

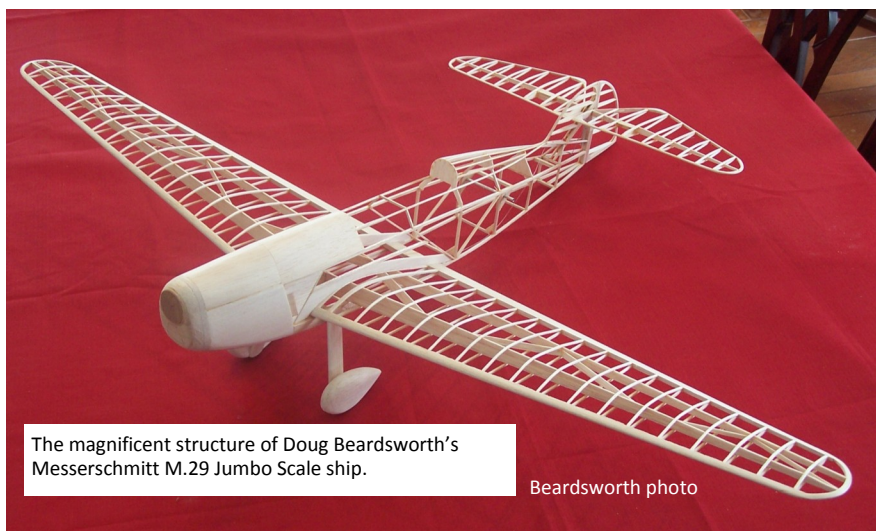
FLYING ACES

Club
News

No. 260

June/July 2011





The magnificent structure of Doug Beardsworth's Messerschmitt M.29 Jumbo Scale ship.

Beardsworth photo



Ron Gosselin retrieving a model the hard way in one of the infamous Wawayanda drainage ditches.

Via Ron Gosselin



Mechanic Rich Pendick offers words of encouragement as Bernie Dion steels himself for the WWI mass launch.

Via Ron Gosselin



Pete Kateris' new twin: the Bf109Z should be ready for action at Geneseo. Kateris photo



FW 190 built by Chris Strachan in the UK from the Wingleader kit is an excellent flyer.

Strachan photo



Via Ron Gosselin

Survivors and near survivors of the BLUR at Wawayanda: Ronny Gosselin, Ed Pelatowski, Pete Kateris, & Bernie Dion

Paul Grabski took this month's cover photo during a recent trimming session in Florida. That's Jack Coyle making a pre-first flight image of his Fokker D.VII. It's built from a Rocky Top kit, and done up in the markings of Lothar von Richthofen's machine.

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Plans - Our Keeper of the Kanones is also a talented draftsman. Mike Welshans sent us his plan for a 24" span Rearwin Speedster, and some docs too. Looks like it could use a DT. Thanks Mike! From the files at GHQ, we have a beautifully detailed plan for Art Chester's Jeep at 16" span from Flying Scale International. It would scale up very nicely for an interesting Greve Race entry. And lastly, there's a classic Dimer that's almost certain to temp Hung: the Monocoupe from Paul K. Guillow.

If the **Dreaded Red X** shows up on your address label, it is time to renew your membership which includes six issues of this newsletter.

Please note: the Red X is the only notice you will receive.

USA = \$20.00 - cash, check, money order, or PayPal.

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To use the PayPal option, go to **flyingacesclub.com** and click on "membership." The PayPal button is at the bottom of the page.

Please make checks payable to: **Flying Aces Club,**

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Questions? - **join@flyingacesclub.com**

BACK ISSUES are available from GHQ at \$5.00 each. Be sure to renew on time! **FAC GHQ, 4207 Crosswinds Dr., Erie, PA 16506-1299**

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Tom Nallen I
Tom Nallen II
Mike Nassise
Bob Schlosberg

*Note - Names in **bold type** are FAC Board members.



Greetings Junior Birdmen,

Lots of odds and ends floating around my desk this time. Here they are in no particular order.

Summer flying season is in full swing, and despite all the wet and/or windy weather, the intrepid Flying Aces have been out in force, tempting Hung with their new creations. By the time this reaches you, WESTFAC III will surely be in the history books, and I'm sure there will be plenty of great stories and pictures to share. I'm hoping that some enterprising folks will send them here so the whole FAC community can get a glimpse of the event. And meanwhile back east, the NonNats is upon us. The DC Maxecutors have been working hard to put together an organization that will keep things running smoothly at the newly streamlined event.

The FAC was set up to encourage the building of unusual subjects precisely because no one else was doing it, and it's worked like a charm. If there was ever any doubt, the pic of the "Hung Aereon" embryo event at the recent contest at Wawayanda, NY will certainly dispel it. Dave Stott's oddball design is pure FAC fun!

The BIG ANNOUNCEMENT this time around is that the FAC store is now open at Café Press. Tom Hallman has done a fantastic job of putting together a line up of merchandise bearing the Blue Max and the classic FAC logo. Top quality shirts and other merchandise are emblazoned with the club markings and sent right to your door. The FAC gets a cut, and doesn't have to get into the business of warehousing and shipping. Next time you see Tom, please thank him for all the work he put into this project. He'll be easy to spot, wearing all those new FAC threads.

The Academy of Model Aeronautics has appointed past AMA President Dave Mathewson as its new executive director. Mathewson was the AMA's prior

president for more than three years, and leader of its governing Executive Council. Best wishes to Dave in his new role.

See you on the flying field!

Rich Weber
newsletter@flyingacesclub.com

S n a f u D e p a r t m e n t

The handsome lad who graced the back cover of our last issue was not Harold Knapp, as the caption would have lead you to believe. The Skyraider pilot is Tim Jackson of the Rio Grande Squadron. Apologies to both. Thanks to Phil Thomas for the correction.



And while we're in apology mode...



Last month we ran a photo of Wally Farrell launching his Miles, and couldn't resist the urge to squeeze a little humor out of it. We did this without consulting the photographer, Pat Daily. The photo was better than the attempted joke, and deserved a better fate. Our apologies to Pat.

News on the Wing

Ross P. Mayo, C in C



The FAC YEAR in review.

The past year has been a whirl wind of activity here at GHQ. I personally thank each and everyone who helped on the various projects. Without their help, very little would have been accomplished. I will name each and please, if you have not already thanked them, please do so. Their efforts benefited all of us and because of them, we are a better group of people.

ITEM 1: Strongly encouraged by George White, GHQ secured Officer and Director's Insurance through one of Juanita Reichel's contacts.

ITEM 2: The FAC Corporation status was improved and strengthened.

ITEM 3: New by-laws were enacted and put into effect.

ITEM 4: The Board was enlarged with additional officers put in place for greater security and accountability of the Board members.

ITEM 5: The GHQ Council was enlarged with broader coverage of the continental US.

ITEM 6: The FAC Federal Non-Profit Tax Exempt status was reestablished with a more advantageous classification.

ITEM 7: Rich Weber became the new FLYING ACES CLUB NEWS Editor. His re-design of the newsletter makes it second to none. There are too many aspects of the new format and system in general to mention individually, but trust me...the value of his efforts and accomplishments are priceless. Our thanks also include Rick Penzick for his assistance to Rich with the new address / record keeping software,

and to and Mike Murtha for the image editing software.

ITEM 8: The official web site of the FAC was created... www.flyingaces.com. It could not have happened without Dave Mitchell. Continuously helping Dave is Stew Meyers...great job men!

ITEM 9: The FAC Web Store at Café Press was created after I asked Tom Hallman to volunteer his talents. Within a few days we had fashion worthy of any runway! Tom's help came by way of Stew Meyers and Tony Pavel...many thanks gents. Check out the link on OUR web site. If you don't have internet access, information will be in future news letters on how to order specific items via the phone.

ITEM 10: Our relationship with the Academy of Model Aeronautics has been strengthened. Did you know that many AMA contests now fly FAC events by FAC rules?

ITEM 11: Our relationship with the National Free Flight Society has been strengthened. Did you know that several FAC members serve as NFFS vice presidents and contributing editors? And most recently, FAC member Don DeLoach...our official liaison to the NFFS was appointed Editor to the National Free Flight Society Digest. If you didn't know all that, I bet you don't know that they have a membership drive on. You can join for two years at the price of just one. Check out their ad on page 16 for details.

ITEM 12: Speaking of the AMA and the NFFS...Tom Hallman's Peanut Mitsubishi 1 MF1 graced the AMA's February magazine cover and (with my nomination and assistance from Don) was awarded one of the NFFS's Ten Best Models of the year. Congratulations Tom.

ITEM 13: All too many members of the FAC have "gone west." One such high profile member was Jack McGillivray. Jack leaves a legacy that may never be duplicated again in two areas: gentile competitor and generosity. He bequeathed \$100,000.00 to both the MAAC and FAC for the "...betterment of

the organization." An FAC Financial Committee has been established to deal with Jack's gift which is still in probate at this time.

ITEM 14: The FAC has established a working relationship with K&L Gates, LLP of Washington DC thanks to Tony Pavel. K&L Gates is the second largest law firm in the US with offices world wide. They will assist the FAC as needed with legal and financial issues.

Wow, what a year! I hope the next year is just as busy...with all of us building more models, building more friendships and getting reacquainted with the FAC fun factor.

See you on the flight deck soon (a hint of things to come),

Ross P. Mayo, CinC.

A post script from GHQ...

I found it rather interesting that both Rich and I decided independently of each other that the HUNG ALMIGHTY QUEST FOR KANONES burr needed to be addressed in the last issue of the FAC News. With so many wrinkles in the many changes of the past six months now pretty much smoothed over I guess we both decided to get that burr out from under our skin. If you "get it," stand up proud and dedicate this flying season to building what you like...flying as much as possible...and just letting the wins happen. Here's to having fun again!

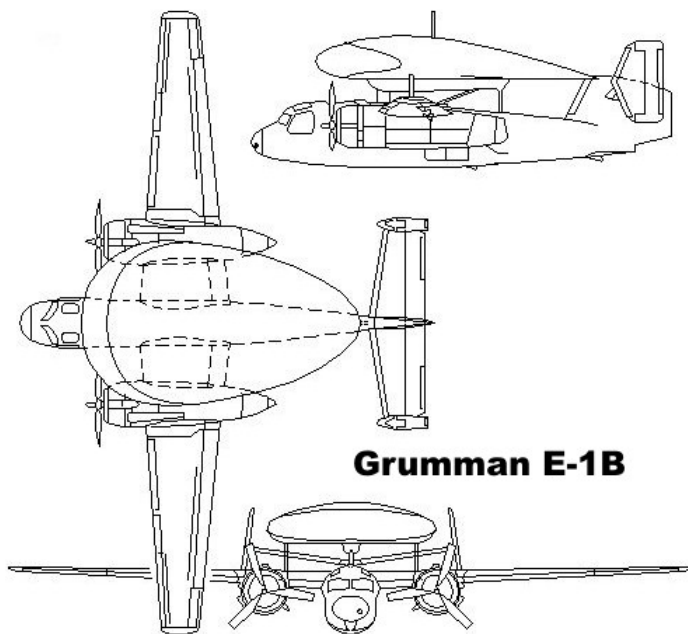
W o r t h w h i l e W e b s i t e

Airfield Models has a website that is devoted to the art of building Radio Control, Display and Control-Line models, but there are lots of great building tips that apply to stickentish Free Flight too.

<http://www.airfieldmodels.com>

George Mansfield - Scale Staffel

B o n u s P o i n t Q u i z



Grumman E-1B

Answer on Page 13

HOBBY SPECIALTIES

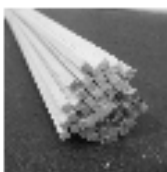
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The Gadgeteer



Here's an idea given to me by FACer Bill Miller of Connecticut. It is about as simple a winding stooge as one can imagine and costs essentially nothing.

The first photo shows a length of coat hanger wire bent into a sort of V- or U-shape. At the apex of the bend is a large loop, and at the ends of the wire are two small loops. The large loop can be pegged into the ground, attached to the back of your car or anchored in some other fashion. Gently bend the arms with the small loops until they just fit over the motor peg. Note that the small loops fit around the motor peg - no wire through a tube-style peg is needed. The stooge works amazingly well. I still use it for working out of the back of my car.

