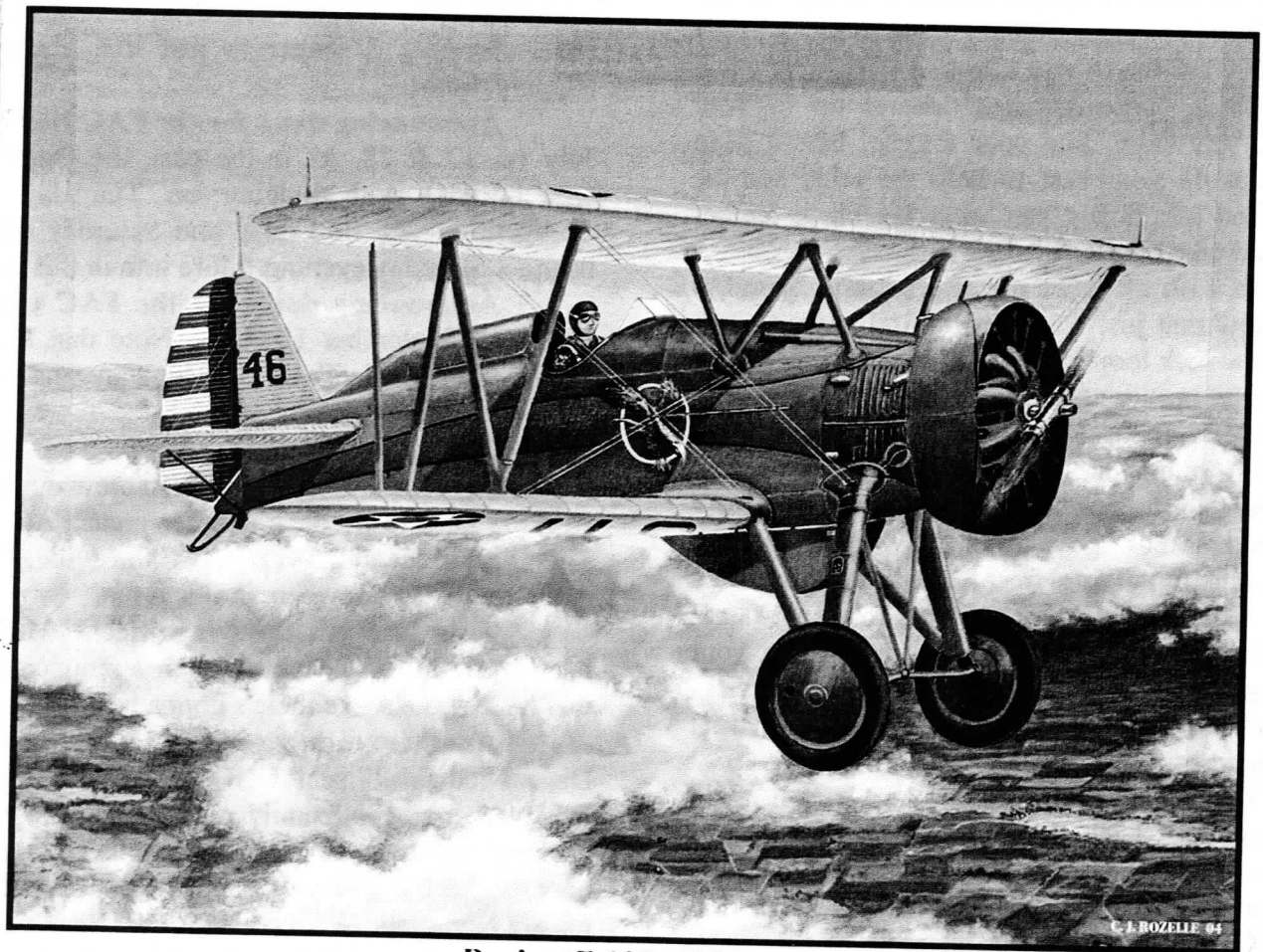
FLYING ACES

Club News

ISSUE 245-171 Jan./Feb. 2009



Boeing F-12E 1936

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NEWS FROM GHQ!

In the beginning there wasn't an FAC club, but a bunch of guys having a great time up in CT flying rubber powered free flight scale models. When the Founding Fathers decided it was time to organize, they created the FLYING ACES CLUB and well, you know the rest. But did you know that originally ALL the rules were on just a few 8.5 X 11 sheets of paper?

So why do we have so many rules now? Well, there weren't as many events back then and there weren't 1,500 members world wide.

Speaking of the rules...there are several changes that go into effect as of today. There are changes in the wording of some events to help reduce confusion. Be sure to check out bonus points for multi-prop models, Contra-props and Jets.

Do you have to read the 2009 Rule Book? Well, 90% of the FAC family will read it and the other 10% will show up at a contest with their motto in tow: "I didn't come to read, I came to fly!"

My advice to you Contest Directors when one of these "unenlightened" shows up to your contest...stay calm, bite your tongue, take a deep breath and do your best to help the rebel see the light. Then ask if you can wear his black leather jacket and take his Harley for a ride.

So with all these members, we're bound to have a few that just don't get it. And sadly to say, even a few seek loop holes for that advantage which only results in more rules and less FAC Spirit. In a perfect world, there wouldn't be a need for changes to the 2010 rule book. One can only hope.

Let's all work on that, after all, are we any different than those guys up in CT way back when? Isn't having fun flying free flight rubber powered models what it's all about? Wouldn't you rather build than bitch? Wouldn't you rather see your model grabbing altitude than graveling attitude? Wouldn't you rather delight in a 30 second flight than defend some 30 degrees of dihedral?

Yes, those early FAC'ers had it right. And did I say 'way back then?' My apologies to you Pinkham Field Irregulars...after all, many of you First Family Members are still having more fun with balsa and glue than what should be legal.

Are there any new events for 2009? Glad you asked. We have added FAC Phantom Flash and a nostalgic version of Dime Scale. Also, Rapier Scale is now known as FAC Rocket / Jet Scale.

HEY! The 2009 FAC Calendar is available! Yep, check out the ad in this issue and get a check out to Miss Juanita PDQ!

Did you get an FAC 30th Anniversary Pin for Christmas? They are also available from Miss Juanita. Did you say you aren't sure about buying something unseen? Check out Dennis Norman's seven page report of the 2008 FAC NATS in the January issue of *MODEL AVIATION.* Wow! Five pages in full color...including a photo of the anniversary pin. Thanks Dennis for a job well done. And a special thanks to Mike Isermann who was instrumental in the design and production of the pin.

And speaking of NATS coverage, did you see the FAC NATS article in the Dec. issue of *FLYING MODELS* by Don DeLoach? Just how does he find the time to build, fly, win events, shoot photos, write articles and make a baby? That's right clubsters, Don and wife Cindy (who did most of the hard stuff) have a new peanut as of 12/17/09. Congrats! Baby Kiley is beautiful. And don't worry Don, changing a diaper is just like changing a slippery motor.

Announcing dates for the FAC Non-Nats! July 16, 17 & 18. As in the past, the Quality Inn will be HQ with judging on Thursday night. Competition will be Friday and Saturday with the banquet Saturday evening. More info in this issue.

Announcing dates for the FAC Outdoor Champs! September 10 & 11. Note that flying at Muncie this fall will be on Thursday and Friday. Details in the next FAC News.

Announcing dates for WESTFAC MK II! September 25, 26 & 27, 2009. The crew out west is working hard to produce another great FAC event. This year's location will be Gainesville, Texas. Additional info elsewhere in this issue.

This just in...the Magnificent Mountain Men want *YOU!* Check out their announcement in this issue. Looks like there's gonna be a bigg'in.

Another anniversary to remember... Dave Niedzielski sent GHQ a reminder that this July marks the 100th anniversary of the first English Channel crossing by Louis Bleriot. To mark his historical flight, we will have a S.L.O.W. Race at the '09 Non-Nats. What's a S.L.O.W. Race you ask? Think...the "opposite" of the B.L.U.R. Race. The details are within this issue. BTW, Dave has already offered to sponsor this event. Thanks Dave!

Enjoy your *FAC NEWS!* Ross, CinC.

From the Editor:

The holidays have come and gone and another month is almost over. There many new things in the newsletter this time. **Make sure you read them.** Ross has given you many new things to think about, and of course we have the application for the Off Nats in this news letter. Further in my page you will find how we want you to send your application and monies.

We have five plans for you and one has the background of the plane plus pictures. This is the Buttercup. The drawing is by one of our past club members who is now deceased, Padre Anderson. You will also find the Miles M-5 Sparrowhawk by Walt Mooney; Aeronca 7AC Champion; designed by R. Danford Hawes and also drawn by him, Fairchild 22 C-7 by John Low; and Megow's Stinson Reliant.

There are two pictures from Muncie sent in by **Mark Rzadca**

You will find articles by Dave Stott, Bill Henn, and Al Cleve and of course are Glue Guru and the story and picture of the Buttercup.

We want to thank all who sent me cards for Christmas and articles for the newsletter. We appreciate all that you have done. Just remember this is a family club. Sometimes we don't agree with the rules, but that usually is easily taken care of. **The thing to remember is we are to be having fun and getting to know the members of this out standing group. They are always there to help when you need it.**

We have ads from Hobby shops and items that others are trying to sell.

I promised I would tell you how to send in your monies for the Off Nats. We have two accounts one strictly for the newsletter and the other is for contests, and all the other items that we have for sale. **Please make out two different checks if you are paying for your dues, the contests and the sale items.** You will make my life much easier, so I don't have to shift the funds between the accounts.

We still have T-shirts from the 30th anniversary at Genesseo, the Muncie shirt, the A-20 and the Dauntles. The shirts are $15.00 except for the Dauntles which is $10.00. There is still souvenir buttons left which are $10.00 (includes postage). There very few Large shirts, most are extra large and bigger. There are still some calendars left which is $15.00. The members sent pictures and Ross and I had to choose what we would use. **Thanks to all the members who forwarded photos for the calendar. Let Ross and me know your comments on the calendar.**

If you move, please send us a postcard giving the new address and the month that your dues are due. Once I get the program on the computer, it will be very simple to find members names that we don't have to look through all Lin's card file. When you move and it comes back, I will re-mail your newsletter to the correct address.

It is time to close and know we will have more information for you in the next newsletter.

Juanita

THE MARTIN 333 ENGINE, PHILLIPS CT-2, PHILLIPS FLEET, AND THE DAY "ERRANT".

By Dave Stott

In the FAC News for May/June, 2008, Fran Ptaszkiewicz mentioned the Martin 333 engine as being used in the Babbcock aircraft he so nicely described. In FAC News for Nov./Dec., 2008, Larry Wacken provided more info on the 333 engine and on the Heath Cannon Ball racer which used it.

The engine was a design by Louis Chevrolet (No kin to the auto maker) and was called the "Chevrolair". This is the same Chevrolet whose larger "Chevrolair" powered one version of the Travel Air Mystery ship. Glenn Martin bought all rights to the 333 engine, and probably some engines. It now bore the name, "Martin 333".

Later, Ivan Driggs bought the rights to the engine, but apparently, never made use of it. Because of the Great Depression, Driggs folded his operation of building the eye pleasing Skylark biplanes. (The Skylarks were powered by the 75 HP Michigan Rover engine.)

Still later, the rights to the 333 along with at least one "Skylark" were bought by James Phillips. The engine then became known as the Phillips 333. Phillips produced two biplane trainers which were a collection of parts of various other aircraft. One was the CT-1 powered by a Menasco, while the CT-2 was powered by the Phillips 333. These were cobbled up in anticipation of government orders for the selection of trainers for the Civilian Pilot Training Program.

Three other biplanes called "Phillips Fleets" were sold on the civil market. These were more or less Fleet biplanes re-engined with the Phillips 333 engine.

Many new companies had been formed in anticipation of giant government contracts for trainers for the Civilian Pilot Training Program mentioned above. The need for new trainers never materialized. The training of pilots was accomplished using existing civilian flying schools and instructors. Phillips Aviation Company would be more remembered for their sleek, gleaming all metal "Aeroneer".

Another biplane which used the Martin 333 engine was the Day "Errant". It was designed by Charles Healy Day to fly around the world on his honeymoon!

Charles Healy Day had designed the Standard JN-1 trainer of WW I. After the Armistice of November 11, 1918, some were modified by Mahoney-Ryan to carry passengers in the comfort of a widened fuselage cabin. Without the open cockpit and the widened fuselage the cruise speed went up a whopping 15 mph! The Gee Bee theory proven back then!

Other designs by Charles Healy Day were the series of ten different models of biplanes built by New Standard. Some were designed with barn storming in mind and carried 4 paying passengers in the huge front cockpit, with pilot behind in another cockpit. One of these is still working at its designed trade at Old Rhinebeck Aerodrome in New York State.

With the "Errant", Day and his bride completed the honeymoon flight around the world. Except for shipping the plane across oceans, the trip was accomplished all by air. The airplane had purposeful design features. A good amount of dihedral and a lot of positive wing stagger. It also had generous stabilizer area. All of these features produced excellent hands–off flying characteristics. Couple this with side by side seating in an open cockpit and you have a ship made to order for cuddling in the clouds. Day certainly thought of everything.

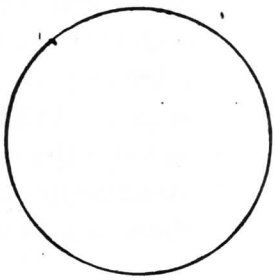
A 21 inch wingspread rubber powered model plan of the Day "Errant" can be found in Max-Fax for May/June, 1991. An extensive article on the honeymoon trip with many photos can be found In National Geographic magazine for June, 1932.

Now we have added 4 more aircraft types powered by the 333. The Martin 333 was not unlike an orphan who bore many names and that no one seemed to want to care for very long. This engine of 120 HP screamed around pylons and battered its way around the world, yet achieved no notoriety as did the mighty Pratt and Whitney engines. Like Justice, history can also be blind.

References: "U.S. Civil Aircraft", by Joseph Juptner, Vol. 4, 5, and 8. Antique Airplane News, July, 1956 and June, 1957. Max-Fax and National Geographic as mentioned above.

Next time, we will take a little closer look at the Heath Cannon Ball racer.

IF THE CIRCLE ON THE RIGHT HAS THE DREADED RED 'X' IN IT, IT IS TIME TO RENEW YOUR MEMBERSHIP WHICH INCLUDES THE NEWSLETTER. COST IS $18.00 PER YEAR IN THE U.S.A., COST FOR CANADA IS $25.00 PER YEAR. COST FOR OVERSEAS IS $30.00 PER YEAR. ALL IN U.S. DOLLARS. SIX ISSUES PER YEAR, PUBLISHED APPROXIMITLY EVERY OTHER MONTH. PLEASE MAKE CHECKS PAYABLE TO; FLYING ACES CLUB, 3301 CINDY LANE, ERIE, PA. 16506.



