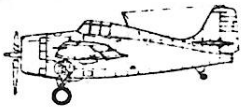
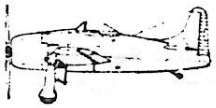


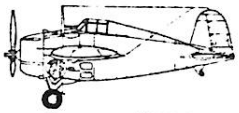
Grumman F4F-4



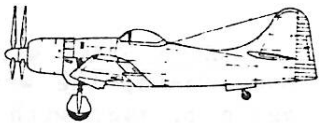
Grumman F8F-1

Grumman XF4F-1

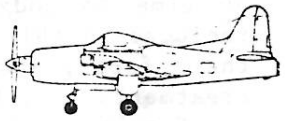
D.C. MAX MAXECUTERS



Grumman XF4F-2



Boeing XF8B-1



Ryan XF2R-1

MAX - FAX

THE NEWSLETTER OF THE D.C. MAXECUTERS

NOV-DEC '83

MEMBERSHIP

Dues for membership in the D.C. Maxecuters is $8.00 per year for residents of the U.S.A., Canada, and Mexico, and $11.00 for all other countries. Your mailing label indicates the year and month of the last issue of MAX–FAX for your current membership. A red mark in the box below is a reminder that your current membership is nearing its end. Send a check, payable to D.C. Maxecuters, to the Treasurer.

DUES REMINDER ☐

MEETINGS

The D.C. Maxecuters hold meetings on the first Wednesday of every month at the College Park Airport, the oldest continuously operating airport in the world.

PRESIDENT	SECRETARY
DAN DRISCOLL 2000 S. Eads St.,#301 Arlington, VA 22202	TOM SCHMITT 11014 Marcliff Road Rockville, MD 20852

TREASURER AND NEWSLETTER EDITOR

ALLAN SCHANZLE
20008 Spur Hill Dr.
Gaithersburg, MD 20879

UPCOMING EVENTS

NOV 4	KENNEDY H.S. INDOOR FLYING	7:00 - 10:00 P.M.
19	INDOOR CONTEST AT FREDERICK, MD RECREATION CENTER. SEE FLYER AND MAP IN THIS ISSUE.	
25	BULL SESSION AT PAT DAILY'S HOME	7:30 P.M.
DEC 10	CHRISTMAS BANQUET. SEE CLUB NEWS FOR DETAILS.	
17	KENNEDY H.S. INDOOR FLYING	1:00 - 4:00 P.M.
23	KENNEDY H.S. INDOOR FLYING	7:00 - 10.00 P.M.
30	BULL SESSION AT DAN DRISCOLL'S HOME	7:30 P.M.
JAN 6	KENNEDY H.S. INDOOR FLYING	7:00 - 10:00 P.M.
20	KENNEDY H.S. INDOOR FLYING	7:00 - 10:00 P.M.
27	BULL SESSION AT ALLAN SCHANZLE'S HOME	7:30 P.M.
FEB 10	KENNEDY H.S. INDOOR FLYING	8:00 - 11:00 P.M.

CLUB NEWS
Allan Schanzle

LET'S START with some comments about the MAXECUTER's SUMMER FUN FLY on September 10. Once again, the weather cooperated. Sure, it was hot, and a little windy, but we were again blessed with good weather, at least for the east coast. Some special thanks are required. Rowland Hoot and George Meyers, who came down from Philly, gave a whole bunch of time to judge the many scale models. If you look at the score sheets, which are included in this issue, you'll find the details of their judging. Indeed, consistency was their forte, and it's tough to complain about your score when everyone else got the same treatment. So, George and Rowland, many thanks for an exceptional job.

Surely, our judges appreciated being able to sit in the shade, so thanks go to Ed Escalante for setting up his tent. Bill Poole spent lots of time making the beautiful trophies and being a general handy-man with administrative duties. My daughter, Lorie, spent several hours helping the judges add up the static evaluations and then total the scores. She also helped to time flights. With all this assistance, I found that the worst part of being C.D. was my lost voice for the next few days. Thanks to you all. Oh yes---did all present appreciate your C.D. scheduling a fly-by of the full size Concord? 'Twas a nice touch, true?

There was one outstanding achievement at the contest, and that was by Bill Bell, who lives, would you believe, on "Dihedral Dr." in Baltimore. Bill's entry in the Bill Winter Commemorative was the Great Lakes Torpedo Bomber, and it flew with incredible realism. But better yet, he had it set up so the torpedo would drop off, and you could just see the model rise a few inches at the time of release, and continue to lumber along in the breeze. Magnificent, Bill.

THE POSTPERSON brought a letter from Claude Husted (4800 Lancaster Pike, Wilmington DE, 19807) with the following question. "Has anyone ever made a Lanier Paraplane Fly? I've tried everything." If you can help, drop Claude a note.

THE CHRISTMAS Banquet will again be at the Evans Farm Inn (1696 Chain Bridge Rd, McLean, VA.) on December 10, 1983. Cash bar will be held from 7 to 8 and dinner at 8. The price is a total of $15 per person, and the gals are welcome. Send a check to Don Srull, 941 Kimberwicke Rd., McLean VA, 22101.

THIS IS BEING written in mid October, and the cool weather and shortened daylight hours are encroaching. 'Tis time to plan for the winter activities, and if your interests are outdoor F/F only, this season has all the appeal of a garlic milkshake. I know a few people who feel winter is the time to sit in front of the "tell-e", watch 250 pound jocks knock the hell outta each other, and drink enough 6 packs to raise the value of the beer manufactures' stock by 7 points. Come spring time, they've gained enough weight that they could kick start a 747. If you fall into that category, you have my sympathy. The rest of us will be building models, flying at the Kennedy H.S. gym, and attending bull sessions. Check the "Upcoming Events" calendar for our local activities.

WE HAVE A new indoor site in Frederick, Md. and a contest is scheduled for November 19, 1983. Check the flyer and map in this issue. A good turn-out might be all that is required to make this an annual affair, so be sure to make an appearance, even if it's just to fun-fly an old model.

THIS ISSUE contains our second full size plan, which was drawn by Paul Gaertner in Charlottsville, Va. It's a lovely, little known, one-of-a-kind Handley Page Gugnunc. The model made its debut at our indoor contest last winter, and after some adjustments, its flight characteristics were stable and predictable. Quite a few photos of Paul and the model have appeared in the magazines' coverage of this years' AMA NATS. The remainder of this issue consists of a photographic review of our September contest, compliments of Tom Schmitt, and a summary of the results. Allan Schanzle continues with Part 4 of his construction series on large rubber models, and also offers a modelers version of "Real Men Don't Eat Quiche," this one entitled "Real Modelers Don't Use Epoxy". Finally, Pat Daily offers a book review. Happy reading.

