

D. C.

MAX FAX

MAXECUTERS

**The Journal of the DC Maxecuters,
The dreaded Potomac Pursuit Squadron #6 of the Flying Aces Club**

Editor: Dave Mitchell

2021-3



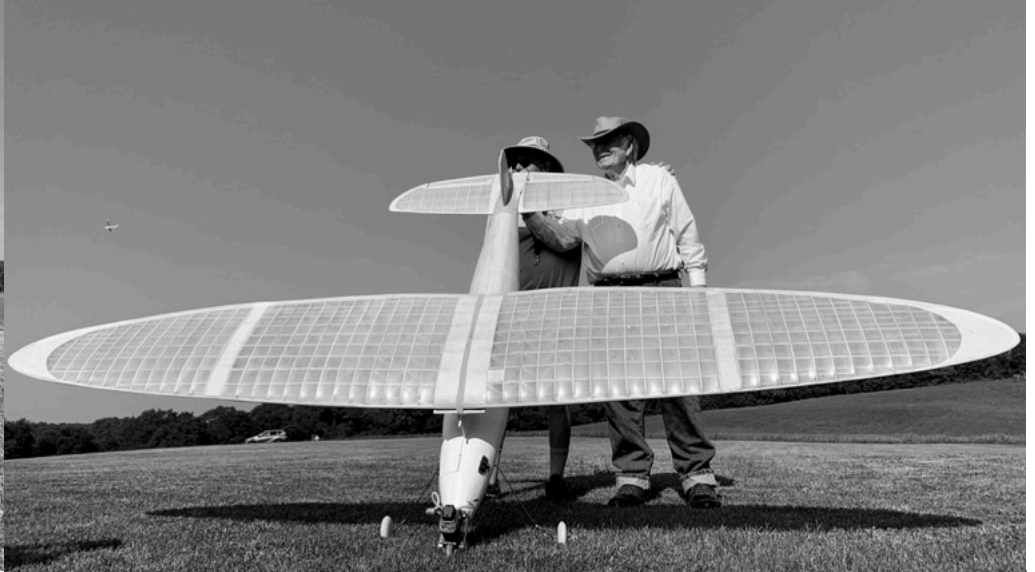
AIRDALE - JULY 2021

The Maxecuters gathered once again at Mike and Mary Dale's for a day of great flying. Yeah, it's mostly R/C, but we don't hold that against our own...

Tom Woodburn with his 1/2 sized Miss America, from the BMJR kit.



John Hunton poses with his spectacular Valkyrie. Technical difficulties have hounded the big bird, but John vows it'll be back!



Udvar-Hazy tough guys. Jay Flanagan with his scratch-built Spitfire, Tony Carp with a Goldberg Gentle Lady, and Bill Hadden with his tried-and-true foamy Panther.



Steve Fujikawa tosses his big beautiful Explorer



David Eames' nifty catapult launch NAV-72. Dave calls this a "blended wing body" design, which is based on an airliner concept he's worked on at Rolls Royce



Bill Hadden readies the Valkyrie for her maiden voyage

MAXFAX 2021-3

The Maxcuters lost one of their finest members this August with the passing of **Tom Schmitt** (1926-2021).

By that time I joined up with the Maxcuters Tom's best modeling days were behind him. Still, even then you could always count on him to show up at the National Building Museum indoor meets, camera in hand, ready for a good chat as the models slowly flitted about.

After one such meet, Tom invited me to visit him and his wife **Mimi** at their home---I guess this was sometime in the early 2000's. I went there fully expecting to walk into the typical lifetime modeler's paradise / hell, with kits and tissue and parts and half built models and balsa dust and archaic, inexplicable tools laying all about. Perhaps I should have known better; but if that was *ever* the norm in the Schmitt household, is was not anymore. What Tom and I discussed that day was a carefully curated collection of three views, plans, magazines and other reference materials, all of which fit neatly into a large hallway closet. Maybe there was more elsewhere in the house, I don't know; but even then, it struck me that Tom had been remarkably circumspect about condensing his collection down to the things that had real meaning to him. When, at the end of our visit, he gave me a small collection of large format three-views, it felt like a handing-off of priceless, personal relics.

So now, as I sort through those three views and pull out the pre-war Wittman Bonzo that we discussed in earnest that day, I think of Tom; and I dedicate myself anew to the idea that I will--someday--build one of these in his memory. You know who will be in the cockpit.

For this issue, then, how do we follow up? Tom was a builder, photographer and editor *par excellence*, but not a drafter of plans....at least not that I have been able to find in the partial MaxFax index that **Allan Schanzle** compiled a ways back. Gosh, **there's** a project for some enterprising archivist, extending the scope of that index to the present....anyway, I figure we've had enough seriousness of late; perhaps something lighthearted is in order, so how about a couple of **Fiction Flyers**?!? This event is crying out for a boost if you ask me, so here we go! I started drafting plans for the *Stratonef H.22* a couple of years ago, and got back onto that project as a way to lighten my modeling load after a successive pair of high-intensity scale jobs. Here then is the result. It's about as short coupled as they come, so I'm not going to predict that it'll be anything less than a handful to trim. But oh, think of the thrill of it sharking overhead, even if only momentarily!!

Not feeling so brave? For those of you looking for less challenge, perhaps you'll be more interested in **Rich Weber's Miss Mystery**. As a condition of publication, Rich made me promise that I wouldn't tell anyone that he originally drafted and built this at 24" wingspan (the Fiction Flyer rules have a 22" max wingspan), so you didn't hear it from ME. The issue is rounded out with some deep discussions of perpetual FF quandries. Enjoy---and use the good wood!

Cheers,

Dm

MAXFAX SUBSCRIPTIONS

Subscription dues for the MaxFax are \$25 per year for residents of the USA, Canada, and Mexico, and \$35 for all other countries.

To subscribe via Paypal:

Visit the Maxcuters website--
www.demaxecuter.org/maxfax

OR

Send a check to:

MaxFax
C/O Beardsworth
1085 Waterbury Rd., Suite 3
Thomaston, CT 06787

Please make checks out to "MaxFax".

Sorry, we no longer accept postal money orders.

MAX FAX SUBMISSIONS - Send articles, plans and high-resolution photos to **Dave Mitchell** via the contact information below. Electronic submissions preferred, but I do old school too.

Dave Mitchell, Editor
230 Walnut St. NW
Washington, DC 20012
davedge@me.com
202-744-9345

MEMBERSHIP QUESTIONS - Contact **Dave Mitchell**; if phoning, leave a message! Email gets more immediate attention. **Please include the words "MaxFax" in the subject line.**

Your mailing label indicates the year and month of the last issue of your current membership. An "X" in the box below your address is a reminder that your dues are due.

PUBLISHING DATES - Four issues of MaxFax are sent each year, one each quarter, but since this is a volunteer publication nothing is guaranteed except that four issues will be sent to all members.

UPCOMING EVENTS:

Maxcuters ZOOM meetings

Occasional Tuesdays at 11:30am, hosted by Carl Hampton. Check your e-mail for notices. To receive an invitation, E-mail Carl at: **champton3@cox.net**

Indoor flying at Bauer Center

It's back! 12:30 on Wednesdays during the school year.
14625 Bauer Dr, Rockville, MD

West Potomac HS Indoor Fun Flies

Save the dates! More info as the dates come up.
Saturday, November 6th, 8:00 am -3:00 pm, Main Gym
Saturday, February 12th, 8:00 am -3:00 pm, Main Gym

Please follow appropriate COVID precautions at all meets.

Remembering Tom Schmitt

I met Tom Schmitt about 50 years ago when I moved from California to the Washington D. C. area. We shared many common interests - airplanes, models, art, and more. We became and remained close friends for more than half of our lives.

Tom was an active modeler, giving generously of his talent and time to local flying clubs. He was also a technically savvy, full size airplane enthusiast - working as an aeronautical engineer at the Naval Air Systems Command (NAVAIR). His beautiful, accurate, and fine flying models showed off his craftsmanship and meticulous building skills, setting high standards for others to work toward. In addition to modeling achievements, Tom became known for his impressive skill as a model photographer. Club newsletters, model magazines and books carried many of Tom's photos showing model aviation at its best; quite remarkable since photography at that time provided little "automatic" help now provided by digital camera technology.



A stalwart DC Maxecuter, Tom was one of the early volunteers to put together and edit issues of the famous Maxfax newsletter. He developed and produced its popular photo pages. He also made the earliest move to a digital version of the newsletter - at a time when that was a complicated, labor intensive task.

I admired Tom's boundless curiosity. Not long ago, when electric power for models was a foolish idea, Tom and I decided to build our own motor systems. It seemed to work, and soon motor "kits" for other club members turned into an unintended business adventure - HiLine, Ltd. Electric Motors. As the company quickly grew, Tom wisely knew when it was time to get back to modeling - just for the fun of it. So we did.

We became close friends of Bill Winter when Bill moved to Virginia as editor of AMA's Model Aviation magazine. We frequently flew with Bill at COMSAT, who christened the club field Shangri-La. As Bill's health faltered, we visited him weekly to have coffee and share stories about on-going projects. Tom would bring photo albums for Bill, including his favorites from Shangri-La. Bill had a Cockatoo, who took to Tom, jabbering and calling out to him for attention as soon as he entered. Tom was loved by all.

I feel privileged to have known and been friends with Tom. All of us who knew him are better for it - this remarkable, generous person will be missed, but always remembered.

Don Srull

Tom and I were at NAVAIR (Naval Air Systems Command) in the 80s. We occasionally would have lunch together with Capt. Pat Daily.

Dudley Prisell

Tom led the way into the age of the world wide web by setting up the original Maxecuters website and populating it with many of his great photos and captions. He did it with hand coded HTML, long before sites like Flickr and Wordpress and the like made photo sharing all so easy.

Bob Marchese

It is amazing to think about the amount of time and effort Tom put into the photo pages back when it was all film. It is a great legacy for Tom to have that work published and available to us.