The photo below shows how my "bat cave" closet looks with six 24"-30" span models mounted within 6 square feet of ceiling space None of the models touch each other and there is still room for two more to be hung later.

With care up to 16 models can be stored, hanging from the ceiling in a 2 foot x 8 ft closet. Hope this helps. I now have a safe storage area that prevents sun fading my models.

George Mansfield
San Diego Scale Staffel, Squadron 41

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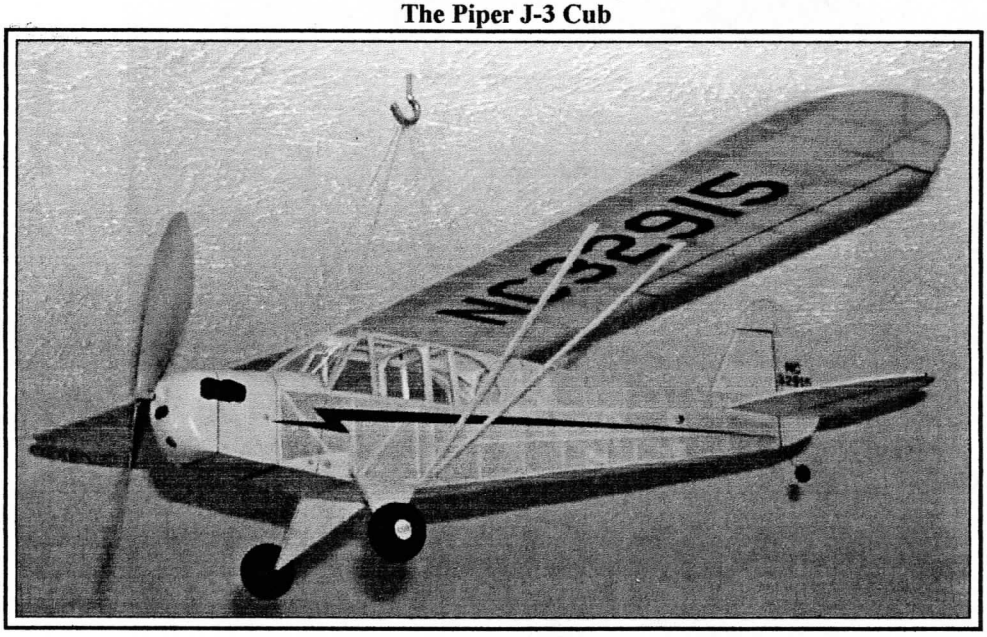
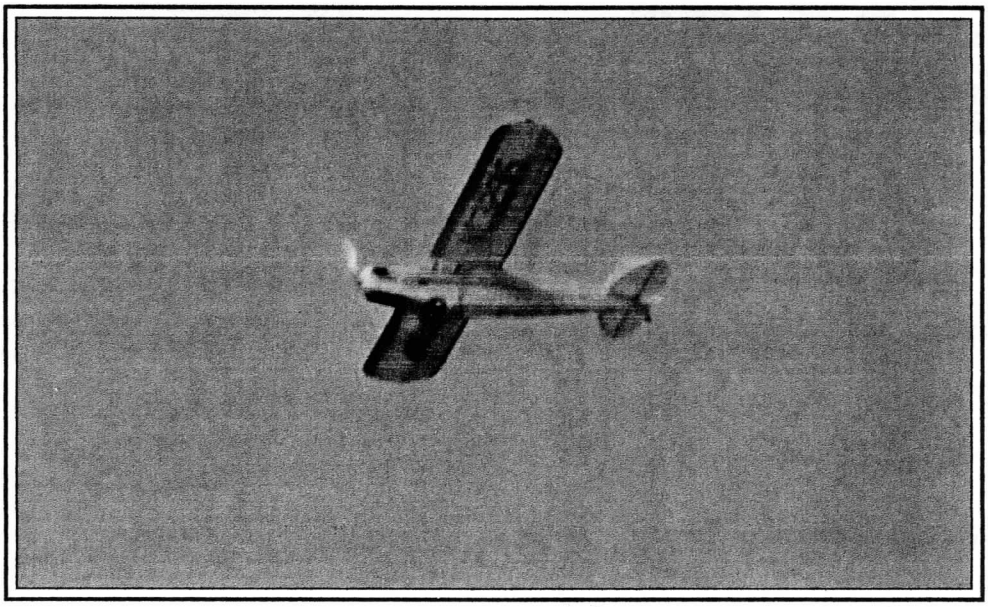
Tandy's First FAC Project
The Piper J-3 Cub





Trimming Tips for Scale Models by Bill Henn

My experience has been that after a scale model has been trimmed to glide straight ahead by hand gliding, then the flight turn during the power mode can be set using thrust changes alone. Some wash adjustment may have to be added at this point to prevent the inside wing from dipping. After a good power pattern has been established, the glide may have to be slightly reset by very carefully adjusting the rudder through the process of trial and error. Sometimes, some of the side thrust has to be removed to get the glide back the way you want it.

I often see many scale models flying fine in the early part of the power mode, or almost entirely through the power mode, which then suddenly turn in the opposite direction and spiral in. I think this may be a case of the power turn being too tight, which often requires that a lot of wash be used to keep the inside wing up. When the torque burns off, the model spins in the opposite direction, especially if you are using a rearward CG. A lot of down- thrust may counter this problem during the initial part of the power mode but, eventually, the model stalls and falls off to one side as the torque diminishes.

I set the CG where I think it should be which is usually at 35% of the cord. I just tack in the horizontal stab, leaving room for it to be shimmed if necessary. If the model dives during hand gliding, negative incidence is added. I always go for a flat "floating" glide never a shallow nose dive.

If the model turns slightly In either direction, something is probably out of alignment and should be corrected before power flying. The only exception would be a very gentle turn caused by wing wash that was put in deliberately to keep the inside wing up.

If the model stalls in flight it may be because the motor has bunched up at the rear, even though it may be braided. When the model lands, check the CG on the spot without disturbing the way the motor has settled. Another cause for stalling is often that the glide turn is too wide. Tightening up the turn slightly may cure the problem.

MUNCIE

WINNERS

The First Buttercup
1937 Wittman Prototype

Not many planes are named after flowers. The Buttercup's reputation as versatile workhorse and test bed of the Wittman racing stable also belies her flowery nomenclature.

But, when a designer/builder/race pilot whips up a utility ship, looks are deceiving. Even as the wrapped-sheet nosed prototype, Buttercup flew better than she looked. While the 1937 T-Crafts, Pipers and Aeroncas putted around at 80 or 90 mph on their Lyc. 0-145's, Buttercup was beating Rangers with hers at 125 V max.

The prototype portrayed no longer exists. There have been four engines, two wings, three main gears, a wind screen and tail changes since 1937. She still flies, but the only unmodified component is the fuse from firewall to tail mountings. Even the color is different.

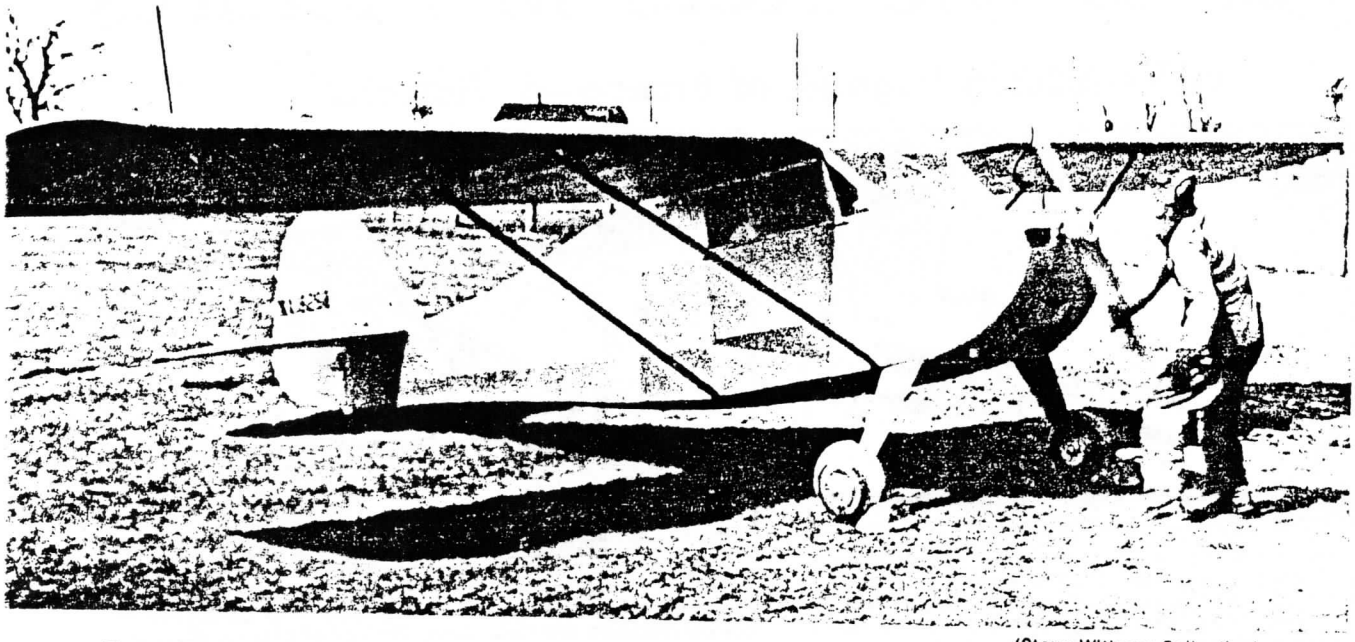
The 1937 prototype was silver-green. By 1938 a fuse strip, the outline of the rib pattern, was emblazoned on the side, but was ***not*** on the prototype. (See photos)

Buttercup beguiled me because every picture of her was different. The July 1980 *Sport Aviation* caught her young and pure. The same magazine, May 1989 in an article by Jack Cox, outlined her past. Some reputation!

The three-views of the 1948 or so version whet my appetite, so we backed it up to 1937, shaved the 30-foot wing down to 13 inches and *voila*, Buttercup in peanut scale. That works out to 1/28th scale.

Specs

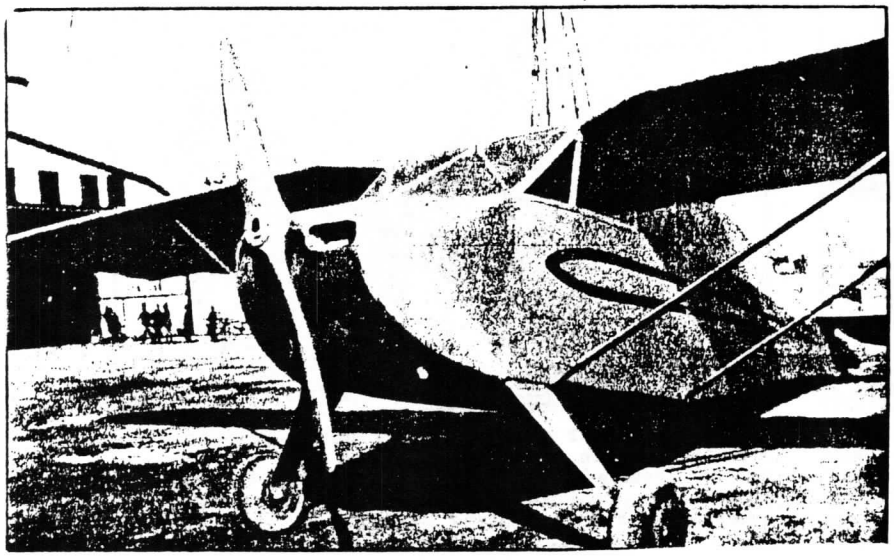
Span:	30 feet
Length:	21 feet
Height:	5 feet 6 inches
Power:	Lyc 0-145 50 hp.
Speed:	125 mph V max
	40 mph stall
Color:	Silver-green
	side stripes added 1938 ff.
Reg. numbers:	NX18628
Model scale:	one inch equals 27.7 inches



(Steve Wittman Collection)

The 1937 Buttercup — father of the Big X, grandfather of the Tailwind. Steve Wittman still owns this airplane in a much modified form. Down through the years it served as a flying test bed for Steve's ideas — his tapered rod landing gear, scimitar props, variable camber wing, etc.

Sport Aviation 7/80

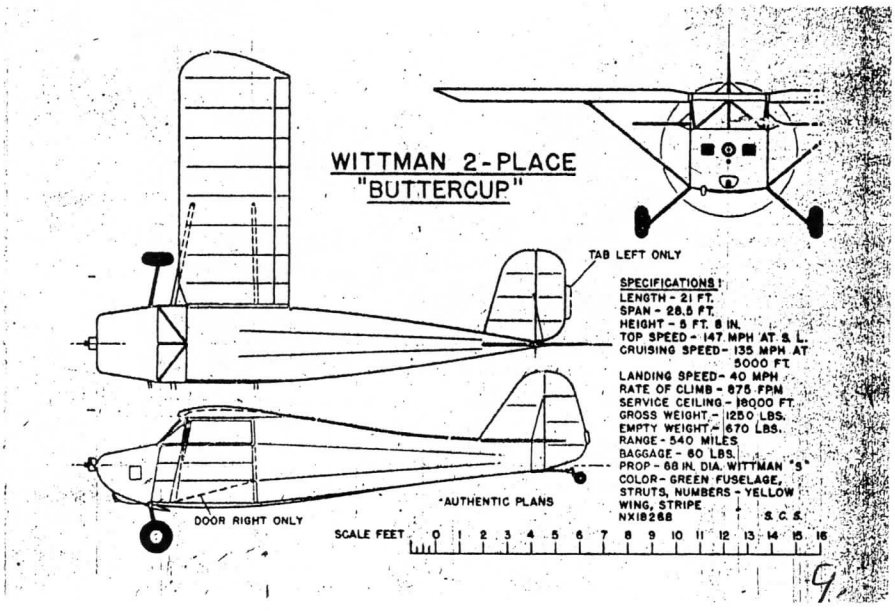


Courtesy Steve and Dorothy Wittman

Buttercup in its original 1938 50 hp form . . . with homemade steel wheels, streamlined tires, no brakes, a tail skid, wire braced tail and ultra simple cowling - just a sheet of aluminum wrapped around the front, top to bottom, with the edges bent around to mate with the sides. At this early stage (note the NX license number), the airplane was finished in silver with just a hint of green . . . opalescent green, Steve called it. The stripe on the side was simply a tracing of a wing rib back to its max depth, then straight lined back to a point. The original 30' wing is on the airplane at this point.

