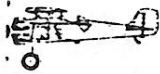
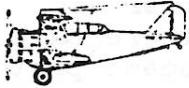


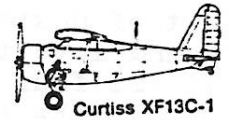
Wright NW-2



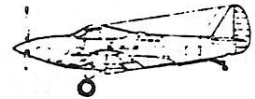
Eberhart XFG-1



Grumman FF-1



Curtiss XF13C-1



Bell XFL-1



Vought XF5U-1

MAX - FAX

THE NEWSLETTER OF THE D.C. MAXCUTERS
MAY/JUNE 1982

MEMBERSHIP

Dues for membership in the D.C. Maxcuters is \$9.00 per year for residents of the U.S.A. Your mailing label indicates the year and month of the last issue of MAX-FAX for your current membership. A red mark in the box below is a reminder that your current membership is nearing its end. Send a check, payable to D.C. Maxcuters, to the Treasurer.

DUES REMINDER

PRESIDENT

DUDLEY PRISEL
5118 Alfred Drive
Waldorf, MD 20601

SECRETARY

GLEN SIMPERS
RT 1, Box 367
White Plains, MD 20695

TREASURER

ALLAN SCHANZLE
8311 Exodus Drive
Gaithersburg, MD 20760

MEETINGS

The D.C. Maxcuters hold meetings on the first Wednesday of every month at the College Park Airport, the oldest continuously operating airport in the world.

UPCOMING EVENTS

- JUNE 5. Maxcuters Early Summer Fun Fly at Comsat. See Flyer in last issue of MAX-FAX.
- JULY 17,18. FAC NATS at Johnsville PA.
- SEPT 11. Maxcutter Summer Fun Fly at Comsat. See Flyer in last issue of MAX-FAX.
- EVERY FRIDAY EVENING- Fun fly at Comsat.

CLUB NEWS
ALLAN SCHANZLE

OK, folks. Sit back and grab a cool one, 'cause this issue is another high mark in MAX-FAX history. About a year ago (Sept/Oct '81, to be exact), you may remember a contribution by Bill Winter entitled "Confessions Of A Mad And Ancient Modeler". Well, this issue includes a equally enticing

bit of nostalgia. From the pen of Earl Stahl comes, "LOOKING BACK". You're gonna love this one too. And oh yes, if this issue feels a little heavy, well it has four additional pages, one of which is an additional photo page. As usual, the photos are the result of hours of work in the dark room of photographer par excellence, Tom Schmitt. And say, Tom will be doing the photograph of the FAC NATS for FLYING MODELS, so when Tom appears in your vicinity at Johnsville in mid July, put on your best smile.

This month's plan is another MAX-FAX original, this time by Hurst Bowers. The model is a lovely PZL-10. In addition to this scale plan, we have the last two pages of Hal Howards' most unusual embryo design, Miss Flim Flam.

As mentioned previously, letters quite often accompany renewal checks, but this month, we have a letter from a new subscriber. It is a classic, and I'm sure it will give you a few laughs. Allan Schanzle has another construction hint, this time about how not to make louvers. Finally, there have been several inquiries about the Fokker DR-1 that has appeared in recent photo pages. In response, you'll find a list of pertinent items about this unusually good flying model.

A NOTE RECENTLY appeared in the MAX-FAX mail box from Bud Carson at the U.S. Naval Academy. "Having tried everything under the Sun to stick condenser paper to balsa, including Micro-X cement (which smells suspiciously like shellac), dope, Ambroid, (close, but no cigar), Elmer's, (which turns your wings into gigantic propellers), goose grease and turpentine, etc., etc.. I have finally found the solution. It is Pentel Roll'n glue, available in office supply stores. It comes with a handy roller applicator and is to condenser paper as Hot Stuff is to fingers. It does not shrink the tissue or warp the wood, and seems to work every time. It is made by (who else?), those wonderful folks who gave us Pearl Harbor. 'Now,' he pleads, 'Can someone give me a glue for Micro-Lite?'"

THE 'OLE MAIL box also produced a note from Jim Miller, back Cincinnati way. He intends to sponsor an FAC No Cal event at the West Baden affair. FAC rules will be adhered to, with a \$2.00 entry fee. Trophies for 1st, 2nd, and 3rd. For further info, contact Jim at 827 Yorkhaven Rd., Cincinnati Ohio, 45240.

THE LOCAL yokels had a CO₂ event at Kennedy H.S. this past March. The best scale performance went to Pat Daily, with a very good flying Ansaldo WW-I biplane. Endurance went to Scott Paisley, who stuck a peanut CO₂ on his Embryo model. Most of us learned a lot about flying CO₂ indoors, but I for one discovered the value of not using a soda cartridge to fill the tank. After the first charge or two, the soda cartridge puts less gas (or liquid) into the tank, so to get up to the ceiling, you need to continuously change the engine speed setting. I increased the speed just a tweek too much - rafters just don't get humbled by balsa and tissue. MORAL- use a large filler source when flying CO₂ indoors.

AT THE APRIL meeting, a motion was made and approved to change the MAXECUTER rule which eliminates the eligibility of any first place plane (or another replica) in the same event. See the May/June 1980 issue of MAX-FAX for details. From now on, the model is eliminated from competition after TWO first place wins. I sure hope the sponsor of this change will take care of the bookkeeping!

FINNALLY, you won't find any Flyers for future contests in this issue. There just wasn't enough space available. Check the previous issue for contest information.

The reward of a model well done is to have done it.

I've known judges that think my models are precision guesswork.

The great reward in judging is developing one's own skills, not observing others.

The greatest modeler was once a beginner.

PHOTO PAGES

MAXECUTER'S 8th ANNUAL CAPITAL INDOOR SCALE AIRCRAFT CONTEST

and
FEB. '82 INDOOR CO₂ FUN FLY

TOM SCHMITT

1. Pat Daily's answer to Dave rees' stick and wire creations - an exquisite CO₂ powered DH-2, from modified Cleveland plans.
2. A ²pert Polikarpov R-5, by Allan Schanzle. We may have to drop a turtle in his shorts to get him drawing, but with a little luck, this plan will appear in a future MAX-FAX.
3. Hurst Bowers pretty CO₂ Farman.
4. Sleek Heinkel 112 by Dudley Prisel - cloned from Don Srull's MAX-FAX plans.
5. The "Boston Robin", Hurst Bower's Bostonian.
6. Don Srull's winning Navy entry - a neat adaptation of the XF13C.
7. Bostonian by Tom Schmitt - all sheet balsa.
8. The Boston Stragler, Don Srull's foam and balsa sheet Bostonian, eyes the Robin.
9. Bill Bell and his Golden Age Fleet Trainer. A fine flyer.
10. Another winning canard by Don Srull - a Bleriot.
11. Scott Paisley preps his Bostonian with Dads help.
12. Paul Gaertner and Kathy wind his unusual pusher twin boom Bostonian.
13. Dudley Prisel launches a pretty Cessna 140. See last issue for close-up photo.
14. One of our midshipmen from Annapolis, Mike Purcell, and his penny plane.
15. A really different Peanut - a Cierva Autogyro.
16. Bob Leishman adjusts his WW-I entry.
17. Joe Clements and CO₂ powered model of his proposed full scale ultralight. Allan Schanzle mesmerized by his CO₂ Aeronca C-3, from a Tern Aero kit.
17. A great flying CO₂ Ansaldo by Pat Daily.
20. Mark Orlasch with an interesting Armstrong Whitworth Quadraplane - Cleveland plans.
21. Randy Kleinert with a fine launch of his Fike (Oh,,, that hurts to type, ed.).
22. Mike Escalante gets some assistance from Dad for his winning Peanut Bristol Scout.
23. Bleriot's never flew like this - Don Srull's latest canard.
24. A magnificent Fairchild 22 by Randy Kleinert - Golden Age Plans.

