FLYING ACES

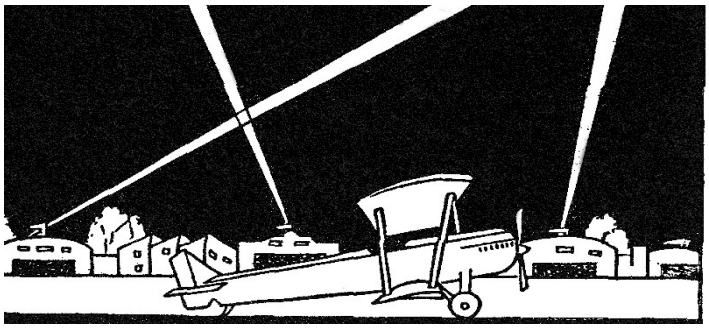
Club News

No. 263 Jan/Feb 2012

Some pics to go with our plans. Above: The Planchais LD-45 IV is a charming little French homebuilt bipe that looks to have some great flight potential as a model. A quick search on the internet turned up a few photos. Musée de l'Air d'Angers has this pretty red one on display.

Below: The Neilsen & Winther Aa is another unusual type, and also looks like a great subject for a Free Flight model. [Note: Free Flight is always capitalized.] This example is on display at the technical museum in Elsinore , Denmark.

Cover shot: From Enrique Maltz, cellist with the Israel Philharmonic and a rather superb modeler to boot. His 1913 Borel Hydro Monoplane may provide some inspiration for the building season. More from Enrique inside this issue.



In this Issue

Plans - Our featured plan is an original drawn up for us by DonDeLoach. The Nielsen & Winther Type Aa should appeal to biplane fans. Special thanks to Don! We got a neat little Peanut Scale biplane from our friends in France. There's more about this in the editor's column. Lastly, we've got a classic Dime plan of the Fokker D.VII. This was scanned from a very crispy and yellowed original. Had to move the crosses (digitally), and the notes at the bottom were reduced in size, but the rest is full size. If any of you can identify the manufacturer, please let us know.

Membership Information

- Membership brings you six issues of the **Flying Aces Club News** and allows you to participate in club activities.
- When the **Dreaded Red X** shows up on your address label, it is time to renew your membership. Please note: the Red X is the only notice you will receive. Memberships will not be back dated so any missed issues of the newsletter will have to be purchased.
- Your renewal date will be printed on your newsletter mailing label so the **DRX** won't sneak up on you.
- If you would like to use the **PayPal** option to send your dues, go to: **flyingacesclub.com** and click on "membership." The PayPal button is at the bottom of the page. This will set up an automatic payment profile, which will insure that your dues arrive on time every year. If you'd rather handle it yourself, you can cancel the profile and rely on the DRX to remind you.
- You can still send a check through the good old mail service. Use the form below, or a reasonable facsimile. Please make checks payable to: **Flying Aces Club**
- **Canadian and Overseas members**, please use PayPal (preferred) or send checks payable in US dollars.
- **Change of address** or any other questions about your membership should be sent to: **Flying Aces Club, 9154 Eldorado Trail., Strongsville, OH 44136**

  or email to - **join@flyingacesclub.com**

The post office does not forward bulk mail so be sure to handle this promptly or you will miss an issue!

FAC News **BACK ISSUES** in limited numbers are available for $5.00 each. Send orders for all back issues to:

Blake Mayo, 3447 Adelaide Drive, Erie, PA 16510

Flying Aces Club Membership Form

Name:_____

Address:_____

City:_____

State/Prov:_____Postal Code:_____Country_____

Email:_____Phone:_____

Annual dues in $US:

- $20 USA
- $28 Canada
- $40 Overseas

Please make checks payable to:

Flying Aces Club and send to:

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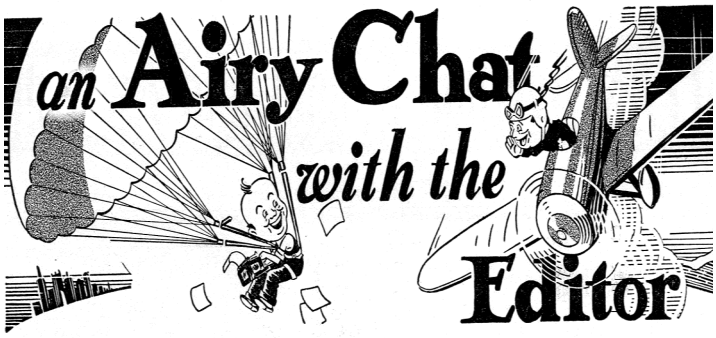
Strongsville, OH 44136



Greetings Junior Birdmen,

Pretty pink blushes department - OK, lets get the snafu covered right away. Last issue introduced a "membership info" section with everything a guy would need if he wanted to contact the FAC. One of the key elements was a nifty little form that would make it easy to send in all your pertinent info with a renewal. Would have worked a lot better if there wasn't a typo in the worst possible place. Despite many double checks and proofreadings, I didn't notice that the US dues were listed as ten bucks instead of $20. Made for a lot of unnecessary correspondence over the last several weeks. My apologies to those of you who had to send another check.

Organizational update - The FAC Board and Council got together in November and had a Very productive meeting. We had some personnel changes in the Board to handle. Roy Courtney stepped down as Vice President so he can devote more time to organizing a FAC chapter in his new neighborhood in North Carolina, and Chris Starleaf was elected to fill the post. Roy will continue as a member of the Council. Mike Isermann shifted from Assistant Secretary to Secretary to fill the post formerly held by Juanita Reichel. Ralph Kuenz was appointed as a Board Member-at-large to fill the slot that Mike left. (Yeah, you need a scorecard! Good news is that we have one in the back of every issue.) Congratulations to Chris, Mike and Ralph! The FAC is fortunate to have people with talent and energy ready to step up.

Inside this issue - The documentation guide from Vance Glibert is highly recommended reading for all FAC Scale modelers. This guy knows what he's doing in FAC Scale, on *both* sides of the judging table. A guy could really help his own cause by heeding the advice in that article. One of the best suggestions, and worth repeating, is to do the docs packet *before* building the model. It's easier to get where you're going if you have a map!

Also well worth the time to read and absorb; George White's terrific distillation of Charles Hampson Grant's take on model stability. If you aren't fortunate enough to have a copy of Grant's classic book, you can get a huge helping of essential Free Flight wisdom right here.

The 2012 –13 FAC Rule Book - The new rulebook is ready for the world! Dave Mitchell, our "Keeper of the Rules" and webmaster, has done a masterful job of revamping the format and, with the help of the guys on the Council, has nailed down the loose ends. (We hope!) You'll find his synopsis of the changes in this issue. For a look at the whole book, you can download it from the club website **flyingacesclub.com** or get one of your computer literate buddies to do it for you. **We will NOT be mailing out a copy to every FAC member as in the past.** Much as we'd like to, it's hard to justify such a huge expense for the club when a great many of our members either don't fly in contests, or can get what they need from the website. We *will* have a small batch printed and made available for those who need them, but we hope you will consider getting your copy locally as a donation to the FAC. A copy of the rule book may be ordered from Store Keeper Bubba "Merchandize" Mayo for $5.00. (US check or cash, otherwise the bank will charge us an $8.00 handling fee!) Bubba's address is on page three.

Inside the next issue, and beyond - We're always trying to strike a balance with the material that goes into each issue. This one's got a bunch of "business" stuff that needed to get out to the troops, but in the new year we'd like to include a bigger proportion of modeling info. That goal will be infinitely easier to meet if you guys send some stuff to the editor! I'm always happy to include original plans, how-to articles, and photos of your modeling activities.

French Peanuts anyone? - One of the plans included in this issue was drawn by Jaques Cartigny and sent to us by our friend and FAC member Alain Parmentier. It will give you a good idea of the kind of high quality plans that are included in their newsletter: les Cahiers du C.E.R.V.I.A. The sample issue we received at GHQ (No. 62) contained three other plans; 18" span Loening M-8 by Jaques Cartigny, F1L (indoor duration type) by Bill Gowen, and a peanut Druine Turbi from Roger Aime. It's packed with documentation of the types featured in the plans, as well as several other unusual types. Also included is an interesting article on the rubber we use to power our ships, and two pages of color photos and docs. It's all in French of course, but as modelers we share a common language that makes it easy to understand. It goes out quarterly, and the price is $35 per year to the US. Sending payment overseas can be complicated so it's probably best to contact Jacques Cartigny 270 Vaugirard Street, 75015 PARIS – France Email : jicar@wanadoo.fr Merci beaucoup to Alain for the info!

See you on the flying field!

Rich Weber "Wingnut"

News On the Wing

Ross P. Mayo, CinC

How about issue # 262 and our first "Cover Girl!" Yeppers, we have another great issue thanks to all who contributed and the terrific work of our editor Rich. Well done one and all.

I must make several comments about the cover shot with the least important first and ending with the most important. Firstly, note the launch table. A staple at the big shows for decades, it was, however, inadvertently left behind after the Non-Nats. If by chance you saved it from being orphaned, please let me know, and thank you in advance.

Secondly, if you still don't have a clue about what the FAC "Spirit" is all about, Erika defines it all: confidence of purpose, pride in accomplishment, controlled excitement of simple competition, and anticipatory joy of a successful flight regardless of the total seconds logged.

Next...look at her launch technique...unassisted ROG perfection! If young Erika can embrace and execute the rule of unassisted ROG...why can't we all?

Lastly, I am sending Erika her very own copy of FLYING ACES CLUB NEWS, issue # 262. I sure hope dad frames it for HER work shop. Mike, let's make that a direct order from the CinC.

There will be a break from an old tradition to start a new one with the 2012 FAC NATS. I'm speaking about the fabulous **FAC T-shirt** tradition. Of course there will be one, but to be more efficient, you will be ordering yours with your NATS registration. Not only will you be paying in advance, but you will indicate how many and in what size! That's right, no more "Sorry Mr. Azure, but all we have left are Extra Small. Perhaps if you sewed three together..." Watch for ordering info on the FAC NATS 2012 Registration form.

What? You don't want to order a T-shirt "sight unseen." Here's the deal Clubsters: if you don't like the t-shirt, I'll buy it back…no questions asked. But you're gonna love it!

In regards to another FAC NATS tradition…if you want to sponsor an event or two please contact me. Many of you have become "traditional event sponsors" and I will try to honor your tradition and support of the FAC as best I can, so get back to me ASAP. Even though costs for everything have gone up again, fees will be the same as last NATS. You may sponsor with "IN HONOR OF…." or "IN MEMORY OF…"

I wish to thank the GHQ Council for all the hard work during and since the November Council meeting. It's hard to be a "Benevolent Dictator" when so many do so much. Next time you see your local Councilman, tell him thanks. And gentlemen, thanks again for making me look so good!

Ross

CinC, FAC

S.O.S.

- Greg Thomas is looking for the printwood patterns for the **Comet Howard DGA-9 kit** - kit number T-1. If you can help, contact Greg at: thomasdesigns@frontiernet.net or via snail mail: 505 Wildflower, Burnsville, MN 55306

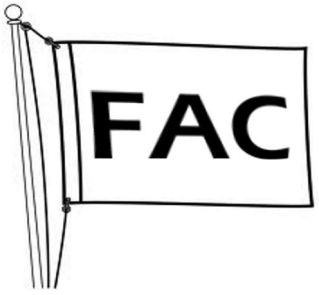
- As long as you're digging through your kit collection, see if you have the **Ideal P-38** (3/4"=1'). Bruce Conway would love to get his hands on the box dimensions, and a copy of the box art. 513-321-5182 3850 Marburg Ave., Cincinnati, OH 45209

- Rick Isaacson has found a flying field in the **Pittsburgh** area (Midway) and is looking for some flying buddies. Contact him at 412-247-1723 rick.isaacson@verizon.net

New Flying Aces Club Flag

A reminder to all our heraldry fans out there: The club flag design contest is underway. Here are the guidelines: 3' X 5' rectangle, or triangular "pennant." Verbiage must NOT include any reference to a specific "MARK" as that info will be on a smaller, separate banner.

Submit your artwork to GHQ via post or email by May 1, 2012. It need not be 100% perfect, as a professional artist will be used for the final proof. Be creative, have fun, and I'm looking forward to your designs. - The CinC.



Nielsen & Winther Aa

The Type Aa (Now Danish "Å") fighter aircraft was the first aircraft manufactured by Nielsen and Winther – a large machine shop in Copenhagen at the time. Six were sold to the Danish Army, but three later crashed, and the remaining planes were then banned from flying.

The aircraft first flew during 1917, and was armed with a Madsen machine gun mounted on the top wing. It was modified during 1918 with an interrupter gear, so the Madsen machine gun could be repositioned, and shoot through the propeller arc.

Rumour has it that the pilots had long been worried about the safety of the construction, but the ban was apparently due to the poor reliability of the Thulin engine used.

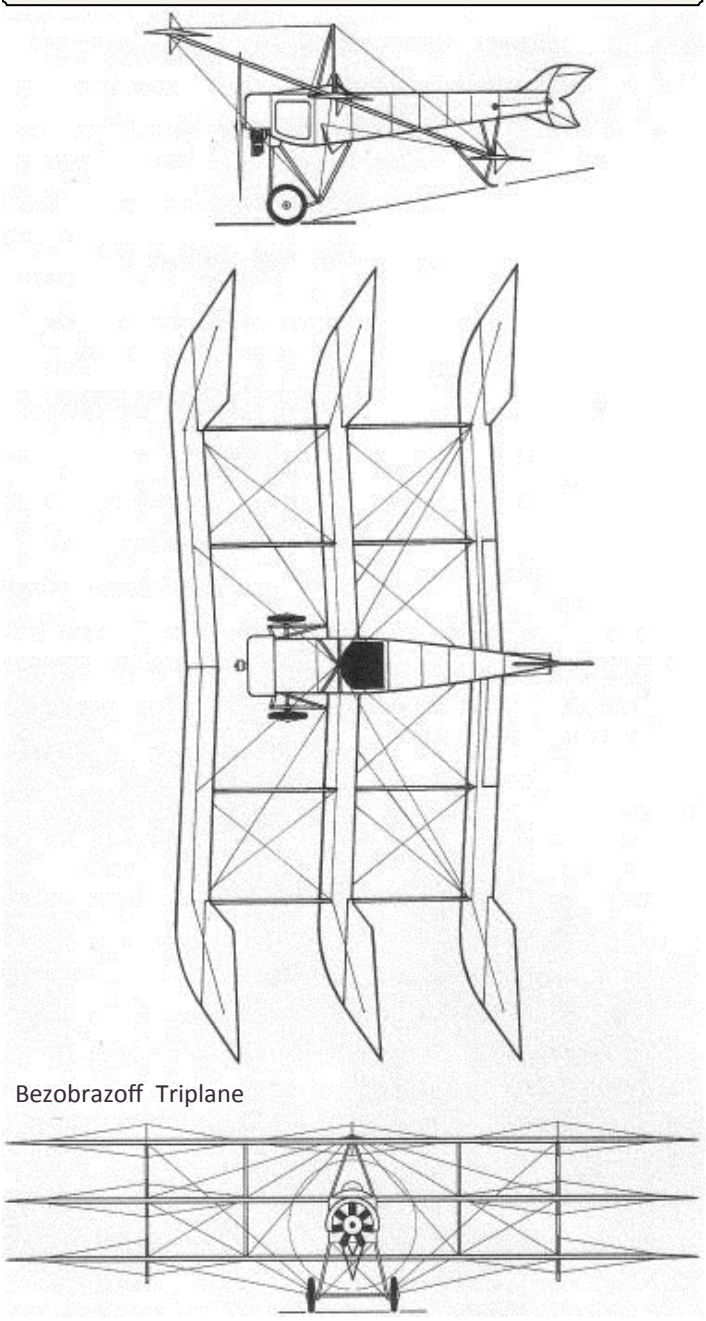
Although this plane was the first indigenous aircraft in the Danish army, it has come to light that at least some of the drawings were from the Thulin factory in Sweden. In fact, on some of the plans the aircraft is named as the Thulin 'L'.