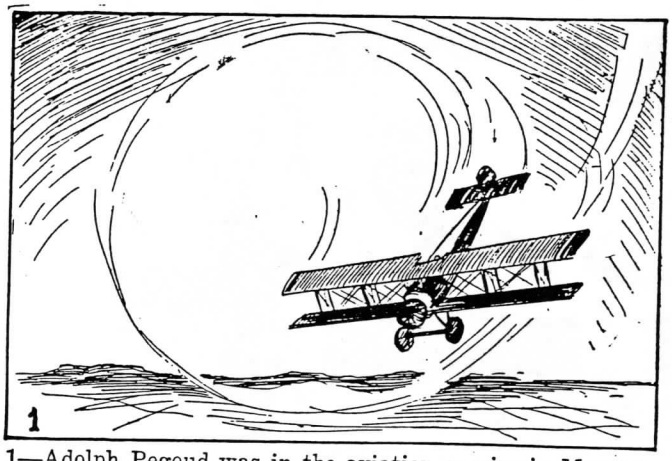
Sport Aviation 5/89

By 1948, only The fuselage & Tail of The original remained ↓

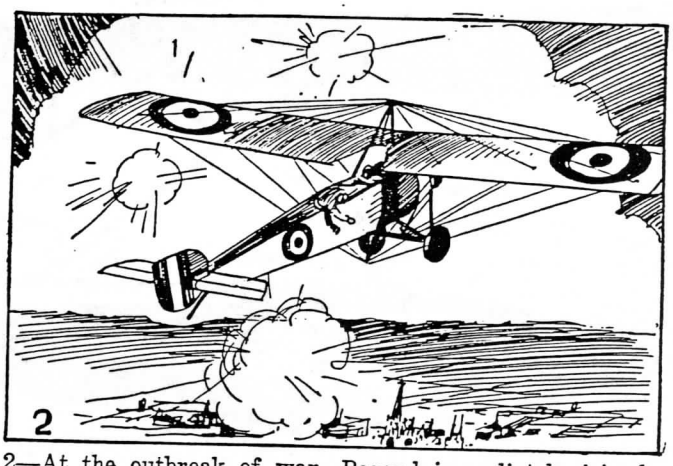


Lives of the Aces in Pictures

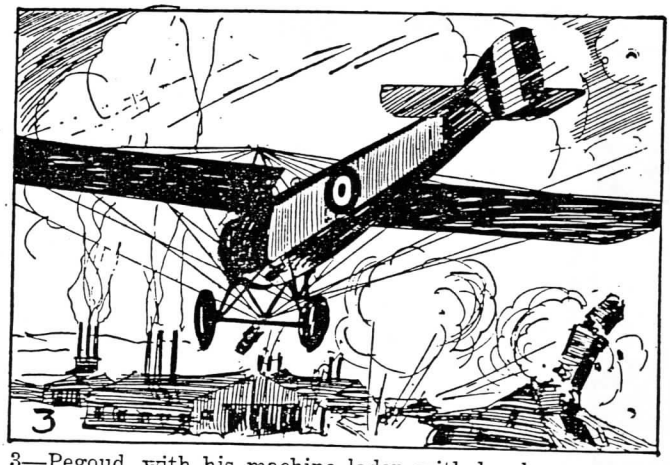
XLV—Adolph Pegoud, of France—6 Victories



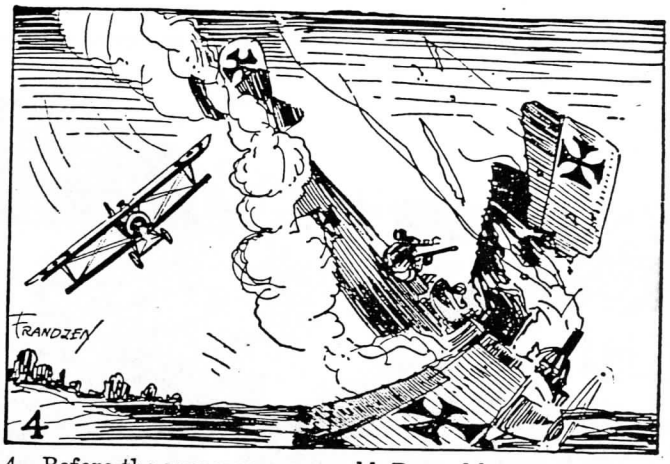
1—Adolph Pegoud was in the aviation service in Morocco before the war. He was among the small group of French aviators who were world famous. Pegoud's renown came from his feat of being the first Frenchman to loop the loop. He also was first to attempt a drop from a plane by parachute.



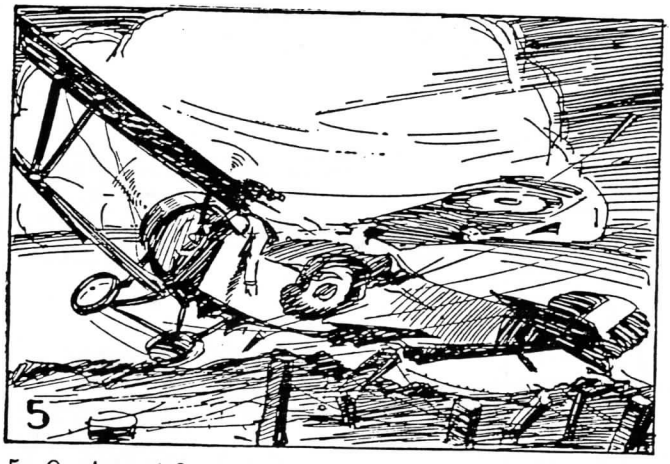
2—At the outbreak of war, Pegoud immediately joined the gallant band of experienced airmen who undertook to get information for their army by use of planes. He went on dangerous reconnaissance trips far back of the German lines. The data he gathered were invaluable to the harassed French ground forces in the fall of 1914.



3—Pegoud, with his machine laden with bombs, went on a long distance raid into German-held territory. He made certain that his bombs would be most effective by waiting until he could drop them at such low altitudes that they couldn't miss the target. He disregarded the danger to himself.



4—Before the war was a year old, Pegoud became an Ace. His battles with enemy planes were incidental to the greater damage he did on his bombing raids. On July 11, 1915 he brought down his sixth plane, following which he received the French Military Medal for his heroism.



5—On August 31, 1915, Pegoud met a two-seater German plane over the lines. He attacked, but during the fight a bullet severed one of his arteries. He was barely able to get his plane over his own lines at Belfort. He died before he could be lifted from his wrecked machine.

6—Adolph Pegoud was born in 1889 at Monteferrat. In his short fighting career of barely a year he carried out more bombing raids than had any other French aviator thus far in the war. During his military funeral, enemy planes circled overhead to drop flowers as their tribute to a gallant enemy.

*** * Wing Loading * ***

Mumbo Jumbo # 137 from the Glue Guru

Serving as a quick, one number index to speed, power consumption and thermaling ability, wing loading is the single most important measure of any rubber powered, free flight model. To figure yours, divide the ready to fly, total weight in grams, by the wing area in square inches. A highly respectable result is 0.5 grams per square inch. Still less is better, for the lower the wing loading, the better the endurance. More is bad, and at above 2.0 grams per square inch, a usefully large flight time is most unlikely. How come?

As model weight and wing loading increase, the speed necessary to support flight also goes up. The increase in speed is reflected in greater power consumption. As a result, a heavier motor may well be required, one that unwinds more quickly, Result: shorter duration.

Once in glide, the heavier wing loading model, moving faster, will consume altitude at a greater rate, landing more quickly. If thermal currents are about, the greater model descent rate means that only the stronger currents will be able to support the model. As most currents are quite weak, the effect is to decrease the likelihood of thermally assisted duration.

With all these drawbacks, why fly a high wing loading model? Sometimes it comes about accidentally, the result of many weighty repairs. Sometimes it reflects a too cautious, heavy weight design. Active may be the fear that light weight building will result in a quick wipe-out, should it hit a tree or car. To hold down wing loading, a certain fatalism is necessary. Overbuilding must be resisted.

Another factor promoting high wing loading is size itself. As models are made larger there is a powerful, automatic tendency for model weight to increase faster than expected. This has to do with the properties of size. As an example, consider the volume of a small prop block, say 1 by 1 by 6 in. The volume is 6 cubic inches, and the prop weight proportional to this volume. Now let's double the size of the model, and block. The new size is 2 by 2 by 12 and the volume is 48 cubic inches. In sum, doubling the size of the model results in 8 times the prop weight. Of course, the wing area has also increased—by 4 times—and that helps, but not enough. Only 8 times would be enough. The end result is that the larger prop size will greatly increase the wing loading of the bigger model.

Should not only the prop, but every stick and bit of tissue also be scaled up, the result will be one of doubling the wing loading. In going big, it's important to give some extra thought to slimming down—otherwise the effort may be doomed.

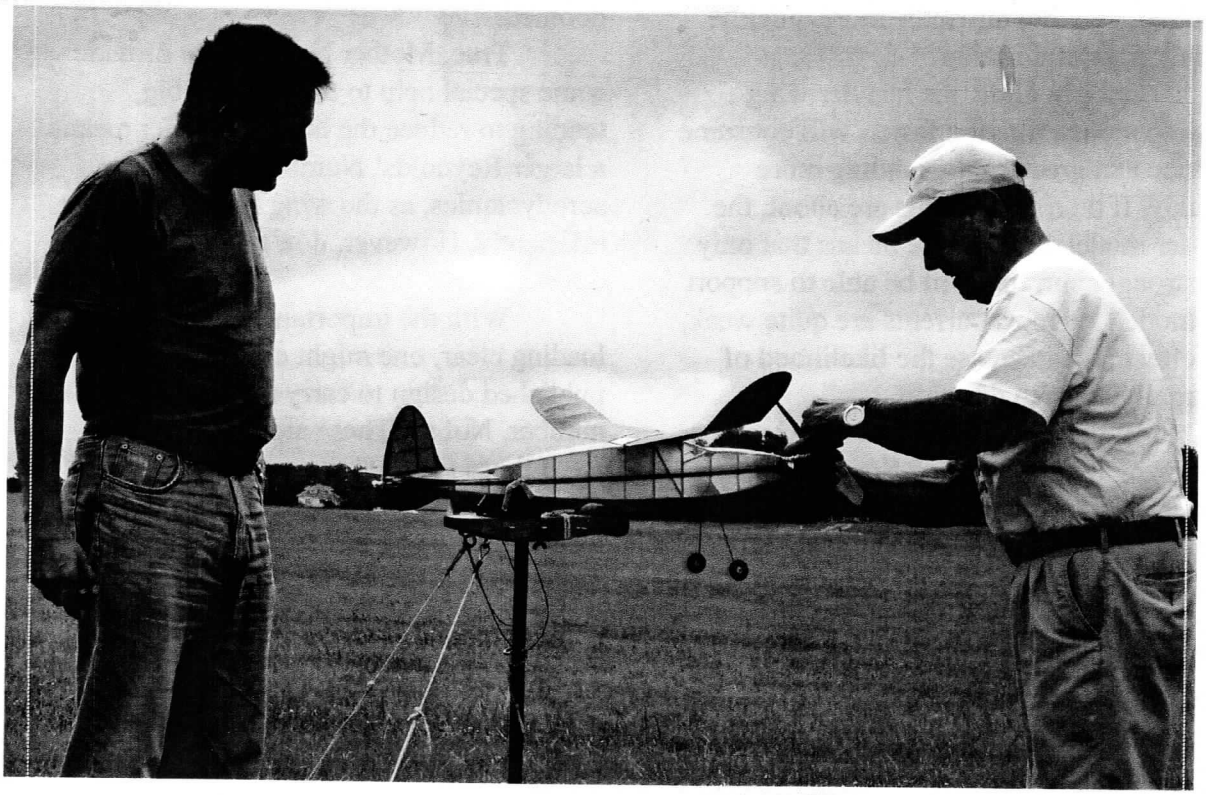
True, Mother Nature does provide some special help to those going big, tending to reduce the burden. Bigger means a larger Reynolds' Number, with better aerodynamics, as the wing functions more efficiently. However, don't bet on it—slim down.

With the importance of wing loading clear, one might expect every published design to carry the resulting number. Not so. These are rarely given. Even those few that are actually published tend to be wrong. Be wary. If the model weight itself is given, do your own calculation.

An Advert for Myself

The Glue Guru approach to Red Baron aerial combat is given by the Leon Bennett book "Gunning for the Red Baron." There's much original stuff here, including fresh thoughts on Richthofen's death. Available at Amazon, Barnes & Noble, and your usual bookstore.

100_2782 is a picture of Harrison Knapp winding his Debut for the embryo event.



100_2780 Here is Norm Becker with his son Dean providing verbal encouragement. Looks like Norm is getting ready to fly his Miss Canada. Dean doesn't fly but he travels from Florida each year to visit his dad and help him out at the Outdoor Champs.

DSC_6015 is a picture of Harrison Knapp and Norm Becker. Norm has just opened the plan he got as prize from the raffle or somewhere else in the contest. The truly amazing thing is that it was a plan for a model that Norm had actually been looking for! How many times does that ever happen?

DSC_6026 Here is Norm Becker with his mug for a third place finish in dime scale along with the Beechcraft Staggerwing that made it possible. Norm was very pleased to take third in such a tough field. I believe this was Norm's first finish that earned a prize at an FAC event. He was not aware that the flying he does with his friends can count as an FAC event as long as three competitors are involved. Perhaps Ross should be on the watch for a flurry of Kanone reports. Maybe we'll even be giving Norm a Blue Max before long.

THE ENGLISH CHANNEL CROSSING CHALLENGE

OUR FIRST S.L.O.W. RACE

Here are the details for the S.L.O.W. Race to be flown at the 2009 Non-Nats this July.

The event will be flown using the B.L.U.R. course as our English Channel. Eligible models will be of "pioneer" prop-driven aircraft of 1914 or earlier vintage. Aircraft that saw action in the Big Fuss are NOT eligible as we already have a nice event for them. Wing span, however, will be limited from 13 to 24 inches. Power will be rubber with no restrictions on motor or prop. All flights will be hand launched.

Scale considerations:
We will "eye ball judge" your model against your 3-view for a minimum 45 scale points. Why? Hey, this is a scale event after all and besides…you don't build wearing mittens with the lights off. Or do you? Oh, just one more requirement…nothing says "Pioneer" louder than all that rigging so all that rigging on your 3-view is required on your model.

The competition:
In groups of three:
Phase 1: each daredevil makes three flights to score points:

Zero points if you fly and land off course.
1 point if you land in the drink.
2 points if you cross the channel "high."
3 points if you cross the channel "low."

[All spectators will vote successful flights as to "high or low" via thumbs up or thumbs down.]