WINNERS AT INDOOR SCALE CONTEST

FAC SCALE (16 entries)

- 1st Don Srull - Bleriot
- 2nd Allan Schanzle - Polikarpov R5
- 3rd Dudley Prisel - Heinkel 112

GOLDEN AGE (12 entries)

- 1st Don Srull - Curtiss XF13C
- 2nd George Meyers - Gadfly
- 3rd Bob Leishman - Luton Minor

PEANUT SCALE (22 entries)

- 1st Mike Escalante - Bristol Scout
- 2nd George Meyers - Gadfly
- 3rd Pat Daily - Curtiss Goshawk

WW-I (12 entries)

- 1st George Meyers - Fokker D-7
- 2nd Don Srull - DH-6
- 3rd Scott Paisley - Albatross D5

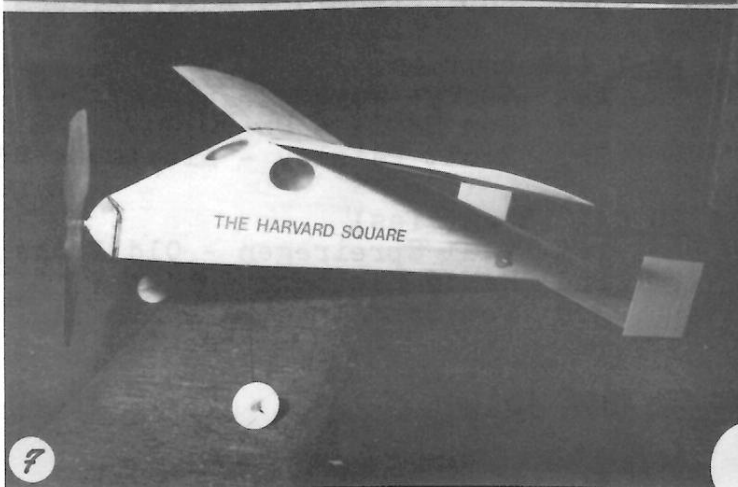
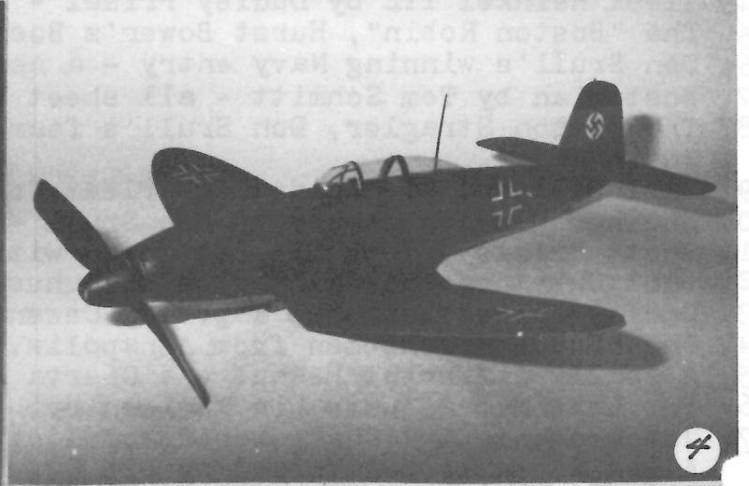
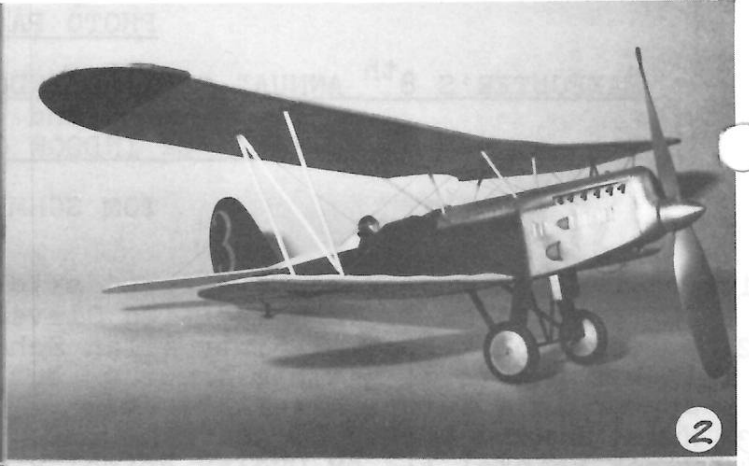
NAVY SCALE (9 entries)

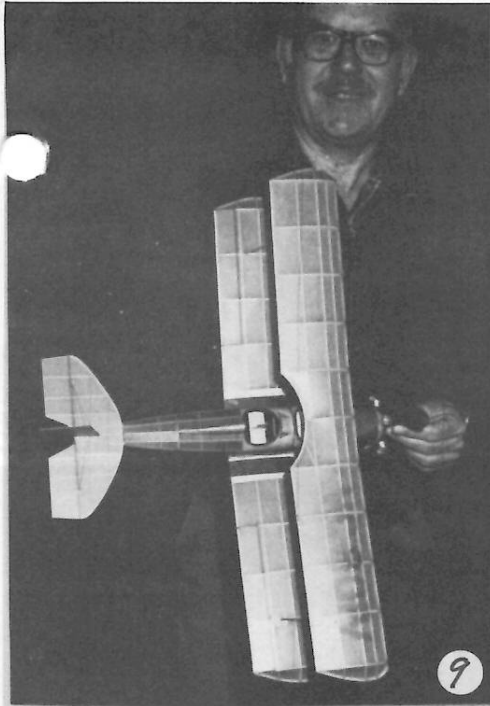
- 1st Don Srull - Curtiss XF13C
- 2nd Scott Paisley - Blackburn Skua
- 3rd Pat Daily - Curtiss Goshawk

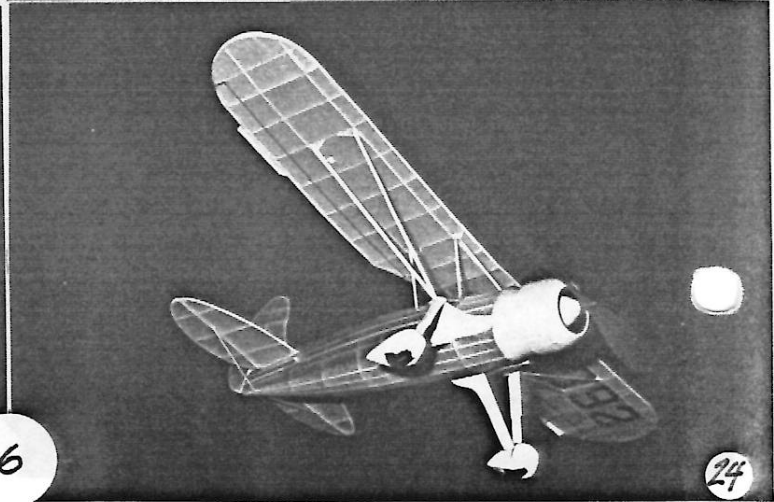
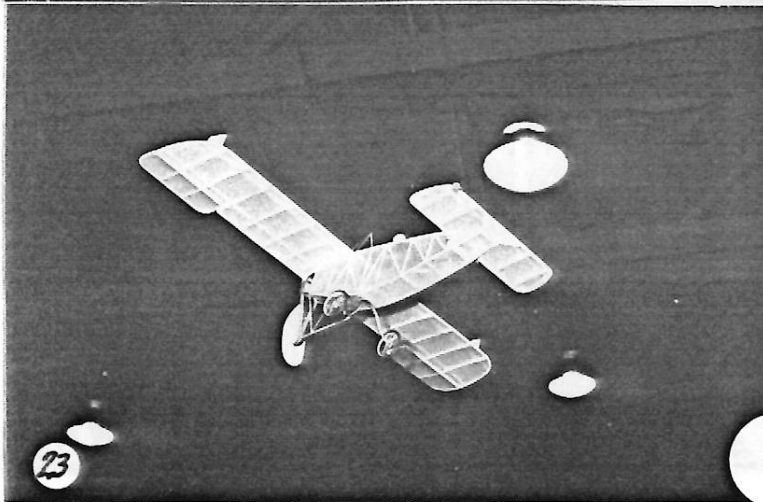
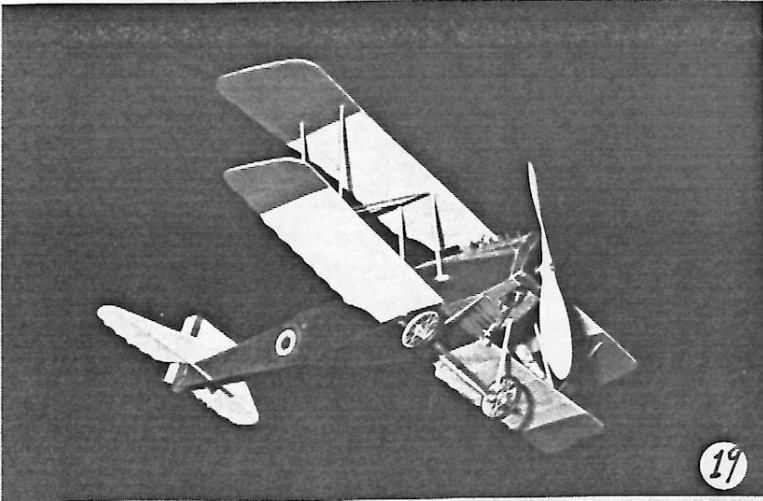
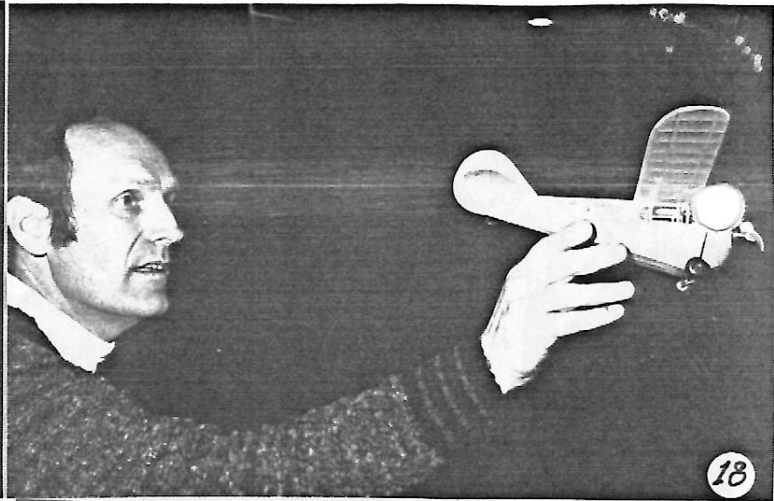
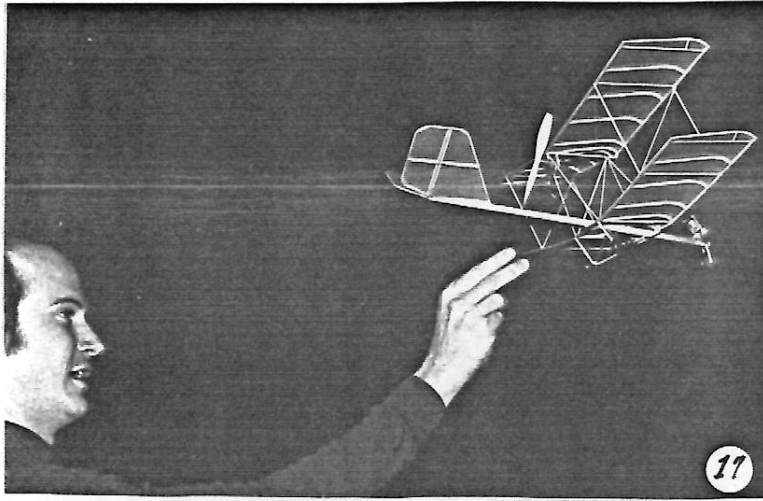
NO CAL (8 entries)

