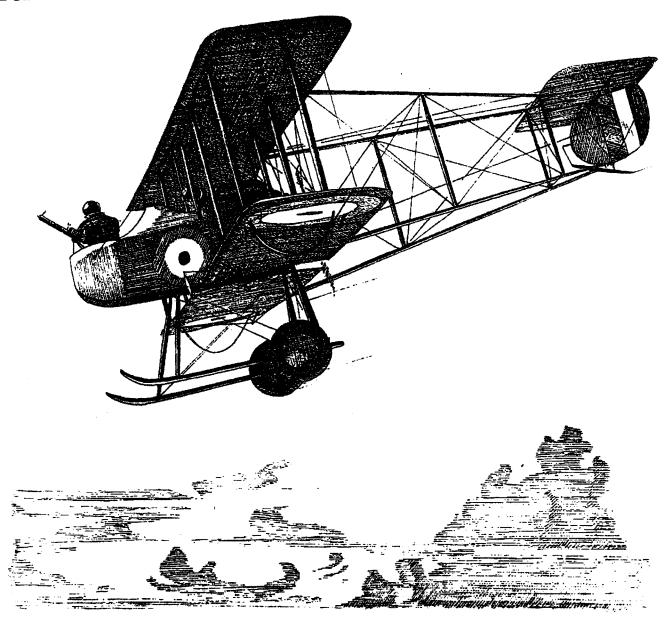
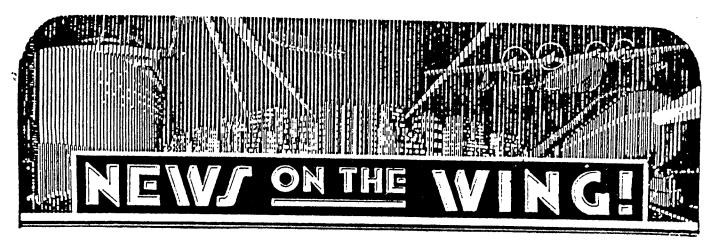
# FINALIS JACKS

ISSUE #211-137 MAY/JUNE 2003

**Club News** 





### **COVER STORY**

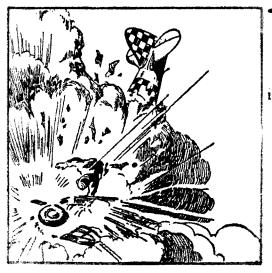
The Vickers Gun-Bus was designed as a two-seater pusher type, with the observer in the front seat. Its name was derived from the fact that it carried a movable machine gun that was worked from the front cockpit, and it was the first two-seater to be so armed.

Produced in 1914 by Vickers Ltd., it was not until 1915 that this machine went to France. The first type of this aeroplane had a double-skid undercarriage. The Gun Bus was usually used for reconnaissance purposes.

The Germans were in the habit of confusing other machines, such as the F.E. and D.H.2, with the Vickers machines since they were very similar in construction. The power unit was a 100 h.p. Monosoupape Gnome engine.

The usual thanks go out to everyone who contributed to this issue. We really do appreciate your help in keeping this thing going! The plans for this one came from; Vought V-80 Corsair and the Piper Cub were in our files here at GHQ, Nate Sturman sends along another, the Tachikawa KI-9 and we have the Penguin from Florent Baecke, thanks, Skysters!

Let's start with the up-coming contest at Geneses, N.Y. on July 19 & 20. We will be staying in the Erie Hall dormitory this year. It is right next to Ontario dorm where we stayed last year, shouldn't be a problem to find it! Check in time at the dorms will be 11:00 am on Friday July 18th and check out time will be by noon on Monday July 21st. Meals at the college are as follows; Breakfast at 7:30 am till 8:30 am, and dinner at 6:00 pm till 7:00 pm. This includes breakfast on July 19--20--21 and dinner on July 18 and 19. Please get your entries in to GHQ as soon as possible. We are committed to the college for a certain number of rooms and if



# The FLYING ACES CLUB

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 comraderie is second nature to all who believe in the spirit of the FAC.

we don't fill those rooms we will be charged accordingly! Entries are really coming in very slow! We must have at least 100 contestants or we will lose money! So if you are planning on entering please get your entry in as soon as you can.

Event sponsors are always needed, so if you are interested please contact GHQ A.S.A.P. Anyone can sponsor, companies or individuals. Doesn't cost as much as you might think

Once again, vendor tables will not be available after June 30, 2003 during the scale judging.

If your bringing a Junior contestant with you please let us know so we can plan for them.

And now here is a first for the FAC. A wedding will take place right on the field during the contest! How about that? All in attendance are invited. See the announcement further on.

We recently received a question concerning the Dime Scale event from a couple of Clubsters. They want to know if the Psuedo Dime models can have a larger wingspan than the traditional Dimers since the rules for Psuedo doesn't state a span limit? This to all Balsa Benders; A Dime Scale model is still a Dimer! 16 inches!

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

Lin

Col. Lin Reichel, CinC, FAC



### WEDDING BELLS WILL BE RINGING



A first-time event will be taking place on the flying field in Geneseo, N.Y. on Saturday July 19, 2003.

All who are present at the contest are invited to the wedding of:

Daniel Kane and Carole Catledge

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 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 approximitly every other month. Please make checks payable to; "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



# THE GOLDEN AGE by Fran Ptaszkiewicz

Designed for use by small nations, the Vought V-80 had many advantages over larger fighting aircraft of the period. In addition to less initial cost than the big ships, the V-80 did not require as much money for its general upkeep.

Cruising range of this plane was twice that of most aircraft used in World War I. By substituting pontoons for wheels the ship could be used over water as well as over land. This made the V-80 practical for both Army and Navy use. Also a float type installation could be achieved by removing the wheel type gear and attaching a single float, sea gear and wing tip floats.

The number of unit parts in this design had been reduced to a minimum so that replacement of various components could be made easily. Where airports were few and far between and difficult to access, it was very hard to transport all of the spare parts that were required to effect necessary repairs.

If another war were to break out, fighting planes would be found to be much more important than they had been in World War I due to the improvements which had already been made since that time. The V-80 was fully equipped with machine guns and bomb racks so that it would be usefull in just such an emergency.

This plane, designated the V-80, had been developed to meet the conditions encountered by many foreign nations desiring air protection at a minimum cost. Small island nations whose budgets could not support an air force of large proportions were forced to purchase the type of airplane that would best meet many requirements. Mainly small field landings and takeoffs, low maintenance costs and still have a fighting capacity comparable to foreign aircraft.

For these reasons it was highly desirable for them to use single place and two place aircraft, which between them could cover the functions of bombing, pursuit, observation, attack and offensive as well as defensive fighting. Moreover, because of the widely scattered and for the most part inaccessible locations of airports, the transportation of spare parts becomes a problem and the interchangability of parts became a major question. Thus the quantity of spares had to be minimized. Also a maximum mobility of operating units necessitated a long cruising range and rugged structure for alighting on unfavorable terrain.

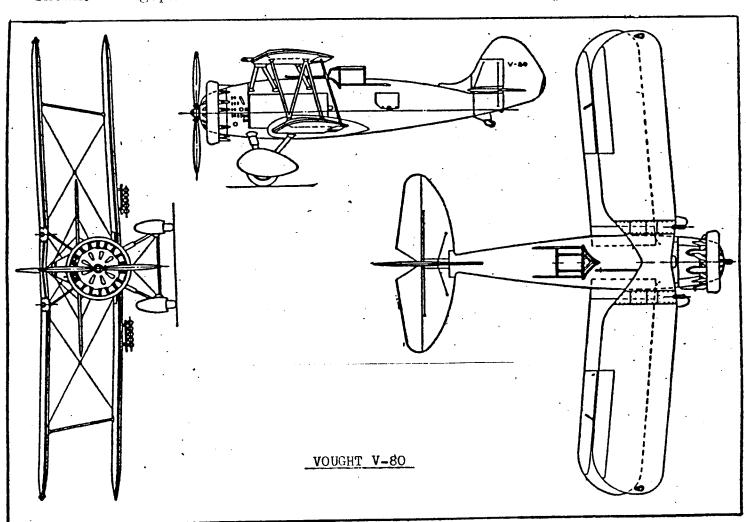
The governments of eight foreign countries which were then equipped with the larger Vought two-seater "Corsairs" as standard fighting equipment, would find an excellent and formidable weapon in adding the new V-80 to their forces. This model was a direct development of the original "Corsair" and used the same framework, fuselage, wings, tail, landing chassis as well as many other important items.

For armament, it carries four rapid-fire fixed machine guns as well as two emergency bomb racks, thus enabling the aircraft to perform as an attack or bombardment ship in addition to regular pursuit duties.

A smoothly streamlined ring encloses the engine, a Pratt & Whitney 700 horsepower "Hornet" radial. The gasoline capacity was 173 gallons, enough to carry the aircraft approximately 800 miles before descending to refuel. While this may have seemed to be a very short flight. Compared with the commercial aircraft of the transport type in operation at that time, it actually was not. When one considered that most high speed fighting aircraft due to their heavy armament had cruising ranges of less than 400 miles distance.

Maximum comfort was furnished for our pilot thru a transparent enclosure which surrounded the cockpit without obstructing his vision or control. All guns were directed forward and were located in the upper wing center section and on the fuselage. These latter two being synchronized to fire thru the propeller arc. With the incorporation of selector switches, any or all of the guns could be fired when the control stick trigger was pressed.

A rubber powered flying scale model of the Vought V-80 may be found in the June 1934 issue of Model Aircraft Engineer magazine. The design is by Virgil Sturiele and the plans are full size and have app parts shown. Wingspan of the model is 27 inches and the lenght is 20 inches.



IF YOU ARE COMING TO GENESEO FOR THE FAC NON-NATS AND ARE GOING TO ENTER THE DIME SCALE AND/OR FAC O.T. KIT SCALE EVENTS BE SURE TO BRING YOUR CONSTRUCTION PLANS WITH YOU. THEY MUST BE PRESENTED!





## **PHOTO PAGE**

Left column; Here is Ted Wales model of Miss Los Angeles. This model won the first FAC mass launch event. See story elsewhere.

The Hughes H-1 racer by Bob Bojanowski. This one has gear that retracts in air after launch! What do you do for landing Bob?

Here is a Curtiss P-40 by Dennis Osborne, nice looker, Dennis. Dennis's picture.

Right column; Fokker D-XIII by George Lewis. Should give you chance in Golden Age Military event George.

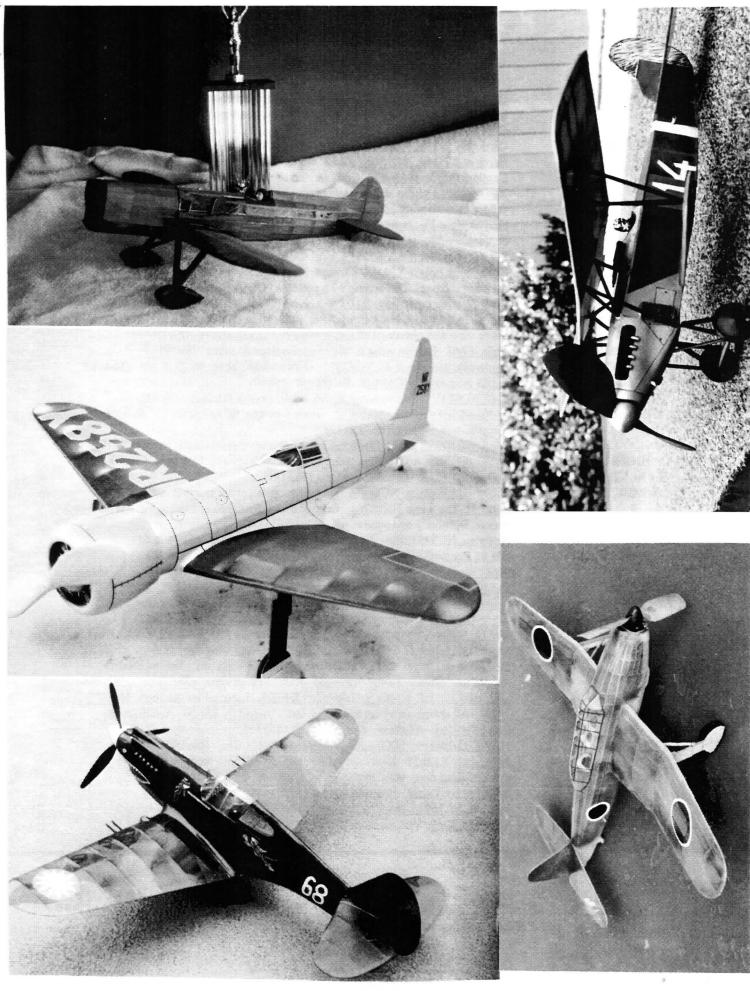
> Dave Dulaitus sent this photo of his Japanese "Grace". Should be a good performer also. Looks like She came from a Diels kit.

