

MAX FAX

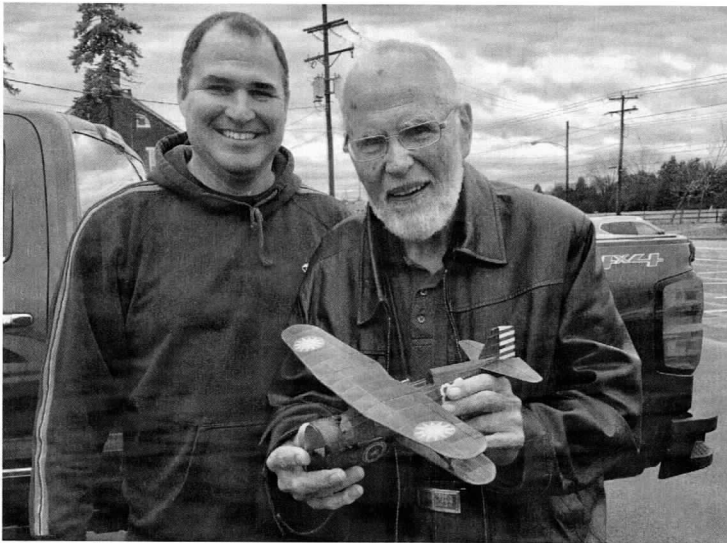
The Journal of the dreaded Potomac Pursuit Squadron #6 of the Flying Aces Club

Editor: Dave Mitchell

2018-4

LUBLIN R-XIII

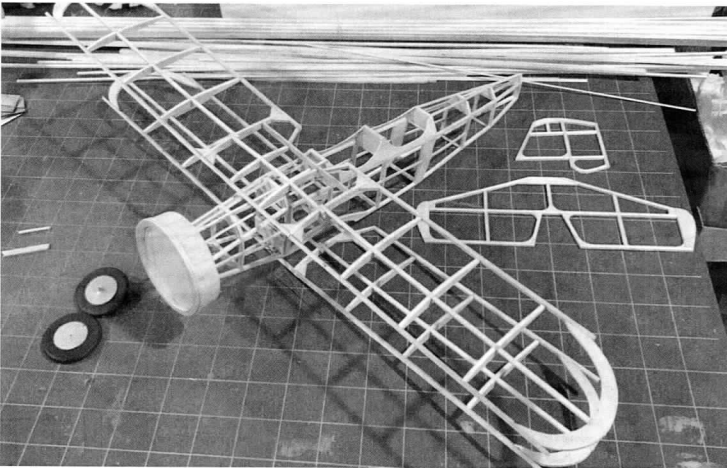
GRUMMAN SKYROCKET



Mark and John Houck Sr. pause for a photo outside of the Kutztown Diner in PA. John's pretty new Curtiss Hawk is from the Diels kit. Nice!



It's always good to hear from Dave Franks, who celebrated his 87th birthday recently by building this big Avenger from the EasyBuilt kit.



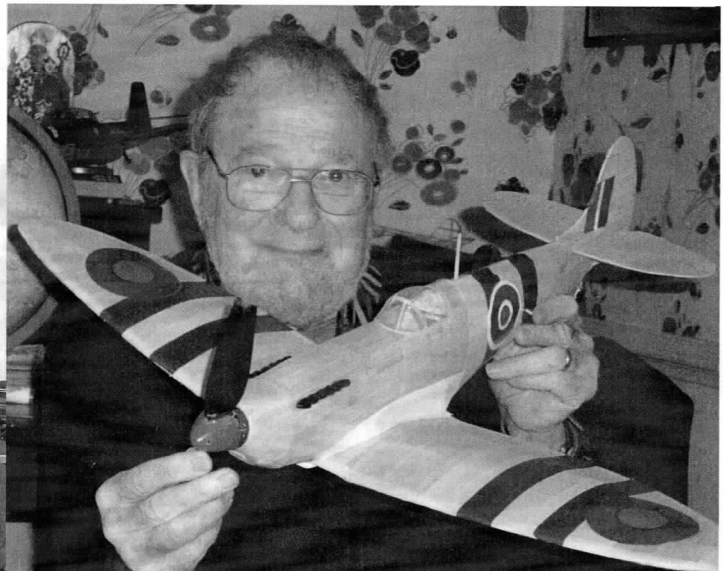
John Ernst's neat China Export Fighter, which will be done up in the colors from the Flying Aces magazine cover. Love that big Townend ring!



John Kramer lets fly with his Pietenpol peanut at last October's Barron Field Air Races in Wawayanda, NY.



More action from Wawayanda! Controlled chaos at the BLUR flightline launch. John Kramer, Oliver Sand and Never Ready Eddie Novak cut 'em loose, while Pete Kaiteris looks out for irregularities.



Dave has been busy! He's clearly pleased with his spiffing new Spitfire...Guillows pattern, with Dr. Franks substituting lighter balsa from his secret stash for the Guillows ironwood.

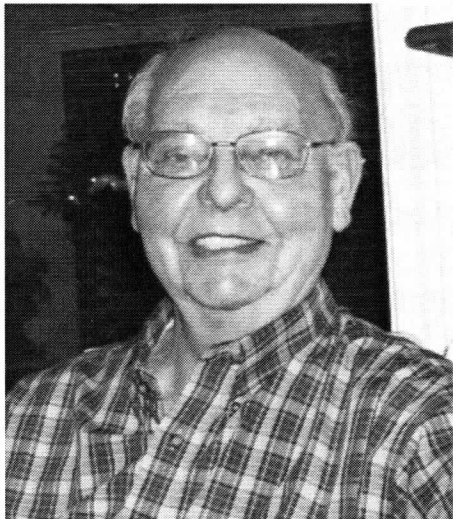
MAXFAX 2018-4

Oliver Sand's Westland Welkin twin Dimer plan in the last FACNL got a lot of people fired up. **Pete Kaiteris** decided to get in on the action with the nifty Grumman Skyrocket that graces our centerfold this issue. These dimer twins look like a fun way to test the twin-engine waters without going whole hog on an FAC rubber scale job!

Me, I'm still working my way through an airmail / liaison aircraft streak. I started working on the enclosed Lublin XIII plan a while ago, with the full intent of having it ready for the indoor flying season. Well, that time is well upon us, and I haven't even BEGUN to lay a stick down for it. Dave Stott would frown upon me, but once again I'm putting an unbuilt, untested plan out there for general consumption. I designed this neo dimer with the Comet Spartan Biplane plan right next to it, using that plan to help guide me in keeping the Lublin design true to the Dimer spirit. It oughta be a real go-er, with that big beautiful wing and the long nose moment. If you like it, and build it, send me pics!

In the category of "things I'm about to build but haven't quite got there yet", let's all have another look at **Pres Bruning's** glorious Vickers Vulcan, shall we? I bumped this plan up to 20" and got as far as cutting out the parts before life got in the way--but build it I will, just...because. Now, I gotta give Pres his props here. Normally when I subject a hand-drafted plan to the SOP test (Strict Orthogonal Process) by importing it in to my CAD drafting program and overlaying reference lines, the result is that I wind up redrafting the whole thing because of all the glaring irregularities and asymmetries. Sometimes these are because of things getting wacky after multiple scans / xeroxes, but sometimes it's just because good hand drafting is REALLY HARD, and is rarely done well enough to escape my CAD-trained eye. The Vulcan plan? SPOT ON. Well done, Pres!

SEASON'S GREETINGS Y'ALL!!! -DM



It's my sad duty to report the passing of another stalwart DC Maxecuter, Ross Summers. Use the good wood, folks.

Ross Summers

SUBMISSIONS - send articles, plans and high-resolution photos to Dave. Electronic submissions preferred, but I do old school too.

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Bethesda, MD 20817

Make checks payable to "D.C. MAXECUTERS"

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Membership questions should be addressed to Stew Meyers; phone 301-365-1749. Email gets immediate attention. stew.meyers@verizon.net

Your mailing label indicates the year and month of the last issue of your current membership. An "X" in the box below your address is a reminder that your dues are due.

Cover images:

FRONT- It's unlikely that a XF5F-1 Skyrocket and a Lublin R-XIII ever shared the same sky. The Lublin was active as late as 1939, but was pretty much wiped out in the Nazi invasion of Poland; the Skyrocket first flew in 1940. And yet, they share a certain degree of "history"- the Skyrocket was the aircraft of the fictitious Blackhawk Squadron, led by Blackhawk, a Polish national...stranger things have happened...

BACK- Pancho Barnes was not someone to be trifled with. An accomplished pilot and businesswoman, Barnes stood up to the USAF in the 1950's in the face of aggressive, possibly unlawful and definitely mean-spirited conduct against her interests, and prevailed--to the tune of \$375k (about \$3.5m in today's dollars). Don't mess with Pancho.

