

MAX FAX

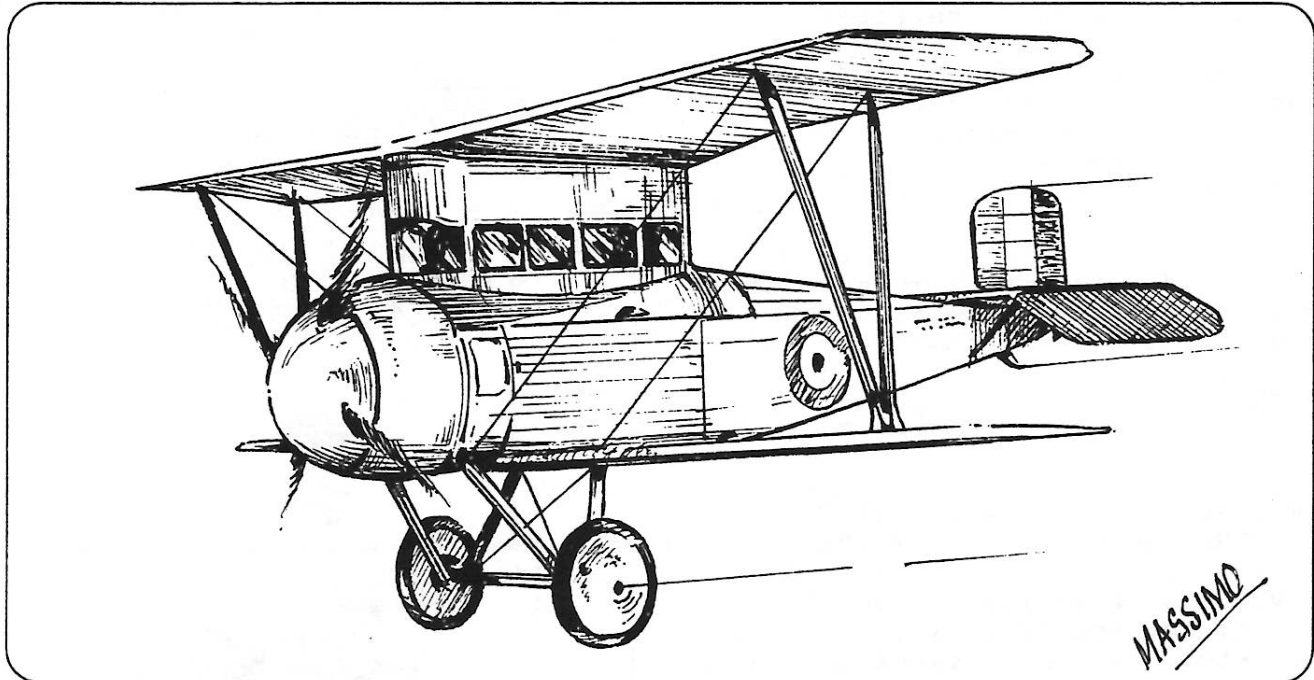


Journal of the D. C. Maxcuters

...home of the dreaded POTOMAC PURSUIT SQUADRON of the Flying Aces Club

EDITOR: BILL CERESA

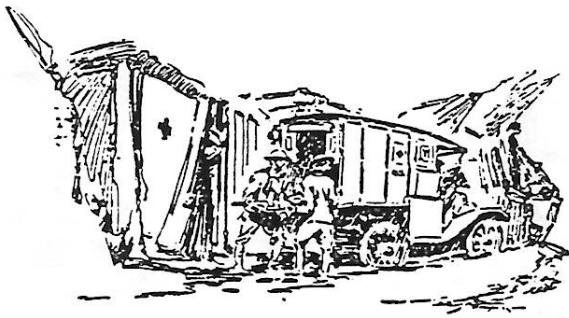
May — June 1995



COMING ATTRACTIONS

IMPORTANT NOTICE:: BECAUSE THE JULY CLUB MEETING FALLS ON THE 4th OF JULY, THAT MEETING WILL BE HELD ON JUNE 27th INSTEAD.

- MAY 14 OLD TIME RUBBER-Mini-Contest at COMSAT. FAC rules.
- MAY 28 TEN CENT KIT SCALE-Mini-Contest at COMSAT.(20" wingspan Max.)
- MAY 31 US INDOOR CHAMPIONSHIP (AAAA)-Johnson City, TN. Contact Roy White,
JUNE 1025 Cedar St. Catawissa MO. Phone; (314)271-2243.
1-2-3-4
- JUNE 11 SCALE BIPLANE EVENT-Mini-Contest at COMSAT.
- JUNE 25 RACERS-Mini-Contest at COMSAT. All Racers eligible.
- JULY 9 OLD TIME GAS ELECTRIC-Mini-Contest at COMSAT. Great fun for all.
- JULY 15/16 FAC FUN FLY-Sponsored by FAC, GHQ & Bay State Squadron, FAC.,
at Geneseo NY. Contact Lin Reichel (814)833-0314.
- JULY 23 WORLD WAR II-Mini-Contest at COMSAT.
- AUG 6 SCALE PROFILE CATAPULT GLIDER-Mini-Contest at COMSAT.
- AUG 20 EMBRYO-Mini-Contest at COMSAT. FAC rules will be used.
- SEPT 9 MAXECUTERS SUMMER FUN FLY-at COMSAT, 9AM-5PM. Contact Alan Schanzle,
20008 Spur Hill Dr. Gaithersburg MD, 20879. Phone: (301)833-5884.



"SWITCH ON".....

The editor of this issue is your "World War" buff, Bill Ceresa. It is done by 1914 standards, no computers, scanners, laser printers, etc., just my trusty typewriter and the good old "Hunt & Peck" system. Even though I may never be able to capture and convey to you, the feeling of a forward airdrome, somewhere in France, as the aircraft engines are cranked up, and the smell of castor oil hangs heavy in the air... close your eyes and concentrate on that forward airdrome, somewhere in France, place this issue close to your nose and you may smell the faint odor of the "3 in 1" oil I used to lubricate my typewriter, prior to doing this issue....."CONTACT"....

"OVER THERE, OVER THERE, SEND THE WORD, SEND THE WORD, OVER THERE"..

Well as you might have guessed by now, this is an issue about WWI aircraft. Not Fokker DVII's, Spad's, SE5's, etc., but about experimental or obscure aircraft of that period.

Our feature plan is just such a subject....the "SAGE Type 2". It is a neat plan by one of our members, Dr. Harvey Pastel. I first saw the model in 1991 at the FAC Fun Fly in Geneseo. Dr. Pastel was kind enough to send me the plan to complete a set to publish in a future issue of MAX-FAX's. Like many projects I tackle, time passed, and passed, until a few months ago, when I finally stopped procrastinating and did it. My apologies to Dr. Pastel for the long delay. The original model is rubber powered, but I believe it would be perfect for a Hi-Line Mini 6 electric.

This issue also contains 3-views of some experimental and obscure aircraft of WWI for those of you adventurous enough to tackle such a project. Be the first on your block to have an airplane that

will be unknown to most of your fellow modellers.

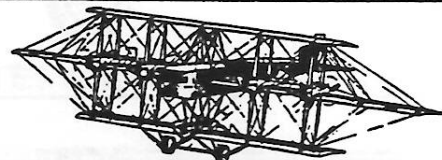
Do you know who invented the first Air-to Air rocket?.....well, this issue contains the information about it's inventor and his rockets, Sub Lt. Yves Le Prieur. I found the story interesting and informative and I hope you will to.

Please excuse any errors in this Newsletter such as spelling, bad punctuation, repetitive words, but English was never one of my strong points. Correct any errors you find mentally and enjoy...."AND WE WON'T COME BACK, TILL IT'S OVER, OVER THERE"

AIRDEVIL MODEL CO.

Planbook

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WW1 AERO (1900-1919) and SKYWAYS (1920-1940)

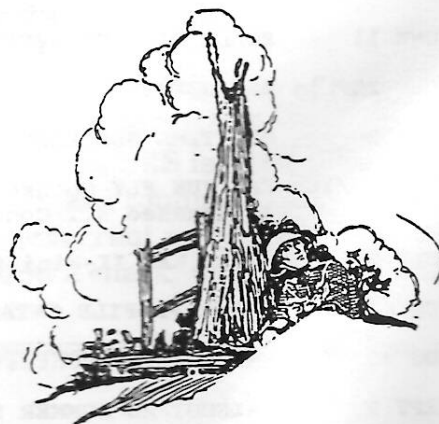
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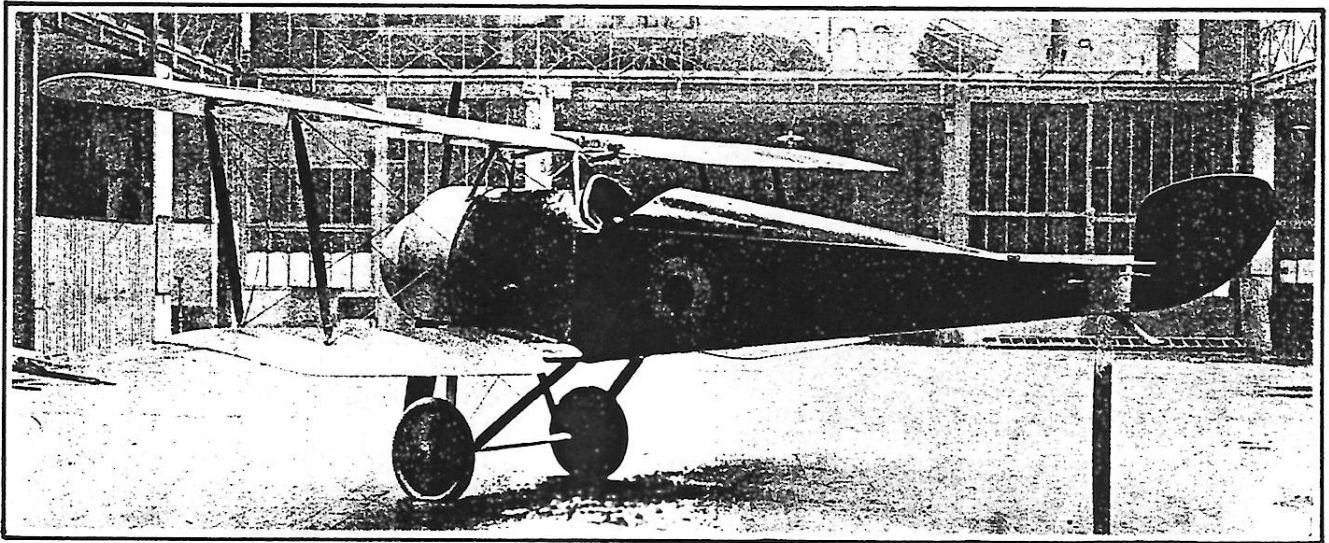
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PONNIER M.1

The Ponnier seems to have been designed in 1915 by Dupont and had an 80 h.p. rotary engine, probably a Gnome or Le Rhone. One source gives its dimensions as being, Span 20.02 ft., Length 19.03 ft., Height 9.189 ft. It was therefore a very small aircraft, smaller than the Nieuport 11.

