

MAXFAX

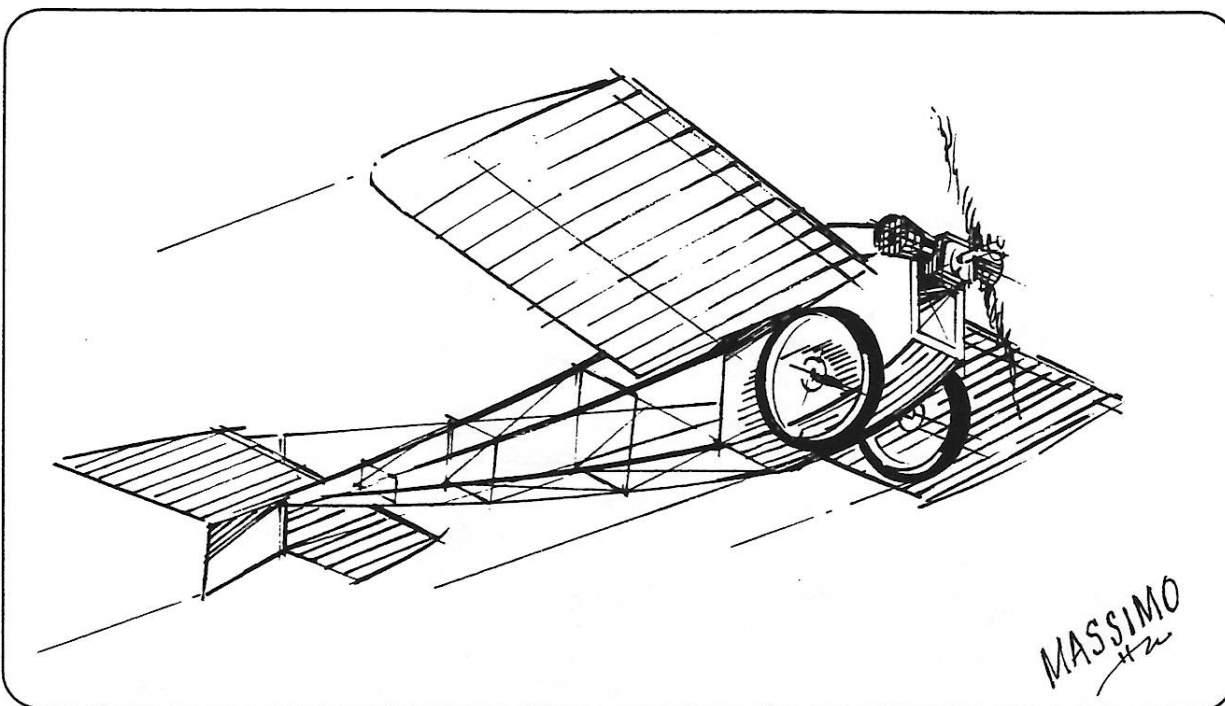


Journal of the D.C. Maxcutters

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

Editors : Terry Pittman

September - October 1995



Coming Attractions

- **September 9 - Maxecuter's Summer Fun-Fly @ Comsat.** 9am-5pm. You must have AMA card with you to be eligible to fly due to site insurance regulations. For more details, contact Alan Schanzle, 20008 Spur Hill Dr., Gaithersburg MD, 20879. Ph. 301.833.5884.
- **September 23-24 - SAM Contest at Cuckoo, VA.** CAAMA contest @ Bill Saunders farm at Cuckoo, Virginia.
- **October 13-14 - Kudzoo 5th Annual Land & Lake Meet.** Two great FAC contests. On the LAKE (10/13) @ Goldsboro, NC. On the LAND (10/14) @ Raeford, NC. See inside for more details.
- **October 22 - Maxecuter's Sunday Afternoon Mini-contest @ Comsat: ROG (Rise-Off-Grass) Mass Launch.** (Is he really serious?) Any rubber-powered float plane can enter. Must take-off the bare grass. No grass coverings allowed. Grass may be flattened (trampled) or pulled-up by hand during 3 minute winding period immediately preceding launch.
- **November ? - PAX River Indoor Contest:** Naval Air Station/Naval Air Test Center Patuxent River, MD. FAC rules. Check in the Nov/Dec MAXFAX or with Claude Powell (301.872.4105), or Tom Schmitt (301.530.0327) for contest date confirmation and specific location on base. Same events and schedule as last year (see Sept/Oct '94 MAXFAX for details.) Events: Old Time Scale, WWI, Peanut Scale, Golden Age, FAC Rubber Scale, Coconut Scale, 14 gm Bostonian, FAC Power, 7 gm No-Cal, Novice Penny Plane (AMA rules), Coconut Mass Launch, No-Cal Mass Launch, Electric Bogus Scale Bostonian, Mass Launch Consolation Event.
- **July 19 - 21, 1996 - FAC Nats Mk. X** *The Mother of All FAC Contests* @ Geneseo, NY

This Edition of MAXFAX...

Pistachios Anyone? This edition is packed with plans. Small ones, CO2-powered, and mostly French, as you have come to expect from moi. It also has the great photo page (photographed by and/or edited) by Tom Schmitt, and the handsome cover art by Massimo (who is this guy?) There are several beautiful Otto Kuhni drawings sprinkled here and there. Also, a special treat, another of our own Rolfe Gregory's great C.A.V.U. (Ceiling And Visibility Unlimited) pieces, this one reprinted from 1977. If you missed it then, you'll never guess why Thompson Trophy racers reminded him of *one-bladed props*. I hope you enjoy reading *and building* from this edition as much as I have enjoyed putting it together.

Each time I offer to edit an edition of the MAXFAX I grossly under-estimate the amount of work involved. We all do. Fortunately, by the time any one of us feels like doing it again, our memory has apparently failed and we volunteer, or get persuaded to do another one.

Which leads to the next point: Please accept our apology for the tardiness of the July/August issue. Most of us Maxecuters who fly @ Comsat, meet monthly at College Park Airport, offer to write newsletters, take the newsletters to the printer and pick them up, arrange for indoor flying sites during the winter, and etc...Most of us have other obligations (like a job for starters) that also make demands on our time. Sometimes we just get a little behind, like last edition. Actually, sometimes I think we are amazed that we keep putting this thing out. But, as you can tell, there is an enormous amount of pride in this club in doing things well, be it building planes or editing a newsletter. So, we'll try to keep on schedule, but...now and then you'll just have to be patient while we get caught up.

Letters, letters, letters. From time-to-time we get letters from you. These include photos, ideas, plans, articles, and money (renewal checks). We share these at the monthly club meetings. Sometimes we can include something you have sent in an upcoming newsletter. But, just as often, submissions don't make it into MAXFAX. Please don't be offended if we don't write back always, or if your submission doesn't make it into the newsletter. We do enjoy hearing from you. Each newsletter's content is 100% at the discretion of that edition's editor. All material submitted goes into a "publishing ideas file" which is passed on to the next editor. Some plans, articles, and other submissions have remained in the file for months, even years, before making it into an edition.

Rules of Thumb. This past winter, renown pilot, and fellow Maxecuter, came to one of our monthly meetings at College Park Airport. Ned knows more about aerodynamic design than most of us will ever forget. He gave me these simple rules of thumb as a starting point for model aircraft design. *Thrust-line reference: wing +2°, stab -2°, CG 25% from leading edge (or mean leading edge), 2° washout at wing tips.*

Subscriber Alert! Several years ago, we switched to sending domestic issues of MAXFAX by bulk mail. This saves \$4.50/year per subscriber, which has enabled us to absorb postal rate, and printing cost increases, while lengthening and improving the newsletter without charging more. The benefits of bulk mail are significant, but there is a downside. The Post Office will not forward bulk mail, unless you tell them you will pay the extra postage. If you move with out telling us, *even if you have your first class mail forwarded*, the MAXFAX will not follow you; the Post Office throws them away.

If you are missing issues of MAXFAX that you think you should have received, this could be the reason. (If you are not receiving issues, how could you read this...??? hmmm.) If you want back-issues that you missed for this reason, be advised that we will have no choice but to charge you for them. In this case, or any other, if you seek back-issues they are \$2.50 each, where available. Requests should be directed to: Treasurer, Frank Rowsome (see address on back cover).

Paris, Jouets Ancien, and le Concorde

by Terry Pittman

My work requires that I travel quite a lot. Where ever I go I try to find some aviation-related point of interest in the city I am visiting. Hobby shops, museums, book stores, etc. It's a sort of coping mechanism that helps make the travel more enjoyable. Sometimes I get lucky. Last winter I got very lucky.

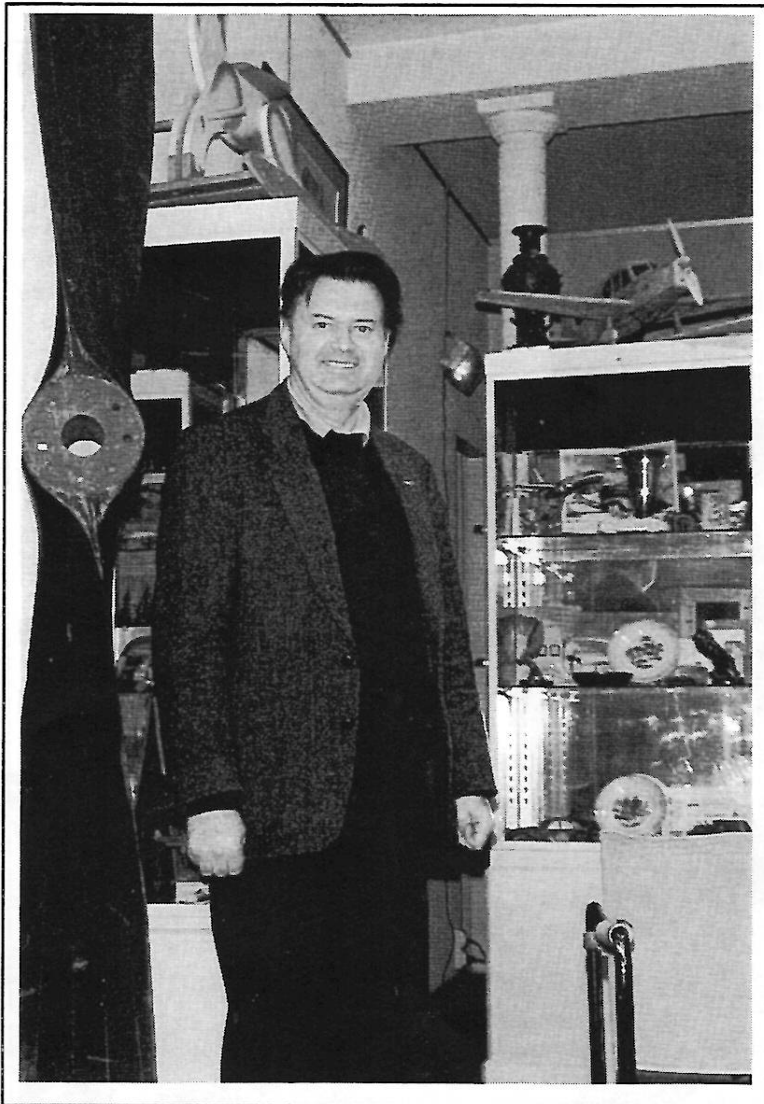
In January I participated in a conference in Paris, the cradle of aviation. During my week there I was able to track down several great aviation book stores, a fabulous antique toy shop that specializes in aviation toys, spend some time in the archives of the "Musee de la Air" (Air & Space Museum), meet a writer for the great aviation magazine "le Fana de l'Aviation", and best of all, my *very clever* travel agent was able to upgrade me to the Concorde on the return trip. I keep a travel diary and the following are excerpts from this memorable trip.

Monday, January 9, 1995

6:17am (Paris time) 35,000 feet, Air France flight 23 - Washington/Dulles to Chas. de Gaulle, Boeing 747. I've been observing our progress, and air traffic control points, on a large TV screen attached to the cabin bulkhead which shows the plane's location on a map, and indicates the air traffic control contact. Have just passed over Cork, Ireland, radio contact is with Wexford. Headed toward Land's End, Cornwall, then on to Paris. The screen indicates we've now been handed off to Glastonbury. Almost there.

Paris, later that morning:

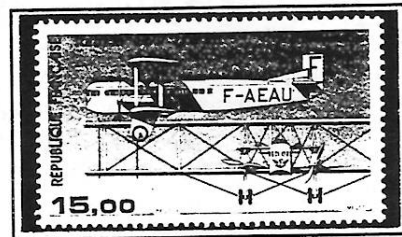
"Headed out to 11am appointment at **le Carreres** bookstore, 21 rue Mayet. (I discovered **le Carreres** several years ago at the Paris Air Show where M. Carreres had set up a temporary shop filled with hundreds of French aviation magazines from the teens, twenties, and thirties, rare books, and boxes of photos of famous and obscure French aircraft.) Upon arrival, M. Carreres gave



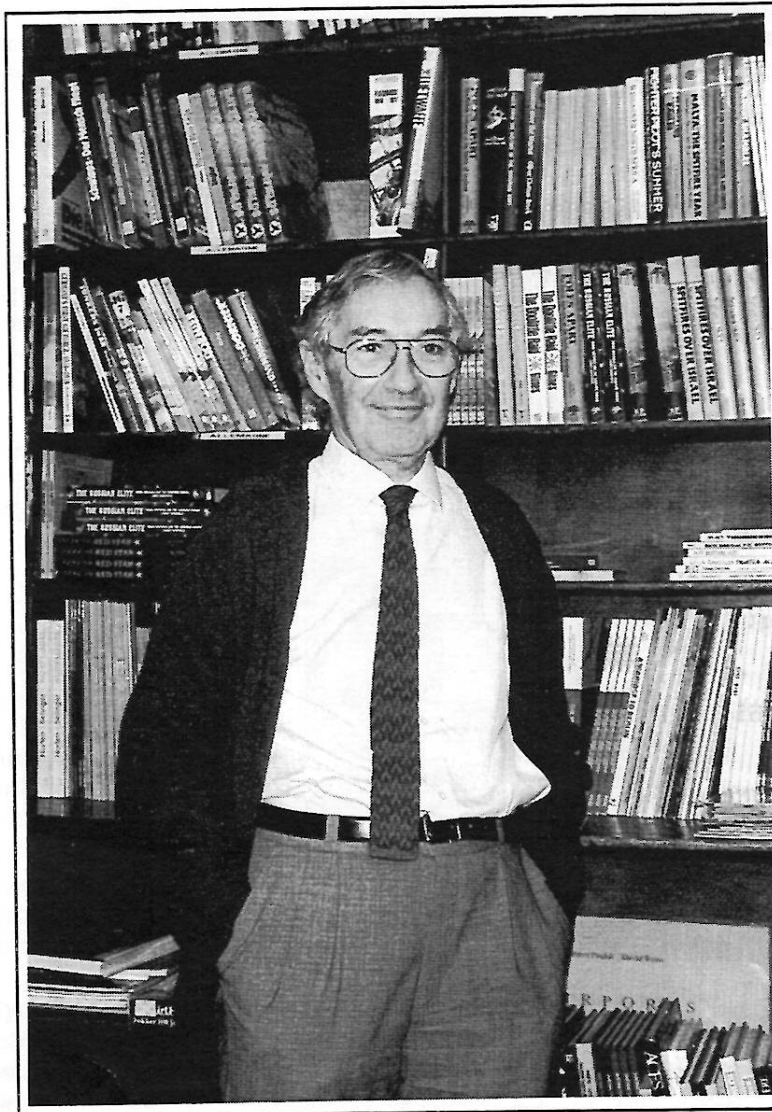
M. Philippe le Page, proprietor of Jouets Ancien, Paris, France. Note: Caudron "Simoun" in background.

me a desk and piles of old magazines, factory brochures, drawings, and literature. While I browsed through the stacks of precious materials M. Carreres disappeared and returned with two espressos and some dark chocolate bars. Just what I needed to warm a cold, damp winter day and keep me going on so little sleep. Unfortunately, M. Carreres wanted an exorbitant amount of money for the magazines so I only bought a couple of photos. One of the cute little Pou de Ciel (Flying Flea) and one of the Caudron C460.

