

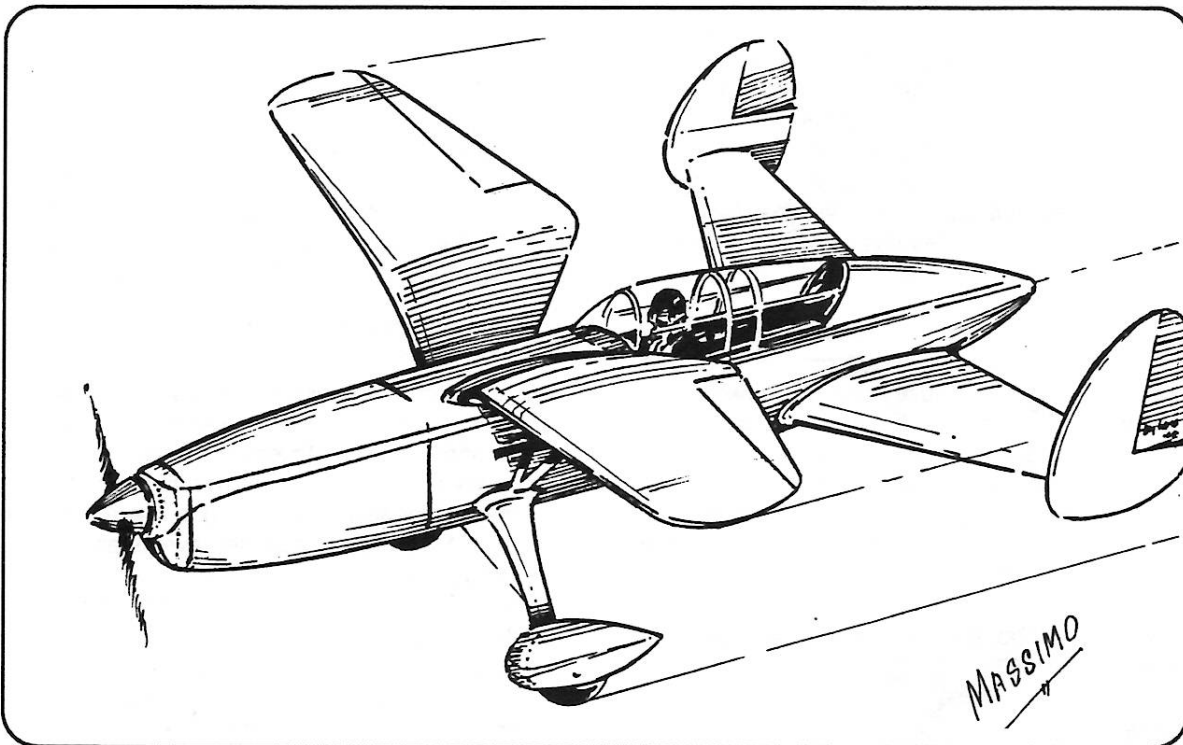
MAX FAX

Journal of the D. C. Maxcuters

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

This Month's Editor: Terry Pittman

May - June 1993



1993 Upcoming Events

- Sundays: Flying @ Comsat 4pm until dark
- May 30: Old-timer contest @ Comsat - Bill Winter's "Commander" eligible.
- Jun. 20: Ten-center contest @ Comsat (max. wingspan 20")
- Jul. 10-11: FAC contest @ National Warplane Museum, Geneseo, N.Y.
- Aug. 15: Any scale bi-plane contest @ Comsat.
- Sep. 4-10: FAC/AMA contest @ Muncie, Indiana.
- Sep. 11: Maxecuter's Summer Fun-Fly @ Comsat 9am-5pm. AMA card required to fly.
- Sep. 18-19: Glastonbury Modelers FAC Contest @ Durham Fairgrounds, Durham, CT. Info: Cap'n "Never Ready Eddie" Novak 203.238.9066.
- Oct. 1-2 (tentative date): Kudzoo Squadron Friday evening splash-down, Saturday FAC contest, Fayetteville, N.C.

Club News

Spring is finally here in the Washington D.C. area and on any day that looks decent I am tempted to blow-off work and head for Comsat. Will Sunday afternoon ever get here?

We had a great indoor season this past winter. The return to Sherwood High School gym was a welcome change from the cramped Farquar facility. Lots of FAC contest events were scheduled for the indoor season – at least one for each flying session – with an emphasis on fun. The Carrier (target) Landing event was a hoot! I regretfully missed the Tow-Line Glider and Rise-Off-Water (fake water) events, but understand they brought out the typical resourcefulness and ingenuity of the dreaded Potomac Pursuit Squadron. Reporter (and club President) Jerry Paisley has a full report later in the newsletter.

I sometimes wonder if our beloved hobby is dying-off, or is it beginning to grow again? The growth of cottage-industry manufacturers of kits, plans, electric motors, CO2 motors, machine-carved props, and etc. certainly are encouraging. The Maxecuters have begun placing "flyers" in hobby shops encouraging "old-timers" as well as "first-timers" to come and fly with us. The message is essentially that "scale stick-and-tissue model airplanes really can fly". We hope to bring some new flyers into the club in 1993.

This Issue

This issue is full of all sorts of good stuff, mostly French. At one of the club meetings this past winter Tom Schmitt brought an old AIR TRAILS to the meeting with a cover story and CL plan for a Delanne "Duo-Monoplane". There were some great photos of the Delanne 20 -T, and a story on the designer of this unique (how dare you say UGLY) tandem-wing aircraft. As my passion is early and golden age French aircraft I dug deeply into the archives of club members and found several plans for Delanne aircraft and some good 3-views, photos, and history.

The Delanne 20 -T was one of those "must-build" projects that immediately moved to the building board ahead of so many other projects. You may recognize this unusual design as it

was featured on one of Bill Hannan's PEANUTS & PISTACHIOS covers several years ago.

Speaking of those models you "just have to build" I received an amusing letter and additional information on the Delanne from Tom Hallman of Allentown, Pennsylvania the week after the PAX River contest. Perhaps you will relate to Tom's experience after reading this brief excerpt:

"When I first saw your Delanne 20 - T [at PAX River] I either suffered great disappointment or extreme relief. Disappointment because I had considered a rubber scale version for years; but relief that now I wouldn't actually have to go through the process of building it!!" "...thanks, now I can go and build that simple high-wing Aeronca I always wanted to build!!"

Maxecuter Two-Kanone Limit Per Plane

In an effort to encourage fliers to build new planes and not re-enter the same old models year after year the Maxecuters have now formally adopted a rule which has been tacitly observed for several years. This rule applies only to Maxecuter-sanctioned events and is effective immediately: "Any model which has won 2 FAC Maxecuter events can not be entered in another Maxecuter FAC event. CD may waive rule under circumstances deemed necessary (e.g. not enough eligible planes, old-timer events, one-design events, etc.)

Featured Plan: Delanne 20 T

My plan for the Delanne 20 T is a modification and enlargement of a Peanut plan by Gerard Porcher, published in the August 1978 edition (#467) of LE MODELE REDUIT D'AVION. The 20 T was designed as an aerobatic trainer, the unique feature being the use of a tandem wing configuration for stability. A variation on the 20 T was the Delanne 10 C2, a heavily-armed two-place fighter with a massive canopy housing an electric turret gun in the tail.

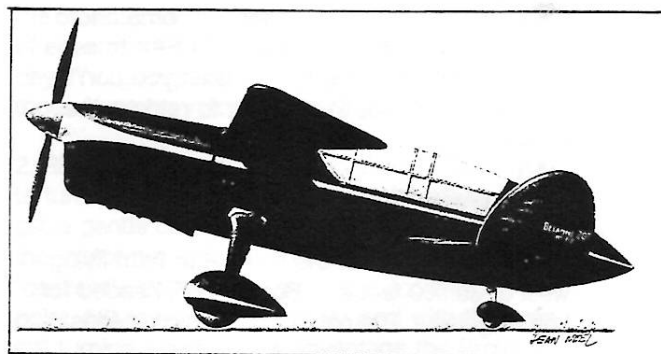
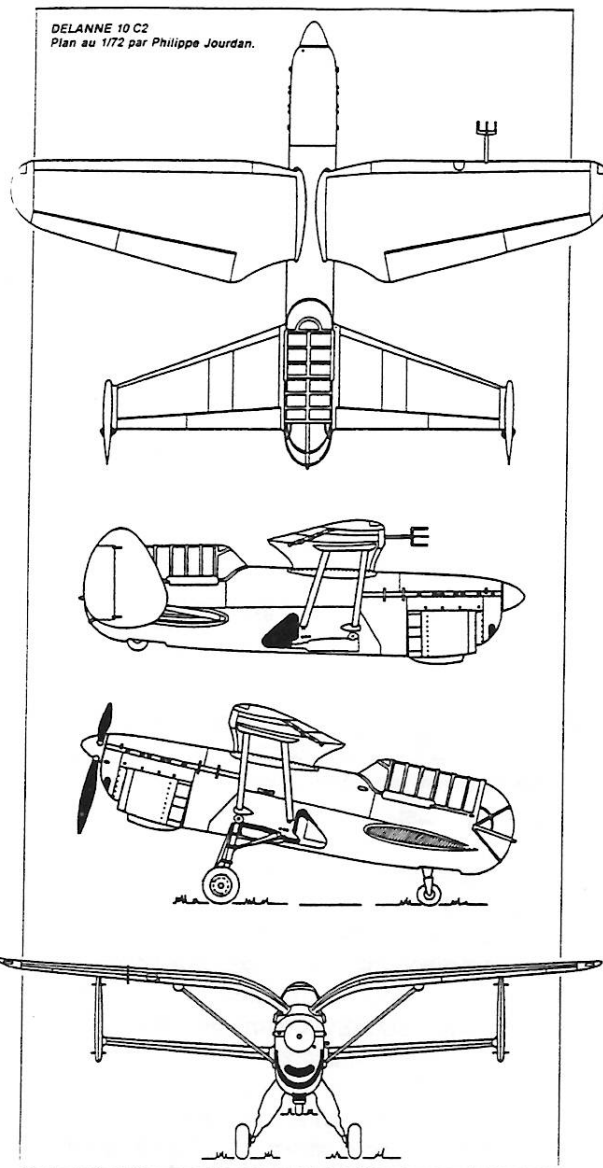
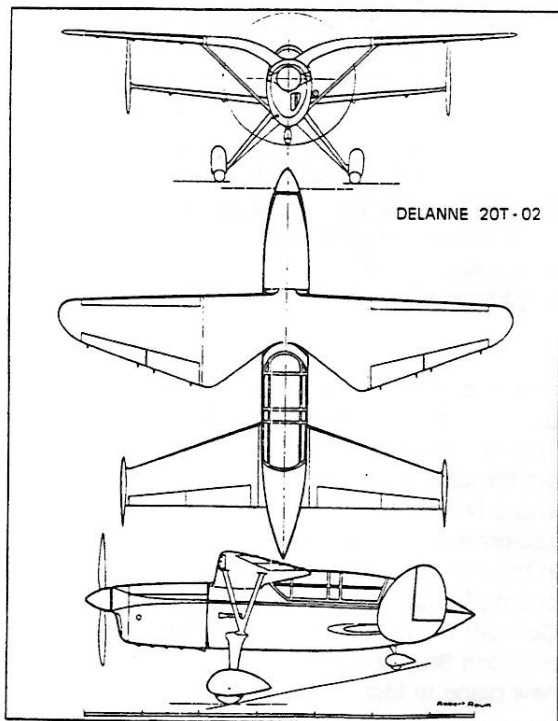
Mechanix Illustrated, May 1939, published an article about the Delanne Type 10 C2 entitled the "Canon Plane". That plan is also included in this issue. If you intend to build this particular

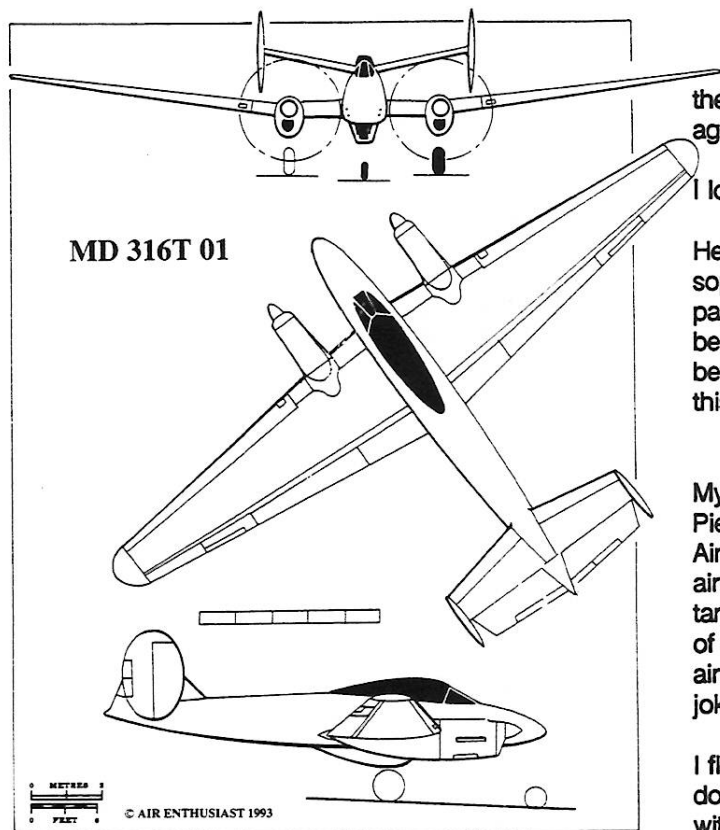
Delanne you will need to enlarge the plan. Observing the "grid" overlay to this plan (for scaling it up) I am grateful for the enlarging copiers available today.

