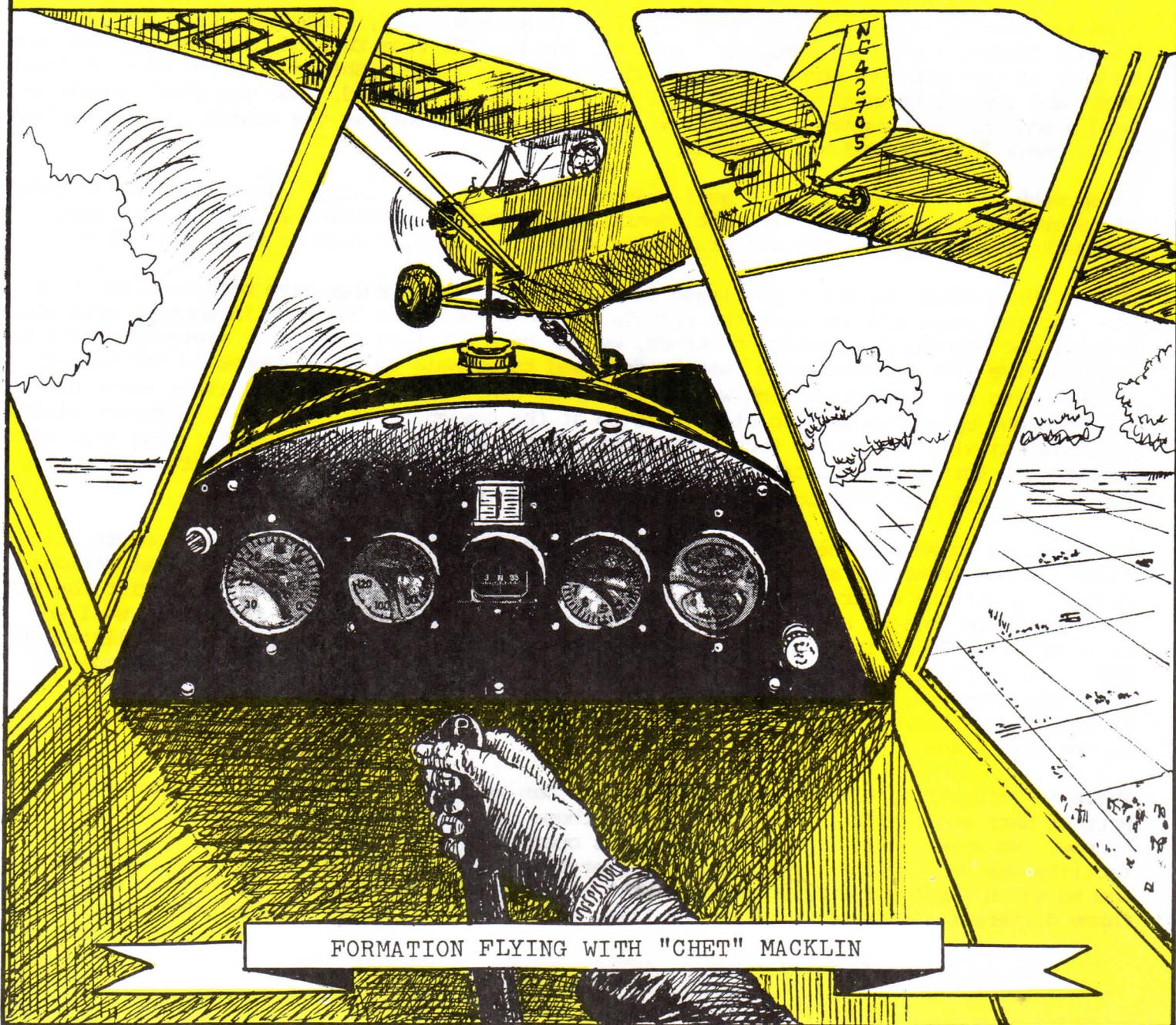




# FLYING ACES

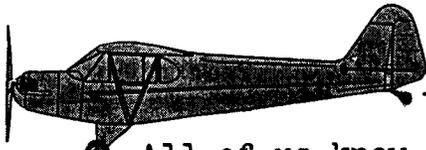
ISSUE #173-99

Jan./Feb. 1997



FORMATION FLYING WITH "CHET" MACKLIN

# NEWS ON THE WING!



## STORY BEHIND THE COVER

All of us know "Chet" Macklin was the FLYING ACES flight instructor. The ten lessons (written by George Lyle) began in June of 1938, and concluded the "final corking installment" in March 1939--with the solo of youthful student Jack Conroy (every FA reader's alter ego).

Many of us will remember soloing the J-3, thanks perhaps to the G.I. bill. We will recall the vibration and noise, the smell of dope, gasoline, hot metal, and those fragrant black seat covers. And the excitement.

But formation flying in Cubs? We'd better leave that to "Chet" and Jack!

Thanks to everyone who contributed to this issue including Chris Starleaf, Dave Livesay, Newt Bollinger, John Rood and Bill Hunter for their plans. Keep 'em coming Clubsters!

More sad news to give you again. We have lost Charles Wyckoff, Chuck gave us the colored loxenge tissue, long time member Jim McPheat, Our Pen-Pal from England, John Blagg, John sent us many of the old-time plans from England and Shirley Stott. Shirley was the wife of John Stott and she accompanied John to all of the contests he attended. She was always ready to lend a helping hand whenever needed. We will miss her as well as the others. Our sympathies go to their families and many friends.

Jason Webb was the winner in the quiz that we had in the last issue. Jason was one of three Clubsters to get all of the aircraft identified correctly. Because his had the earliest postmark he was declared the winner. There were 18 entries, enough to try a Quiz again.

The new Dime Scale rules are published in this issue. These rules have been bandied about for over two years and now with the efforts of Bob Clemens who has been in contact with Stu Meyers, Doc Martin, Dave Stott and others, we now have a set of rules that everyone should be able to live with. These rules must be followed to be able to win a Kanone in FAC competition. Also the subject of high-wing military aircraft for the Modern Military event has been brought up and we want to clear that up at the present time. All Hi-Wing Modern aircraft (production) will fly in the Modern Civil Aircraft event, military included! They will not be eligible for Modern military events. The same applies for Golden Age Military aircraft. Cut these rules additions out and paste them in your rule books.

You will see an ad somewhere in this issue for the new kits put out by Dumas Products, Inc. These are all laser cut and include press-on decals, great balsa, step-by-step instructions as well as all the other materials to make a first class product. I have just built the kit of the Stinson Voyager and she sure is a beauty. Everything fits just perfectly, well engineered kit. There is no price for these kits in our ad but the Mr. Mulligan is listed at \$18.95 as is the T-34. The other 3 kits are 17.95. No shipping costs are listed, must be about the standard, I would guess. We are now going to build John Bell's kit of the Stinson SR-10 Reliant that was advertised in the last issue. Hope to give you a report on that one in the next issue.

While in Titusville, Florida just before Christmas we had the pleasure of visiting with Tom Herr of Herr engineering. Tom puts out all those good laser cut kits, I sure you know about by now. We were really impressed with Tom's operation, not at all what we expected. The facility was very clean with a place for everything and everything in its place! Very neat! And to watch the laser cutting machine work was something to behold! The machine will cut three different sheets of balsa at one time, and only takes about, I would guess, 40 seconds!

3.  
Tom has two of these machines and he says they are both running 8 hours a day, 5 days a week. Tom also says that he has some new kits coming out shortly. He showed me the plans for a couple of them but I am not at liberty to tell you what they are as yet just in case things don't turn out right for now. We'll keep you posted. These will be smaller models and I am anxious to see them on the market.

The Geneseo Bash is shaping up and there is an entry blank for this contest on the last page of this issue. Please get your entry in as soon as possible, it helps us with the paper work, Since this one is only a two day contest rather than three we have dropped a couple of events and added a couple of different ones, more to experiment as well as be serious. We have split the power scale event into two categories. There will be an event for single engine aircraft and one for multi-engine aircraft. We have also added the Jimmy Allen type of models as an event. Another new event, and I think this one may catch on as some of our others have, is for Midget Racers. The models must be of a midget racer from post World War Two and have no larger than a 13 inch wingspan and will be a mass launch event. We will have at least two midget racer plans for you in the next issue. Meanwhile you can get to your drawing board and draw one of your own.

You will find an up-dated "Kanone" list in this issue. Blue Max Medals have been earned by Tom Groening, Del Balunek, Bill Passarelli, Larry Kruse, Jeff Englert, Charlie Hill and the first lady flyer/modeler Jane Schlosberg. Congratulations to you all. WELL DONE! If any of you Clubsters have earned the Blue Max Medal and not received it please contact GHQ at once!

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

Lt. Col. Lin Reichel, CinC-FAC

#### LATEST FAC PLAN PACK

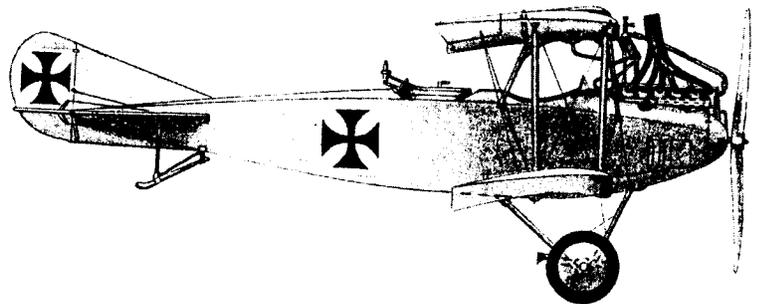
Five brand new, never before published plans by Tom Nallen. GREAT STUFF by one of modelings super designers and builders. Get yours for only \$15.00 postpaid from FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Douglas A-1 Skyraider	19" span
Halton HAC-2 Minus	21 1/2" span
No. American P-51B Mustang	18 1/2" span
Hawker Hurrican I	20" span
Gee Bee Model "E"	18 7/8" span

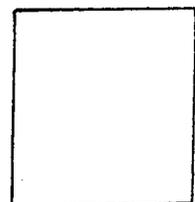
Plan Packs #1-2-3-4 are still available from GHQ. Price is \$10.00 each postpaid.

#### FLYING ACES T-SHIRTS

This year's T-Shirt features the Gloster Gladiator and is a very fine T-Shirt. It is a light blue shirt with the aircraft done in Pre-War RAF colors. You'll want one of these for sure. Sizes are; small, medium, large, X-large and XX-large. Price is \$12.50 postpaid. Send order to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



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 and Canada. Overseas the cost is \$20.00 per year. Six issues per year published every other month. This is your last issue under your old membership. Please make checks payable to "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



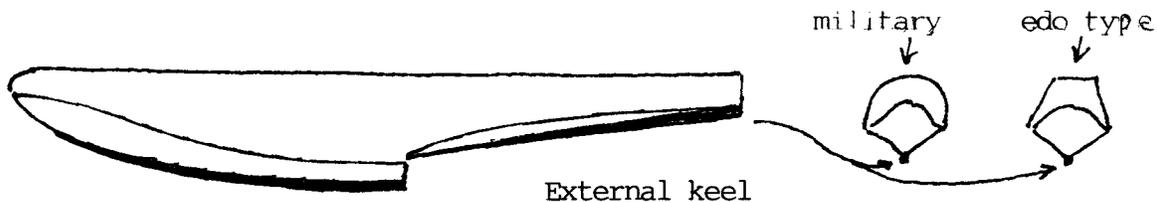
R.O.W. FLOAT DESIGN

by  
Jake Larson

Most everyone puts a large water rudder on their float (s). Some on left float, some on right and some on both. I've tried it and it never worked for me. If I got a straight track, I got a bad turn and vice versa. Then I recalled a lesson from a course in boat design and used it. WORKS GREAT!



Usual float for model aircraft. Internal keel (crutch) large rudder.

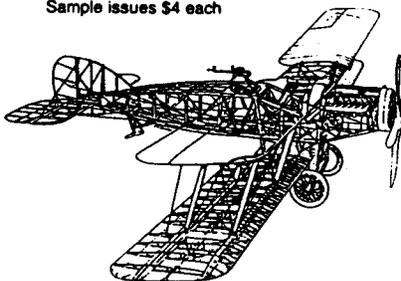


The keel is not deep-- $\frac{1}{4}$  inch for large aircraft (36 inch + span) and  $\frac{1}{8}$  inch is great for 24 in span aircraft. The length gives you the area and it acts over the length of the float rather than just the rear of the float. The rudder at the stern wants to make a turn (in the air as well as on the water). The shallow keel resists turning in water and, since water is more dense than air, it is effective. Once airborne it has minimal effect on the flying trim you've set in. Also, you've set flying trim to compensate for that shallow keel.

CONTEST**WW1 AERO (1900-1919)****SKYWAYS (1920-1940)**

- historical research
- workshop notes
- information on paint/color
- aeroplanes, engines, parts for sale
- your wants and disposals
- information on current projects
- news of museums and airshows
- technical drawings and data
- photographs
- scale modelling material
- news of current publications

Sample issues \$4 each



**BUILD ONE! A REAL ONE!**

Sole distributors for P3V, a computer program to generate a 3-view from a photograph.

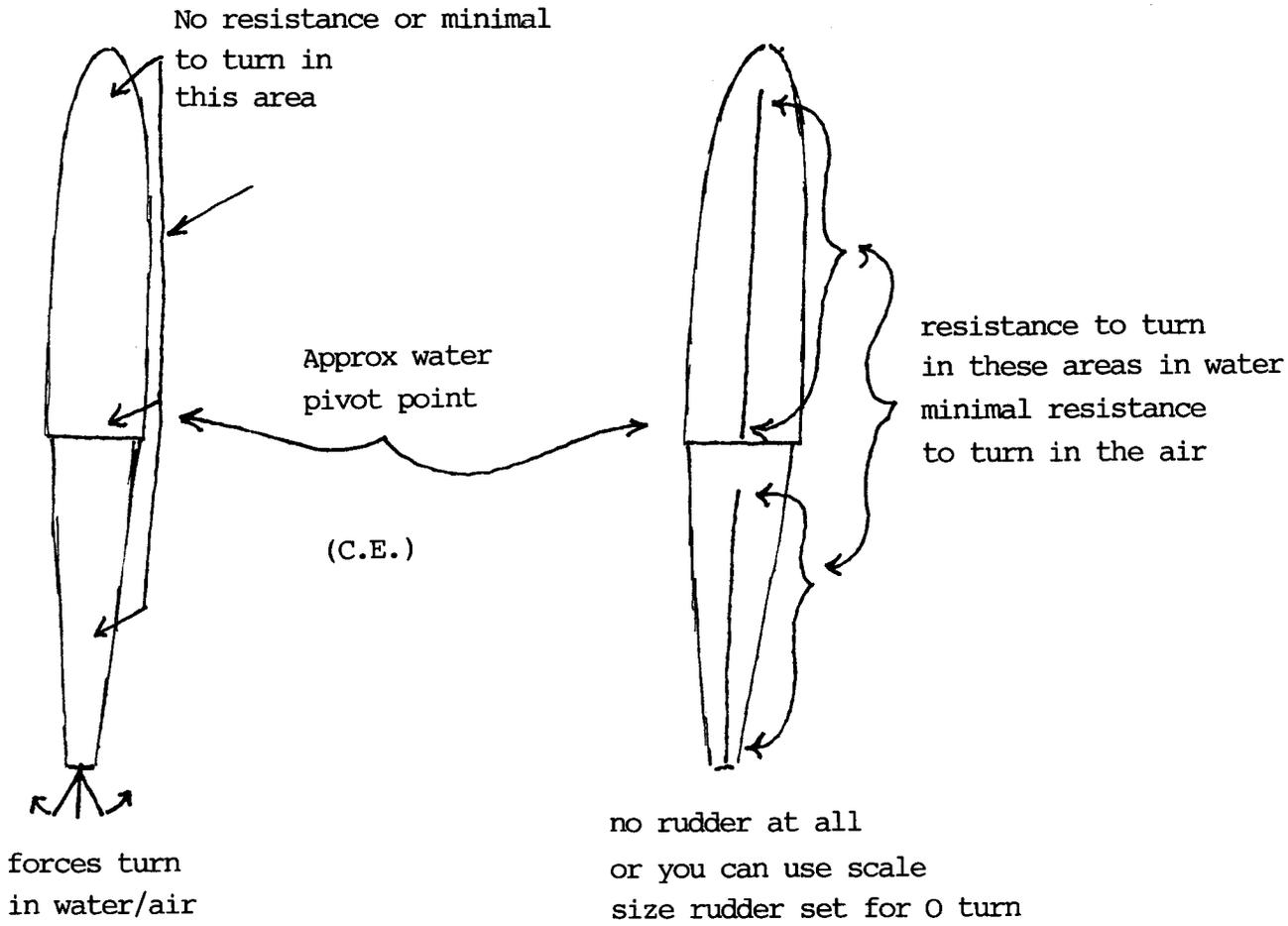
Published by: **WORLD WAR 1 Aeroplanes, INC.**

15 Crescent Road, Poughkeepsie, NY 12601 USA (914) 473-3679

The Cleveland Free Flight Society Indoor Contest for April 6, 1997 at Kent State University, Kent, Ohio. EVENTS; EZB, Novice Penny Plane, Mini-Stick, Bostonian, Jetco-R.O.G., Hi-Wing Peanut, Peanut Scale, WW-I Bipe Combat, Golden Age Scale, WW-II No-Cal Combat, No-Cal Scale (Under 5 grams), No-Cal Scale (over 5 grams), Dime Scale.

Contest Directors: Mike Zand, 5803 East Ash Rd., Independence, Ohio 44131 (216)-524-3480 and Larry Mzik, 117 Sycamore Dr., Painesville, Ohio 44077 (216) 357-7361

THIS IS A HUGE SITE!!!!