Leaving le Carreres, I crossed the street and entered **Jouets Anciens** (Antique Toys), a cute little shop filled with toy airplanes, trains, and cars. I admired at great length a beautiful "gyroplane" model of the Arc-en-Ciel, the exotic tri-motor from the 30's. The model is all aluminum with red trim and is suspended on a "boom" with a (cord-pulled) gyro on the other which balances perfectly on a base. I feel like a little kid in toy store. I ask myself for permission to spend money. I leave without it.



Lovely French FARMAN "Goliath" Stamp



M. Jean Claude Brabant, Proprietor of la Maison du Livre Aviation, Paris, France

Tuesday, January 10

The hotel and conference center are located on top of an underground mall which also contains a post office. Found a series of gorgeous stamps with images of historic French aircraft. My favorites: the Farman F60 "Goliath" and the CAMS 35 Seaplane. Bought several "Goliath" stamps.

Thursday, January 12

Left the conference and returned to **Jouets Anciens** where I had seen the "Arc-en-Ciel" gyroplane. This visit I had the good fortune of meeting the owner, M. Phillippe le Page. Turns out M. le Page is also a FF modeler and is acquainted with master modeler Emmanuel Fillon and quite a few others in this global modeling community. He was very impressed with the "MAXFAX" back copies I had brought along and I gave them to him. In return, he gave me a DEAL on the gyroplane and as I was leaving he pulled another antique toy plane from a closet and put it in my bag. It's a "Flech'

Avion" or "flying arrow", a wood, wire and yellow silk folding bird-like contraption that is launched with a rubber loop attached to a dowel and at 25 meters the wings are supposed to pop open. The model was awarded a scientific achievement award in 1925. We agreed to stay in-touch and I rushed for the metro with a big smile on my face.

Friday, January 13

Stopped at **la Maison du Livre Aviation** ("House of Aviation Books", recommended by Bill Hannan. Thanks Bill!). As I browsed I noticed a gentleman behind a desk and I introduced myself. His name is M. Jean Claude Brabant and he is the proprietor. He made a great effort to try and identify good books for me. The only one of interest was a Bleriot Chronography entitled "Bleriot l'Envol du XX Siecle", a large format book full of great photos and quite a few 3-views. (I designed the Bleriot XXXII herein from 3-views in this book.) Afterward he introduced me to another gentleman whom he said wrote for "la Fana", the French aviation magazine. M. Alain Marchand. The three of us enthusiastically discussed the aircraft of my favorite French designers:

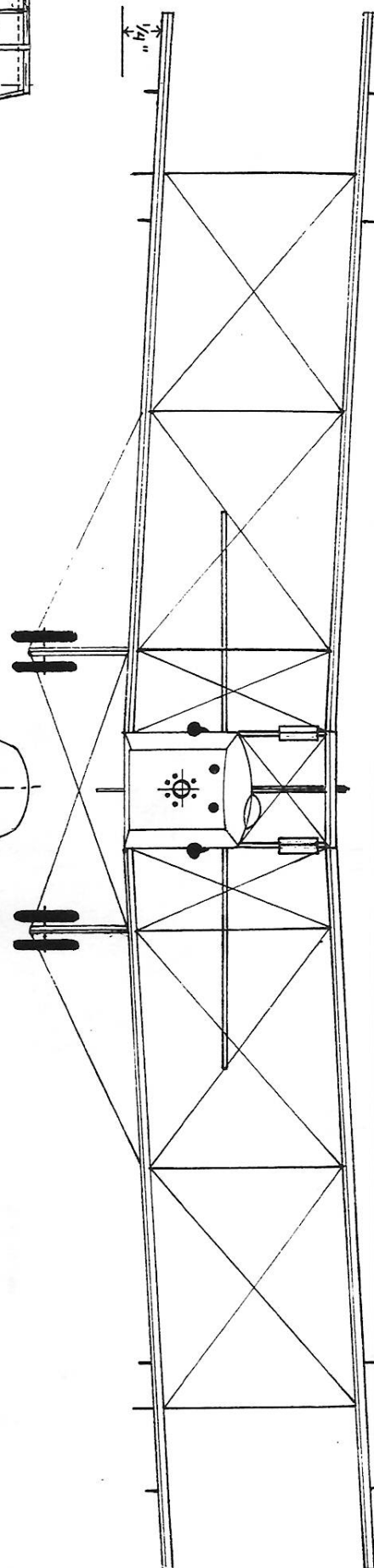
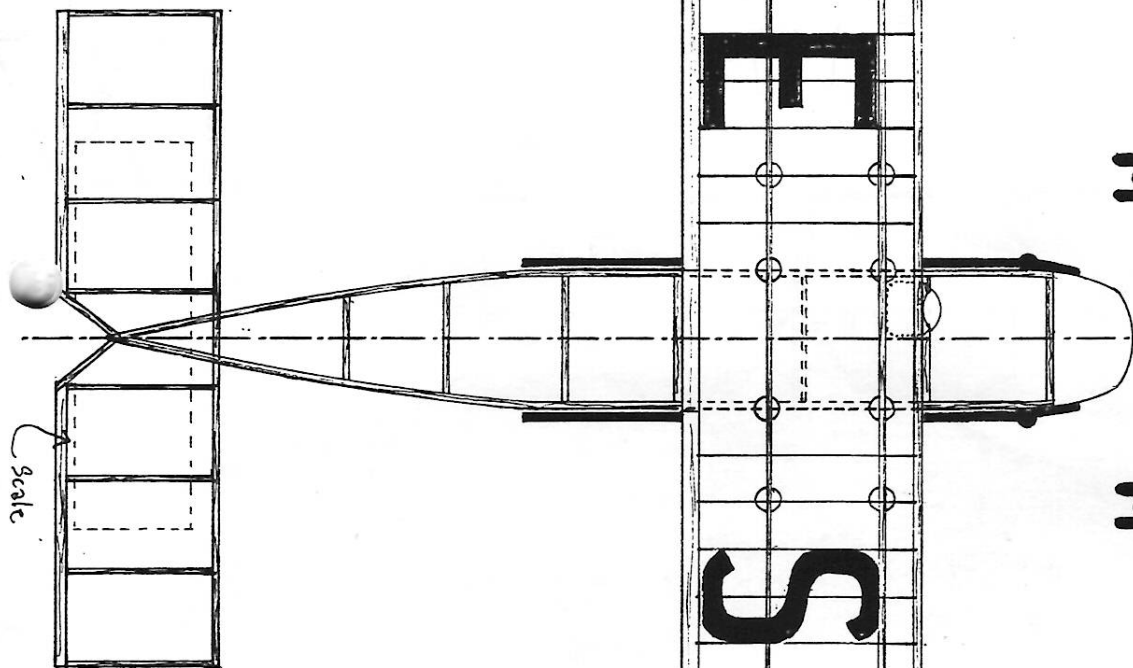
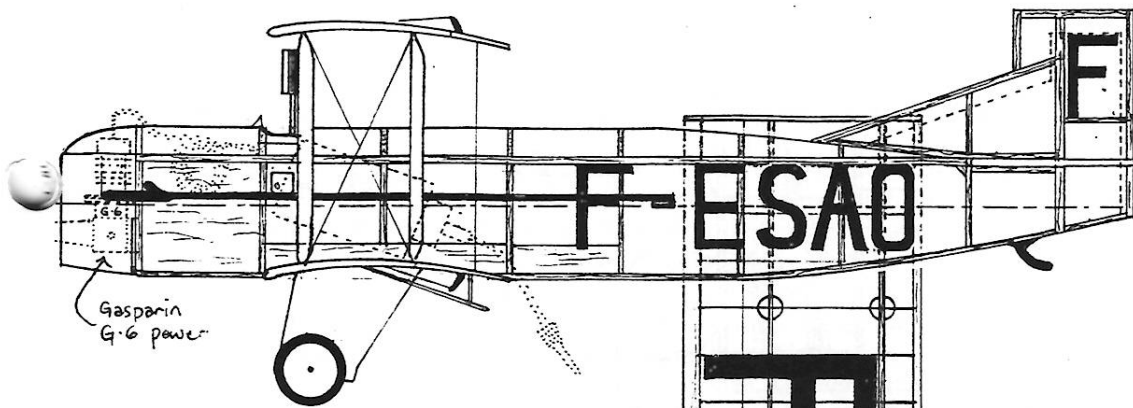


Exhibit at Musee de la Air et Espace, Paris, France in honor of Antoine de Saint Exupéry, famous aviator and author.

Payen, Hirsch, Delanne, and Farman. (According to Brabant and Marchand, Payen is alive and well – they occasionally see him). They told me of an aircraft museum at Orly Airport containing a PA (Payen) 100. M. Brabant indicated that it would be possible to meet M. Payen if I would like. Unfortunately, not enough time this trip. M. Marchand was excited when I told him of my proximity to the National Air & Space Museum Archives. He is particularly interested in some obscure U.S. Navy aircraft of 1926-33 which were transported INSIDE submarines. (and I thought this idea was uniquely Japanese...) Any of you out there with information on these aircraft? Write M. Alain Marchand at this address:

M. Alain Marchand
14 rue de Sèvres
92100 Boulogne
France

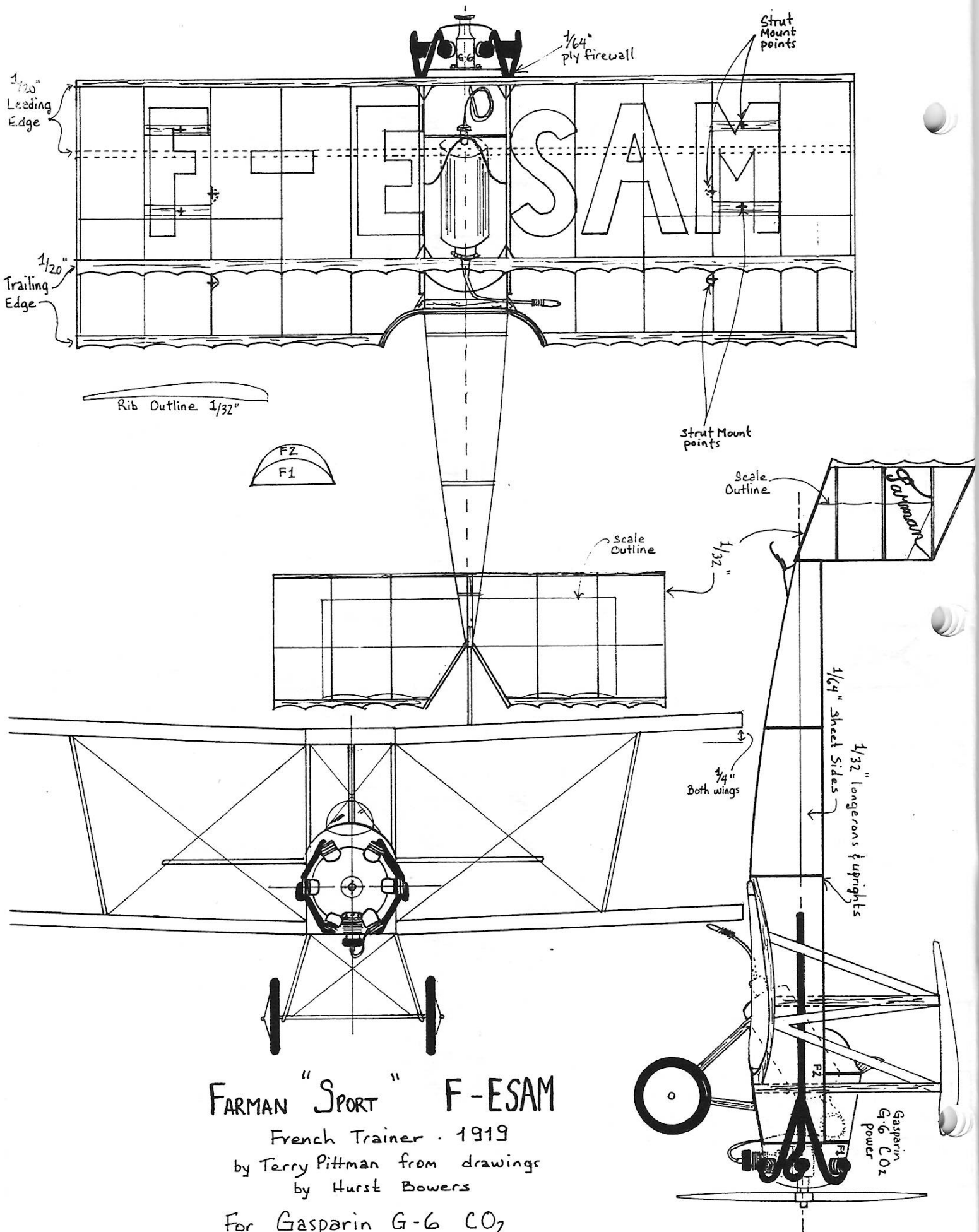
Later I headed for le Borget Airport, location of the Musee de la Air (Air & Space Museum) and also the Archives. I wandered among



FARMAN

1e FARMAN monomoteur - 500 HP - 1924
 World Record Holder: Duration and Distance

Scale flying model designed & drawn by Terry Pittman
 January 1995



FARMAN "SPORT" F-ESAM

French Trainer - 1919
 by Terry Pittman from drawings
 by Hurst Bowers

For Gasparin G-6 CO₂
 FAC Power Scale

the beautiful and exotic early aircraft, models and photos. I lost track of time and by the time I found the archives there was only about one hour of research time before closing. I was assisted by librarians, M. Nicolaou and M. Lorant who managed to deal with my poor French, and I with their English. They quickly convinced me that I had only time to review the files on one or two planes. I choose: FARMAN F-60 "Goliath", and the FARMAN F-120 "Jabiru", specifically the "Jabiru" with four motors. For the next hour I leafed through fantastic photos of these planes, the people who flew them and their passengers, manufacturers correspondence, 3-views and technical drawings. I made some photocopies of 3-views and ordered several copies of photos. I seriously regret not finding the archives earlier. I could spend weeks there.

Monday, January 16 (The Concorde)

Arrived at the airport early for 11am departure. The cab driver has a son and daughter both working in D.C. She at the National Gallery, he at Nieman Marcus. Small world. Waited for boarding time in "le Club", the special lounge for Concorde passengers. I am people-watching.



The sleek Air France Concorde being prepared for its supersonic transatlantic flight from Paris to New York

Some passengers are on a first-name basis with the flight attendants. From the conversations I gather that some are media-types returning from some meetings in Cannes...dark shades, Louis Vitton bags, cashmere sportcoats, etc. Others look like they have just made a quick hop to Paris for some shopping. Had a cafe au lait and two chocolate croissants. It just doesn't taste this good at home. Outside the window waits the elegant Concorde. It is surrounded by numerous fuel and fire trucks.