Incidentally, I recently found that the KINKO'S copy shops (a national chain, I believe) often have large format copiers which are ideal for 100% copies of large-sized plans. I have used KINKO'S several times to make 17" x 22" copies of plans, rather than make multiple-sheet copies and then tape them together for a building-board plan. They only charged a couple of bucks and it took about ten minutes.

The October 1950 edition of AIR TRAILS featured a fine article on Maurice Henri Delanne and his range of unique tandem-wing aircraft.

In December of 1988 through February of 1989, LE FANA DE L'AVIATION ran a series of articles on the Delanne aircraft. Many photos are included as well as color schemes for the 20 T and the 10 C2.





MD 316T 01

The Sherwood Splashdown by Jerry Paisley

OK...Where were all the Maxecuter sailors on Friday evening the 26th of March? Five, yes five, members showed that night a Sherwood. Shame on you guys. You could hear the echos as the few aircraft hit the walls. Shame on you guys. Doug Buchanan came all the way from Thurmont, so what is your excuse? The club goes through a lot of trouble to arrange and pay for our indoor flying sessions. Well, it is your loss. Those in attendance had a good time enjoying the SEAPLANE event. Two brave souls did bring floatplanes and got them to ROW or ROFWA (Rise Off Floor Without Assistance). Additionally, they achieved respectable flight times. Look for some photo coverage in the next issue of MAX-FAX to see what you missed. [Jerry – at least you don't need a tippy canoe in the gym to retrieve the planes!...tp.]

Flying West

As I write this part of the newsletter I am flying west at 30,000 feet in a Boeing 767, headed for Los Angeles. The cabin is full which means

there is no elbow room and enough pre-school age children to start a nursery school.

I love flying.

Here I am flying along in one of the most sophisticated aircraft made today. I have no particular sensation except for the discomfort of being cramped, and the desire for something better to eat than shrink-wrapped fishy fish. But this is not Flying. It's more like...Transportation.

My first commercial flights as a kid were on Piedmont and Eastern Airlines out of Douglas Airport in Charlotte, N.C. I don't recall what the aircraft were; I just remember the steps from the tarmac up to a big silver bird, and the vibration of the large engines. Eastern Airlines was THE airline. Piedmont Airlines was the brunt of many jokes. How things change.

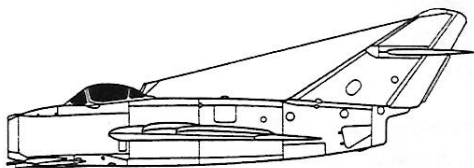
I fly a lot these days for business. And yet I don't associate all the time I spend up in the air with flight. Flying is a visceral experience. Flying is an intimate experience. Flying what took place in great lumbering aircraft of the past...the Farman Goliath, the DC-3, the Constellation. Or better, flying is what I and my fellow Maxecuters do outdoors each Sunday evening spring through fall, and indoors during the winter. Flying is watching the model you built from scratch gently circle upward, catching the late afternoon lift, and bouncing gently with the breeze. Flying is watching the unbelievable floating landing of a scale model indoors, where the main wheels seem to never want to touch the floor, and when they finally do, the tail slowly lowers as the plane rolls to a stop, and you just smile at the beauty of your handiwork.

Now it is several weeks later and once again I'm up in the air. On approach to the Marine Air Terminal at La Guardia on the Delta Shuttle. I am thinking about last Sunday up at Comsat. It was a breezy but beautiful day so I packed the just-covered, and yet un-painted, Delanne 20 T in the car. As it was Easter Sunday I was not optimistic that I would find many Maxecuters at Comsat. By the late afternoon Doug Buchanan and Don Srull had joined me, each of us with a new plane to test.

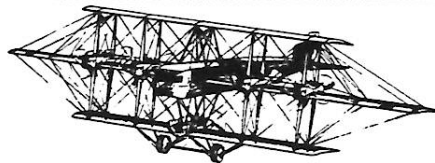
I have learned to keep my expectations low for first flights as there is usually a considerable amount of trimming necessary, and sometimes, a plane just does not want to fly. This Sunday was a pleasant surprise for us all. After minor CG and elevator trim adjustments the Delanne was climbing upward in gentle right-hand circles with the beautiful sound of the C02 motor chugging away. Lift from the tandem-wing made the plane particularly buoyant, and stalls were controlled and gentle, just like Maurice Henri had said they would be.

Doug had his just-built Bill Winter "Commander" ready to fly, a beautiful job, bamboo landing gear and all. With a minor thrust adjustment it was flying great – over a minute – and these were trimming flights!

Don had brought his new MIG-15 electric ducted-fan, with a span of about 30" or double the size of his previous Micro-4 MIGs. Don must have built half a dozen MIGs over the past year, each time analyzing and refining the flight characteristics and the ducted-fan performance. But this one was BIG and a little on the heavy side, and we all know that "the bigger they are..." Don charged it and then with intense concentration gave it a flat, hard heave into the air. And...it FLEW. The MIG settled into a gentle right-hand climbing turn for a second or two and then the afterburners kicked-in. It continued the climbing turn, accelerating all the way up. The power-curve dropped and it settled into a gentle glide, decelerating until it reached an idling cruising speed and ever-so-gracefully landed. Doug and I were about as ecstatic as was Don and we all hooted and hollered for a while. Rare are the days when things go so well. We cherish the moments like these.



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Making C02 Motors Perform

C02 motors are my favorite method of propulsion. I find them to be efficient and reliable (not to mention the pleasant sound they make). I can't understand why they are not more popular. I have heard comments many times that C02 motors are too finicky and unreliable. In the interest of the proliferation of C02 propulsion I thought I would pass along some of what I have learned about getting the most out of them, and how to keep them running consistently.

1. Prop Size – This is the single-most important factor I have found affecting the performance of C02 motors. The propellers supplied with the Brown C02 motors are too small for optimum performance. Granted they look nice and scale-like, but you will get significantly improved thrust and run-times if you use a larger prop. On the Brown A-23 I use the 5 1/2" North-Pacific "Sleek Streak" prop. On the Brown B-100 I use the 7" "Sleek-Streak" or 7" Bentom prop. The Bentom is a British import (I think), much better molded than the "Sleek-Streak" and available through Peck-Polymers. The prop sizes on the Telcos, Modelos, Gasparins and the Russian motors are about right, though a bit of experimentation never hurt. One of these days I'm going to try a variable-pitch prop like those I use on indoor rubber models.

2. RPM – Increasing the prop size will allow you to turn-down the RPM's to the point where you get a gentle climb during the "power" phase of the motor run, a long "cruise" and then "descent". With a "liquid-charge" (covered in point #3) the model will likely land with the prop still turning slowly. One advantage the Brown's

have over some others is that they will "free-wheel" in the event the charge is exhausted before landing. This is due to the low friction of the steel piston. Most other motors use some form of plastic piston.

3. Basic Charging – There are two ways to charge the motor. One is a "gas" charge and the other is a "liquid" charge. A "gas" charge means only CO₂ gas has filled the tank and the motor run will be short. A "liquid" charge is where the tank is filled with liquified CO₂ and as the liquid moves from the tank to the cylinder head it warms and turns to gas, producing a long run.

Before we get into gas and liquid charges I must digress momentarily on the subject of chargers. There are basically two types: Soda-bulbs and commercially available CO₂ siphon tanks.

The first and lowest out-of-pocket initially is the "soda-bulb" charger. This is a small apparatus which holds a standard CO₂ cartridge used in "spritzer" bottle. CO₂ "spritzer" cartridges are easily found in your local shopping mall at Brookstone, Williams-Sonoma (kitchen and cooking supplies) or any store that carries household kitchen supplies. I usually ask for "soda bulbs for spritzer bottles" and the clerk knows what to look for. Soda-bulbs are convenient but they are used fairly quickly and the dollars add up. Hence, the CO₂ siphon tank.

The CO₂ siphon tank is typically a 5 lb capacity aluminum tank filled with CO₂, used for small drug store soda fountain installations, or "wet bars" in homes where soda water or spritzer is needed. They are inexpensively refilled at the fire department. I searched high and low for a 5 lb tank and they are hard to find. Finally I ordered mine from Peck-Polymers. Peck will even fill it before shipping, and they have the correct fitting for filling the motor.

Now, back to gas and liquid charges. The gas charge is used for trimming and the liquid charge is used for official flights.

Using a soda-bulb charger, the gas charge is the result of filling the tank while holding the

charger upright. That is where the nozzle of the charger is pointing upward into the filler nipple which is attached to the model.

Again, using a soda-bulb charger, a liquid charge is the result of filling the tank while holding the charger upside-down. That is where the nozzle of the charger is pointing downward into the filler nipple. With the charger pointed down, the liquid CO₂ can travel out of the soda bulb into the tank.

Theoretically, the attitude of the charger should be reversed (compared to the soda bulb charger) when using a CO₂ siphon tank, as the siphon tank has a tube inside the tank which draws CO₂ liquid from the bottom of the tank. I have just recently begun using my tank and haven't verified this.

4. Contest Charging – For some reason, the second motor run is always longer than the first. Probably has something to do with the tank temperature. So, in contest flying, always make the first motor run an un-official flight. Then, immediately re-charge the motor as follows for a maximum-length run:

Place a new soda-bulb in the charger and fill your tank with a liquid charge. Immediately, remove the soda-bulb and replace it with a new soda-bulb and repeat the liquid fill step. This will give you a maximum liquid charge. During contests you will use lots of soda-bulbs, but your flights will be longer.

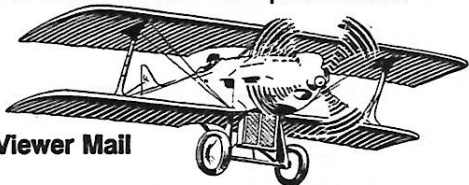
5. Oil – Buy some light machine oil and after every 5-6 motor runs put a drop of oil in the oil-points on the motor (typically the cylinder ports, but varies by motor). Well-oiled motors run considerably longer than un-oiled ones.

6. Keep It Clean – This may seem obvious but dirt and dust gets into these motors and inhibits performance. I always take the heads off my motors the night before a contest and make sure there is no dirt in the ball-valve which could affect the performance. I usually find some balsa dust/oil mixture or other goop to clean-out.

7. Tank Size – I get a thrill out of getting the maximum performance out of the standard tank size. If you build light and get

the RPM/prop combination right you shouldn't need to use a bigger tank. If however you want to assure yourself of a long run every flight then by all means call Peck-Polymers and order a bigger tank. On the other hand, you might just watch your beautiful creation and expensive motor go home to HUNG, the great god of thermals.

