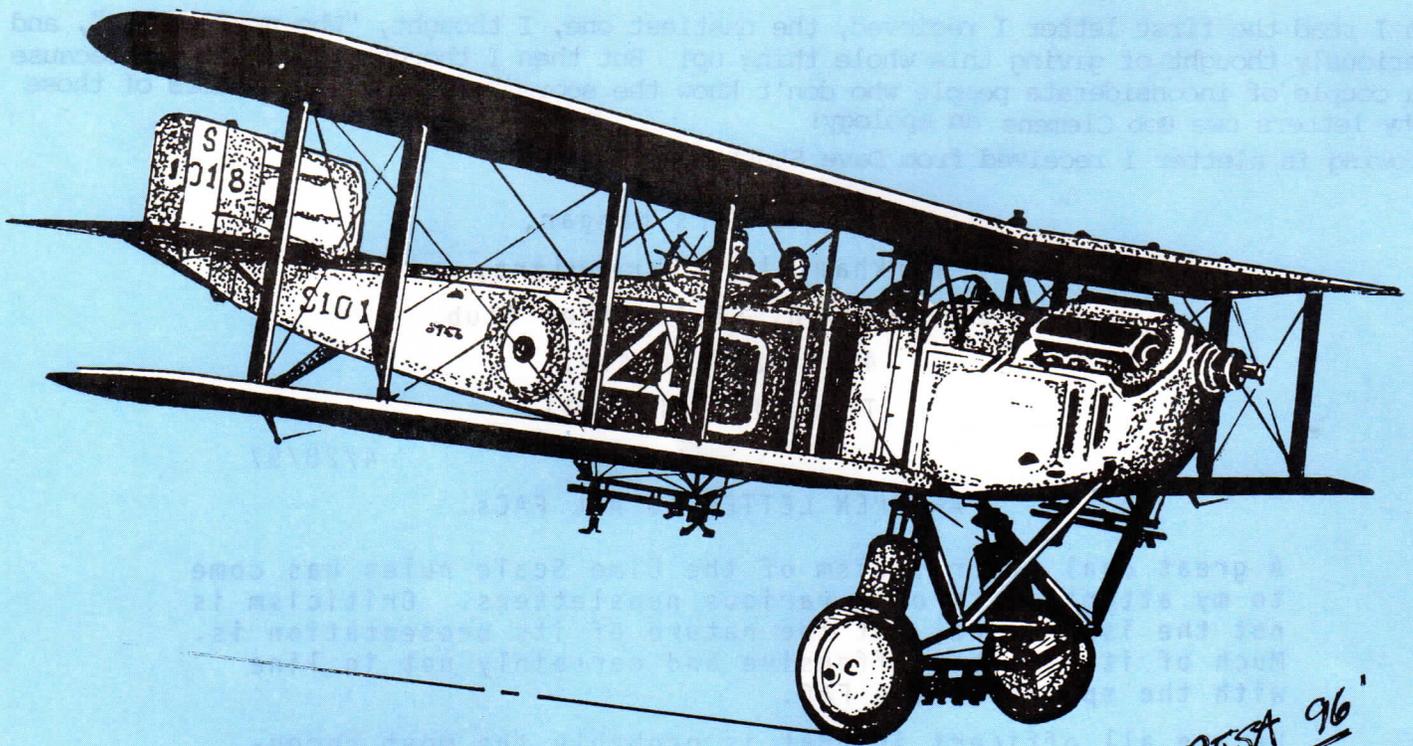


FLYING ACES

Club News



ISSUE #175-101

MAY/JUNE 1997

NEWS ON THE WING!

DIME SCALE DOWNER! The recently adopted Dime Scale Rules stirred up quite a controversy by a few people resulting in a NASTY tirade against Bob Clemens who volunteered to seek out a set of rules that everyone could live with. What these few people don't realize is that Bob Clemens nor anyone else makes the rules for the Flying Aces. All rules are made by FAC-GHQ after a long period of study and experimentation. Bob Clemens contacted several people as well as a couple of clubs and had virtually no response from them. What some of you dissenters don't know is that Bob only volunteered to gather info on the Dime Scale Rules and collate it. Most of the current FAC Dime Scale Rules were decided on right here at GHQ not at Bob Clemens's word processor.

Some dissenters want to go with only the top surfaces to be covered with tissue because that was the way it is on the original plan and they want to keep the old time flavor. Fine, but if that is the case how can you have laminated outlines on the flying surfaces? You can't have it both ways Clubsters!

However, the current rules will be ineffect for the rest of this year while we await your comments and suggestions. Don't forget, no set of rules are perfect right at the start. It takes time to get a good set of working rules for anything.

When I read the first letter I recieved, the nastiest one, I thought, "Who needs this?", and I seriously thought of giving this whole thing up! But then I thought, "Why do that because of a couple of inconsiderate people who don't know the score!" I think the authors of those nasty letters owe Bob Clemens an apology!

Following is a letter I received from Dave Stott, our Founder.

Headquarters Hangar,
Pinkham Field Irregulars,
22 Squadron, Flying Aces Club,
4304 Madison Ave.,
Trumbull, CT 06611

4/28/97

AN OPEN LETTER TO ALL FACs.

A great deal of criticism of the Dime Scale rules has come to my attention through various newsletters. Criticism is not the issue here, but the nature of its presentation is. Much of it has been offensive and certainly not in line with the spirit of the FAC.

We are all officers in what is probably the most recognised club devoted to free flight flying scale yet to evolve. I find it degrading to our organization as a whole that each of us cannot offer criticism and remain a gentleman.

Sincerely,



Dave Stott,
Air Marshall, FAC.

The cover on this issue is another fine drawing by our good friend Bill Ceresa. This time ^{3.} Bill has drawn a Fairey III-D Mk. II. This ship served in the British Royal Navy as an aircraft spotter-reconnaissance ship. She served in the years between 1924 and 1930.

Two more of our club have been lost since the last issue. Thorn Jones and Robert Haigh both passed away recently. Our sympathies go out to their families and friends. They will be missed by all.

The plans in this issue were done for us by Mark Fineman (Vultee XA-41), Paul Boyanowski (Focke-Wulf A17), Dave Stott (Thompson/Balboni) and Dave Livesay (Douglas BTD-1), once again thanks very much and thanks to everyone else who contributed to this issue.

The entries are coming in at a pretty good pace, we now have over 50 so it looks like another banner year at Geneseo for our off-year contest. This one continues to grow and in another couple of years may even reach the total entries of our nationals. Don't miss this one if you can make it. And please get your entries in as soon as you can, it sure helps with the paper work and planning here at GHQ. Entry blank on the last page.

We will be staying in Erie Hall, that is the dormitory we stayed in last year. It is located right next to our old dorm, Ontario. We have some great news to relay to you also. On Saturday July 19th in the evening, beginning around 7:30 or so our two freinds from the Chattanooga, Tn. area will be hosting a little hospitality hour or two or three in the dorm lounge. Ollie Benton and Oscar Smith will be putting this on to show appreciation for all the help and good fellowship that they have enjoyed over the years from the Flying Aces Club and its members. This is their way to show their sincerety. Refreshments will be served, all are invited including those not staying in the dorms. Be there!

If anyone wants to show videos during this shindig please bring them with you for all to enjoy.

The following were printed in the last issue of the newsletter and we are printing them again because they are still in effect. If you have any questions don't be afraid to call or write. My address is below on this page and my phone number is (814) 833-0314.

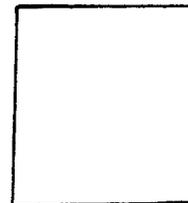
The scale judging of the models will take place at Peter's Party Complex in Leicester, NY, just 4 miles from Geneseo. This is the same place we did it last year. Food will be available there also if you don't want to go back to the college for dinner if you are staying there. The judging will take place on Friday, July 18 starting at 2:00 PM. Come as soon after 2:00 PM as you can. We are also lokking for volunteers to scale judge the models. If you always wanted to try your hand at it now is the time! It really isn't that difficult to do. There will be experienced judges to work with, so get your judging feet wet!

We are looking for sponsors for some of the events. Either manufacturers or individuals are welcome. If you are interested contact me, Lin Reichel at GHQ for more info on costs, etc.

Vendor tables will be available also during the scale judging. This gives the manufacturers and anyone with items to sell a chance to show their wares. It also gives the members something to do while the models are being judged. If you want a table or two, contact me at GHQ for prices and availability.

I have been asked by several Ozone chewers about having a special event just for foam models. This we can do, if, I have commitments from at least five members that they will have foam models there. I will also have to know this as soon as possible. This will be an event for foam models of scale aircraft only, any size. Scale judging as per FAC rules.

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.



1997 is the 70th anniversary of the New York to Paris flight of the "Spirit of St. Louis" piloted by Charles Lindberg..

As a celebration of this historic event, the Mid-Hudson Modelmasters club will conduct a special rubber powered, free flight contest for model replicas of the "Spirit of Saint Louis"

This free flight competition will be held on Saturday, September 6, 1997 in conjunction with the annual radio controlled model event.

Two versions of this famous plane will be used.

A profile type, 24 inch span model designed by David Arenstien especially for the beginner modeler will be one type and another type will be a standard built-up design of 18 inch span designed by Steve Curran which will be flown by "other than beginners".

The plans and other details can be obtained by.. writing to: THE MODEL MUSEUM, OLD RHINEBECK AERODROME, 44 STONE CHURCH ROAD, RHINEBECK NY 12572

There will be two age groups; Up to 15 and 16 to 18 years old.

The contest will be divided into two classes;

Beginners in one class and all others in the other class.

Both classes may be entered with two separate models.

Before the flying of the models they will be displayed for all to see and the staff of the Aerodrome will judge the one that they like the best. They will not be judged for scale accuracy.

A person interested, can get a good look at the "Spirit of Saint Louis" replica which is being constructed at the Aerodrome Museum shop. When finished, this aircraft will be part of the fabulous collection of planes in the airshows of the future.

Anyone in attendance at any of the airshows scheduled from June 14 to August 17 can stop by the Model Airplane Museum at the Aerodrome and pick up your copy of the plans. Ask for Bill Poythress.

Before I sign off on this issue I want to tell you about a new kit we recently received here at GHQ. It is the Timer's Nightmare and is an old-time gas job that has been reduced down to a size to fit our electric old-time replica event as well as some other events. See the ad in this issue. This kit looks like a real good bargain when you consider that it has laser-cut parts (97) and uses that new covering material, polyspan. If you are into that event you won't want to pass this up!

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

It. Col. Lin Reichel, Cinc-FAC

FAC Postal Contests

This years postal contest will be different than those in the past. This time we will be shooting for a target time. The time will be a secret until the contest is over but it will be somewhere between 30 seconds and two minutes. An independant member of GHQ will pick the time and put it in a hermetically sealed envelope until the contest is over. The closest time to the target will be the winner.

There will be two divisions, Golden Age Civil and Modern Civil aircraft only. You may enter only one model per event and you can enter three flight times per model. The contest starts now and will end on October 31, 1997. Times postmarked after Nov. 2nd will be void. Send your name, the name of your model and the time to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506



The truly international newsletter for indoor fliers! Indoor News is published four times a year and covers all types of indoor models, from peanuts to microfilm.

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Contest Calendar

- June 14th..Dayton, Ohio, Frank Scott, 6633 E. Lefevre Rd., Casstown, Ohio 45312. (513) 335-3057
- June 21-22..and July 12-13..Wichita, Ks. Jeff Englert, 10118 Sterling Ct., Wichita, Ka. 67205
- June 22..July 27..and Aug. 3..Cleveland, Ohio, Russ Brown, (216) 382-4821.
- June 22...Glastonbury Modelers, Durham, Ct. Ed Novak, (203) 238-9066.
- July 4-5-6..Allen, Tex. Lone Star Sector, Jerry Porter, (214) 320-1788.
- July 12....Country Club Hills, Ill., Chris Starleaf, (815) 786-6490. Also Aug. 2..Aug. 16, Sept. 20.
- Aug. 12-13-14..Gananoque, Ont. Jim Anderson, (613) 342-5613, Also on Aug. 23-24.
- July 12-13..Canadian Nats., Bill Henderson, (416) 481-6972.
- Aug. 8-9-10..Fayette, NY, Jack Barker, (716) 624-2844.

THOMPSON-BALBONI Spl.

YET ANOTHER MIDGET RACER
IN PEANUT SCALE.

By Dave Stott.

How could I possibly resist building a model with a name like that? "Thompson", my friend and flying companion of decades. The inspirational and spirited partner in the founding of the Flying Aces Club. "Balboni", the world's first aerial junk man written up twice in the Flying Aces magazine of old. Supplier of parts to many barnstormers and the movie stunt flyers right up until his untimely death in the late 1940s. Though I had never known him, he was indeed a boy's hero just as much as any of the fictional heroes that flew in the pulp pages of our good old mag. Did Arrigio Balboni have a hand in this midget racer? I am not certain. A strong possibility exists, as both the racer and Balboni stem from California.

As this model has been built from these drawings, we can offer some full size templates and a few hints to aid the modeler. This midget had two advantages over the others. The lack of a spinner, and straight thru wing construction. Yep, gang, I know it also has a long nose, but I am not convinced that is quite the advantage one might think. In spite of many hours in the air this baby just does not want to climb to the altitude one thinks it should be capable of. She climbs up, down comes the nose and loses some, back up again a bit higher, down again see-saw, see-saw. Can it be that cheek cowl way out front causing this action? Different stabilizer incidence angles have been tried, both positive and negative from that shown on the plan with no elimination of the see-saw action. But, she flies good enough, and long enough to escape being shoved into exile in the back of the hangar.

Construction is about the same as described for the two previous midgets. No stringers on top up front to snag rubber knots. Keep the nose as light as you can. All the midgets have a tendency to be nose heavy. Wash out both wing tips as shown on the plan. The color scheme is all over maroon with cream registration and race numbers.

The test model weighs in at .72 ounces. This is the all-up flying weight that includes a 14 inch loop of Tan II rubber, a 5.5 inch North Pacific plastic prop, and a 1/8 inch ball of clay ballast on the tail skid.

Whats up for next time? Just look down wind at the other end of the "drome. See that ground crew guy hangin' on to the fin of that bright red midget as the pilot revs 'er up? Well, that is a Wittman "Buster" midget and you pylon polishers will find plans to this gem next time around.

WANTED: Plans for the following aircraft, Emsco B3-A Trimotor, Emsco B-8 Flying Wing, Waco KBA, Bresse R6-C, Mono Monocoach, Laird LCB cabin Biplane, Zenith Z6-A, Vance Flying Wing, Berliner-Joyce all vision 29-1, Stearman Coach cabin biplane. R. Steven Johnston, 506 West Galer, Seattle, Wa. 98119.

TIMERS NIGHTMARE

OLD TIME REPLICA FREE FLIGHT

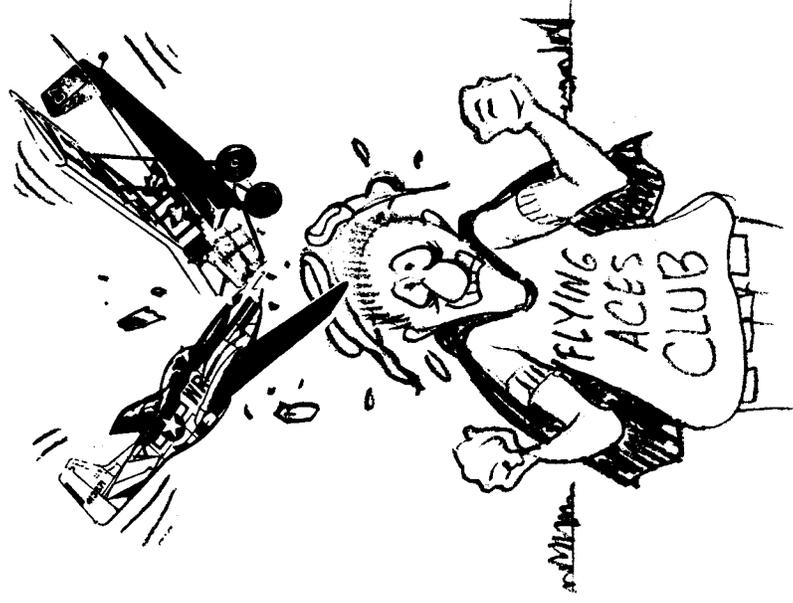
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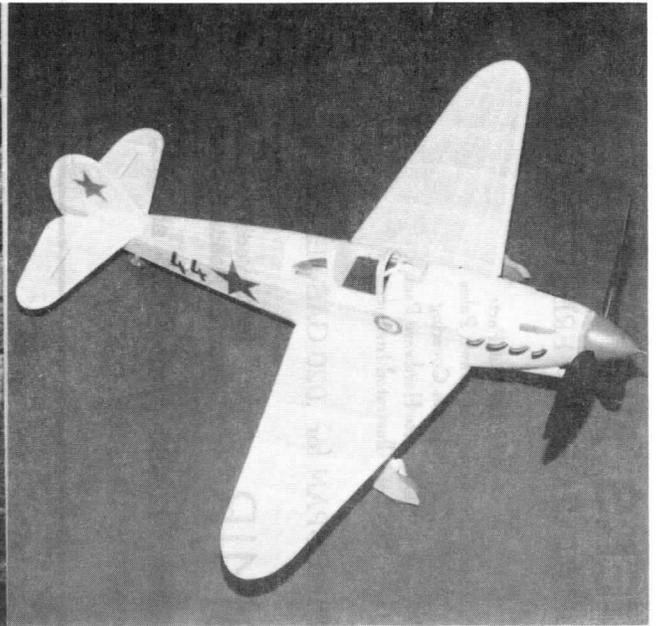
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Sharps, Florida. 32959-1210

Price, \$29.50 plus \$3.00 shipping
Florida res. 6% tax.



Bob Reeves

67



ABOVE:

Yak-1 by Bob Isaacks. See ad in this issue for plan and canopy deal.