Specifications:

Crew: 1
Length: 6.60 m (21 ft 8 in)
Wingspan: 7.70 m (25 ft 3⅛ in)
Height: 2.8 m (9 ft 2¼ in)
Empty weight: 350 kg (772 lb)
Gross weight: 550 kg (1212 lb)
Powerplant: 1 × 67 kW (90 hp) Thulin rotary engine, a copy of the LeRhone
Maximum speed: 150 km/h (93 mph)
1 x 8 mm Madsen machine gun

Source: http://www.natureandtech.com/

Bonus Point Quiz



Bezobrazoff Triplane

Answer on page 22

Worthwhile Website

Before you log on, promise yourself that you won't waste too much modeling time looking at the huge pile of 3v drawings here:

http://www.rcgroups.com/forums/showthread.php?t=557457&pp=15

FAC Scale Documentation Guide

Vance Gilbert

FAC Scale is still by far the most popular event in the Flying Aces. It is the perfect opportunity to meld art, sport, and science into one friendly and informative competition with like-minded pursuitists (yep...made that word up…). Yet, as one FAC'er has said to me, "...assembling the documentation package is traumatic...I hated doing book reports back in the 6th grade and I hate them now…" Well…this article will hopefully provide guidelines to make that "book report" a far less traumatic event, making it one that is simple, fun, informative, representative of your model, and maybe even making you out to be a bit of the historian of note.

WHATS MOST IMPORTANT TO INCLUDE

— PICTURE OF YOUR SUBJECT

Whatever pictures you have of the ship. The picture trumps all, and has the last word as to what it looks like, what the details are, what was light and dark etc. A published colorized piece of artwork out of The Illustrated Encyclopedia of Blah Blah will suffice, but remember, this was invariably drawn by someone that also had a picture of the plane. Do a Google web search for your ship, check inter-library loan for a book containing it, or write a friend that might have a book that has your plane in it.

— 3-VIEW OF YOUR SUBJECT (or purchase/ published plan)

The three view is the line drawing of the airplane that shows the top, side, and front views of your subject. It gives the true shape (or as true as that artist that day can muster) of flight surface tips, fuselage line and contours, and the location of various details of the plane. It is essential if you are to draw your own plans.
The three view is of secondary importance to the picture, however. It is there to back up what you see in those real life in the pictures. That said, a simpler, well done 3-view will better serve the FAC's purpose than an uber detailed, every-rivet-counted view. General rule is that if there is a really complicated 3-view at your disposal, there exist a simple 3-view somewhere. See the "Pictures of Your Subject" section (above) to see where to go research-wise.

— COLOR AND MARKING JUSTIFICATION OF YOUR SUBJECT

~ Here are your colors, Sir -
In many cases, particularly for the Golden Age, this is the hardest criteria to come across. Sometimes it is spelled out for the modeler on a picture, 3-view, or a plan. Or you've come across a colorized pic from the Blah Blah Encyclopedia. Or you actually have a color pic of the plane. Bravo! Your work is done! Still, a statement of the colors you see actually written down in your package near the photos, with an arrow to the area, makes it "contractual", just in case one man's *silbergrau*, to his eyes, is another man's white.

~ Hey Buddy, your guess is as good as mine, you are the historian -

More often than not colors are ignored by even the greatest of aviation historians and therefore go unrecorded. Don't let any of that stop you. Look at planes from the same factory, same time. Dave Stott called it the "leftover paint theory". Planes from the same era, same usage, same purchaser might likely be particularly finished. Dark, light, silver, grey, corrugated, sometimes yellow is dark because of orthochromatic film…. oh there are lots of rules when "guessing" color form black and white photos. Do some research, good luck, have fun, and enjoy being the historian.
Bottom line is make the statement as to what you believe the color to be or what the markings may have been by saying, underneath the pictures somewhere:
"Colors were probably all-silver with blue trim and blue wheel discs, as this ship was also in the hire of Imperial Aircraft at this time, and this was their scheme. Brown (wood) struts, black wheels, brass radiator".
Done.
Same can be said for a unique or little known Russian or Bulgarian or whatever warplane or cropduster and the itinerant markings. If there's room, there is no sin in including an actual color pic of a similar plane and saying yours was colored similarly. Judges will note: All these methods should garner full color and marking points if you even attempt to be thorough.

—-FIFTY WORD DESCRIPTION OF THE PLANE'S NAME, TIME PERIOD, AND USAGE

"The Dayton Wright Aerial Coupe O W-1 (1919) was a four seat touring aircraft by the Dayton-Wright Company, one of the first American post-war civilian passenger cab-

in aircraft, intended for the post WW1 civilian air travel boon, which never materialized. Only one was built."
Or
"P-38 Lightning "YIPPEE" was the 5,000th Lightning built, and rolled off the line in Burbank California in May 1944, signed by everyone who worked on it. "

For a lesser known subject, maybe a mention of what powered the plane.

Done.

Truly, the judges have planes of their own to fly, and really aren't in a position to an in-depth history of your pride and joy. Simple and short rules the day..

E. CAVEATS

~ Hey Jack, where's your plan?

There was a time in FAC Scale where all you needed was the building plan to enter and compete. Sure, that's still fine at your local contest, particularly with a newcomer that hasn't gone all Ken Burns historical about FAC like you have. Over the years occasionally plans have had a picture, a three view, and "call outs" of the colors right there - now THAT"S a complete plan! If you use a published or kit plan rather than a 3-view as your secondary source to your pictures, well, remember - that plan or kit was drawn from something. Bottom line with plans is this - if you have a decent/defining picture(s), 3-views, and a source for color, leave the plan home. That's heresy to some old school FAC'ers, but trust me, judge wants to see how closely you've represented the real thing on your flying replica.. They don't want to open and unfold some multi-folded full-sized thing. How you got there (the plan) really is your business. Some people never even use plans, actually going straight from a little 3-view with calipers and a calculator and "drawing" their plan with the wood tacked onto an appropriate board. You will have a hard time finding a plan for a scale ship by the late great Jack McGillivray. I watched him do this years ago. Irony is that he was a draftsman for a living.

~ Correct that 3 view, color call out, or colorized picture

Sure, get some white out and a pencil and a french curve and fix that 3-view to accord with your picture. Or maybe your colorized view has some of it correct but, in your opinion, some of it wrong. Say so with a bullet in the "Colors" part of your documentation:
"Although this view shows correct colors of silver and dark mahogany for the fuselage, photo's actually support the wing being bleached linen colored rather than the silver shown".

We'd never suggest that some kanone hounds have done things to 3-views and pics to make their building simpler, lighter, easier or whatever. They'll do what they'll do. We're appealing here to the historian in the FAC builder. That's why you do this in the first place, nest paw? History, in a thermal, overhead. What else is there?

~ Don't snow the judges with volumes of stuff

There is such a thing as having too many photos and views. Port, starboard, top, bottom, is plenty for a start. Maybe one or two extra pics of cowling scoop details, wing bomb mounts, a prominent and defining wing fillet, or of that special radial engine you've made. Also, if you must show a picture of a different plane/sister ship because it was the only pic of some detail or another and you know that detail was shared by all ships like it, say so: *"Pictured here is NC1023 to show scoop detail. Same would be on NC1026:*

~ Proposed or unbuilt planes.

Here's where the *FAC* get's to be even *more* fun. Suppose you'd like to draw up or build from a plan (there are a few) a plane that was… *supposed (proposed)*? Well, the FAC has room for you, Brother! Here's what to supply to get full credit for your Lawson Bomber or Lippisch P.04-106*:*

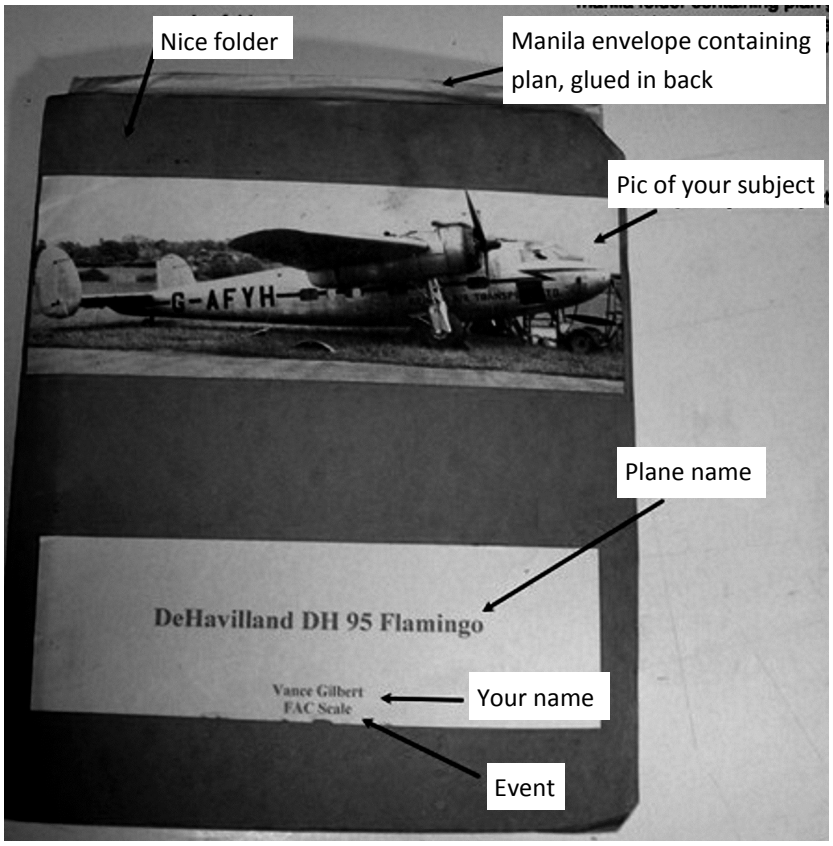
- 3-view
- Colorized pics or the like, or pic of another plane from the same /company/designer/usage
- Statement as to the planes projected use
- Statement by you, the modeler, describing why that plane is colored the way it is

List look familiar? Well, the only difference is that outside of the 3-view, speculation rules the day. Look at the bevy of Lippisch P-13s or Boeing 306 flying wings in FAC competition.

SOURCES

At the bottom of your docs, list, yes like a book report, your sources of information:

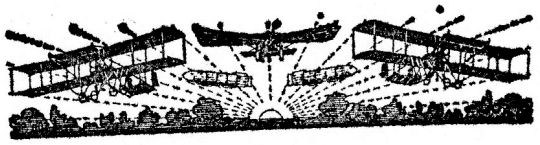
The Illustrated Encyclopedia of Aeroplanes, by Gilbert, Stott, Henn, & Hallman © 2009

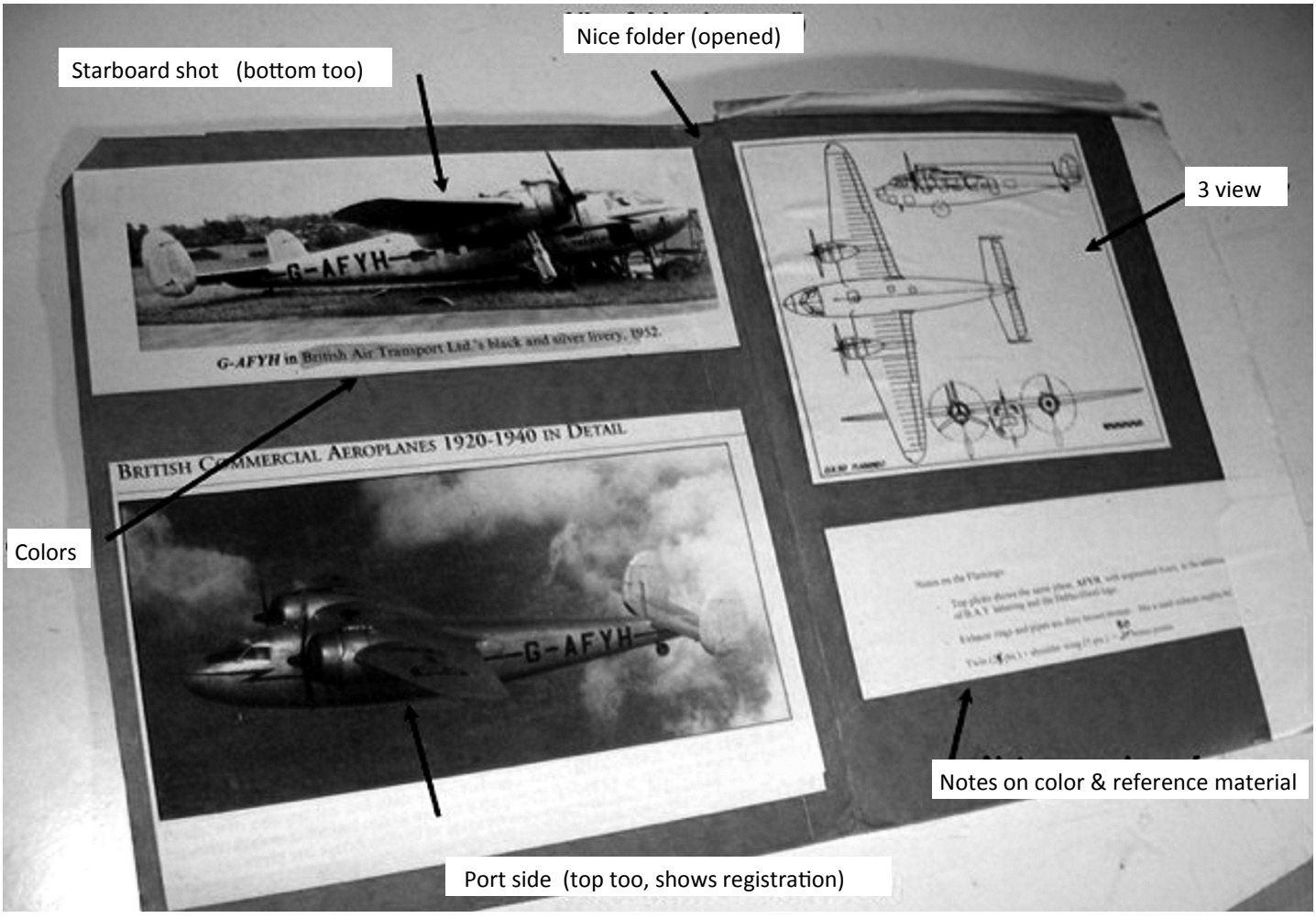


LAYOUT

Since the eventual layout is to be simple as simple can be, here are simple pics of what I believe scale judges like to see on the front and inside that folder. Try to get everything bound or otherwise stuck to the folder. If you *have* to use loose pages of any kind, **make sure** they have your name and the name of your model on it.