My 24 inch span Curtiss Robin on floats, pointed into the wind, ran 80 feet without turning a bit and it was trimmed for right turn in flight. DANG! I didn't have enough power to R.O.W. but it did run straight and true and I had to swim for it! I added rubber and it finally did R.O.W. and go into a gentle right turn as I'd trimmed it to do but while in the water- no turning. Try it--you'll like the results.

## Contest Calendar

March 23,...Merrimac Valley Air-Istocrats 19th Annual Indoor Contest. Events; FAC Peanut Scale, H.L.G., FAC Scale, WW-II, Penny Plane/EZB, Bostonian, No-Cal Scale, Mini-Stick, Golden Age Scale (ML), Flying Horde. CD, Jim Fioreo (508)687-0024 Or Kevin Barrett (508) 686-6869.

April 13....Merrimac Valley Air-Istocrats. Events; FAC Peanut, Civil Production, WW-II, PennyPlane/EZB. CD's, Tim MacDonald (508) 686-1912 or Richard Zapf (508) 352-8331. Site, Haverhill, Mass.

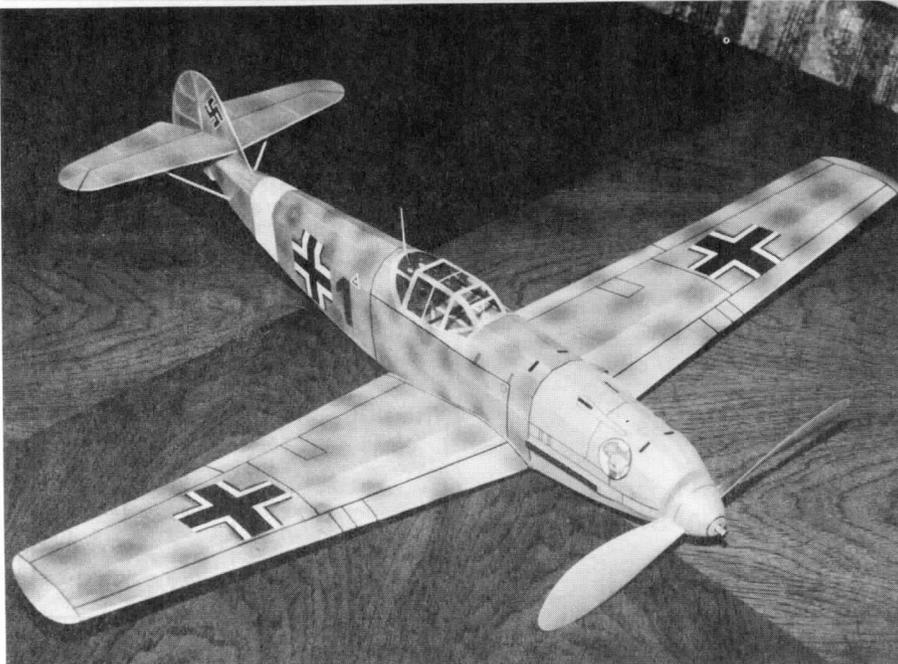
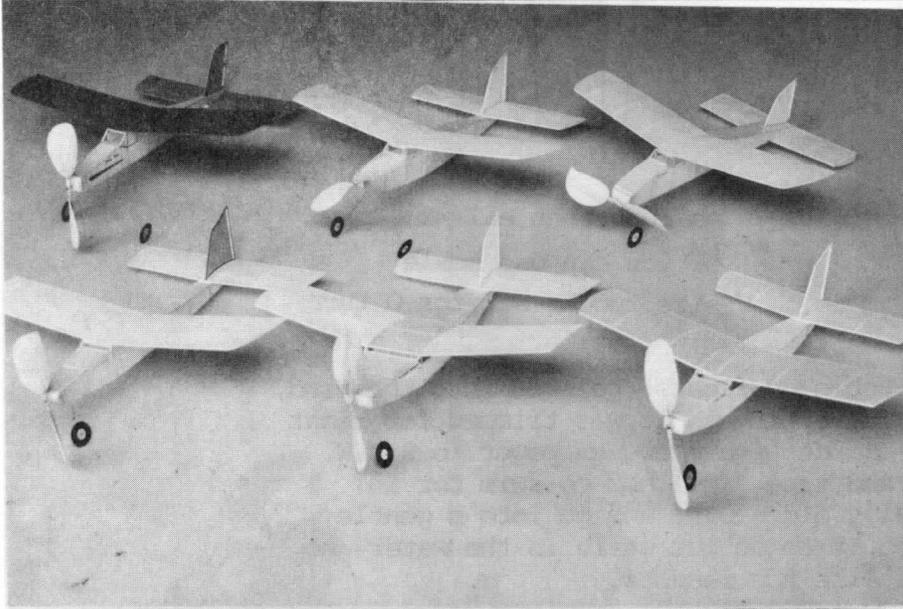
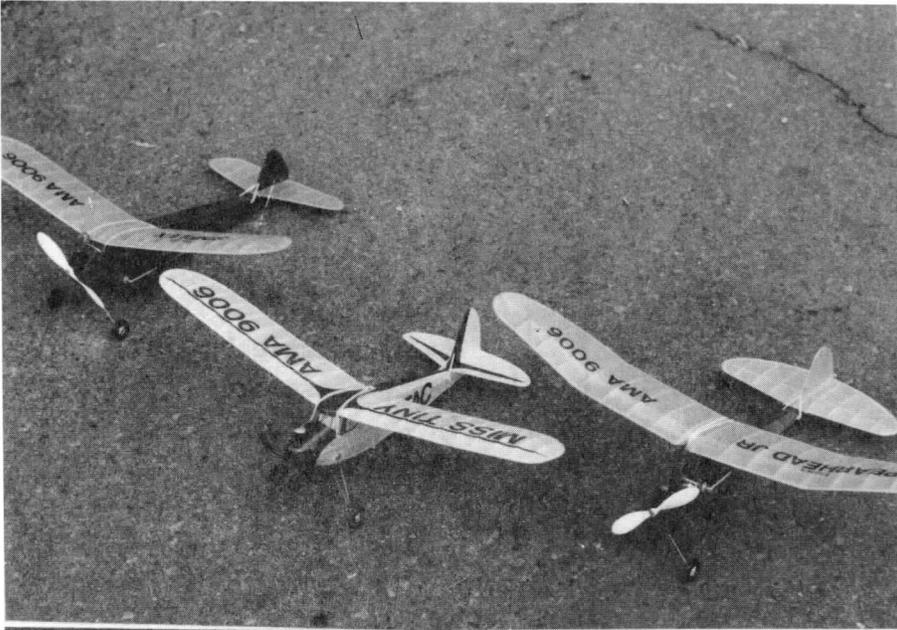
April 20....Spring Kanone Quest, Cactus Squadron, Phoenix, Az., FAC events. CD, Bob Schlosberg 941-8778.

May 4.....Detroit Cloudbusters Indoor Meet, Flint, Mi. Events,; FAC Scale, Golden Age Scale, WW-I, WW-II, Races, Site is 300' X 400' X 89'. CD, George Lewis, 3602 St. Clair Hwy., China Township, Mi. 48054.

**DIELS ENGINEERING, INC.**  
P.O. BOX 263  
AMHERST, OHIO 44001  
**MODEL OF THE MONTH**

**THE DOUGLAS TBD-1 DEVASTATOR**  
US NAVY TORPEDO BOMBER

1/24 scale. 25" span. Rubber powered free flight scale flying model. Complete kit with . decals, canopy, Japanese tissue & more. Kit price \$25.00 each plus \$4.00 shipping. Ohio residents add 5.75% sales tax.  
Catalog \$2.00 each or Free with order.  
ON LINE ON AMERICA ON LINE (DIELSENGR)  
email dielsengr@kellnet.com



## THE GOLDEN AGE

by  
Fran Ptaszkiewicz

Consolidated P2Y-1, -2, -3, built by the Consolidated Aircraft Co., at Buffalo, N.Y. They were long-range flying boats, originally powered by two Wright R-1820 "Cyclone" nine-cylinder radial engines.

The dimensions of these machines were; wingspan 100 ft., length 61 ft. 9 inches, height 19 ft. 1 inch and wing area 1,514 square feet. Performance was 139 miles per hour maximum speed.

Historically the airplane made its first flight on March 26, 1932 and the first service delivery date was February 1, 1933.

In 1927 Issac M. MacLadden joined Consolidated and began designing the Navy's first monoplane flying boat, the XPY-1, powered originally by two Wasp engines. This design also flew with a third engine mounted on struts above the wing, during its first month of testing.

Interestingly, when the Navy requested a bid for nine patrol boats after the test program, the Martin Co. managed to underbid Consolidated on its own design and the Martin Co. produced boats were redesignated as P3Ms.

In May 1931, Consolidated received a contract for a developed version which was a sesquiplane (biplane with a small lower wing).

The prototype again flew with a third engine mounted on struts above the wing while the other two engines were located just below the wing. The lower wing replaced the wide struts, which in the P3M version had carried the stabilizing floats.

On July 7, 1931, the Navy ordered 23 twin engine P2Y-1s, followed by another 23 PY-3s with the more powerful Cyclone engines mounted directly on the upper wing thereby reducing the drag of the original mounting struts.

One of the larger airplanes known to man, is this mechanical marvel of a flying boat built in Buffalo, N.Y. Ships of this type are doing service daily on many overwater routes and are setting up safety and mileage records for others. to shoot at. Proclaimed a local Buffalo paper.

Airplane enthusiasts were encouraged to study the design and to notice the details of its construction that contributed so much to making it a champion of the air, proclaimed another story.

Continuing, we were urged to note how the bottom (hull) was fashioned so as to aid the heavy craft in "coming clean" off the water instead of being glued to the surface by suction, or what we would eventually call surface tension. The airplane was considered so large that two rudders had been deemed necessary to assure proper maneuverability on the water.

In January 1934, it was "Anchors Aweigh" as six of the Navy's new high powered flying boats swiftly slipped into the air, bound for an historic flight.

All night and into the dawn of a new day these ponderous planes and heroic pilots battled their way through rough wind and sky. Each aircraft was throttled back to an average speed of 100 miles per hour, for it was said they were in no hurry,

A. A. (AL) Lidberg mps; 1008 E. Baseline Road; Suite 1074; Tempe, AZ 85383  
Phone (602) 839-8154 Evenings and Weekends

Dear Lin,

With the successful response that Series 'A' mini-old timer full kits for CO2 or small electric power have received, AAL/mps is now introducing a new kit - the Series 'B'.

This new set also consists of three pre-WWII gas free flight models, scaled down to 21"-23" wing-span. The models are: the "Miss Tiny", a very realistic cabin model; the "Simplex", a very basic box-bodied model; and the "Spearhead Jr.", a cabin model with a high mounted wing so that it looks a lot like a pylon model. As usual, the mini-old timer models are fairly easy to build, simple and practical for sport or FAC competition flying - and, perhaps best of all, they take up little building or storage space.

Series 'B' models continue the full kit idea with balsa and ply printwood, sticks, esaki light weight tissue, wire, wheels and sheet acetate plastic for windows, along with crisp blackline printed plans and fairly detailed instructions. The price for the Series 'B' kit with all three models is \$35. postpaid in the US and Canada. Series 'A' kits, containing the Cumulus, Flea and Skyscraper mini-old timers are also available at the same price. A catalog illustrating all of the AAL/mps plans and kit models is available for \$2.

Thank you for your support - the pics and reprint of my letter in your newsletter were nice!

Sincerely,

AL

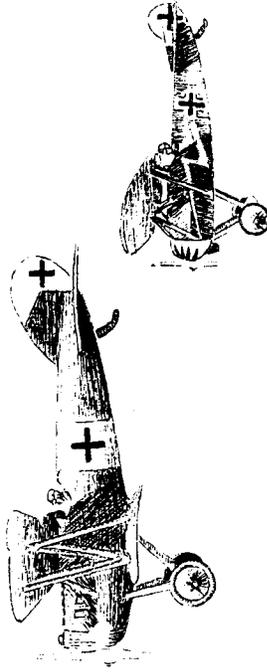


PHOTO PAGE: Left column; top, Al Lidberg's lineup of his new triple kit. See ad in this issue.

Middle; A collection of "Legal Eagles" by Newt Bollinger. Are you a lawyer, Newt? Photo by Newt.

Bottom; Another fine model by Chris Starleaf. Plans in this issue. Come to Geneseo or Muncie to see this fly! Photo by Chris.

Right column: top; Chuck Wojtkiewicz and his DH-Turbo Beaver. Looks like it would be a great flyer. Photo by Chuck.

Bottom; Juanita Reichel with her Nesmith Cougar Peanut. Photo by Fred Wunsche.

just a routine flight for six stock model planes and thirty hardy crewmen. "Merely a routine flight", announced a Naval Press release.

It was hard for the average person and even an air enthusiast to comprehend a flight of 2,396 miles as being all in a day's work, as it were, but sleet and mist could not keep our Navy back.

Twice the groups were separated in the impenetrable darkness which surrounded them like a suffocating cloak. Many times during the course of the flight they were forced to fly within several feet of the rough seas, but not once did they lose their position.

Their arrival at Honolulu was met with much enthusiasm and ceremony, the epochal flight having been successfully completed in less than 24 hours.

As a result of this most important flight, naval bases in Hawaii and California were now linked by patrol planes and the Japanese were so impressed they purchased a P2Y-1 for their service units.

The Navy noted that two of the crew on this historic flight were Buffalo residents and that all of the aircraft were Buffalo built. The Consolidated P2Y flying boats powered with Wright "Cyclone" engines were constructed and assembled in the huge Consolidated plant located on Elmwood Ave. in the city's northside area of Buffalo.

As a direct result of the Pacific flight, the plant had received what was then a very handsome order for more and better flying boats of a similar type.

The seaplane drawing accompanying this article is not of the Navy's type, rather it depicts the cabinized version which was then in use along the South American Air Lines, Rio-Buenos and New York air routes.

Speed and dependability had marked the "Commodores" entire flying Career.

The name "Commodore" was given to the aircraft to distinguish it from its military counterpart and there were a few other modifications from the Navy's version, these being in the interest of passenger comforts.

In researching for this article, an incident was recalled wherein the aircraft on a passenger run, was forced to descend as a result of engine trouble. The airplane made a forced landing undamaged on a grassy field with the passengers being somewhat frightened but none the worse for the experience, it was reported in fine print.

A general description of the aircraft is as follows; The complete hull which supported the tail surfaces at the aft section was fabricated of sheet duraluminum, as were the outer floats. The control cockpit as it was then called, seated two pilots and was located several feet from the nose of the airplane.

In the Naval version the observer or gunner sat immediately forward of the pilots with his compartment carrying the anchor and camera mechanism or gun.

Early models of both the commercial and military flying boats, had been monoplanes, the wing having been supported by the struts. In later designs however, the struts on the lower wing had given way to a small lower wing panel, which it was believed would contribute a great deal of lift and speed on the newer models and thus making the airplane a sesquiplane rather than a monoplane. The wing and tail surfaces were completely covered with linen fabric as were the ailerons and rudder units. Two Wright "Cyclone" engines located between the hull and wing supplied the then huge aircraft with dependable power.

The civil versions in use at the time were painted orange and cream with the hull being the latter color. In the Navy or Military variety the wings and tail were

## S.O.S.--S.O.S.

Wanted; #-views for the Macchi MB-308 and the All-Ame American Ensign. Joe Valenta, 3748 W. Butler, Phoenix, Az. 85051.

Where can I purchase some Tricresyl-Phosphate (TCP)? Chic Rubrich, 19404 Elkhart, Harper Woods, Mi. 48225.

Want to locate a set of plans for the P-30 class HOTBOX by John Oldenkamp from the July 1977 issue of Model Builder magazine. Jerry Makela, 1004 So. 24th St., Richmond, Ind. 47374.

Seeking a copy of the book "The Best of the Golden Age of Flying Models". Sidney Gilbert, 955 Patterson Dr., Sarasota, Fla. 34234.

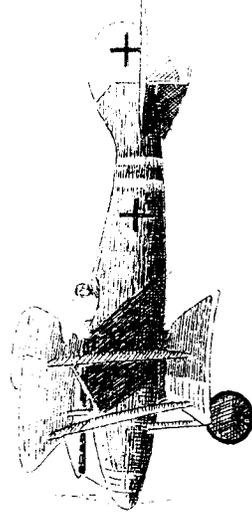
Wanted; Info and 3-views, color and markings for the Vizzola F.5 mfg. by Caproni. Jim Hanegan, 1424 West Day, Denison, Tex. 75020.

Looking for the patterns for Comet's "King Cobra" Also the plans. It was kit #E-10. Doug Wilkey, 94 First St., Clay, Ky. 42404.

John Hlebcar, 201 Foster Rd., Napa, Ca. 94558 is looking for a copy of the "Curtiss Hawk" F11C-4 by Miniature Aircraft.

Wanted; Color onfo on the French Bassou FB-40. Tim Hayward-Brown, 1A Dryden St., Tranmere 5073, South Australia.

Lindsey Smith is looking for a copy of the 30" plan of the Douglas Observation plane kitted by Megow. Contact him at; Spring Meadow, Fyfield, Andover, Hants., SP18EL England.



# Laser Cut Rubber Powered Flying Models



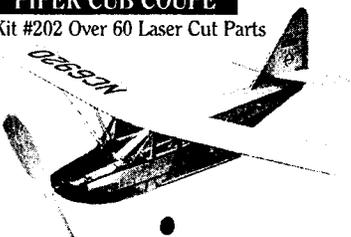
**MR. MULLIGAN**

Kit #201 Over 70 Laser Cut Parts



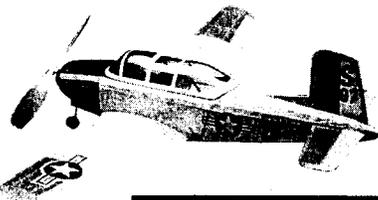
**PIPER CUB COUPE**

Kit #202 Over 60 Laser Cut Parts



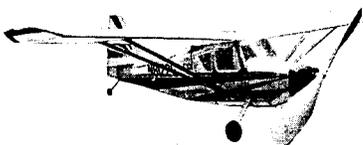
**STINSON VOYAGER**

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**T-34**

Kit #204 Over 50 Laser Cut Parts



**CITABRIA**

Kit #205 Over 50 Laser Cut Parts

Introducing five laser cut kits from the biggest new name in Free Flight Aircraft...Dumas Products.

