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NOVEMBER 1976

Next meeting: Wed. Nov. 3, at 7:30, College Park Airport

During the last meeting (for those of you who did not show) Bill Clarke, who ran the summer H.L.G. contest for the club, handed out his beautiful hand made trophies. First, was Rubber arm, alias Steve Poretz, pushed hard by John Sites who was second, Bill Clarke third and fourth Pat Daily. Another great job Bill and really handsome trophies - THANKS.

As some of you know, we have two kite flyers in the club who every year bring home a trophy in the Smithsonian kite flying contest held at the Mall. These bring Eric Wallgren and Rolf Gregory, representing opposite ends of the age scale. In the last issue of Boys Life Eric and his kites were featured in a nice article. Congrats Eric.

As you get into this issue you will find another view of last months HMFTC article by Allan, which as you will remember was on instability, (spiral that is). This view is by "Two wings are better than one" Stew Meyers.

This past Wed. was the monthly M.A.S.S meeting, (Metropolitan Area Scale Society). which is headed by Hurst Bowers, this is an informal group and you are all invited to attend the meetings. Contact Hurst, Pat Daily or my self if you care to attend, for directions or a ride. We meet on the fourth Wed. of each month.

During the meeting we firmed up the indoor contest to be held at Andrews A.P.B. on the 15th and 16th of Jan. There will be six events, Hurst Bowers Flyline Models will donate a Flyline Kit for each 1st place and the Maxcutters will give a trophy for 1st thru 3rd.

Events will be P-NUT, Monoplane and Bi Plane, AMA flying rules and Mooney scale judging, AMA SCALE but using Mooney rules all the way Monoplane and Biplane events, WWI combat Using same flying rules as FAC Thompson Trophy. The sixth event will be No-Cal FAC Rules.

START BUILDING

The Bull session will be at my house this month on the 19th of Nov. see map elsewhere in this issue.

Ray

CLUB HAPPENINGS ----- by Pat Daily

INDOOR FLYING SESSIONS AT KENNEDY HIGH: The indoor season got under way on October 1, 1976 at Kennedy High Gym. Thanks to the heroic efforts of a super maxcutter, Bill Saunders, we are once again able to use this fine facility to fly our latest creations in without suffering the ravages of winter weather. We all owe brother Bill a great big vote of thanks. The indoor schedules were distributed at the last maxcutter meeting but in case you were absent we will make it a point to post the upcoming dates in MAX FACTS. So for the next couple of months here goes:

NOV 12, 26 and DEC 10, 17 and Jan 7, 21.

These are all on Fridays from 7 to 10 P.M. It might be wise to check on the availability of these dates by calling Pat Daily or Kennedy High before coming.