- 1st Paul Spreiregen - Old Ironsides
- 2nd Randy Kleinert - Cougar
- 3rd Tom Schmitt - Waterman Aerobile

(CONTINUED ON PAGE 13)







LOOKIN' BACK

by

Earl Stahl

It is probably unwise to spend much time reflecting on the past. I believe we should keep looking and moving towards the horizon. My exception to that philosophy involves the aircraft and model planes of the period between the two great wars.

Among my earliest recollections are the visit of the Gates Flying Circus to my home town, and then, later, the excitement and awe imparted by the exploits of Lindbergh, Chamberlin, Gooble, Byrd, Earhart, and their contemporaries. Lindbergh's daring conquest of the Atlantic had the greatest impact on the populous. I was almost nine at the time, and I first heard of his success from an exuberant policeman as I was making the long trek, on foot, from a local farm being used as a flying field. Even before the "Spirit of St Louis", I had been hooked!

At first, the man carrying machines and their pilots were the thing, but when the local newspaper commenced a series of construction articles on ROG Stick, Tractor Endurance, and Twin Pusher models (by Merle Hamburg, as I recall), some of us youngsters grabbed the bait. Not long after that, the second issue of MODEL AIRPLANE NEWS appeared on the rack of our neighborhood "Mom and Pop" grocery store. My Dad provided the first fifteen cents, and, somehow, I have found the cash for almost every issue since.

The dreadful depression of the Thirties permeated all activities. I don't remember many of the hardships, but, rather, I identified with the promise of the future as exemplified by the fetes of dashing aviators flying ever better aircraft. Model building, at that time, was an excellent activity to pursue. Unlike kids of today, we didn't have to be sent to camp or summer school to keep us occupied. With some pine, balsa, ambroid, and periodicals, we never had to ask "What can I do?" to keep from being bored. For me, it was a great period.

Competitions for free flight rubber powered models were held frequently during the Thirties. In our region, the largest city, Pittsburgh, had newspapers which promoted Junior Birdmen (Hearst) and Junior Aviator (Scripps Howard) model plane activities. Those competing publishing giants had their local and national youth oriented aviation events to enhance the sales of papers. The forerunner to the AMA Nationals commenced even earlier. As a teen-ager, I participated in a great number of those contests.

Getting to those distant happenings was a challenge. Our family did not have an automobile, so I rode Greyhound from Johnstown, Pennsylvania to places like Detroit, Chicago, Akron, and Cleveland. Safely transporting eight or ten models was a problem. Storage for big items of baggage on those old buses was under canvas on the roof. To protect my homemade model cases, I would insist on climbing the chromed ladder at the back, to attend to the proper placement and retrieval. No transportation casualties ever occurred.

One can't be absolutely certain, but I believe competition in those days was every bit as stiff as I observe today. To be a viable competitor, one had to build good models, be able to analyze and correct flight characteristics, and then to practice, practice, practice to be able to deal with all kinds of environmental conditions.

In our little city, there were a dozen, or so, of us who were extremely active. Except during the bitter winters, we flew almost every day in a near-by park or at a small grassy airport. Large groups of spectators were common. Once I launched a twin pusher, which had been accidentally wound backwards, over the heads of the crowd that had gathered about in a circle. The big canard backed down after my upward thrust and settled on the head of a small boy. The exposed, unwinding motors snatched his hair. He was flailing at the model. His Dad whipped out a pocket knife to resolve the problem. I pleaded "Cut the hair", and then, in defeat, wilted at the loss of those valuable strands of 1/8" flat, brown.

My first flying scale model was a George D. Wanner Co. Leopard Moth. It was a prize from some contest event, and it was one of the few kits I ever assembled. It was a competent flyer, and because of the nice appearance stimulated a new interest---flying scale models.

Shortly thereafter I came upon outline drawings of the attractive Rearwin Speedster sport plane. I fashioned a flying scale version applying some of the know-how acquired from free flight contest type models. It was a superb flyer, so I built another, and, yet, one more. A picture of the second one was sent to MODEL AIRPLANE NEWS with the hope that it might be selected for inclusion in the section of the magazine devoted to reader's accomplishments. The picture was published, and, then editor, Charles Grant invited me to prepare a construction article on the Rearwin for publication. That is how the series of articles on flying scale models started.

Doing those articles was genuine fun. (Perhaps, I should explain that I could devote time to such activity since I worked only part of each day on the original airmail pick-up system. We used Stinson SR-9's to deliver and collect, on the fly, mail for towns and small cities of Pennsylvania and West Virginia. The airline was All American Aviation, which became Allegheny, and is now U.S. Air. I was one of their first employees.) Unfortunately, I had the feeling that the construction articles were being received with indifference by the readers. Oh, I got letters from Europe, Africa, South America, and Australia, but the editors, aside from never rejecting an article, made few comments or recommendations. Usually, I would suggest the plane type for the next subject, and that was it. To this day, I have no idea of the circulation of MODEL AIRPLANE NEWS, AIR TRAILS, or FLYING ACES during the time I was a regular contributor. For several decades after I stopped submitting the articles, I supposed the various models had been forgotten. Then, in recent years, letters, phone calls, and visitors to my NASA office have made me aware that many folks had built and enjoyed the models. It is a source of pleasure to be aware that some of the designs are still being built and flown.

Recently, possibly because of the acute interest in realism--- pilot in the cockpit, authentic colors, markings of specific aircraft, etc.---a few have questioned the authenticity of some of those old designs. The information explosion upon us has made available much more data, on most any aircraft, than was obtainable, at least to me, in those earlier days. The point to be made is that a sincere effort was made to be as accurate as material at hand permitted.

AERO DIGEST was the foremost magazine of that time. It cost thirty five cents a copy which was big money. Annually, in March, they published a huge issue, the price escalating to fifty cents, which had three-view drawings, specifications, and a picture of scores of commercial and military aircraft. Although the drawings were small it was a priceless source of data for the modeller. If one of the designs interested me, I would write to the manufacturer for more details, glossy photos, and above all, large drawings. Some companies responded favorably. Otherwise, the tiny drawings had to be scaled-up using dividers. Later, I met a model builder who worked for the local power and light utility. His job included operation of their photostat machine. He would enlarge those AERO DIGEST drawings several times--- black on white, white on black, etc.---to meet my size requirements and ease the drafting burden. Expanded by that method, some of the lines looked so broad and fuzzy, one might conclude that they were made by the wet end of a cigar butt! Occasionally, very complete information could be gotten. Phillips and Powis Aircraft, Ltd. in England, despite the raging war, sent excellent drawings, photos and manuals for the Miles Magister article.

I would, first, design the models in simple form on large, tablet paper. The magazine page size usually dictated, for me, the fuselage length, and, thus, the overall size. Once the prototype model was built, photographed, and tested, detailed drawings were made. As was clearly evident, I had no training in drafting, except that some one had cautioned me to not dip bow pens in ink to load them.

Unlike many builders today, I did not try to duplicate colors or exact markings of a specific aircraft. My object was to use colors which I had learned would photograph well in black and white. I had best luck with reds and yellows, so no sand and spinach or olive drab for my Spitfire, Hurricane, or P-40 Hawk. They were red.

The photos to illustrate the articles never matched my expectations. I used a Welta film pack camera, with ground glass, for the stills, and a Kodak Retina 35 mm for action. The only guy in our town who would tackle my processing orders for enlargements was "Thumbs" Salinger. He seemed to specialize in water marks. I criticized his prints. He explained that I gave him almost nothing to work with.