Hannan's Runway

Bill and Joan continue downsizing the business; however, Hannan's Runway publications and Frank Zaic books remain available, while they last. (Dealer inquiries are also invited). Please check website for current inventory.

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WESTFAC.... Hello from the Folks out West

Roger Willis

Probably when you read this, our FLYING ACES WESTFAC III will be in the Kanone records and we will be putting together the story and pictures for our friends at FLYING MODELS. Larry Kruse, who did a fantastic cover story for WESTFAC II in Texas was not able to attend this year so I will be scrambling to find a great story teller who can put something together for our friend Frank Fanelli at the magazine.



The new WESTFAC Walt Mooney Memorial Trophy created by Keith Sterner.

As our CINC-C knows, it takes a lot to put these wonderful events together and run them. While everyone on our Working Committee did a great job, there are a few folks who need some mention. First of all, our Contest Director, Chuck Etherington. Chuck hails from Colorado and has been very active in the NFFS and the MMM Club. While he has

CD'ed many freeflight events, this was his first FLYING ACES effort and he did a great job. It's not easy to run 23 separate event categories with only two hands and two feet. I think Chuck grew another set of both at WESTFAC III.

Our "artist in residence" for WESTFAC continues to be a real inspiration. Phil Thomas from the RIO GRANDE SQUADRON did all the art work for our WESTFAC III trophies and T-shirts. We chose the Navy's WW II Grumman Avenger for this year's event and Phil's rendering is now reflected on many trophies and shirts heading back home.

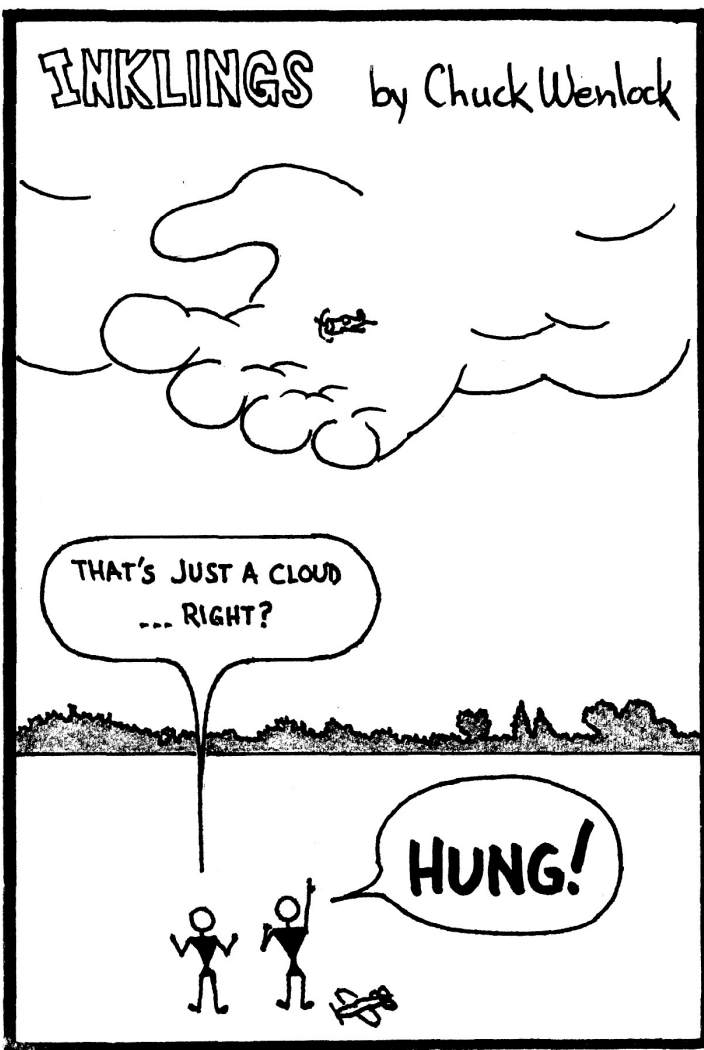
Our newest Working Committee member is Duke Horn from the LONE STAR SQUADRON near Dallas Texas. Duke created all of our sponsor posters. These posters are gifts given to each sponsor who supported two events. We display them at the scale judging and at the flying field during the entire time and during the Awards Banquet, each sponsor is called up, recognized and given his or her Sponsor Poster. It should be noted that the sponsor support for WESTFAC has been 100% and in fact, all of the sponsor events were full and paid only 30 days after we opened sponsorships over a year in advance. ...!!

The all-star running back on this years Denver venue was Don DeLoach. He was everywhere before, during and after the event. He has the bruises to show for it too. At the last minute, a banquet vendor who had committed to WESTFAC, filed us all under "forget" and Don went in search of a new banquet location. He not only found a better location, but negotiated the plate price and the level of service. Also, Don introduced a new WESTFAC Scoring Card that enhances and simplifies the flyers need to report times and event performance. These new cards were made part of the Flyer Folders and will become an integral part of WESTFAC in the future. Taking Phil Thomas' art, Don created new WESTFAC III flight box stickers that were given to all participants as a colorful reminder of their WESTFAC experience.

These are just some of the guys who make WESTFAC work. The Working Committee concept was born in 2005, when the idea of a WESTFAC

event was born. As each of the three current venues held WESTFAC, the Working Committee was expanded. Now, we have three venue Teams: PERRIS CALIFORNIA, GAINESVILLE TEXAS and DENVER COLORADO. We want to continue to rotate WESTFAC around these venues on the odd numbered years for all to enjoy. The word ALL is key here. At this WESTFAC, we had flyers from ten different states and for the first time, we had a flyer all the way from Pennsylvania. Some of you great folks back East may know him..Keith Sterner. Not only did he come and fly at WESTFAC, but he volunteered to construct our new WALT MOONEY MEMORIAL TROPHY which is awarded to the 1st place flyer in Peanut Scale. We sure hope Keith's remarkable journey encourages some great flyers out East to gaze WEST towards PERRIS California in 2013.

Planning for WESTFAC IV will begin soon..... Roger



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Don's Fly Lite Tissue
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Postage for tissue is \$3.00
All Wood Orders Shipping is 15% of cost

2011 FAC Non Nats Event Schedule

JULY 14 8:00-5:00 15 events

FAC SCALE-Best flight of Three

- #1 FAC Peanut
- #2 FAC Rubber Scale
- #3 FAC Jumbo
- #6 FAC Rocket / Jet
- #7 FAC Pioneer
- #8 FAC Power

TOTF (Total of Three Flights): SCALE

- #10 Golden Age Civil
- #13 Modern Military
- #14 Low Wing Mil. Trainer

TOTF (Total of Three Flights): NON SCALE

- #29 Embryo Endurance
- #31 OT Rubber Cabin
- #34 OT Gas Replica- (Target time / lowest total deviation wins)

MASS LAUNCH

- #21 WWI---9:00am
- #20 Goodyear / F1---11:00am
- #15 Thompson Trophy---3:00

NOTES:

FAC SCALE (Events #1-3, 6-8):

- Scale judging will begin at **2:00pm on July 13th at the HAG Hangar.**
- Flight scoring: Best of Three official flights

TOTF SCALE (Events #10-14):

- All TOFT scale models will be informally judged on the field for compliance with the new Pilot's Pre-Launch Checklist (PPLC), which replaces the old "45 point rule" standard. The PPLC is available on the website, as well as in FAC Newsletter #258. This will be a "soft" phase in of the new rule, but all competitors are encouraged to make an honest effort to comply. Outrageous flouting of the new rule will merit a public flogging.

DIME SCALE will be flown to the 2012-2014 rules. Available on the FAC Website, and in FAC Newsletter #256

MASS LAUNCH (Events #15, 16, 20-22):

- All TOFT scale models will be informally judged on the field for compliance with the new Pilot's Pre-Launch Checklist (PPLC), which replaces the old "45 point rule" standard.
- No qualifying heats: Everybody's in!
- No 15% motor rule. Load 'em up!
- All fliers must have a mechanic; all mechanics must have a stopwatch; all flights will be TIMED till down.
- We will fly a minimum number of heats; count on no more than four TOTAL for each event. It will be ruthless.

HALF-SIZED WAKEFIELD-as per rules posted on the FAC Website and in FAC Newsletter #259. Models must weigh 1oz. minimum ready to fly, *without* rubber.

JULY 15 8:00-4:00 14 events

FAC SCALE-Best flight of Three

- #1 FAC Peanut
- #2 FAC Rubber Scale
- #3 FAC Jumbo
- #6 FAC Rocket / Jet
- #7 FAC Pioneer
- #8 FAC Power

TOTF (Total of Three Flights): SCALE

- #11 Golden Age Military
- #12 Modern Civil

TOTF (Total of Three Flights): NON SCALE

- #30 OT Rubber Stick
- #33 FAC Jimmy Allen

#24 DIME SCALE (2012 rules)

MASS LAUNCH

- #16 Greve---10:00am
- #22 WWII---1:00pm

SPECIAL EVENT:

- #36 Half- Size Wakefield

Non Nats Notes

From the DC Maxecutors

The DC Maxecutors will be your “host” club for the 2011 Non Nats. We’ve prepared some notes to help guide you through the rules that will be in place at Geneseo.

1. GENERAL FAC RULES. It is YOUR JOB to know them. The Maxecutors will be conducting all events as per FAC rules. The most up-to-date versions are on the web-site at www.flyingacesclub.com/FACrules.html

Note that while these may vary in structure from the printed 2010-2012 rule book, the content is essentially unchanged. There are some exceptions, but GHQ has been careful to try and make any transitional rule changes LESS restrictive so no-one gets pinched.

2. COMPLIANCE CHECKS. Models flown in the following events will require compliance checks:

Dime Scale (2012-2014 rules)

All Mass Launch models (PPLC)

All TOTF Scale models (PPLC)

All TOTF Non Scale models (see individual event rules)

Models must be presented for review prior to first flight, at which time the model will be entered into the on-field database and “cleared”. A table will be set up near the GHQ tent and staffed for this purpose. It is YOUR job to get your plane checked out. If you hand in your time slips but don’t bother to get your plane cleared, your scores will not be entered. If your plane goes OOS and has not been cleared, your flight times will not be entered. Models that do NOT pass muster are free to fly, but they cannot compete and cannot win.

PLEASE REVIEW THE FAC RULES FOR EACH EVENT AND MAKE SURE YOUR MODEL IS IN COMPLIANCE!

3. MASS LAUNCH EVENTS. It’s gonna be war out there.

- Please register your plane and have it checked for PPLC compliance WELL BEFORE the call for the event. We want to avoid field checks.

- No qualifying heats. Everybody’s in!
- No rubber restrictions. Load ‘em up!
- First round: EVERYONE flies in a mass mass launch. Thrills! Spills! Kills! Last 12 down advance. The last 6 down from the second heat advance to the final round.
- All flights will be TIMED to the ground. All pilots should have a mechanic and MUST have a stopwatch. In the event that mechanics are scarce, pilots will be allowed to time their own flight under the honor system, but mechanics are preferred. All stop watches will be started in unison, approximately 15 seconds before the call to launch. Models are then timed until down, and the time reported to the field official.

4. OT GAS REPLICA

Scoring: three target times. Lowest TOTAL deviation wins. Target times will be posted / announced at 8:00, 11:00, and 2:00 on the day of the event. ONE official attempt per round. Fliers must submit their result for a given target time within the three hour window allotted, i.e.:

Round #1:	8:00-11:00	submit score by 11:00
Round #2:	11:00-2:00	submit score by 2:00
Round #3:	2:00-5:00	submit score by 5:00

4. COMMON QUESTIONS

Q: Will the rule requiring “raised cabins with clear windows” on OTRC models be in effect at the 2011 Non Nats?

A: NO. Since the effect of this rule is to eliminate a whole raft of popular models that would otherwise compete in OTRC, driving them to OTRS instead where they do not belong, the Maxecutors have decided to nix this rule for the event. Note that this does NOT constitute a rewrite of the 2010-2012 FAC rules, which will be revisited at the end of 2011.

Q: Will there be two classes of Dime Scale, Pseudo and Traditional, like last year?

A: No. Dime Scale will be flown to the 2012-2014 rules that have been posted on the FAC Website and were published in the FAC Newsletter. Note that any model that qualified as a Pseudo or Traditional Dimer in the past will qualify under the 2012-2014 rules.

Q: The FAC rules for my event say the prop has to be a certain type / size. Can I fly it with something different?

