

MAX FAX

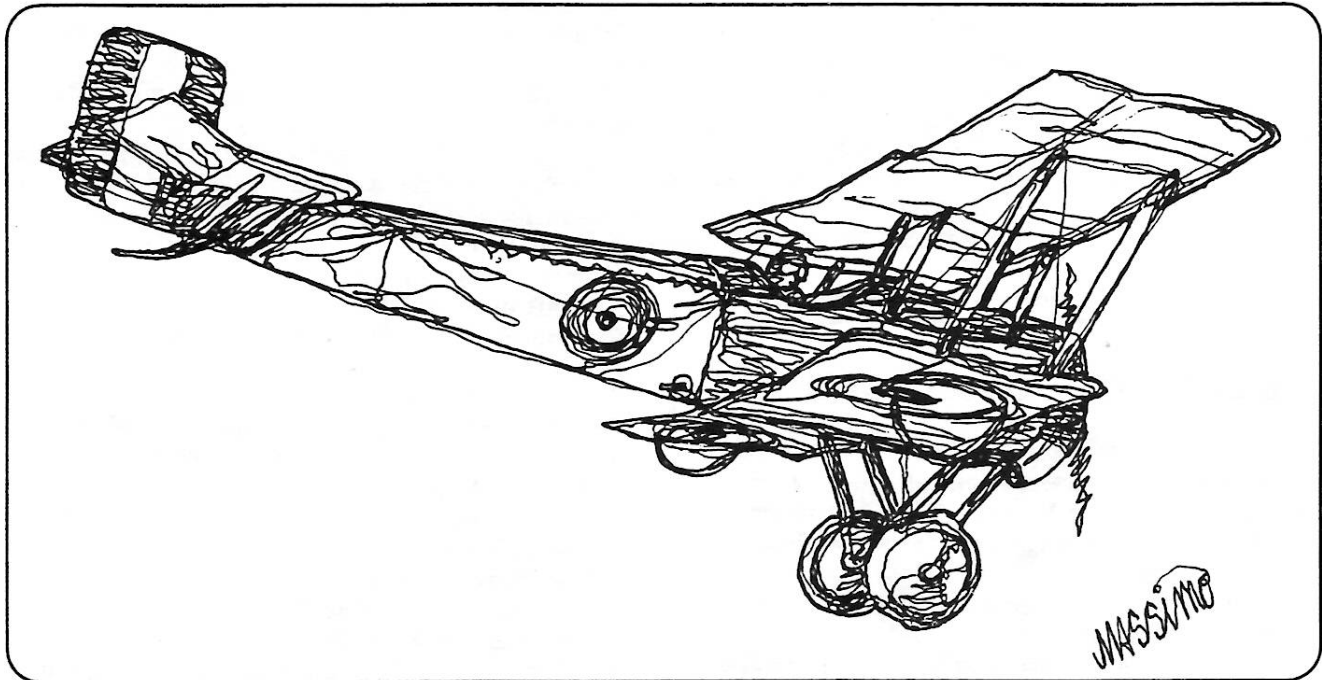


Journal of the D. C. Maxcutters

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

Editors: *Bill Ceresa and Tom Schmitt*

May — June 1994



COMING ATTRACTIONS

- May 29 Mini-Contest - OLD TIMER at COMSAT - FAC Rules.
- June 2-4 Indoor FAC at USIC, Johnson City, Tenn. Contact Jim Miller, 107 Lorelei Dr., Fayetteville, Ohio 45118 (Send Self Addressed Postcard).
- June 12 Glastonbury Modelers Spring Fling, Durham, Connecticut. Contact Ed Novak, 106 Cutlery Ave., South Meriden, Connecticut 06450.
- June 19 Mini-Contest - TEN CENTER at COMSAT (Max Wingspan 20").
- June 25/26 AAA Contest at Galeville, New York (FAC Events included).
- July 8/9/10 FAC NATIONALS at National Warplane Museum in Geneseo, New York.
- August 14 Mini-Contest - Any SCALE BIPLANE at COMSAT.
- August 21/22 ANNUAL CUCKOO CHALLENGE at Bill Saunder's Farm, Cuckoo, Virginia.
- September 10 MAXECUTER'S SUMMER FUN FLY at COMSAT 9AM to 5PM
Contact Allan Schanzle 20008 Spur Hill Drive, Gaithersburg, Maryland 20879
Phone (301) 840 - 5884.
- Sept 11-17 NATIONAL SAM CHAMPS at Muncie, Indiana.
- Sept 24/25 CAAMA Contest at Bill Saunder's Farm, Cuckoo, Virginia.
- October 1 KUDZU FAC Contest at Raeford, North Carolina - Also Seaplane FUN FLY Friday evening September 30 - Contact Dave Rees, 606 Walnut Creek Drive, Goldsboro, North Carolina 27534 Phone (919) 778 - 6653.

N - E - W - S F - L - A - S - H !

We have learned from G-2 (*Kanone Kounter Roy Courtney*) that none other than our own ACE from the hills of Thurmont, Doug Buchanan, will be awarded his BLUE MAX at the FAC NATS this summer in Geneseo! Congratulations Doug!

VANCE GILBERT EDGEWISE

If you have admired Vance's models and wit, you should know that he is every bit as gifted as a singer-song-writer as he is a modeler. In January, his first commercially distributed album came out: **VANCE GILBERT EDGEWISE**, Philo CD PH 1156, 1994, Rounder Records Corp., One Camp Street, Cambridge, MA 02140. Help a friend - and do yourself a favor - ask for it (under Folk Music) at the better music stores first. Good listening on the drive to Geneseo.

Courtesy of Frank Rowsome.

BAD NEWS - GOOD NEWS

You already know the *bad news*; we all were disheartened by the cancellation of the Patuxent Indoor Contest this past March. That fact coupled with the loss of the local gym due to snow closings made for a dismal indoor flying season. The Commander of the Helicopter Test Facility decided it would not be possible for us to utilize one of the hangars during the period in March. Our men on the scene attempted to secure the use of another facility's hangar but to no avail in the short time available. The *good news* is that the picture is brighter for use of the Helicopter Facility this coming November and hopefully again in March 1995. We will not burden our readers with details but suffice to say we are keeping our fingers crossed!

SWITCH ON, CONTACT, LET'S GO!

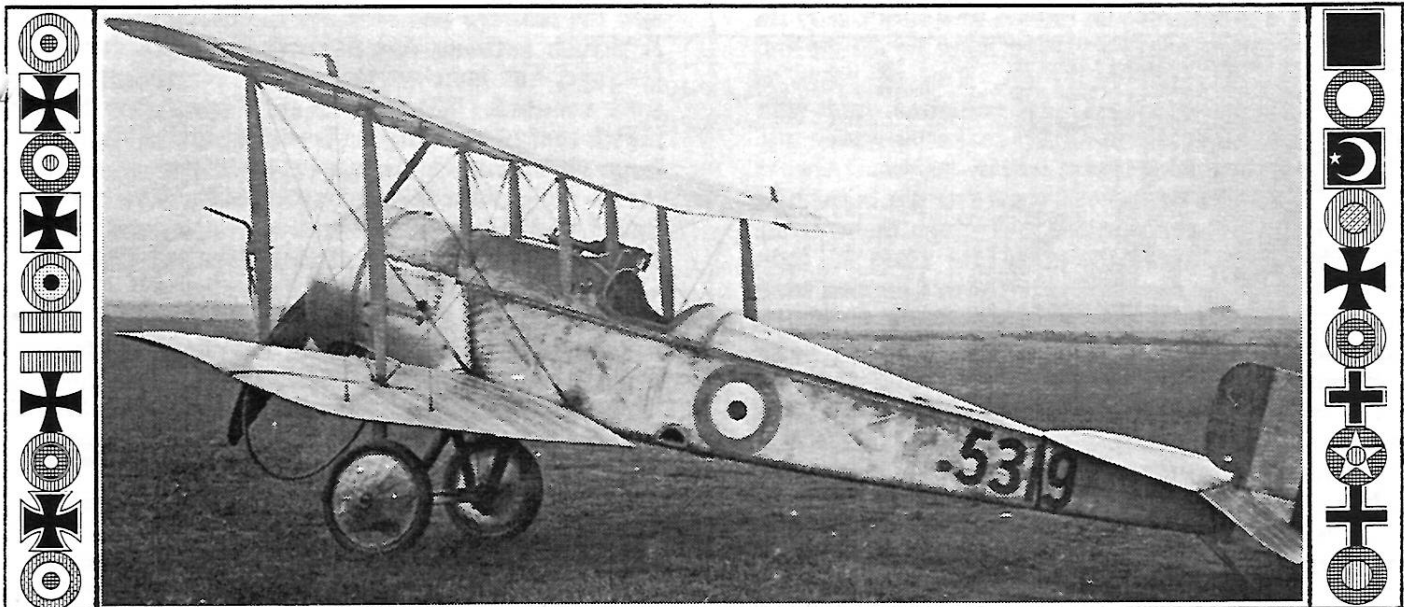
"*pack up your troubles in your old kit bag and smile, smile, smile*" — well as you may have already guessed this issue is about aircraft of the First World War. Our feature plan is the English "Bristol Scout" by Kevin Sharbonda, a beautiful airplane and a great flier. For added interest a three view and color data are included for a Bristol Scout that was evaluated at McCook Field by the United States. It had some differences from the British version in the

cowl and no wing tip skids. The other plan is an obscure British fighter, the Vickers F.B. 16D by Mike Hostage. Mike enlarged his computer drawn PEANUT plan to an eighteen inch wingspan and it turned out to be a nice flier. Some background information on the F.B.16D is included with a three view and also for a follow on aircraft, the Vickers F.B.19 Mk II. For a highlight in this issue there is a special surprise as our eminent story teller Rolfe Gregory has come out of retirement to regale us with some fascinating anecdotes concerning Nancy's dad (with Nancy's assistance). This issue contains several other articles; one in particular that should be of interest concerns an interesting and possibly little known weapon (flechettes) used by some WWI aircraft. A graphic description for making cockpit coaming is included for all you WWI builders out there. Our own Prof Bud Carson provides a follow-up article dealing with rubber motor sizing which should help you in your quest for WWI *Kanones*. And for your information there is a book review on a terrific new publication "Austro-Hungarian Army Aircraft of World War I". Don't overlook the quiz for you eagle eye WWI buffs. There is a *mystery photo* of a twin engine three-place WWI aircraft in this issue. Send in the name (a single clue - it is a French aircraft) by July 1 and we will pick one winner randomly who will receive a one year extension of his or her's MAXFAX subscription!. Send your answers to Bill Ceresa 11410 Blueridge Drive, Beltsville, Maryland 20705 or Tom Schmitt, 11014 Marcliff Road, Rockville, Maryland 20852. Finally there is a description and results of our Indoor Carrier Event held this past winter. And a big thank you to *Ray Rakow* for the screened photos in this issue. Now, if you do not enjoy this issue — no more *Kanones* for you! Until next time — "*it's a long way to Tipperary, it's a long way to go*" - - - - -

NOW LET'S TAKE OFF!

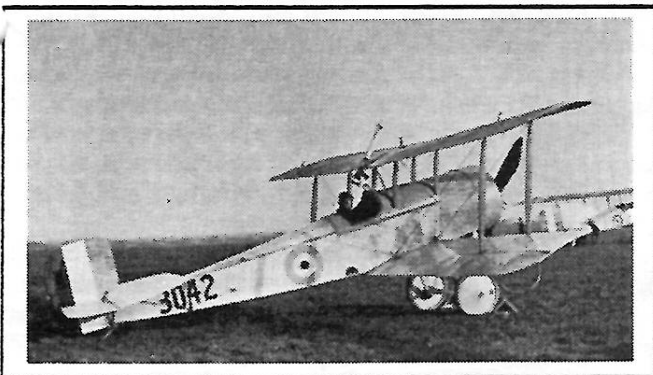
THE BRISTOL SCOUT

Kevin Sharbonda has provided us with a definitive rubber scale plan of the ubiquitous Bristol Scout. While we have seen several other plans of this well known WWI aircraft, this is the one to build. A comprehensive discussion of the Bristol Scouts was presented in AIR ENTHUSIAST issue number 32 published in 1987. The article included color profiles and many excellent photographs. An interesting



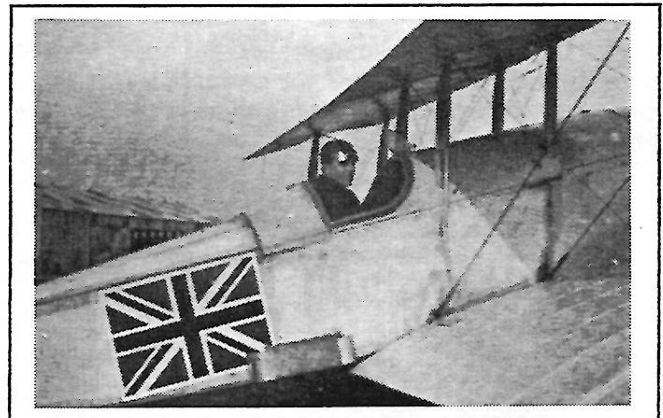
THE BRISTOL SCOUT

historical aspect of this aircraft was the variety of armament options employed. One of the many armament provisions for the Scout is shown below.