1911  
EASTBOURNE N

12 3/8" SPAN

D. SKULL 12-67 #

ALL-UP WT. = 5.0 gms  
1/2 FISHMOTOR  
WITH MOTOR = 5.55 gms

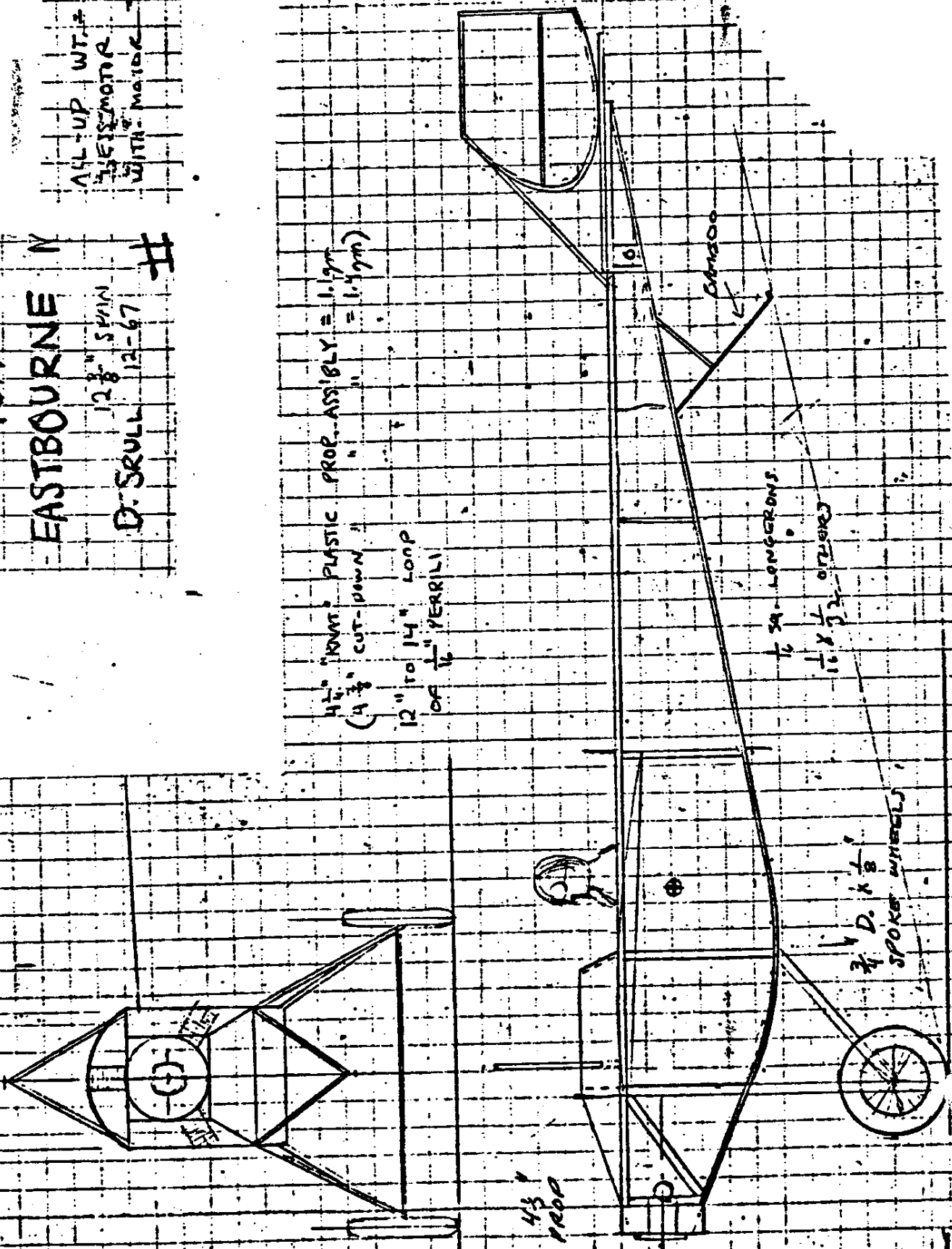
4 1/4" HWY. PLASTIC PROP. ASS'LY = 1.7 gm  
(4 1/8" CUT-DOWN) = 1.7 gm

12" to 14" LOOP  
OF 1/4" PEARL

29 LONGERONS  
1 1/2" x 1/2" ORWOOD

3/4" D. x 1/8"  
SPOKE WHEELS

43  
PROP



**BEGINNER'S CLASSES:** Now that I have told you about the indoor sessions here comes the kicker. We have agreed to conduct a couple of building classes for youngsters who would like to try their hand at flying models. Thanks to the generosity of Bob Peck, we have several free beginner's ROG kits available for newcomers-- now all we need is some advertising -- get some beginner's to come to the flying sessions and then some of you kind old modelers will gladly donate some of your time and glue, yes we need some glue, and help get them started in the right direction. This kind of an effort is a small price to pay for an indoor site---so lets see some volunteers to help with the program.

**BULL SESSIONS:** The first of our winter Bull Sessions was held on Oct 22 at the home of Pat Daily. Thirteen beer drinking dope (nitrate) crazed modelers showed up and a great time was had by all. Old movies of Army Air Corps and Bendix racers were shown and Eric Walgren brought a great pile of ancient MAN and Air Trails and Flying Aces dating back to 1932 (44 years old --wow) and we had a great time looking through and drooling over these great mags-- Jimmy Carter and Jerry Ford failed to command any notice whatsoever, even if it was the third debate. These sessions are really great fun and I for one, am really looking forward to the next one at Ray Rakow's on Nov. 19. Be sure and plan on it.

**PLANS AND THREE VIEWS:** Both Don Srull and Eric Walgren have graciously donated copies of several plans that will grace the upcoming issues of MAX FACTS. Some of these are really obscure, if not downright ancient. We are very proud to be able to have them in our newsletter. Thanks guys.

**MASS MEETINGS:** Okay scale fans, the Metropolitan Area Scale Society has started its fall meetings again. They welcome anyone interested in scale aviation from full size to models. Meeting nights are the 4th Wednesday in Fairfax VA. Contact Pat Daily or Hurst Bowers for directions. (Daily 460-1298)

**Winter Contests:** -- Your duly appointed contest board has decreed the following dates as contest dates.

- November 28 --a sunday-- Nocal and Embryo rubber at the Comsat Site--time 1:00 PM till dark --nocal scale and embryo rules are those of the FAC club published in MAX FACTS two months ago.
- December 10 -- P-nut Scale Contest at Kennedy High--Mouney rules--must ROG
- January 15 -- MASS Indoor AMA scale and biplane scale events along with P-nut scale events to be held at Andrews AFB--more later on this one
- February or March-- a Manhattan event and perhaps another P-nut scale event

C. A. V. U.

(Ceiling And Visibility Unlimited)

(Yeah, I know, it's unrestricted - but it wasn't so in the beginning).