These walnut scale (17-1/2" wing span) models come with Precision Laser Cut Parts, hand selected balsa, injection molded propeller, F.A.I. Contest rubber, plastic wheels, vacuum molded plastic parts, full color peel and stick decal set, light weight colored tissue, and the most comprehensive plans and instructions of any rubber powered kit.

Call today 1-800-458-2828 Ext. 700 and ask for an information packet on the Dumas line of Rubber Powered Flying Models.



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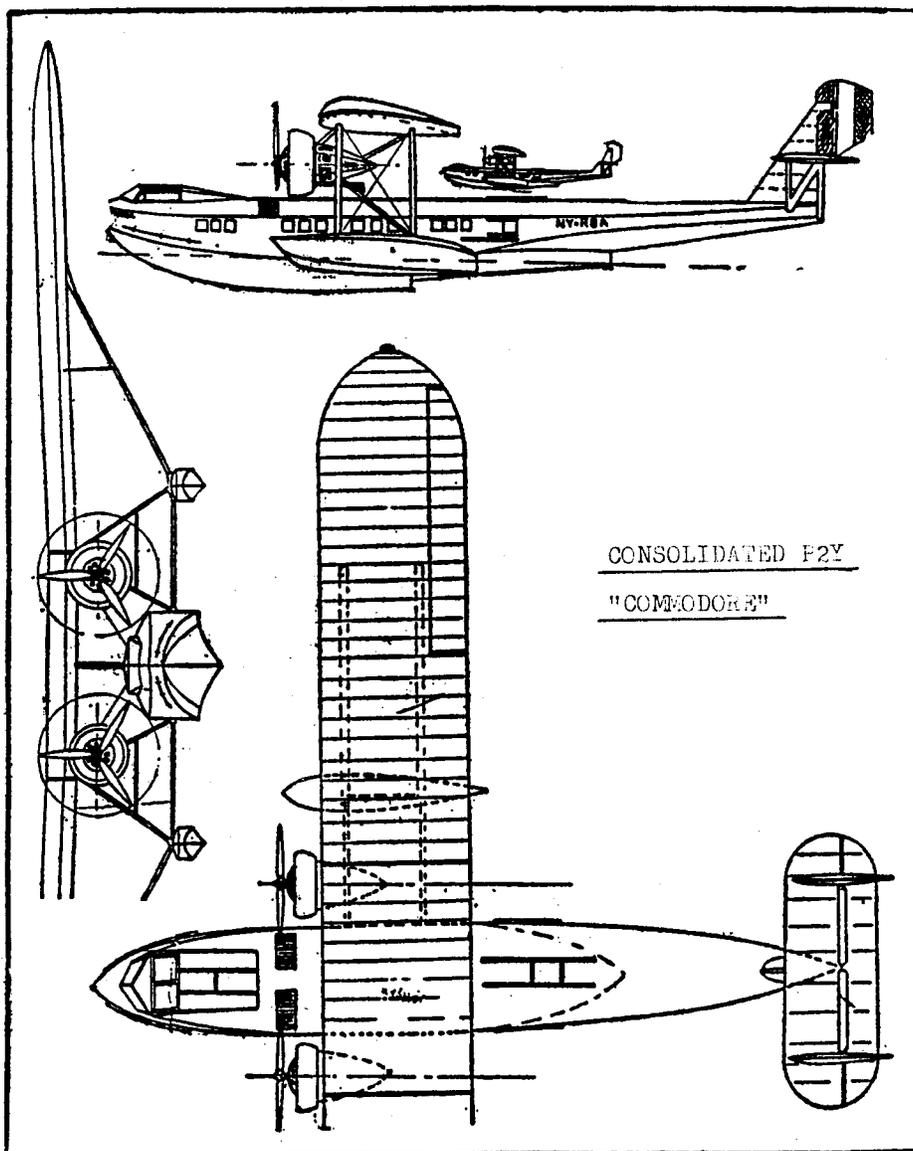
painted yellow with the rest of the aircraft navy grey.

The building of the flying boats in the Buffalo area was not without its problems, primarily that of assembly, dis-assembly and re-assembly as the aircraft were first built and assembled at the factory, then dis-assembled and trucked approximately three miles thru city streets to the edge of the Niagara River, finally reassembled at the river's edge and prepared for test and qualification flights.

This was not the only difficulty encountered, as during the Winter and Spring particularly when the ice was flowing out of Lake Erie and into the Niagara River on its journey to Niagara Falls, these pieces would produce a hazzard of ice damage to the boats and more than once, personnel would be made to stand by the aircraft and pole away the potentially damaging ice flows.

It certainly was one of the many reasons the Consolidated Co. moved their operations to San Diego, Ca., where the P2Y series of flying boats eventually led to the design of the famous PBV "Catalina" flying boats which did yeoman service during World War Two.

The January 1934 flight from San Francisco to Pearl Harbor by six boats from Naval Squadron VP-10F will always be remembered as the most important flight of that time, as well as precursor of overwater travel to come.



CONSOLIDATED P2Y

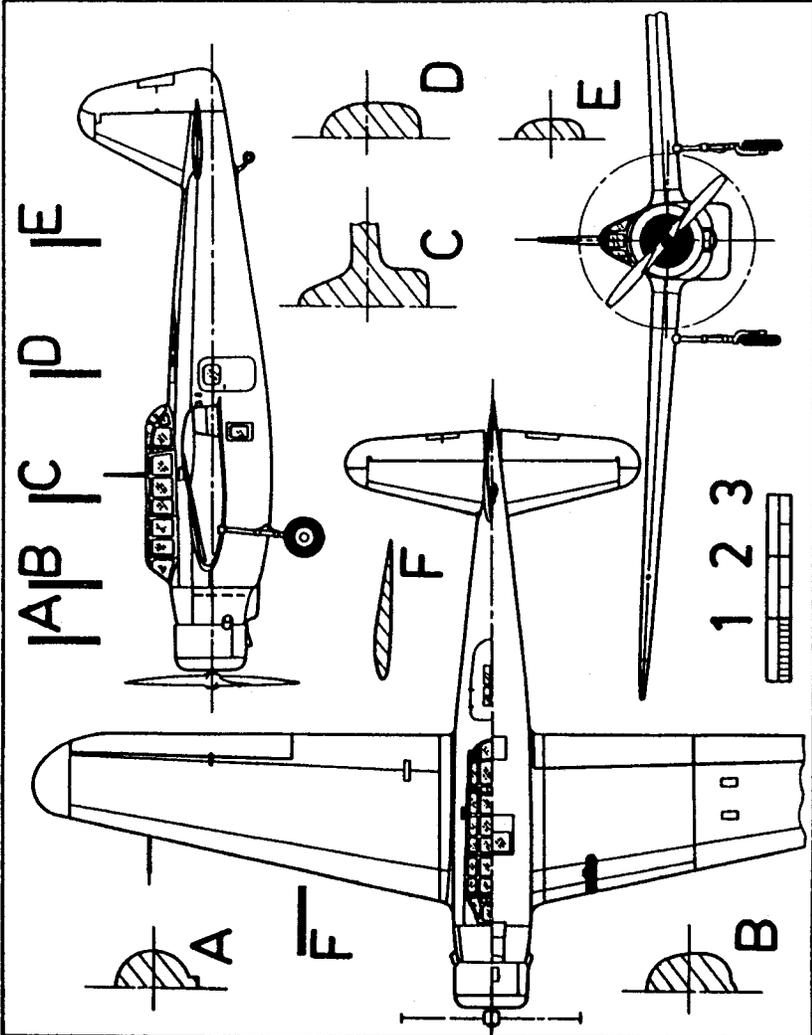
"COMMODORE"



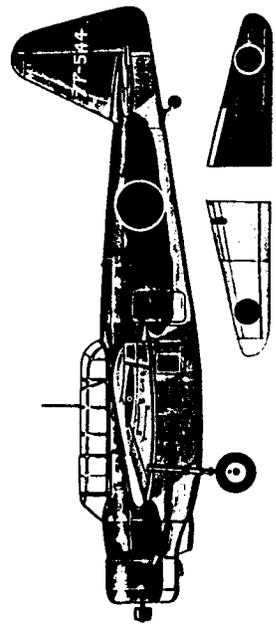


KYUSHU KLIW NAVAL CREW TRAINER  
By Nokonzuma Nomosaki.

Looking like a school boy's drawing of a North American O-47 this large ship (49 ft. span) trained Japanese air crew en masse. The trainee pilot and radio operator/gunner occupied the upper glazed cockpit, while the student navigator and bombardier sat below decks with the instructor. With this crew of 5, one machine gun,



GENIAL INSTRUCTOR



132 pounds of practice bombs, and fuel this bus limped along at a 100+ mph cruise and could claw it's way to 18, 440 ft. if the mill put out it's advertised 515 H.P. The economics of training air crew en masse was a great savings in time, instructors, and equipment. But, I cannot help but think of the mighty task imposed on the instructor, especially when he may well have had to dash continually from below decks to the cockpit, and back. It is small wonder he looks as depicted below the drawing. Toward the end of the war these craft were often used on suicide missions, by then deemed expendable. I cannot think of a worse ship to use for this purpose, with it's low speed, low ceiling, and large size.

Coloring: Dark areas on the drawing were sea green, while the undersides were light grey. The inboard wing section had a yellow leading edge wrapping around a bit on both top and bottom as depicted on the drawing of the wings. The inscription on the fin and rudder was white, as were the rings around the national insignia in the sea green areas of the ship. No white ring encircled the underwing insignia. The single long oleo was grey, as was the hub of the wheel.

Although I have seen no photo of the nose of the ship, and the three view depicts two successive air intakes, one in the bottom of the engine cowl, the other in the forward belly of the fuselage, intuition drives one to think that the second "intake" was rather a bombardier's aiming window. Perhaps glazed on the bottom as well as the front face. Note that there are four windows in the turtle deck, as well as the side of the belly and entry door..

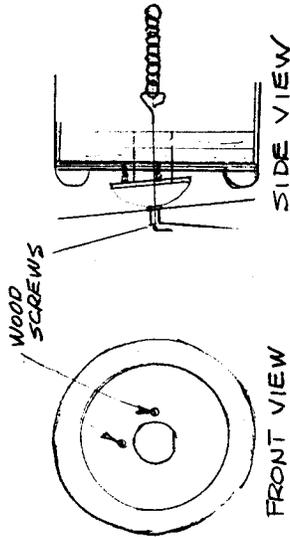
Ref: "Letectvi & Kosmonautica", 1983, #12, & #15.  
"World War II Airplanes" Vol.2., Rand McNally  
Color Illustrated Guides.

Since elephants don't fly very well - try Peanuts!

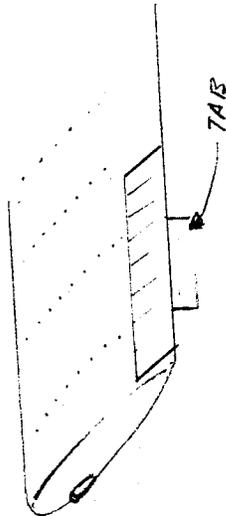
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under 13 inches in wingspan. © Peck-Polymers  
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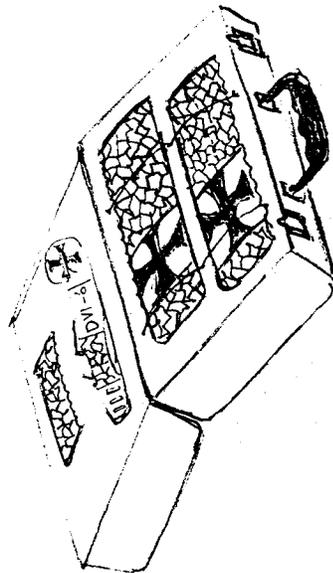
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BAB SAACKS PILOTS LOGOS '96

Peanut & No-Cal Scale Postal Meet

Our annual Winter Postal contest is now in full flight Skysters! Fly that model and send those times in to GHQ. We have four divisions or "Wings" which are; Outdoor Peanut, Indoor Peanut, Outdoor No-Cal and Indoor No-Cal. Enter as many models as you wish in each event, send in your time along with the name of the model and the event. Contest times count too. Every time you better a time with a particular model send that time in also. Send your entries to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

This contest closes on April 30, 1997. Entries postmarked after May 1, 1997 will not be accepted.

Indoor Peanut

Pilot	Plane	Time
1. Jim Holland	Lacey M-10	83 sec.
2. Barrie Taylor	Waterman Gosling	82 "
3. Stan Fink	Huntington H-12	69 "
4. Larry Kruse	Facetmobile	52 "
5. Lin Reichel	Cougar	39 "

Outdoor Peanut

Pilot	Plane	Time
1. Don Reed	Cougar	328 sec.
2. Ollie Benton	Chambermaid	107 "
3. Ron Hummel	Monocoupe	70 "
4. Tom Hallman	Matrinsyde Buzzard	69 "
5. Ron Hummel	Lemberger LD-206	52 "

Indoor No-Cal

Pilot	Plane	Time
GEORGE LEWIS	WATERMAN GOSLING	244 SEC.
1. Lincoln Ross	F4F Wildcat	244 sec.
2. Larry Kruse	BOO-Ray	207 "
3. Larry Kruse	Fairey Barracuda	185 "

Outdoor No-Cal

NO ENTRIES AS YET.

## The Shape of a Winner?

Dick Bennett

Anyone who has followed World War I mass launch events knows the S.E.5 or S.E.5a is the plane to beat. Just how dominant is it? Take a look at the table — this is a list of all WWI types that have placed 3rd or higher in FAC mass launch events, as reported in *Flying Aces News* issues 55 through 171-97. The point scores for each type were figured by giving each plane 3 points for a first place finish, 2 points for every second, and one point for each third. Rankings of the top five are shown in parentheses.

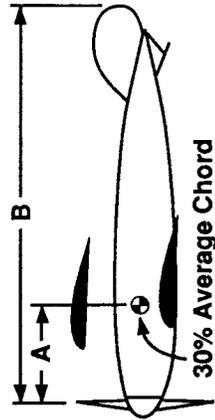
Type	Points	Type	Points
Albatros D. (All)	5	Martinsyde G. 102 Elephant	3
Armstrong-Whitworth FK-8	5	Martinsyde F.4 Buzzard	2
Bristol Scout D	12 (4)	Nieuport Ni. 17	2
DeHavilland DH 6	27 (3)	Nieuport Ni. 28	2
DeHavilland DH 9	3	Port Victoria PV-6 Kitten	5
Dornier D. I	3	Port Victoria PV-7 Grain Kitten	9 (5)
Euler (Quadruplane?)	3	RAF SE-5, SE-5a	58 (1)
Fokker B. II	1	Roland D. VIb	2
Fokker D. VI	2	Sopwith 1-1/2 Strutter	3
Fokker D. VII	43 (2)	Sopwith Pup	1
Halberstadt D. II	1	SPAD 13	2
Martin Handasyde	1		

Over all these years, only 23 different types have managed a win, place or show, and only half of these have come in first. Of those eleven, six have made solitary appearances in the winner's circle. The bulk of the trophies have gone to the S.E. 5, followed by the Fokker D. VII and DH 6. Clearly, the S.E. is king of the hill.

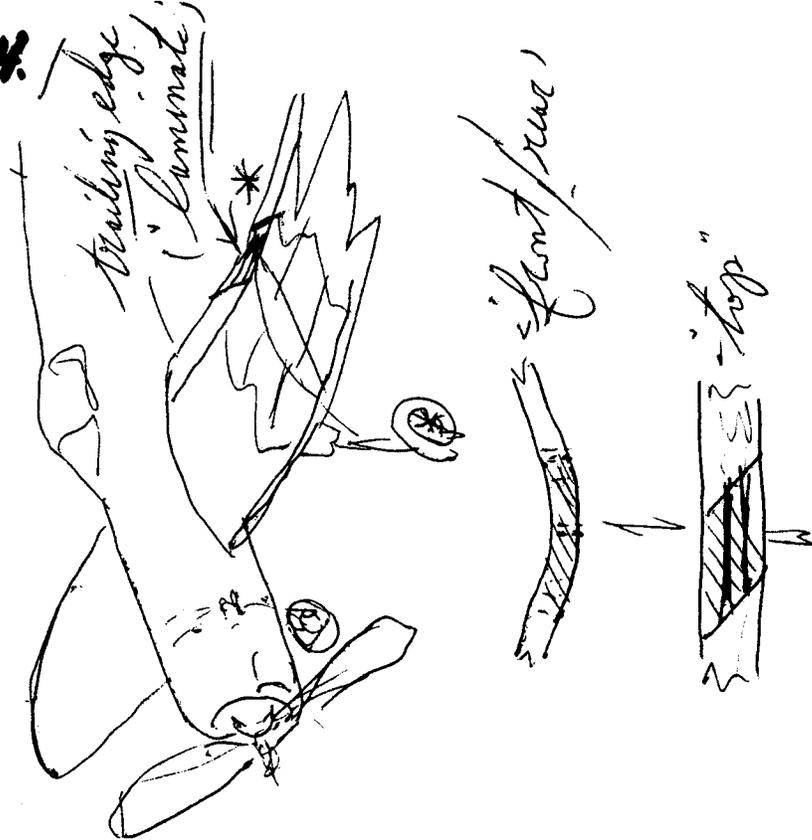
Obviously, the S.E.5 derives much of its success from its design parameters. It's blessed with a large wing area, which keeps wing loading low, and a long nose, which minimizes the need for performance-robbing ballast and permits longer motors without getting into balance problems. A contributing factor is its boxy fuselage, which can be built more lightly than a stringer-and-former design.