WING MOUNTED LEWIS GUN

Another interesting example was a dart (flechette) dispenser located at the trailing edge of the lower wing; a photograph of the installation is shown in the opposite column. The many armament options should give the FAC WWI judges a few headaches in qualifying a model for the WWI COMBAT event! Dangerous Dan Driscoll is contemplating installing a pistol/holster in the cockpit of his Bristol Scout to meet the FAC gun requirements! We would like to see the FAC rules simply state that armament provisions must be included for WWI MASS LAUNCH events. After all,



RANKEN DART BOX INSTALLATION

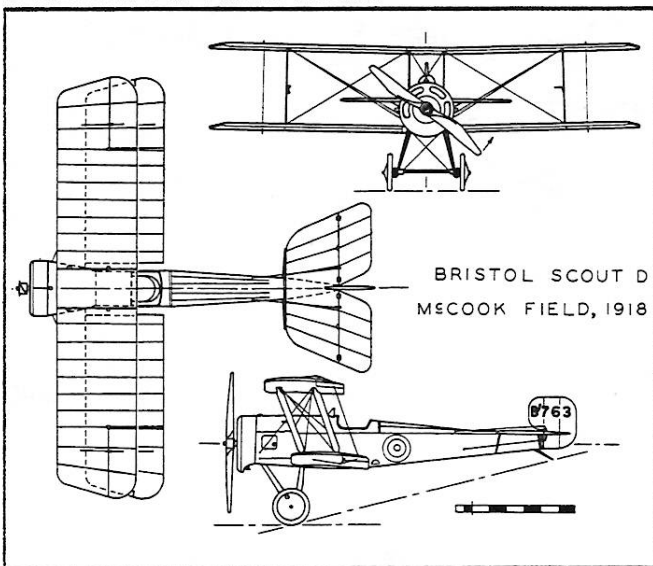
bombs qualify aircraft now. Now let us defer to Kevin for more information concerning the Scout and his model.

"Models 'C' and 'D' were related very closely, having minor differences. Model 'D' had increased dihedral, enlarged tailplane, some with cut-outs in the lower wing for landing visibility, short span ailerons and relocated underwing skids. Cowling should be simulated aluminum alloy. I used aluminum wrapper from a 7/11 chili-cheese dog. Cowling goes back to the front cabanes; rest of the plane was a natural finish. Later models had khaki fuselage and top wing surfaces, and natural undersides. I used sliced fuel tubing for cockpit coaming. Engine can be simulated.

Construct a 3-dimensional engine or a quick easy fix is to zerox a copy of a 9-cylinder 80hp Le Rhone and glue behind the thrust button. Rest of plane is conventional construction. I use one piece wings with a saddle in the fuselage. This makes it easier and aids in aligning wings and setting angles. Always keep tail feathers light. Best tip I ever got is to build 2 or 3 if not too complicated and weigh them, using the lightest one. Save the other for when the light one gets trashed. Hopefully that won't happen until after a Kanone or two. Build the struts strong by sandwiching 1/64" ply between two pieces of balsa and sanding to scale shapes. I believe I flew the plane with an 8" prop on 2 loops of 3/32" FAI tan rubber. The last time I saw it was at a meet in Glastonbury, Connecticut, when having just installed a free-wheeling device on the prop she went OOS along with one of George Meyer's great WWI planes in a terrific thermal that took it right out of a left-turning glide and kicked it into a right-turning climb — seceeee ya! Good luck with yours."

AMERICAN BRISTOL SCOUT

If you wish to build the Bristol Scout as sent to the United States in 1918 for evaluation, the three view and information that follow indicate the differences from other Scouts.



AMERICAN BRISTOL SCOUT

The Scout arrived at McCook Field on 7 May 1918 in very bad condition with many small parts missing including the struts and wires. It was rebuilt and appeared as follows. It had been completely recovered with wings and horizontal tail clear doped,

and the fuselage and cowl area were khaki colored. A British cockade was painted on each side of the fuselage, but none on the wings. No wingtip skids were installed. The front of the engine cowl did not match that of any known Bristol Scout. It had four large slots around the upper perimeter of a small center cut-out for the propeller shaft. The Aircraft Board had recommended that a production contract for 500 Bristol Scouts be placed with the Fisher Body Corporation of Detroit, but it was cancelled before any Scouts were produced. The information on the American Bristol Scouts was found in a book (one in a series of three) by Robert B. Casari titled "Encyclopedia of U.S. Military Aircraft, The World War I production program".

C. A. V. U.

Ceiling And Visibility Unlimited
by Nancy and Rolfe Gregory

Like Glenn Curtiss and the Wright Brothers, bicycles were the stepping stone to Tom Connolly's interest in aviation and learning to fly. With his brother Michael, he owned a bicycle shop in Ireland. His engraved trophies attest to his expertise in bicycle racing in his home town.

An acquaintance in Ireland, home on a visit from America, where he had emigrated and set up a business, persuaded Tom, Nancy's dad, to go to Scranton, Pa. with the promise of employment. Against objections from the family and friends, Tom decided to try his luck anyway. Upon arrival in Scranton however, Tom found the job was not as promised and he went to work for the Ford Motor Co., where he remained for 2 years.

The Spring of 1915 found him planning a visit back home. His father had died the previous summer, and he longed to see his family. At the last minute Tom changed his mind, even though he had purchased his steamship ticket in Scranton. He knew that if he was to learn about Aero Mechanics and eventually become a pilot, he must continue his education. Besides, there was a certain young lady, named Mary Ellen, to whom he could not make a commitment until he had steady employment.

What piqued his interest in airplanes is not recorded. But Tom enrolled in the Pennsylvania School of Aero Mechanics, in Scranton. After graduation in 1917, Tom was eager to use his new found skills and he began employment with Aeromarine plane and motor Co., in Keyport, N.J..

When Tom was settled in his new job, he returned to Scranton to marry Mary Ellen, and bring his new bride back to New Jersey with him. America

had gotten into World War I and it would be several years before they could make the trip to Ireland.


Subsequent employment in this infant aircraft industry included such long forgotten companies as Standard Aircraft, Wittman-Lewis, Wright Aeronautical, Curtiss-Wright, and later teaching at Stewart Technical School, N.Y., Rising Sun Aviation School and the Chamberlin Aircraft School, both in Philadelphia. Then as now, success in the aircraft industry was dependent on a fickle public and "sometime" contracts with the government. One had to go where the jobs were.

Clarence Chamberlin taught Tom to fly. He was always proud of the fact that F. P. Lahm signed his 1924 Pilot's License, and that his 1926 Pilot's License was signed by Orville Wright. After graduation from the Flight School operated by Chamberlin & Rowe Aircraft Corporation, in Hasbrook Heights, N.J., in 1924, Tom was fortunate in helping repair and restore old surplus W. W. I airplanes in his spare time. They had been purchased by Chamberlin and Rowe for restoration and resale to pilots, mainly for barnstorming. The list

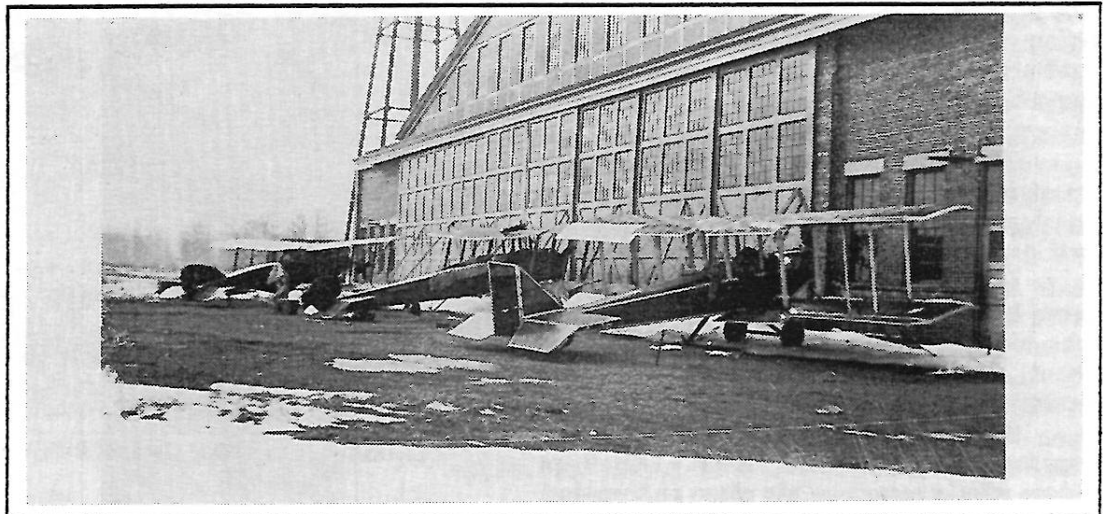
included: at least 1 Bristol Fighter, 2 Sopwith Camels, 3 DH 6s, several AVRO 504Ks, and at least 1 Italian Ansaldo. Unfortunately, all the instructions and instruments included with the Ansaldo were in Italian. Neither Chamberlin, Rowe, Tom nor any of their friends understood Italian. The day was saved when a dapper gentleman, Bert Acosta, appeared on the scene. He jumped out of his car with arms outstretched

towards the Ansaldo, and in a loud voice said, "An old Ansaldo, my favorite airplane"! They knew they had their translator.

Tom purchased one of the DH 6's for his own use. He redesigned and reconstructed the cockpit area, pulled out the original engine, and replaced it

Fédération Aéronautique Internationale United States of America		
LICENSE ISSUED TO Mr. <u>THOMAS J. CONNOLLY</u> Place of Birth <u>Tulla, Ireland</u> Date of Birth <u>May 26, 1893</u> Contest Committee Chairman <i>Orville Wright</i>		

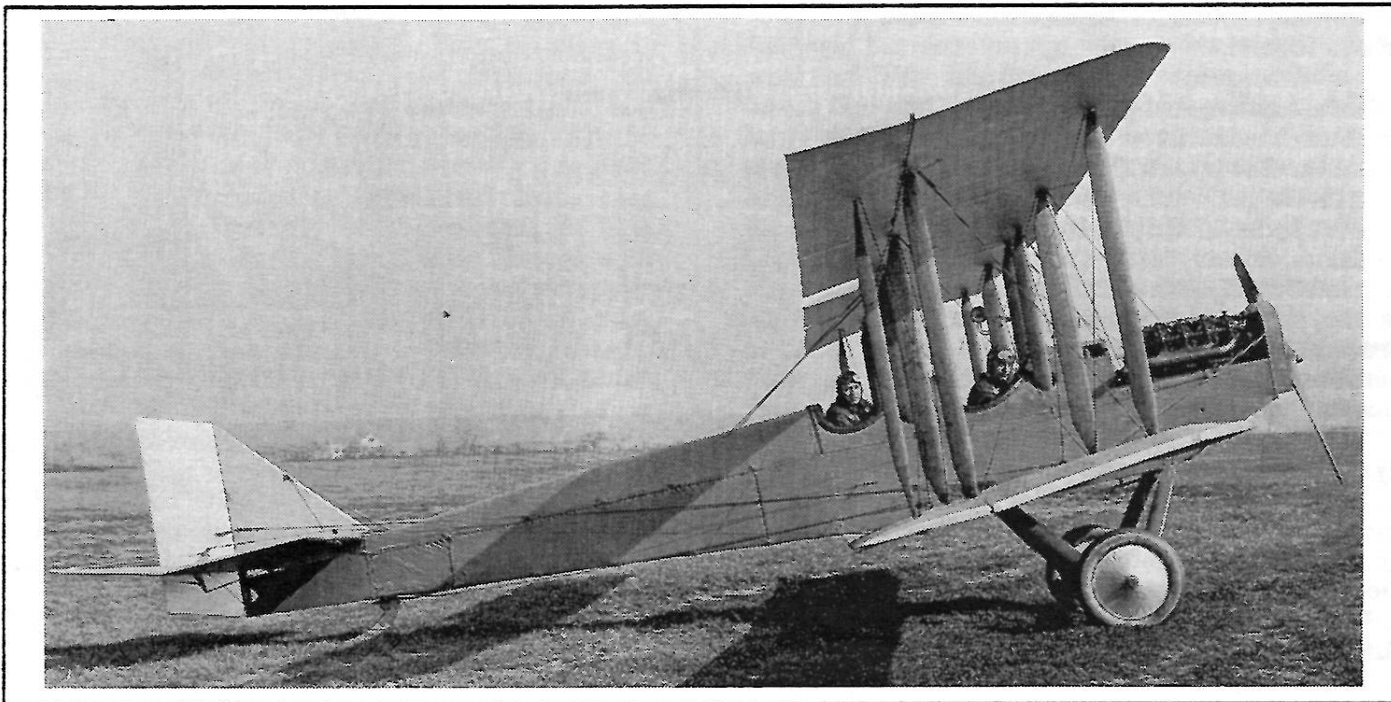
**THOMAS J. CONNOLLY'S PILOT LICENSE
SIGNED BY ORVILLE WRIGHT**



BRISTOL FIGHTER, AVRO AND A DH 6

with a new Curtiss OX-5 engine. Tom re-covered the airplane and repainted it. Unfortunately, no record of the colors he used survives.