Some were ordered by the French Government for evaluation, one being test-flown by the famous Nungesser on the 29th of January 1916. He spun it into the ground breaking both legs and his jaw, so it was probably a dangerously unstable design, certainly unsuitable for the average pilot to fly.

During 1916, the Belgians were looking for a readily available single-seater, not being able to get enough Nieuports from France, and Major Louis Tournay, a former Engineers Officer in charge of Belgian aircraft buying, took a chance and ordered some Ponniers. As Willy Coppens later wrote in his book "Days on the Wing", Major Tournay was unfortunate in some of his purchases, notably in connection with the number of Ponnier single-seat fighters that proved unstable, and he rejoined the Engineers.

Later Dupont designed the Hanriot HD-1. The relative obscurity of that great little fighter was partly due to the failure of the Ponnier. There is a certain resemblance between the two planes, and the French could'nt be blamed for thinking that they might finish up with another failure on their hands.

-----W. M. Lamberton

Reference; CROSS & COCKADE, Vol. 3 Number 2, 1963

Note: The Hanriot HD-1 was never produced by the French because at that time the aircraft of choice was the SPAD. However, the Hanriot HD-1 was used with great success by both the Italians and the Belgians. The Italians produced 1,537 Hanriot HD-1's during 1917-1918, and the Belgians, 125. The famous Belgian Ace Willy Coppens, who scored 37 victories, of which 26 were Balloons, attained that score flying a Hanriot HD-1.

THE LE PRIEUR ROCKET

When at the end of 1914, early 1915, the combatants had adapted to trench warfare, positions became very important.

The most valuable source of obtaining such information was the tethered balloon. Both sides employed them. The German balloons were called "Drachen" and initially Allied Forces were unsuccessful in destroying them due to the lack of suitable weapons.

In the Spring of 1915, the French introduced such a weapon, the Le Prieur air-to-air rocket.

The aerial rocket introduced in 1915 was the brain child of a French Naval Officer, Sub-Lt. Le Prieur. His rocket resembled an ordinary sky-rocket. It consisted of 1½ foot casing which contained a warhead and propellant charge. This was mounted on a 3 foot wood-stick to stabilize the rocket in flight. The front of the casing had a cone of wood to which was affixed a triangular knife-blade to penetrate the "Drachen" envelope and ignite the gas within.



A formal portrait of Yves Le Prieur taken some years before World War I. Blessed with an inquisitive mind Le Prieur was responsible for a number of advances in weaponry, fire-control and navigational equipment.



An excellent close-up view of the Le Prieur rockets installed on a Nieuport 11 fighter. Note how the stabilizing wooden stick fitted into the metal launching tube and the rather jury-rigged arrangement of the wiring which ran across the wing to the firing button in the cockpit. Visible on the tip of the rockets is the metal knife-blade which was designed to penetrate the Drachen's envelope. The pilot inspecting the rockets has been identified in previous publications as Norman Prince of the Lafayette Escadrille. (Smithsonian Institution photo, A 48748-2)

The complete package, warhead and stick was fired from metal tubes attached to the outer struts of the aircraft. The rockets, which were fired electrically, were mounted at an upward angle of 17° 30' to compensate for the large gravity drop. Conducting wires were stapled to the wings and connected the rockets to a firing button located in the cockpit. One or two buttons could be fitted, the difference being a full salvo of 8 (1 button), or 2 salvos of 4 (two buttons).

The aircraft most closely associated with these rockets were Nieuport 11, 16, and 17 fighters. Other aircraft, including Sopwith Pups and a Sopwith Camel were used on a limited basis.

The first use against "Drachens" came on the 22 of May, 1916 on the Verdun front. At least 5 balloons were destroyed. One was shot down by Charles Nungesser, the French ace. They were also employed by the British. The British ace Albert Ball first used the Le Prieur rockets on June 26 1916, attacking a German "Drachen". He was spotted by the balloon's crew who began hauling down their charge. Closing to within 16 yards Ball fired all his "darts"- and missed.

It is interesting to note that in Ball's report on that day he mentions the weapon that would eventually replace the Le Prieur rocket-

Buckingham incendiary ammunition. Devised by J. F. Buckingham of Coventry these phosphorous .303 rounds were first introduced in July 1916.

Interesting enough, the Germans had their own version of Le Prieur's rocket. In October 1916 a special Raketentrupp (rocket squad) was dispatched from Berlin to test the rockets operationally on a Halberstadt D.II. The test lasted only two weeks. The Germans felt that such rockets were of limited usefulness.

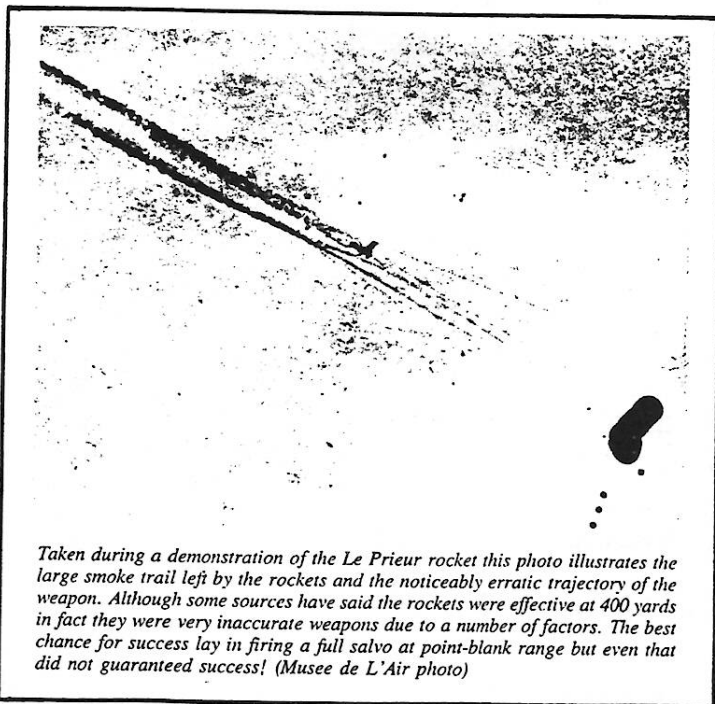
One enterprising German pilot, Lt. Rudolf Nebel of Jasta 5, had better luck with his own home-grown rockets. Using lengths of stovepipe and standard infantry signal rockets Nebel, a former engineer, constructed underwing launchers for his Halberstadt D.II fighter. Nebel scored 2 kills before rocket blast torched the lower wings of his D.II. Nebel crash landed and was later awarded the Iron Cross, First Class for his efforts. Lt. Herman Goering, who submitted a report on Nebel's rockets, suggested they be codenamed Nebelwerfer. Ironically twenty years later, in World War II, Goering's Luftwaffe would adapt infantry Nebewerfer ground to ground rockets for use against American B 17 and B 24 formations!

Though the Le Prieur rockets was met with official indifference, it had its successes.

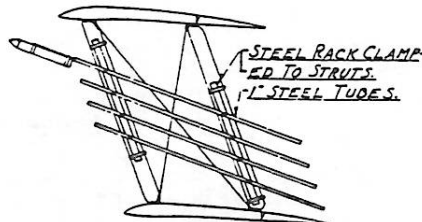


The Le Prieur rocket was only one of many inventions that sprung from the fertile mind of Yves Le Prieur. During his lifetime he was responsible for inventions in a number of fields. Aside from his air-to-air rocket, he made contributions to aerial and maritime navigation, anti aircraft fire control, underwater diving equipment and aerial bombsights.

The drawing enclosed in this article shows how the set-up looked on an aircraft. Although this example is on a Sopwith Camel, the general arrangement of the tubes and rockets are the same on other aircraft. The other drawing shows the wiring diagram and aiming device.



Taken during a demonstration of the Le Prieur rocket this photo illustrates the large smoke trail left by the rockets and the noticeably erratic trajectory of the weapon. Although some sources have said the rockets were effective at 400 yards in fact they were very inaccurate weapons due to a number of factors. The best chance for success lay in firing a full salvo at point-blank range but even that did not guaranteed success! (Musee de L'Air photo)



LE PRIEUR ROCKET TUBES ON PROTOTYPE

So all you adventurous modelers of WW I aircraft, equip your Nieuport 11, 16 or 17 with a set of Le Prieur rockets.

LE PRIEUR ROCKET SYSTEM.

Fig 154.

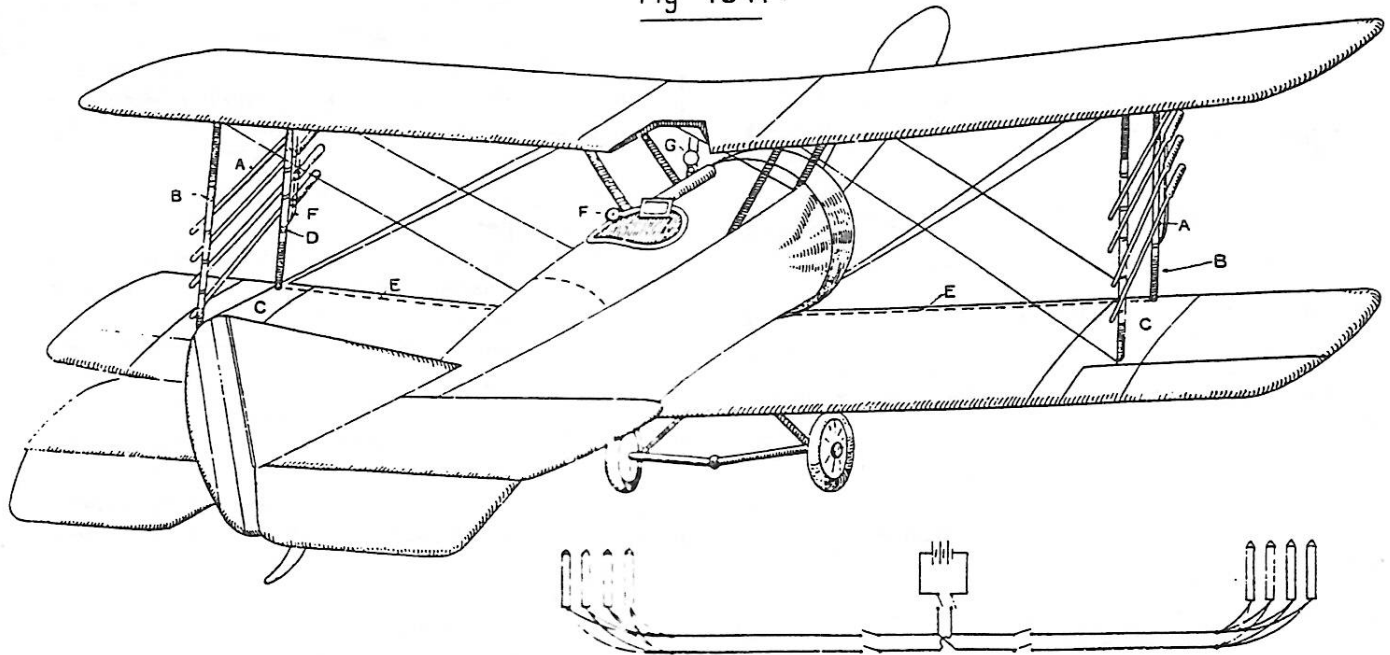


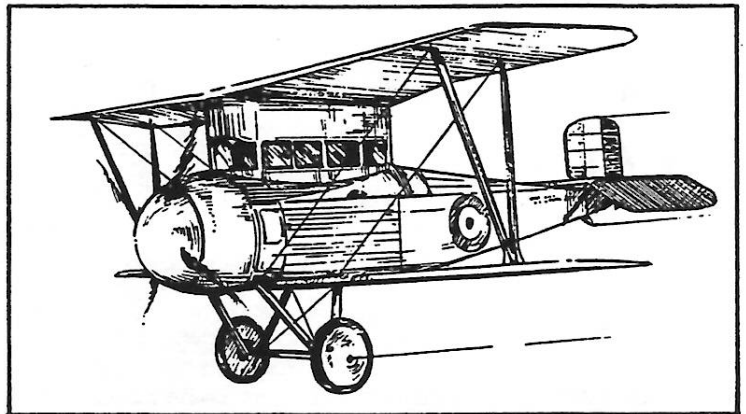
DIAGRAM OF CONNECTIONS.