Non Nats Notes continued:

A: Not if you want to compete in the event. If the FAC rules say the prop has to be plastic, the prop has to be plastic. If the FAC rules say the prop cannot be larger than a certain size, the prop cannot be larger than that size. Likewise for other event specific rules.

PLEASE REVIEW THE FAC RULES FOR EACH EVENT AND MAKE SURE YOUR MODEL IS IN COMPLIANCE!

Q: Why does my high-wing Golden Age Military model have to fly in Golden Age Civilian?

A: Because the rules say so.

Q: What the Sam Hill is the "PPLC"? Why should I care?

A: As of 2012, the **PPLC (Pilot's Pre-Launch Checklist)** will be the new FAC standard for judging compliance with minimum scale requirements in Mass Launch and TOTF Scale events. It replaces the "45 point minimum" standard of years past, and provides a simple checklist of items that must be on a scale model for it to compete. You should care because the Maxecuters are going to conduct a "soft launch" of the PPLC at the Non Nats. Mass-Launch and TOTF Scale models will be checked for compliance against the PPLC. If items are missing, but in the opinion of the official the model would have passed under the old 45 point system, the model will be allowed to compete. In the event that a model is in gross violation of EITHER standard, it will not be cleared for competition. A copy of the PPLC can be downloaded from the FAC website at: www.flyingacesclub.comPilotsPreLaunchChecklist.pdf. It was also published in the March/April 2011 FAC Newsletter.

Q: Why are the Maxecuters being such hard-balls? Isn't this all just supposed to be fun?

A: Because they are a bunch of mean old codgers who think that rules exist for a reason.

MORE QUESTIONS? E-mail 2011 Non-Nats CD Dave Mitchell: webmaster@flyingacesclub.com

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One of a Kind

By Fran Ptaszkiwicz

Responding to an article in the December 2006 issue of Model Aviation magazine by Dr. D.B. Mathews, I requested and received a copy of a three view drawing depicting an unusual type of Cessna aircraft.

The aircraft, designated Cessna XMC-Model 1014 and code named "Magic Carpet," was somewhat reminiscent of an earlier company design; the "Skymaster" Model 336, a twin-boomed, twin engine aircraft having its engines located fore and aft on the fuselage. According to the information Dr. Mathews had, the "Magic Carpet" was to be a sport-type design for use by the private pilot, general aviation segment of air enthusiasts.

The reason for the cancelation of the project following assembly and flight testing is unclear as is the information regarding performance and historical background. With the takeover of Cessna by the Textron conglomerate, much documentation was lost. People authorized to "clean house," with no regard for any archival interest, may have designated this material to a land fill or shredder.

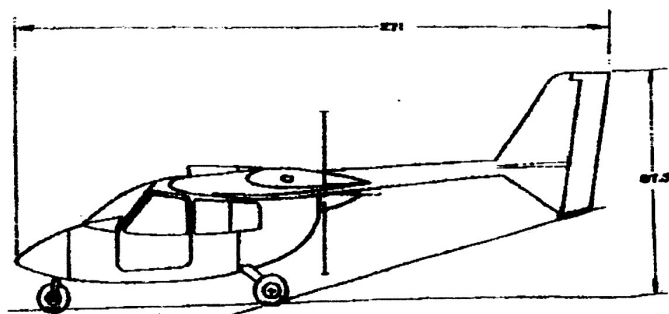
Having worked at Bell Aerospace Corporation, which was and outgrowth of the great design innovator, the Bell Aircraft Corporation, I had seen similar over-zealous young people with no regard for corporate history begin to dump drawings of Bell's "Airacuda," "Airacobra," "Airbonita," and "Airacomet" before they were throttled by senior design types. The drawings were rescued and consigned to the Niagara Air and Space Museum in Niagara Falls, NY.

There is a very good photograph of the "Magic Carpet" on page 110 of the December 2006 issue of Model Aviation Magazine, in the "Flying for Fun" column edited by Dr. Mathews.

The original aircraft was assigned the F.A.A. registration number N7174C. The sleek looking design had a high wing that was slightly swept back, and the two place cabin had a door on either side for pilot and passenger access. The pusher engine was located in the rear of the fuselage. The fixed gear was of the tricycle type, and in the photo, the wheels are housed in very streamlined housings (pants). The aircraft was designed and built in 1970, and first flown in January 1971.

The sketchy three view provided depicts the design well. It does not show the "pants" as does the photo, but the basic configuration is there. Sadly, the overall dimensions are unintelligible so that the actual physical size of the ship is unavailable. Sketching in the desired structure could produce a fine flying model.

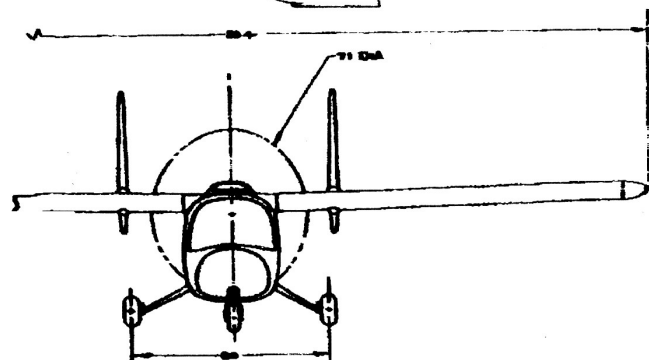
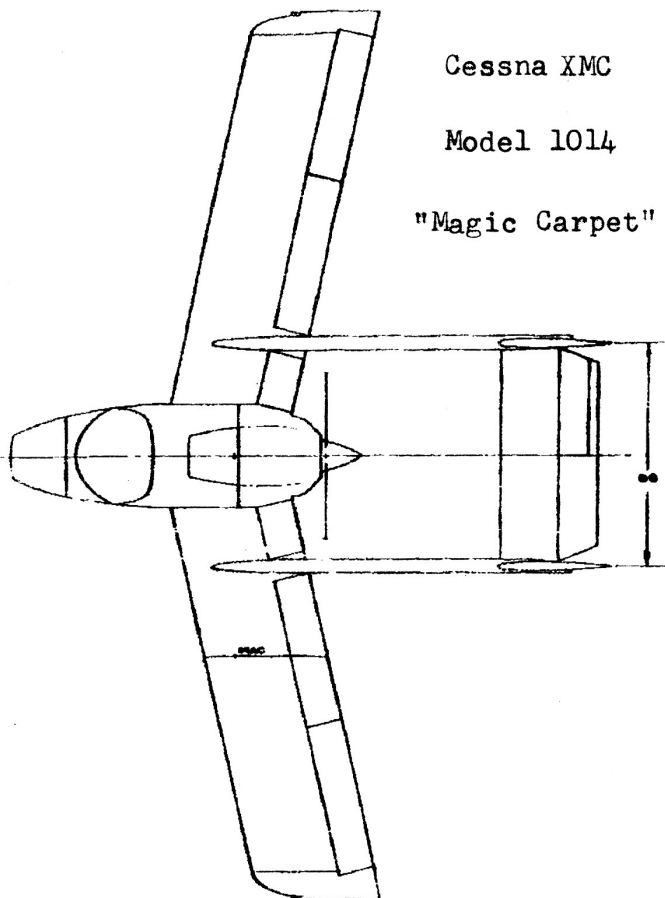
I wonder how many more "One of a Kind" designs may be out there waiting to be brought to light.



Cessna XMC

Model 1014

"Magic Carpet"



Dutch Roll Revisited

A recent issue of this newsletter had an article which discussed models having "Dutch rolling" action in flight. I have had several models, both canards and tractors, that had that problem.

All were cured by increasing fin area- not reducing it. I cut a thin and light balsa sheet (1/16th-1/32nd) to fit on the rear of the fin. Usually 1/4th" solves the problem, but Sometimes only a width of 1/8th" will do. Remove small strips from the added piece until the roll returns. (It is not necessary to use full winds for testing.) Then add a strip slightly larger than necessary and finish off as desired.

Good flying,

Clarence Mathers



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BP QUIZ answer - 25 points for twine engines, and another 15 for biplane configuration. That radome has as much area as the wing!

Half Awake Equals a Bird in the Bush

By O. Leo Strutt, Boy Reporter

"You cahn't get theyah from heeah"—Bert & I

Hark, Skysters! The FF clubs are abuzz with discussion about 1/2-sized Wakefields. The new event was originally proposed by Gordon Roberts and Dave Pishnery of the Cleveland Stork Squadron. The DC Maxecuters, hosts for the 2011 Non Nats, agreed to include it in the schedule as a special event. The sound of old plans unrolling and modelers leafing through their Zaic books fills the air, and the balsa dust is flying. But wait! There is some confusion regarding the rules. Ah, rules. Well, we're here to help you sort them out, or at least to help you feel more educated in your confusion.

Here's the (abbreviated) **FULL SIZE** Wakefield rules for the period January 1, 1937 to December 31, 1952:

- A. Wing Area to be 200 sq. in., +/- 10
- B. Fuselage cross section: Length squared divided by 100 ($L^2 / 100$)
- C. Minimum Weight to be 8 oz., with rubber, ready to fly (RTF).

Here's the (abbreviated) 1/2 **SIZE** Wakefield rules as currently published in the FAC newsletter (#259) and on the FAC website:

- A. Wing Area : 50 square inches, +/- a bit.
- B. Fuselage cross section: Length squared divided by 100 ($L^2 / 100$)
- C. Minimum weight: 1 oz. finished model, empty, without rubber.

Modelers with proper mathematical training and a belief in the sanctity of rules will compare these two sets and nod their heads in agreement, at least until they compare lines "C" at which point they will come up short and sputter, "What? Why is one a minimum weight **WITH** rubber, and the other **WITHOUT**?" Those without proper mathematical training will never even make it that far---they start

saying "What?" at the opening bell. So here's the skinny, friends, line by line.

WING AREA: To half-size a given wing, you want to start with its dimensions, not its area. Let's say the full-size is 40" x 5". Take 1/2 of each of those dimensions and you have your 1/2 size Wakefield wing: 20" x 2.5" (WA = 50 sq. in.)

FUSELAGE CROSS SECTION: No problems there, unless your math skills ended at subtraction and addition.



MINIMUM WEIGHT: How in heavens name does one arrive at 1 oz being equal to 1/2 of 8 oz? Once again, start with the overall dimensions, and have faith in mathematics. If you scale **EVERY** dimension of an object exactly by 1/2, its volume and theoretically its weight should be 1/8 the original. Of course as a practical matter that's impossible with a model since things like tissue and finish thickness do not scale down. But as a general rule, that's how it works. Since we are working in three dimensions (L, W, H) the given starting weight (8 oz) must be thrice halved: $8/2 = 4$; $4/2 = 2$; $2/2 = 1$. Voila! So far, so good. But then you may ask, why do these blasted new rules differ as to the "with rubber / without rubber" issue? To answer this, one must acknowledge differences of approach, and of opinion.

On the one hand, there are those who feel quite strongly that to craft a new rule that does not mirror the spirit, intent and process of the old rule is to dishonor the original rule. Indeed, the rules that Gordon Roberts and Dave Pishnery originally submitted stipulated that the weight should be "1 oz. minimum, with rubber, ready to fly," in accord with the original decrees.

Others feel equally strongly that a 1 oz. ready to fly minimum would result in models whose wing loading was far less than that of the typical Wakefields of yore, would favor more expert builders, and would result in a lot of OOS models, DT's be damned. In Don Srull's words:

"The revised rule keeps wing loading, which determines how a model flies, a bit closer to the original 8 ounce Wakes, which were sturdy, kinda massive things. (Gordon Roberts') total 1 ounce rule gives a wing loading 1/2 the original Wake's and leads to a lighter, indoor-type flyer."

LET'S DO THE MATH!

Wing loading full size Wakefield: 200 sq. in. WA, 8 oz. (227g) all-up weight: $227 / 200 = 1.27\text{g} / \text{sq. in}$

Wing loading 1/2 sized Wakefield: 50 sq. in. WA, 1 oz. (28.35g) RTF weight: $28.35 / 50 = .57\text{g} / \text{sq. in}$.