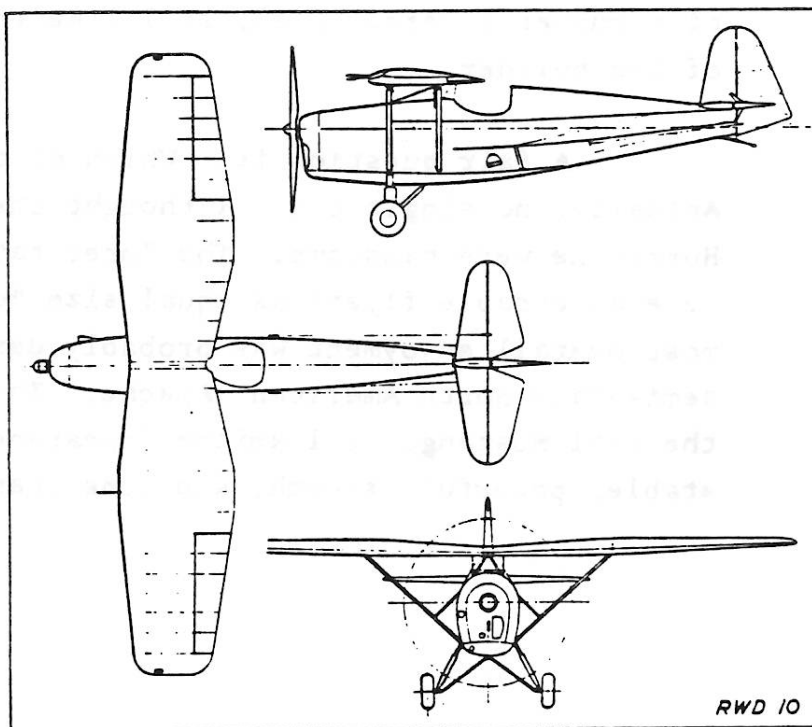
In retrospect, I must conclude I could have done more work on optimizing propellers. Once I settled upon a length, width, and pitch, that was it. Surely, there is an opportunity to improve on the performance of my original designs by some propeller experimentation. Incidentally, I do not admire the use of the manufactured, plastic propellers which is common today. They are probably better than our hand carved ones of days gone by, but I do believe skillful fashioning of a prop presents the greatest challenge in the construction of a rubber powered model, so I like to see that effort on the part of the builder.

A fair question is: Which of those old models was my favorite? Actually, no single one. I thought the little Waco E and the Hawker Hurricane were handsome. The Interstate Cadet and General Skyfarer were as capable flyers as equal size "cabin" contest models. The most overall enjoyment was probably derived from what I called a semi-scale North American Apache. The real prototype later became the P-51 Mustang. I liked the appearance, and flights were super--- stable, powerful, smooth, and consistent.

Along with the Wakefield, Moffett, and other contest models, I hung the flying scales, as they grew in numbers, from the ceilings and on the walls of a several rooms unoccupied house at the back of our lot. It was so full, space was at a premium. The place was the gathering site for modellers from all about, as well as curious neighbors. In summer our English setter and beagles came and went through the open windows. Sticky ribbons of paper, common at that time, hung from the ceilings to trap and torment flies and mosquitos. Lots of strangers came. One night, Holger Hoiriis, who flew a Bellanca to Denmark behind Lindbergh and Chamberlin, knocked at the door. He was crossing our mountains on a westward flight, and was forced down, by low clouds, on the outskirts of town. Hearing of the youth with all the model planes, he abandoned Lowell Thomas and Amos and Andy on the hotel radio, to drop by, to talk planes. I was thrilled.

Those were enjoyable times. I look forward to one day stepping back from the busy routine that has occupied my working years, so I may again participate in the great activity of building and flying scale model planes.

*3-VIEW
FOR
PLANS IN
THIS ISSUE*



Dear Allan:

This is to inform you that Claude Powell, your local MAXECUTER representative and inveterate glue dobber, has finally gone an' dun it! I have managed to stay on the wagon since 1949...four years in the Navy (Korea), seven years in college (University of Tennessee), over 21 years in this really neat job at the local electronics test facility...and then this guy comes along. Actually, I've been plagued by an acute infection of Bacillus Modella Railroadii, which is an affliction I inherited in 1954 while recuperating from a massive frontal lobotomy. Unfortunately, when I tried to mortgage the kids last year to fund my medication, Momma made me switch to booze.

Poor Claude has been a rather lonely feller out here in the sticks, so as soon as he found out about my fling with Whitman, Megow, gum bands and banana oil he went straight for the jugular... even gave me some copies of MAX-FAX just to see me bleed a little. Well, the old urge returned just like he knew it would, and I began to ruminate over the now yellowed and crumbling copies of M.A.N. that I'd saved and then moved...and moved...and moved. To be honest, I did manage to sneak a few more issues of M.A.N. during the intervening years (just to see what the "peasants" were doing out there), but my railroader friends never knew about this side of my character so it had no effect on my standing in the group.

Then it occurred to me one night, as I was lounging seductively in my Fruit-of-the-Looms and staring at the idiot box through a mist of Old Tennis Shoe, that here was the perfect opportunity to have a hobby and justify my losses. Everyone knows that model airplanes do tend to flail about and crash a lot. On the other hand, model railroads are entirely predictable...they run on tracks...right? Bet me, Jack! Try explaining how your \$750 imported brass choo-choo augered in to the deck from five feet because the #*!! voltage regulator went nutso while your back was turned! Of course, nothing like this ever happened to me, but I do know a guy who....

Anyway, good ol' Claude invited me to a fun-fly at the local gym and then had the disgusting grace to let me ROG his Embryo whatcha-ma callit to my heart's content. So now the hook is imbedded clear up to the shank, and I am trying desperately to convince my wife that I should NOT be committed to an institution. What I really need instead, Doctor, is some serious counselling and a little compassion. To this end I am enclosing my check for nine bucks...please consider it a bribe and enroll me for the next year's pile of your illustrious journals for free.

Ignominiously,



C.K. (Ken) Potyen

BOSTONIAN (6 entries)
1st Scott Paisley
2nd Don Srull
3rd Tom Schmitt

PENNY PLANE (8 entries)
1st Glen Simperts
2nd Mark Avila
3rd Mike Escalante

FOURTEEN WAYS NOT TO MAKE RAISED LOUVERS

ALLAN SCHANZLE

The Arrow Sport I mentioned in the previous issue of MAX-FAX taxed my mental capacity to the edge of total frustration. Never before, to the best of my recollection, has this hobby brought forth such fervor that I found myself screaming in the basement model room (locally called the "mole-hole") due to my own personal inability to develop a detailing technique to a level of personal satisfaction.

For over one week, I had gone thru mental gyrations for the simulation of raised louvers. I had all kind of good ideas, from the simplest of painting with a stencil, to the most complex of using a Dremel tool to cut holes in the 1/32" sheet cowling. The moment of truth came on a Saturday morning at 9:00 AM. The contest was only two weeks away, and I doubted that any further meditation would produce a physical end product.

The local mutt was curled up on the chair in the mole hole. (it's next to the furnace, and the warmest room in the house - she's no dummy. Neither am I - I relocated some of the furnace ducting so as to keep that little room toasty warm. If the local Secretary of War ever finds out, you folks may need a new editor.) But alas - I digress. Back to the louvers.

Painting the little devils on with a stencil looked OK, but just didn't give that 3-dimensional appearance. So I added some shading with gray paint. That looked better, but only when viewed from a particular angle. So I tried grinding small slots with a Dremel on some scrap 1/32 sheet balsa. Not bad, but to get all those little suckers lined up just right was next to impossible. Besides, the slots looked like "slots", not raised louvers. So I tried to make a special tool for the Dremel. More frustration, and failure.

By now, it's noon, and my love for louvers is rapidly dwindling. A few choice expletives reverberate thru the basement, and the dog digs down to the deepest part of the chair. It's time to get serious. These flippin things have got to be completed - today.

One last idea comes to mind. Use bond paper, cut slices in the shape resembling a "C", and bend the bond paper on the uncut edge to give the desired 3-dimensional effect. BINGO!!! It works. Even looks good. Something like this:

CUT ALONG
SOLID LINE →  *BEND ALONG THIS LINE*

Now to install them on the cowling. Oh no!!!! - It can't be. The cowling is a compound curve, and the raised portion of the louver won't stay "raised" when bent around a compound curve. This brought on at least five minutes of "explicite" expletives, somewhere near the db level of a drill sargent. I turn to get a cup of coffee and see the poor mutt cringing in the corner, shaking like a freshman about to take his first final exam. I go over to soothe, comfort, and reassure her feelings. She nips at me in self defense and darn near busts the door off the hinges on the way out of the mole-hole. Stupid K-9. She just doesn't understand frustration. (No wonder... she had her "pockets" picked at 9 months). Even the family fails to inquire about the ranting and raving. They know when to avoid a madman.

But then it occurs to me. Paper will bend in darn near any direction. So I hold the paper on the cowling and force a new bend to raise the louver. Ah Ha. It works. Now let's lay out a step-by-step procedure.