The DH 6 was a rather ungainly looking creature with its square lines, but it did have some good features that contributed to its popularity as a



TOM CONNOLLY IN HIS REFURBISHED DH 6

training airplane. The wing section had a substantial amount of undercamber, causing it to be referred to as "the clutching hand". This section gave the airplane a rather slow landing speed which was appreciated by students and instructors alike, but it didn't do anything to help out in the upper speed department.

This airplane served Tom's needs almost to perfection! For example you could crowd several paying customers into the big front cockpit. Remember, at this time there was no C.A.A. or F.A.A. or other government agency breathing down your neck. That was to come along a couple of years later with the advent of the Aeronautical Branch of the Department of Commerce.

Tom's pride of ownership in the newly renovated DH 6 was short-lived. An inept student pilot cracked up his plane and washed it out. Insurance on these "old crates" was non-existent. His last entry in his Pilot's Log Book, for a DH 6 flight is August 1926.

When the supply of surplus W.W. I planes dried up, Chamberlin and Rowe moved on, after dissolving their corporation. You will no doubt recall that Chamberlin flew the first passenger, Charles Levine, across the Atlantic, non-stop, in June 1927, just 2 weeks after the Charles Lindberg historic non-



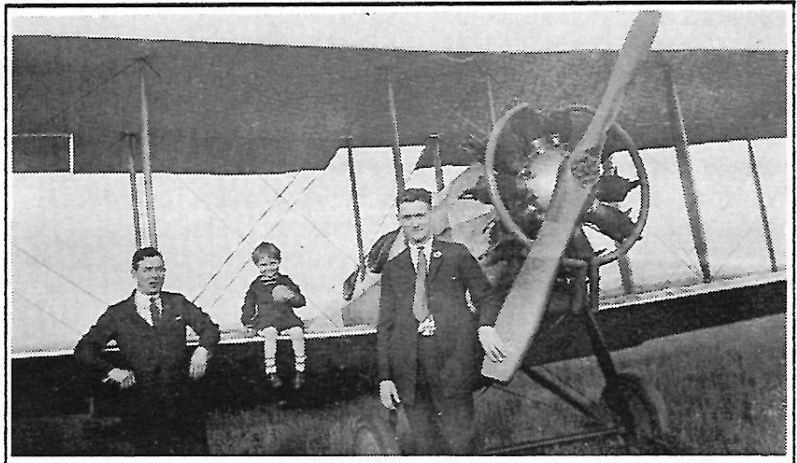
CLOSE-UP OF TOM IN REAR COCKPIT OF HIS DH 6

stop flight to Paris in May 1927. Basil Rowe was to achieve a degree of fame as the first and chief pilot for Pan American Airways. In 1955, his record was written up in Robert Ripley's "Believe It or Not". He had flown 5,594,000 miles and logged 35,000 air hours.

For Tom probably no employment was more interesting nor challenging than working with "Brock & Weymouth, Engineers and Aerial Mappers,

in Philadelphia, Pa.". "His first assignment was to rebuild an old Fokker C-2, customizing it for the needs of aerial photography". That company was "one of the first aerial mapping companies in the world". They "later participated in several federal projects, such as the Boulder and Hoover Dams, the Wabash River Project, etc.". "They were also pioneers in the use of aerial mapping for a variety of purposes, including geological surveys, contour mapping, and real estate appraisal and assessing data." But for the stock market crash in 1929, they might still be in business. Their successor was Aero Service Corp.. A pilot flying for that Company was Bill Burgess, my flight instructor who taught me to fly in 1936. It is a small world, isn't it?

Like the battery commercial on TV, Tom kept going, and going, and going. He was working in the General Electric space program mandatory retirement came (age 65). They rehired him as a consultant. When he tired of the travel



TOM CONNOLLY, TOM JR. AND NEAL SHEA IN FRONT OF AN ANZANI POWERED DH 6



NANCY PATIENTLY AWAITING HER TURN IN DAD'S DH 6

required in consulting for G.E., he retired for the second time. Retirement wore thin in a few weeks, so he was back at work - "this time in the accelerator program with Forrestal Laboratories at Princeton University". After 3 more years, he retired for good. Thus he ended his career as he began - "in pioneer projects".

Tom logged more than 1,000 hours, flying land planes, seaplanes and autogiros. He had only one potentially serious accident during his career. But, according to the glowing account the following day in the Trenton Times, due to his "skill, experience and quick action" no one was injured, even though the Fairchild 71 airplane was destroyed. Tom was hopping passengers one Sunday at old Mercer Airport (later site of the Luscombe Airplane Corp.). On one flight, the Wright J-6 engine quit cold just after takeoff. With nothing straight ahead but people and cars, Tom quickly chose to purposely crash on the only clear spot available, letting the left wing hit first to absorb most of the crash load. The fuselage split open and poured the seven startled but unharmed passengers out onto the grass like so many apples. It looked as if it were in slow motion!

When Tom died in 1965, at age 72, after a brief illness, no one could say his hopes and dreams had not been fulfilled. The poem "High Flight" comes to mind. But, oh, how he would have loved to see the Astronauts landing on the moon!!!

But for a quirk of fate, this story could not be written. I could never have enjoyed those hangar flying hours with my father-in-law, nor enjoyed the fun we had playing our violins together. Worst of all, I would never have met and married that pretty,

blue eyed girl by the name of Nancy that many of you have seen me running around with.

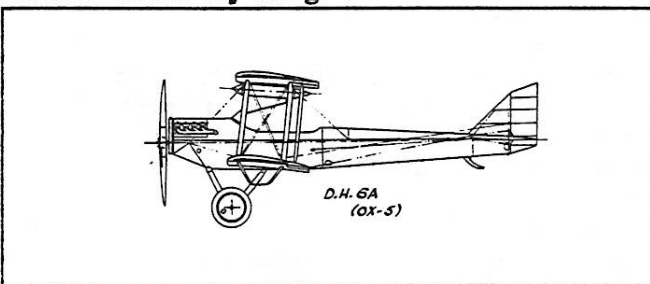
In the Spring of 1915, Tom's plans were changed by circumstances. As stated before, he had already purchased his steamship ticket. Apparently the agent was unaware that the rate for passage had changed the month before, and issued the ticket, in Scranton, at the old rate. Arriving at Pier 54, in Manhattan, he learned that the rate had almost doubled, and he hadn't the funds to make up the difference. A friend, living in N.Y., was there at the pier to see him off. He could have raised the money for him by the next day, but the ship was leaving that day at noon, May 2.

Other people were on stand-by, hoping for a cancellation, so Tom gave up his reservation. He stayed for a brief visit with his friend in New York, then returned to Scranton.

On May 7, arriving at the steamship agent's office, in Scranton, to redeem his refund draft, Tom was shocked by the headline in the afternoon paper, "Passenger ship sunk by German U-Boat!" The details followed: "At 10 a.m. (EST) this morning, the Cunard Lines Steamship 'Lusitania' was sunk, without warning, off the coast of Ireland. At least 1,198 are dead or missing. 124 of the dead were Americans. The 'Lusitania' bound for Liverpool, had sailed last Saturday, May 2, from Pier 54, Manhattan."

End Notes: We are indebted to Nancy's younger brother, Jack Connolly, a published author, for photos, letters, research, phone calls and many details gathered from family letters and recollections. Many quotations are taken from Jack's published articles, many details of which we were previously unaware. These quotes used by permission. Our thanks also to Nancy's youngest brother Bill, also a pilot, for the use of Tom's Log Books. Nancy's oldest brother, Tom Jr., had his own log book, helmet and goggles, and accompanied his dad on many local and cross country trips.

Reference is also made to Clarence Chamberlin's "Record Flights" and Capt. Basil Rowe's "Under My Wings".



DH 6A CIVIL CONVERSION WITH OX-5 ENGINE

PHOTO PAGES - WWI REVIEW

1. A featured full-size plan in this issue is a Bristol Scout by Kevin Sharbonda, seen here winding with Glen Simperts holding.
2. The other featured plan is the Vickers F.B.16D; this one by Mike Hostage. Mike's daughter Sarah is getting a few pointers on adjustments.
3. Dan Driscoll with his featherweight Bristol Scout.
4. Another Bristol Scout photo from Bob Schlosberg, this one by Jane .
5. And yet another Bristol by Dave Rees.
6. Now why doesn't someone build a Bristol Scout for this Gasparin G-24-N Radial CO2 motor. Or better yet use the rotary (yes, rotary) version. The radial is available from Peck Polymers and SAM, U.K.. The rotary is a special order item.
7. Mr. C. A. V. U. - Rolfe Gregory with his DH 6.
8. Fernando Ramos getting up steam to launch his Diesel powered Sopwith Snipe at a FAC NATS.
9. Our Las Vegas connection Bob Haight sent this photo of his HiLine geared IMP powered Camel.

BOOK REVIEW

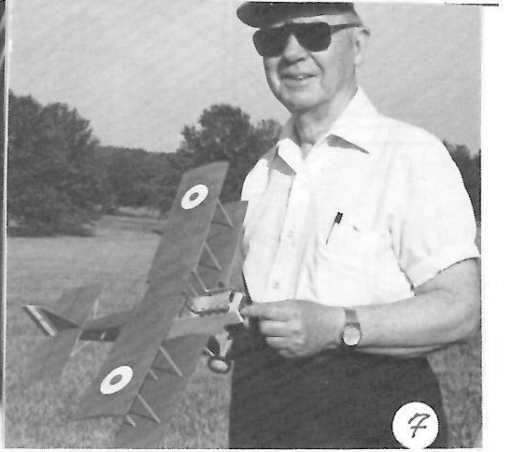
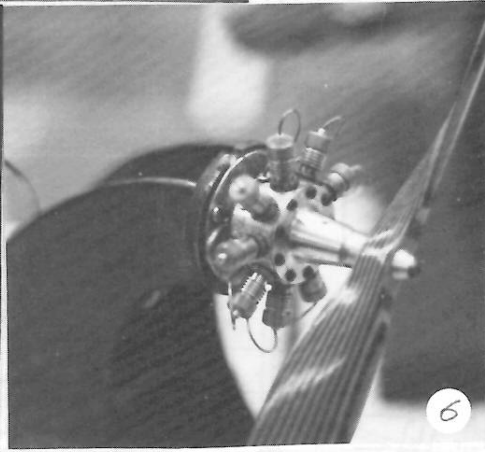
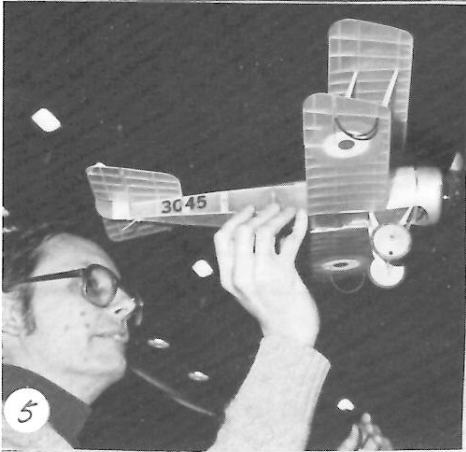
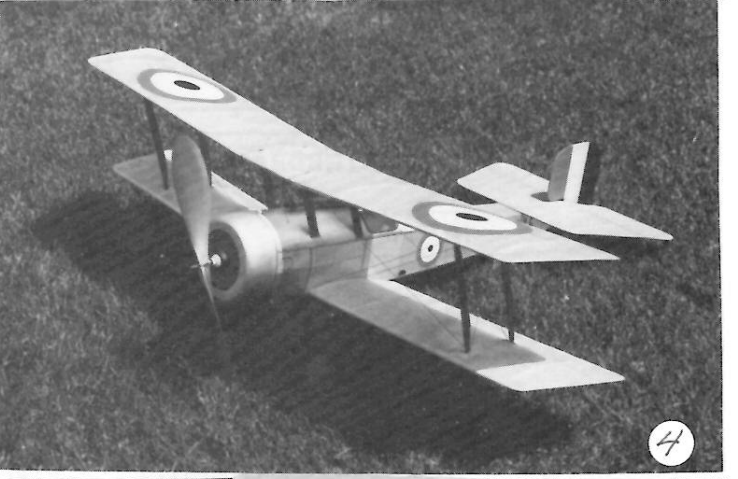
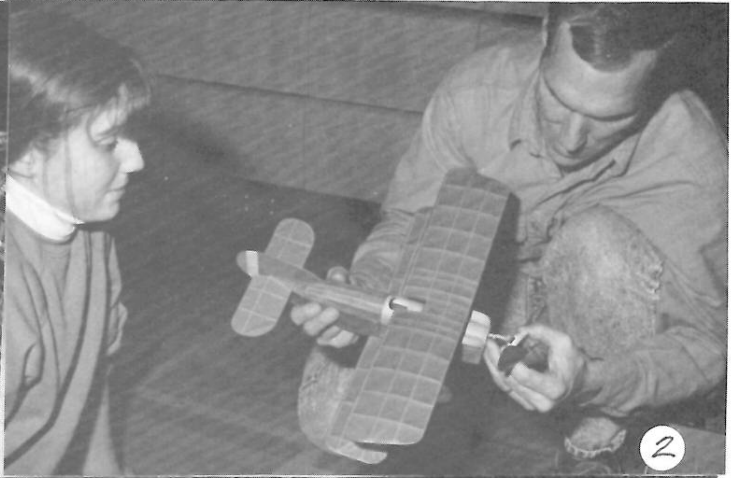
by Bill Ceresa

"AUSTRO-HUNGARIAN ARMY AIRCRAFT OF WORLD WAR I" by Peter Grosz, George Haddow and Peter Schiemer.