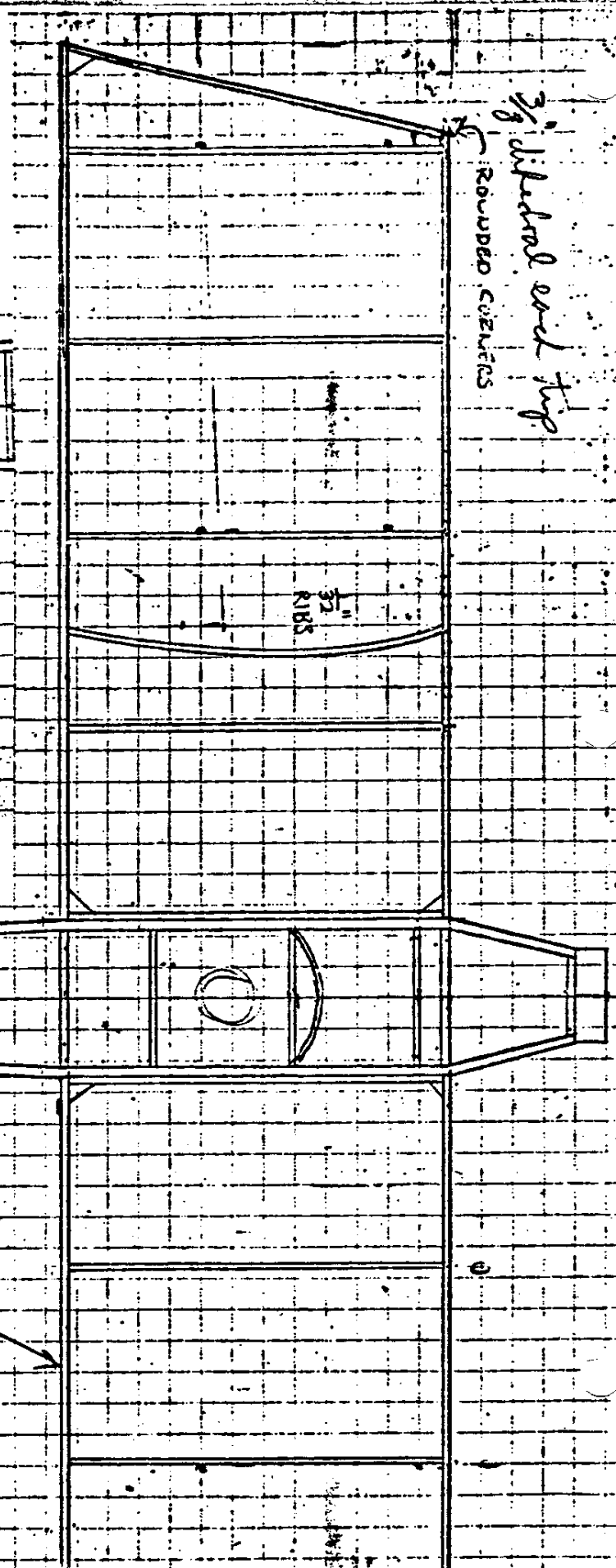
By Rolfe Gregory

Whenever you mention the name of that well known and sometimes controversial aeronautical engineer and designer, William B. Stout, to model airplane fans, they usually associate the name with one of two things: either the Ford trimotor or the Stout indoor trophy awarded each year at the NATS. I associate the name with something entirely different.