We've boarded and it really is quite small inside. The windows are tiny. There are a total of twenty-eight rows, one isle, no middle seats. The plane is being de-iced and now I can see nothing through the fluid-streaked window. At 11:25am the pilot hits the gas. Very impressive acceleration. The tiny windows are flowing with the de-icing fluid and I can't make out anything on

the ground or in the sky. I just pay attention to the sensations of the continual acceleration as we climb sharply. This is the most striking difference between a typical flight and this one, the acceleration pushes you back into your seat, and never seems to end.

There is a digital speedometer on the bulkhead in front of seat 1C. It now (11:36am) reads Mach .91 and we are just passing over le Havre. It took about three hours to drive this far from Paris several days earlier. 11:38am - now leveling off and turning northwest (I think). Mach .96. With a break in the clouds and the windows now clear I can make out the French coast line below. 11:40am, Mach .99. Now Mach 1.00. I can feel slight bubble of turbulence as we push through the sound barrier. The sensation is sort of like the resistance one feels in a car on the freeway when passing a truck. As you steer out of the calm air directly behind the truck and you hit the wake, it seems to hold you back for a second, and then you feel the resistance ease as you move into un-disturbed air. Though I'm not quite sure what I expected to feel, I must confess that I am a bit disappointed. It doesn't seem possible that this could be the same sound barrier that Chuck Yeager passed through in The Right Stuff. Where's the bucking bronco? Where's the boom? Everyone around me is fixated on the speedometer too and there is nothing but the white noise and the almost "electric" hum of the engines. After a few seconds the conversation resumes. 11:43am, just cleared the French coastline @ Mach 1.15.

11:45am: Mach 1.30.

11:47am: Mach 1.50.

11:49am: Mach 1.75. The mind boggles at how fast we're going. There is a bit of turbulence here, similar to that around Mach 1.

11:58am: Mach 1.85.

Somewhere around Mach .90 menus were passed around, also chocolate covered almonds, and hot wash cloths. On the menu: duck breast & foie gras, grilled turbot (fish), spinach & tomato Niçoise-style, petit fours (?), fresh fruit salad, coffee, digestifs, and wines matched to each course. These are not the options. This is what they are going to serve me during the flight!

11:58am: Mach 1.92. Champagne and hors d'ouvres arrive. Very good champagne, caviar, salmon fumé – before lunch. How decadent!

12:01pm: hovering at Mach 1.98 - 1.99.

12:05pm: Mach 2.01. (We remain at Mach 2 for approximately the next two hours.)

I have reset my watch for EST. It's now 6:36am in New York. Foie gras are served, the wine is Sauternes. Formidable! Such luxury makes me think of the golden days of aviation when airliners set the standard for classy, fast travel. I suspect the beautiful but un-profitable Concorde is the last of the commercial luxury aircraft. Very nice turbot on a bed of spinach, with anchovy butter. Bourgogne blanc wine. I keep thinking that most of my friends and family at home are just rising and here I am with a five course meal. The wine tastes good, but I remind myself that I have to go to the office when I arrive just after lunch.

Out the window the sky is steel blue/gray. Below the Atlantic is seamlessly cloud-covered. The window quite warm to the touch. Sunlight? Friction?

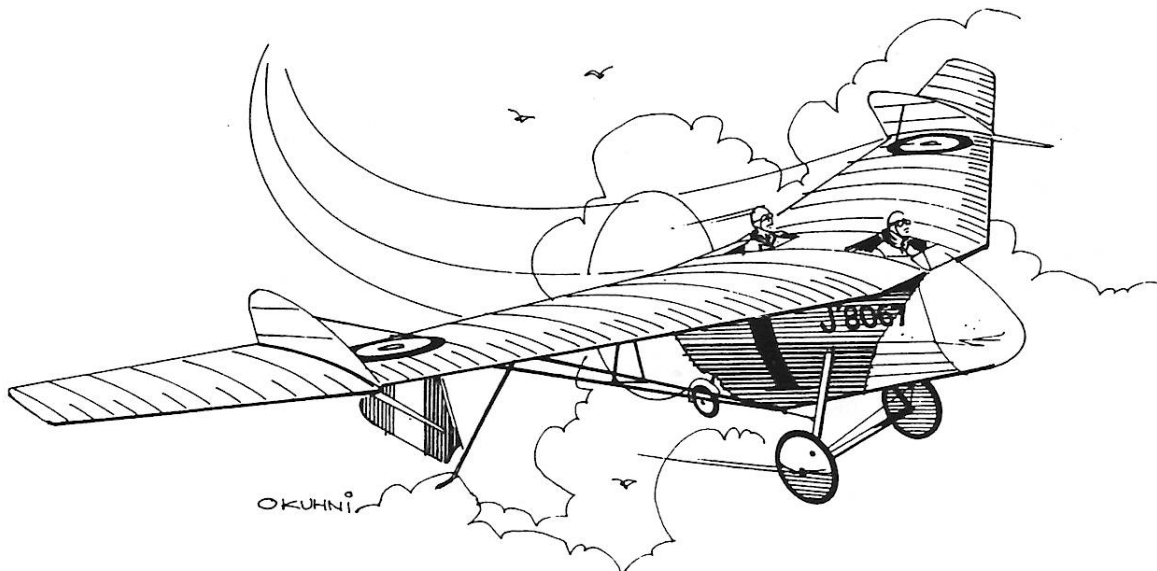
8:05am: Mach 1.99. Cloud cover breaks. Can see the ocean but no details due to altitude and the small windows. A jet passes far below us headed toward Europe. This white "dart" in the sky must be quite a sight for the pilots down there.

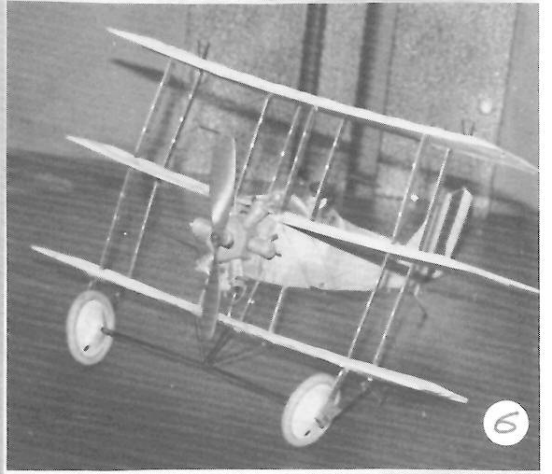
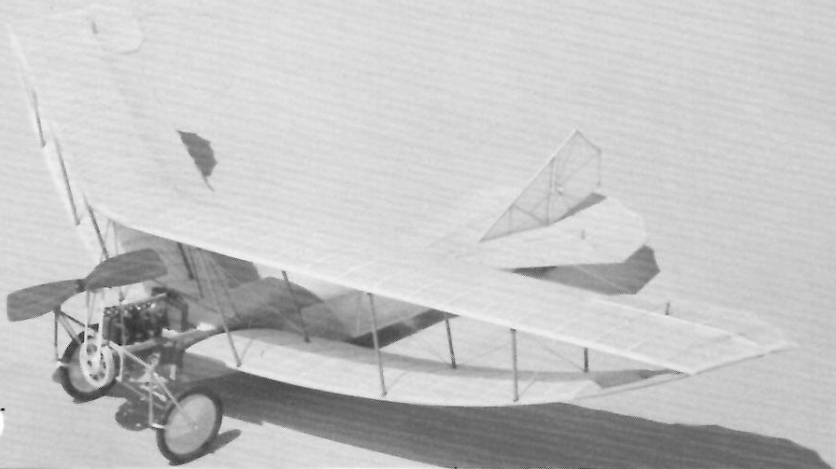
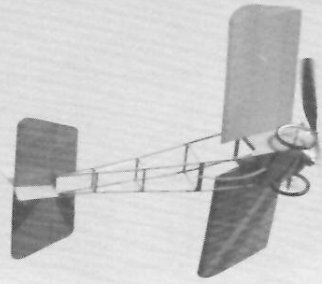
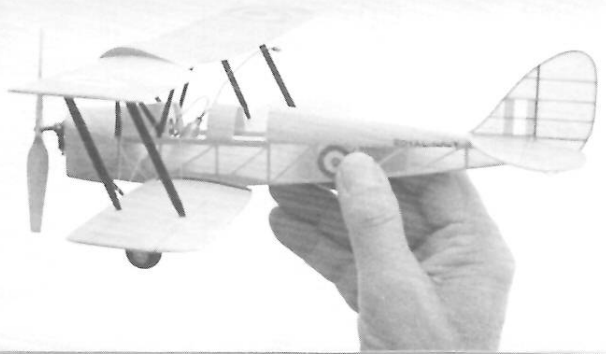
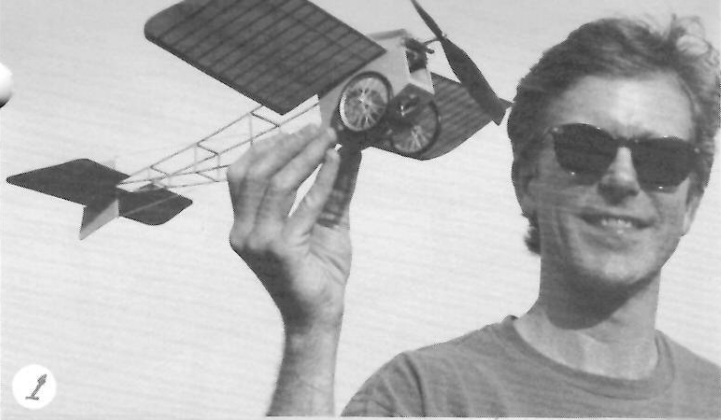
Photo Pages

1. Our Editor for this issue, Terry Pittman, holds aloft his Gasparin G-24T CO2 powered model of the obscure Bleriot XXXII, the subject of one of the full size plans herein.
2. An other plan is a Brown CO2 powered model of a Tiger Moth by John Lewars, shown here without it's cowling.
3. The Bleriot XXXII in full flight before it met an untimely end escaping Shangrila!
4. Our friend and master miniature builder on the west coast Otto Kuhni sent this photo of his 13 inch CO2 powered Arup. He reports that it has been finished and is a good flier.
5. Another of Otto's masterpieces, a 1912 Lohner Bernhardt powered by a Gasparin GM 120 with a belt drive to the prop; not flown yet as Otto has been testing belts.
6. Another old-timer with lots of character, a Breda Pensuti by John Blagg; photo source unknown.
7. How about this PEANUT Ag Cat by Jiro Sugimoto; great model and great photo by Jiro.
8. Jiro with his PEANUT MIG 15; see March-April MAX-FAX for a bones photo of this aircraft.

FAC at Geneseo 1995

9. Stu Weckerly with his nifty PEANUT Waco (?) seaplane. This was a great flier.
10. Robbie Paisley came with his Grandmom Helen and Granddad Jerry to cheer him on in the OLD TIME CABIN Rubber event. Robbie was flying a FA Moth.
11. Mr. Gee Bee, Tom Nallen, flew this very pretty "City of Springfield".
12. Tom Nallen II wowed all of us with his winning POWER SCALE Junkers. It was powered with an Italian Compressed Air motor; flew and sounded very realistic.
13. Our local Compressed Air Guru is Bert Phillips. His Ryan is a good flier with the Italian Compressed Air motor; unfortunately some leaks were his undoing at Geneseo.
14. Bill Bell came along and really had a ball; look at his Golden Age P-51 going aloft.
15. We caught Tom Nallen's Gee Bee Z racing around some imaginary pylons.
16. The FAC's eastern troubadour Vance Gilbert is always ready to lend a helping hand to a youngster; seen here with Chet Bukowski's son.







8:37am: Mach 1.68. We've begun our descent into New York.

8:38am: Mach 1.55.

8:40am: Mach 1.25.

8:43am: Mach 0.99. No turbulence as we go sub-sonic.

9:01am: Mach 0.30. Very bumpy now. Nose-high approach. Very heavy cloud cover.

9:04am: Gear down.

9:05am: Touch down @ JFK. Intense fog. Long drop to nose gear. Severe deceleration. Now we're on the taxi way. Seems zero visibility.

We've been creeping along the taxi ways for about fifteen minutes, no terminal in sight. Flight attendant tells me we're lost. Almost couldn't land. Finally we find our way to the terminal. Total flight time: 3 hours, 58 minutes. two hours at super-sonic speed. Incredible.

Post script: I took the Delta Shuttle back to Washington, and a cab (both sub-sonic) to my office where I was worthless for the remainder of the day. That evening my wife and kids treated me -- not like Chuck Yeager -- but rather, like an ordinary guy. We had a one course meal, no wine, and went to bed.

Visiting With Otto Kuhni

By Terry Pittman

You've seen Otto's models in Bill Hannan's Peanuts & Pistachios, and magazines. The beautiful illustrations in Old Timer Model Supply's catalog were drawn by him. His work is an exquisite blend of art and science. Recently I have had the good fortune of visiting with master modeler, Otto Kuhni during two visits to Los Angeles. Both times we agreed to meet at a little restaurant in the "Valley". After a sandwich, and discussion of the merits of small models and CO2 motors, Otto invited me to take a peek at some of his handiwork.

On the first occasion, his Honda Civic hatchback was chock full of the most beautiful models I had ever seen. I get concerned about banging mine up when I take three or four out to the flying field, but there, in the back of his car must have been twenty or more gorgeous, petit flying things. Among them, a 1912 Lohner Bernhardt (see photo pages), Bates monoplane, the Arup flying wing, still in bare-bones (also featured in the photo pages), four or five Westland-Hill Pterodactyls, and numerous others. We went over each one in detail.

As I went over these models, I was struck by the way Otto had simplified very complex designs, while retaining the essential qualities of the original airplane. This is hard to articulate, but his models look so real, the details are where you expect them, but at the same time there is a certain simplicity to them. Again, details were there, in some cases, extreme detail -- like spark plugs and head bolts on mock cylinders -- but he hadn't over-detailed them with inordinate panel lines, or other distractions. Sometimes I think we add details that we *know* are there on the full scale aircraft, but many of which would not be visible -- at least not blatantly obvious -- at the scale we are building. I know at least three illustrators who build free flight scale. Otto, Tom Hallman, and Bill Cereza. (Actually, quite a few of the modelers I know can draw and sketch quite well.) I've talked with Tom about the subject of appropriate and consistent detail and he said that it is an illustrator's technique. That is, to distill the subject into the simplest form while retaining the

details which will yield the maximum impact (without adding excessive weight.) I find this to be very difficult, but a great goal to strive for.

On the most recent visit, he had only brought along four models: a 6" span navy float bi-plane (rubber-powered) – said it flew beautifully; The Arup, now covered – after initial trim problems it flies well; the Fairey Long-Range (I think this is the name), a bare-bones Pterodactyl-type flying wing, and a whimsical multi-plane (one regular-size shoulder wing, and four or five very skinny wings above staggered forward. In this one, the pilot's mouth and eyes are open wide with fear, and he seems to be trying to get out...! Otto promised more photos, and to let us publish some of his plans in future editions of MAXFAX.

I enjoy studying other modelers' work. I like to see how they solve design problems, how they build light, but strong structure, how they balance details against the overall look and feel of the model. I enjoy seeing unusual, obscure aircraft modeled. Most of all, I like to see unorthodox designs fly. As previously mentioned, there are several photos of Otto's work on the photo page, and more to come in future issues. Notice the with elliptical dihedral on the lower wing of the 1912 Lohner Bernhardt bi-plane. It is CO2 powered and uses a belt (rubber loop) to a flywheel, all hand crafted and machined by Otto. I left LA inspired, feeling that I could tackle almost any project, no matter how unusual the design. Now that I am back home, I find the many of these aircraft daunting design challenges. BUT, I will have to tackle one of these. Perhaps the Arup? Maybe even a Pterodactyl...if I can ever get the covering on this FARMAN.