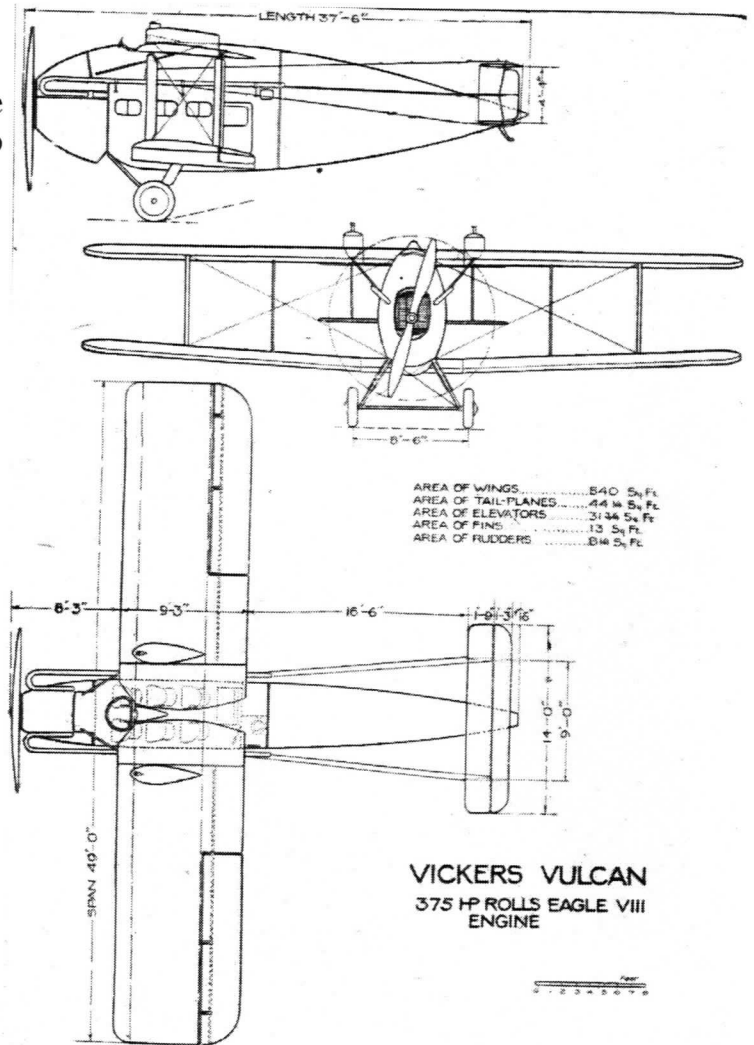
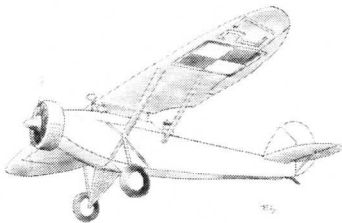
MAX FAX NEWS

Just about two years ago, we decided it would be a good idea to put all MaxFax subscriptions onto a calendar year cycle. You know, January 1-Dec 31st, everybody on the same timeline. It was supposed to help Stew keep track of all the subscriptions. Well, you know, the best laid plans of mice and men... what we didn't foresee was that NEW subscribers would be unaware of this great idea, and would sign up whenever the mood stuck them--say, mid April. What do we do then, tell them they can't have any issues until January? Round up all the back issues for that year and send them in a bundle to get them caught up? UGH.

Long and short of it, we're going back to the old rolling subscription basis. Sorry for the confusion. Whenever you sign up, you'll get four issues from that date, starting with the first issue that comes out after you sign up. Renew when you see the dreaded red X on the back page. PLEASE--keep an eye out for that red X!! Don't make us chase you down for renewal, we

hate that and besides, it takes time and energy we'd rather put into making a neat newsletter...

--Dave and Stew



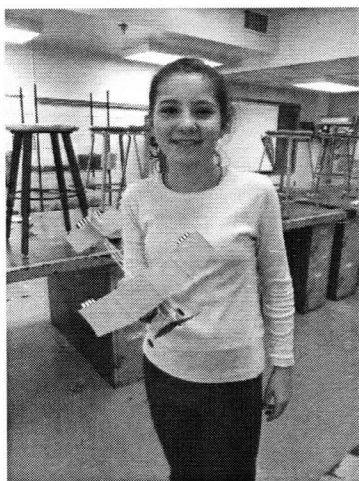
Three views and a tasty photo of the Vickers Vulcan, to get your juices flowing for Pres Bruning's neat Vulcan plan. If this ship doesn't make your heart flutter, you should go see your doctor...9 were ordered, 8 were built between 1922 and 1928; they could carry 8 passengers. What style!



FOO FIGHTERS SQUADRON #75 REPORT

This is our 6th year and **John Murphy** and I have tweaked it a little each year based on the reaction of the students. Some of this is a balance of incentives vs. "guidance" in trying to keep them focused and progressing. The other part is just figuring out what they like to build or what is buildable and gets them to take the next step up in their abilities. It will turn out that some will goof off and waste time and then get discouraged as they see no improvement and fall behind. As a volunteer, this is very frustrating as I want to see them succeed, but that success is primarily up to them. I also don't like to waste my time. But others will show dedication and improvement. These are the "gems" and really help motivate John and me to stay in the game. This year is particularly encouraging as we have a great group of 8th graders who are turning out to be meticulous builders and fun kids to be around. Lucky John has been mentoring them on their Phantom Flash build. I have 4 of the 7th graders who are doing really well, then a couple who may (or may not) pleasantly surprise me. Hopefully I'll learn to be a better motivator for them. Incentives are really important. But we are having fun! I'll be ordering up some more Foo-Fighter T-shirts soon as that appears to be a significant motivator (that and the cookies!)

-Scott Richlen



At our last Foo-Fighter session we gave away a Peck's ROG with the stipulation that if you won it, you would build it at home and bring it back for a show-and-tell! Annabelle won and here she is with her completed ROG. You can see that it is very nicely built.

(below) John has done a great job of shepherding the 8th graders through the Phantom Flash build....



MARAUDING MUSTANGS SQUADRON #VT47 REPORT

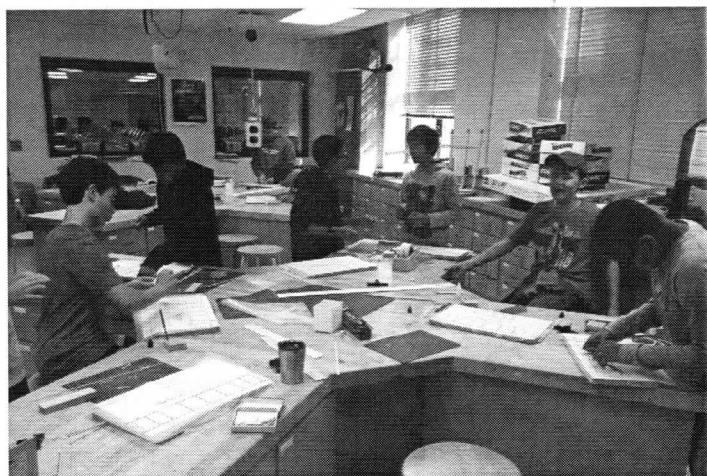
The Maryland Marauding Mustangs, currently forward based at Wood Middle School in central Maryland, has met three times since the last report.

On October 4th, the squadron flew the first training sortie in the school gym, using the Mountain Lions they built the weeks prior. The mission was a great success with only minor casualties. All pilots returned safely, and aircraft were all repaired and restored to airworthy condition forthwith.

Riding high on our success the previous week, the squadron met again on October 11 to begin their first stone-cold scratch building project, the *Foo Flyer* designed by **John Murphy** of Virginia's **Fabulous Foo Fighter Squadron**. We conducted training on the variations in balsa, how to compare sheet weight, density, grain and stiffness. We learned how to use balsa strippers to make the airframe components and how to READ A PLAN!!! Some rookie pilots needed reminders to READ THE PLAN!!

We successfully made all the strips needed and began to lay out the parts on the plan before our session ended. Finally on October 18th, the squadron met again and resumed construction in earnest. Two rookies pilots missed the last muster and had to be brought up to speed but to their credit, they caught up quickly. We learned about how to cut and fit parts precisely, and to be critical of our work. Perfect is good enough. Good enough isn't. As squadron commander, I was very pleased to see the quality of workmanship my fledgling Ensigns achieved with just a few minor nudges. We now have most of the wings and tails assembled, expect to get to stabilizers and covering next week. My veteran pilots finally got to shift from directly training the rookies and put balsa on the board in an ambitious build of Dick Baxter's "Big Pussycat". It will be their first attempt at a built-up 3D fuselage.

Respectfully,
Doug Griggs, Commander
Maryland Marauding Mustangs Squadron VT47



Marauding Mustangs hard at work in their hangar. Their project is John Murphy's *Foo Flyer*.