In conclusion, go ahead and be an FAC Scale historian. Crank up the copier or scoot to Kinko's or Staples with your originals, get your gluestick, scissors, nice pen, and ruler. Do the "book report" before you do the model, do a great job on the model, and get super high points in FAC Scale!!





Hello from WESTFAC

The Happenings Out West

This has been an exciting summer and fall for WESTFAC. This summer found us in Denver Colorado at WESTFAC III. The Working Committee did a great job and the Event was described by many as super fun. WESTFAC IV planning will begin just prior to the 2012 FAC NATS. and we hope to have dates and flyers ready for the NATS banquet evening.

Some real excitement began here in Arizona with the implementation of our new membership model. Our goal is to increase the FLYING ACES membership roster in 2011 and 2012 by doing what Vic Nippert suggested some time ago….. try something new and different, cause our old thinking isn't working too well.

Well, we took Vic's idea to heart and designed a new membership model around a not-so-new demographic… the ACTIVE ADULT COMMUNITY. Most ACTIVE ADULT COMMUNITIES have central Club House facilities and those facilities have "craft rooms" equipped with tables, chairs, electric outlets and work benches. Hummmm, let's ask the management if we could use the room free for a MODEL AIRPLANE BUILDING CLASS for Active Adults who live in the Community. We did. They said sure you can.

We then solicited the entire Community using their internet distribution channel announcing we would hold a new MODEL AIRPLANE BUILDING CLASS and it was free. We gave the date the class would begin and then we explained that not only would we teach the attendees to build the model, but we would also teach them to flight trim and fly it. Of course, at the time, we had no flying site. We began the class on October 24th at 9AM and were shocked to see a rather large turnout. As we introduced everyone, we confirmed one of our hypothesis that most of these folks built models as a kid and loved it. Then, as with most of us, life got in the way until now as many of them are now retired and have moved to this Community. Most all of them said they wanted to build and fly again, now that they had time and good health. That was a confirmation of our initial demographics. WOW.

We chose the FLYING ACES MOTH for everyone to build together in the class and at home between the classes. We chose that model because it usually fly's right off the building board and you can enter it in a couple of official FLYING ACES and SAM events. Now with three classes behind us, these guys are well on their way and seem to be having a ball.

However, we still needed a place to fly. One of the City Councilmen for our Town lives in our Community. We contacted him and sat down to explain what we were doing and what kind of a flying site we needed. He suggested we make an appointment to see the Mayor. He explained that the Mayor was a retired farmer and knew all the farmers in the Town limits. Possibly, with his help, one of them would be willing to help us obtain a flying site.

We got the appointment and sat down with the Mayor and Vice Mayor to explain our needs. We gave the Mayor a copy of the recent FLYING ACES NEWSLETTER and some 8 X10's of Mass Launches and flying field pictures. It turns out that the Mayor is a pilot and fly's his own 185 taildragger. What luck..!! He was excited about helping Seniors in the Community (they vote) and he promised to pick up his phone and call several farmers he knows personally. We explained we were looking for a section or half a section of alfalfa because you can walk on it and not damage it and landing on it is similar to landing on feathers.

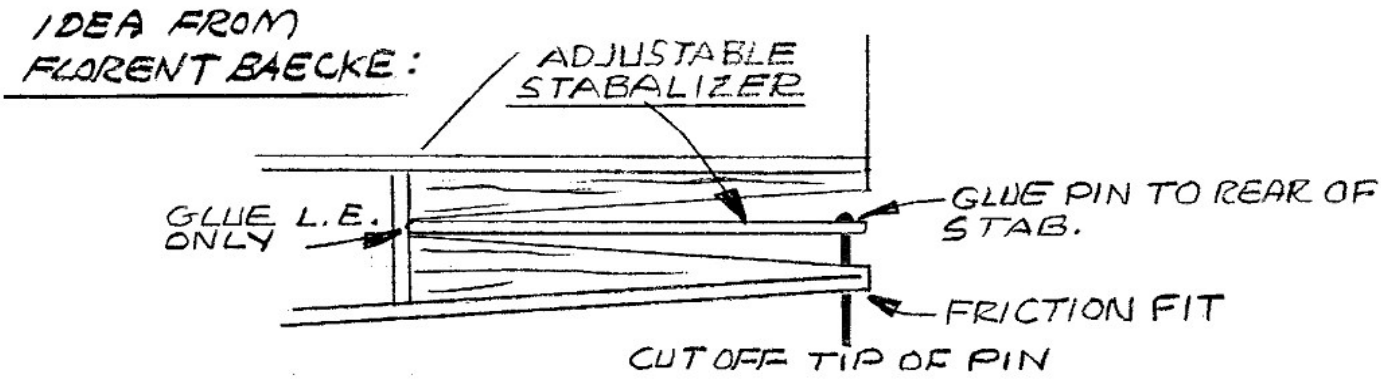
The good Mayor went to work. About two days later, we received a call from a local farmer who invited us to meet with him at his farm. At that meeting, we showed him some of our stick and tissue models and the similar items we showed the Mayor. He showed us the most beautiful half section of alfalfa we had ever seen and said… " it's yours to use, have fun" Thus a new FLYING ACES FLYING SITE was created in the West Valley of Phoenix in the Township of Buckeye Arizona. We promptly reported this to GHQ and to the Vice President of District X AMA .

One of the outstanding outcomes of implementing this model for membership growth is the fact that it wasn't difficult. Given some good focus and the right contact approach, any of you can do this. We feel the ACTIVE ADULT COMMUNITIES have a population of good potential model builders given some basic instruction and most Cities and Township's are eager to help Seniors , but you need to start at the Top. Efforts focused on Parks and Recs folks don't seem to pay off.

Our goal of growing the FLYING ACES out West continues to be WESTFAC's prime objective…. And it's a lot of fun..!!

Many Maxes to ALL

Roger Willis

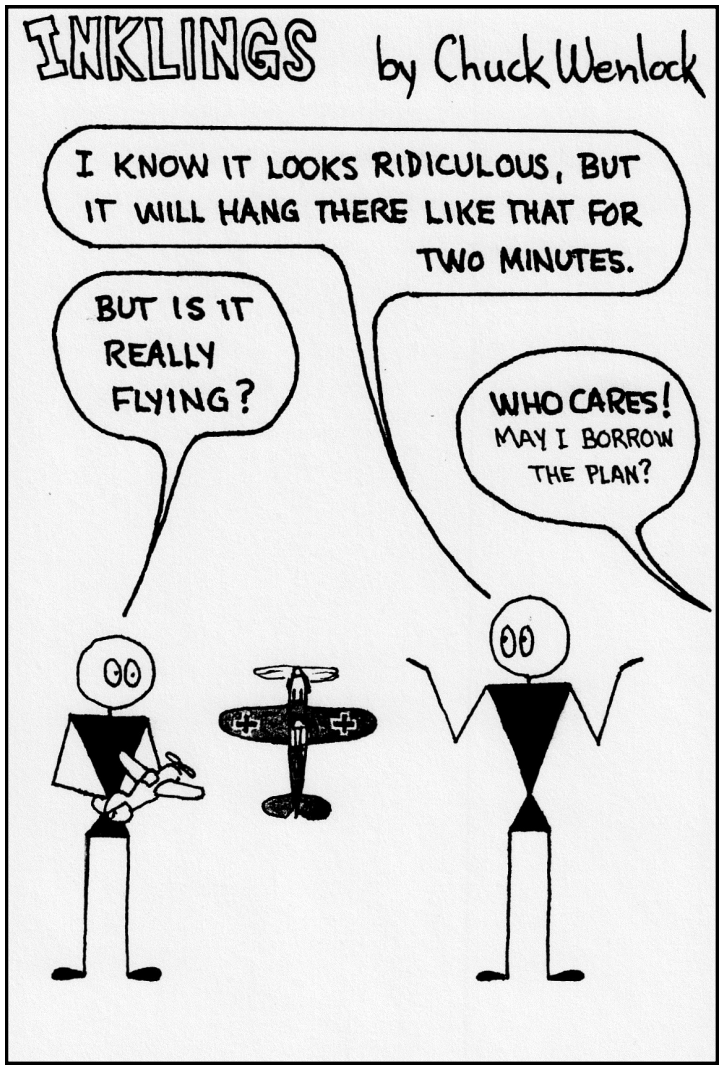


FREE Digital Newsletters!

The Harfang Escadrille is at it again! Check out the latest edition of the **Harfang Chronicle and Mail** at the website below. It's pure FAC style fun! http://www.hippocketaeronautics.com/downloads/HC&M4.pdf

...and George Mansfield is still making the digital version of the terrific **Scale Staffel Newsletter** available to all just for the asking. Send your email address to George at: gmansfield75@gmail.com

Roger Willis sent in this photo from WestFAC: Ed Comfort prepping his new Flying Aces Moth for a flight.



2012-2013 FAC RULE CHANGES

A Basic Synopsis - complied by Dave Mitchell

Alright lads and lasses, it's almost time to unveil the FAC Rule Book for 2012-2013! The FAC Council met in November to review, tweak and approve a number of changes, including but not limited to those presented here. PLEASE NOTE: The layout and content of the new 2012-2013 rule book varies considerably from the 2010-2012 edition. We beseech thee----**THROW THE OLD ONES AWAY!** Attempts to cross-reference will breed confusion, anguish, wailing, gnashing of teeth and tearing of hair.

1. The Bendix Race is eliminated as a Mass Launch event. Bendix Racers and any other purpose built racers from domestic races held from 1929 though 1939 will now compete in the Greve or Thompson according to whether they have radial or inline engines. Documentation of unknown or unusual aircraft is responsibility of builder.

2. The Aerol and the Shell Speed Dash are eliminated as official FAC events.

3. Rubber Jet / Manned Rockets Scale is eliminated as a separate event. These models will now compete in FAC Rubber Scale according to wingspan.

4. GHQ Peanut has been eliminated.

5. Rocket / Jet scale is eliminated as a separate event, due to the general unavailability of Rapier motors. These models will now fly in Power Scale.

6. Giant Scale is eliminated as a separate event. All multi-wing models with wingspans greater than 30" (36" for monoplanes) will now compete as Jumbo Scale.

7. Old Time Plan Kit Scale (OTPKS) and a new category of design, Modern Plan Kit Scale (MPKS), have been brought together to form a brand new FAC class: Simplified Scale. Think Dime Scale, but bigger models, and with a twist...see details in this issue!

8. Golden Age Military and Golden Age Civilian are now combined into one class: Golden Age Combined. All Golden Age Combined models must have landing gear down. Parasol aircraft are allowed.

9. Fiction Flyer has been adopted as an official FAC event.

10. 1/2 Wakefield remains on "unofficial" status as an FAC event. Rules will be posted to the FAC website and in the newsletter to support continued growth of the event at FAC contests. Open to any published Wakefield from 1934 through 1950. Models must weigh 1 oz. before rubber.

11. New NATS award: "Zero Bonus Point Scale", given to the FAC Rubber Scale model (event #2) with the highest total score MINUS BONUS POINTS. Any judged FAC Rubber Scale (event #2) model that posts an official time is eligible. Scores will be culled from your official FAC Rubber Scale (event #2) total scores--no additional flights are necessary. Awards to fifth place.

12. At the 2012 Nats, the traditional "High Wing Weenie" award will be given to the highest total scoring high-wing FAC Peanut Scale model (event #1).

13. Embryo official flights are now as per standard FAC Primary rules: 20 sec. min., 120 sec. max.

14. Wing Span for all events is defined as PROJECTED, i.e. measured wingtip to wingtip off the model. Wing Area is measured from the flat plan.

15. The PPLC Dihedral rule applies to ALL FAC Scale events: 1" per tip, per 12" of wingspan, or in the case of low-wingers, the bottom of the canopy--whichever is higher. Models built from kits or kit plans may be built to plan, even if the dihedral exceeds these limits.

16. Mid-wing aircraft have been defined more clearly. A visual / verbal guide is included in the new 2012-2013 rule book.

17. WWI / WWII mass launch events are now restricted to aircraft that actually experienced combat during their respective wars. EXISTING models that fall outside of this restriction (Martinsyde Buzzards, etc.) will be grandfathered for two years.

18. Bonus points for shoulder wing aircraft have been eliminated. Shoulder wing aircraft are now treated like high-wing cabin aircraft, i.e. zero bonus points.

19. The rules for the entire class of TOTF-Non Scale have been reworked. Most importantly, the category formerly known as "Old Time Rubber Cabin" is now called "Old Time Rubber Fuselage"; models in this category must have take-off / landing gear, which distinguishes them from "Old Time Rubber Stick" models which are hand launched and have none.

20. The use of any R/C device during FAC competition is officially forbidden.

VIII. SIMPLIFIED SCALE

A new FAC class that includes traditional FAC Old Time Plan/Kit Scale models, as well as Modern Plan / Kit Scale models which can be designed and built WITHOUT structural limitations. In concept, Simplified Scale is similar to Dime Scale, but with longer wingspan. The objective to provide an opportunity for modelers to build recognizable, "everyday flying" scale models that are essentially true to a three view of the aircraft, but are not intended to compete at the FAC Scale level nor to have to pass the requirements of the Pilot's Pre-Launch Checklist. The emphasis is on FUN! HOWEVER....nothing prevents a modeler from entering a Simplified Scale model of either stripe into an FAC Scale event or an event subject to the PPLC.

1.0 BASIC RULES

A. Wing span is more than 16"; no maximum
B. Eligible models will fall into one of two broad categories:
   1. Old Time Plan / Kit Scale (OTPKS)
   2. Modern Plan / Kit Scale (MPKS).
C. Model and plan must be presented to the CD prior to first flight for "static judging" and awarding of bonus points as described below.
D. Simplified Scale models of either stripe may be entered into FAC Scale or TOTF Scale events if desired, but must meet the full qualifications required for those events (scale judging, PPLC, etc.)