1 additional point if you cross the channel as the second of two.
2 additional points if you cross the channel as the third of three.

3 additional points per flight if you color and mark your pioneer aircraft to tickle ***your*** fancy. Why? Well, for two reasons: one, if twelve totally scale Bleriot XI's show up, how are we to tell them apart? And second, those pioneer craft really do need some color…especially in fading light.*

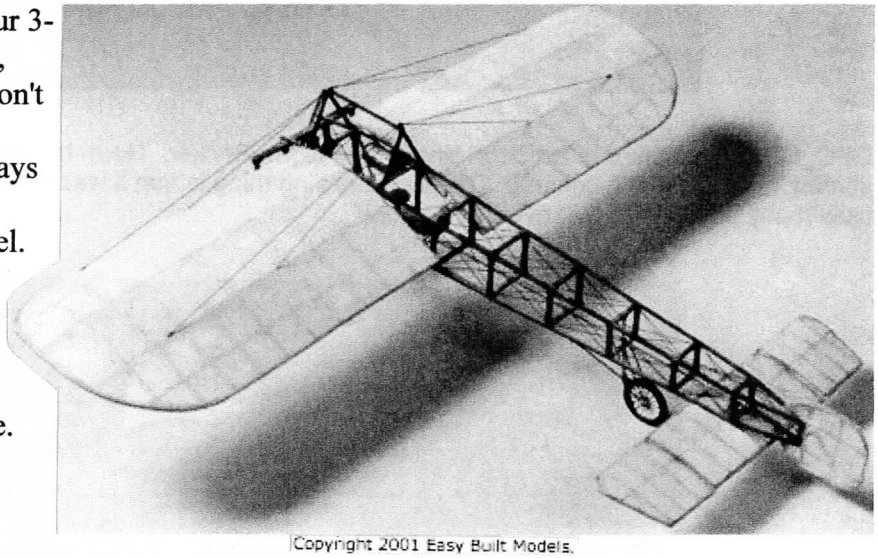
Phase 2: the top three scoring models will have a three flight fly off.

By the way…the meaning of S.L.O.W. is, well…
Slow, Low Or Wet!

For more info about Louis Bleriot, go to: www.centennialofflight.gov/essay/Explorers_Record_Setters_and_Daredevils/Bleriort_1909/EX1.htm. I know that's a long addy, but it will get you there without a lot of site navigation. And be careful about the spelling of Bleriot in the addy…there's an "r" in "Bleriort." (Is this a typo or French spelling?)

* As to the comment of "…fading light." Well, the S.L.O.W. and the B.L.U.R. will be flown Friday EVENING starting at 7:15…more or less. We thank the HAG for allowing us to make official flights in the early evening hours.

Now go build a colorful pioneer! And don't forget to pack bug spray and a flotation vest!



Copyright 2001 Easy Built Models.

ENGLISH CHANNEL CROSSING BLERIOT XI

Easy Built Models has in its inventory a static scale model of the Bleriot XI. With some encouragement from us, I wonder if we can get Dave Niedzielski to re-engineer the kit into a rubber powered flying model. Drop Dave a note or email if you are interested in buying such a kit if he put one together for us. How about it Dave…is a free flight conversion possible? I know I'm ready to order one.

EASY BUILT MODELS
PO Box 681744
Prattville AL 36068
334-358-5184
www.easybuiltmodels.com

Tell him the CinC sent you.

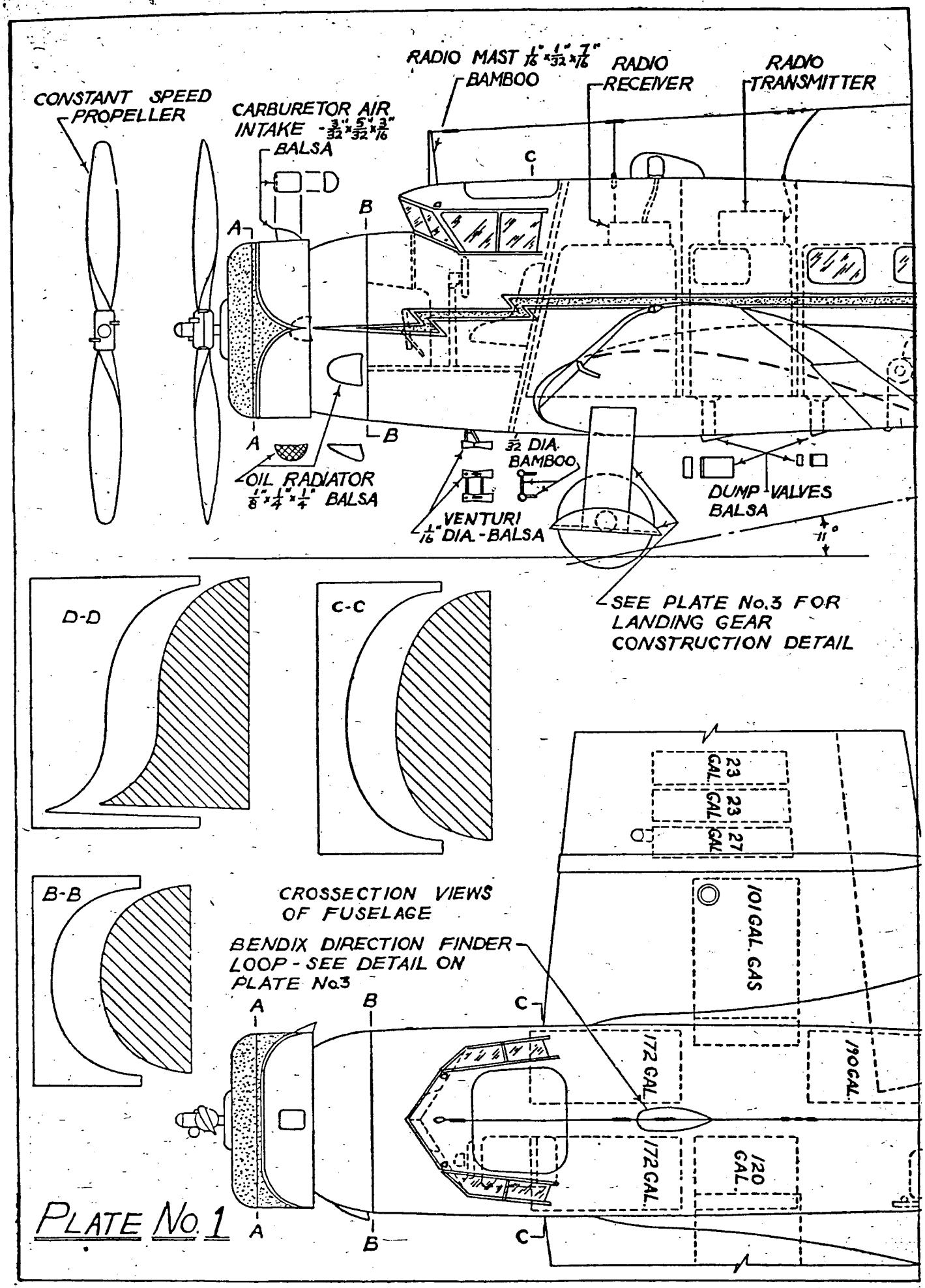
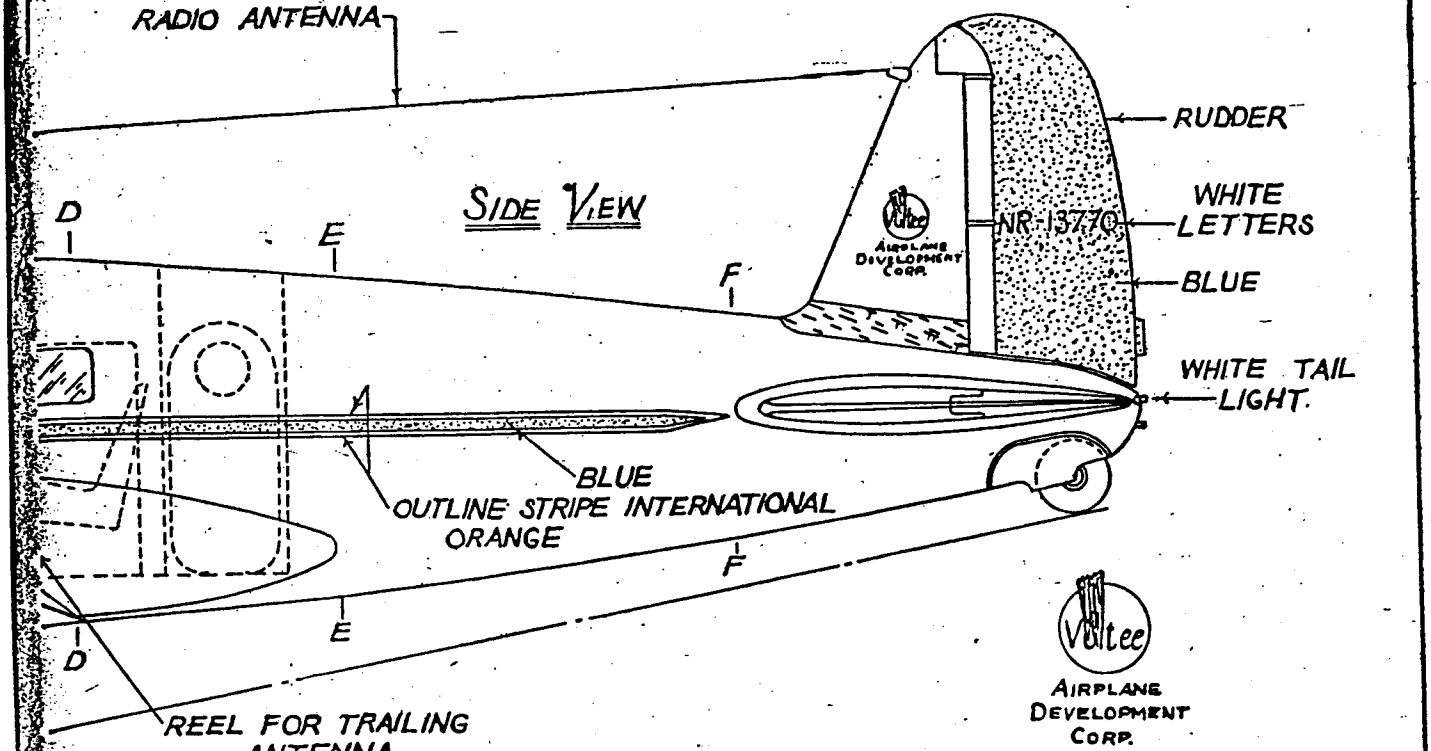
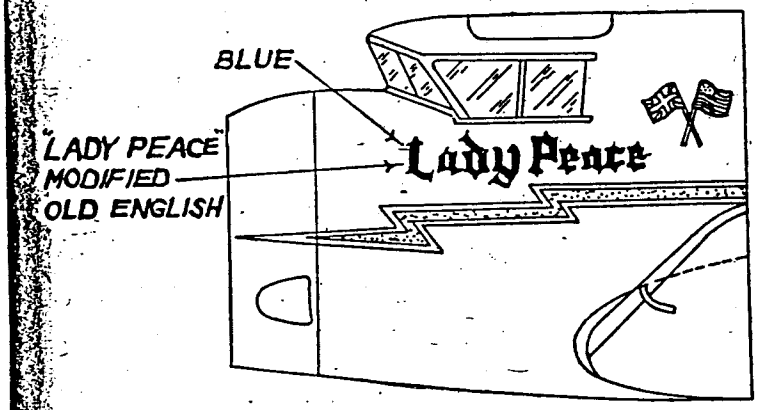

RADIO MAST 1/16 x 1/32 x 7/16 BAMBOO
RADIO RECEIVER
RADIO TRANSMITTER
CONSTANT SPEED PROPELLER
CARBURETOR AIR INTAKE - 3/32 x 5/32 x 3/16 BALSA
D
C
B
A
A
B
OIL RADIATOR 1/8 x 1/4 x 1/4 BALSA
1/32 DIA. BAMBOO
VENTURI 1/16 DIA. - BALSA
DUMP VALVES BALSA
11°
SEE PLATE No.3 FOR LANDING GEAR CONSTRUCTION DETAIL
D-D
C-C
B-B
CROSSECTION VIEWS OF FUSELAGE
BENDIX DIRECTION FINDER LOOP - SEE DETAIL ON PLATE No3
23 GAL.
23 GAL.
27 GAL.
101 GAL. GAS
172 GAL.
190 GAL.
172 GAL.
120 GAL.
A
B
C
A
B
C

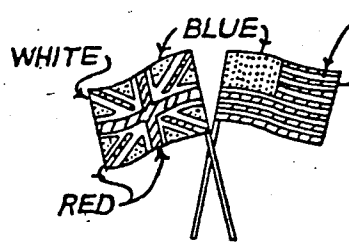
PLATE No. 1



Vultee
AIRPLANE DEVELOPMENT CORP.