1

2

3

4

5

6

7

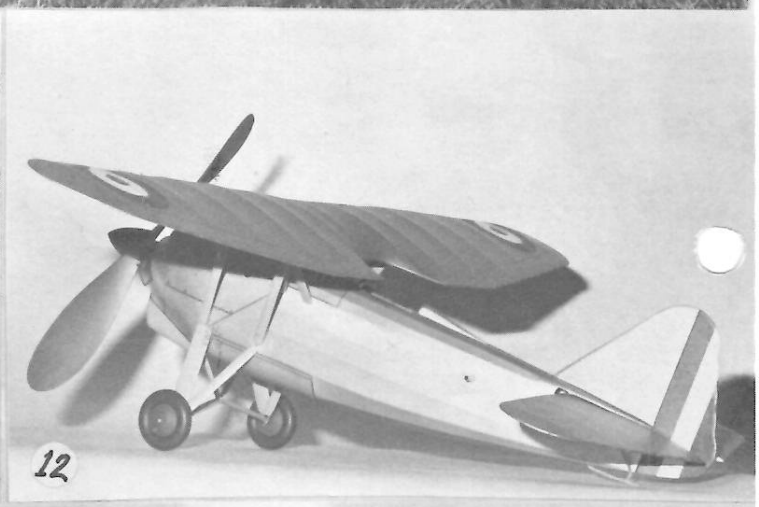
3

8

9

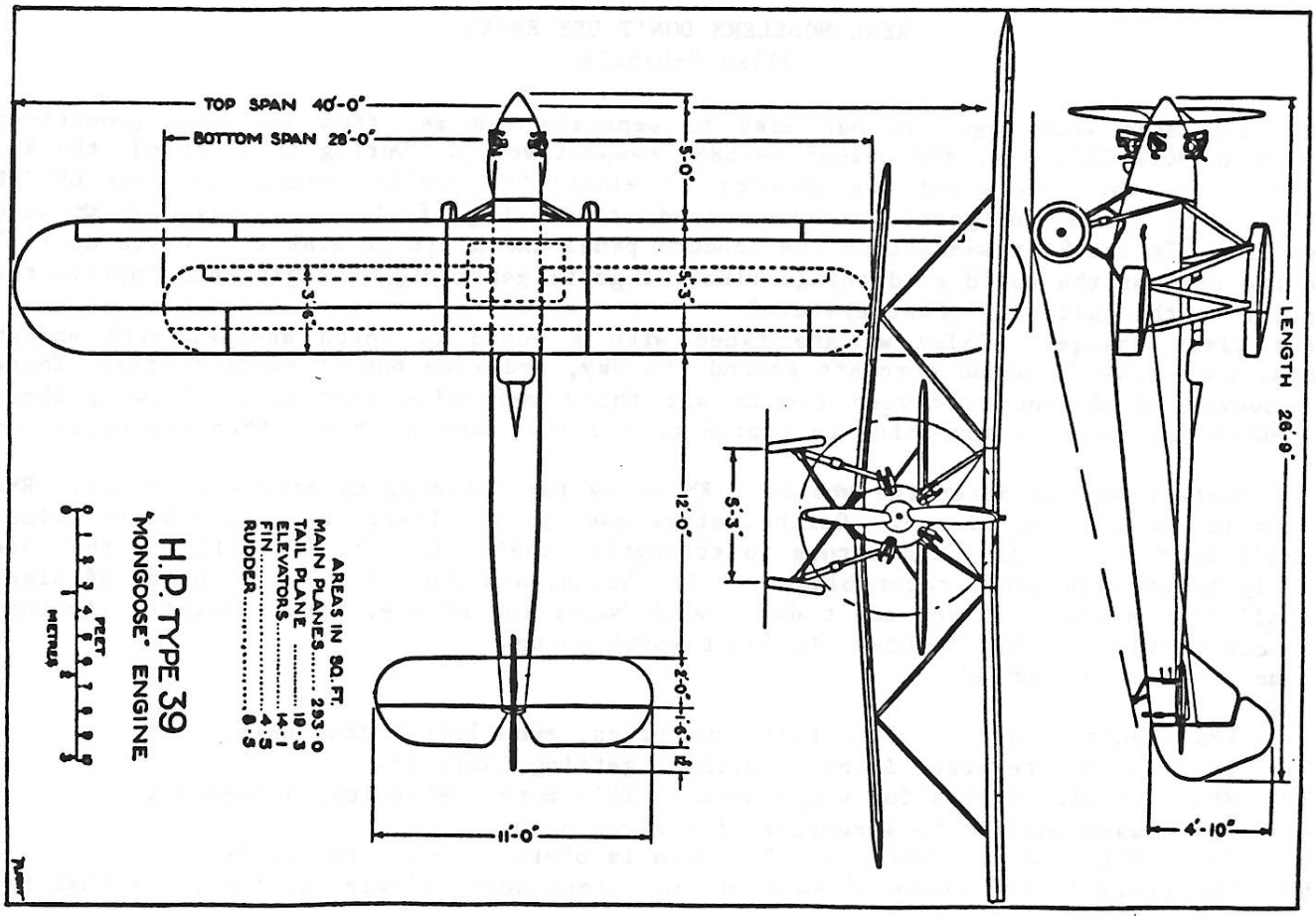
10

11


12


13


14



THE HANDLEY PAGE TYPE 39 : Three-view general arrangement drawings.

PHOTO PAGES
Tom Schmitt

1. The feature plan of this issue, a full size fold out of Paul Gaertner's very pretty Handley-Page "Gugnunc".
2. The designer and builder inspecting his handiwork.
3. Lorie Schanzle, our hard working assistant contest director takes time out to proxy fly Allan's Stinson in this year's Trans-Comsat.
4. Two more hard working assistants at this years summer "Fun Fly": George Meyers and Rowland Hoot spent most of the day judging scale for the Bill Winter and FAC events. Rowland's grin is a result of the scoring for his CO2 powered Dunne.
5. Dudley Prisel and his photogenic Hien. See the last MAX-FAX for his full size plans.
6. Another MAX-FAX feature model; Dave Rees with his Golden Age Nicholas Beazley.
7. Dave again with his sleek Caudron racer.
8. Beauty and the Beast! Toma Doll, a comely spectator at our recent "Fun Fly", was kind enough to judge the "best looking" in the Flying Aces Moth event. Her winner - Rolfe Gregory's "Midnight Moth". Rolfe also won the endurance part of the F.A. Moth event.
9. Don Srull with his WW-I winning Grain Kitten.
10. The rogues gallery at the "Bill Winter" event of this summers "Fun Fly". Rather than list all the names here, we will have a little contest with the winner receiving a one years free extension of his or her membership. The seventh entry received by the club secretary from an address at least two hundred miles away will win. Simply list all the names of the persons and models to win this fabulous contest.
11. Dan Driscoll and his midnight oil special; a very pretty yellow Udet Flamingo, good for second place in Bill's event.
12. Another entry in our "Bill Winter" commemorative, the photographers chubby Dewoitine 535.
13. Bill Bell and his torpedo dropping version of Bill Winter's Great Lakes. Falling torpedos kept all the contestants on their toes.
14. The winner of our commemorative event, Dave Rees and his high flying Curtiss SOC-3.

REAL MODELERS DON'T USE EPOXY

Allan Schanzle

Not too many years ago, it was easy to separate the men from the boys (sometimes called REAL MODELERS, RMs, and QUICHE EATERS, respectively). During this period, the RMs were the ones who understood the physics of elasticity (rubber bands) and the QUICHE EATERS had to clean the gook from their loud, thundering, flying machines. A RM said things like, "a tweek of washout on the inboard panel and a bit of stab tilt outta do it," while the rest of the world said things like, "I gotta get a bigger engine and improve the reception on the galloping ghost system."

But times change. Today we are faced with a world in which anyone, with enough dollars, can drive 10 pound aircraft around the sky, and even buy it ready-to-fly. There are, however, differences between the RM and those who think they are. Knowing these differences may give us something to aspire to - a role model, or a father figure,if you will.

The easiest way to determine who is a RM is by the building materials they use. RMs use Ambroid, balsa, and tissue. Quiche eaters use epoxy, fiberglass, and plastic films. RMs don't need 6 foot jigs and spruce to strengthen their aircraft for flight - they are perfectly happy with pins, razor blades, 4 lb. balsa, and four 8 1/2 x 11 pages of plans taped slightly askew. If you can't do it with balsa and tissue, find something lighter. If you can't find anything lighter, it isn't worth doing.

Some observations on RMs -

1) RMs aren't afraid to carve their own props, even left handed ones.
2) RMs can bend reverse "S" hooks without getting confused.
3) RMs like sliced ribs for wings because it's more aesthetically pleasing.
4) RMs always modify the structure of a given plan.
5) RMs don't need instructions. The plan is obvious, even when it isn't.
6) RMs revel in the aroma of Ambroid, and spend hours picking at the stuff that has dried on their fingertips.
7) According to employer records, RMs always "get sick" for three days before a contest.
8) RMs use their knowledge of aerodynamics to make models fly successfully, not electronic wizardry to compensate for warps and too rearward C/G's.
9) RMs are eager to chase their aircraft, because they know how much good they are doing for their bodies when the 'ole ticker in the chest is a-pumpin' at no less than 120 beats per minute.

What kind of models are flown by RMs? R/C? C/L? God forbid. Even little old ladies and grade school students can steer a 10 pound miniature thru the sky with a few controls or wires. No, RMs use rubber bands for power. A good modeler can get one minute with his scale job in dead calm 8:00 P.M. air. The great modeler can get 80 seconds under similar conditions with an unorthodox design, like pusher canards. A truly outstanding modeler can get 1 minute with a B-17.

Rubber power is truly remarkable. It's possible to destroy several months effort with a single turn too many. Quiche Eaters can only destroy their creations prior to flight by stepping on their model, for which they deserve the result. The best way to approach the system is thru trial and error, and winding tubes, of course.

What kind of tools does a RM use? In theory, RMs could make their aircraft with nothing but balsa, tissue, ambroid, music wire, clear dope, razor blades, and pins. Your typical RM draws his own plans during lunch break or on a flight half-way across the country. Some have been known to sketch out an original during two sessions "on the throne."

It has been observed that some scale models have outlines that closely resemble scribbings of a two year old, rather than outlines from any published 3-view. RMs know what is correct without looking through their library of books to determine the shapes. For this reason, RMs are reluctant to build from an existing plan. Quiche Eaters modify a kit or previously published drawings, usually using the sole of their shoe as a french curve. This works so well, that many editors seldom recognize the similarity to earlier works. Quiche Eaters live by a single, word — plagiarize. You can be sure that no RM would be caught dead building anything over 3 oz. His replicas are designed to shatter records, not windshields.

Recently a black cloud has formed on the RM horizon. It seems that some highly placed Quiche Eaters in the Hobby Industry decided that chain saw motors would be great to power 30 pound and heavier aircraft, which they have the audacity to call "models." And, of course, the greater the weight, the greater the cost, and hence, the greater the profit. And our fearless leaders at AMA seem to concur. How many pages have you recently seen devoted to the multitude of new frequencies? But where is our national indoor site? RMs still have fun, even if it's with a simple ROG at the local elementary school playground or multi-purpose room.