LEFT COLUMN, Top:

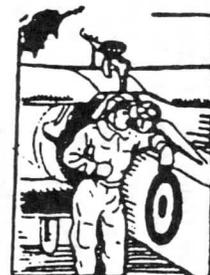
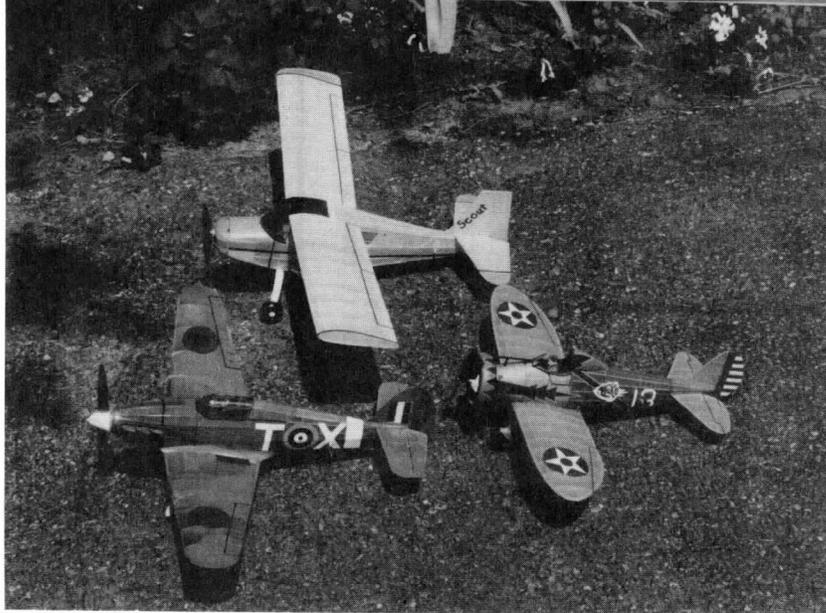
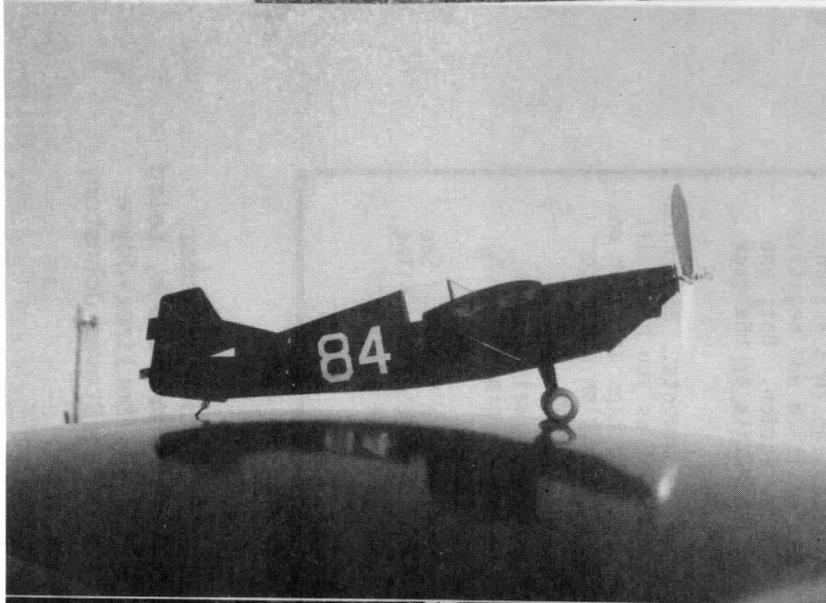
Focke-Wulf A-17 by Paul Boyanowski. Great flyer. Model was out of sight on its 1st official flight! Plan in this issue.

Center:

Dave Stott's Thompaon/Balboni Special built for the new Midget Race event. Plan in this issue.

Bottom:

Bellanca Scout, Hawker Hurricane and Boeing P-26 by Roy Guge. Beautiful models in the color photo.



A TRIO OF MIDGETS.

By Dave Stott.

Say, clubsters, it is gettin' to look like a circus side show what with all the midgets around here. yep, and you will probably see even more of these little pylon polishing peanuts come this summer at Geneseo. Commander Lin Reichel has added a mass launch event for 'em on July 19. Gonna give it a go? In case you do, here's the color schemes for this trio.....

THOMPSON-BALBONI Spl.

All over dark red. cream numbers and letters. Kendall logo red with yellow lettering.

DIXON Spl.

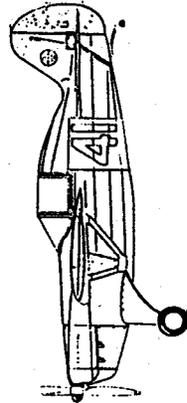
Wing and stabilizer were colored a blue and white sunburst pattern, as indicated on the plan by "B" and "W". The vertical tail is blue with white registration lettering and the Kendall Oil logo which was a red disc with yellow lettering. Landing gear legs and fuselage were blue. The cheek cowls were white with the white continuing aft to form a tapered stripe that included a rectangle containing the race number "41". Wing struts and wheel hubs were white. Because the wing race number and registration overlay the sunburst pattern it is thought they might have been a contrasting color to both the blue and the white. Possibly red.

GRANVILLE BEE GEE "BABY".

Colors of the Bee Gee were basic airplane yellow with dark blue trim. This means the nose and belly of the fuselage and wing leading edges were blue. There is a color separation line on the plan to show this. It is assumed that the lettering was also dark blue as it appears the same shade as the trim in the one photo available. The clown cap spinner was yellow with a small blue stripe that began at the tip and spiraled down and around 3 times to end at the back plate. On a model this size, the spinner virtually disappears because of the size of our prop hubs. Wheel hubs have a dark blue and yellow "ying-yang" pattern on them. Kendall Oil logo is a red disc with yellow lettering. Prop was wood, so should be a yellowish hue.

CONSTRUCTION HINT.

Make every effort to keep the nose light. To keep the rubber knots from hanging up on the inside of the nose, use no stringers underneath the bond paper covering on top. Do not build up cheek cowls until after the nose has been covered and doped once.



The Dixon Special and the Granville Bee Gee "Baby" plans were in the March/April 1997 issue of the newsletter.

INDOOR PEANUT

Pilot	Plane	Time
1. Rick Choate	Pottier	94 sec.
2. Barrie Taylor	Waterman Gosling	89 "
3. Doc Martin	Ford 2-AF	86 "
3. Don Brimmer	Lacey M-10	86 "
5. Doc Martin	Lemberger	85 "
6. Newt Bollinger	Cougar	84 "
7. Jim Holland	Lacey M-10	83 "
8. George Nunez	Turbo Beaver	82 "
9. Sidney Gilbert	Lacey M-10	78 "
10. Jonathon Nunez, (Jr)	Blackburn Airdale 77	77 "
11. Antony Koebin	S.Dumont 14 bis	76 "
12. Jack McGillivray	Fleet Canuck	75 "
13. Stan Fink	Huntington H-12	69 "
14. Paul Squires	Jodel D-9	60 "
14. Graham Lovejoy	Lacey M-10	60 "
16. Dave Linstrum	Lacey M-10	58 "
17. Dick Harker	Sperry/Jenny	56 "
18. Frank Hirleman	Hi-Max	53 "
19. George Nunez	Fike	52 "
19. Larry Kruse	Facetmobile	52 "
21. Tom Hallman	Martinsyde Buzz.	48 "
22. Tim Hayward-Brown	Bloch 120	43 "

OUTDOOR PEANUT

Pilot	Plane	Time
1. Bill Passarelli	P.A.M.A.	386 sec.
2. Don Reed	Cougar	328 "
3. Ollie Benton	Chambermaid	107 "
4. Curt Sanford	Lacey M-10	83 "
5. Dave Linstrum	Lacey M-10	80 "
6. Tom Hallman	Martinsyde Buzz.	76 "
7. Ron Hummel	Monocoupe	70 "
8. Ron Hummel	Lemberger	52 "
9. Paul Stott, Sr.	Farman Renault	41 "
10. Tim Hayward-Brown	Bloch 120	34 "



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4/97

High Gumbandery

Shall we spend a little time talking about propellers? If so, it won't hurt to first tell you to do a little research. Generally, when someone writes on a topic the credits are given at the end of the piece. I would like to tell you all right up front, to search out copies of your favorite club Newsletters that contain articles on props. Check out those in particular by Bud Carson, and The Glue Guru. Most of the stuff in our own publications are easy reading, and put into practice can raise the level of your understanding, and the altitude of your models. The learned Mr. Carson can give you the honest analytical and understandable facts on aerodynamics of any kind, including propellers. I've included a list of some recommended reading.

What I say about props is simply based on a good many years of having fun flying model airplanes. Some of this experience is still intact in the long term memory cells of my nitrate fumed brain. Usually there is a good reason for everything we do. My mention of the above named gentlemen is in the hope that they will look with kindness on my mutterings, and in so doing let me continue to believe that at least some of the trophies on the shelf are not due entirely to luck!

I'm left handed, and this has made it easier to carve the commonly used right handed props. This was one of the factors in getting me to start carving propellers. There was also the special collection of plans and construction articles of a great modeller named Earl Stahl who wouldn't consider a model complete without a carved prop. All his plans showed the dimensions for a prop block. So, next time you decide to slug it out with gravity on the flying field, spend some quality time with these folks on the printed pages of your favorite magazines and newsletters. In today's hurried pace we often just scan through these. We look at the plans and three views, check out the pictures and read the captions, and look to see if we can find our name mentioned anywhere. Then put it aside to read through "when we get more time". Isn't it true that you can pick up almost any year old newsletter and read something in it for the first time?

Some folks have asked me about the props I use, and I'm the first to admit that I use both carved balsa and plastic props. One of my better flying models, a long lived Lockheed Altair, uses a 9" plastic prop. After trying several carved ones, the plastic prop was fitted and it flew just great with it. Pride be gone, it's been on the model ever since. The great machine carved balsa props that Superior Props markets are excellent. You can specify the pitch, diameter and even select the number of blades. The sanding, final finishing, airfoil, and blade shape is your call, same as a carved prop.

For this article, lets limit the topic to props for outdoor Scale Models.

Consider that for outdoor flying, most of the time obtained for a winning flight, is made in the glide mode. This means we want the prop to be efficient as a free wheeling (free propping) device. As Mr. Shakespeare would put it, therein lies the rub. The very

same device that translates the energy from the rubber band into thrust to propel our model skyward becomes the biggest impediment in obtaining a long floating glide. For sure, the best we can do is take it out of gear and coast down the hill. Put the prop in neutral, and let it spin free. We know how fast a model will descend if the prop hangs up. A ratcheting or "Z" bar catch as a positive free wheeling device on the prop is the best. It beats the spiral catch cast into the plastic props and is the only way to go if you have a properly pre-tensioned motor that holds tension when unwound.

A step further in improving the glide with a free wheeler is to consider how we can use aerodynamics to help us further reduce the drag of a free spinning prop. When the prop is being "pushed" around by the flow of air moving over it in the glide mode, undercamber on the rear surface means that the airflow over the leading edge of the prop that flows over the rear face will have to execute a greater "wraparound" at the leading edge. This airflow will tend to separate in eddy currents. In other words, in the glide mode, the prop airfoil is trying to fly inverted at a very high angle of attack. In many cases it's a stalled wing merely spinning because of the higher pressure air being deflected from the forward surface. This will create turbulence and disturbed air flowing behind the free wheeling prop. Generating this turbulence (and drag) requires power, which is provided by, and taken from, the forward motion of the model! For this reason, I do not carve undercamber in an outdoor prop. Another help is to put a radius on the leading edge. This rounded L.E. helps the air to flow around to the rear face of the prop in the glide mode. A sharp L.E. can cause flow separation and promote turbulence. This turbulent air in the washed area or wake of the prop affects the airflow (lift and drag), over that part of the wing. Also, because it is not a smooth airflow, it reduces the efficiency of the stabilizing surfaces usually located at the rear of the model. To compensate, we find rubber models need bigger (heavier), stabs than other model types. This rearward structure will have a vote on how much nose weight your model must carry into the battle. So, during the glide, the smaller the adverse aerodynamic effects of the prop, the smaller the compensating aerodynamic needs.

Another consideration is the weight of the prop. I know it takes more energy to spin a heavy flywheel than a light one. So it's better to have a light prop, and spend the limited energy of the rubber motor bashing air backwards rather than spinning weight around in circles. I'd never balance a model by using a heavy prop

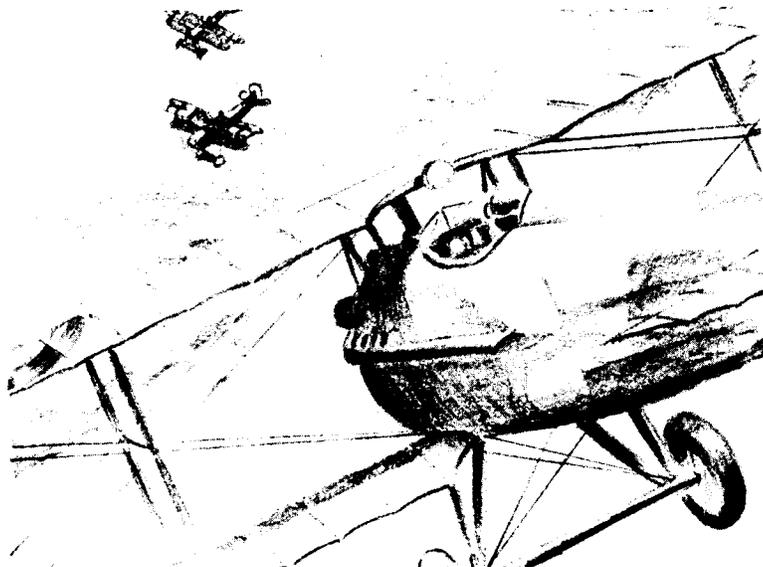
This is the trade-off process. We must recognize that some of the aspects of a good ozone chewing prop on the way up will not promote a good glide once the driving force of the motor is spent and the prop becomes driven. I used to talk props with the forever young Chuck Kotilla. Chuck enjoyed flying high performance "Wakefield" models. He said that if he had to fly with a non-folding prop he'd make it a symmetrical section. (Too bad he never got hooked on FAC.)

The right prop for any model is determined through a gradual improvement process. The diameter, pitch, blade shape, and airfoil section are what you determine. The prop is only a part of the propulsion system of your rubber powered model. The prop shaft,

did you know...?

9.

- That one of the highest-scoring aces with the smallest percentage of confirmed victories was a Frenchman?
- That while officially credited with 41 victories (sufficient to place him 4th on the list of French aces) his own log book claimed 105 victories?
- That only one of each four victories he scored was officially confirmed?
- That many of his battles were not only against superior odds, but were fought deep within enemy territory that it was impossible to receive confirmation for those that he destroyed?
- That during a combat he had drifted over the Swiss border where he was forced to land and was interned?
- That he not only accomplished his escape from Switzerland, but he also took his Swiss guard with him to French soil and to safety?



- That his reward for a successful escape attempt was to be sentenced to 60 days arrest for "allowing himself to become lost in an air battle."
- That no "glory hound" he did not let lack of confirmation interfere with his zeal. His motto was: "*Le Boche know of their losses!*"
- That this was *Georges Felix Madon, Capitaine of SPA 38!*

Drawings And Text
by

ERNIE ATKINS

bearings (nose block and prop), provision for thrust adjustments, free wheeling assembly, and of course, the rubber motor, are the other factors. All of them are important.

Diameter: Start with 1/3 the wingspan. (Most peanuts fly with a 6" prop).

Pitch: Start with 1.3 times the diameter. Get a prop pitch gauge. Understand what pitch means and what helical pitch means. A SASE and comment will get you a prop pitch gauge. Low drag model = higher pitch.

Blade Shape: Put the blade area where there's clear air behind the prop.

Airfoil Section: The prop is a wing going around in circles. Thick enough at the hub to resist breaking, thinned to about 6% near the tips.

Prop Drive Shaft: "S" hook, solderless* for simplicity. * See Prop Bearing.

Nose Block Bearing: A 1" tube or two hard Points at least 1" apart. The Nose block must seat firmly in the front of the fuselage to hold it's position against the side load of thrust offset.

Prop Bearing: Tube-in-a-tube for a balsa prop, tube in plastic.

Thrust Adjustments: Provision must be made so that the prop shaft can be deflected to point down and to the right.

Free Wheeler: Positive release ratchet type.

Rubber Motor: Approximately 30% of total model weight unless flying 15% rule. Braided as described in "Twice Twisted Tan II".

I have endeavored to make this easy to understand. If it doesn't work for you, talk it over with a modelling buddy or write to me for further comments. Propellers are a very complicated item. They are a challenge, and like your model, a work of art. Carving your own propeller will enhance the moment, that time when folks are looking your model over, and see that *your* work begins right up front.

Rottensox

Recommended Reading: (These are but a few, there are many more)

(FA = Flying Aces, MF = Max Fax, CB = Cloudbusters)

FA #152 Prop Parameters, Glue Guru. FA #168 Prop Design, John Blair

CB 3-96 Twice Twisted Tan II, R. Kuenz. FA #170 Impulse & Props, Glue Guru.

FA # 155 True Pitch, Glue Guru. MF 1-92 Thoughts on Props, Bud Carson.

MF 3-93 Free Wheelers, Tom Schmitt. MF 1-92 Nose Blocks, Rolfe Gregory.

MF 7-93 Thrust Adjuster, Bert Phillips. MF 1-94 Rubber Cross Section, Don Snull.

MF 5-94 Rubber Length, Bud Carson. CB 9-95 Tube in a Tube, Rottensox

FA # 169 Nose Blocks, Tome Arnold. CB 12-92 Right Rubber Motor, Vanderlinde

PLANS

Rubber Scale. Old Timer

Nostalgia & Sport - powered.