In summary, CO2 motors can be an efficient, reliable, and enjoyable power-source for your scale models if set-up correctly and well maintained. I own many varieties including, Brown A-23's and B-100's, Czech-made Modelo and Gasparin's, and a Russian motor. Overall I think the Brown motors are the best built and most problem-free, the A-23 being ideal for 13" - 24" span models (built light!) and the B-100 well-suited for 20" - 28" span models.



Viewer Mail

John Walker of Charlottesville, Virginia writes: "...In the near future I am planning to move into a smaller house. This will greatly reduce the space available to store my valuable aeronautical JUNQUE. JUNQUE is a step or two more valuable than just plain junk.

I have a collection of old magazines from the 1930's plus several CLEVELAND plans with print wood, even a Cleveland SF-Folker D7 kit that I will have to part with. If anyone is interested I'll send them a list if they send a legal size envelope. No SASE, no list..."

John Walker's address: 160 Ivy Ridge Road, Charlottesville, VA, 22901

Construction of the Delanne 20 - T - 02

The construction of the model is fairly typical of a split-shell, keel design with the exception of the front gull-wing center section.

Fuselage

First I construct the top and bottom keels, glue the formers on one side of the keels while attached to the building board, and then attach

the other side's formers. The stringers go on next.

The Gull Wing

Per the plans, I built a jig for construction of the gull portion of the wing and used three laminations of balsa for the leading-edge, trailing-edge, and the spar. It took me several tries to get the compound curves of the trailing edge right, but

I definitely couldn't have done it without the jig. You laminate the leading and trailing edges, and the spar, sand them to shape, and then assemble them into the center gull section.

You must balsa sheet the top of the jig in order to have a building surface for the gull wing section. I found it helpful to draw the leading and trailing-edge outlines on the sheeted surface of the jig. You can use push pins into the sheeting to hold everything in alignment while the glue dries.

I built my jig from scrap pine and cut the front and rear gull shapes on a band saw. By cutting carefully I was able to use the wood cut away from the top of the gull shape as a sort of a "plug" to press down on the laminations as they were drying. Once the laminations were cured, I constructed the center section on the jig.

Mounting the gull wing on the fuselage was accomplished by spot-gluing the gull-wing unit into place and then checking for alignment. Once everything was straight I CyA'd each joint and then sheeted from the nose to the front of the cockpit.

The outer-wing sections of the front wing plug in. White plastic tubing (from the architectural modelling supplies section of the hobby shop) was used inside the gull-wing and outer wing panels to allow the outer wing sections to be plugged-in. I used music wire inside the plastic tube to hold everything together. Plug-ins absorb impact and make the model easier to transport.

The curved wing-tips are laminated using a sandwich of paper-thin bass wood and balsa. This bass wood is very handy, comes in yellow plastic packets of 15 and is labeled "Scale Lumber", HO scale 1' x 6', N gauge, 2 x 12. I

(Con't on Page 12)

PAX RIVER REVISITED

A casual perusal of the March 1993 contest results in this issue of MAX-FAX does not begin to tell the whole story of another great day at the Patuxent River Naval Air Station. Our Spring contest was a resounding success for all concerned. We owe a big well done to Claude Powell and Bill Powell for a fun filled day. We specially want to thank Bill Powell for his persistence in obtaining the cooperation of the Navy to allow us the use of the Helicopter Test Facility hangar. Unfortunately, Bill was ill that day and did not attend the contest. Claude Powell is the shaker and the doer that makes certain all the necessary loose ends are neatly tied, not to forget the trophies which are provided by St. Mary's County. While we are on the subject of trophies give MASSIMO a pat on the back for his art work which is an essential part of their production. We do not know whether Bill Powell or Claude were responsible for the snack bar setup, so will thank them both again. No one missed their breakfast or lunch that day. We also wish to thank Dudley Prisel our long lost Maxecuter for providing us with many of the door prizes.

Now back to the contest. At least 28 or more contestants flew in at least one event. We added three extra events this year, MINI-STICK and the NOCAL and COCONUT mass launches. They were enjoyed by many and will be continued in the fall. Earl Stahl paid us a visit and there are rumors that he will undertake a new scale design. John Worth was there also and maybe we can get him to revert to his roots and produce an entry. Harold Crispin enjoyed his visit and was invited to award trophies. We should attempt to start a grass roots movement to get him duely nominated in the next AMA presidential election and then support him by voting. A final comment; let us thank all those contestants and spectators who came to enjoy themselves and donated \$128 for Navy Relief.

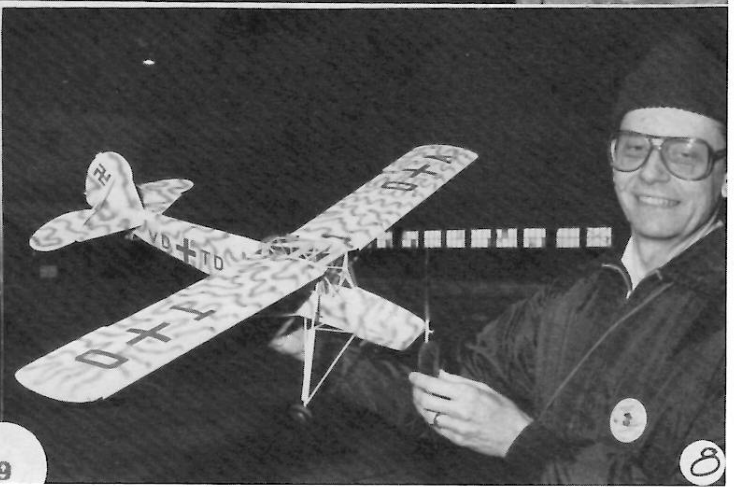
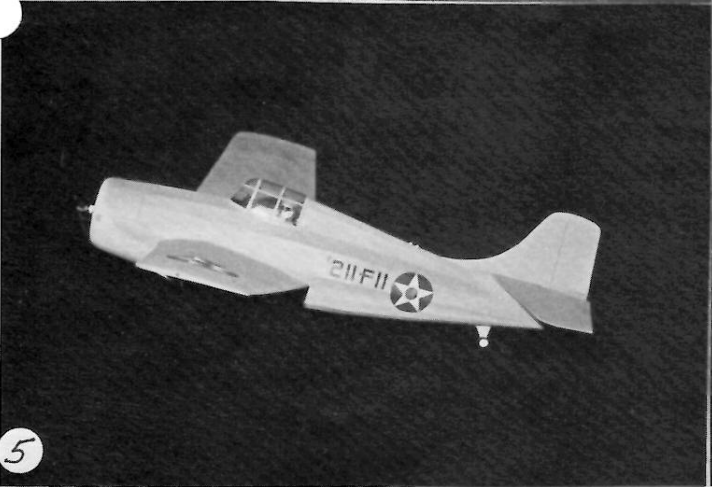
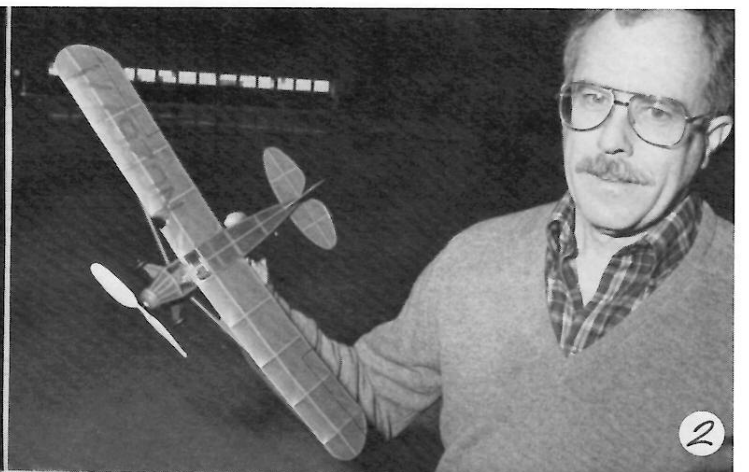
By Tom Schmitt

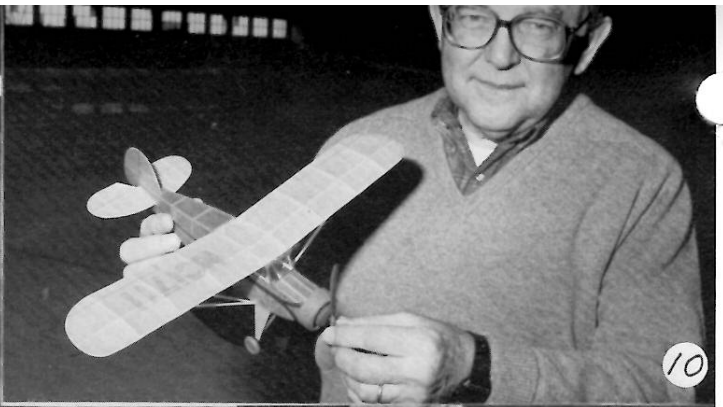
PHOTO PAGES

1. The Delanne T 20 is the featured plan of this issue, adapted by Terry Pittman from a PEANUT design by Gerald Porcher.

PAX RIVER MARCH 1993

2. Dan Driscoll walked away with a Kanone in the OLD TIME KIT SCALE event with this Comet Funk. A mid-air during a mass launch did not slow him down (note damaged right wing leading edge).
3. Bert Phillips brought along a great looking Bellanca, just out of the Crofton Aircraft Works.
4. Doug Buchanan has reason to be happy. His COCONUT J-3 just out of the shop was a realistically good flyer with J-3 scale-like flight.
5. If the pilot of Pat Daily's nifty Wildcat had been looking where he was going he may have survived to fly in the NAVY event. Better luck next time Pat.
6. Allan Schanzle was test flying his Corsair resplendent in New Zealand markings. First flights in the hangar looked very promising. Pat Daily immediately took off to build his own F4U.
7. John Worth came and enjoyed the fun. He brought along an electric powered R/C sport model.
8. We all believe that Dave Rees has a COCONUT tree in his backyard. The newest beauty is his Fieseler Storch.





9. Hurst Bowers did a great job on this Rearwin Sportster from an EasyBuilt kit. Unfortunately it flew a little bit like a ruptured duck.
10. Another Rearwin Sportster by Don Srull built from a HiFlier plan also was a rock and roll flier. Elvis would have been proud of the gyrations.
11. Prof Bud Carson was the Kanone grabber in the hotly contested NOCAL mass launch event with this nifty Cessna racer.
12. Reggie Batterson from Richmond, shown here with his great flying NOCAL racer.
13. Our pres Gerry Paisley also picked off a First Place in the COCONUT mass launch event flying a J-4.
14. 'MASSIMO' got away from the drawing board long enough to finish his BOGUS BOSTONIAN Defender.
15. One of our newer members Russ Sandusky came from Baltimore with Carol, his fiancée, a delightful lady and hopefully a convert to our craft.
16. Tom Hallman made the trip from Pennsylvania to win a Kanone with a beautifully constructed and flying Mr. Smoothie.
17. It was good to see Kevin Sharbonda back in action, seen here with his Pfalz in the WWI event.
18. John Houck is another prolific producer of planes. His latest COCONUT is a Lincoln AP adapted from a MAX-FAX original by Hurst Bowers.