The RM might occasionally compromise his principles and work on something other than a 24 inch rubber powered B-25. For example, RMs have been known to build CO2 powered replicas of aircraft that took part in the first big fuss (WW-1). But this is merely a temporary distraction. It is only logical (a trait of RMs) to avoid rubber power for most of these short snooted multi-winged beauties, and CO2 is the obvious, quiet, and clean alternative. RMs are smart people.

Generally, RMs work the same way they play.....with airplanes. He is constantly amazed that his employer actually pays him while running off a set of plans on the company Xerox machine (and charging it to some obscure government contract), or chewing the fat on the phone with a modeling friend. Sometimes, RMs actually write articles for newsletters while at the office desk (oops!!). Here are some tips on recognizing RMs.

1) At a party, RMs are the ones in the corner talking about Reynolds number and wing loadings.
2) At the beach, RMs draw plans in the sand.
3) RMs go to the Smithsonian library at lunch time.
4) At a funeral, the RM is the one saying, "Poor George. And he almost had the P-38 trimmed out before the coronary."
5) In a hobby shop, the RM is the one who insists on checking each piece of balsa with his fingernail, assuming he forgot to bring his 1/10 gram scale.

The typical RM lives in his modeling room. Surrounding the building board are the plans of every model he has ever built. These are piled in random on every surface available — the top of the TV, and under piles of 6 month old dirty laundry. The aroma is enough to instantly clear the sinuses. Years of toluene and acetone have dulled his sense of smell, and to the RM, the pungent mildewed clothes afford a viable alternative to the chair cushion. You will also find some half dozen or so partly filled cups of cold coffee. Occasionally, there will be cigarette butts floating in the coffee. In some cases, the cups will contain Pepsi. And, unless he is very good, there will be a chart on the wall that defines the dimensions of the block for any prop you care to carve. Taped to the wall is a 3-view of the next project, and open jars of dried up Floquil abound throughout the room. Strewn about the floor are balsa chips and slivers of tissue, intermingled with wrappers of peanut butter filed cheese crackers (the type that are made stale at the bakery so they can't get any worse while waiting in the grocery store). Finally, on the top left hand corner of the building board, underneath the box of Oreos, is a case of empty beer bottles, left over from last months bull sesion with other RMs.

The RM is capable of working 30, 40, or even 50 hours at a stretch, under intense pressure. In fact, he prefers it that way. RMs are natural born procrastinators. A contest deadline doesn't bother the RM; it is simply another challenge and motivation to finish his latest creation. If there is not enough contest preparation pressure on the RM, he tends to make things more challenging by working on some small but interesting detail of the model for the first 3 weeks. Then he finishes the task in the last week, in two or three 50 hour marathons. This not only impresses his cohorts, but creates a convenient excuse for leaving that dirty, mildewed laundry for another month. And best of all, it affords the challenge of trimming out the model on the day of the contest. This, of course, becomes the RMs excuse for not winning. In general, RMs don't wear neckties. RMs don't wear wingtip shoes. RMs arrive at work in time for lunch, when the Xerox machine is free. RMs may or may not know his kids names. He does, however, know the entire section on stability in Charles H. Grants book, "Model Airplane Design - Theory of Flight," RMs don't know how to cook, even "7-Elevens" aren't open at 3 AM, so they must survive on coffee and Twinkies.

Looking to the future, some RMs are concerned that the latest generation of those in our hobby are not being brought up with the same outlook as their elders. Many of them have never seen a rubber powered model or a carved prop. Hardly anyone who is not a RM knows about folding props, winding stooges, stuffing sticks, and sources of good rubber. Today's Quiche Eaters are soft - protected from the reality of torn tissue by using, instead, plastic coverings. Some alleged modelers manage to win contests with terrible looking ghost scale ships that just happen to hook a thermal. They strut away in an arrogant style. Fortunately, they never return. Good riddance to bad rubbish.

From my experience, I think it's safe to report that the future is bright for RMs. The FAC has instilled new life for this fun-loving group of thermal seekers. There are even some outstanding kits being sold, and, of course, some real dogs. But when have you seen 50 contestants having so much fun as at the recent FAC NATS? Some of us shall prevail in the modeling hobby using rubber power..... as God intended.

DESIGN AND CONSTRUCTION OF LARGE RUBBER MODELS
PART 4: PLUG IN WING DESIGN
OR
LET 'EM FLAP AND LOFT, BUT NEVER FALL OFF

Allan Schanzle

When a wing span gets above a few feet, it becomes a necessarity to make the wings removable, but pray, not in flight!!! The PT-19 wings are 5 1/2 feet, and portability in my car demands not only a removable wing, but individual right and left hand wing panels. Two methods for holding the wings on were considered:

1. The "French" (Tongue in grove) method.
2. The "American" (Plug in tube) method.

I've never used or even seen the first of these, and every design I developed seemed to offer too much weight. The plug in method I used several times with success on smaller models, so it was selected.

One of the biggest bug-a-boos with right and left plug in wings is that they must be properly aligned, i.e., the same angle of attack must be maintained for both panels. My method is surely not unique, but it 'tis easy and accurate.

The obvious thing to me was to build the wing in one piece, and then make cuts thru the structure where the panels are to plug into the fuselage. Now block up both wings to the proper height at the tip. Use two identical blocks, and hold the center section of the wing flat against the table with weights or pins. This should insure that both wings have the same angle of attack, at least at the wing root section. Now tack glue the wing panels to the center section (Figure 2) and install the tubes (with the wires inside), against the wing spars. If you bent all four wires absolutely identical, it should not matter which wire goes where, but having 'ole Murphy as a constant companion for the past 20 years, I use red and green felt tip markers to color code the end of each wire. For example, practically all of us (there is always an eccentric around) associate a green traffic light with "go" and a red light with stop. So in my scatter-brained mind, green means "front" or "right" (you can usually turn right on a green light without stopping). So red means "left" or "rear". The color code is shown in Figure 1.

Try to design the wire lengths so that the portion that goes into the wing is longer than that which goes into the fuselage center section, thus insuring against reversibility. This should be done anyway, to give the necessary strength. Make the wire tubes and plug in wires that go into the wing panels about 1/5 or 1/6 of the semi-span. That is, if your wing span is 50 inches, the semi-span is 25 inches, and the tubes in the wing outer panels should be about 5 inches long.

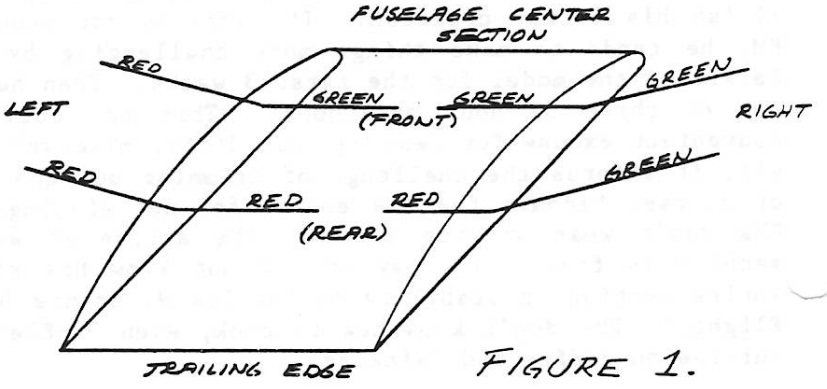


FIGURE 1.

One final note about constructing the plug in wires. The "bend," or angle break, is essential. Don't try to fit in straight wire, since this will seriously inhibit the ability of the trailing edge of the wings to swing away from the root rib when your little jewel dorks its nose into the terra firma. If youre building a plane with no dihedral, well, you've already asked for trouble, and a little more won't make any difference.

So now your wings are in place, but what's to hold them there when your rubber motor is vibrating like gangbusters? With smaller models, you can put a very small kink or bend in each of the wires, and this exerts enough pressure against the surrounding tube to hold the wings in place. But I wasn't willing to trust this method with a model this size. I decided to use rubber bands in tension in conjunction with the structure shown in Figure 2.

Build the 1/16" plywood compression plates and modify the wing outer panel root ribs as shown in Figure 2. Install the two plywood compression plates with heavy rubber bands. To install these compression plates to hold on the wing, you'll need an access panel in the top of the wing between the front and rear spars. I'll leave the design of this aspect as an exercise to the reader.

Now to mount the wings onto the fuselage, insert the ends of the wire plugs into the fuselage and wing tubes and pull the compression plate away from the fuselage root rib, raise the plate above the wing panel root rib and slip down and forward in the "L" shaped slot. Let the compression plate rest on the wing root rib and slowly let the wing slide toward the fuselage. How 'bout' dat - it really works. You can adjust the amount of compression by adding or removing rubber bands.