An official diagram showing the proper installation of eight Le Prieur rockets on an Allied fighter. In this view the rockets have been fitted in their launching tubes (A). To protect the struts from the rockets' exhaust apparently wire was to be wrapped around the strut near the top and bottom (B) while sheeting protected the upper surface of the lower wing (C). Although the diagram doesn't show this long metal strips were bolted on to the outside of the struts, the launching tubes resting in four "O"-shaped holes. Wires (E) ran across the lower wing, connecting the rockets with the firing switch in the cockpit. The Le Prieurs were fired using a two-sight system (F, G) which used the diameter of an observation balloon as a firing guide. (H. M. Stationery Office)

NOTE: The photos and text used are excerpts from an article by Mike O'Connor and appeared in the Summer, 1987 issue of **OVER THE FRONT**, a publication of "The League of World War I Aviation Historians".

SAGE Type 2

The SAGE Type 2 was designed by Clifford W. Tinson and built by the Frederick Sage & Co. Ltd. The SAGE Type 2 was intended to be a fighter aircraft. At the time of its design, no synchronization gear was available, so all armament had to be able to fire over the propeller arc. In this aircraft the crew sat in a fully glazed pylon cabin that supported the upper wing. A hole was cut in the center section of the upper wing to allow the Observer to stand upright and wield a Lewis machine gun fitted to the surface of the upper wing near the trailing edge and fire the machine gun in almost all directions. The aircraft first flew on the 10th of August, 1916. Although its performance was quite good, no attempt was made to develop the design further and the project abandoned.



GoldenAge
REPRODUCTIONS



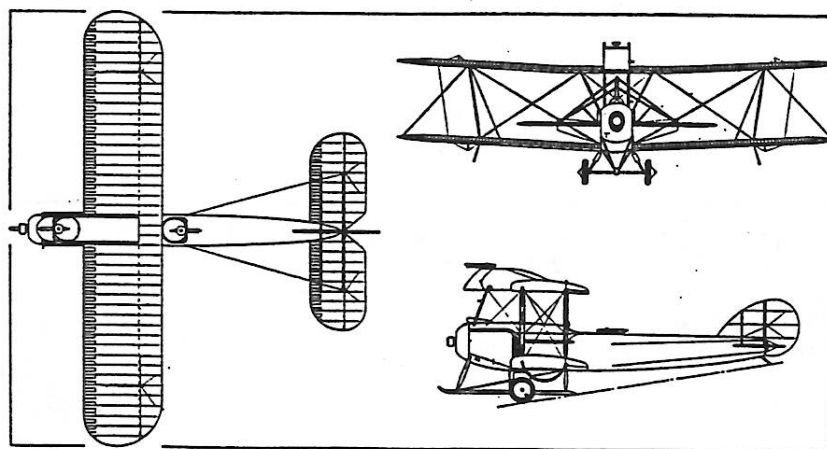
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JOE WACHTER---Our club recently received a letter from Mary Wachter, Joe's sister, informing us of his death, which occurred very suddenly in early October, 1994. Joe had been receiving our newsletter for a number of years, and corresponded with a number of our members. He was an avid scale modeler and will be missed by the modeling community. The D.C. MAX-ECUTERS wish to extend our deepest sympathy to his family for their loss.

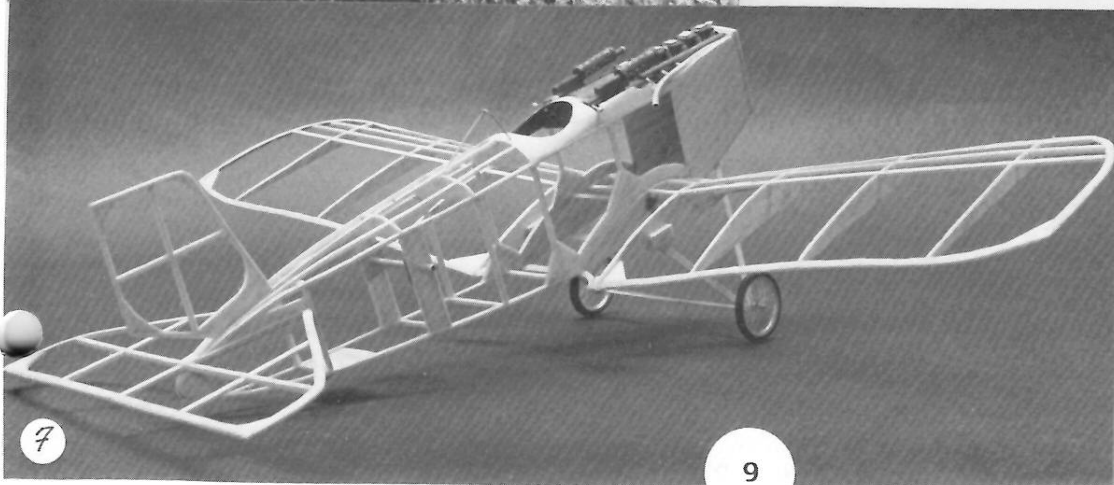
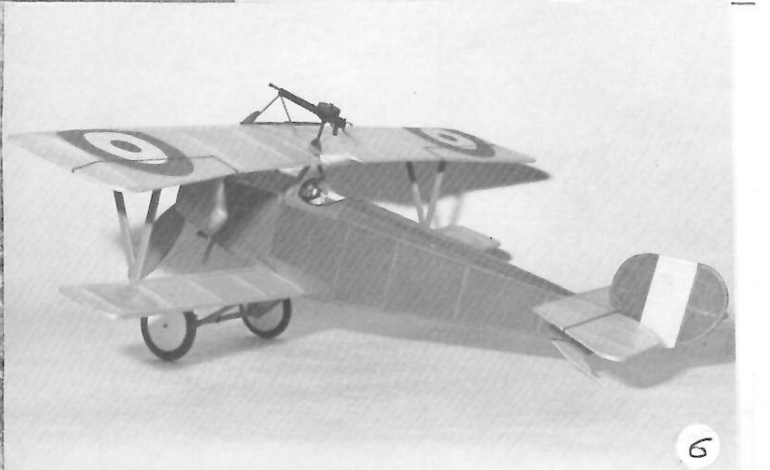
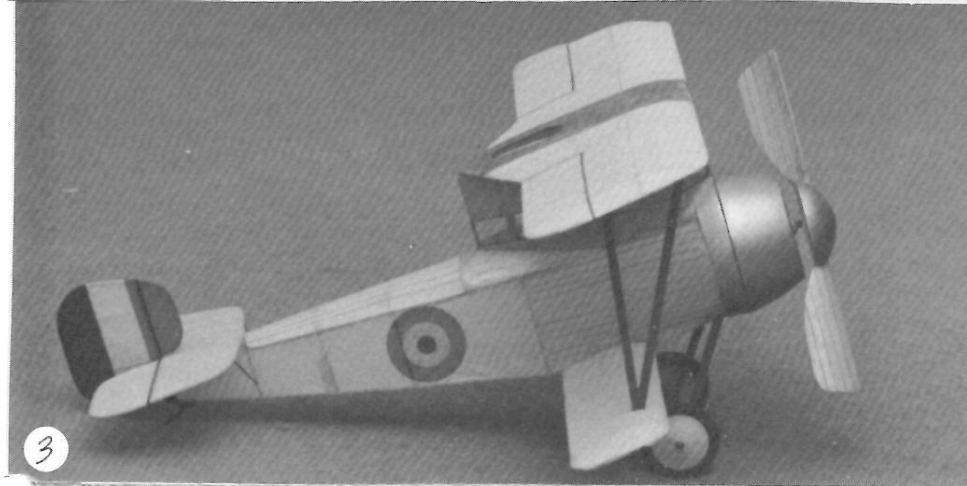
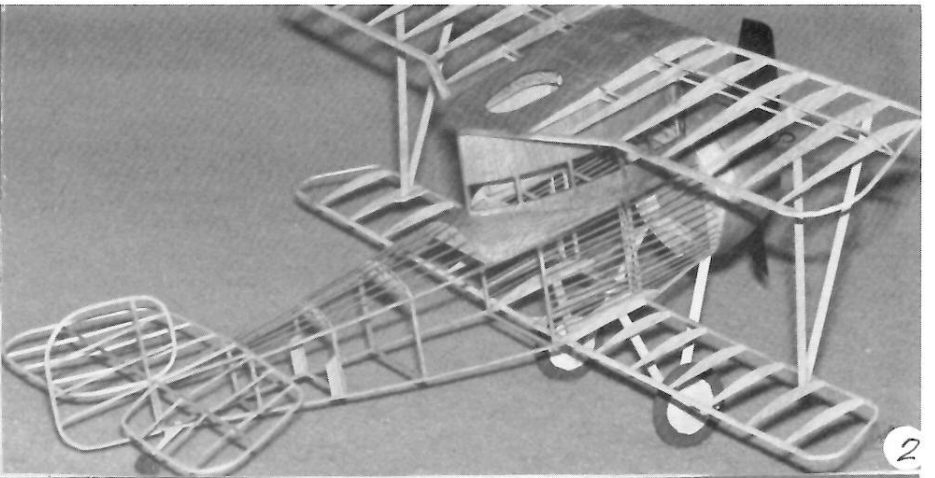
PHOTO PAGES - WWI REVIEW

1. Our Editor for this issue, Bill Ceresa, without a WWI model.
2. The featured plan for this MAX-FAX is the SAGE fighter by Harvey Pastel.
3. Another view of the SAGE with it's bones covered; both photos by Harvey.
4. Jiro Sugimoto sent us this shot of his petite PEANUT Fokker triplane.
5. Another Fokker from Bob Schlosberg, this time a DVII from a Megow/Vintage Aero plan with a 24 inch span.
6. Remember Dan Driscoll's nifty Nieuport a victim of conversion to CO2 and then electric without success either way.
7. A fine example of four-pound balsa construction, Allan Schanzle's Junker.
8. Genial Joe Wachter one of our friends in the SOTS is no longer with us; if you receive the CLOUDBUSTER'S newsletter please see their fine epitaph concerning Joe.