Tom Schmitt

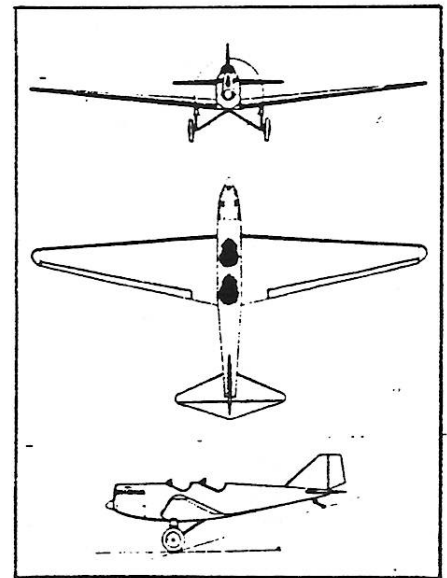
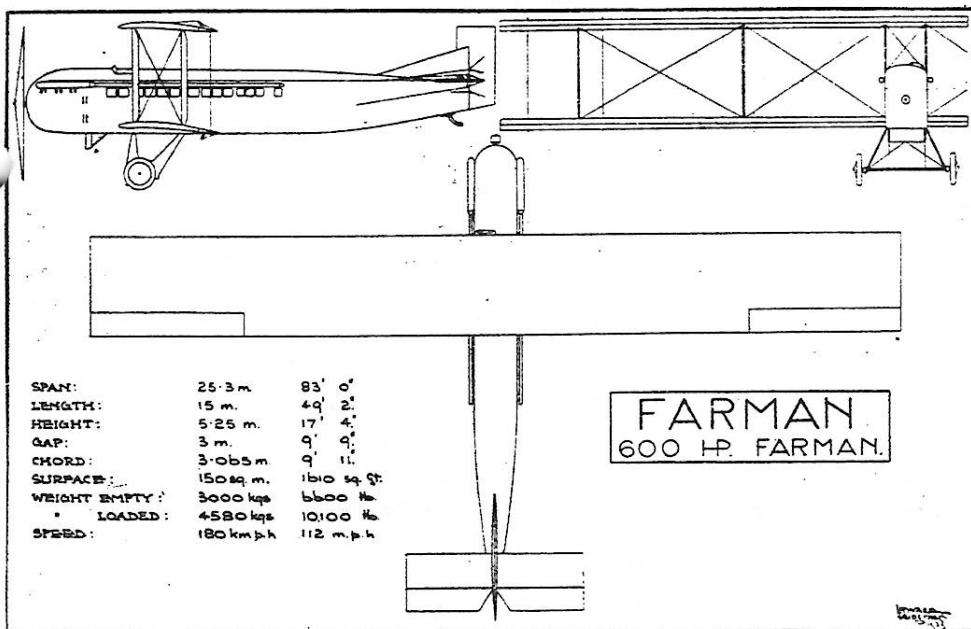


Photo et plan trois vues du biplace de tourisme Wibault 340 PS-2 resté à l'état de prototype unique...

Mini-Contests held at Sherwood this winter

<u>Name</u>	<u>Contest event (Indoor)</u>	<u>Date</u>
Terry Pittman	14 gram Bostonian	November 20, 1992
Jerry Paisley	Target Landing	December 12, 1992
Frank Rowsome	Tow-Line Glider	January 15, 1993
Frank Rowsome	Mini-Stick	January 30, 1993
Doug Buchanan	Bogus Bostonian	January 30, 1993
Terry Pittman	Peanut - Moony Rules	February 20, 1993
Kevin Sherbonda	Peanut Mass Launch	February 20, 1993

push pins into the plan outlining the contour of the curve and then stretch the wood around the pins. I use CyA glue here for strength and quick drying.

Rear Wing

The rear wing is constructed in one piece and then inserted into the fuselage. It was spot-glued and alignment was checked. Once everything was straight I CyA'd everything and then sheeted between the longerons where the wing enters the fuselage.

The Canopy

I have to confess that bubble canopies usually frighten me off. When I look at a plan or three-view and notice it has a bubble canopy it usually goes to the bottom of the stack. But once again I found that my imagination was worse than reality.

First start with a rough shaped solid balsa plug the size of the canopy. Then add balsa to the back end and front of the plug and smooth this into the contour to make the plug about 1/4" longer at the front and rear than the actual space the canopy should occupy. This will give you a small edge for attaching the canopy to the covered plane. If you don't do this the canopy will never fit.

Mount the canopy plug on a balsa block about 2 inches high to allow for ample room for pulling the heated acetate over the plug.

Then cut from two sheets of 1/16th plywood a frame for holding the acetate to be pulled over the balsa plug. Cut a hole in frame about 1/2 inch larger than the shape of the plug when viewed from the top. Drill 8 holes through the frame to accommodate 1/2 x 6 sheet metal screws. Mount a piece of acetate in the frame.

Put on a pair of gloves before beginning the next step since you will need to handle some hot parts.

Heat a toaster oven (or full-sized oven) to about 350 degrees. Also start a moderate flame on your stove top.

Suspend the frame on the top of a cake tin so that as the acetate heats and begins to sag it will have plenty of room to droop. Place the tin and frame in the oven. When the acetate begins sagging about 1/4 inch quickly remove the tin and frame from the oven and push the plug slowly but firmly into the soft acetate until you feel resistance.

Quickly pick up the frame and hold it about 18 inches above the flame (acetate side down) while keeping pressure on the plug, and ease the plug into the soft acetate until it extends about 1/2 inch beyond the bottom of the plug. Move away from the heat and hold everything steady until it sets.

If you get a tear, wrinkle, or hole, try again. It usually takes me three or four tries to get it right. Once you have molded a good canopy trim it carefully and put it aside until you are ready to mount it.

Power

I used a Brown B-100 to power the Delanne 20-T. The tank is mounted at about 45 degrees (forward tilt) just under the cockpit. I always make my CO2 tank mounts out of blue foam. In this case I cut two half-shell tank mounts and then slid them between the longerons and white-glued them in place. This mount will allow the tank to be removed if needed by lifting the tank up and pulling forward, but holds the tank in place during flight and even rough landings.

Landing Gear

The same white plastic tubing is used to hold the plug-in landing gears. I made the faring around the landing gear wires from glossy paper stock (rather than balsa) folded and glued into a airfoil shape. This is light and flexible. Wheels are made from a sandwich of blue foam with 1/32 ply in the middle, turned on a dremel tool using sandpaper.

Trimming

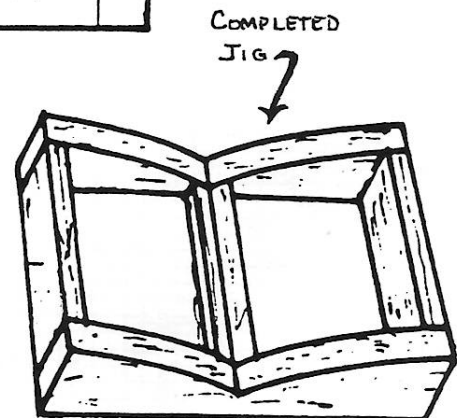
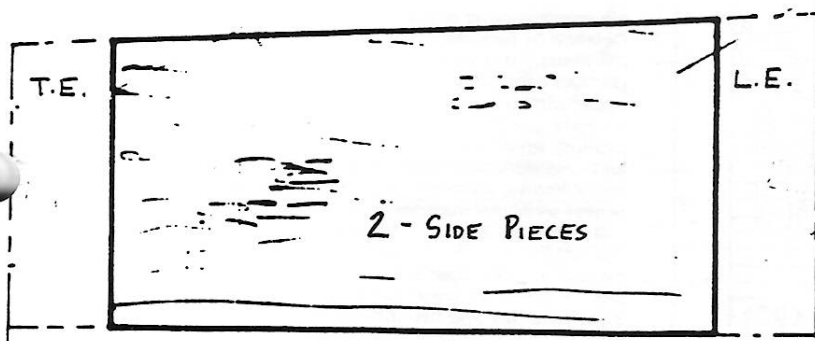
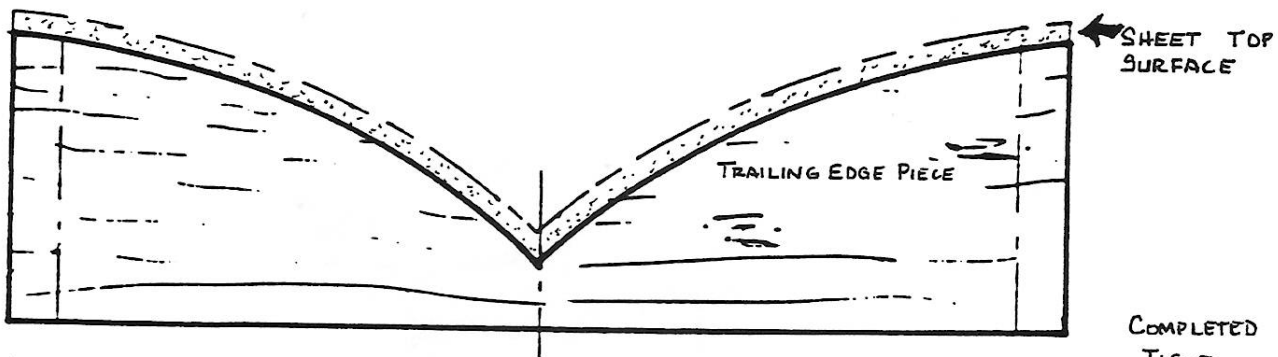
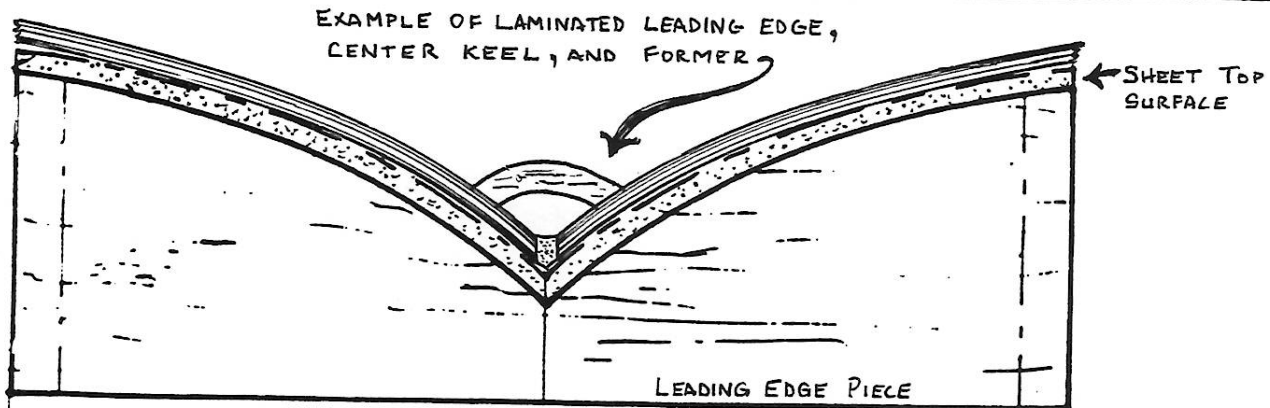
During construction I was concerned about the exaggerated angle of attack indicated on the original Porcher plans for the rear wing. Never having built a tandem wing before I knew that the CG should be well aft of the normal CG point in order to utilize the lift of the rear wing. Otherwise the rear wing is just baggage.

On the other hand I had to assume that Porcher had actually flown the model and that there must be some reason for his designing the rear wing mounted at such a negative angle. So, I added the moveable elevators to the plan to adjust the effective angle of the rear wing.

With elevators set at neutral, and a gas charge to the motor set at a low RPM I launched the Delanne. It flew in a wide right-hand circle with a slight nose up attitude, oscillating from stall to stall. Just as designed, the front wing stalled first and then the rear wing. The result was a gentle settling with the nose at a higher angle, then it would regain speed, climbing, and the cycle would repeat itself.

I added about 5 degrees down elevator, a 1/32" shim for down-thrust, and a small lump of clay to the nose after several more test flights and got a nice climb under power with flat glide. The CG indicated on the plan gave the best performance. I added the adjustable rudder to the left side only after test flying as it needed a bit of left to keep the circle large.