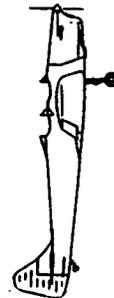
rubber & towline. RC Sailplanes - scale, sport & electric. All models illustrated. Catalog \$2.00

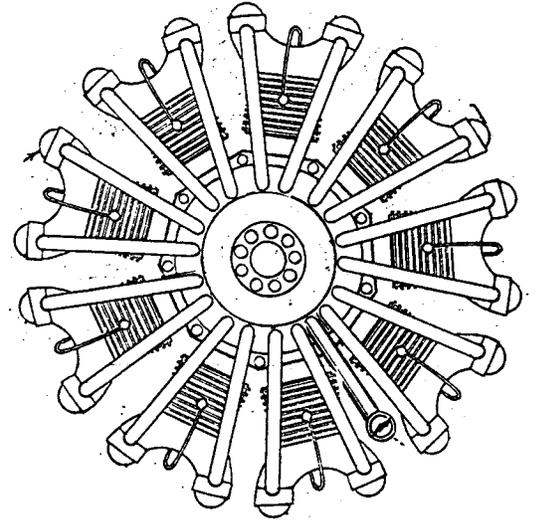
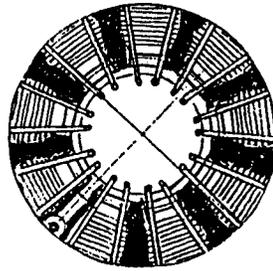
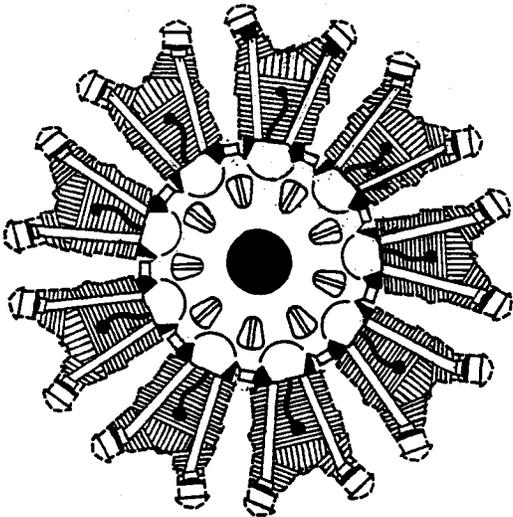
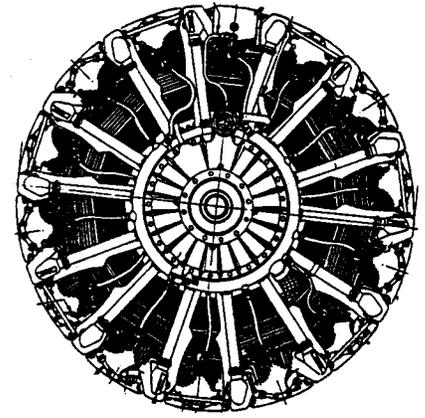
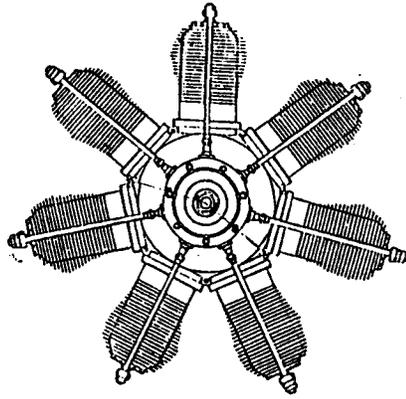
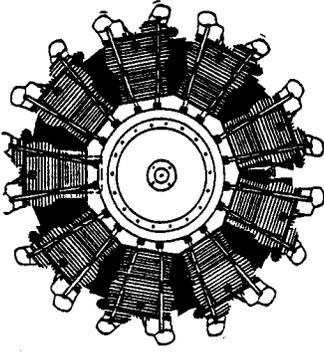
Cirrus Aviation

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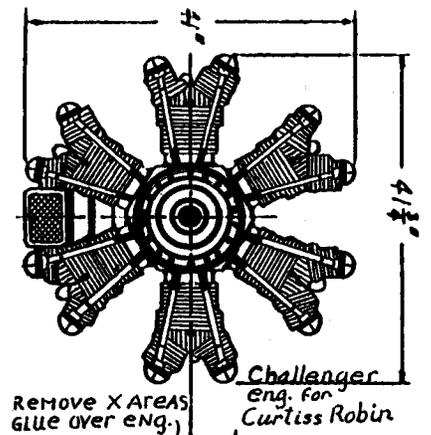
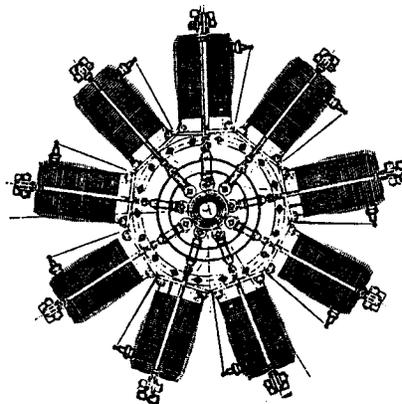
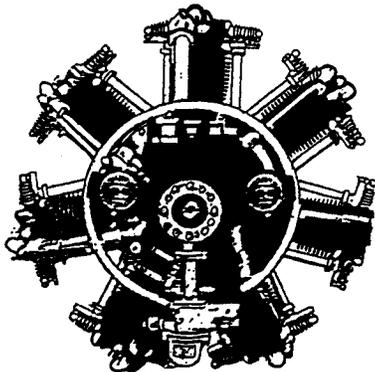
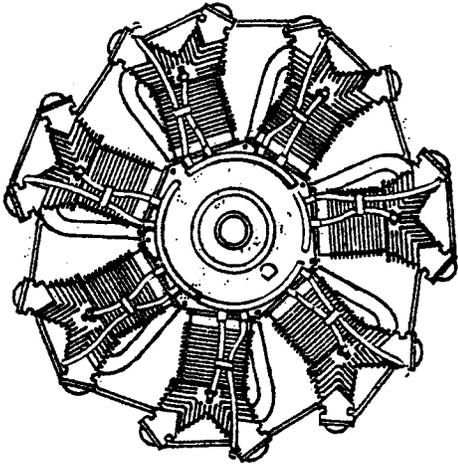
Victoria, BC V9B 4Z2

Canada

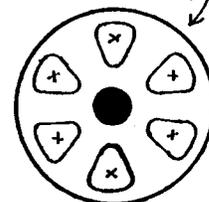




DRESS UP THE FRONT OF YOUR COWL
by Jake Larson



Remove X AREAS
glue over eng.



Looking Back At Canadian Aviation

Art Doten, MAAC 95L

Canada Car And Foundry FDB-1

Wingspan: 28'

Length: 21' 8"

Engine: 1-750 h.p. Pratt & Whitney

R-1535 Twin Wasp Jr.

Maximum Speed: 261 m.p.h.

Armament: 2-0.50 in. guns

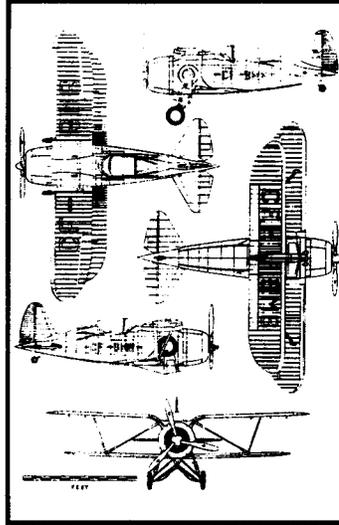
and

2-116 lb. bombs

Date: December 17, 1938: The proto type of the Gregor Fighter flown by test pilot George Adye first flew at Fort William, Ont. on this date in 1938. It was the first Canadian designed and Canadian built, all metal fighter aircraft. Canadian Car and Foundry, located at Fort William, were responsible for building this design by Michael Gregor. The aircraft was designated FDB-1, indicating its intended role as a fighter-dive bomber, and was known as the Gregor Fighter with reference to the name of the designer.

The writer, as a student at high school at that time, was very much impressed with this attractive design and has ever since been infatuated with the aircraft. More than 50 years have passed and I still haven't built a model of the FDB-1.

This biplane design with its stubby fuselage was of a stressed-skin construction, with the wheels of the landing gear folding neatly into the fuselage sides forward of the wing as in the early Grumman fighters. The unequal span wings were metal construction with fabric covering. With the gull shaped upper wing, the design was intended to give the pilot good visibility, and it did while flying. However the pilot's view during take-offs and landings was not good. During airworthiness tests held at St. Hubert airport, Montreal, in May 1939, Flt. Lt. Lawrence Wray noted that the Gregor fighter was a successful effort and that below 15,000 feet could successfully engage a monoplane fighter. However by this time CCF had been given a contract to build Hawker Hurricane fighters. The FDB-1 prototype was the only Gregor built.



References: *Canadian Aircraft Since 1909* by K.M. Molson and H.A. Taylor. *Air Pictorial Magazine*, December 1972, Canadian Car And Foundry Gregor FDB-1 by Peter Lewis.

A model of this aircraft is one of many that can qualify for the Canadian Aviation Historical Society's Special Achievement Award, presented annually at the Canadian Nats. □

WANTED: Plans for a Martin PBM-3 flying boat that was built during WW-II near Baltimore, Md. Can anyone help? Bill Lubis, 8657 Reservoir Rd., Fulton, Md. 20759-9628

* * More Blown Motors * *
Mumbo Jumbo # 79 from the pen of the Glue Guru

Salutations, disciples! Today we shall further consider that great menace to mankind - the blown motor. Though the incidence per modeler, per year, is modest - perhaps two incidents per year - it's likely that many rubber scale modelers have abandoned the hobby over the blown motor issue, for there is something disheartening in seeing one's work torn to shreds. We've noted the profit in external winding; today, let's consider lubes.

Lubes work by coating the rubber with a slippery substance capable of reducing the friction between strands. The classic lube - 'tincture of green soap mixed with glycerine', is now rare indeed and I know of no source. Something supposedly similar is sold by SIG and works reasonably well, despite a tendency to dry out after a few days. Though dry, it continues to coat the rubber with a wax-like substance quite effective in resisting the high pressures developed between strands in the 'wringing out' process we use in winding. Criticism has come mainly from FAI competition modelers who dislike the low initial viscosity of the soapy SIG lube. Here the claim has been made that when first applied, the lube is too easy to wipe off, or squeeze out, a tendency especially apparent on hot days.

Critics of soapy lubes tend to advocate castor oil, relishing the extreme stickiness of this natural oil. There's something to it; castor oil is sticky indeed. It's also available at any drug store in an odorless form at a low price. Unlike petroleum oils, it doesn't attack rubber. On the negative side, it does tend to dry out and vanish - but this takes weeks and your motor life will likely be over by then. It also tends to leave spots on the interior side of tissue. All told, I think it the best of the various lubes. (I use plastic covering.)

Currently favored by competition flyers is silicone grease. This one is even stickier than castor oil, never dries out and has a high viscosity resistant to change, even in summer heat. A few dollars buys a sizable toothpaste tube of GE silicone grease at bearing supply stores. The catch is one of putting it on properly. The stickiness and high viscosity makes it difficult to spread evenly. Because the lube is resistant to flow, it's unforgiving of skipped areas of rubber. Bitter experience suggests: in using silicone grease, make certain that every bit of rubber is covered, or else...

To apply lube, the classic technique is still best - spread some newspapers, build a lube pile or puddle within one hand, and pull the rubber strands through the lube with the other. As the rubber strands go through the gap between thumb and forefinger, apply the European gesture for money - a sort of back and forth rubbing motion. The idea is to get an even coating without missed sections. Running the motor twice through your fist should do it.

Somewhat less messy is the baggie technique. Drop your motor and 'enough' lube into a baggie. Close and knead. Remove motor; throw out baggie. The catch is in the 'enough'. If too dry, much trouble lies ahead. If too wet, the inside of your fuselage will be drenched. If too much kneading has occurred, a sensational tangle will result. Better the thumb and forefinger approach.

Which lube is best? Awash in rumors and incomplete testing, we can't be sure. My guess is that satisfaction is mostly a matter of 'goodness of fit'. To those with unpleasant memories of castor oil, anything else seems better. Noting that most oils and soaps will work effectively over the short range, for example, shampoos containing alcohol, only the long haul needs thought. Here, expert opinion tends to favor silicone grease.

LAIRD STORY

This little book is dedicated to Al Whiteside, who was a great pilot. I am not selling anything or trying to raise money for a charity. Heart failure forced me to retire from commercial real estate in 1987 and this left me with the time to pursue my interests in photography and to research many things that I had always wanted to pursue.

After about a year I had taken pictures of all the old barns that I could find, and read most of the books I wanted to read. I became a real grouch which was made worse by the pain from a damaged femoral nerve that was damaged when an artery was removed from my right leg during heart bypass surgery.

My son knew that I had been a serious model airplane builder when I was a teenager, and that I still had a passion for 1930's raceplanes. He gave me a book that renewed this passion, and I began building scale models of the racers that had won the Thompson and Grieve Trophy races. I met Ollie Benton and he taught me how to make the things fly.

The Laird "Solution" was one of the greatest raceplanes of all time. Al Whiteside bought it about 1940 and brought it to Chattanooga, where it sat in Harry Porter's hangar for about 3 years, being flown often. In 1930 and 1931 this ship was the one to beat in any major air race.

I had always wanted to trace the Laird's history, which I have done over the past 5 years. The attached paper is the result of my reading every book I could find about the Laird, talking to old pilots who were familiar with it, and finally joining the Society of Air Race Historians from which I have received much information about the ship.

I know that flying and Lovell Field are both close to your heart and thought that you might like to read the history of what had to be the most famous ship to ever be based at Lovell Field. Many of the pictures are poor, I had to copy them from old books and magazines. I do not have permission to use these pictures, so they should not be used for publication.

Please read and pass on to someone else who is interested in flying.

Ray
Raymond Payne Jr.

Historic significance of the Laird "Solution"

1. First aircraft to win the Thompson Trophy pylon race for aircraft with unlimited displacement engines.
2. The only biplane to win the Thompson Trophy.
3. Won the 1930 race powered by the first Pratt & Whitney Wasp. Jr. out of the factory.

4. Finished the 1931 Thompson in 3rd place.
5. It and it's sister ship the "Super Solution" were the smallest airplanes at only 21ft wingspan to ever fly a big 9 cylinder 987 cubic inch displacement engine.
6. The Wasp Jr. that powered the ship in the 1930 race was returned to Pratt & Whitney later that year and overhauled. Pratt & Whitney loaned it to Granville Brothers to power their 1931 "Gee Bee Z" which won the race, so that engine won the Thompson two years in a row in different airplanes.
7. The "Solution" was owned by 15 owners and rebuilt 5 times before being acquired by the New England Air Museum.
8. It is one of only about a dozen original 30's raceplanes still in existence, and remarkably, it was still being flown in the late 1940's.
9. 30's raceplanes are so sought after by museums today they are having replicas of them built at hundreds of thousands of dollars per copy. Even foreign museums want them.
10. About 4 of these original raceplanes have been completely torn down and rebuilt at great cost and are being flown again. There are about 30 replicas of them flying and according to the Society of Air Race Historians there are about 15 under construction at present.
11. The big Oshkosh annual air show began having a special event for 1930's raceplanes in 1992 featuring several of them on display and being flown in mock races.
12. Delmar Benjamin has flown his replica of the 1932 Gee Bee R-2 in air shows all over the United States demonstrating to the public the beauty and speed of the 1930 raceplane.
13. Built only 27 years after the Wright's first successful flight, the "Solution" was one of the very first landplanes capable of exceeding 250mph in level flight.

CHATTANOOGA'S MOST FAMOUS AIRPLANE

The time was the summer of 1941, the place Lovell Field Chattanooga, Tennessee. An air show was in progress and the show announcer had just told the spectators that Al Whiteside of Chattanooga was getting ready to fly his famous Laird raceplane that had flown in the Thompson Trophy and Bendix Trophy races.

Whiteside walked out to the little white biplane that had a huge radial engine. A mechanic opened two clamshell cowl doors above the cockpit so Al could climb inside to sit in a small cramped seat. The cowl doors were closed over the cockpit, leaving a small hole just large enough for the top of the pilot's head to project up enough for his goggles to let his eyes see an inch or so above the top of the fuselage. The mechanic then tightened nuts all around the perimeter of the cowl doors with a nut driver - - no way could the pilot get out.

The mechanic walked around to the front of the ship and spun the propeller two or three times to free up the engine and prime it. Then there was the usual 30's dialogue between the pilot and the mechanic, SWITCH ON and CONTACT. The big nine cylinder Wright "Whirlwind" engine blurred several times blowing blue smoke out of the exhaust and then came to life with a roar that literally shook the ground.

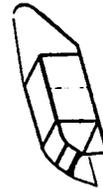
As Whiteside taxied off you could not help wondering how that little waist high rudder could possibly control that airplane. He taxied to the North end of the field and lined up with the main runway. He ran up the engine a bit and once the tower gave him clearance he released the brakes and began his takeoff run. The little white ship gained speed rapidly and was off before mid field, the "Whirlwind" raising a terrific roar that rattled car windows. He was soon out of sight.

Within just a few minutes time a small white dot could be seen approaching the SW end of the field. The beautiful white ship with the red scallops on the front of the fuselage and on the wheel pants, flying about 50 feet above the runway, zoomed across the field faster than I had ever seen a biplane fly, then pulled up into a steep rolling climb. Al disappeared again flying NE, but was back in a few minutes a white dot in a gentle dive, going like the dickens. He leveled off over the North end of the runway and flew down it again at about 50 feet altitude, this time so fast the wing wires were screaming almost as loud as the roar from the "Whirlwind."

I shall never forget that day because Al Whiteside gave us a brief look at "The Golden Age of Racing" that spanned today's modern high speed aircraft. Many 30's race pilots paid with their lives for the progress in the development of engines, fuel and aircraft structures their pioneering left us.

The replica of the GeeBee R-2 that Delmar Benjamin flew in our 1996 air show has a wingspan of 25 feet. Whiteside's Laird had a span of only 21 feet and they were both designed to use the same engine.

continued next issue....



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Bob's latest offer; Yak-1 plan (25" span) with all rib and former patterns and formed canopy and molded fillets. Mailed in a bullet proof mailing tube for \$15.00 PPD.

Peanut & No-Cal Scale Postal Meet

This concludes our Winter Postal Contest. Thanks to all who entered. Plan prizes will be sent to the winners.