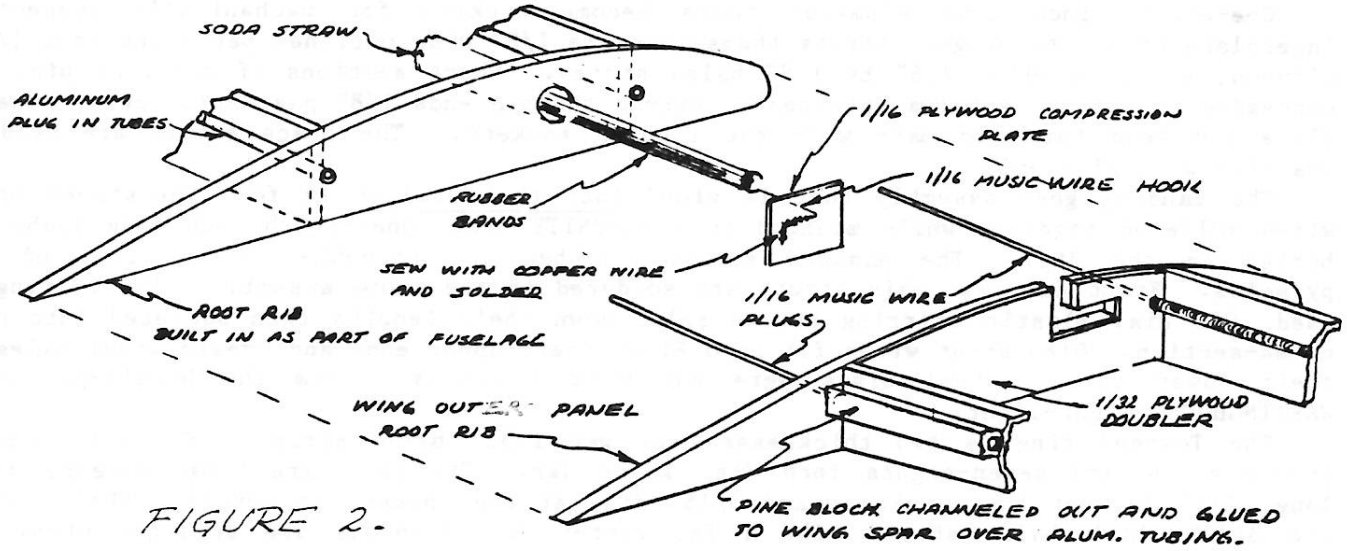


FIGURE 2.

BOOK REVIEW
CDR PAT DAILY

NOW HEAR THIS!! A new book "NAVY AIR COLORS" by Tom Doll, Berkley Jackson, and William Riley has just caught the wire. Published by Squadron/Signal Publications, this book is fantastic. Just the title alone - NAVY AIR COLORS - makes an old salt shed a tear. and when you relize this book covers the period of 1911 - 1945 its enough to make you drool with anticipation. I can see those F4B4's in formation now. God,I love it! Ninety seven pages of photos and color plates of the most colorful years of all aviation history. I've already picked out a Northrop BT-1 to build - never ever saw one before - but this book has it. Or how about a green tailed Vought SB2U-1 in Commander Ranger Air Group Markings. If that doesn't grab your fancy there are Marine Corps and Coast Guard jobs that will quarantee you a real challenge. This book goes for $8.95 - and its the best $8.95 I ever spent on any shore leave. Its a perfect (but better) companion to "Air Force Colors" by Squadron. Better because the photos are super, the colors are neat and the Navy is better than the AF any time. Get one - it will be a collectors item.

THE HANDLEY PAGE H.P. 39

Paul Gaertner

Nicknamed "Gugnunc" by a London newspaper, this one-of-a-kind machine first flew in April 1929. It was England's only competitor in the Guggenheim Safe Aircraft Competition, whose stringent demands included exceptional control at low speeds.

Handley Page had invented leading-edge slots and the Gugnunc was brought out partly to stimulate industry interest in this mechanism. Slots, flaps and a 150 hp engine in an aircraft with modest wing loading gave the Gugnunc awesome (for 1929) STOL performance. One amusing acount of the plane's abilities in demonstration goes as follows: "At Handley Page's new aerodrome, England (the pilot) started the engine inside the new large hangar and was already airborne as he passed through the hangar doorway."

On the original model, the full length of the fuselage top was covered with 1/64" sheet balse (not shown on plan). Upper ends of the bamboo cabane struts fit into holes drilled in 3/32" sq. balsa that beef up the appropriate upper wing ribs. This same scheme holds for the lower strut ends; add small balsa pieces at or near fuselage formers F2. Front cabane struts are installed last; they are 1/16" by 1/8" sanded to oval cross-section.

One-eighth inch long aluminum tubes become sockets for mechanically connecting interplane struts to wings. Struts themselves are 1/8" wide outlines per plans from 1/64" plywood, built up with 1/16" by 1/8" balsa strips. Short sections of straight pins are concealed in the 1/16" balsa thickness. Extend the pin ends 1/8" past strut ends, glue in place and bend these to mate with the tubular sockets. The brace struts are held in position with glue only.

The landing gear assembly that is glued into the fuselage is four Vee-shaped brass wires soldered together while mounted in a MASONITE jig. One-eighth inch long stubs are buried in the jig. The exposed struts are bent to resemble the outlines of two pyramids. Front and rear main struts are soldered to the above assembly. For fairings I used .090 dia. plastic stirring straws split down their lengths then squeezed into oval cross-section. Oleo strut wires fit into F1 at their upper ends and create wheel axles at their lower ends. Wheel discs were cut with a compass, from the bubble-pak of a WESTINGHOUSE night-light.

The Townend ring is two thicknessess of wet 1/32" balsa strip 19/32" wide, shaped around a one and seven-eights inch dia. spice jar. Cylinders are balsa dowels, 9/16" long, 1/4" dia. at the crankcase and 5/16" dia. at the rocker arm covers. These covers are 3/32" thick balsa shaped like a fat letter U. Pushrods are straight pins. The crankcase is as shown on plans. This assembly carries the 1/16" O.D. brass tube prop shaft bearing. The engine-Townend ring assembly is keyed into the nose of the fuselage with four pieces of 3/32" square spruce or very hard balsa.

The shape between the front and rear cockpits is a half-cylinder of clear plastic sheet painted black so as to leave a circular, clear window as shown on the plan view. Rear headrest is the usual cone-shaped item.

COLOR SCHEME:

Silver: Registry letters, front (1/16"x1/8") cabane struts, brace and interplane struts, oleo shock struts, wheel discs, fuselage forward of F1 and 1/16" wide trim stripes running length of fuselage longerons.

Black: Bamboo cabane struts, horizontal stabilizer struts, engine, undercarriage, fuselage aft of F1.

Natural Linen: Wings and all tail surfaces.

MOTOR: Four strands 3/32" FAI, 19 inches long

ACKNOWLEDGMENT: This should have appeared on page 6, but I goofed. "Real Modelers Don't Use Epoxy" is an adaptation of Post's "Real Programmers Don't Use Pascal" and Feirstein's "Real Men Don't Eat Quiche".

CONTEST RESULTS FOR F.A.C. SCALE

NAME	AIRCRAFT	STATIC					FLIGHT (SECONDS)				TOTAL PTS.	PLACE
		WGT. 0-30	CLIP 0-20	WING 0-25	BONUS	TOTAL	1	2	3	FLIGHT POINTS		
D. REES	ZIPPY SPORT	27	16.6	12.5	–	56.1	58	50	44	58	114.1	6
D. REES	CURTISS SOC-3	27.5	16.9	10.9	15	70.3	50	34	42	50	120.3	4
G. MEYERS	CURTISS SOC-3	25.6	16.5	12	15	69.0	40.6	63	68	64	133.0	2
O. PRISEL	WACO-SRE	27	17	12.5	15	71.5	51	36	79	66.5	138.0	1
D. PRISEL	KI-61	29	18	12.2	10	69.2	42	40	–	42	111.2	7
D. DRISCOLL	UDET FLAMINGO	24	14	10.5	15	63.5	27	29	41	41	104.5	11
R. GREGORY	FAIRCHILD 24	18	16	10.8	–	44.8	36	71	63	65.5	110.3	9
R. GREGORY	LUSCOMBE	12	7.2	8.2	–	27.4	20	–	–	20	47.4	20
A. SCHANZLE	VULTEE ATTACK	22.5	13	10.8	10	56.3	33	30	47	47	103.3	12
T. SCHMITT	BONZO	23	14.5	11	5	53.5	22	42	28	42	95.5	15
T. SCHMITT	DEWOITINE 535	24	17	12.5	3	56.5	29	28	–	29	85.5	17
R. HOOT	HOWARD MULLIGAN	29	19.5	12.4	–	60.9	40	31	–	40	100.9	13
R. HOOT	CESSNA 1911	28.5	13.5	12	5	58	52	–	–	52	110.0	10
M. MOSKOW	REARWIN SPEEDST.	25	14.5	9.8	–	49.3	34	–	–	34	83.3	18
B. BELL	CURTISS ROBIN	15	11.5	10.5	–	40.0	28	26	30	30	70.0	19
B. BELL	MARTIN T4-M1	24	14	11.5	15	64.5	31	23	20	31	95.5	14
D. SRULL	BLERIOT 25	24	13	10.5	20	67.5	71	–	–	65.5	133.0	3
D. SRULL	DORNIER 335	27	16	11.5	20	74.5	45	–	–	45.0	119.5	5
P. DAILY	IVLAND SPORT	29	17	12.2	3	61.2	30	–	–	30	91.2	16
P. DAILY	FOKKER D-7	27	18	10.9	15	70.9	40	–	–	40	110.9	8