2.0 DESIGN AND CONSTRUCTION

A. Old Time Plan Kit Scale (OTPKS)
   1. Constructed from plans published or the plans of kits produced before January 1, 1946.
   2. An OTPKS model entered in Simplified Scale will be declared "OTPKS-Worthy" and will be eligible for 10 bonus points in a Simplified Scale contest IF and ONLY IF the modeler can show his model has been built as per the original plan in ALL RESPECTS, allowing for the following exceptions. Models that deviate from the plan outside of these exceptions will be treated as MPKS models, and will not qualify for the 10 point bonus. The burden of proof is solely on the modeler.
      a. Nose may be altered to accommodate thrust bearing and removable nose plug.
      b. Prop type and diameter may differ from plan.
      c. Rear motor peg may be located anywhere within fuselage or nacelles.
      d. Markings should be appropriate to the era of the aircraft and its purpose, but need not represent any particular actual aircraft nor follow the markings shown on the plan.
      e. The model plan serves as your documentation if you are attempting to qualify for the 10 point bonus. No plan---no bonus.
B. Modern Plan / Kit Scale (MPKS)
   1. Constructed from a modern plan / kit that is essentially true to a simple three-view of the aircraft modeled.
   2. May be of any aircraft of any era.
   3. No construction restrictions, except as outlined in the FAC PRIMARY RULES.
   4. Markings should be appropriate to the era of the aircraft and its purpose, but need not represent any particular actual aircraft.
   5. The model plans and a simple three view shall serve as your documentation

3.0 STATIC JUDGING / BONUS POINTS / SCORING

A. Simplified Scale models are not to be held to the same standards of scale fidelity or craftsmanship as FAC Scale models. No scale points are awarded. "Judging" is strictly pass/fail, according to the rules above .

B. Model and plan or three-view must be presented to the CD prior to first flight for "static judging" and awarding of bonus points as described below.

C. Bonus points are NOT cumulative. Only the highest value criteria will be added once to your flight score.
   1. Exception: OTPKS-worthy models that meet the criteria of the rules above will be awarded 10 additional bonus points.

POINTS	CRITERIA
0	High-Wing Cabin and Shoulder-Wing Monoplanes
1	Landing Gear Down and Dirty
2	Compound curved / bubble canopy from clear flat sheet material, i.e. P-51D
3	Parasol
5	Mid-Wing
5	Canard or Tandem wing
10	OTPKS-worthy
10	Low-Wing
10	Float Plane
15	Biplane
20	Triplane
20	Multi-Engine

D. Flight score: Total of three flights.
E. Total score: bonus points added once to total flight.

Dave Stott Memorial

The Alco Sport One Design Contest

Yamabiko, Japan August 2011

Enrique Maltz is the builder of the ship that graces the cover of this issue. His report on the Alco Sport contest shows the ongoing worldwide impact of the Flying Aces Movement, and Dave Stott. Ed.

Dave Stott was a true giant in the aeromodelling world, a real legend; certainly a fatherly figure to many, including myself. The nature of my work (I am a professional cellist with the Israel Philharmonic Orchestra) causes me to travel all over the world. In one of those tours through the USA about 22 years ago I called Dave (while in New York). He invited me to come over immediately, I was thrilled! From that first meeting, visiting the Stott's was the real" highlight" of every USA tour. I loved to dialogue with Dave and Terry; he was very knowledgeable in many subjects, including classical music. He loved Mozart's music, and he once even gave me his own violin from childhood. I fixed it and donated it to the Ramat Gan (Israel) conservatory for children, which made him very happy. We always had conversations about the world. He was fascinated by my descriptions of different places in the world that I had seen or played in. His vocabulary was always sharp and sometimes very sarcastic, and the conversations were really inspiring. After talking it was time to see all his models in the basement... the workshop, and then the books...

His heart was immense and so was his generosity, always offering help, materials, suggestions, and his wife Terry was always waiting for me with a great meal. They are in my heart and mind and always be as if they were my own parents.

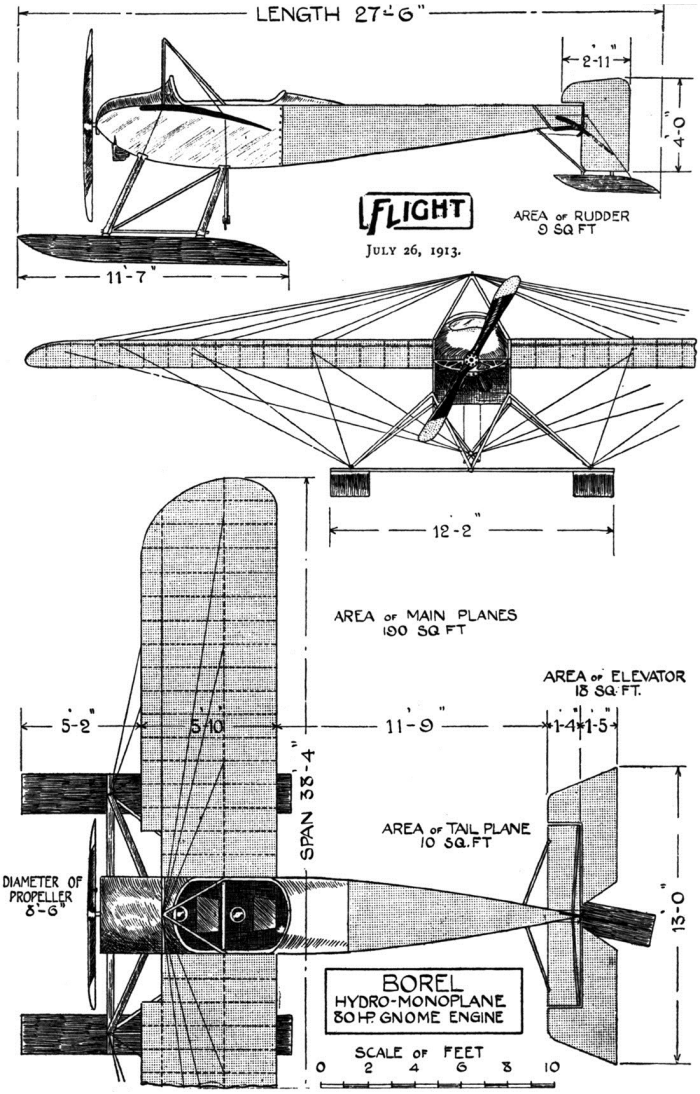
I was in the middle of a Far East tour with the IPOI in Tokyo), when the phone in my hotel room rang; my dear friend Jiro Sugimoto called me to let me know about the very sad news of Dave's death, the previous day.... Jiro and I had already organized a club meeting for the Nagoya Shonai Club so the meeting was dedicated to remember Dave. I brought my cello and played in his memory.

At that very moment we sat with all the attending members and came up with the idea of having a one design contest to remember Dave in the upcoming nationals at the Yamabiko dome in northern Japan. We agreed that I should call Dave's son Paul to ask for a suitable model for this purpose. I called Paul a few times; he thought of one of the earlier models before the peanut movement got started that Dave draw plans for, a 12 inch high wing monoplane. Since the Shonai club flies almost exclusively peanut scale, it was OK, but then Jiro wrote to me that a plan for the Alco Sport made by Dave in 1969 was found in one of the model magazines. He asked me to make contact again with Paul Stott to ask for permission to use it for the contest, to which Paul happily agreed. Then a small change in the drawings was apparent, the very first drawing had an under camber rib, a latter one had a flat rib; it was decided to use the flat wing rib.

Twenty two modelers took part of the competition, and 28 Alcos were built. The standard of workmanship was excellent, and some of the flight times were outstanding. You can appreciate it on the photos and results. I was supposed to be in Japan during the time of the Nationals (last August) but because of the tragic events of the earthquake and Tsunami I could not attend personally. Still, I wanted to participate in the contest to remember my dear friend Dave Stott. Jiro kindly agreed to proxy fly my Alco. She arrived in Japan slightly broken, but Jiro not only fixed her (good as new), but flew her to second place, after his own Alco---a simply gorgeous model from the hand of a true model master.

It was all a big success. It makes me happy to think that Dave would enjoy to see 22 (!) Alcos flying around, because I knew how much he loved to fly his own models. It was a proper celebration to remember somebody who dedicated and gave so much for our beloved hobby.

Enrique Maltz
Israel



Here's another shot of Enrique's beautiful Borel Hydro.

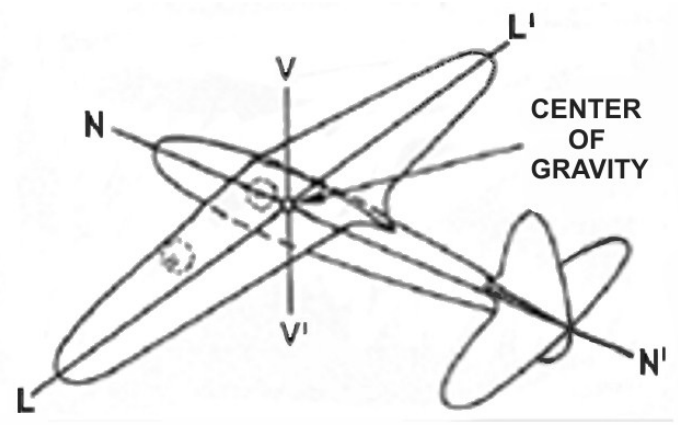
GRANT ON STABILITY - Part III

LONGITUDINAL STABILITY

by George White

This is the third in a series of articles abstracting information concerning Stability from the 1941 book "Model Airplane Design and Theory of Flight," written by the famous Charles Hampson Grant. Let the reader understand that I'm going to be liberally using Grant's exact words and illustrations, condensing them, and for ease of reading the constant use of quotation marks is omitted.

The first two articles in this series dealt with Grant's defining the types of stability and discussed the factors influencing and methods of achieving lateral and directional stability.



Grant defines stability as the capacity of an airplane to overcome any tendency to displace or turn from normal flight — or to return to normal flight after displacement.

As can be seen from the diagram above, there are three kinds of stability to deal with, i.e. **Longitudinal stability** which refers to the maintenance of normal flight about axis, L-L1. **Directional stability** which refers to the maintenance of normal flight about the vertical axis, V-V1. **Lateral stability** which refers to the maintenance of normal flight about the axis running through the center of gravity on axis N-N1.

As discussed in the previous articles, critical to achieving stability in a model is the establishment of the center of gravity (c.g.) both vertically and laterally. Having done that, this article will discuss **Longitudinal Stability.**

When an airplane is longitudinally stable, the nose and tail will resist any tendency to dive or nose up into a stall; and when experiencing any such displacement about axis L-L1, will return to level flight.

Lack of longitudinal stability is evidenced in two ways:

(a) Upon being launched the ship may nose up into a stall, or dive under power, from which maneuvers it fails to regain equilibrium.

(b) It may fly properly for a short distance, then nose up or down suddenly because of a gust of wind, from which it does not recover.

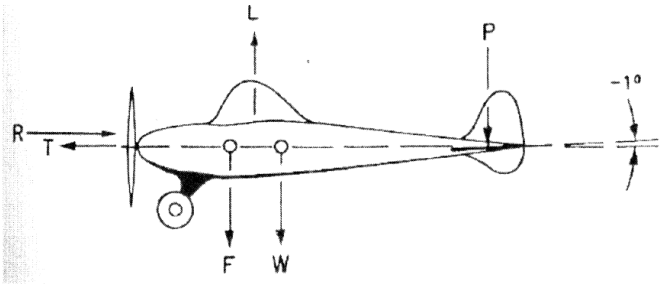
In the first instance, the plane is forced out of flight position by a feature of incorrect adjustment or design existing **within** the plane itself; while the second is caused by an **external** factor.

Grant divides factors governing longitudinal stability into two classes.

(1) Those tending to displace the plane from normal flight attitude.

(2) Those that resist this action, or cause the ship to recover from displacement.

Each of these two factors will be examined in turn.



Displacement or Disturbing Factors: These are:

1. Position of c.g. relative to wing lift
2. Type of wing section
3. Size of wing chord
4. Difference in angle between wing and stabilizer

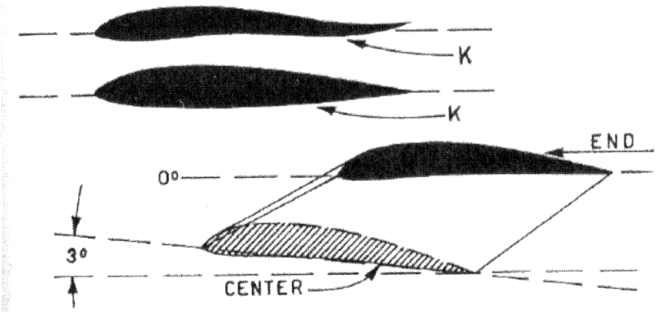
5. Speed

6. Stabilizer moment arm

7. Position of thrust line or propeller pull relative to center of resistance of the flying plane.

Displacement factor #1, position of c.g. relative to wing lift is illustrated in the diagram above. If the c.g. is located at W, behind the center of lift, it will tend to pull the tail down and create a stall unless the stab is designed to carry part of the load. When a non-lifting tail is used the c.g. must be located ahead of the line of lift (F) . Grant's rule in this instance is to locate the c.g. of 1/3 the chord back from the leading edge.

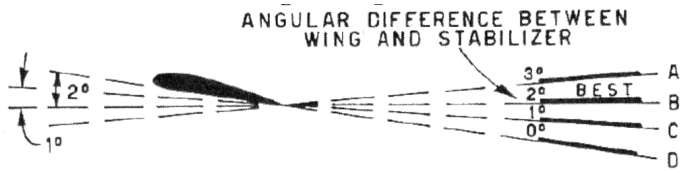
Displacement factor #2, **type of airfoil**. The point on the median line where lift acts vertically on the wing is called the center of lift. Insofar as longitudinal stability is concerned, it is not fixed, but changes with any variation in angle of attack. At small angles of attack lift acts at a point 50%-55% of the chord back from the leading edge. As the angle of attack increases, the center of lift moves forward until at 10º angle of attack it is about 30% of the chord from the leading edge.



Grant offers three methods for reducing the shifting of the center of lift. The upturned trailing edge and the use of a symmetrical airfoil will accomplish the job. Neither airfoils are as efficient in terms of lift as a flat or undercambered airfoil, but the purpose here is to reduce center of lift shift. The third method is to sweepback the wing and wash out the angle of incidence toward the outer ends.

Displacement factor #3, **chord size**. On any given airfoil section, movement is a percentage of the chord. Since the movement of the center of lift amounts to about 1/3 of the chord, the smaller the chord, the less actual movement occurs. He offers a convenient rule: "never make the average wing chord greater than 1/6 of the wing span. Also, never make the average wing chord greater than 1/3 the distance between the wing center and the stab center (i.e the distance from wing center to stab center should be equal to at least 3 times the average wing chord).

Displacement factor #4: Difference in angle between wing and stab. Grant recommends that the wing normally be set at an angle of incidence relative to the thrust line of 2º to 3º. If the stab has a greater lifting angle of incidence than the wing, the tail will lift and the model will dive. If the stab is set at angles of incidence less than that of the wing, depending upon speed, a stall is encouraged. Grant advises to have as little difference in angle between the wing and stab as possible— usually the stab should be set at 2º or 3º less angle of incidence than the wing or wings as illustrated below.