It occurred to me that if we can reduce key design parameters like these to simple numbers, we can quickly compare other types of aircraft to the S.E. and screen them as potential competitors in mass launch events. This would weed out the obvious dogs, but more important, might spotlight some "sleepers", types able to give the S.E a run for its money. I settled on two factors:

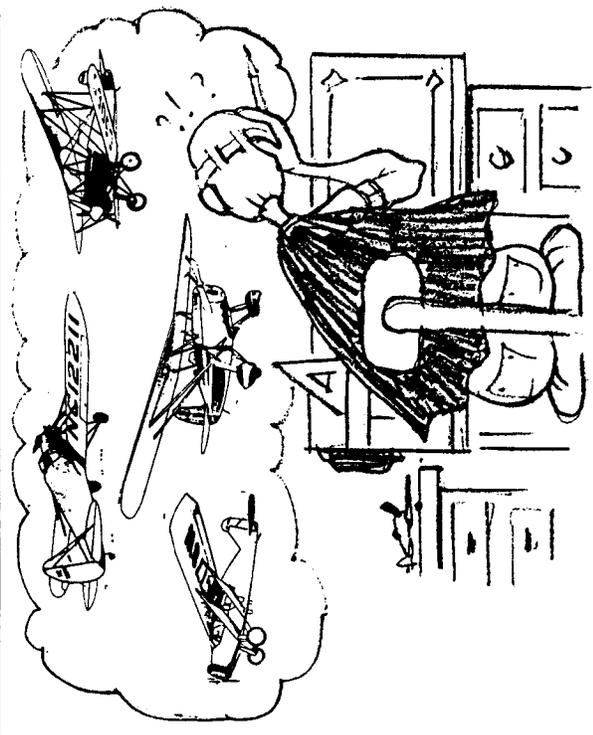
1. **Nose Moment**, which I have defined as the distance from the propeller plane to the 30% average chord point of the wings, divided by the distance from the propeller plane to the rearmost point on the aircraft. A high number is better.



14.



JOHN HALL'S METHOD OF STRENGTHENING WING JOINTS SUCH AS ON THE CORSAIR.



2. Because FAC events have wingspan limitations, we want to keep wing loading low by packing as much area as possible into a limited span (a la Fike & Lacey). In short, we want a wing with a low aspect ratio. I chose to express it as the **mean chord-to-span ratio**, figured by dividing the total wing area by 2 times the square of the span. The two times factor takes into account the fact that we're dealing with biplanes. Again, a high number is better.

These two factors are then plotted on a graph — nose moment on the vertical axis and chord-to-span ratio on the horizontal axis. There's one refinement — planes with inherently lighter rectangular fuselage cross sections are identified by dots surrounded by squares. This convention also applies to those with rounded turtledecks. Oval, circular or extensively faired rectangular structures are identified by circled dots.

The graph contains the parameters for all the planes on the table of winners (except the Martin Handasyde, whose type wasn't identified in the contest standings), plus an assortment of other single- and two-seater biplanes. If we treat the S.E.5's coordinates as the Holy Grail and draw circles centered on them, we get a rough idea of how closely competing designs approach these winning proportions. As you can see, the immediate neighborhood is pretty sparsely populated, but two of its occupants are the DH 6 and Bristol Scout, which placed 3rd & 4th on the winners' list. But, ahah! We've spotted a sleeper — the Berg C. I. Hate the nuisance of detailing the rear pit on two-seaters, you say? You're in luck — the Austro-Hungarians converted a bunch of them into single-seaters for use as escort fighters and photo-recon machines. Check out pages 172 - 3 of Austro-Hungarian Army Aircraft of World War One, by Grosz, Haddow & Schiemer.

Other designs just outside the inner circle include the Sopwith 1-1/2 Strutter, a one-time winner, Armstrong-Whitworth FK-8, which logged one first and one second, and the Euler Quadruplane, which racked up three thirds years ago. Its 4 narrow-chord wings put it close to the winner's circle, taking advantage of the fact that the chord-to-span formula is set up for biplanes. Others in the neighborhood are the SVA 5, AGO C. IV, Albatros D. II, UFAG C. II. Shapewise, all but the Albatros have some difficult features to deal with, but maybe, just maybe, there's a winner in the lot.

The biggest surprise coming out of this study is the Fokker D. VII. Buried as it is, back in the middle of the pack, it certainly doesn't seem to be worthy of its second place status. If the D. VII can do this well, there's hope for a slew of designs. One point worth making here — the D. VII's chord/span ratio of 0.129 is based on dimensions published in the old **Profile** series. Use the **Windsock Datafile** as your source, and it improves to 0.133, and Grosz/Haddow/Schiemer's dimensions raise it to 0.142, which puts it just outside the inner circle. Picking your scale source can make a big difference.

Does the system work? Only time and experimentation will tell. I can vouch for one thing though — if I had made up this graph first, I would never have built my Berg D. I. It took a 2" steel washer buried in the noseblock to balance, and the extra weight made it about as easy to trim as a bowling ball. One trim flight, one repair, one trim flight, one repair, one trim flight .... I've quit patching it up. Now it's getting a new set of wings. You see, the C.I single seater's fuselage is almost identical to the D. I. You hear that, Rottensox?

Coming soon .... World War II fighters.

Jason Webb was one of two Clubsters to send in the quiz with all planes identified correctly. Jason's prize is on the way. Congrats!

## OBSOLESCENT OR SMALL QUANTITY PRODUCTION AIRCRAFT OF THE ARMY, NAVY, COAST GUARD & MARINES

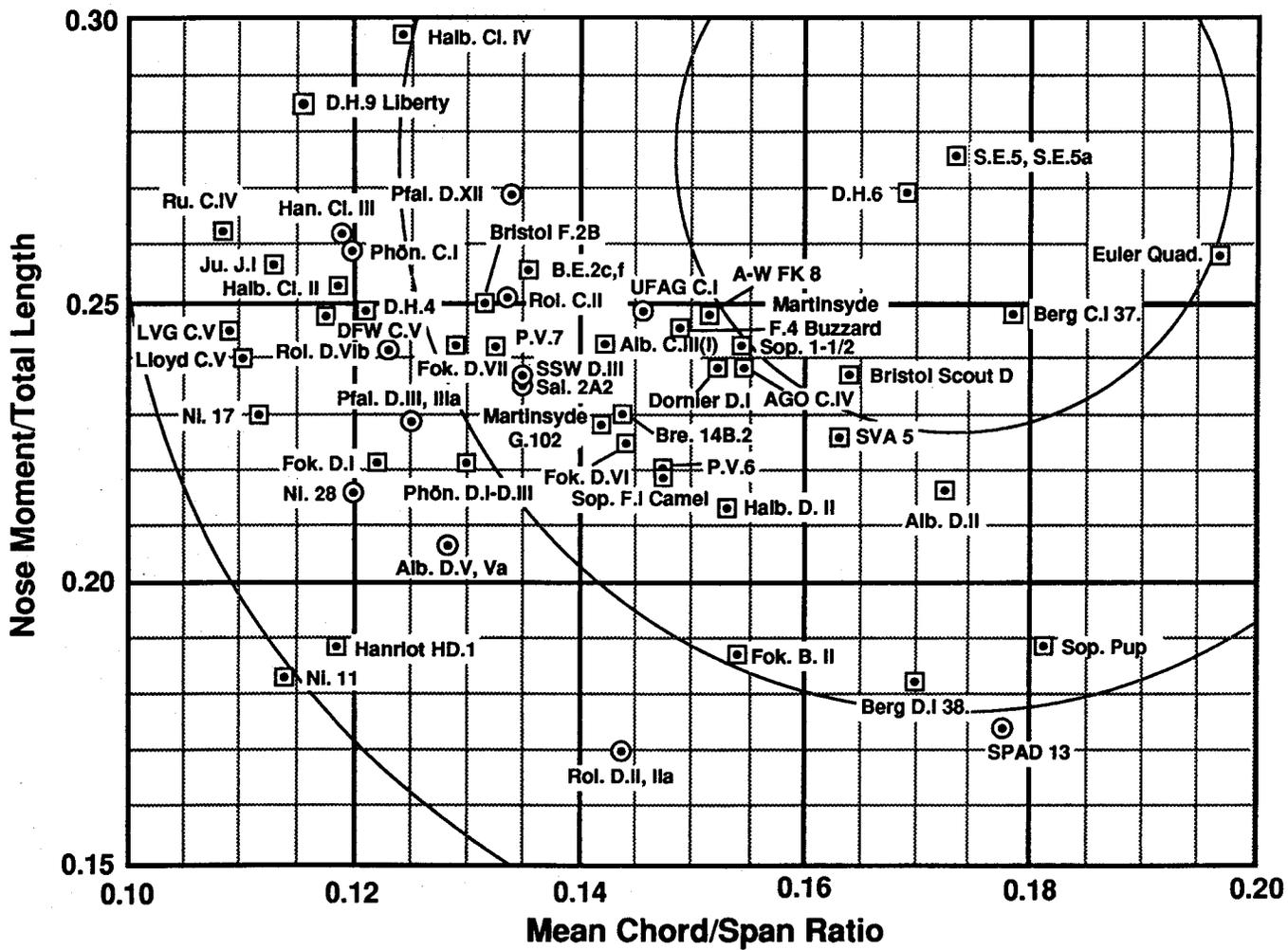
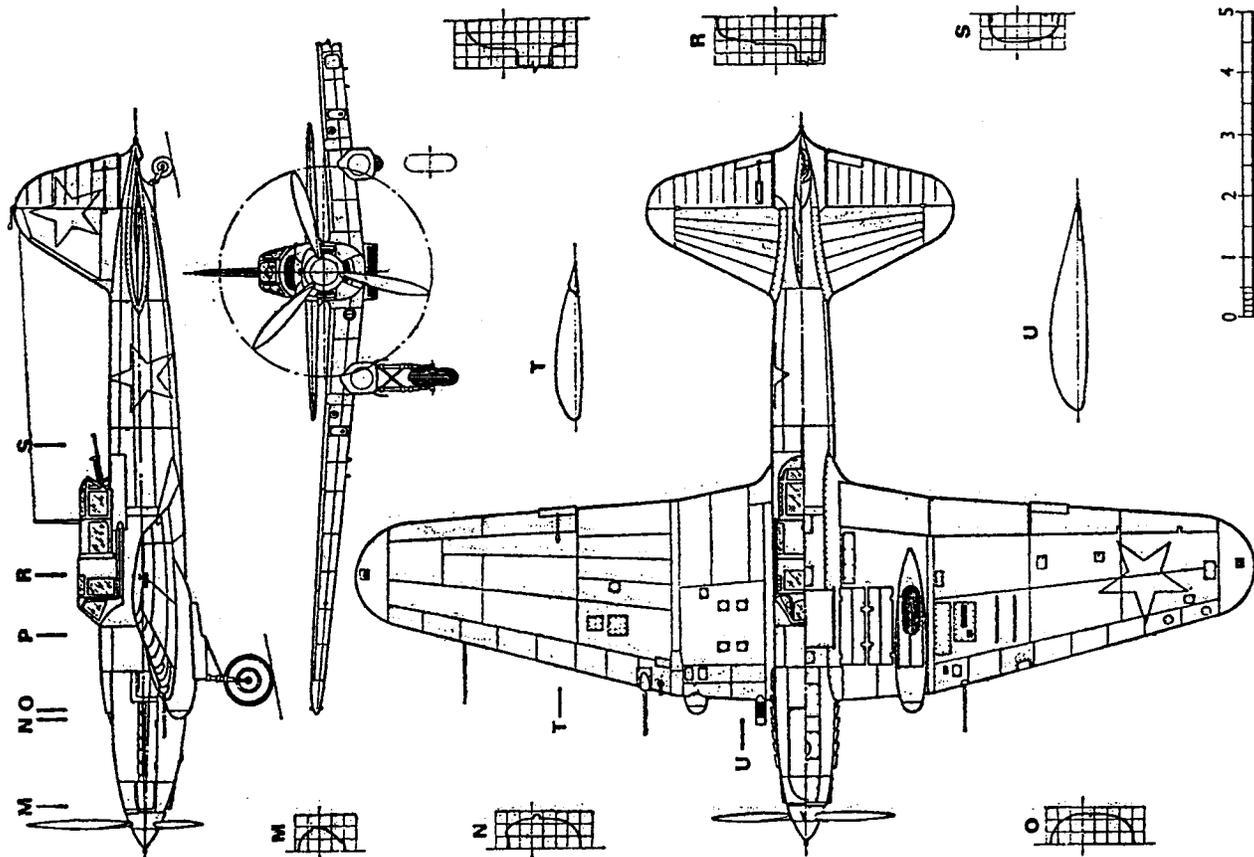
The aircraft depicted are either obsolescent types or those purchased in small quantity by the Services. A few, like the GRUMMAN Skyrocket and the BELL Airacuda, are still being tested and experimented with and may yet go into production. Most pursuit and fighter planes shown were formerly our first-line combat craft, but have been retired to the role of pursuit-fighter trainers and are flown by pilots just before they are assigned to the new combat planes. The rugged and faithful MARTIN B-10's and 12's are flown during the transition period from single-engine craft to the bigger and faster attack and bombing planes, and are also used to tow targets for antiaircraft trainees on practice fire.

Although retired from the front ranks, these obsolescent planes are filling an important gap in our war program and their use through a number of years attests to the sound construction of American aircraft.

[ 1 ]	Boeing P-12E	[19]	Douglas B-18A
[ 2 ]	Boeing XPBB-1	[20]	Douglas B-23
[ 3 ]	Boeing 247-D	[21]	Lockheed C-40
[ 4 ]	Bellanca AIRBUS CARGO	[22]	Martin A-30
[ 5 ]	Bell YFM-1	[23]	North American BT-9
[ 6 ]	Bellanca L-50	[24]	North American O-47
[ 7 ]	Curtiss A-10	[25]	Northrop 17A, BT-1, A-33
[ 8 ]	Curtiss A-12	[26]	Vought SBU-1
[ 9 ]	Boeing P-26A	[27]	North American P-64
[10]	Curtiss P-36	[28]	Martin B-10 & 12
[11]	Curtiss SOC-3	[29]	Grumman F2F & F3F
[12]	Curtiss P-37	[30]	Grumman J2F-1
[13]	Curtiss A-18	[31]	Douglas B-19
[14]	Curtiss SOC-3	[32]	Grumman XF4F-1
[15]	Douglas O-38E	[33]	Ryan YO-51
[16]	Douglas DC-5	[34]	Seversky P-35
[17]	Douglas O-46	[35]	Northrop A-17
[18]	Douglas DEVASTATOR TBD-1	[36]	Spartan EXECUTIVE
		[37]	Vultee BC-51

# Ilyušin Il-2 typ 3

SUBMITTED BY RICK DORT



## FLYING ACES DIME SCALE

A Unified Rules Proposal by Bob Clemens, Western New York Free Flight Society  
with added input from Stew Meyers, DC Maxcutters, and the MIAAMA club of Miami, FL

### Premise:

These rules were proposed to promote the building, flying, and designing of Dime Scale models by members of the Flying Aces Club under a uniform set of rules that hopefully will be adopted by any other groups holding competitions for models of this class, thus avoiding the need to build different models to meet different rules. They have gone through several stages of evolution since first drafted. Every effort has been made to maintain the nostalgic spirit of Dime Scale while allowing for some practical deviation such as appropriately altering of color schemes and markings and the option of strengthening certain typically weak Dime model joints.

Neo-Dime Scale designs of pre-1941 aircraft are both encouraged and supported by allowing them to compete alongside the Comet, Hi Flyer, Burd, and Megow models of yesteryear, adding variety to the available menu of Dime Scale plans. To prevent the loss of those few Dime models whose wingspans exceed 16 inches, the rules allow for their reduction to 16 inches. To encourage the widest possible range of model types, the standard FAC bonus point system has been employed in the firm belief that since it works for traditional FAC events, its use will benefit Dime Scale competition as well.

Note that there is no traditional scale judging, only an "in or out" evaluation of the model's fidelity to its plan. No scale documentation, other than for color scheme and marking deviations from those indicated on the model plan, is required. I believe these rules have captured the simplicity, pseudo-realism, and fun that are the essence of Dime Scale models in a manner we can all enjoy.

Bob Clemens  
Rochester, NY  
January 1997

### General:

1. Models entered in the Dime Scale event must be from kits that sold for 10 cents in the 1930's and 40's. Neo-Dime Scale models such as those from Airdevil (Dave Stott), Mike Nassise, and others published in various newsletters such as the *FAC News*, *Tailspin* and *Max Fax* are eligible provided they follow traditional dime scale design and construction techniques and represent full-scale aircraft produced from 1914 through 1940. The contest director will have the final say on questions of model eligibility.
2. Models will be judged solely on their fidelity to their construction plan, which must be submitted with the model. All details shown on the plan must be on the model. Markings and color schemes can be either as shown on plan or of builder's documented choice. See item 1. under "Modifications Allowed," below.
3. Maximum wingspan allowed is 16 inches. Dime Scale plans and neo-Dime Scale plans that have 20-inch spans, such as the Comet Taylorcraft, Vultee Attack, Allied Sport, etc., or the Martin MO-1 (Nassise) and the Nicholas Beazley and Hollywood Hamilton from the "Airdevil" series can be reduced to 16 inches.
4. Two models may be entered by each contestant, but only the higher scoring of the two is eligible for an award. To save time, only the top finishers will be static judged, as many models as there are awards.
5. Dime Scale models can be flown only in the Dime Scale event at contests where a Dime Scale event is held. If there is no Dime Scale event, they can be flown in other events in accordance with FAC rules.