CONTEST RESULTS FOR CATAPULT GLIDER

NAME	FLIGHT TIMES (SECONDS)							PLACE
	1	2	3	4	5	6	TOTAL	
J. PERSH	34	29	61✓	48✓	120✓	38	229	1
D. DRISCOLL	14✓	13	12	22✓	17✓	10	53	6
R. KLEINERT	33	18	–	–	–	–	51	7
G. SIMPERS	89✓	43	42	77✓	36	60✓	226	2
J. SITES	36✓	29	43✓	21	39✓	27	118	5
A. SCHANZLE	37	41	57✓	21	56✓	50✓	163	4
H. HOWARD	38✓	19	42✓	33	91	120✓	200	3

CONTEST RESULTS FOR HAND LAUNCH GLIDER

NAME	FLIGHT TIMES (SECONDS)							PLACE
	1	2	3	4	5	6	TOTAL	
R. HOOT	56✓	28✓	22✓	–	–	–	106	4
D. DRISCOLL	23✓	23✓	28✓	21	11	7	74	5
G. SIMPERS	44✓	43✓	23	77✓	41	15	164	3
J. SITES	29	119✓	37	107✓	35	120✓	346	1
L. SHARP	33✓	20✓	11	120✓	5	10	173	2
H. HOWARD	20	25✓	25✓	21✓	20	–	71	6
BRIAN CORWELL (JR)	15✓	5	5	9✓	7	8✓	32	1ST JR.

CONTEST RESULTS FOR BILL WINTER FAC SCALE

NAME	AIRCRAFT	STATIC					FLIGHT (SECONDS)				TOTAL PTS.	PLACE
		WGT. 0-30	CLIP 0-20	WING 0-25	BONUS	TOTAL	1	2	3	FLIGHT POINTS		
D. REES	CURTISS SOC-3	27.5	16.9	10.9	15	70.3	50	34	42	50	120.3	1
D. DRISCOLL	UDET FLAMINGO	24	14	10.5	15	63.5	27	29	41	41	104.5	2
R. GREGORY	LUSCOMBE	12	7.2	8.2	–	27.4	20	–	–	20	47.4	6
A. SCHANZLE	VULTEE ATTACK	22.5	13	10.8	10	56.3	33	30	47	47	103.3	3
T. SCHMITT	DEWOITINE 535	24	17	12.5	3	56.5	29	28	–	29	85.5	5
B. BELL	MARTIN T4-M1	24	14	11.5	15	64.5	31	23	20	31	95.5	4

CONTEST RESULTS FOR F.A.C. POWER SCALE

NAME	AIRCRAFT	STATIC					FLIGHT (SECONDS)				TOTAL PTS.	PLACE
		WGT. 0-30	CLIP 0-20	WING 0-25	BONUS	TOTAL	1	2	3	FLIGHT POINTS		
D. REES	HYPERBIPE	28.5	17.4	12.3	15	73.2	33	26	–	33	106.2	6
D. DRISCOLL	ALCO SPORT	27	6.5	10.5	–	44.0	43	28	39	43	87.0	7
A. SCHANZLE	FOKKER DR-1	27.5	16.5	10.9	20	74.9	42	71	38	65.5	140.4	1
R. HOOT	DUNNE D8	28.5	16.0	10.9	40	95.4	29	31	–	31	126.4	2
B. BELL	CURTISS JENNY	26	15.5	11	15	67.5	44	–	–	44	111.5	5
D. SRULL	BLERIOT 25	26	18	10.5	20	74.5	46	–	–	46	120.5	3
P. DAILY	CURTISS HAWK P-1	27	17	11.3	15	70.3	42	–	–	42	112.3	4

CONTEST RESULTS FOR GOLDEN AGE

NAME	AIRCRAFT	ROUND ELIMINATED										PLACE
		1	2	3	4	5	6	7	8	9	10	
FLIGHT A												
R. HOOT	REARWIN SPEEDSTER		X									
D. DRISCOLL	UDET FLAMINGO	X										
D. REES	NB-3	X										
B. BELL	CESSNA C-34	X										
G. MEYERS	MARTIN MO-1			X								3
P. DAILY	INLAND SPORT		X									
FLIGHT B												
C. POWELL	LOCKHEED VEGA		X									
D. PRISEL	ERCOUPE											1
D. SRULL	PIETENPOL				X							2
M. MOSKOW	REARWIN SPEEDSTER	X										
R. GREGORY	CORBIN SUPER ACE	X										
A. SCHANZLE	STINSON SR-5	X										

12.

CONTEST RESULTS FOR FLYING ACES MOTH

NAME	AIRCRAFT	ROUND ELIMINATED										PLACE
		1	2	3	4	5	6	7	8	9	10	
FLIGHT A												
D. DRISCOLL												
B. BELL												
T. SCHMITT												
R. KLEINERT												
C. POWELL												
M. MOSKOW												
R. GREGORY	BEST LOOKING											1
FLIGHT B												
A. SCHANZLE												

CONTEST RESULTS FOR WW-II

NAME	AIRCRAFT	ROUND ELIMINATED										PLACE
		1	2	3	4	5	6	7	8	9	10	
FLIGHT A												
R. HOOT	VULTEE VENGENCE		X									
D. DRISCOLL	VOUGHT F4-U	X										
O. REES	PZL-24											1
G. MEYERS	HE-112	X										
R. KLEINERT	HELLCAT				X							2
D. PRISEL	HE-112			X								3
R. GREGORY	P-51	X										

