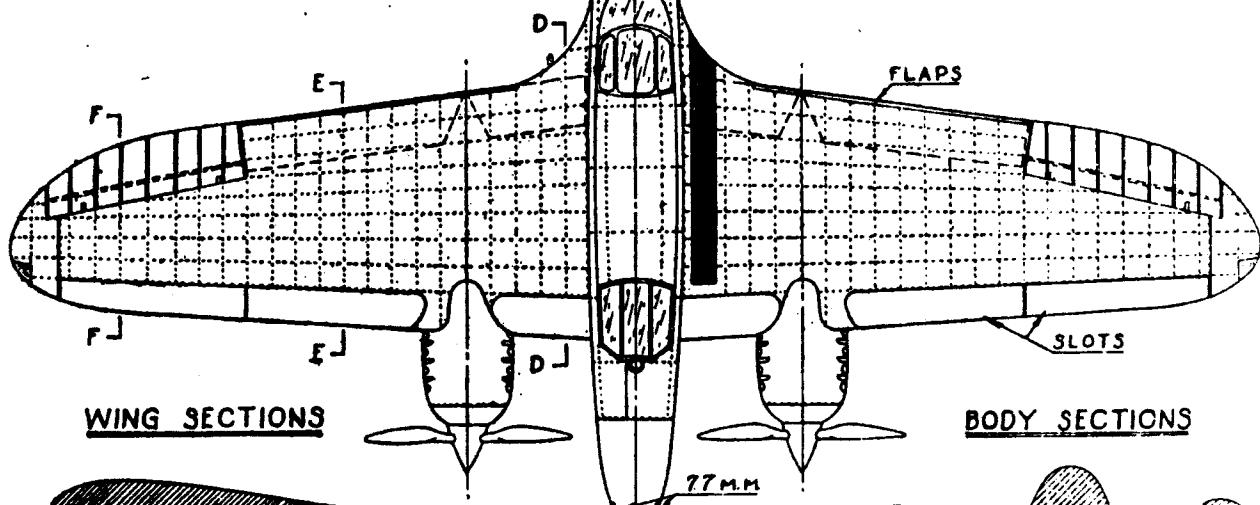
*Art Collard*





### SPECIFICATIONS

SPAN	36'-3"
LENGTH	27'-4"
HEIGHT	8'-2"
TOP SPEED	300 M.P.H.
GROSS WT	6,205*
MOTOR	2-8 CYL. 840 H.P.



## Wing and Stabilizer Incidence Angles for the Scratch-Builders

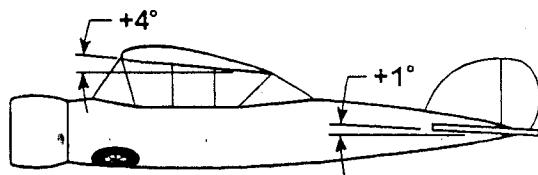
One of the great failings of many early model kits and magazine plans was to show both wing and stabilizer at zero degrees incidence. The likelihood of a model being able to fly if built to plan with both wing and stabilizer set at zero degrees (as shown on most old "Dime Scale" plans) is slim to none. As an assist for builders of Dime Scale models built from these old plans, and for scratch-builders drawing up their own plans, here's some rules of thumb for inci-

dence angles that can be used as a starting point.

In almost all cases, there should be a difference in incidence angle between the wing and stabilizer of about three degrees. The three degrees is relative, depending on the location of the wing with respect to the thrust line of the model. Here are three generic sets of incidence angles, depending on whether the model is a high wing, mid-wing, or low-wing model, that can be used as a starting point.

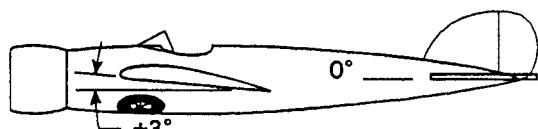
### high wing model:

wing: + 4 degrees  
 stab: + 1 degree  
 wing inc. - stab inc.:  $4 - (+1) = 3$  degrees



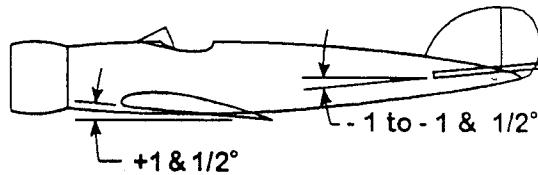
### mid wing model:

wing: + 3 degrees  
 stab: 0 degrees  
 wing inc. - stab inc.:  $3 - 0 = 3$  degrees



### low wing model:

wing: + 1.5 degrees  
 stab: - 1.5 degrees  
 wing inc. - stab inc.:  $1.5 - (-1.5) = 3$  degrees



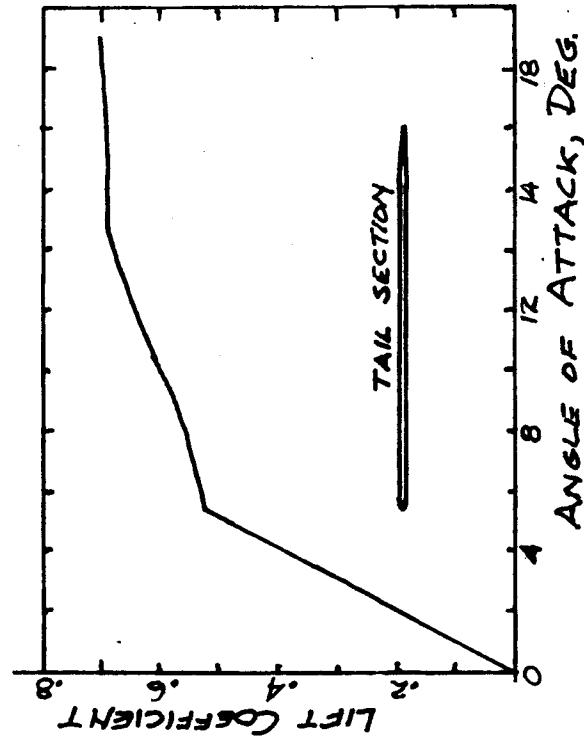
Most of us use tail construction of the "flat plate" type — a rounded nose, no camber, and a tapered trailing edge. Exactly this section has been wind tunnel tested by F.W. Schmitz. His results (below) show a straight line response through 6 Deg. and then a fall-off of lift generation as the section stalls. However, no matter what the angle (through 18 Deg) lift never falters or declines. In short, the tail does its thing through any reasonable angle of attack. Our stability problems are not the tail's fault.

There are the usual sneaky provisos to be added here. Schmitz did his testing at a scale that is too high (i.e., Reynolds number of 42,000). Perhaps our small models act differently. Yet, I rather doubt it. I believe that whatever woes we experience don't arise from failure of tail action. We must seek other villains.

\* Tail Aerodynamics \*  
 Mumbo Jumbo # 127 from the Glue Guru

The unending stability trauma we struggle with raises the question: does the tail do its thing properly? Does it really create enough lift to jack up the tail end of the fuselage, preventing wing stall? Or does it simply stall itself, once some small angle of incidence is passed? And in stalling, does it shrug off its stabilizing chore, thus contributing to the general chaos?

As for generating enough force, we have each learned that it's necessary to increase the tail area until it equals at least 25% of the wing area. Actually, 3.5% works a lot better but tends to look a bit outlandish. Still more area is rare — appearance does count and we seem to draw the line at 35%. But even with plenty of area, and each square inch of it busy generating a corrective force, why is stall so rampant? What about tail aerodynamics?



## FLYING ACES PLAN SERVICE

### DUMAS KIT REVIEW

We have seen the latest Dumas Kits and there are some interesting subjects included in this series. All kits contain the usual assortment of materials such as well drawn plans, tissue, decals and vacuum formed parts, etc.

Two of these kits are really for display purposes but with a little work they could be made into powered models or be used as catapult models. They are the F4-D Phantom of 19" span and the F-105 Thunderchief with a span of 15".

Next in line are two of Howard Hughes famous aircraft, the Hughes H-1 racer with material to build either the 24" or a 30" wingspan model. The 24" would of course be eligible for the FAC Thompson Trophy Race. Then at a 30" span we have the Hughes HK-1 "Spruce Goose" flying boat. The Goose is not a powered model but could be converted very easily to any kind of power. In the FAC rules you can even put a prop on the nose to fly this bird!

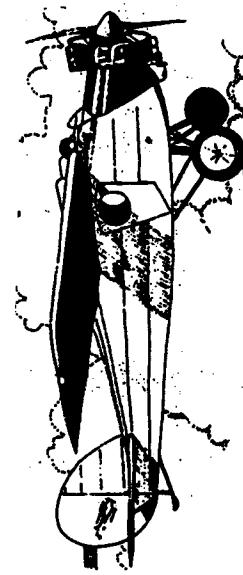
Last but not least they have added these models to their 17.5" wingspan series; Cessna 120/140, Boeing P-26, Fairchild PT-19 and the Fokker Eindecker E-111.

All of these kits can be made into good or better flying models by lightening them up a little here and there. Although their kits are getting much better in the weight department, by chopping a little here and there you can get a real light weight model out of any of the kits. We have no prices on these kits at this time. See your dealer!

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

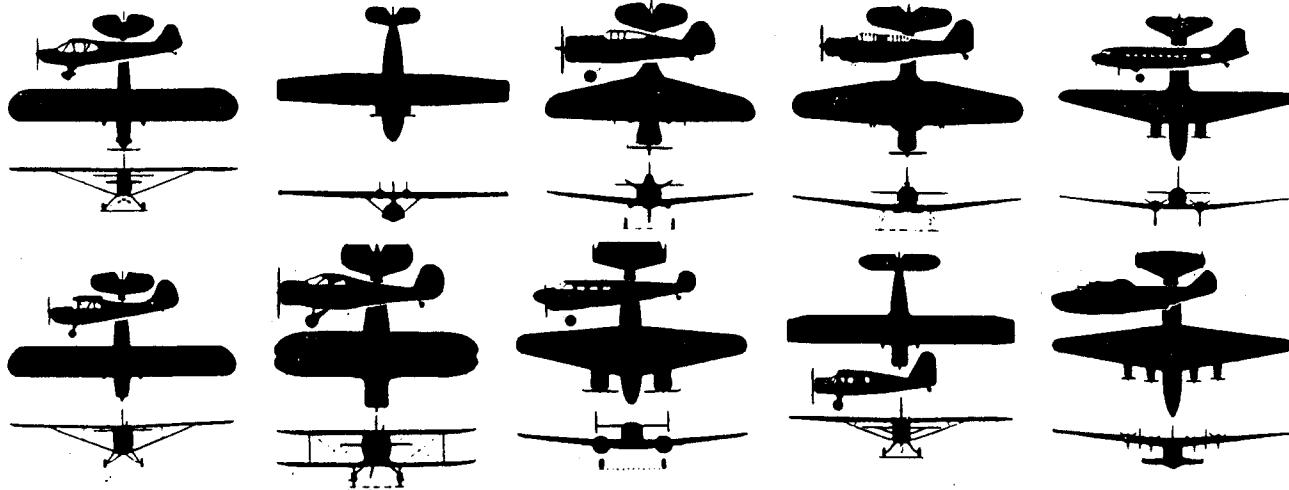
Aircraft	Span	Designer	Price
Westland Lysander	24"	Studiette	3.00
Northrop Gamma	36"	Bruning	5.00
Fairchild PT-19	24"	John Low	4.00
Curtiss Gullhawk	24"	Wilkey	4.00
Boeing P-26	18"	Wilkey	3.00
Waco C-7	22"	Boyanowski	5.00
Laird Solution	14."	Nallen, Sr.	4.00
Waco "D"	24"	Bruning	4.00
Lockheed Orion	24"	Nallen, Sr,	6.00
Monocoupe	24"	Canada M.C.	3.00
Seversky SEV-2	22"	Nallen, Sr.	6.00
Gee Bee QED	24"	Nallen, Sr.	6.00

All plans shipped postpaid. Send orders to; FAC, GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



The drawing above is of the Cessna Phantom and is the theme model from this year's FAC Outdoor Champs. The plan was drawn by Les Burdsal and has a wingspan of 29 inches. The model virtually flew right off the drawing board! You can get a copy of this plan from GHQ for \$6.00. Send to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. OOPS! FORGOT, you get a 3-view too!

Name the plane contest. Send your answers to FAC-GHQ. First one to name them all or gets the most right will win a prize. Entry must be postmarked no later than November 10, 2005.



Aside from that, the judging hours are priceless from a competitor's standpoint. I always take photos of everything that even remotely interests me, including aircraft I have photographed before. Going over the pics a week later at your leisure and I am amazed at what the camera has picked out that my eye missed the first time around. With the buzz of the crowd, the socializing, the swapping of techniques, it is so easy to get overwhelmed and only superficially "see" what is on the table. Many builders hang around their models and if they notice some poor guy struggling to get a good camera shot, they will come over and hold the plane up for them and the resulting conversation always turns up a new or unique thing the fellow did. I had the pleasure of meeting Clive Gamble who built a fabulous Westland Welkin that so far surpassed the one I built 12+ years ago, that my photo snapping of it turned into a delightful 30 minute conversation with him as he went over all the things he did with it. Its flying ability was even better as he got over a minute with and entered it into the WWII combat event. If you are familiar with the Welkins impossibly short nose, long skinny wings, and the fact it is a TWIN to boot, you will appreciate what he did with it.