Wally Farrell

Tom was a good friend for almost 40 years. He was one of the good guys, and I am truly sorry to see him go.

Dan Driscoll

Tom was extremely active in the Maxecuters when I first joined the club in 1980. His photos were a labor of love when it was difficult to take, develop, and put photos in a newsletter. A true artist, he would carefully compose and crop the photos for maximum impact. His was always a gentle presence who was always helpful with advice back when my noseblocks were loose and my coverings were sloppy. He kept up correspondence with modelers throughout the world and was a true ambassador of our craft.

Glen Simperts



Epic quest? Questionable epic? A cautionary tail? A simple case of quod erat demonstrandum? You decide....

MISS MISTERY, FICTION FLIER

by Wingnut, in literary collaboration with Pete O'Tewbe

Chapter One: Her

It was the darkest and stormiest night in a hot summer full of dark and stormy nights, maybe ten years ago, maybe eight, I dunno, who cares. All I remember is how it began, which is easy, because it began the same way most of my life stories have begun: just me in a cluttered room, alone, looking for something to take my mind off my latest regret--something to replace *her*. Of course, her had a name. Booth. Booth Ranger. Maybe you heard of her? Yeah. Her.

Okay, so I'd fallen pretty hard, I admit. I thought I was a tough guy, but the day she walked through the shop door and into my life my legs had got weaker than the plotline of a third rate dimestore gumshoe pulp novel. It'd been fun for a few years, sure, we had some good times, and I still say it's no crime if maybe I was guilty of thinking she was mine...you know, *the one*.

Ha. Mine? Who was I kidding. Booth propped me up and took me to the dance in Fiction Flier, one of my favorite FAC—that's Flying Aces Club—events; but she was too good for me, and she knew it, and she knew that I knew that she knew it, and everybody knew it. Maybe I was a fool, maybe I was blind, but I could still read the writing on the wall. I was too proud to wind up one of those sad sacks holding an empty bag of nothing, so I got the jump on the situation and told her it was over between us, Jellybean. She cried, but I figure they were tears of joy. A regular crocodile. *Planes*.

Anyway, there I was, killing time, assembling docs for a variety of interesting Fiction Flier options from the old pulps and comic strips of the 30s & 40s, when WHAM! SLAM! THUNK! Somebody shoved something through the mail slot, and quick-like! I heard 'em running off, and then the sound of whitewall tires

squealing on wetblack pavement like a stool pigeon on a chiseler. I threw open the window to see if I could get a glimpse of a licence plate, but all I got was a facefull of rain, and my papers blown all across the room by the wind coming in harder than a Joe Louis one-two. I slammed the window shut and looked around. A real mess. It took me a couple of hours to mop it all up and get things in order, and I was gonna call it a night when I saw *it*...the

thing that started it all, lying there on the floor just inside the door. I'd forgotten it in all the excitement. I gave it the once-over—a book I guessed, wrapped in plain paper. I dusted it for fingerprints. Nothing. It seemed safe enough, so I poured a shot of milk, sat at my desk, and opened the package. It was a book alright, about some guy named *Russell Keaton*.



Keaton...I'd seen that name before...then it all came back to me like a loving mother's slap in the face: I'm a kid again, lying on the living room floor reading the Sunday *Buck Rodgers* cartoons, back in the good ol' days before the second Big Fuss—and this Keaton character, he was the artist! Cool. Pretty soon, the milk carton was empty and it was later than it seemed. There were all sorts of interesting fictional airframes scattered through the book, and before I knew it I'd forgotten all about *her*--what was her name again? I found some drafting paper, pointed up my Ticonderoga #2 with my X-acto and started in on a whole bunch of the crates with nothing but a French curve and a straightedge for company. I could hear the night voices calling for me through the window, but I ignored 'em. Time flew. I hadn't felt so giddy since the Dodgers beat the Yankees in nineteen hundred and fifty five...

Chapter Two: Them

...and we all know what happened after THAT. The Bronx Bombers got their revenge in '56, and a year later the Dodgers skipped town, ripping out every Brooklyn kid's heart and taking it with 'em. I learned a hard lesson then, that nothing good lasts forever; and now to prove it sure enough, a short while after the Keaton book had got me all excited, the geniuses at FAC-GHQ started tinkering with the Fiction Flyer rules and decided it would be a good idea to *eliminate the scale judging and bonus points from the event!* What were they thinking?!? Another one of their cockamamie capers contrived to contort and confuse contestants! Would they never learn? If you figure I wasn't too keen on the change you figure right; I knew right then and there that some low-level, unscrupulous, win-starved, kanone-hungry curmudgeonly character would come up with a slick high wing cabin monoplane Fiction Flier that would essentially dominate--and ruin--the event. Did I mention it was my favorite event? And now, no bonus points?!? No scale points?!? No problems! Try it, you like it, and have some more while you're at it! I got madder than a hornet,

stomping around the office and throwing things and cussing out GHQ and waving my arms around until I knocked over a big stack of the drawings I had made earlier that month. Wiping the froth from my mouth, I looked them over, and it slowly dawned on me that one of the designs from the Keaton book fit this "High Wing Weenie" Fiction Flier bill perfectly. Being something of a curmudgeon myself, well...it seemed to be written in the stars. If somebody had to do it, it might as well be *me*...hey, at least I'd know it was done right! Some say it's irony; maybe you call it destiny; I just say I didn't have a choice. **Miss Mystery** was about to become a model aeroplane.

Chapter Three: It

The outline of the fiction that goes with this Fiction Flier is that the heroine of Keaton's "Flyin' Jenny" comic strip, (Jenny, of course) was to compete in a cross-country all-girl air race. The bad guys got two identical airplanes painted up with the same registration, and two girl pilots

made up to look identical too. One plane took off from the start line, the other already was stashed close to the finish line. So clever.

Part of the fun/challenge of this event is trying to come up with a 3v and plan that looks a lot like the artwork. There are usually multiple versions that need to be reconciled into a reasonable compromise that captures the character of the ship. There's also a certain amount of "creative geometry" in the artwork that needs to be overcome to get the three views to agree with one another. Fortunately, I enjoy the drawing process almost as much as building the model.

Chapter Four: QED

In the end, Miss Mystery did exactly what I'd hoped it would do. It flew for the first time that year at the big

contest at Geneseo, needing only a minor adjustment to the thrust line. It won the event without breaking a sweat and went OOS on its third official flight. It wasn't one of those dramatic "specked out at thirty thousand feet going straight up" kind of OOS flights. It was way out

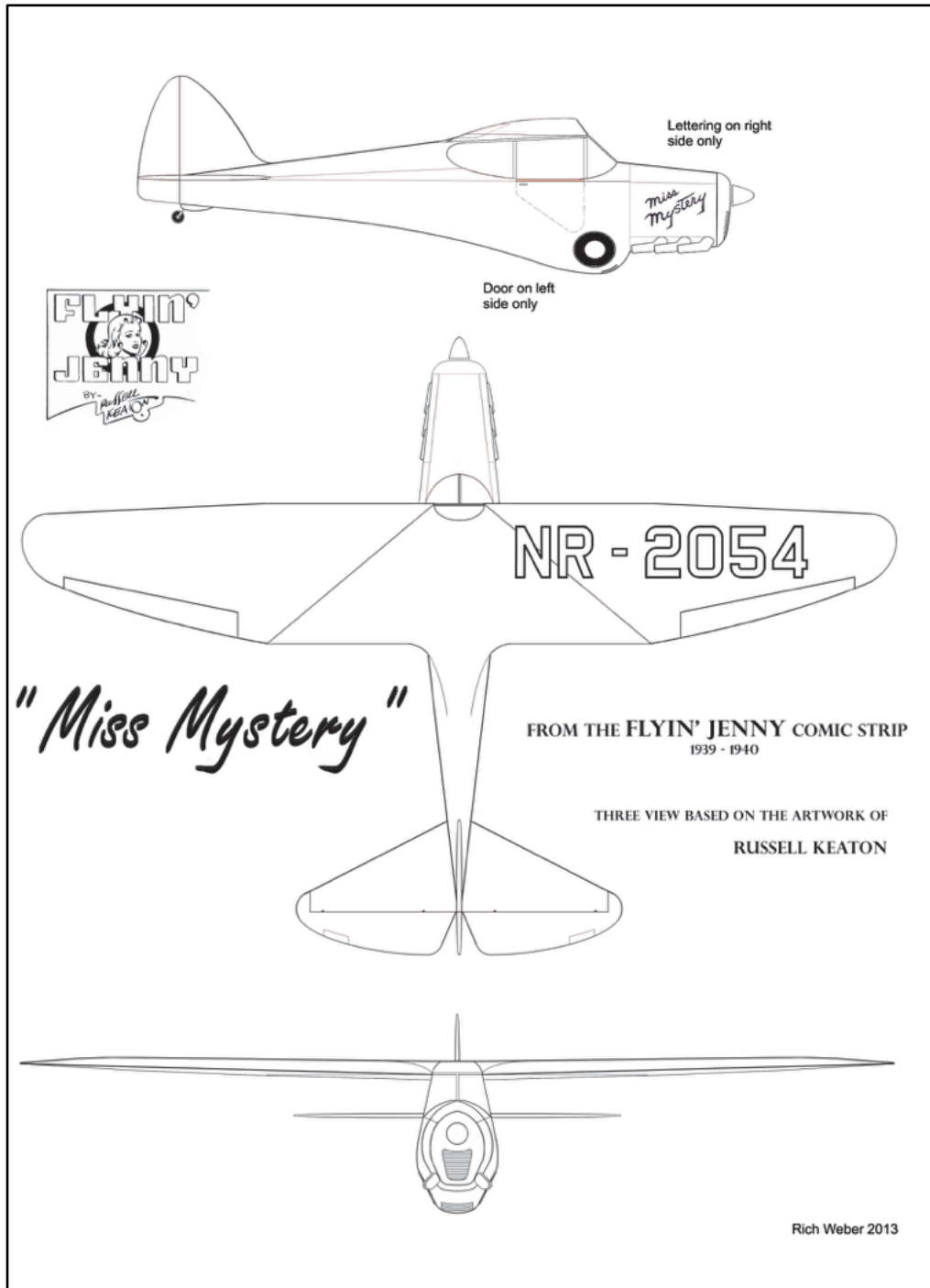
beyond the corn fields when it looked like it was coming down, and I just didn't feel like wasting precious contest flying time looking for it. Sorry, Sweetheart. However, it had made the point, and whattayaknow? The next year GHQ