1. Make your cowling out of bond paper. Good quality 50# stuff is fine. (This newsletter is printed on 50# paper....but don't you dare even consider the thought. Go buy some, cheapskate.) Don't glue the cowling to the framework yet. Just tack-glue with rubber cement and mark on the paper the proper location

- of the louvers.
2. Remove the paper cowling from the framework and make (or acquire from templets) a shape that matches the shape of the desired louvers. I found some old rivet head templets from my days at Chance Vought that had the perfect outline. Cut the bond paper along this line with a #11 xacto blade.
 3. Place a straight edge along the dotted line noted above and raise the cut section slightly.
 4. Adhere, with clear dope, some black tissue to the back side of the paper cowling behind the louvers. Be careful not to glue to the louvers; just the outside edge of the tissue.
 5. Now glue the whole paper cowling to the fuselage framework, and bend the louvers up slightly. Hold at arms length and admire the end product. How simple, and your family and mutt have been spared the fury and rath of utter frustration..... You're welcome.

CHARACTERISTICS OF
A REAL, HONEST-TO-GOODNESS FLYING FOKKER DR-I TRIPLANE

ALLAN SCHANZLE

Sheer ignorance and dumb luck produced a very successful flying model of the Fokker DR-I. We've had several pictures in the past issues of MAX FAX and several folks have inquired about its characteristics. The following should help.

PLANS: The old Peerless design. Plans available from Golden Age Reproductions, P.O. Box 13, Braintree, MA 02184. I think the plan # is 127.

SPAN: 19".

WEIGHT: 1.75 oz. with Telco CO₂ engine and empty 3 cc tank.

PROP: 7" Paulownia wood prop.

THRUST LINE: 1/32" shim at top-right of mounting firewall (down and right thrust.) ^{LEFT}

OUTLINES: As per the plans, with rudder as shown for "flying" model.

AIRFOIL: Flat bottom, no washout.

WING ANGLE OF ATTACK RELATIVE TO STAB:

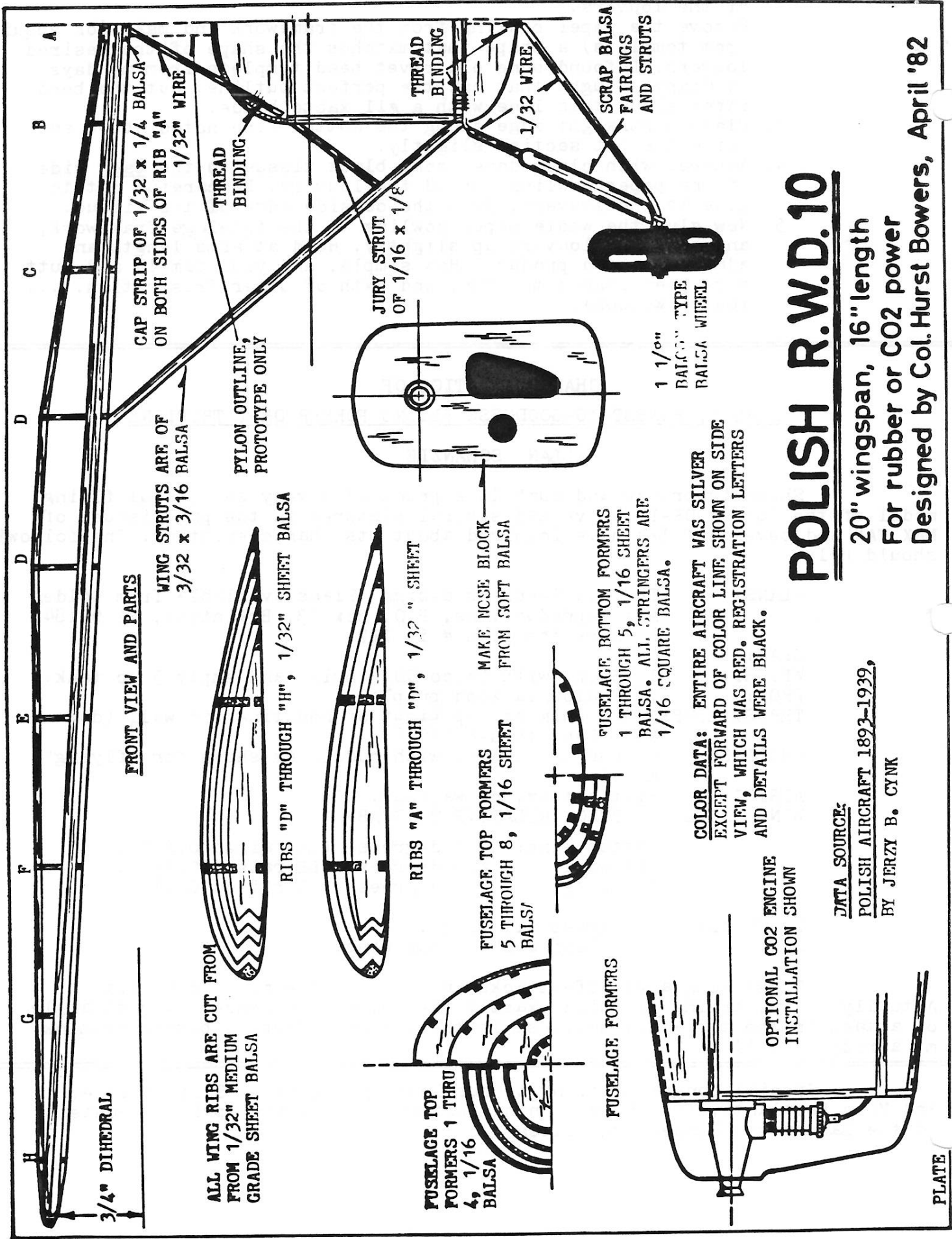
Bottom wing:	3.8 degrees	(LE raised 0.20").
Mid wing	2.9 degrees	(LE raised 0.15").
Top wing	1.9 degrees	(LE raised 0.10").

DIHEDRAL: 3 degrees all wings.

C/G: 1.5" behind LE of top wing.

Those wing angle-of-attacks are the way the model came out. Actually, I was trying to build exactly the reverse sequence (largest angle of attack in the top wing; smallest in the bottom). Maybe I better rethink my aerodynamics!!

Special congratulations to our local youngsters, Scott Paisley and Mike Escalante, for their winning performances at the April 25 contest t the Lakehurst "Hindenburg Hilton".



FRONT VIEW AND PARTS

CAP STRIP OF 1/32 x 1/4 Balsa ON BOTH SIDES OF RIB "A" 1/32" WIRE

WING STRUTS ARE OF 3/32 x 3/16 Balsa

ALL WING RIBS ARE CUT FROM 1/32" MEDIUM GRADE SHEET Balsa

PYLON OUTLINE, PROTOTYPE ONLY

RIBS "D" THROUGH "H", 1/32" SHEET Balsa

FUSELAGE TOP FORMERS 1 THRU 4, 1/16 Balsa

RIBS "A" THROUGH "D", 1/32" SHEET

FUSELAGE TOP FORMERS 5 THROUGH 8, 1/16 SHEET Balsa

MAKE NOSE BLOCK FROM SOFT Balsa

FUSELAGE FORMERS

FUSELAGE BOTTOM FORMERS 1 THROUGH 5, 1/16 SHEET Balsa. ALL STRINGERS ARE 1/16 SQUARE Balsa.

JURY STRUT OF 1/16 x 1/8

THREAD BINDING

1/32 WIRE

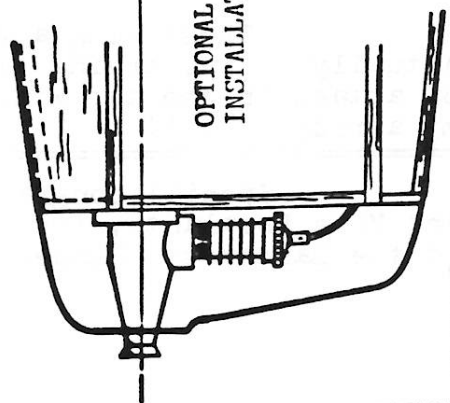


1 1/8" BALCO TYPE Balsa WHEEL

SCRAP Balsa FAIRINGS AND STRUTS

COLOR DATA: ENTIRE AIRCRAFT WAS SILVER EXCEPT FORWARD OF COLOR LINE SHOWN ON SIDE VIEW, WHICH WAS RED. REGISTRATION LETTERS AND DETAILS WERE BLACK.