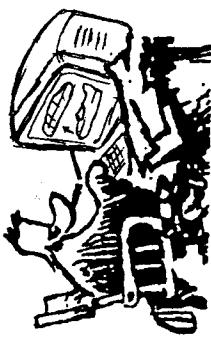
Looking at Chris Starleaf's magnificent electric Lockheed Electra airliner and talking to him for equally as long about multi engine electrics, silver painting techniques, launching methods, repairs, removable wings, and his philosophy and strategy on flying in general, was absolutely priceless. And so it went, airplane after airplane, conversation after conversation, photo after photo, until you are practically ready to leave immediately so you can hit the workbench! You don't get this stuff sitting at home reading magazines or surfing the web on models. It's like a haircut.....you just gotta be there. Looking at the array of craftsmanship from "rugged" to "exquisite" is inspiring as you realize that your own personal level of expertise fits in too. You may not be the Flying Michelangelo that some fellows are, but you ain't chopped liver either.

A last minute change of plans found me headed to the latest Non-Nats and am I glad I went. For those living in a box, the FAC Nats are held in Geneseo every even numbered year. So a similar affair on the "off" years is called, naturally, the NON-Nats. Attendance is just slightly less than the regular event and the airplanes are every bit as astounding and, in fact, are sometimes even MORE interesting as this is the event that some wild subjects are tried out prior to the biggie the next summer.

The area is so popular for various tourist events that rooms are tight and if you want to stay in an air conditioned motel rather than the dorms of the University, you had better start making reservations early. I was lucky, as thanks to the internet and the ability to pass info around quickly, I found space with Buzz Trabbic from Tennessee at the last available hotel for 30 miles around. Based on the horrendous heat and humidity that weekend had, the air conditioning was a life saver. Having said that, though, I missed a lot of the incredibly inspiring and informative bull sessions that always take place in the dorms. So both are good.

The next day though is really when the rubber meets the road....er, air, that is. Those "rugged" subjects of yesterday with the patches and repairs tend to take to the air like bats at sunset. The weather was both good and bad. As far as wind went, for the most part it was gentle breezes and summer zephyrs. A few windy moments but they did not stay. The heat and humidity were another matter. With heat in the 80's and the humidity at 100%, with or without rain, it was drinking water time all the time for everybody. One of the thunderstorms that blew through the area really was dramatic. It was a solid black-gray wall of water that marched through accompanied by lightning and thunder. What was really unique was the roar of the rain hitting the trees surrounding the field. I had never heard such a thing before outside of the tropics!

My personal efforts were poorly planned as I came to the contest with mostly untrimmed aircraft which meant that I had to spend far too long fiddling and fooling with my head in the trunk of the car. Jeez Louise, I could have done that in my own driveway and saved the trip. My Ju-635 with all its engines



## Flightline

Airy musings by Tom Arnold

had been sitting since its last contest 2+ years ago and I had totally forgotten such vital things as rubber length, weight, etc. and so I searched out the only tall grass on the field which was a good 600 yards from the flight line for trimming. Things came along fine but I missed so much back at the ranch, so to speak. All those great planes I photographed the night before were just dots in the sky as I fiddled and fooled and sweated with my planes. The 635 was OK but I wanted just one teeny weeny last trim flight before I wound to the max for an official. The flying area was cut pretty close and as it is a heavy aircraft, I had real fears that I would get only one good flight before a bad landing. You guessed it---it crunched on hard ground beyond the trim area. No go for FAC scale.

My next one to tweak was a Short Seamew of 20" span and it acted up a bit before it calmed down. At the 2002 Nats, I had one fly OOS, so I had high hopes for this baby. Last was the Westland Wyvern that I put together for the new Counter-rotating prop event. Sponsored by John Rugalbuto who makes a very fine small rubber counter rotation unit, I was looking forward to seeing the other competing aircraft as I was shooting in the dark as to how to build and trim them. Trim flights showed I needed lots of power and my nose assembly was too heavy. Clay on the tail just makes you want to cry.

Finally, all was set and the events were flown. The Seamew made a gentleman's showing with one of three flights being 1:23 while the other two being much more modest. The Tan II rubber just seemed tired and I heard that from a number of contestants. Whether it was a fact or just sour grapes, I don't know but it was a real dramatic drop in power for whatever reason.

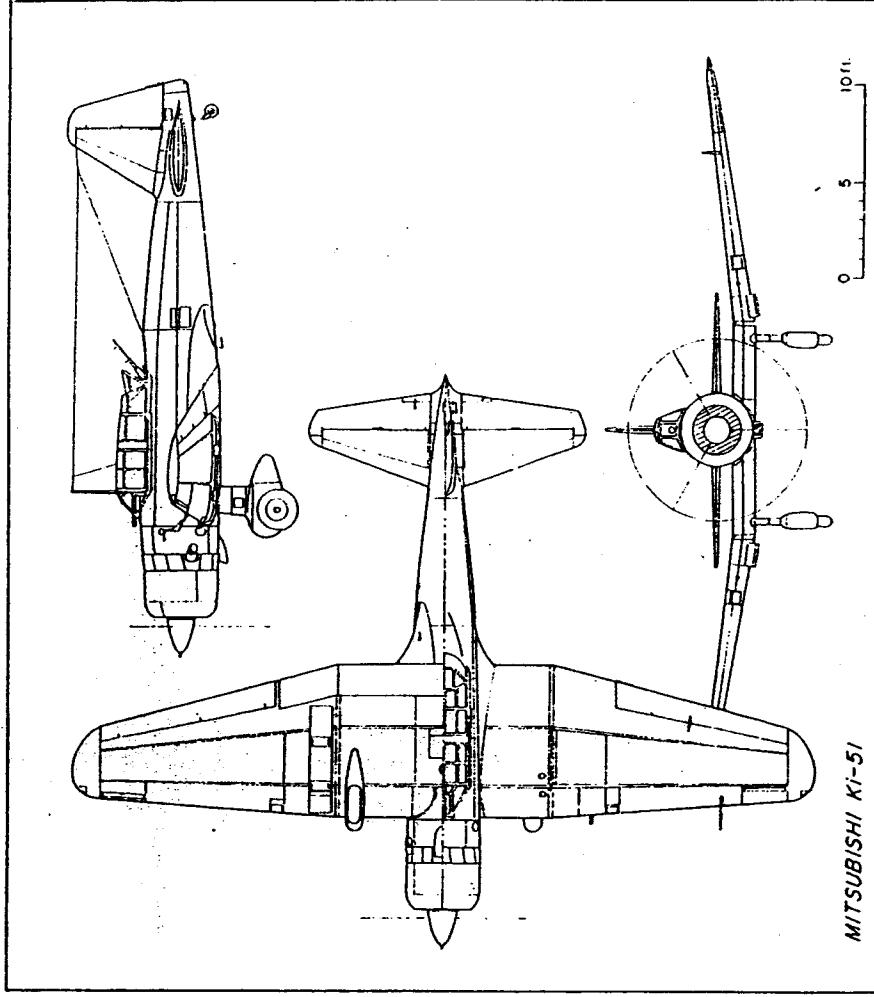
My battle scarred Do335 dorked in early on the WWII Mass Launch as I pulled that old, old rookie mistake of over winding and the torque burst set up a circling roller coaster and after 2 quick cycles over and in it went. With 5...yes, 5...guys to be eliminated on just the first round of three different groups launching, I did not want to be one of them. Dumb.

The Counter-rotating event (is it Counter, or Contra?) was a real eye-opener. There were some good looking subjects and all of the entering pilots agreed that you really have to pack some thick motors in them to overcome the friction of even the well made units we all had. On the initial launch my lead sled ran out of poop early and came in hard with a half wound motor and really shed the prop blades. Dang, back to the drawing board for it. The winner was Jack McGillivray with his own home made unit flying a Koolhaven FK-1. It was kind of hard to draw any conclusions as Jack is an excellent builder, builds incredibly light, and his unit was different than the rest of us. While the Counter rotation times were never going to be competitive, it was still a kick to see them up there churning away. Hopefully, the event will continue as it reminds me of scale ROW---tough to do well and a real challenge, but Wow! when it works, it really is a sight. You should have seen the Skyshark.

There was a sort of shadow non-nats going on (can anything be more stealthy than a "shadow non-nats") every evening as the fading day is really excellent flying weather. A big contingent gathers for fun flying and trimming and a lot of hangar flying and really is worth coming back to the field for. Bring your ugly airplane that flies as you will be in good company until darkness drives you in. It was suggested that the night fighter mass launch be held at 1 am later on for the hairy-chested types.

Things wrapped up Sunday eve with the traditional banquet and bar flying afterwards and again I felt so soaked with ideas, inspiration, new models to tackle, new methods, and old friends that the 3 days is, indeed, enough. Time to turn it all into action at home.

### **Mitsubishi Ki-51 3-views.**



*MITSUBISHI Ki-51*

## ERIE FAC CONTEST AT GENESEO

Another fine weekend at Geneseo, N.Y. for the small but dedicated group of Ozone Chewers that showed up. We knew it would be a small turnout but a most enthusiastic one! Next year should bring a larger group of Skysters when they know far enough in advance for the date and the price of gasoline should come down. (We can hope!) The weather was fantastic with winds practically non-existent for most of the day. Watch these pages for next year's date. Following are the results;

### FAC RUBBER SCALE

pilot	model	best time	scale pts.	bonus pts.	total
1. Jim DeTar	KI-61 Hein	62.5	54	10	126.5
2. Bob Clemens	Porterfield CP-65	61	60	00	121
3. Rich Miller	Wet Wot	42	56	15	113
4. Lin Reichel	Huntington H-12	30	52	5	87
5. Ron Goeslin	Spitfire	21	51	10	82

### DIME SCALE

pilot	model	flight times	bonus	total
1. Walt Kornrich	Pitcairn Mailwing	56+45+111+	45	257
2. Rich Miller	Fokker D-VII	72+62+43+	45	222
3. Mark Rzadca	Great Lakes Tr.	47+	15	62
4. Lin Reichel	Stinson 105	00	00	28

### O.T. GAS REPLICA

pilot	model	flight times	total	flyoff
1. John Carls	Zipper	120+120+120	360	+2
2. Bob Clemens	Zipper	120+120+120	360	+13
3. Mark Rzadca	Zipper	120+120+120	360	+63

target time of 60 seconds for flyoff

### WORLD WAR ONE

pilot	model
1. Jim DeTar	Fokker D-VII
2. Rich Miller	Fokker D-VII
3. Walt Kornrich	Martin-Syde Buzzard

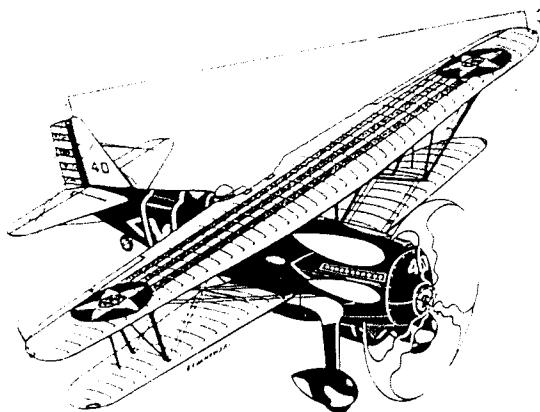
### OLD TIME RUBBER CABIN/STICK COMBINED

pilot	model	flight times	total
1. Garry Hunter	FA Moth	120+99+120	339
2. Jim DeTar	FA Moth	120+109+106	335
3. Bob Clemens	Weight Rule	94+120+120	334
4. Mark Rzadca	Gollywock	98+87+120	305
5. Mark Rzadca	Miss Canada	120+38+28	186
6. Jerry Crawmer	Gollywock	107	107

### Embryo

pilot	model	flight times	bonus	total
1. Jim DeTar	Debut	120+120+75	9	324
2. Rich Miller	Hornet	120+120+45	9	285
3. Mark Rzadca	Puma	72+75+84	9	240
4. Jerry Crawmer	Hornet	54+81+64	9	208
5. Bob Clemens	Lancer	83+70	9	162
6. Ross Mayo	Mz Adventure	59+34+40	6	139