## FIRST MASS LAUNCH RACE EVENT

Ted Wales writes (along with a photo) about the very first mass launch race event ever held by the FAC. The enclosed photograph (see photo page), taken this April, pictures the "remains" of my Miss Los Angeles with which I won the very first mass launch race event thirty-one years ago in 1971. As you can see its flying days ended when a motor blew up (you should see the otherside!). The same can be said of me, since difficulty in walking keeps me from chasing models.

The little club started by Dave Stott and Bob Thompson gave us a lot of fun back then. The remarkable thing is that the, now greatly expanded, FAC is still a source of such good fun!

st is over on May 25th. Entries ed after May 27th will not be con-Send your times to; FAC-GHQ, dy Lane, Erie, Pa. 16506.		Time	89 sec. 83 " 61 " V. 59 " 52 " 44 " 44 "			Time	75 sec. 56 "	Time	Dordier Falke 06 sec. Westland Lysander 05 " 1!		Time	acer 132 sec.
er on May 2 May 27th wour times to;	EANUT	Plane	Lacey M-10 Andreason Cougar Wittman T.W. Farman Andreason Monocoupe Waco YKC	Waco SRE Lacey M-10	NO N	Plane	Cougar g Porterfield O-CAL	Plane	2	CAL	Plane	Wittman Racer
The contest is over on May 25th. Entries postmarked after May 27th will not be considered. Send your times to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.	OUTDOOR PEANUT Pilot Plane	Pilot	1. Gordon Roberts 2. Garry Hunter 3. Garry Hunter 4. Mike Zand 5. Ross Mayo 6. Mike Zand 7. Del Balunek 8. Del Balunek		FEANUL IND	Pilot	1. Dave Linstrum Cougs 2. Dick Klingenberg Porter OUTDOOR NO-CAL	Pilot	<ol> <li>Fran Ptaszkiewicz D</li> <li>Fran Ptaszkiewicz W</li> <li>Fran says, big wind!</li> </ol>	INDOOR NO-CAL	Pilot	1. Dave Linstrum



# WHAT COLOR WAS IT?

Part 16. By Dave Stott

### Continuing data from Skyways

WINSTEAD: 1926 Special, 2297, OX-5 One and only two open cockpit biplane. Red

fuselage and fin. Silver wings, stab, and cowl. Lettering white or silver.

Chrome spoke wheels. (Sk62)

ST. LOUIS: Cardinal C2-110, NC528N. Buff(?) with red trim. (SK36)

Cardinal C2-110, NC951B. Red & white. Detail of logo on fin. (Sk65) Cardinal Prototype, X422. Combination of red & silver. (SK44) XCG-5 Cargo glider. Blue fuselage except for upper section which was

yellow as were wing and tail. (SK36)

FORD: Flivver. Ford Flat twin, 3218. Dark blue fuselage, silver wings. Black registry

on wings, white on tail. White logo. (SK36)

ARUP FLYING WING: S-2, Continental A-40, R12894. All silver, black trim & reg. (SK41)

CAL. POLY. INST.: CP-2 "Miss Poly", X501M. Orange, blue & yellow patterns after a Berryloid

Ad paint scheme. Three-view with patterns. Only one built. (Sk40) CP-3 Warren taperwing. 110 HP Kinner, X10257. 1933 colors: Cream, chocolate brown, & black trim. After 1933, same colors with different pattern.

Three view and photos of all California Polytechnic planes. (Sk47)

MONOCOUPE: Velie, 6740. Orange wing & tail, black fuselage & struts. (Sk49)

ALEXANDER: Eaglerock, radial engine, NC439V. Maroon fuse., silver wings & tail. (Sk49)

CESSNA: C-165 Airmaster, NC19498. Bright red. (Sk49)

BIRD: C-K, NC914V. Yellow wings & tail, bright orange fuselage. (Sk49)
PITCAIRN: PA-6, NC548K, Super Mailwing. Black fuselage, fin and struts. Yellow

wings & stab. White trim. (Sk49)

PA-8, NC10751, Super Mailwing. Same as above except fin is yellow.(Sk49)

VOUGHT: <u>V-143, NR56V</u>, final config. Blue fuselage, rest yellow. One built. (Sk50)

KARI-KEEN: <u>Coupe, CF-ANR</u>. Green & orange. (Sk51)

ARROW: 1929 Sport Biplane, NC804M. Blue fuse. pale yellow wings & stab. (Sk51)

Sport M, low wing, NC18764. Only one with Menasco in line engine. Wheel

pants. Burgundy and yellow. (Sk61)

BUHL: Airsedan, NC8451, Packard Diesel radial. Black & gold. (Sk44 & 61)

De HAVILAND: DH 85 Leopard Moth, G-ACOJ. Silver and Green patterns. (Sk52)

Gipsy Moth, NC919DH. Yellow and black. (Sk60)

SPARTAN: C-3,NC705N. Blue & yellow patterns. (Sk52) & (Sk61)

REARWIN: Sportster, Ken-Royce, LV-X-210 (Argentinan). All yellow, black trim. (Sk52)

LINCOLN: AP, NC12553. Dark blue fuselage & fin. yellow wing & stab. (Sk53)

DOUGLAS: XB-19. Allison V3420 in line engines. All Weather Flying Center, USAAF in

late 1945. All silver with red tail, ailerons, nose and wing tips. Yellow stripe separating red nose. Yellow stripe inboard of red wing tips. Yellow chevron

on red fin. Front 1/3 of each nacelle yellow. Three view. (Sk54)

STEWART: M-2, two 300 HP Wright Whirlwinds. X493M. Later with drag rings, NC

493M. All cream with blue trim. Still later, owned by Abrams Aerial Survey

Co., NR493M. All silver. Only one built. (Sk55)

FLAGG: 1933 F-13 Biplane, NX13625. Yellow with black trim. One built. (Sk65)

JACKSON: 1934, A-2, X12875. Blue tinted aluminum overall with medium blue nose

trim and drag ring. Only one ever built. (Sk56 & Sk58)

TAYLOR: <u>E-2 Cub, NC12607</u>. Blue and silver. (Sk56)

J-2 Cub, NC16935, Continental A-40. Black & orange. (Sk62)

FIAT: AS-1 and AS-2 Various factory schemes given. (Sk58)

WANTED: Copies of early Phinias Pinkham stories. Matt Smytkowski, 22855 Schwerman Rd., Mundelein, Ill. 60060 Phone (847) 540-9246.

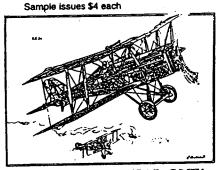
## GOLDEN AGE RACE PLANE COLORS AS PRESENTED IN SKYWAYS No. 41, BY JOHN SUNYAK

\*Colors observed by author

					COLOR							
MODEL	YEAR	ENGINE	SPAN	LENGTH	FUSELAGE & TAIL	WING	WING REG. NO./ COLOR	TAIL REG. NO./ COLOR	RACE NO./ COLOR	PILOT	LOGO	REMARKS
Folkerts SK-2*	1937	4 cyt. Menasco	16'	19'6"	Red w/ Aluminum Spinner	Red, Black Leading Edge	R283Y Black	R283Y Black	1 on top of left wing, Black	Roger Don Rae	Miss Detroit	
Folkerts SK-2	1938	4 cyl. Menasco	16'	19'6"	Red	Red, Black Leading Edge	R283Y Black	R283Y Black	11 Black	Gus Gotch	The Foo	
Folkerts SK-3*	1937	6 cyl. Menasco	16'8"	21'	Cream, Red Trim	Cream, Red Trim	R14899 Red Black 301; early 1937 R14889	R14899 Red; 14889 early 1937	301 Black	Rudy Kling	Jupiter Pride of Lemont Red & Black DX	Unpainted aluminum canopy after Greve qualifying race
Folkerts SK-4*	1938	6 cyl. Menasco	16'10"	22'11"	Red	Red	NX288Y Blue	NX288Y Blue	15 Blue, also on silver disk	Joe Jacobson		,
Folkerts SK-4*	1939	6 cyl. Menasco	16'10"	22'11"	Red	Red	NX288Y Blue	NX288Y Blue	15 Blue	Del Bush		Revised vertical stab. & rudder
Floyd Bean	1938 1939	6 cyl. Menasco	13'10%	19'9'	Yellow Brown Trim	Yellow Brown Trim	NX97Y Brown	NX97Y Brown	22? Brown	Bob Bean		Red pin stripe separating scallops
Gee Bee Model Y	1931	P&W	30'	21'	Red & White	Red & White	NR11049 Red	NR11049 Red	54 Red	Maude Tait Bob Hail	Filaloola Bird (a good luck charm)	
Gee Bee Model Y	1933	Lycoming, then Wright	30'	21'	Red & White	Red & White	NR718Y Red	NR718Y Red	7 Red	Florence Klingensmith		Gee Bee Z had red (?) or brown (?) pin stripe separating main
Gee Bee Model Z*	1931	P&W	23'6"	15'1"	Black & Yellow	Black & Yellow	NR77Y Black	NR77Y Black	4 Black	Lowell Bayles	City of Springfield	colors, other Gee Bees had dark blue (?) or
Gee Bee R-1*	1932	P&W	25'	17'9"	Red & White	Red & White	NR2100 Red	NR2100 Red	11 Red	Jimmy Doolittle	7 S.A.R.A.11 Dice (11)	błack (?) pin stripe separating
Gee Bee R-2*	1932 `	P&W	25'	17'9'	Red & White	Red &White	NR2101 Red	NR2101 Red	7 Red	Lee Gehlback	7 S.A.R.A.11 Dice (7)	red & white main colors.
Gee Bee R-1/R-2	1935	P&W	25'	19'9"	Red & White	Red & White	NR2101 Red	NR2101 Red	7 Red	Cecil Allen	IF (Intestinal Fortitude) in 1933, Filaloola	Made from components of the R-1 & R-2
Haines H-2	1936	Scarab			Red & White	Red & White	14518	14518		Frank Haines		
Haines H-3*	1937	6 cyl. Menasco	20'8"	20'3"	Copper	Copper	R91Y Red	R91Y Red	88 Red	Frank Haines	Firefly	Referred to as Mystery Ship
Hall Bulldog*	1932	P&W	26'	19'8"	Red & Black	Red & Black	NR2111 Black-Red	NR2111 Black	6 White	Bob Hali		White pin stripe separating colors
Hall Cicada	1932	P&W			Green w/ Cream & Brown	Green w/ Cream & Brown	NR13205	NR13205		Bob Hall, Frank Lynch	"Cicada" on tail	Paint scheme in Cicada design

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  - B-25C SOLID NOSE WW-2 ATTACK BOMBER 42" SPAN, RUBBER/ELECT
    - BRANDENBURG W-19. WW-I FLOAT BIPLANE, 30.5" SPAN RUBBER
      - RUMPLER C1. WW-1 RECON, 30" SPAN RUBBER
- P-51D MUSTANG- CADILLAC OF THE SKY- 33" SPAN RUBBER/ELECT
- GRUMMAN AVENGER-WW-2 TORPEDO BOMBER 41" SPAN RUBBER/ELECT
- DE HAVILLAND MOSQUITO BRITISH PLYWOOD BOMBER 41" SPAN- RUB/ELECT DE HAVILLAND SEA HORNET-LATE WAR TWIN, 31" SPAN -RUBBER

# FOR SALE:

David Crown, 9386 Landings Lane, #507, Moth, Ol' Reliable, Phineas Pinkham and not separate. The sale of a lifetime. The Original Flying Aces magazines for sale. more in these issues! Make offer. Also and January and March 1938. Excellent have other mags for sale. \$1.00 gets list. condition. All 4 as one package--will Rare find! August and October 1937 Des Plaines, II. 60016.