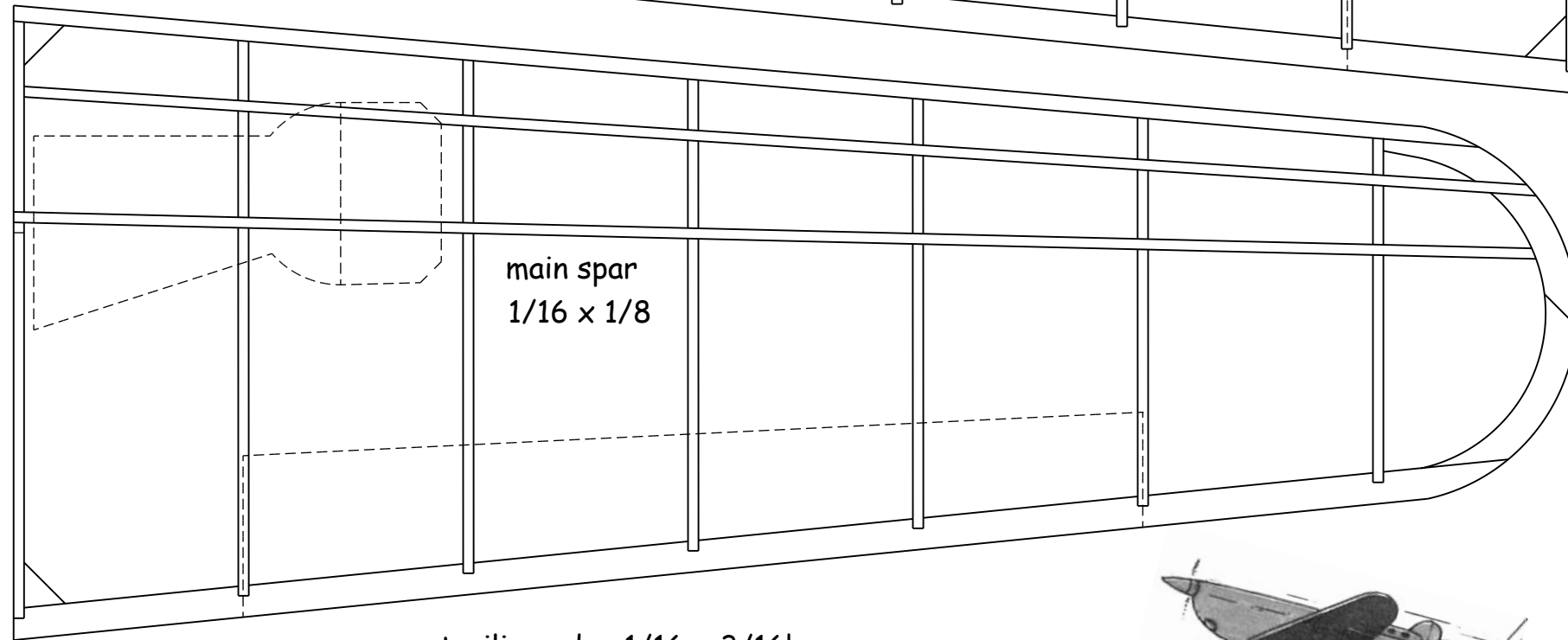
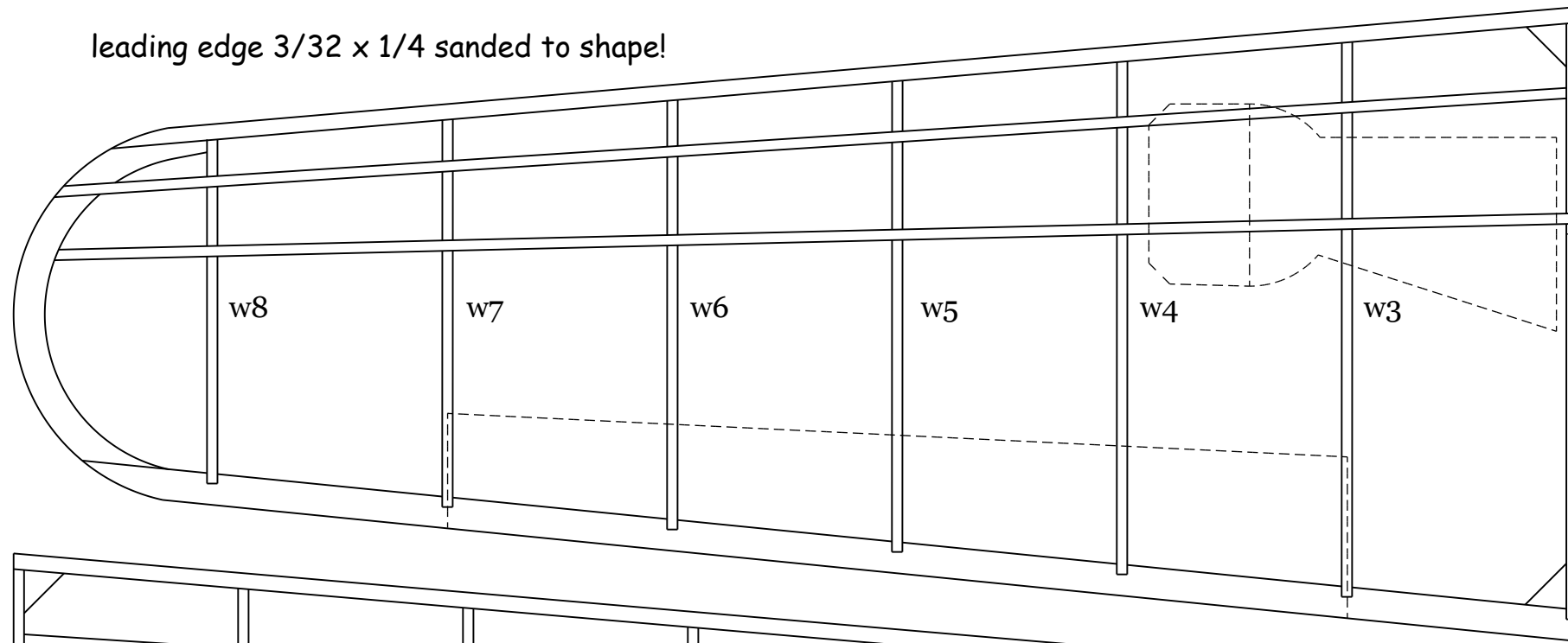
came to their senses, did an about-face, and Scale Judging and Bonus Points were back as a part of the Fiction Flyer rules, where they have remained ever since. Mission accomplished.

If you're looking for a simple, good flying entry for the Fiction Flier event, Miss Mystery is your ticket to the game. This is the part in the story where there are usually notes to help you figure out some of the finer points in the plan. I don't think it needs much of that. There's nothing complicated in the design. No struts, wires, landing gear, oddball construction, nor canopy to form. As Tracy said of Hepburn, "Not much meat on her, but what there is is cherce." The only unusual shape is that bulge under the fuselage, which can be shaped from a soft balsa block. You can dispense with the Rees style wing construction if you are more comfortable with the more traditional Comet style wing framing. Just swap in solid ribs and a 1/16" spar top and bottom at the 1/3 chord point. If you're partial to using DTs on your models, this one could probably use one. The color scheme is left to your imagination. I used clues from the original artwork to add color lines to the 3v and plan. You are free to make your own interpretations. The original model was pink and white with black markings, simply because I thought that reflected the female-oriented nature of the original 1940s comic strip.

Stay tuned for more Fiction Flier designs. I've got a few more on the drawing board and the editor of this rag is a harsh task master...

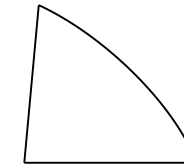
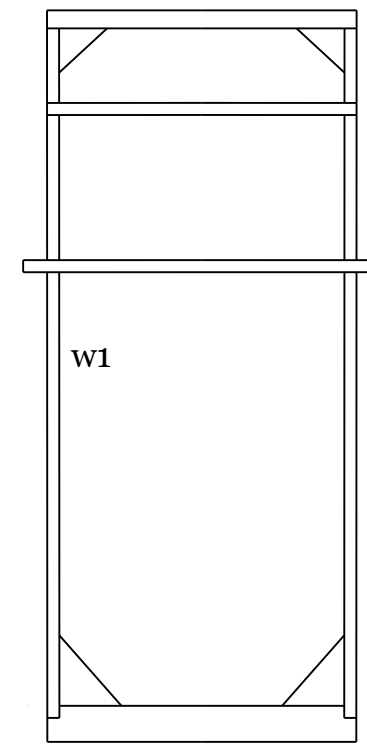


leading edge 3/32 x 1/4 sanded to shape!