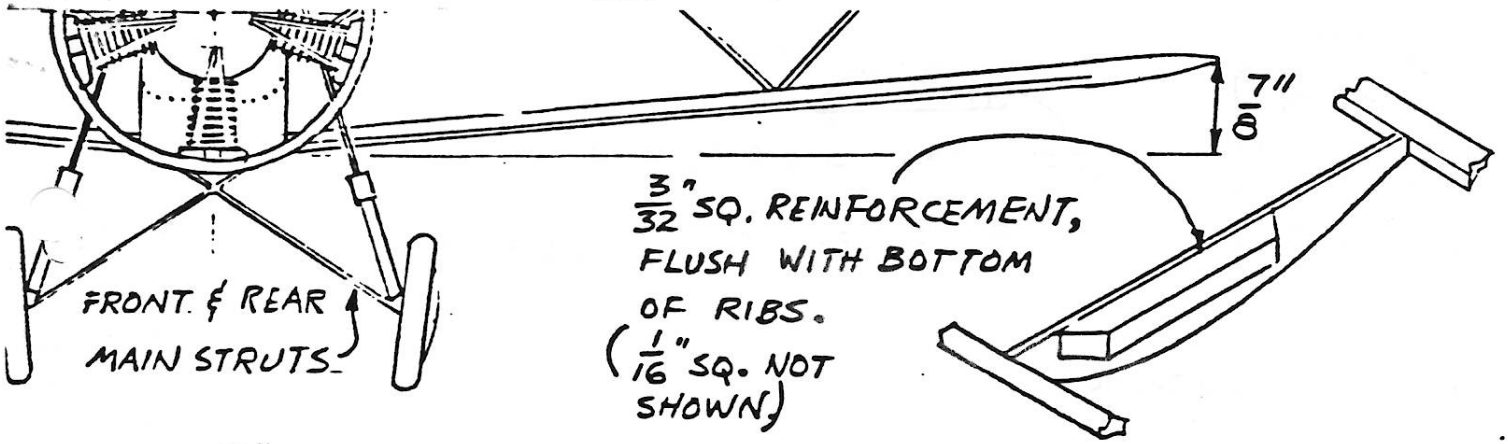
CONTEST RESULTS FOR WW-I

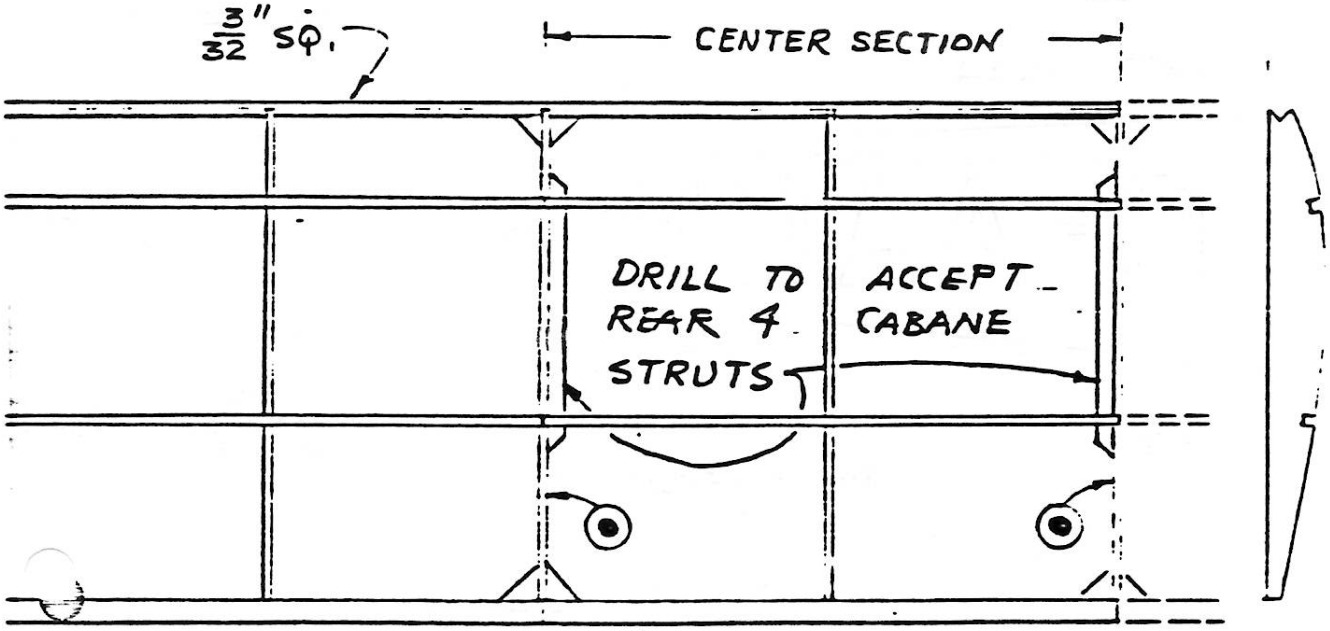
NAME	AIRCRAFT	ROUND ELIMINATED										PLACE
		1	2	3	4	5	6	7	8	9	10	
FLIGHT A												
R. HOOT	FOKKER D-7	X										
D. REES	FOKKER D-7		X									
B. BELL	FOKKER D-7	X										
G. MEYERS	1½ STRUTTER		X									
P. DAILY	FOKKER D-7	X										
C. POWELL	ALBATROSS D-5				X							2
D. SRULL	GRAIN KITTEN											1
R. GREGORY	NIEUPORT 17			X								3

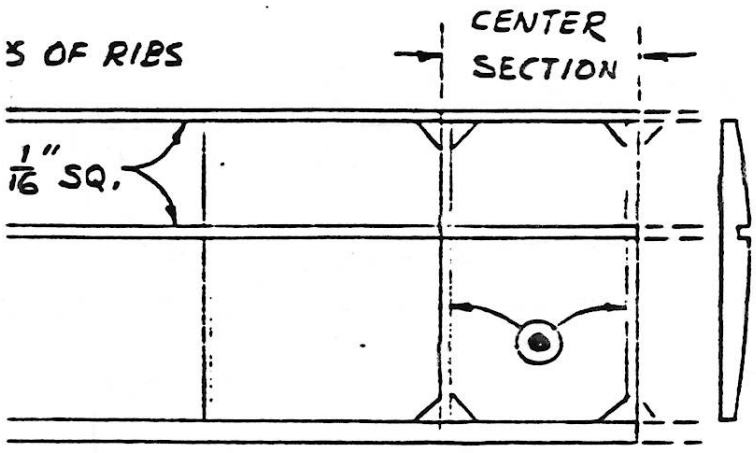
THE MODELER'S CREED

TO PERFECT THE ART OF PUTTING THINGS OFF, YOU NEED LOTS OF TIME.

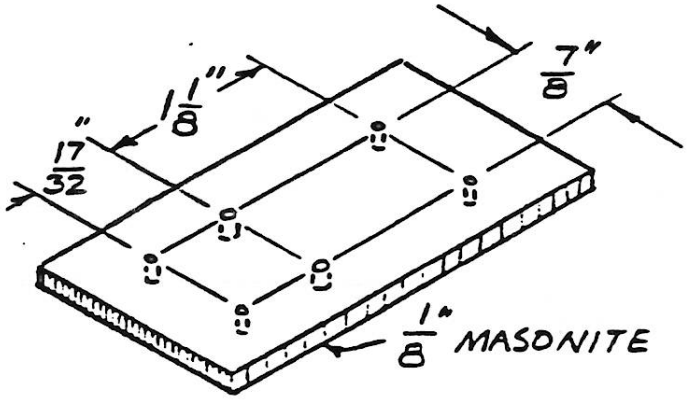
WINNER OF THE RACES: .....GEORGE MEYERS
WINNER OF COMSAT SPEED EVENT:.....PAT DAILY
WINNER OF COMSAT NAVIGATION EVENT:..CLAUDE POWELL







1/16", OTHERS 1/32"



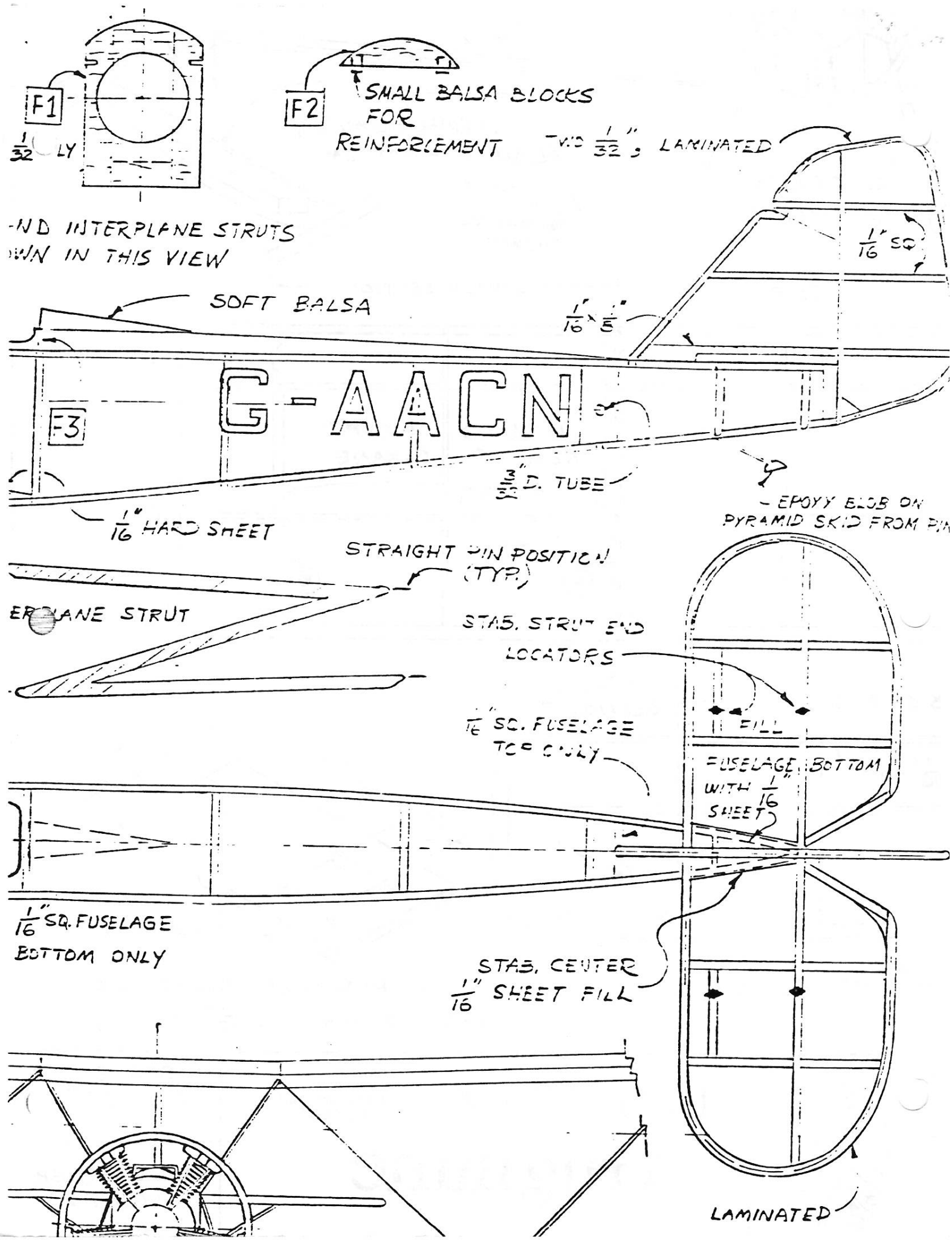
UNDERCARRIAGE SOLDERING JIG
DRILL CORNER HOLES 1/32", OTHERS 1/16"