Wing loading 1/2 sized Wakefield, 50 sq. in. WA, 1 oz. (28.35g) airframe plus 25% (9.5g) motor = $37.85 / 50 = .75\text{g} / \text{sq. in}$

Keen observers have noted that if one was REALLY looking for the authentic Wakefield experience, they could stuff models built to either standard with 21g of rubber and have their fun. BE THAT AS IT MAY, the event at the Non Nats will be run according to the published revised rules, with sincere apologies to Gordon Roberts and Dave Pishnery for straying from the true path.

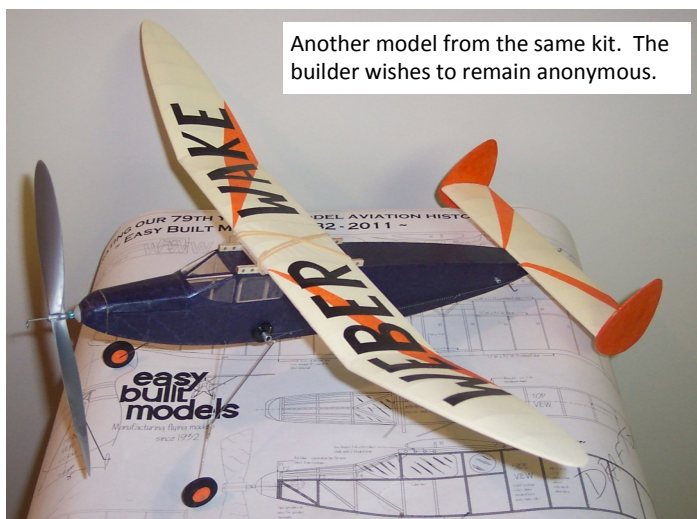
"...caelum certē patet; ībimus illac."--Ovid



Paul Stott with his Haines H-3 Greve Racer.



Louise Houck stands in as a mechanic for her husband John as he winds up his Fokker D.VI for some WWI action.



Another model from the same kit. The builder wishes to remain anonymous.

Dihedral

M u m b o J u m b o # 1 5 0
f r o m t h e G l u e G u r u

Dihedral is that upper displacement of wing tips relative to the wing center. It's an important factor in stability, especially for spiral stability. Too much or too little means big trouble. Modelers have struggled for decades to get it right and much has been achieved, but there is still much to be learned. For example, official NACA model testing (technical report #494) has shown that no dihedral (0 deg.) will lead to a spin, as will an over generous 9 deg. as measured from center to tip. Something in between is wanted. Fine, and this matches my own experience. However, how do we proceed to the right answer?

Unfortunately there is no easy path. Complications include the high torque experience by the fuselage as a reaction to the motor power, as well as the rotating prop wash impinging on the vertical tail. Each is additive. Together they amount to a powerful twisting torque. For conventional prop rotation, the result is a strong left turn tendency. As a form of last straw, this motor-prop factor changes with time as power runs down.

Additional complications are those of fuselage and vertical tail area, acting to buck or possibly encourage a turn. Finally there is a low or high wing issue, sufficient by itself to create much uncertainty.

In short, the complications are many-too many to permit a simple answer. Instead I employ two basic means of dealing with the issue.

First is dihedral itself. I generally use about 3 deg to 9 deg.- more on low wing models and less on high wing - but usually closer to the upper limit (1 ½ inches of rise for each ten inches of span, i.e., a 40" span will have each wingtip elevated by 3").

As for torque, I use the usual offset thrust line, pointing the thrust line to the right by a few degrees. This is best done in the field by simply inserting a piece of shim stock between nose block and fuselage. Usually a narrow piece of 1/32nd plywood is about right. To keep it from falling out, double sided scotch tape is useful.

In testing, beware of weather flukes. I shall always remember testing a veteran jumbo Piper Cub. Years of flight assured me of it's peaceful, benign character. Anxious to get going on a brilliant summer morning. I applied

100 hand turns, only to have it stall and spiral dive into the ground. The problem was a too close tree line complete with lingering turbulence. Moral: above all, avoid freakish weather effects! A severe gust can overcome the most stable of models.

An Advert for Myself

Under the name Leon Bennett, I've written a series of books about that most successful of fighter pilots, Manfred von Richthofen or the Red Baron. More than clashes and skill was involved. The aerodynamic characteristics of triplanes vs. biplanes is developed as is the art of gunnery. Maneuvering and it's aerodynamic demands are explored. All is written at the level of the Glue Guru column- if you like one You'll like the other.

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Gone West



Steve receiving the Clodbuster Life Achievement Award dressed in his WW-II US Navy dress blues which he still fit into after all these years.

On May 6, 2011 Clodbuster's Model Airplane Club lost a long time member and friend in **Steve Kanyusik**.

Steve was a true American hero during WW-II joining the Navy right after Pearl Harbor and serving on several carriers during the duration. Steve earned the Bronze Star and a Purple Heart for standing by his gun during a kamikaze attack on his aircraft carrier. He also re-upped during the Korean conflict once again serving his country.

Steve wrote over a dozen feature articles for *Model Aviation*, including a cover story on old time free flight in March of 1987. Steve's writing and photography was also featured in *R/C Report*, *Live Steam*, and *Warbirds*, plus, no doubt, many others that haven't come to out attention.

Steve will be interred at Arlington National Cemetery next to his first wife.

Via Mike Welshans of the Clodbusters

The model-building hobby has lost another of its forefathers. **Robert Reder**, co-creator of Monogram Models, has died. He was 93.

Starting in 1935, Reder was a designer and draftsman at Comet Model Airplane & Supply Co. in Chicago. During World War II, he worked with the Navy to develop a national program for building identification models, used for training by pilots and anti-aircraft gun crews. By 1945, he and pal Jack Besser pooled their life savings (\$5,000), and started Monogram Models in, appropriately, his mothers basement. Monogram started with balsa-wood ship and airplane models, but soon switched to injection-molded plastic and added automotive subjects. Among other things, Robert Reder designed the Phantom Fury. He was a prolific designer for Comet, as well as a first class Gentleman.

Via Lee Campbell, editor of The New CIA Newsletter

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FAC Contest Calendar

Cloudbuster Fred Greg, aka Loopy, is the official FAC Contest Calendar Coordinator. He'll be your contact man for all contest announcements. You can reach him one way or another with the information below.

Fred Gregg 13701 Provincial Dr Sterling Heights, MI, 48313-2018

586.884.6919

loopy.cbfac@yahoo.com

Elyria	OH	July 31	Cleveland Free Flight Society	Jim Gaffney	jamesfgaffney@hotmail.com
Otay Mesa	CA	August 14	FAC Squadron #41	George Mansfield	gmansfield75@gmail.com
Elyria	OH	August 14	Cleveland Free Flight Society	Jim Gaffney	jamesfgaffney@hotmail.com
Denver	CO	Sept 3-5	FAC Mountain States Scramble	CD - Don DeLoach	ddeloach@comcast.net
Muncie	IN	Sept 8-9	2011 Outdoor Champs	CD - Ralph Kuenz	rdkuenz@yahoo.com
				F. Gregg	loopy.cbfac@yahoo.com
Elyria	OH	Sept 18	Cleveland Free Flight Society	Jim Gaffney	jamesfgaffney@hotmail.com
Otay Mesa	CA	November 13	FAC Squadron #41	George Mansfield	gmansfield75@gmail.com



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Above: Don DeLoach displays his new F4U Corsair. Below: This shot of Stu Weckerly is from a video of a Cloudbusters indoor contest last Winter. While the quality of the photo may not be the best, it certainly captures the magic of Free Flight. Video by Ralph Kuenz, picture capture by Chris Boehm.





2011 FLYING ACES CLUB OUTDOOR CHAMPS AMA FLYING SITE – MUNCIE, INDIANA SEPT. 8TH AND 9TH 8:30 AM TO 4:30 PM AMA Sanction # 11 - 0223

Thursday, September 8

1. FAC Scale*
2. FAC Jumbo Scale*
3. FAC Power Scale*
4. FAC Peanut Scale
5. Golden Age Scale (Civ & Mil combined)
6. FAC Dime Scale (2012 Rules)
7. Old Time Gas Replica
8. Embryo Endurance
9. Old Time Rubber Cabin (Must ROG)
10. World War I Combat ML****
11. Greve Race ML*****
12. EasyBuilt 1939 Aeronca "Chief" *****

Friday, September 9

1. FAC Scale*
2. FAC Jumbo Scale*
3. FAC Power Scale*
13. Phantom Flash
14. FAC No Cal Scale
15. Low wing Trainer
16. AMA P-30**
17. Old Time Rubber Stick
18. World War II Combat ML***
19. Thompson Race ML*****
20. Peanut Race Planes ML*****

All planes for Scale Judging must be turned in by 12:00 noon Thursday Sept 8 for both days events.
OT Rubber times must be turned in by 3:00 PM each day (for target time fly-offs).

*These FAC events may be flown either day. Judging is on Thursday Sept. 8 only.

**Flown to current AMA rules.

***Mass Launch. Must show armament and correct colors, insignia, etc.

**** Mass launch. MULTI-WING ONLY. Rigging wires, guns, proper colors, markings, required.

*****Mass Launch. See Rule Book for qualifiers in Thompson and Greve.

***** Mass Launch. Any era race plane. Proper colors, markings, required.

***** Use EasyBuilt plan or kit for this One-Design event.

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All entrants must hold a current AMA or MAAC License

Trophies (Engraved Glass) will be awarded to third place

Model plan of the "Erie Daily Times" will be provided in Contestants' kit.

Questions, Comments, contact:

Contest Director; Ralph Kuenz 1- (517) 240-0208 / rdkuenz@yahoo.com

Co-CD: Fred Gregg 1-(586) 884-6919 / loopy.cbfac@yahoo.com

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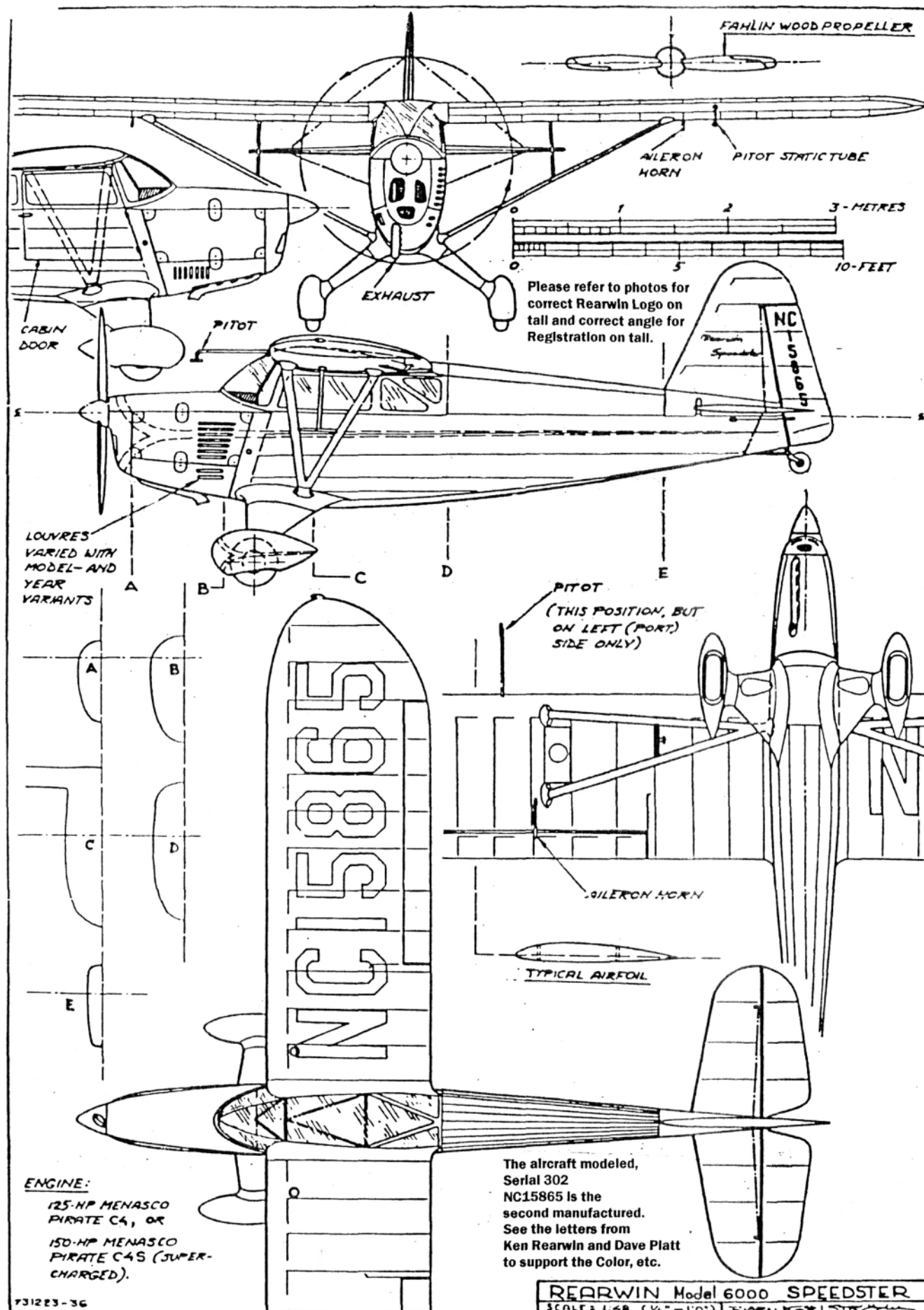
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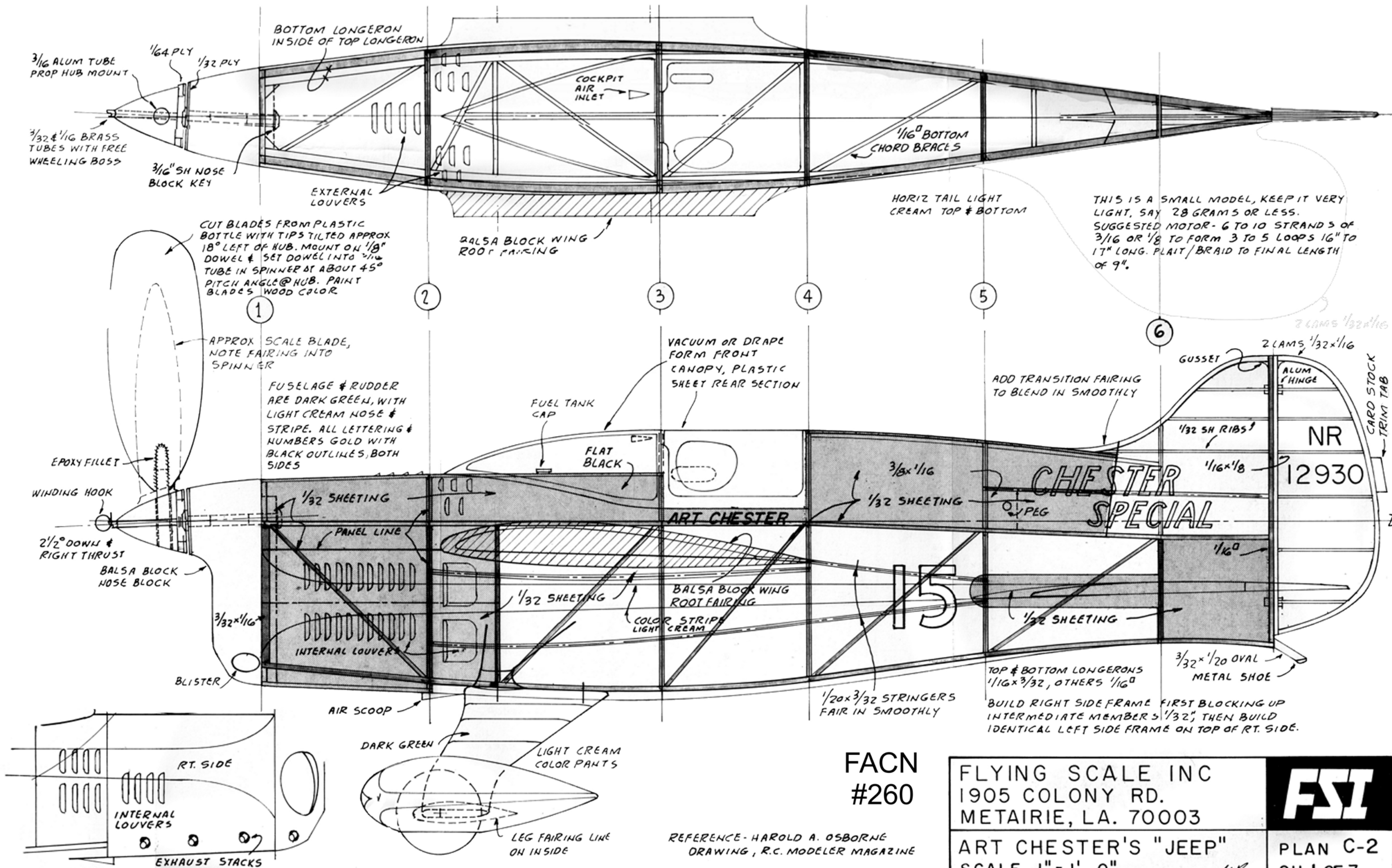
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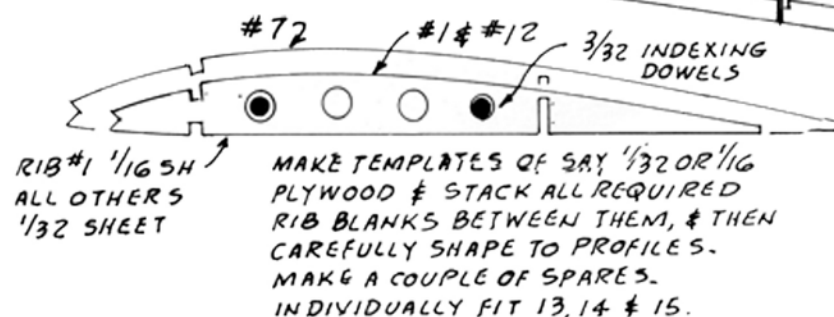
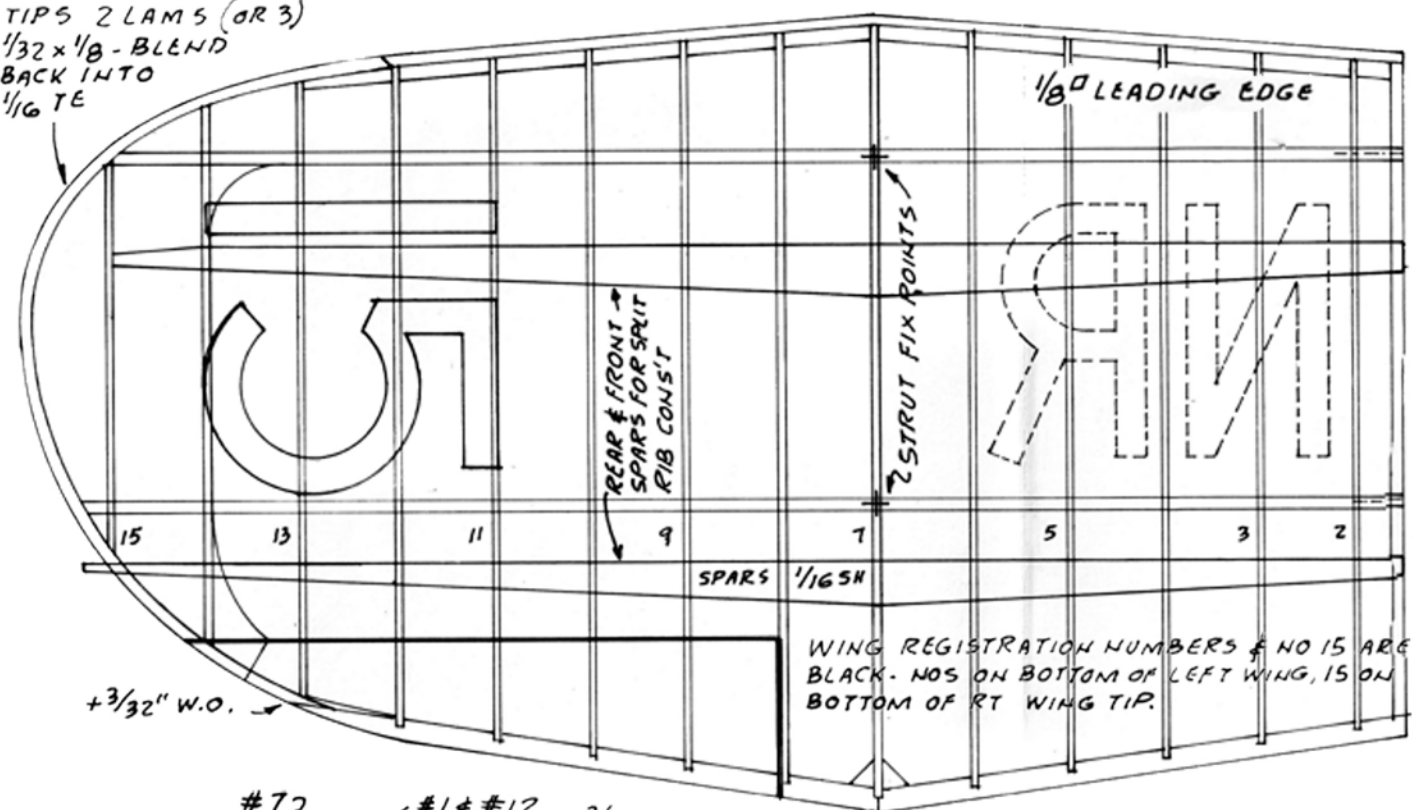
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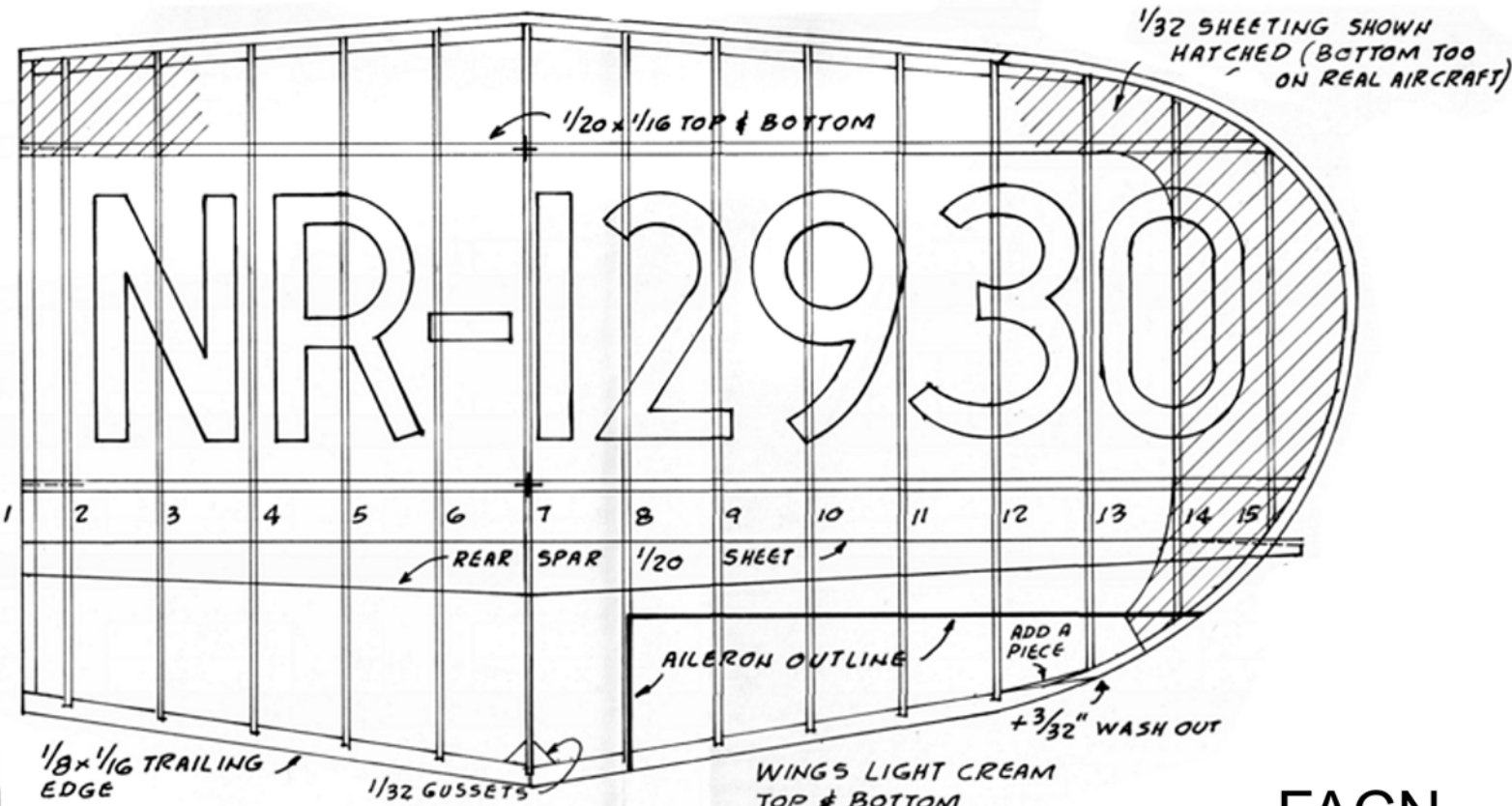
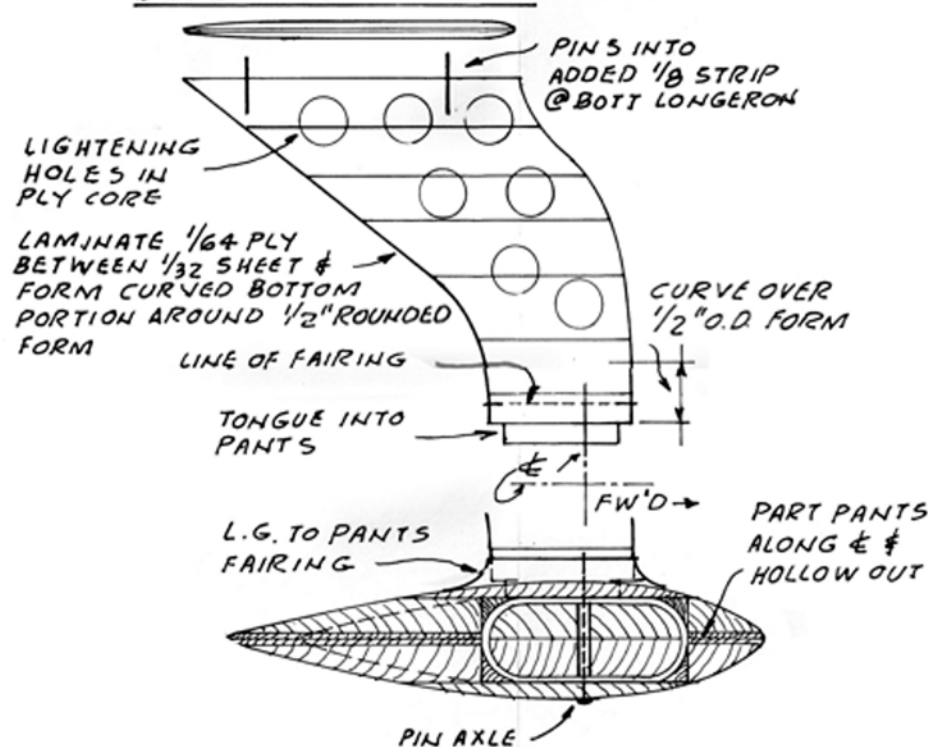
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SH 1 OF 3