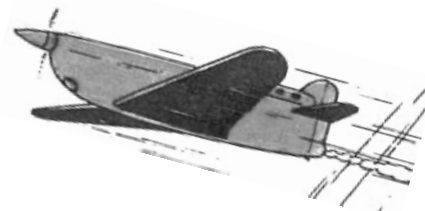
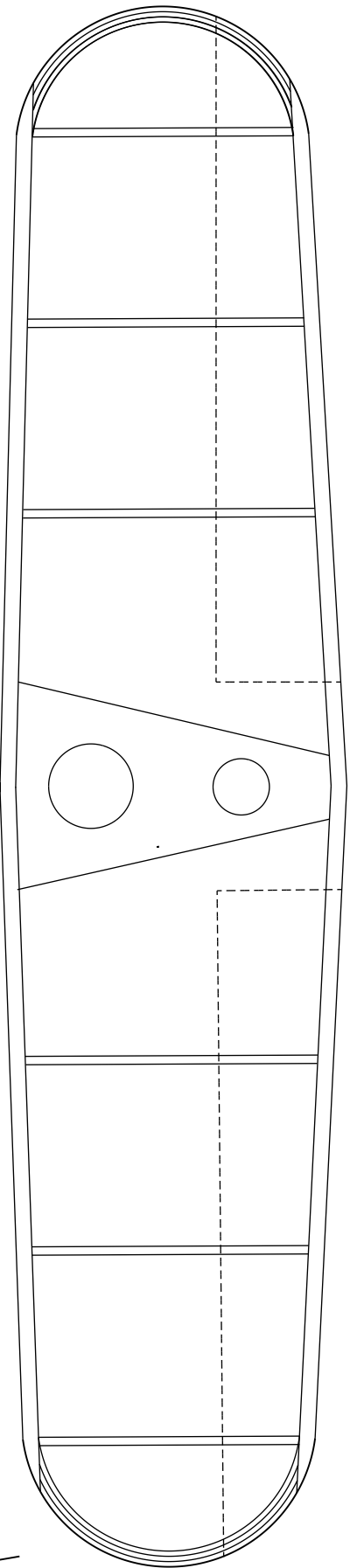
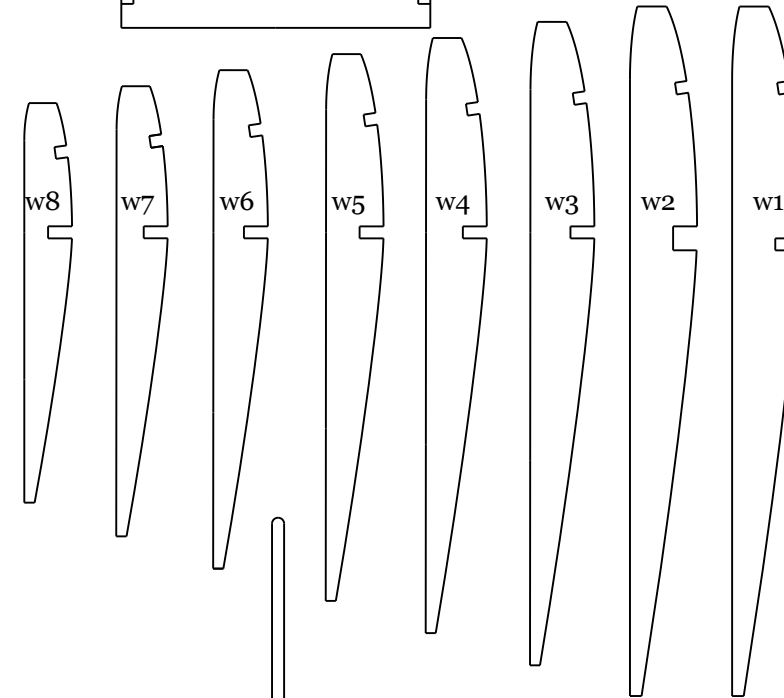


main spar
1/16 x 1/8

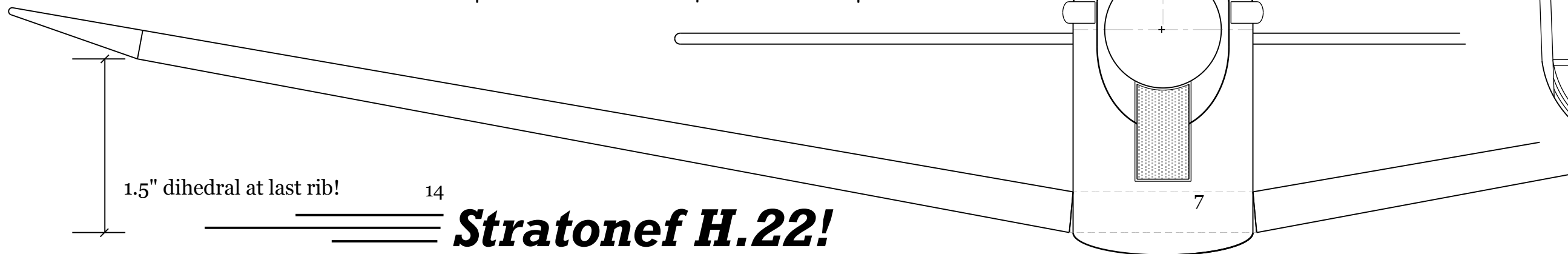
trailing edge 1/16 x 3/16!



Dihedral
angle gauge-
use for root
rib on center
section and
main wing
panels!



All parts 1/16" sheet or square stock except where noted!

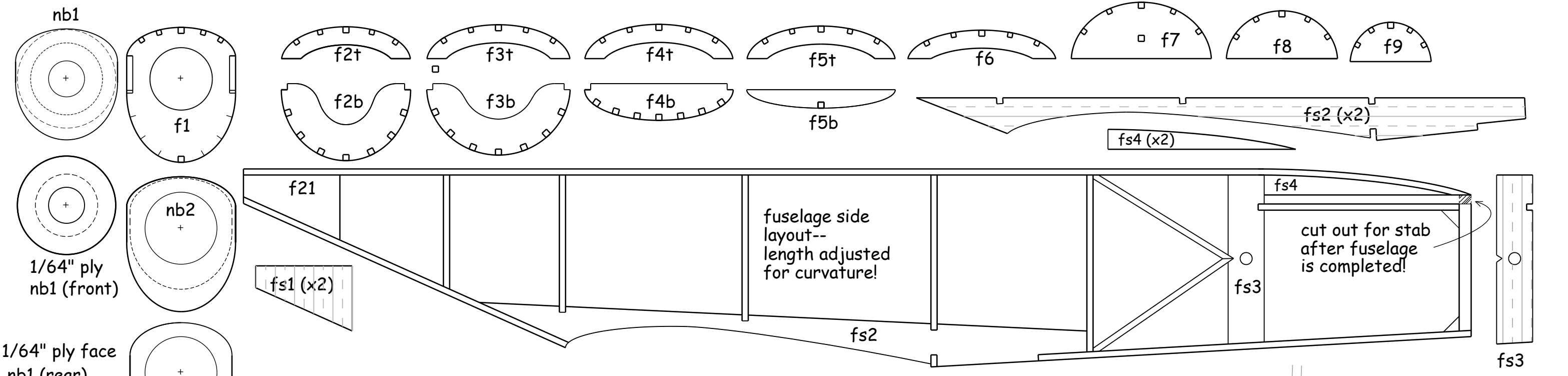


1.5" dihedral at last rib!

14

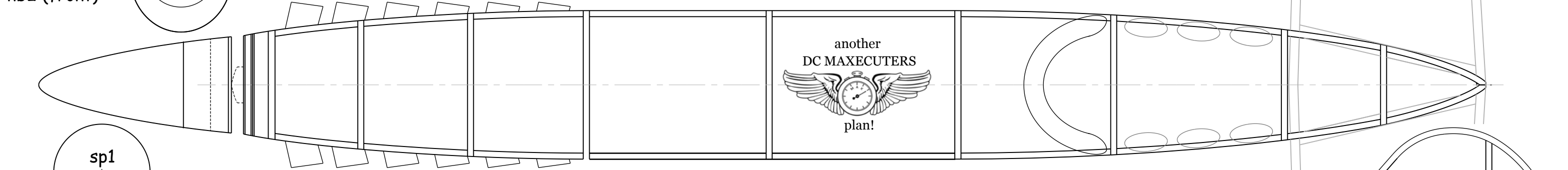
Stratonef H.22!

7



1/64" ply nb1 (front)
 1/64" ply face nb1 (rear)
 nb2 (front)

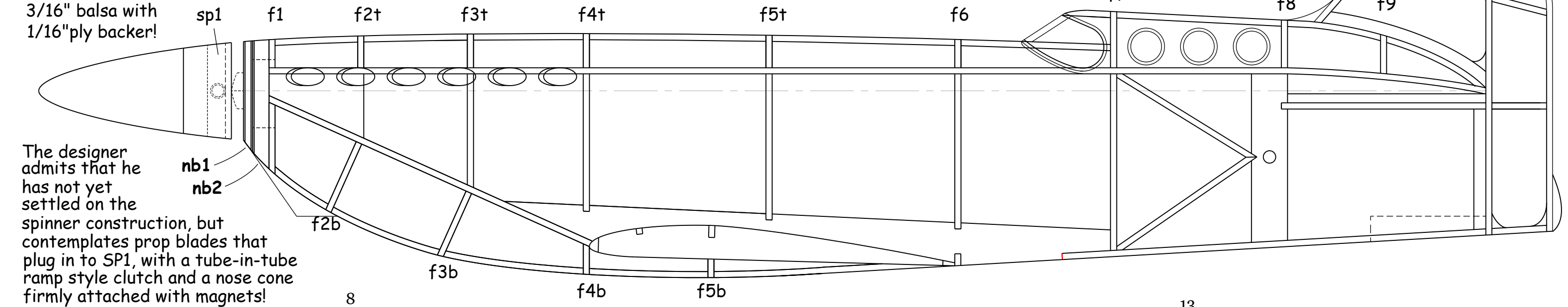
All parts 1/16" sheet or square stock except where noted!



A Gizmo Geezer adjustable nose button is recommended!

Color scheme: Bright Red overall!
 Black lettering!

