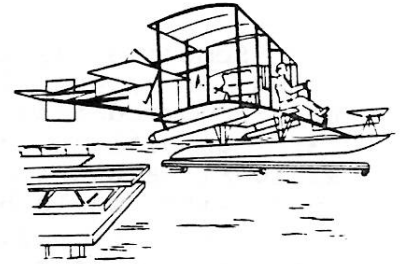


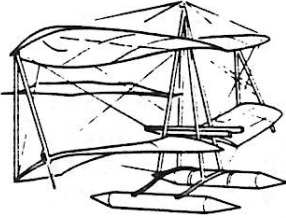
Turbo-Prop Flying Boat - R3Y-1



MAXECUTERS

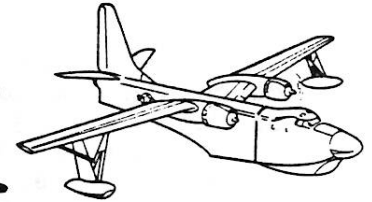


Shot Off Santee Dock - 1912



Gallaudet Floatplane - 1897

MAX - FAX



U.S. Navy P5M-1 "Marlin"

THE NEWSLETTER OF THE D. C. MAXECUTERS
JANUARY/FEBRUARY 1988

MEMBERSHIP

Dues for membership in the D.C. MAXECUTERS is \$10 per year for residents of the USA, Canada, & Mexico, and \$11 for all other countries. Your mailing label indicates the last year and month for your current membership. A red X next to the label is a reminder that your current membership has ended. Send a check, payable to the D.C. MAXECUTERS, to the Treasurer.

MEETINGS

The D.C. MAXECUTERS hold meetings on the first Wednesday of every month at the College Park Airport.

PRESIDENT

Bill Ceresa
11410 Blueridge Dr.
Beltsville MD 20705

SECRETARY

Bert Phillips
1709 Crofton Parkway
Crofton MD 21114

TREASURER

Allan Schanzle
20008 Spur Hill Dr.
Gaithersburg MD 20879

UPCOMING EVENTS

- Jan 9 1988: Sherwood H.S., 4:00-7:00 PM., Comet 10 incher contest.
- Jan 30 1988: Sherwood H.S., 4:00-7:00 PM., WW-I mass launch contest.
- Feb 13 1988: Sherwood H.S., 4:00-7:00 PM., Coconut scale contest.
- Feb 20 1988: Sherwood H.S., 4:00-7:00 PM., Peanut contest, Mooney rules.
- March 26 1988: Indoor contest at PAX River. See Flyer in this issue.

CLUB NEWS

ALLAN SCHANZLE

Well, folks, the rumors regarding the FAC NATS at Geneseo are running like Montezuma's revenge, so let's try to set the record straight. I think you deserve the whole story, at least as I know it at the time of this writing. But it is my opinion, as editor of this newsletter, and contest director for the next FAC NATS, that the FAC headquarters in Erie MUST BE THE OFFICIAL SPOKESMAN AND SEE TO IT THAT COMMUNICATION LINKS WITH ALL FAC'ERS IS MAINTAINED. That should be done with the FAC NEWS. There are quite a few FAC'ers that do not subscribe to MAX FAX, and it would be unfair, nay, improper, to use MAX FAX as the official means of distributing information concerning the FAC NATS. Now, let me set the proper background for what follows.

Sometime around early June of this past year, the MAXECUTERS were asked to sponsor the 1988 FAC NATS. We agreed, but only provided a field and accommodations were lined up, at least to the point where we could carry on with the details via correspondence. It was stated to us that the National Warplane Museum in Geneseo would again be available, and the local University would be happy to offer a place to rest our weary bods after a full day of flying. Furthermore, the Erie PA folks would make final arrangements for the field, and the lads in Rochester would make the initial contact with the University. With that as input, your editor went to the June monthly meeting and asked for support. It was approved by all.

Bob Clemens did a yeoman's job in contacting the University concerning accommodations, but we needed an approved date from the owners of the flying field before making final arrangements with the State University of New York (SUNY). For one reason or another, field approval ultimately fell upon the shoulders of the MAXECUTERS, and in particular, Tom Schmitt. With one phone call, indications were that the field would be available for the dates of July 9 and 10, 1988, but it would have to be approved by the Board of Directors of the museum. That was supposed to be done at the Board of Directors meeting on Oct 8, and we were promised a return phone call shortly after that time. The call was not received, and after waiting several weeks, Tom placed another call to our contact, Chester Ostrowski. As a result of that call, the following letter was sent by Tom specifically requesting written permission to use the field.

Chester Ostrowski
Administrative Assistant
National Warpane Museum
P.O. Box 159
Geneseo, New York 14454

November 3, 1987

Dear Chester,

Please excuse the delay in responding to our phone conversation of two weeks ago. As I had mentioned, some personal obligations would postpone my reply until this time. This letter confirms our discussions concerning the use of the National Warplane Museum facilities on the 9th and 10th of July, 1988. With permission of the National Warplane Museum, the nationwide Flying Aces Club will hold their bi-annual National model airplane contest on those dates. The contest will be planned and directed by the D.C Maxecuters, a club chartered by the Academy of Model Aeronautics in the Washington D.C area. Our Contest Director will be Allan Schanzle who is fully accredited by the AMA as a director. His address is 20008 Spur Hill Drive, Gaithersburg, Maryland 20879 and phone number (301) 840 5884. We plan to obtain an Academy of Model Aeronautics Sanction and third party insurance coverage through them.

Approximately one hundred contestants will participate in primarily rubber powered scale model events similar to those of the 1986 Flying Aces Club Nationals. We also expect about an equal number of spectators to attend, mostly relatives and friends of the contestants. Most of these will be utilizing the facilities of the nearby State University for housing and meals. We plan to have our banquet there Saturday evening the 9th of July with a well known aviation personality as a guest speaker. Perhaps some of your staff may be interested in attend-ing. We will inform you of arrangements when they are completed.

We would enjoy provisions for refreshments and lunch at the airfield. At the 1986 contest soft drinks and hamburgers were prepared and sold in one of the maintainance sheds located between the administration building and the hangar. Everyone I talked to thought they were great. Something

similar would be ideal for our contest.

If you have any questions concerning the contest please do not hesitate to contact me or Allan Schanzle. We are interested in receiving a written confirmation of our schedule because of the work and expense entailed in such an effort. On behalf of the Flying Aces Club we wish to express our gratitude to you, Mr. Wadsworth and the Board of Directors for permission to use the National Warplane Museum facilities.

Sincerely yours,

Tom Schmitt

In about two weeks, Tom received the following letter.

National Warplane Museum

P.O. BOX 159
GENESEO, N.Y. 14454
716-243-9887

November 16, 1987

Mr. Tom Schmitt
11014 Marcliff Road
Rockville, Maryland 20852

Dear Tom:

I regret to inform you that the National Warplane Museum Board of Directors has voted against having any model airplane competition on museum property. In fact, the Board has voted to prohibit all model airplanes from flying at the Museum.

We sincerely regret any inconvenience that this may have caused your group.

Sincerely,

NATIONAL WARPLANE MUSEUM



Skip Lehman

SL:dm

CC: Austin Wadsworth
Chester Ostrowski

For the sake of brevity, I have omitted the inclusion of quite a few other matters. For example, we were requested by the University to fess-up a non-refundable \$500 deposit to SUNY, which I refused to do until I got written permission from the museum. That could have been a real kick in the center hip pocket. Tom has spent endless hours trying to communicate with the people at the museum for acquisition of the field, when in reality, we should not have had to do it at all. Long distance communications on matters like this are difficult, if not impossible. An "in person" approach would have been better.

The day we received the above letter from the museum, I called Lin Reichel and told him to sit down, because I was going to spoil his whole

day. I suggested that he contact other people in an attempt to line up a field, in particular Wright Patterson AFB. We heard nothing in return for several weeks, but rumors were starting to run rampant.