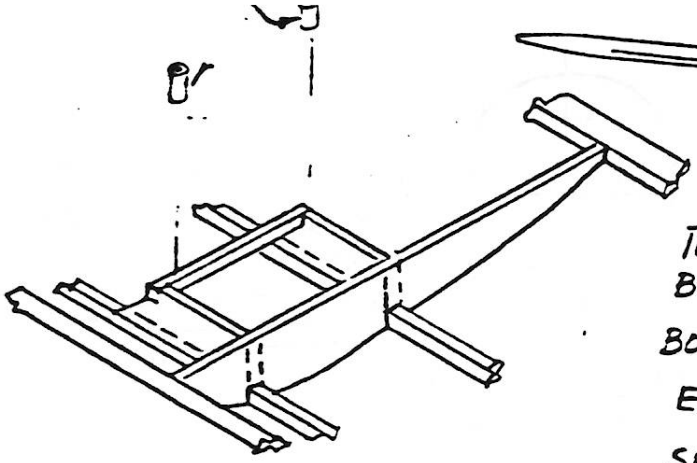
CTUAL LENGTH
2 1/2"
1 5/8"
1 19/32"
17/32"
3/4"
1 5/8"

HANDLEY PAGE Type 39
Gugnunc

SCALE: 1" = 24"

PAUL GAERTNER
AUG. 1983


F1
1/32 LY
F2
SMALL BALSA BLOCKS FOR REINFORCEMENT
TWO 1/32" LAMINATED
-ND INTERPLANE STRUTS
)WN IN THIS VIEW
1/16 SQ
SOFT BALSA
1/16 x 3/8
G-AACN
F3
3/32 D. TUBE
- EPOXY BLOB ON PYRAMID SKID FROM PIA
1/16" HARD SHEET
STRAIGHT PIN POSITION (TYP.)
ER PLANE STRUT
STAB. STRUT END LOCATORS
1/16 SQ. FUSELAGE TOP ONLY
FILL
FUSELAGE BOTTOM WITH 1/16 SHEET
1/16" SQ. FUSELAGE BOTTOM ONLY
STAB. CENTER 1/16" SHEET FILL
LAMINATED



WHEEL DISC

1/16" SQ AND 1/16" SHEET BRACING FLUSH WITH BOTTOM OF RIBS.

EPOXY ALUM. TUBING SOCKETS INTO "CORNERS"

LAMINATED

1/16" SQ.

T.E. 1/16" x 1/8"

EPOXY ALUM. TUBING SOCKETS FLUSH WITH TOPS OF

LAMINATED

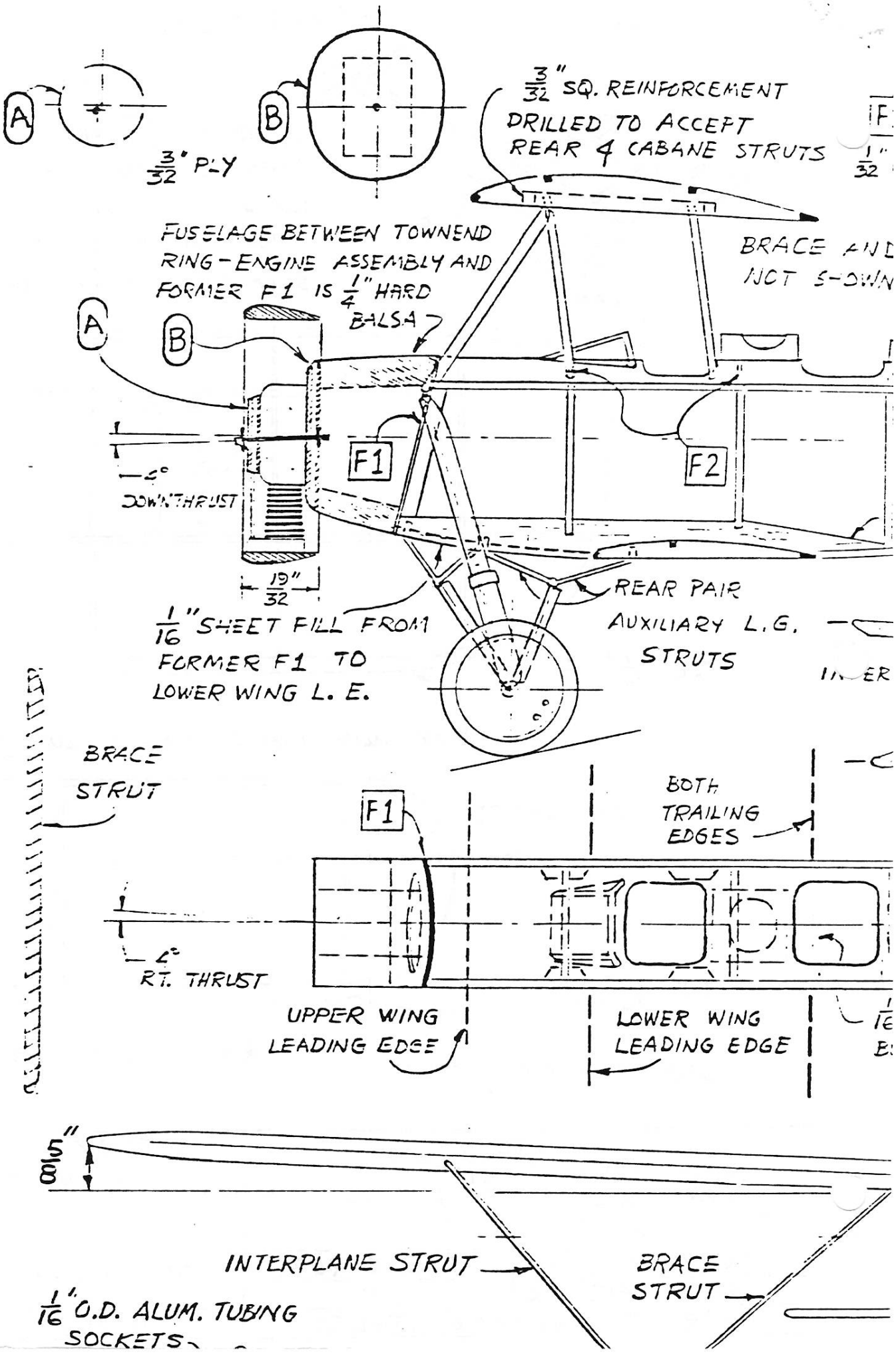
1/16" S

T.E. 1/16" X 1/8"

USE OS-18 (7") PROP

RIBS DESIGNATED ⊙ ARE 1/16"

ITEM	MATERIAL	ACTU
CLEO SHOCK STRUT	.025 D. MUSIC WIRE	
FRONT MAIN L.G. STRUT	"	-
REAR MAIN "	"	
FRONT PAIR AUX. L.G. STRUTS	.031 D. BRASS WIRE	
REAR PAIR AUX. "	"	
REAR FOUR CABANE STRUTS	APPROX. 1/16" BAMBOO	


A
B
3/32" PLY
3/32" SQ. REINFORCEMENT DRILLED TO ACCEPT REAR 4 CABANE STRUTS
FUSELAGE BETWEEN TOWNEND RING - ENGINE ASSEMBLY AND FORMER F1 IS 1/4" HARD BALSA
BRACE AND
NOT SHOWN
A
B
F1
F2
2° DOWNTHRUST
19/32"
1/16" SHEET FILL FROM FORMER F1 TO LOWER WING L. E.
REAR PAIR AUXILIARY L.G. STRUTS
BRACE STRUT
F1
BOTH TRAILING EDGES
2° RT. THRUST
UPPER WING LEADING EDGE
LOWER WING LEADING EDGE
.015"
INTERPLANE STRUT
BRACE STRUT
1/16" O.D. ALUM. TUBING SOCKETS

First Ever Indoor Model Airplane Competition

Frederick City Recreation Department

presents

Fall Fun Fly

Nov. 19

12:00 TO 3:30

"RUBBER POWER"

INDOOR CONTESTS

BEAUTIFUL FACILITY, WITH NO EXPOSED RAFTERS!