### Construction:

1. Wood sizes specified on plan must be used. No structural changes from plan are allowed, except as noted below. Reduced plans must use wood sizes shown on unreduced plan.
2. Tail and wing outlines must be built per the plan. No laminated outlines permitted.
3. All flight surfaces must be covered on both sides. No undercamber permitted. Covering material must be standard domestic or Japanese tissue, such as Esaki. No Gampi tissue or condenser paper can be used.

### Modifications Allowed:

1. Color scheme and markings shown on plan may be changed to more accurately represent those of a particular subject aircraft. If this is done, authentication is the responsibility of the contestant.
2. Butt attached wings may be made in one piece and carried through the fuselage for added strength.
3. Tail surfaces may be reasonably enlarged.
4. Nose area may be modified to provide removable nose block, improved thrust bearing, and ample rubber motor clearance so long as no alteration is made to external shape shown on plan.
5. Rear rubber motor attachment method may be changed.
6. Stringers and tissue may be used instead of stiff paper called for on some plans, and can be added where needed to help more accurately shape fuselage surfaces.
7. Wing spars may be moved.
8. Traditional dime model butt joints, such as those typically found on wing and landing gear struts, may be reinforced using materials such as wire, carbon fiber, Tyvek, sheet balsa, and plywood. Basswood may be used in lieu of balsa.
9. Retractable landing gear may be represented in either the up or down position.
10. Any size or type of prop can be used.

### Flight scoring:

The total flight time of three hand-launched official flights will determine the winner. An official flight is 20 seconds or longer, with a two minute max. A flyoff will be used to break ties, with bonus points again added. Standard FAC Scale bonus points will be added per flight, according to model type. A complete list and explanation of these bonus points appears elsewhere in the FAC Rule Book.



S.O.S.--S.O.S.

Wanted; Color scheme for the Gere Sport. Barrie Taylor, 2 Thackeray Ave., Winnipeg, Manitoba, CANADA R3KOM1

17.

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1/16 x 1/4	36"	48"	12	16
1/16 x 3/8	36"	48"	13	18
1/16 x 1/2	36"	48"	17	21
1/16 x 3/4	36"	48"	22	26
3/32 x 1/8	36"	48"	11	12
3/32 x 3/16	36"	48"	12	14
3/32 x 1/4	36"	48"	13	16
3/32 x 3/8	36"	48"	15	19
3/32 x 1/2	36"	48"	19	24
3/32 x 3/4	36"	48"	26	32
1/8 x 1/8	36"	48"	11	13
1/8 x 3/16	36"	48"	13	18
1/8 x 1/4	36"	48"	14	21
1/8 x 3/8	36"	48"	15	23
1/8 x 1/2	36"	48"	21	27
1/8 x 3/4	36"	48"	28	36
3/16 x 1/8	36"	48"	14	23
3/16 x 1/4	36"	48"	18	27
3/16 x 3/8	36"	48"	21	29
3/16 x 1/2	36"	48"	24	36
3/16 x 3/4	36"	48"	30	45

1/4 x 1/4	36"	48"	22	30
1/4 x 3/8	36"	48"	27	33
1/4 x 1/2	36"	48"	29	41
1/4 x 5/8	36"	48"	37	50
1/4 x 3/4	36"	48"	42	58
5/16 x 5/16	36"	48"	27	35
5/16 x 3/8	36"	48"	31	39
5/16 x 1/2	36"	48"	38	48
5/16 x 3/4	36"	48"	46	62
3/8 x 3/8	36"	48"	36	45
3/8 x 1/2	36"	48"	40	57
3/8 x 3/4	36"	48"	47	59
3/8 x 5/8	36"	48"	53	68
1/2 x 1/2	36"	48"	49	64
1/2 x 3/4	36"	48"	60	82
5/8 x 5/8	36"	48"	60	86
5/8 x 1	36"	48"	83	114

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1/4 x 1	36"	48"	52	78
3/8 x 1	36"	48"	67	86
1/2 x 1	36"	48"	76	104
2 INCH	36"	48"	37	50
1/32 x 2	36"	48"	38	50
1/16 x 2	36"	48"	48	61
3/32 x 2	36"	48"	49	65
1/8 x 2	36"	48"	60	74
3/16 x 2	36"	48"	80	74
1/4 x 2	36"	48"	88	90
3/8 x 2	36"	48"	88	119
1/2 x 2	36"	48"	110	143
3 INCH	36"	48"	43	60
1/32 x 3	36"	48"	44	60
1/16 x 3	36"	48"	52	67
3/32 x 3	36"	48"	52	67
1/8 x 3	36"	48"	83	84
3/16 x 3	36"	48"	78	103
1/4 x 3	36"	48"	94	130
5/16 x 3	36"	48"	109	152
3/8 x 3	36"	48"	115	170
1/2 x 3	36"	48"	150	205
4 INCH	36"	48"	68	92
1/32 x 4	36"	48"	68	92
1/16 x 4	36"	48"	82	114
1/8 x 4	36"	48"	83	134
3/16 x 4	36"	48"	108	158
1/4 x 4	36"	48"	152	179
3/8 x 4	36"	48"	210	285
1/2 x 4	36"	48"	285	336

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3/4 x 3/4	54	68
1 x 1	68	88

## 36" DOWELS

1/8	.16	5/16	.27
3/16	.17	3/8	.37
1/4	.20	1/2	.54

## 36" LEADING EDGES

1/4 x 3/8	50	3/8 x 3/8	75
3/8 x 1/2	85	1/2 x 1/2	1.05
1/2 x 3/4	1.45	3/4 x 3/4	1.80
3/4 x 1	1.70	1 x 1	1.85

## TRAILING EDGE

1/8 x 1/2	36"	48"
3/16 x 3/4	35	47
1/4 x 1	39	64
5/16 x 1-1/4	48	71
3/8 x 1-1/2	58	85
1/2 x 2	90	—
3/4 x 3	1.00	—

## 36" AILERON

1/4 x 1	57
1/4 x 1-1/4	65
1/4 x 1-1/2	74
1/4 x 2	80
5/16 x 1-1/4	74
5/16 x 1-1/2	75
5/16 x 2	86
3/8 x 1-1/2	83
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1/2 x 1-1/2	95
1/2 x 2	1.08

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1/32 x 12 x 48	6.35	1/4 x 6 x 12	1.25
1/32 x 48 x 48	24.75	1/4 x 12 x 12	2.30
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1/16 x 12 x 12	1.80	1/4 x 12 x 48	7.25
1/16 x 12 x 24	3.65	3/8 x 6 x 12	1.50
1/16 x 12 x 48	6.25	3/8 x 12 x 12	2.85
3/32 x 6 x 12	1.35	3/8 x 12 x 24	5.50
3/32 x 12 x 24	2.63	3/8 x 12 x 48	10.00
3/32 x 12 x 48	5.04	1/2 x 6 x 12	2.00
3/32 x 12 x 48	9.75	1/2 x 12 x 12	3.50
1/8 x 6 x 12	.75	1/2 x 12 x 24	5.80
1/8 x 12 x 12	1.25	1/2 x 12 x 48	11.25
1/8 x 12 x 24	2.35	1/4 x 6 x 12	.90
1/8 x 12 x 48	4.50	1/4 x 12 x 12	1.75
1/8 x 48 x 48	16.00	1/4 x 12 x 24	3.45
		1/4 x 12 x 48	6.50
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Obechi 1/42" x 10" x 10" 13.75  
1/8 Balsa Plywood same price as 1/8 Lite Ply

<b>CA'S</b>		<b>Bob Smith</b>	<b>Flash</b>
Thin	1/2 oz	2.10	1.85
Gap, or	1 oz	3.49	3.00
Thick	2 oz	5.95	5.00
	8 oz	17.95	16.50
	16 oz	—	30.00
Odorless	1/2 oz	4.55	3.85
Thin	1 oz	8.45	6.65
Gap, or	2 oz	14.95	12.00
Thick	2 oz	14.95	12.00

## 36" BARGAIN BALSA BUNDLES \*

1/32 x 3 (10)	1/32 x 4 (8)	1/8 x 1/8 (46)	3/16 x 3/16 (32)	1/4 x 1/4 (21)	3/8 x 3/8 (13)	1/2 x 1/2 (9)
1/16 x 3 (10)	1/16 x 4 (9)	1/8 x 3/16 (35)	3/16 x 1/4 (22)	1/4 x 3/8 (17)	3/8 x 1/2 (11)	1/2 x 3/4 (7)
3/32 x 3 (8)	3/32 x 4 (5)	1/8 x 1/4 (32)	3/16 x 3/8 (22)	1/4 x 1/2 (15)	3/8 x 3/4 (9)	
1/8 x 3 (8)	1/8 x 4 (4)	1/8 x 3/8 (30)	3/16 x 1/2 (18)	1/4 x 3/4 (10)		
3/16 x 3 (5)	3/16 x 4 (4)	1/8 x 1/2 (22)	3/16 x 3/4 (15)			
1/4 x 3 (4)	1/4 x 4 (3)	1/8 x 3/4 (15)				
3/8 x 3 (4)	3/8 x 4 (2)					
1/2 x 3 (3)	1/2 x 4 (2)					

**\$2.95 per Bundle**

(\*) denotes qty per bundle - \* Some Stains, Wormholes, Irregulars

## FOAM SHEETS

2" WHITE 1.0 lb. Density	12" x 24"	1.75
2" WHITE 1.0 lb. Density	24" x 48"	6.30
4" WHITE 1.0 lb. Density	12" x 24"	3.50
4" WHITE 1.0 lb. Density	24" x 48"	12.75
2" BLUE 1.6 lb. Density	12" x 24"	3.65
2" BLUE 1.6 lb. Density	24" x 48"	13.28

\$8.00 HANDLING + OVERSIZE SHIPPING CHARGE  
Nichrome Foam Cutting Wire - 8 feet - \$3.00

**MY ENLARGEMENTS AND COPIES ARE REALLY GREAT FOR:**  
SCRATCH BUILDERS - 3-Views or plans can be enlarged or reduced to any scale  
MAGAZINE PLANS - Can be restored to full scale or larger  
COLLECTORS - Use a copy instead of your valuable plans for building  
PRINTWOOD - Can be computerized and included with plans  
QUALITY - Solid black lines on white bond paper

STANDARD PAPER SIZES AVAILABLE - PRICES ARE BASED ON SIZE OF PAPER NEEDED  
18"x24" (Printed area 17" x 22") - Enlargement \$5.00 - Copy \$3.00  
24"x36" (Printed area 23" x 34") - Enlargement \$10.00 - Copy \$6.00  
36"x48" (Printed area 35" x 46") - Enlargement \$20.00 - Copy \$12.00  
When plans are too large to fit on a single standard sheet, I normally put them on multiple sheets, allowing 1/2" to 1" overlap. I also add "targets" to the sheets that allow easy and precise alignment of adjoining sheets.  
Oversize sheets up to 36"x96" can be made for \$1.80 per square foot. Send your plans and a check for the estimated cost with instructions. NOTE: When sending me your plans, please DON'T try to repair them.

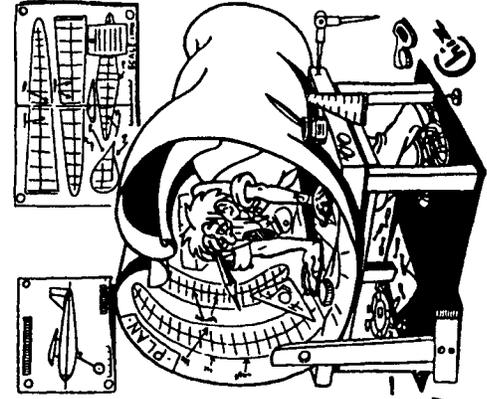
Prices do not include postage. Add \$3.00 to have plans sent folded in an envelope. If you would like to have the plans sent rolled add \$6.00. Shipping outside of the USA will cost more.  
All my work is GUARANTEED!!! If you don't like it you get your money back with no hassles. My enlargements and copies may not be the cheapest that you can get, but lots of people have said that they are the BEST AVAILABLE.

There have been some questions about making enlargements and copies of plans with respect to copyrights. My understanding of the copyright law is that it is perfectly legal to make copies of a plan for your own personal use. If you own a plan or kit you are entirely within your rights to have copies made so that you can preserve the original plan. When a plan is no longer available from the copyright owner, or the copyright has expired there is no prohibition against making copies. The restoration of old magazine and kit plans falls into this category.

I've been collecting plans, 3-Views and magazines for quite a few years now and if you are looking for something that is no longer available from the normal sources, I may have it in my personal collection. In addition, many other collectors of kits and plans have offered to lend me items from their collections. If you're looking for something special, let me know.

A complete listing of what I have on hand and what is available commercially is being prepared. I had hoped to have this done by now but it is a much bigger job than I had anticipated. It will take another year or more to complete this project. In the meantime, please be patient.

I'm always on the lookout for plans that I don't yet have in my own collection. If you have old plans or magazines that you would be willing to lend or donate to the cause, let me know. Help me to preserve the old and rare examples of our wonderful hobby!!



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## High Gumbandery

### My First Out Of Site Flight

It was the summer of 1946. You could buy model airplane glue without turning in an old tube. Comet cement in the red and yellow tube, Duco in the green. Some of the kits were coming in with formers printed on real balsa wood. No more pine or cardboard for print wood parts. I think though for years afterward some of the Comet kits had pine stringers. These heavy duty stringers weren't so bad. At the time, my models generally required qualities in their construction materials that gave protection from frequent sudden stops rather than help in finding thermals for long flights.

Just on the south side of Jackson, (Michigan), is a large tract of public land, Ella Sharp park. About a 1/2 hour careful bike ride with a model strapped with T-36 rubber across the handlebars. On this day I had a Comet "Phantom Fury". I remember it cost me 25 cents and it was a bargain because that particular line of kits was going up to 29 cents. Inflation was awful to me. The Fury was mostly all white except I had put red diamond insignia on the wings with some Christmas wrapping paper. It had run where I wet my fingers to smooth down the corners. I had put a Pawolima wood prop on it. I had saved the prop for a long time, maybe two years. I bought it at the Bike/Hobby shop on Pearl street. It seemed like a swell prop, until I found out it had been made by the Japanese. At the time I almost threw it away in the garbage. I say almost, because this was an early experience of rationalization. It took some time before I'd fly one of my models with a Jap prop. This is what four very formative years of wartime living will do to a kid.

So, I rode out to the park, to the hill with the round brick bandstand where you could get a 15 second glide out of almost any model. I rubber banded the wing on. The tail wasn't built as the plan showed, I mean it wasn't removable. First glide showed it needed just a little nose weight. Forgot to bring clay. Then I remembered I stuffed some clay around the reflector on the back fender to stop it from rattling. I was wearing my "hi-tops" with the jack knife pocket on the right side. I scraped the clay off with the knife and put it on the nose. Good glide. Using my trusty winder, (right index finger) I cranked in the turns. There was a slight wind coming out of the north. I squinched my eyes closed tight, and thanked God for airplanes. Then I spit on the glass bead behind the prop, launched, and did it fly! I was thrilled. The bandstand is located near the south edge of the park. The Phantom Fury went out over the south perimeter road on the longest flight ever for me.

I took off running after it. I was going so fast that the Saint Christopher medal on a chain around my neck came out of my shirt and was slapping me on the cheeks. (I've since lost the Saint Christopher medal and Chris lost his Sainthood with Vatican II.) A row of small trees near the bottom of the hill blocked the Fury from view for a moment. When I got through the trees the model was gone, but I had a "line" on it. I could see across an open area beyond the south perimeter road, and onto some private property adjacent to the park. I spotted my model, right on my "line" next to a barn.

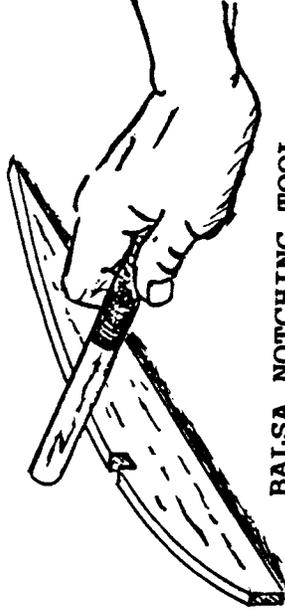
I was across the open area and through a big hole in the fence in short time. Just beyond the fence were some thick bushes I had to crawl through. The bushes were dripping water, like they had just been sprinkled. I came out of the bushes all wet and saw

that my "line" was on a white wooden duck on a pole whose wings were suppose to look like they were flapping in the wind. Then someone yelled "Who's that!". I knew I was trespassing on private property, and then I saw two police cars and a bunch of policemen walking around as if they were all trying to find ME!

I did a 180, back through the bushes and started running. It was hard to run because my wet clothes were clinging to me and didn't want to move the same way my skin did. I spotted a big yellow vehicle parked in the clear area near the south perimeter road. I think it was an earth mover or road grader used to scrape the dirt roads in the park. I climbed under it and didn't move. I heard voices and a car drive nearby a couple of times, but no one spotted me shivering under there. I laid very quiet for a long time, until I started to itch and get real thirsty. There was a little bumping sound over my head. I turned and looked up, and there was my model, stuck in the machine! It was impaled on one of those shift levers that didn't have a knob on it. Then all was quiet and the voices were gone. I retrieved my model and quickly left the site.

Later that day, when delivering "The Jackson Citizen Patriot" newspaper, I read that this property on Stonewall Road had been burglarized the night before. The police were there looking for clues and I guess I wandered into the midst of them for a moment! With all of this, I realized that among my model airplane adventures, I had experienced my first out of site, and out of sight, (and out of fright), flight.