## NEW T-SHIRTS FOR 2005

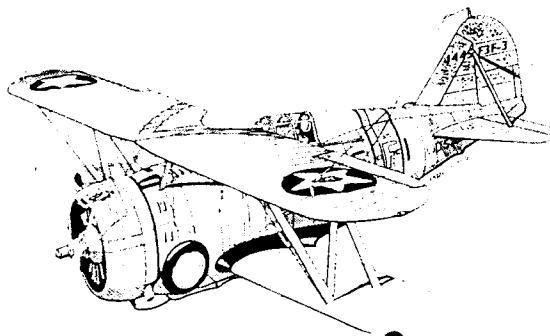


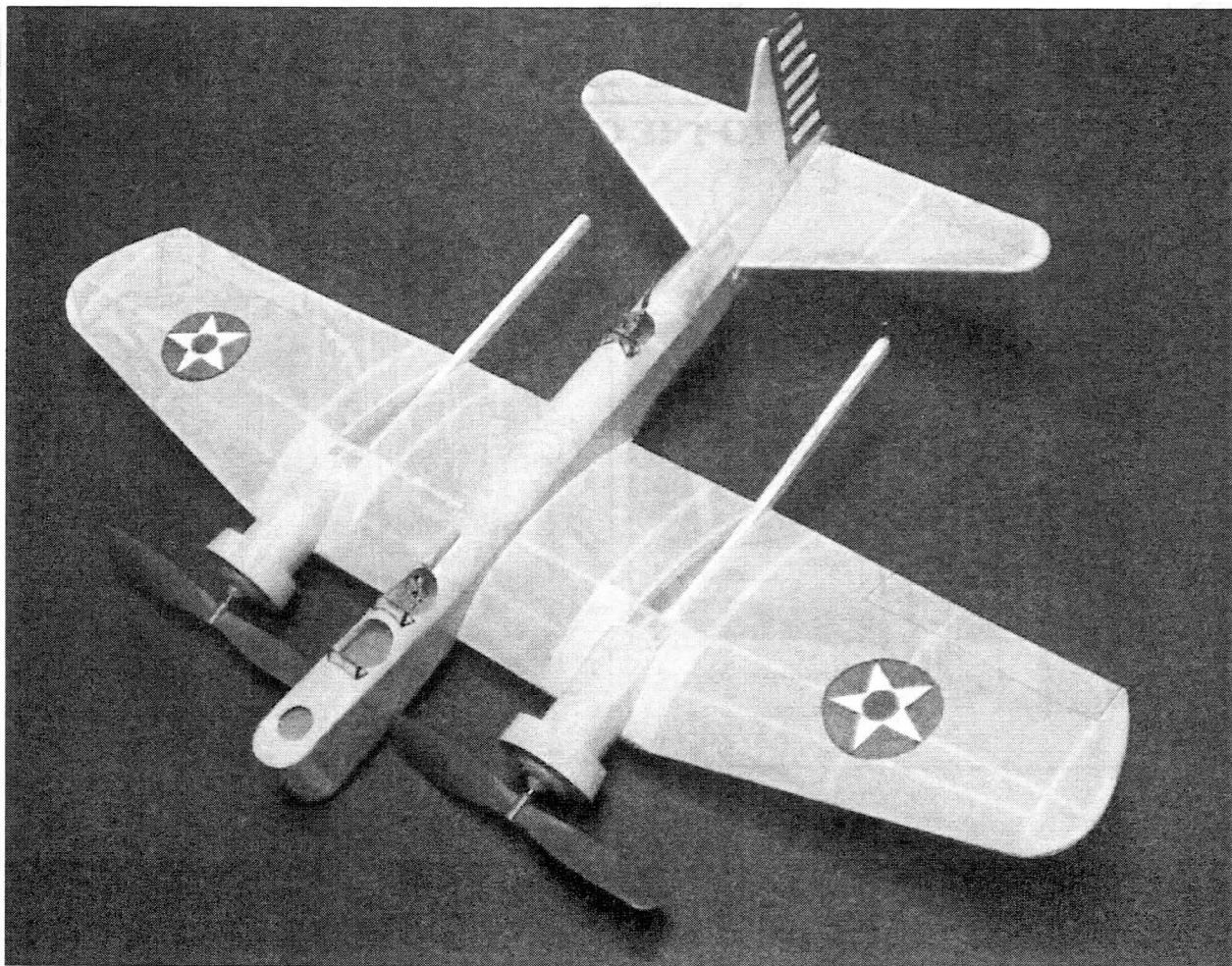
We have two new T-Shirts for this year Skysters. And real beauties they are! You have your choice of the Curtiss P-6E Hawk designed by Bob Bojanowski and the Grumman F3F-1 designed by Pres Bruning. And, you just may want to purchase both of them, they are really beautiful in the 1930's color schemes of the military!

Both shirts are priced at \$15.00 each postpaid. We sold a lot of these shirts at Geneseo last month and some sizes are in short supply. So if you want to get these shirts we advise you to get your orders in A.S.A.P. Send your orders to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Sizes available for the Curtiss P6-E; [REDACTED], Large, X-large, XX-large, [REDACTED]

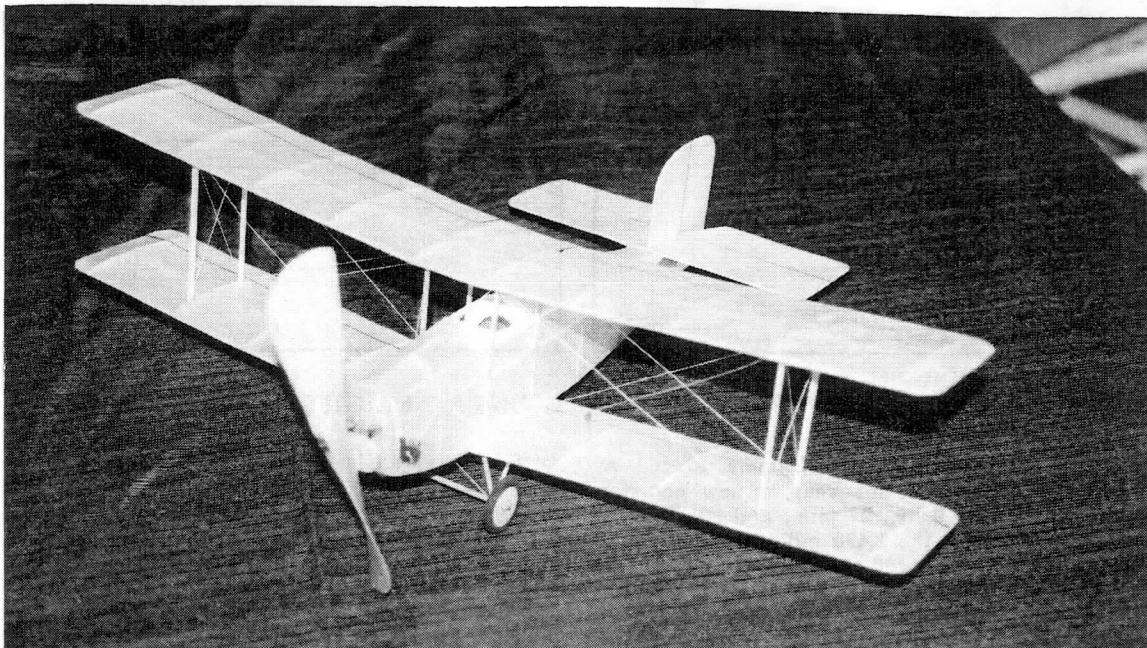
Sizes available for the Grumman F3F-1; small, large, X-large, XX-large, [REDACTED]





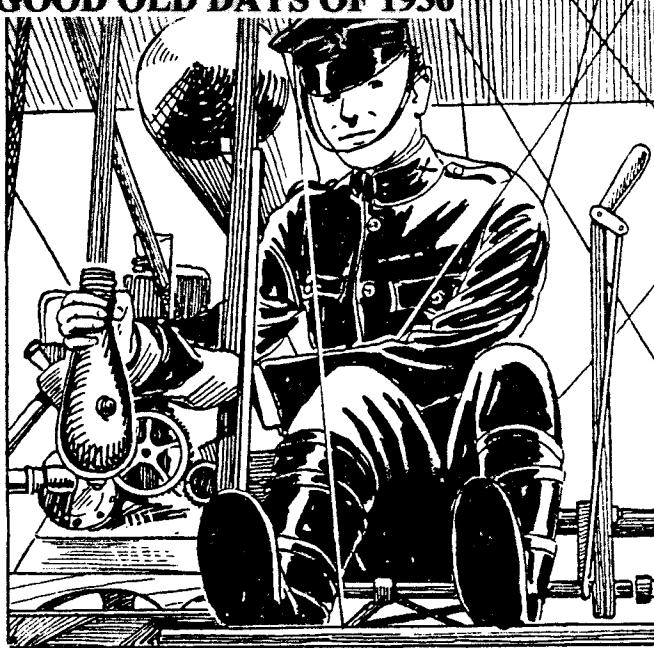
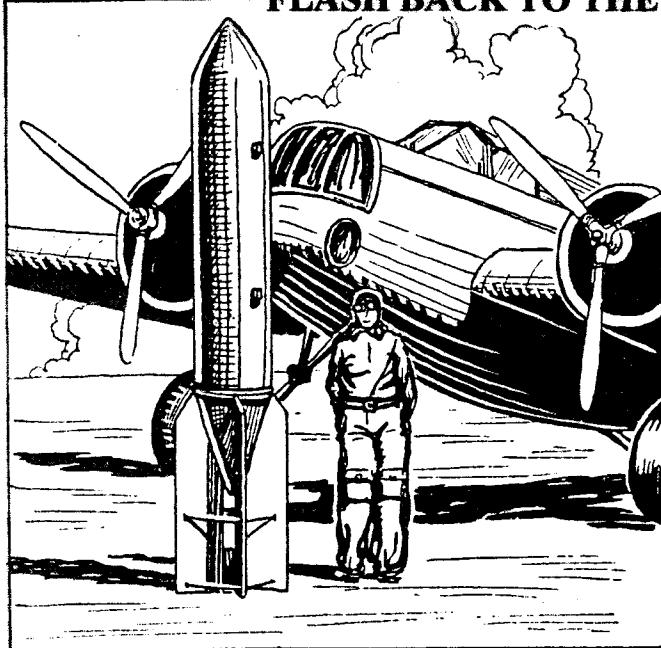
Top photo; Pete Kaiteris sent this photo of his Boeing Y1B9-A Psuedo Dime Scaler. Pete says she flies very nicely and stability is surprisingly good! Even though this one had been done as an original Dimer we let this one go because the original was a very poor example as a model.

Bottom photo is the Psuedo Dimer of the "Vickers Vigit" by John Blair. John says she took third place in Dime Scale at Johnson City this year with a best flight of 74 seconds. Plans for both of these models pictured here are in this issue.



# CompAIRisons · by Colby

FLASH BACK TO THE GOOD OLD DAYS OF 1936

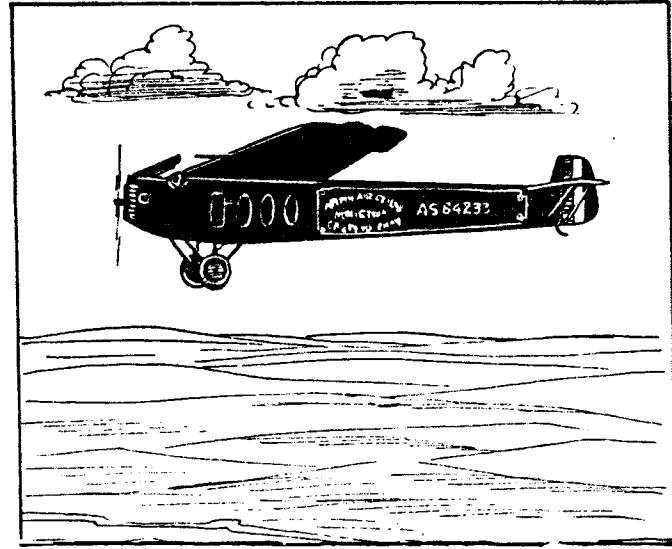
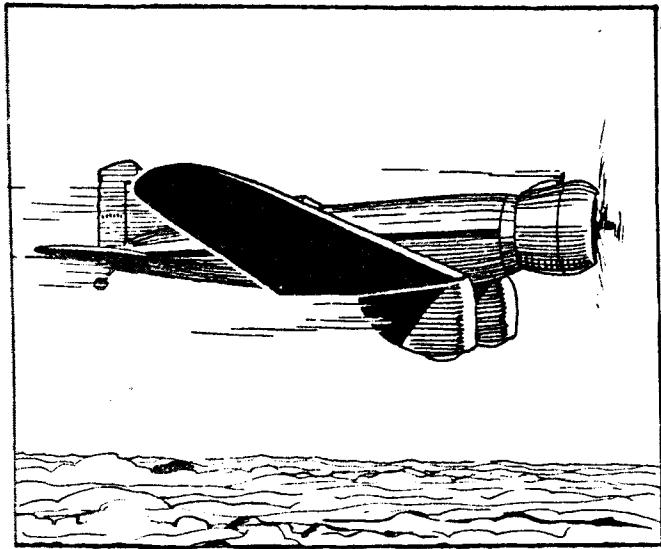


## THE LATEST AERIAL BOMB—AND THE FIRST

ONE ton is the weight of the huge modern air bombs which tower twice as high as a man, and one of them can destroy a small town! Before this messenger of ruin is released from the bottom of the bomber which carries it, special bomb sights that figure altitude, speed, drift, and direction are brought into play. Various kinds of explosive are used, depending on the kind of destruction required. By using different cases and timing devices, the bomb, more

over, can be made to penetrate farther within the target before exploding.

In contrast, let us consider the U. S. Army's first aerial bomb produced in 1910. Consisting of a load of explosive in a pear-shaped metal container, this bomb weighed only 15 lbs. It was carried in the Army's first plane, one of the early Wright pushers. The bomber simply let loose with it when he figured he was over his target.



## THE LATEST NON-STOP TRANS-CONTINENTAL FLIGHT—AND THE FIRST

WHEN Howard Hughes' Northrop Gamma landed at Newark on January 14 of this year, a new non-stop trans-continental record of 9 hr., 27 min., and 10 sec. was chalked up. Hughes covered the 2,490 miles from Burbank Airport, Calif., at an average speed of 263 m.p.h., doing most of his flying in the neighborhood of 18,000 feet. Though designed for a 700-h.p. engine, Hughes' ship used a 925-h.p. Wright "Cyclone" power plant for this trip.

By comparison, let's hark back to May 2, 1923 when the first non-stop coast-to-coast flight was completed. In this memorable hop, the ship was a re-built T-2 Fokker Army Air Service transport powered with a 400-h.p. Liberty, and the pilots were Lieuts. John A. Macready and Oakley G. Kelly. It took them 26 hr., 50 min. to reach Rockwell Field, San Diego, after leaving Roosevelt Field, L. I. They figured their average speed a bit better than 100 m.p.h.