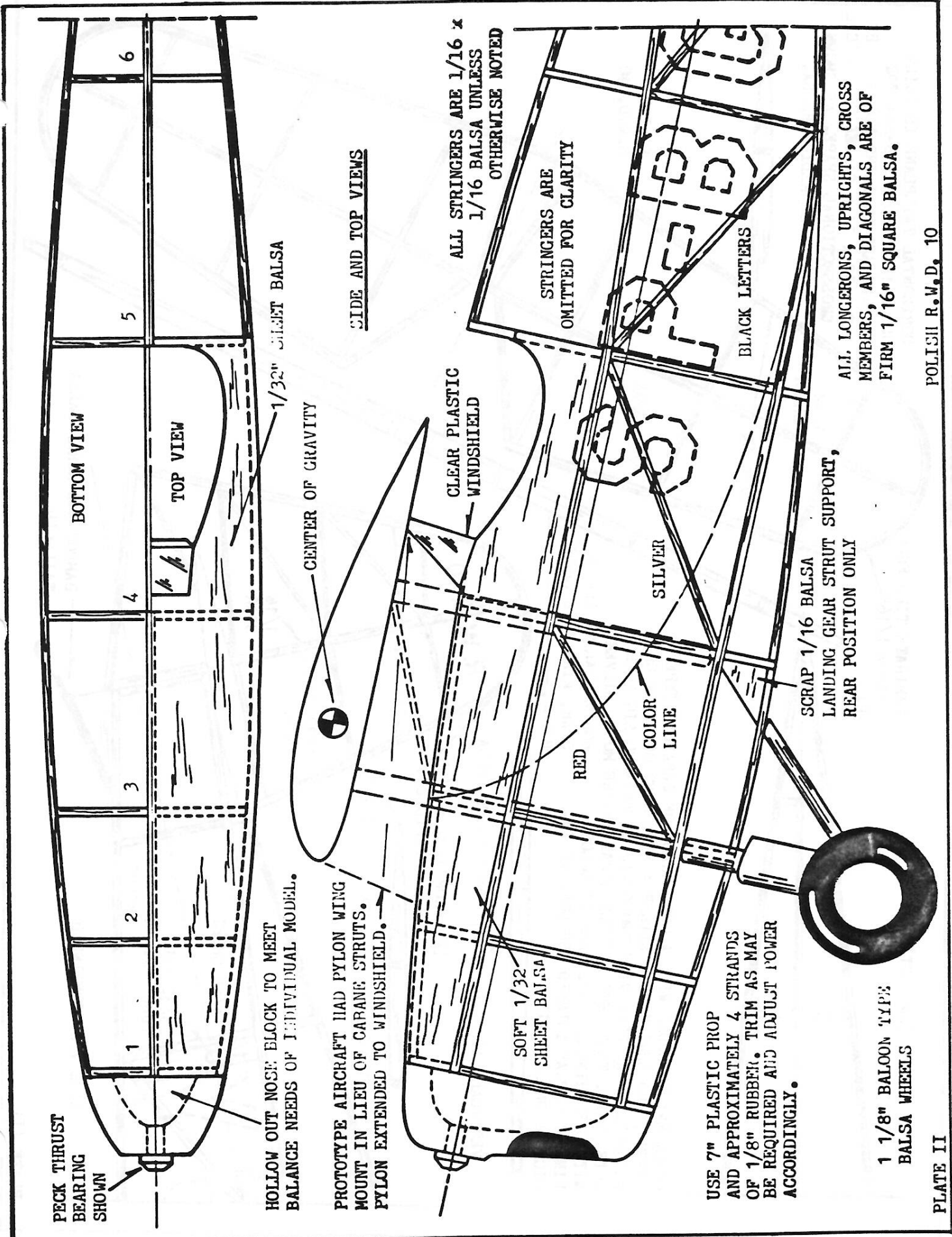
OPTIONAL CO2 ENGINE INSTALLATION SHOWN



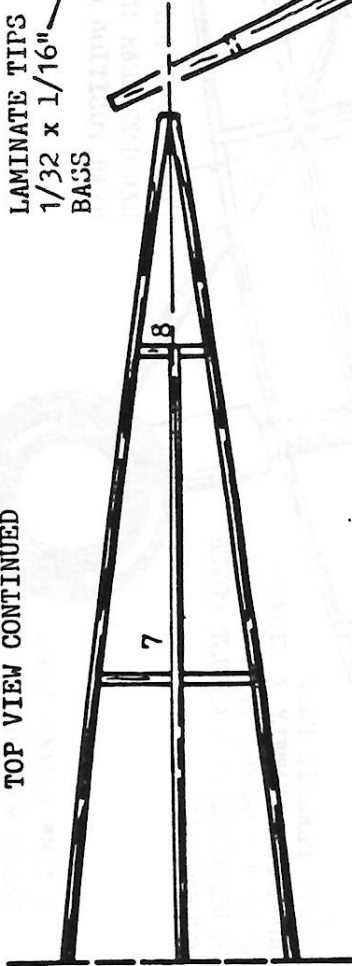
POLISH R.W.D.10

20" wingspan, 16" length
 For rubber or CO2 power
 Designed by Col. Hurst Bowers, April '82

DATA SOURCE:
 POLISH AIRCRAFT 1893-1939,
 BY JERZY B. CYNK



TOP VIEW CONTINUED



LAMINATE TIPS FROM
1/32 x 1/16"
BASS

HORIZONTAL TAILPLANE IS BUILT
USING 1/16" SQUARE Balsa FOR
LEADING AND TRAILING EDGES. RIBS
ARE 1/32 x 3/16 SANDED TO TYPICAL
CROSSSECTIONAL SHAPE, AS SHOWN
BELOW. USE MEDIUM Balsa.

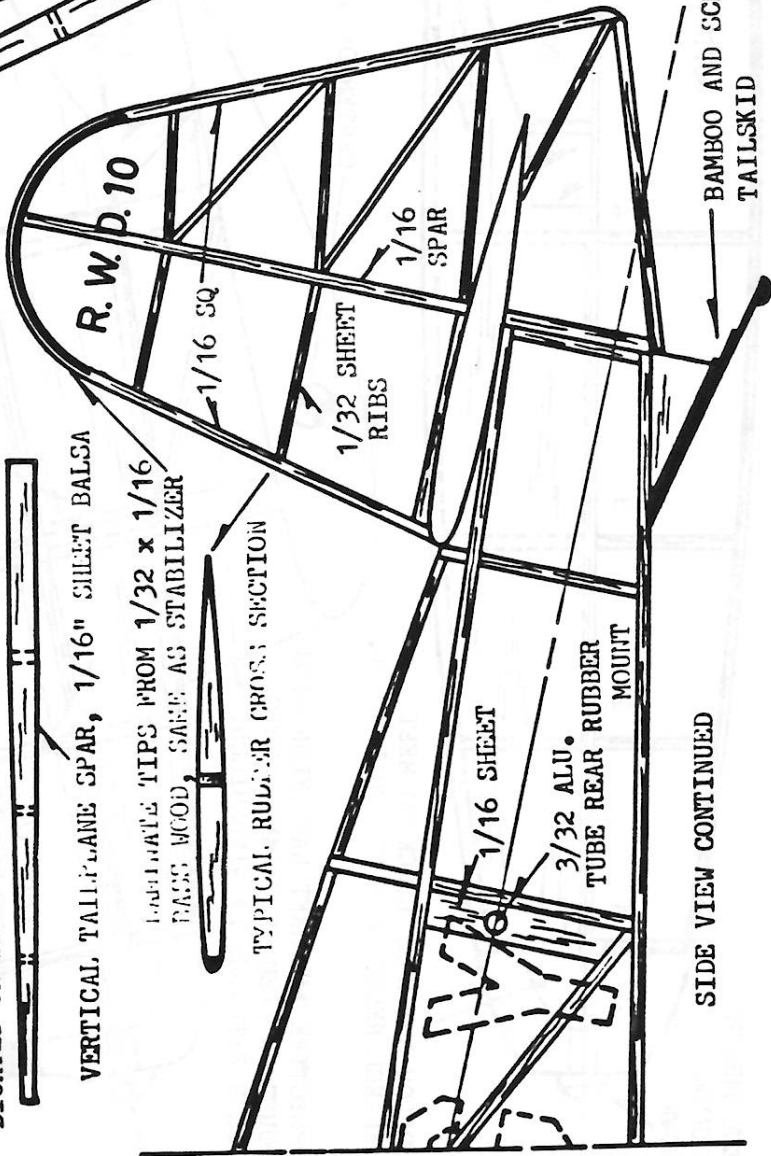
COVER ENTIRE MODEL WITH A GOOD GRADE OF JAPANESE TYPE
TISSUE, AND SHRINK WITH EITHER A FINE MIST OF WATER OR
ALCOHOL. CLEAR DOPE WITH TWO COATS OF THINNED SIG LITE
COTE DOPE. THEN VERY LIGHTLY SPRAY ENTIRE MODEL SILVER
WITH ONE THINNED COAT. MASK AT COLOR
LINE AND SPRAY THINNED RED DOPE AS IN-
DICATED ON SIDE VIEW.