VICKER F.B. 11

It was a three-place aircraft apparently intended as an escort fighter or anti-patrol aircraft. Besides the pilot, two gunners positions were provided, one in an elevated pulpit located on the center-section of the upper wing. It was designed in 1916 and after two were built the design was abandoned. It was the advent of the synchronization gear for firing the machine-gun through the propeller, which offered much greater operational potential of aircraft that sealed it's demise. One aircraft continued to be flown for a time, but crashed and was completely wrecked.



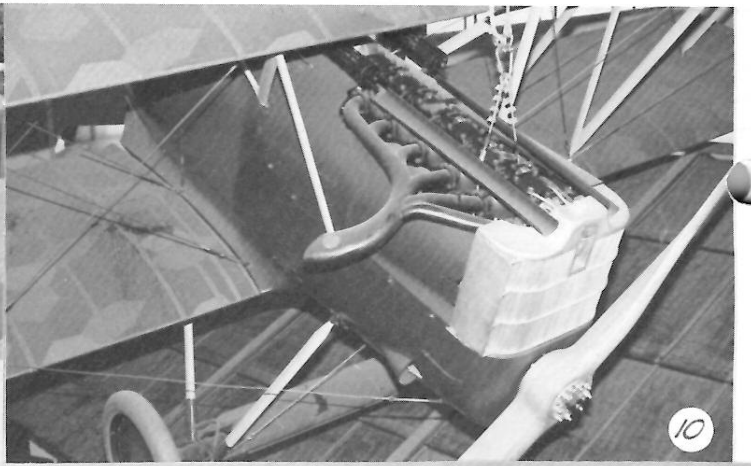
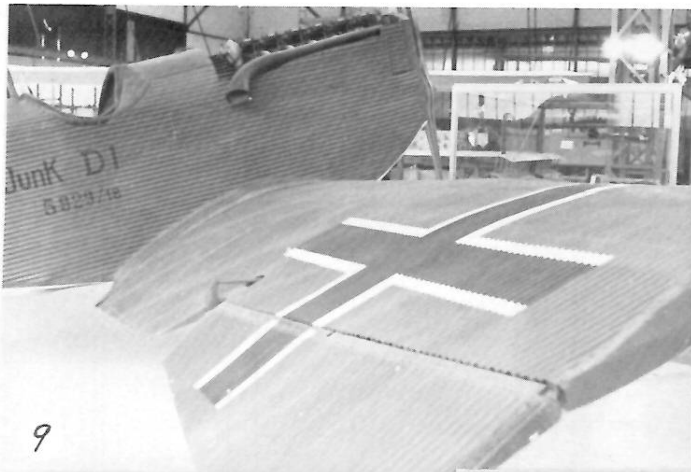


PHOTO PAGES -WWI REVIEW

9. The Junkers DI in the Paris Air Museum.
10. Another WWI aircraft in the museum, a Pfalz; photo by Glen SImpers.
11. Pat Dally winding his Fokker DVII, Rich Hensel holding; where are you Rich?
12. Remember Pat's beautiful CO2 Ansaldo lost in the wilds of Raeford.
13. Build this Grain Kitten for the Don Srull event at Raeford this fall.
14. Our Raeford connection, Tom Odum with his Euler.
15. Another example of Pat's artistry, his Austrian Albatros.
16. Claude Powell seen launching his DH-5, a seldom modelled WWI aircraft.



READING INDOOR AIR RACES SATURDAY MAY 6, 1995 - 9AM to 4PM DKI HANGAR - READING AIRPORT - READING, PA

EVENTS FLOWN ALL DAY MASS LAUNCH EVENTS **

FAC SCALE	PEANUT	11AM
COCONUT SCALE****	WORLD WAR I	12PM
GOLDEN AGE SCALE*	POST WWI MILITARY	1PM
5 GM NO-CAL	COCONUT	2PM
10 GM BOSTONIAN	NO-CAL	3PM
HARVEY WALLBANGER***	BOSTONIAN	3:30PM

FAC RULES - JUDGING STARTS AT 10:30AM TROPHIES AWARDED THROUGH THIRD PLACE

- ***** TOTAL OF THREE OFFICIAL FLIGHTS IS SCORE - WINGSPAN UNDER 36"
 **** ONE MASS LAUNCH PER AIRCRAFT
 *** HARVEY WALLBANGER AWARD GOES TO FLYER WITH ATTITUDE
 ***** WINGSPAN 36" AND OVER FOR MONOPLANES, 30" AND OVER FOR BIPLANES

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FABRICATING WWI TYPE AIRCRAFT WHEELS

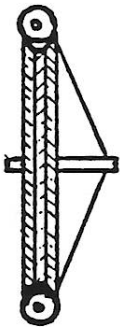


Fig. 1

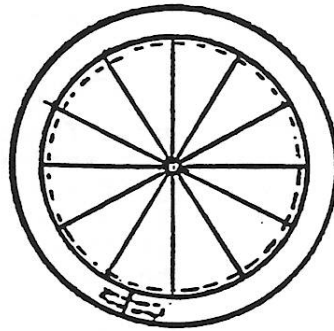


Fig. 2

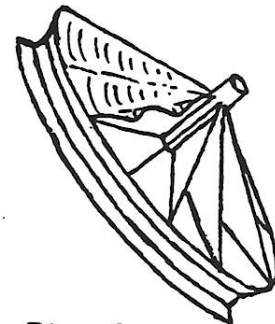
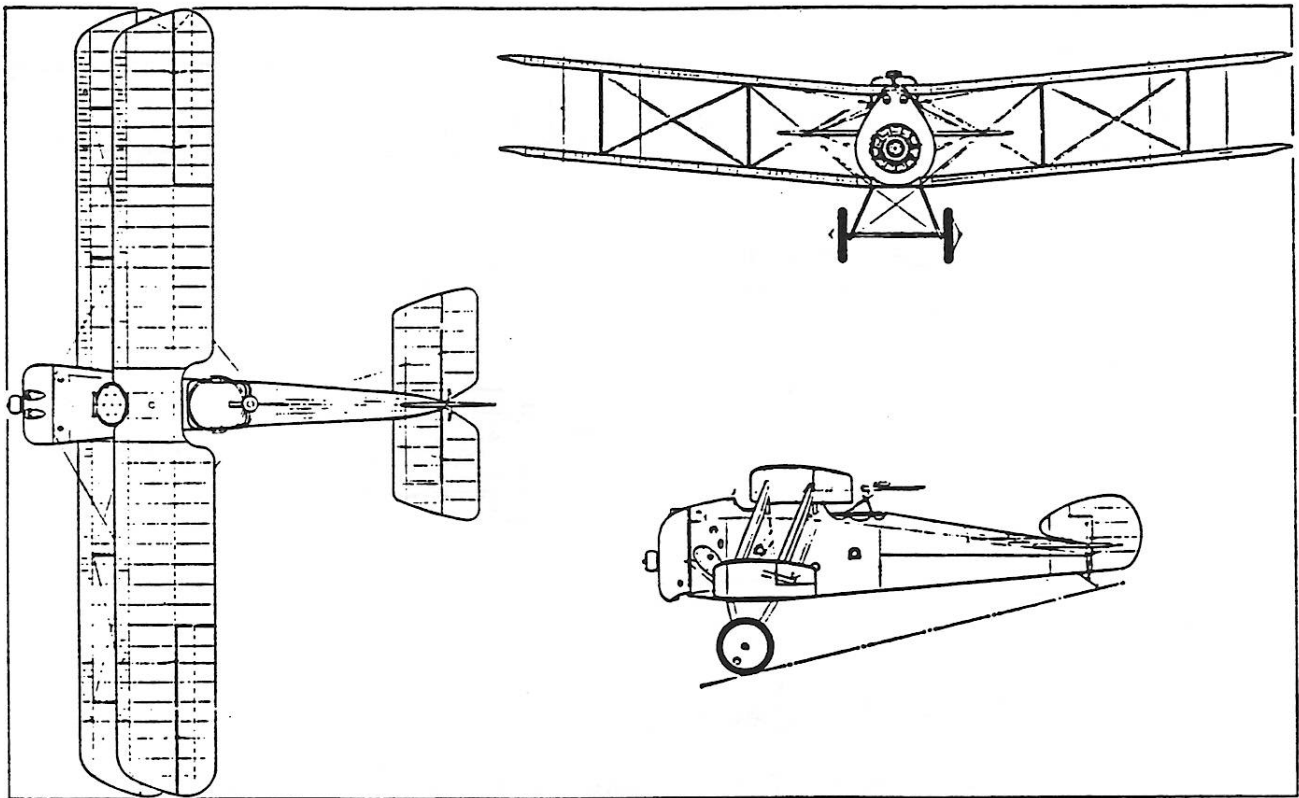


Fig. 3

No dimensions are given as the idea can be adapted to any scale. The basic wheel is constructed of three layers of wood sheet with center slightly smaller in diameter and outside layers beveled as in Fig. 1. Spoke arrangement is made of pieces of thin wood sheet or strong card stock shaped as right triangles and extending from axle bushing to outer circumference of wheel. (see Fig. 1). Bearing is a length of aluminum or brass tubing. Finished wheel is covered with silk, nylon or tissue and doped in the usual manner prior to mounting the tire. (see Fig. 3).

Tire is black rubber tubing, obtainable in a wide range of sizes from model shops and auto supply parts suppliers. It is held together with a curved piece of tubing or wire slightly larger than the inside diameter of the tubing so that a force fit is effected (see Fig. 2). This joint should also be sealed with a good grade of rubber cement.

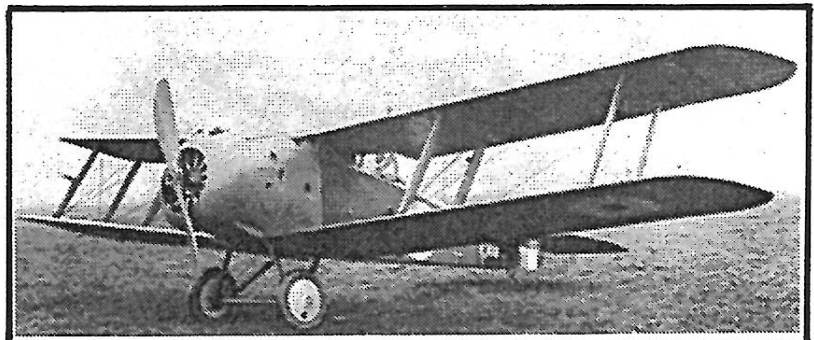
NOTE: This modelers "TIP", was presented in the Summer 1962 issue of "CROSS & COCKADE". It's author is the well known Earl VanGorder, editor of "Flying things for Fledglings", published every month in "FLYING MODELS".