## HOW TO BEAT TOM HALLMAN

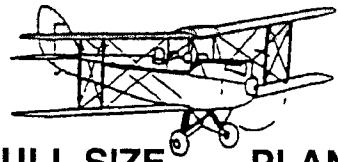
By David Mitchell

I sat in my shop the other night, nursing a fifth of chilled gin, repairing my fleet and licking my wounds after the Non-Nats in Geneseo. Having scored a couple of third-place finishes, I was trying to make myself feel better, reminding myself that the level of competition in which I was flying was pretty high, and that ANY finish in the top three was cause for celebration. But a hollow voice kept sounding in my head, like a vinyl record skipping, like a drum beating in the dead of night. It whispered to me: "Beat Tom Hallman".

I know, I know. Lots of you have been at this game for YEARS, and maybe you have just resigned yourself to always finishing behind T.H., and maybe you have not. You watch him, year after year, raking in all those awards at the banquet, and I do believe that most of us admire him. Now that he is over fifty, we may even respect him. But, by gum, I have decided to DO something about his domination of our sport. Following are four things that you can do to Beat Tom Hallman. I intend to try them all. Wish me luck.

1. **Build Reasonable Airplanes.** Don't let Tom fool you with all his fancy Bleriot canards and such. What does he win with, day in and day out? Cubs. Cessnas. Honest, workaday American lightplanes. Oh yes, you will hear Tom talk about building rubber power Dornier DOX's and such, and the Waterman Arrowbile is certainly nice looking, but these are ruses intended to draw you down the garden path of irrational projects, thinking you have to one-up him by building a Caproni Flying Houseboat, while he builds a Piper Tri-Pacer and prepares to clean up.
2. **Avoid Making Mistakes.** This one seems like a no-brainer, but you have to realize that even the tiniest error can do you in when you are up against T.H. I will give you an example. I was involved in a fly-off with Tom, vying for second place in Golden Age Civil at Geneseo. Tom won, and I was at a loss as to why—it was pretty hard to think what I could have done any better. Fortunately, Tom had ordered one of his minions to shoot a video of the contest, which he later sent to me (see #3 below). It took me several viewings of the footage before I realized that I had *launched the plane directly into the ground*. This is precisely the sort of advantage that you cannot afford to hand to him.
3. **Avoid looking at Tom's Videos and Pictures.** One of T.H.'s favorite demoralizing techniques is to send out pictures and videos of his beautiful airplanes, flying up a storm, to anyone with an internet connection that he can reach. Beware! He is trying to sap your will to compete against him! Remember that he makes his living as a visual artist, and visual artists are by nature subversive. There is no telling what kind of subliminal messages he may wind be introducing the motor into backwards your brain. It is true that occasionally he will slip up and allow valuable information to appear in these images (see #2 above), but you must always be on your guard for the corrosive effects of his propaganda. I recommend that you view his postings only in the company of another modeler, preferably one who is disinterested in the event for which the model shown is intended.
4. **Steal his White Sparkly Glove.** T.H. cannot function at his peak without his white sparkly glove. This is a fact, though it is little known. It is rumored that he received the glove as a gift from Michael Jackson for showing the disgraced pop star's plastic surgeon how to cover a compound curve using the wet tissue technique, but this has not been substantiated. If true, however, it suggests that Hallman would have some difficulty in obtaining a new glove should the current one be, ah, lost.

There you have it, four valuable techniques for your toolbox. Next: **How to Beat Chris Starleaf.**



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Indianapolis, In. 46227.

## THE GOLDEN AGE

by  
Fran Ptasziewicz

Towards the end of the "Golden Age", in the late 1930's and just before the beginning of what would eventually be called the "War Years", in aviation parlance and history. There appeared a few unusual aircraft configurations, which various designers thought may help in the defense of their country, at a time when a second world war was appearing on the horizon. However, many people in various facets of government, particularly those in the aviation departments or bureau's of their country's, thought war was a long way off and hopefully not to be realized.

One such unusual design was the Arsenal-Delanne fighter also called the Delanne Cannon Plane.

This was a multi-seat fighter that differed radically from the present fleet of fighter aircraft in service among the European powers at that time.

This Delanne design was actually a tandem or duo-mono monoplane. The front wing was a gull-type and slightly higher than the rear surface, which featured considerable sweepback and dihedral. The rear wing which took the place of the stabilizer also had twin-rudders mounted on the tips of this rear wing. Thus, these two wings provided ample wing area without excessive wing-span.

The airplane was powered with a liquid-cooled engine, the 860hp Hispano and the reported top speed was estimated to have been in excess of 350 miles per hour.

For armament the airplane carried two 12.7 caliber machine guns in the wing firing just outside of the propeller arc, also a 20mm cannon firing thru the engine shaft. There was an electric turret mounted in the aft end of the fuselage which also featured a cannon although some reports indicated the use of multiple rifle caliber type guns. This armament was to be used against large bomber formations.

Designer, Maurice Henri Delanne, had sought to interest the French Aviation Ministry in the production of the design following successfull testing of two prototype machines.

However, bureaucratic wrangling delayed any decisions until it was too late. The war which many hoped would not happen had begun.

As the German army was moving into France, Delanne moved his two prototypes into the countryside where he concealed them and hoped to utilize them as the nucleus of a small air force for the Free-French group which was attempting to form and fight the German advance.

Alas, it was too little too late.

With the fall of France, Delanne was forced to destroy his two airplanes rather than let them fall into enemy hands. For this he was incarcerated by the enemy.

After spending some time in a German prison he was released and forced to work on Germany's Messerschmitt ME-262 program.

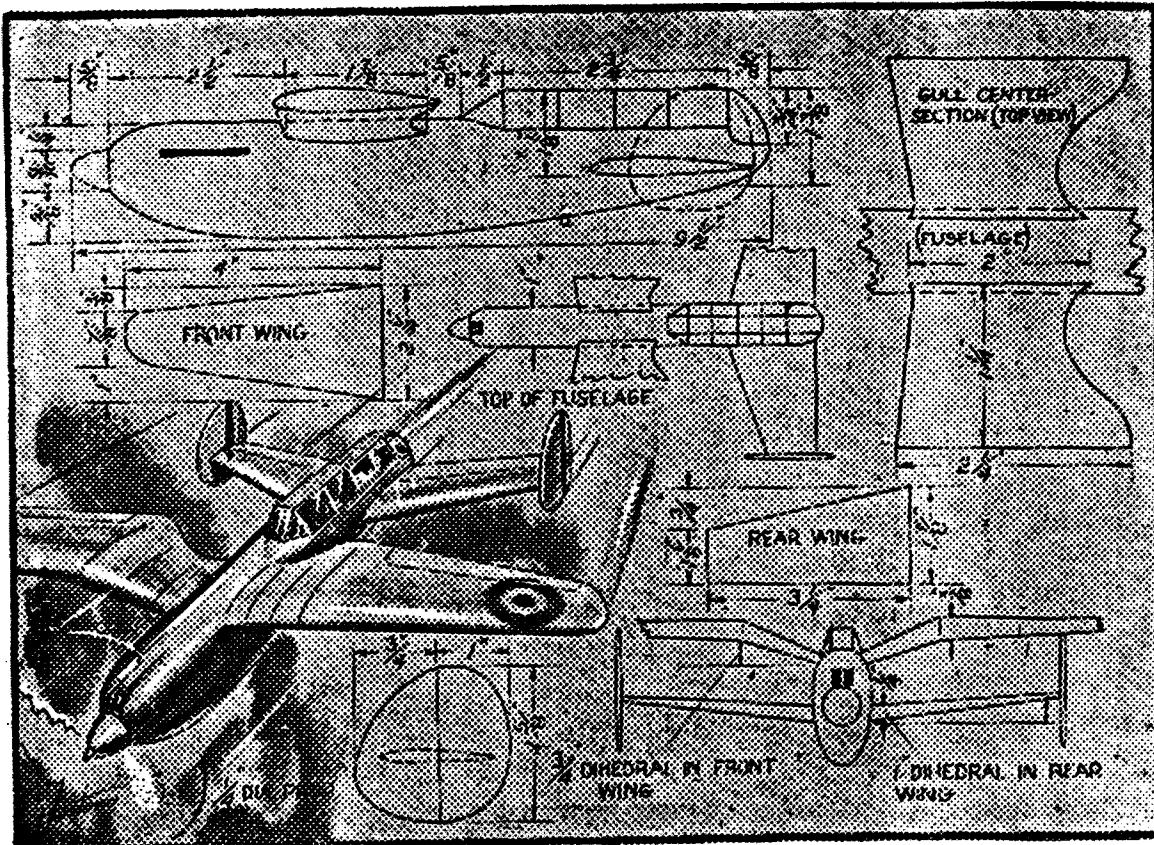
Following the war, he resumed his work with the Duo-Mono designs, however there seemed to be little interest in the configuration, although he persisted and another sport version of the design was built and flown but engendered little enthusiasm in the aviation fraternity of that time.

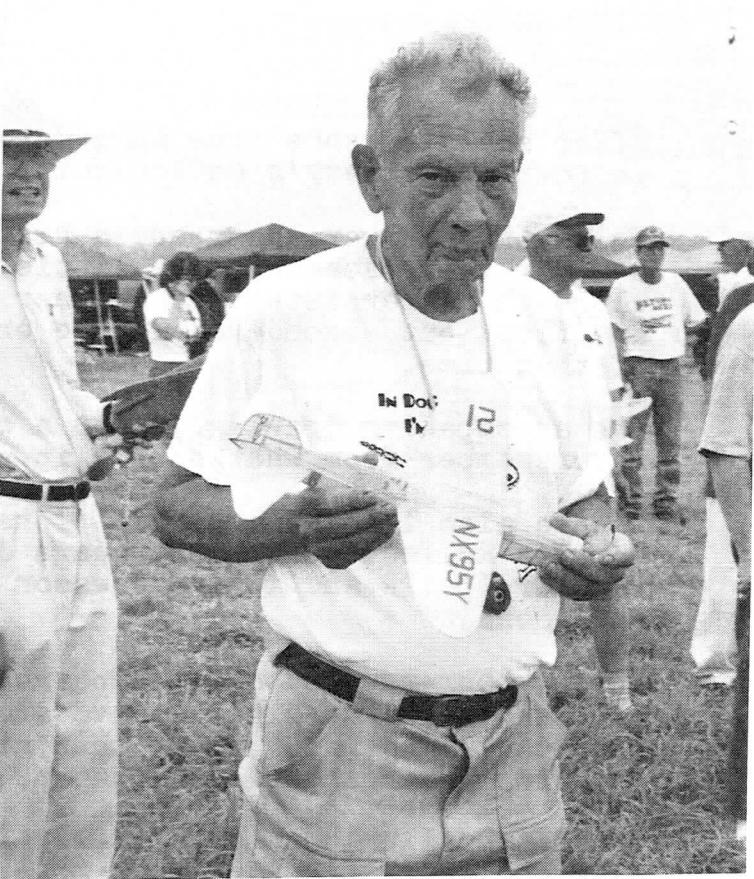
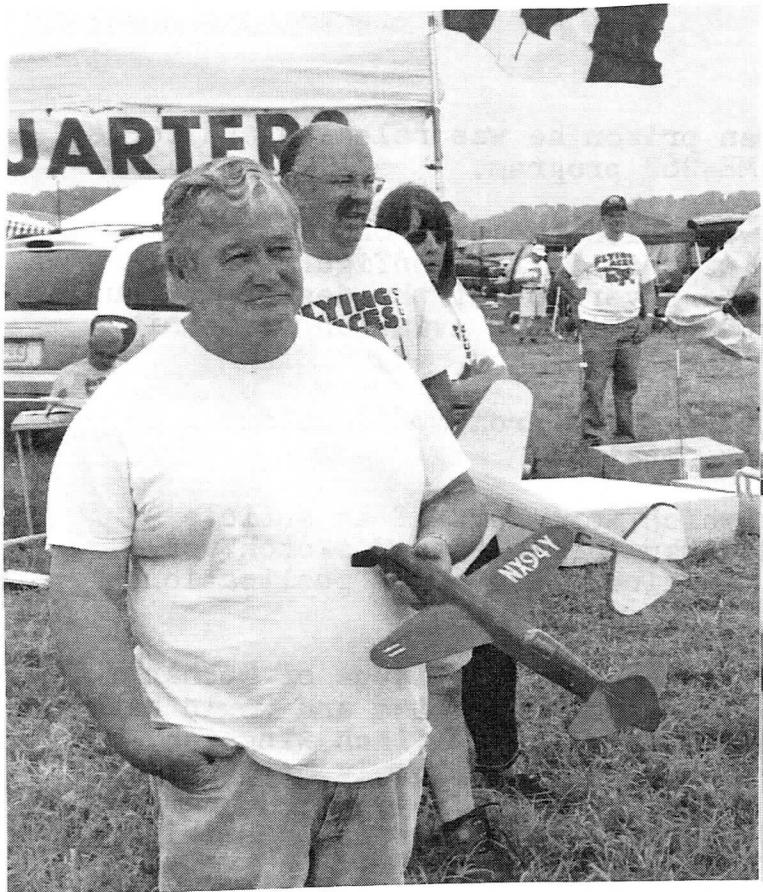
The accompanying drawing is for a solid model from my files and I do not remember from what source it was obtained.

I have also located a set of plans which were part of an article by Douglas Rolfe who for many years did many articles and sketch work for Air Trails and its successor magazines plus other publications and books.

This rubber-powered model appeared in the May 1939 issue of Mechanix Illustrated. The plans I have are less than page size and would have to be enlarged which would then give the model a 21 inch wingspan and an overall length of 16 inches as indicated dimensionally on the plan.

I believe Allen Hunt or possibly other plan suppliers may possibly have full size plans of this model.