Final standings;

INDOOR NO-CAL

Pilot	Plane	Time
1. Barrie Taylor	Heinkel HE-119	417 sec.
2. Jack McGillivray	Fairey Barracuda	365 "
3. Mike Morrow	P-39Q Mr. Memmen	352 "
4. Lincoln Ross	F4F Wildcat	276 "
5. Mike Morrow	XP-47H Thunderbolt	250 "
6. George Lewis	Waterman Gosling	244 "
7. Rich MacEntee	Lacey M-10	215 "
8. Larry Kruse	Boo-Ray	207 "
9. Wayne Trivin	Farman	204 "
10. Newt Bollinger	Lacey M-10	191 "
11. Dave Linstrum	Farman	187 "
12. Larry Kruse	Fairey Barracuda	185 "
13. Sidney Gilbert	Piper Cub	150 "
14. Dave Linstrum	Porter	149 "
15. John Tudor	P-51 Mustang	118 "
16. Bill McDow	F4F Wildcat	107 "
17. Dick Obarski	Farman Postale	102 "
18. Frank Hirlenan	HE-112	97 "
19. Ken McConnell	Maule M-5	95 "
19. Don Brimmer	B-70	95 "
21. Dick Harker	C-3605 Schlepp	89 "
22. Mike Ditrich	P-51 Mustang	88 "
23. Mike Ditrich	Swee-Pea	83 "
24. Alan Clarkson	Tiger Moth	70 "
25. Doc Martin	Windham	65 "
26. Alan Clarkson	Waterman Gosling	57 "
27. Charles Neilson	F4F Wildcat	24 "
28. Walt Schlesinger	Nieuport 17	14 "

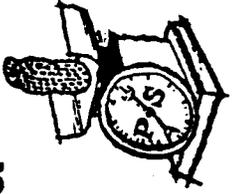
OUTDOOR NO-CAL

Pilot	Plane	Time
1. Ron Hummel	Tailwind	656 sec.
2. John O'Leary	Heinkel HE-119	349 "
3. LaVon Kuehne	Chambermaid	235 "
4. Russ Sandusky	Nakajima KI-84	149 "
5. Dave Linstrum	Pilatus Porter	112 "
6. Tom Hallman	Hawker Typhoon	90 "
7. Paul Stott, Sr.	Taylor Cub	46 "
7. Steve McKeown	Fokker F-II	46 "
9. Paul Stott, Jr.	Piper Cub	30 "
10. Ron Carr	Stinson L-5	22 "

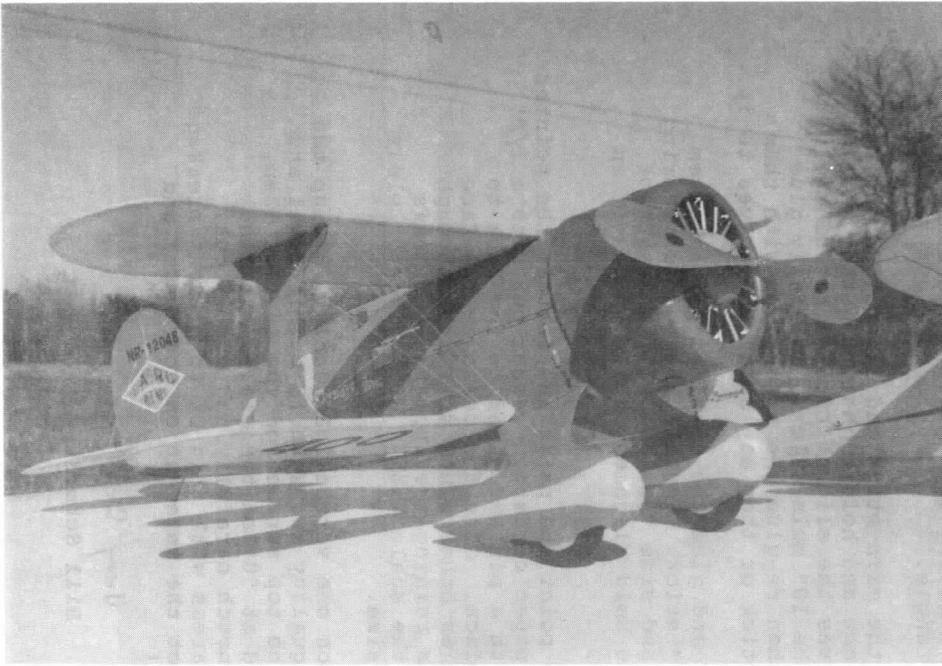
YESTERYEAR PLAN SERVICE

List #9

179 clean, sharp legible plans from new master transparencies, with all rib and former patterns. You MUST send \$1.00 plus a 55¢ S.A.S.E. for your copy to; Yesteryear Plan Service, 3517 Kristie Dr., Erie, Pa. 16506



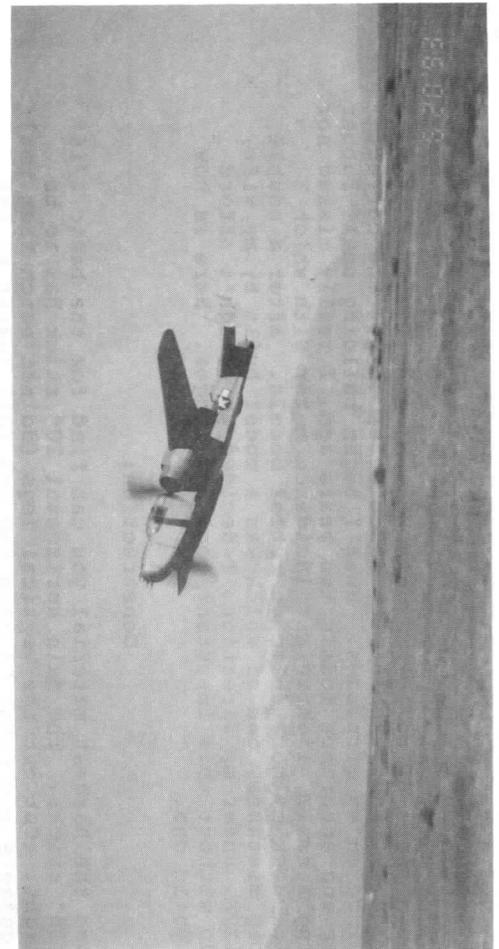
17.



Ray's 20 inch wingspan model of the Laird LC-DW 500 "Super Solution" which Jimmy Doolittle flew to victory in the first cross country Bendix Trophy race in 1931, and in which he led the first 3 laps of the 1931 Thompson Trophy pylon race.

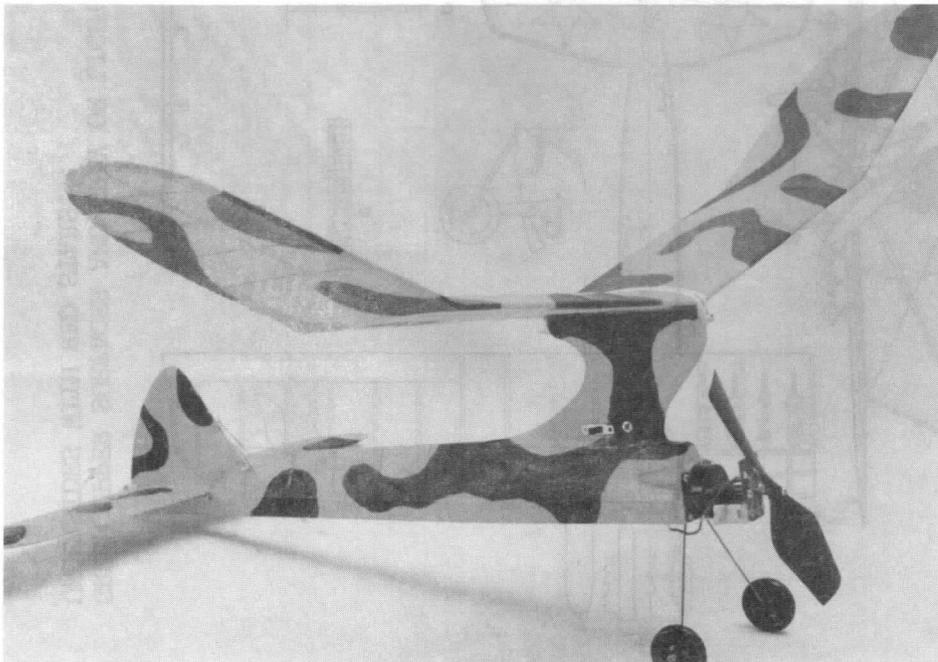
Model is built mostly from Midkiff plan with some parts constructed from Cleveland plan, with added details from Bob Hirsch and Paul Mott scale drawings. The model is powered by 2, 20 inch loops of 3/16 inch FAI rubber that is braided and wound from 500 to 750 turns. Finish is two very thin coats of Sig aircraft dope applied with an air brush.

Model is a good stable flier and has been flown about 25 times over the past 3 years and has never sustained any damage.



ABOVE:

Don Harwood's beautiful B-25 off on another mission. Model from Mike Midkiff's plan.



LEFT:

Timer's Nightmare, kit by BMJR Model Products. Designed for FAC Old Time Electric Replica and SAM 020 gas events as well as the PeeWee 30 event. See ad this issue.

MAKE A SMALL, LIGHTWEIGHT INCIDENCE METER

Through years of building radio control models, I came to rely on my trusty Robert incidence meter to get the correct decalage on my airplanes. When I began building small rubber scale and endurance models two years ago, I really missed not having a small, lightweight incidence meter with which I could check my more delicate rubber models. After a couple of big mistakes, one of which was a model built by my wife, Marilyn, under my direction, I decided we couldn't afford to do without this important tool any longer. Here is how you build one.

Construction:

Choose the hardest material you can find for the basic 1/16" x 3/16" sticks. The main horizontal 10" stick has to be straight. Cut out the vertical legs (do not notch them yet) and gussets and first CA glue the top full gusset to the vertical sticks using a drafting triangle or some means to guarantee a perfect 90° angle.

Lay the assembly under the main stick and lightly CA glue the lower half gusset in place and hold tightly together while the glue sets. This gives the slight friction fit of the verticals to slide on the 10" main stick. Carefully glue the front caps on and then re-glue the assemblies with them removed from the main stick or they may stick themselves to it.

Guarantee a perfect 90° and glue the vertical pointer stem in place on the main 10" stick. Install the pointer bearing true 90° both ways top and side view and slip a length of 1/32" wire through it to hold alignment while you CA it in place.

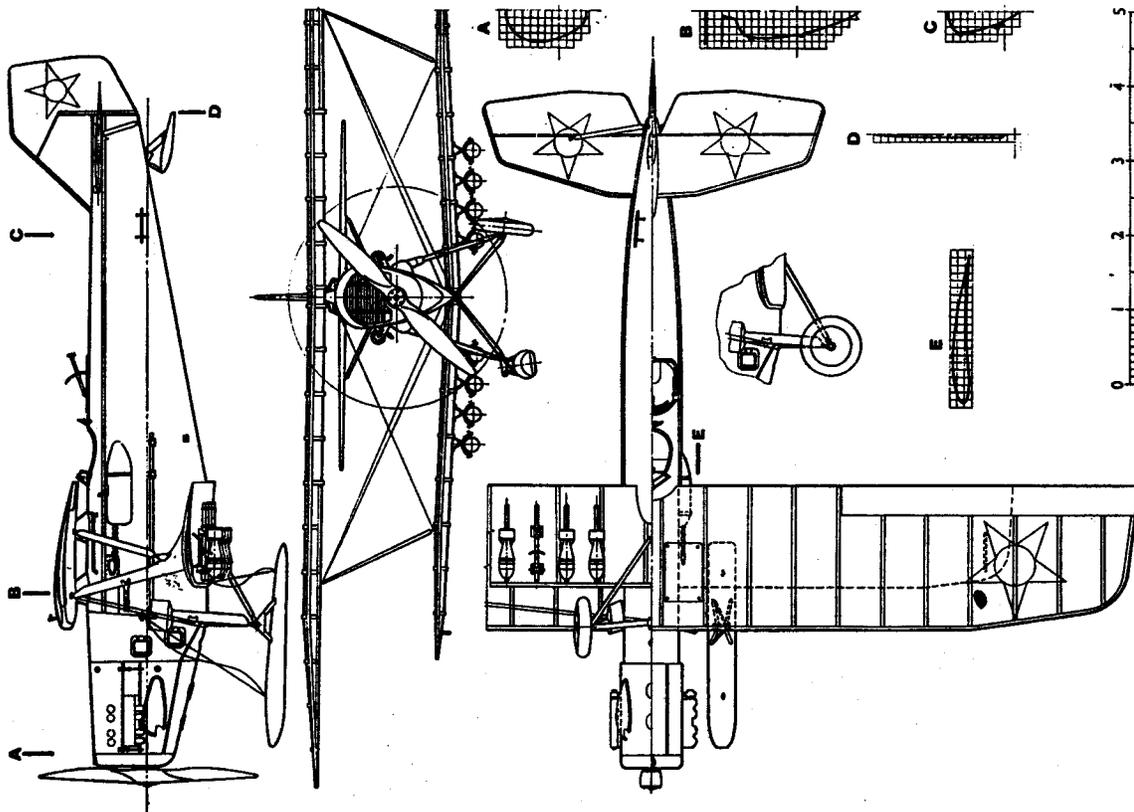
Cut, bend, and grind to point and paint and install the pointer in its place. A small paper cardstock washer cut with a 1/8" paper punch is holed with a pin and glued to the back to retain the pointer in place. Glue the scale to the face plate with a glue stick as other glues will seep through and stain the bond paper ruining the appearance of this important item. Cover the scale with a wide piece of clear label tape and trim to size.

Cut the notch as shown on one vertical leg only. Set up the horizontal bubble on a quality carpenter's spirit level and index this notch with the top surface of the level. Then, with the pointer aligned at "0" on the scale, mark the location of the second notch carefully and cut it out. Harden the two notched areas with thin CA to prevent breakage with the wood grain. Set the meter up on your model and prepare to be surprised!

Very Best -
Bill Schmidt

Tupolev R-3

SUBMITTED BY RICK DORT



GREEN UPPER SURFACES AND GRAY OR LIGHT BLUE
UNDERSIDES WITH RED STARS.

MINI INCIDENCE METER

FOR PEANUT & SMALL RUBBER.

TYPE MODEL AIRPLANES

BY BILL SCHMIDT 9/18/96

CONSTRUCT FROM VERY HARD 1/16" x 3/16" Balsa for light wgt. as req'd for a peanut size model. Faceplate is 1/16" sht.

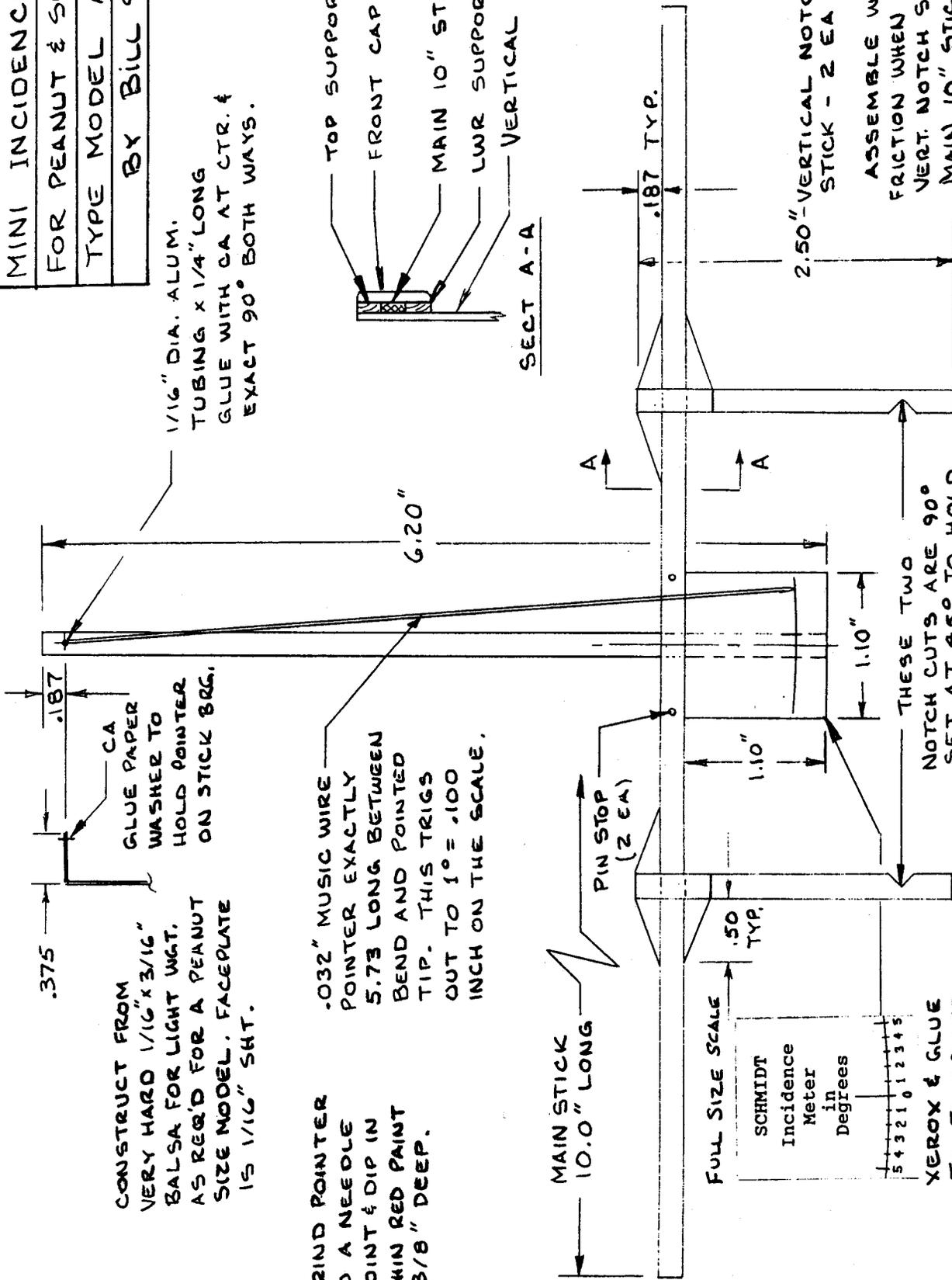
1/16" DIA. ALUM. TUBING x 1/4" LONG GLUE WITH CA AT CTR. & EXACT 90° BOTH WAYS.

GRIND POINTER TO A NEEDLE POINT & DIP IN THIN RED PAINT 3/8" DEEP.

.032" MUSIC WIRE POINTER EXACTLY 5.73 LONG BETWEEN BEND AND POINTED TIP. THIS TRIGS OUT TO 1° = .100 INCH ON THE SCALE.

TOP SUPPORT GUSSET
FRONT CAP STRIP
MAIN 10" STICK
LWR SUPPORT HALF GUSSET
VERTICAL NOTCH STICK

SECT A-A



ASSEMBLE WITH LIGHT FRICTION WHEN SLIDING THE VERT. NOTCH STICKS ON THE MAIN 10" STICK. MAKE ONLY ONE NOTCH THEN WITH POINTER ON "0" ALIGN ON HORIZONTAL SURFACE OF SPIRIT LEVEL & MARK & CUT 2nd NOTCH.