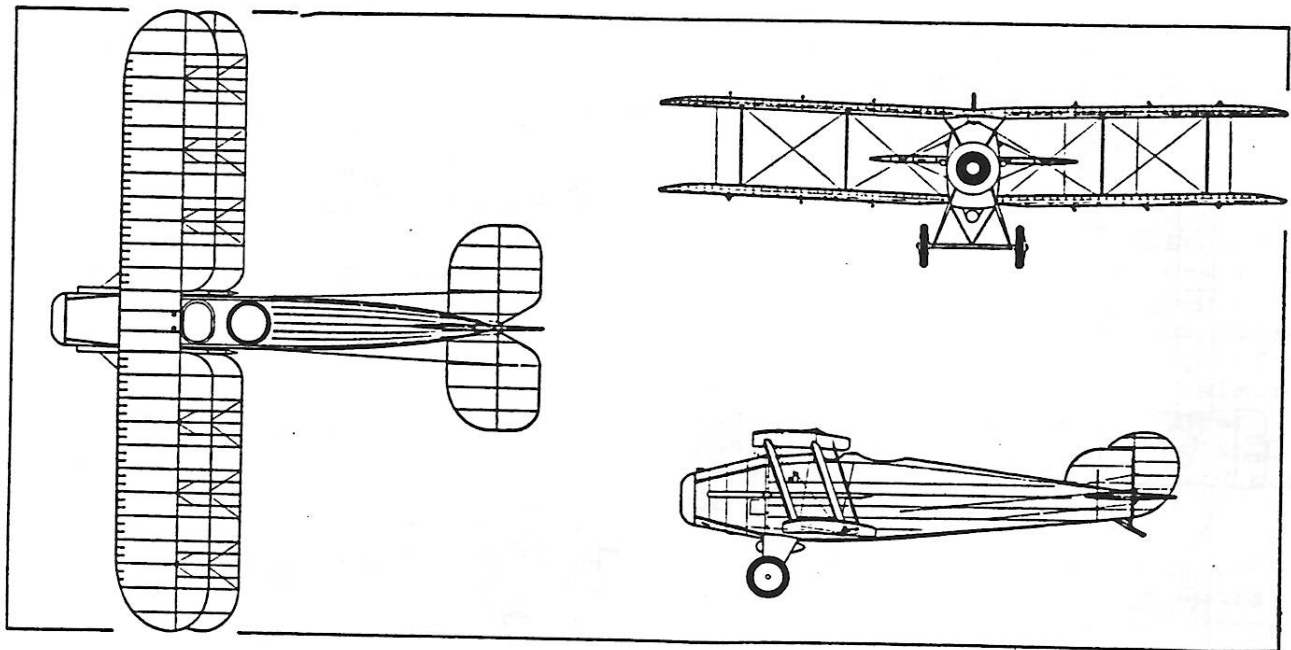


SOPWITH 3F2 "HIPPO"

Designed in 1917, the SOPWITH "HIPPO" was a two-seat fighter powered by a 200 H.P. Clerget 11 cylinder rotary engine. It had a negative stagger to its wings to give it's crew the widest possible field of vision. It was first flown at Brookland in November of 1917. It was then modified with a new set of wings and was re-tested in January of 1918. Its performance though good, was inferior to that of the BRISTOL F.2B. The "HIPPO" was officially abandoned in February of 1918. Again the company re-designed it with greater dihedral in the wings, plain ailerons of greater span and enlarged fin.

It re-appeared in April of 1918 in this improved version, but at that time was deemed to be too late to be considered. Take a look at the last version. I believe it has great model potentials. The dihedral looks like it was designed for a model. Another factor to consider, it has no cabanes.....





AVRO 503:

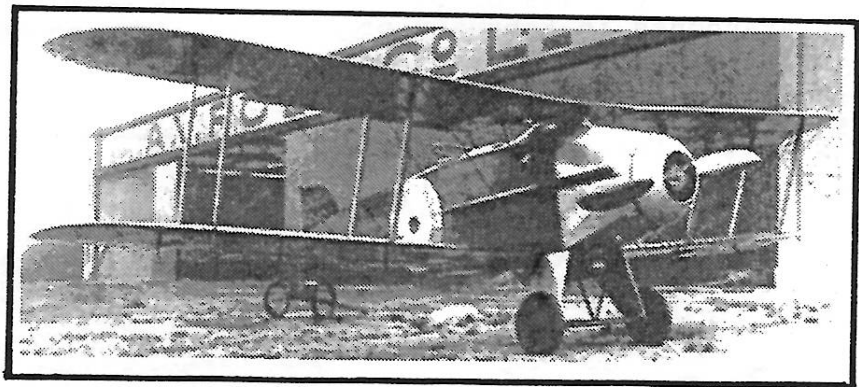
The AVRO 503 represented a departure from the basic AVRO 504 design.

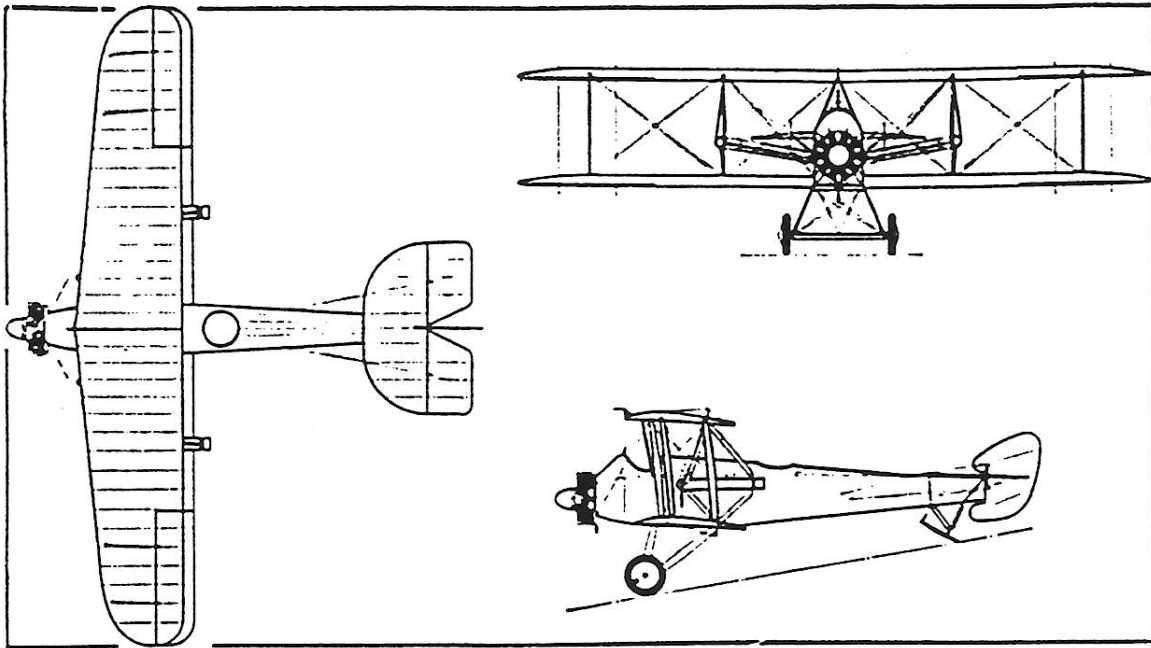
Cleanliness of design and the crews field of vision were carefully considered. It had a large spinner on the airscrew with a central appature to admit air to the radiator. The undercarriage V-struts were faired over for less drag, and a central pylon was fitted to the fuselage to mount the upper wing, thus eliminating the use cabane struts. The central pylon also enclosed a small Vickers machine-gun within its fairing. The fuselage was deep, thus bringing the pilots vision level with the top of the upper wing, improving his view.

The aircraft was completed and tested in May of 1917, and although its performance was good, it was unable to improve on the speed and climb of the BRISTOL F.2A.

It's other disadvantage was that it used the same power-plant as the production SE5.a.

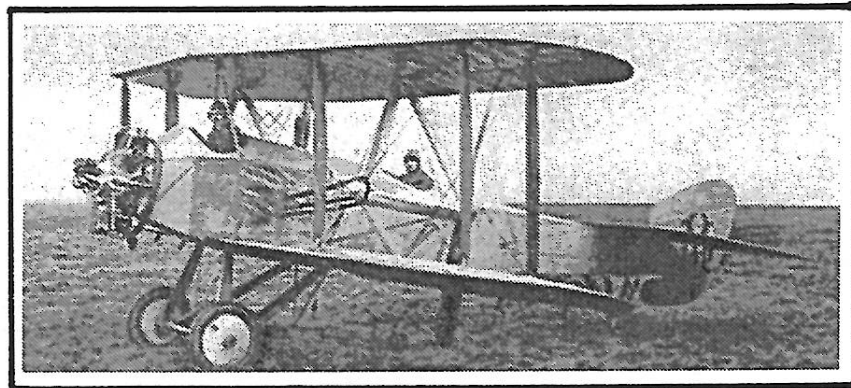
The aircraft never went into production, but I feel as a model it has good potential.