If you want to model Austro-Hungarian World War I army aircraft this book is meant for you. It is a large format 10" by 12", has 570 pages, 102 scale three view drawings, 60 in 1/48 scale and 42 in 1/72 scale and 26 pages of color.

I thought I had seen about all the aircraft of WWI but this book has many experimental ones I've never heard of plus three views of them. It is a great book whose contents are awesome. There is only one drawback — it is expensive \$91.00 in the USA — \$94.50 in Canada and Mexico — and \$95.50 outside North America. These prices include shipping at surface book rates. I looked at it this way when I bought it; that's about 8 beers less a month for a year — it's worth the sacrifice. To obtain a copy send checks/money orders in US \$ or British pounds at current exchange rates to:

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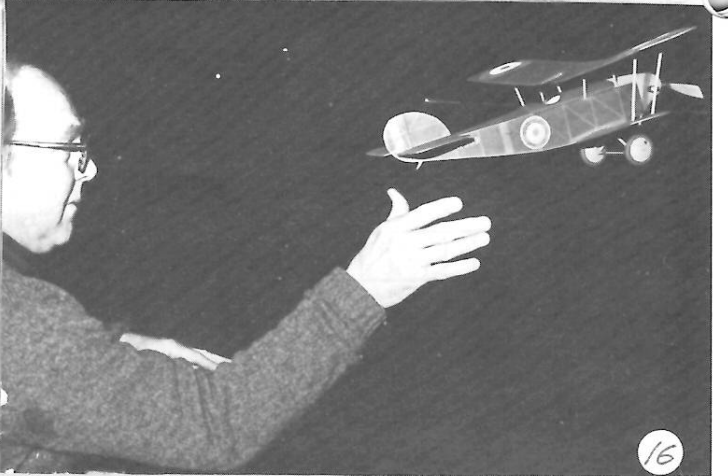
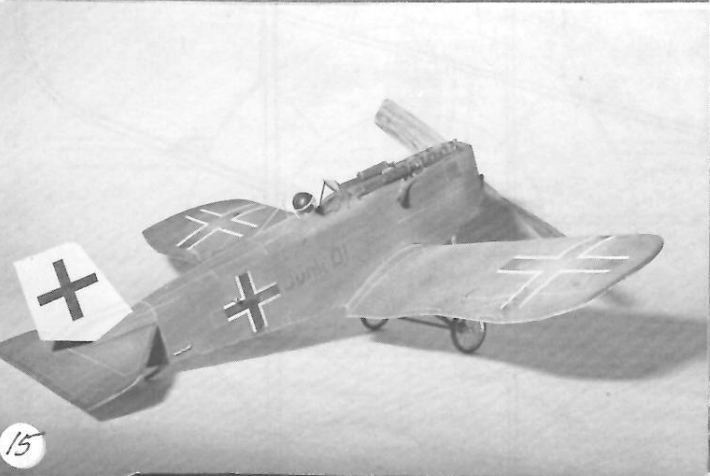
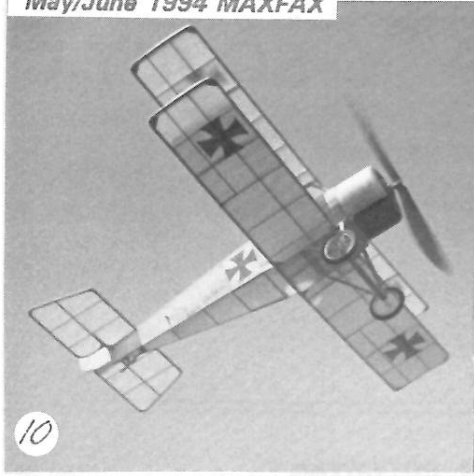
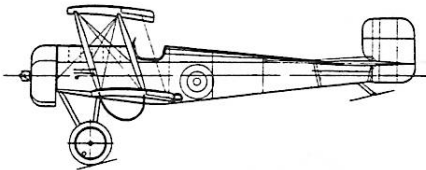


PHOTO PAGES CONTINUED

10. Tom Odum's Euler seen flying high over Shangila South.
11. Obviously an Earl Stahl Albatros by Stew Meyers.
12. Ned Kragness with his Sopwith Triplane.
13. The beautiful but ill-fated CO2 powered DH-2 by Pat Daily.
14. Do you remember Bill Noonan and his Armstrong-Whitworth Ape, the 1984 NFFS Scale Model of the Year.
15. Allan Schanzle's great looking rendition of the Junkers D-1.
16. Don Srull launching his Grain Kitten.
17. Tom Hallman's beautiful Martinsyde S-2.
18. No not a WWI aircraft but our latest Ace Doug Buchanan storing up some calories for his next Kanone seeking sortie.

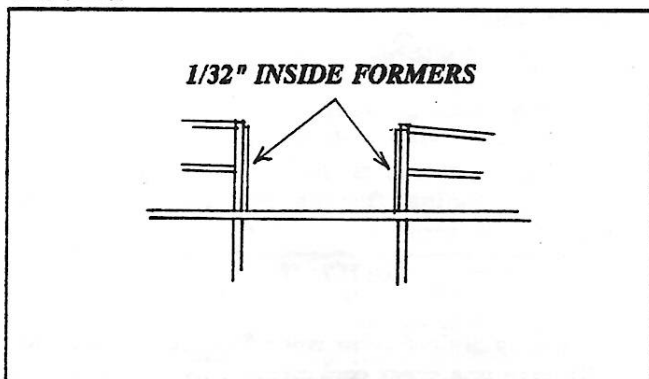


COCKPIT COAMING MADE EASY

by Bill Ceresa

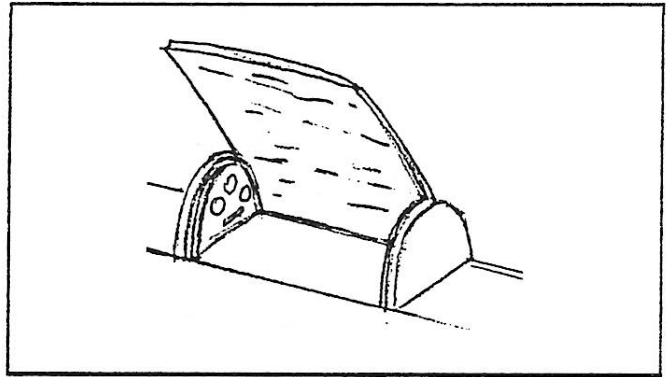
Follow the sketches and notes in order for great cockpit coaming.

[A] Use 1/32" smaller former on the inside of both cockpit area formers. The smaller former in front area of fuselage is now your instrument panel so paint it the appropriate color and add instruments at this time.



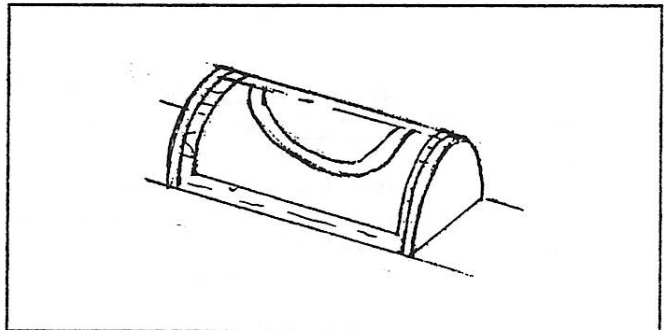
SKETCH [A]

[B] Sheet with 1/32" soft balsa (note grain direction). Lightly mark centerline.



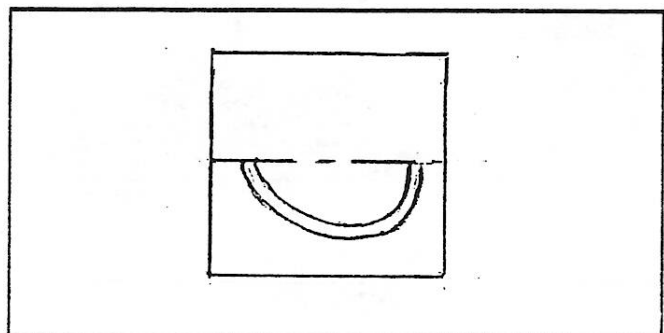
SKETCH [B]

[C] Draw centerline on piece of paper (use low-tack note paper so you can remove with ease) and place paper on sheeted area matching the centerline on sheeted area. Then draw outside and inside cockpit cut-out area on half of paper.



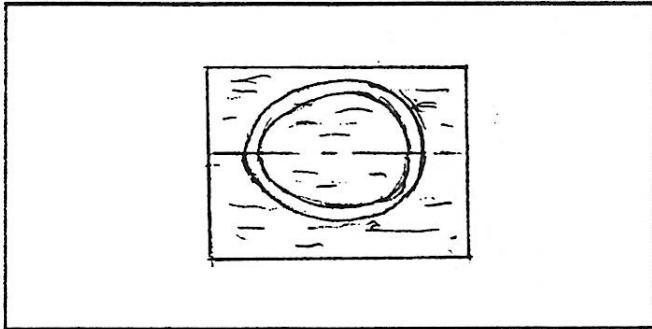
SKETCH [C]

[D] Remove paper pattern, fold at marked center line and trace other half of cockpit placing folded paper on light table or on a window will facilitate tracing opposite side.



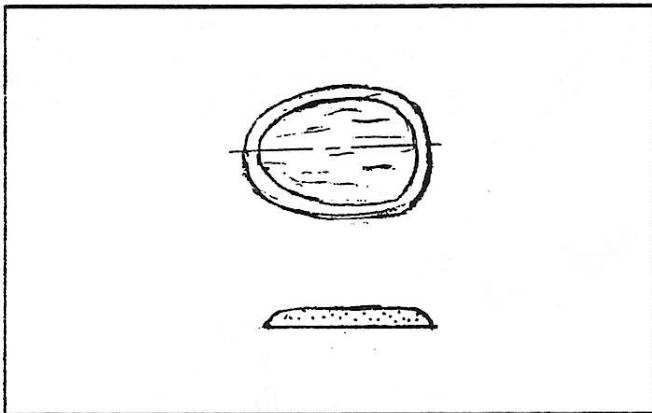
SKETCH [D]

[E] Transfer pattern to 1/16" balsa sheet (note grain direction) then cut and sand to outside coaming pattern.



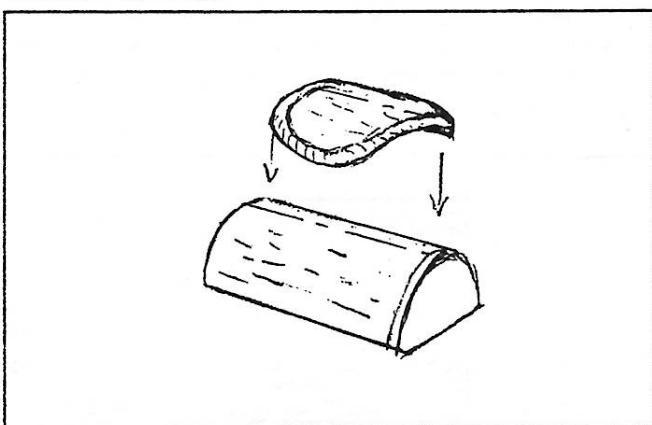
SKETCH [E]

[F] Round the outside edges of the balsa coaming.



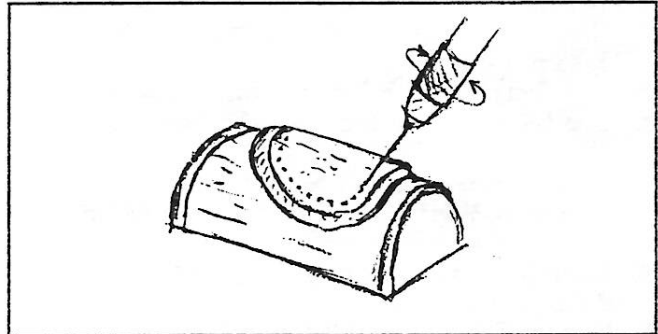
SKETCH [F]

[G] Glue to cockpit sheeting (make sure it is centered on line).