Photos by Fred Wunsche; Top left, Dan Kane and his Mr. Smoothie, right, Bill Henn and his Chambermaid. Bottom left is Charlie Sauter and the Keith-Rider and on the right is Ed Pelatowski with his Folkerts SK-3 "Jupiter".

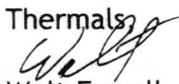


Hi Lin,

## AIR MAIL

Enclosed are my dues...sorry they are a bit late. I wanted to comment briefly on John Koptonak's article on trimming airplanes. I used to fly with John when I lived in Connecticut and was introduced to this method many years ago. It has served me well. One of the big advantages of trimming a scale plane this way is that you start out without the weight of the prop and motor (often 30% of the total), so your ship flies slower and is less likely to be damaged when you are beginning to trim. It is important to be sure and do repeated glides so you can tell what the plane really wants to do. If you can get some additional height for the glide phase, it will really help. I have a deck on the back of my house that I use to launch planes from but finding a small hill or incline would work too. Small problems that you see in the glide may actually get worse as the plane is put up to speed under power (the plane will be heavier and flying faster) so it is important to look carefully at any tendency to spin right or left. Many thanks to John for such a clear detailed explanation. It has really helped me out over the years.

Thanks also to you and all the staff at FAC-GHQ for keeping the organization going.

Thermals  
  
Walt Farrell

## The untold story of the Japanese surrender

This is an untold story of the steps preceding the formal surrender of Japan, September 2, 1945, onboard the USS Missouri in Tokyo Bay. It leads up to this solemn and ceremonial event ending a war that consumed many lives, subjected so many to primitive and terrifying living conditions that left a multitude of human beings crippled in mind and body. The pending surrender was a catharsis to the world, but of more immediate consequence, a feeling of relief for those of us preparing for Operation Downfall, the invasion of the Japanese home islands. The bombing of Hiroshima on August 6 and the subsequent strike against Nagasaki on August 9 was the precursor to and the inducement to sue for peace unconditionally. The happening in Tokyo Bay did not suddenly materialize; it required planning and preparation between the warring parties and most importantly, communication with a belligerent Japan.

JAPANESE, From Page 6  
where we lost so many American lives. It was overpowering!! This airplane meant to us no more artillery and mortar barrages, no more malaria, dengue fever and typhus, no more water filled fox holes, but most of all, it meant no more violent deaths and maiming of human beings.

The Japanese peace plane made

one pass over the airfield with the escort planes in close haul and landed to the cheers and relief of



This specially-marked bomber carried Japanese envoys to an island near Okinawa in 1945. **Perry Pollins**

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## Ten-Step Trimming Process for Rubber Models

by John Koptonak

**Trimming** This is a topic that gets beaten to death and I'm sure that the method presented here will open a flood of comments. I will say this method has worked for me quite well for some time and allowed me to save many a model from trimming disaster. It can be used for any type of model from No-Cal to Jumbo Scale. The important thing to remember is not to skip any steps and to follow them carefully and patiently. Do not go on to the next step until you have met the requirements of that step. **THERE ARE NO SHORT-CUTS BUT THIS METHOD DOES WORK!**

There are two concerns with trimming that must be satisfied; CG and thrust line. The CG of the model must be located at the right location to provide stable flight and provide maximum aerodynamic efficiency. A CG that's too far forward spells loss of aerodynamic efficiency. A CG that's too far aft spells stability problems. The thrust line determines how the model will be pulled (or pushed) through the air. Many modelers try to juggle each of these two problems at the same time causing unnecessary trimming confusion. The trimming procedure presented separates the two variables and treats them individually. You first get the most efficient "glider" you can with components allowed for free flight stability, then power the "glider" and adjust the thrust line. It's actually nothing new. I hear it's basically the same method utilized by rubber scale modeler Mike Midkiff. This does have a few differences from other methods I've seen and allows a logical progression towards a trimmed, stable flying model.

We will assume that your model has been built straight and true. Take the time to check this. I won't go into details on how to do this, but make sure you have no warps. This method of trimming also assumes the model has the right amount of dihedral and that all flying surfaces are of adequate size but does have some leeway to compensate for this since it checks stability. Your model will also need a way to adjust the stabilizer incidence. Here's the steps for trimming. Each will be discussed in the text that follows.

### No-Nonsense Trimming

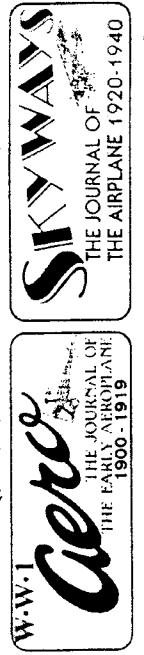
1. Locate CG.
2. Balance model without prop and motor to locate CG.
3. Glide model.
4. Adjust stabilizer for a smooth glide.
5. Check stability by launching into slight dive and climb.
6. Re-adjust CG for stability if necessary.
7. Mark location of the new CG (if changed in step 6).
8. Install prop/motor and re-balance to established CG.
9. Test fly under power.
10. Adjust flight pattern with thrust line.

There you have it. Ten easy steps to successful free flight. Perform each step and your model will fly. Let's look at each step in detail.

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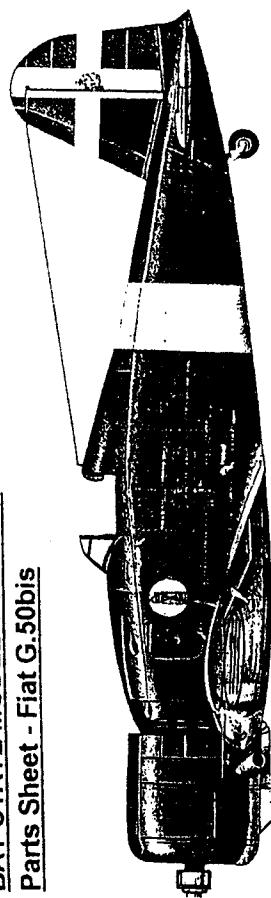
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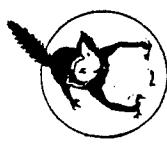


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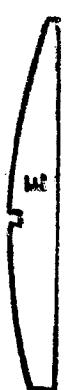
Parts Sheet - Fiat G.50bis



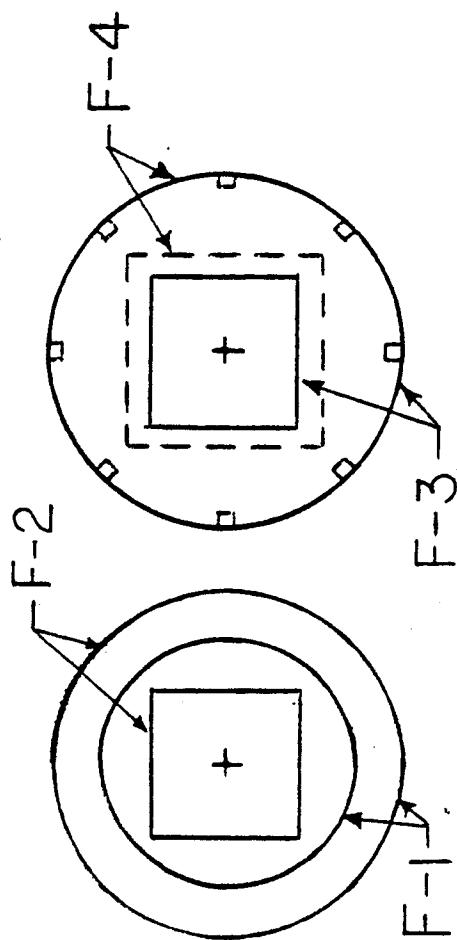
G.50bis with topsides  
in dark olive green.



Black Cat Emblem  
20 Gruppo C.T.

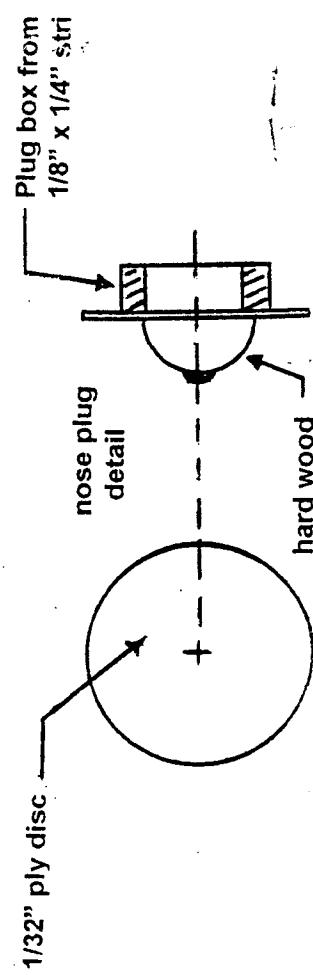
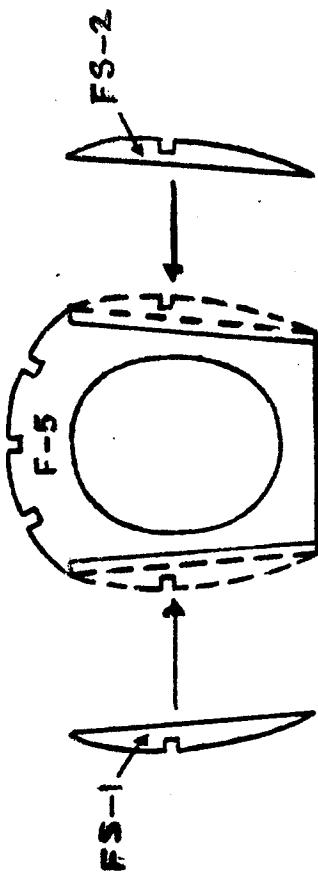