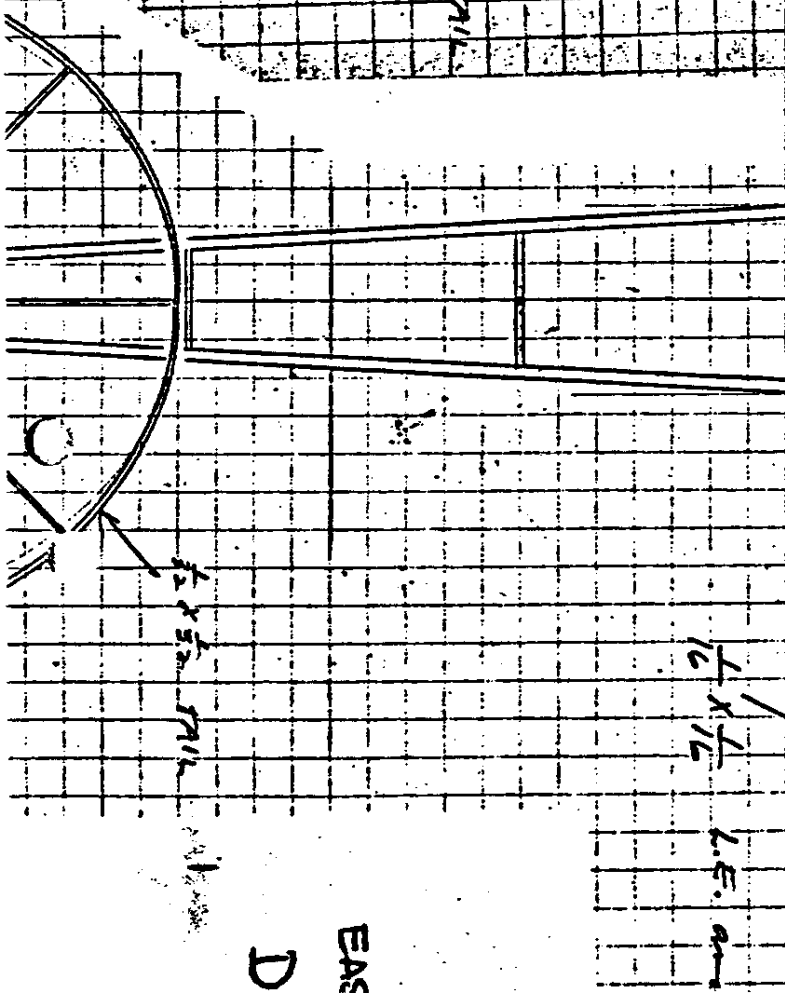
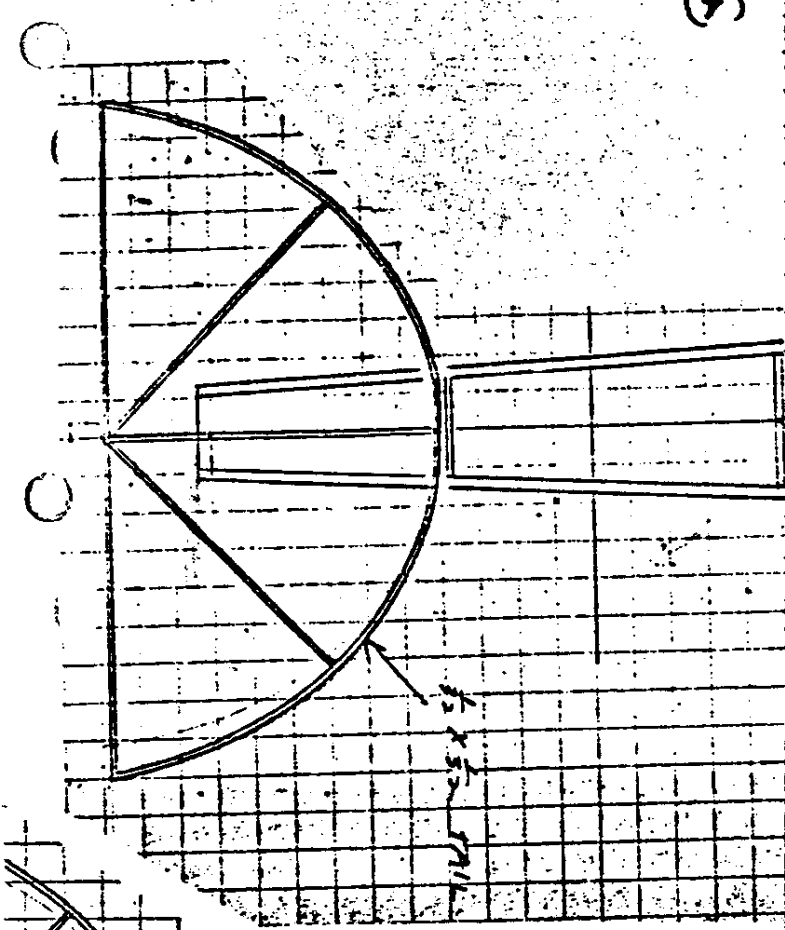
One Friday night in 1932, I was visiting in my neighborhood when one of the fellows said, "Greg, I bet you can't guess who's spending the night just up the street from you -- it's that airplane man, William B. Stout. He and his wife are visiting the Morris". He had to be kidding! If someone had told me in those days that I could meet and talk to any famous figure in the whole aeronautical world that I wanted to, I would have picked William B. Stout.

When I got home, I knew the boy wasn't joking. Mr. Morris had called earlier and said they had friends staying with them who wanted me to meet. Mr. Stout wondered if I could come up next morning and bring my models. Would I!

3/8" lateral end tip  
Rounded corners



(4)



D  
EAS

1/2 x 1/2 L.F. 2

I don't think I slept a great deal that night. Next morning I hiked up the street with one of my better flying models and sure enough -- standing on the front steps of the Morris home was a very familiar looking man -- the same guy I had seen so many times before - in magazines. He put out his hand and said "You must be that young fellow, Rolfe Gregory, that Mrs. Morris has been bending my ear about"! He must have thought I was a deaf mute because I just stood there shaking hands, and staring at him without saying a word. He finally broke the spell by suggesting we go over to the big field across the street and see how the model would fly.