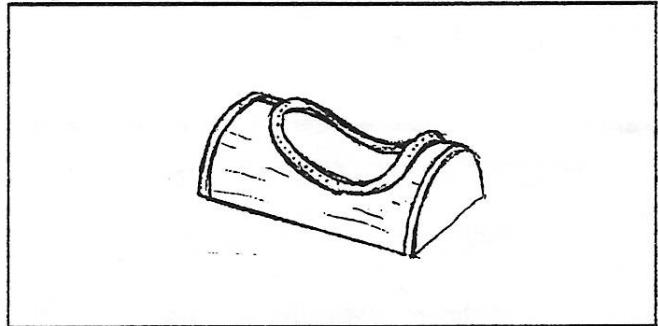
SKETCH [G]

[H] With a pin-vise drill numerous holes, closely spaced inside of cockpit coaming line. Remove with a #11 blade by connecting holes and remove center section with underlining sheet.



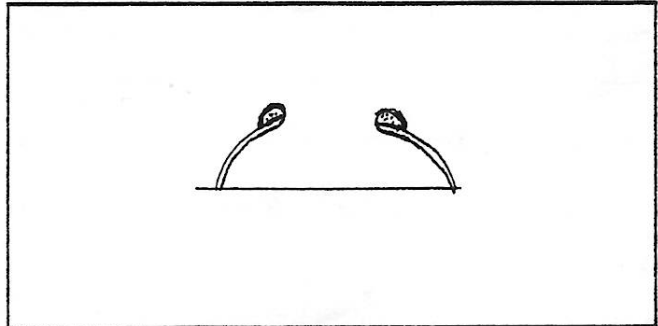
SKETCH [H]

[I] Sand inside area to line marking the inside of the coaming. Sand both top and bottom to a rounded shape.



SKETCH [I]

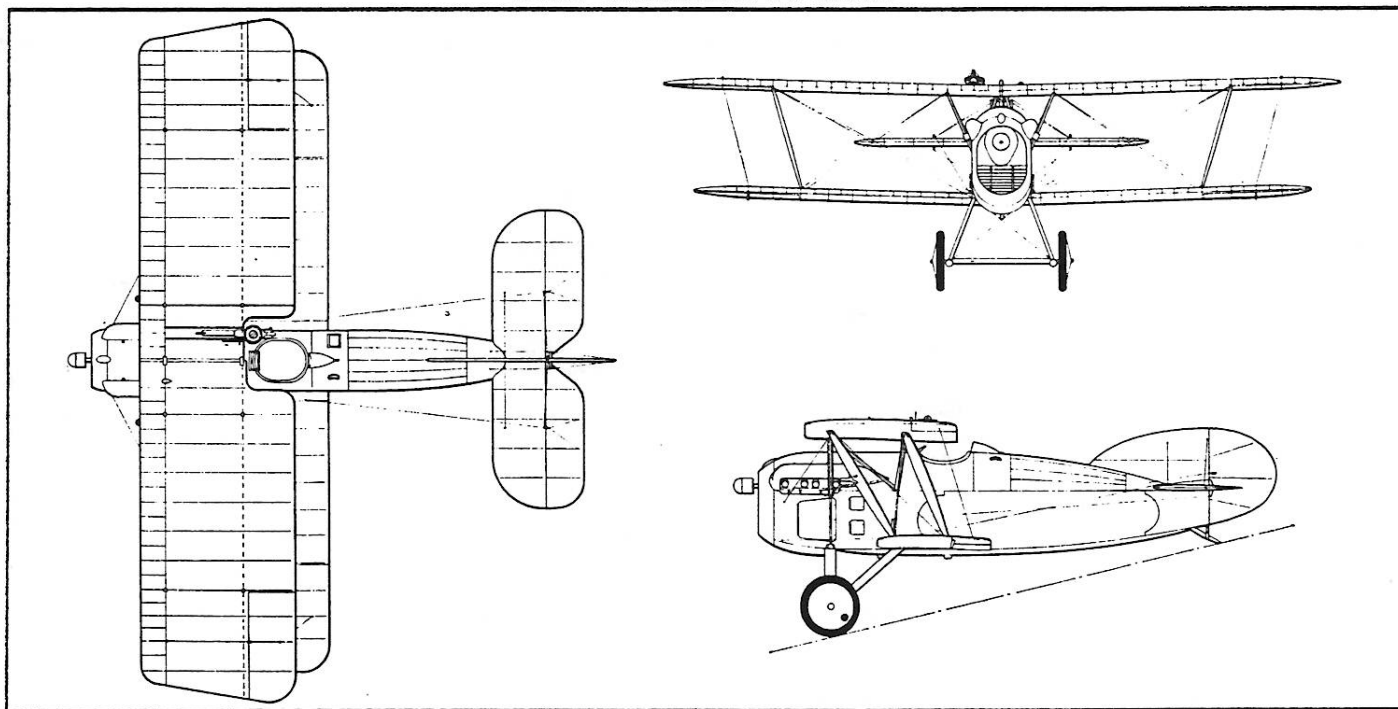
[J] Cross-section of cockpit coaming when complete.



SKETCH [J]

Paint coaming desired color when finishing model and you will have one great cockpit area — I - guar - aaa - nnn - tee - it!

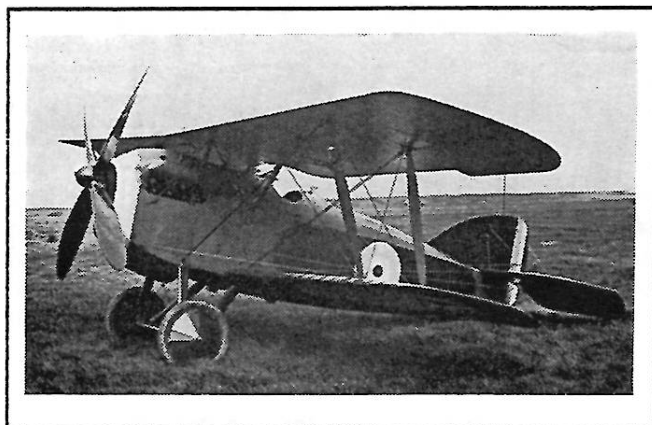
THE VICKERS F.B.16D



VICKERS F.B.16D

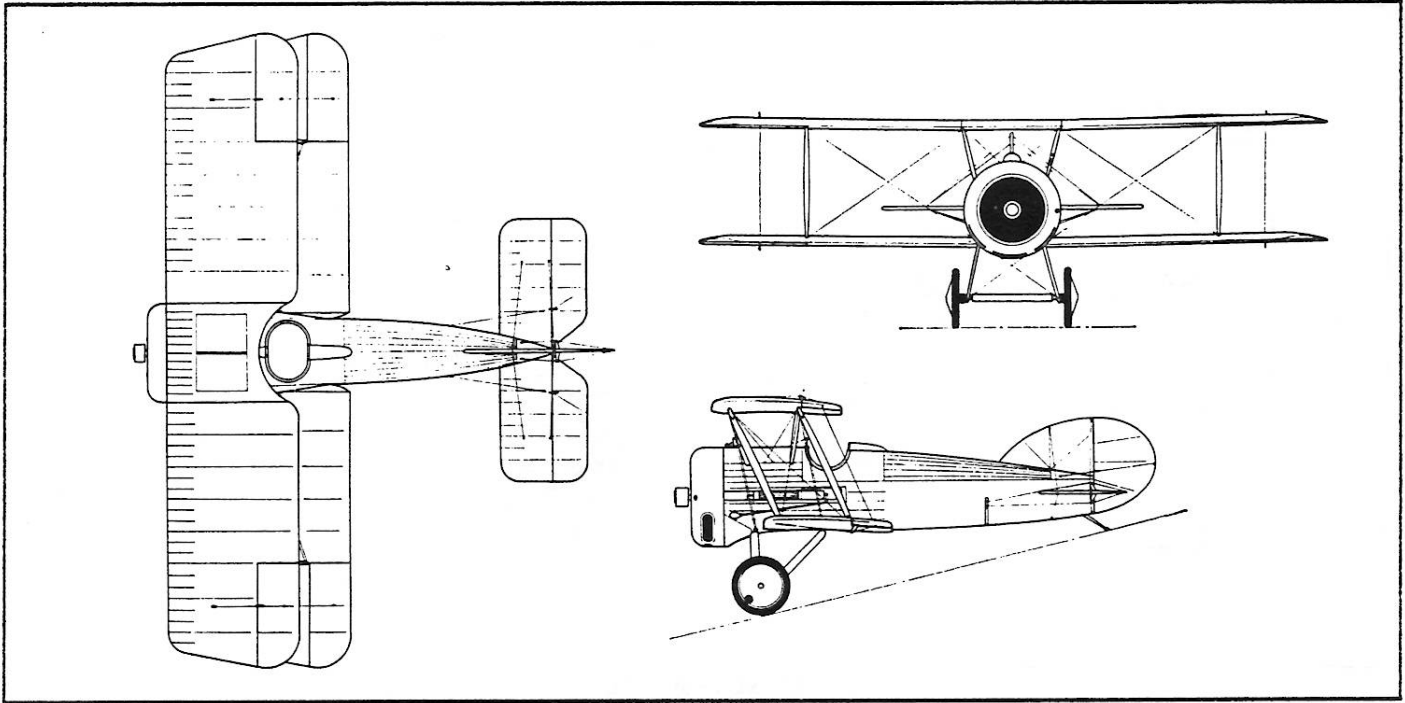
The Vickers F.B.16D never went into production during WWI nor did it make the trip across the channel to France. However it was favored by Captain McCudden as a personal aircraft and according to J. M. Bruce (*Fighters WWI, Volume III*) was with him in Britain and painted red during his duties as a fighting instructor. The French were also interested in the F.B. 16 design series as a 'C' variant with a Lorraine-Dietrich engine. The F.B.16D had a Hispano-Suiza engine. The F.B.16C was never built but evolved into the F.B.16E which was flight tested at Villacoublay but never put into production. Its performance was outstanding but suffered from propeller problems which ended it's development. The 3-view at the top of the page from Bruce's book was used by Mike Hostage in conjunction with his CAD program to develop the construction drawing in this issue of MAXFAX. A photo from Bruce's book is shown in the opposite column. While the aircraft unfortunately is not qualified for the WWI event (according to current rules) it nevertheless should make a great model for the PEANUT event. It has much going for it with low aspect ratio large area wings and a decent nose moment plus much room for a rubber motor. A photo from Bruce's book is shown in opposite column. Additional information and photos can be found in Putnam's book 'The British Fighter Since

1912'. For the scale purists the upper wingspan was 25 feet and the wing chord was 5 feet 6 inches. We have seen Mike Hostage's model fly and it appears to have much promise. Mike built his model larger than his original PEANUT drawing but there does not appear to be any good reasons why the PEANUT will not be just as good.



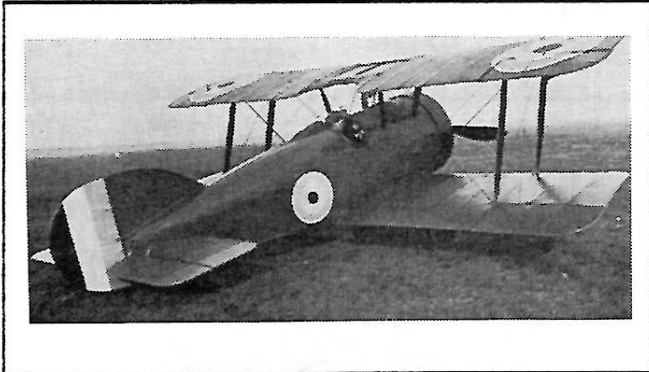
VICKERS F.B.16D

VICKERS F.B.19 Mk.II



VICKERS F.B. MK.II

Bruce's book presents another Vickers fighter which may be interesting to the FAC WWI Mass Launch devotees. In addition to the 3-view on this page, Bruce's book provides a history of the type and some photographs, one of which is reproduced below.



VICKERS F.B.19 MK.II

The F.B. 19 was a single seat fighter, designed in 1916. The standard power units were the 100 HP Gnome Monosoupape and the 110 HP Clerget 9Z. Single Vickers gun was mounted on the port side of the fuselage in a trough formed in the side fairing.

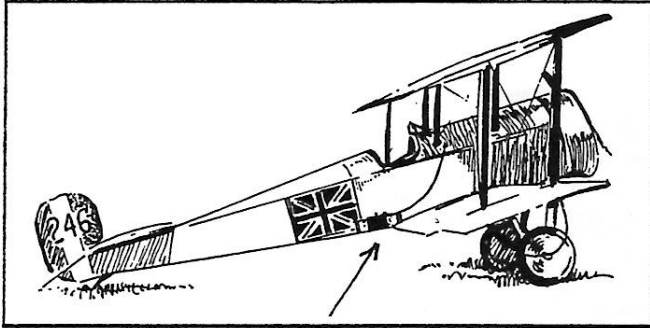
It's line of fire lay inside the engine cowling.

The F.B.19, both Mk.I and Mk.II's, went into limited production with orders from the R.F.C. It was often called the Bullet by the R.F.C.. While it was found unsuitable for duty in France, it did find service with the Middle East Brigade and Home Defense Units which makes it eligible for FAC WWI Mass Launch Events. A number of the type were also delivered to the Russian Government late in 1916. The disposition of these latter aircraft is not well known.