ENLARGEMENT OF VULTEE INSIGNIA





AMERICAN AND BRITISH FLAGS ON THE "LADY PEACE"

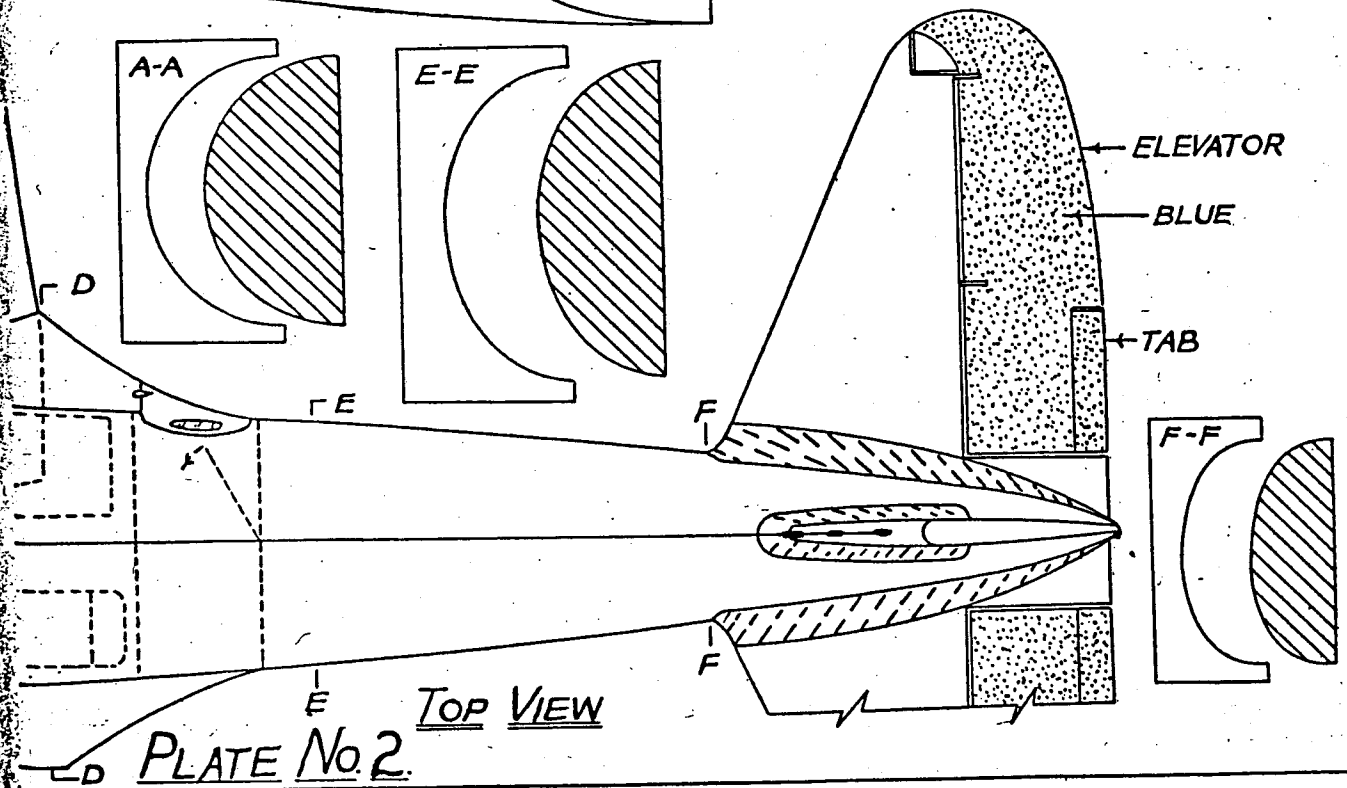


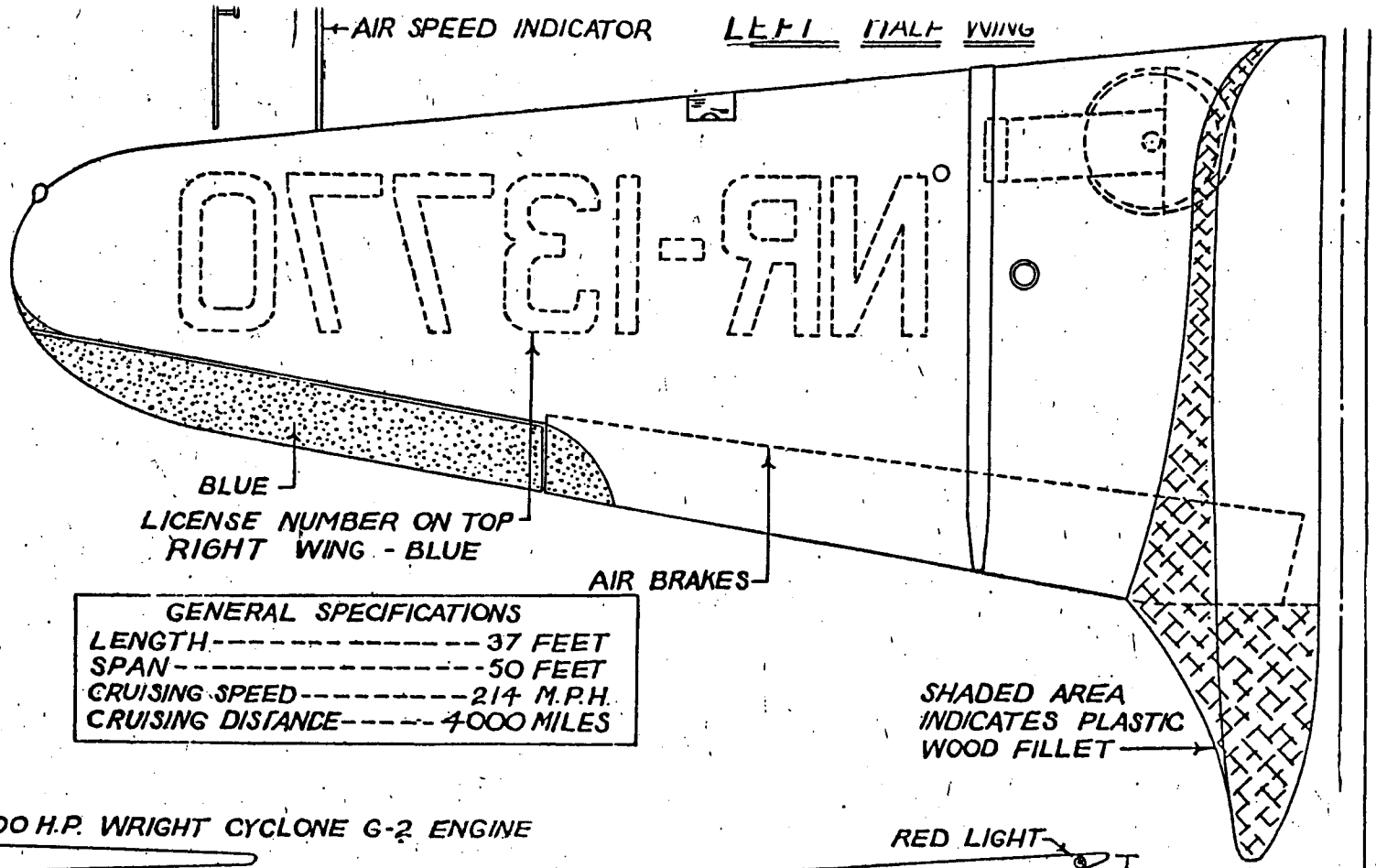
PLATE No. 2.

LADY PEACE

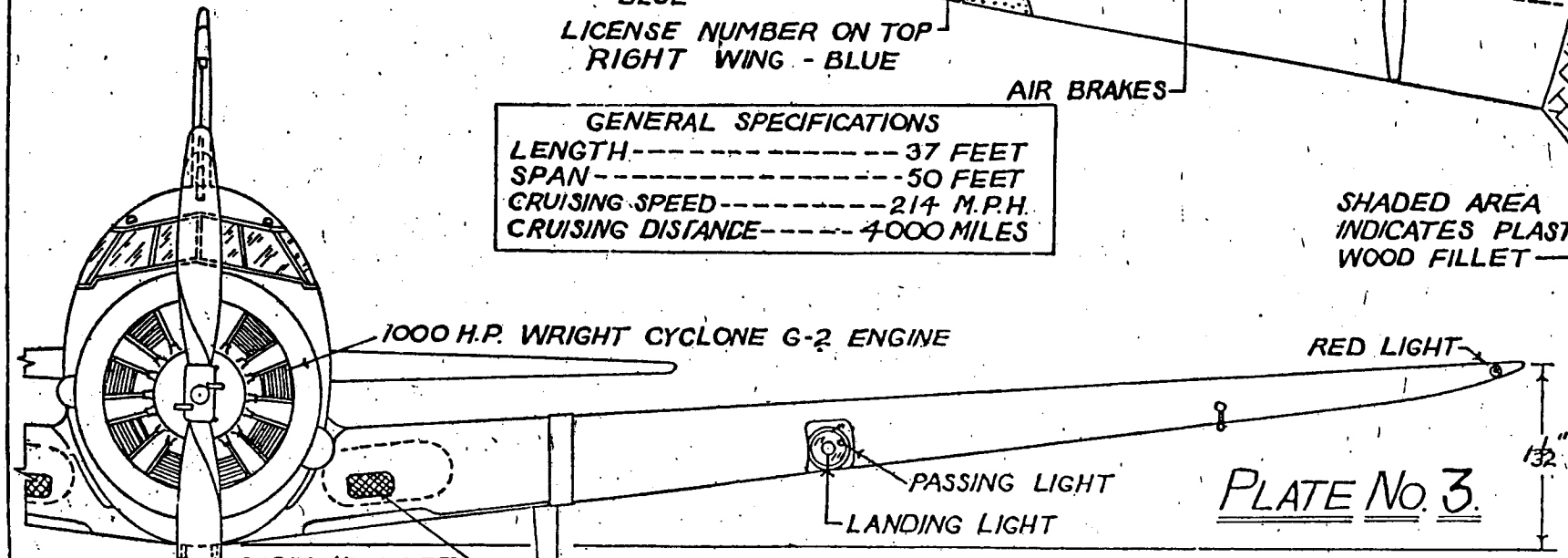
NEW YORK - LONDON
MERRILL-RICHMAN

AIRCRAFT DEVELOPMENT CORPORATION

SCALE-$\frac{1}{40}$ SIZE

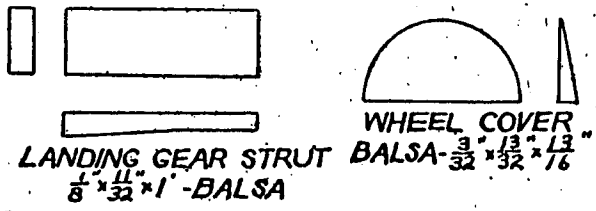


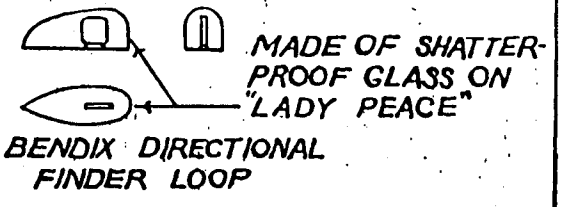
GENERAL SPECIFICATIONS	
LENGTH	37 FEET
SPAN	50 FEET
CRUISING SPEED	214 M.P.H.
CRUISING DISTANCE	4000 MILES



FRONT VIEW

PLATE NO. 3.

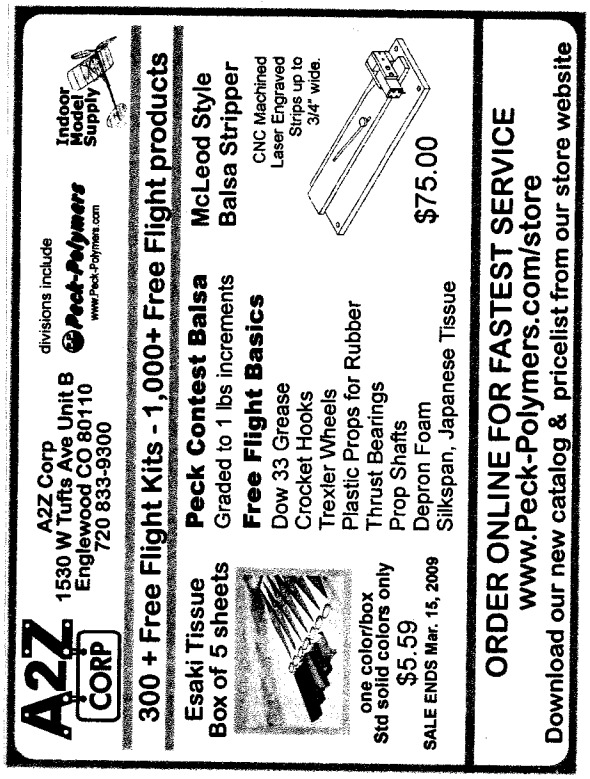




FOR SALE:

We are selling Lin's airplane kits. Lin had over 550 kits which we have had priced. There are only 5 kits with poor boxes and of course they are Cleveland kits. If you would be interested in bidding on these kits, please forward a stamped self addressed envelope, 9 x 12 and forward to Juanita Reichel, 3301 Cindy Lane, Erie, PA 16506 and we will send a listing of all these planes. I want to sell them as 550 kits and not break them up into the planes that you would like and be left with the rest.

****



Need a Phantom Flash kit?
A2Z Corp. has them in stock!

The Magnificent Mountain Men Club

wants *YOU*

To fly FAC WWII Combat in Denver, Labor Day weekend, 2009

$100 cash to the winner!

Second through last place receive *ZERO dollars* (Gentlemen, this *is* COMBAT!)

The rules:

- FAC rules, 100% by the book. 3-D combat A/C only
- Models must have armament and meet the 45-point rule.
- First time FAC flyer? Your entry into this event is FREE!

Every combatant will receive a very special gift just for participating!

This special event is just one small part of the **44th Rocky Mountain FF Championships** weekend, which features more than 40 competition events in every FF discipline from FAC (ten events) to AMA, FAI, SAM, and more. Three days of flying (September 5-6-7) in our glorious late-summer weather, with (typically) light winds and shirt-sleeve temperatures. Oops! Did I forget to mention our 27,000-acre (5 x 7 miles!) flying field?

Visit www.themmmclub.com. Or email the Contest Directors:

Don DeLoach ddeloach@comcast.net Jerry Murphy jb_murphy@msn.com

LITTLE-KNOWN AIRCRAFT OF WORLD WAR TWO
(Taken from previously secret government files)

Probably two of the least-known and most highly secret airplanes to come out of World War Two were those known as BQ-7's and BQ-8's. This was in spite of the fact that they were both modified versions of two of the best-known aircraft of all time.

The Army Air Force throughout the course of the war had been attempting to come up with a guided missile (or "flying bomb") using converted conventional airplanes. Among these were B-17's, modified in England to serve in this capacity and designated BQ-7's.

The operational procedure was for a crew of two to make the take-off and then bail out, with a primitive forward-looking television camera in the nose being sufficient to enable an operator in a separate aircraft to guide the machine to its target via radio control. (Records show that television, invented in the 1930's, had a maximum transmission range of eleven miles during the BQ era.)

Modifications to the airplane consisted of conversion of the flight deck to an open cockpit in order to facilitate the bail out process, plus removal of all unnecessary weight. It might be noted that normal bail out exits were not accessible due to the fact that fuselages were filled with 20,000 pounds of Torpex explosives.

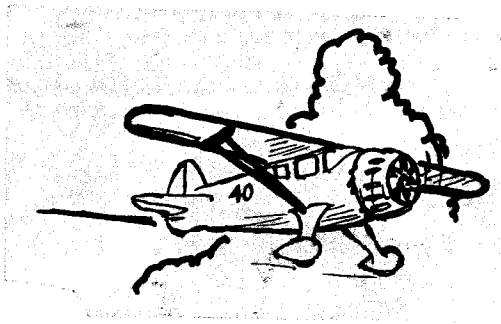
The usual bomb load for these airplanes was 5,000 to 8,000 pounds when carrying enough fuel for normal long-range missions, but this could be increased to 17,000 pounds with minimum fuel aboard. Further weight reduction (removal of gun turrets, etc.) made possible the 20,000-pound capability. Records show that a total of 25 B-17F's and B-17G's were used in this manner.