Worth Checking Into...

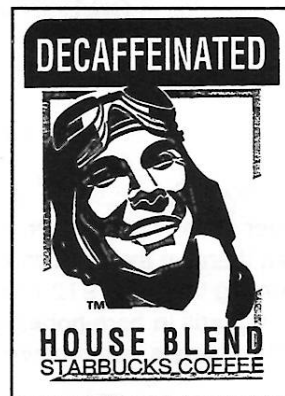
Hannan's Runway - Where the fun takes off! Model airplane publications and other goodies. (Bill Hannan tells me that he has a new publication coming out late summer, early fall. He didn't tell me the title, but it will be of the same style and quality as the famous Peanuts & Pistachios series.) Hannan's Runway, Box 210, Magalia, CA 95954. Catalog: \$1 (refundable with order)

Peck-Polymers - Sandy Peck is a great source for CO2 motors, particularly the smaller Gasparins and Browns which she keeps in stock. Peck-Polymers carries just about everything the free flight modeler needs. Peck-Polymers, P.O. Box 710399, Santee, CA 92072. 800.392.5520.

WWI Aero - The Journal of the Early Airplane, and **Skyways** - The Journal of the Airplane 1920-1940. WWI Aeroplanes, Inc., 15 Crescent Road, Poughkeepsie, NY 12601 914.473.3679.

ORD Chicago - This little shop is the aviation enthusiast's dream come true. Located in the Hilton Hotel connected to O'Hare Airport, ORD Chicago specializes in airline memorabilia, airplane motif clothes (classy stuff), and static scale wood and plastic display models. Proprietors Chuck and Linda Tilley have amassed an impressive collection of rare airline jewelry, pins and etc., beautifully framed airline ads and posters from the 40's 50's and 60's. ORD Chicago is a favorite gathering spot for current and retired airline pilots from around the world. ORD Chicago, O'Hare Hilton, O'Hare International Airport, P.O. Box 66414, Chicago, IL 60666. 312.601.8200.

Mr. Duane Brehmer, a MAXFAX subscriber, writes that he is writing a book which will be a compilation of plans and kits. He says that he will trade-a-plan, or buy your scale aircraft plan, any size or type. He can copy plans up to 36" x any length. Call or write: 14720 South 234th Street, Gretna, Nebraska 68028-6416. 402.332.4303.



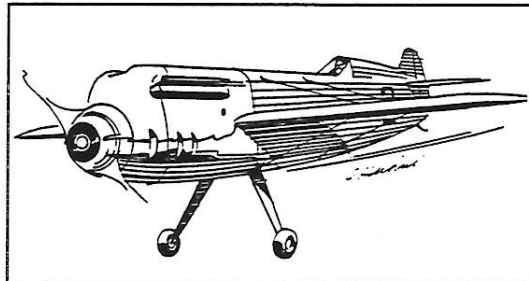
One of several great aviation logos from the San Francisco-based Starbucks Coffee. Each coffee has its own logo/sticker.

C.A.V.U. (Ceiling And Visibility Unlimited)

by Rolfe Gregory

Reprinted from August/September 1977 MAXFAX

While building a model of a Thompson Trophy racer for the upcoming race event of our D.C. Maxcuters club, I started thinking about one-bladed propellers. Strange, you think, that a Thompson racer should remind me of one-bladed props? Let me explain.



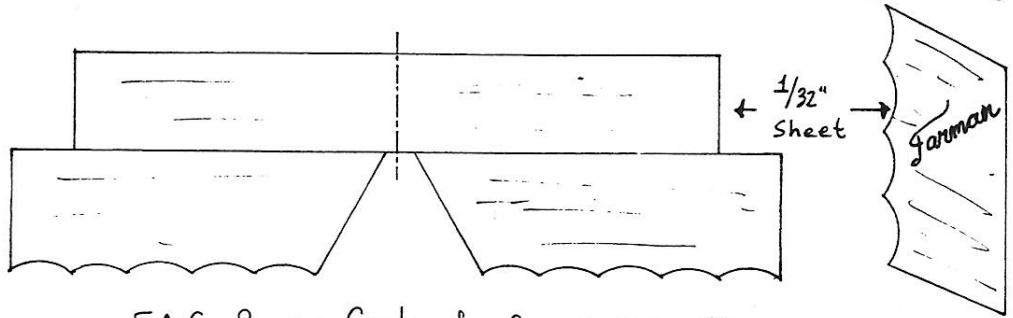
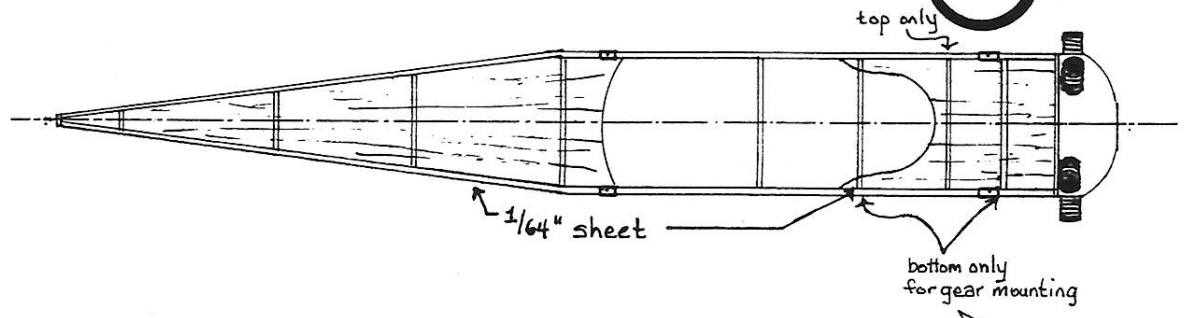
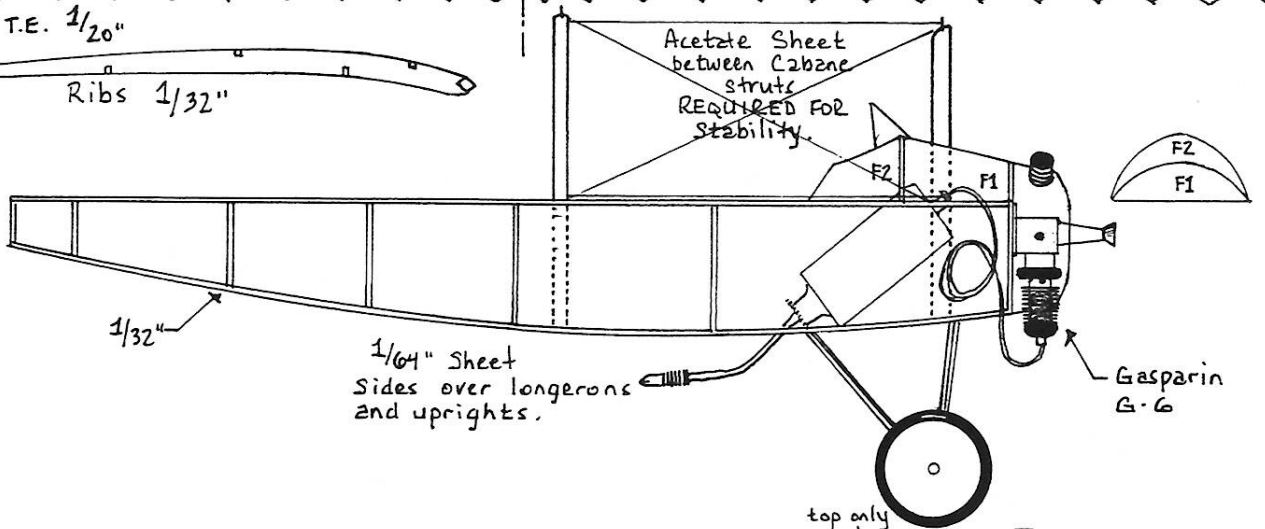
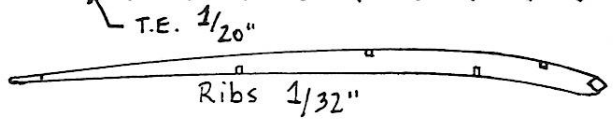
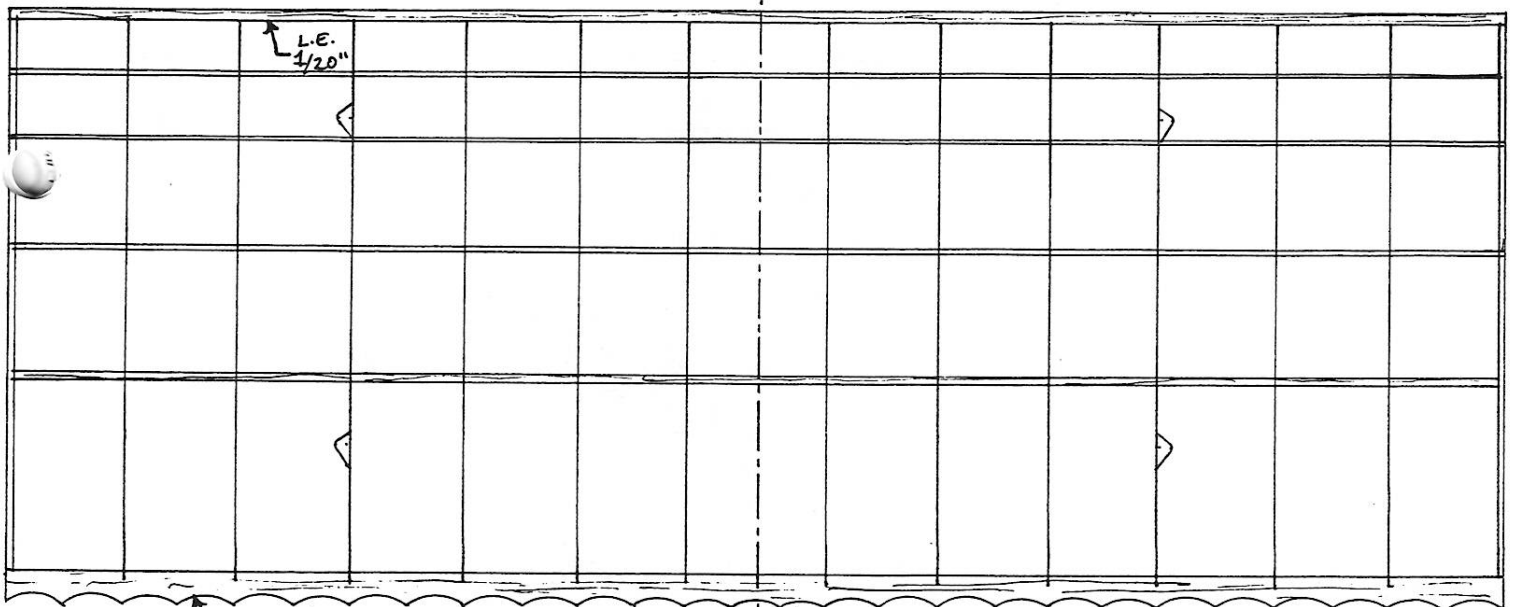
Most of you guys, especially free-flighters, know that a single-bladed propeller is, at least in theory, more efficient than the usual two-bladed variety. But, there is a slight problem -- vibration. Even properly counterbalanced, there is still the possibility of the problem - at least under some conditions of power, R.P.M., etc.

Back in the mid-30's, a very fine gentleman by the name of Walter Everts designed a one blade prop which was called an "EVEREL" and sold under that name. It was counter-balanced, of course, but the blade was pivoted on the hub such that it was free to move back and forth, and as it moved, the pitch changed. As I recall, when under full power the blade moved forward and the pitch decreased. When you reduced power to cruise, the blade move rearwardly and the pitch increased. Of course, I may be wrong on this and it may have been just the opposite. Anyway, it worked - on some planes, that is. It was great on the Taylorcraft, pretty good on Cubs, but it didn't do much on the Aeronca. And on Luscombes - forget it! It wasn't just the engine horsepower because it was really great on the 145 H.P. Warner Cessnas. Jesse Jones, Manager, for so many years, of the Lancaster, PA Airport, had a Cessna C-37 that he used to win a lot of races with, and it would run away from everything in its class - including Cessnas.

It was just before the 1938 Thompson Trophy Race at Cleveland, Ohio, when I had my first experience with the EVEREL one-blader. And I do mean Just before the race - like 2 hours! The National Air Races always had an opening ceremony. The first event, at 1p.m. each day, was a mass flight of the latest of the aircraft was called "Aviation on Parade". All the airplanes selected to fly in the event were lined up in rows at one end of the field, supposedly in order of their speed, the fastest in front and the slowest last. When the starter's flag dropped, everybody was to take-off in a horse race start, past the grandstands. The flight plan called for two laps around the race course, marked by four pylons. The first time around we were supposed to dive slightly, level out fairly close to the ground, fly past the grandstand, then pull-up at the end of the field, head for the first pylon and go around the course the second time, landing the next time around time. After landing, we were to taxi up in front of the stands, forming a long line, shut-off the engine, get out and stand in front of our airplane while the band played the National Anthem and the flag was raised. Very impressive, maybe corny to some, but to me a big thrill.

My friend, Jerry Coigny (pronounced Coiney), was there with one of the very first Luscombe 50's off the production line back in Trenton, New Jersey, and, of course, the management just had to have it in the "Aviation on Parade". Every manufacturer tried to get his latest creation in that event. I was to ride with Jerry in the race.