Sometime around the first of December, I got a call from Bob Clemens, asking what the hell is going on. I relayed our sad story, but Bob was optimistic that the problem could be turned around. I personally didn't think that was possible, since the letter was rather definitive in nature. At Bob's request, Tom made another call to the museum, and eventually heard from Skip Lehman, who asked a few questions about the type of models we were going to fly. Tom and Skip agreed to talk again in a few days, and as of today, December 16, we have been told that a letter is forthcoming that will give us written approval for use of the field. That is where we stand as of today. It looks as if the field will indeed be available, thanks to the efforts of Bob Clemens and a friend of his in the Western New York Free Flight Society, Jack Barker. If the 1988 FAC NATS do indeed come off at Geneseo, we can thank these two fellows. Gold stars to both.

Time is running out, not only for the MAXECUTERS to get the affair arranged, but for the proper advanced notice to those concerned. We need written approval for use of the field before making further plans. If additional problems arise in this area, we suggest postponing the event until 1989, when we will again act as sponsors. But we will not, at least with me as C.D., do a half-assed job. Either its done right, or it won't be done by us.

So that's the status, folks. I regret having to inform you of this sequence of events, but we have done the best we can. We are aware that you would like to make vacation plans for next summer, and we will keep you informed of any future developments. But I will reiterate that we have kept FAC Headquarters informed on an event-to-event basis, and that they must get the word out to all FAC'ers, if by no other means than a one page issue of their newsletter.

Well, there must be some good news that can be inserted in this otherwise depressive issue. Les-see. The Christmas banquet was once again a raving success, with lots of good groceries (mostly German style) and Dr. Paul Garber, Historian Emeritus of the Smithsonian, as guest speaker. Since this is the 60th anniversary of Lindbergh's flight across the Atlantic, he reviewed some of the many aspects of Lindbergh and his plane, the Spirit of St. Louis. During his presentation, Paul discussed many related subjects, such as his personal conversations with Lindbergh. And can you imagine the pride when I say we had a guest speaker that has had lunch with Orville Wright! Needless to say, Dr. Paul Garber is one of the world's leading aviation historians. It was a thrill and pleasure to have one-on-one contact with this gentleman. We thank you Dr. Garber, for again joining us at our yearly banquet. Thanks also to Rolf Gregory for contacting Paul, and to the Spreiregens for making the restaurant arrangements.

Even though this is supposed to be a model airplane club, it sometimes takes on the characteristics of a model railroad club, in this case, when annual elections are held. We "choo-chooed" another year out of our present officers. Congrats to Bill Ceresa and Bert Phillips

This issue features a peanut plan by John Tudor of the Page Racer. This little sucker ought to be a real fine flyer. In addition, you'll find Part 1 of a series of articles on basic aerodynamics, by Bud Carson, and a review of the PAX RIVER contest by Tom Schmitt. A second plan, an Embryo by Don Deloach, is also included. Some contest results, and of course, our superb photo pages by Tom Schmitt, round out this issue. Oh yes, let's not forget MASSIMO, our mysterious cover artist who really did a job on the Page Racer.

PAX RIVER REVISITED
Tom Schmitt

Once again NAS Patuxent River was the scene of a great indoor contest orchestrated by Claude Powell. This time Claude even arranged sleeping quarters for our long distance travelers. Five contestants took advantage of the Navy's hospitality and had a great time. Claude hopes to have similar arrangements for both men and women at the March contest but be sure to call him at least two weeks in advance. His phone number is listed on the contest announcement in this issue.

Twenty nine contestants participated in the 11 events and many spectators made the trip to enjoy all the fun. At least thirty remained for the festive dinner afterwards, from which it was difficult to depart since conversation was flowing like a good wine.

FAC judging was accomplished by Pops Browning and his stalwart crew from the Patuxent River R/C club. They have performed this chore for Claude in the past several contests and deserve a well earned plaudit for their professional approach.

The ranks of COCONUT flyers are swelling; eight models were entered including a Waterman Aerobile. They all were great flyers! This event holds much promise due to the urging of Bud Carson who was awarded a distinctive button as the event originator. Our Pres did a great job on the artwork for that button and all the other awards which are provided by St. Mary's Recreation and Parks Department.

One of our missing Maxcuters, Capt. Pat Daily USN, provided us with another prize to go to the winner of the Navy Mass Launch event, but only if a U.S. Navy plane won. It was a beautiful mahogany serving tray inlaid with U.S. Navy pilot's wings, handcrafted in the Philipines. After a hard fought battle George Meyers with his F4U nosed out a determined Doug Buchanan flying a Skyraider. Well done guys! I am sure Pat would have been proud of you. Hurry back Pat; Pax River is not the same without you.

We did miss another of our Maxcuters at this contest. Dan Driscoll did not show; something about getting married the next day. Well at least you will not be able to use that excuse next time Dan. Seriously Dan and Susan, congratulations from all your modeling friends.

Howard Crispin, our AMA District IV Vice President was pressed into service for presentation of the awards. Afterwards he joined us for dinner and conversation. One of these contests we expect Howard to bring an aircraft for flying.

Our sincere thanks go to Capt. Fitrell, Commanding Officer of the Naval Air Station and all those personnel, Navy and civilian who make these great contests happen. Our flight happy contestants showed their appreciation by donating over fifty dollars to the Navy Relief Society.

PHOTO PAGES
Tom Schmitt

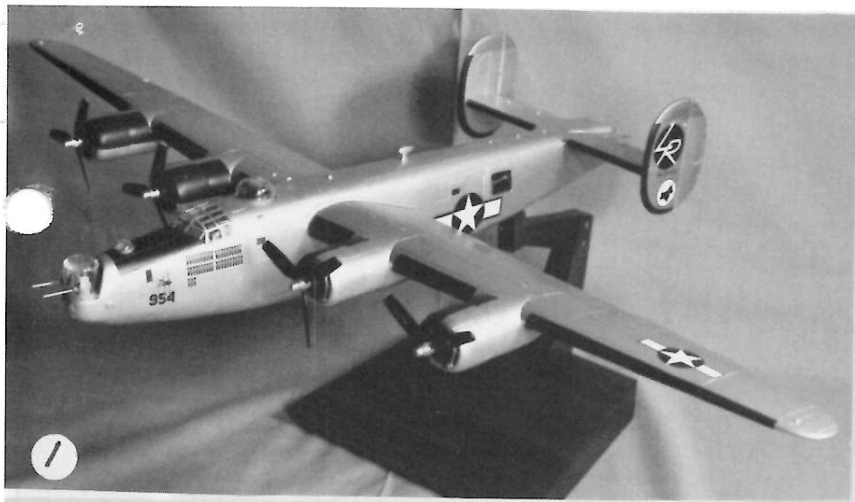
1. No, not a successor to Denis Norman's Lancaster, but a magnificent 1/48 display model of a B-24J by our master craftsman, Tom Yanosky; photo by Tom.
2. The Trans-Atlantic commemorative bunch on a damp chilly miserable day at Comsat. Hurst Bowers walked away with the most points. See the previous MAX-FAX for results.