Ralph Kuenz



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July 19-20, 1997

Time 8:30 am until 5:00 pm

Registration FormPlease print

Name \_\_\_\_\_ AMA or MAAC No. \_\_\_\_\_  
 Street \_\_\_\_\_ Jr./Sr. \_\_\_\_\_ Open \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Entry fee \$25.00 flies all events. No fee for under 18 years of age. Please remit by June 30, 1997 to ease paper work later. Mail entry fee to; Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

Awards through third place. All contestants must be members of the A.M.A. or the M.A.A.C.

<u>Schedule</u>	<u>Saturday July 19</u>	<u>Sunday July 20</u>
	FAC Scale	Hi-Wing Peanut
	FAC Peanut	Golden Age Scale
	Embryo Endurance	Jumbo Scale
	Pioneer Scale	FAC Power Scale (single engine)
	Greve Race *	FAC Power Scale (multi-engine)
	World War One Dogfight *	Thompson Race *
	Goodyear Midget Race *	World War Two Combat *
	FAC Old Time Rubber	Modern Military *
	Giant Scale	FAC Old Time Stick
	Dime Scale	No-Cal Scale
	Jimmy Allen	Jimmy Allen
		FAC Old Time Electric Replica (gas)

\* These events are Mass launch events.

All events are for rubber powered models except for Power Scale and O.T. Electric Gas Replica. You must show proof of scale to get past the 45 point rule in mass launch events. All Pioneer Scale models will be flown in the Pioneer event only, regardless of size. Dime Scale models can only fly in the Dime Scale event.

I wish to make the following advanced reservations for the contest.

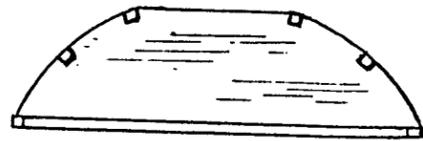
\_\_\_\_\_ entry fees at \$25.00 each \_\_\_\_\_ \$  
 \_\_\_\_\_ reservations for double occupancy with meals, \$130.00 per person \_\_\_\_\_ \$  
 \_\_\_\_\_ reservations for single occupancy with meals, \$160.00 per person \_\_\_\_\_ \$  
 Total \$ \_\_\_\_\_

Please note, we will not be able to refund cancellations received after June 30, 1997. If you plan to share a room with someone, please indicate their name so we can direct the University to set up the proper room arrangements.

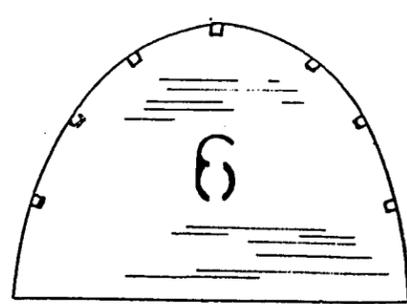
Your meals at the University will include dinner on Friday July 18th, Breakfast and dinner on Saturday July 19th, breakfast and dinner on Sunday July 20th and breakfast on Monday July 21st.

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

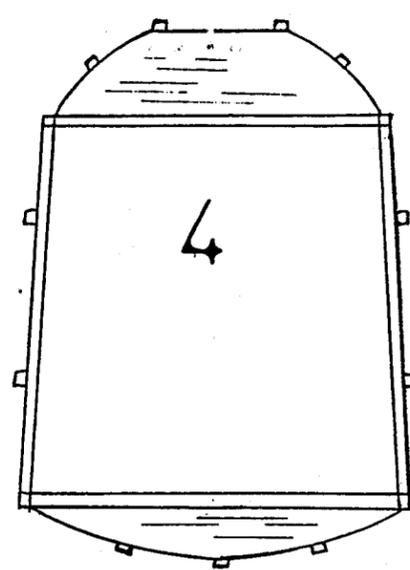
Contest Director; Lin Reichel



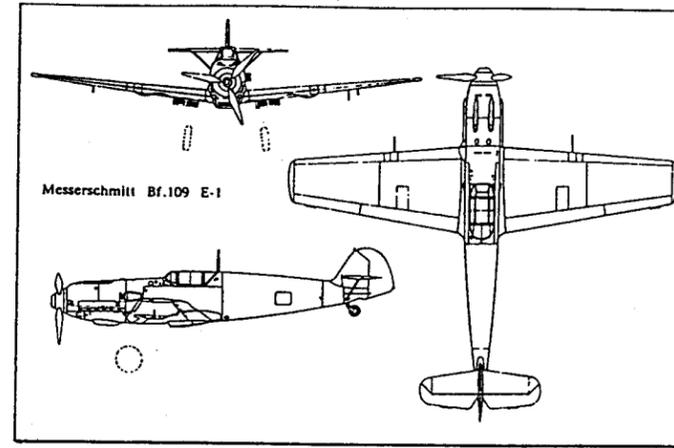
5A



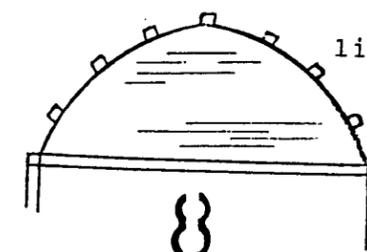
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4

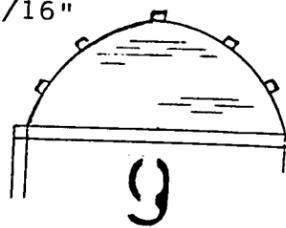


Messerschmitt Bf.109 E-1

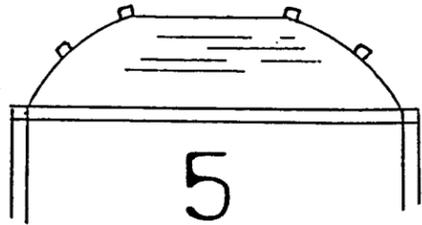


8

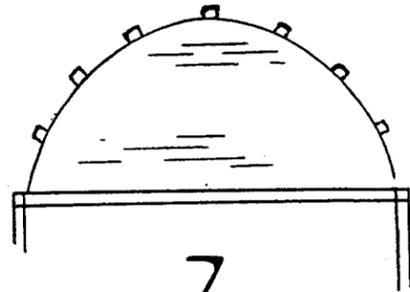
light 1/16"



9

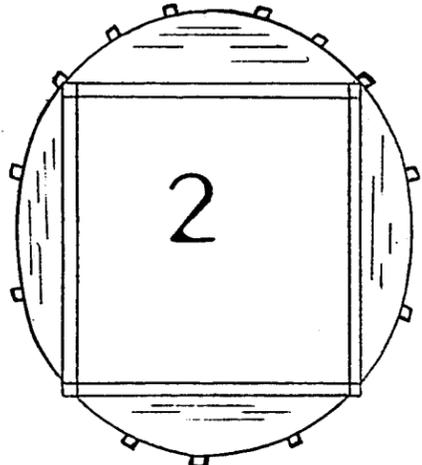


5

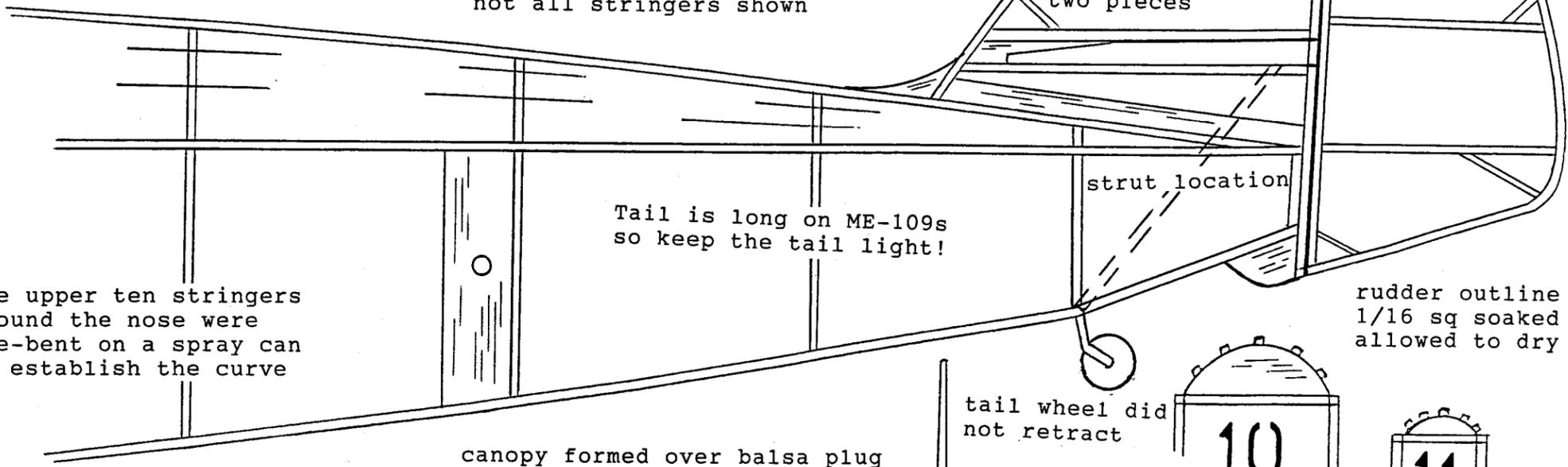


7

All formers are light 1/16"



2



not all stringers shown

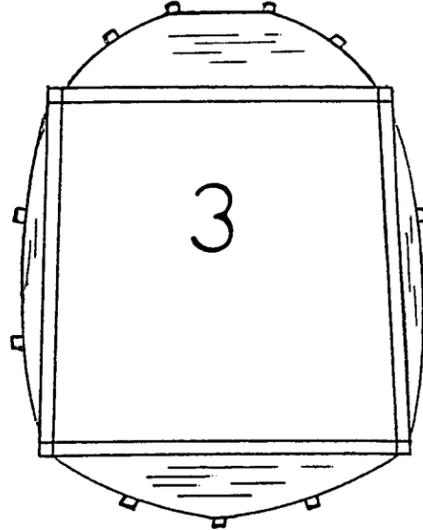
Tail is long on ME-109s so keep the tail light!

rudder is built in two pieces

strut location

rudder outline 1/16 sq soaked allowed to dry

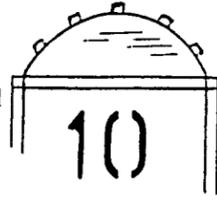
tail wheel did not retract



3

The upper ten stringers around the nose were pre-bent on a spray can to establish the curve

canopy formed over balsa plug



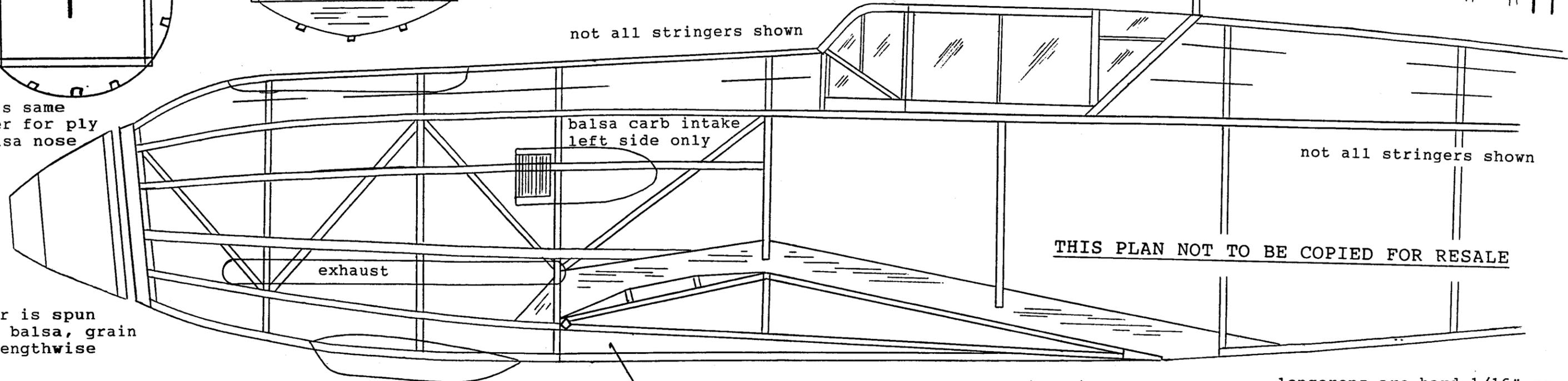
10



11

not all stringers shown

Use this same diameter for ply and balsa nose pieces



not all stringers shown

balsa carb intake left side only

exhaust

stringers and tissue added after mounting wing

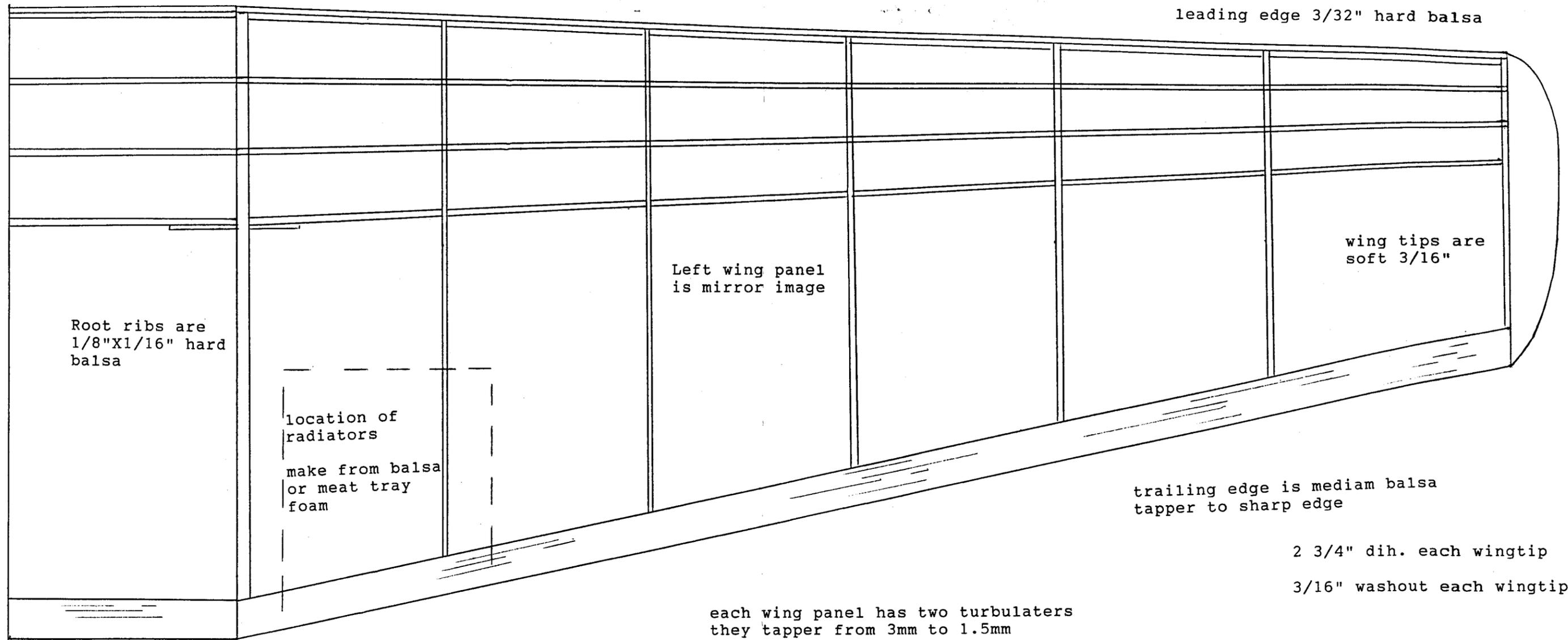
longerons are hard 1/16" sq

**THIS PLAN NOT TO BE COPIED FOR RESALE**

Oil cooler carved from soft balsa

Spinner is spun formed balsa, grain runs lengthwise

leading edge 3/32" hard balsa



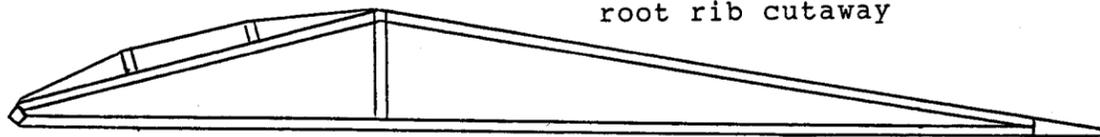
13 MM

5 MM

spar is mediam 1/16 balsa, top notched only

THIS PLAN NOT TO BE COPIED FOR RESALE

root rib cutaway

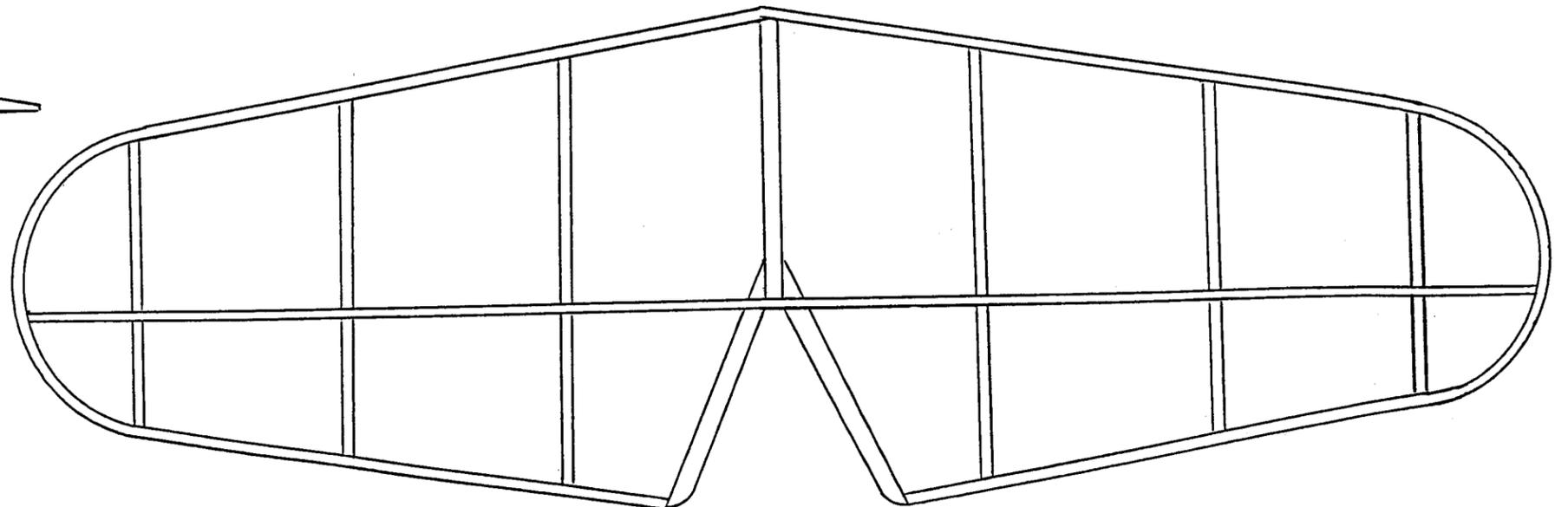


# ME 109 E

BY Chris Starleaf

Weights; Prototype flew with a Peck 9.5" prop and weighs 46.5 grams without rubber. 2.2 grams of ballast was required in the nose the tail is long so keep the tail as light as possible.

rubber; 4 strands of FAI tan II 3/16" about 29" long @1600 turns.