All wing ribs from 1/16" sheet

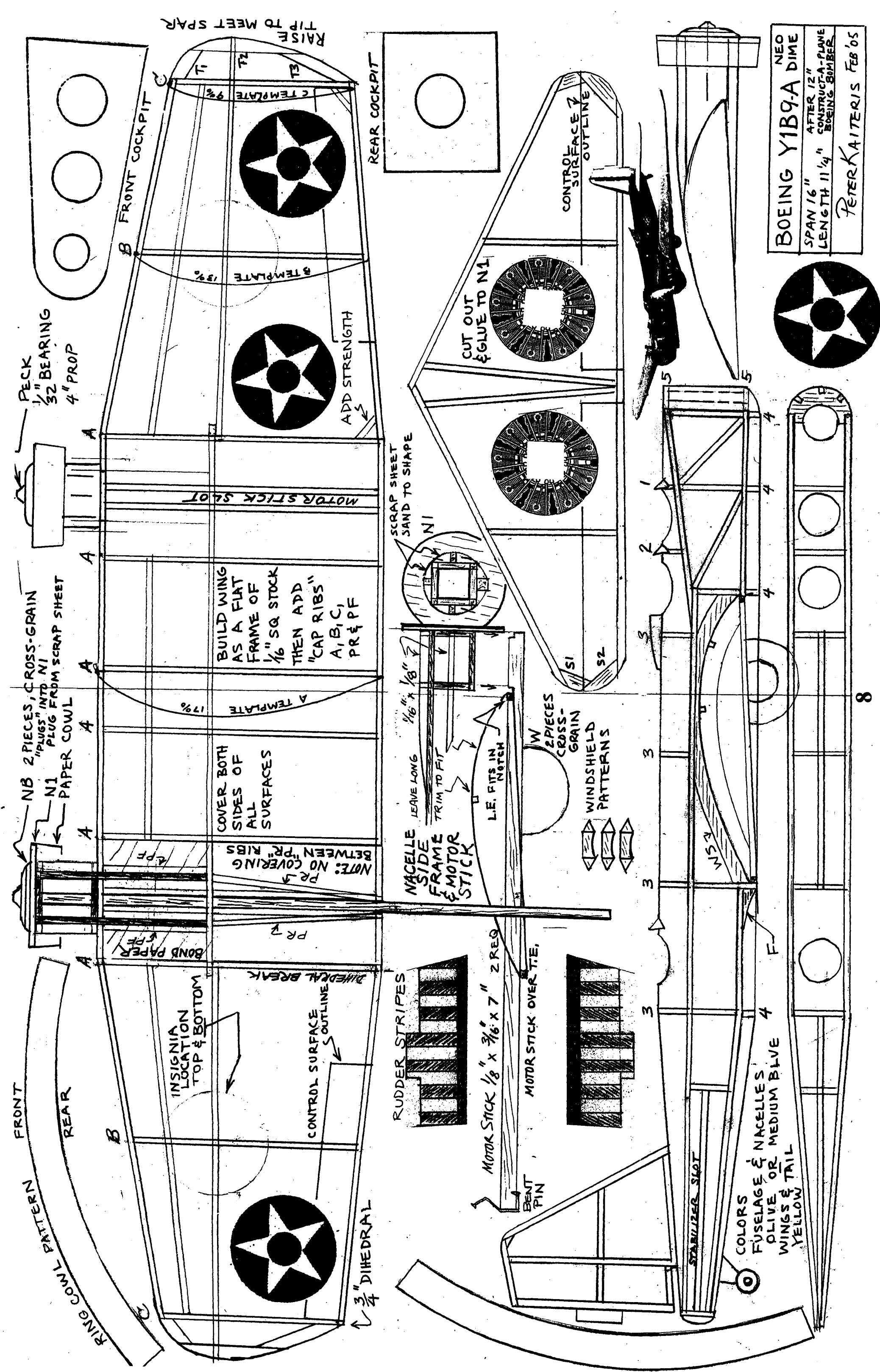


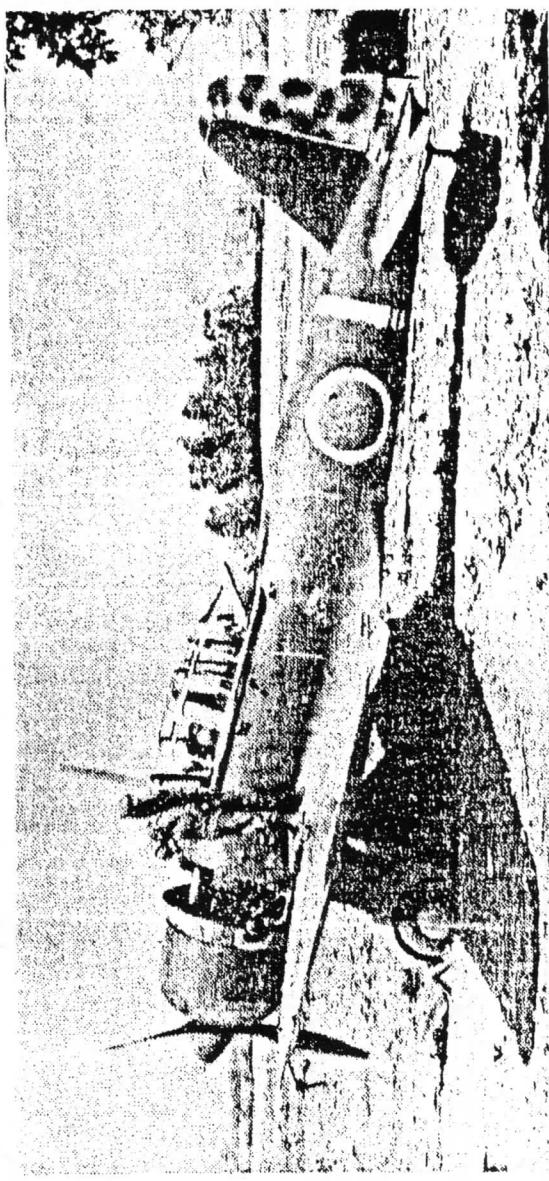
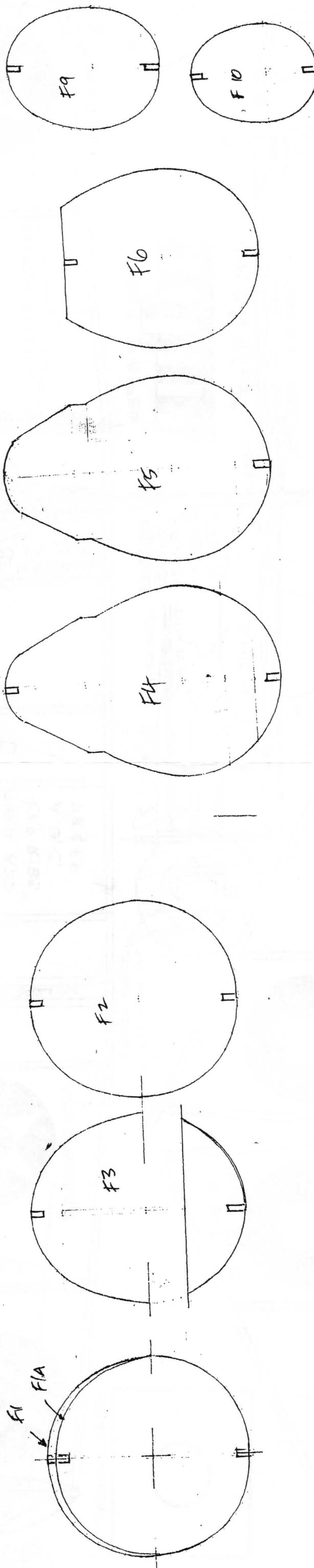
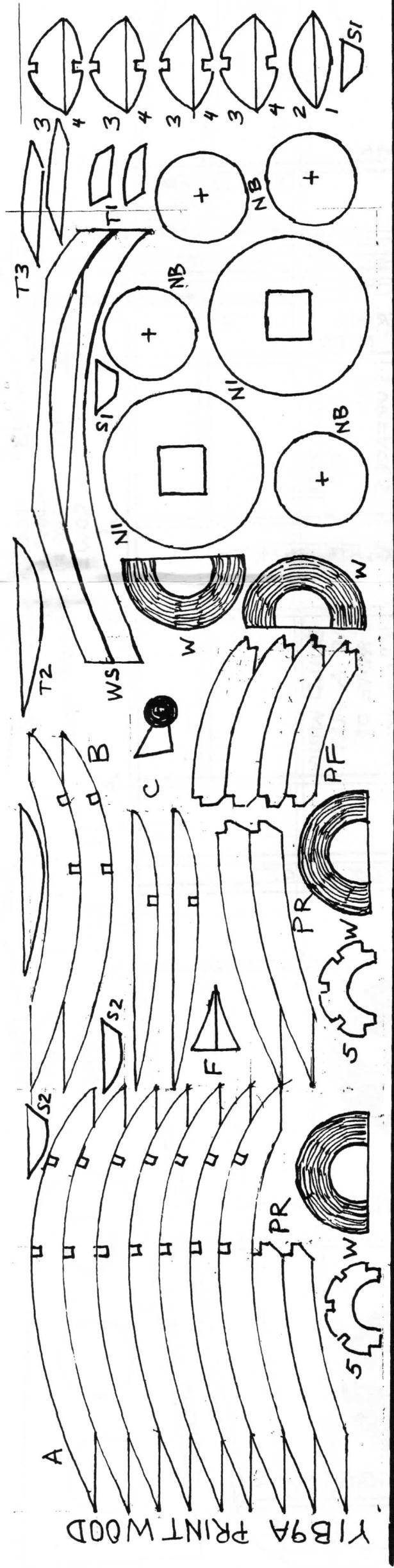
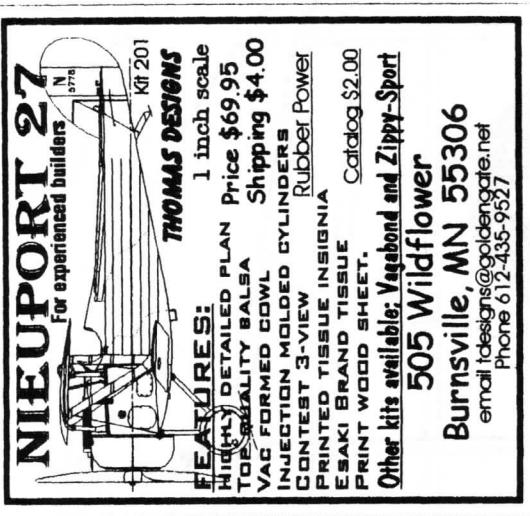
Formers F-1 & F-2 from 1/8" sheet.

All other formers from 1/16" sheet.

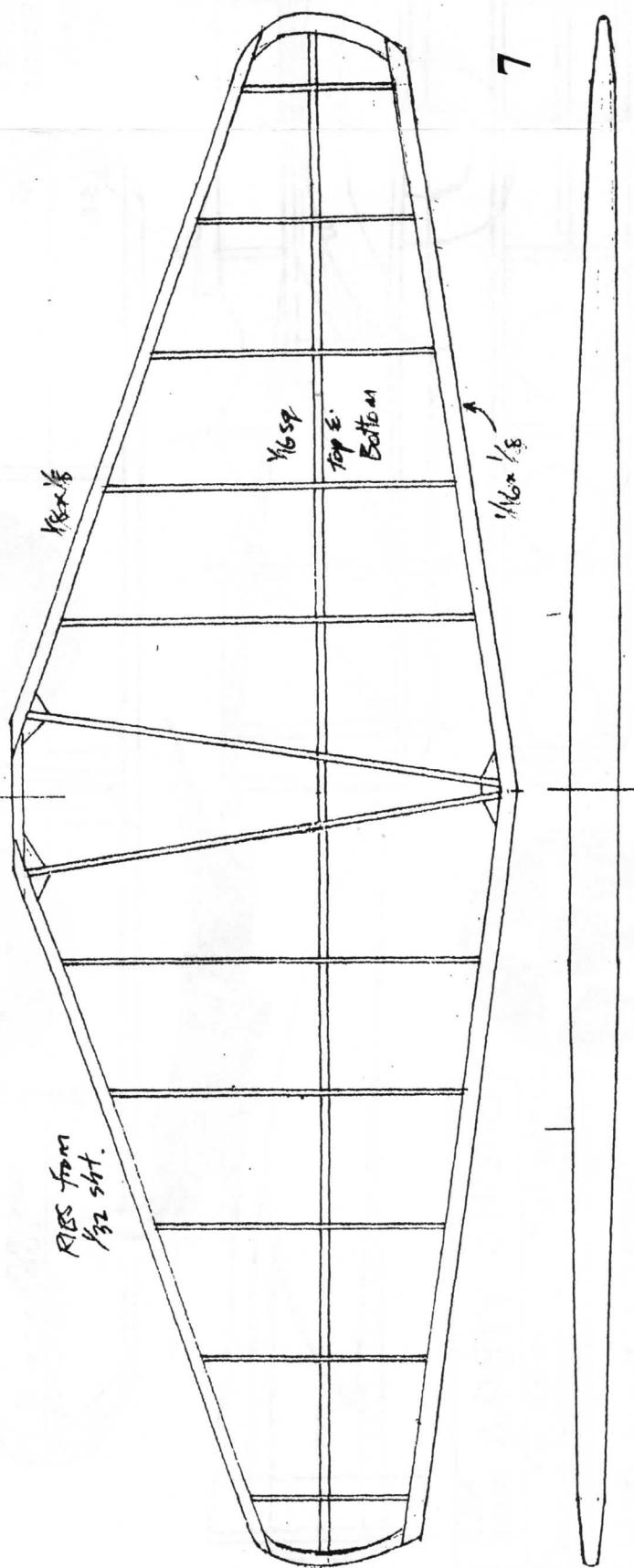


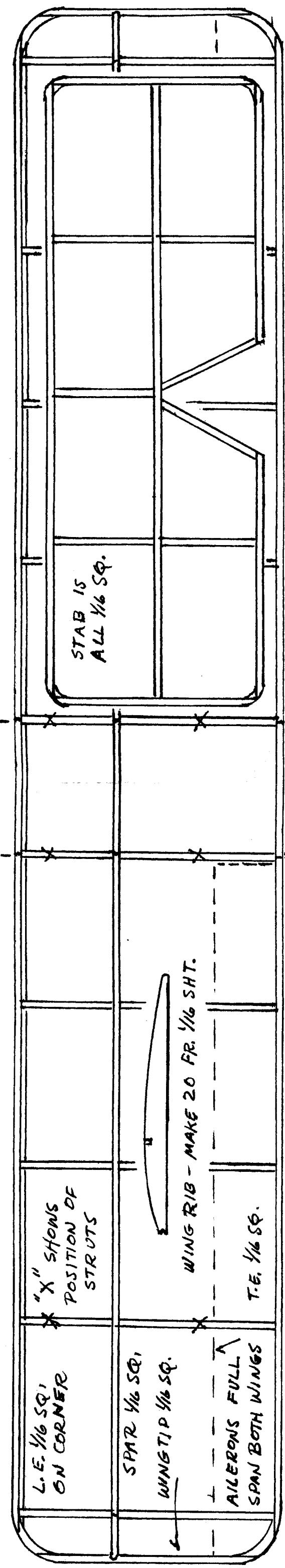
Factory fresh G.50bis in  
3-color camo scheme  
but no sqdn. markings.





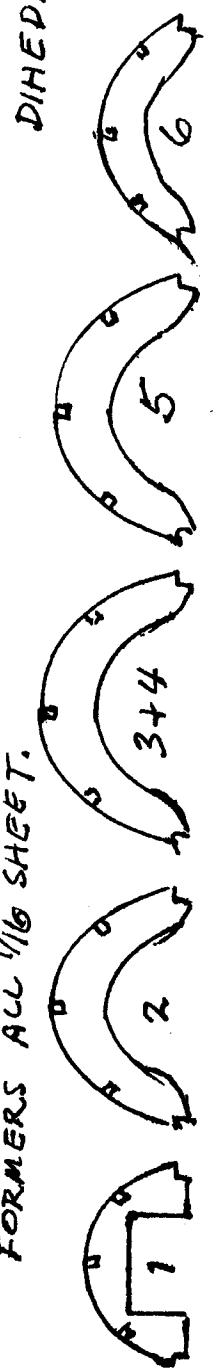
A Mitsubishi Ki-51 abandoned on Okinawa. (US Navy Department.)





UPPER AND LOWER WINGS ARE IDENTICAL.

DIHEDRAL BREAK



COLOR SCHEME  
PROBABLY ALL SILVER  
LATER REGISTRATION  
"G-EBHN"

PROPELLER WAS  
CHAIN-DRIVEN  
FROM FLAT-TWIN  
ENGINE, GEARED  
2 $\frac{1}{2}$ :1, PARTIALLY  
COWLED.

FILL FRONT OF NOSE  
TO FIT "PLUG".

THREAD

DIHEDRAL IS 5 $\frac{1}{8}$ "  
UNDER EACH TIP

RUDDER  
ALL  $\frac{1}{16}$  SQ.

STAB

6

5

4

3

2

1

6

5

4

3

2

1

CROSS PIECES  
SHOWN BY  
DASH LINES  
BOTTOM ONLY.