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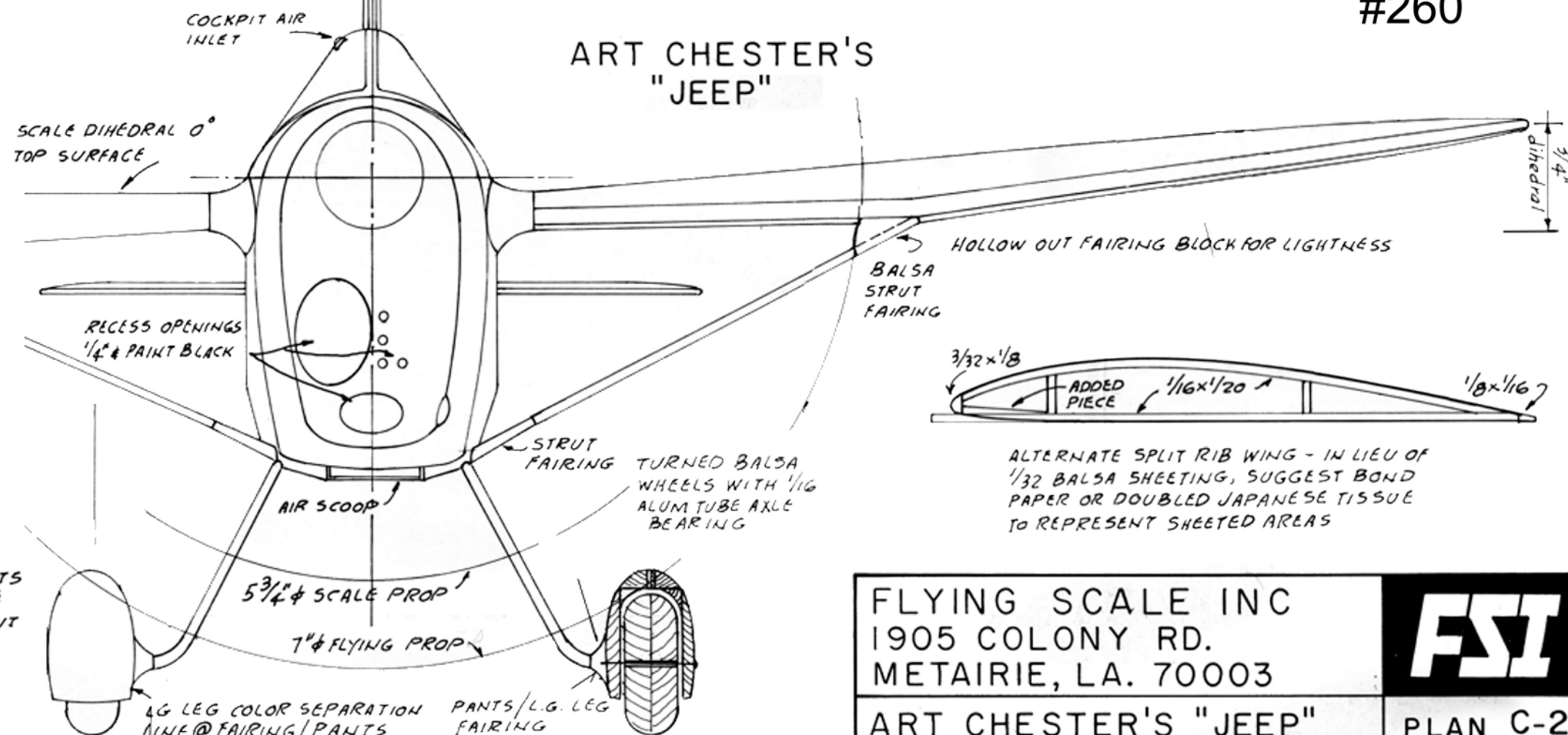


DEVELOPED L.G. LEG DARK GREEN



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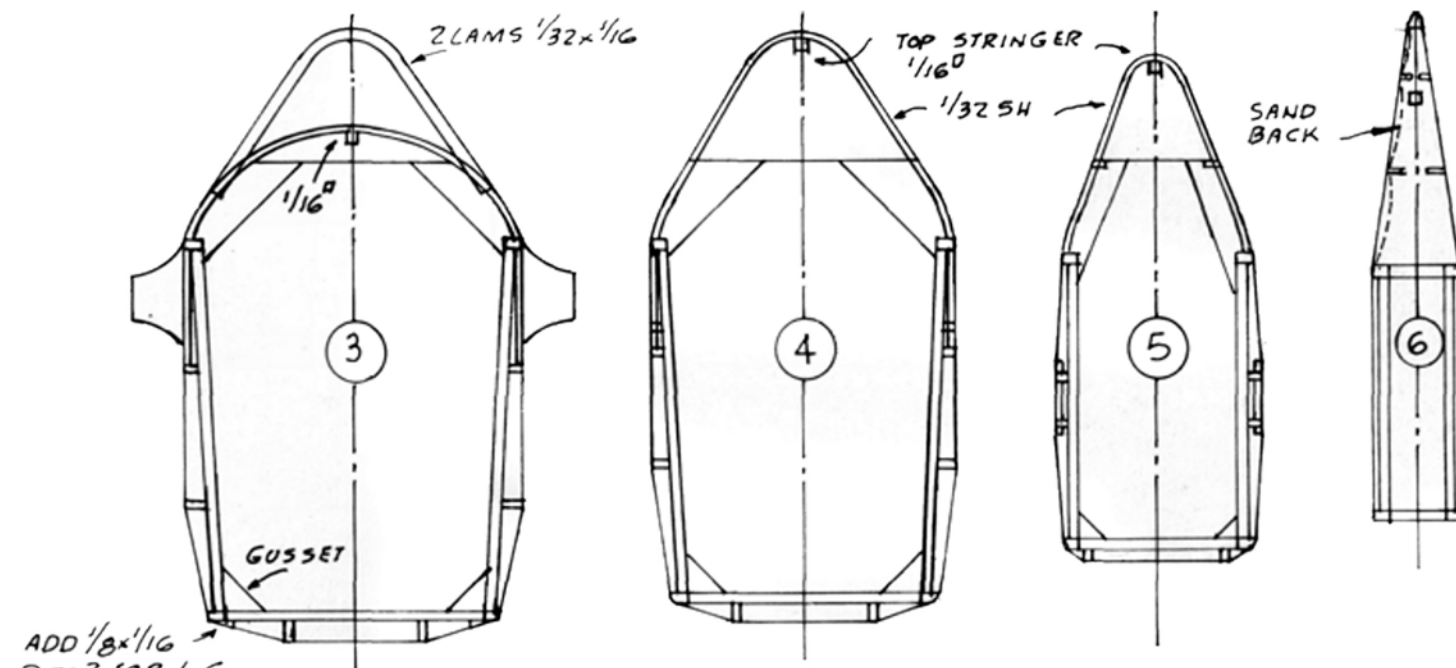


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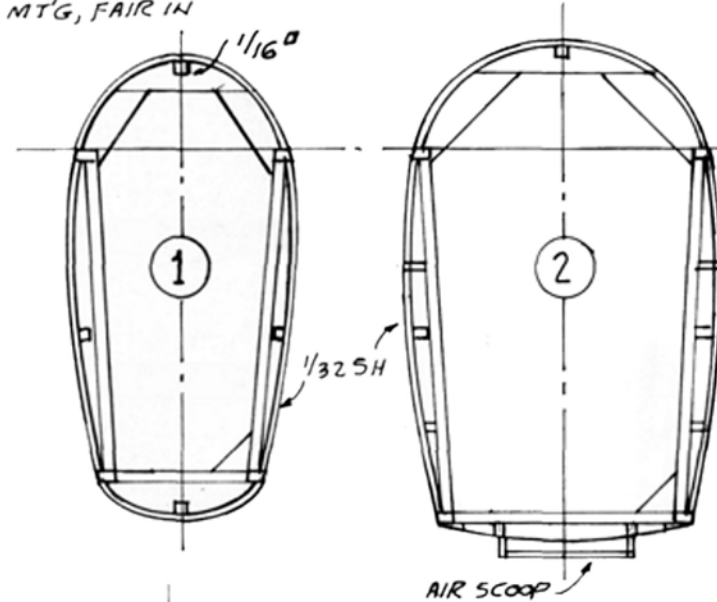
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PLAN C-2
 SH 2 OF 3