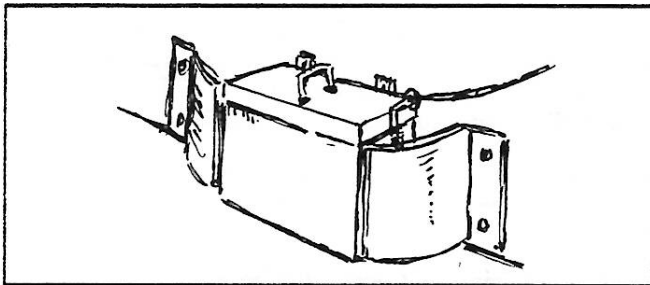
WORLD WAR I AERIAL DARTS

The use of aircraft to drop steel darts (flechettes) was first advocated by Clement Adler in 1909. They were placed in production by the French in 1912 and first used in combat in the Moroccan campaign of 1912. They were used to harass and break up formations of infantry. Both sides employed them during WWI using a variety of flechette and container designs. As the war continued and trench warfare became the norm the effectiveness of the darts diminished and that of small bombs increased. The British armed some Bristol C Scouts

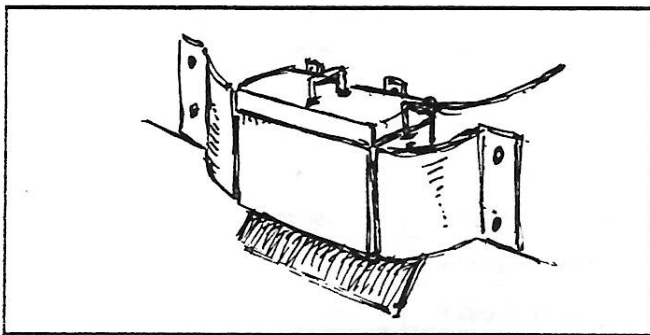
with flechettes so you have the option of arming your Bristol Scout model with flechette containers instead of machine guns. The following sketches illustrate the aircraft installation and a typical flechette.



PLACEMENT OF DART BOX ON BRISTOL SCOUT

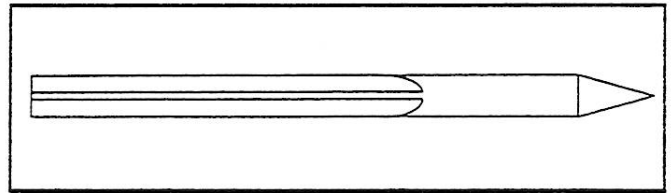


DART BOX WITH FAIRINGS



DART BOX IN OPEN POSITION

Explosive darts were also introduced in combat in 1915 as a weapon against Zeppelins. They were named Ranken Darts for their inventor Francis Ranken. These were intended to be dropped above the Zeppelins to penetrate them and subsequently explode causing the hydrogen gas to ignite. No kills were recorded however and the explosive darts were discarded as bullets were introduced. By the end of 1916 explosive darts were phased out.



DART (FLECHETTE) ABOUT 3/4 FULL SIZE

A definitive history of the development and use of all types of darts can be found in an article by Harry Woodman in the Nov/Dec 1993 (Vol. 9 No. 6) issue of *Windsock International*. For anyone with an interest in WWI aviation a subscription to this periodical is recommended. The publisher is Albatros Productions Ltd., 10 Long View, Berkhamsted, Herts, HP4 1BY, U.K.. The cost of one years subscription to both *Windsock International* and *Aircraft Data Files* (6 issues of each) is 72 POUNDS. Individual copies can be obtained from Hannan's Hangar, Box 210, Magalia California 95954. Call Joan or Bill at (916) 873-6421.

DETERMINING RUBBER LENGTH FOR A GIVEN WEIGHT AND CROSS SECTION

by Bud Carson

I'm sure Don Srull's excellent pointers on sizing rubber motors (Jan/Feb '94 MAXFAX) will be welcomed by all serious flyers. I know it certainly opened my eyes on this sometimes vexing matter. Many thanks Don. I have a small footnote to add to his article, which I hope will prove useful as well.

Don's information tells us how to estimate the weight and total width of a motor, but the question remains, given the weight and cross section (width) how long should the motor be? It would appear that unless you have a good gram scale, this is not an easy question to answer. But after weighing out any number of motors, I am happy to report that you don't need a scale - there is an amazingly simple formula that is easily remembered and allows you to calculate the desired motor length without tears. For the standard FAI rubber (.043" thick) the formula is

$$L = ((3/2)W)/b$$

or three-halves the weight to width ratio. Here, L is the motor length in inches, W is the weight in grams, and b is the motor width in inches. So let's suppose

you want to make up a motor of 4 strands of 1/8th that weighs 10 grams. Then $b = 4 \times 1/8$ or $1/2$ ", and $W = 10$, so

$$L = ((3/2) \times 10) / (1/2) = 30 \text{ inches}$$

Since the motor has 4 strands, you will need a length of 120 inches of 1/8th, plus a couple of extra inches to make the knot. What could be simpler?

Now suppose the model is underpowered on this motor and you decide to "rubber up" to $5/32$ ", while preserving a total weight of 10 grams.

Then $b = 4 \times 5/32 = 5/8$ " so

$$L = ((3/2) \times 10) / (5/8) = 24 \text{ inches}$$

Again, this will require a nominal strip of 96" (8 ft) to make up the 4-strand motor.

Of course, sometimes you are faced with the opposite problem. Suppose you have a prop hook-to-rear peg distance of 15 inches and you want a 12 gram motor that is twice the nominal distance, or 30 inches. What cross section should you use? Solving

the above formula for b, we get

$$b = ((3/2)W)/L \\ = ((3/2) \times 12)/30 = 0.6 \text{ in.}$$

In this case, a 4-strand motor stripped to 0.15 will do the job. Or, suppose you use Don's magic formula and determine that b should be 0.5". With $L = 30$ ", we solve for the weight,

$$W = (2/3)bxL \\ = (2/3) \times 0.5 \times 30 = 10 \text{ grams}$$

Unless you suffer from terminal math anxiety, you should now be able to meet any rubber sizing problem head on! As a final thought, I should note that these formulas seem to work within a few percent regardless of the rubber - FAI Brown, Tan, or Tan II. Have fun!

INDOOR CARRIER EVENT

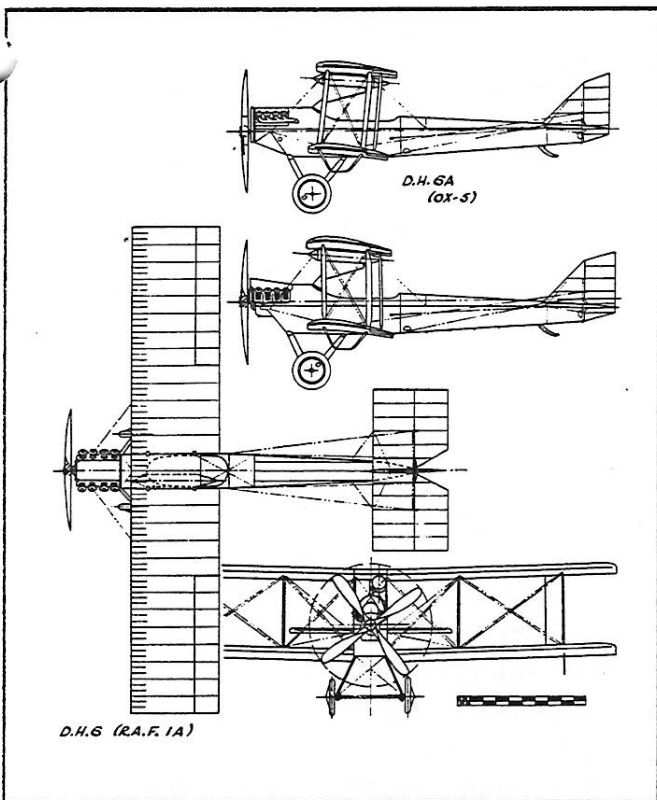
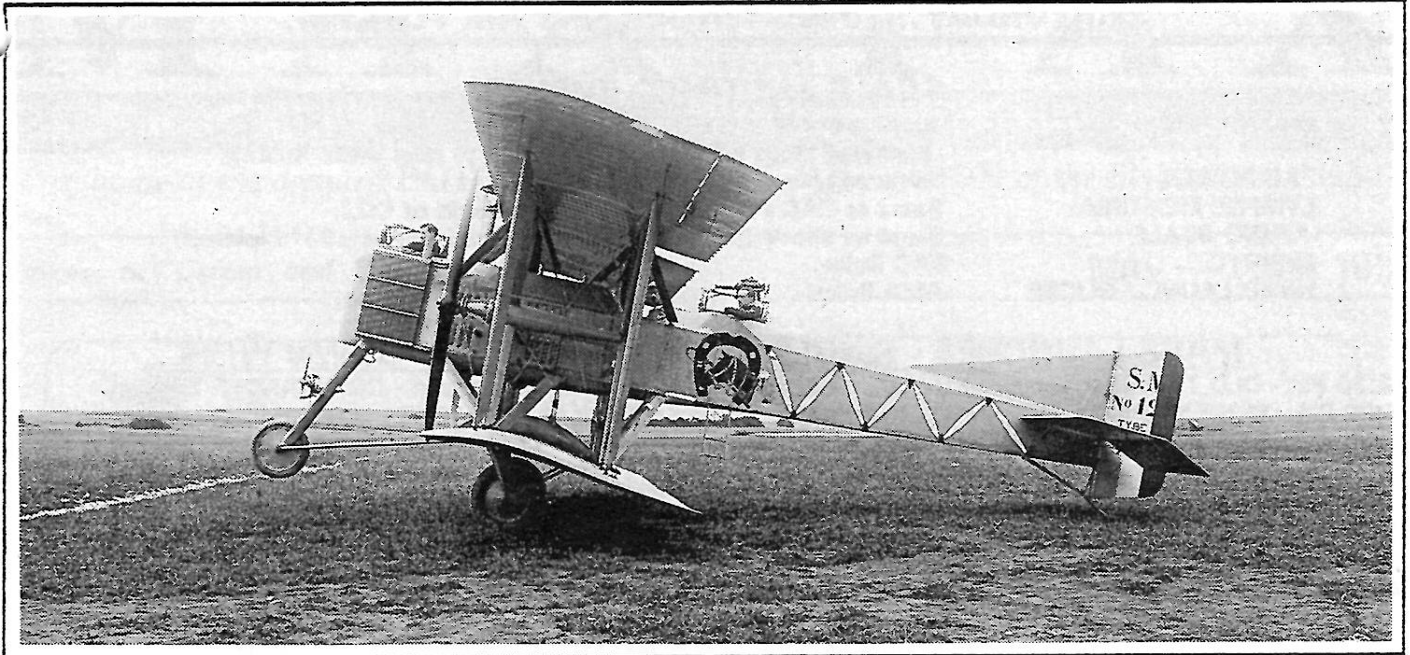
This event was tried during the 92/93 indoor season and was enjoyed by all, both the contestants and spectators. It was held again this past winter and proved to be a bright spot in an otherwise dreary indoor season. The rules were modified for this year and proved to be more interesting. The rules were simple. The event was open to any scale aircraft with a separate category for Navy aircraft. The aircraft are hand-launched (catapult launch) or R.O.G. from one of the basketball court foul shooting key slots (our friendly home carrier base). After launch they must fly over the opposite basketball court key slot (bombing the enemy carrier) and then return to land on the home carrier (within the slot). The scoring used was as follows; If your plane R.O.G.s you get 1 point, a landing back aboard the home carrier (within the slot) is worth 5 more points. Landing within the 3-point zone but outside the slot is worth 3 points (pilot recovery possible by carrier helo possible), a landing outside the 3-point zone but inside your half of the court (pilot recovery possible but time consuming) is worth 1 point, additional flights over the enemy carrier (more bombing/strafing runs) during a single mission are worth 1 point each. No points are scored for failing to fly over the enemy carrier. There is obviously not anything scientific about this scoring but it seemed to work and was a lot of fun. Try this

event or a variation thereof during one of your indoor sessions, you will get a kick out of it! The results follow; Frank Rowsome was the winner with a high of 5 points.