COCKPIT  
AREA BOND  
PAPER

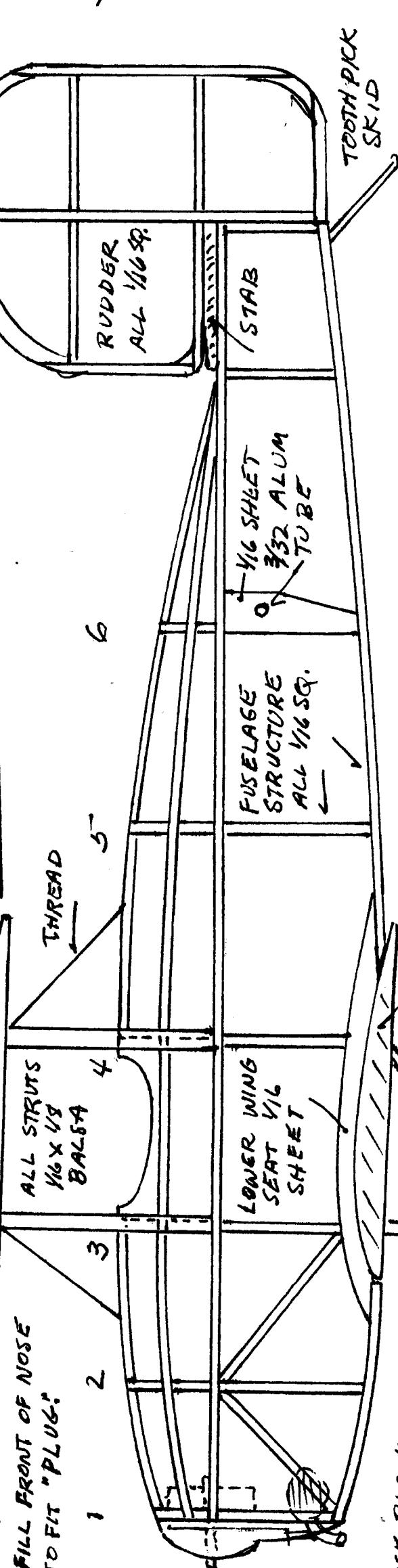
ALL STRUTS  
 $\frac{1}{16} \times \frac{1}{8}$   
BALSA

LOWER WING  
SEAT  $\frac{1}{16}$   
SHEET

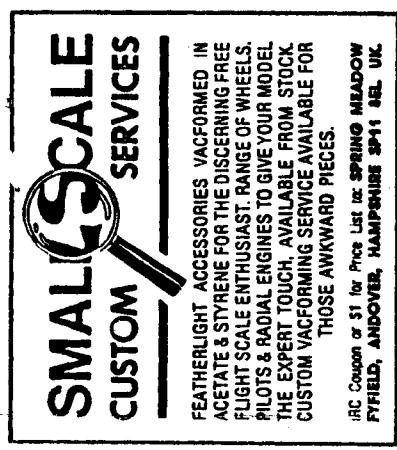
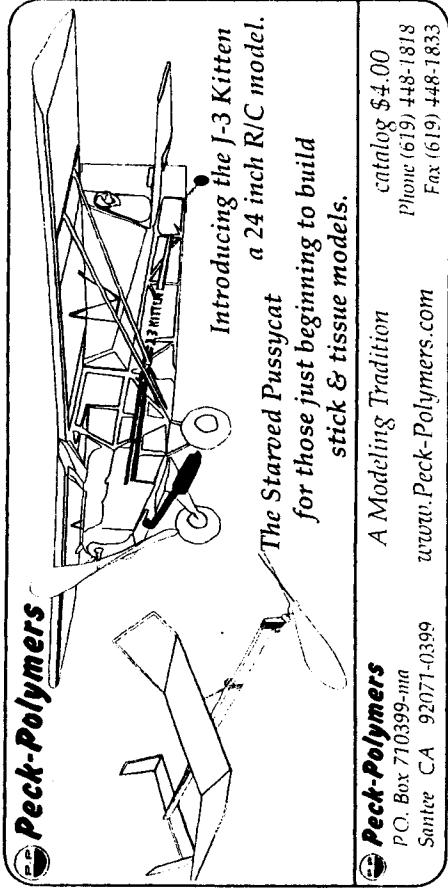
NOSE BLOCK  
FROM  $\frac{1}{4}$  SHT.  
BRASS TUBE  
BUSH. SEE  
DETAIL.

POSITION OF  
LOWER WING.  
NOTE INCIDENCE.

GRAY THREAD  
RIGGING.

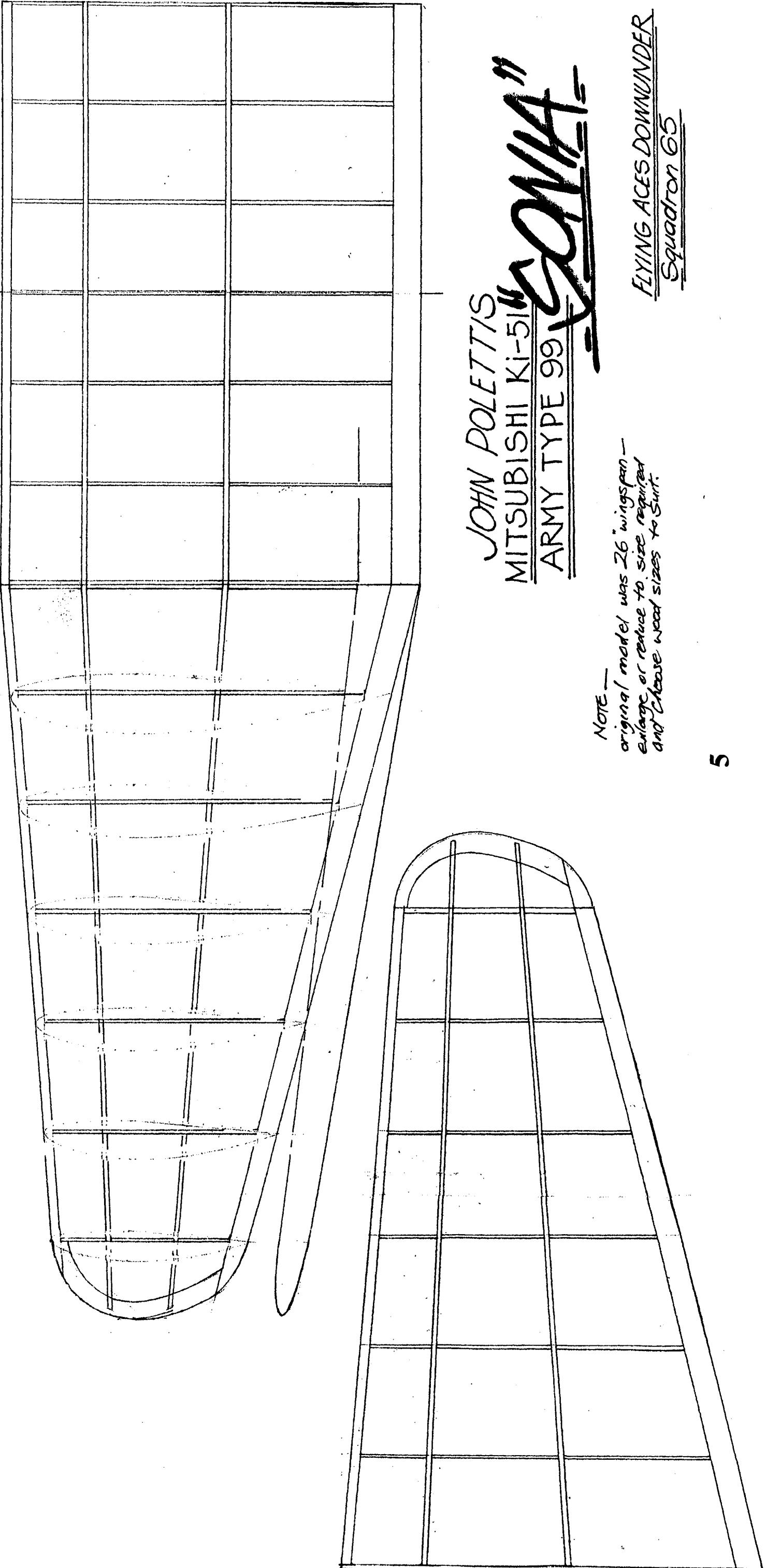


BUILD LANDING GEAR  
FROM  $\frac{1}{16}$ " DOWEL.  
WHEELS ARE 2 LAMS.  
 $\frac{1}{16}$  SHT. ALUM. TUBE  
BUSH. USE PIN FOR AXLE.

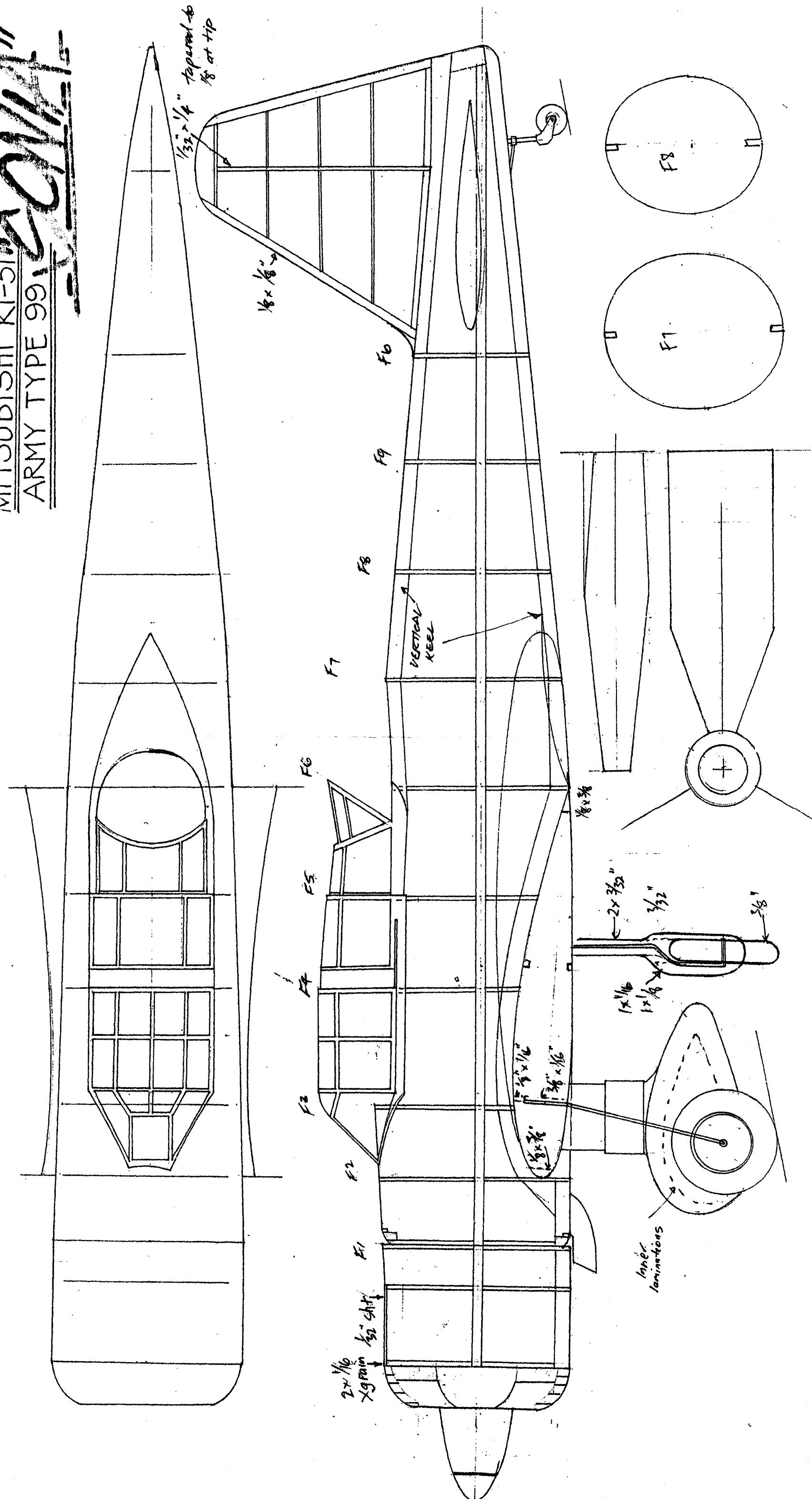


**Staggerwink Plans are STILL Available!**  
Special thanks to Clive Wienker for providing Eagle Squadron with Staggerwink plan packages.  
So what's a Staggerwink? The Staggerwink is a cute little Bostonian size sport model. Clive Wienker, who designed & built it, has allowed our club to sell the plan packages. The packages are outstanding in quality, and include a full-size drawing, four large photos, and a nice letter from Clive. The cost is \$7.00 if mailed in the U.S. If you want one, send \$7.00 to Al Likely, 9722 South 200, Kent WA 98031. All proceeds go to the Eagle Squadron Club Treasury.