# SHORTY'S BASEMENT

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Ph. 740-223-7471

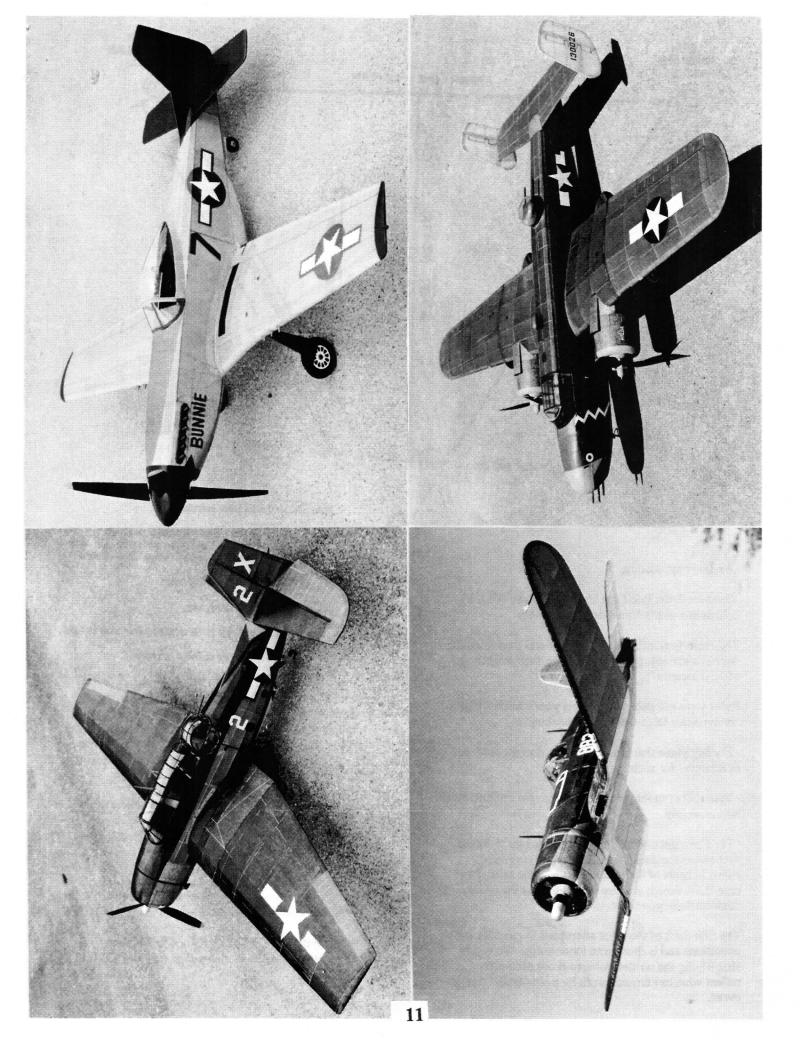
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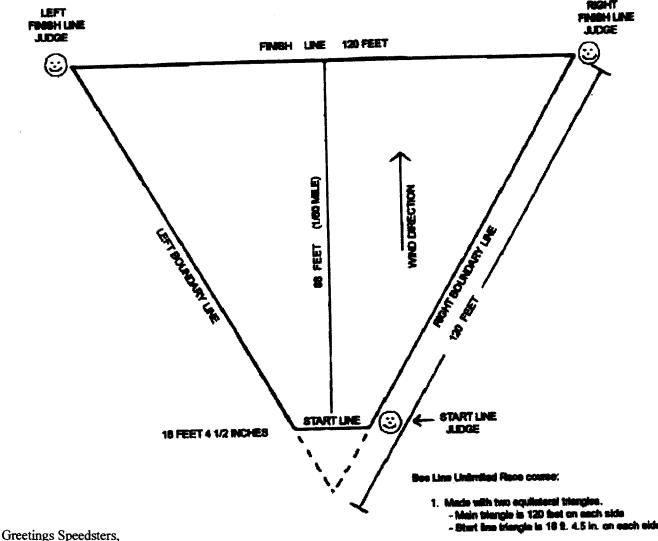
West wings kits. Also have ducted fans Your one stop for Aerographics and And L-2 Rapier motors.

We have plenty in stock. Shipment is within a couple of days.

# PHOTO PAGE

These are all photos of Mike Midkiff's latest models built from his plans which are available from the ad on the left. Left column; Grumman Avenger and Vought F4U Corsair. Right column; P-51D Mustang and No. Am. B-25C.





Yes indeed, the Bee Line Unlimited Race (BLUR) will be held at this year's Non-Nats in Geneseo.

The event is an official FAC event and thus earns the winner a kanone, plus the top three finishers will get official awards.

Rules were not published in this year's rulebook, but are avialable from GHQ. In a nutshell:

- Fly any plane that was flown in a documented race, or intended for such.
- Max rubber motor weight 7 grams. No limit on model size or weight.
- Fly a straight course 88 feet long and try to be the first across the finish line. Planes are generally flown in heats of 4 airplanes at the same time. The race is not timed; you are racing to beat the other contestants in your heat.

The first draft of the rules attempted to cover many conditions and is thus quite loooooong. We will be simplifying the written rules to more accurately reflect what has turned out to be a simple and fun event.

- h line is 120 £. lang
- test (1/50 mile) long from start to finish.
- will be placed down wind

Note: It is no longer necessary to qualify for the race beforehand. But if the judges ask you to demonstrate viability and safety of your airplane, you will need to show that the model can safely complete the course. Keep the propellers made from plastic or balsa (no metal!).

Now, 88 feet goes by rather quickly. A motor run of about 3 seconds will do it. Longer motor runs just mean a needless chase and retrieval. Keep it short so we can move through the various heats.

Ed Pelatowski has won this event for two years in a row despite serious competition. So get you BLUR racer ready and come put Fast Eddie in his place!

Any questions? Contact GHQ or Chris Parent (ctparent@yahoo.com). See you at this year's B.L.U.R...

4/9/03

# Air Mail

May 4, 2003

Dear Lin,

"Fliteline" in the March/April FA Club News sure brought me to immediate attention.

Introduction of easy- to- build foam models into FA competition would spell the end of our side of the hobby. See how commercialization has ruined AMA! Few modelers stay with a throw-away hobby of stamped plastics that requires little personal effort! Don Srull is 100% correct in his view about preserving our modeling heritage.

The enclosed little ditty appearing in the No 10 SAM 35 Yearbook expresses the sentiment of many of us.

Regards,

oe Barkley, FAC,

Mid-South Squadron

entertain. It's not my fault kids have no WHO killed model planes that once 'Not II" exclaimed the TV set. "I merely Everyone interviewed said "Certainly not I!" skies?

time to make a model plane."
Who killed the model planes that
Grandpa used to get? dime or nickel kit?
"Not II" say manufacturers
of the costly RC gear. And
pre-cut parts and instant Banana oil and tissue, the

Who killed the pride in building, the work all done by hand? Balsa sticks and printwood we learned to cut and sand?

planes?

pre-formed and such. Anyone can make a plane, the effort isn't much."
Who killed the model gliders we once bought for a cent? That looped the loop and made us laugh. I wonder where they went? "Not I!" says the plastic man. "With parts

"Not much profit selling those!" the local druggist chimes. Pennies will not pay the rent, not nickels, even dimes!" vacant lot with grass so green and high? Don't blame me," the builder says, with Who killed all the flying sites? There's no place left to fly. Where's the local

Who killed model plans once found in mags of yesterday? That you could use that very night; not have to send away? "Not Il" say all the editors. "We need the space for ads. RC is what pays the bills. KEEP OUT signs in hand. People they want houses, and houses use up land!"

powered planes we kids all used to fly before the city ran us out of park and out of field and sky?

"Nor II" the council man disclaims, his golf club in his hand. "Your planes are much too dangerous, and not kid-directed fads."
Who killed the rubbertake up too much land." Who killed

model

glue which cost so very

Who killed model airplanes? Is their time now past? Can it be that times have changed and that the

die is cast

Who'll save model airplanes? Is there still time to win? Where do model planes leave off and where do kids in a pre-cut plastic world where batteries are a must, will the skills of yesteryear become but balsa dust?

Will other people save them? I'll have to disagree. Find a junior, show him how. Don't leave it up to me. Howie Stails

Glue Guru on the Fokker Triplane-

Here's a new book spelling out the Red Baron's mount with all its virtues and flaws:

# Three Wings for the Red Baron

Sopwith's Triplane was set aside as mediocre. The SPAD's Triplane effort was a disaster. inherently slow. the concept Curtiss attempt was a flop. proved

winged fighters, betting his life on Fokker's design, despite its inferior engine. Why? What did Yet Richthofen saw great merit in threehe see in three wings?

Wounded and depressed, was he merely grasping at straws while engaged in denial? Was his death, in a Fokker Triplane, a chance event or one more proof of three wing inadequacy?

The answers are here, backed by solid research in London, Munich and Berlin. Some 240 illustrations are offered, including rare wartime 3views of the Curtiss, Sopwith and Fokker Triplanes.

straight Glue Guru-aerodynamics with a certain verve. I think treatment is you'll like it.

supplies a faster delivery. You can examine some 15 pages without charge by reaching Amazon.com on the internet and then requesting "Three Wings The book is available through Barnes & Noble, Amazon, Borders, Books-a-Million and private bookstores as well. Price varies a bit, with Amazon offering the lowest price, but B & N for the Red Baron". In return, you can inspect, or even print out, the first chapter

Check it out!

## New Blood—Story from New Modeler at Age 56

I took the following from the Internet SAM talk group. Rick Isaacson is a newbie. In our ongoing discussion about what's to be done about free flight, attracting, and keeping guys like Isaacson is important. As John Barker from England observed in last month's Flight Plug, our "juniors" are in their 50's. Rick's story is quoted in its entirety below.

"I am 56 years old and have been modeling for about three and a half years with a particular focus on the old time flying models. Essentially, I learned how to model from reading Don Ross's book on rubber powered models as well as from many of you good folks on the FFML. I went to Geneseo not to compete but to fly and have fun and to gawk and learn. I brought with me two old time wakefield-type models - the Miss World's Fair and Earl Stahl's Gypsy, both I believe from 1939.

The fun started as soon as I pulled onto the Geneseo field on Friday morning. I parked my car next to two friendly fliers from Toronto who had each been modeling for about ten years and who, like me, had coincidentally also brought a Miss World's Fair to fly (as well as other models); they had also come to Geneseo to fly and have fun, not to compete. As is common in our hobby these two strangers were extremely friendly and helpful and insisted that I stay and enjoy the weekend with them and two of their Canadian friends at their flying site. Within a few moments, they asked me if I wanted to meet Don Ross; sure enough, they called over Don Ross who stopped and chatted and told stories with us. Don Ross is quite an entertainer and storyteller.

I then thought I would try my luck flying and wound up my Gypsy, carefully removing the blast tube, and then watched in horror as the rubber motor broke, not in the blast tube, but in my new six-weeks-in-the-building beautiful Gypsy, ripping apart the fuselage! So much for my first flying experience at Geneseo this year.

The wind then picked up and was too strong for a neophyte like me to fly my Miss World's Fair. So I walked around with my mouth open, gawking at the most beautiful flying scale models I had ever seen. I also watched as the experienced modeler from Canada, Bob Hammett, repeatedly flew his Miss World's Fair in those high winds, each flight being well in excess of two minutes, and each time being brought successfully to earth just short of the trees or other obstacle by a properly working dt fuse. Watching him and Chris Starleaf and all of these experienced modelers fly their beautiful models, I now knew what I wanted to be when I grow up!!