WING JIG: DELANNE 20-T-02

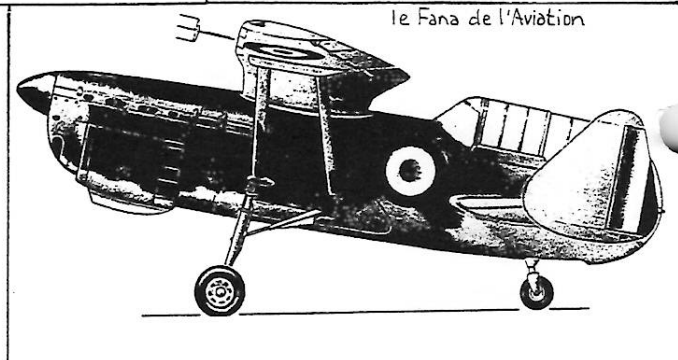
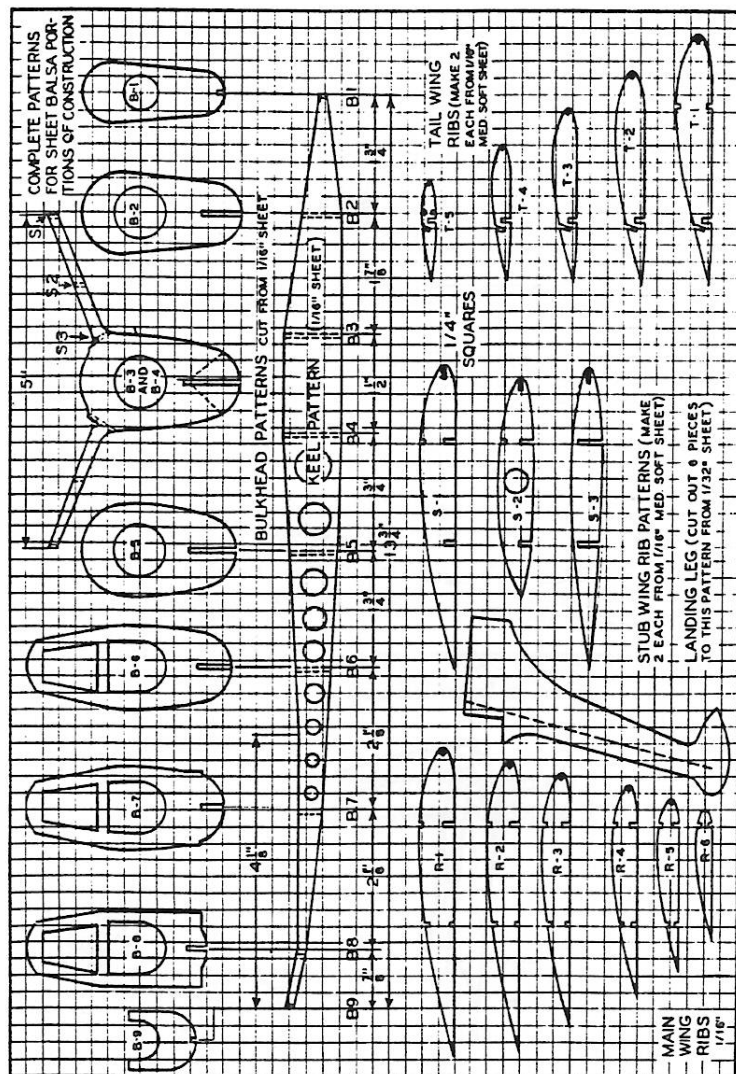
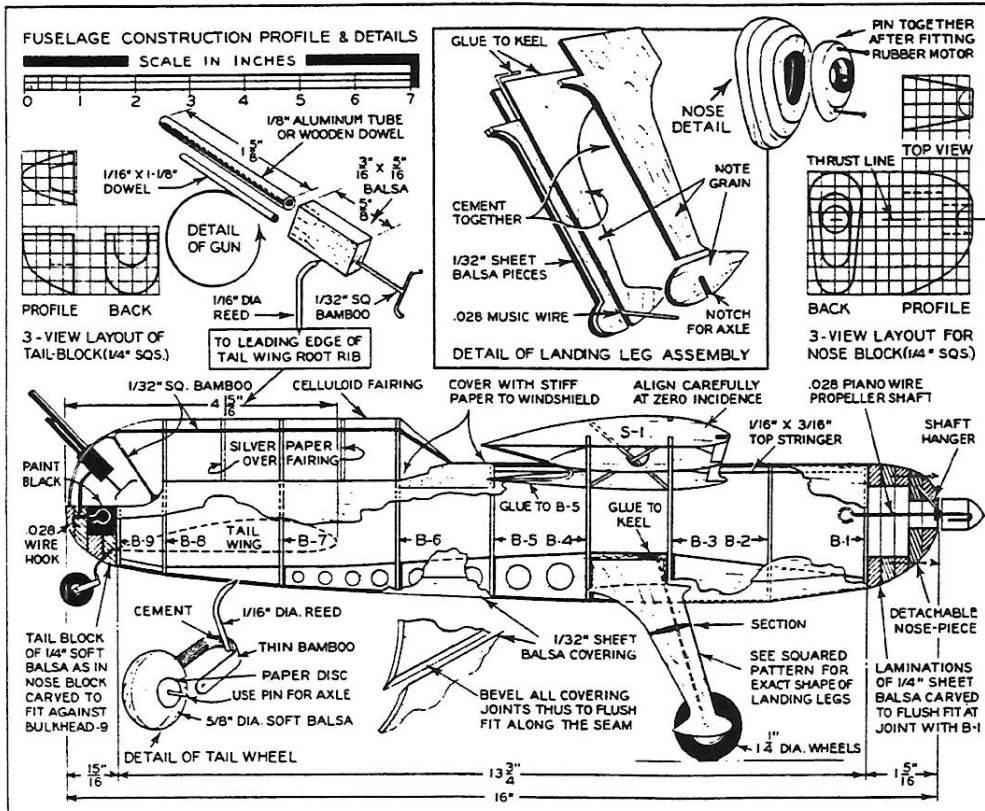


Cannon-plane

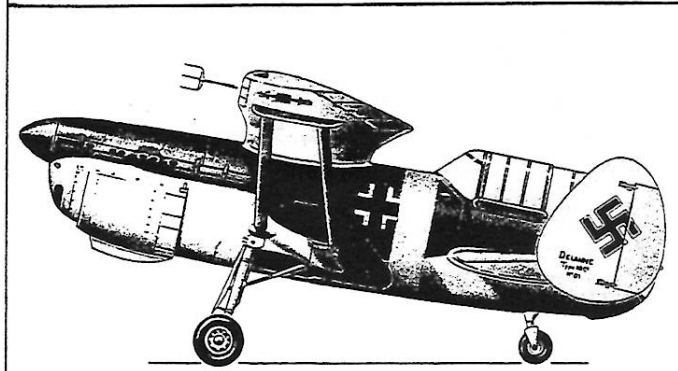
by
Douglas Rolfe

THE Delanne cannon-plane is France's latest thing in multi-seat fighters. Featured on the cover and elsewhere in this issue of MECHANIX ILLUSTRATED, the Delanne differs so radically from conventional military types, that the editors thought our air-minded readers would like to have plans for a flying scale model of this interesting airplane.

May 1939



le Fana de l'Aviation



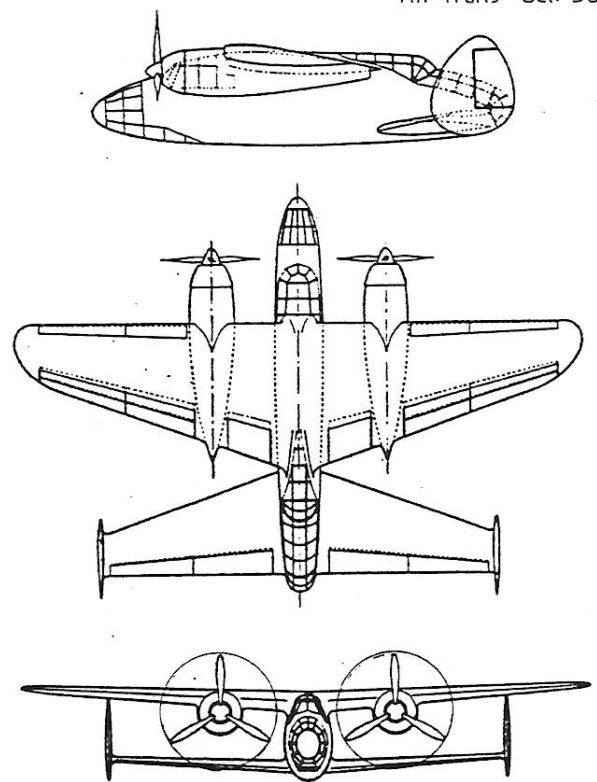
No information is available about the colour scheme of the Delanne 10 two-seat fighter prototype. Photos clearly show that the aircraft was painted with the standard French and later German camouflage. French specifications for this were, for upper surfaces, medium blue-grey, dark brown (also described as burnt sienna) and Khaki (unvariably described as mixed colours) which was a more or less brownish green. Lower surfaces were very probably of the mandatory light blue-grey. It is not known, however, whether the specified buff-coloured (wheel wells, for instance) or black or midnight-blue (cockpits) coatings were applied. The Germans are likely to have painted the aircraft with the medium and dark green « splinter » camouflage on upper surfaces and light grey (with more or less blue or green) on lower surfaces. The fuselage was marked with a yellow stripe and two different black crosses. 1/72 nd scale profiles by Jean Cuny. 1/72 nd scale profile of the Delanne 20 by Jean Noël.

The Nostalgic Aviator

That's the name of a remarkable little aviation shop in Burbank, California that I visited recently. Owner Scott Whitmire's card says: "Aviation Memorabilia, Aircraft-Placement Film/TV". This place has lots of unique static models – including some Russian aircraft manufacturer models, vintage aviation ads matted for framing, reprints of classic aviation posters like those done by Pan Am in the 30's promoting its Clipper service to exotic destinations, real "nose art" cut from WWII aircraft, books, vintage propellers and instruments, and other odds and ends. A new catalog is currently being printed. If you would like one write to:

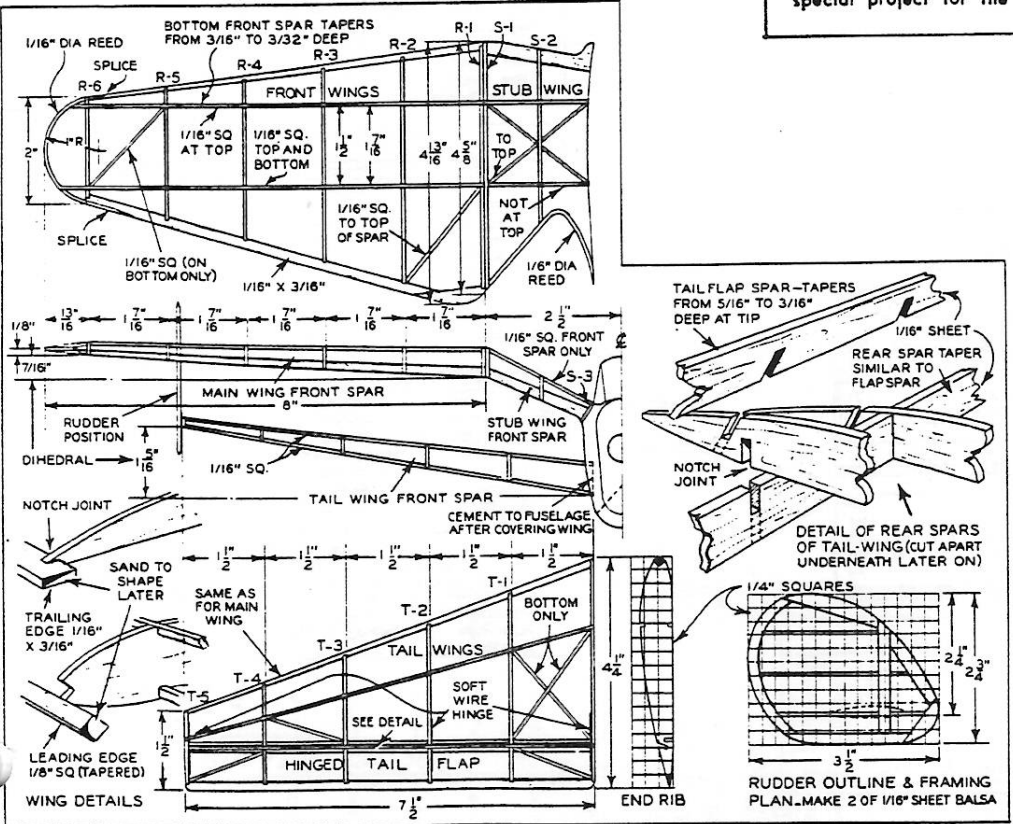
Scott Whitmire, The Nostalgic Aviator, Inc. 1012 Hollywood Way, Burbank, CA 91505 (818) 558-7870.