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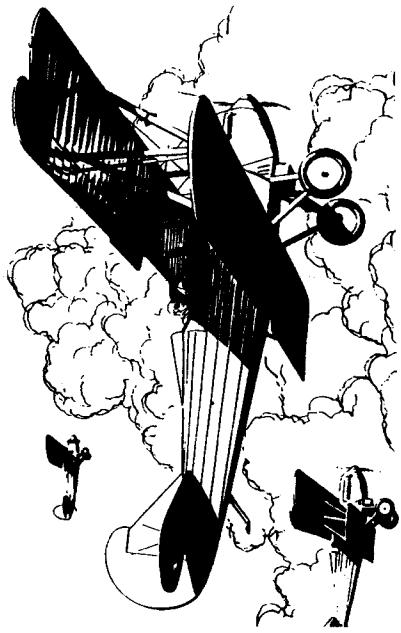
*John Dolett's*  
MITSUBISHI Ki-51  
ARMY TYPE 99



Old Time Rubber Cabin

Contestant	Model	Flt 1	Flt 2	Flt 3	Total	Mass-Launch fly-off Place
Ted Teach	Double Feature	120	120	120	360	1
Stu Cummins	Wren	120	120	120	360	2
Mark Rzadca	Miss Canada	120	120	120	360	3
Dan Driscoll	Wren	120	120	120	360	
Geo. White	Wren	120	120	120	360	(n/a for fly-off)
Mike Zand	Victory	82	117	84	283	
Geo. Lewis	Miss Canada	98	98	67	263	*
Jack Tisnai	Hugelot	105				105

## FAC OUTDOOR CHAMPS



Embryo Endurance

Fit 1	Fit 2	Fit 3	Bonus	Total	Place
120	120	120	9	369	1
120	118	95	9	342	2
47	120	68	9	301	3

FAC Dime Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Bonus	Total	Place
Jim Miller	Martin MO-1	70	120	83	15	288	1
Stu Weekerly	Fokker D-7	54	120	67	45	286	2
Dan Kane	D.H. Tiger Moth	78	64	57	45	244	3
Wally Farrell	Arado	75	61	65	30	231	
Wally Farrell	Curtiss Robin	108	66	47	0	221	
Mark Rzadca	Great Lakes	58	65	49	45	217	
Mark Rzadca	Arado 96	44	58	75	30	207	
Dan Driscoll	Boeing P-12E	42	64	51	45	202	
J.C. Ruppert	Arado	89	58	50	30	197	
Geo. White	Fairchild 45	61	44	58	30	193	
John Houck	Curtiss SBC-4	44	57	47	45	192	
Bruce Finley	Martin MO-1	59	54	62	15	190	
Les Burdsal	ME M20-B	52	57	53	0	162	
Jack Moses	Curtiss Robin	45	63	48	0	156	
Stew Myers	Ryan SC Cabin	30	42	37	30	139	
Pres Bruning	Arado	32	33	20	30	115	
Norm Becker	Monocoupe 110	59	*	*	0	59	
Phil Cox	Heinkel 113	39	*	*	10	49	
Jack Moses	Arado	29	*	*	10	39	
Bob Isaacs	Stinson 105	29	*	*	0	29	

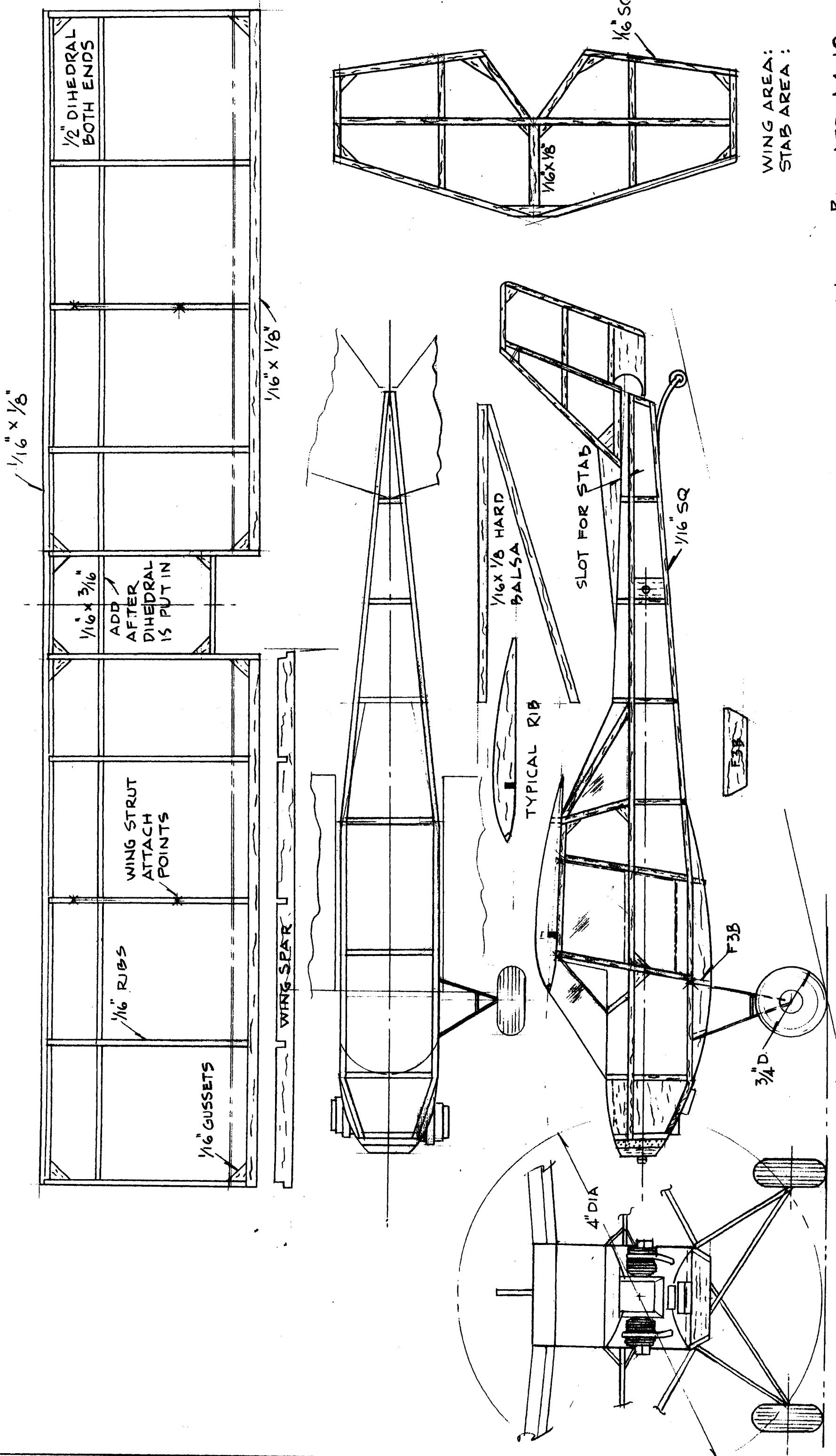
WW-II Mass Launch

Fac Peanut Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale Bonus	Total P.
Jim Miller	Fokker D-7	120	*	*	56	153.5
John Houck	BeBe Jodel	95	*	*	56	142.25
Bob Isaacs	Chambermaid	93	*	*	56	138.75
Pres Bruning	Arado 198	62	84	50	58	135
Walt Farrell	Waterman	70	68	67	57	125
Mike Isermann	Chambermaid	63	48	57	58	124.5
Bruce Finley	Heinkel 1077	45	57	*	61	123
Mike Isermann	Helio Stallion	49	66	*	58	121
Stu Weekerly	Caudron 460	51	*	*	56	117
Jack Tisnai	Neiuport 17C	43	40	*	58	116
Paul Boyanowski	Akron Funk	52	36	43	60	112
Don Lang	IS-4	45	40	47	56	108
Michael Zand	Adreasen	27	*	*	56	98
All Backstrom	Lemberger	30	*	*	47	30

Fac Special Junior Award - John Kane

Vic Didelot Trophy = Chris Starleaf



## FAC Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale	Bonus	Best	Total	Place
Chris Starleaf	Dash-8-300	73	120	60.5	25	82.5	168	1	
Bob Bojanowski	F-7F Tigercat	75	*	61.5	30	67.5	159	2	
Jack McGillivray	SE-5 Replica	90	120	*	60.5	15	82.5	158	3
Vance Gilbert	D.H. Flamingo	48	77	61	54.5	30	68.5	153	
Vance Gilbert	Westland Limosine	93	73	94	61.5	15	76	152.5	
Mike Midkiff	Shinden	66	77	*	61.5	20	68.5	150	
Dave Rees	CANT	47	55	51	62.5	30	55	147.5	
Pres Bruning	FM-1 Pete	44	74	57	54.5	25	67	146.5	
Phil Cox	Fleet 2	116	*	*	61.5	15	82.5	145.5	
Jack Tisnai	Hawker Fury	79	*	*	60.5	15	69.5	145	
Dave Rees	Fox Moth	56	58	67	61.5	15	63.5	140	
Mike Midkiff	H/B W-19	52	*	*	61.5	25	52	138.5	
Rich Miller	Wet Wot	20	29	53	59.5	25	53	137.5	
Jim Miller	Wet Wot	71	53	45	47	25	65.5	137.5	
Jack Moses	P-51A	43	94	*	50	10	76	136	
Rich Adams	XP-54	49	67	52	56.5	15	63.5	135	
Paul Boyanowski	Hanover CL-IIIa	76	40	77	62.5	15	68.5	132.5	
Mike Isermann	BV P-193	52	*	*	62.5	15	52	129.5	
Juanita Reichel	Piper Clipper	120	*	*	44	0	82.5	126.5	
Pete Azure	Swiss 3603	59	57	*	56.5	10	59	125.5	
Pres Bruning	Curtiss XP-55	43	56	*	49.5	20	56	125.5	
C. Hill	Tony	47	48	*	58	50.5	10	58	
Al Backstrom	Fleet 2	51	33	*	46	15	51	112	
J. Blair	Aeronca LB	29	36	*	59.5	10	36	105.5	
Pete Azure	Heinkel H-100D	39	45	45	46	10	45	101	
Rich Adams	Jenny	29	*	*	55.5	15	29	99.5	
Charles Schobloher	Cessna C-34	25	25	*	50	0	25	75	

## Jumbo Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale	Bonus	Best	Total	Place
Dave Rees	CANT	42	62	40	57	30	61	148	1
Vance Gilbert	Avia BH-25	82	80	88	58	15	74	147	2
Mike Midkiff	D.H. 9	70	79	*	57	15	69.5	141.5	3
Jack Moses	ME-20B	61	80	*	54	0	70	126	
Dan Kranis	Found 100	75	120	*	42	0	82.5	124.5	
Buzz Trabbic	Rearwin	72	78	92	47	0	75.5	122.5	
Bob Isaacs	A-20 Havoc	34	*	55	30	34	119		
Ed Bojan	Cougar	60	59	58	51	0	60	111	
Phil Cox	Luscombe	52	*	58	0	52	110		

## FAC Power Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale	Bonus	Best	Total	Place
Ted Alebone	Bristol F2B	120	*	*	59	15/1.5	82.5	143	1
Dave Rees	Colibri	120	*	*	59	10/1.0	82.5	142.5	2
Mike Midkiff	RAF FE-8	100	*	*	56	20/2.0	82.5	140.5	3
Mike Midkiff	PV-2	111	*	*	55	25/2.5	82.5	140	
Chris Starleaf	Lockheed 1-188	120	*	*	53	45/4.5	82.5	140	
Phil Cox	D.H. 6	120	*	*	53	15/1.5	82.5	137	
Chas. Hill	Junkers J-11	59	*	*	54	20/2.0	59	135	
Bob Isaacs	Sopwith Schneider	74	86	*	49	25/2.5	80.25	131.75	
Chas Hill	D.H. Hawk Moth	54	92	*	54	0	75.5	129.5	
Mel Roth	Waterman Gosling	63	120	*	44	3/0.3	82.5	126.8	
Ted Alebone	Hawker Hart	20	46	*	61	15/1.5	46	108.5	

## Golden Age Scale

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale	Bonus	Best	Total	Place
Herb Kothe	Stinson 125	120	120	120	120	144	1	147	1
Jack McGillivray	Cessna C-38	120	120	120	120	90	2	140	2
Dave Rees	Nicholas Beasley	110	100	119	119	329	*	140	3
Stu Cummins	Taylorcraft O-57	104	100	91	91	295			
Stu Weckerly	Stout 2AT	81	93	96	96	270			
Jack Moses	Fairchild 24	82	60	120	120	262			
Buzz Trabbic	Fairchild 24	75	94	88	88	257			
Wally Farrell	Interstate Cadet	75	94	120	120	225			
Paul Boyanowski	Nicholas Beasley	80	66	79	79	225			
John Houck	Waco ZGC-7	58	79	77	77	214			
Mike Zand	Fairchild 45	64	64	57	57	185			
Pres Bruning	Taylorcraft	45	63	51	51	155			
Pete Azure	Fokker Super "U"	46	64	*	*	110			
Dave Niedzielski	T-Craft Auster	63	44	*	*	107			
Mike Midkiff	Howard DGA	60	*	*	*	60			

## WW-I Mass Launch

Contestant	Model	Flt 1	Flt 2	Flt 3	Scale	Bonus	Best	Total	Place
Richard Miller	Fokker D-7	120	*	*	59	15/1.5	82.5	143	1
Bob Bojanowski	SE-5	120	*	*	59	10/1.0	82.5	142.5	2
Jack Tisnai	Nieuport 28	100	*	*	56	20/2.0	82.5	140.5	3
Frank Rowsome	SE-5A	111	*	*	55	25/2.5	82.5	140	
Stu Weckerly	Grain Kitten	120	*	*	53	45/4.5	82.5	140	
Walt Farrell	Fokker D-7	120	*	*	53	15/1.5	82.5	137	
Dave Rees	Martinsyde Elephant	54	92	*	54	0	75.5	129.5	
Bob McClelland	Fokker D-7	74	86	*	49	25/2.5	80.25	131.75	
John Houck	SE-5	120	*	*	53	15/1.5	82.5	137	
Chris Starleaf	Fokker D-7	120	*	*	53	15/1.5	82.5	137	
Paul Boyanowski	Hannover Cl-IIa	120	*	*	53	15/1.5	82.5	137	
Mike Midkiff	Euler	120	*	*	53	15/1.5	82.5	137	
D.H. 9	Fokker D-8	120	*	*	5				