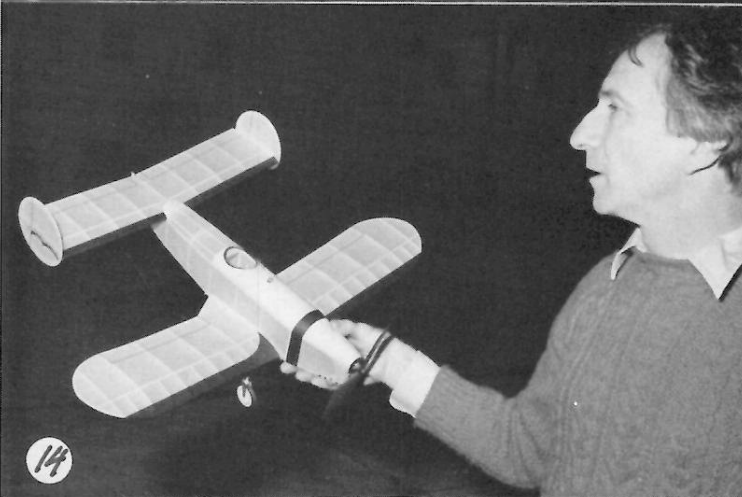
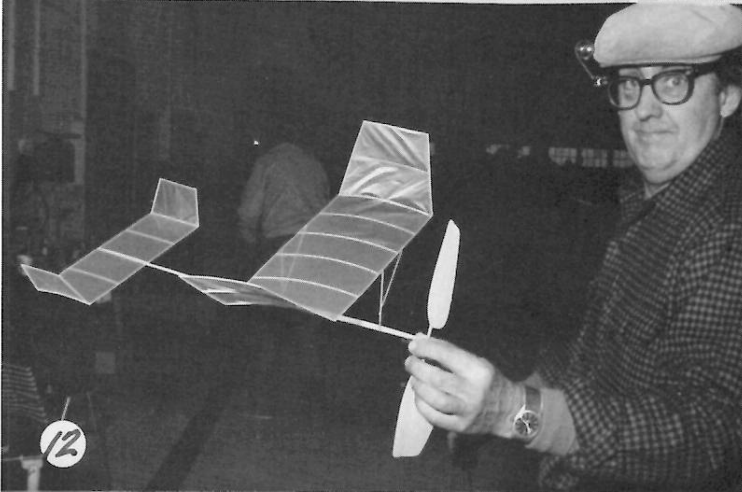
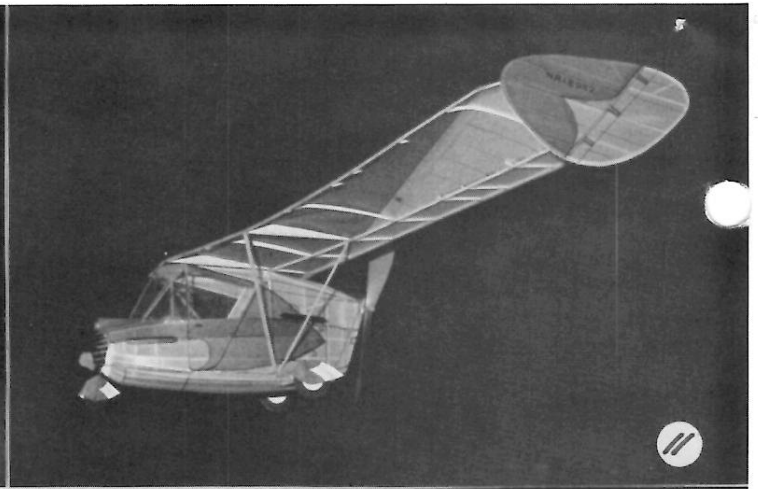
KUDZU FAC Contest North Carolina

3. A great flying Jumbo Dewoitine 338 by Dave Rees carried away first place in that event. Look at all those happy passengers in the cabin.
4. Dave Smith gave him a close race with this nifty Savoia Marchetti but lost out to a pick-up truck; unfortunately the truck came through unscathed.
5. Joe Hurdle with a very pretty Cougar using his homemade silver tissue to cover it for a very effective and realistic finish.
6. The judges, Dan Driscoll and Dave Rees hard at work on FAC judging; CD Bob Wedel kibitzes.
7. IT TAKES A TOUGH MAN TO FLY A TENDER CHICKEN! No, that's not Frank Perdue hiding behind the Fairchild; just der Schanz trying to hide from the photographer while cackling. See last MAX-FAX for the whole sordid story.

PAX RIVER CONTEST

8. A study of concentration; Mark Houck winding his Curtiss for the NAVY MASS LAUNCH event.
9. The big daddy of COCONUTS, Bud Carson holds his latest, a great model of the Dormoy 'Bathtub'.
10. Another COCONUT, a Fairchild 24 by Marv Yoder.
11. COCONUTS were everywhere; how is this for a terrific flying machine? John Houck's Waterman proved to be a good flyer.
12. Reggie Batterson drove up from Richmond to carry away first place in Novice Pennyplane.
13. Walt Liszewski came all the way from upstate New York with his family to enjoy the fun; come back again Walt and stay for dinner.
14. Joe Barish entered this nifty CO2 Maboussin Hemiptere to pick up a second place in FAC Power Scale.
15. Talk about cooperation among modelers; the Patuxent River R/C Club deserves a round of applause for a great job judging the FAC aircraft.
16. George Meyers won a hard fought battle over Doug Buchanan for first place in the NAVY MASS LAUNCH event; and was rewarded with this handsome serving tray donated by Capt. Pat Daily USN.
17. Howard Crispin our AMA VP awarded all the prizes, this time to Walt Eggert one of our visitors from the Johnsville, Pennsylvania area. Prexy Bill Ceresa assists.
18. Don Srull provided us with this happy photo of last MAX-FAX's model design (the Cavalier Mustang) and it's creator Linsey Smith. Linsey is also the entrepreneur behind the vacu- formed parts mentioned in that issue. Try some; you will like them.





BASIC AERODYNAMICS

-Bud Carson

PART I: EFFECT OF STREAMLINING

Aerodynamics is an applied science devoted to the study of forces that act between solid bodies immersed in a moving airstream. Through a study of aerodynamics, we are able to understand how lift and drag on bodies are produced. This field is relatively new; it has only been since the beginning of this century that we have discovered the principles of flight, although birds have been flying around for a hundred million years!

Among the many things that impeded our understanding of aerodynamics for many years were the preconceived notions of scientific experts, who formed their opinions on the basis of incorrect assumptions. These assumptions seem so obvious and compelling even today, especially to the newcomer to aerodynamics, that they must be dealt with and dispelled at the very beginning. Therefore I have decided to begin this discourse by going straight to the heart of the matter, and addressing one of the major misconceptions that many people share, which simply involves the way air flows around an object such as a wing.

When we try to visualize the flow of air about a wing (or other aerodynamic shape), it is natural to rely on our common sense and assume that in passing through the air, a wing pushes the air to either side much the same way that a plow moves earth or snow, leaving a "furrow" equal to the frontal area of the wing. From this we would conclude that the resistance to motion, or drag, would depend on the amount of air being displaced so that, for example, given two wings of the same general size except for their thicknesses, the thicker wing would have more drag than the thinner one. Likewise, we would predict that the drag on a given wing would increase as the angle it made with the flight path increased, since the greater the angle, the wider the furrow it would plow through the air.

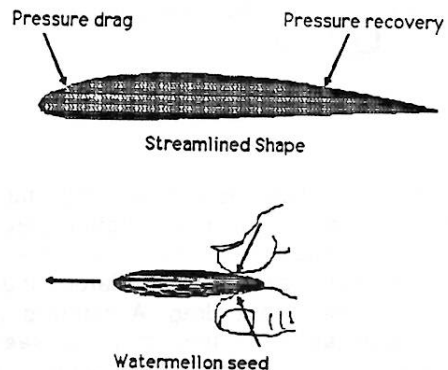
This was exactly the view held for many years by eminent scientists, who then went on to "prove" mathematically that manned flight was impossible, since the power needed to produce enough lift for a man-carrying machine would be prohibitive.

As it turns out, this is a fairly accurate picture for hypersonic flight and also for general aerodynamic shapes flying on the fringes of the atmosphere. However, for conventional low speed

flight, this concept is totally erroneous and misleading. The first real proof of this was given by the Wright brothers, both through their windtunnel experiments on wing sections, and later, by their practical demonstrations at Kittyhawk and beyond. Thus the experts were proved wrong, opening the way for serious scientific investigations that form the basis of modern aerodynamics.

Among other things, we now accept that if a body is "streamlined," (meaning that it has a long, tapered, or "teardrop" shape) its drag will be but a small fraction of a flat plate having the same frontal area placed perpendicular to the flow. At full-scale flight speeds, an airplane wing has a drag roughly 1/10th of a flat plate of the same frontal projection travelling at the same airspeed, and the giant airships of the past typically had a drag 100 times lower than a flat plate having the same frontal area. This may seem paradoxical and completely at odds with intuition. Yet it stands as scientific fact. There is obviously more to drag than simply "boring a hole in the sky."