Two Navy B-24's (Navy designation PB4Y-1) were converted in a similar manner and redesignated as BQ-8's. Like the BQ-7's, they were stripped down and packed with explosives. They had a somewhat better payload than the 17's and were able to carry a 25,000-pound load.

Targets for both versions were reserved for high priority objectives that were heavily defended and very "hardened." These included German V-1, V-2, and V-3 missile sites that were protected by many feet of reinforced concrete. At least eight BQ-7's were expended in missions, as were both of the BQ-8's.

The pilot on the first BQ-8 mission was Lt. Joseph Kennedy, older brother of John F. Kennedy. Apparently, when Kennedy set the fuses prior to abandoning the airplane, they misfired and the load of explosives detonated in midair.

This was the first of the violent deaths that would plague the Kennedy family for over half a century.



I KNEW THOSE CHICKENS WOULDN'T SHOW!

FAC NON-NATS REGISTRATION FORM — GENESEO, NY — JULY 16, 17& 18, 2009

PLEASE USE A SEPARATE FORM FOR ALL CONTESTANTS. PLEASE PRINT! AND PLEASE MAIL EARLY!

NAME _____ CHECK ONE: ___ JR. ___ OPEN AMA, MAAC or equivalent #_____*

ADDRESS _____ CITY _____ STATE _____ ZIP _____

HOME PHONE _____-_____-_____ EMAIL ADDRESS _____

Entry fees at $25.00 each [Contestants 17 or younger fly for FREE!]..... (#) _____ $ _____

Banquet tickets at $30.00 each with NO dorm or meal ticket reservations..... (#) _____ $ _____

Reservations for double dorm occupancy ** WITH meals and banquet ticket at $175.00 each..... (#) _____ $ _____

Reservations for single dorm occupancy WITH meals and banquet tickets at $220.00 each ..... (#) _____ $ _____

* All contestants must be members of the AMA, MAAC or other foreign country equivalent. To compete, you MUST present your current card to register at the event. Please remit all fees by JUNE 15, 2009 to ease the paper work at the event. Mail entry form and check or International Money Order to FAC, % Juanita Reichel, 3301 Cindy Lane, Erie, PA 16506. GHQ will NOT be able to refund cancellations AFTER June 20, 2009.

TOTAL $ _____

** Tell us who you are sharing the SUNY dorm room with: _____. GHQ will notify the University.
If you require a "ground floor room," please let us know with your PAID registration.
University meals include dinner on Thursday the 16th with breakfast and dinner on the 17th, and breakfast only on the 18th and 19th. Times TBA. The Saturday evening banquet will be at the Quality Inn – Geneseo, 4242 Lakeville Road, Route 20A, Geneseo, NY 14454, phone 585-243-0500, fax 585-243-9007.

If you plan on staying at the Quality Inn you must call and inform the reservation desk you are with the FLYING ACES CLUB.

WAIVER: I hereby release the FLYING ACES CLUB, INC., the HISTORICAL AIRCRAFT GROUP, INC., Austin Wadsworth, the STATE UNIVERSITY OF NEW YORK (Geneseo), and all other persons and organizations connected with this contest from liability whatsoever for accidents or injury incurred while participating in the FAC NON-NATS 2009 competition. I also agree to abide by all flying and field rules in force at this contest.

SIGNATURE _____

ALL scale judging will be at the Quality Inn on Thursday July 16th starting at 2:00P.M., including FAC Jumbo and FAC Giant. NO contestants admitted to the judging area prior to 2:00P.M.! Vendors may set up after 12:30P.M.

SCALE JUDGES & RUNNERS WILL HAVE "HEAD OF THE LINE" PRIVILEGES FOR THEIR MODELS!

If you want to be a judge or runner, please contact Ross. Judging will be done via pairs this year. New judges are welcomed...what better place to get the experience!

FRIDAY EVENTS 8:30 TO 5:00 P.M.

FAC Scale	Dime Scale – Traditional	OT Gas Replica	WW I Qualifier
Jumbo / Giant Scale	GHQ Peanut	OT Rubber	Thompson Qualifier
Pioneer Scale	Golden Age Biplanes *	Jimmie Allen	Greve Qualifier
Power Scale	(Civil & Military)	French Design	WW II "Radial" Qualifier
	Modern Military	(Target time)	WW II "Inline" Qualifier

SATURDAY EVENTS 8:00 TO 4:00 P.M.

FAC Scale	Dime Scale – Nostalgic	Embryo	WW I Combat **
Jumbo / Giant Scale	Modern Civil	OT Stick	Thompson Race **
Pioneer Scale	Golden Age Civil (NO Bipes!)	Phantom Flash	Greve Race **
Power Scale	Golden Age Military (NO Bipes!)	Fiction Flyers	WW II Combat **
	Rocket / Jet Scale		(Top 10 Radial and Top 10 Inline)

BY POPULAR DEMAND...AFTER DINNER COMPETITION! FRIDAY...starting at 7:15 P.M.

The B.L.U.R. and the Bleriot Channel Crossing Challenge, a S.L.O.W. (Slow, Low Or Wet) Race will be flown in the evening hours.

In honor of the first Channel crossing, the S.L.O.W. is an event for those "plain-Jane" pioneer models prior to 1915. Build them scale, but let's color and decorate to tickle one's funny bone. We'll use the BLUR course as our English Channel. We'll fly in heats of three. Everyone makes three flights to garner points with the top three moving on to the finals. It will be the slowest & lowest that wins!

* Three (3) TIMED – mass launches; three hours apart at 10:00 A.M., 1:00 and 4:00 P.M. These are NOT "elimination rounds." All entered fly ALL three flights. This is NOT "combat." You may launch any distance from your competitor as long as the event director can see you and you can hear him. Scoring is "total of three flights." Your mechanic must time and record your flight as per usual.

** Regular mass launch event. REMEMBER...one model per mass launch event...that includes WW II ...that means one radial OR one inline...NOT one of each!

VS 17.6

1/16 BY 1/8 LEADING EDGE
1/16TH SQUARE SPARS

1/16 TH SHEET WING TIPS
(5) CENTER RIBS 1/16TH SHEET, OTHERS 1/32ND SHEET

1/16TH SQUARE PARTS

SCALE TAIL

H TAIL

1/16TH SHEET CORNERS AND GUSSETS

WING DIHEDRAL

1/16 BY 1/8 TRAILING EDGE

USE BLOCK BALSA FOR NOSE BLOCK, COWL TOP AND HEADREST

CARVED BALSA WING FILLET

"ALL PARTS ARE BALSA UNLESS OTHERWISE NOTED."

USE 1/32ND DIA. PIANO WIRE FOR LANDING GEAR AND PROPELLER HOOK

FRONT VIEW

1/32ND SHEET SIDES AND BOTTOM

FUSELAGE TOP VIEW

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

PECK POLYMERS PROPELLER AND THRUST BUTTON

7/8TH DIA. WHEELS

PAPER FAIRING SEE PATTERN

1/16TH SQUARE LONGERONS AND UPRIGHTS

SIDE VIEW

PLASTIC WINDSCREEN PATTERN

WHEEL FAIRING PATTERN

WING RIBS

PEANUT SCALE
"MILES M-5 SPARROWHAWK"
BY WALT MOONEY

Strut location

Strut true size

1/16" space between ribs

L.E.

For the 'One-Design' Mass-Launch, stick to the outlines. Color scheme and N° number is your choice.

Raise tip to spar when splicing to L.E. & T.E.

Spar

Under ribs Add after wing is built.

Wing struts 1/32 x 1/8

Control surface outline

NC 2111E

1/2" Dihedral each tip

Rib Template

Basic structure is 1/16" square

Ribs are sliced from 1/16" sheet.
Tips are laminated from 2 strips of 1/32 x 1/16 formed around cardboard or foam form, waxed with candle or crayon.
Color is creamy yellow with internat'l orange trim.
Original covered on right side, motor stick on left.

Stabilizer

L.E.

1/16" sheet

Notch for L.E.

Notch for spar

Notch for T.E.

1/16" Sheet

Plastic Windshield Thin plastic Windows

1/16 Sheet

Stabilizer location

AERONCA

NC 2111E

Alum. tubes in sheet for removable motor stick

Color line

Rear hook

Thin wire

Alum. tab stick positioner

1/16" sheet

3/32" x 3/16" Motor Stick

1/16" O.D. Brass Tube Brg.

Solder to .025" x 3/32" brass strip. Glue & wrap.

Original used 6" North Pacific Prop.

.020" M.W. Ldg. Gear

Paper Fairing

Meat tray foam or 1/16 Balsa Wheels with 1/8" dowel hubs.

See "Modeling Tips" this issue.

Use Aluminum duct tape for hub caps.

If you don't want a removable motor stick (but you should), just glue it at the front only. Stick stands off from fuselage on 1/16" stand-offs.

Indoor, use 1/16" sq. rubber one loop @ 15" long.

Do NOT water shrink nor dope the tissue!

Use your favorite stick and bearing installation.

Alum. Tube

.020 wire

Stand-offs

Motor Stick

Front end shown separated.

Bent Pin latch

Aluminum Tab with Pin hole

Thin wire glue & wrap

Tail end

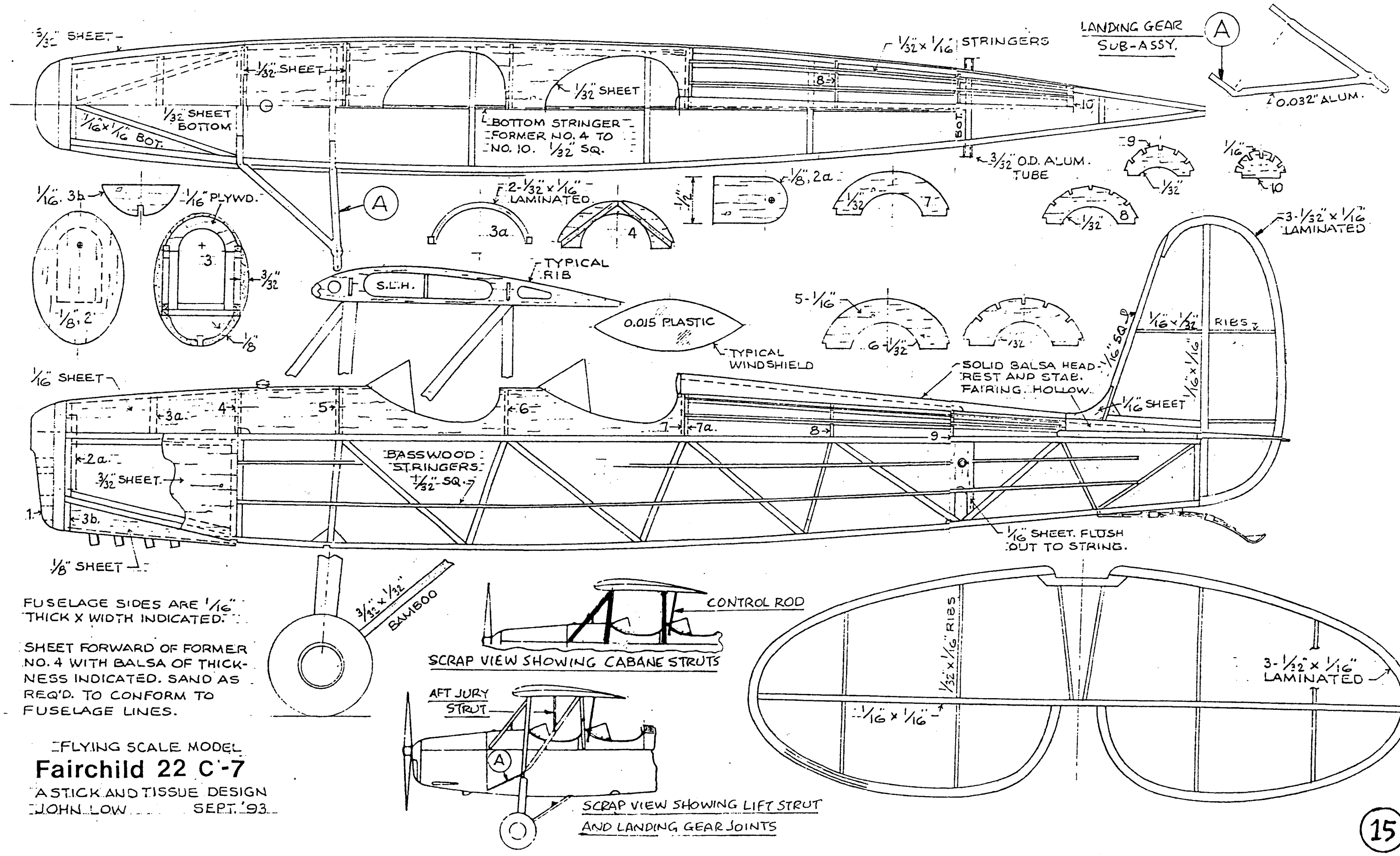
This removable motor stick is a lot easier to build than to draw!!

Best time to date: 1:43.4

Note: USIC Rules require minimum weight 6.2 grams. Original weighs 6.8 grams.

L. G. Pattern

Aeronca 7AC Champion
No-Cal Scale
Designed by: R. Danford Hawes, P.E.
Drawn by: R.D. Hawes; Checked by: R.D.H. 4-17-92



FUSELAGE SIDES ARE 1/16" THICK X WIDTH INDICATED.

SHEET FORWARD OF FORMER NO. 4 WITH BALSA OF THICKNESS INDICATED. SAND AS REQ'D. TO CONFORM TO FUSELAGE LINES.

FLYING SCALE MODEL

Fairchild 22 C-7

A STICK AND TISSUE DESIGN

JOHN LOW SEPT. '93

COVERING MATERIAL

SPAR

SECTION A-A

RIB B

A

3/32" x 1/16"

A

1/32"

FIRST RIB OUT-BOARD OF CENTER

TIP OF REAR SPAR

3-1/32" x 3/32" LAMINATED

FRONT SPAR 1/32" x 3/16"

1/16" x 1/8" + 1/16" x 1/16"

REAR SPAR, SAME EXCEPT AT ENDS

1/20" x 3/32"

1/20" x 3/16"

CENTER RIB

TIP RIB

1/32" x 1/16"

1/16" x 1/16"

1/16" x 1/16"

TIP RIB

RIB B

INK LINE

1/8" x 1/16"

1/8" SHEET

9/16"

1/32" φ BAMBOO

1/32" x 3/32" BAMBOO JURY STRUTS

TRUE LENGTH LIFT STRUTS

5/32"

1/32"

CENTER RIB

1/32" TIP RIB

LAMINATE WHEEL DISCS WITH GRAIN AT A 60° ANGLE

1/8" WH-1

1/8" WH-2

1/8" DIA.