MANN
&
GRIMMER

M 1

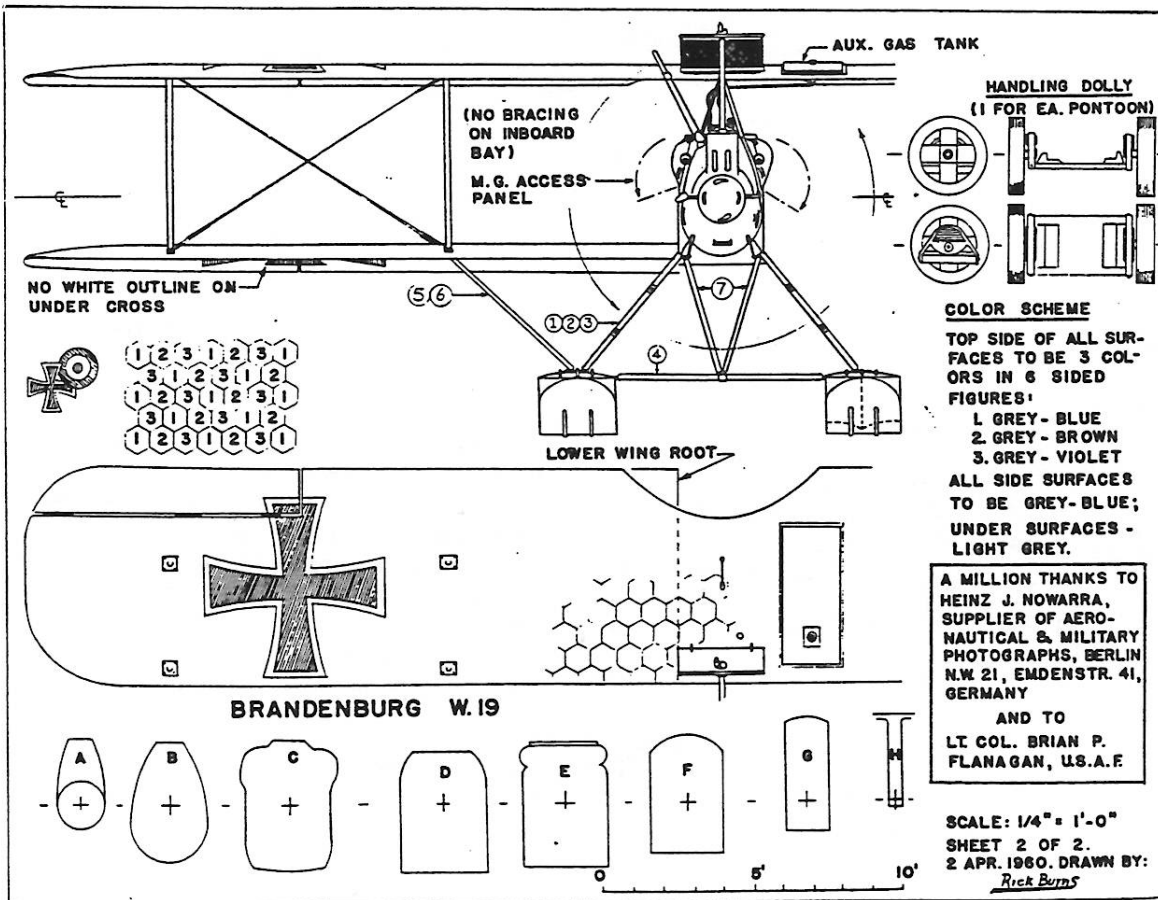
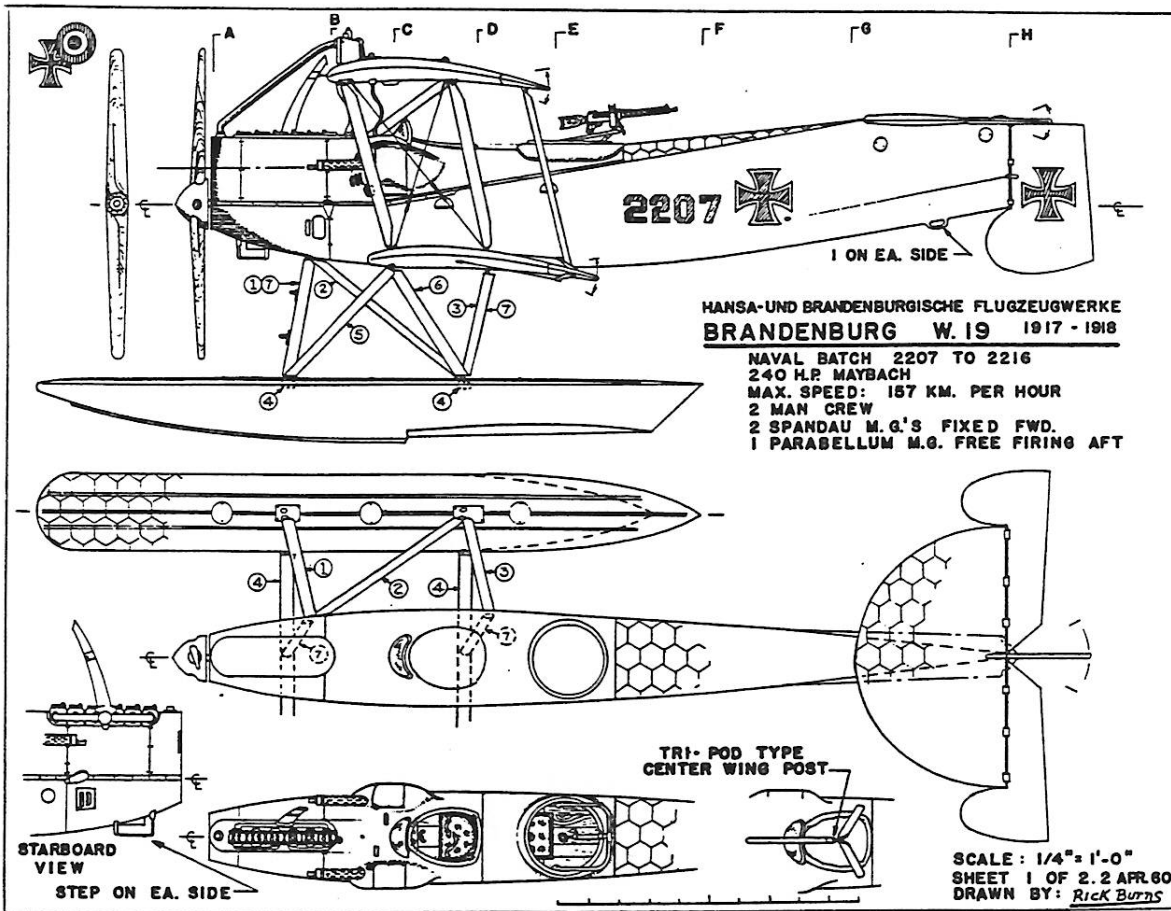


The design for this aircraft was begun in 1914 by R. F. Mann. Mr. Mann began his aircraft design career when he was 17 years of age with his former school teacher, R. P. Grimmer, designing model airplanes. All of the model designing was done in pre-war years.

The MANN & GRIMMER M1 airplane was powered with a 100 H.P. Anzani rotary engine in the conventional tractor mode, but on this aircraft it also had shafts connected to the rear of the crankcase, which drove via a gearbox, side pusher airscrews. These can be done on a model as dummies with free-wheeling props. (Extra 10 bonus points in judging), in FAC SCALE.

Though this aircraft went through several design changes, it never scheived any degree of success.

The other reason I selected this aircraft is that it was designed by a former modeller. Need I say more.....



**D.C. MAXECUTERS 1995 SUMMER FUN FLY
SATURDAY, 9 SEPTEMBER - 9 AM TO 5 PM**

SCALE and TIMED EVENTS

FAC SCALE	Judging starts at 11:00 AM
FAC POWER	Qualifying flight is not required except to post static scores.
JUMBO SCALE	Same as above.
EMBRYO	Same as above (36" Minimum span monoplanes - 30" biplanes)
HAND LAUNCH GLIDER	FAC Rules.
FAC OLD TIME ELECTRIC GAS REPLICA	AMA Rules
	FAC Rules.

MASS LAUNCHES - SINGLE SORTIE - LAST ONE DOWN WINS

12:30 PM - OLD TIMERS -	FAC Rules (36" Maximum Wingspan - COMMANDER Eligible).
1:00 PM - MODERN CIVILIAN	Production non-military aircraft (1943 - present).
1:30 PM - RACERS AND AEROBATIC	One event for all racers and aerobatic aircraft.

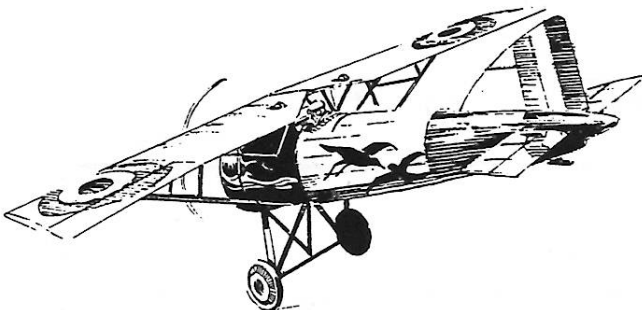
MASS LAUNCHES - MULTI SORTIE

2:00 PM - WORLD WAR I	Combat WWI BIPLANES with Markings, Rigging and Weapons.
3:00 PM - WORLD WAR II	Combat WWII aircraft with Markings and Weapons.
4:00 PM - GOLDEN AGE	Any aircraft from 1920 through 1939. Retract gear must be down.

FINALE - A REALLY MASSIVE LAUNCH - SINGLE SORTIE

4:45 PM - TRANS COMSAT SPEED AND NAVIGATION	Any rubber powered scale aircraft that flew in any of the other contest events.
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**CD Allan Schanzle
2008 Spur Hill Dr., Gaithersburg, Maryland 20879 - SASE Please or
Phone (301) 840-5884**



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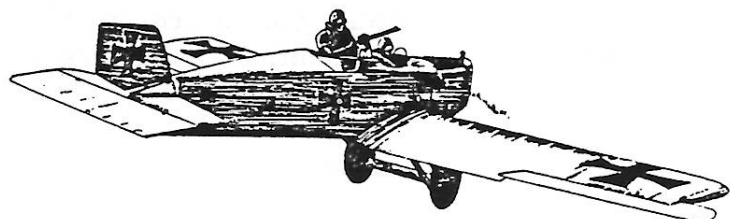
Assembled motor, prop, and wiring harness \$29.95
 NiCd battery 3 x 150 mAh \$12.95
 NiCd Battery 4 x 150 mAh \$17.95

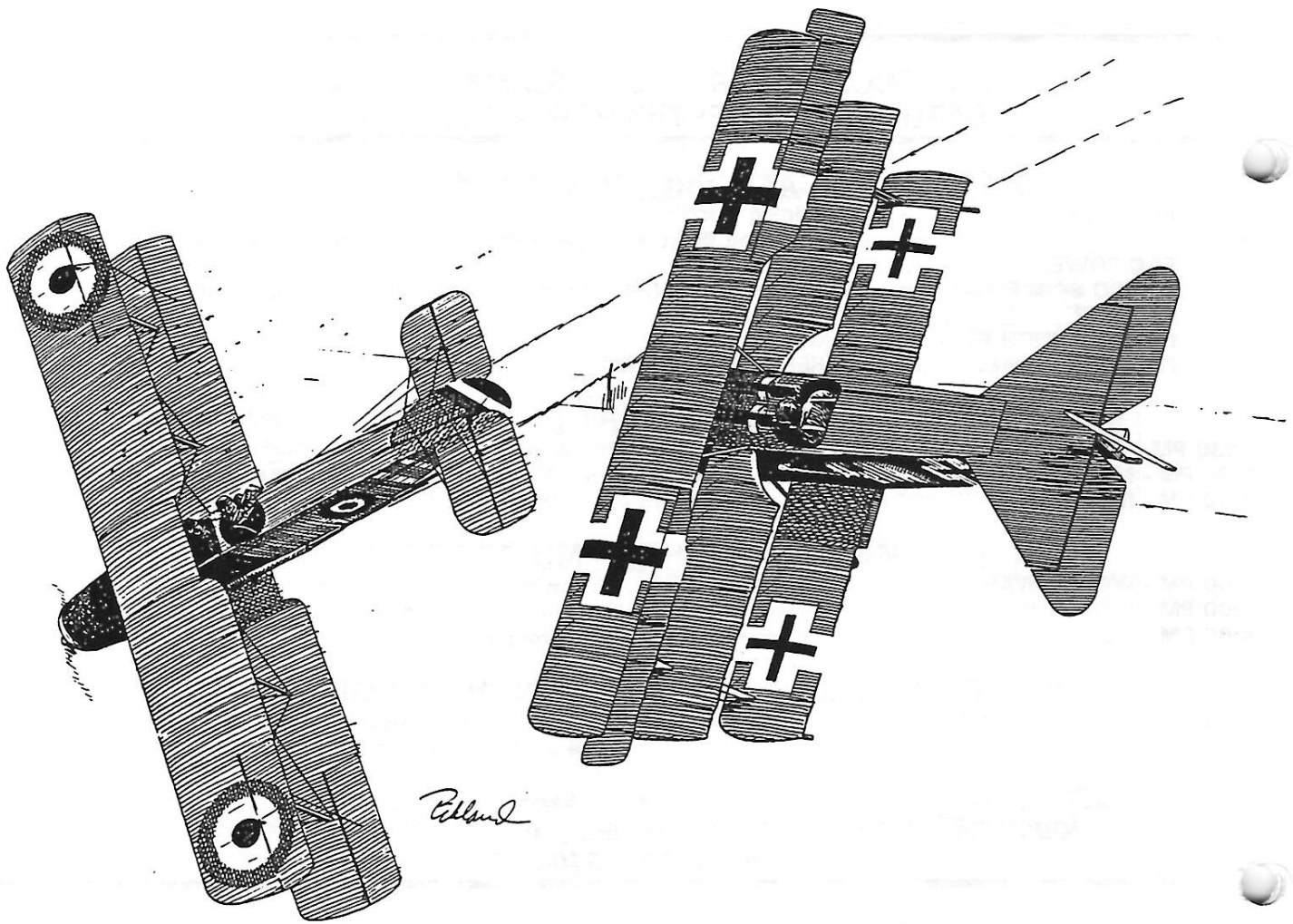
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The great line drawing which appears on the back cover of this newsletter, appeared in 1965 to illustrate an article in the now defunct "CROSS & COCKADE" publication.