It was a gorgeous sunny day and even though too windy for me to fly, it was simply great just to walk around and gawk and visit with other modelers and buy various modeling items at the numerous booths. It was during that time that I saw many experienced modelers break their rubber motors or crash their planes once in a while - I didn't feel quite so bad about what happened to my Gypsy! With the help and encouragement of fellow fliers that evening I tried to glue and fix my Gypsy to a degree that I thought I might be able to fly her on Sunday after giving the glue a day to rest.

The next morning the wind was calm, and though I intended to try to fly my Miss World's Fair, I never got the chance. At the request of a nearby modeler, I volunteered to be a "mechanic" for another modeler who needed one. I had seen people in contests

holding other people's planes while they winded them and I was told that that was what a mechanic did, so I figured I would give back a little and agreed to be that gentleman's mechanic for that particular event (I don't even remember what the event was). While walking out to the site on the flying field, I kept talking to myself, telling myself to please not crush this guy's plane when I held it or do some other horrible thing to cause him to miss the competition. I watched nervously as "my" flyer released his plane. It took off beautifully and was flying great and I proudly yelled "looking good Frank" only to hear people yell at me to shut up as I soon learned that the only time you're supposed to say anything in your role as a mechanic is when your flyer's plane touches down! I could not find a hole big enough to hide in so I just continued to watch "my" flyer and this time yell when I was supposed to. My fellow was eliminated in the next round and by that time, the wind had picked up again and I never flew that day.

That evening, after my newfound Canadian friends insisted on taking me out to dinner, we returned to the field to fly our Miss World's Fair airplanes. The wind had died down and it was a beautiful evening. I was successful in flying my pretty lady and absolutely had a blast watching her fly several times in excess of two minutes gently gliding down to a degree that, like a little kid, I was able to run it down and snatch it out of the air at the end of its flight before it hit the ground. I went to bed happy and contented, perhaps I could fly with "the big guys" without making a fool of myself. I was determined to try and fly my now repaired but tissue-tattered Gypsy the next day.

The wind the next morning was still a little strong for me so I decided just to keep my Gypsy on my stooge and wait for a break in the wind. About fifteen minutes later, I saw an elderly gentleman with a cane quietly standing next to my Gypsy looking it over. I walked over and proceeded to tell him that this model was from 1939 and was designed by a very well known and a wonderful modeler by the name of Earl Stahl. I asked this gentle, soft-spoken nice man if he had ever heard of Earl Stahl to which he gently replied: "I am Earl Stahl!!!!!!" If you will take a moment and try to visualize the scene you will be able to share my wonderment and understand why I could not get my mouth to close! We had a wonderful chat together in which I learned that he was 85 years old and no longer flew because he could not get around as well any more. He related that after he had built his Gypsy in 1939, he had gone into the war effort where his designing abilities had been noticed and subsequently spent the next 40 years working, I believe, for NASA, contributing to many of their flying efforts. I mentioned how despite all of the modern technological changes in flying models it was still so much fun to build his "old" designs. He related that for him so much of the fun came in the building aspects of our hobby and that he always tried to design his planes so that they were easy and fun to build. He said that his Gypsy was a good model and he encouraged me to continue to "work with her." He told me, speaking of technological changes, of how, when the war was over, a modeler had told him about his plane's dethermalizer to which Earl had responded, "what's a dethermalizer?"!! I also coincidently learned that we were from the same small town in Pennsylvania (Johnstown) and had lived in close-by neighborhoods and despite our age differences the high school rivalry and cheers had remained the same. He was a lovely gentleman to talk with.

He had walked away when I realized that I should have asked him to sign my repaired Gypsy. I looked for him unsuccessfully for the next hour. I decided that perhaps when I flew my Gypsy I would see him again. I returned to my site determined to impress Earl Stahl with a fantastic flight of his Gypsy. When I got there, I saw how the wind had blown my Gypsy up in the air, while still attached by its rear peg on my stooge, breaking the fuselage in half! So much for my idea about impressing Earl Stahl. I never saw him again.

Sunday evening, while most of the modelers where at the banquet, I returned to the flying field for perhaps one or two last flights of my Miss World's Fair. It was about 8:45 pm. The sun had just gone down over the horizon. An almost whole moon was rising and the sky was crystal clear with one star visible. Not only was it beautiful but also there was absolutely no wind and I was completely alone in this whole field where only a few hours earlier there were literally hundreds of people and cars and booths and tents. It was surreal. I proceeded to crank up my Miss Worlds Fair and watch her soar in beautiful circles in the twilight sky against the moon. On her last flight, of almost 3 minutes, I laid down in the grass on my back and watched her quietly glide down to a perfect three-point landing on her wheels only about twenty feet from me. I packed up my gear and went home. That, I said, is what this hobby is all about. Memories as we know fade with age but these, my "I am Earl Stahl" memories, I suspect will last a lifetime.

# Tips on Tissue Covering

by Homer Smith

It is very difficult for me to get the perfect tissue covering job I see others get. There are a few things that I have learned from the mailing lists that have helped and maybe it will help you if you will indulge me the time.

The UHU purple glue stick has come to be my adhesive for tissue and is used almost exclusively. For small models I use two techniques. For the underside of wings and the tail feathers I use pre-shrunk and Kryloned tissue. Take a piece of cardboard and cut out a hole in it a little larger than the part. At least a quarter inch over but a half inch won't hurt. Be sure to cut left and right holes for wing and tail feathers. Glue tissue to the cardboard hole and let the glue dry. Spritz the tissue with water or alcohol from a small hair spray bottle (fine mist) and let it dry. When you are happy with the amount of shrinkage, hit it with a fog of Krylon. Krylon will shrink some over a day or more so let it dry good. Apply glue stick to one side of the part and press against the tissue being sure you have the correct side on top. Press it down with your fingers and let it dry at least 24 hours. Before cutting the part from the frame be sure that the tissue is stuck down all the way around. Cut it out and go on to the other side of the part. If it needs more Krylon, pin it down after hitting it with another fog and remember to put on more next time when it is in the cardboard frame.

Over time it has become obvious that I was not letting the material or parts dry long enough at each stage. If you don't let it dry it will pull from the framework and leave wrinkles or sags.

For parts with only a two dimensional curve like the top of the wing on the FA Moth I do about the same thing but cut the tissue from the frame when dry and apply over the top of the wing. Put on a generous coat of glue stick

and get the preshrunk and Kryloned tissue set over the top of the wing panel. Press the tissue down at the root rib and end rib in the center of each and get the tissue fairly taut. Don't try to do the top of the wingtip at the same time - use a separate piece. Now work your way from the center of the trailing edge and leading edge toward the tips working the tissue taut with your fingers. If the tissue refuses to move or you have to go back over a place just dampen your finger with a little water and continue to work with it. The glue stick will soften and let you move the tissue for several hours after initially applied. Keep going in one sitting till you get all the wrinkles out. Pin it down and leave it for 24 hours.

For three dimensional parts like the fuselage of a Zero, I use raw tissue in the conventional manner. Let each gore dry well before going to the next gore. Letting the tissue dry between strips will keep you from denting or loosening the tissue by handling while doing the next gore. My biggest problem is moving the tissue before the glue dries after I have it all smoothed out.

By the way, I use only Japanese tissue because most domestic tissue has no water strength and the color will run. The only domestic tissue I have found that does not fall apart when hit with water or color run is Hallmark and Aleene's tissue. Both are heavier than Esaki. My tissue jobs have improved quite a bit using this approach.

Glue Container Tip: Used milk bottle caps are a plastic, and free, receptical to hold the glue. When the glue dries just twist the cap and the glue pops out to be ready for the next use. Works for all glues, including Ca, white, yellow, and cellulose.

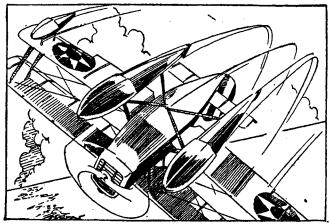
# They Had What It Takes

# X-MAJOR AL WILLIAMS-AEROBATIC GENIUS

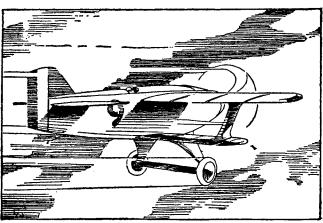
By ALDEN McWILLIAMS



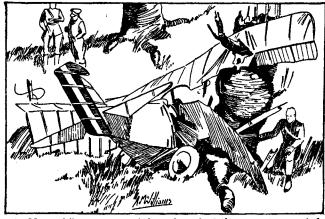
1—Alford Joseph Williams, Jr.—yep, that's his full name—was born in New York City on July 26, 1896. A well-built young fellow, he was athletically inclined from the first. In fact, after graduation from Fordham University, he joined the New York Giants ball club of the National League and held down the job of pitcher for two years.



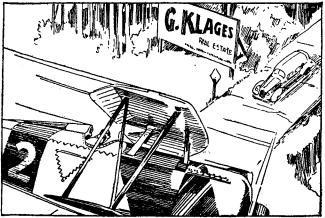
2—But Al Williams had always had a hankering for the sky. So when the United States entered the World War, he signed up with the Navy Air Service—and quickly proved himself to be an exceptionally good fiyer. He first tested planes. Then the development of the science of aerobatics (aerial acrobatics) became his specialty.



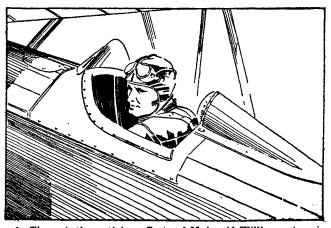
3-In 1922, Williams tried to win the Pulitzer Prize Race, but three other flyers flashed in ahead of him. Undaunted, he again went after this prize in 1923—and this time he won it with a 243-m.p.h. speed. Later that year, he chalked up a world mark of 258 m.p.h. This record stood until 1931.



4—Meanwhile, a new training plane had the experts worried. Five pilots had crashed in these jobs, so trouble-shooter Williams coaxed one into an experimental spin. It turned out to be a flat spin, and unable to pull out, Al suffered a bruising crack-up. But his test data served to correct the ship's faults.



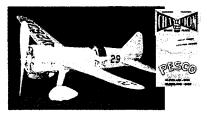
5-Williams finally resigned from the Navy Air Service in 1926 in order to devote his full time to high-speed research and advanced aerobatics. His expert, painstaking work during these past ten years have won him renown as a leading aero consultant, and meanwhile he continues in top listing as one of our best and most active airmen.



6—Through the untiring efforts of Major Al Williams, American aviation has achieved new and more brilliant heights. Our most outstanding aerobatic genius, Williams, has been awarded the Distinguished Flying Cross—and Al is no doubt hurtling his 300-m.p.h. Cyclone-powered Grumman to new honors as you read these lines.

# NEW PLANES & ONLINE ORDERING

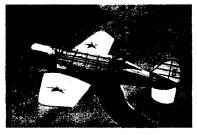
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## PHOTO PAGE

Left column; Here is Nate Sturman's Tachikawa KI-9 (plan in this issue), 2nd pic is KI-9 in flight. Looks like a winner!

Bill Henn sent this photo of his Reggiane RE-2005. Bill says she'll do 2 minutes easy!

Right column left; Here is Jack Moses' rendition of the Wendt W-1 for Dime Scale.

The Northrop Alpha from a Dumas kit by Elmer Mellander. Looks good! Can't wait to see that one in the ozone!

## ScienText, 48 Whitney St., Westport, Ct. 06880

In the Mar./April issue of Flying Aces, page 17, I was delighted to see Dave Dulaitus' Bf-108b. This came from our plan set for the "Taifun", which is still available from us here at the above address.

The plan set consists of full-size plans and patterns, and includes tissue, acrylic and scale wheels. The price, including S&H is \$13.95. We still also have a small photo catalog, which is free for a #10 SASE (\$.37 postage).