0.015" WIRE

ROLL A PAPER TUBE. SQUEEZE AND PINCH TO A STREAMLINE SHAPE

0.032" ALUM.

EPOXY

1/16" O.D. ALUM. TUBE

BIND

0.025" WIRE

WH-2

WHEEL DISC

3/64" DIA. BAMBOO

1/16"

WH-1

TURNED WHEELS. 1/16" O.D. ALUM. BUSHING.

TRUE LENGTH CABANE STRUTS

11/16"

1/32 x 1/64" BAMBOO

1/64"

3/16"

1/32" x 3/32" BAMBOO

1

1/4"

FLAT BLACK VENTILATION OPENINGS

LIFT STRUT

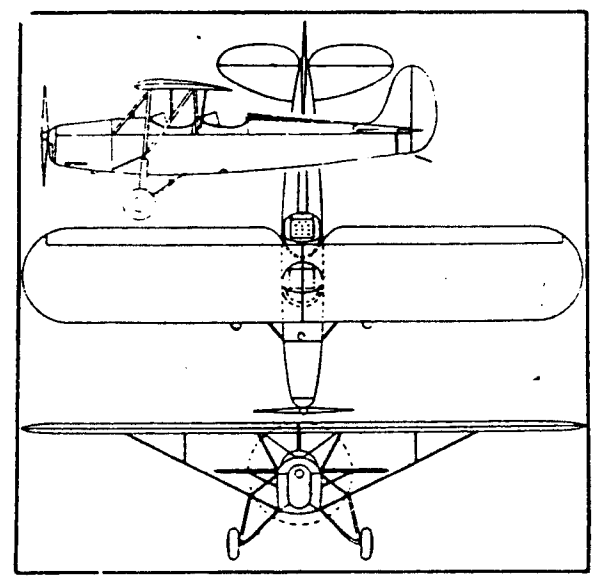
1/16"

PAPER WASHER

0.025" WIRE

2-1/32" x 1/8" GROOVED FOR WIRE AND LAMINATED

THE RIGHT WING PANEL AND TYPICAL REGISTRATION WHICH OCCURS ON ITS TOP SURFACE ARE REPRESENTED BY DASH LINES. REGISTRATION IS ALSO DISPLAYED ON THE BOTTOM OF THE LEFT WING.



Fairchild 22

2° R.T.

3/32" DIHEDRAL

1/16" x 1/8" - SAND TO SHAPE

LAMINATE TIPS
1/32" x 1/16" STRIPS

1/32" SHT. - 18 REQ

B

1/16" SHT. 2 REQ.

R

A

2 REQ.

F.T.

.026" DIA. WIRE
LANDING GEAR

1/32" SQ. STRS. TOP & BOT.

NX18268

NUMBERS TOP
RIGHT & BOTTOM
LEFT WING

1/16" x 3/32"

1/64" SHEET

1/32" SQ. STRINGERS

1° D.T.

DOOR RIGHT ONLY

SOFT BALSA

STRUT LOCATIONS

5/8" DIA.
OVAL WHEELS

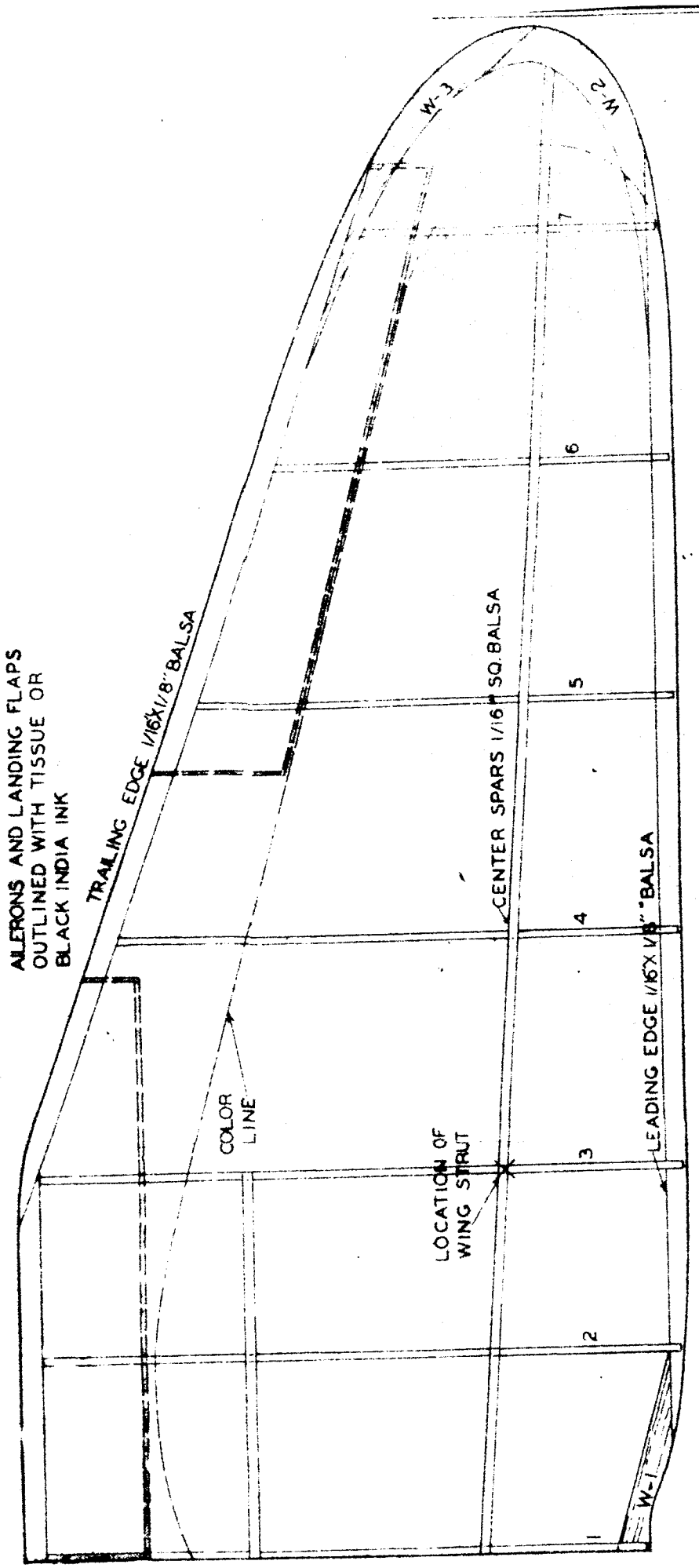
1/32" x 1/16" LAMINATES

NX18268

NOTE! ALL 1/16" SQ. UNLESS SPECIFIED

1/32" x 1/16"
LAMINATE

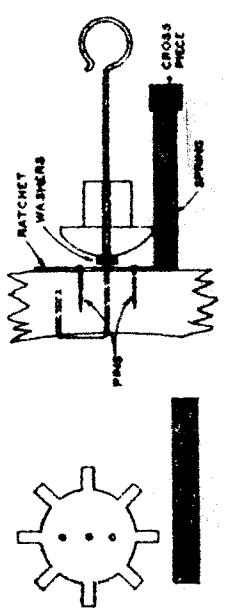
"BUTTERCUP"
1937
BY: PADRE ANDERSON
SCALE: PEANUT
REDRAWN FOR E.A.C. NEWS
1-6-93 BY: JOE BARNA

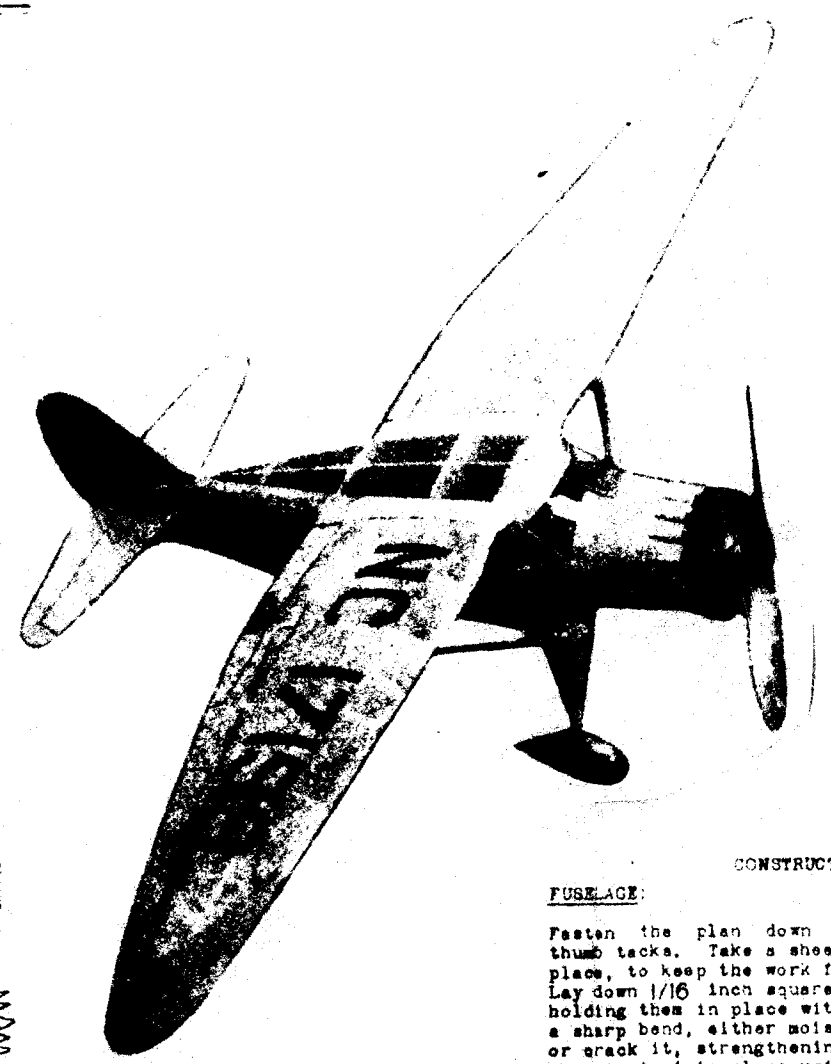


The MEGOW "Motor Hum" DEVICE

Directions for Installation

Fasten ratchet to back of propeller with small end pins. Nose block must be hollowed for spring to pass through so that spring may vibrate freely. Spring is imbedded in balsa cross piece which is cemented to back of nose block. Spin propeller and release tip of spring to hit against teeth of ratchet to produce a smooth even hum.





CONSTRUCTION NOTES

FUSELAGE:

Fasten the plan down to a large flat surface with thumb tacks. Take a sheet of wax paper and lay it in place, to keep the work from adhering to the plan. Lay down 1/16 inch square balsa for the longerons, holding them in place with pins. Wherever there is a sharp bend, either moisten the balsa at that point, or crack it, strengthening it later with cement. Fit the struts into place using a drop of cement to hold each joint. Either one or both sides may be built at the same time, whichever way is convenient.

Join the two sides with struts at the widest part of the fuselage. Make sure that the joints are dry before going further. Now bend the longerons inward, according to the top view. Fit in the remaining struts, using pins to hold each joint while the cement is setting. Be sure that the entire fuselage is in line. The nose block, rear hook, and formers complete the fuselage frame.

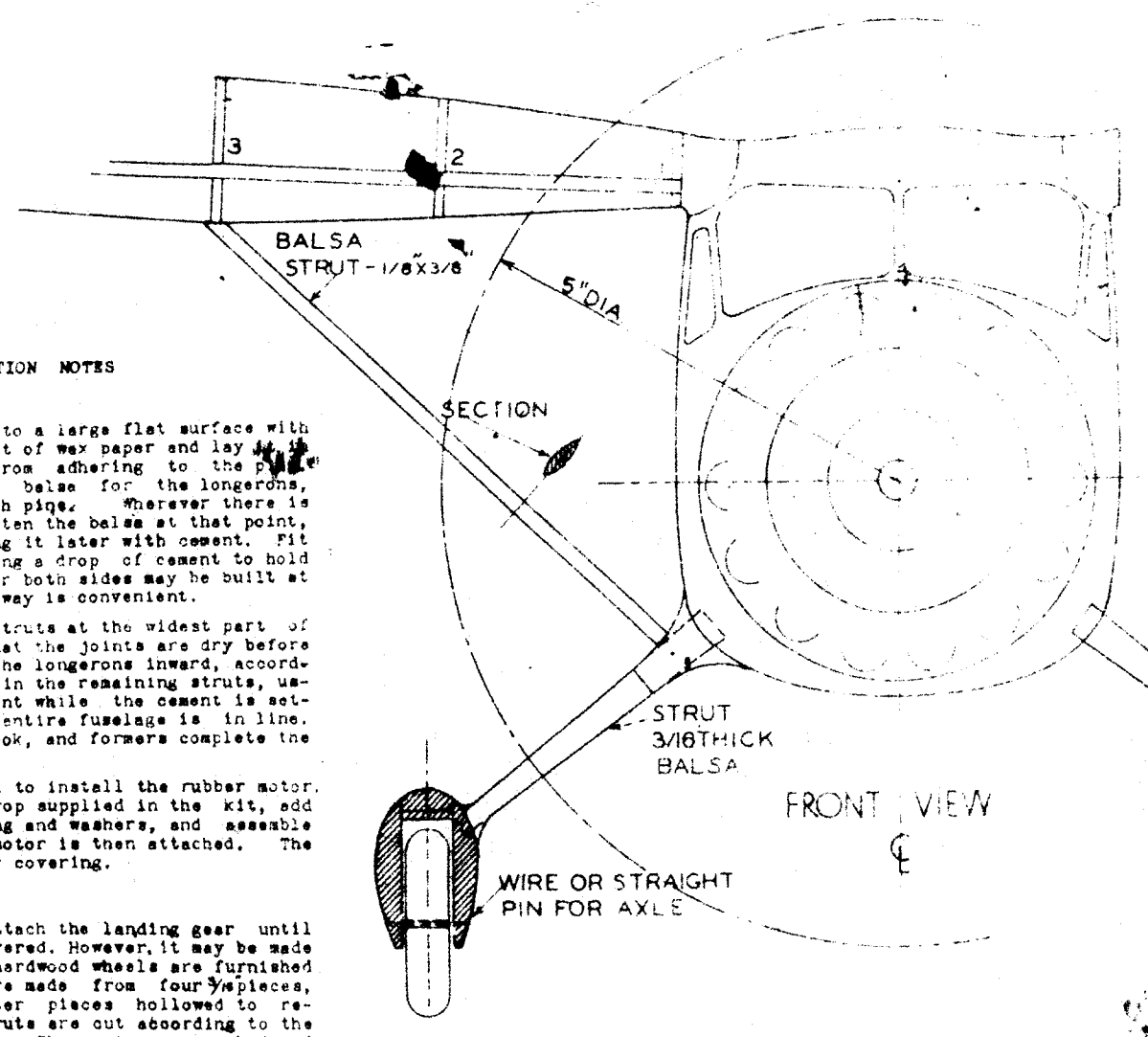
At this stage, it is well to install the rubber motor. Finish the semi-carved prop supplied in the kit, add on the prop shaft, bearing and washers, and assemble in place. The rubber motor is then attached. The fuselage is now ready for covering.