The big field was the same place that barn stormers had used for years, to hop passengers, and the same field I was to use many times later when I would fly down on week-ends, from my job at the Luscombe Airplane Co., in New Jersey, to visit my parents. After World War II, it became a housing development and there is nothing to indicate that an airplane, or even a model, ever landed there.

This particular day was cold, cloudy and uninviting, but it was a bright day for me. The model flew unusually well and I had my chance to ask Mr. Stout all the many saved up questions. I told him I planned on becoming an aeronautical engineer after finishing high school, and was shocked when he advised me against it. He said engineers were a dime a dozen and I would do better to study business administration. (I didn't take his advice). I remember he told me that it wouldn't be long before almost all airplanes would be built of metal, and that the Ford trimotor would still be flying when the Fokker trimotor (its competitor) would be found only in a museum. How right he was! His parting remark was, "I hope you win my (Stout) trophy at the Championships (as he called them) some day".

As Paul Harvey says on his news broadcast: "And now for the rest of the story". Fifteen years went by. It was 1947 and I was in Cleveland, Ohio, for the National Air Races. The night before the Thompson Trophy Race, while standing in the lobby of the Carter Hotel, a sort of downtown headquarters for the Air Races, I saw Mr. Stout. He looked across the lobby, walked over with his hand extended as he had 15 years before. "I remember you", he said, "you're Rolfe Gregory and we had great fun one cold morning flying a model down in Petersburg, Virginia".

You see, as I said in the beginning, when someone mentions the name of William B. Stout, I think of something different. I think of a remarkable man who could remember, after so many years, a scrawny young high school kid he had seen only once.

You know, I would sort of like to win the Stout trophy, just once!