THESE TWO NOTCH CUTS ARE 90° SET AT 45° TO HOLD ON THE L.E. & T.E. OF THE MODEL'S WING & TAIL.

XEROX & GLUE TO FACE PLATE WITH GLUE STICK THEN COVER WITH CLEAR LABEL TAPE.

THE GOLDEN AGE
by
Fran Ptaszkiewicz

The Fokker D-23 was an airplane which appeared to have potential, however it lacked the time to develop. Designed and built during the years 1937-1938, by the Fokker Works of World War One fame, the airplane never did have the opportunity to prove itself.

This tandem engine, single seat fighter was armed with cannon and outboard wing mounted machine guns. The aircraft which featured an engine fore and aft was expected to somewhat revolutionize the trend of fighting aircraft.

The overrunning of Holland by the Nazi forces terminated the development of this advanced design. The layout was vaguely similar to the Lockheed P-38, which was also in its development stage at that time, and supposedly flew at a speed of close to 400 miles per hour. The new Fokker however, was reported to have reached a top speed of 330 miles per hour early in its flight test program.

There is a three view drawing and a model plan accompanying this article. The model drawing shown is for an all-sheet rubber-catapult model. This sling-shot model of the D-23 is easy to build and makes an excellent flyer. It should be constructed from sheet balsa or soft light-weight pine.

The addition of some weight in the form of lead or preferably modeling clay to the nose, approximately where shown will be necessary to balance the model for a successful glide, following the launch.

Remember, when launching a catapult model, or any other type of model, caution is the watchword! It is important to make sure the area around your launch point is clear of spectators and fellow modelers.

TAILSPINS

These little bits of aviation trivia were found in an old aviation book I purchased some time ago. Appearing by the yellowing condition of the paper to have been part of an old newspaper column. Probably Circa 1934.

The Mexican Ministry of War and Marine is considering the use of military planes for customs patrol along its coasts and borders, fighting forest fires, making aerial surveys, combating agricultural pests and other duties.

The Mexican transportation law has been amended so that airplanes engaged in international passenger and freight service, and airplanes of foreign registry, are forbidden to engage in local commercial flights in that country.

Great Britain's Royal Air Force consists of 94 squadrons. There are approximately 2700 pilots in the Royal Air Force of Great Britain.

The Key brothers of Meridian, Mississippi, could have made twenty round trip flights from coast to coast in a modern transport in the time they remained aloft on their recent record breaking endurance flight.

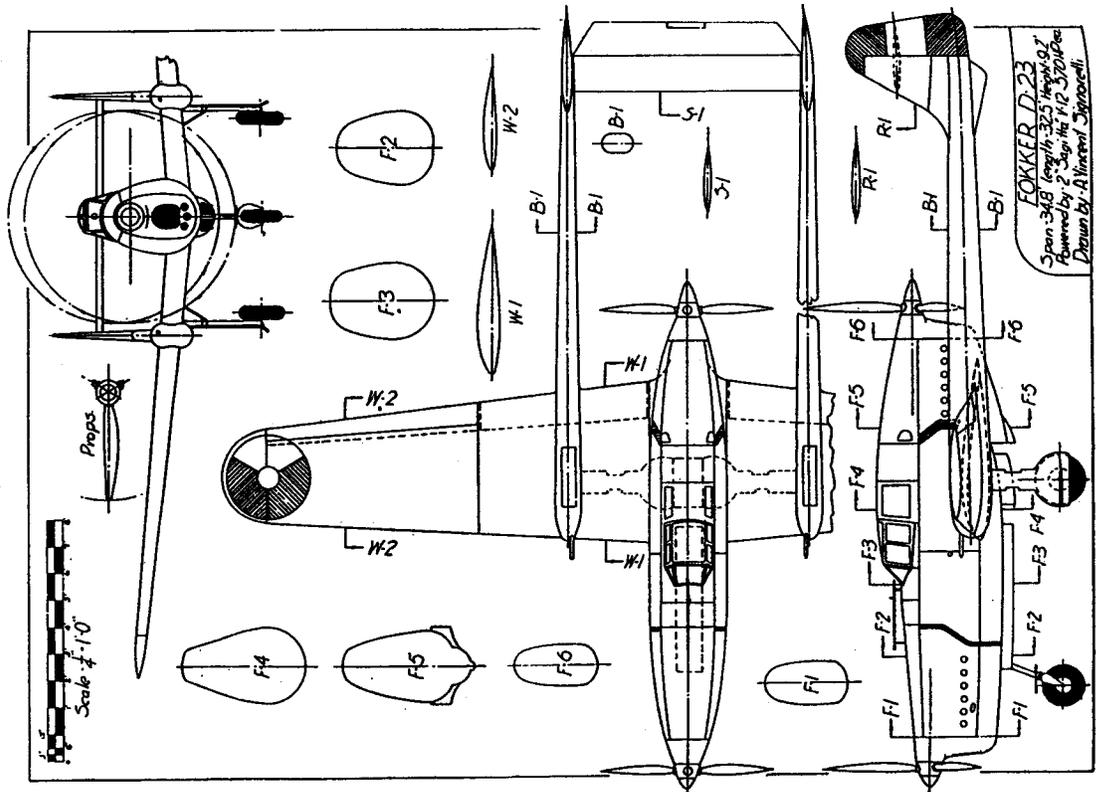
Records show 104 regular transport flights in and out of the Chicago Municipal Airport every hour.

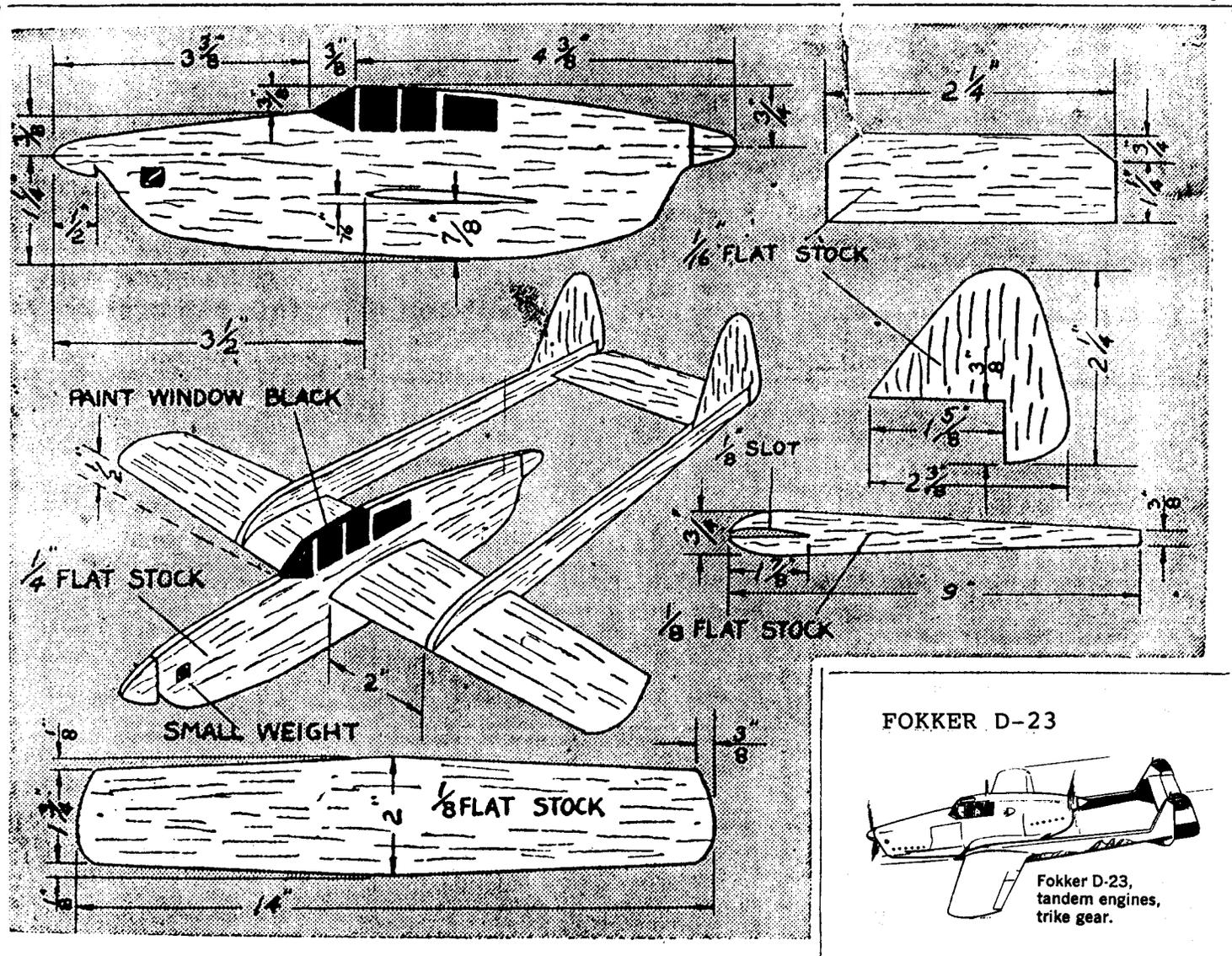
Three large aircraft manufacturers have completed plans for the construction of airplanes capable of carrying thirty passengers!

Air line pilots flying between Los Angeles and El Paso have been requested by the U.S. Forestry Department to report all forest fires by radio to prevent serious conflagrations from developing.

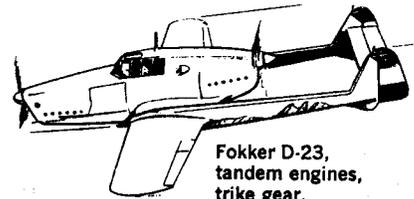
A new civil and commercial airport is under construction at Lima, Peru, and when in operation will service all non-military airplanes.

TANDEM-ENGINE PRE-NAZI DUTCH FOKKER D-23





FOKKER D-23



Fokker D-23, tandem engines, trike gear.

ATTENTION MODEL BUILDERS!

Can you afford to be without the most comprehensive model airplane guide available on the market today? **MODEL WARPLANES, 1996** lists over 10,000 plans, kits, scale drawing, photographs, booklets, cowls, canopies, decals, and retracts! Everything from peanut to quarter-scale!

- Vol. 1: World War One, 1914-1918 [220 aircraft types, 192 kits, 1,388 plans, 155 sources]*
- Vol. 2: Golden Age, 1919-1939 [272 aircraft types, 155 kits, 1,361 plans, 200 sources]*
- Vol. 3: World War Two, 1939-1945-Axis [143 aircraft types, 281 kits, 628 plans, 204 sources]*
- Vol. 4: World War Two, 1939-1945-Allied [198 aircraft types, 531 kits, 1,909 plans, 346 sources]*
- Vol. 5: Jet Age, 1946-1996 [253 aircraft types, 415 kits, 949 plans, 313 sources]*

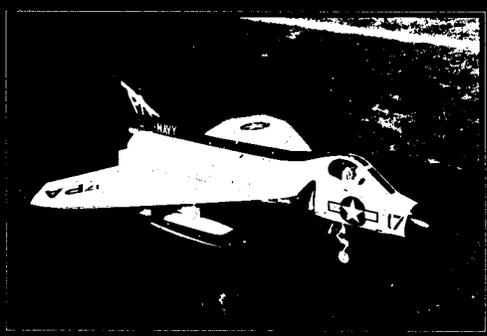
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Salem, MA 01970 USA 508/745-9849**

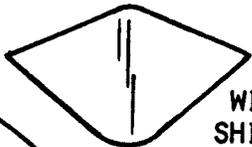
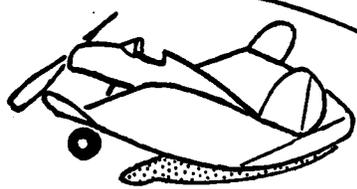
Dealer inquiries invited!

**MODEL WARPLANES
1996**

Compiled By
John C. Fredriksen, Ph.D



Volume 5:
Jet Age, 1946-1996



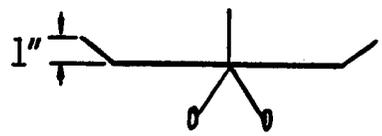
WIND-SHIELD

GLIDE ADJUSTM'T WEDGE

WING: 5/64 FOAM OR 3/64 Balsa
 LEADING EDGE ON FOAM: 1/16 SQ Balsa
 FUSELAGE & RUDDER: 1/16 FOAM OR 1/32 Balsa
 RUBBER: ABOUT 3/32
 MOTOR STICK & BLOCKS: 3/32 X 3/16 Balsa

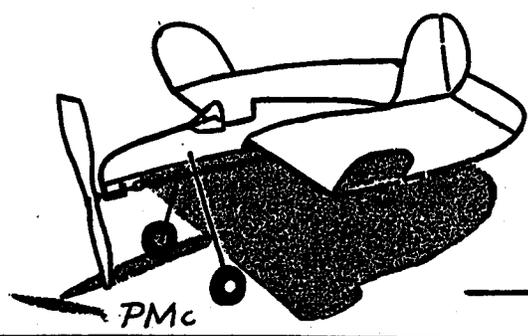
AN APPROXIMATE ARUP

GLUE ANGLED TIPS WHILE WING IS FLAT. COMPLETE MOTOR STICK THEN ATTACH WING. USE 4" NORTH PACIFIC PROPELLER. AN ADJUSTABLE PROP BEARING WILL BE REQD. IF N PACIFIC BRG IS USED MAKE THRUST ADJUSTM'TS WITH WEDGES BETWEEN STICK AND BRG. CUT AWAY FUSELAGE AS REQD TO MOUNT LANDING GEAR & PROP BEARING.



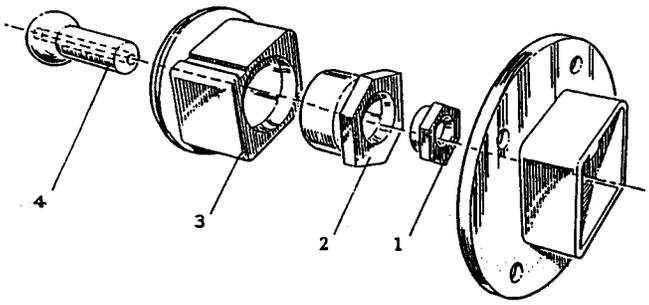
5/8 BALANCE HERE

FLYING: BALANCE AS SHOWN. TRIM GLIDE WITH ELEVATOR WEDGE AND POWER WITH THRUST ADJUSTMENT. MODEL RESPONDS TO NORMAL TAIL & THRUST ADJUSTMENTS. DEFINITE DOWNTHRUST REQUIRED.



OPTIONAL LANDING GEAR
 .025 DIA WIRE
 1" WHEELS

ALLOW ROOM FOR DOWNTHRUST



Knight & Pridham Ltd,
Adjustable nose button.
Drawing by Jim Newman.

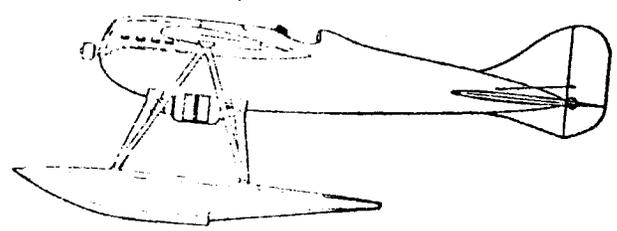
Location Ring.
Fixed to model.

Adjustable nose buttons now available from Dr. Diesel. Suitable for models from 13" to 30" spans. Only \$4.00 each plus 50 cents postage.

P.A.W. Diesels, 913 Cedar Lane, Tullahoma, Tn. 37388.

WANTED: Scale documentation for the Pitts Special; Ted Lewis, 10 Winslow Rd., Chelmsford, Ma. 01824.

WANTED: Lubomir Koutny of the Czech Republic is looking for photos of the Nieuport Delage (1920) on floats. He also is looking for Three views and/or photos of the Nieuport Delage Ni-D 450 and Ni-D 650 which flew in the 1931 Schneider race. Please send info to; Charles Hill, 6518 LaMora, Houston, Tex. 77083.



FLYING ACES OUTDOOR CHAMPS

AUGUST 30-31, 1997

Time 8:30 am until 4:30 pm each day

AMA National Flying Site
Muncie, Ind.

Registration form

Please print

Name _____ AMA No. _____
Street _____ Jr/Sr _____ Open _____
City _____ State _____ Zip _____

Entry fee \$25.00 flies all events. Please send before August 15th if possible. Send to; Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

Awards through third place. All contestants must be members of the AMA or MAAC.

<u>Schedule</u>	<u>Saturday Aug. 30</u>	<u>Sunday Aug. 31</u>
	World War One *	World War Two *
	Greve Race *	Thompson Race *
	FAC Scale	Power Scale
	Golden Age Military *	Jumbo Scale
	Dime Scale	Peanut Scale
	Golden Age Civil	Embryo Endurance
	Old Time Stick	Old Time Rubber
	No-Cal Scale	Modern Civil
	Jimmy Allen	Modern Military *

* Mass launch events. Dime Scale models can only fly in that event.

Golden Age Military must have gear down.

Both Old Time Rubber events must have all flights turned in by 2:00 pm each day. This gives us ample time for fly-offs.

Make sure you have your proof of scale for all events!!!!

GENESE0, NEW YORK FLYING ACES CONTEST

July 19-20, 1997

Time 8:30 am until 5:00 pm

Registration Form

Please 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.

Schedule

Saturday July 19

Sunday July 20

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

* These events are Mass launch events. We will use the 15% rubber rule in all mass launch events except for the Goodyear Midget Races, give 'em all you got!

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.