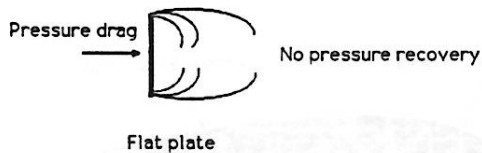
The explanation is really quite simple. Like most paradoxes, the discrepancy between intuition and fact stems from faulty reasoning. The comparison between a wing and a plow is invalid because the plow casts aside the earth permanently, which requires work equal to the force needed to push the earth aside times the distance it is moved. However, the comparison ends there. When air is moved sideways by a wing, it is not displaced permanently. Rather, the air closes in on the back, or "retreating" side. In so doing, the air pressure transfers a thrust to the retreating side which opposes some of the drag on the front side. This effect is often demonstrated at picnics when mischievous boys shoot watermelon seeds merely by pinching them on the retreating side. The finger pressure gives the seed a forward thrust which propels it with considerable (and, to the target, sometimes painful) speed. In aerodynamics, this is called the effect of "pressure recovery."



The actual amount of pressure recovery available to provide this benefit on a given body depends on the smoothness with which the displaced air returns to its original state. If the transition from the point of maximum displacement is smooth and undisturbed, almost full pressure recovery can be achieved. We call such flows "attached" since the air flows smoothly past the afterbody without tendency to break away, or "separate" from the surface.

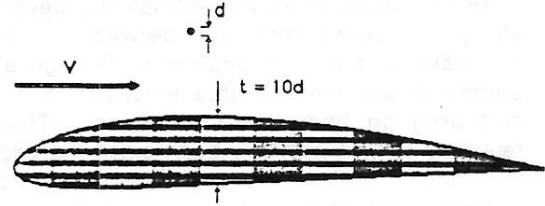
In other words, if the flow is attached to the afterbody, much of the work done in pushing the air aside by the wing section will be stored in the form of pressure and given back on the retreating side, so that the net work done is very small indeed. In fact, the force resisting motion arises mostly from the friction between the air and the wing, and almost none of it is due to the displacement of the air itself. Thus, the displacement of the air has very little drag effect on a streamlined body and a typical wing section will have almost the same drag as if it had no thickness at all, regardless of its actual thickness! This is born out by windtunnel experiments. At zero lift, an ordinary low speed airfoil having an 18% thickness (expressed as a percentage of its chord) has the same drag, to all intents and purposes, as one having a 9% thickness. Neither has a drag anywhere close to the amount predicted if we assumed that they merely plowed through the air, and were unaware of the pressure recovery effect.

On the other hand, if the flow is allowed to seek its own path in returning to the undisturbed state (as it would behind a sphere, cylinder, or a flat plate) without the guiding hand of a smooth afterbody, then most of the pressure recovery effect will be lost and we may safely assume in this case that the body is indeed "plowing a furrow" through the air. The air still closes in behind the body, but in a very confused state, which absorbs mechanical energy. In aeronautical parlance, the flow is said to be "separated," and such shapes are often referred to as "bluff bodies." This is shown below:



The drag on bluff bodies will be many times greater (for the same speed and frontal area) than on streamlined shapes. It follows then that a streamlined shape can be much larger than a bluff body and still have less drag. A highly graphic and practical application of this may be seen in the evolution of aircraft design. Most early aircraft had a great many bracing wires exposed to the airstream, the designers logically (but mistakenly)

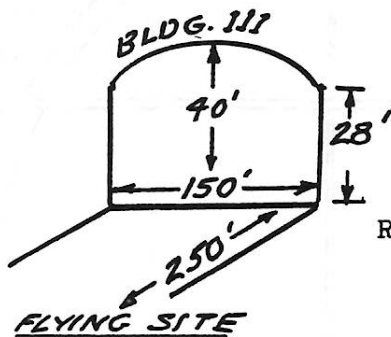
assuming that the wires would have negligible effect on the overall drag of the aircraft since they had so little cross section. Later, it was discovered that the bracing wires produced far more drag on some aircraft than the wings they were supporting! Little wonder, then, that modern aircraft have no external bracing wires, although some are still being made with streamlined struts.



Believe it or not: The wire and the wing section have the same drag

Thus we see that drag on a body depends more on its shape, and less on its frontal area, as might logically be supposed. The lesson is that we cannot always trust our instincts: someone once said that few things are more obvious than that the sun rotates around the earth!

So far, we have only considered drag from the standpoint of pressure differences. There is another form of drag only briefly mentioned here which arises from friction between the air and the body, called "skin friction." In the next part, we will examine this in more detail. Meanwhile, keep those afterbodies smooth!



INDOOR MODEL AIRPLANE CONTEST

MARCH 26, 1988

9:00 AM - 5:30 PM

ROTARY WING HANGAR, BUILDING 11
NAS/NATC PATUXENT RIVER
LEXINGTON PARK, MARYLAND

NO ENTRY FEE & FAC RULES

MAJOR EVENTS (Trophies awarded)

MASS LAUNCH

- | | |
|--|----------|
| 1- WW-I | 12:00 PM |
| 2- NAVY SCALE | 1:00 PM |
| 3- PEANUT SCALE | 2:00 PM |
| 4- MILITARY
GOLDEN AGE
(1920-1934) | 3:00 PM |

OTHER EVENTS

- | |
|-------------------------------------|
| 5- FAC SCALE |
| 6- COCONUT SCALE* |
| 7- BOSTONIAN (14 gm) |
| 8- NOVICE PENNYPLANE
(AMA RULES) |

SPECIAL EVENTS (Prizes awarded)

- 1- INDOOR HAND LAUNCH GLIDER (AMA RULES)
- 2- FAC POWER SCALE (4 oz maximum weight)
- 3- NO-CAL (7 gm min weight w/o motor)

* COCONUT RULES - 1 oz minimum weight w/o motor
Minimum wingspan - monoplanes 36 ins.
- multiwings 30 ins.
Scale Judging - Modified Mooney Rules