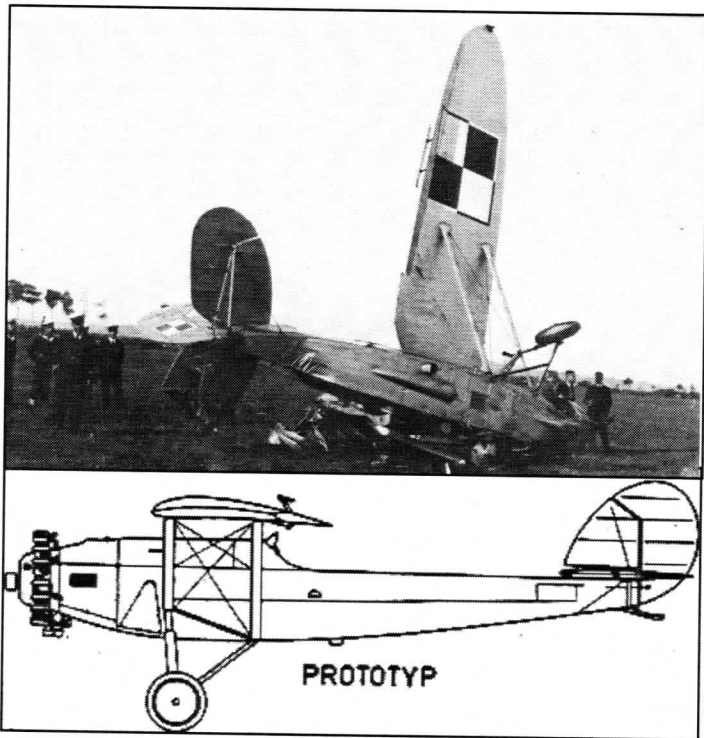
LUBLIN R-XIII

Neo-Dime Scale by Dave Mitchell

Plage i Laśkiewicz was the first independent aircraft manufacturer in Poland, getting their start in 1920 with production of license-build aircraft for Ansaldo, followed by contracts with Potez and Fokker. In the mid 1920's **Jerzy Rudlicki** became the chief designer, and the company began producing their own aircraft under the **Lublin** name. Of Rudlicki's Lublin designs, only the R-XIII was built in any substantial numbers, but it was a very successful aircraft, with 17 variants (including the prototype). Whatever the variant, the principal role of the aircraft was in observation and liaison, and it served from its introduction in 1932 through the invasion of Poland in 1939, with a few stragglers making into 1940 in Romania.

The R-XIIID variant was by far the most produced, and there are a number of photos of this aircraft on the internet. In the Dime Scale spirit, however, I decided to model the one I could NOT find a photo of, the R-XIII prototype, which was distinguished (along with other R-XIIIA models) by having a flat fuselage top aft of the pilot's cockpit. Why model this one? And hey, how come there's no no observer's cockpit on the plan?

I'm a kid in 1935. I saw a crash picture in the newspaper of this keen airplane I never saw before. I found a side view drawing, and I decided right then to draw it up and model it! How do I know it had an observer's cockpit? How would I know it might have elaborate camouflage?

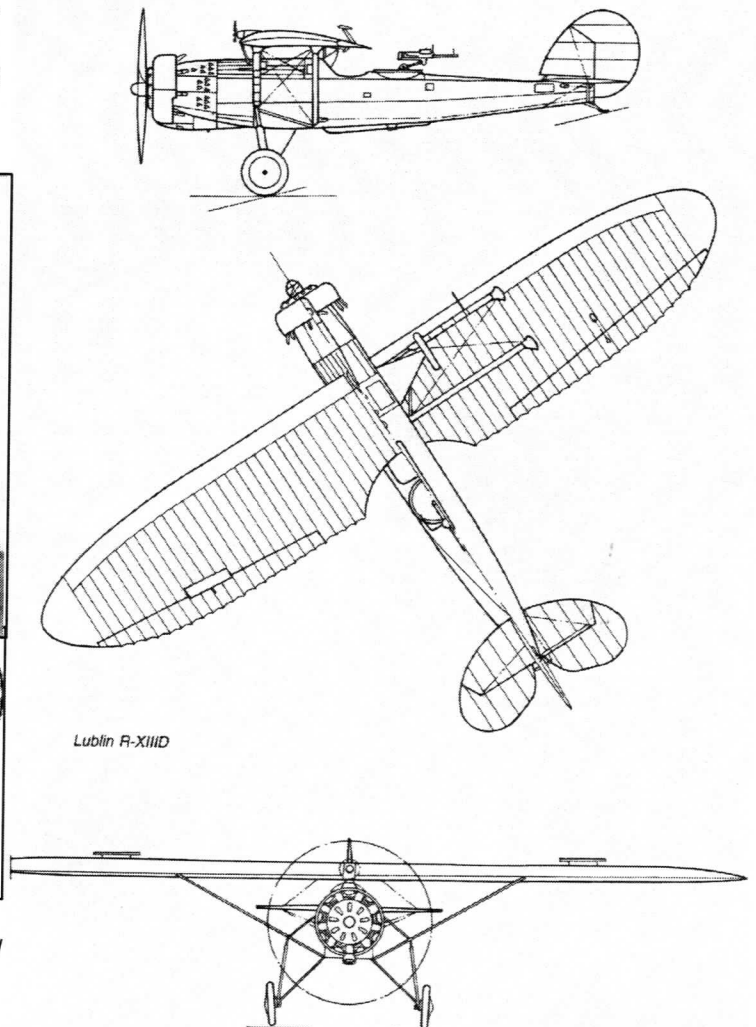


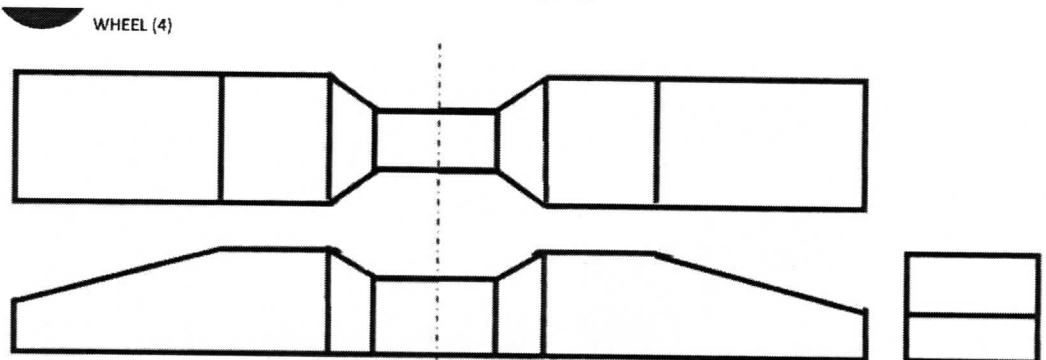
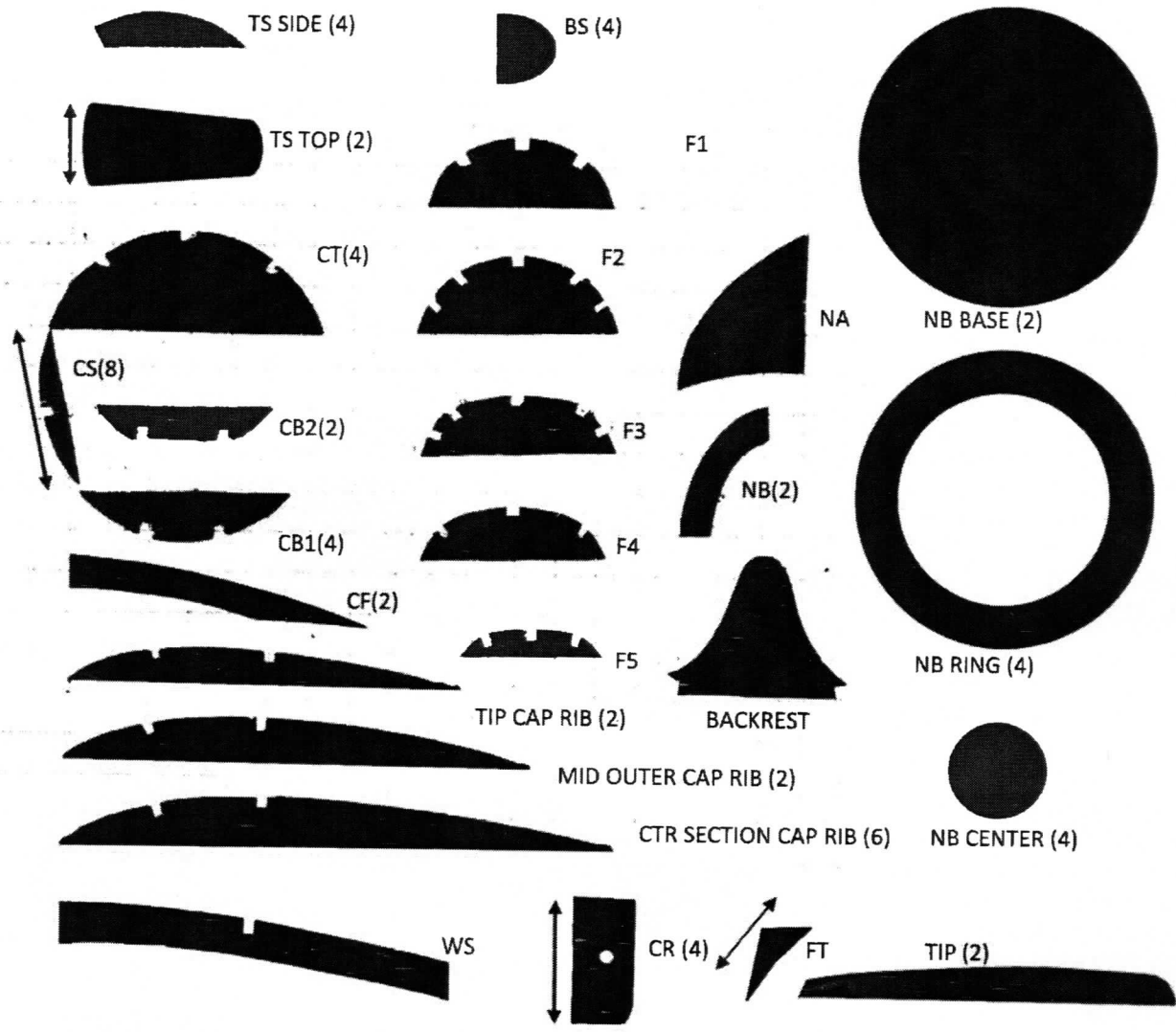
All I know is Dad gave me a Comet Fokker DVII kit for my birthday, but Joey Smith built one of those already and anyway I like modern airplanes, and Dad said if I was careful about it there might be enough wood in the Fokker kit to build my own design...wait 'til the gang sees this!