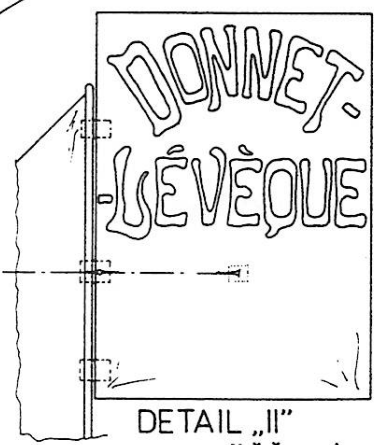
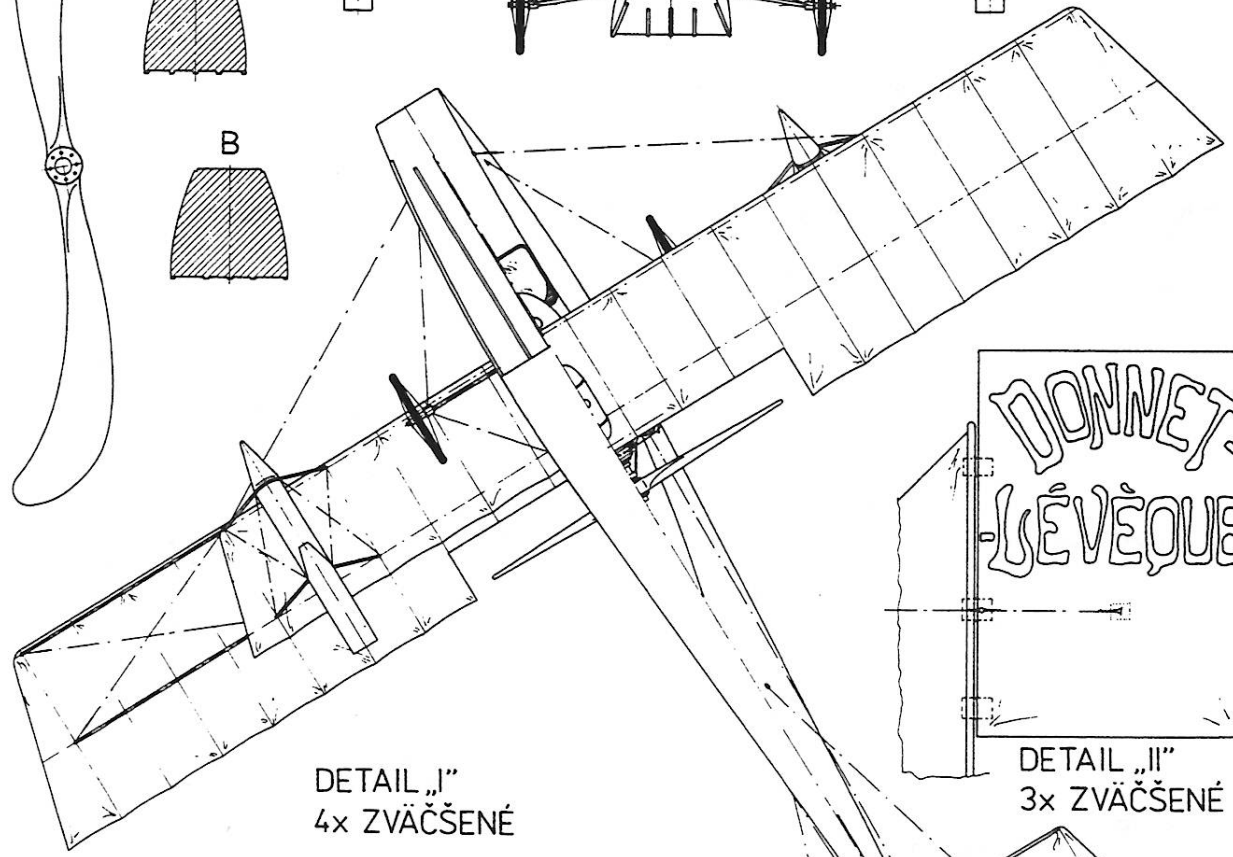
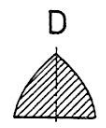
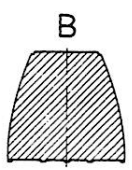
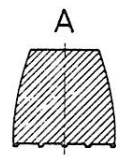
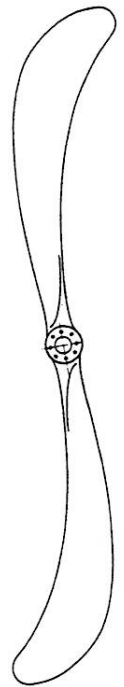
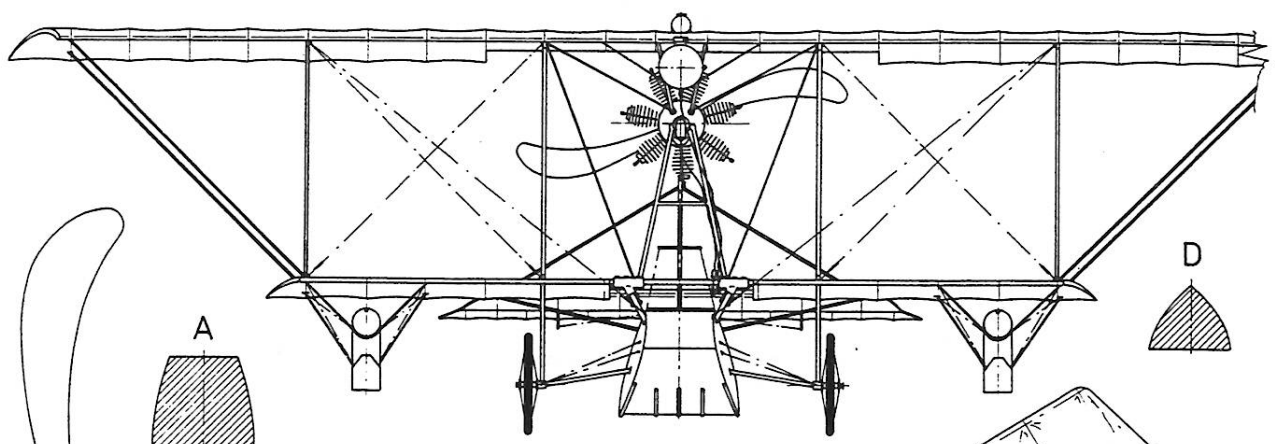
When you get a bunch of manufacturers showing-off their latest offerings in an event like that, two things happen. First, there are arguments when the airplanes are lined up according to their relative speeds, (T-craft, Piper, Aeronca and Ercoupe people were furious when our Luscombe was placed ahead of them); and, second, in spite of pre-flight briefing to hold positions, keep it



FAC Power Scale for Gasparin G-6 CO₂

FARMAN "Sport" F-AIDJ 1926 by Terry Pittman 1992

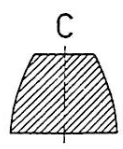
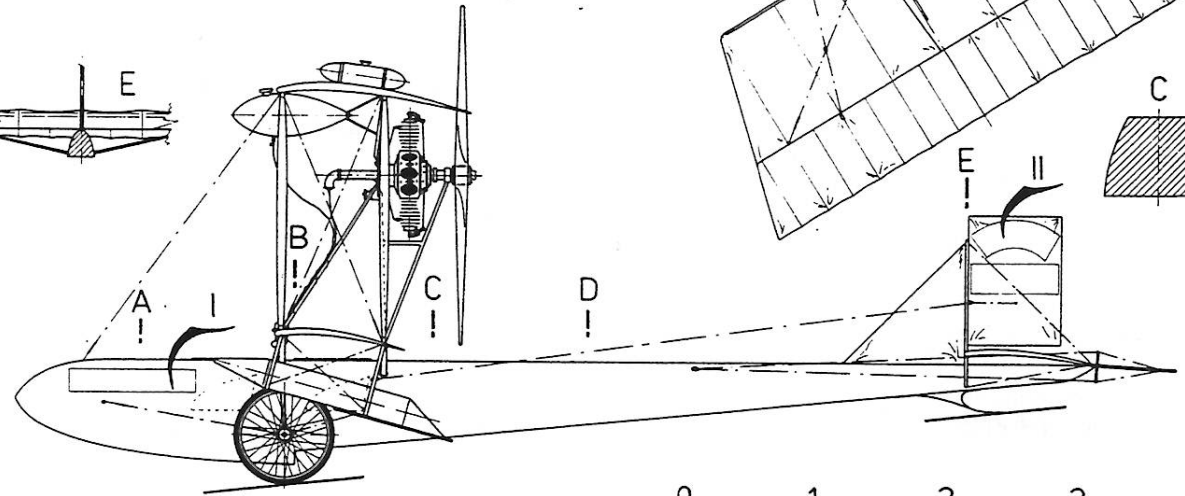
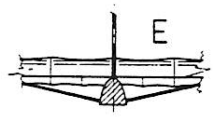
"la Carte Postale" from drawings by Emmanuel Fillon
(the Post Card) 21



DETAIL „I“
4x ZVÄČŠENÉ

DETAIL „II“
3x ZVÄČŠENÉ

DONNET-LÉVÊQUE



nice and safe, etc., you know what everybody did - they kept the throttle all the way forward trying to make like Roscoe Turner and pass as many of those ahead as possible. I still think it was a miracle no one got killed in those free-for-alls.

Somehow, this day (Labor Day, 1938) Walter Everts talked Jerry into putting a one blade EVEREL prop on the Luscombe with the idea it would, like the T-craft, improve its performance. I wasn't too happy about the idea, but in those days we were a bit crazy anyhow.

With no test flight, we taxied out to the big line-up. I thought the vibration was a bit bad but figured it would smooth out at higher R.P.M. The flag dropped and we were off. With about 30 commercial airplanes, led by 18 Grumman F3F fighters taking off all at once, the noise as deafening, the turbulence terrific and the vibration downright frightening. You couldn't read an instrument on the panel - all a blur - and the wing struts looked about a foot wide! We went around the first pylon and Jerry throttled back, but the vibration was even worse, so we stayed at full bore. I'll say one thing - we went fast even if we did shake! The airplane in front of us was a new Monocoupe 90 and we passed it at one of the pylons. Luckily, we landed after the next lap without mishap.

The big Thompson race was flown around the same course later and, while it was a thrill to watch Turner, Ortman, Whittman, et al, fight it out, my biggest thrill occurred less than couple of hours earlier when we were bending around those same pylons for on of those once-in-a-lifetime experiences.

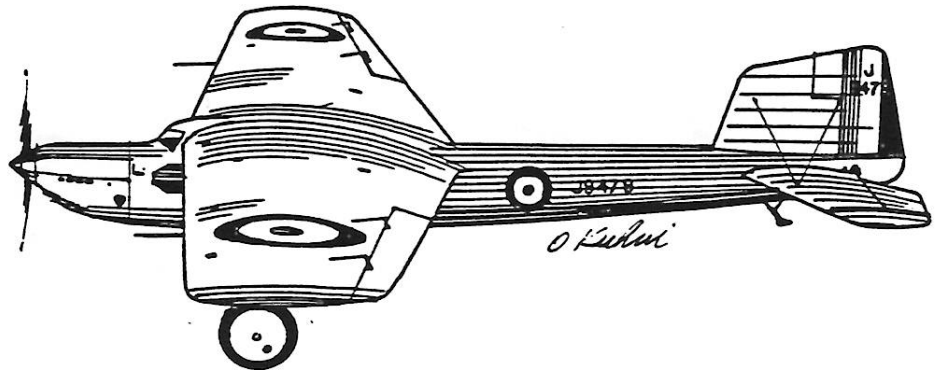
Now you see why one-bladed props remind me of the Thompson Trophy. As a matter of fact, I wonder how this model racer would perform with a one-blader?!?

Teeny, Tiny CO2 - Powered Scale Models

by Terry Pittman

I love CO2 motors.

Don't tell me. You had problems with them and gave them up years ago. You found them too finicky, unreliable. Well, I've been flying CO2 - powered models for the past six years, and they have been good to me. Perhaps the technology has improved. Or, perhaps I am a masochist. Regardless, I am particularly fond of the little ones, like the Gasparin G-5, G-6, G-10, and Brown GB-12 and A-23. I don't just collect them, I fly them. Now, I'm sure you're starting to mutter things like, "Those little motors are too expensive" or, "I can't built anything that small" but remember, none of those negative thoughts you are having is true. And if you listen to them they will prevent you from having lots of fun. Just to help out, I have answered several of the objections below, so that immediately after reading this, you can pin this MAXFAX to the building board and start building.



Objection No. 1 - "They're too expensive." Reply - Fact is, they are kind of expensive (approximately \$100-175), but no more so (perhaps even less) than a good golf club, fishing rod & reel, tennis racquet, gun, or detailed scale model locomotive (hah! Take **that** Pat and Dan). Dare I mention the expense of RC radios, motors, and other paraphernalia?



Photo: Gasparin CO2 powered pistachio. Photo provided by Stephan Gasparin via Sandy Peck of Peck Polymers.

Objection No. 2 - "I can't build anything that small." Reply - Wrong. The designs are simple. The fuselage sides are sheet. And the wings are bigger than a stab on a ten-center. They go together very quickly.

Objection No. 3 - "They'll fly away, and then I'll loose that expensive motor." Reply - These are the last planes out of the box. You only take them out when the sun is low, the air is calm and the thermally part-of-the-day is over.

There is nothing like the thrill of these little planes flying low and slow in the calm evening air, catching a flash of sunlight. You can fly them indoors as well during the winter. Both the "Sport" and the "Carte Postale" will do better than a minute in calm air. I have included plans for three Gasparin G-6 pistachios in this issue. They fly great. They were easy to build. Honest. They are small, but the construction is simple.

So, pick up the phone right now and call Sandy Peck at Peck Polymers. I was out there not long ago and she still had a good supply of the small Gasparins. Recently she had a special promotion offering discounts on Gasparins, perhaps it's still on. Order a G-6 and build either the FARMAN "Sport", the "Carte Postale", or the FARMAN "Goliath" Mono-motor and you too will be hooked.

I have also included several other fine flying CO2 model plans in this issue. I know they fly well because I have either built them myself, or have seen them fly. Check out John Lewars' beautiful Tiger Moth. The Bleriot XXXII flew so well it flew away. (Note: I didn't follow the "fly only in the non-thermally part-of-the-day rule" that day.)

Construction Notes For Pistachios (and others)

by Terry Pittman

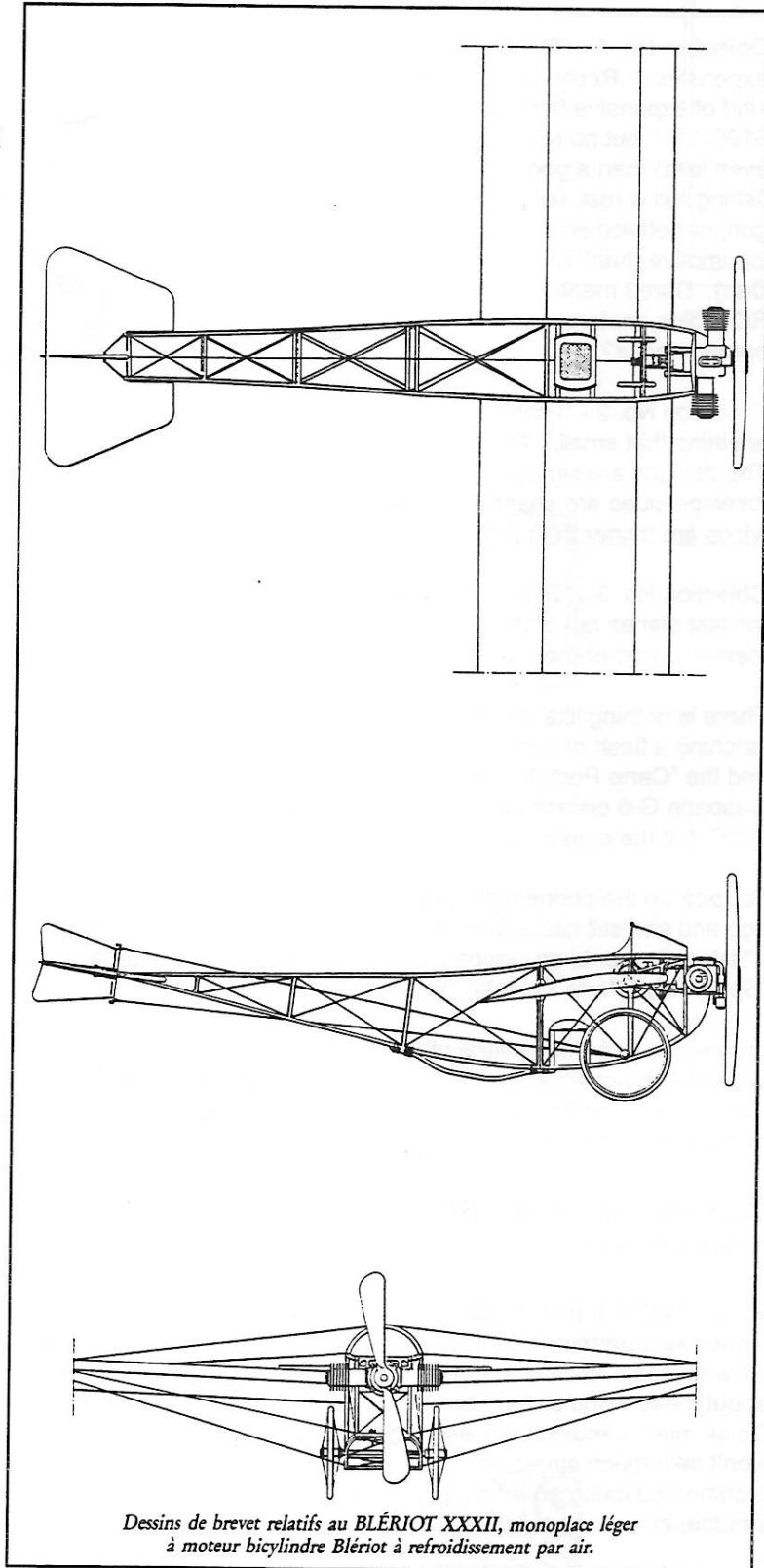
✓ **Pistachios, in general-** Build as light as you possibly can. 1/20th sq. wood is about the largest size permissible. This should be used for longerons, wing leading edges. Use 1/32nd sq. for wing spars and tail feathers. Where sheet is used, 1/23rd, and 1/64th is good. If you think about these wood sizes relative to the proportions of an ordinary sized model, they will seem right. Do as much sanding as possible before assembly of the fuselage, wings, and tail feathers. They won't take much stress, and your big fingers will squish them if you're not careful. For sanding I recommend using an emery board, or nail file. They are much easier to handle than pieces of sandpaper.