AIRCRAFT FOR SCALE JUDGING MUST BE TURNED IN BY 11:00 AM
NO QUALIFYING FLIGHT IS REQUIRED

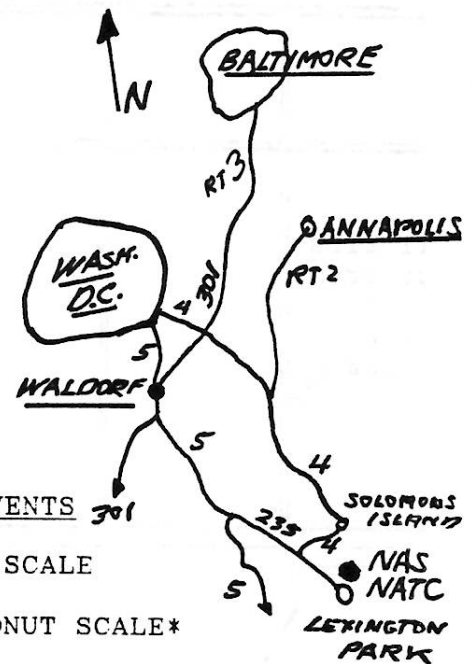
ALL FLIGHT TIMES MUST BE SUBMITTED BY 4:30 PM DEADLINE
AWARDS: 5:10 - 5:30

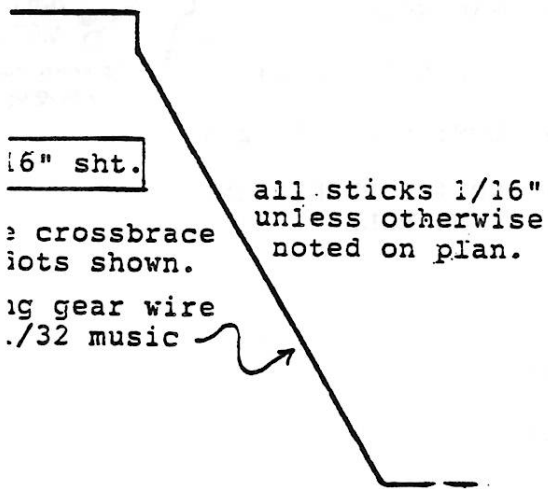
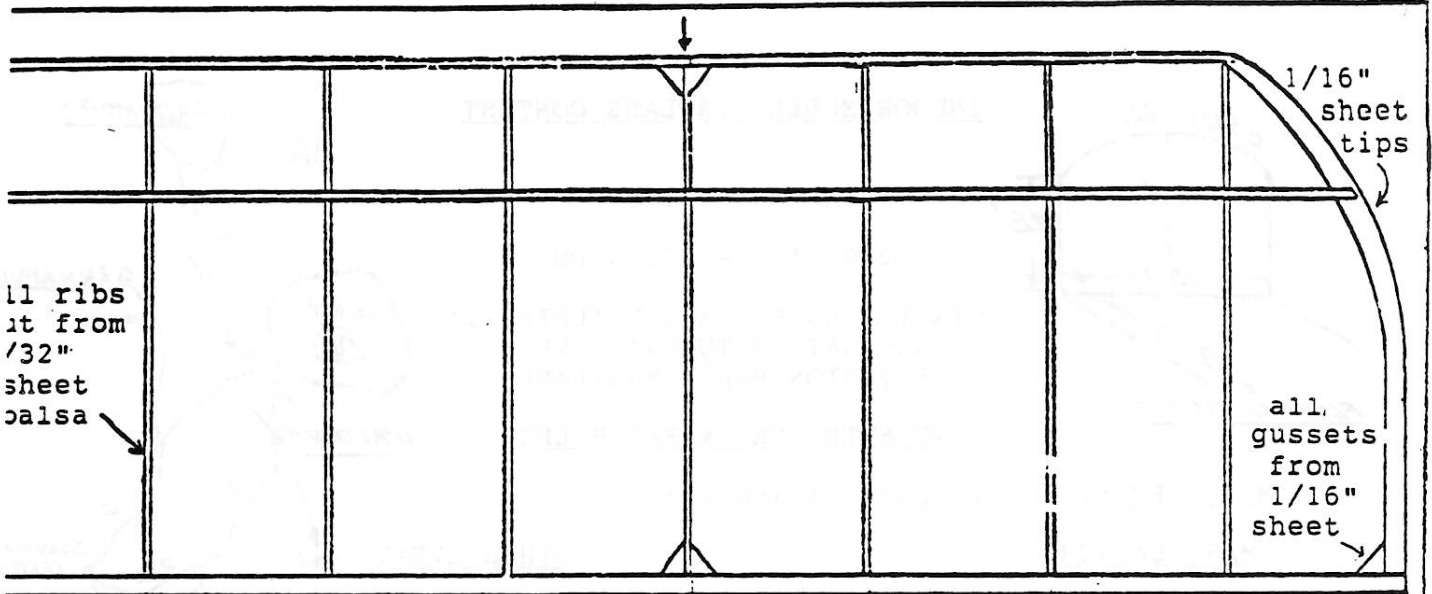
LOCAL RULE: ONLY ONE MASS LAUNCH EVENT PER AIRCRAFT

INFORMATION: COORDINATORS: CLAUDE POWELL 1 (301) 872-4105
TOM SCHMITT 1 (301) 530-0327
CONTEST DIR: ALLAN SCHANZLE 1 (301) 840-5884

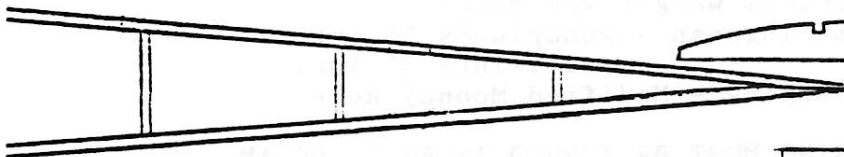
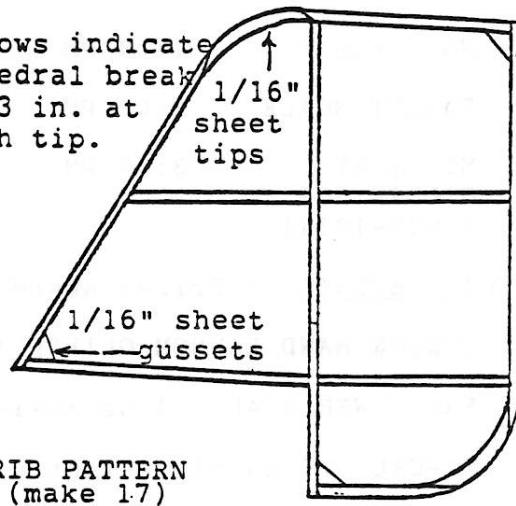
On-base housing may be available for both men and women at this contest; please contact Claude Powell at least two weeks prior to contest date.

SPONSORED BY: NAVAL AIR STATION/NAVAL AIR TEST CENTER,
PATUXENT RIVER, MARYAND AND ST. MARY'S
COUNTY RECREATION AND PARKS.



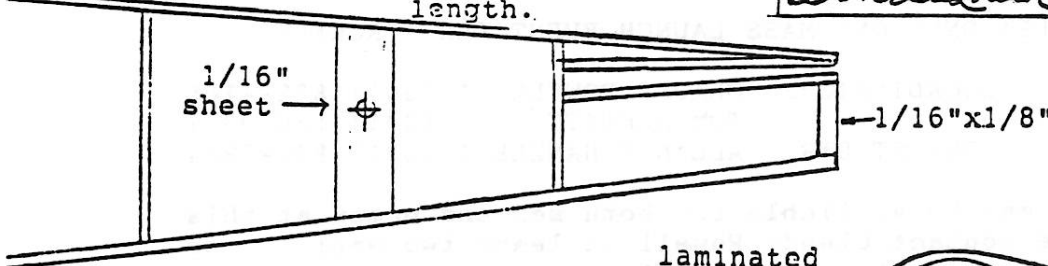


arrows indicate dihedral break of 3 in. at each tip.

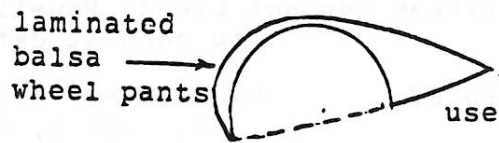


This airplane will fly indoors or out on one loop of 1/8" or 3/32" rubber about 1 1/2 times the fuselage length.

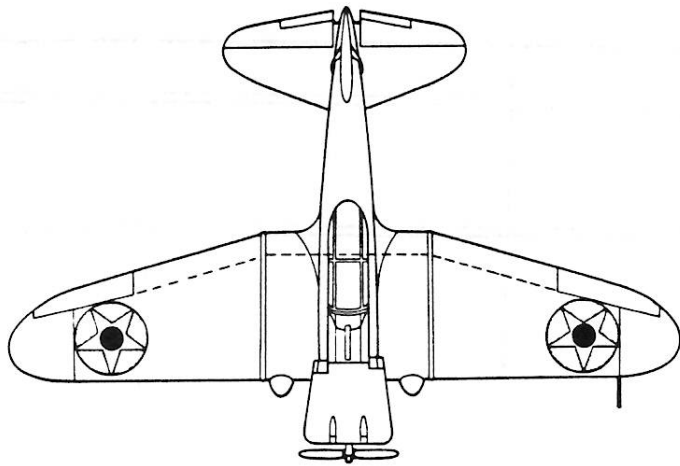
"LUCIFER"
AN EMBRYO SHIP
Designed by:
Gon DeLoach



total flying weight: 14 grams.