About halfway through drawing this plan--which started out life as a 20" Simplified Scale job-- a big brouhaha erupted on the internet and among the FAC Council regarding "what defines a Dimer." I had just had an online conversation with **Denny Dock** about the Comet Spartan Biplane (plan in this issue), and I figured that was as good a template as any to use for guiding my hand in reducing the Lublin to proper Dime Scale spartan-ness. I didn't go for the undercambered, single-surface covered wing, it's true...but I damn near did! The fact is I wanted to use those big Polish red and white under-wing roundels on the model (yes, they are apparently still called roundels, even though they are square) because they are pretty much my favorite insignias of all time.

Armed with our superior historical perspective, it would be a simple matter to modify this design into the R-XIIID shown on the three-view, and I have to admit it would look pretty keen with the observer's cockpit all tricked out. Bump this baby up in size a bit to Simplified Scale, and you can twist it towards whatever variant you prefer. Go ahead, add that machine gun. And no, I haven't built it yet. You're on your own.

-Dm





PROP BLANK 5" DIAM MAKE TWO COUNTER-ROTATING OUT AT TOP

GRAIN DIRECTION ← → EXCEPT AS NOTED FOR TS TOP, CS, CR, & FT

GRUMMAN XF5F-1 PARTS SHEET

GRUMMAN XF5F-1 SKYROCKET

A Neo-Dimer Twin by Peter Kaiteris

I have wanted to do this pugnacious aircraft for a long time but the short nacelles left me stymied. When I saw **Oliver Sand's** Neo-Dime Welkin (FACNL #305, Nov-Dec 2018), the Skyrocket popped into my head. Instead of wrestling with the short nacelles, I just made them longer and by leaving them blunt and open at the back, put the peg right at the trailing edge.

This first flight version had exhaust pipes, no fillets and straight rudder hinges. As the aircraft was developed, the exhaust system was changed to short stubs, a wing fillet was added and the rudder hinge line changed several times. Eventually a short nose was added and the nacelles were extended, and finally the XP-50 Army version has trike gear and turbo chargers. The plan could be bashed to represent anything in that sequence. Interestingly the addition of a nose raised the landing speed by 10 kts.

The cap-rib wing construction is something I use all the time. It is very quick, particularly when a wing is tapered.

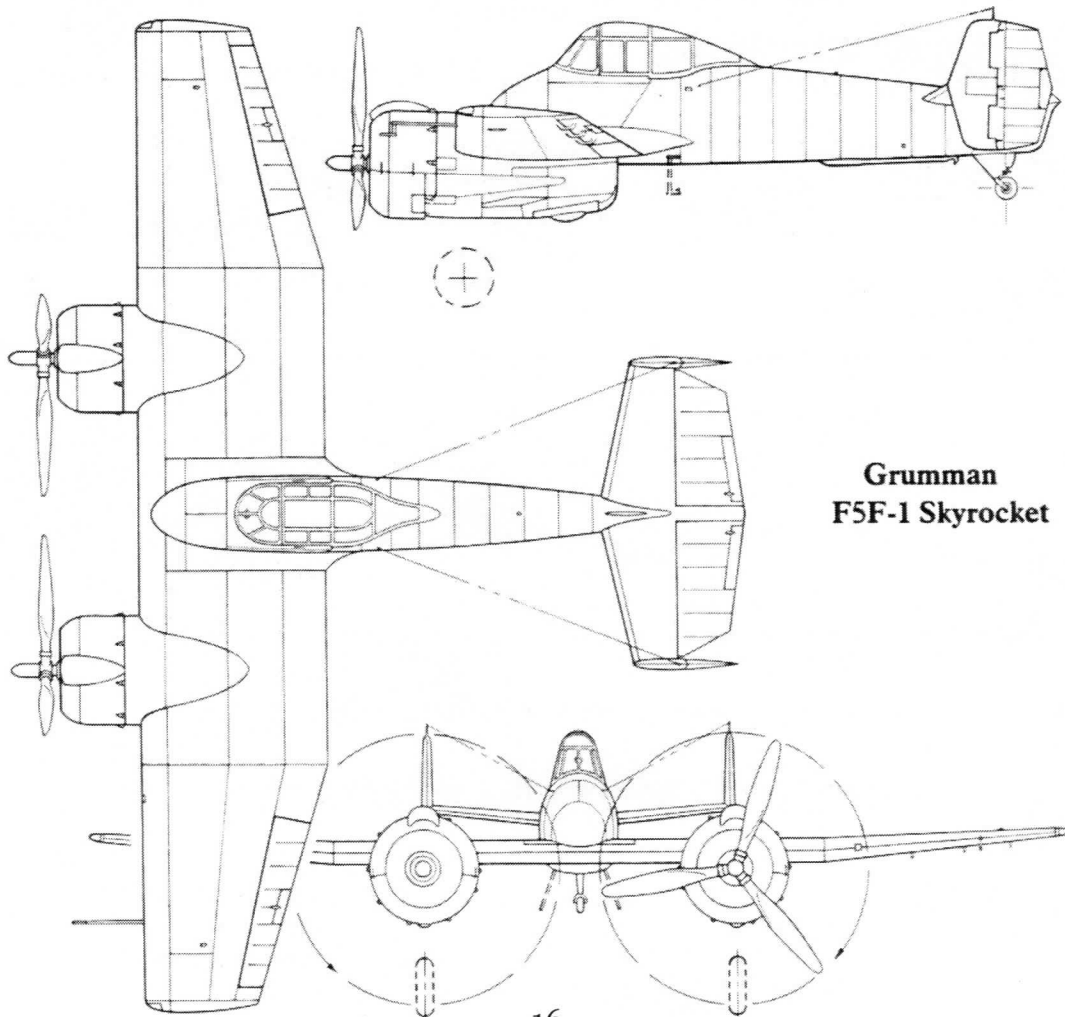
The simplex airfoil template makes ribs of any chord length with exactly the same shape and % thickness. The program that generates the curve can be set to any thickness, 8% was used here. Feel free to add gussets. The plan shows the trailing edge doubled at the root wing bay, which is slightly longer than the rest, and is the only structural change from the prototype.

The model balances at about the main spar. Really light props are a necessity. The prototype model has balsa props that are less than 3 g for the pair, and tail weight was still needed.

When attaching the tail, lightly glue it at the front only. The prototype needed some shims under the stab to increase the decalage.

All up and balanced the model came in at 17.5 g including 0.3g tail weight. With 16" loops of 3/32" rubber weight, the weight is 21.5 g. With almost 50 sq" of area, and most of that area "blown" by the two 5" props, the Skyrocket is a gentle stable flyer.

-PK



Grumman
F5F-1 Skyrocket

CREATING THE NOSE SECTION OF THE IAR-80

Robert N. Martin, Ph.D.

The plan I used to build this model was developed by **Octavian Aldea**. The nose section of the plan is shown in **Figure 1**. The nose is made up of five sections. The forward laminated sections, N-1 and N-2, are circular in shape and lend themselves to spinning on a lathe or drill press. Laminated section N-3 begins as a circle where it connects to N-2 but transitions to an oval shape with the major axis in the vertical which can be seen when the upper image of the nose is compared to the lower in Fig. 1. Section N-4 and the laminated filler section, N-5, are oval in shape and allow the nose to connect to the remainder of the fuselage which is also oval in cross-section.

For N-1, I used multiple pieces of balsa to match the 9/16" (1.4 cm) depth and a 1/4 inch dowel to create the lamination form. In the end of the dowel which would not be in the drill press chuck, I drilled a centering hole which would fit on the spike of the vertical lathe base (**Figure 3**).

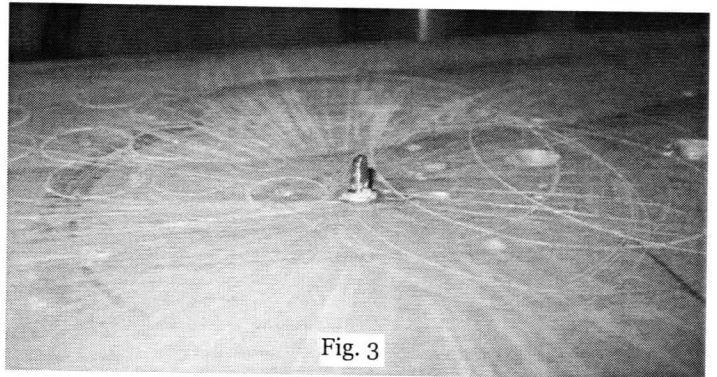


Fig. 3

The outer surface of the lamination form was waxed with beeswax to ease the removal of N-1 when finished. The seven layers of 1/16" balsa were boiled and then glued and secured to the lamination form. After the glue had cured the front and rear of N-1 were then shaped per the plan. The laminating form for N-1 was then removed and placed back into N-1 from the front so N-2 could be mounted. N-2 was made of three 1/16" flat sheets glued together. Each of the sheets had been cut with a circle cutter to approximately the outside diameter of N-2. The circle cutter was then used to cut out the center where the removable motor mount would be located. A 1/64" plywood 'donut' piece was glued to the front of N-2. This piece of plywood is used to align the motor mount to the nose of the model. The N-2 assembly was centered and glued to the back of N-1. The combined assembly was then mounted on the drill press and sanded to the appropriate diameter.