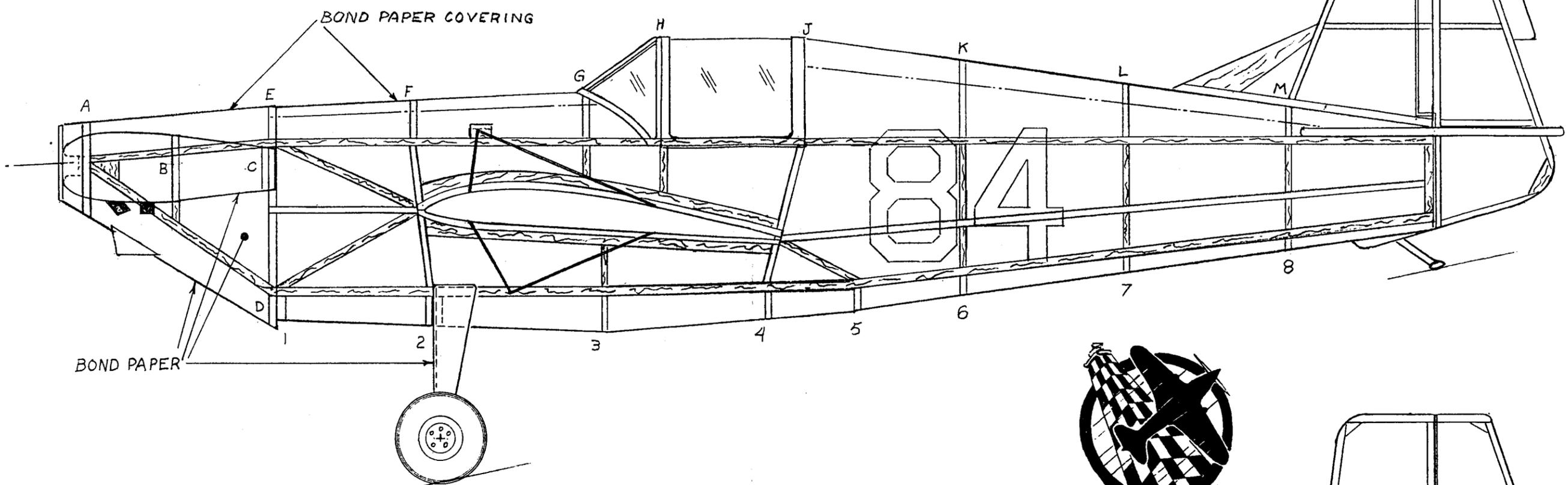
_____ entry fees at \$25.00 each _____ \$
_____ reservations for double occupancy with meals, \$130.00 per person _____ \$
_____ reservations for single occupancy with meals, \$160.00 per person _____ \$
Total \$ _____

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.

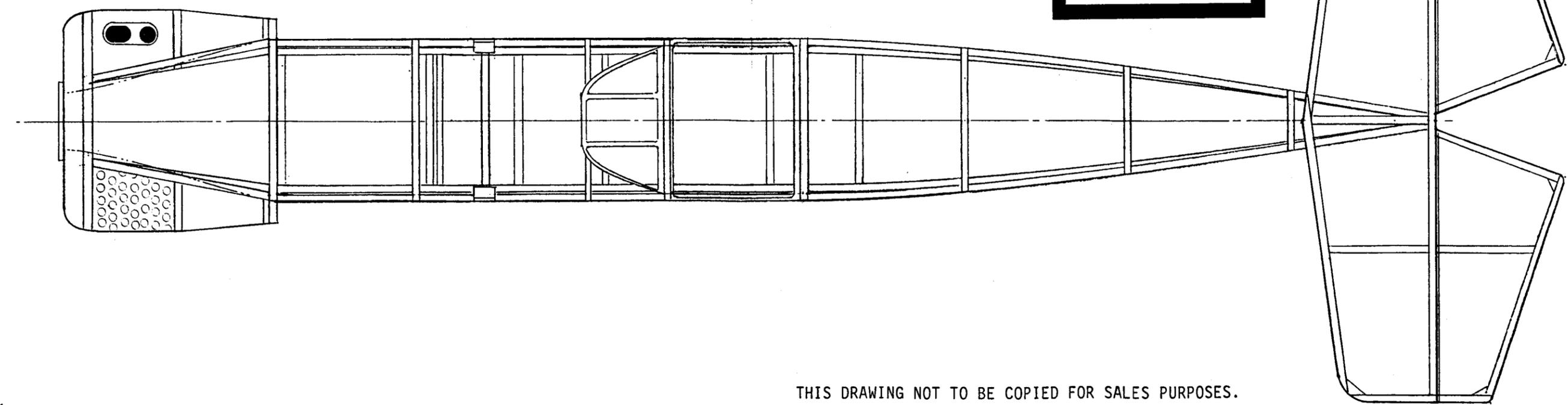
Your meals at the University will include dinner on Friday July 18th, Breakfast and dinner on Saturday July 19th, breakfast and dinner on Sunday July 20th and breakfast on Monday July 21st.

Scale judging will take place at Peter's Party Complex in Leicester, N.Y. on Friday July 18 starting at 2:00 pm. Bring your models there to be scale judged. Giant and Jumbo models will be judged on the field on Saturday July 19. Food will be available at Peter's if you wish to eat there. This is the same place we did the scale judging last year.

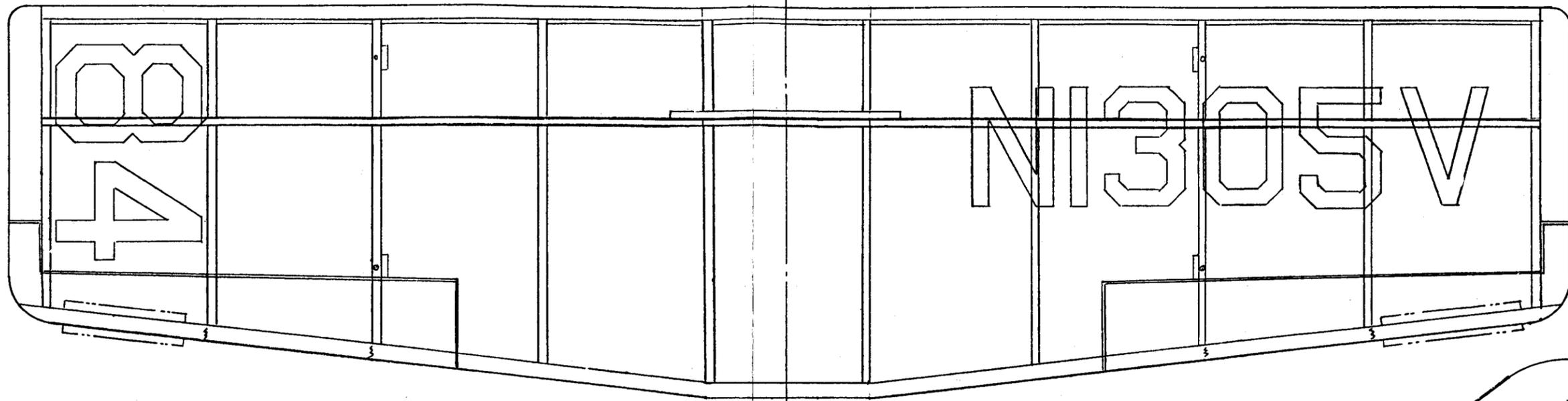
Contest Director; Lin Reichel



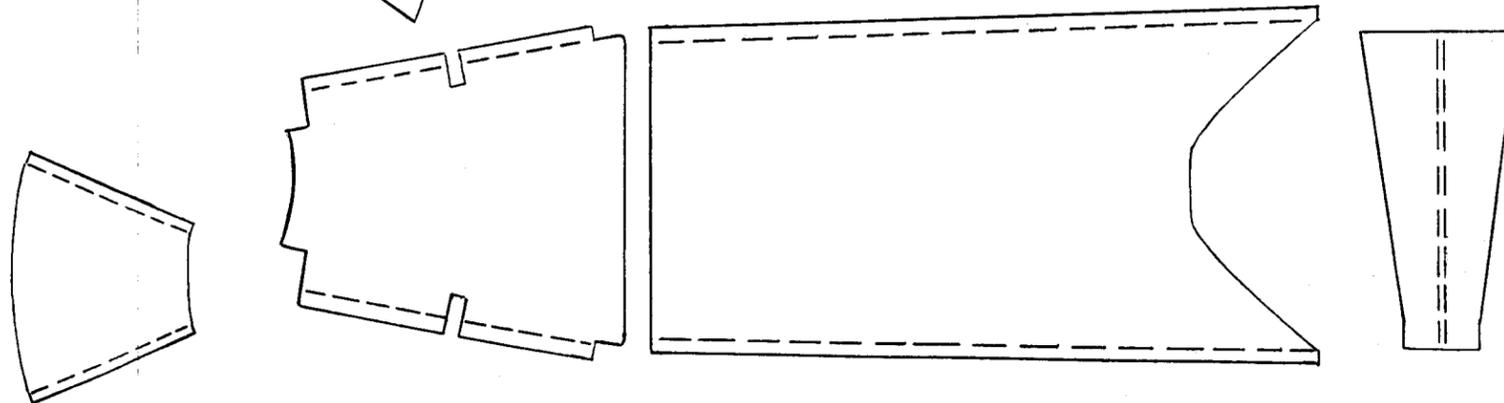
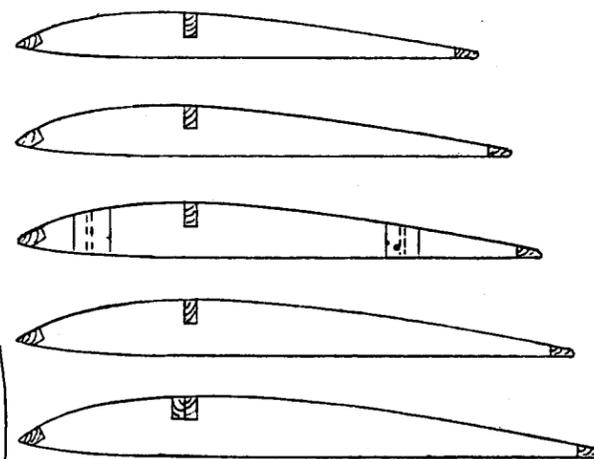
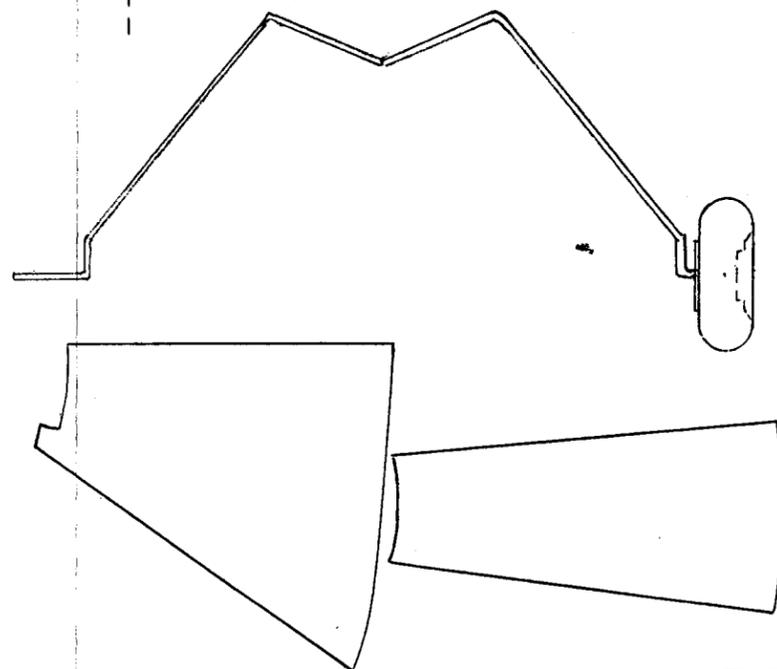
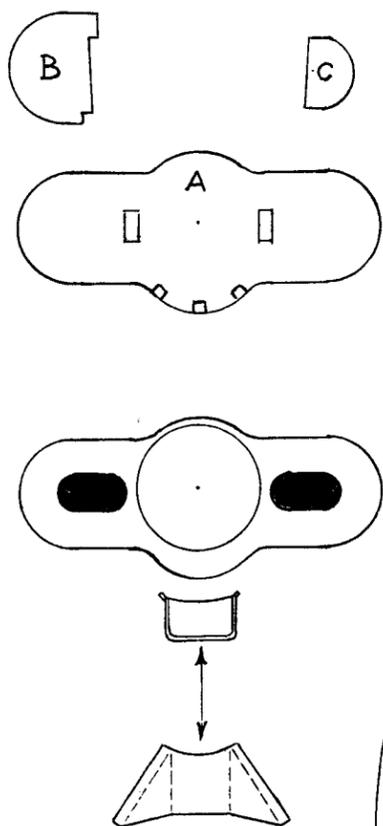
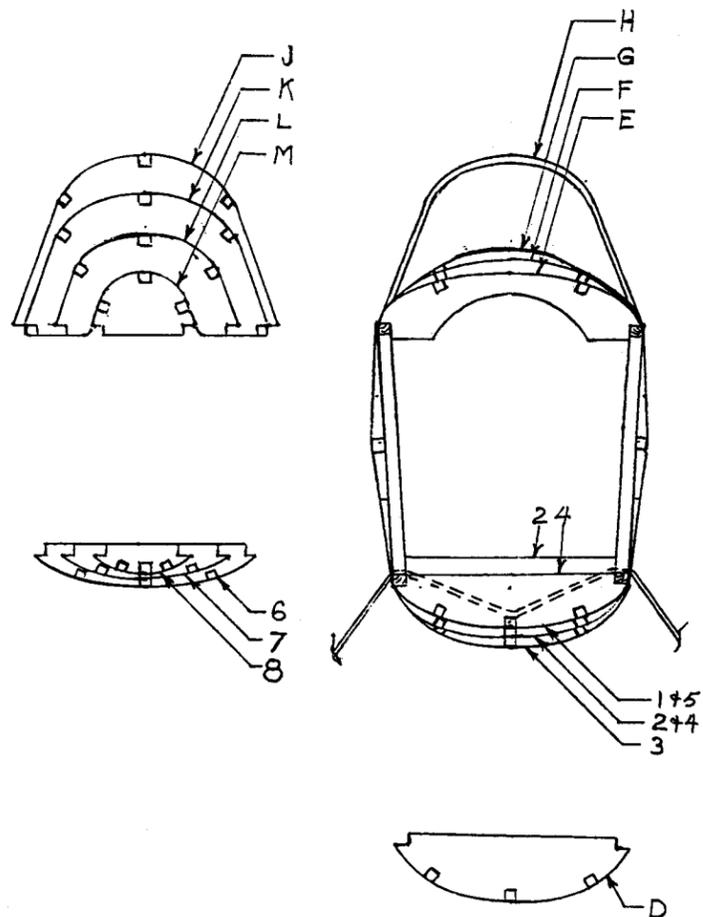
THOMPSON-BALBONI Spl.



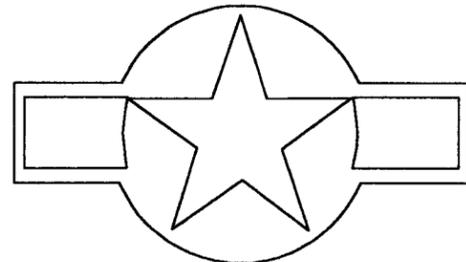
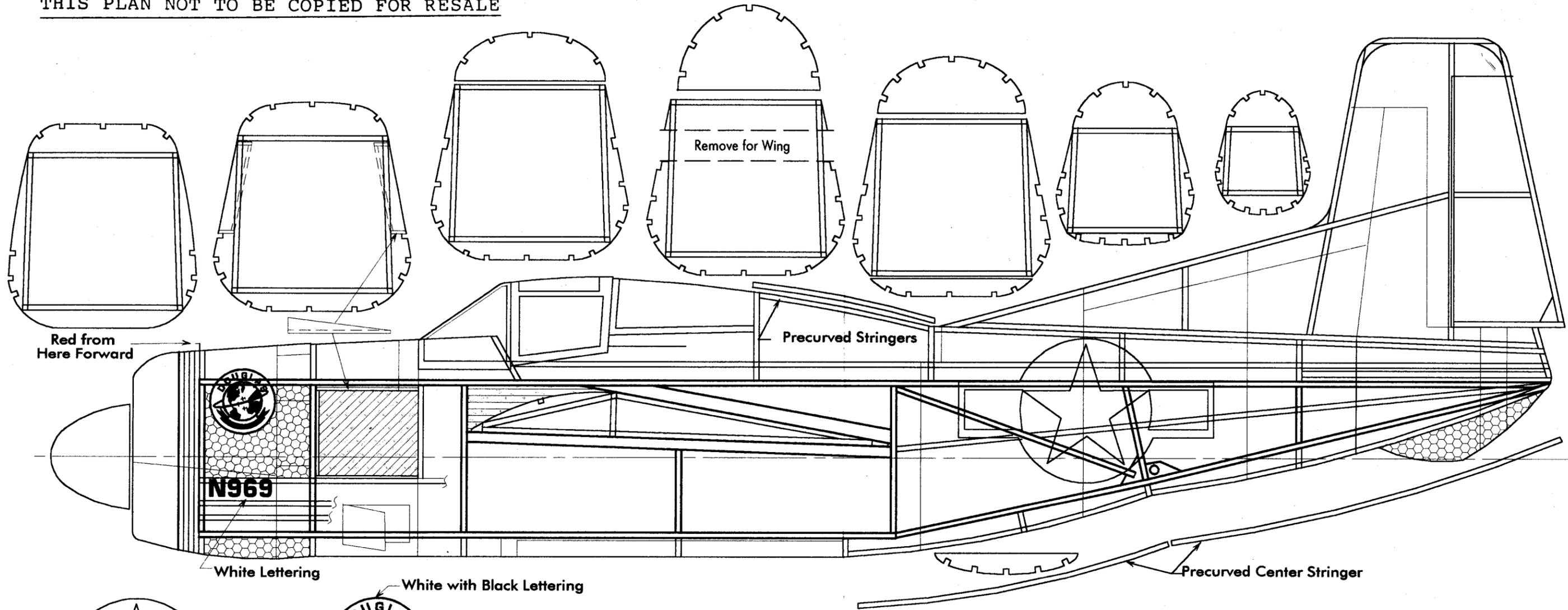
THIS DRAWING NOT TO BE COPIED FOR SALES PURPOSES.