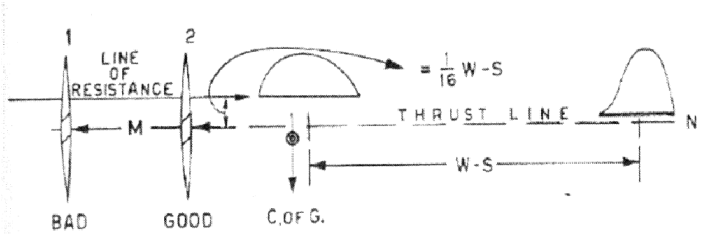


Displacement factor #5, Speed. If the stab is set at an angle less than the wing, given sufficient speed, it will tend to make the model climb or stall. It then may be asked why, if at considerable speed it tends to produce a deviation from level flight, should there be any difference. The reason is that this difference is important to recovery, so a slight difference must be maintained.

Displacement factor#6, **Stabilizer Moment Arm.** It should be obvious that the shorter the stab moment arm, the greater will be the displacement angle for any given stab movement, and the longer, the less displacement angle and the more easily the plane will recover. Experience has shown that the stab moment arm should be approximately 1/2 the wing span. The length should never be less than 2/5 the wing span with rubber models. Gas models may have a moment arm of as little as 1/3 the span. However, the shorter in either case, the greater the tendency to stall and dive. The faster the model flies, the longer this moment arm should be.

Displacement factor#7, **Position of thrust line or propeller pull relative to center of resistance of the flying plane.** Another factor tending to throw a plane out of equilibrium longitudinally is the location of the point of

power application and the direction this power acts relative to various components of the entire airplane.



Grant states that as a rule, the best location for the thrust line is at a point about 1/16 of distance W-S (stab moment arm) below the wing center section measured from the leading edge. The thrust line should act in a direction parallel to the longitudinal axis MN. In this position, it will nose up the model slightly under full power. Using negative stab angle will do the same thing, but that adds an additional load on the wings and reduces flight capacity. The thrust line may be lower than this **if** the c.g. is below it The governing factor is to avoid placing the thrust line (center line of prop shaft) below the c.g. because the plane will tend to glide steeply or dive sharply at the end of flight. In low wing monoplanes the thrust line is almost always above the line of resistance, therefore negative incidence on the stab is required to reduce the diving tendency under power. In order to have the least disturbing effect, the point of power should be as close to the c.g. as possible. By having the prop a considerable distance from the c.g. the disturbing effect has to be corrected by other factors.

Corrective Factors: These are:

1. Angle of stab chord to line of flight (center line of prop shaft) as compared to wing angle to line of flight.

2. Distance of stab from wings(stab moment arm W-S above)

3. Stab area

4. Position of c.g. relative to center of lift, considered in a vertical plane.

Corrective Factor #1, **stab chord angle compared to wing angle.** This is both a disturbing and a correcting factor. When the stab is set at an angle of 2º less than the wing to the line of flight, the disturbing factor is small. When greater than that there is a tendency to stall at high speed. From the results of experiments is was found that the stab should be so placed that it is 2º or 3º less than the wing's angle of incidence where the wing center section is near or slightly above the thrust line and the wing has normal dihedral. As the wing increases in height relative to the stab moment arm, the stab angle can be reduced. This can be visualized in the diagram above where if the wing height is increased, the line of resistance will tend to push the tail down, reducing the need for the stab to do so.

Corrective Factor#2, **distance of stab from wing**. This factor was discussed above in displacement factor #6.

Corrective Factor#3, stab area. One of the greatest faults of scale models is that the stab is too small for steady flight and to overcome stalling tendencies. The larger the stab area, the less the plane will deviate from normal flight and the less the wing angle of attack will vary. The less it varies, the more efficient the wing which allows longer flight on less power. Grant provides some rules as follows:

1. When the c.g is above the thrust line and the nose is long, make the stab 45% of the wing area.

2. When the c.g. is below the thrust line, make the stab 30%-35% of the wing area, 25% for gas models.

3. When the c.g. is below the thrust line with a short nose and the prop close to the wing, 25% of the wing area.

4. In biplane models, use 5% less than that shown above.

Grant makes no rules for scale models other than to say that the stab should range from 25% to 45% of the wing area for most all models.

Corrective Factor#4, position of c.g. relative to center of lift.

Grant makes an unusual argument for having the c.g aft of the center of lift, requiring upward pressure on the stab. He recommends a positive stab angle of 1/2º to 1º, although it should still be about 2º less than the wing incidence relative to the thrust line. His point is that any spin tendency with this arrangement can be corrected by adding 10% to the fin.

The reader will notice no mention of "downthrust" as a correcting factor. Grant's book goes to great length proving that there is no such thing as "downthrust," but that will have to be the subject of another article. Stay tuned!

2012 FAC NATS JULY 18-21 GENESEO, NY SCHEDULE OF EVENTS

WEDNESDAY JULY 18, in the HAG Hangar:

- Registration 12:00pm - 5:00pm; Vendors, Jawboning, and General Tomfoolery
- FAC Scale judging
- PPLC Compliance checks for TTOF Scale, Mass Launch, and BLUR

THURSDAY JULY 19 8:00-5:00

Mass Launch Events:

9:00 #25 WWI
11:00 #22 Thompson Trophy
2:00 #6 Low Wing Military Trainer

#1 FAC Peanut Scale*
#2 FAC Rubber Scale
(inc. Zero Bonus Point event)
#3 FAC Jumbo Scale
#4 FAC Pioneer Scale
#5 FAC Power Scale

TOTF-Scale
#32 Aeronca Chief 1-Design

TOTF-Non Scale
#10 OT Rubber Stick
#12 2-bit+1 OT Rubber-ROG
#14 OT Gas Replica-1st

Misc. Timed Events
#15 Simplified Scale

Evening event: SLOW

FRIDAY JULY 20 8:00-5:00

Mass Launch Events:

9:00 #26 WWII
11:00 #23 Greve
2:00 #9 Modern Military

#1 FAC Peanut Scale*
#2 FAC Rubber Scale
(inc. Zero Bonus Point event)
#3 FAC Jumbo Scale
#4 FAC Pioneer Scale
#5 FAC Power Scale

TOTF-Scale
#8 Modern Civilian

TOTF-Non Scale
#11 OT Rubber Fuselage-ROG
#14 OT Gas Replica-2nd
#13 Jimmy Allen-ROG

Misc. Timed Events
#20 Jet Catapult
#21 Fiction Flyer

Evening event: BLUR

SATURDAY, JULY 21 8:00-4:00

Mass Launch Events:

9:00 #29 Midway Commemorative
11:00 #24 Goodyear / Formula
2:00 #31 Russian Fly

#1 FAC Peanut Scale*
#2 FAC Rubber Scale
(inc. Zero Bonus Point event)
#3 FAC Jumbo Scale
#4 FAC Pioneer Scale
#5 FAC Power Scale

TOTF-Scale
#7 Golden Age Combined

TOTF-Non Scale
#29 1/2 Wakefield-ROG
#14 OT Gas Replica-3rd

Misc. Timed Events
#16 Dime Scale
#19 Embryo-ROG

Evening event: FAC Banquet

* This year's High Wing Weenie Award will be given to the highest scoring high wing FAC Peanut Scale model.

FAC KANONE REPORT

FAC Club Name________________________________ **Contest Date** ____/____/________

Contest Director________________________________ Email Address________________________________ Squadron #_______

Please list the top four finishers of each event. You may indicate the total number of flyers in each event if you wish.

Event:		TOTAL FLIGHT SECONDS / FLIGHT TIMES (or HEAT ROUNDS FOR ML EVENTS)			or BEST SCALE FLT.				FAC member?	
Contestant's full name	**Model**	**1**	**2**	**3**	FACTORED	**Bonus Pts**	**Scale Pts**	**TOTAL**	**PLACE**	**Y/N**

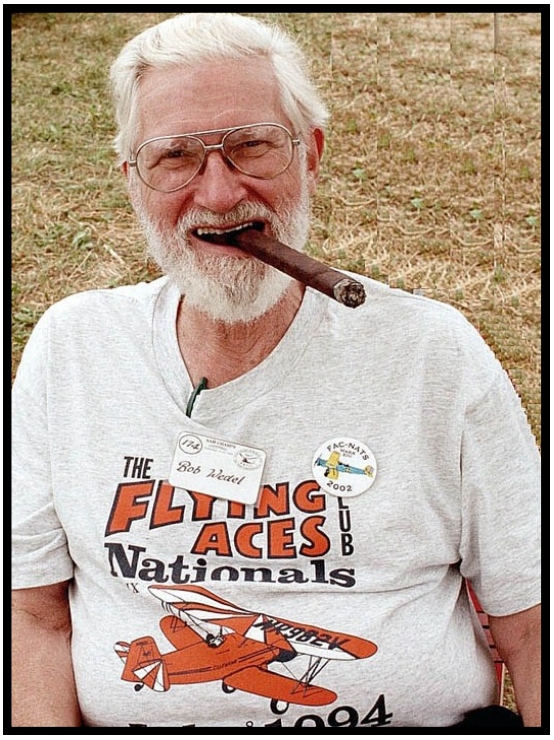
Event:		TOTAL FLIGHT SECONDS / FLIGHT TIMES (or HEAT ROUNDS FOR ML EVENTS)			or BEST SCALE FLT.				FAC member?	
Contestant's full name	**Model**	**1**	**2**	**3**	FACTORED	**Bonus Pts**	**Scale Pts**	**TOTAL**	**PLACE**	**Y/N**

Event:		TOTAL FLIGHT SECONDS / FLIGHT TIMES (or HEAT ROUNDS FOR ML EVENTS)			or BEST SCALE FLT.				FAC member?	
Contestant's full name	**Model**	**1**	**2**	**3**	FACTORED	**Bonus Pts**	**Scale Pts**	**TOTAL**	**PLACE**	**Y/N**

Send completed forms to: MIKE WELSHANS, KEEPER OF KANONES 976 Pearson, Ferndale, MI 48220 mbwelshans@AOL.com

Gone West

The FAC fraternity wishes to extend our sincere condolences to the family and friends of Bob Wedell and John Worth. They will be missed.



Claude Powell reports that long time MaxeCuter and life long modeler **Bob Wedell** passed away on Dec 7 after a brief illness.

I'm very sad to report that **John Worth** has left us.

John was a giant of aeromodeling, with a career that spanned the entirety of our hobby. He will be familiar to many through his tireless advocacy of micro r/c, and his deep involvement with the AMA. A longtime DC Maxecuter, he could always be counted on to bring some amazing new device to the meetings, a twinkle in his eye.

We have lost a giant. John will be sorely missed.

Dave Mitchell

TTOMA

Model of the Year Event

This year, the Thermal Thumbers of Mid Atlanta will be doing something a little different in their "model of the year" event. Instead of one single model we have elected to use a whole batch. Here's the rundown:

* Any Earl Stahl scale model is eligible.
* Models may be built as per the original plans or scaled up or down.
* Maximum wingspan is to be 36 in.
* Rubber power only.
* Models will be flown as Total of Three Flights or Mass Launch. This will be CD's choice but will be published in TTOMA newsletter and FAC news prior to contest date. Most likely TOTF will be the norm.
* Event is eligible for Kanones if enough flyers enter and fly.

FAC Contest Calendar

Contact **Fred Greg** with your contest announcements. You can reach him one way or another with the information below:

13701 Provincial Dr Sterling Heights, MI, 48313-2018 586.884.6919 loopy.cbfac@yahoo.com

Winthrop, MA	Jan 28, Feb 25, Mar 31	Stealth Squadron Indoor Contests	Richard Zapf	978-352-8331 evenings
Washington, DC	March 4	MAXECUTERS INDOOR MEET at the NATIONAL BUILDING MUSEUM	Glen Simpers	http://www.flyingacesclub.com/NBM2012.pdf
Kent, OH	April 15	Cleveland Free Flight Society Indoor Contest at the Kent State University Field House	Michael Zand Don Slusarczyk	imzand@hotmail.com don@slusarczyk.com

FAC GHQ & Council

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Fred Gregg
Tom Nallen I
Tom Nallen II
Mike Nassise
Bob Schlosberg

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

When contacting FAC officers via email, please be sure to include "**FAC**" in the subject line so that your message isn't overlooked.

Bonus Point Quiz Answer

Our panel of experts has declared that the little Russian oddball should do very well in the BP department. It gets five points for Tandem Wing, and twenty for being a Triplane. Grand total: 25.

If you have a ship that you'd like to submit for a review by the BPQ committee, please send it to the editor. You don't have to do anything fancy with the drawing or photo. Just send along your request or idea and we'll do our best with it.

Wawayanda—2011

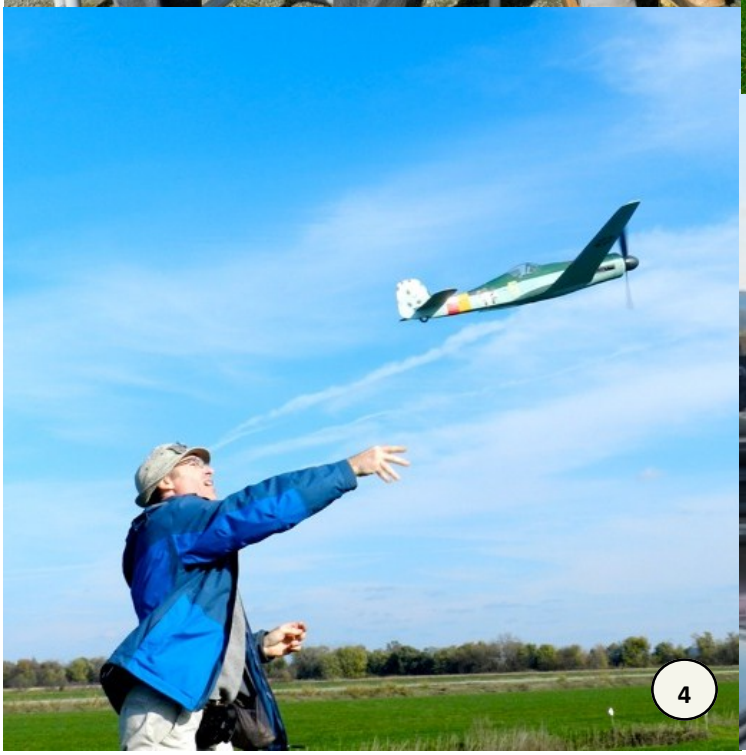
These photos and captions were sent to us by Dick Gorman.

The field was a bit sloshy, but the weather was great, especially on Sunday, and there was a whole lot of flying going on! 1. John Houck shows great form as he launches his Joy's Racer in the Fiction Flier mass launch event. 2. Modern Military mass launch always has a big contingent at Wawa. 3. Vance Gilbert inspects the "Happy Crash" of Dallas Cornelius' Jumbo scale winning Boeing. After making a massive circle around the field she came back toward the cars and we all feared the worst. She slid in on the roof of this van, bumped the car top carrier and stopped unscathed! You shoulda' been there! 4. Luc throws his Jumbo Ta-152. What a gem! 5. Pete Kateris and son Mike enjoying the weather on Sunday.