For section N-3, three copies of the template were used to create the lamination form. These templates were glued to 1/4 inch dowel with one template at each end and the third in the middle. As with the lamination form for N-1 a centering hole was drilled in the front end of the dowel. Once the five lamination layers had dried, N-3 was placed on the drill press and sanded to the appropriate size as part of the initial shaping of the piece. Section N-3 was then glued to the combined N-1/N-2 nose. Once the glue had cured the final sanding of N-3 could begin (**Figure 4**).

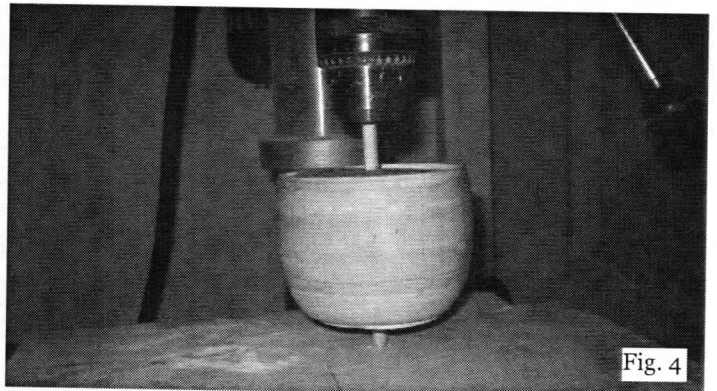


Fig. 4

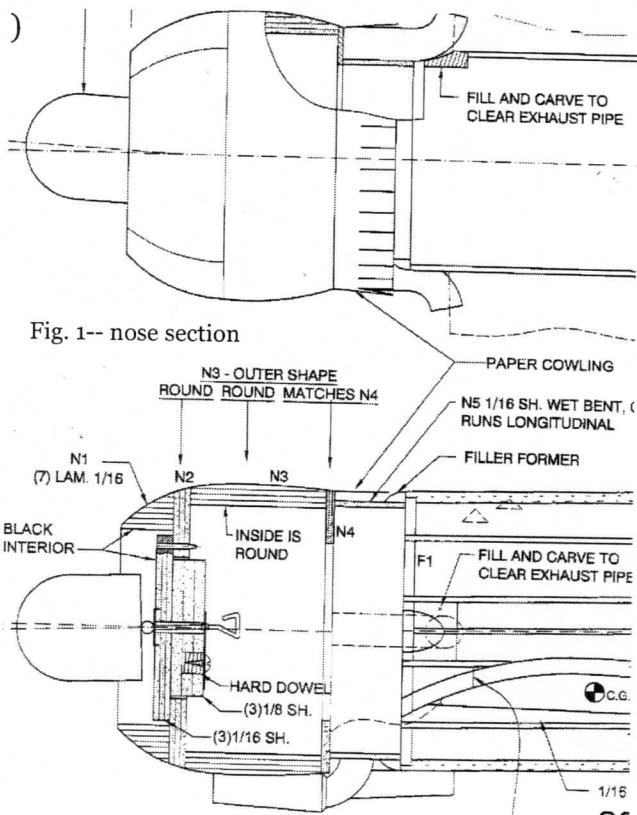


Fig. 1-- nose section

Using the templates from the plan, I created forms for the laminations, see **Figure 2**. I glued the plan templates with UHU to the balsa which gives a firm bond that can be broken with a little water.

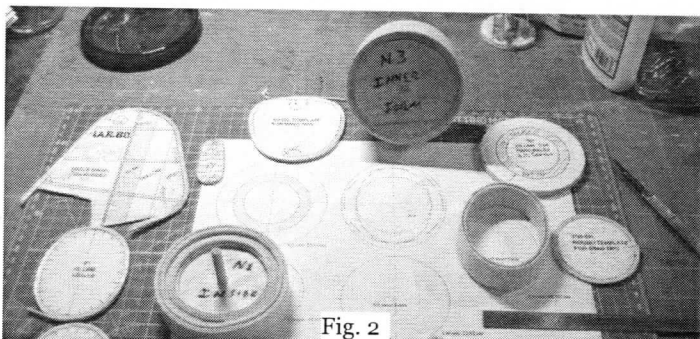


Fig. 2

The two dowels were aligned with the aid of a short piece of bamboo (Figure 5). Since the front half of N-3 is round,

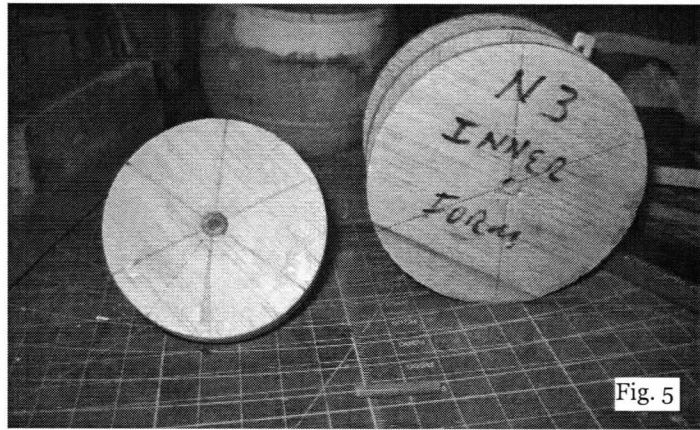


Fig. 5

sanding was relatively easy on the drill press, however since the rear is an oval this became a challenge. To me there were two solutions: sand it round to the major (vertical) axis of the oval or sand it to the minor (horizontal) axis. I chose the latter since by attaching N-4 to the rear of N-3, I would have a guide to applying light-weight spackle on the major axis and then hand sanding the entire rear of N-3. The results with all nose cowling section together can be seen in Figures 6 and 7.

-RM

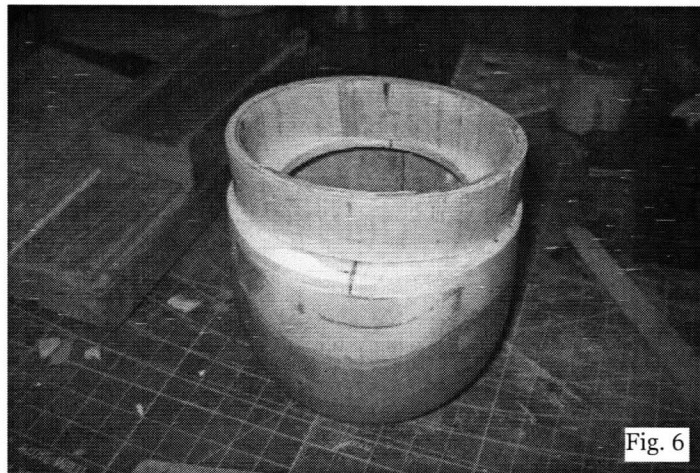
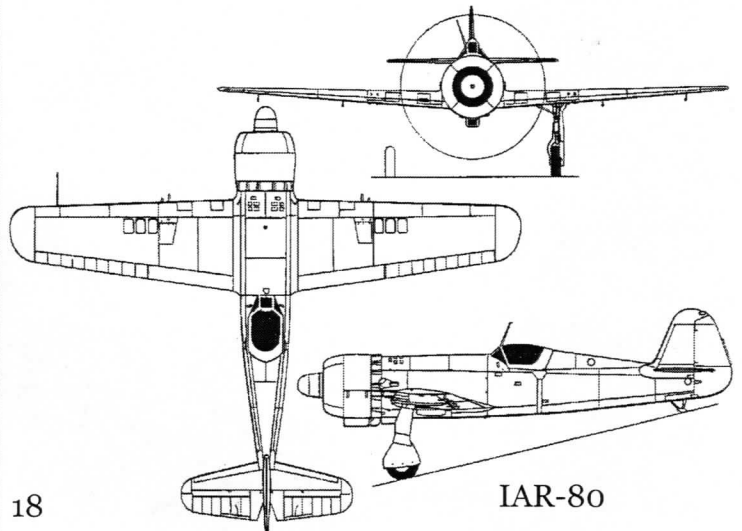
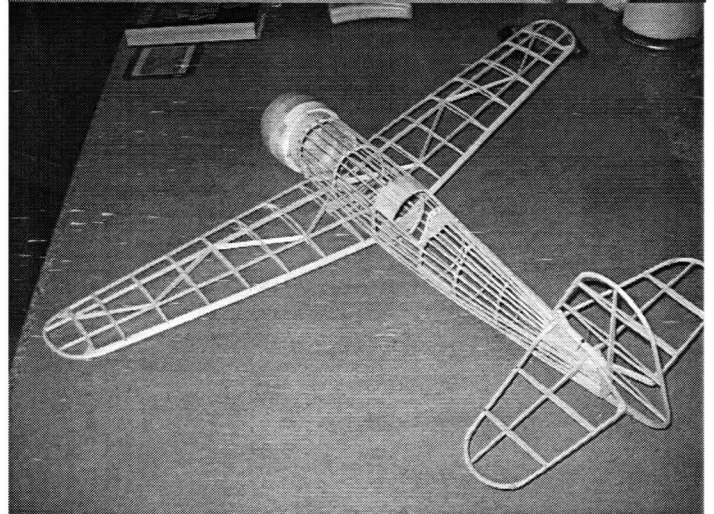
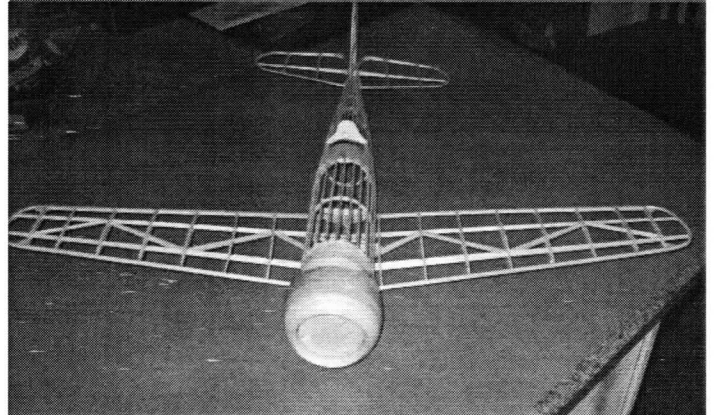
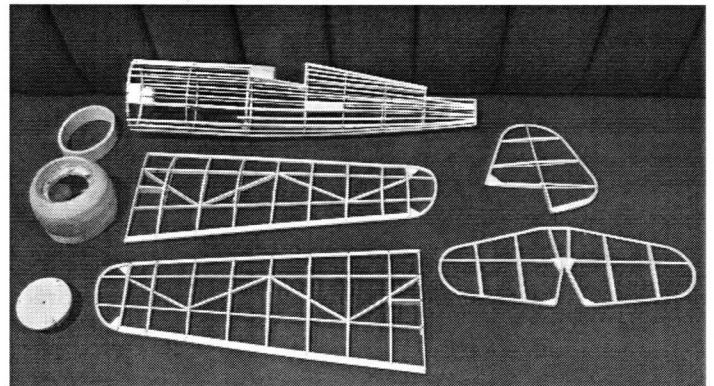