LANDING GEAR:

It is advisable not to attach the landing gear until the fuselage has been covered. However, it may be made at this time. Turned, hardwood wheels are furnished in the kit. The pants are made from four 3/32 pieces, sandwiched, with the center pieces hollowed to receive the wheels. The struts are cut according to the plan and are streamlined. The pants are notched and the struts cemented in. Wire or straight pins are used for the axle. When landing gear is ready to be attached, the strut is notched and fitted onto the former D2, and strengthened with plenty of cement.

WINGS:

Start with the wing outline, while that is drying, cut out the ribs from the printed piece. When the outline is dry, raise it up on the pins that fastened the outline to the plan to the required height and slip in the ribs. Put on the top center spar and when the wing is completely dry, remove it from the plan and add on the bottom center spar.



NOTE: KIT IS INTENDED FOR FLYING MODEL
NO DOPE IS INCLUDED IN KIT

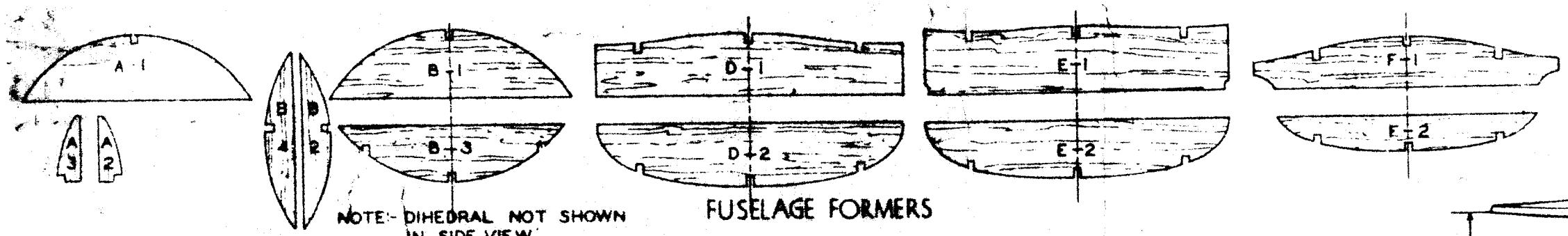
MEGOW'S MODELS

Stinson Reliant

WING SPAN 23 INCHES

DRAWING FULL SIZE

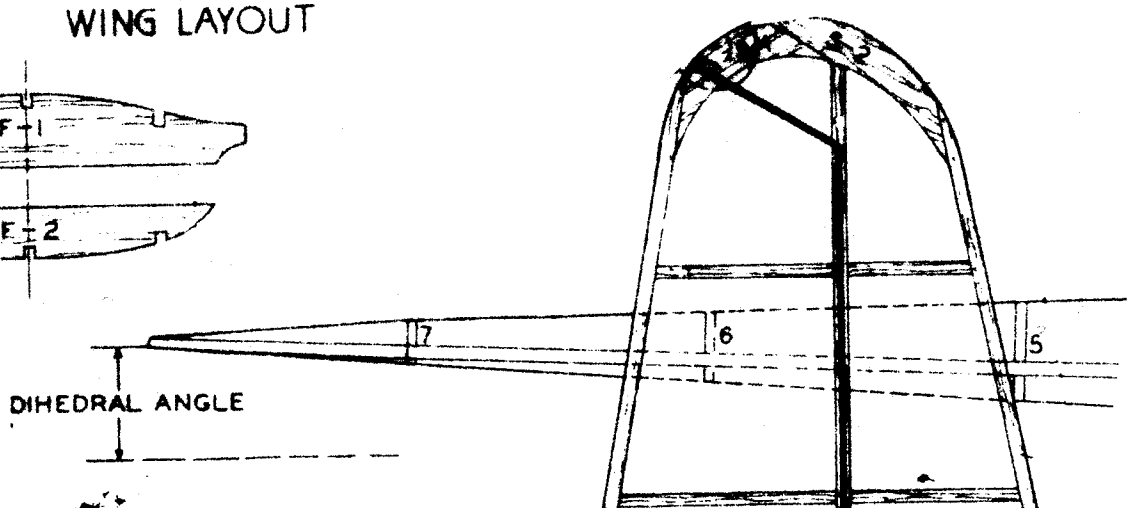
KIT NUMBER C20

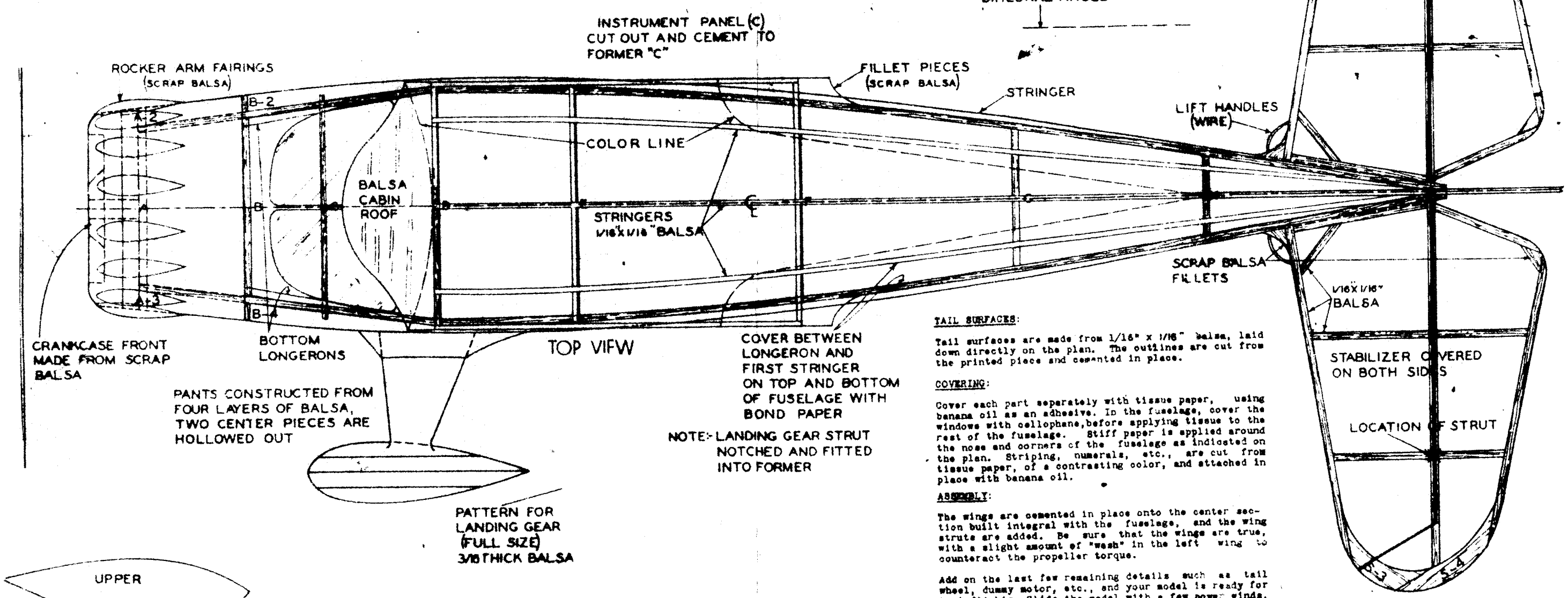


NOTE:- DIHEDRAL NOT SHOWN IN SIDE VIEW

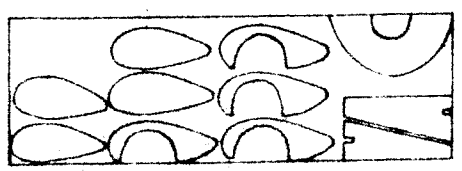
FUSELAGE FORMERS

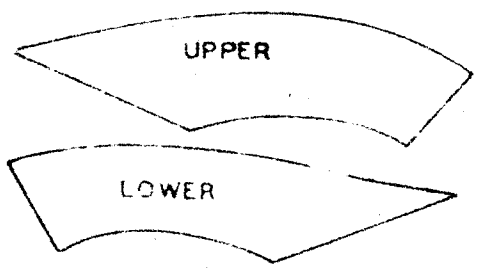
WING LAYOUT





METHOD OF LAYING OUT PLANK FOR PANTS AND LANDING STRUTS





LANDING GEAR FILLET PATTERNS

TAIL SURFACES:

Tail surfaces are made from 1/16" x 1/16" balsa, laid down directly on the plan. The outlines are cut from the printed piece and cemented in place.

COVERING:

Cover each part separately with tissue paper, using banana oil as an adhesive. In the fuselage, cover the windows with cellophane, before applying tissue to the rest of the fuselage. Stiff paper is applied around the nose and corners of the fuselage as indicated on the plan. Striping, numerals, etc., are cut from tissue paper, of a contrasting color, and attached in place with banana oil.

ASSEMBLY:

The wings are cemented in place onto the center section built integral with the fuselage, and the wing struts are added. Be sure that the wings are true, with a slight amount of "wash" in the left wing to counteract the propeller torque.

Add on the last few remaining details such as tail wheel, dummy motor, etc., and your model is ready for test flights. Glide the model with a few power winds, and correct any tendency to stall or dive by adding weight to front or rear. This model will make wonderful flights with only a few slight adjustments.

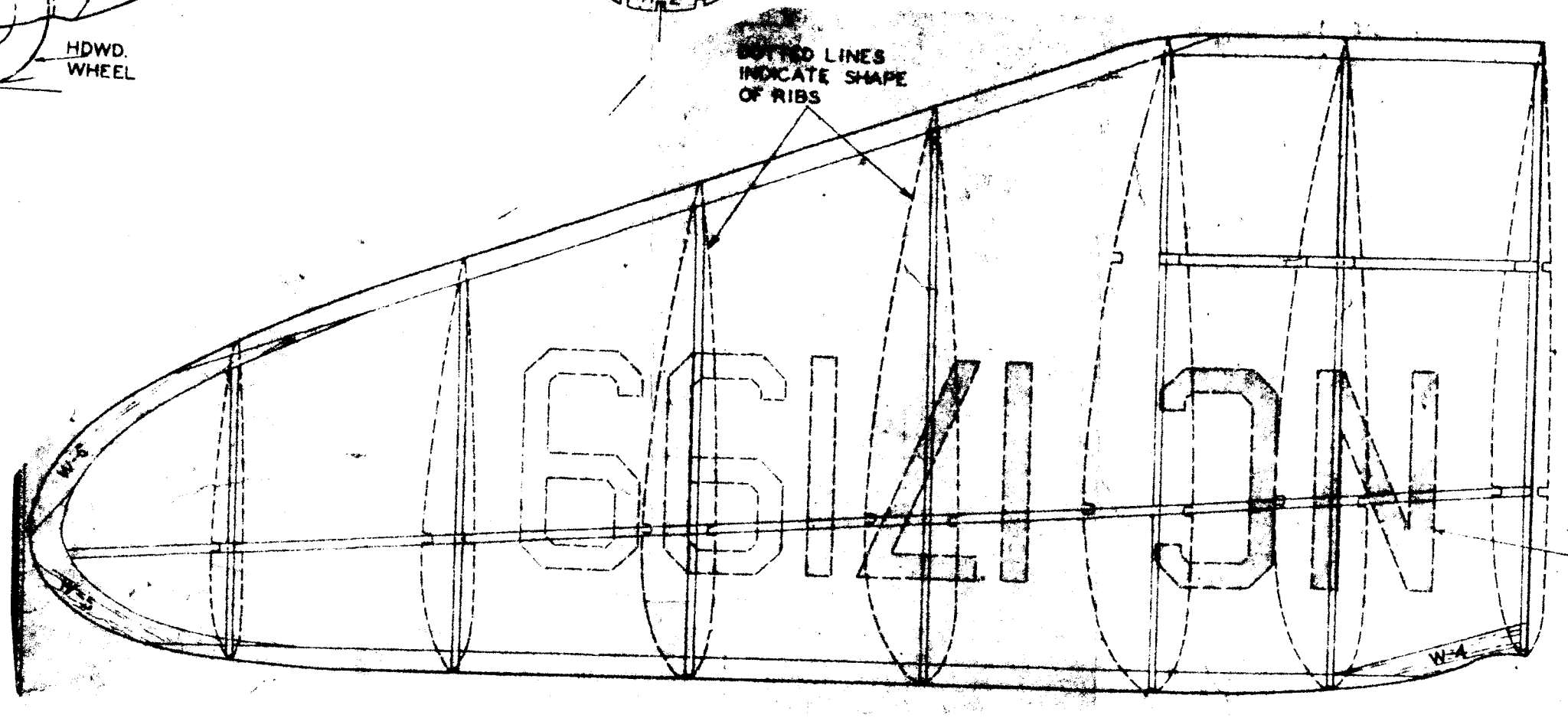
COLOR SCHEME

BLUE- FUSELAGE, RUDDER, LANDING GEAR, TRAILING EDGE OF WING, NUMERALS

YELLOW- WINGS, STABILIZERS, TOP OF FUSELAGE, FUSELAGE AND PANTS STRIPE, NOSE DESIGN

MEGOW'S, PHILADELPHIA, PA., U.S.A.

5" CARVED PROP
WASHERS
WINDSHIELD (CELLULOID)
TURNED BALSA NOSE
PROP SHAFT
COVER TO HERE WITH BOND PAPER
THRUST BEARING
3/16 SHEET BALSA
PANTS OUTLINE
PANTS COVER OUTLINE
HDWD. WHEEL
CELLOPHANE WINDOWS
STRINGERS 1/16" SQ. BALSA
SIDE VIEW
ALL FUSELAGE CONSTRUCTION IS OF 1/16" SQ. BALSA
OPTIONAL FUSELAGE STRIPE - YELLOW
SCRAP BALSA FILLET
LEAVE SECTION OPEN ON BOTTOM FOR ACCESS TO RUBBER MOTOR
REAR HOOK
COVER RUDDER ON BOTH SIDES
1/16" SQ. BALSA
STABILIZER BRACE
STRUT 1/16"X1/8" BALSA
CROSS BRACE
SCRAP BALSA
WIRE
TAILWHEEL (BALSA)



MOTOR
CUT OUT AND CEMENT IN PLACE

NUMERALS MAY BE CUT FROM TISSUE OF A CONTRASTING COLOR AND APPLIED WITH BANANA OIL