WORLD WAR I MASS LAUNCH

GOLDEN AGE MASS LAUNCH

PAC PEANUT SCALE

R.O.G. BEGINNERS' CLASS ★

Contestant Numbers and Performances Displayed on Giant Electronic Boards

FREDERICK RECREATION CENTER — **FUN FOR THE ENTIRE FAMILY**

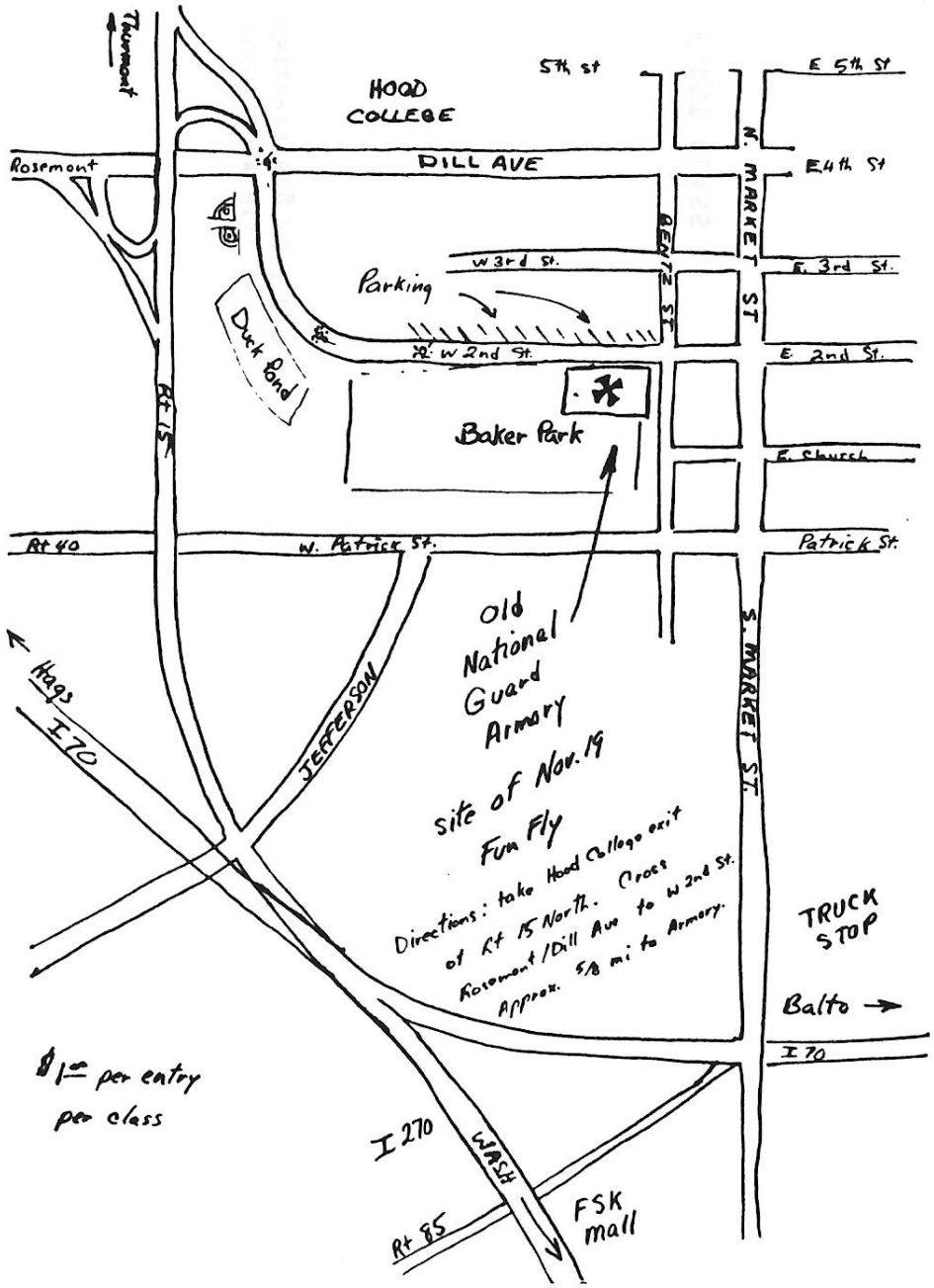
2nd & BENTZ STREETS — **PHONE: 662-5161**

371-9477 (eves.)

★LAUNCH YOUR PLANE OFF MODEL AIRCRAFT CARRIER AND FLY OVER SHARK-INFESTED WATER AND LAND SAFELY AT THE HOME BASE. IF YOU DON'T, YOU ARE OUT. IF YOU CAN, YOU COME BACK FOR THE NEXT ROUND, ETC. THERE WILL BE THREE AWARDS FOR THIS CLASS.

13.

MAP FOR CONTEST SITE

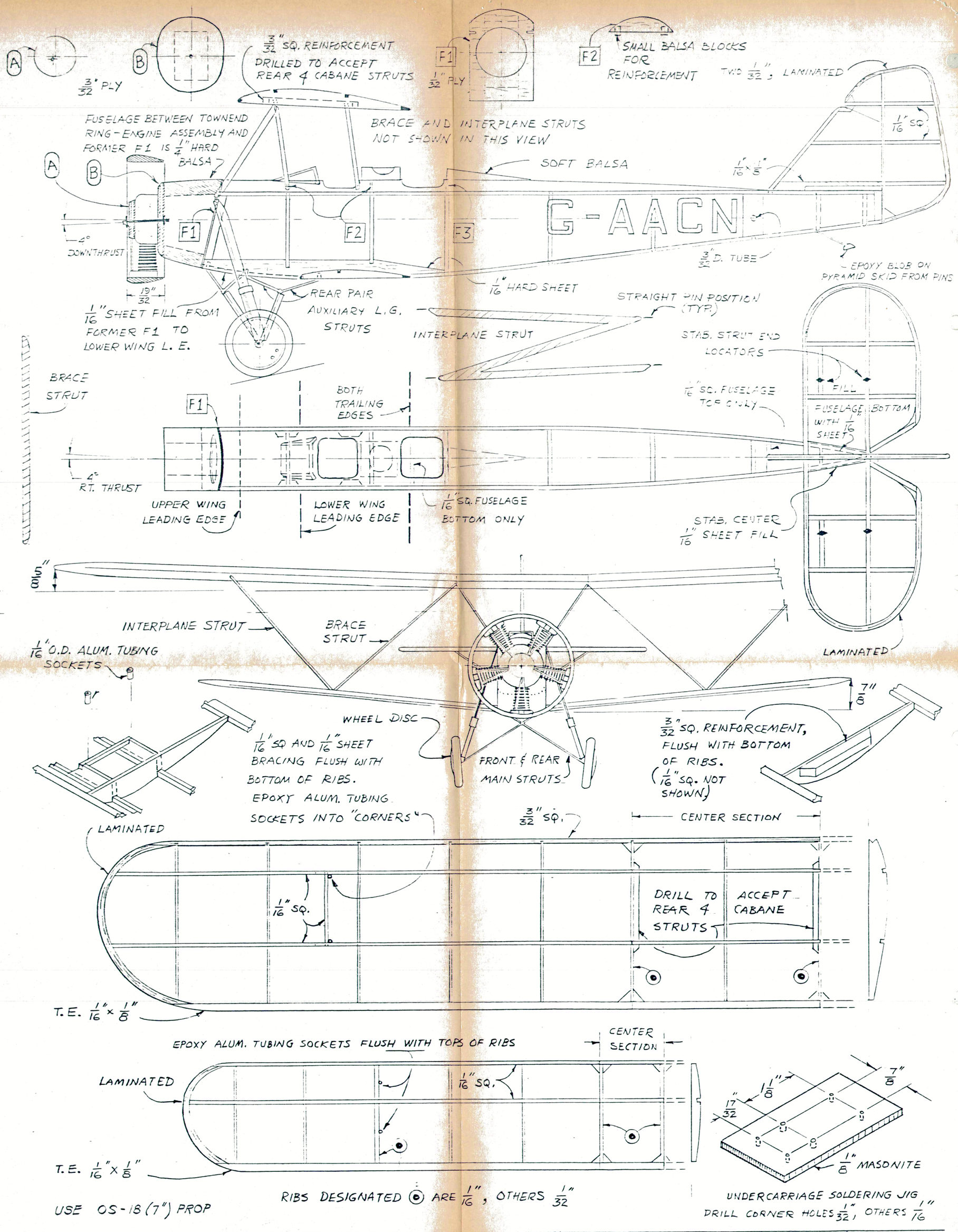


FIRST CLASS

20008 Spur Hill Dr.
Gaithersburg MD 20879

max-fax

NOV
DEC 1983



USE OS-18 (7") PROP

RIBS DESIGNATED ⊙ ARE 1/16", OTHERS 1/32"

UNDERCARRIAGE SOLDERING JIG
DRILL CORNER HOLES 1/32", OTHERS 1/16"

ITEM	MATERIAL	ACTUAL LENGTH
OLEO SHOCK STRUT	.025 D. MUSIC WIRE	2 1/2"
FRONT MAIN L.G. STRUT	"	1 5/8"
REAR MAIN "	"	1 19/32"
FRONT PAIR AUX. L.G. STRUTS	.031 D. BRASS WIRE	17/32"
REAR PAIR AUX. "	"	3/4"
REAR FOUR CABANE STRUTS	APPROX. 1/16" BAMBOO	1 5/8"

HANDLEY PAGE Type 39

Gugnunc

SCALE: 1" = 24"

PAUL GAERTNER
AUG. 1983