Fig. 6



Fig. 7

Here's three more shots of Robert's IAR bones...nice work!



LUBLINS and SKYROCKETS

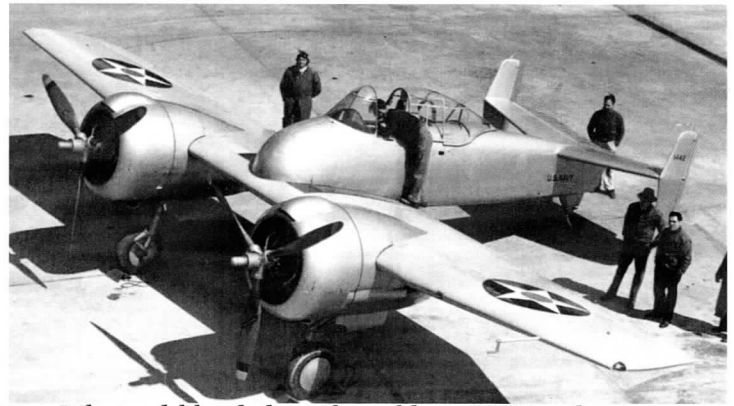


Fly-by view of an R-XIII-D. Note the observers cockpit, LG fairings, Townend cowl, and fairing that runs under the bottom of the nose.



(above) This looks to be an R-XIIIA. The rear fuselage appears flat; an observers cockpit and machine gun have been fitted.

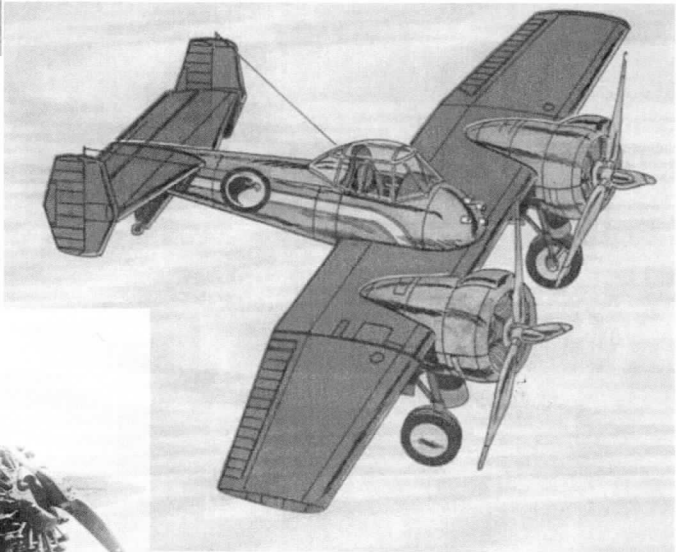
(Below) Excellent view of what appears to be an R-XIII-B--rear fuselage top is rounded, observer's cockpit has been fitted with a defensive machine gun. No Townend ring, LG fairings, or nose fairing. Note the fairly elaborate camo scheme. This image also shows the strut and landing gear arrangements well.



What red-blooded youth could see THIS and not come away with their heart pounding?!? The XF5F-1's fame--was spread largely through the **Blackhawk** comic book series; only one was ever built.



The XP-50, a further development of the XF5F-1 with accomodations for more armament, turbo charged engines, and tricycle landing gear.



(above) "HAWK-A-A-A!!!" No evil could possibly stand up to the noble, relentless attacks of the Blackhawk Squadron! Their XF5F-1s slicing through the skies, Blackhawk and his men fought valiantly to turn back the tide of Nazi aggression. Blackhawk himself was Polish; perhaps he spent some time in a Lublin R-XIII....?

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UPCOMING EVENTS

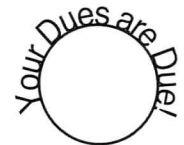
Bauer Community Center – Rockville, MD
Wednesdays during school year 12:45-2:15 – FF,
Light RC

Bykota Community Center, Towson, MD –
Fridays 6:00 – 9:00 FF and Light RC

Highland Springs HS indoor meet
Jan. 20, 2019 Richmond, Va

National Building Museum Indoor Meet
March 24, 2019

Spring Kudzu Contest
Raeford, NC; May 18-19, 2019



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Go to **www.dcmexcuter.org** and click on
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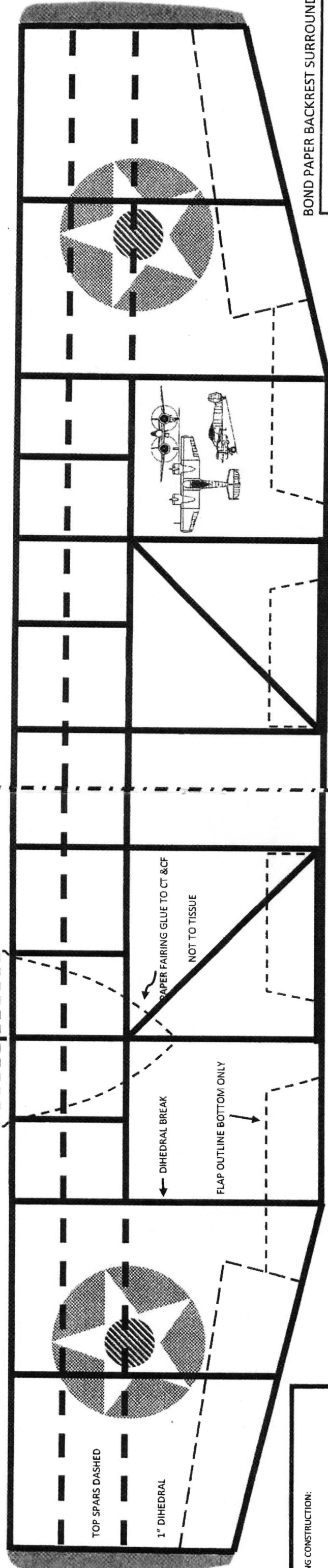


Florence Leontine Lowe "Pancho" Barnes (1901-1975) began her aviation career in 1928, when she soloed after just six hours of instruction. Two years later she competed in the Women's Air Derby cross-country race and set a new women's air speed record in her Travel Air R Mystery Ship. She was the founder of the Associated Motion Picture Pilots union of aerial stunt fliers. Born into a wealthy family, her fortunes were devastated by the Great Depression; she sold everything she had and in 1935 opened the Happy Bottom Flying Club in the Mojave desert near Muroc Field. The club was the favorite hangout of a "who's who" list of illustrious test pilots of the era, until the USAF decided it needed her land for a proposed runway. Mystery, arson and political intrigue followed...https://en.wikipedia.org/wiki/Pancho_Barnes

TIP

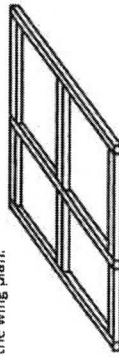
TOP SPARS DASHED

1" DIHEDRAL



WING CONSTRUCTION:

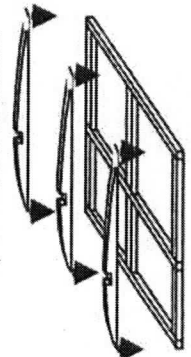
Build a "ladder" frame of 1/16" sq sticks on the wing plan.



Cut cap ribs to the full chord at each rib location using the Simplex AF template, which gives the exact same shape and % thickness for any chord length.



Notch the cap ribs and install on the frame.



The cap ribs overlap the leading and trailing edges.