THIS PLAN NOT TO BE COPIED FOR RESALE



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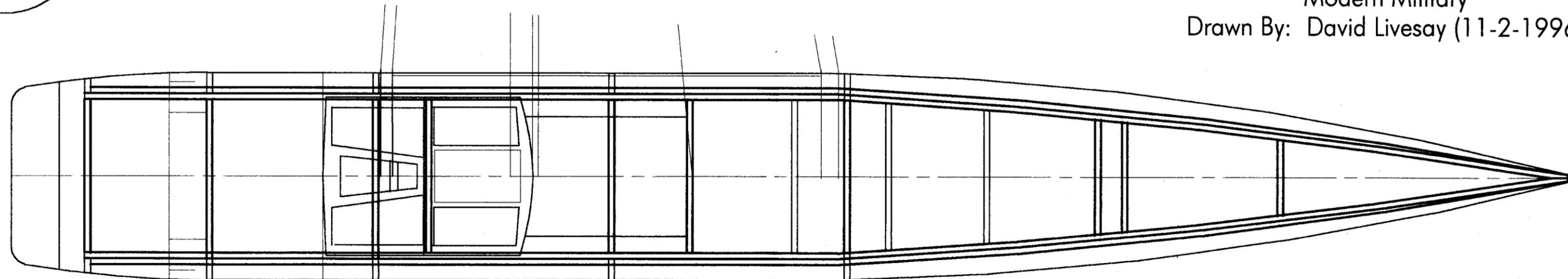


White with Black Lettering
 Lt. Blue Water & Green Land
 Red ribbon

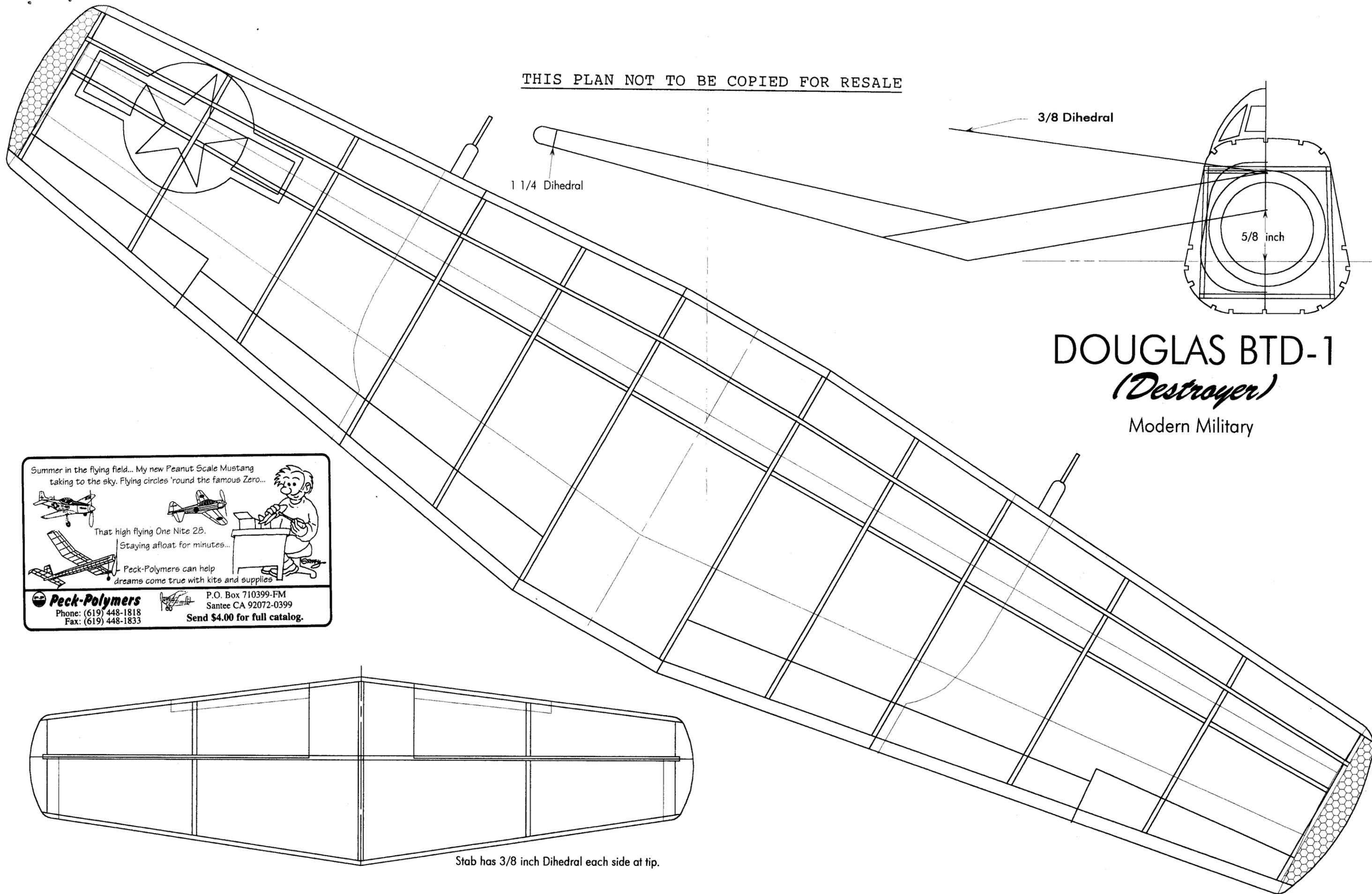
Color Notes:
 Overall Dark Blue
 Red Cowl Stripe
 Douglas Logo as Noted

DOUGLAS BTD-1 *(Destroyer)*

Modern Military
 Drawn By: David Livesay (11-2-1996)

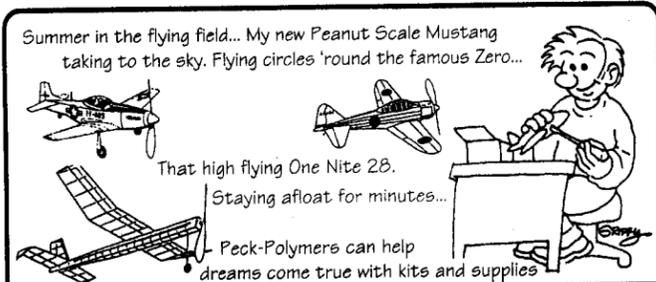


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DOUGLAS BTD-1
(Destroyer)
Modern Military

Summer in the flying field... My new Peanut Scale Mustang taking to the sky. Flying circles 'round the famous Zero...
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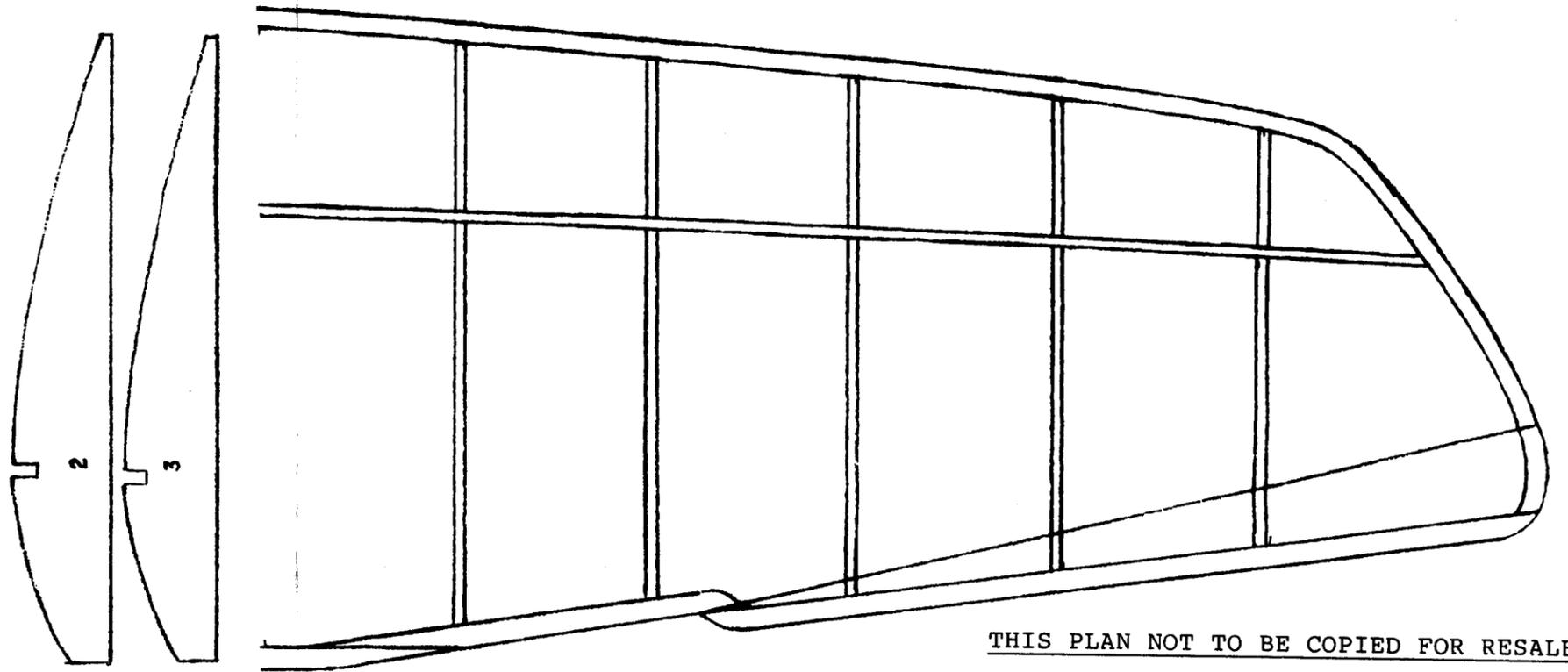
P.O. Box 710399-FM
Santee CA 92072-0399
Send \$4.00 for full catalog.

Stab has 3/8 inch Dihedral each side at tip.

AIRCRAFT WAS OVERALL LIGHT GREY. THE COWL (FIRST BAY FORWARD) WAS SILVER. REGISTRATION BLACK.

THE EMBLEM ON THE RUDDER HAD A YELLOW FIELD WITH BLACK OUTLINE, AND FIGURE. ALL LETTERING BLACK, ALL STRUTS BLACK. WINDOW OUTLINES WERE BLACK.

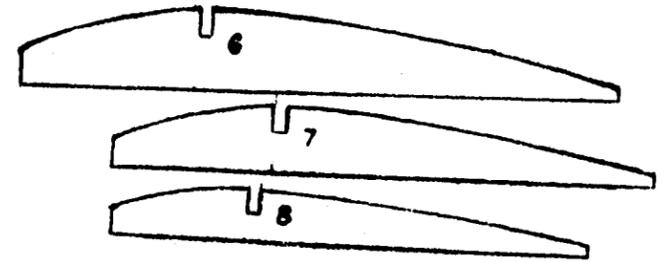
ENGINE CRANKCASE IS 3 LAMS. $\frac{1}{8}$ " Balsa FACED WITH $\frac{1}{64}$ " LITE. PLY. ENGINE CYLINDERS ARE FOAM. FIRST BAY AT NOSE IS FILLED WITH FOAM. NOSE MOMENT IS LONG, AND NOSE SHOULD BE BUILT SOMEWHAT LIGHT. MOTOR PRG COULD EVEN BE MOVED AFT TO THE LAST BAY. LEADING EDGE OF WING IS 2 LAMS. OF $\frac{1}{4}$ " x $\frac{1}{16}$ " TAPERING TO BLEND WITH $\frac{1}{16}$ " x $\frac{1}{8}$ " T.E. $\frac{7}{8}$ " DINEDRAL AT TIPS.



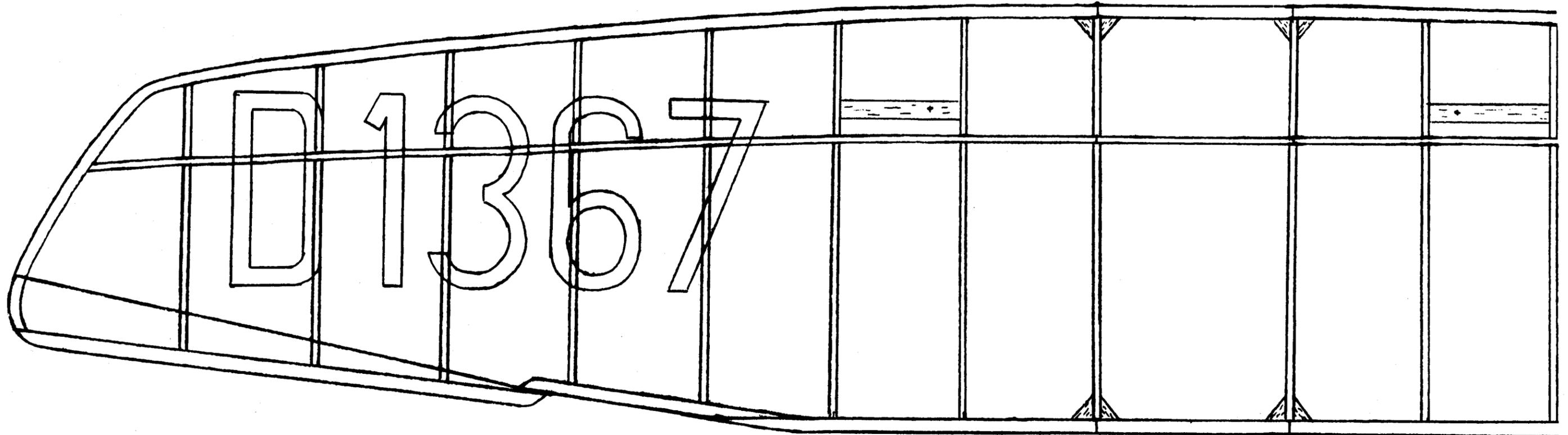
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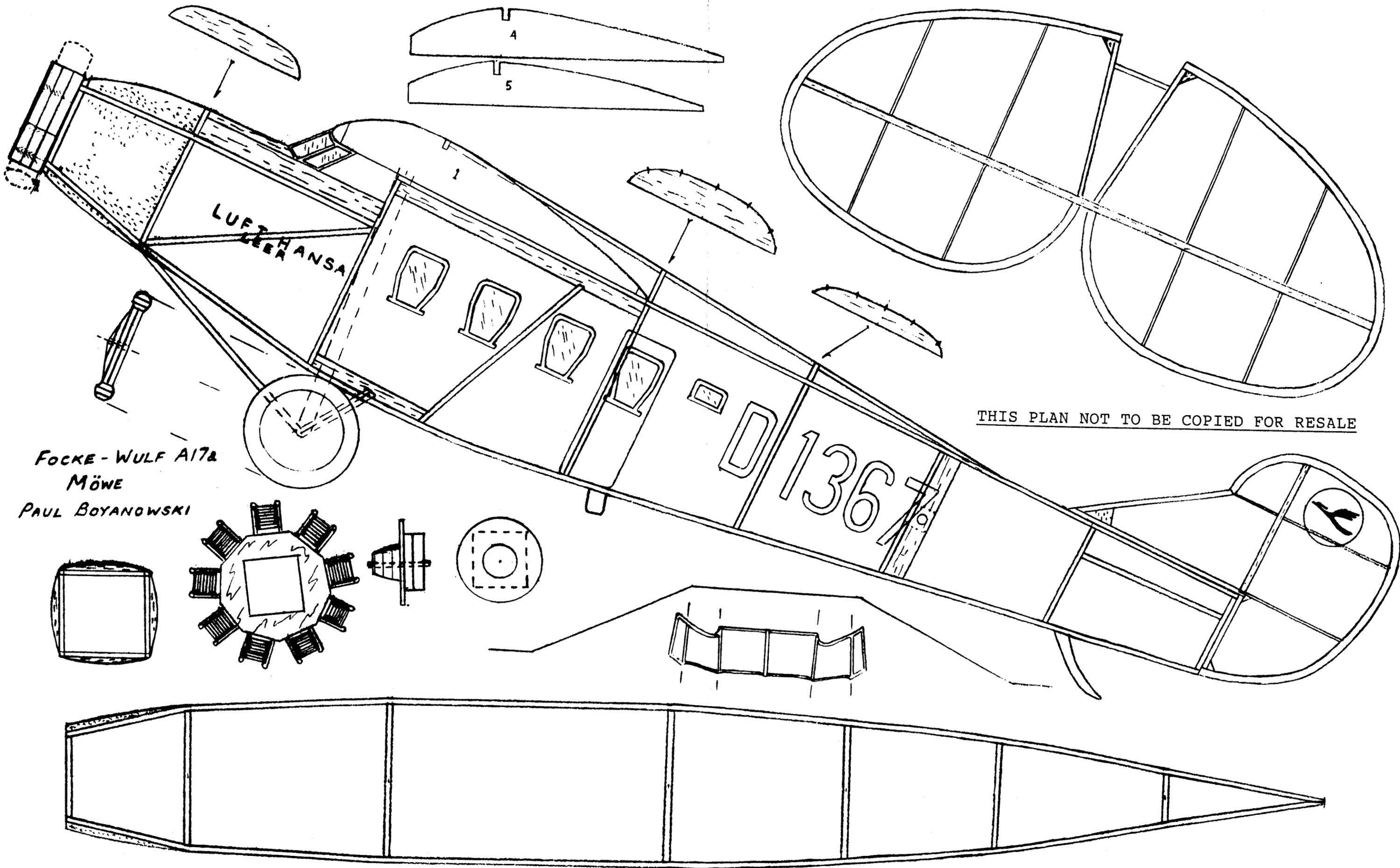
THE SPARS ON THE TAIL SURFACES ARE $\frac{1}{64}$ " x $\frac{3}{32}$ ", AND FIT INTO NOTCHES ON BOTH SIDES OF THE SYMMETRICAL $\frac{1}{32}$ " RIAS. MAX. THICKNESS OF THE SECTION IS APPROX. $\frac{3}{32}$ ".

WING REGISTRATION IS SAME LOCATION SHOWN, ON TOP AND BOTTOM OF BOTH WINGS. (4 LOCATIONS)



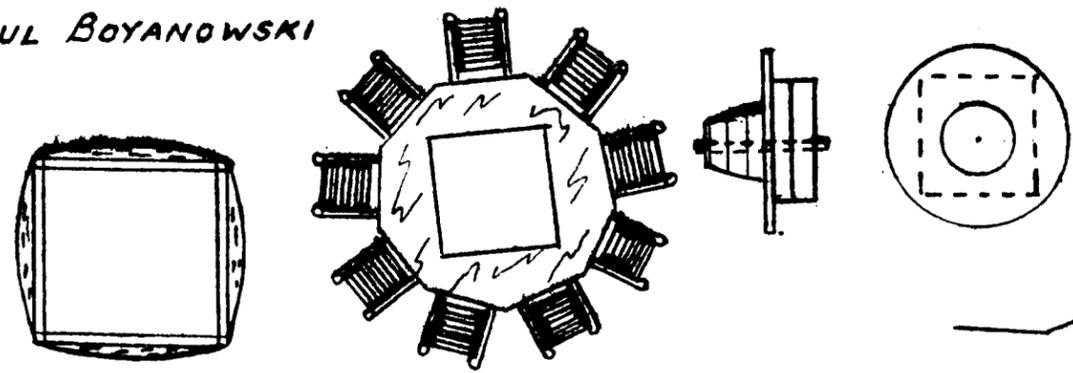
A NICE LONG LOOP OF $\frac{3}{16}$ " RUBBER, WITH $8\frac{1}{2}$ " DIAM. PROP. WORKED WELL.