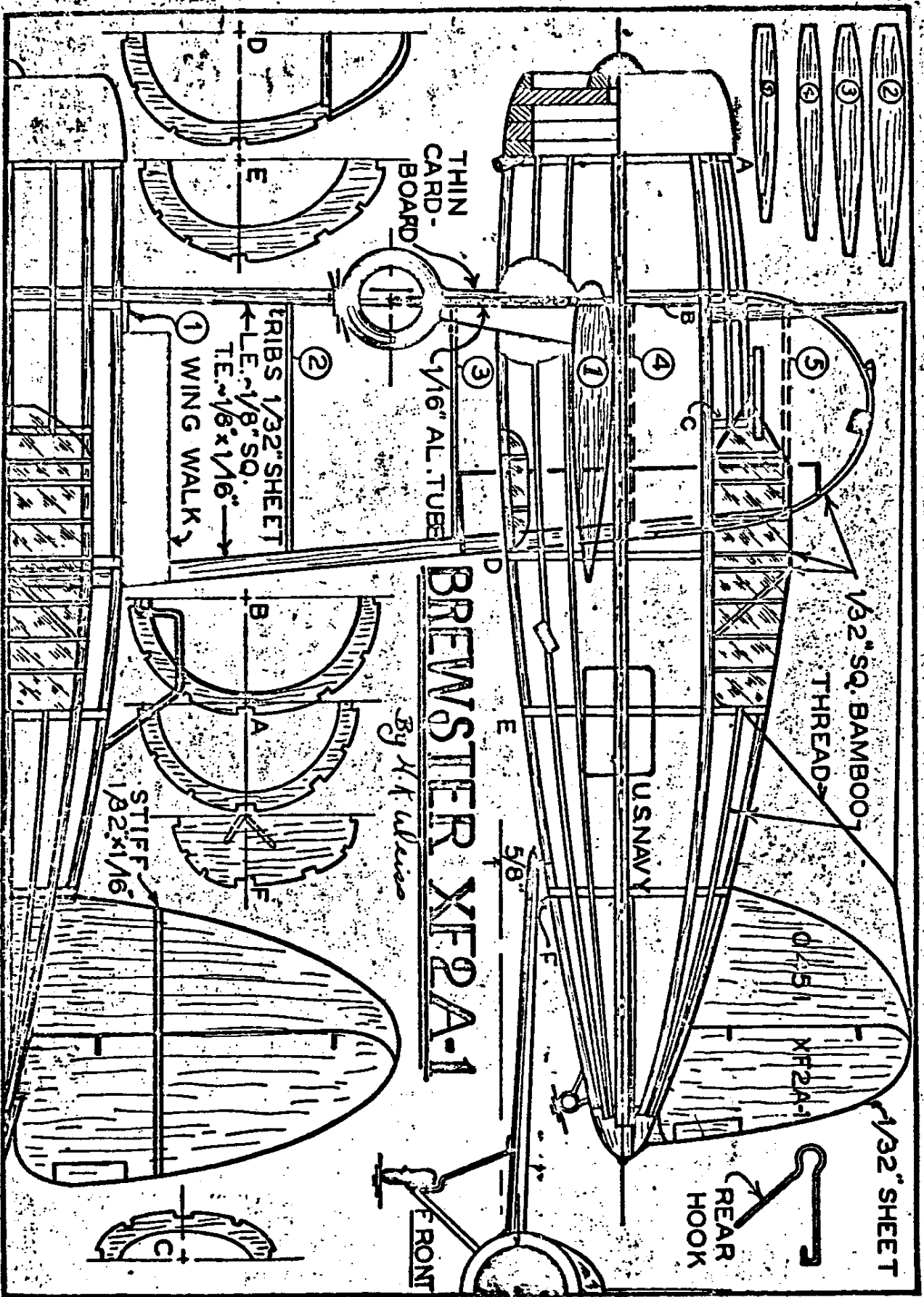
#### More Scale Spiral Instability

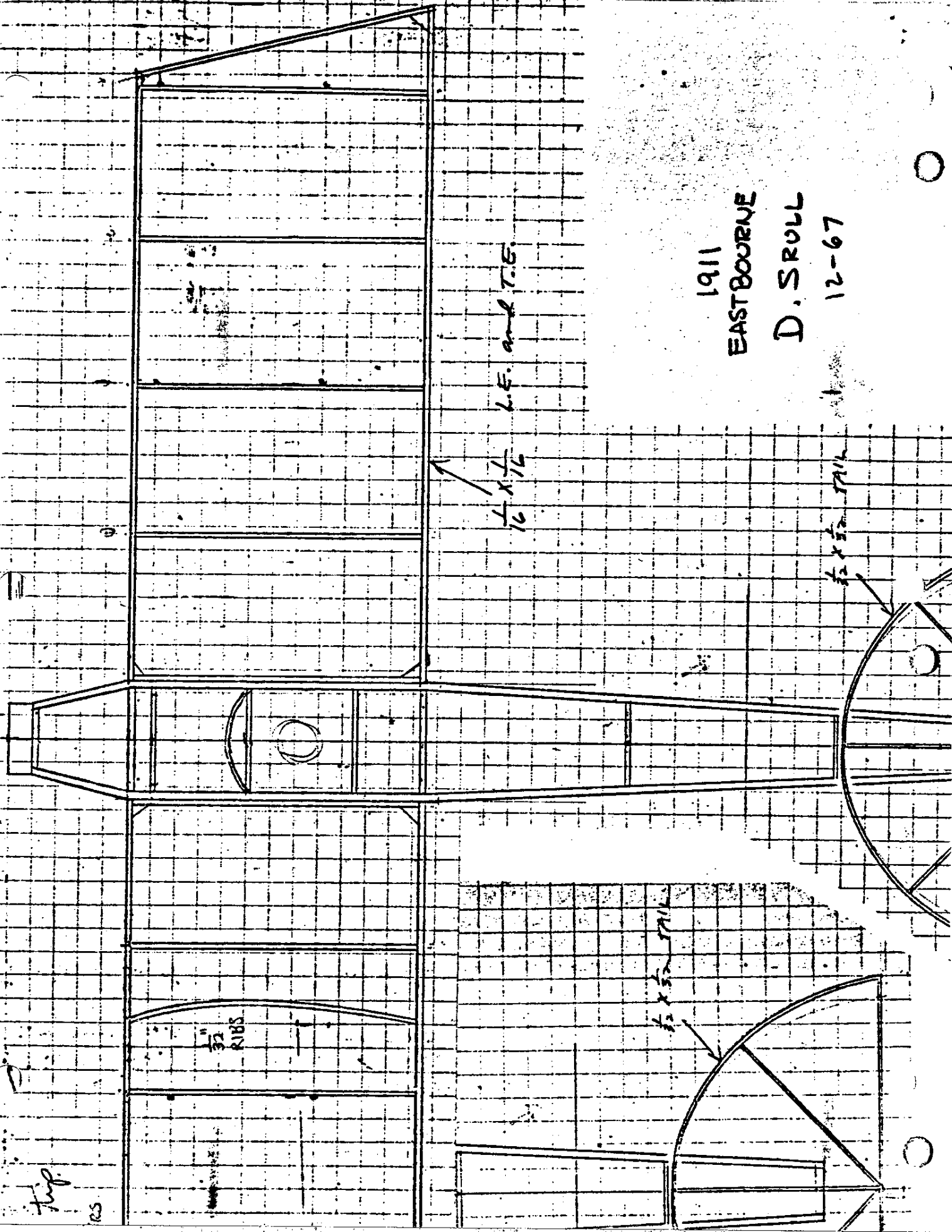
Zero Shanzel has done it again with more HMFIC (Horse Manure For Intentional Consumption). I will admit he probably is an expert on instability- judging from seeing him fly. None the less, I feel a view from the other end of the animal is desirable.