Air Trails Oct. '50

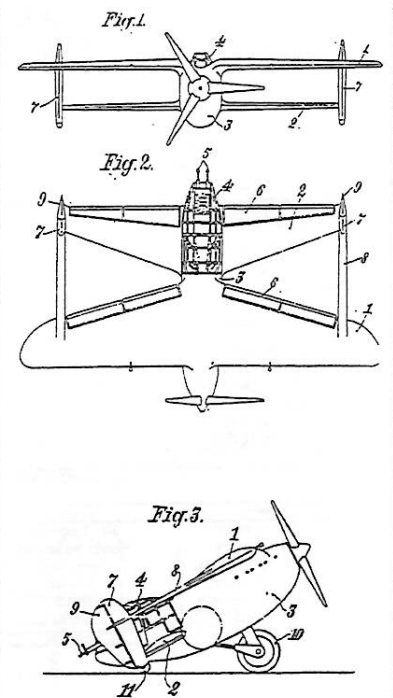


Twin-engine bomber was in the design study stage as a special project for the French Air Force when the Nazis struck.

Cannon Plane (continued)



le Fana de l'Aviation



Pax-River Indoor Contest 3-20-93

FAC Rubber Scale									
Name	Aircraft	Static Scoring				Fit Tm Sec		Grand Total	
		Const.	Color	Work	Total	Bonus	Fit. 1		Fit. 2
Tom Hallman (1)	Mr. Smoothie	29	12	18	59	3	72	82	133
Frank Rowsome (2)	44Y "Judy"	25	12	18	55	10	61	67	128.5
Jerry Paisley (3)	Buffalo	28	11	18	57	5	66		125
Kevin Sharbonda	Platz-III	24	10	18	52	15	56		123
John Houck	Junkers J-1	27	12	18	57	15	43	46	118
Tom Hallman	Nicholas Beazley NB-3	29	12	19	60	10	47		117
Kevin Sharbonda	Helicat	24	11	18	53	10	46		109
John Houck	XFL-1	26	11	18	55	10	43		108
Brian Kopenhaver	F4U	25	10	18	53	10	38		101
Dave Rees	Fieseler Storch	29	12	20	61	0	32.5		93.5

FAC Power Scale									
Name	Aircraft	Static Scoring				Sec		Grand Total	
		Const.	Color	Work	Total	Bonus	Fit. 1		Total
Terry Pittman (1)	Bernard 201	28	12	19	59	0	83	120.5	
Mark Houck (2)	Baby Ace	30	10	16	56	0	24	80	
Paul Spreiregen (3)	Piper J4	24	11	16	51			51	
Terry Pittman	Fauman Carlo Pastale	25	11	18	54	0		54	

Coconut Scale				
Name	Aircraft	Static	Fit. Sec	Grand Total
Dave Rees (2)	Porterfield	28	87	115
Doug Buchanan (3)	CUB J3	27	55	82

Bogus Scale Bostonian					
Name	Aircraft	Flight Times (sec.)			Grand Total
		Fit. 1	Fit. 2	Fit. 3	
Reggie Batterson (1)	Robin	81	75		81
Doug Buchanan (2)	Found	66			66
Scott Paisley (3)	Sky Farer	84			84
Bert Phillips	Hollo	48	54	58	56
Frank Rowsome	Super Cruiser	55			55
Richard Gillis	Citabria	54			54
Bill Ceresa		50			50

7-Gram No Cal					
Name	Aircraft	Flight Times (sec.)			Grand Total
		Fit. 1	Fit. 2	Fit. 3	
Reggie Batterson (1)	Cassutt	182			182
Bud Carson (2)	Cessna C-3	160	175		175
Tom Hallman (3)	Hawker	152			152
Richard Gillis	Goeling	107			107
Ray Rakow	Shinden	51			51
John Krouse	Spirit of St. Louis	48			48
J. Warren	Porter	30	17	16	30
N. Warren	Citabria	7	25.5	21	25.5
N Warren	Phantom	11.94	10.1	9.70	11.9

Penny Plane					
Name	Aircraft	Times Min & Sec			Grand Total
		Fit. 1	Fit. 2	Fit. 3	
Randy Kleinert		7:24			7:24
Glen Simperts	2 cents worth	7:12			7:12
Bud Carson	1-A-Penny	6:30			6:30
Reggie Batterson	Glow Penny	6:27	5:59		6:27
Frank Rowsome	Green Penny	5:35			5:35

Mini-Stick					
Name	Aircraft	Fit Times (Sec)			Best
		Fit. 1	Fit. 2	Fit. 3	
Frank Rowsome	MS1	362			362
Reggie Batterson	Valtee	251	315		315
Don Srull		246	271		271

14-Gram Bostonian					
Name	Aircraft	Flight times (sec)			Best
		1	2	3	
Mike Moskow (1)	AEF	78	106		106
Reggie Batterson (2)	Kraft	83	94		94
Terry Pittman (3)	Oissedu Fou	90	47	92	92
Kevin Sharbonda	Key's Racer	71	77	79	79
Bill Ceresa	Boston Beanercraft	55			55
Ward Maitre	Pacific Ace	42	48	52	52

Consolation Mass Launch						
Name	Aircraft	Round Eliminated				Place
		1	2	3	4	
Tom Hallman	Mr. Smoothie					1
John Houck	Rowin Speedster				X	2
Paul Spreiregen	Pussmoth			X		3
Bert Phillips	T-Craft	X				
Kevin Sharbonda	Skua		X			
Jerry Paisley	Buffalo	X				
Frank Rowsome	J-3 Cub		X			

Old Time Kit Mass Launch						
Name	Aircraft	Round Eliminated				Static Score
		1	2	3	4	
Dan Driscoll	Funk					1
Frank Rowsome	F4F				X	2
Bert Phillips	Taylor Craft			X		3
Rich Gillis	Harlow	X				
Doug Buchanan	Allied Sport			X		
Mike Moskow	Puss Moth	X				
John Houck	GB-D		X			
Paul Spreiregen	Fairchild 24			X		

World War I Mass Launch						
Name	Aircraft	Round Eliminated				Place
		1	2	3	4	
John Houck	JU-1					1
Dave Rees	Martinsyde S1					2
Kevin Sharbonda	PFALZ-III				X	3
Mark Houck	Newport 12C-2			X		
Staw Meyers	D VII	X				
Mike Moskow	D VII		X			

Navy Scale Mass Launch						
Name	Aircraft	Round Eliminated				Place
		1	2	3	4	
Frank Rowsome	Judy					1
Kevin Sharbonda	Skua					2
Jerry Paisley	Buffalo				X	3
John Houck	XF1L-1		X			
Dan Driscoll	ABM2 "Zero"	X				
Staw Meyers	AD	X				
Brian Kopenhaver	F4U Corsair			X		

P-Nut Scale Mass Launch						
Name	Aircraft	Round Eliminated				Place
		1	2	3	4	
Don Srull	Fred					1
Frank Rowsome	J-3 Cub					2
Tom Hallman	Mr. Smoothie					3
Paul Spreiregen	Lacey			X		
Rich Gillis	Couger			X		
Terry Pittman	Jodel				X	
Jerry Paisley	J-3 Cub	X				
Bert Phillips	Mono Coupe	X				
Glen Simperts	Vagabond		X			
John Houck	Boeing Monomail	X				
Doug Buchanan	Lacy	X				
Scott Paisley	J-3 Cub				X	
Tom Savage	Pittman PC-9	X				
Staw Meyers	Cessna		X			
Kevin Sharbonda	Cessna	X				

Golden Age Mass Launch					
Name	Aircraft	Round Eliminated			Place
		1	2	3	
Dave Rees	Porterfield				1
Paul Spreiregen	Fairchild 24				2
John Houck	Rowin Speedster				3
Kevin Sharbonda	Luton Minor	X			
Doug Buchanan	HL-2		X		
Richard Gillis	Airmaster	X			
Glen Simperts	Taylorcraft		X		
Mike Moskow	Corburn	X			

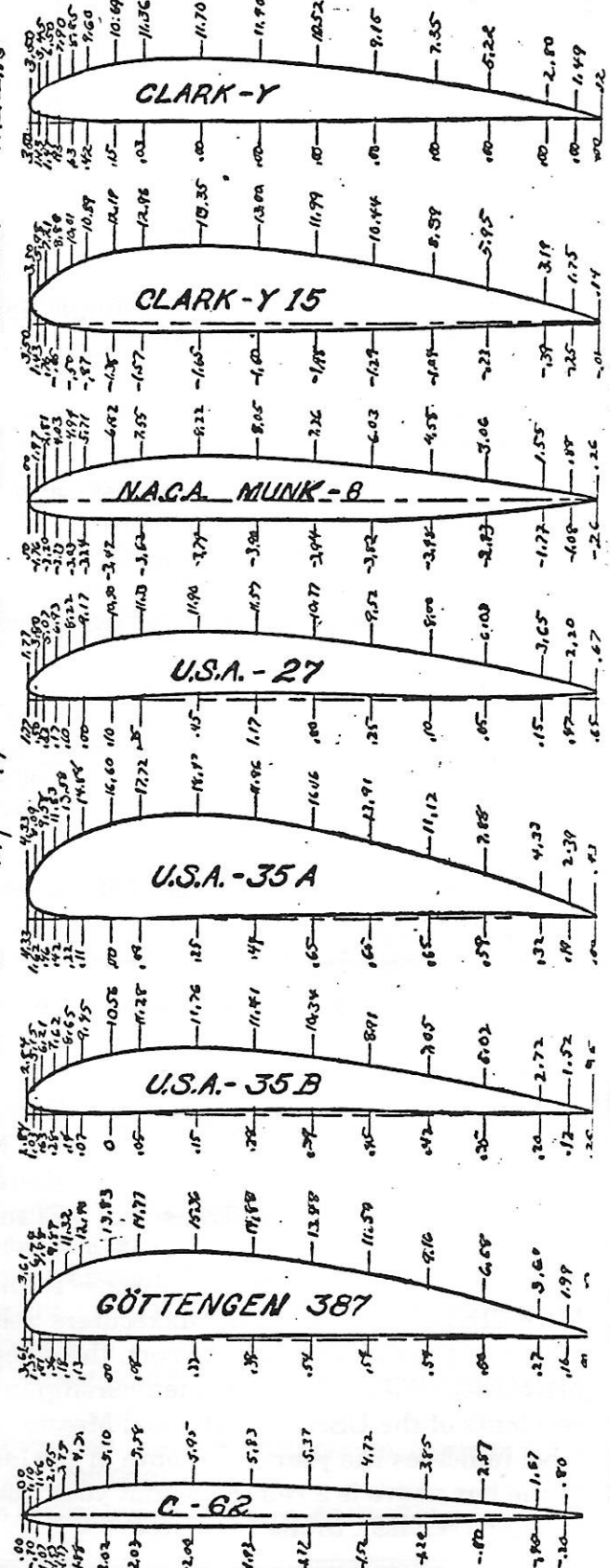
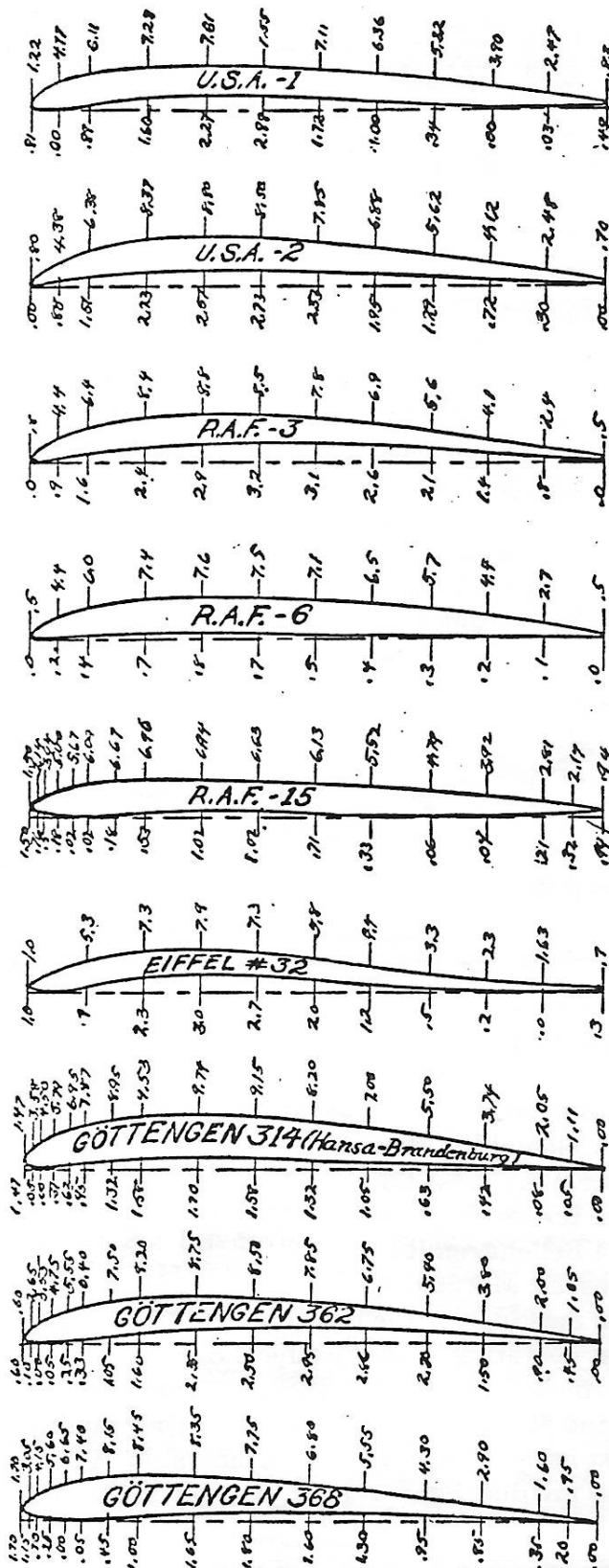
No-Cal Mass Launch					
Name	Aircraft	Round Eliminated			Place
		1	2	3	
Bud Carson	Cessna C-3				1
Reggie Batterson	Cassutt				2
Richard Gillis	Goeling				3
Tom Hallman	Hawker Typhoon		X		
Rus Sandusky	P-51 Racer	X			
Warren	Porter	X			
Ray Rakow	Shinden		X		