POLISH
R.W.D. 10

VERTICAL TAILPLANE SPAR, 1/16" SHEET Balsa

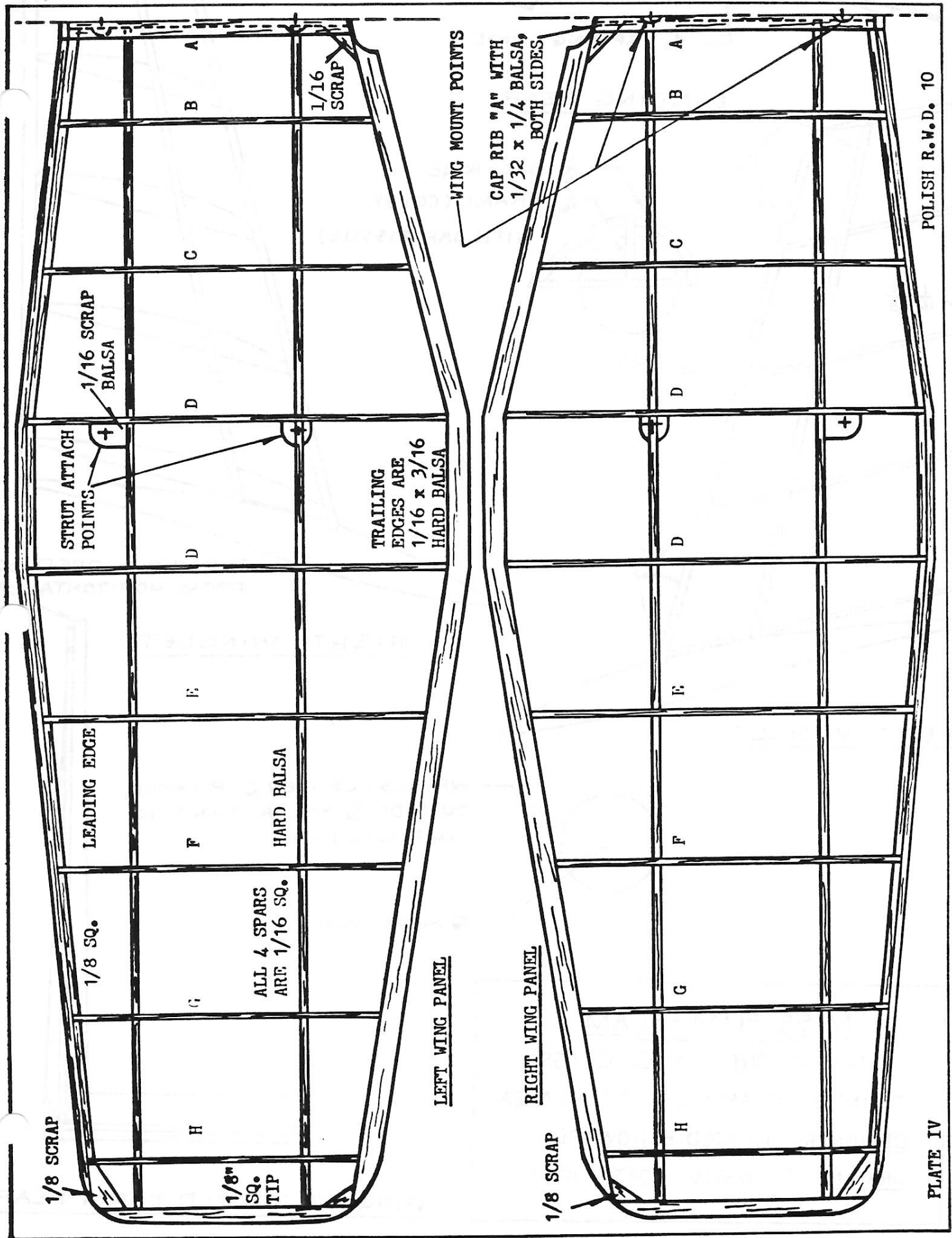
LAMINATE TIPS FROM 1/32 x 1/16"
BASS WOOD, SAND AS STABILIZER

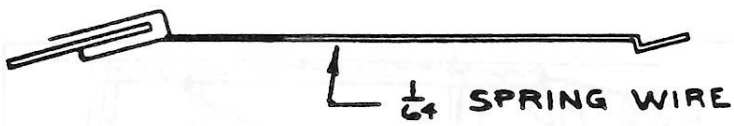
TYPICAL RUBBER CROSS SECTION



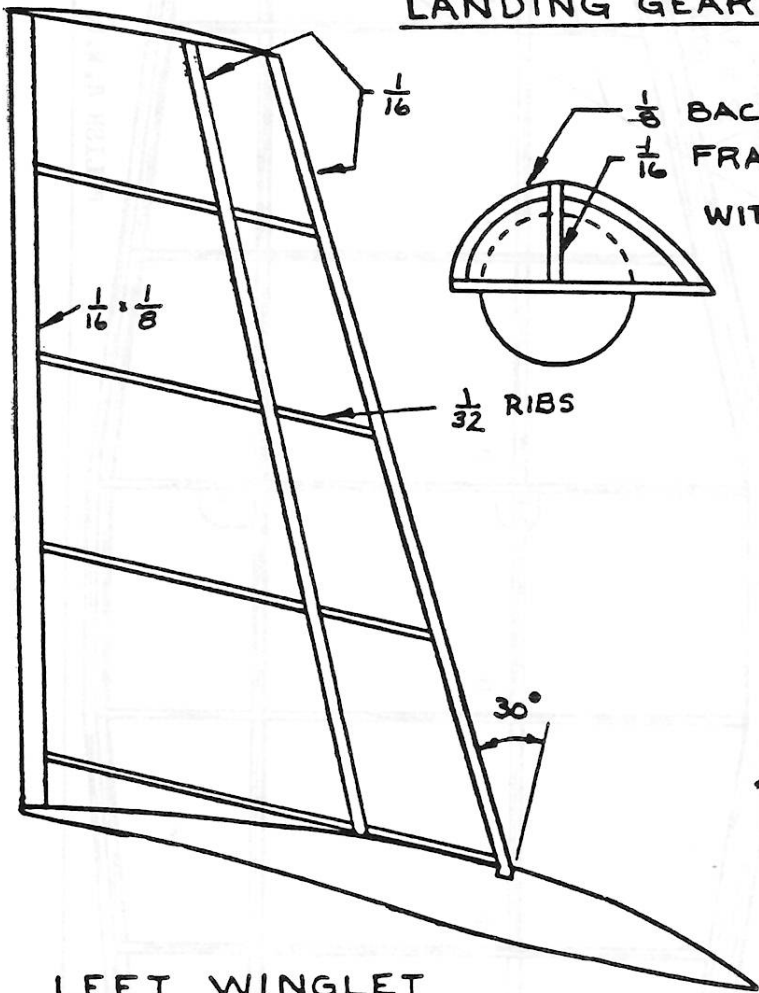
SIDE VIEW CONTINUED

PLATE III

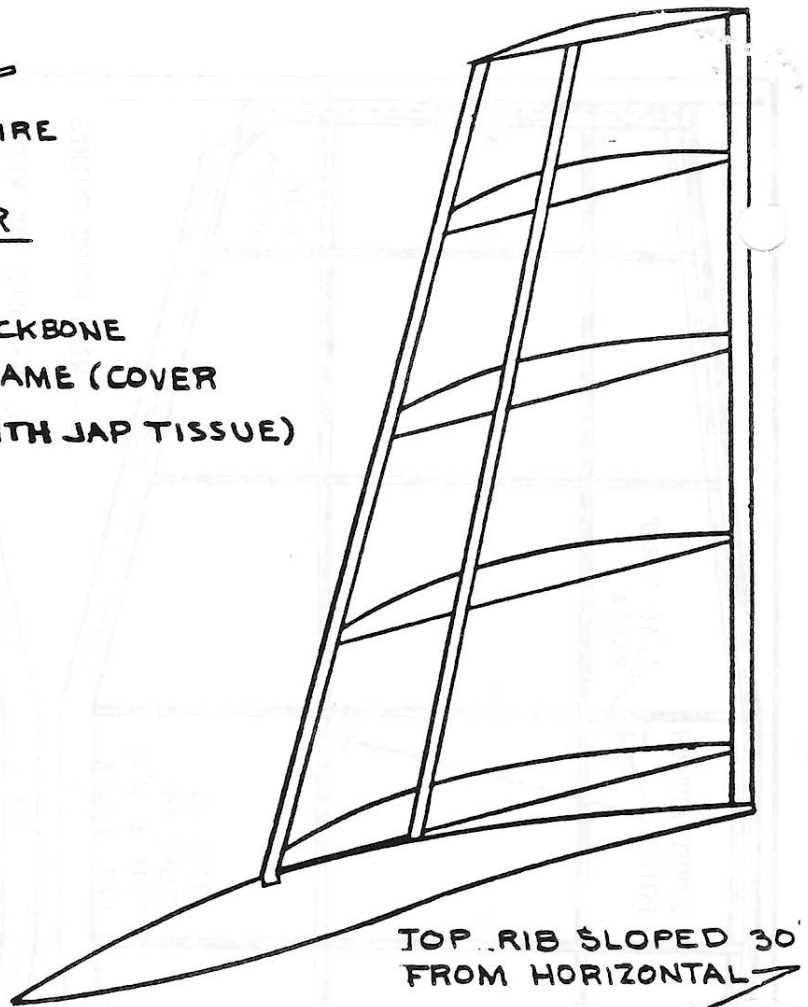
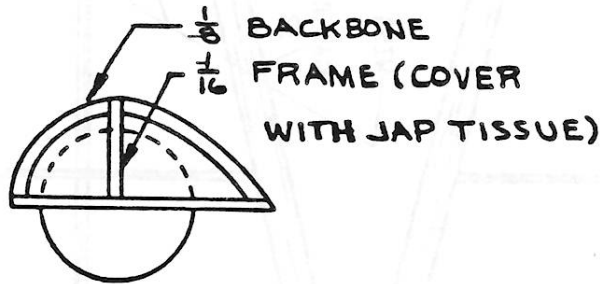