The spiral stability of a model is a function of lateral area, its centroid, dihedral, sweepback, and rudder/fin size. Basically, if the vertical surfaces are too small in relation to the dihedral, the plane will rock its wings in a dutch roll, if disturbed; if they are too large, the plane will tuck its nose and spiral in.

Spiral instability can be cured in some scale free flights by freeing the rudder hinge and letting it flop. Which effectively reduces the area with out hacking up the tail or its covering. Further by counter weighting the rudder and providing a pendulum control, severe cases can be cured.

Looking at the other factors involved, increasing dihedral helps as does sweeping up the tips and washout. More area forward helps, ie cowls and canopies which Shanzel eschews on test flights will help improve marginal spiral stability. Finally if one has the balls to use a little power and get away from the near stall regime all kinds of stability problems resolve themselves.





1911  
 EASTBOURNE  
 D. SROLL  
 12-67

$\frac{1}{2} \times \frac{1}{2}$  L.F. and T.E.

$\frac{1}{2} \times \frac{3}{4}$  TAIL

$\frac{3}{2}$  RIBS

$\frac{1}{2} \times \frac{3}{4}$  TAIL

tip.

105

1

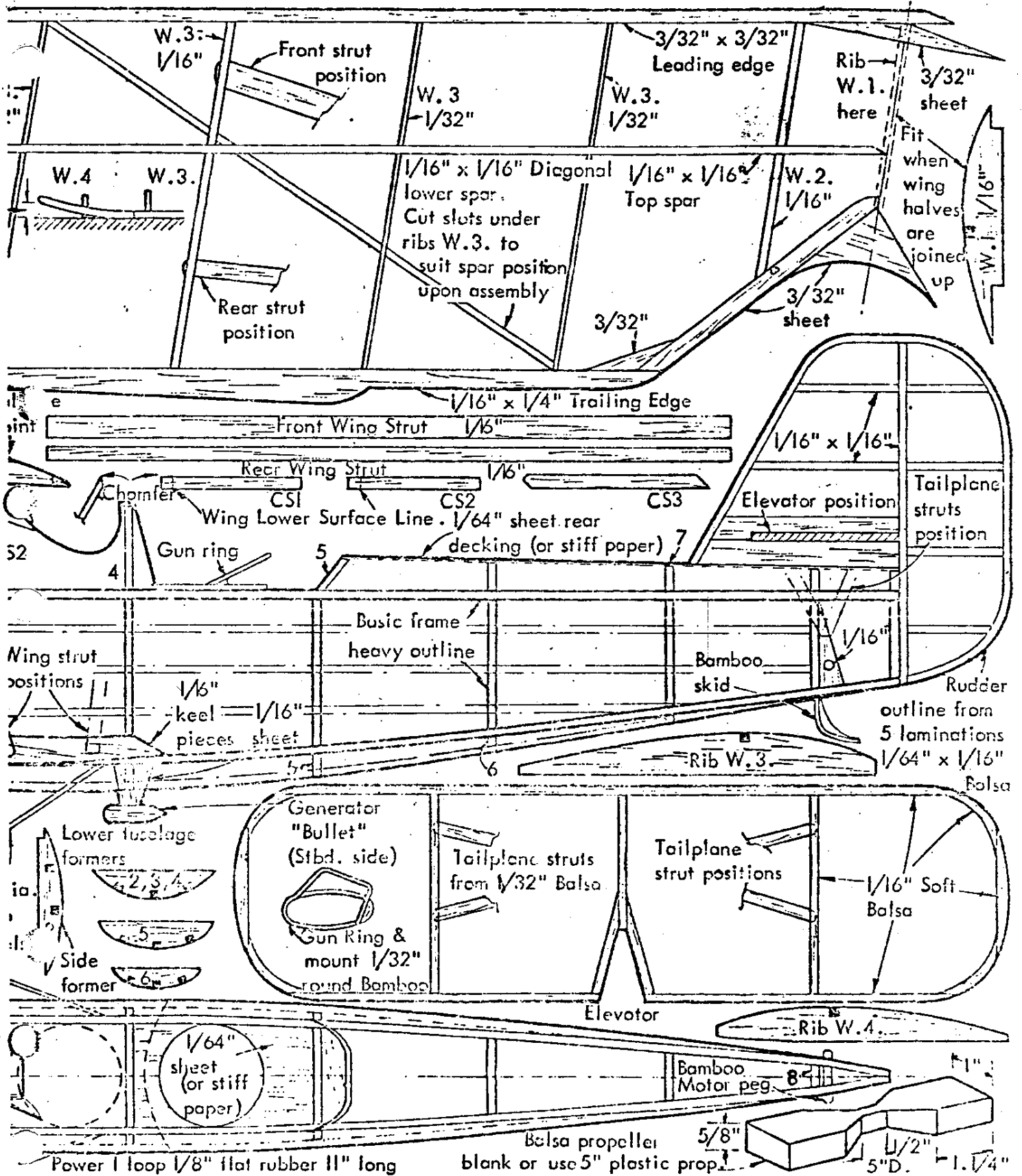
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3