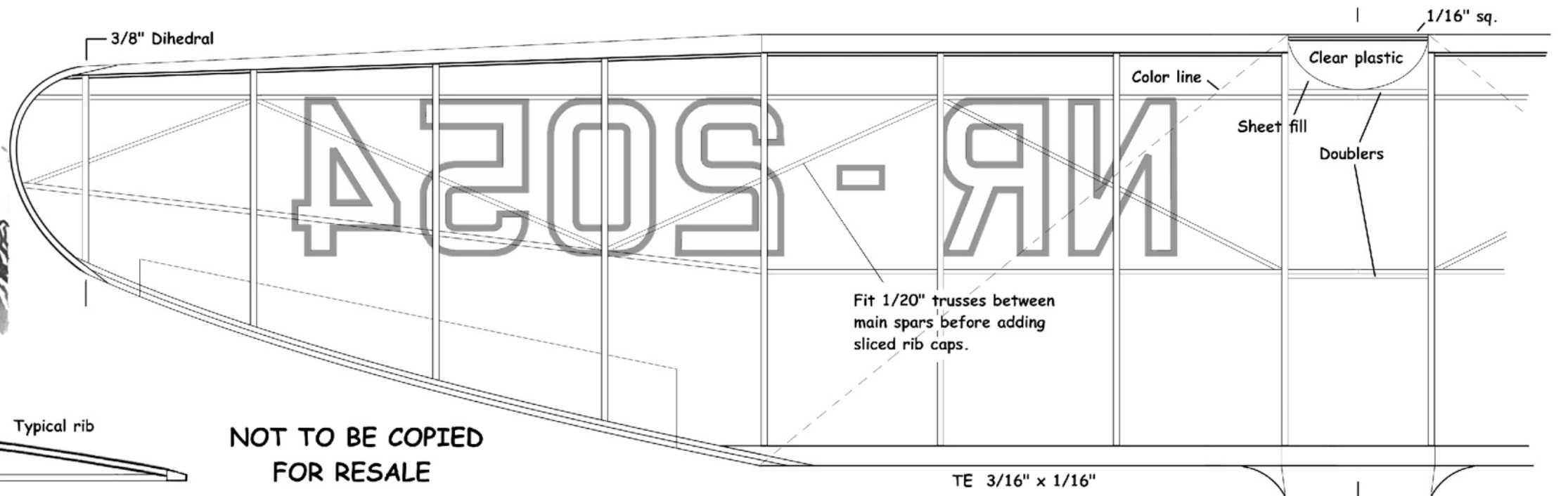
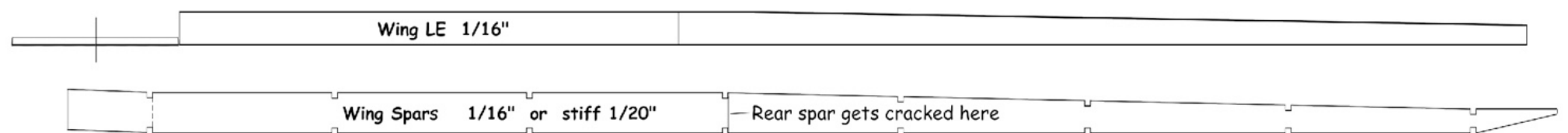
sp1
 3/16" balsa with 1/16"ply backer!



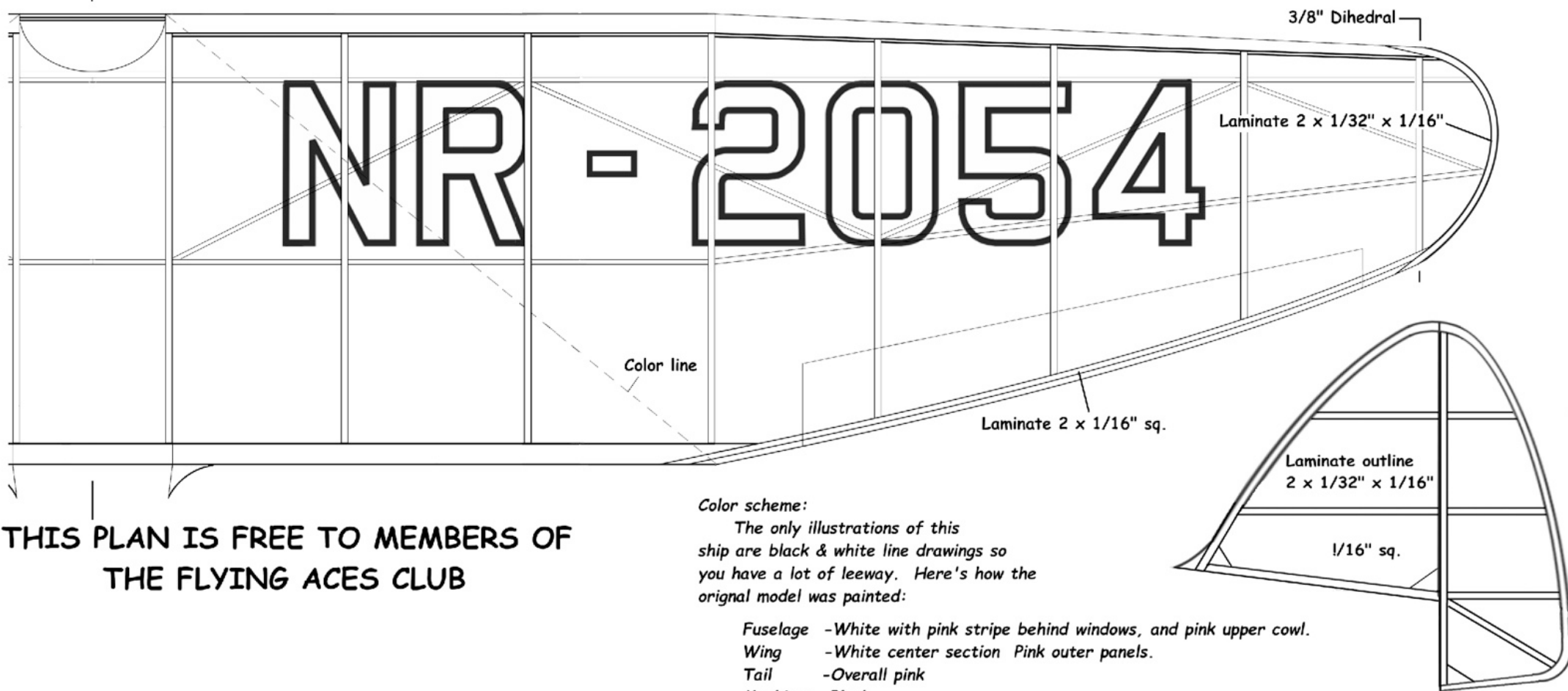
H-22



1/16" sq. at center section



NOT TO BE COPIED FOR RESALE



THIS PLAN IS FREE TO MEMBERS OF THE FLYING ACES CLUB

Color scheme:
The only illustrations of this ship are black & white line drawings so you have a lot of leeway. Here's how the original model was painted:

- Fuselage - White with pink stripe behind windows, and pink upper cowl.
- Wing - White center section Pink outer panels.
- Tail - Overall pink
- Markings - Black



A FLYING ACES CLUB
FICTION FLIER

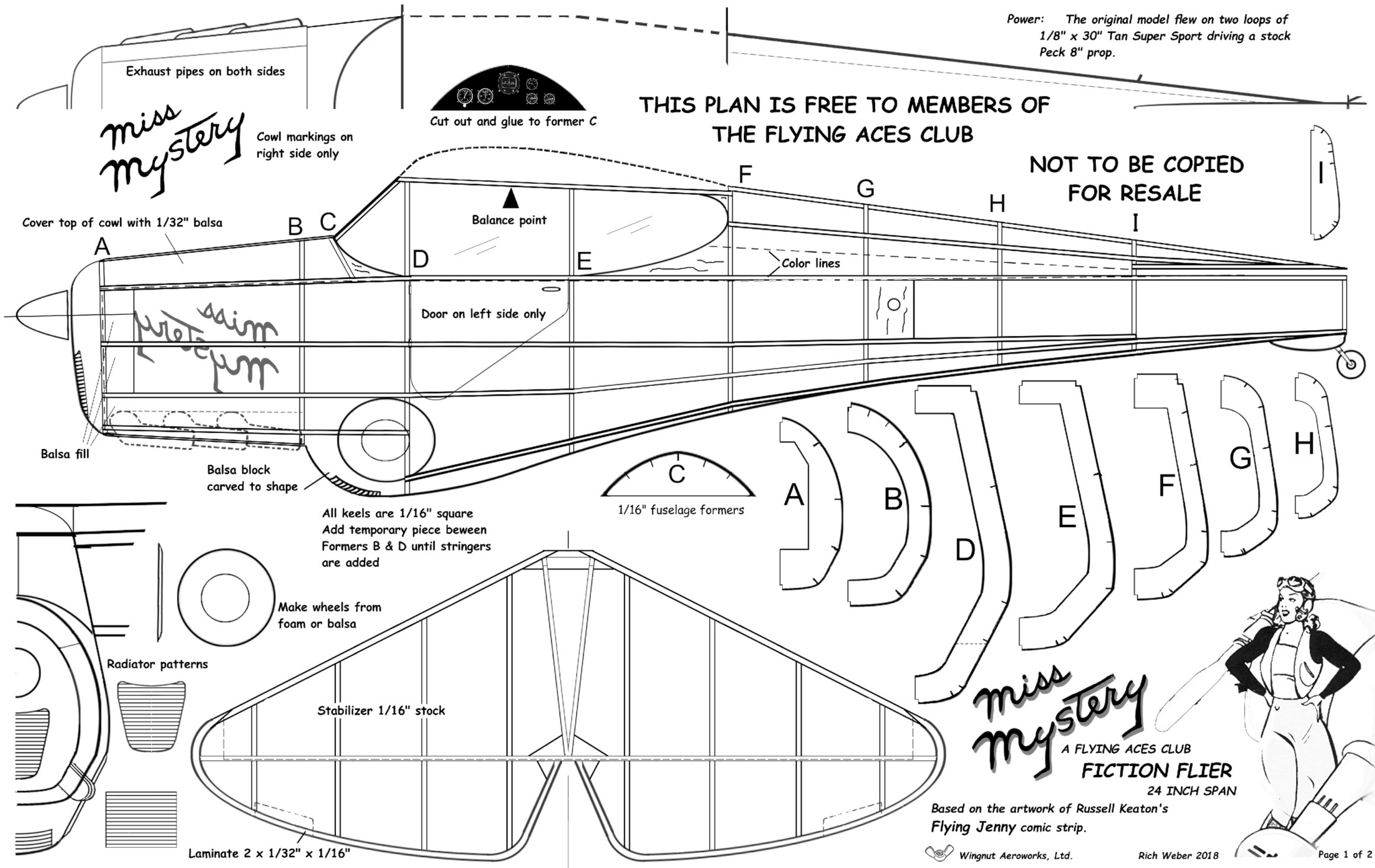
22 INCH SPAN

Based on the artwork of Russell Keaton's
Flying Jenny comic strip.