✓ Pre-shrink the tissue before covering. Do not wet or dampen the tissue once the structure is covered. If you use Micro-X Early Bird Tissue (I recommend it), you don't need any paint or dope on the surfaces of most of these early aircraft. The un-covered structure may seem flimsy, but it will be fine once covered. Use a "Sharpie" permanent marker for the registration, lettering and other details. Do the registration lettering on the tissue before attaching the tissue to the wings.

✓ Mount the motor with the little brass screws and nuts found in the model railroad sections of the hobby shops. I think the size is 90. Down-thrust is necessary, 1 to 3 degrees, and some right-thrust. Use small washers between motor and fire wall to adjust thrust.

✓ **FARMAN "Carte Postale"** - VERY IMPORTANT: Glue a very thin sheet of acetate between the cabane struts. With zero dihedral, and a parasol wing, you will need these invisible vertical fins for stability.

BLERIOT XXXII - Before assembling the fuselage, glue a strip of boron or carbon fiber to the inside of each longeron. This will add essential strength but little weight. If you use boron, wear glasses, and handle with care.

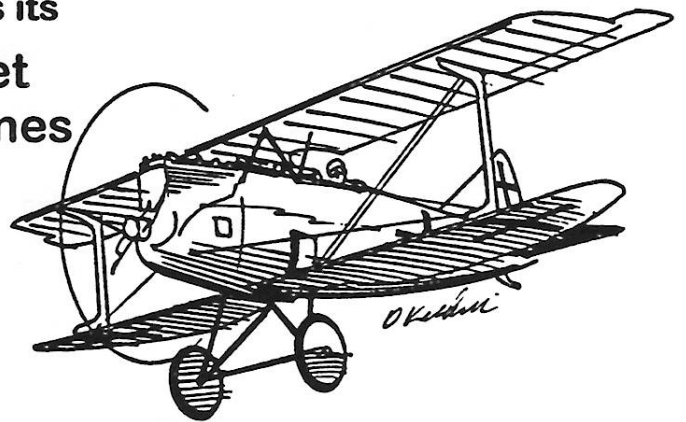


Blériot XXXII 3-View from "Blériot l'Envol du XX Siecle"

The ***Kudzu*** Flying Corps presents its
**5th Annual Land & Lake Meet
For Free-Flight Scale Airplanes**

October 13 - 14, 1995

Call Dave Rees for more information @ 919.778.6653



✈ ***O***n the LAKE (Oct. 13) Goldsboro, NC

Starting time: 5pm, 3 events; all aircraft must take off from the water. Timing starts at lift-off.

Events:

1. Any scale rubber-powered airplane
2. Any scale airplane powered by electric or CO2 (no internal combustion engines)
3. Any non-scale rubber-powered airplane
(canoe paddling practice all evening)

✈ ***O***n the LAND (Oct. 14) Raeford, NC

Starting time: 9am, 12 events, FAC rules.

Mass-launch:

- | | |
|--------------------|--|
| 1. WWI Biplane | 5. Modern Production Civilian (1945 and later) |
| 2. Golden Age | 6. Peanut Scale |
| 3. Combined Racers | 7. Modern Military (1945 and later) |
| 4. WWII Military | 8. Old-Timer Kit Scale (20" max span) |

Hard-Core Scale: (Judging turn-in by 11am, flown all day)

- | | |
|--------------------|--|
| 1. FAC Scale | 4. Old-Time Rubber |
| 2. FAC Power Scale | 5. Any airplane designed by Don Srull* |
| 3. FAC Jumbo Scale | |

* See March/April MAXFAX for list of eligible entries. Must be rubber powered. FAC Scale judging

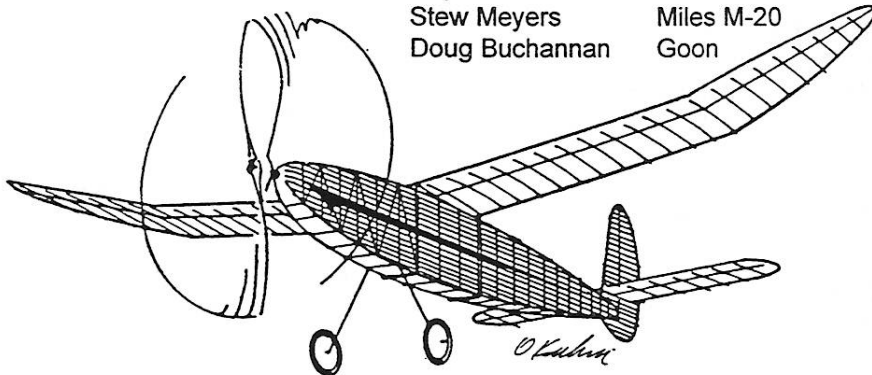
Lunch break at 12N. Entry fee \$5, includes lunch.

There will be a buffet dinner at McCalls at 8pm Friday night, and a pizza & beer dinner after dark on Saturday near Raeford. Both dinners are Dutch treat.

Maxecuter Summer Contest Results

Though we had quite a few contests scheduled at Comsat this summer, weather and low turn-out reduced the number of mass-launch events that actually occurred from mid-June through July. Here is a tally of results at press time:

| Contest | Date | Contestants | Model | Place |
|-------------------|---------|---------------|--------------------------|-------|
| Scale Bi-Plane | June 11 | Stew Meyers | Folker D-7 | 1 |
| | | Don Srull | Curtis Helldiver | 2 |
| | | Terry Pittman | Aero A-18 | 3 |
| Old Timers | June 18 | Alan Schanzle | Flying Aces Navy Pursuit | 1 |
| | | Don Srull | Commander | 2 |
| | | Frank Rowsome | Moth | 3 |
| Ten-Center | June 18 | Alan Schanzle | Arado 96 | 1 |
| | | Stew Meyers | Art Chesters Jeep | 2 |
| | | Don Srull | Mureaux | 3 |
| Racers/Aerobatics | July 9 | Don Srull | Cessna CR-3 | 1 |
| | | Ray Rakow | Mr. Smoothie | 2 |
| | | Stew Meyers | Miles M-20 | 3 |
| | | Doug Buchanan | Goon | 4 |

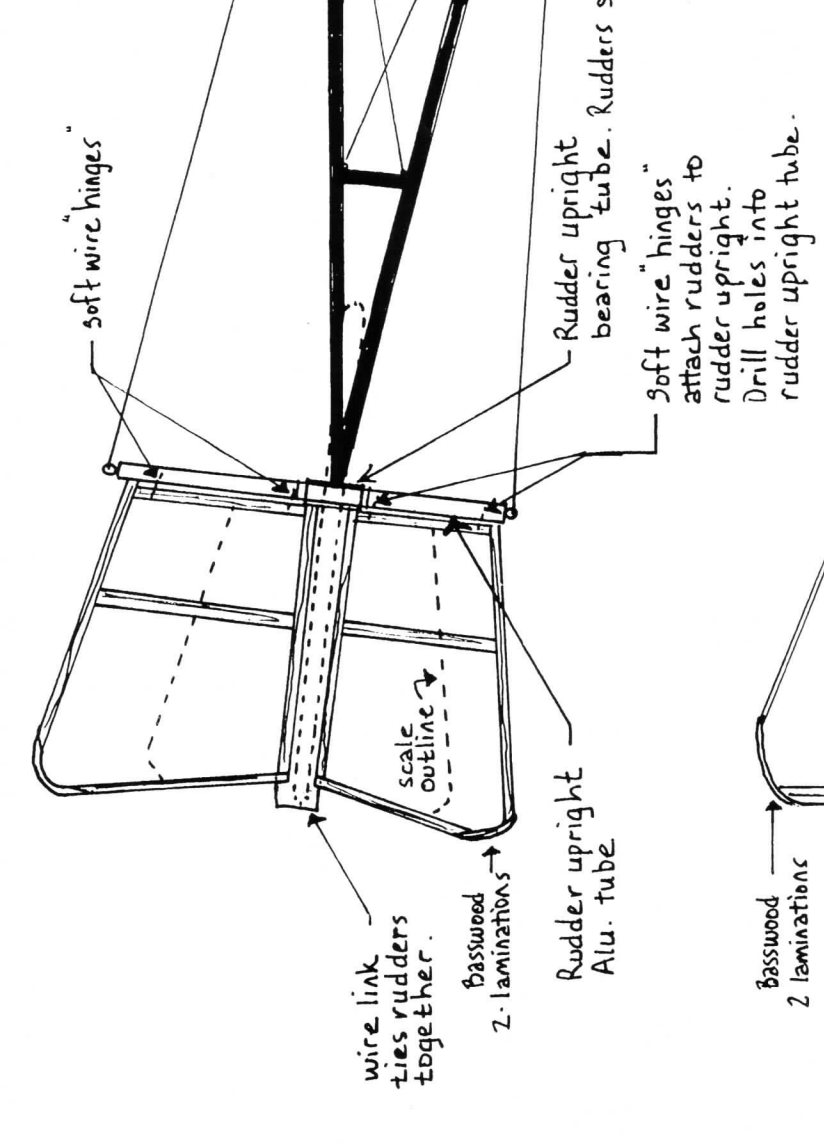
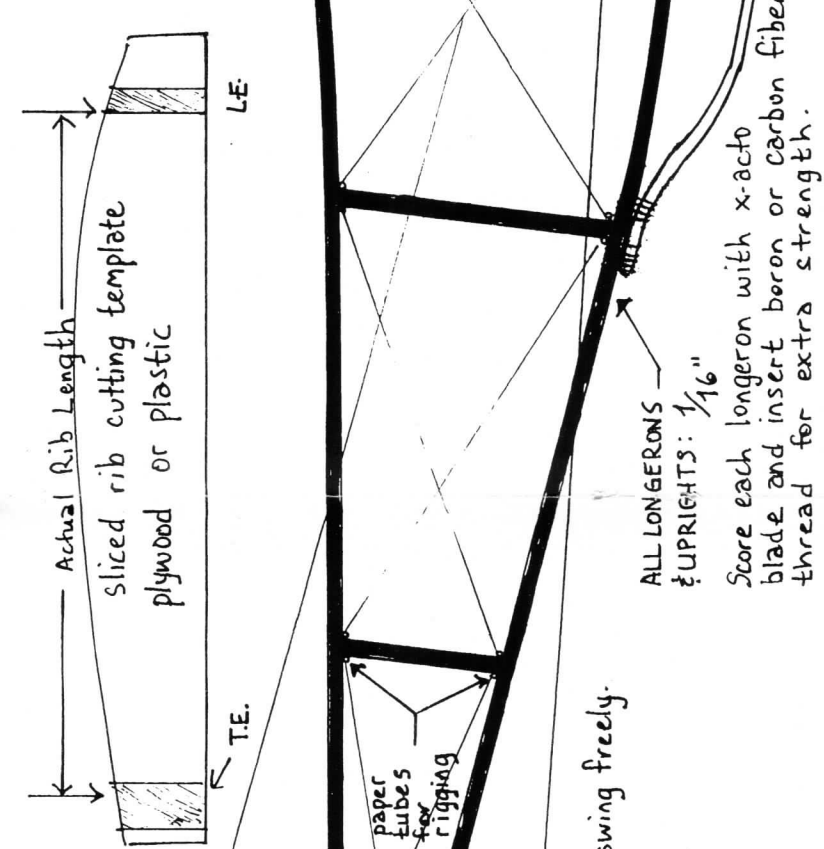
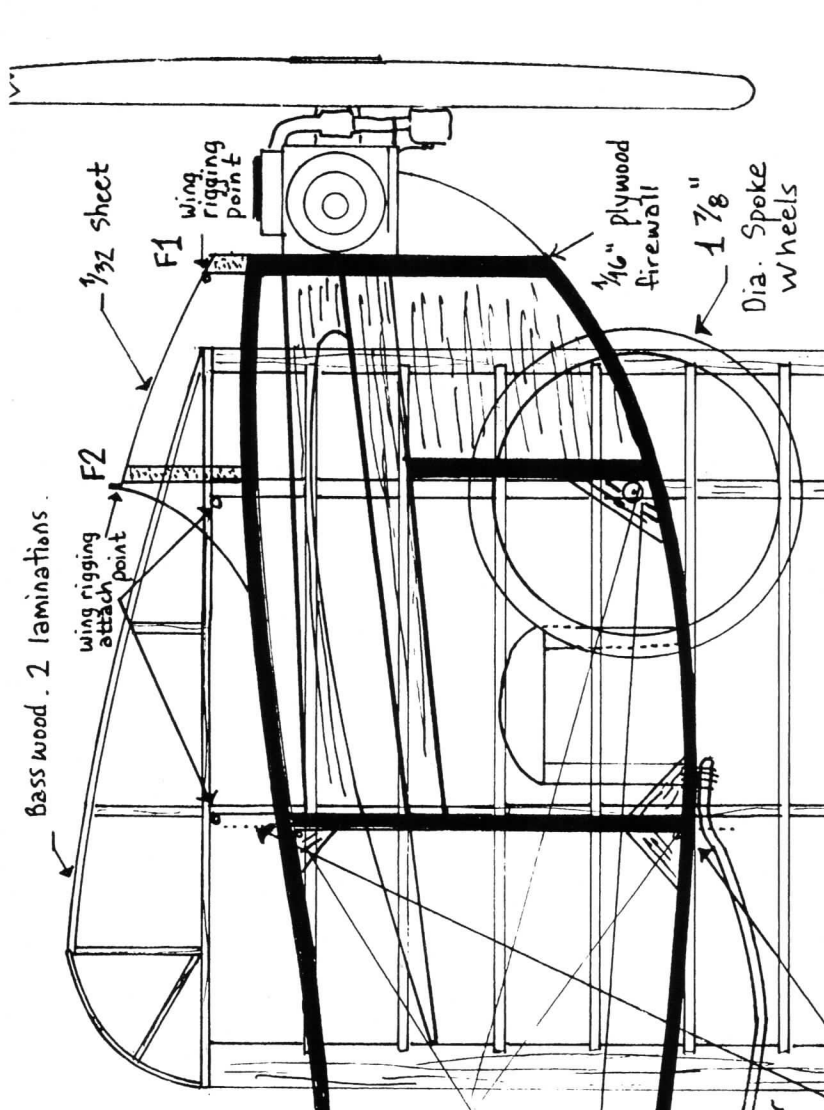


NOTE: Your Dues Are Due

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.