Coconut Mass Launch					
Name	Aircraft	Round Eliminated			Place
		1	2	3	
Jerry Paisley	Cub J4E				1
Doug Buchanan	Cub J-3				2
Dave Rees	Fieseler Storch		X		3
John Houck	Lincoln AP	X			

SOME AIRFOIL SECTIONS

Early

Present



Stockton Ferris Jr.

D. C. Maxecuters 1993 Summer Fun Fly
Saturday, 11 September - 9 a.m. to 5 p.m.

Events

- F.A.C. Scale:** Judging starts at 11:00 a.m.
Qualifying flight is not required except to post static scores.
- F.A.C. Power:** Same as above.
- Jumbo Scale:** Same as above. (36" wingspan monoplanes - 30" biplanes)
- Hand-Launch Glider:** AMA Rules
- Embryo:** F. A. C. Rules

Mass Launches - Single Sortie - Last One Down Wins.

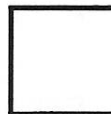
- 12:30 pm - Bill Winters Salute:** One design - 1933 Construct-a-plane Company
"Commander" by: Bill Winter- Published in Jan - Feb 1993 Max-Fax.
- 1:00 pm - Modern Civilian Production:** Any non-military aircraft (1943 - present)
- 1:30 pm - Racers:** One event for all racers including international aerobatic aircraft.

Mass Launch - Multi Sortie

- 2:00 pm - World War I -** Combat WW I biplane with Markings, Rigging, & Guns
- 3:00 pm - World War II -** Combat WWII Aircraft with Markings Rigging & Guns
- 4:00 pm - Golden Age -** Non-military aircraft (1920 thru 1942)
- 4:45 pm - Trans-Comsat speed and Navigation Event.** - Any scale aircraft that flew in any of the above events.