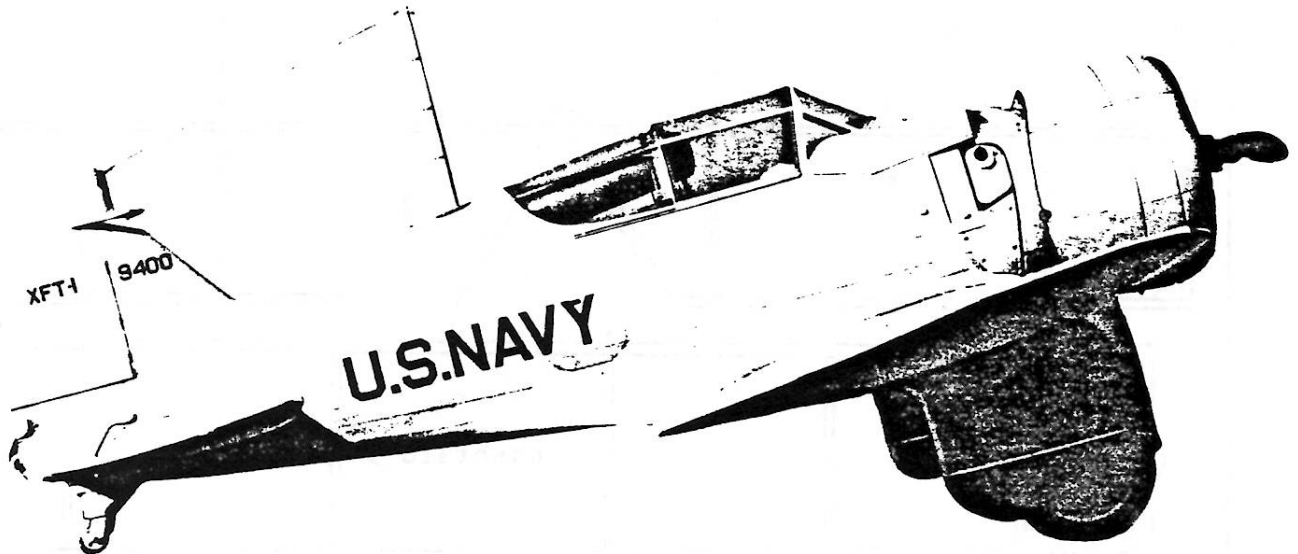
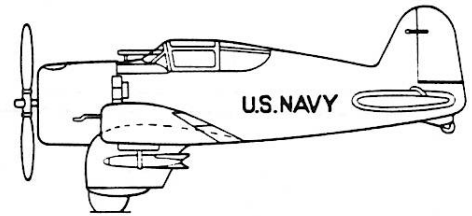
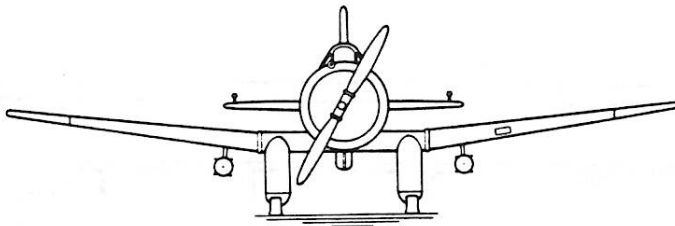


use 3/4" diameter wheels



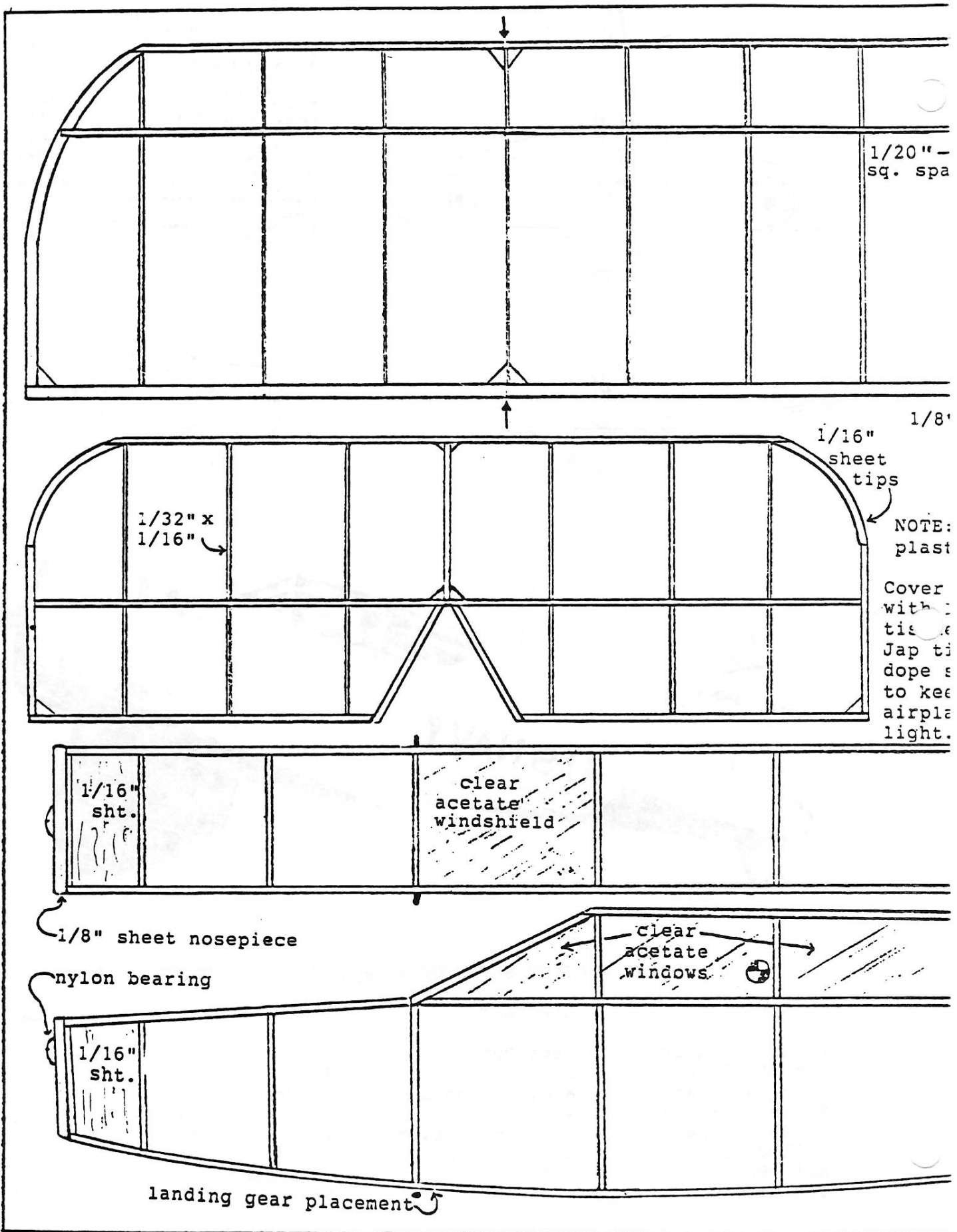
**XFT-2 FIGHTER
DOUGLAS**

Wing Area 177 Sq. Ft.
 Aileron Net Area Each 5 Sq. Ft.
 Flap Area Total 20 Sq. Ft.
 Horizontal Stabilizer Area 22 Sq. Ft.
 Elevator Area 13 Sq. Ft.
 Vertical Stabilizer Area 4½ Sq. Ft.
 Rudder Area 6 Sq. Ft.
 Wingspan 32 Feet
 Overall Length 21 Feet
 Overall Height 9½ Feet
 Top Speed (Maximum Gross) 240 MPH
 Cruising Speed (Maximum Gross) 228 MPH
 Range 900 Miles
 Powered by Pratt-Whitney Twin-Wasp Jr. 650 HP
 Maximum Gross Weight 7,761 Pounds



BOSTONIAN CONTEST SHERWOOD HIGH SCHOOL 21 NOVEMBER 1987

CONTESTANT	AIRCRAFT	TIMES	SECONDS	PLACE
Allan Schanzle	Boston Pup	71	79	----- 2
Bert Phillips	Box	44	47	
Doug Buchanan	Beancraft Banana		Crashed	
Kevin Sharbonda	Boston Racer	77	75	----- 1
Randy Kleinert	Great Expectations	32	39	
Bill Clarke	Peabody Packet	51	60	
Bill Bell	Found		Crashed	
Tom Schmitt	Boston Scrod	57	61	----- 3



1/20" -
sq. spa

1/8"
1/16" sheet tips

1/32" x
1/16"

NOTE:
plast

Cover
with
tis
Jap ti
dope s
to kee
airpla
light.