1


FRONT/FRENTE
5


2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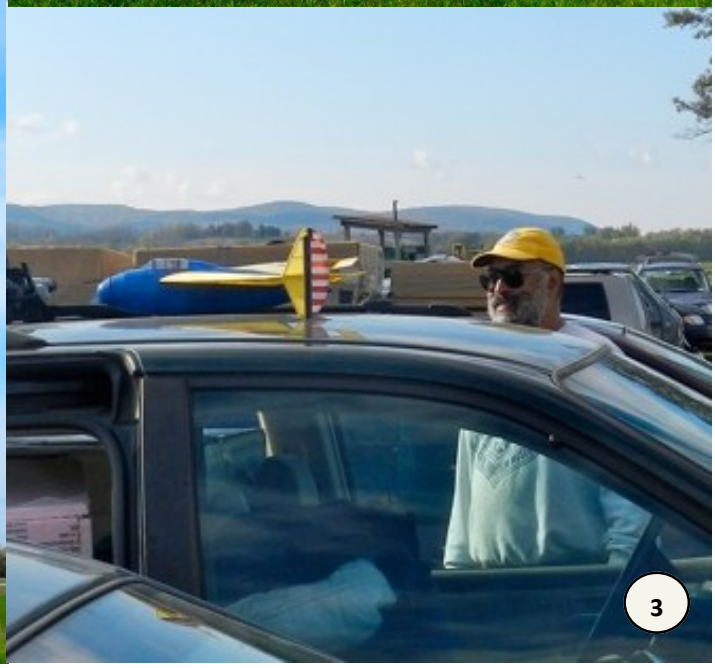
3

FLYING ACES Club

9154 Eldorado Trail

Strongsville, OH 44136

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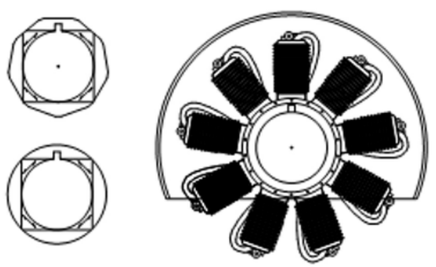
Two of the FAC's masters -

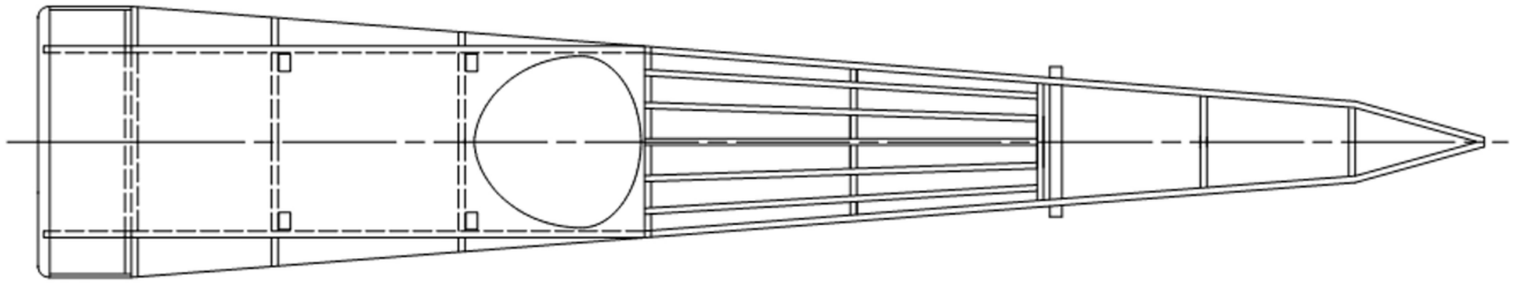
Above: Vance Gilbert with his Avro 547 Triplane on the field at Wawayanda, NY in October. You get an idea of the field conditions from the background.

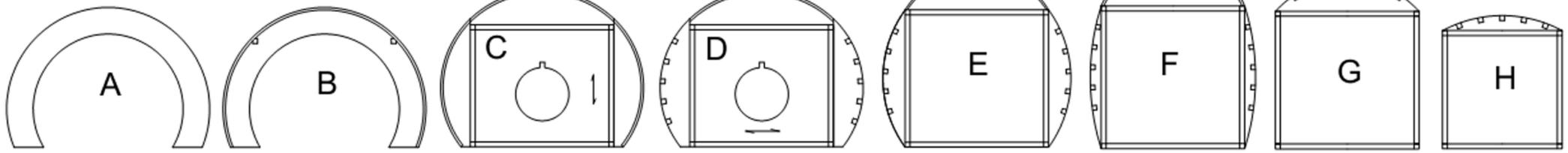
Dick Gorman photo

Left: The incomparable Pres Bruning launches his unique Embryo at the 2011 Outdoor Champs in Muncie, IN.

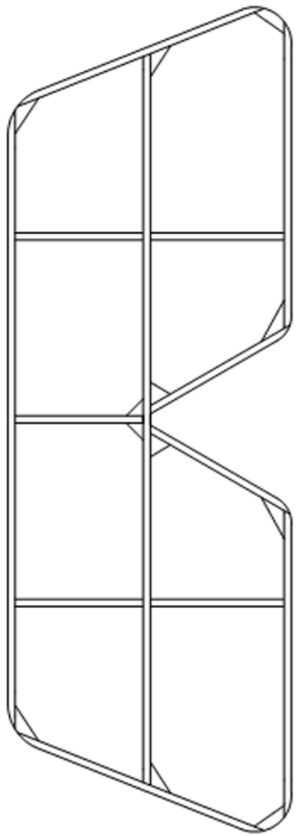
Ralph Kuenz photo

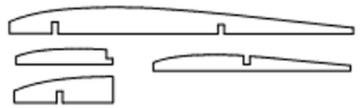


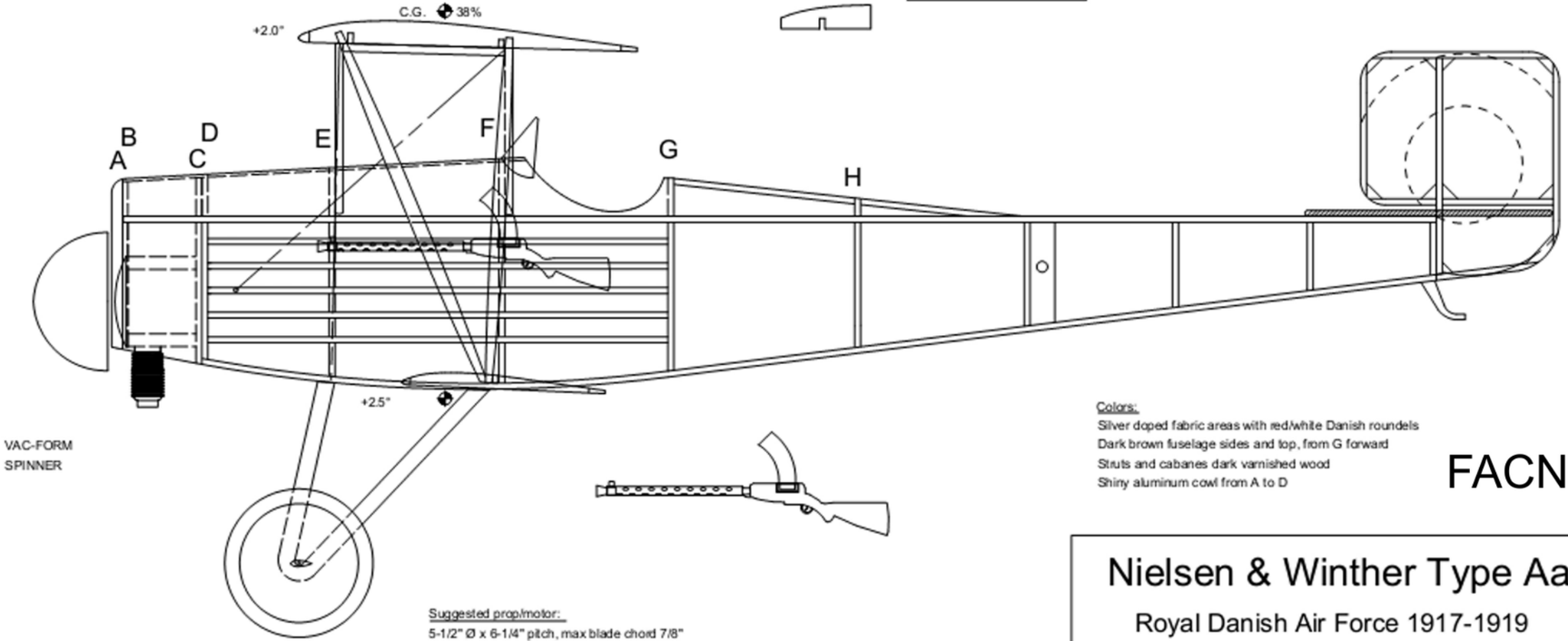




This plan was scaled down to Peanut size from the original, drawn at 21" wingspan. For 21" version enlarge by 162%.







VAC-FORM
SPINNER

Suggested prop/motor:
5-1/2" Ø x 6-1/4" pitch, max blade chord 7/8"
18-22" loop 1/8" Tan Super Sport

Suggested Peanut wood sizes:
1/16" spars, leading edges, struts
1/20" framing, ribs, trailing edges, formers
1/32" stringers, fuselage sheeting

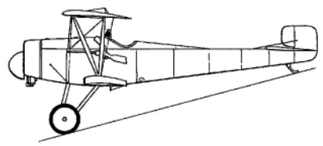
Colors:
Silver doped fabric areas with red/white Danish roundels
Dark brown fuselage sides and top, from G forward
Struts and cabanes dark varnished wood
Shiny aluminum cowl from A to D