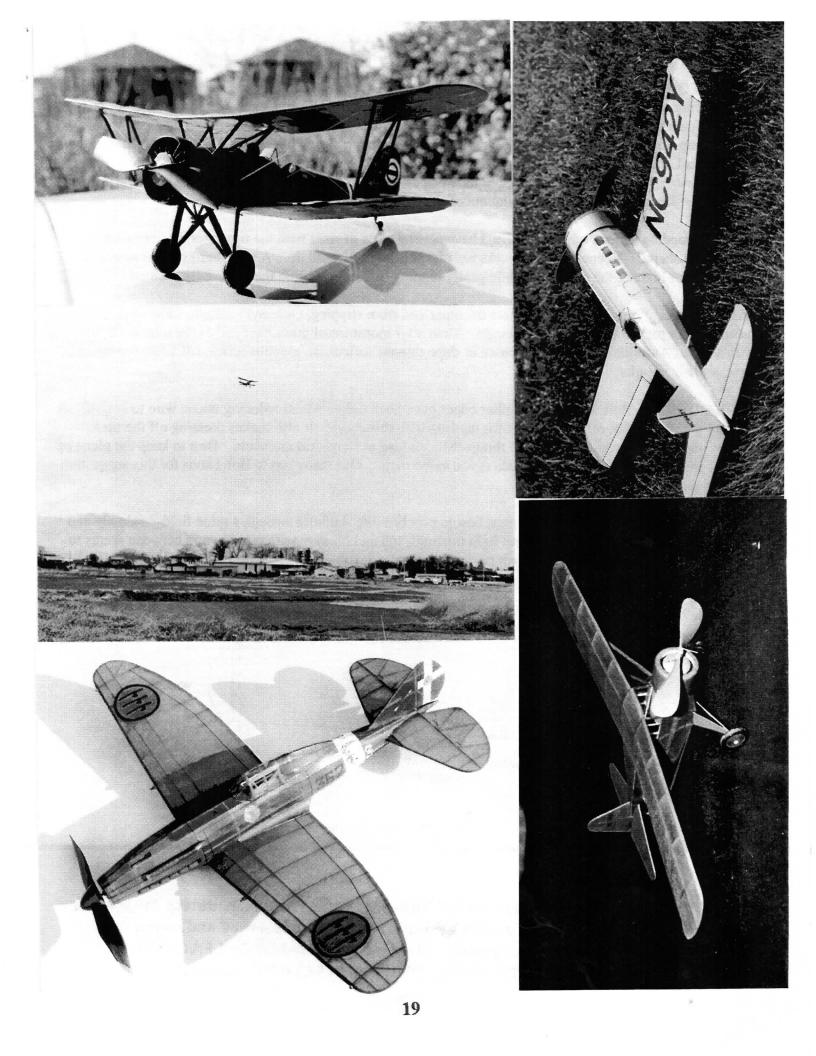
Best regards, Peter Wank

# SUMMER POSTAL CONTEST

The summer flying season will bring with it the FAC POSTAL contest. It will commence with your reading this and will end on October 26, 2003, entries postmarked after October 28, 2003 will not be considered.

We will have 5 events for you ozone grabbers to scrap in. They are; Golden Age Civil Scale, Golden Age Military, Modern Civil, Modern Military and the Comet Phantom Flash. There will be no max times in any of the events, it is all you can get! Enter as many events as you want with as many different models as you wish. Every time you better a score with a particular model, send it in.

Send all entries to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. EFF--AAA--CEEE!!!!



### MECHANICS CORNER BY ALLAWTON

REAR PEG RETENTION; Ever witnessed or experienced a model's rear peg migrating from one of the holes during windup, or worse, during flight? Ooh---that blue air! We've seen several solutions for this; internal foam stoppers is one. Another is to put grooves near both ends of an aluminum tube peg which accept snap rings. Can you imagine searching for a dropped snap ring in the weeds?---Tougher to find than Osama bin Laden! A torn-up fuselage led me to what could be called "the blunderbuss fix". Remember those Pilgrim rifle barrels? An aluminum tube peg can be flared similarly by tapping one end with a finish nail point. Keeps that end from slipping out of the hole.

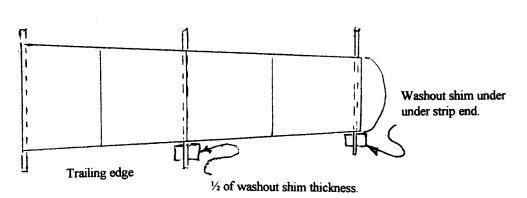
To accommodate various tube diameters, I have several sizes of nails with the tips smoothed out a bit to a better cone shape. A bench grinder works well for this but a file will do. A semi-hard surface seems to work best for bracing the other end while gently rapping in the flare. File the sharp edge a bit and it's done.

"Aha!" you say, "But that doesn't protect the other end from slipping, Dummy!" Right. The other end can be knurled or roughened with a razor blade. Then after motor installation, that end of the tube is slopped with a tad of Ambroid type glue. Acetone or dope thinner softens the glue for scrape-off when the tube has to be pulled. Works!

WIRE CUTTING; How many cutting plier edges have been dulled whilst reducing music wire to length? A Dremel tool with a cut-off disc is great for tussling with this chore. It also makes dressing off the tip to remove burrs and miscellaneous sharp things that can lead to Band-Aid moments. Best to keep the plane of the disc out of line with face and pinkies if you value them. Our thanks go to Bob Davis for this suggestion many moons ago.

WING "CURE"; When processing wings, best to proceed like skulking through a mine field----slowly and carefully! To shrink the tissue, several light mistings, top and bottom, with pin-down in between seems to work best for me. Here's the pin-down method currently in use:

After misting both sides, pin down on 1/8 square strips to promote equal drying on top and bottom.



Leave pinned down for one or two weeks!

That's it. Head for the flight line.

Vendor tables for this year's FAC Non-Nats at Geneseo, N.Y. during the scale judging at the Days Inn on Friday July 18th must be reserved and payed for by June 30, 2003. No exceptions! If interested please contact FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. Phone (814) 833-0314 A.S.A.P.

# \* \* Blade Pitch Revisited \* \* Mumbo Jumbo # 111

Today we'll brood over the issue of rubber prop blade angle. Early exposure to Earl Stahl designs, plus some Wakefield attempts, convinced me that knowledgeable people liked a blade angle of about 30 degrees (at the 2/3 radius position). One always looks for confirmation, and as the other fellow's model climbs away from ours, there is inevitably some feeling that maybe it isn't so; maybe some other blade angle is better. Can this be?

The problem is made complex by our accompanying demand for long duration. We want not only max climb but max duration. These are not the same thing. The prop pitch angles required for each condition are quite different. Given dead air, the max duration setting is best. However, given lively, thermal filled air, a high climb is required to reach the strongest thermals.

Wakefield people, knowing this, have decided that only thermals can produce victory, and pass up the maximum duration possibility in favor of 30 degrees and climb. At the opposite end, indoor people, who detest thermals, depend entirely on max duration, and go with a blade angle of 45 degrees or more.

What about us? We want some compromise between max duration and max climb. It's never easy to nail down a compromise, but a reasonable amount of testing with a variable pitch prop and a standard low wing Jumbo configuration suggests that 30-35 degrees is most likely to be the optimum setting. There are freakish days offering a high wind speed, and a lower pitch is better. The reverse is also true—in a dead calm, with the earth warm and giving off a small rising current of air, just sufficient to extend the glide for a great distance, the highest possible pitch is profitable. In this very unusual case,

outdoor flight has been reduced to something approaching indoor conditions.

One thing not immediately clear is why the low pitch approach—say 20 degrees—turns out to be so disappointing. Yes, it produces a high climb *rate*, but this is not the same thing as a high climb. At 30 degrees, the climb persists, while at 20 degrees, it soon dies. How come?

Some serious prop testing reported in Germany, March 1940 (Luftfahrt und Schule) may hold the answer. The props tested were standard rubber and gas props. If anything, they seem better carved than ours, with greater care taken to hold constant pitch. Diameters and pitch values tested are in our range.

One useful finding is this. Low pitch props turning at a high rotational speed operate at an efficiency less than half that of the equivalent high pitch prop at a low rotational speed. In practice, low pitch rubber props find little air resistance and so speed up. By turning fast, they do generate lots of thrust. However, each bit of thrust so generated is achieved at a very low efficiency, or at a high cost in rubber energy. The inevitable result: poor overall climb. The slow rotation of the indoor modeler's prop has a lot to be said for it—in terms of efficiency.

When all is said and done, can something be done to improve our current flight efficiency? The rules do not approve variable pitch props but I suppose a ground adjustable pitch would be acceptable. One might dream of a prop whose pitch could be set before each flight, reflecting exact wind, and thermal conditions.

One catch is the work required to fabricate the prop. A second catch consists of the limited gains to be expected—perhaps another six seconds—as the difference between Earl Stahl's all purpose 30 degree blade angle and the optimum setting for that particular day.

As for me, cheese container anyone?



# FLYING ACES CLUB OUT DOOR CHAMPS

MUNCIE, IN. SEPT. 6-7 2003 8:30 AM- 4:00 PM AMA Sanction# 03-0623

**EVENTS:** 

Sat. Sept 6		Sun. Sept 7						
**FAC Jumbo Scale		**FAC Jumbo Scale						
**FAC Power Scale		**FAC Power Sca	le					
FAC Scale		FAC Peanut Sca	ile					
Golden age		Modern Civil						
O.T. Rubber Cabin		O.T. Rubber St	tick					
Jimmy Allen		Erie Daily Tim	es					
Embryo Endurance		NoCal Scale						
Dime Scale		***Rocket Scale						
* Thompson Race	ML	* Peanut Racers ML						
* WW1 Dogfight	ML	* WW2 Dogfight ML						
* Fairchild 24	ML	* Greve Race	ML					
Registration: Send To	(make out chec	cks to):						
Les Burdsal 552 N	. Lindberg st.	Griffith, IN 46319						
NAME		AMA#						
Street		City						
State ZIP		T Shirt size: M	L XL					

- \*\* Flights for these events can be made during contest hours on both days
- \* Mass Launch Events
- \*\*\* FAC power scale rules. AMA safety rules (lanyard)
- Peanut Racers can be any era/class, must be in proper colors and markings
- Fairchild 24 models must be built from Guillows kit or plan
- O.T. Rubber times must be turned in by 3:00 pm to allow flyoffs

\$25.00 Entry Fee flies all events and includes a free "T" shirt
Entrants must hold AMA or MAAC license
Trophies awarded to third place

Questions/comments/Directions: Contact Les Burdsal 219-924-1149 Email: <u>Lpbsr60@cs.com</u> OR: CD Ralph Kuenz 313-786-6490

### FLYING ACES PLANS

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

AIRCRAFT S	SPAN	DESIGNER	PRICE
Erie Times O.T. Westland Lysande Northrop Gamma Fairchild PT-19 Curtiss Gulfhawk Boeing P-26 Waco C-7 Laird Solution Waco "D" Lockheed Orion Monocoupe	24" r 25" 36" 24" 24" 18" 22" 14" 24" 24" 24"	Engstrom Studiette Bruning John Low Wilkey Wilkey Boyanowski Tom Nallen St Bruning Tom Nallen S Canada M.C.	\$3.00 \$4.00 \$5.00 \$4.00 \$4.00 \$5.00 \$5.00 \$5.00 \$4.00
Seversky SEV-2	22"	Tom Nallen S	Sr. \$6.00

Plans sent postpaid. FAC-GHQ, 3301 Cindy Lane. Erie, Pa. 16506.

# **FLYING ACES T-SHIRTS**

Did you get your Seversky SEV-2 T-Shirt yet? Better hurry!! The sizes we have left are; small, medium, large and extra large. Send your order to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506. This is a great looking shirt!

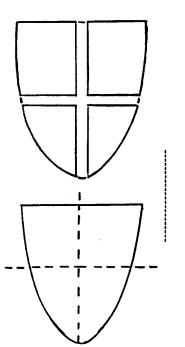
We want to thank all of you Clubsters who support the club with your purchases. This keeps us from having to give you a dues increase.