1/16"
sht.

clear
acetate
windshield

1/8" sheet nosepiece

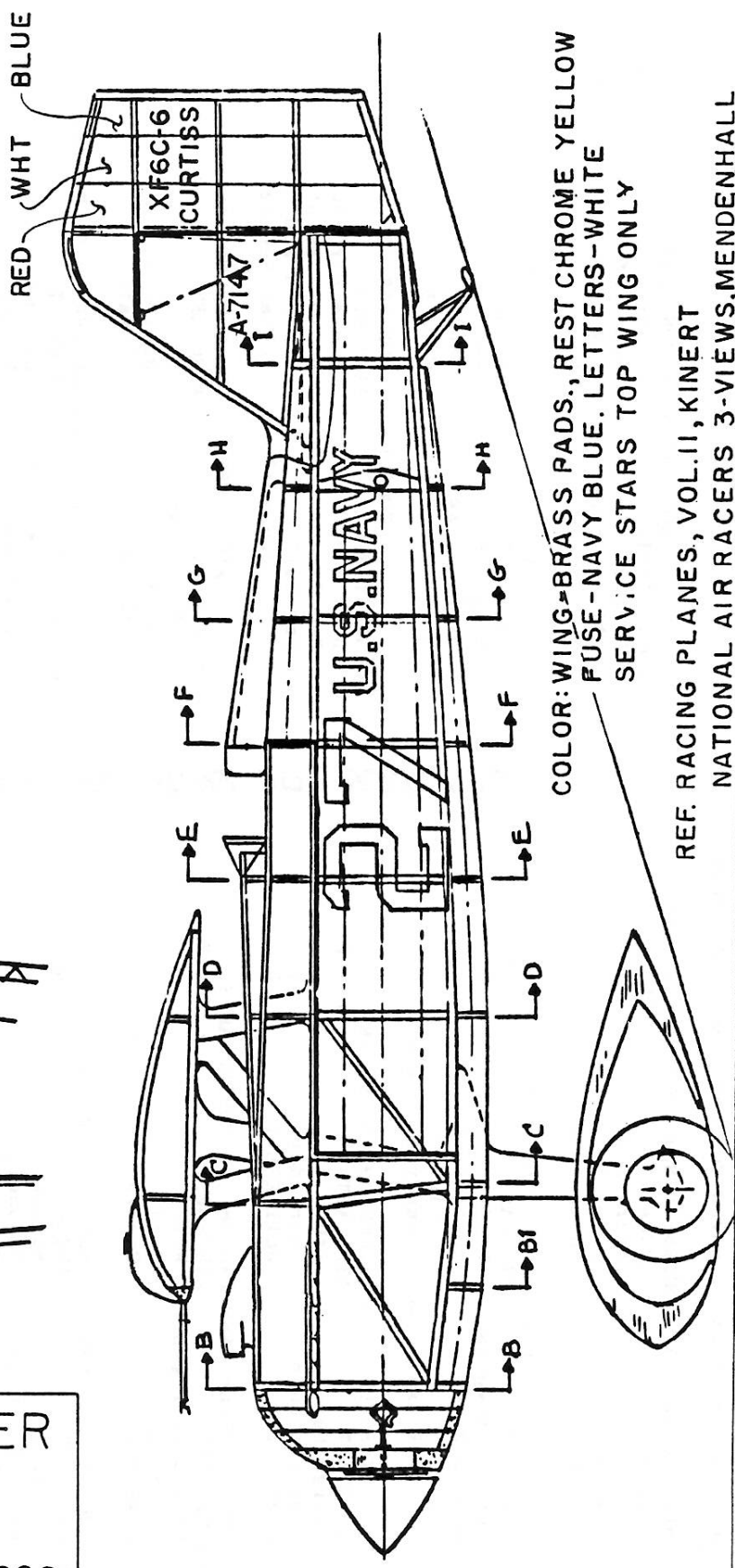
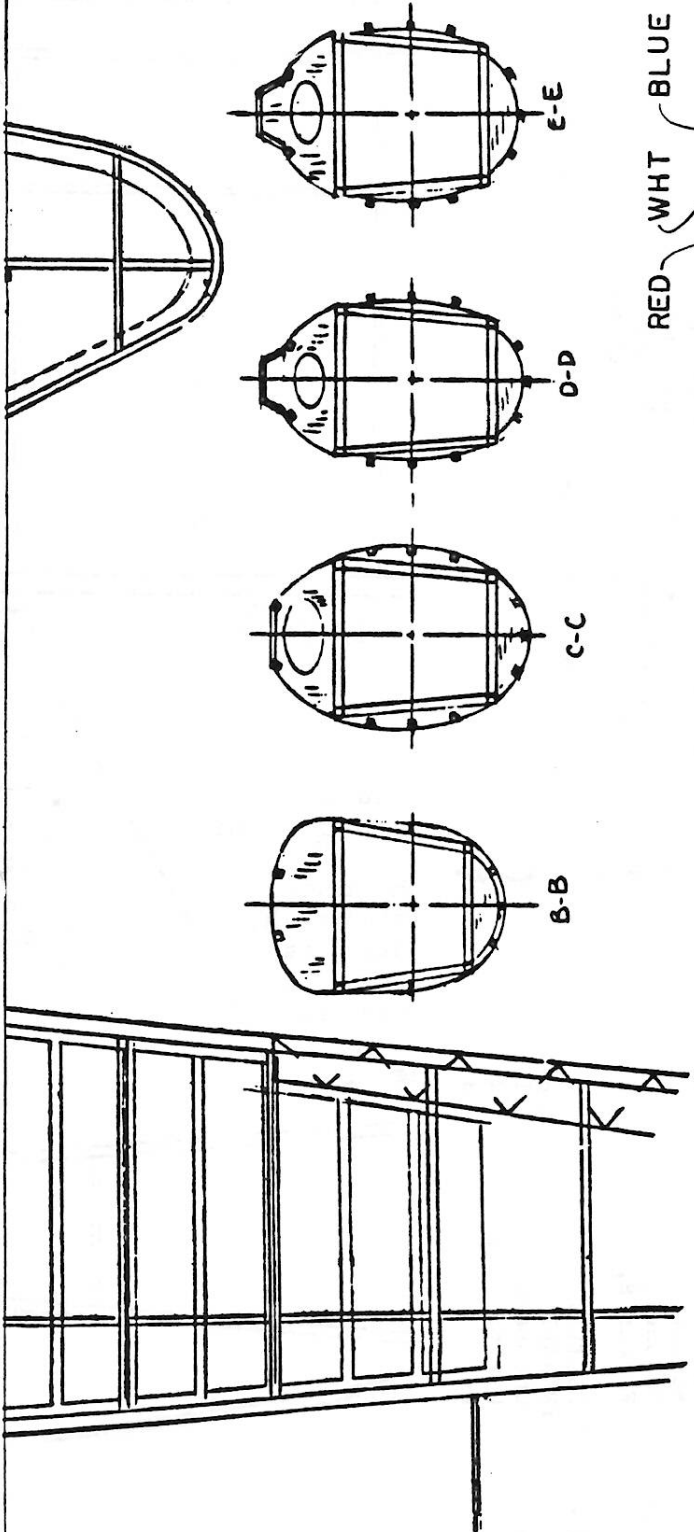
nylon bearing

clear
acetate
windows

1/16"
sht.

landing gear placement

CURTISS "HAWK" RACER
 XF6C-6
 DES. & DRWN. J. J. TUDOR 1986



COLOR: WING=BRASS PADS., REST CHROME YELLOW
 FUSE=NAVY BLUE. LETTERS-WHITE
 SERVICE STARS TOP WING ONLY

REF. RACING PLANES, VOL. II, KINERT
 NATIONAL AIR RACERS 3-VIEWS, MENDELHALL

CONTEST RESULTS FOR PATUXENT RIVER CONTEST 7 NOVEMBER 1887

FAC RUBBER SCALE 11 CONTESTANTS/15 AIRCRAFT ENTERED
 CONTESTANT AIRCRAFT PLACE
 Don Srull Bleriot 25 1
 Dave Rees Zippy Sport 2
 Walt Eggert Farman Sport 3

WVI MASS LAUNCH 10 CONTESTANTS
 CONTESTANT AIRCRAFT PLACE
 Kevin Sharbonda DH-6* 1
 George Meyers Martinsyde S1 2
 Dave Rees Martinsyde S1 3
 * Proxy flown by Randy Kleinert