4

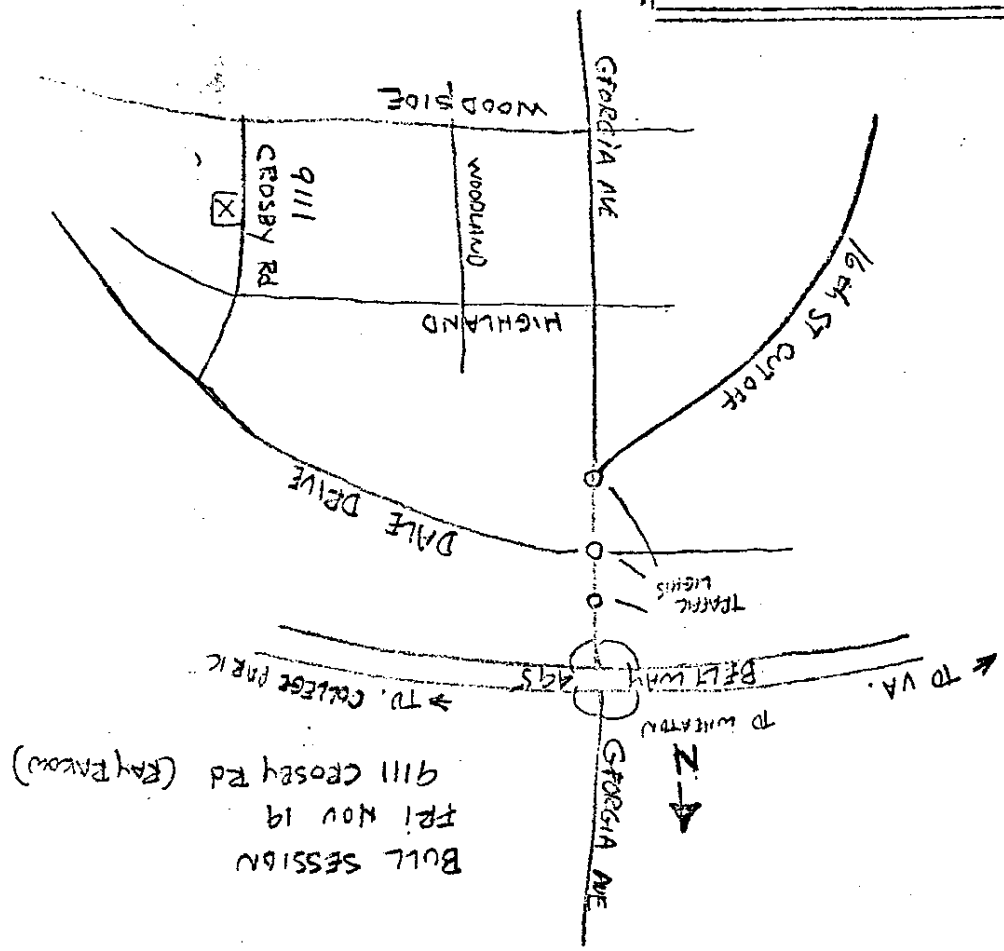


# HEINKLE 46



|                         |             |
|-------------------------|-------------|
| KENNEDY HIGH            |             |
| INDOOR FLYING - FRIDAYS |             |
| OCT. 15, 29             | FRI. 4, 25  |
| NOV. 12, 26             | MAN. 11, 25 |
| DEC. 10, 17             | APR. 1, 22  |
| JAN. 7, 21              | MAY 6, 20   |
| TIME 7:00 PM            |             |
| ON MANOLI# EAST OF      |             |
| GEORGIA - IN GYM        |             |

(7)  
 CLIP & SAVE  
 →



Now to discuss Sterling kits. Structurally these are an abomination. They are basically designed as rubber jobs, but are so heavy that it takes lots of rubber and a big prop to prolong the glide (Sterling for flight). Now a big prop requires more rudder as well as more rubber. So when you use a small prop with a gas engine, you end up with too much rudder. A nice diesel swinging a large prop would have helped.

Another trick applicable to pulse rudder is to move the C.G. slightly forward and angle the rudder hinge line aft. This results in a slight nose up in turns and more longitudinal stability. Sometimes it is difficult to separate out the effects of longitudinal from spiral stability or instability as the case may be. This is especially true at slow speeds (near a stall) with the pilot, observer, and builder all in one confused individual, with his thumb thrashing from side to side bending the stick, as he mumbles incoherently "Ain't it neat, it's scale!" and his tongue/droplets out of his mouth. Scale fiends are basically unstable, spiral and otherwise.