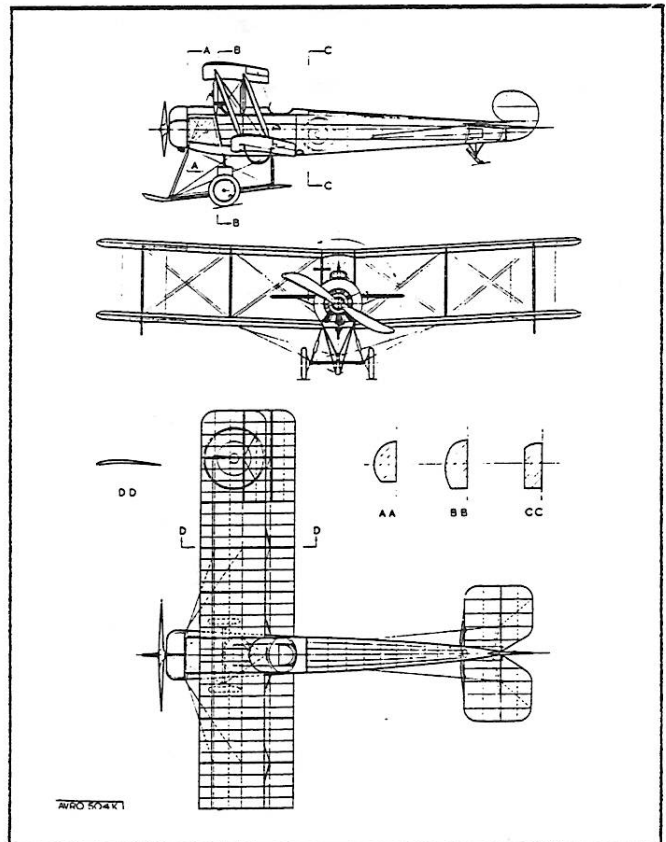
CONTESTANT	AIRCRAFT	POINTS
STEW MEYERS	NJ-1	3
STEW MEYERS	CESSNA	LOST AT SEA*
FRANK ROWSOME	PA-12	5
FRANK ROWSOME	J-3 CUB	5
RUSS SANDUSKY	WILDCAT	0
RAY RAKOW	BRIST SCOUT	0
BERT PHILLIPS	SOP TRIPE	0
BERT PHILLIPS	J-3 CUB	0
JERRY PAISLEY	J-3 CUB	3

*Stew's Cessna went to that "happy hunting ground" in the sky when it flew into the return duct of the heating system, never to be seen again!

MYSTERY PHOTO



DH 6 CIVIL CONVERSIONS



AVRO 504K

**D.C. MAXECUTERS 1993 SUMMER FUN FLY
SATURDAY, 10 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.

LYMPNE MEMORIAL

Same as above.

JUMBO SCALE

Same as FAC POWER but only for Electric or CO2.

EMBRYO

Same as above (36" Minimum span monoplanes - 30" biplanes)

HAND LAUNCH GLIDER

FAC Rules.

AMA 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

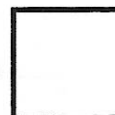
4:45 PM - TRANS COMSAT SPEED AND NAVIGATION

Any rubber powered scale aircraft that flew in any of the other contest events.

CD Allan Schanzle

*2008 Spur Hill Dr., Gaithersburg, Maryland 20879 - SASE Please or
Phone (301) 840-5884*

NOTE: Your Dues Are Due



CLUB OFFICERS

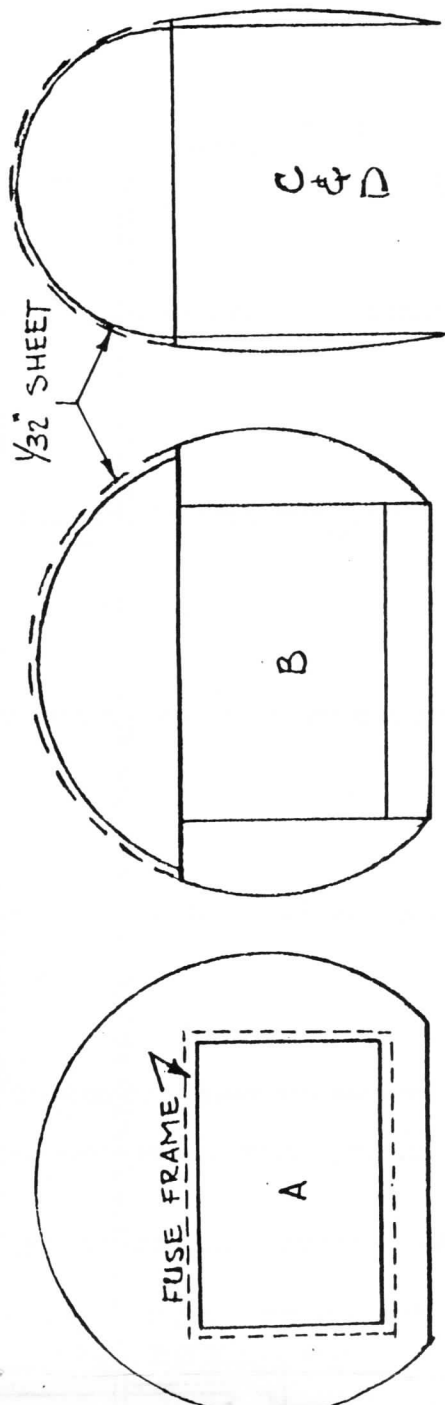
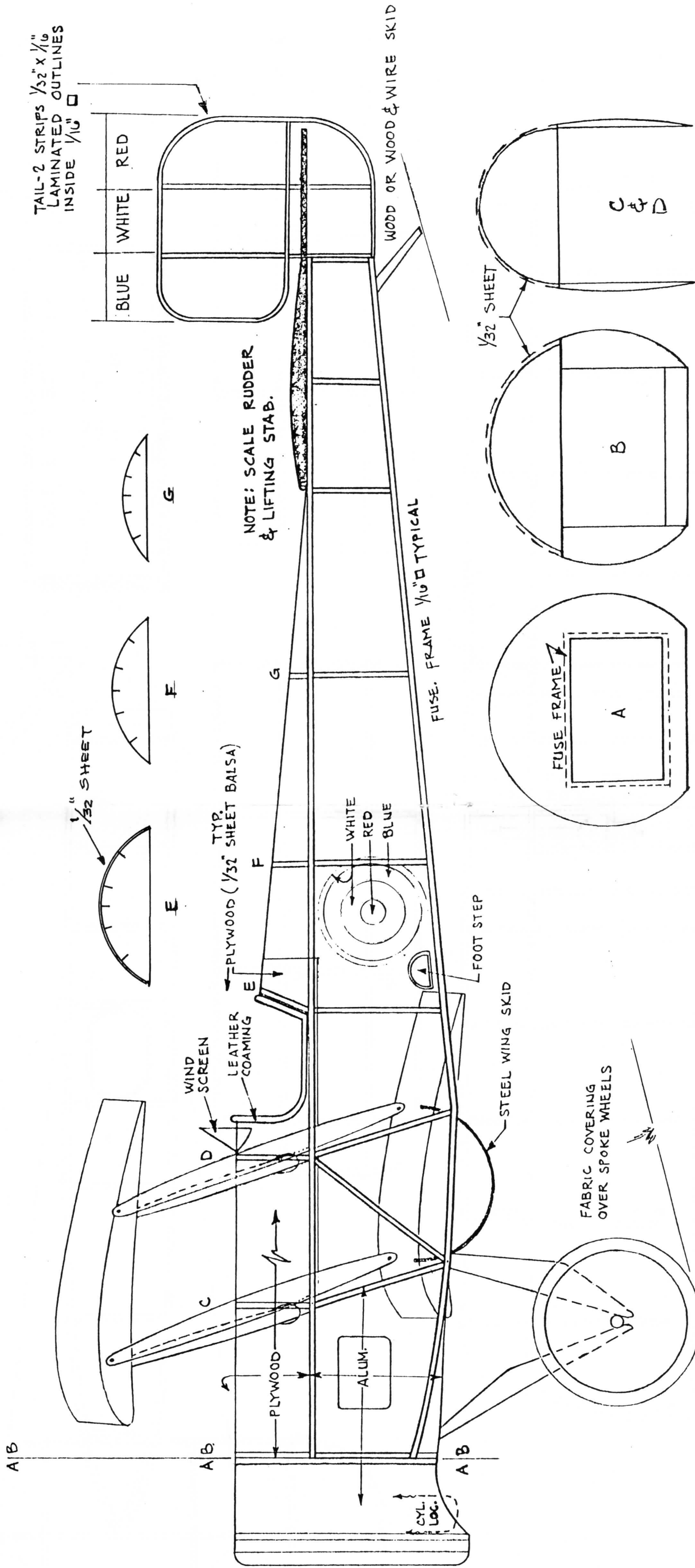
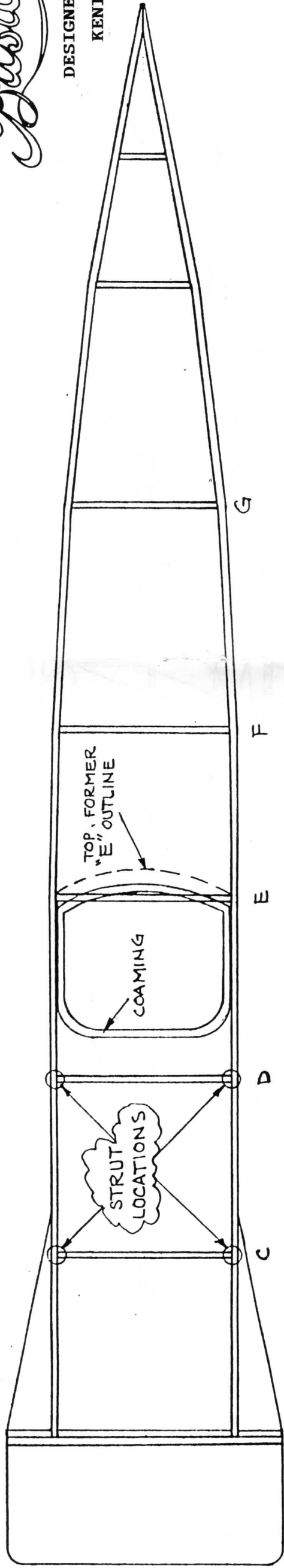
President Terry Pittman
7863 Colonial Vil. Row
Annandale, VA 22003
Secretary Bert Phillips
1709 Crofton Pky
Crofton, MD 21114-2305
Treasurer Frank Rowsome
10904 Bellehaven Rd.
Damascus, MD 20872



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.

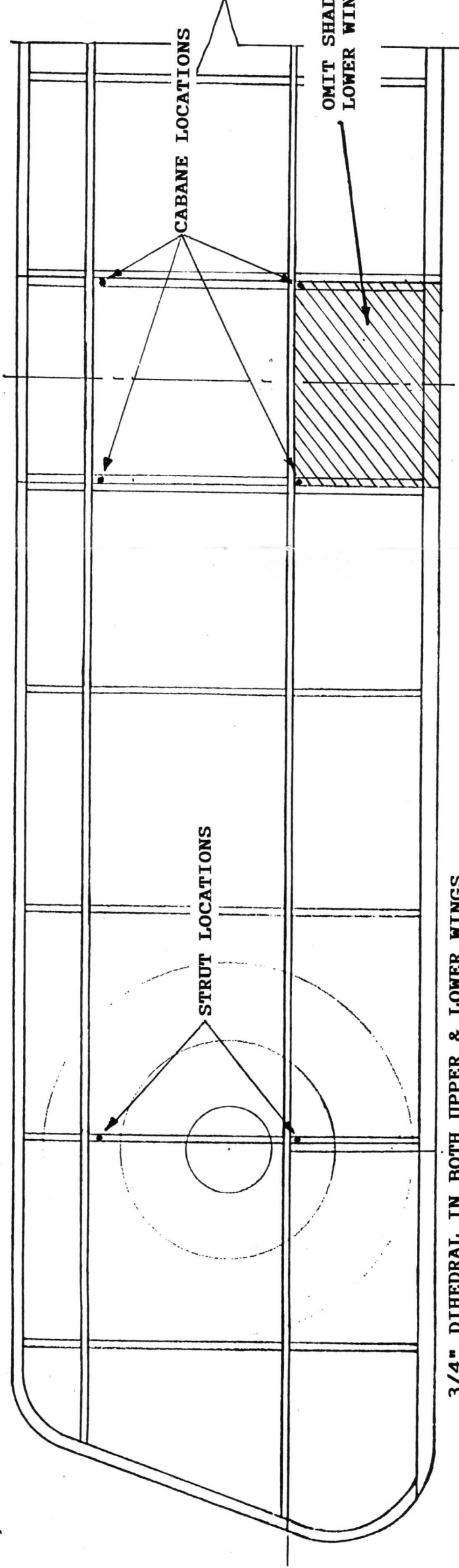
MEMBERSHIP Dues for membership in the D.C.MAXECUTERS is \$15 per year for residents of the USA, Canada, and Mexico, and \$25 for all other countries. Your mailing label indicates the year and month of the last issue of your current membership. A red "X" in the box above is a reminder that your dues are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