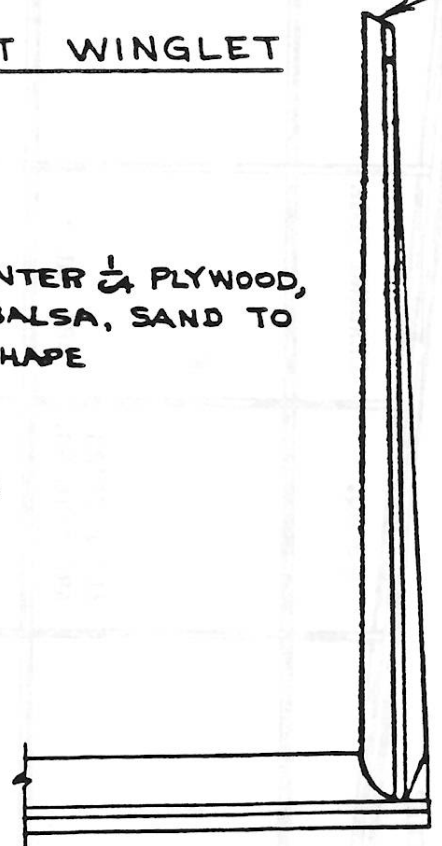
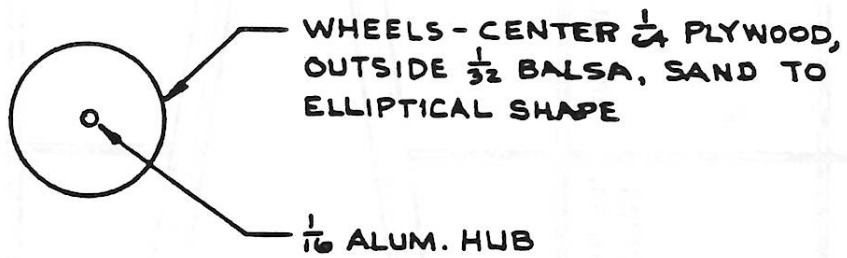
LANDING GEAR



LEFT WINGLET

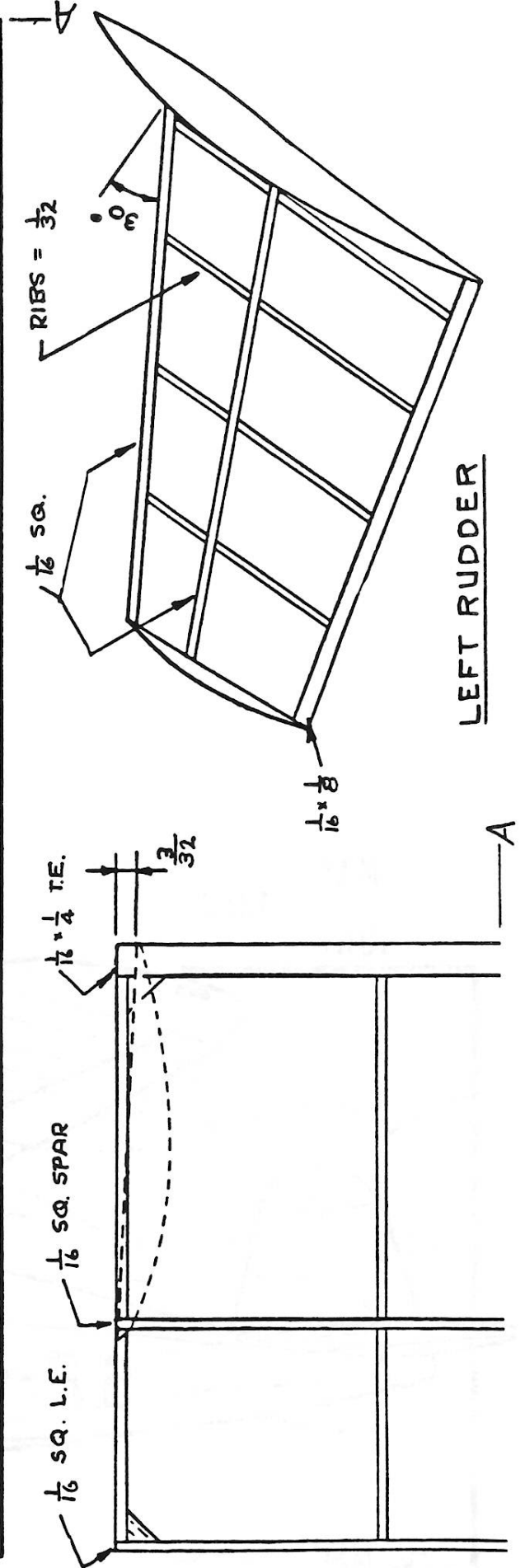
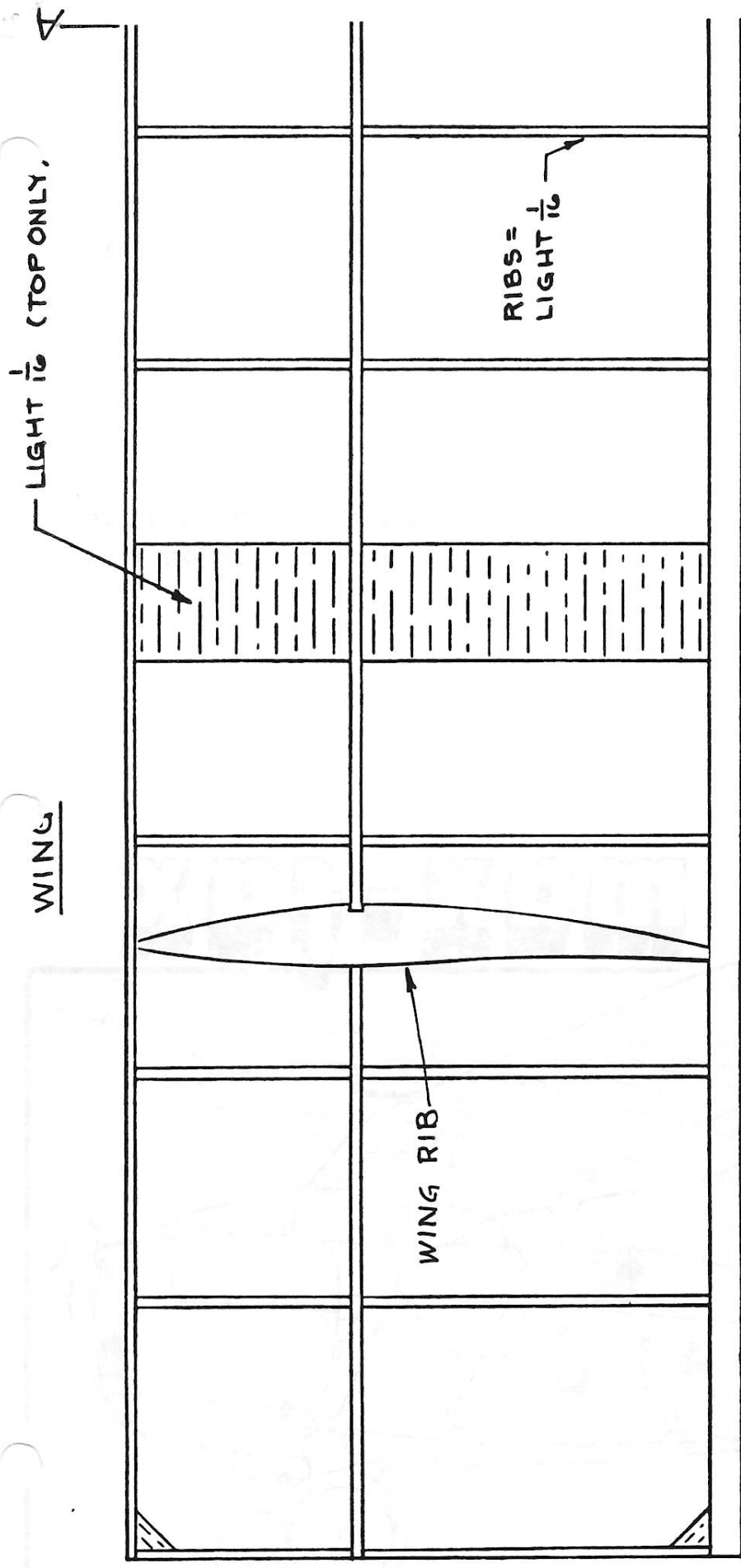


RIGHT WINGLET



WINGLET VIEWED FROM REAR

'MISS FLIM-FLAM'
 EMBRYO ENDURANCE CLASS
 50 IN² WING AREA 25 IN² STAB AREA
 DESIGNER: HAROLD H. HOWARD
 DRAWN: G.L.WATTS DATE: 10|24|81



FIRST CLASS

8311 Exodus Dr.
Gaitthersburg Md. 20879

MAY
JUNE 1982

max-fax