Power: The original model flew on two loops of 1/8" x 30" Tan Super Sport driving a stock Peck 8" prop.

THIS PLAN IS FREE TO MEMBERS OF THE FLYING ACES CLUB

NOT TO BE COPIED FOR RESALE



miss mystery

A FLYING ACES CLUB

FICTION FLIER

24 INCH SPAN

Based on the artwork of Russell Keaton's Flying Jenny comic strip.

STRATONEF H.22 FICTION FLYER

By Dave Mitchell

The Belgian cartoon artist **Georges Prosper Remi**, aka **Hergé**, was well known for incorporating aircraft into his fast-paced adventure stories. Often, the aircraft were recognizable as minor variations on an existing full-sized example; but in the case of the *Stratonef H.22* I think the argument can be made that he created a proper Fiction Flyer.

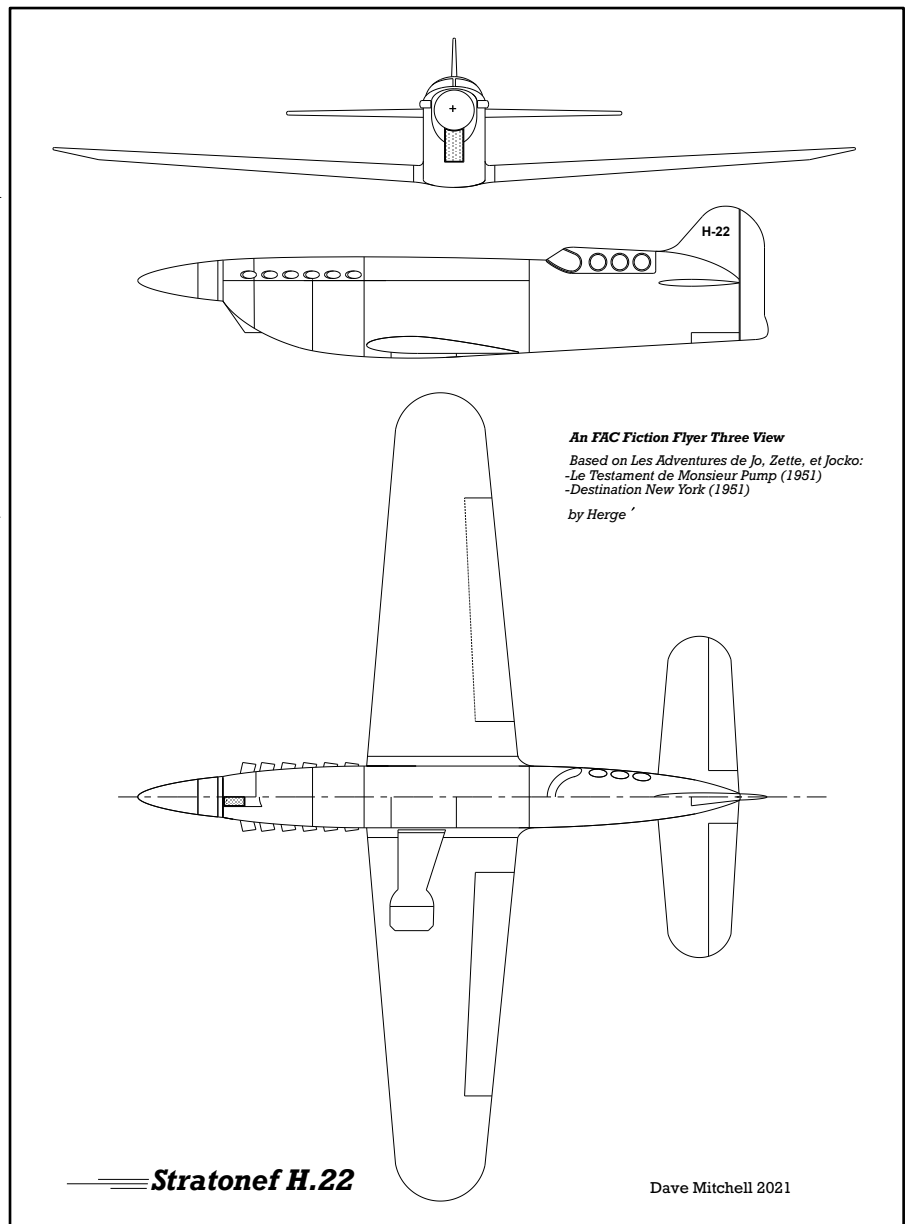
The Stratonef H.22 first appeared in 1938 in *Coeurs Valliant*, a Catholic French weekly newspaper. Hergé had begun his association with the paper in 1930 with his famous *The Adventures of Tintin* series; in 1936, he created the less-well-known *Jo, Zette et Jocko* series at the request of the paper's editor, Abbot Courtois, who desired a more "family oriented" feature. In contrast to Tintin, who was a globe-trotting, disaster-courting orphan, Jo and Zette were to have a recognizable family life. In actual practice, this meant a good deal of the strip was spent detailing the distress of their parents, who sobbed and wrung their hands as Jo and Zette trotted the globe and courted disaster in their own fashion, with Jocko, their pet chimpanzee, along for the ride. For his part, Hergé apparently deeply disliked the strip, but it was complicated times, and a job was a job was a job. As anyone who has looked further into the history of this cartoonist will know, Hergé's relatively high profile would land him in many a pot of hot water. The history of his working alliances raised questions then, and continues to raise eyebrows today....maybe even MORE today. Such is the price of fame.

But I digress. Could the Stratonef have failed to excite the hearts and minds of the 1930s youth? C'mon. With its bright red color scheme and rakish lines, its minimal markings that practically scream "clandestine!" (not an easy thing to scream, try it) and its Jules Vernian deep-sea-diving porthole canopy side windows, who KNOWS what seeds of mischief it may have sown in the innocent hearts and minds of the intended audience! I



I know I fell for it, and I'm no schoolboy. The *Stratonef H.22* series comprised two related stories: *Le Testament de M. Pump* (Mr. Pump's Legacy) and *Destination New York*. In his will, the late Monsieur Pump has left \$10M to the builders of the first aircraft to fly from Paris to New York at 1000 km/hr--that's about 620mph, no small feat in

1936! A condition of the prize is that it must take place within one year of the reading of the will, however, so the race is on! Zo and Zette's dad, Monsieur Legrand, is pretty darn handy. He is hired to design and build the Stratonef H.22 by the *Sociétés Anonymes Française de Constructions Aéronautiques*, or SAFCA. Among the bad'unns in the game are the Stockrise brothers, William and Fred, nephews of M.

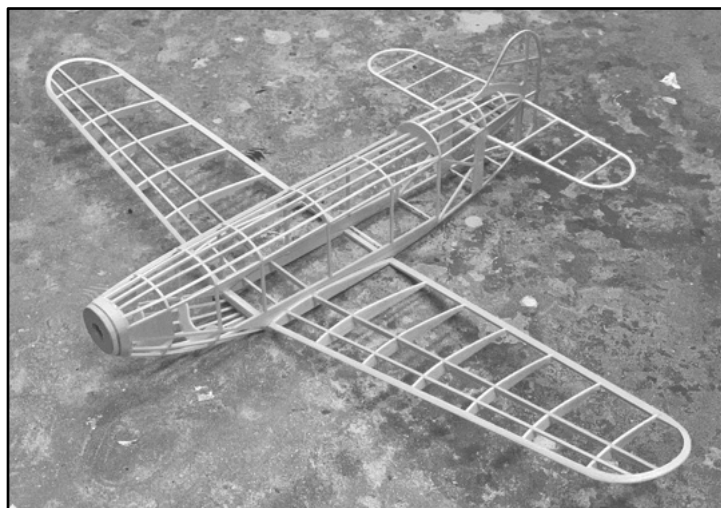


An FAC Fiction Flyer Three View
Based on *Les Aventures de Jo, Zette, et Jocko*:
-*Le Testament de Monsieur Pump* (1951)
-*Destination New York* (1951)
by Hergé

Pump, who stand to lose their stake in the will if the H.22 succeeds in its objective--and they are none too happy about THAT. In fact, they will stop at *nothing* to prevent the Stratonef from realizing its purpose INCLUDING being downright mean and discourteous to Jo, Zette, and Jocko. In the end....well, you'll just have to read the stories yourself to find out what happens, as our heroes zigzag their way through a multitude of dangerous circumstances that would make even the stoutest of parents cringe. It's a wonder they didn't drink.