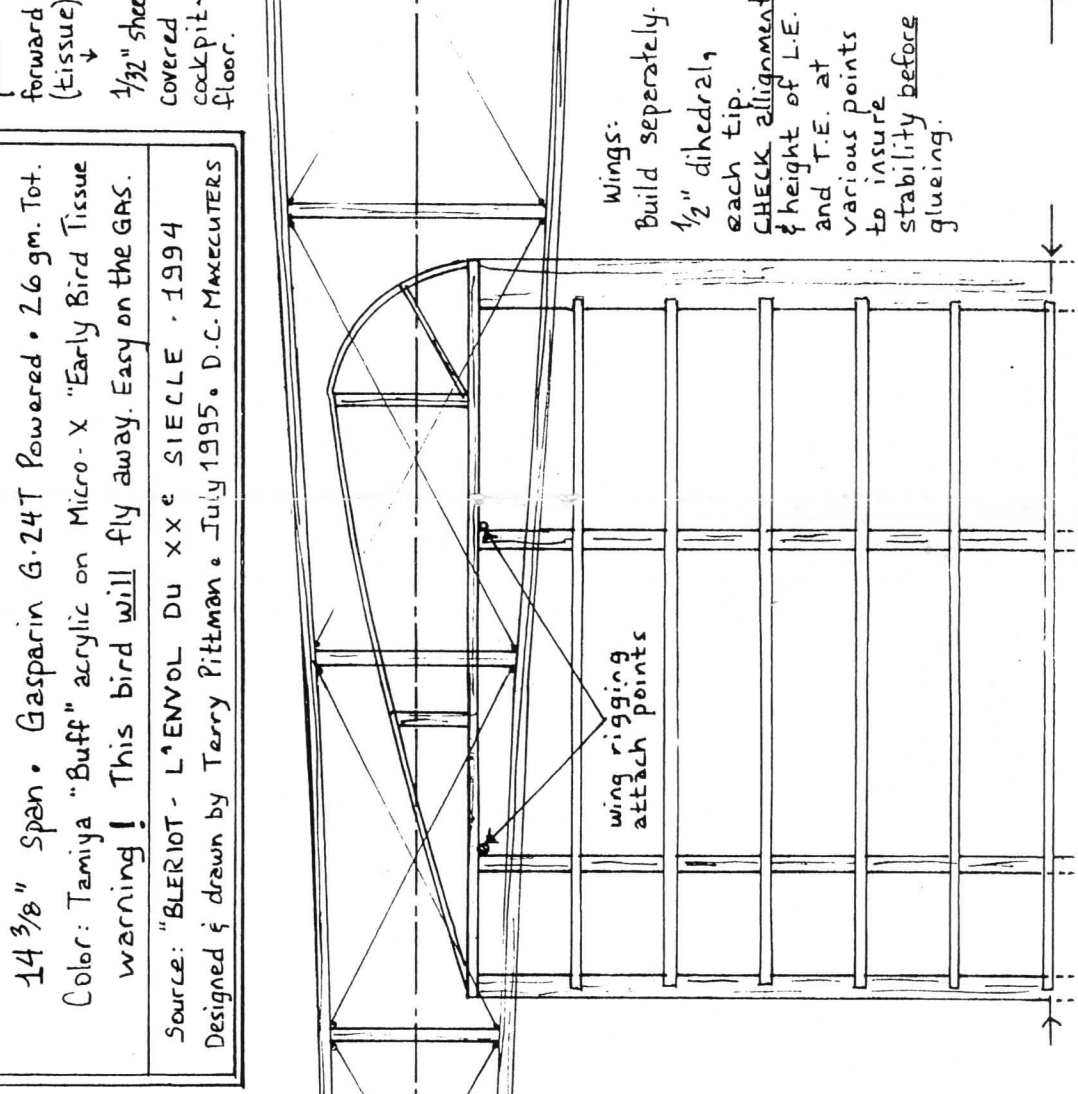
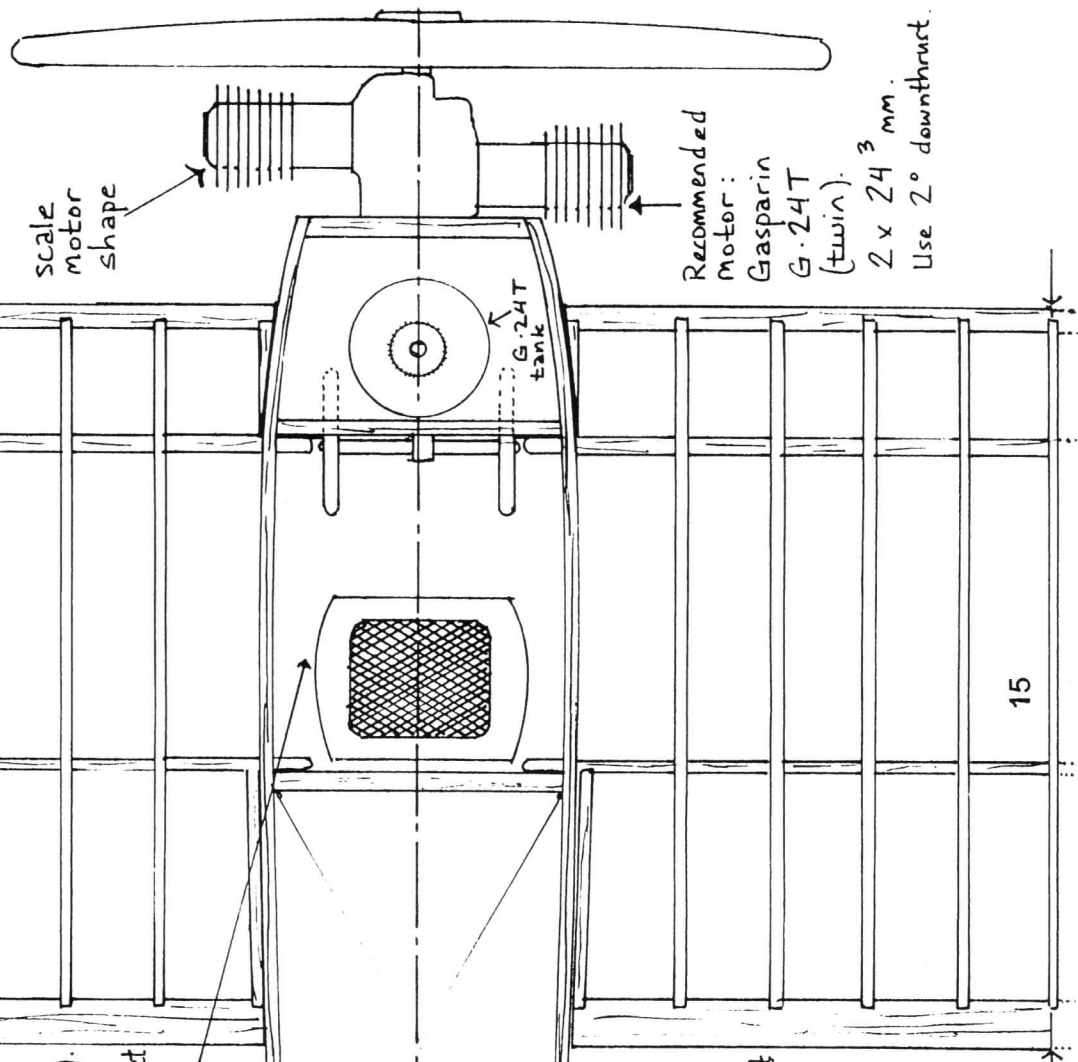
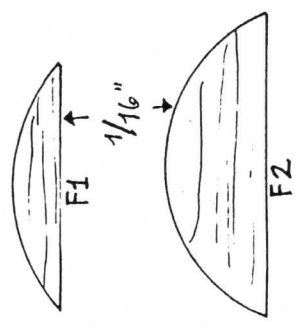
le Bleriot XXXII 1912 FRANCE

FAC Power Scale

14 3/8" Span • Gasparin G.24T Powered • 2.6 gm. Tot.
 Color: Tamiya "Buff" acrylic on Micro-X "Early Bird Tissue" warning! This bird will fly away. Easy on the GAS.
 Source: "BLERIOT - L'ENVOL DU XX^e SIECLE - 1994" Designed & drawn by Terry Pittman • July 1995. D.C. MAKECUTTERS

ALL TAIL FEATHERS: 1/20"

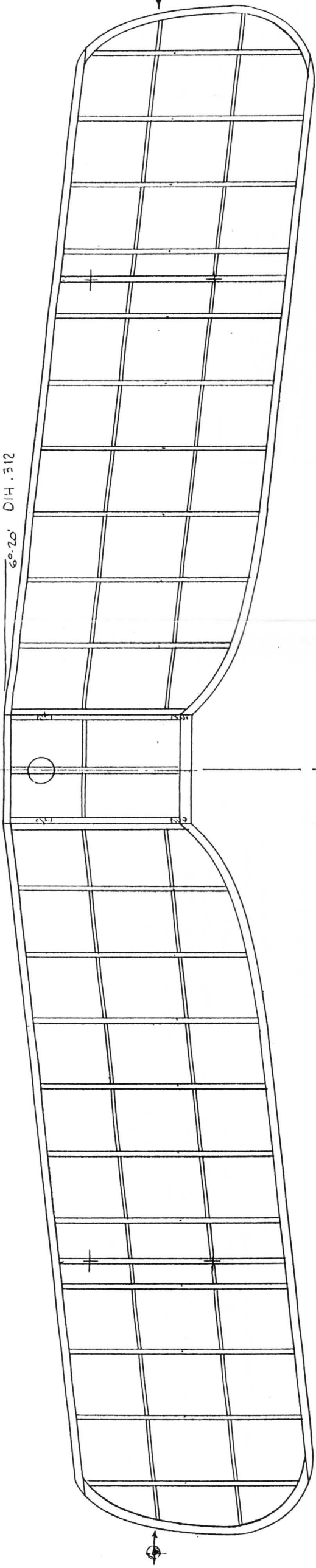
Rudder upright bearing tube is glued to horizontal stab.
 Rudder upright tube is inserted into bearing, then rudders are attached.