### T-SHIRT CLEARANCE SALE

We have to make room for the 2003 shirts so we are offering the following shirts at \$10.00 each, we will pay the postage.

Ford Tri-Motor	Medium size only
Monocoupe	Large size only
Douglas O-38	SmallLarge
-	Y Lorgo YYY Large

FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



This article was originally published in Wingtipx, newsletter of the Mid-Hudson Model-



HERE we have it again, fellows-this time in World War pilot style:

FONCK **GUYNEMER** R CKENBACKER COPPENS VAUGHN MANNOCK RICHTHOFEN LUKE

ві\$нор

By Bob Hudson ANOTHER WAY TO ENLARGE TAIL SURFACES

Many of us simply use a copy machine, while others use "dead reckoning" to draw the larger There are several ways of enlarging scale tail surfaces in practice today. surface outlines. Here's a trick borrowed from seamstresses

1. Trace the outline of the tail surface you wish to enlarge. Trace the entire vertical stab Draw a line extending at a right angle from a point bisecting the centerline of the horito the first and passing through its center point. The surface is now divided into four zontal stab (or base of the vertical stab) to its tip. Draw a second line perpendicular Cut the traced surface out with a pair of scissors. or half the horizontal stab. 7

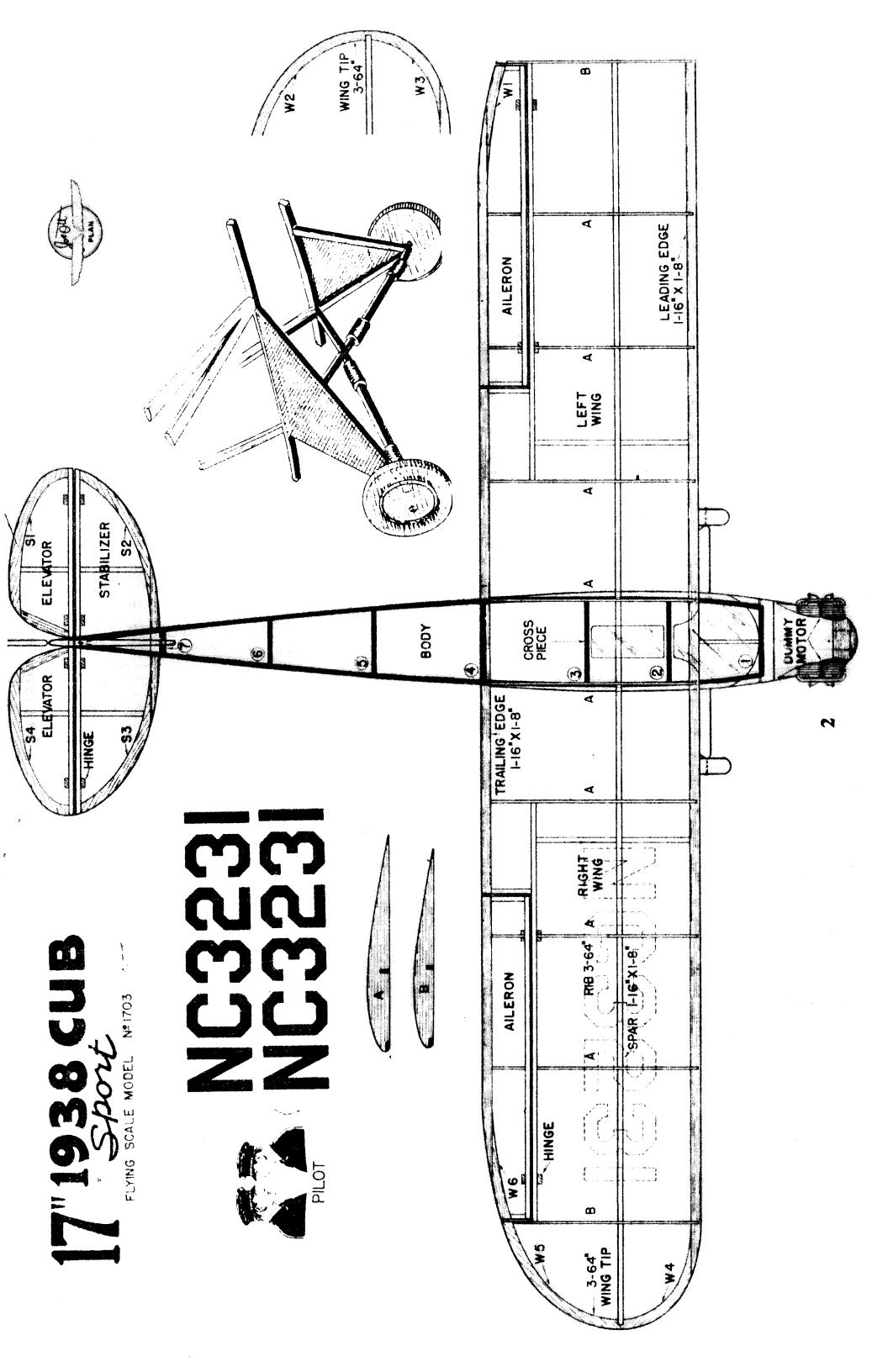
Cut these four sections apart with your scissors. Tape or glue (a glue stick is great for this job) the sections to a sheet of paper so that they form the new and enlarged Fill in the gaps where the sections have been moved apart. If you don't want to surface desired. Be sure they are properly aligned and parallel with each other. sections. See accompanying diagrams.

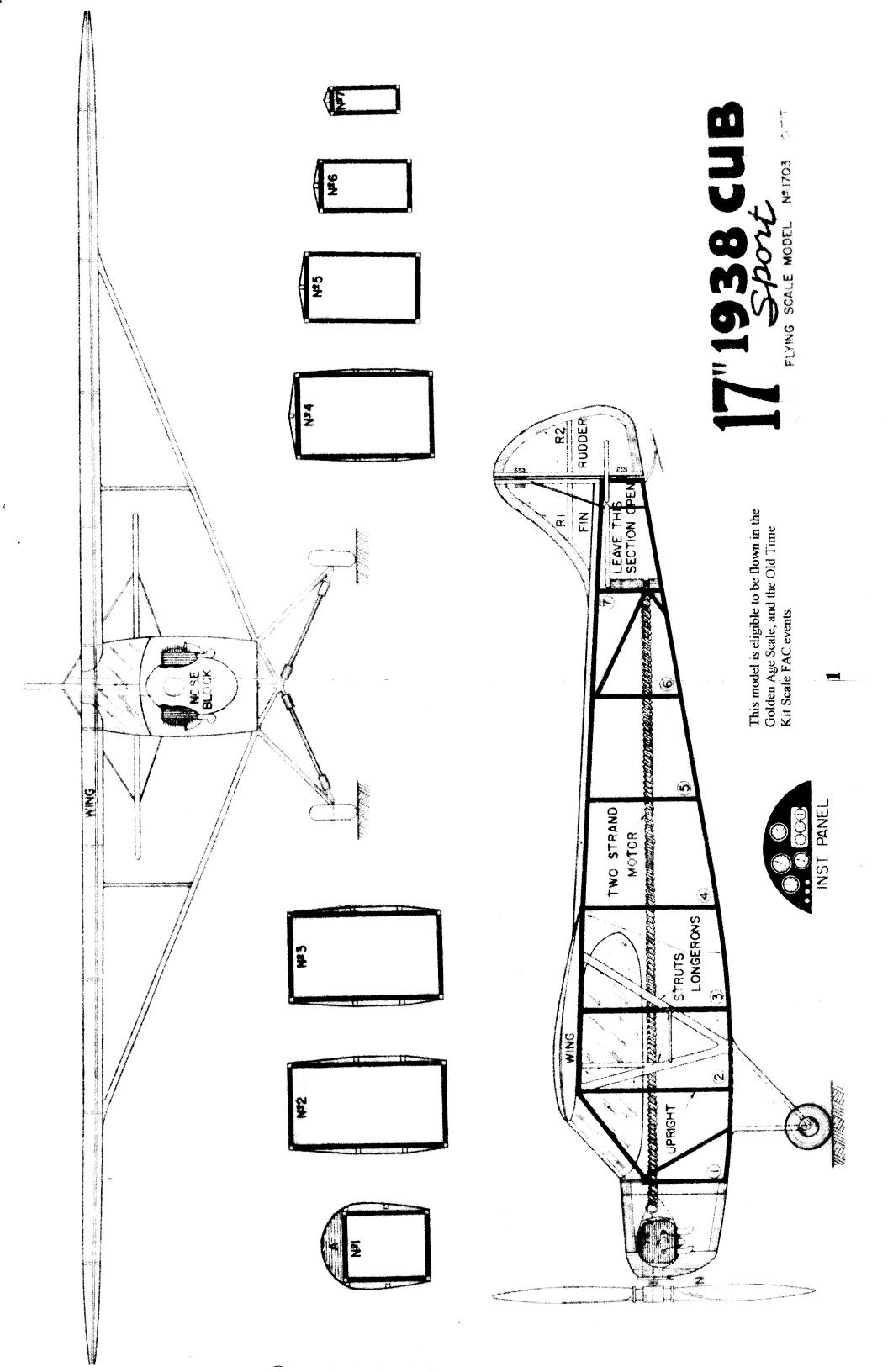
This method may not be as easy as photocopying, but it does allow you to eyeball proportions in both directions. Maybe the ladies were a little more advanced in their the outline of the enlarged surface, and make changes as desired. You can also just enlarge in one direction, something not possible with the photocopier, or in varying

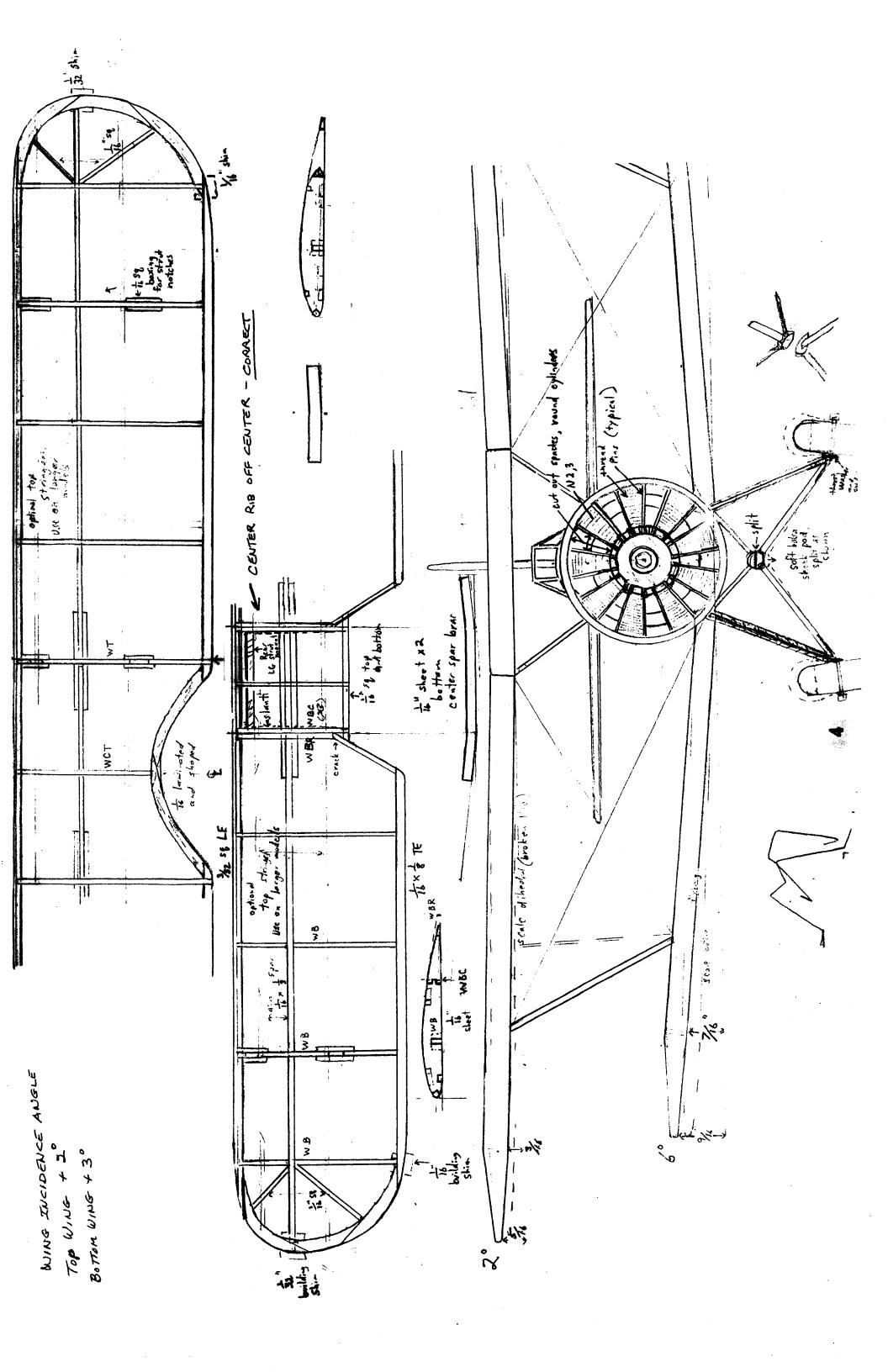
build over bumpy paper, retrace the enlarged surface.