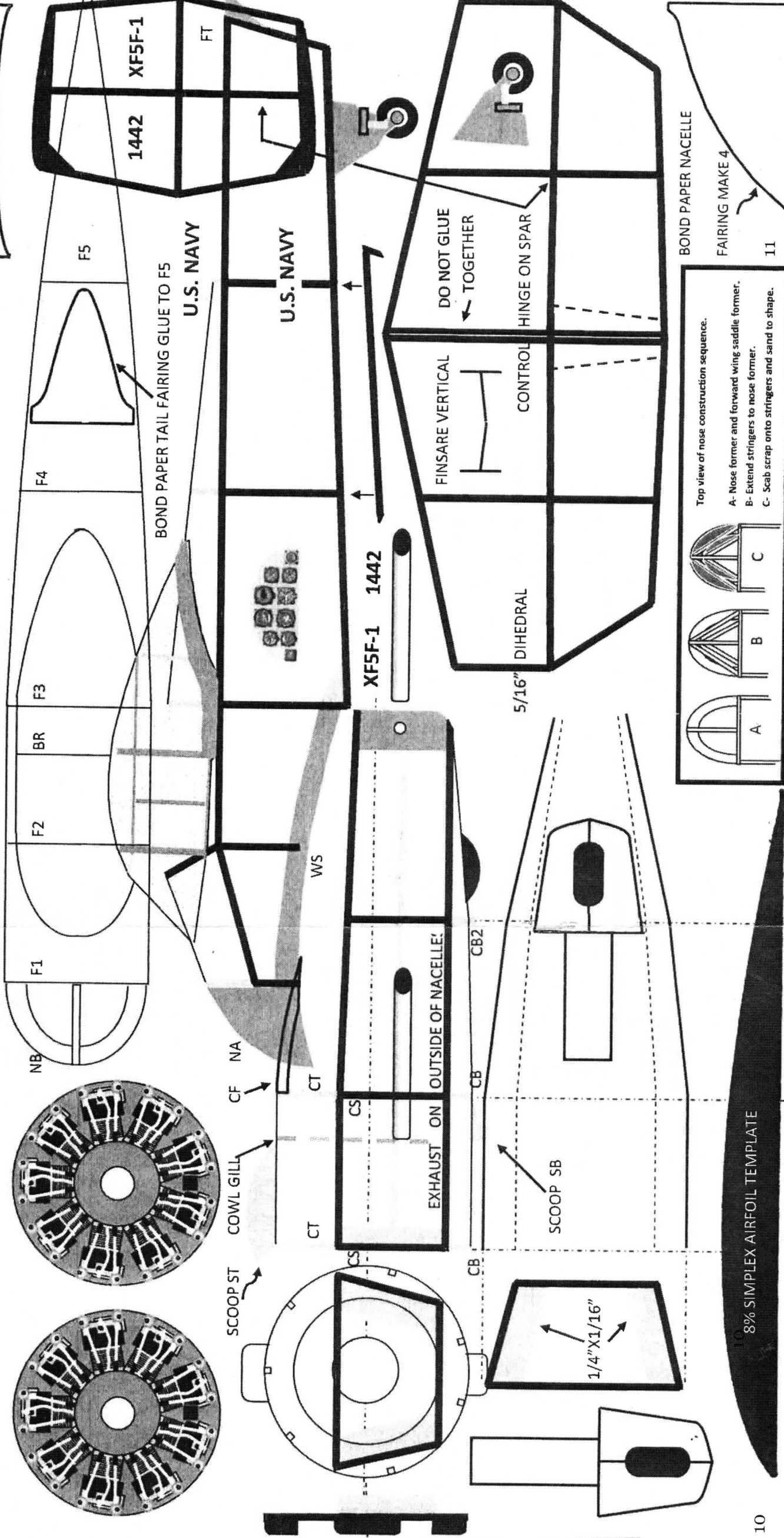


Attach the top surface tissue to the front face of the leading edge and the rear face of the trailing edge.



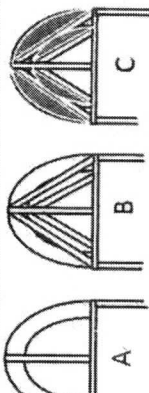
GRUMMAN XF5F-1 SKYROCKET BuNo 1442
1940 Interceptor Prototype, two 1200 Hp Cyclones, 383 MPH & 4000 ft/min climb

Neo-Dime Scale, 16" span, 12" length
Design & Dwg by P. Kaiteris Nov 2018

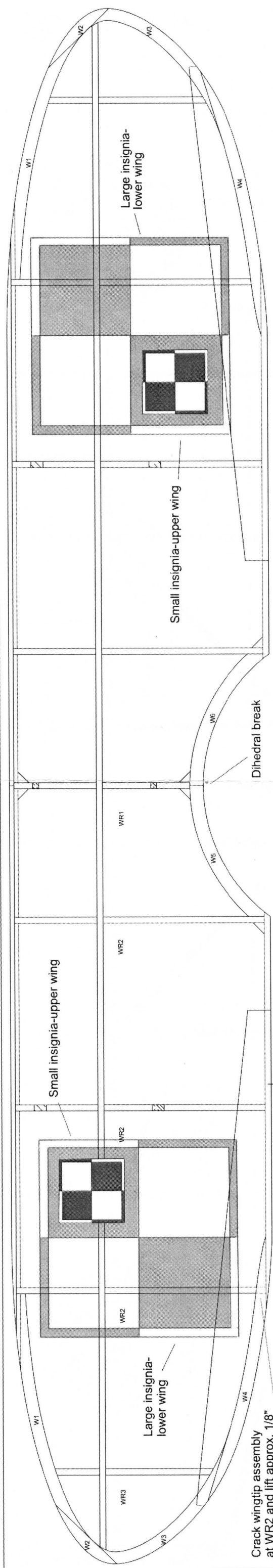


Top view of nose construction sequence.

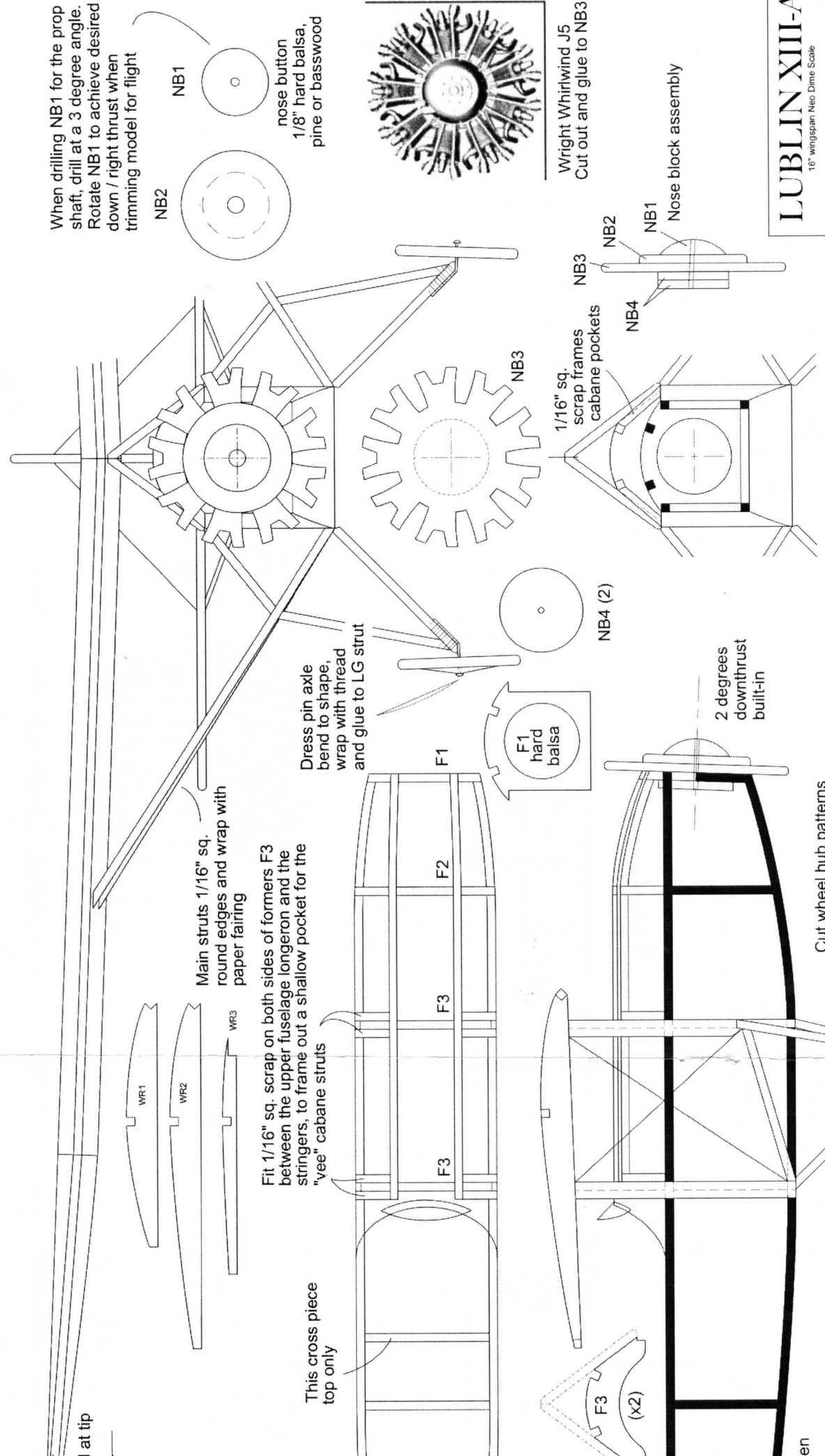
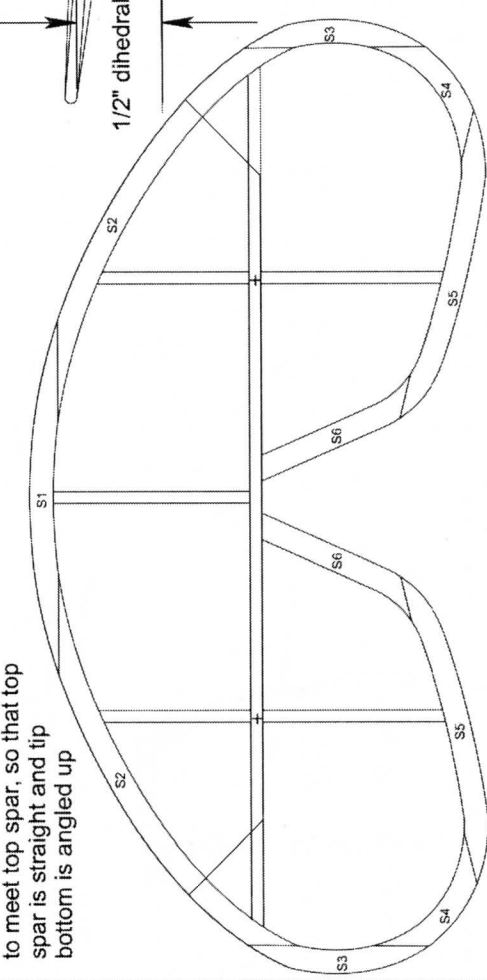
- Nose former and forward wing saddle former.
- Extend stringers to nose former.
- Scab scrap onto stringers and sand to shape.