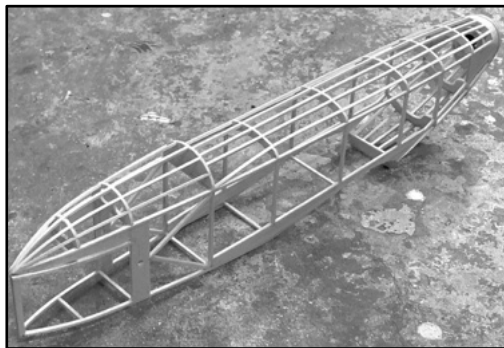
There's a whiff of a Dewotine 520 about the aircraft, perhaps a dash of Caudron as well, but if the H.22 has any real-life precedent, I'm not aware of it. As is the case with most comic artists, even fastidious ones like Hergé, substantial liberties are taken with the drawing of the H.22 over the

course of the series, so the three view presented here is very much a composite of ideas. I've added a few details to satisfy the real-life needs of an airplane, such as an air intake for that big ol' honkin' 12 cylinder Belchfire 4000 engine, or whatever it is. The plan for the model hews pretty close to the three view. Those wiser than me have suggested that the stab will need to be much larger, as well as the rudder. I say they may well be right, but if I'd wanted to build a Maboussin Hemiptere, I'd have build one, by gum. Perhaps I will think differently once the beast has been test flown. As for that, I must confess that I've not yet finished the prototype, and that in publishing this plan, I violate the sacred *Stott Act*, which says a model must be flown before the plan is released upon the populace. Well, it won't be the first time I've broken that rule. I beg the mercy of the courts. And anyway, there's something about the H.22 and its backstory that says you just gotta girdle your loins and GO FOR IT.

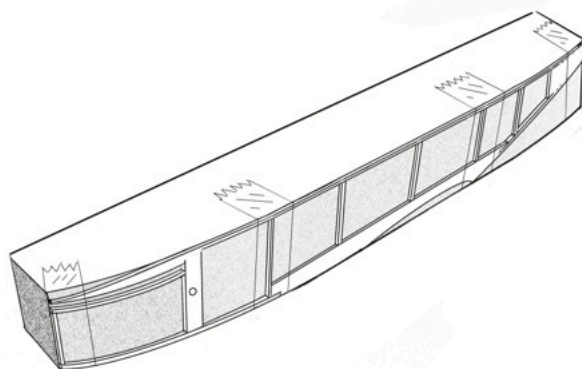
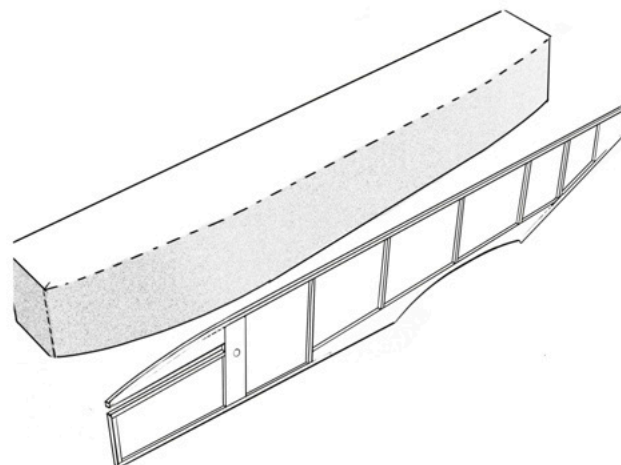
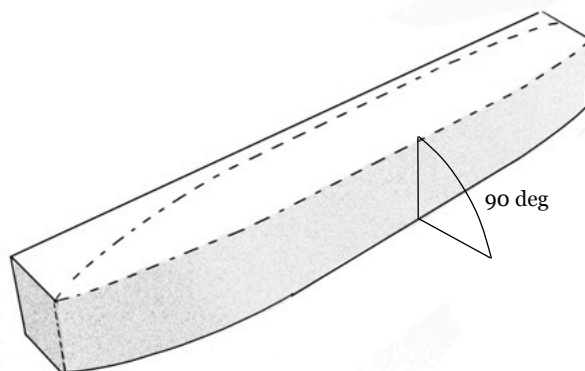
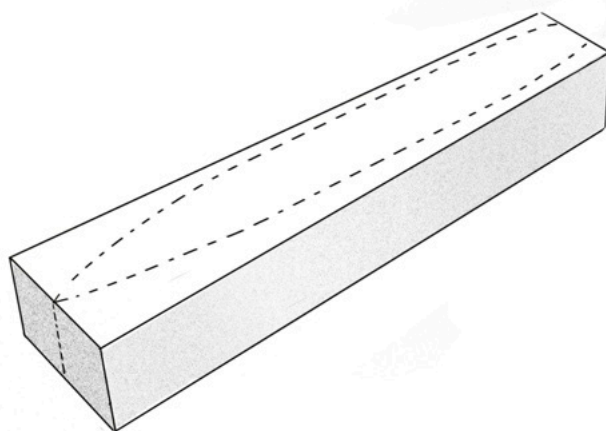


The Bends

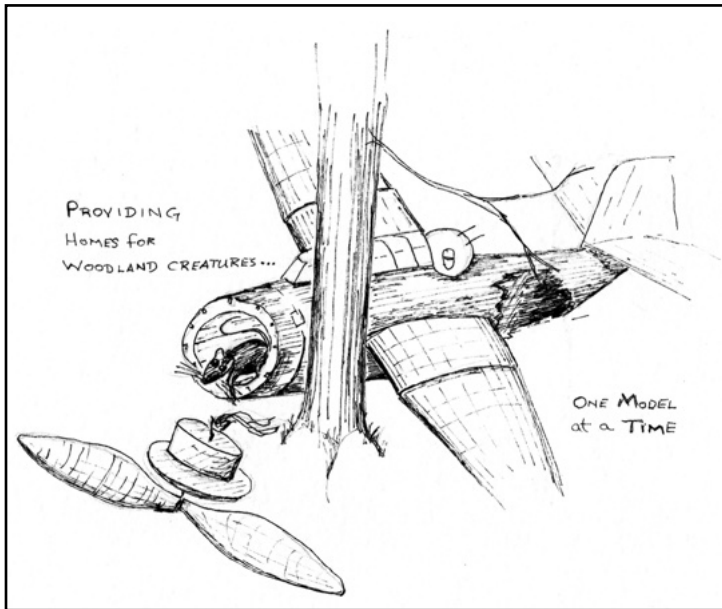
Besides the spinner, the only thing that might be tricky about the *Stratonef* construction is the sharp bend of the fuselage at the rear (note that on the



plans, the length of the side frame layout has been adjusted to make up the loss in overall length from the bend). In these situations I like to make a pre-bending jig for the side frames out of foam insulation board--see the illustration at right. Make a copy of the fuselage plan view and glue it to a piece of foam of suitable thickness. Cut and sand the foam to the inside line of the fuselage side, making sure to keep the new surface square to the faces of the foam board. A trued-up sanding block is handy for this; if you have access to a stationary disc sander, even better. You can save yourself some grunt work if you bend your fuselage frames one at a time; then you only need to surface one side of the foam block. Just make sure you mark which end is the front and which is the back (don't ask me why I mention this). Once you are satisfied with the form, soak a completed fuselage



side frame briefly in some hot water, and then carefully bend it to the form, using masking tape or clear packing tape as needed to hold it in position. TIP: a sheet of soft balsa placed between the tape and the frame will protect it from being damaged by the tape, help distribute the bending forces, and keep the balsa under compression as it takes the bend--for clarity's sake, I didn't show this in the drawing. Let it dry overnight, repeat for the other side, and *voila!*



From Maxcuters Prez **Glen Simpers**: "I made this sketch long ago to commemorate my Avenger, lost at Comsat for many months. When I later stumbled upon it a field mouse had made a home inside. He had done some redecorating. First that nasty rubber had to go. Then a new main door was made in the side. Finally it was packed with soft moss. While I would have rather had the model intact at least some creature had made use of it..."

INCIDENTALLY....Part 2

In the last MaxFax issue, we ran a graphic from the late Bill Hannan that provided some starting points for how to set up the incidences on a range of typical aircraft--high wing monoplanes, biplanes, etc. After digesting this handy how-to, I was keen to apply it to some designs I have in the pipeline, so I loaded up my budding plan of the Caproni CA.125 biplane and got to work. It wasn't long before I began to ponder one of "those" questions: *when setting the incidence of a wing, do you use the bottom of the wing as your reference--let's call it Method 'A'-- or do you use an imaginary chord line that runs from the entry point of the airfoil back to the trailing edge --Method 'B'?*

I had always used Method 'B'. The Hannan graphic *suggests* Method 'A'....but then it doesn't specifically address the issue of an airfoil with a Phillips entry. Obviously, if one were using a sharp LE with no Phillips entry, then the question is moot! Anyway, as I planned to use a Clark Y-ish airfoil with a moderately blunt Phillips entry on the Caproni, I drew up two profiles of it in CAD showing the application of each method (see drawing at right).

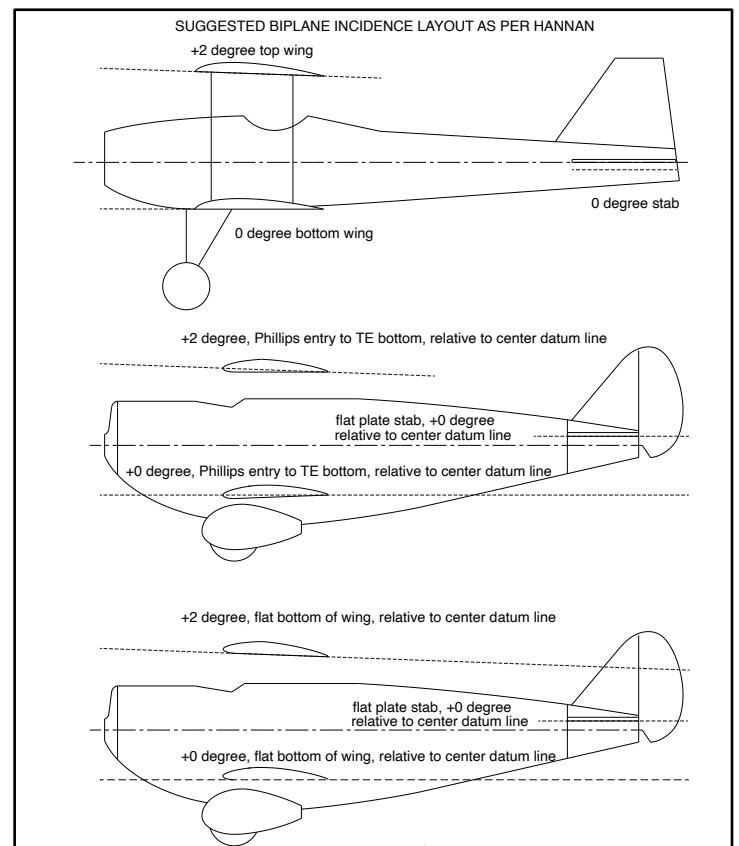
Assuming Method 'B' and the airfoil presented, an imaginary chord line running from the entry point of the Caproni's Phillips LE to the TE provides +2 degree incidence relative to the flat bottom of the wing. The result in the middle graphic certainly *looks* odd, but doesn't *necessarily* invalidate the approach. Using the same airfoil and Method 'A', the bottom graphic looks better....but is it? How does all this relate to downthrust, and the need thereof? Questions, questions!