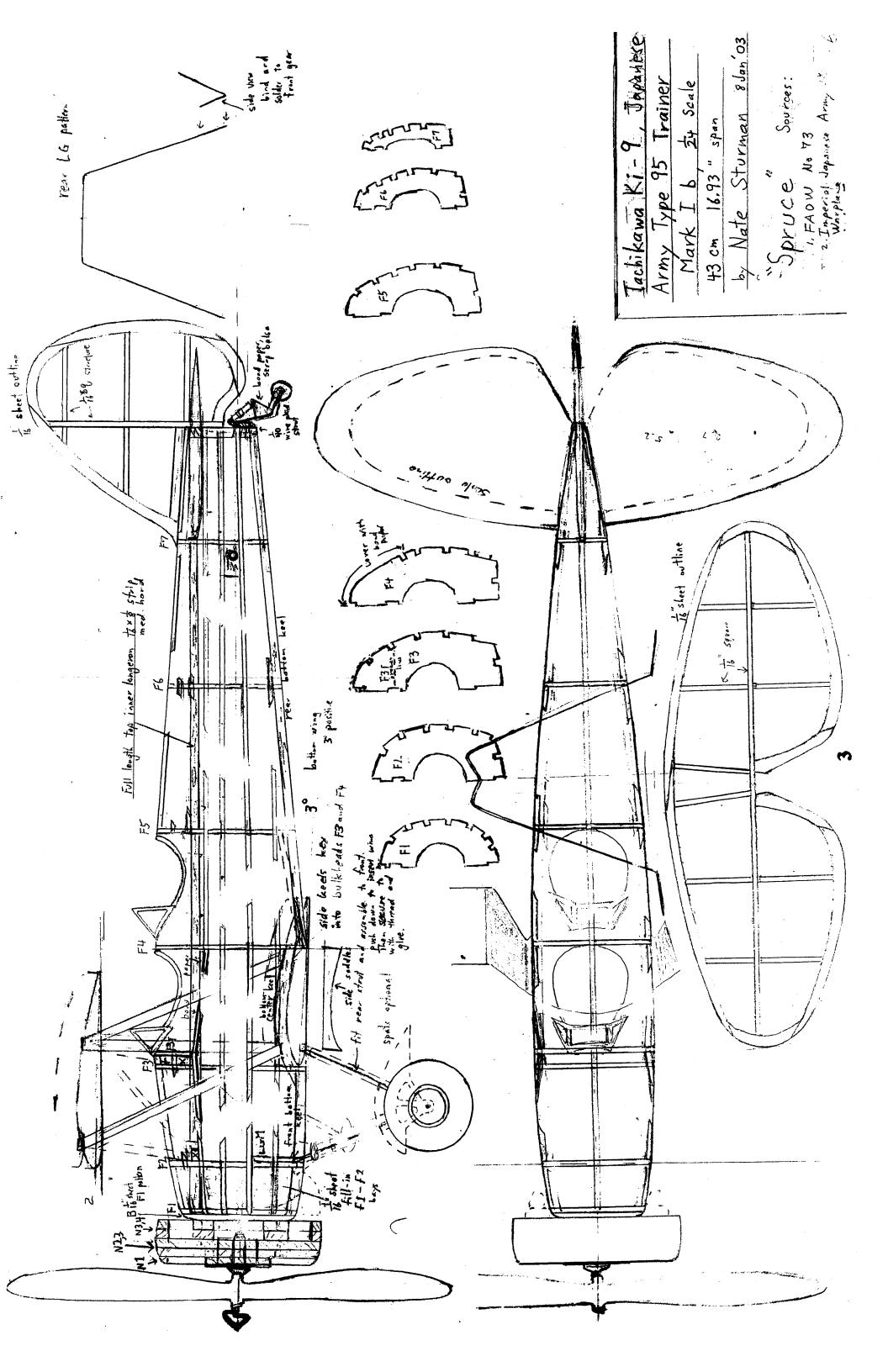
techniques than we give them credit for

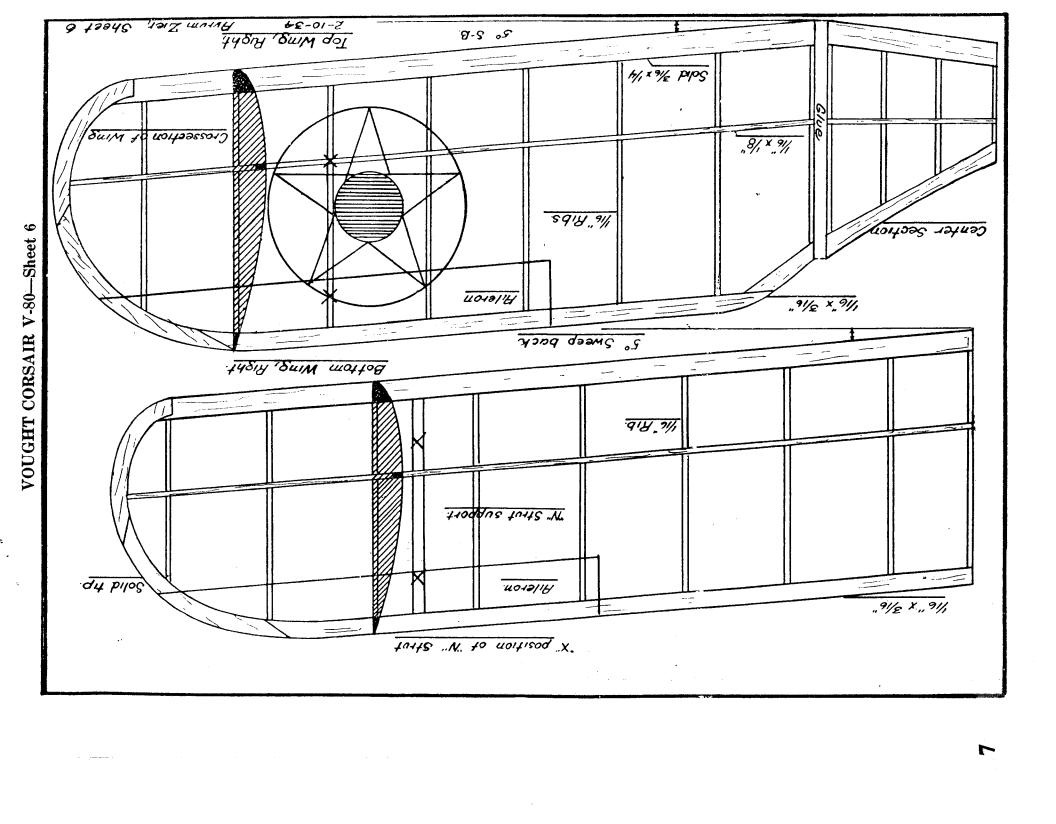
FAC NON-N	ATS, GENESEO, N.Y.	REC	GISTRATION FORM	JULY 1920, 2003		
Please print; N	Name		AMA or MAAC No.	Jr./SrOpen		
S	treet	City_	State	Zip		
	.00 flies all events. No fee for the field. Mail entry to; Lin					
Awards throug	gh third place. All contestant	ts must	be a member of the AMA o	r MAAC to participate		
SCHEDULE	Saturday 8:30 am until 5:00	0 pm	Sunday 8:30 am until 4:0	0 pm		
	FAC Scale FAC Peanut Embryo Pioneer Scale Greve Race * World War I Dogfight * Giant Scale Modern Military * O.T. Gas Replica O.T. Rubber Dime Scale Golden Age Civil Scale Fairchild "24" * (Guillow) Phantom Flash (Comet)  s are mass launch events. Por	wer Sca	•	BLUR Race to be decided as to what day		
for Power Sca models must t flights in by 2	tle and O.T. Gas Replica. O. oe flown in the Pioneer event	T.G.R. i regardle time for	may be powered by electric ess of size. All O.T. Rubbe fly-offs, NO EXCEPTION	or CO/2. Pioneer Scale er events must have their S! Plans must be presented in		
Entry fees at	\$25.00 each (flies all events)			\$		
Banquet tick	ets at \$21.00 each with no do	rmitory	reservations	\$		
Reservations	for double occupancy with n	neals an	d banquet at \$172.00 each	.\$		
	for single occupancy with m			,		
can set	unds after June 30, 2003. If you pup the proper room arrangements ast and dinner on July 19, breakfas	. Your i	are a room with someone pleasoneals at the university will inclu	ide dinner on July 18,		
	Judging will take place at the Day		-	:00 pm. Please wait till then		
New conte	VER: I/we hereby release the Histo York (Geneseo), The Flying Aces st from any liability whatsoever fo to abide by all flying and field ru	Club and or accide:	d all other persons and organizations incurred while participating	ions connected with this		