NOTE: Your Dues Are Due

CLUB OFFICERS

President	Terry Pittman 7863 Colonial Vil. Row Annandale, VA 22003
Secretary	Bert Phillips 1709 Crofton Pky Crofton, MD 21114-2305
Treasurer	Frank Rowsome 10904 Bellehaven Rd. Damascus, MD 20872



MEETINGS The D.C.Maxecuters hold meetings on the first Tuesday of every month at the College Park Airport, the oldest operating airport in the U.S.

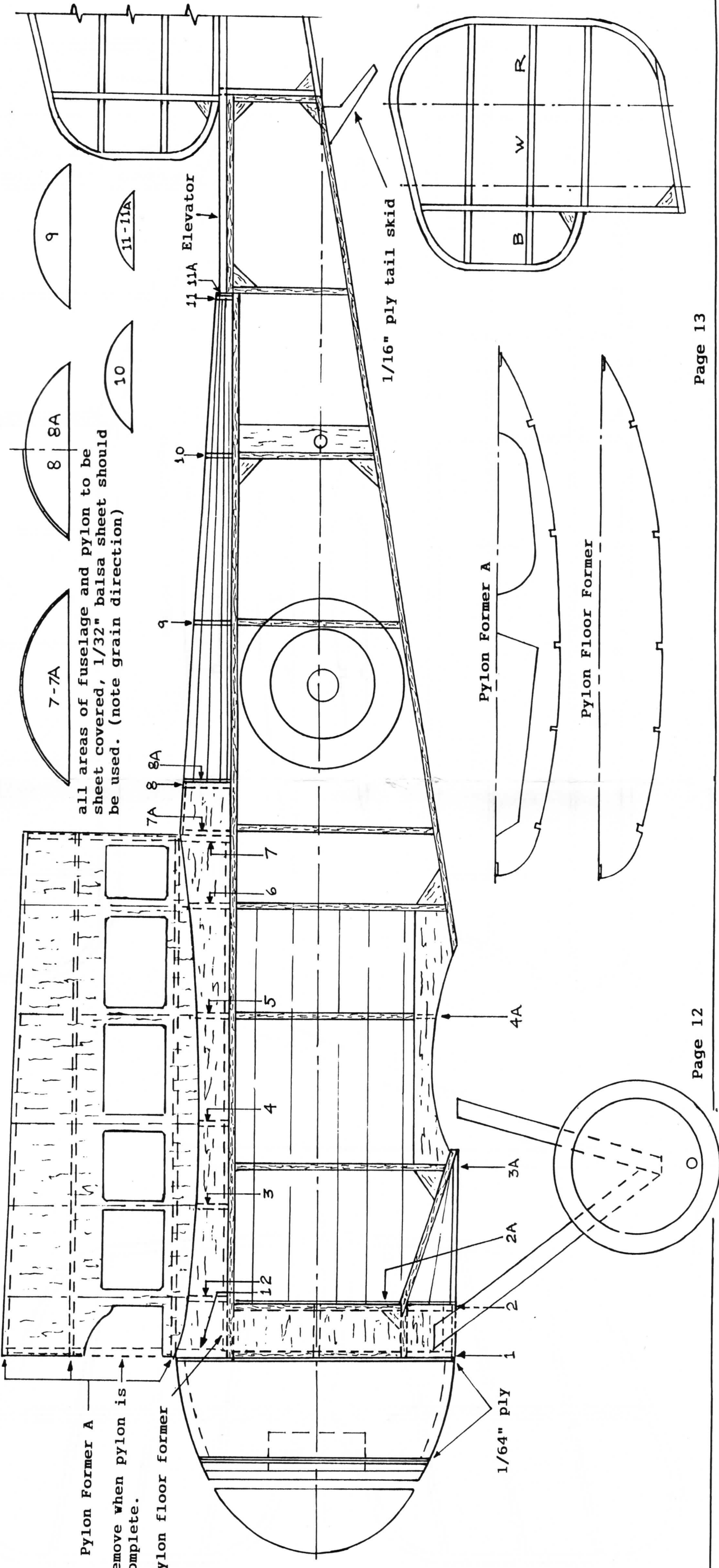
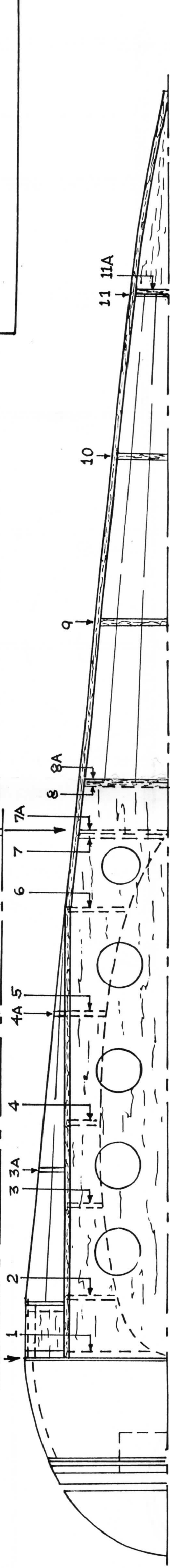
MEMBERSHIP Dues for membership in the D.C.MAXECUTERS is \$15 per year for residents of the USA, Canada, and Mexico, and \$25 for all other countries. Your mailing label indicates the year and month of the last issue of your current membership. A red "X" in the box above is a reminder that your dues are due. Send a check, payable to the "D.C. MAXECUTERS", to the treasurer.

1/16" sq. balsa is added to underside of balsa sheet for strength. Carbon fiber would also work.

Holes to save weight (optional)
1/16" balsa sheet used to join fuselage sides. (top only)

SAGE Type 2

BY DR. HARVEY PASTEL



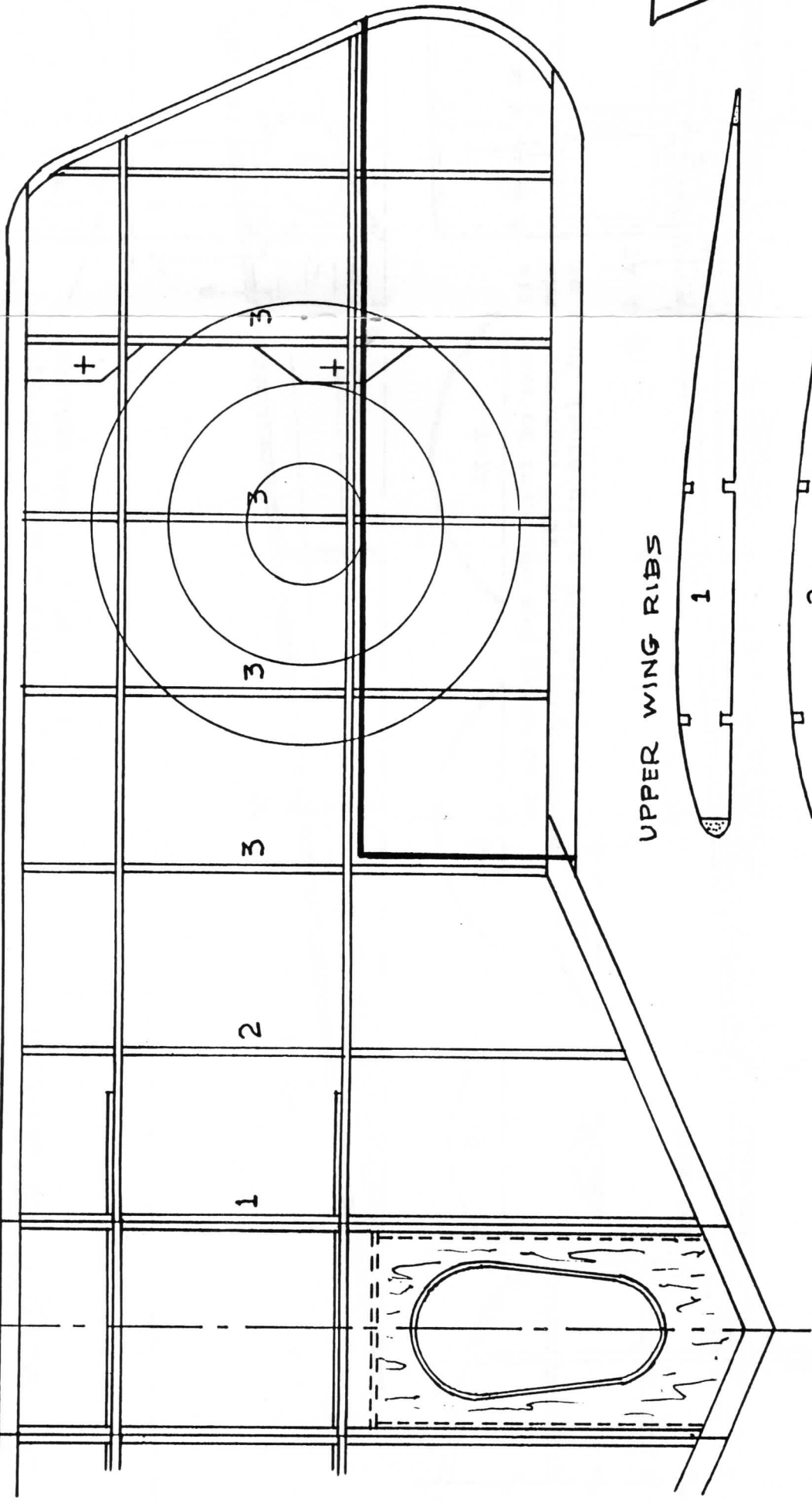
all areas of fuselage and pylon to be sheet covered, 1/32" balsa sheet should be used. (note grain direction)

Pylon Former A
remove when pylon is complete.