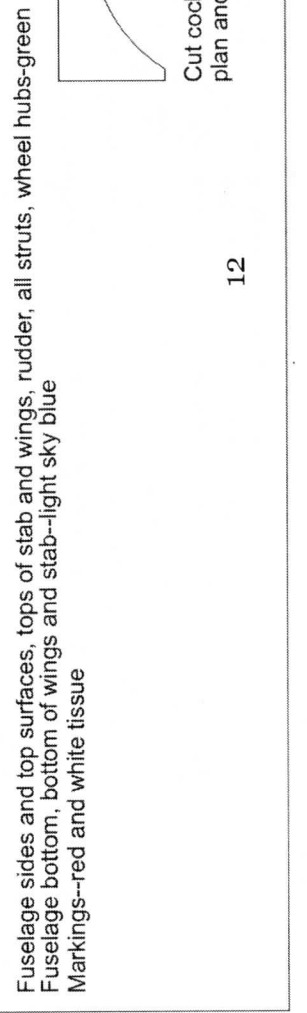
BOND PAPER NACELLE
FAIRING MAKE 4
11



Crack wingtip assembly at WR2 and lift approx. 1/8" to meet top spar, so that top spar is straight and tip bottom is angled up



When drilling NB1 for the prop shaft, drill at a 3 degree angle. Rotate NB1 to achieve desired down / right thrust when trimming model for flight

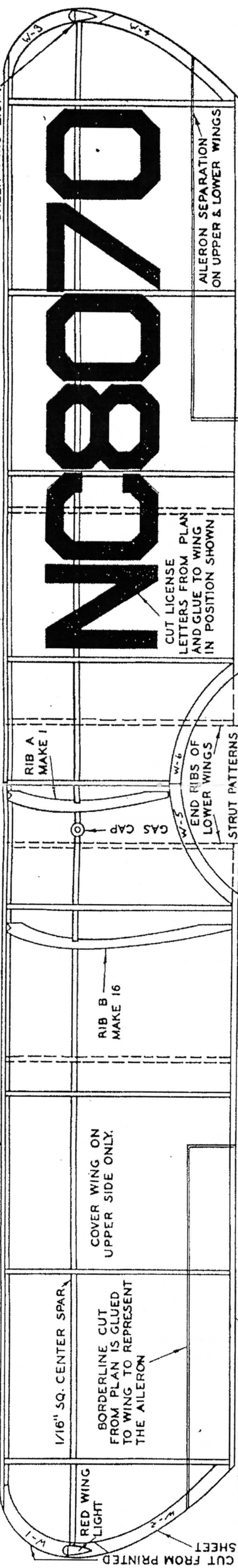


Fuselage sides and top surfaces, tops of stab and wings, rudder, all struts, wheel hubs-green
Fuselage bottom, bottom of wings and stab--light sky blue
Markings--red and white tissue

LUBLIN XIII-A
16" Wingspan Neo Dime Scale
MAXECUTTERS
Designed and flown by Dave Minkoff 2018

1/16" SQ. Balsa Leading Edge

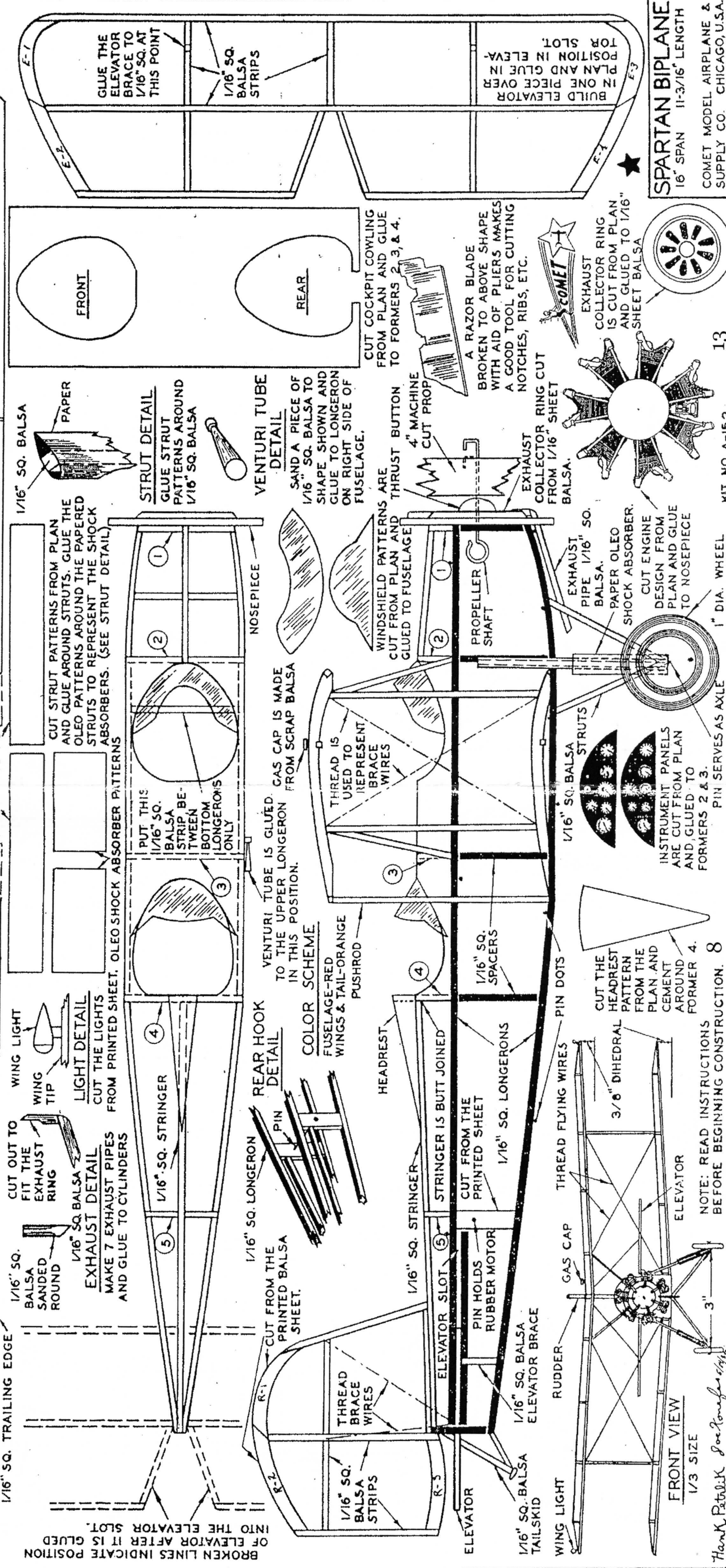
Green Wing Light



N88070

CUT LICENSE LETTERS FROM PLAN AND GLUE TO WING IN POSITION SHOWN

AILERON SEPARATION ON UPPER & LOWER WINGS



BROKEN LINES INDICATE POSITION OF ELEVATOR AFTER IT IS GLUED INTO THE ELEVATOR SLOT.

SPARTAN BIPLANE
16" SPAN 11-3/16" LENGTH
COMET MODEL AIRPLANE & SUPPLY CO. CHICAGO, U.S.A.

KIT NO. A-152 13

NOTE: READ INSTRUCTIONS BEFORE BEGINNING CONSTRUCTION. 8

Front View 1/3 Size

Handwritten signature: Hank Petrick

VICKERS VULCAN P-NUT
 BY PRES BRUNING
 11/7/81 REF. AEROPHANE
 MONTHLY OCT '81