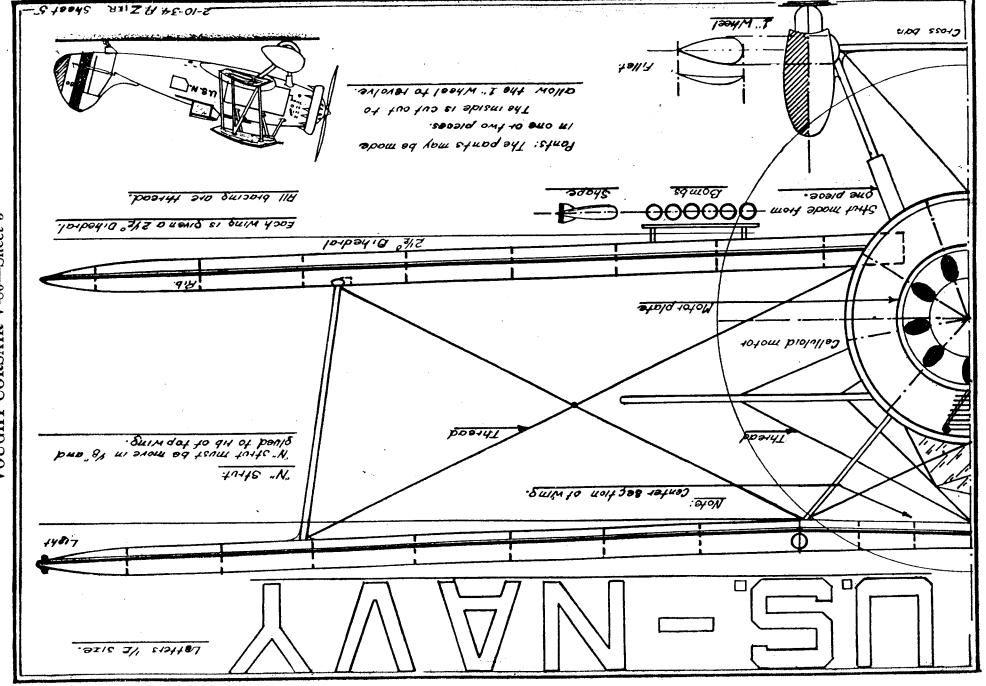


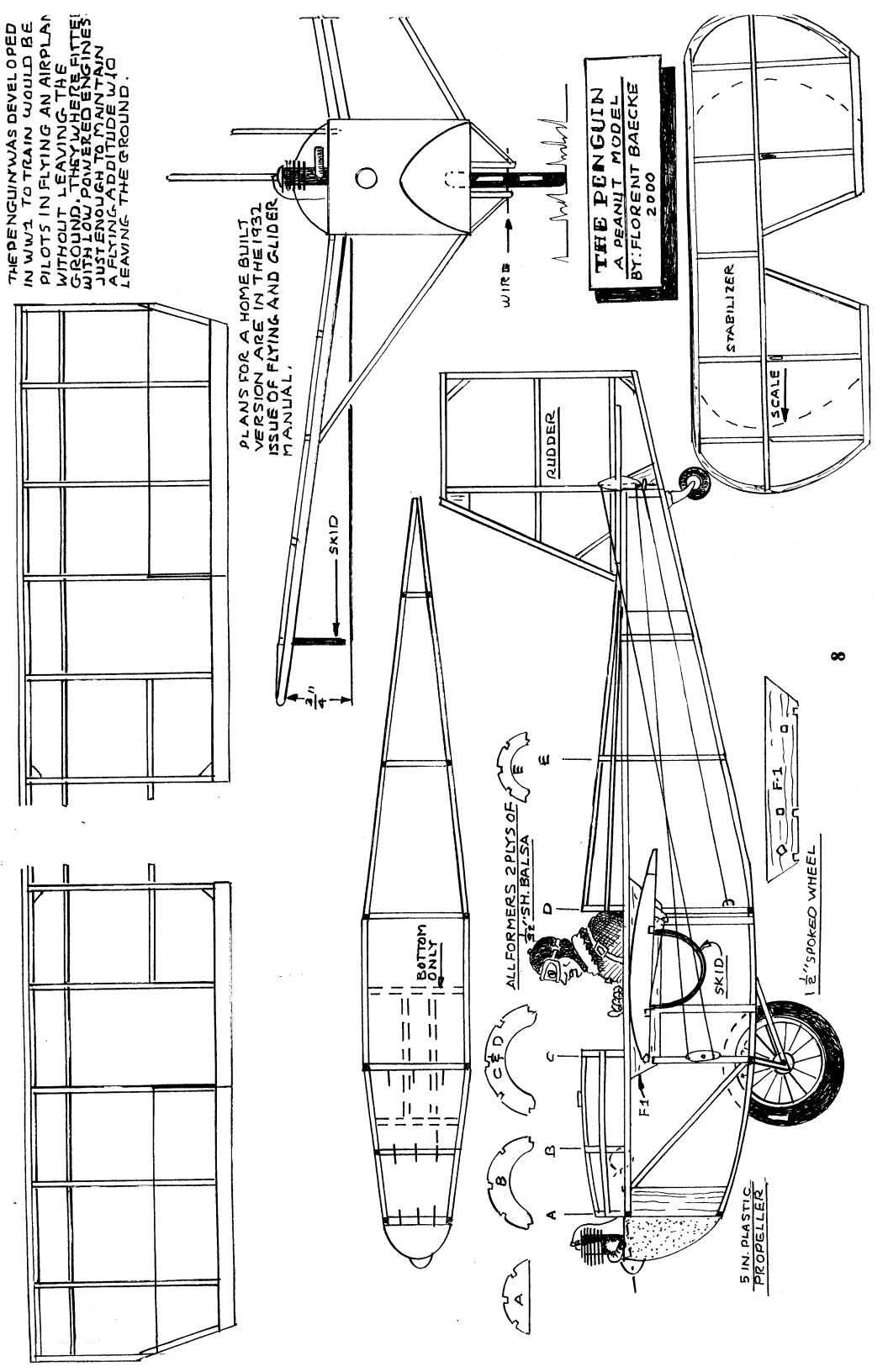


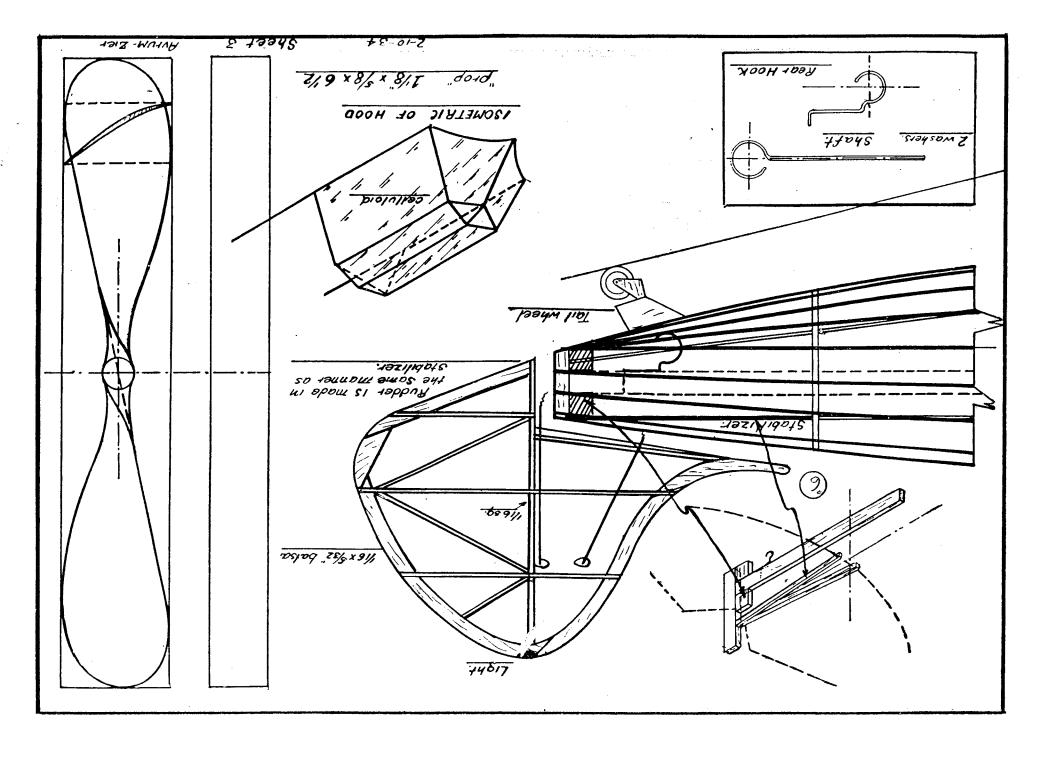


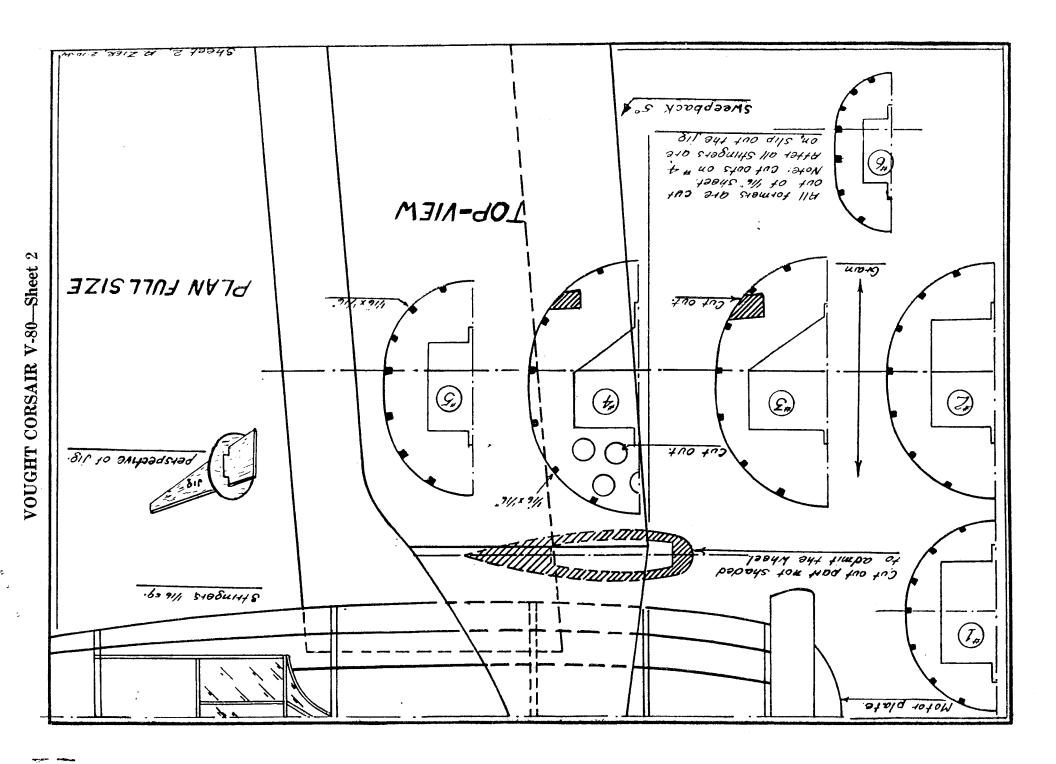


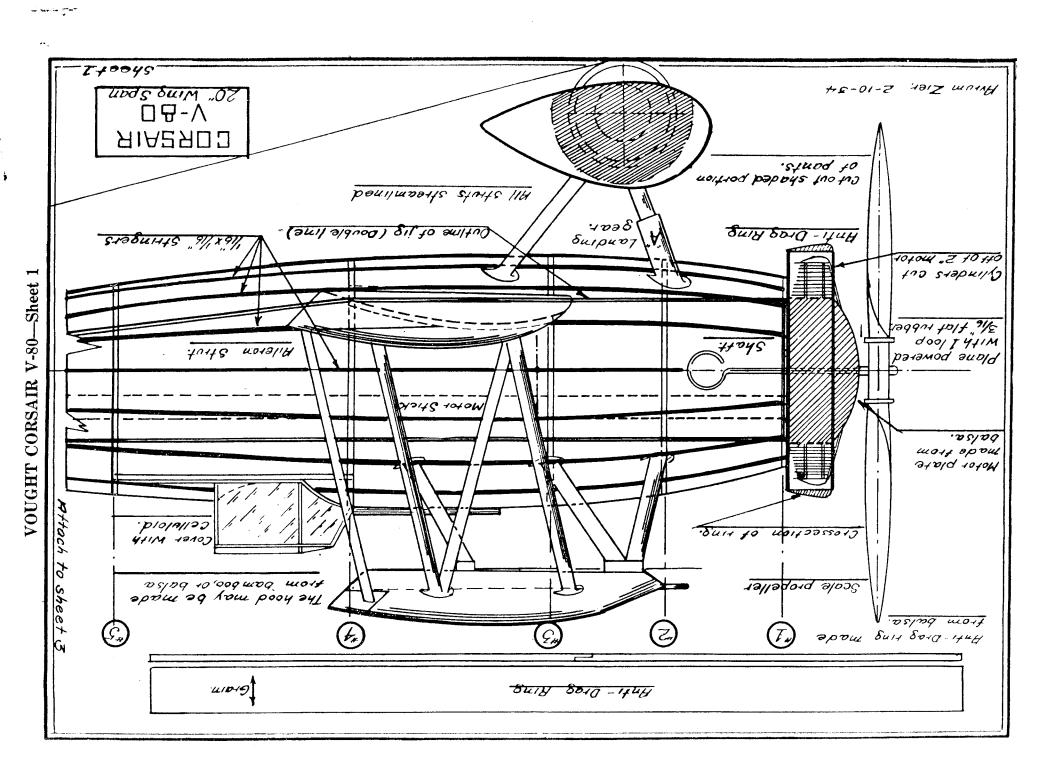












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