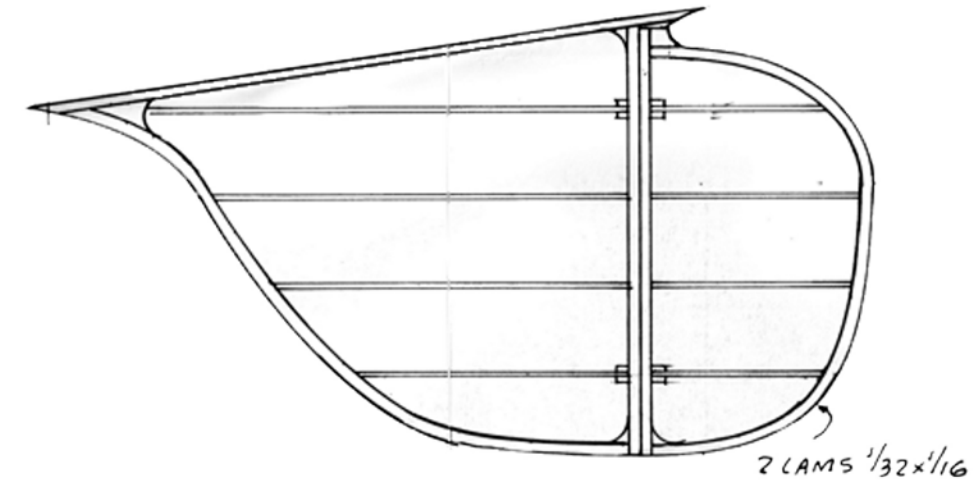
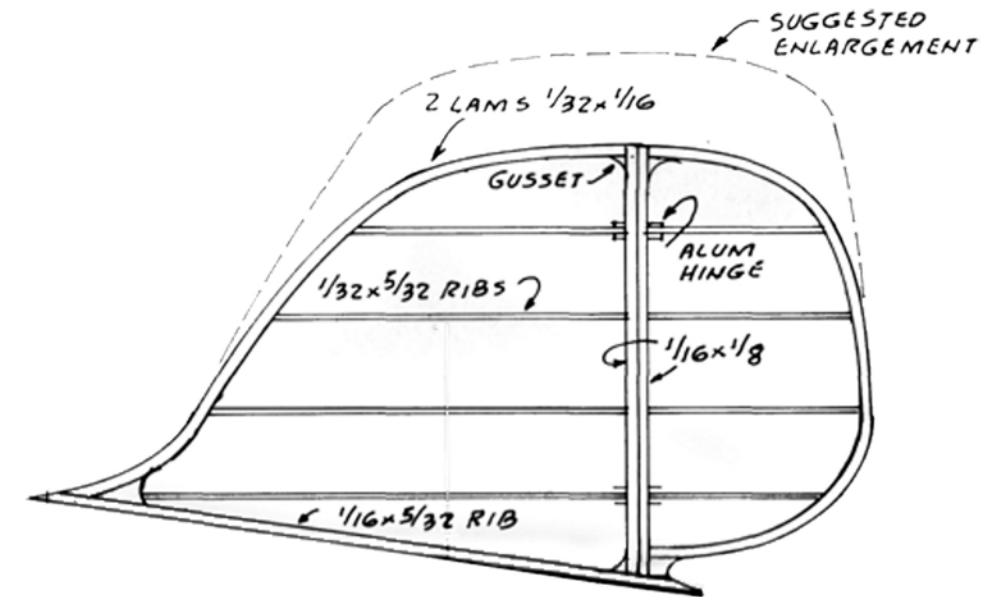
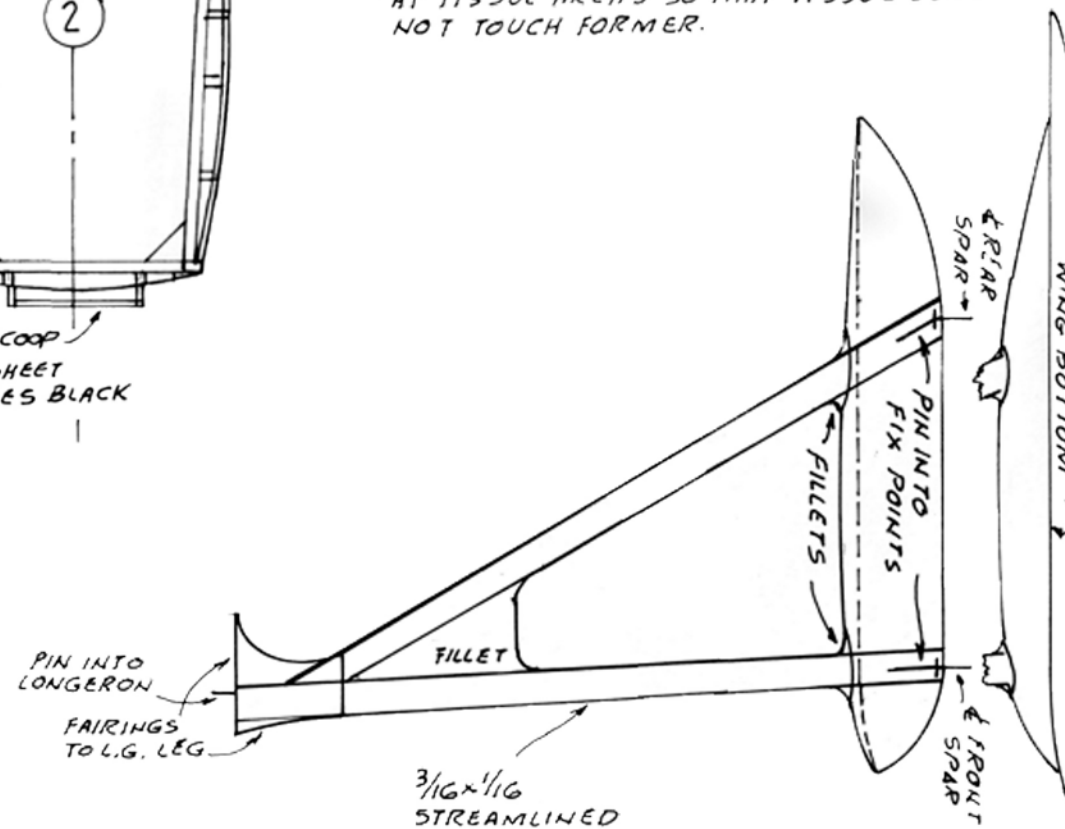


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ALL FORMERS 1 THRU 3 - $\frac{1}{16}$ SH; 4 THRU 6 - $\frac{1}{20}$ SH. ALL STRINGERS, UNLESS OTHERWISE NOTED $\frac{1}{20} \times \frac{3}{32}$ & SANDED DOWN TO FINAL PROFILES SHOWN.

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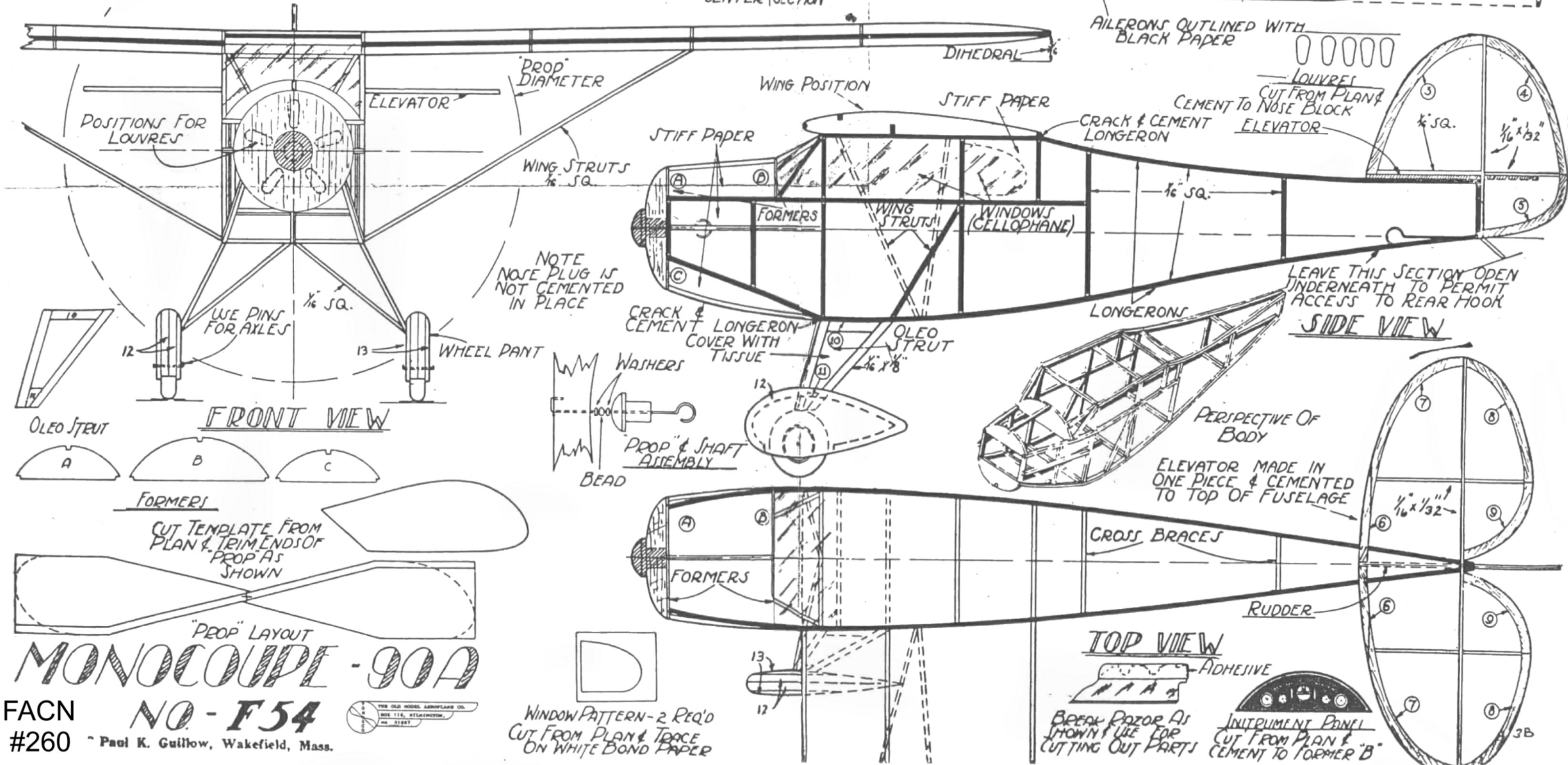
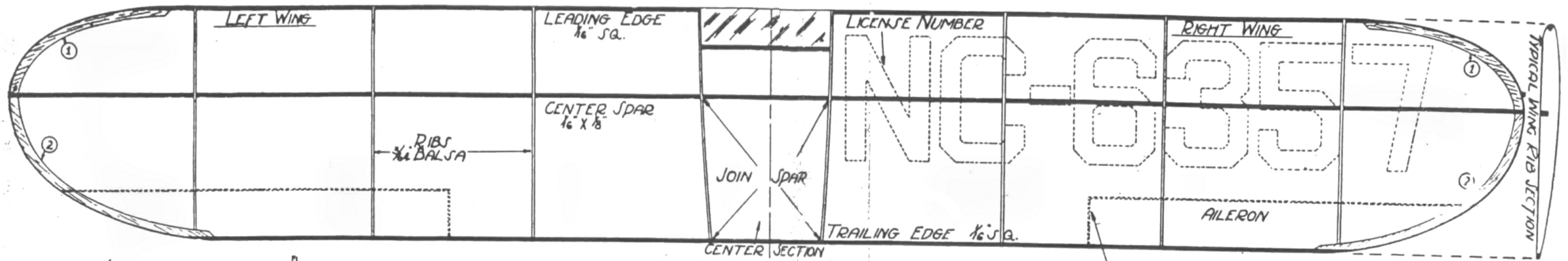
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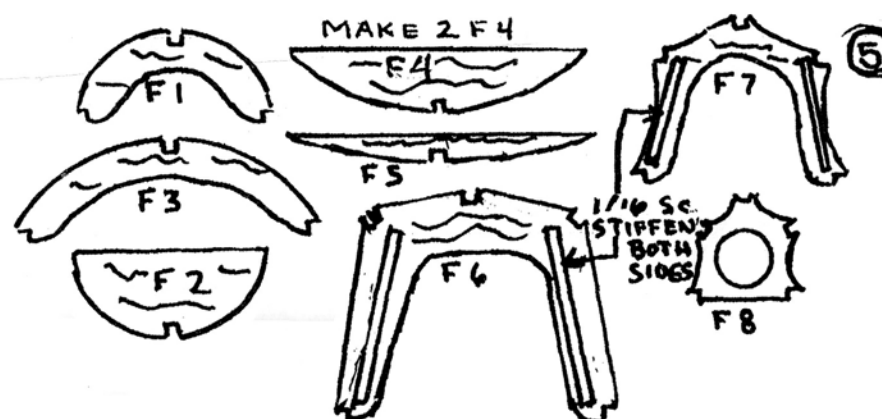
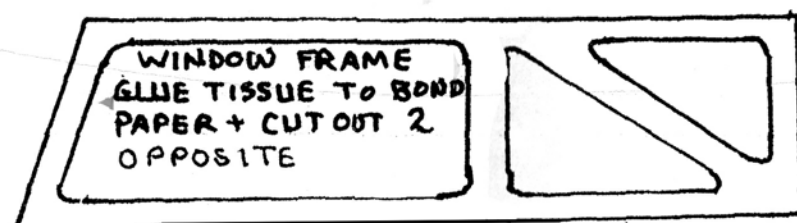
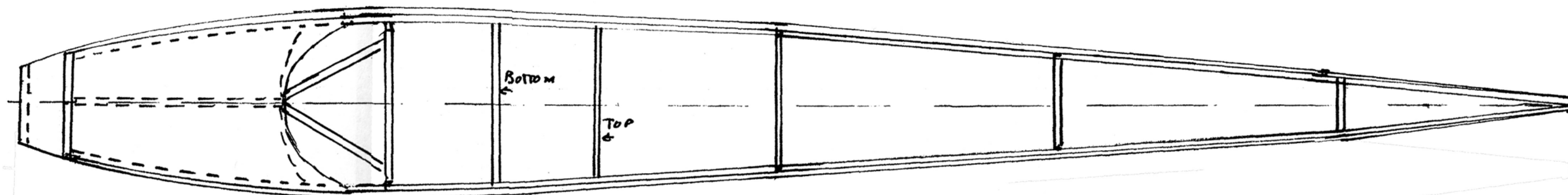
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PLAN C-2
SH 3 OF 3