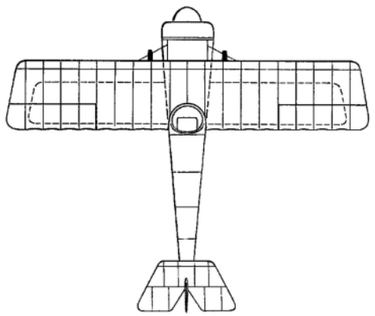
FACN #263

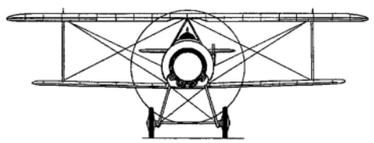
Nielsen & Winther Type Aa

Royal Danish Air Force 1917-1919

Designed by Don DeLoach, May, 2009



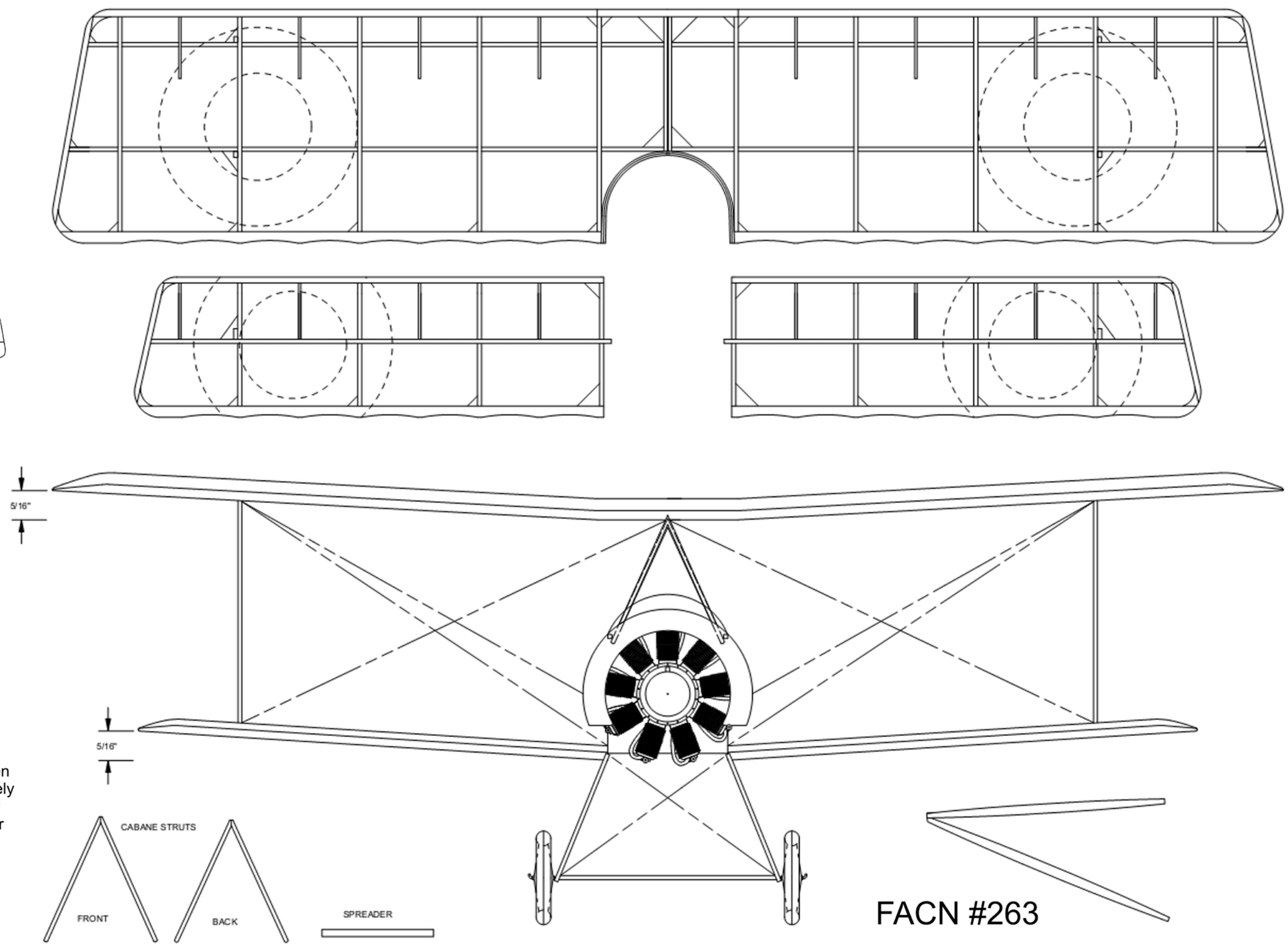




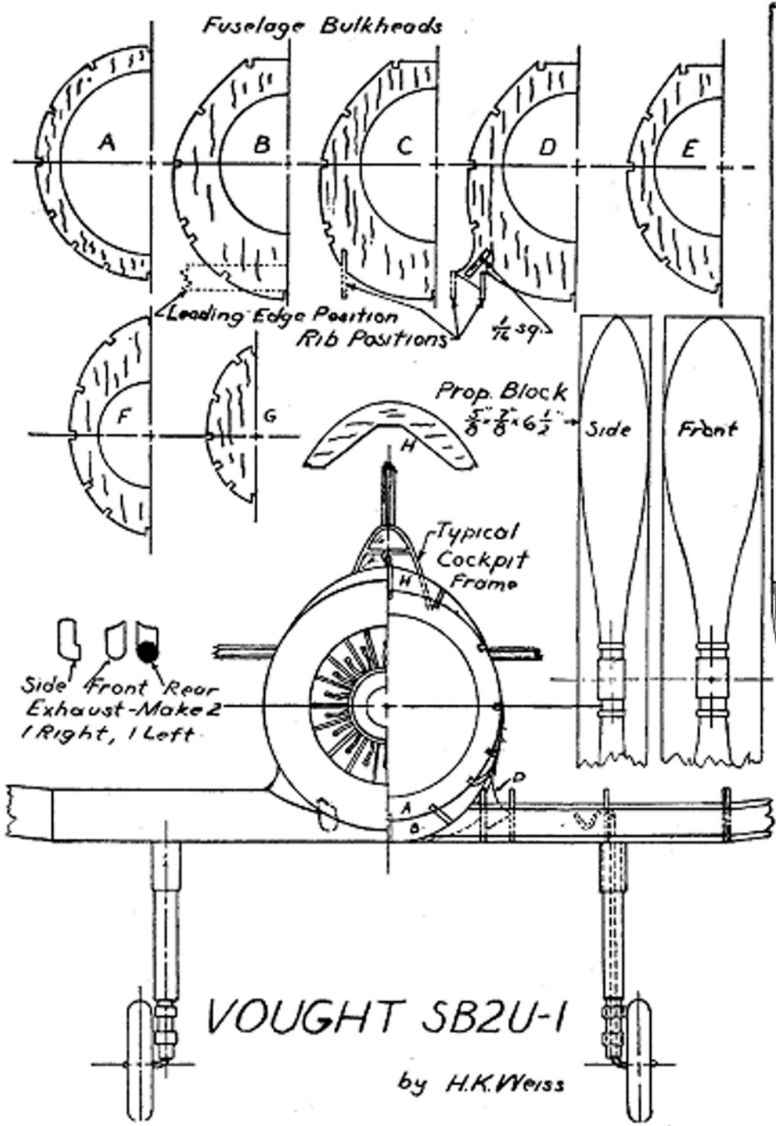
Nielsen & Winther Type Aa

There was a small production batch of six aircraft in 1917 that were delivered to the Danish Air Force. They were fitted with Madsen machine guns and tested extensively but Denmark stayed out of the War so the crates almost certainly never saw combat. It's a really nicely proportioned, simple ship that ought to be a fine flyer at any size.

Thermix
Don DeLoach



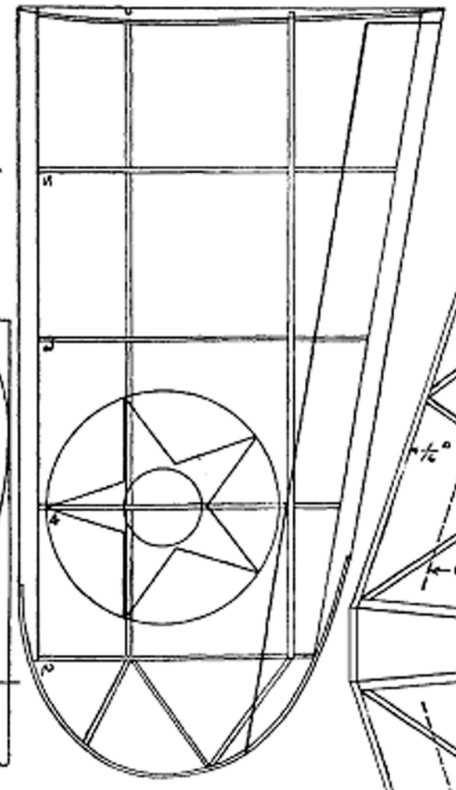
FACN #263

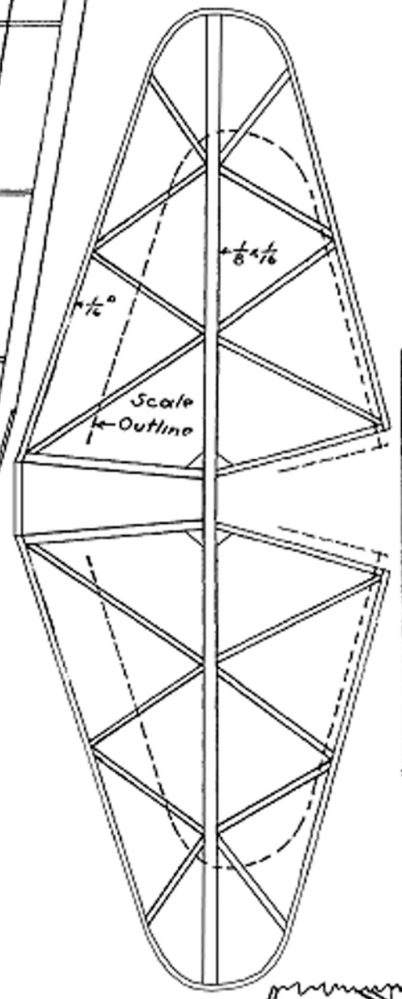


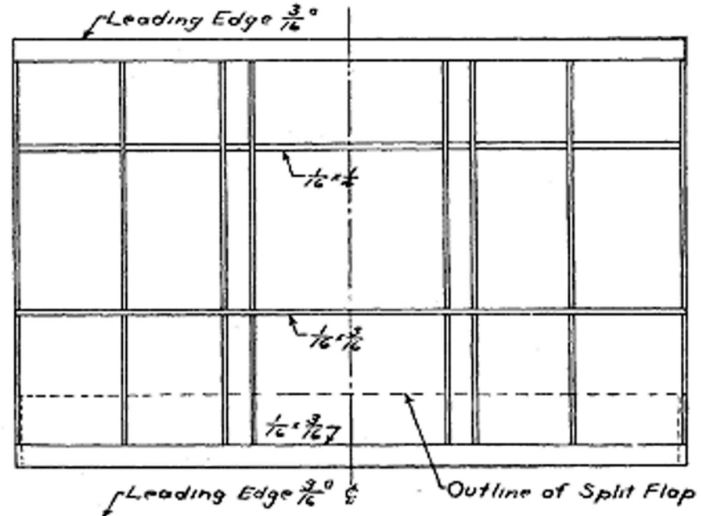
VOUGHT SB2U-1

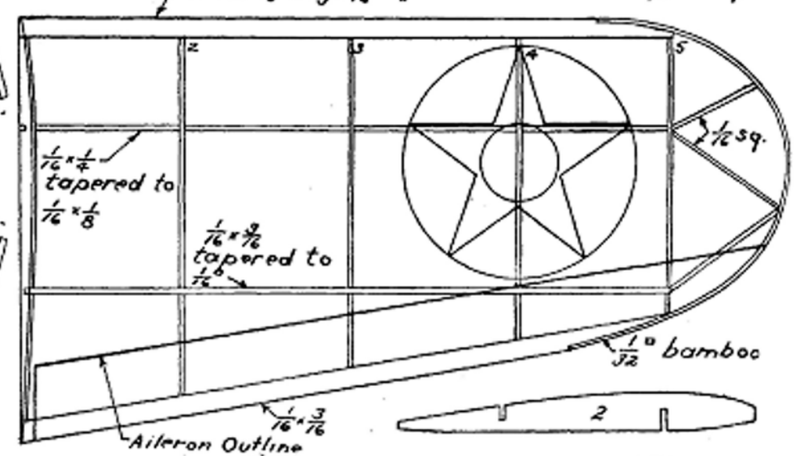
by H.K. Weiss

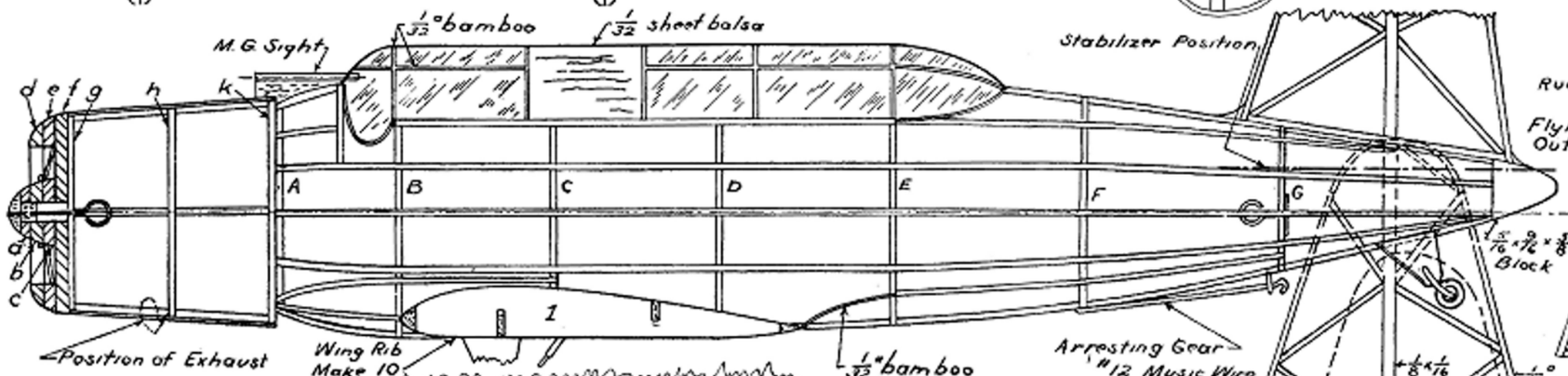
FACN #263

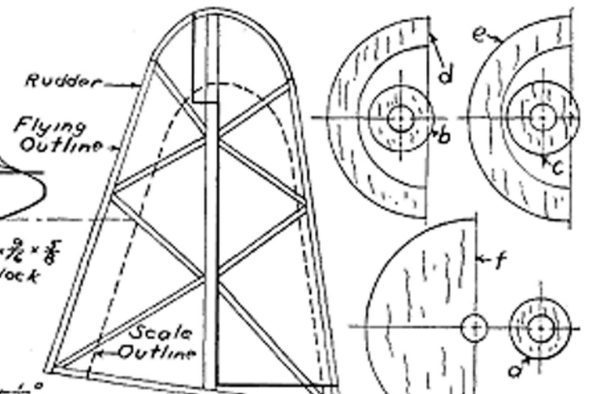










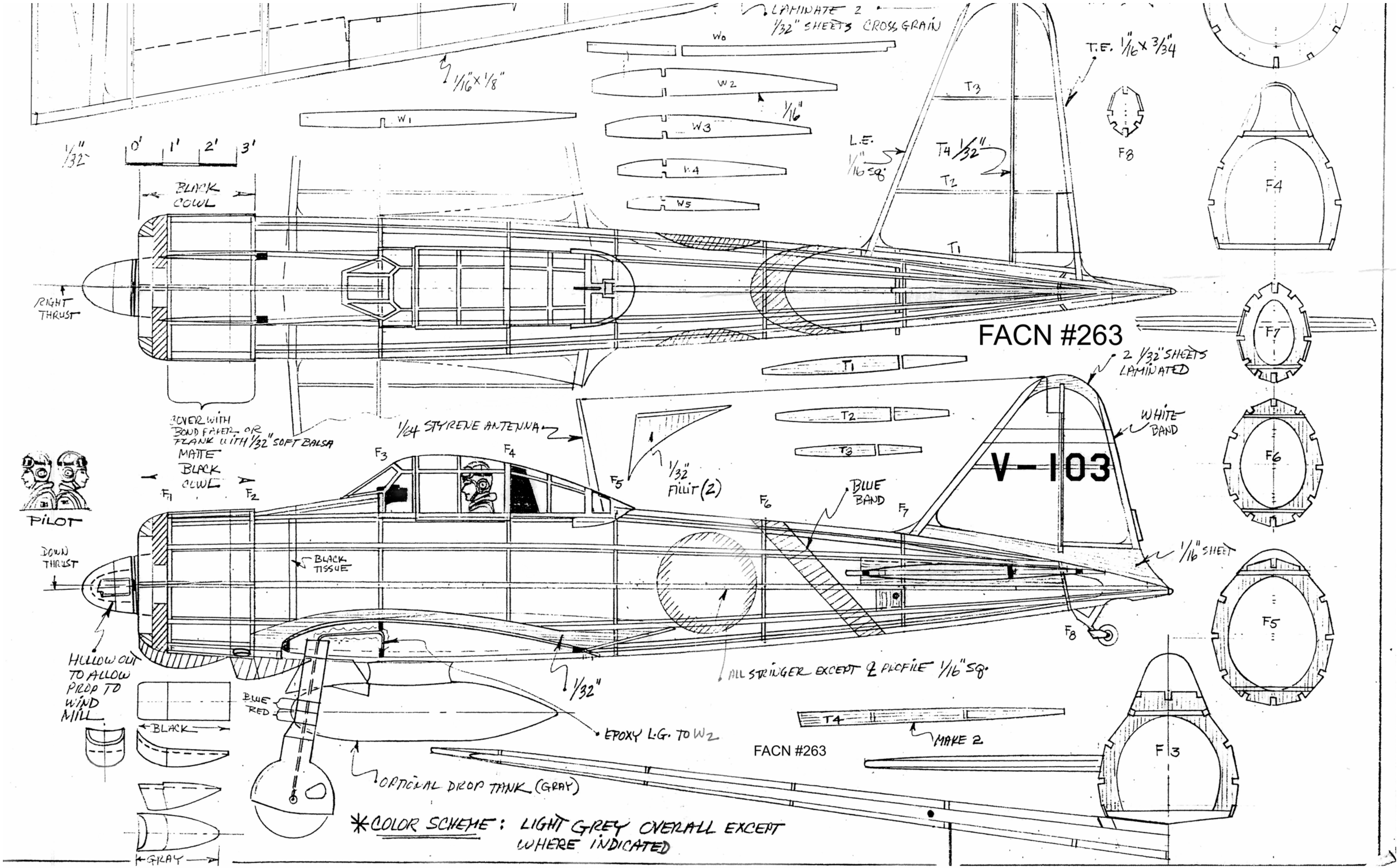


VOUGHT SB2U-1

by H.K. Weiss

FACN #263

Leading Edge Position
Rib Positions
1/16 sq.
Prop. Block 5/8" x 7/8" x 6 1/2"
Side
Front
Typical Cockpit Frame
Side Front Rear Exhaust-Make 2 1 Right, 1 Left
Scale Outline
1/16"
1/8 x 1/16
Outline of Split Flap
Leading Edge 3/16" ℄
1/16 x 1/4 tapered to 1/16 x 1/8
1/16 x 3/16 tapered to 1/16
1/16 sq.
1/32" bamboo
Aileron Outline
1/16 x 3/16
Wing Ribs Make 2 of Each
M.G. Sight
1/32" bamboo
1/32 sheet balsa
Stabilizer Position
Rudder
Flying Outline
Scale Outline
3/16 x 3/16 x 5/8 Block
Position of Exhaust
Wing Rib Make 10
1/32" bamboo
Arresting Gear #12 Music Wire
Flying Outline
Scale Outline
Pine Nose Plug
1/16 Balsa Braces (see ①)
Paper Wrapping
#34 Aluminum
#12 Music Wire
1/8 Al. Tubing
Paper Wrappings
Scale Outline