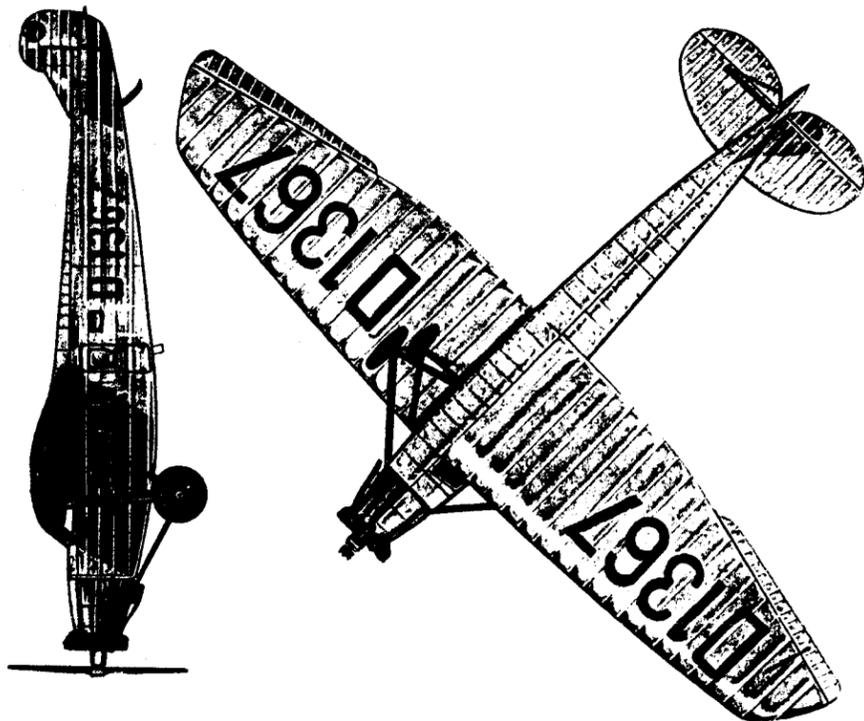


THIS PLAN NOT TO BE COPIED FOR RESALE

Focke-Wulf A17a
Möwe
Paul Boyanowski



FOCKE-WULF A 17 (Germany)



21 Focke-Wulf A 17a Möwe Lear of Deutsche Luft Hansa, ca 1932. Engine: One 480 h.p. Siemens-built Bristol Jupiter VI nine-cylinder radial. Span: 65 ft. 7 1/2 in. (20.00 m.) Length: 48 ft. 0 in. (14.63 m.). Wing area: 672.7 sq. ft. (62.50 sq.m.). Take-off weight: 8,818 lb. (4,000 kg.). Maximum cruising speed: 109 m.p.h. (175 km/hr.). Service ceiling: 16,400 ft. (5,000 m.). Range: 497 miles (800 km.).

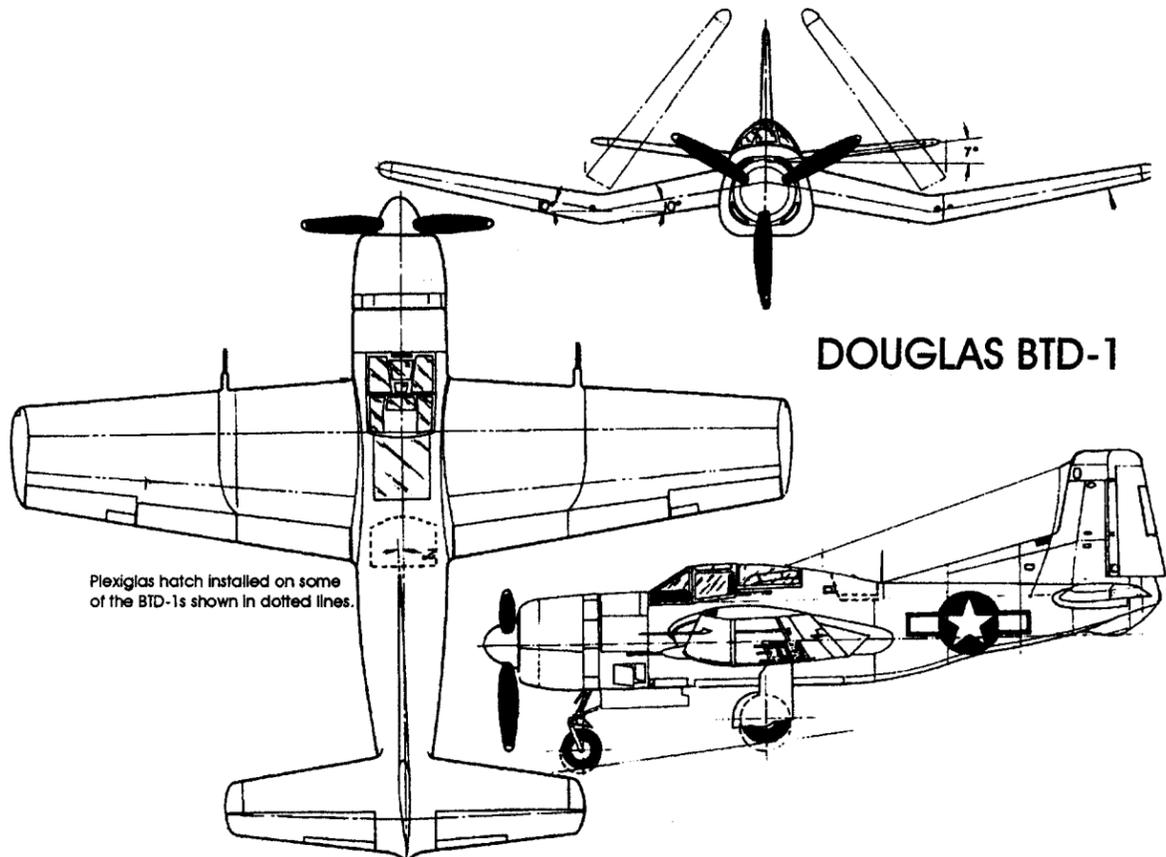
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DOUGLAS TBD-1

DOUGLAS TBD-1

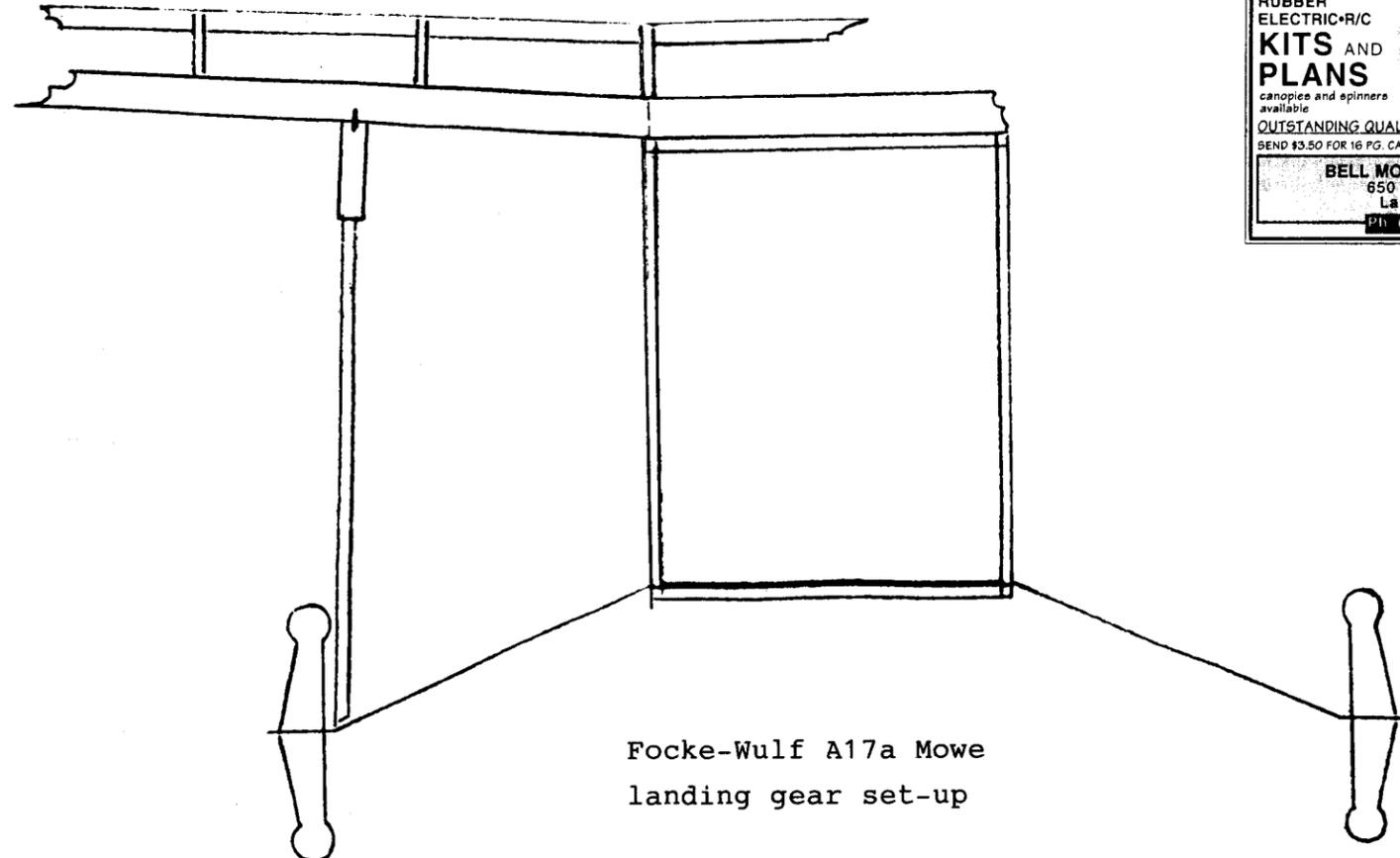
● The Douglas XSB2D-1 (later redesignated XBTD-1) Destroyer, the XTB2D-1 Devastator II (also known unofficially as the Skypirate), and the XBT2D-1 were all predecessors of the famed Skyraider series which, in various forms, still serve with the U.S. Navy. In fact, the last-mentioned type, the XBT2D-1, was the prototype for the AD Skyraider series, the change in designation being made when the Bureau of Aeronautics revised its aircraft designating system, eliminating many of the complex series of mission letters.

Although the XSB2D-1 (alias XBTD-1) Destroyer embodied much of the experience gained by Douglas with their SBD Dauntless series of shipboard bombers, it was, in fact, an entirely new design bearing virtually no resemblance to its predecessor. Intended as a heavy shipboard attack aircraft, the XSB2D-1 made its debut in 1942, the first two prototypes having the BuAer serial numbers 03551 and 03552. It embodied a number of advanced features, not least of which was the provision of remotely-controlled dorsal and ventral gun barbettes each containing a single 0.5-in. machine gun with 800 rounds. Fixed armament comprised two wing-mounted 20-mm. cannon with 400 rounds. An unusual feature was the form of the dive brakes, which were of finger-type, comprising six segments attached to the fuselage underside aft of the bomb-bay.

Powered by a Wright Cyclone R-3350-14 radial air-cooled engine offering a maximum output of 2,250 h.p. for take-off and a normal maximum of 1,800 h.p. at 6,800 ft., the XSB2D-1 had an empty

weight of 12,458 lb. and a maximum loaded weight (with two Mk. 13-1 torpedoes) of 19,825 lb. Overall dimensions were: span, 45 ft. 0 in.; span folded, 20 ft. 8 in.; length, 38 ft. 7 in.; height, 16 ft. 11 in.; wing area, 375 sq. ft. The fuselage bomb-bay could accommodate two 500-lb., 1,000-lb., or 1,600-lb. bombs, two 325-lb. or 650-lb. depth charges, or two Mk. 13-1 or -2 torpedoes, and two 100-lb. bombs or 325-lb. depth charges could be carried on underwing pylons. Performance was as follows: maximum speed, 321 m.p.h. at sea level, 320 m.p.h. at 7,500 ft., 346 m.p.h. at 16,100 ft.; initial climb rate (at 16,273 lb.), 1,940 ft./min. (at 19,825 lb.), 1,150 ft./min.; time to 10,000 ft. (at 16,273 lb.), 6.3 min.; (at 19,825 lb.), 12.6 min.; service ceiling (maximum loaded weight), 20,300 ft.; range (at 16,273 lb), 850 mls. at 180 m.p.h., (at 19,825 lb.), 620 mls. at 177 m.p.h.

An evaluation batch of thirteen SB2D-1s was ordered (BuAer Nos. 04959-04971), and a further prototype was completed (BuAer No. 44318), but prior to the completion of these aircraft they were redesignated as TBD-1 Destroyers, the prototypes being redesignated XBTD-1s. The third prototype and the pre-production Destroyers differed from the initial prototypes in having the remotely-controlled gun barbettes eliminated, together with the position for the second crew member, this resulting in some cockpit redesign. The first pre-production TBD-1 Destroyer (04959) appeared in December, 1943, this later being modified as the sole XBTD-2, and a further fourteen TBD-1s were ordered (BuAer Nos. 09048-09062), but only the first three of these were completed before further development of the Destroyer was cancelled.



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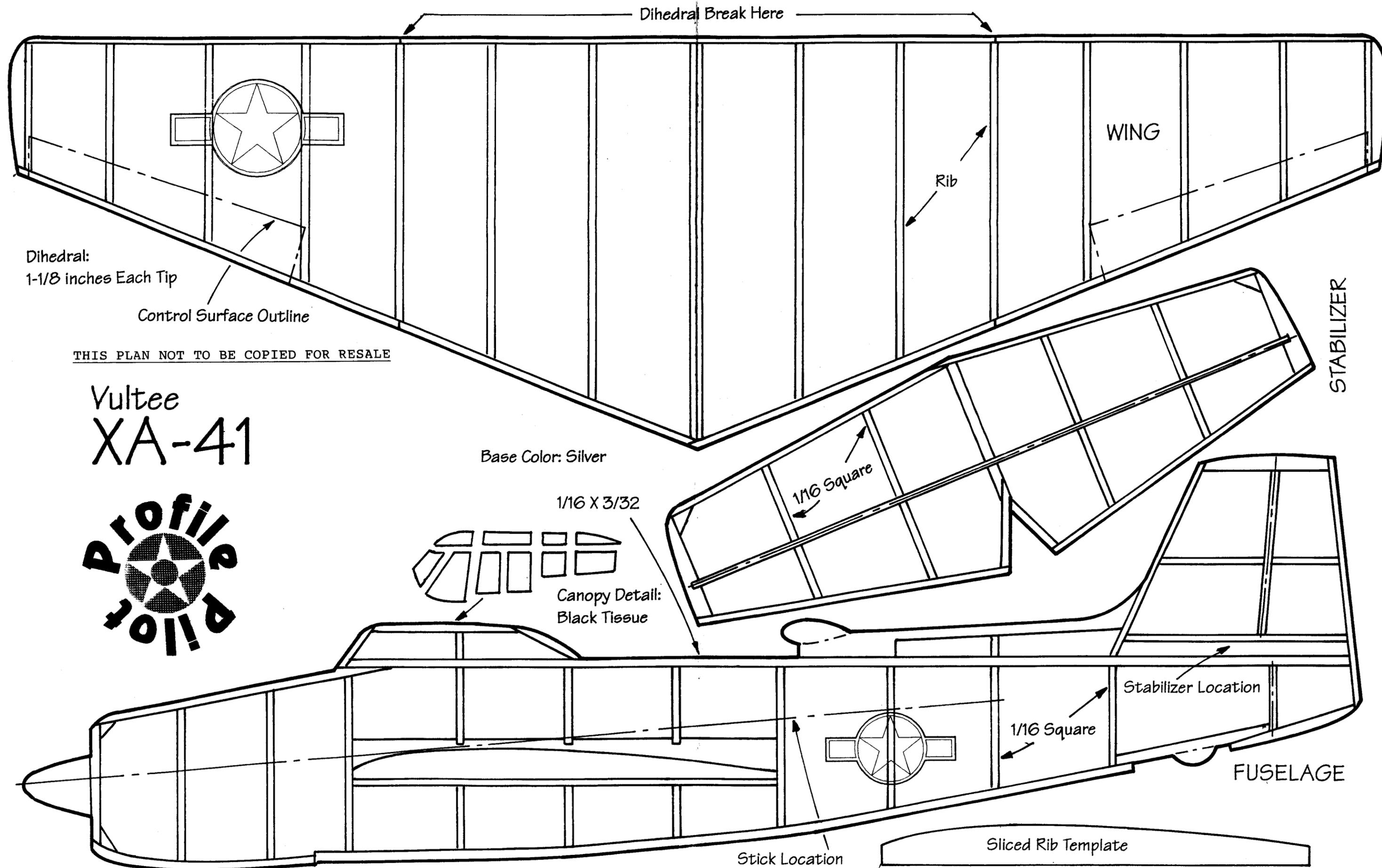
Albatross D11	FoF Hellcat	P-38J Lightning
Fokker DVII	FW-109A	P-39Q Airacobra
Fok. Triplane Dr I	Haw. Hurricane	P-40F Warhawk
S.E.5A	Heinkel He-111H-2	P-47D T-bolt
Spivvath F.1 Camel	Junkers Ju-88A-1	P-51B Mustang
SPAD S.XIII	BF 109E.1	PT-17 Stearman
F4F Wildcat	Mc262A-1a	Spitfire MK.V
F4U-1A Corsair	AnM5 Zero	TBF-3 Avenger
B-17G Fly. Fortress	B-24 Liberator	B-26B Marauder
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B-25 Mitchell	B-29A Superfortress	

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ASW-17 ws-11-1/2" MINIMOA ws-11-1/2"

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Vultee XA-41