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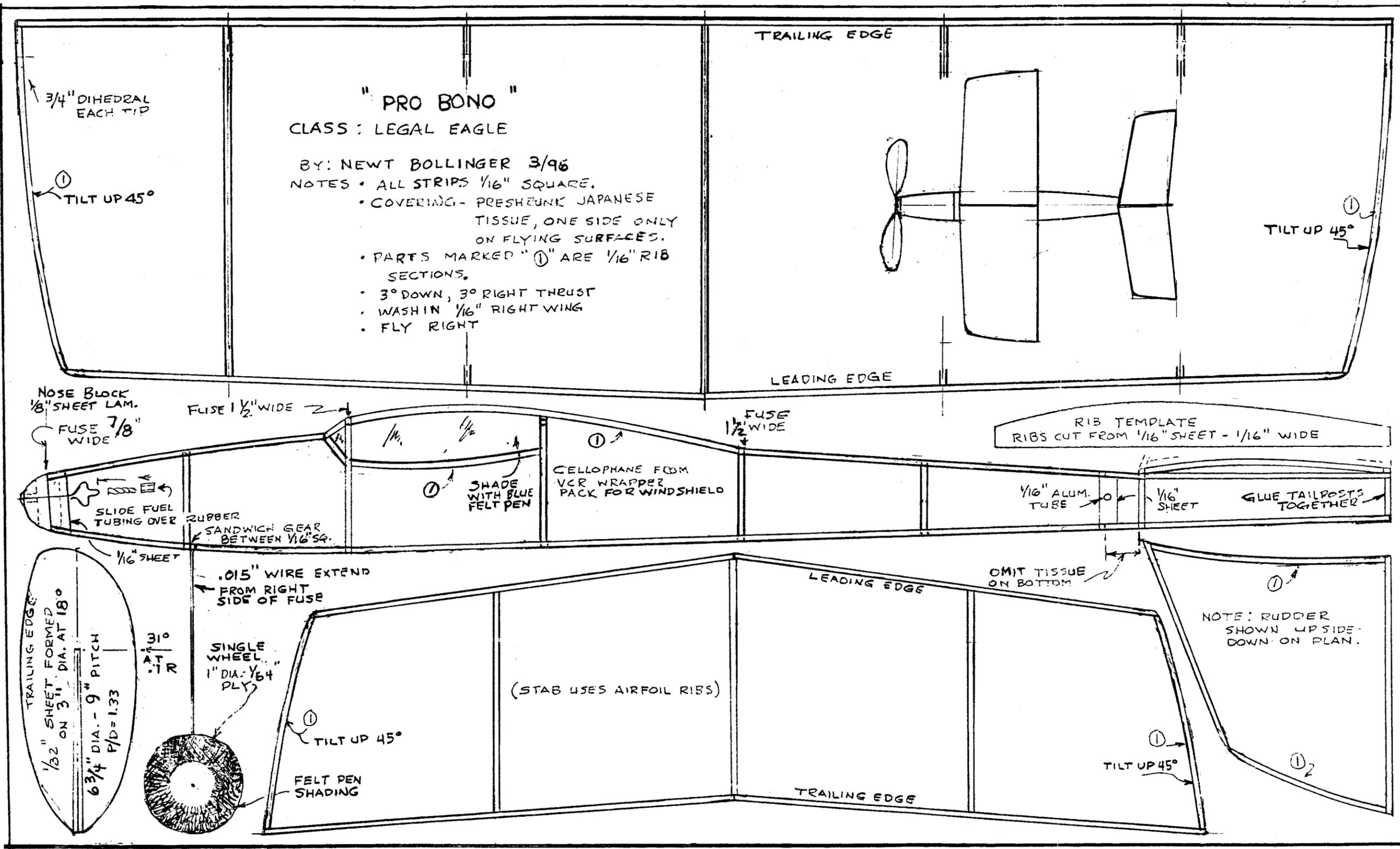
POSTAGE/HANDLING: \$3.00/U.S. ♦ \$4.00/CANADA-MEXICO ♦ \$5.00/OVERSEAS (SURFACE)

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**Contest Results**  
Please send all contest results directly to; Roy Courtney, Box 88; Elma, N.Y. 14059



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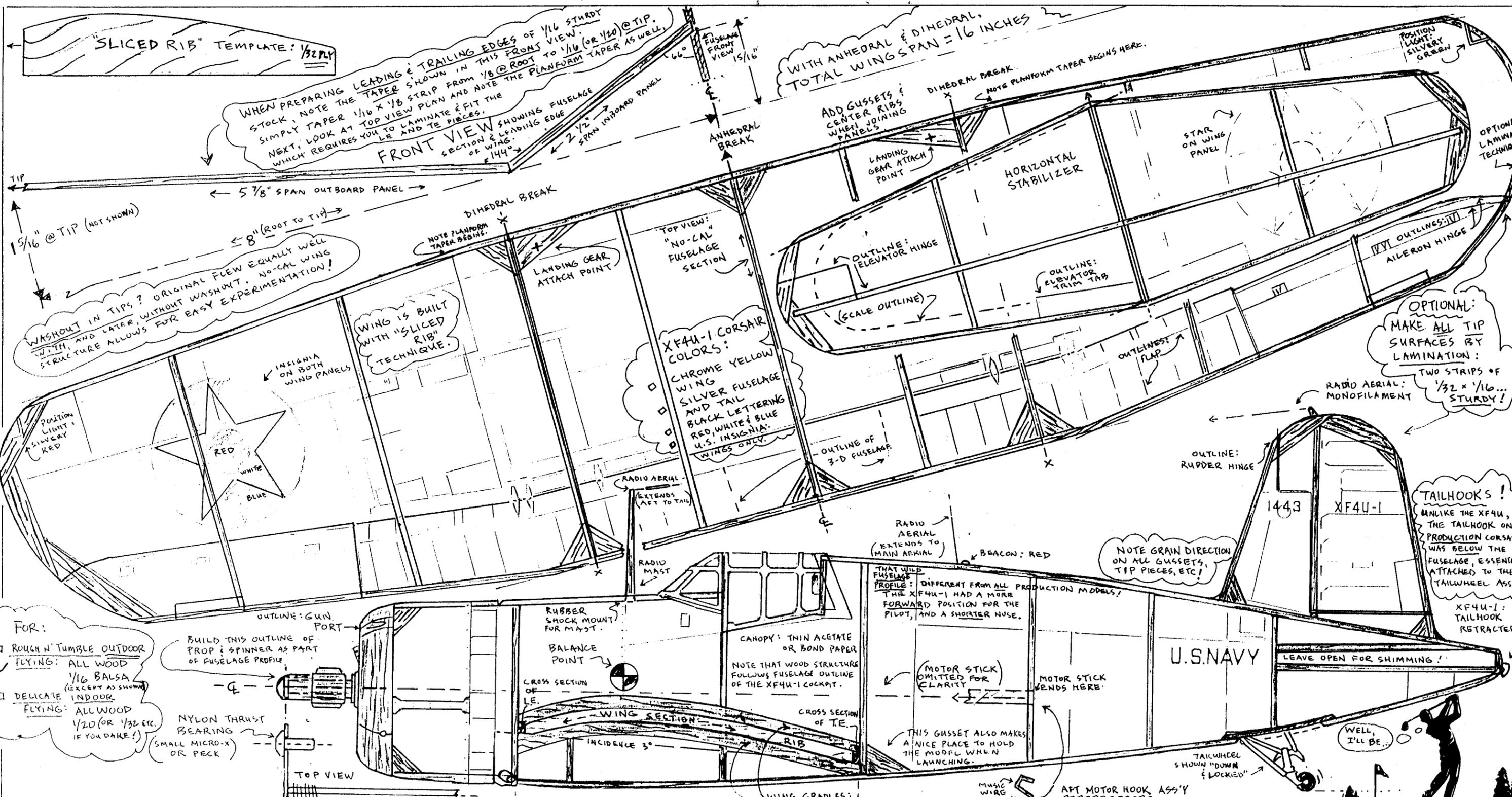
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"SLICED RIB" TEMPLATE: 1/32 PL

WHEN PREPARING LEADING & TRAILING EDGES OF 1/16 STURDY STOCK, NOTE THE TAPER SHOWN IN THIS FRONT VIEW. SIMPLY TAPER 1/16 X 1/8 STRIP FROM 1/8 @ ROOT TO 1/16 (OR 1/20) @ TIP. NEXT, LOOK AT TOP VIEW PLAN AND NOTE THE PLANFORM TAPER AS WELL, WHICH REQUIRES YOU TO LAMINATE & FIT THE LE AND TE PIECES.

FRONT VIEW SHOWING FUSELAGE SECTION & LEADING EDGE OF WING.

WITH ANHEDRAL & DINEDRAL, TOTAL WINGS PAN = 16 INCHES

15/16" @ TIP (NOT SHOWN)

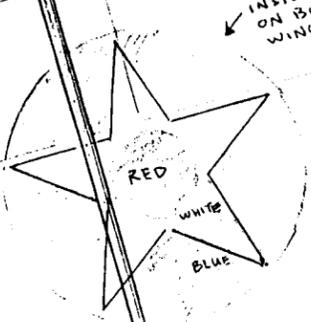
5 7/8" SPAN OUTBOARD PANEL

8" (ROOT TO TIP)

WASHOUT IN TIPS? ORIGINAL FLEW EQUALLY WELL WITH, AND LATER, WITHOUT WASHOUT. NO-CAL STRUCTURE ALLOWS FOR EASY EXPERIMENTATION!

WING IS BUILT WITH "SLICED RIB" TECHNIQUE.

XF4U-1 CORSAIR COLORS:  
 CHROME YELLOW WING  
 SILVER FUSELAGE AND TAIL  
 BLACK LETTERING  
 RED, WHITE & BLUE U.S. INSIGNIA: WINGS ONLY.



OPTIONAL: MAKE ALL TIP SURFACES BY LAMINATION: TWO STRIPS OF 1/32 X 1/16... STURDY!

TAILHOOKS! UNLIKE THE XF4U, THE TAILHOOK ON PRODUCTION CORSAIRS WAS BELOW THE FUSELAGE, ESSENTIALLY ATTACHED TO THE TAILWHEEL ASSY.

XF4U-1: TAILHOOK RETRACTED

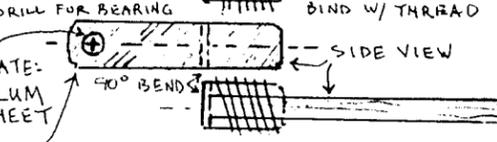
NOTE GRAIN DIRECTION ON ALL GUSSETS, TIP PIECES, ETC!

FOR:  
 ROUGH N' TUMBLE OUTDOOR FLYING: ALL WOOD 1/16 Balsa (EXCEPT AS SHOWN)  
 DELICATE INDOOR FLYING: ALL WOOD 1/20 (OR 1/32 ETC. IF YOU DARE!)

BUILD THIS OUTLINE OF PROP & SPINNER AS PART OF FUSELAGE PROFILE.

NYLON THRUST BEARING (SMALL MICRO-X OR PECK)

TOP VIEW



MOTOR STICK: 1/8 X 1/16 HARD W/ CARBON FIBER REINFORCEMENT OR: 2 LAMINATIONS OF 1/8 X 1/16 HARD

ORIGINAL MODEL FLEW GREAT WITH A SIMPLE PECK PLASTIC 6" PROPELLER AND 1/8" RUBBER; CONSISTENT ONE MINUTE FLIGHTS, ON 16" THROUGH 18" LOOPS, OF FAT TAN II RUBBER. BALANCED AS SHOWN, THE MODEL WAS SENSITIVE TO TRIM ADJUSTMENTS, BUT VERY STABLE ONCE TRIMMED!

RUBBER SHOCK MOUNT FOR MAST.

BALANCE POINT

CROSS SECTION OF LE

INCIDENCE 3°

WING SECTION

RIB

CROSS SECTION OF TE

INVERTED GULL WING "LOW POINT REF. LING"

OPTIONAL: LANDING GEAR "DOWN & LOCKED"!

NOTE ATTACH POINT 1/4 INCH INBOARD OF GULL WING DINEDRAL BREAK. SIDE VIEW SHOWS LENGTH RELATIVE TO A/D.

MAKE MUSIC WIRE STRUTS; BOND PAPER (LAMINATE X 2 WITH CA GLUE) FOR GEAR DOORS AND STRUT DETAILING; FOAM OR Balsa WHEELS.

KEEP 'EM LIGHT FOR A GOOD FLYING BENT-WING BIRD!

CANOPY: THIN ACETATE OR BOND PAPER  
 NOTE THAT WOOD STRUCTURE FOLLOWS FUSELAGE OUTLINE OF THE XF4U-1 COCKPIT.

THAT WILD FUSELAGE PROFILE: DIFFERENT FROM ALL PRODUCTION MODELS! THE XF4U-1 HAD A MORE FORWARD POSITION FOR THE PILOT, AND A SHORTER NOSE.

(MOTOR STICK OMITTED FOR CLARITY)

THIS GUSSET ALSO MAKES A NICE PLACE TO HOLD THE MODEL WHEN LAUNCHING.

MUSIC WIRE

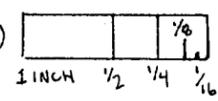
BIND W/THREAD

TOP VIEW

AFT MOTOR HOOK ASSY

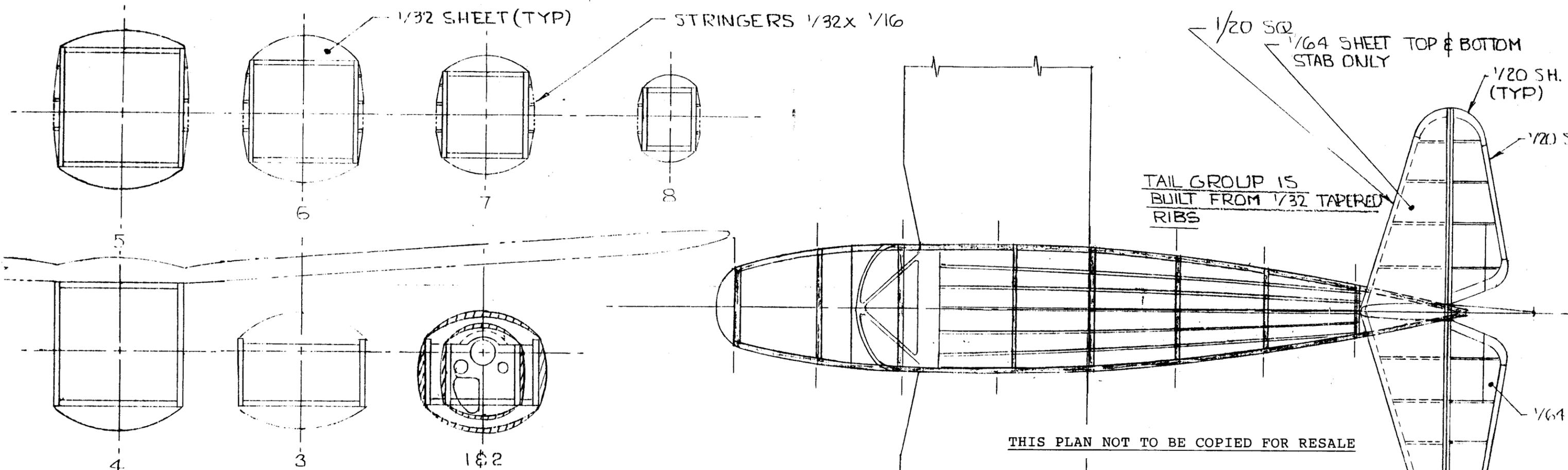
WELL, I'LL BE...