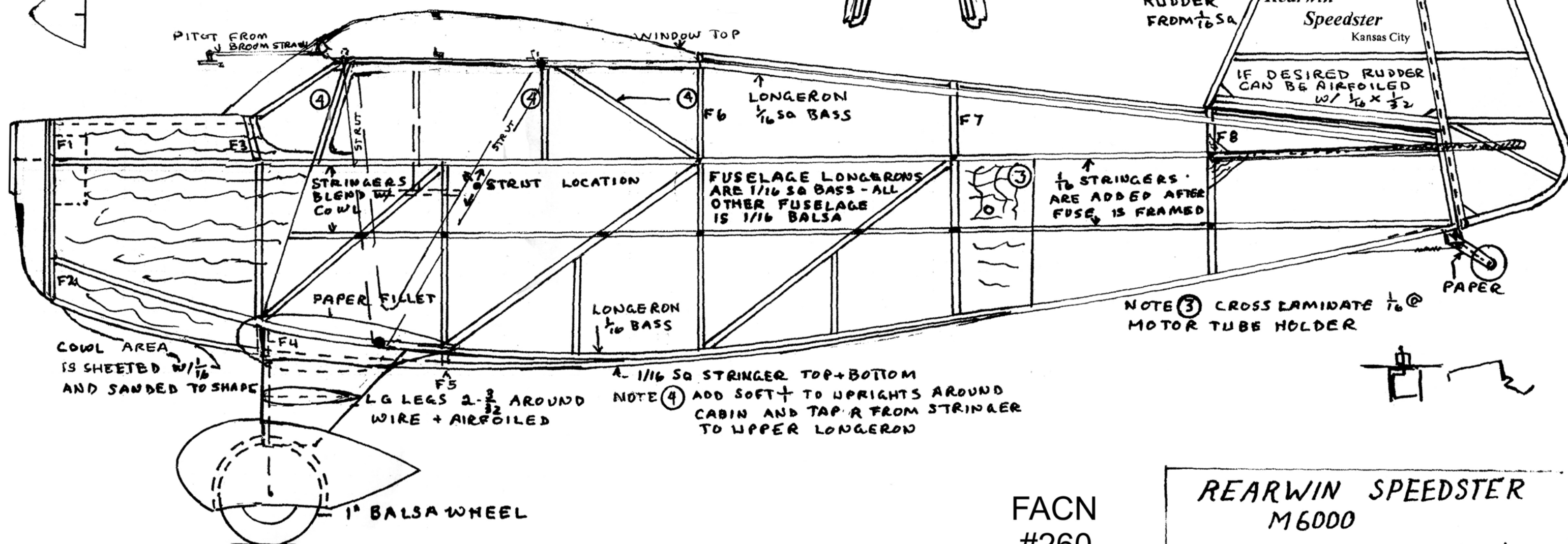


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Speedster
Kansas City

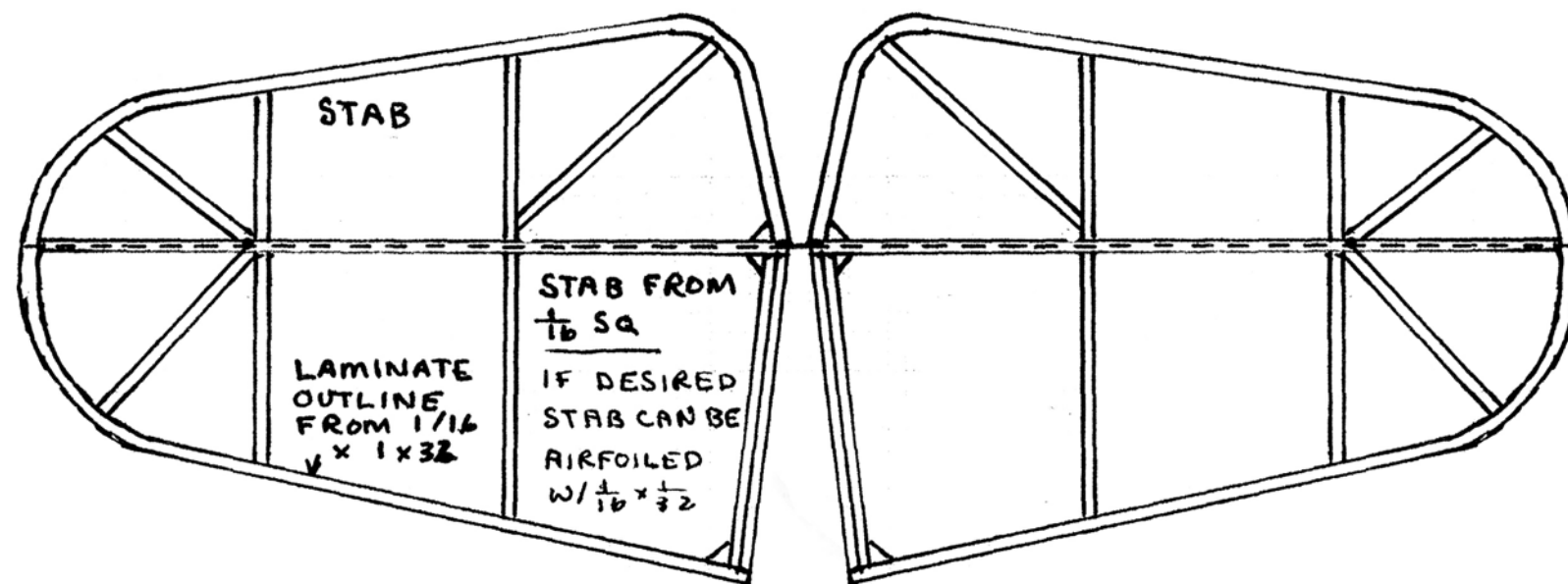
IF DESIRED RUDDER
CAN BE AIRFOILED
W/ $\frac{1}{16} \times \frac{1}{32}$



FACN
#260

REARWIN SPEEDSTER
M6000

MIKE WELSHANS 1/2007



STAB - ELEVATOR SEPARATION

WINDSCREEN & CABIN TOP
- .005 ACETATE

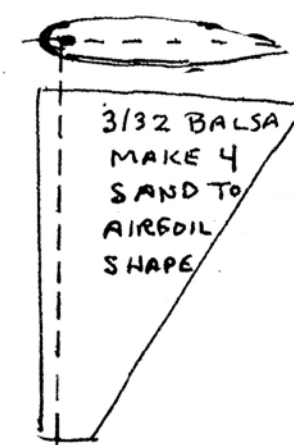
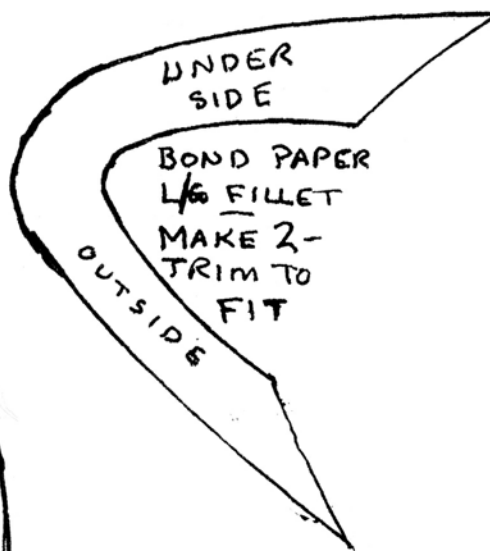
CREASE SLIGHTLY
TO FIT FORMER F.6

FRONT

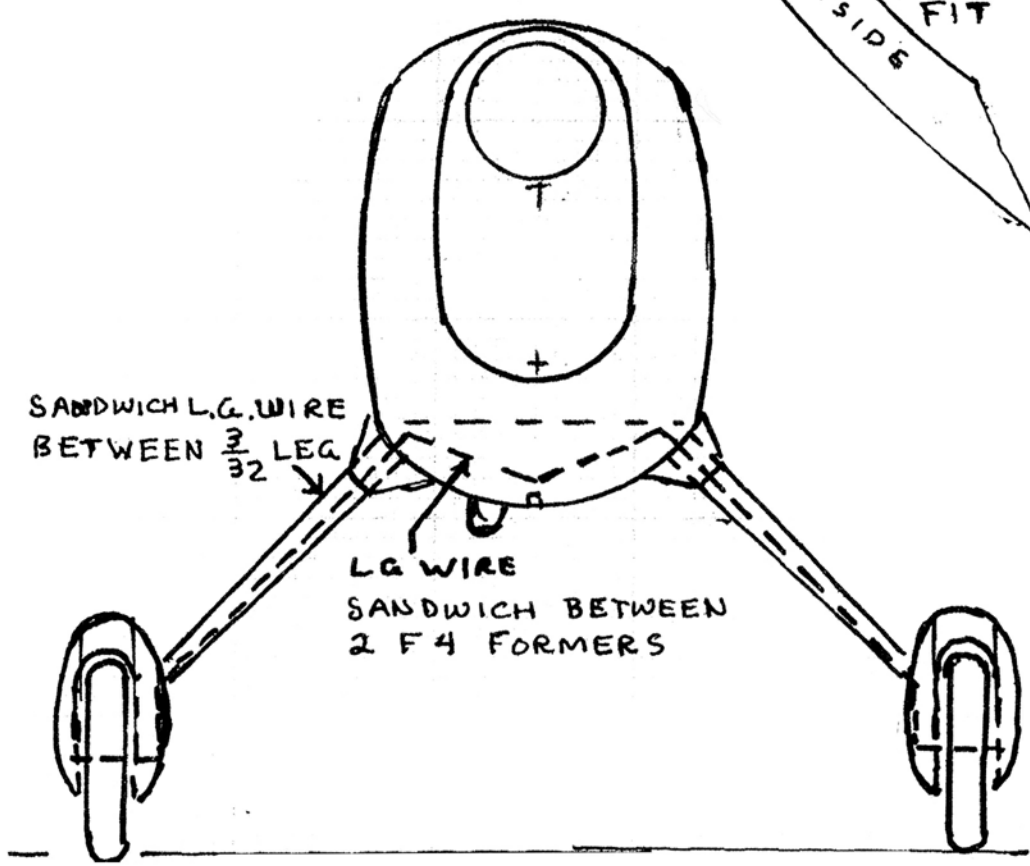
TRIM ENDS TO FIT

RIB A SIDE
WING FAIRING - TISSUE ON BOND
GLASS SIDE

FACN #260



NOTCH FOR WIRE - INNER + OUTER LEG



← WHEEL PANTS FROM - CTR LIGHT $\frac{1}{4}$ " SHEET - OUTER LIGHT $\frac{3}{32}$ " SHEET NOTCH BACKS TO ACCEPT WIRE

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