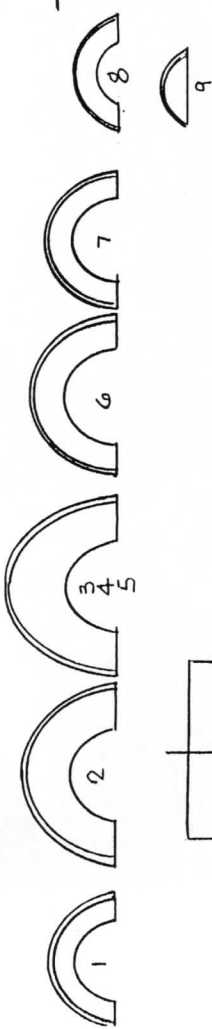
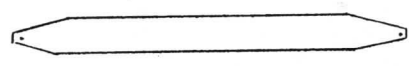
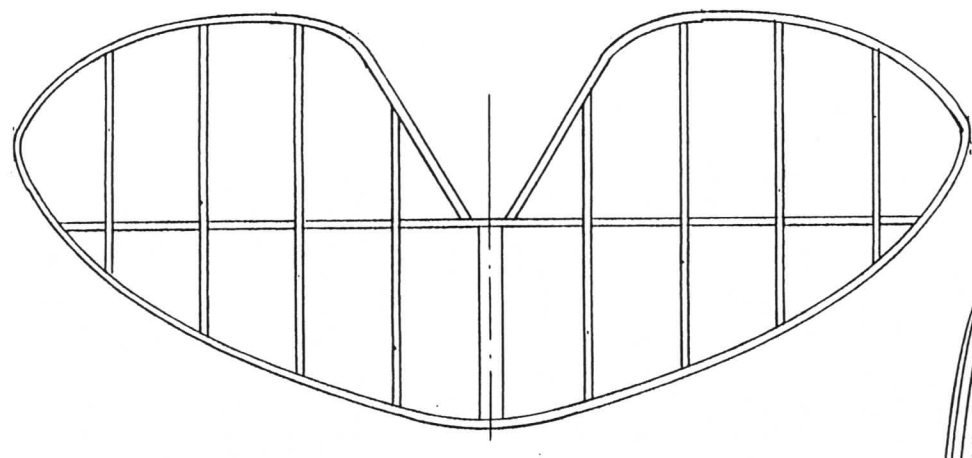
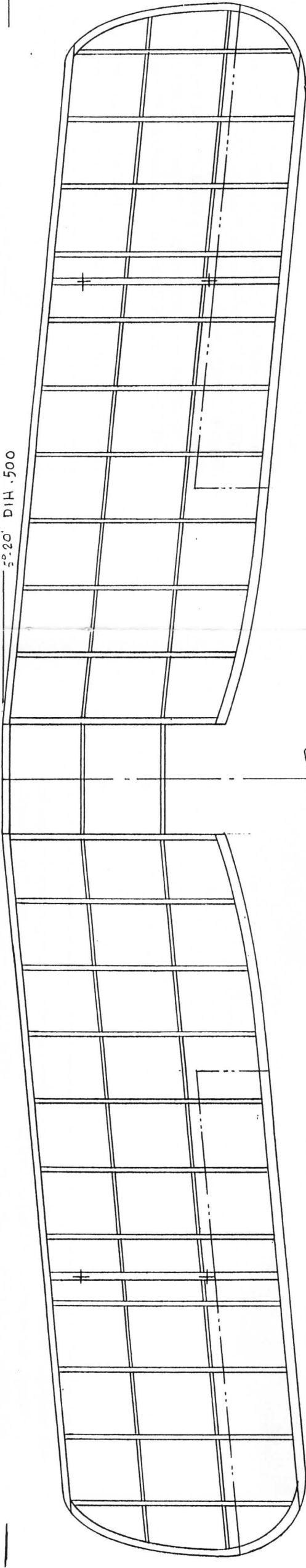
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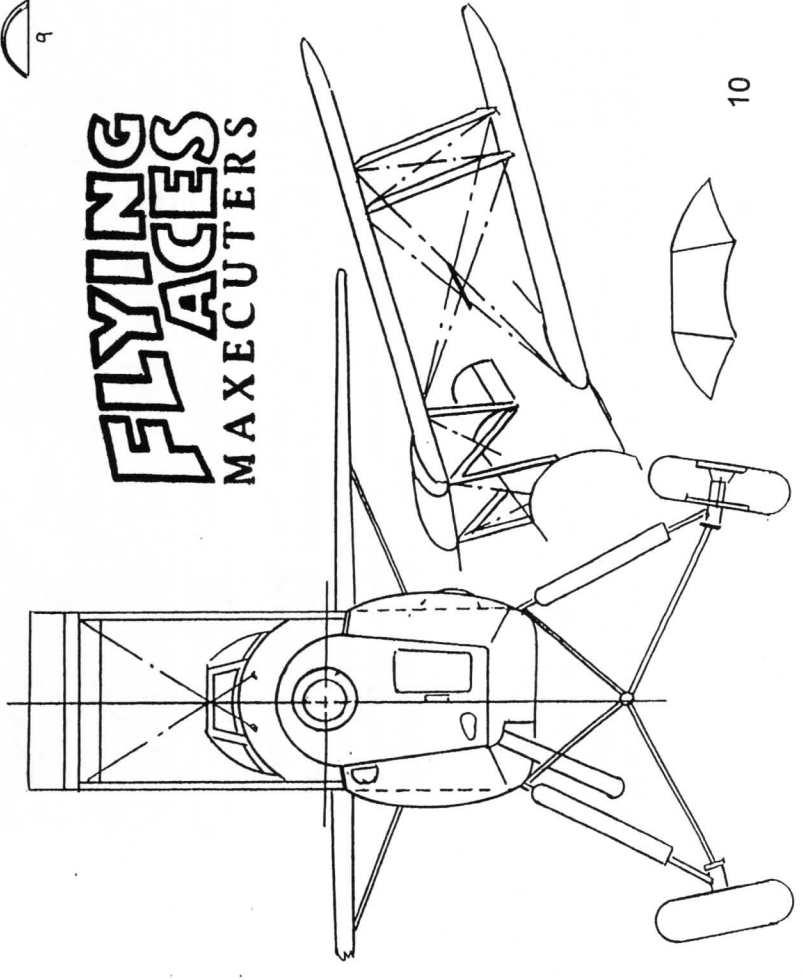
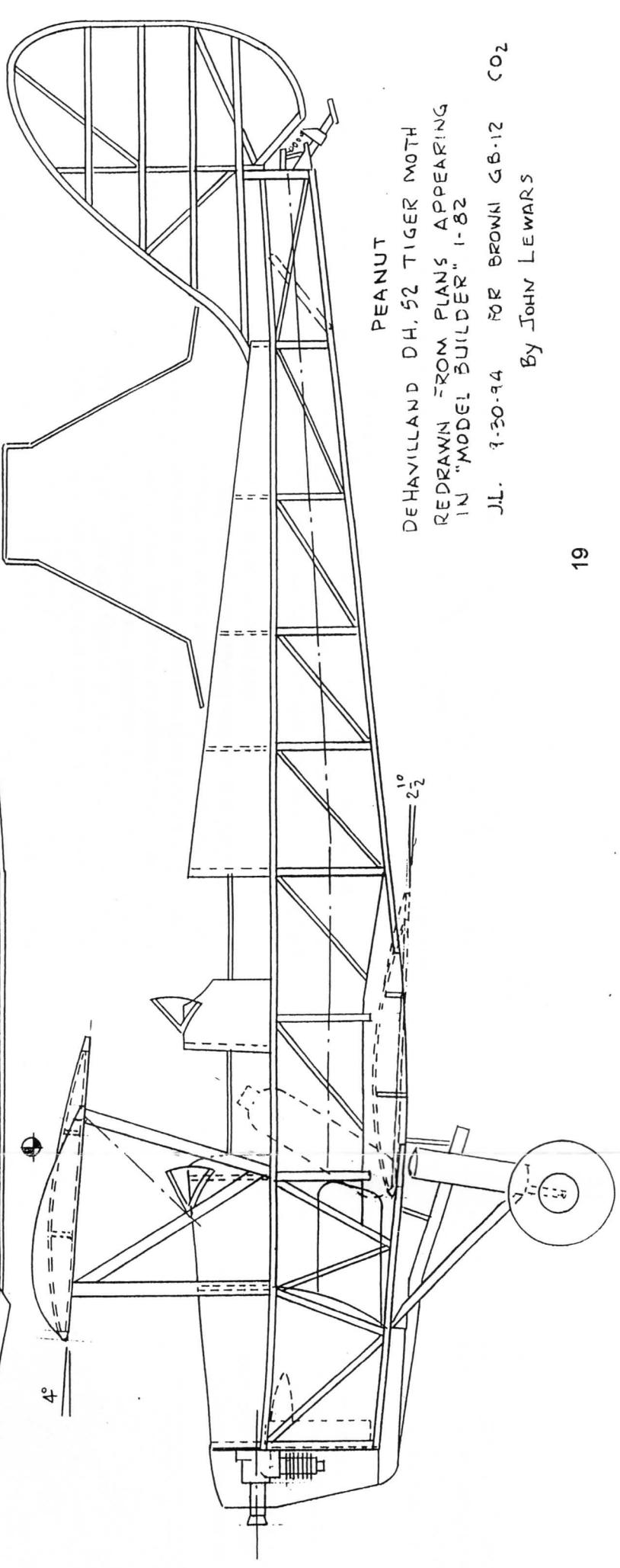
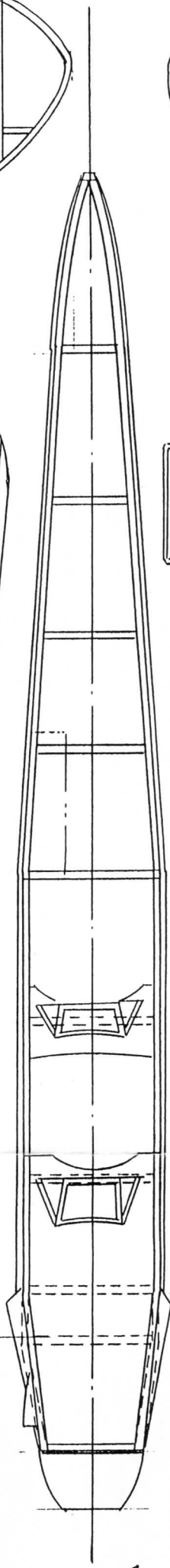
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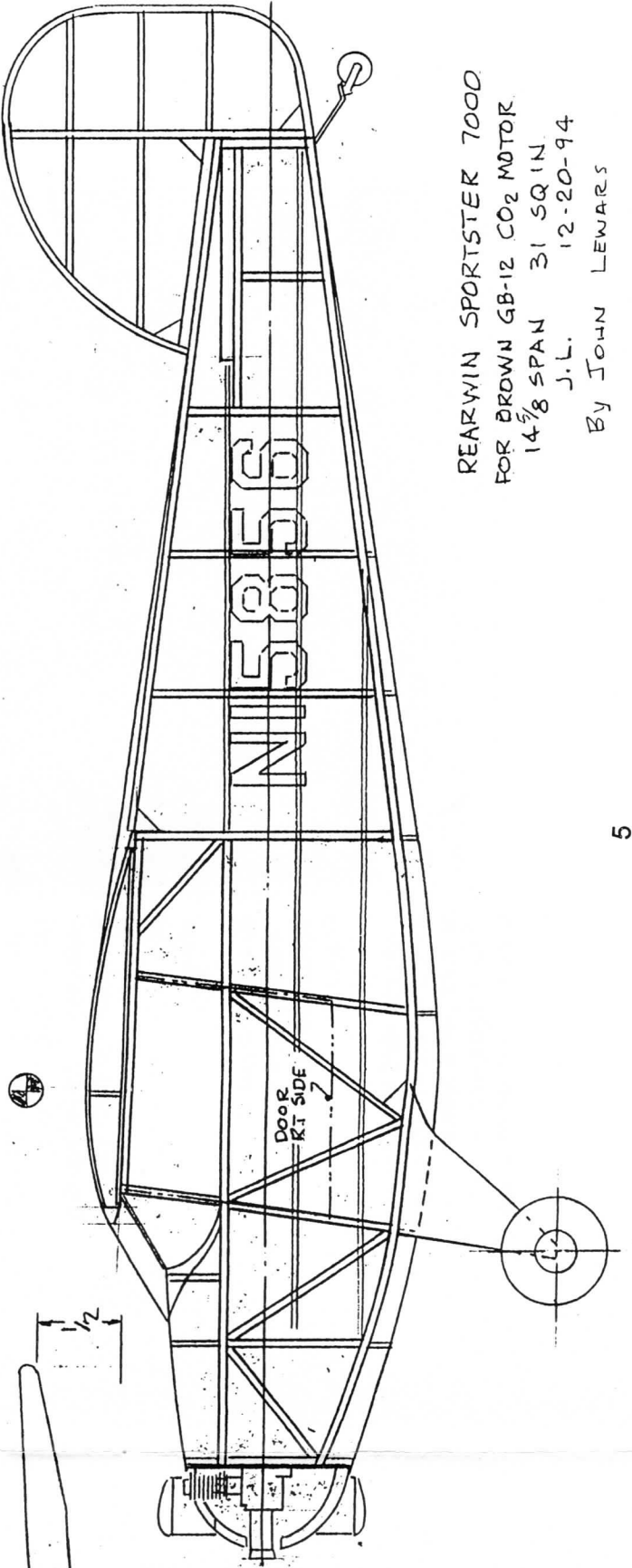
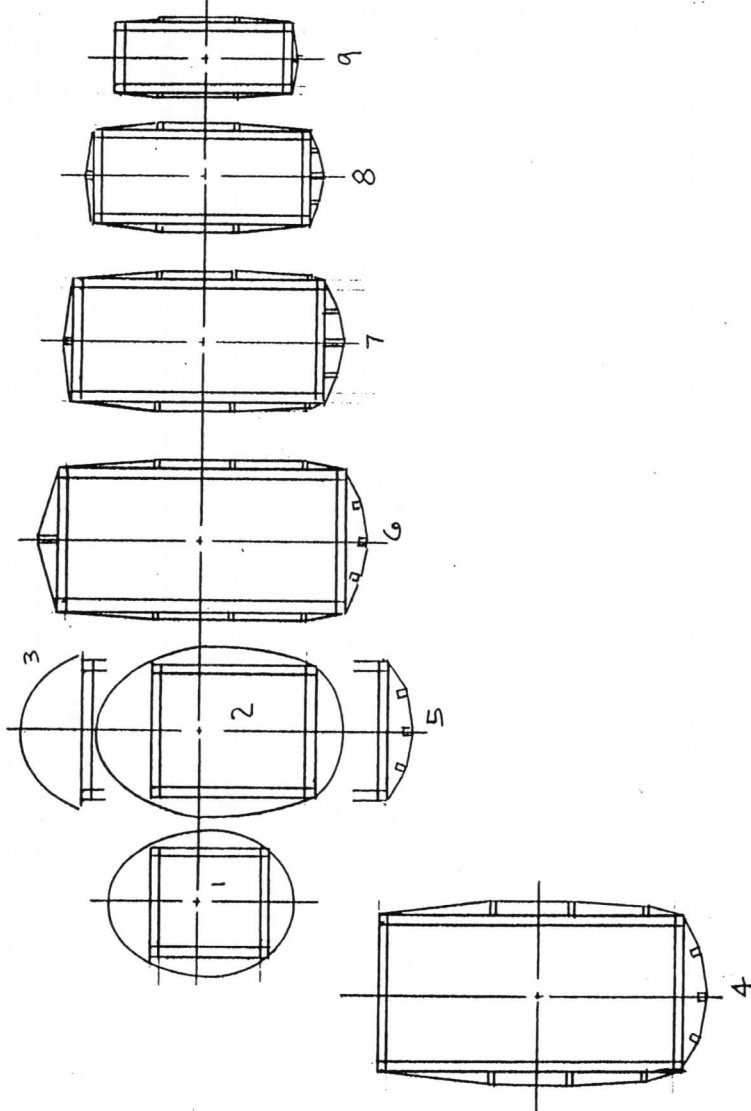
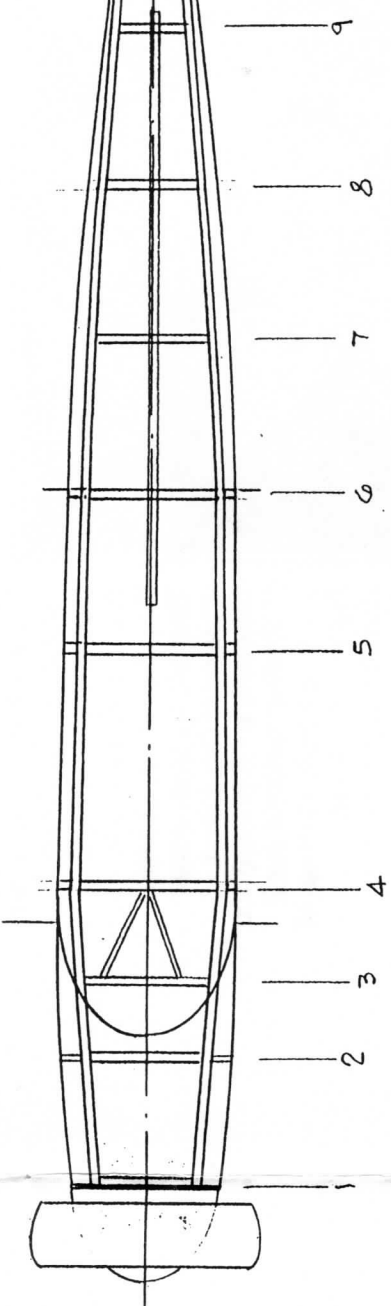
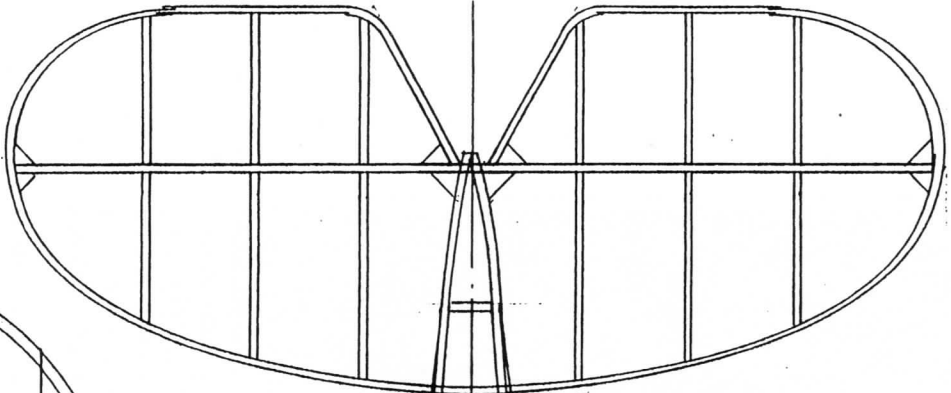
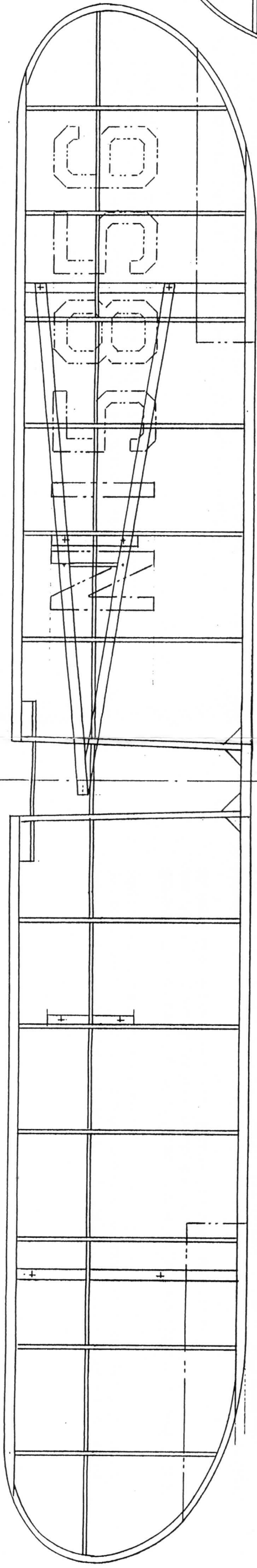
5° 20' DIH .500



**FLYING
MAXECUTERS**



PEANUT
DEHAVILLAND DH. 52 TIGER MOTH
REDRAWN FROM PLANS APPEARING
IN "MODEL BUILDER" 1-82
J.L. 3-30-94 FOR BROWN GB-12 CO2
By JOHN LEWARS



1/2

DOOR
RT SIDE

**FLYING
MAX CUTTERS**

REARWIN SPORTSTER 7000
FOR BROWN GB-12 CO₂ MOTOR
14 5/8 SPAN 31 SQ IN
J.L. 12-20-94
By JOHN LEWARS