TAILWHEEL SHOWN "DOWN & LOCKED"

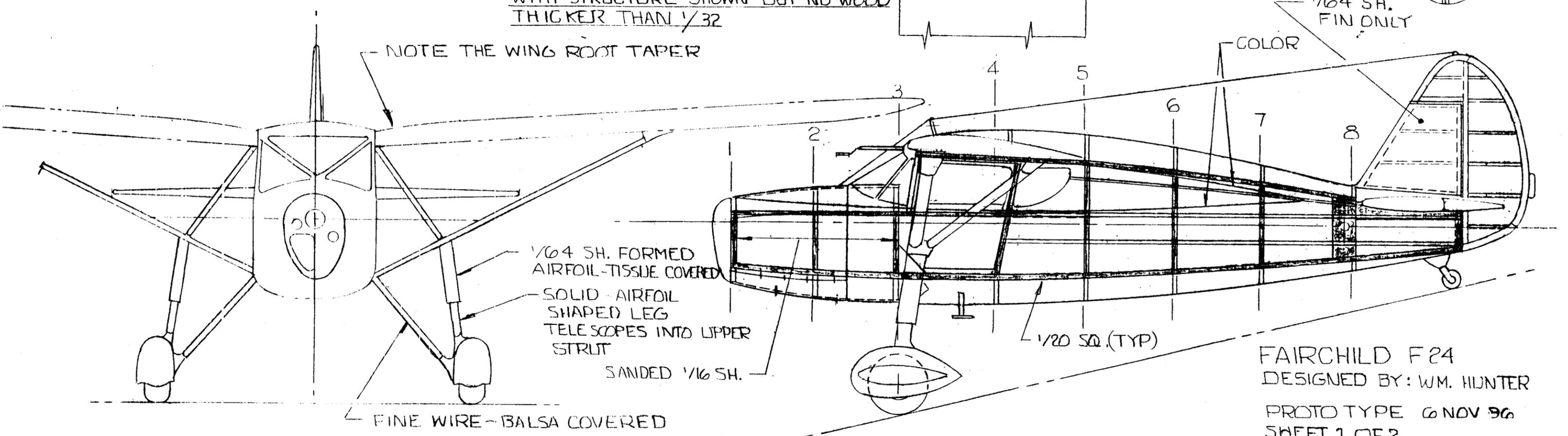


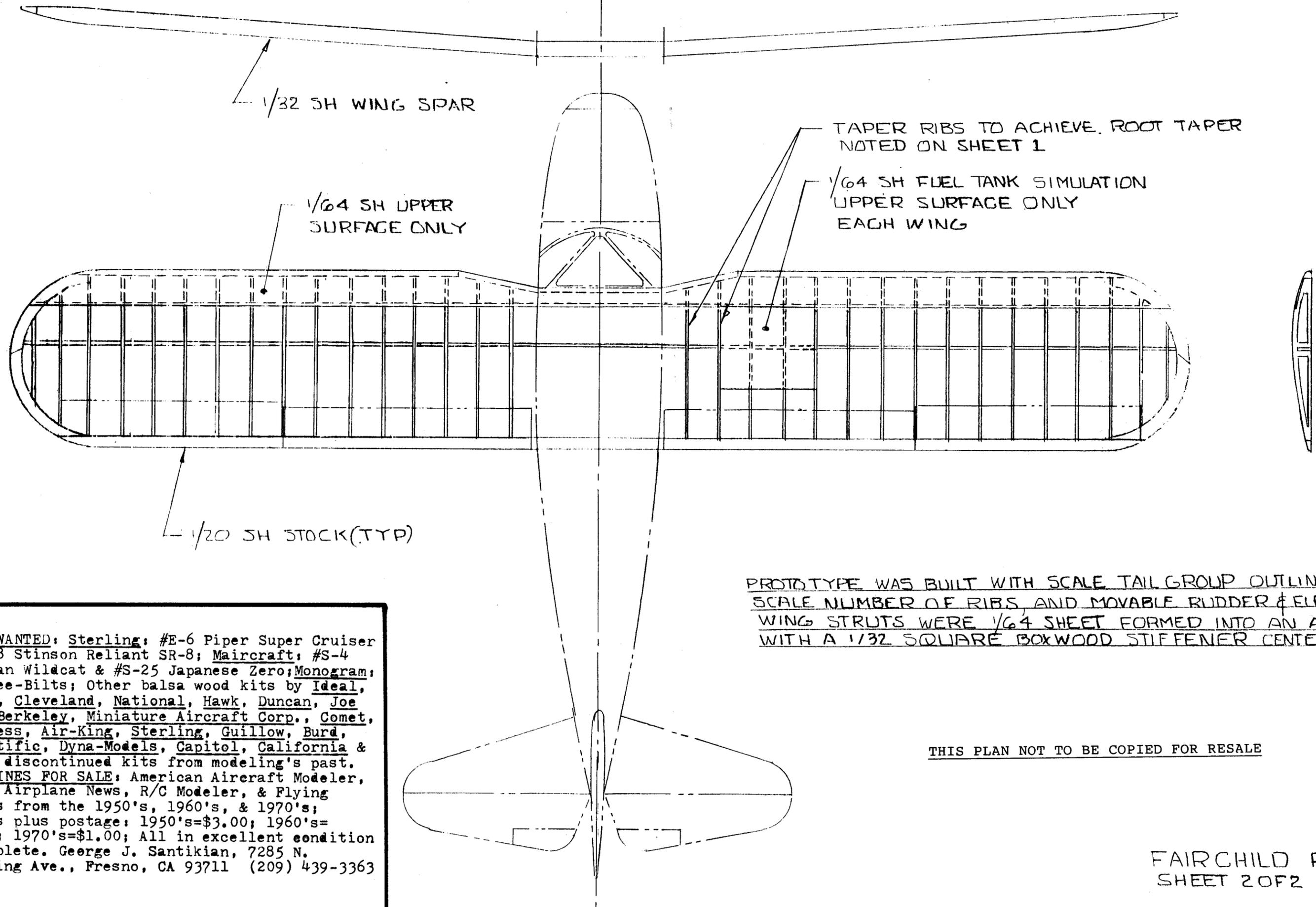
### VOUGHT XF4U-1 "CORSAIR"

THE PROTOTYPE IN THE LEGENDARY LINE OF VOUGHT'S "BENT-WING BIRDS"... FAMED VOUGHT TEST PILOT BOONE GUYTON LANDED THE XF4U-1 IN EMERGENCY ON THE GOLF COURSE, NORWICH, CONNECTICUT, JULY 11, 1940, AND THIS MODEL PLAN DRAWN UP IN HIS HONOR.. FOR "WINGOVERS AND WALLBANGERS", NEWSLETTER OF THE NORWICH FLYING ACES CLUB. John Rood, Jr. SEPTEMBER 1996



NOTE: PROTOTYPE WAS BUILT TO 9.3 GRAMS W/O MOTOR WITH STRUCTURE SHOWN BUT NO WOOD THICKER THAN 1/32





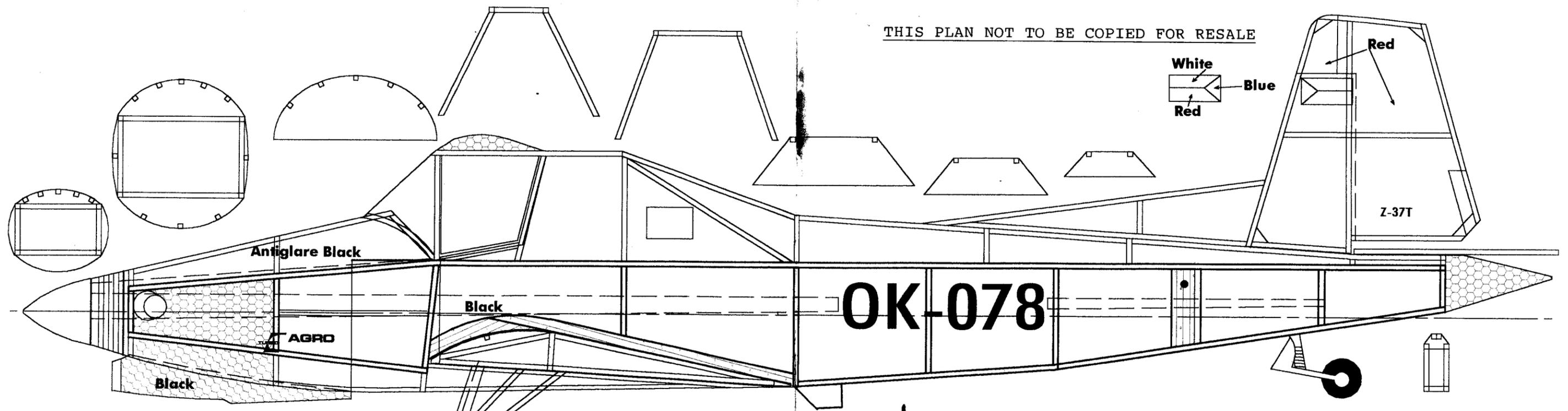
**KITS WANTED:** Sterling: #E-6 Piper Super Cruiser & #E-8 Stinson Reliant SR-8; Maircraft: #S-4 Grumman Wildcat & #S-25 Japanese Zero; Monogram: Speedee-Bilts; Other balsa wood kits by Ideal, Megow, Cleveland, National, Hawk, Duncan, Joe Ott, Berkeley, Miniature Aircraft Corp., Comet, Peerless, Air-King, Sterling, Guillow, Burd, Scientific, Dyna-Models, Capitol, California & other discontinued kits from modeling's past.  
**MAGAZINES FOR SALE:** American Aircraft Modeler, Model Airplane News, R/C Modeler, & Flying Models from the 1950's, 1960's, & 1970's; Prices plus postage: 1950's=\$3.00; 1960's=\$2.00; 1970's=\$1.00; All in excellent condition & complete. George J. Santikian, 7285 N. Channing Ave., Fresno, CA 93711 (209) 439-3363

PROTOTYPE WAS BUILT WITH SCALE TAIL GROUP OUTLINE, SCALE NUMBER OF RIBS, AND MOVABLE RUDDER & ELEVATOR. WING STRUTS WERE 1/64 SHEET FORMED INTO AN AIRFOIL WITH A 1/32 SQUARE BOXWOOD STIFFENER CENTER CORE.

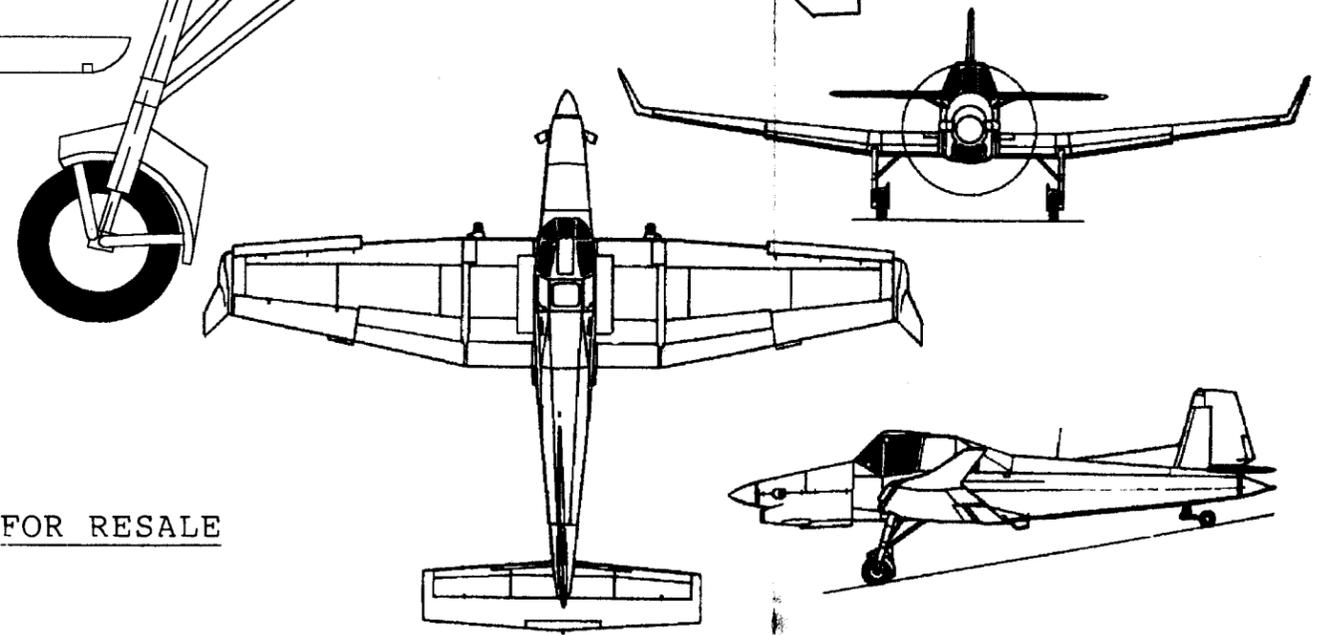
THIS PLAN NOT TO BE COPIED FOR RESALE

FAIRCHILD F24  
SHEET 2 OF 2

THIS PLAN NOT TO BE COPIED FOR RESALE



**COLOR NOTES**  
 Overall Yellow  
 Wingtips & Moveable Rudder - Red  
 Striping & Lettering - Black  
 Spinner - White



**ZLIN Z-37T (Cmelák)**  
 CZECHOSLOVAKIA Agricultural Aircraft

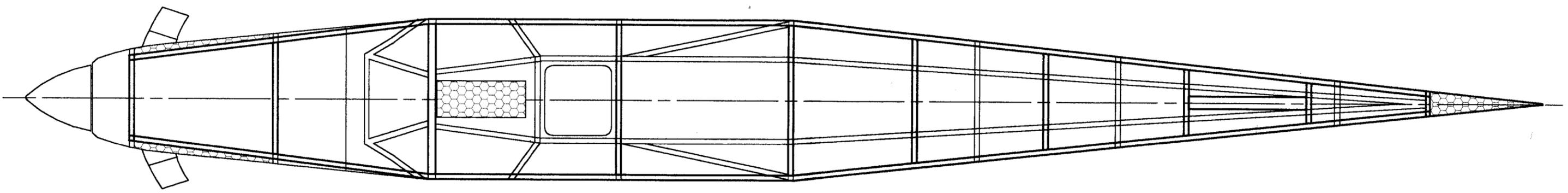
Drawn for FAC Newsletter  
 By: David Livesay  
 (10-24-1996)

Scale References

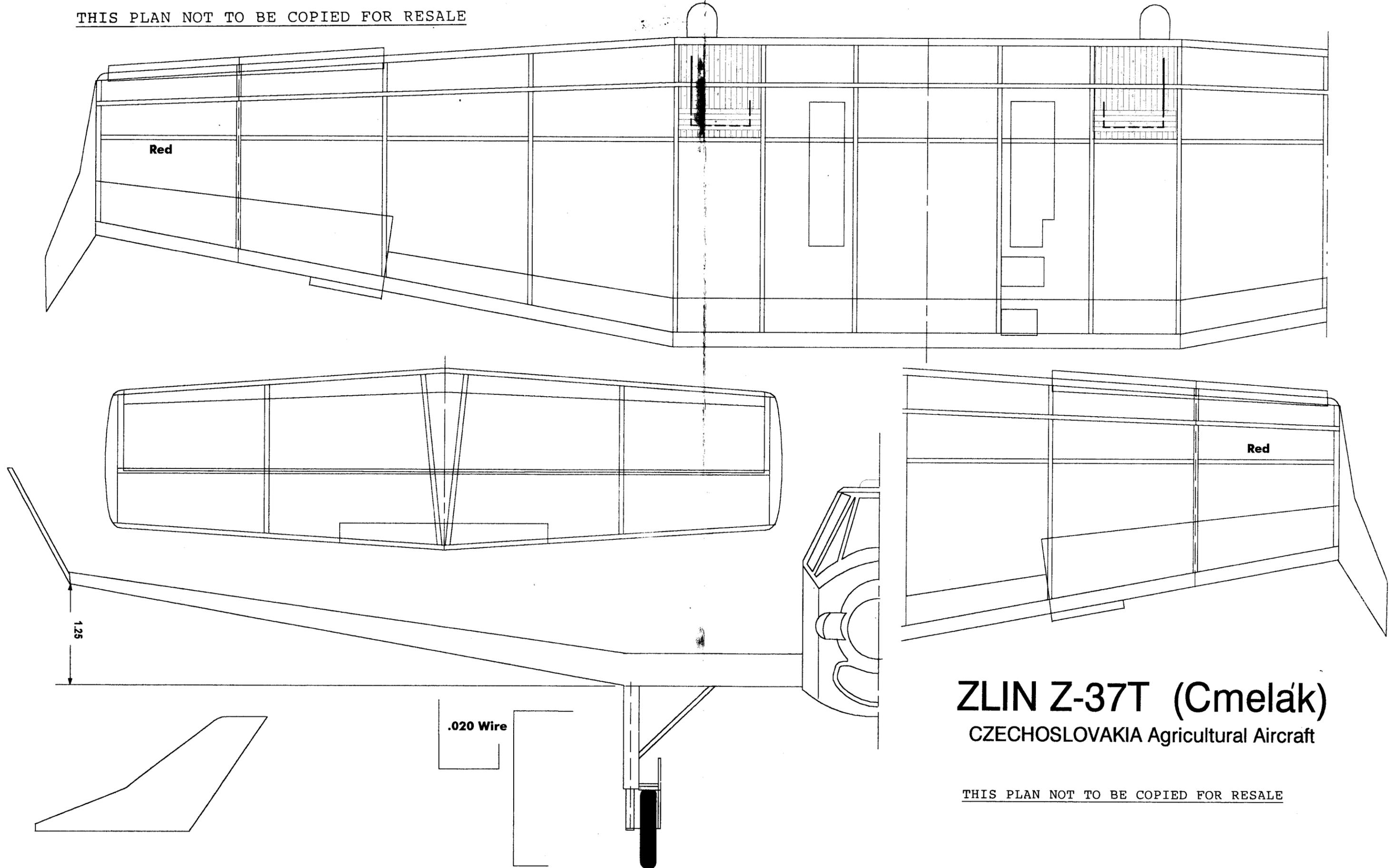
Letectvi Kosmonautika  
 1989 No. 6  
 Janes All The World's  
 Aircraft 1986-87

THIS PLAN NOT TO BE COPIED FOR RESALE

Zlin Z 37T Agro Turbo agricultural aircraft, which entered production in 1985 (*Pilot Press*)



THIS PLAN NOT TO BE COPIED FOR RESALE



**ZLIN Z-37T (Cmelák)**  
CZECHOSLOVAKIA Agricultural Aircraft

THIS PLAN NOT TO BE COPIED FOR RESALE