LAMINATE 2
1/32" SHEETS CROSS GRAIN
W0
1/16" x 1/8"
W2
1/16"
W1
W3
W4
W5
1/32
0' 1' 2' 3'
BLACK COWL
T.E. 1/16 x 3/34
T3
L.E. 1/16 sq.
T4 1/32"
T2
T1
F8
F4
RIGHT THRUST
FACN #263
F7
2 1/32" SHEETS LAMINATED
COVER WITH BOND PAPER OR PLANK WITH 1/32" SOFT BALSA
1/64 STYRENE ANTENNA
WHITE BAND
V-103
F3
F4
F5
1/32" FILLIT (2)
BLUE BAND
F6
F7
F6
PILOT
MATTE BLACK COWL
F1
F2
DOWN THRUST
BLACK TISSUE
1/16" SHEET
F8
F5
HOLLOW OUT TO ALLOW PROP TO WIND MILL
1/32"
ALL STRINGER EXCEPT ℄ PROFILE 1/16" SQ.
BLUE
RED
BLACK
EPOXY L.G. TO W2
T4
MAKE 2
FACN #263
F3
OPTIONAL DROP TANK (GRAY)
GRAY
*COLOR SCHEME: LIGHT GREY OVERALL EXCEPT WHERE INDICATED

MITSUBISHI A6M2 'ZERO-SEN' MODEL 21

SCALE : 7/16" = 1'-0" DR.BY: R.P. BROWNE

REFERENCE : PROFILE PUBLICATIONS #129

FACN #263

FACN #263

L.E. SHAPE FROM 1/8" X 3/16"

MEDIUM GREEN TISSUE DOPED TO UNDER SURFACE

1/32" TAPERED SPARS (TOP & BOTTOM)

W0 W1 W2 W3 W4 W5

1/16" RIB

1/32" RIBS

1/16" X 1/8"

ALUM. TUBE SLEEVE

MODEL ROCKETRY BALSA NOSE CONE CUT DOWN

SLEEK STREAK PROPELLOR BLADES JOINED IN PIE FASHION SLEEVED WITH ALUMINUM TUBE

NOSE BLOCK

LAMINATE 2 1/32" SHEETS CROSS GRAIN

T.E. 1/16" X 3/32"

T3 T4 T2 T1

L.E. 1/16" SQ.

1/32"

0' 1' 2' 3'

BLACK COWL

RIGHT THRUST

COVER WITH BOND PAPER OR FRANK WITH 1/32" SOFT BALSA

MATTE BLACK COWL

1/64 STYRENE ANTENNA

F1 F2 F3 F4 F5 F6 F7 F8

1/32" FILLET (2)

BLUE BAND

WHITE BAND

2 1/32" SHEETS LAMINATED

V-103

PILOT

Planchais LD - 45 IV

piqueur 5°
droite 2°

bloc
10/10
lisses 0,5 x 1,2
tableau de bord
2 fois 3/10 fils croisés
5/10
A
B
C
D
araldite
1,2 x 1,2
lamellé
2 fois 0,5 x 1,2
bambou
+ papier
roue styro 7 mm
ctp 5/10
roue styro 18 mm
B
2 fois 3/10 fils croisés
C
lamellé
2 ctp 0,3 x 1,5
dièdre 3 mm
10/10
D
mats
1,2 x 3 profilé
haubans
fil lycra torsadé
très tendu
paille 1 mm
partie plate
du pare-brise
dièdre 10 mm
ligature
souplisseau
coulissement
libre
carénages
parfois absents
orifices
laissant voir
le carter moteur

1,2 x 1,2
0,5 x 1,2

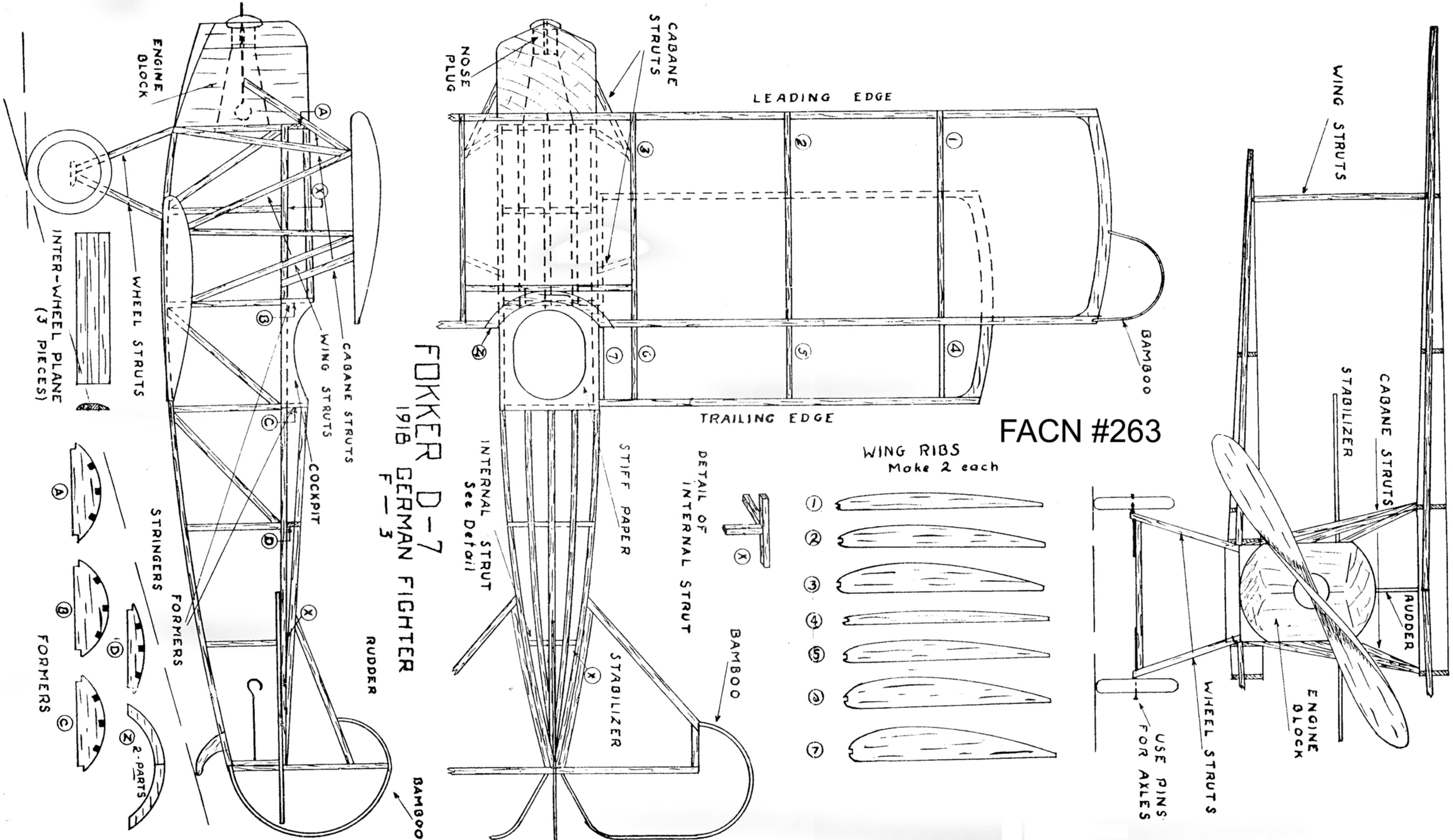
FACN #263

Hélice 140 mm plastique ou bois dur taillé pas relatif 1,6
Moteur une boucle de 2,7 à 3 mm 350 à 400 mm de long

10/10
1,2 x 1,2 dur
5/10
1,2 x 1,2
1,2 x 1,2
25/10
bambou

ligature
ou soudure
plier vers l'extérieur
replier
vers l'intérieur

J C -- 12/2005



DIRECTIONS FOR BUILDING YOUR FLYING MODEL.

Good Flying Models depend on (1) careful construction of the various parts, (2) accurate alignment of the model, (3) correct balance and (4) proper adjustment of the wing and tail surfaces. Good-looking models cannot be had unless printed parts on the sheet balsa are cut out accurately or unless you follow carefully the outlines of the drawing when assembling the various parts. This is especially true of the fuselage which will appear lopsided if you are careless. Your airplane will not fly well unless great care is used on the assembly. The wings and stabilizers must be parallel to the line of thrust or you will be in trouble. If your plane is not in balance it will fail to rise or else it will rise too rapidly. Finally, the wing and tail surfaces must be warped slightly for good flights.

PROCEDURE: Tack your plan sheet to a working board. Fasten a sheet of wax paper over it as a protection from the cement. Cut the "spray balsa" apart with a razor blade. This will give you a generous supply of 1/16" squares. The printed parts on the sheet balsa can be cut out later while you are waiting for other parts to dry. In general the procedure will be (1) construct the various parts, (2) to assemble the airplane, (3) to correct the balance, and (4) to adjust the wing and tail surfaces.

PARTS CONSTRUCTION: (1) The Fuselage. Place your wood strips on the side view of the fuselage. Use pins to hold the longerons (stringers) in place. Cement the upright and diagonal braces to them. Build the second side on top of the first. When dry separate the two sides with a razor blade except at the tip of the tail. Work from the nose to the tail and put in the top and bottom cross pieces or formers, as shown in the top view. Then cement any remaining stringers to the formers. Bend the tail hook and cement in place. It is very important that it be placed in the exact position shown in the side view of the drawing. Then carve the nose block and cement in place. Cover the fuselage with dark tissue. Leave the bay at the tip of the tail open so that the tail hook is accessible. (Special Instructions for Construction of Fuselage for F-5, F-7, F-8, F-10, and F-11. Cut out the formers from the sheet balsa. Cement the stringers in place. Do not try to put all the stringers in at once. Start with four, in square or oblong patterns. After you have fastened these to the formers go ahead with the rest of the stringers. Cement the nose block in place. Bend the tail hook to shape and cement in place and then do the tail skid. Cover the body with dark tissue. Leave the bay at the tip of the fuselage open so that the tail hook is accessible.) (2) The Wings. Place the spars in position on the top view of the wings. The forward spar in this case forms the leading edge, the rear spar the trailing edge. Cement the ribs in place. Put on the wing tips. When bamboo is used for wing tips it can be bent to shape by holding it over a candle flame. Cover the wings with light-colored tissue. (Special Instructions for F-2. Do not cover the wing fillet section until after the wings have been fastened to the fuselage and the struts fitted in. See instructions under Airplane Assembly for directions how to put on wings.) (3) Tail Surfaces. Build the tail surfaces directly on the plan, the stabilizers on the top view and the rudder on the side view. Do not cover with tissue until they have been fastened to the fuselage. (4) The Propeller. The sawed balsa propeller is made ready quickly by smoothing with sandpaper. Pierce a hole for the propeller shaft. Insert propeller shaft first through the nose plug, then through the washers and finally through the propeller. Bend wire over the propeller and cement in place. (Special Instructions for F-2, F-9, F-10, and F-12. Make the wheel pants as follows: Cut the fillers and sides from the balsa sheet, cement together and sand to shape.)

AIRPLANE ASSEMBLY. Before assembling your model, study the plan carefully and note the exact position of the various parts in relation to each other. (1) Wing Assembly for F-2, F-4, F-6, F-11, and F-12. Attach the wings to the body after carefully noting that the bottom of the wings is parallel to the line of thrust. You can find the line of thrust by drawing a line on the side view of your drawing from the center of the propeller hook to the center of the tail hook. Then check your assembly with the front view of the plan to see if you have the proper dihedral in the wings. Attach the wing struts. (Special Instructions for F-1, F-3, F-5, F-7, F-8, and F-9. Cement the lower wings on first. Make sure that the wings are parallel with the line of thrust. Locate the line of thrust on your plan by drawing a line from the center of the propeller hook to the center of the tail hook. Check also with the front view to see if the wings have the proper angle with the body. Then cement the interplane struts to the wings and let dry in the right position. Cement the top wing in place. Finally put in the cabane struts.) (Special Instructions for F-10. Cement the top wings in place. Fasten wing struts to bottom of top wings. Cement lower wing to struts. Then put in cabane struts.) (2)Put on the stabilizers. Make sure that they are parallel with the line of thrust. Then fasten the rudder in place. Cover the stabilizers with light color tissue; the rudder with dark tissue. Cover one side only of the tail surfaces. (3) The Landing Gear is next. Then do the tail skid or wheel. (4) Hook up the propeller by catching the rubber motor over the propeller hook, drawing the other end through the body by means of a long wire hook or string, and then hooking it on to the tail hook. (5) Shrink tissue tight by spraying the model lightly with water except for the tail surfaces. Water is used instead of dope on light models as dope makes the models too heavy.

AIRPLANE BALANCE. The point of balance of your model is about one-third back from the leading edge of the wing. If the plane is nose heavy, correct by adding weight to the tail or by reducing the nose weight; if the model is tail heavy, correct by adding weight to the nose. BB shot makes good nose weights. Airplanes that are tail heavy will stall quickly; those that are nose heavy will lose altitude rapidly when hand-launched.

FLIGHT TESTING. This type of model flies best in light air or a calm. Be sure that you have plenty of room, free of trees and other objects. Remember that your airplane will not be likely to fly well unless it makes good glides. Hence, the first thing to do is to glide your model. If it noses down too sharply as you glide it, correct by raising the trailing edge of the stabilizers slightly. Make these adjustments by breathing heavily on the stabilizers as you bend them. If it stalls correct by lowering the trailing edge of the stabilizers. If the plane turns to the left, correct by giving it opposite rudder; if it turns to the right, correct with a little left rudder. If the airplane makes a circular dive to left, correct by "washing-in" the tip of the left wing. Do this by gently warping the trailing edge of the wing tip downwards. A circular line to the right would be corrected by "washing-in" the tip of the right wing. Now for the first flight. Hold your model by the nose block, as you wind the propeller. Wind the propeller clockwise until you have a row and a half of knots on the rubber motor (about 50 times). Launch it carefully from the hand by thrusting it forward gently as you release the propeller. The model should be pointing down slightly and the wings parallel with the ground when you release it. As it goes forward note whether it flies up or down, left or right, forward, etc. Make whatever adjustments are necessary before flying it again by warping the wings or tail surfaces or by correcting the balance. Fly again. Once the model is properly adjusted, wind the motor fully and fly again.