DESIGNED AND DRAWN BY
KENIN SHARBONDA

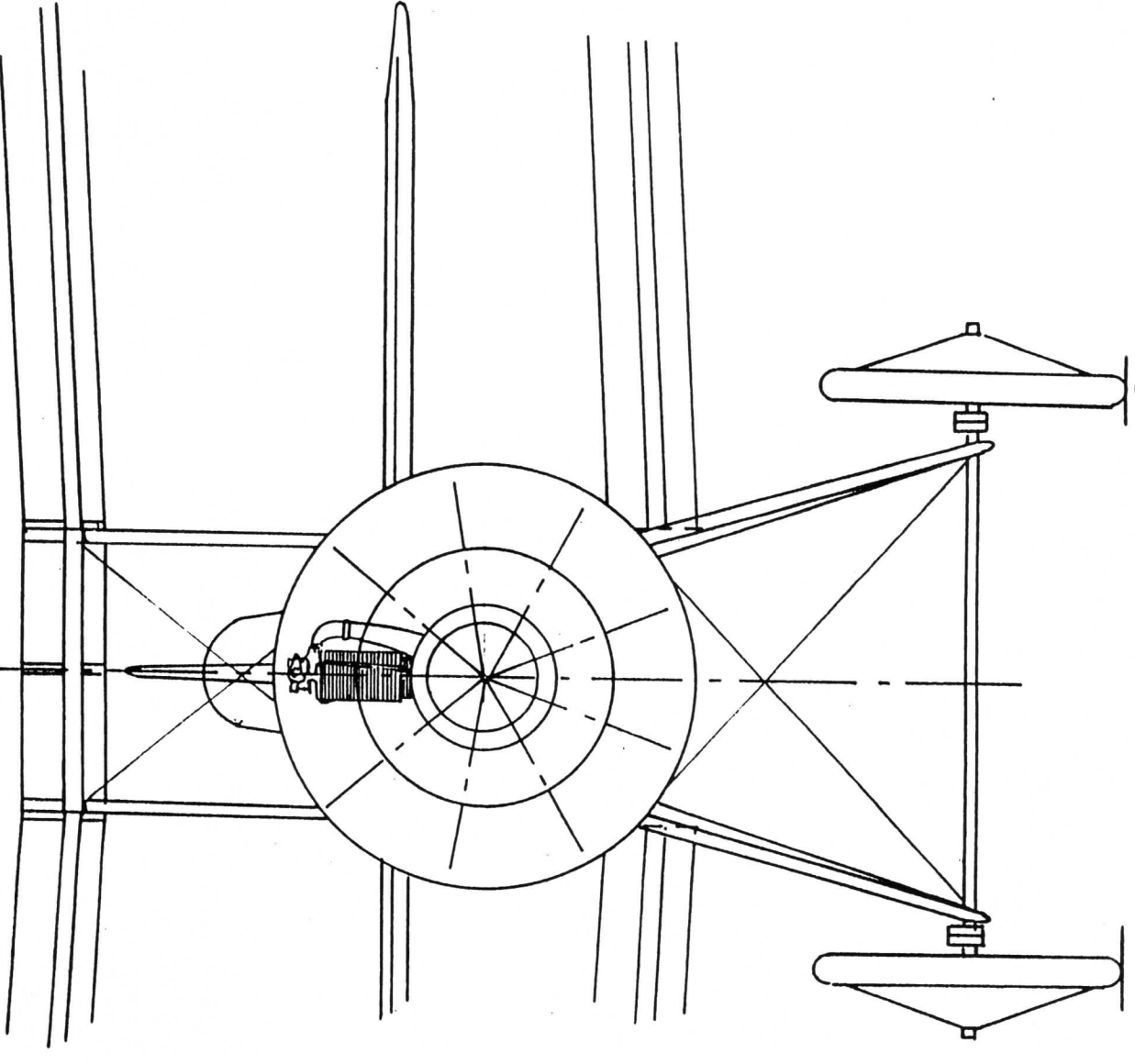


66 *Bristol* 99 SCOUT C

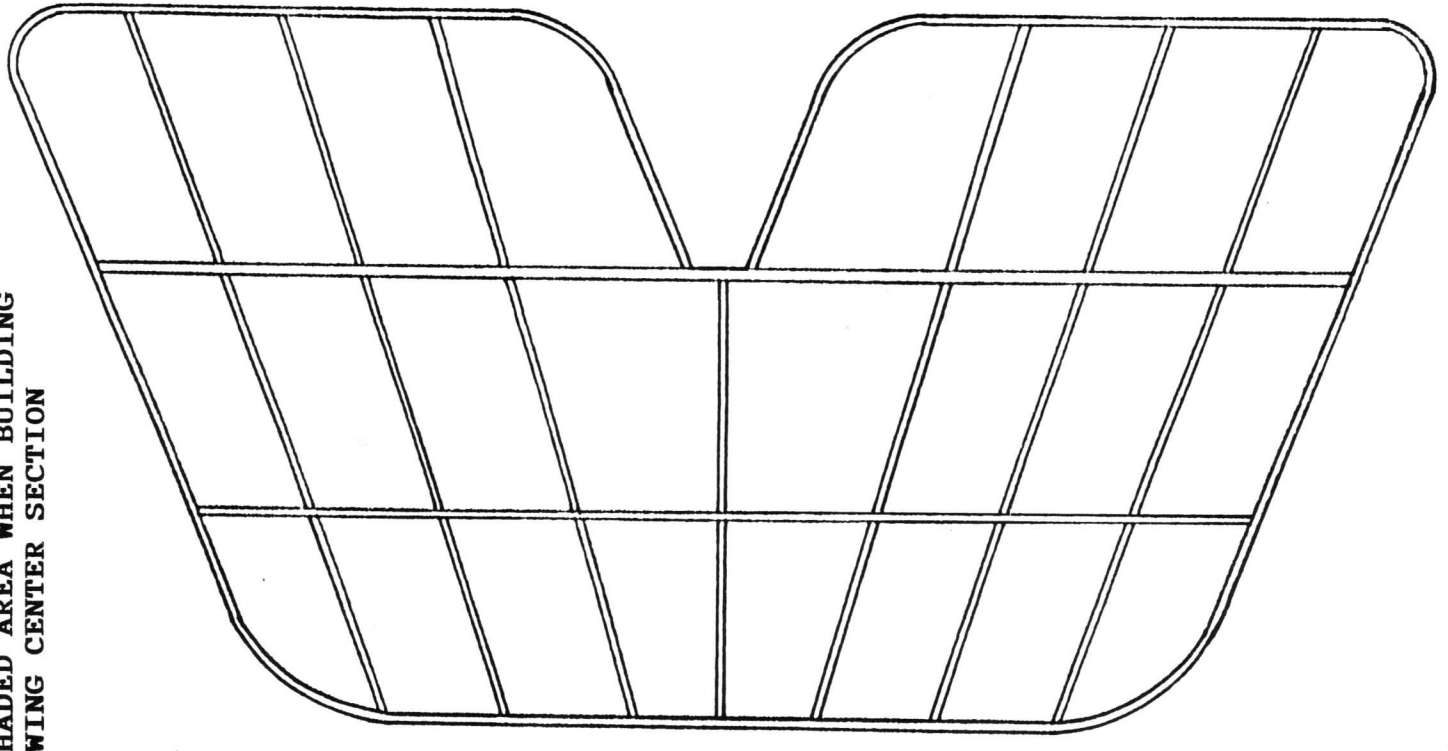
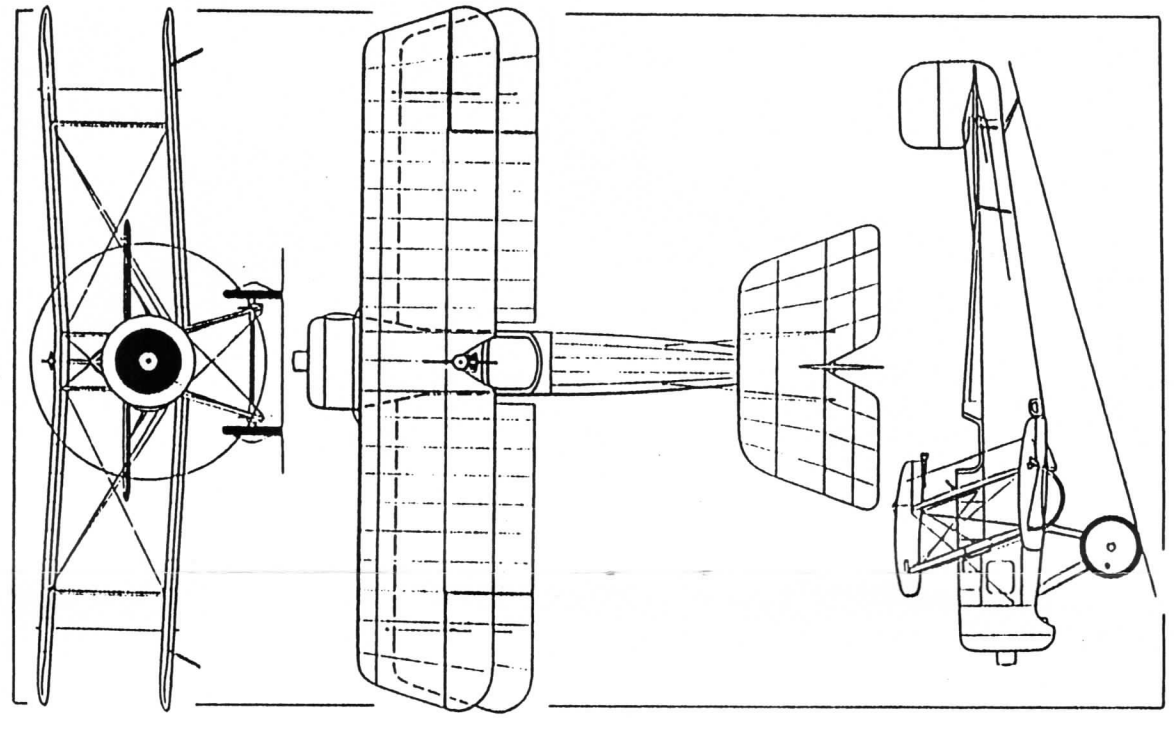
DESIGNED AND DRAWN BY
KEVIN SHARBONDA



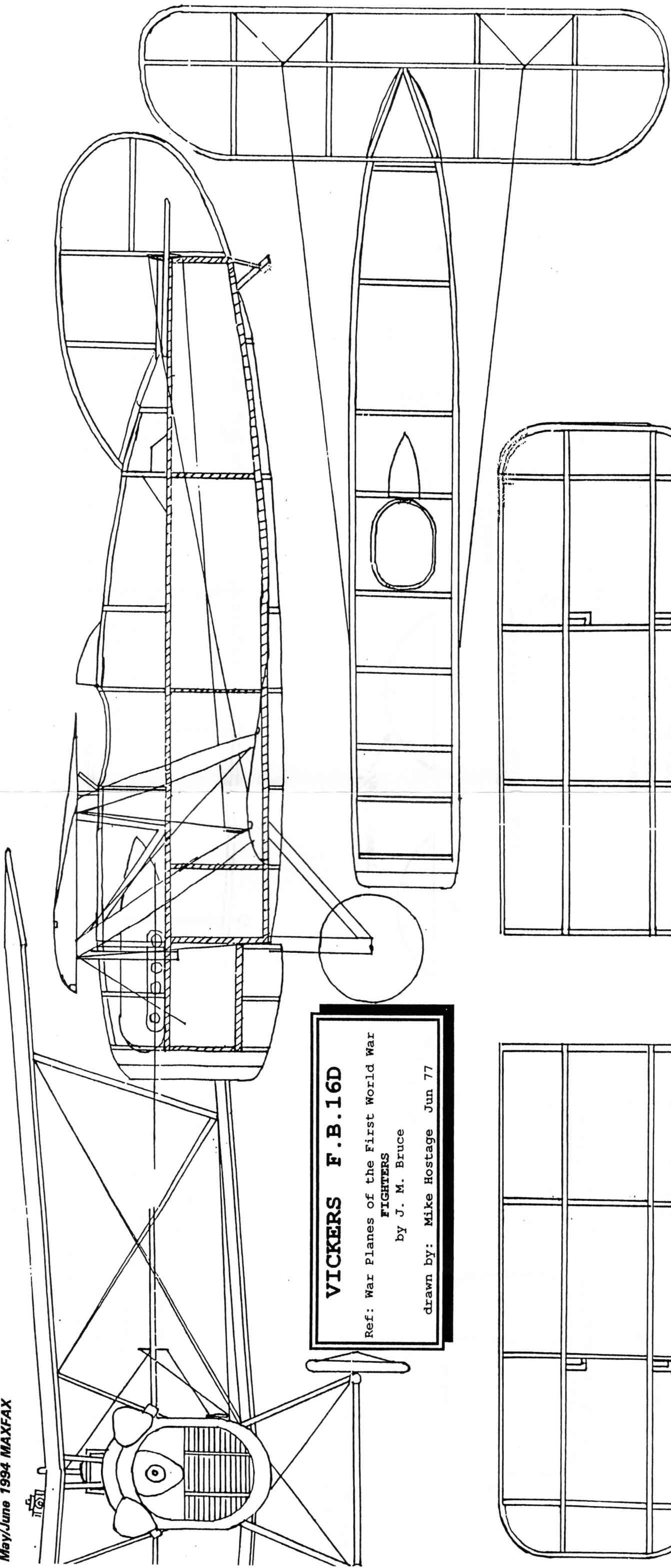
3/4" DIHEDRAL IN BOTH UPPER & LOWER WINGS



10



15



VICKERS F.B.16D

Ref: War Planes of the First World War
FIGHTERS

by J. M. Bruce

drawn by: Mike Hostage Jun 77