Figuring this stuff out is way above my pay grade, so I turned to a panel of experts. To no one's surprise, the "answer" was clear as mud. What started out a simple query became a whirl of interrelated thoughts, and I'm pretty sure the original question never got answered. Gosh I love this hobby! Here are excerpts from the peanut gallery, reflecting their experiences with a variety of models, primarily biplanes but with a smattering of triplane talk in there too:

In my initial pass at this (the Caproni CA.125), I drew in a substantial amount of positive incidence in both wings--probably close to +4 degrees, measuring from a line at the bottom of the TE to the entry point of curvature of the Phillips LE (Method B). My thinking was that putting this strong positive incidence in the wings would help to minimize the need for downthrust. However, having tried that on my SBC-3 Dimer design, I'm not sure it works that way--at least not on a biplane. Built to plan, the SBC-3 still requires gobs of downthrust. Thoughts? --DM

My typical setup is closer to the bottom profile, with the exception that +2 deg on the top wing is too much for me. I'd halve that to closer to +1 and in practice I'd probably set the lower wing centersection at the smallest discernable amount of positive possible. Just because I tend to build small amounts of washout into every wing I build. The middle Phillips entry profile is all new ground for me. I'd be hesitant to set that lower wing such that the flat bottom of the wing is essentially negative to the thrustline. But who knows - this is all tenuous science at best IMHO at our scales. --TN2

I maybe spent a whole .04c on this, and the conflicting advice out there when planning the Camel. It has conventional stagger, and I ran an extra degree or two of incidence on the lower (rear) wing. The reasoning I went (cont. next page)



with was that if the rear wing was doing a little more work, it moved the center of lift back, so I could run a slightly more rear CG (every bit helped with that ship). Plus the wing doing more work also produces more drag, and I would rather have the drag below the CG than miles above where it is generating the need for more down thrust. -CG

When setting up my DR1 triplane, I set the top wing at slightly less incidence than the middle and lower wings. I reasoned that it "did the most work" and so I'd want it stalling last...and that less drag at the top of that crate could only be a good thing. A little more drag at the middle and lower decks might be helpful, right? I dunno! Seems to have worked but I'm certainly not convinced that it's the only way to get a DR1 to fly well. BTW, there is no intentional washout on the DR1. I figured it didn't need any more drag. --DM

Washout causes drag? How much are youse guys using? If the wing is flying on 2+ degrees and the washout is at zero, there isn't much more drag than if it was at the flying angle. Maybe less. There's definitely some drag, and it isn't adding any lift, but it can add stability in place of dihedral. Since dihedral also reduces lift, I figure it's a wash. -WN

The drag issue would have me using the same setup in a zero stagger biplane. I discount the one wing stalls first argument as we seem to spend a lot of trimming time avoiding the stall in the first place. -CG

I don't think it's an all or nothing response. Like footfalls for a runner - as one foot lifts, the other stabilizes the running motion on the ground. Nobody stops flying altogether - I like to think of it as one wing flying a little better than the other at various "x" points of time and at "y" moments. -VG

The ideal is to get all the wings to do all the lifting they can. Different layouts call for variations in the set up. When there is positive stagger, I put a little extra incidence in the bottom wing just cuz it's operating in the downwash of the upper wing, plus it has to deal with the turbulence caused by the struts and rigging on its upper surface. I figure it needs just a bit more bite. With zero or negative stagger, they both get the same incidence angle. -WN

I feel that Wing / stab and thrustline relationship is fixed unless there is a real odd drag issue at play; the fuselage just holds them together. Increase the incidence of all flying surfaces relative to the fuselage and downthrust relative to the fuselage will reduce. My 109 is build with +5 wing and +2 stab as I want that tail high look. -CG

Like CG, I believe that adding more incidence to the wing does reduce the need for downthrust. However the Helldiver dimer datapoint (biplane, both at +2) that DM and TH experienced is contrary to my observations. That ship apparently needs a good bit of downthrust, and may just be "what it needs". One related thing that I have observed is that if a ship has a significantly forward placed CG, with relatively high decalage to suit that CG position, then the need for more downthrust may be greater.--DB

My Wacko (MaxFax 2020-4) has strongly staggered wings. It has +2 in the bottom wing; zero in the top wing and in the lifting stab. Down thrust was built in per plan (-9 degrees--Ed). The only adjustment was nose weight. -PK

I believe the amount of stagger plays a part in how one sets up a multi wing ship. PK and CG both used more positive incidence in the lower wing with the positive stagger of the Camel and Wacko. CG's Camel / PK's Wacko both point to the lower, more aft placed wing doing a bit more work, being slightly more draggy, and allowing a more rearward CG location makes perfect sense to me.

My Waco Taperwing and the Sopwith tripe were both set up with all wings at the same incidence, of about plus 2. The stabs on each (and all of my ships) were made adjustable for incidence once the CG was established when test flying. I was quite careful setting incidence on the Tripe, and because all the wings are identical, it was easy to set them all by measuring from wing to wing at the LE and TE both at the root and the tips. The Tripe had a whiff of washout in the bottom L wing, but all other wingtips had none. I don't recall specifically adding it to that lower left panel- it crept in as I assembled the ship, and never seemed to hurt its performance. I did add just a bit more incidence to all wings than what was shown on the plan.

I wonder if that conversation between Dave Stott and Al Lawton that I overheard concerning their respective Curtiss S3 triplanes comes into strong play here. I'm thinking it does. Two exact same airplanes. Both terrific flyers. Two totally different set-ups. They decided together that, to paraphrase, as long as not all the wings were at the same incidence, so that at least one of these swings is flying when the other one or two isn't/aren't, then you're all set. As long as somebody is different. Dave later went on to say that he's even a fan of 0-0 top to bottom as long as all wings have washout. He'd grimace at my loss of lift as I did both for my biplanes and triplanes..-VG

My Sopwith tripe balanced at the middle wing's aileron hinge line, which is just about 50% of the combined chord of all three equally staggered wings. I was surprised by how far aft it was. I didn't set it there to start; I began by test gliding and adjusting the stab incidence and nose weight till it glided well. Final stab incidence was established by flight testing. My recollection on the Tripe was that I had more positive incidence in the stab than the wings.

My Waco Taperwing has relatively thin wing sections, large but scale wing separation and some positive stagger. I added perhaps a 1/16 washout on that ~17" span ship to all panels. It is just barely visible on sighting the wing alignment as seen from the rear.

I have found that adding more washout to a wing usually demands that you increase either the wing incidence or more negative stab incidence to compensate. Pretty obvious when you think of it- the root may be at +2, but the tips could be at 0.

So if a ship is laterally stable to begin with, then the need for washout can approach zero. But with some scale ships that are marginally stable, washout sure can help, but may also drive the subsequent tweaks needed-demanding more decalage and forward center of gravity. -DB

There are many roads up the mountain. -PK

Simplicity is an illusion. -DM



Mike Stuart's gorgeous, big Consolidated Fleetster takes to the air, resplendant in its silver and red TWA markings.



Tom Hallman's peanut Bleriot XXVI canard triplane, moments after completing a max flight at Muncie. Yes, you read all that right.



Don's got a big new Aneq III in his nest. It's a steady, graceful flyer. Note the rudder add-on.



Enrique Maltz is building a peanut version of Tom Hallman's Babcock Taubman design (above). That scale reads 1.8g....!



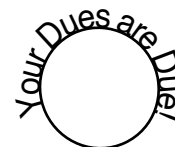
Mark Fineman's *Double Jeopardy* Legal Eagle--a Pete Kaiteris design. Mark says it's a fine flyer! Plans are in *MaxFax 2020-4*.

Your Editor's Fokker DR.1, still waiting on its details (below) Bashed from the Ozark Aviation short kit, a great design by Mike Midkiff.



D.C. MAXECUTERS
% Dave Mitchell
230 Walnut St. NW
Washington, DC 20012

PRESORTED
FIRST CLASS
US POSTAGE
PAID
PERMIT 4491
SUBURBAN MD



RENEW ON LINE!

Go to www.dcmxecuter.org and click on **MaxFax** at the top of the page.

FRONT COVER:

It's not easy finding pictures of the late **Tom Schmitt**; he was far more often to be found behind the camera than in front of it. So this picture of him photographing the launch of Don Srull's pioneering electric Dornier DO-X seems appropriate, as we remember our friend.

BACK COVER:

It's similarly difficult to find pictures of **Ruby Wine Sheldon** (1917-2012). A photographer by trade, she came to aviation late in life, not learning to fly until 1964 when she was 41. By 1966 she was operating in Phoenix AZ as a charter pilot and instructor for Sun Valley Air Service. In 1969 she joined the U.S. Geological Survey Water Resources Division as a pilot, surveying territory from the Panama Canal to Alaska in a wide range of aircraft, including Cessna 180s, DC-3s, Douglas B-23s, T-33 Shooting Stars and UH-1 helicopters; in 1974 she became the first woman in the US to be rated as a Helicopter Instrument Flight Instructor. With her race partner **Marge Thayer**, Sheldon twice won the transcontinental Women's Air Race Classic.