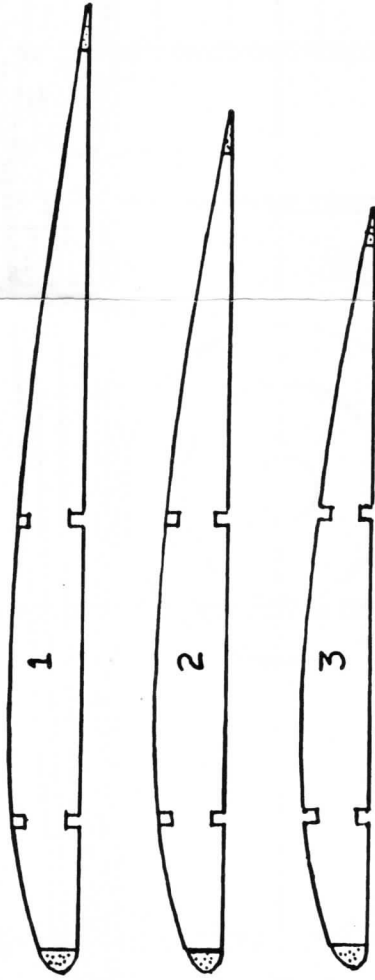
Pylon floor former

SAGE Type 2

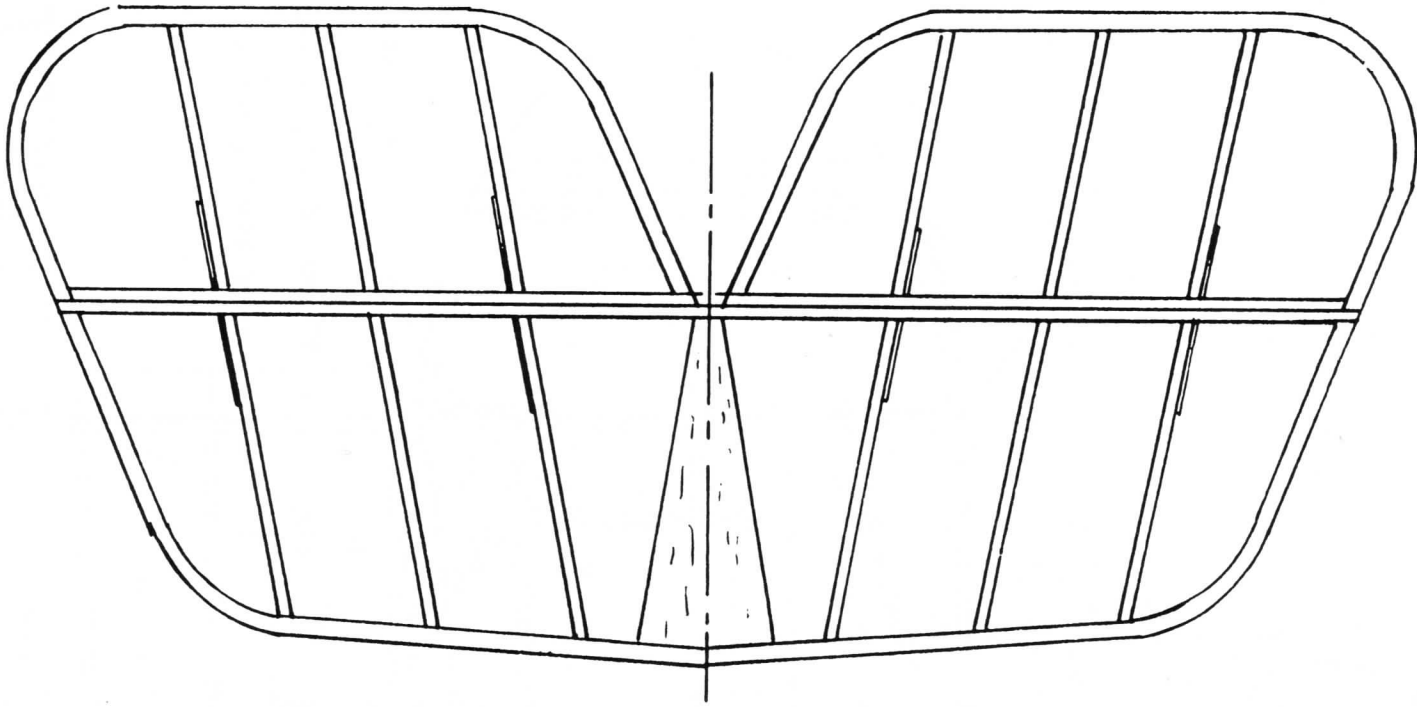
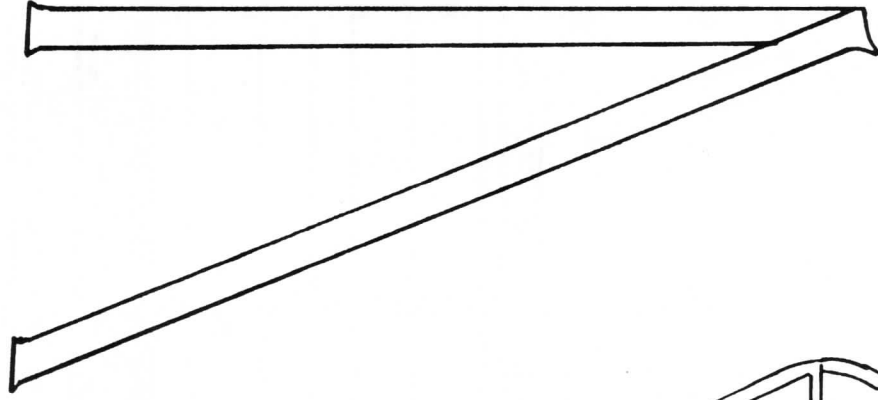
BY DR. HARVEY PASTEL



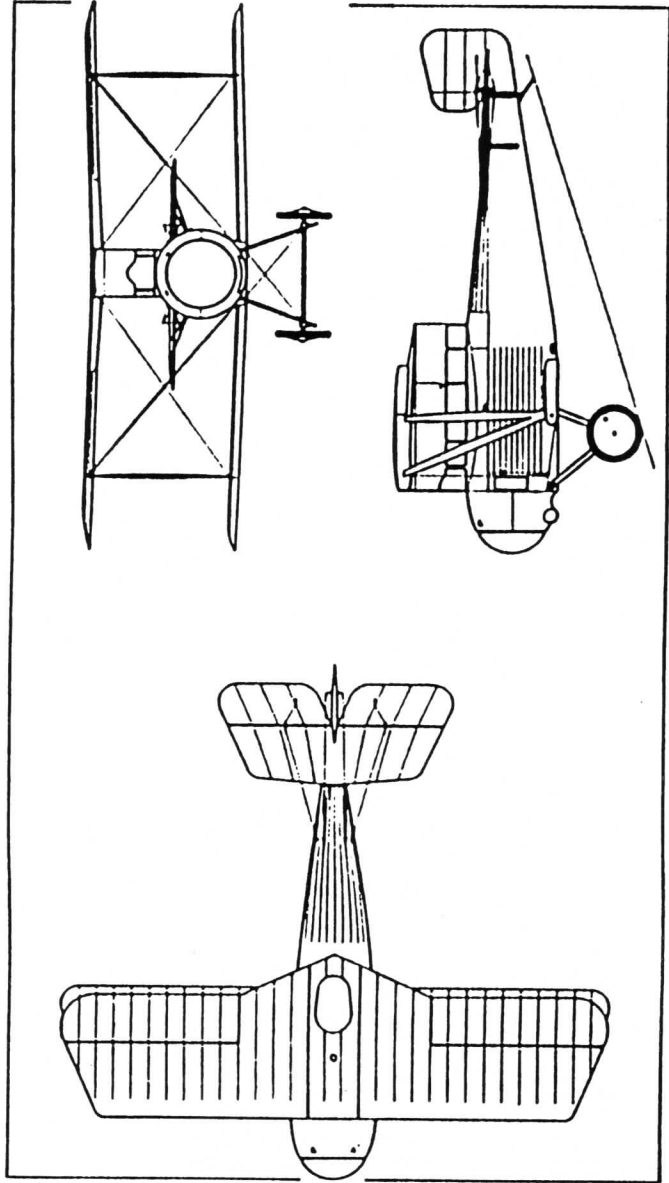
UPPER WING RIBS



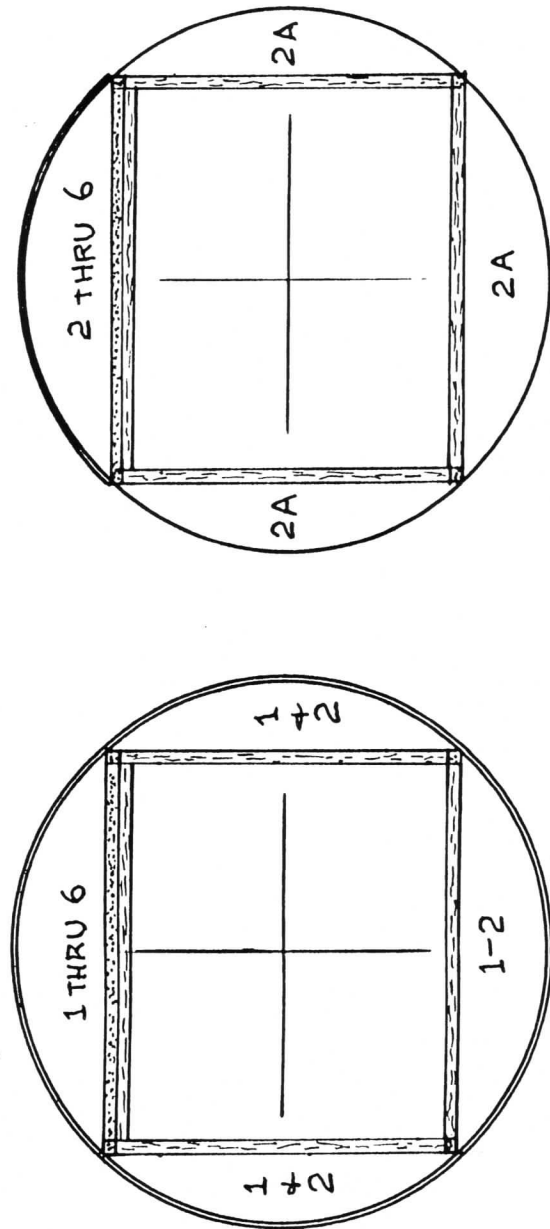
LOWER WING RIBS



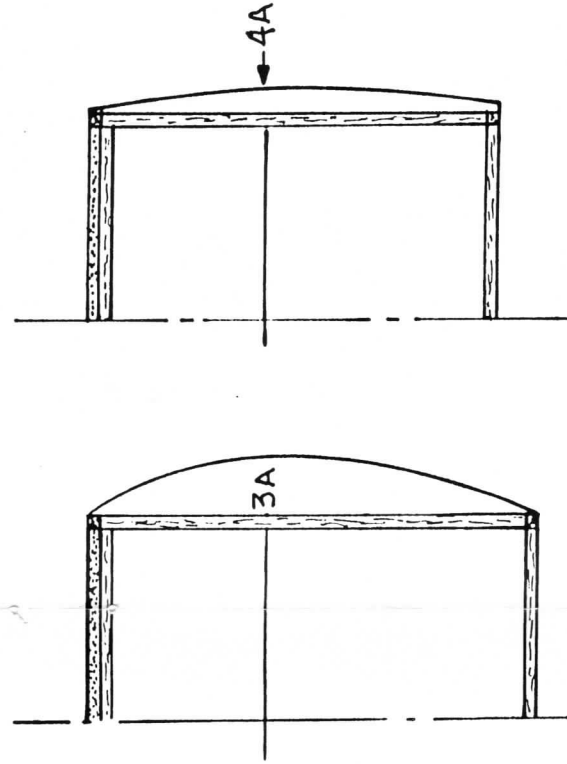
5/16" Dihedral



1/4" Dihedral



NOTE: I believe that increasing the dihedral in both wings to 1/2" and adding 1/16" washout to each wing tip would increase stability. This is only my opinion. Use your own expertise.



SAGE Type 2

BY DR. HARVEY PASTEL