NOTE: Your Dues Are Due



CLUB OFFICERS

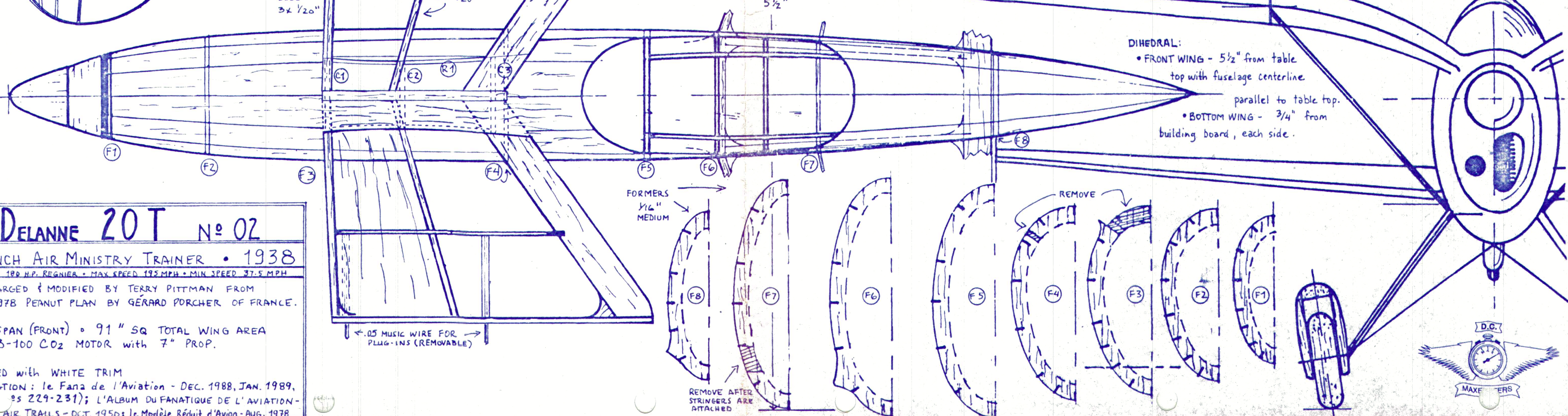
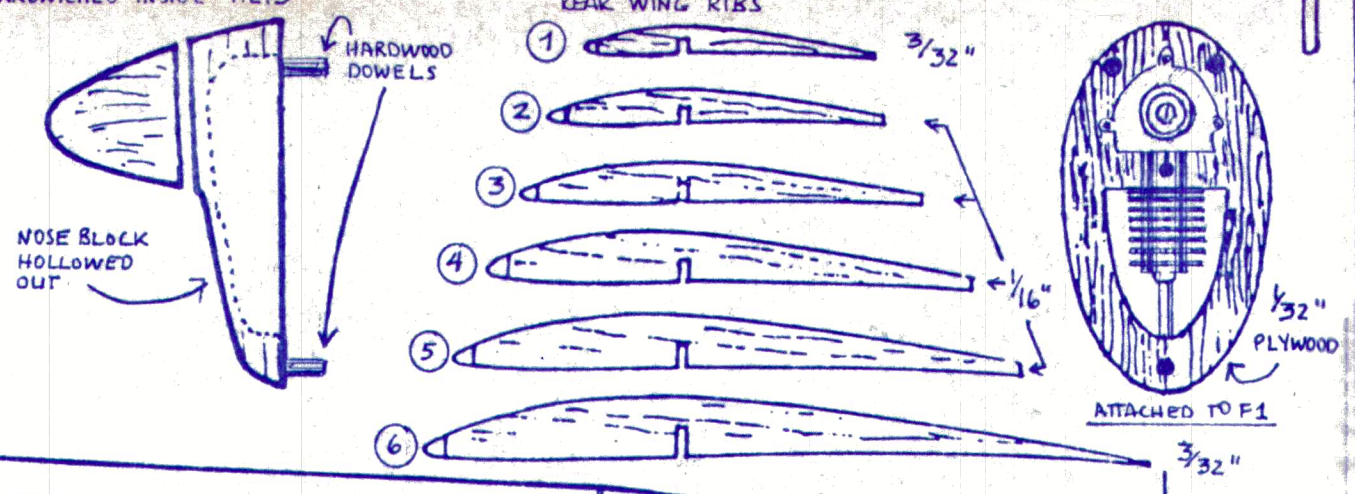
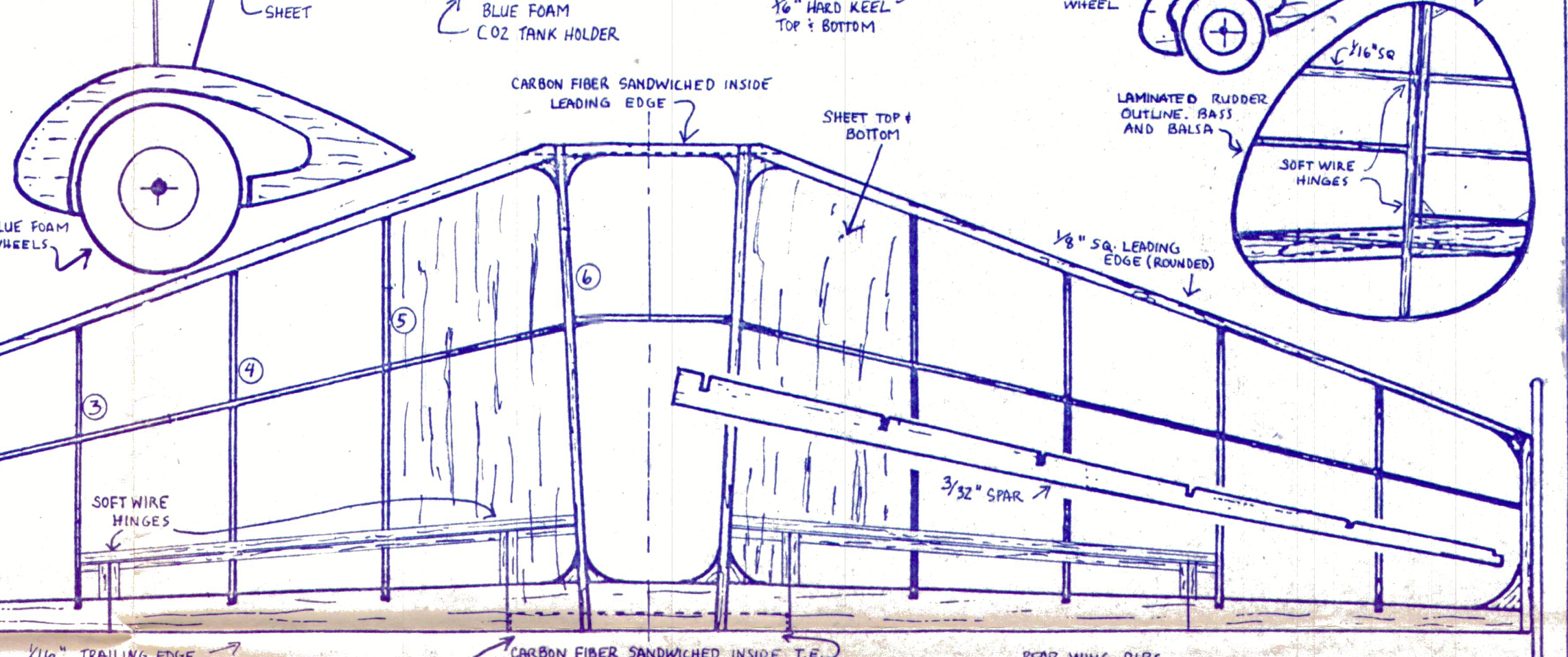
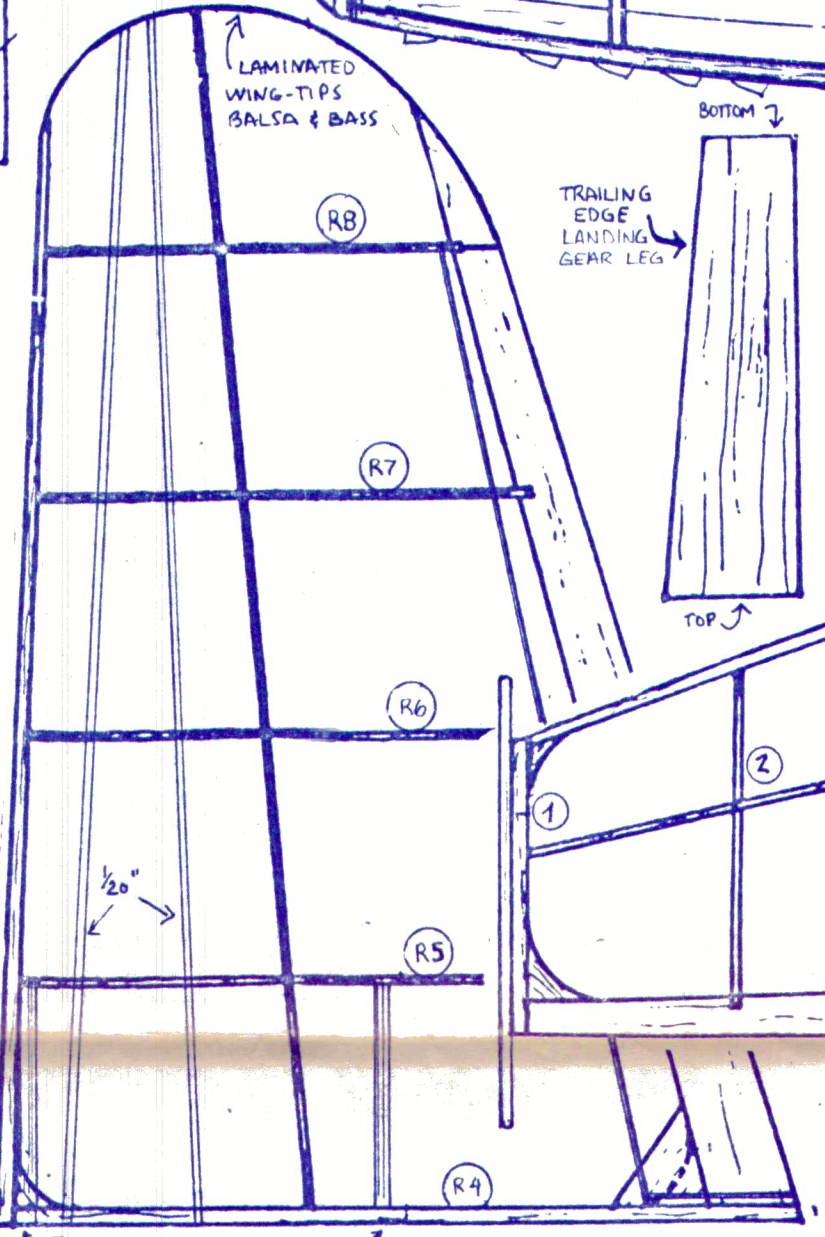
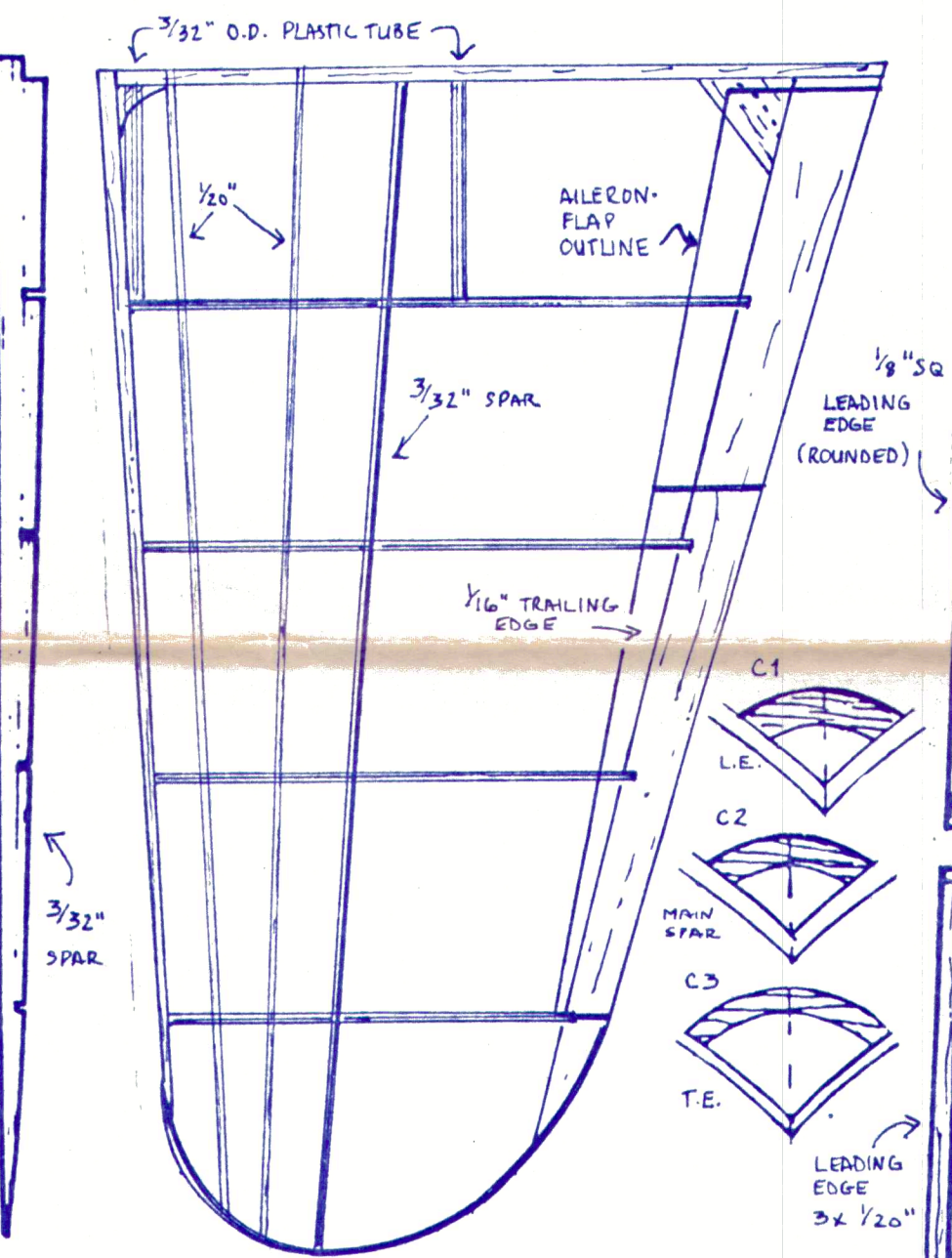
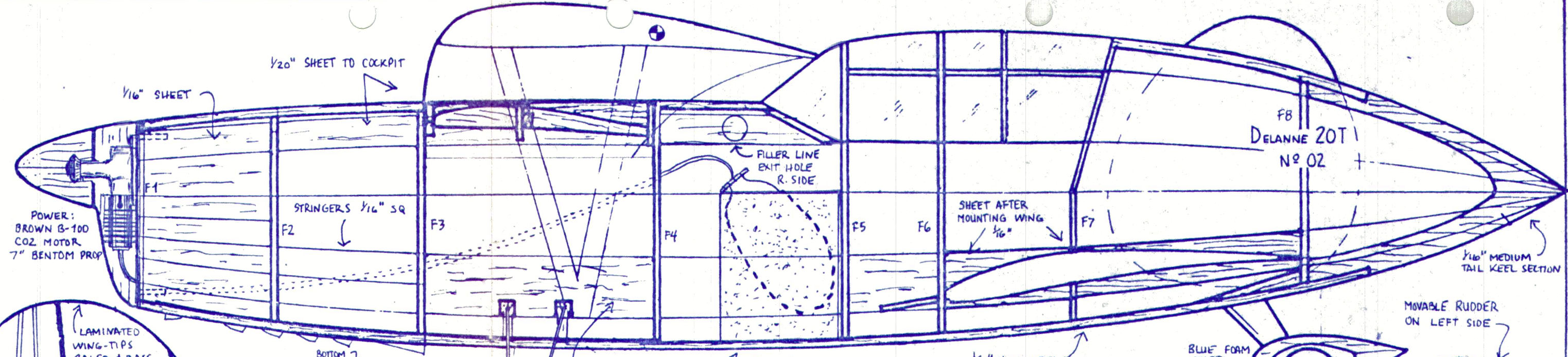
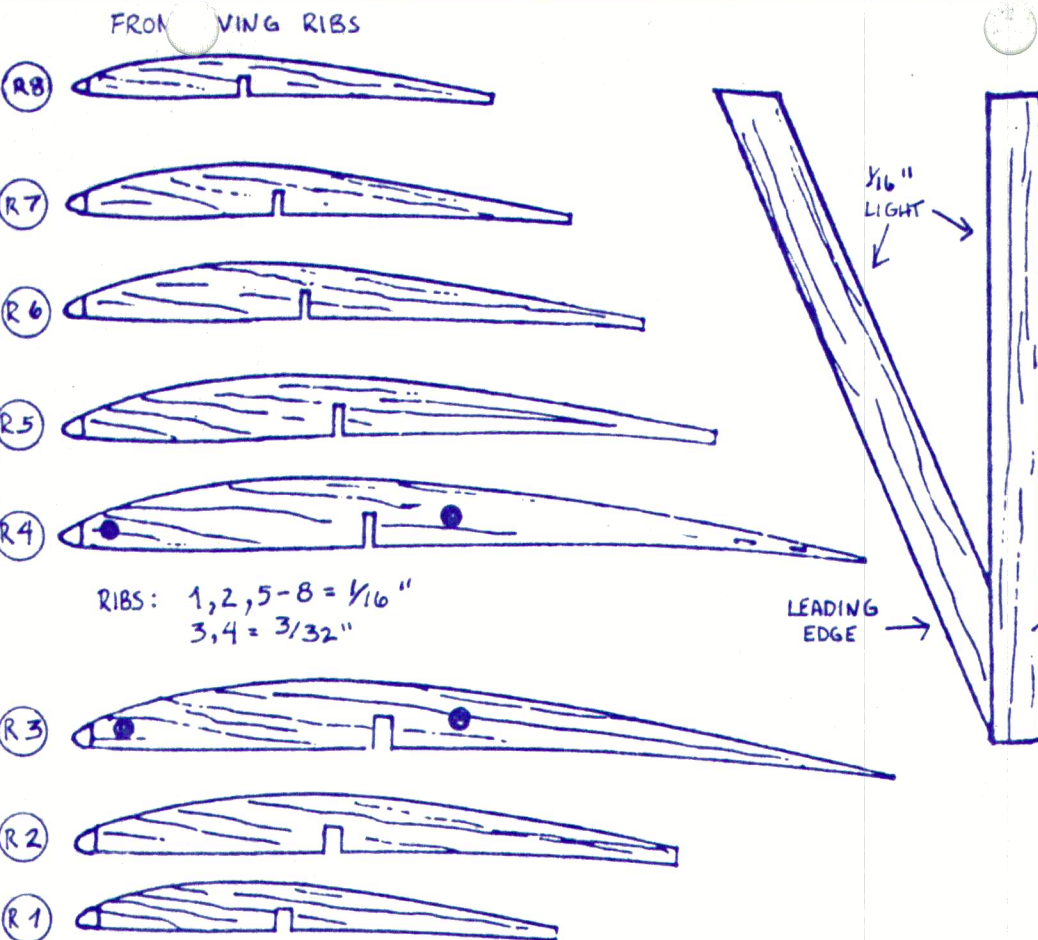
President Jerry Paisley
20 Clearwater Ct.
Damascus, MD 20872

Secretary Terry Pittman
7863 Colonial Vil. Row
Annandale, VA 22003

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.



DELANNE 20T No 02

FRENCH AIR MINISTRY TRAINER • 1938

23.8' SPAN • 199 H.P. REGNIER • MAX SPEED 195 MPH • MIN SPEED 37.5 MPH

• PLAN ENLARGED & MODIFIED BY TERRY PITTMAN FROM ORIGINAL 1978 PEANUT PLAN BY GÉRARD PORCHER OF FRANCE.

• 18 3/4" SPAN (FRONT) • 91" SQ TOTAL WING AREA

• BROWN B-100 CO2 MOTOR with 7" PROP.

• COLOR: RED with WHITE TRIM

• DOCUMENTATION: le Fana de l'Aviation - DEC. 1988, JAN. 1989, FEB. 1989 95 229-231; L'ALBUM DU FANATIQUE DE L'AVIATION - DEC. 1970; AIR TRAILS - OCT. 1950; le Modèle Réduit d'Avion - AUG. 1978