NAVY SCALE MASS LAUNCH 9 CONTESTANTS
 CONTESTANT AIRCRAFT PLACE
 George Meyers F4U 1
 Doug Buchanan Skyraider 2
 John Houck Bell XFL-1 3

P-NUT SCALE MASS LAUNCH 13 CONTESTANTS
 CONTESTANT AIRCRAFT PLACE
 Paul Spreiregen Fike 1
 Don Srull Fred 2
 Dave Rees Contestor 3

GOLDEN AGE MASS LAUNCH 14 CONTESTANTS
 CONTESTANT AIRCRAFT PLACE
 Don Srull Mureaux 1
 Allan Schanzle Monocoupe 2
 Walt Eggert Farman Sport 3

NO-CAL 6 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Randy Kleinert Chambermaid 1
 Bud Carson Dayton-Wright 2
 Walt Eggert P47 3

BOSTONIAN 7 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Doug Buchanan Beancraft Banana 1
 Allan Schanzle Boston Pup 2
 Paul Spreiregen Found 3

NOVICE PENNYPLANE 9 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Reggie Batterson ----- 1
 Bill Clarke Banks 2
 Randy Kleinert Original 3

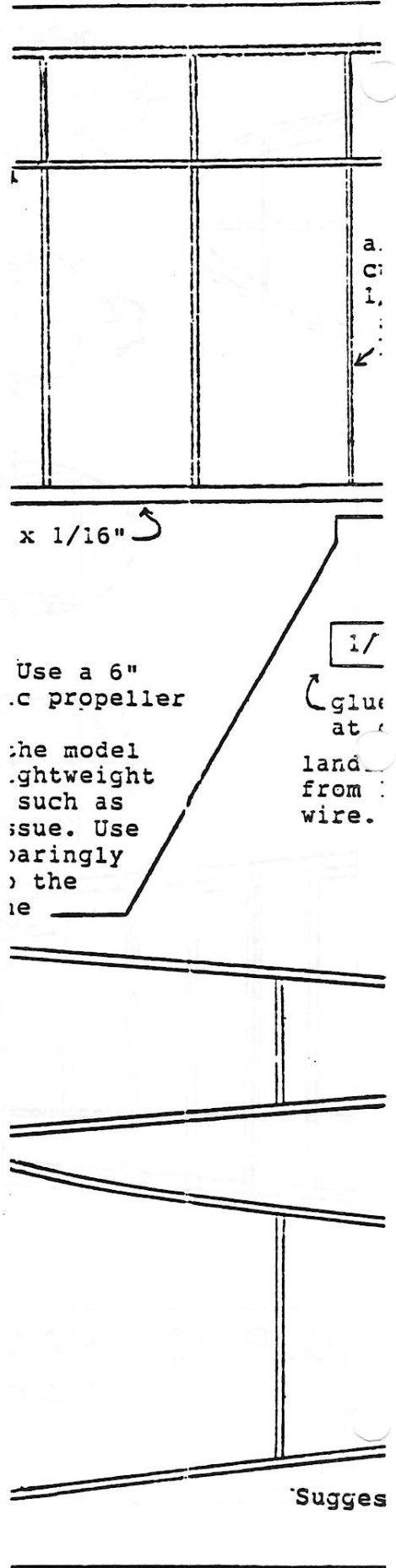
COCONUT 8 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Dave Rees Travelair 6000 1
 Bud Carson Dormoy 'Bathub' 2
 Pat Daily Curtiss Robin* 3
 Proxy flown by Allan Schanzle

FAC POWER SCALE 6 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Allan Schanzle LA 11 1
 Joe Barish Hemiptere 2
 Mark Houck T'Craft 3

INDOOR HAND LAUNCH GLIDER 3 CONTESTANTS
 CONTESTANTS AIRCRAFT PLACE
 Randy Kleinert Sweepette Wasp IV 1
 Glen Simpers Bunker Hill 2
 Mark Houck Original 3

GRAND PRIZE WINNERS Don Srull and Mark Houck

CENTER OF EMBRYO PLAN →

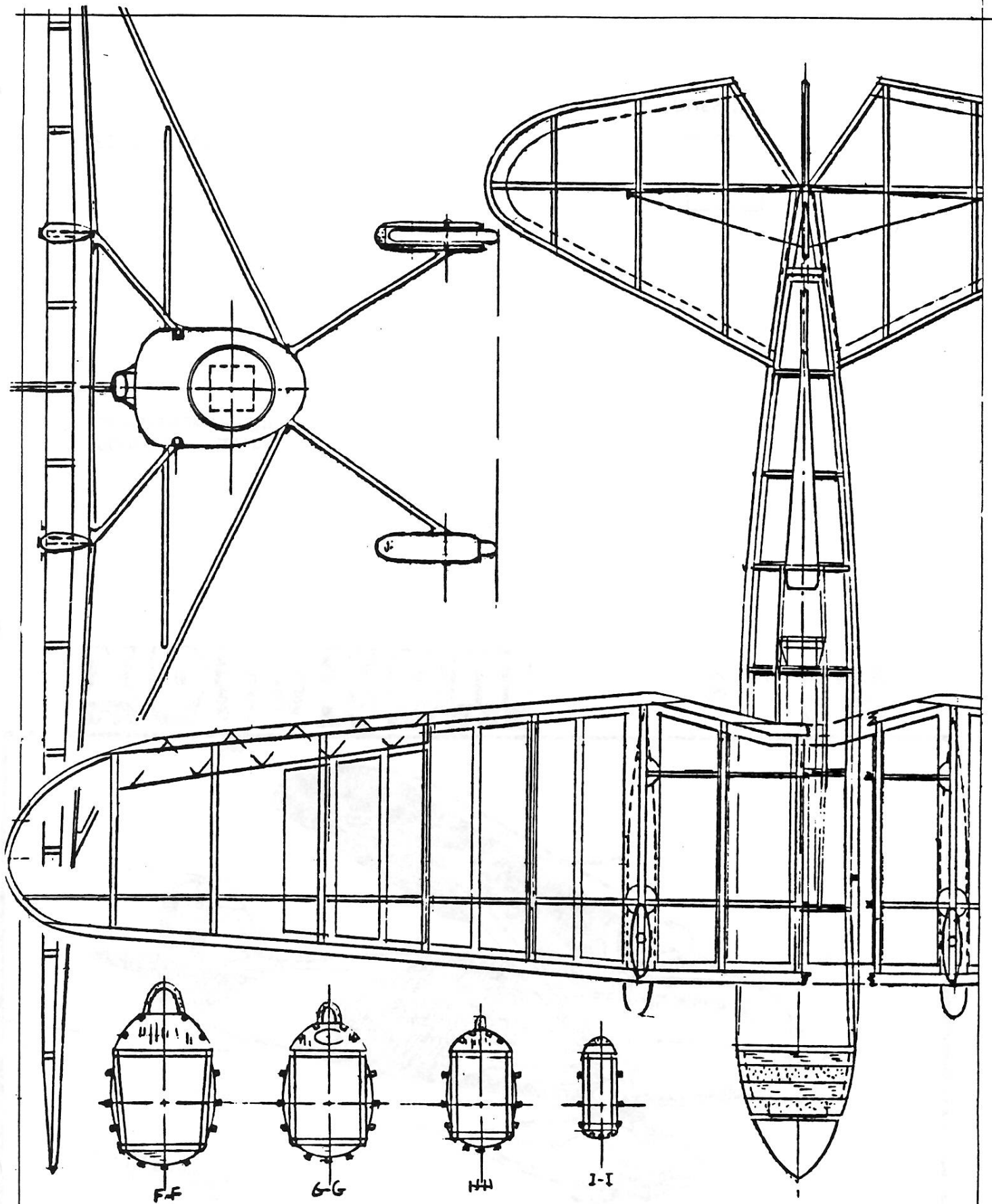


Use a 6" .c propeller

the model lightweight such as issue. Use varyingly the

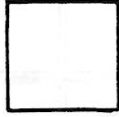
1/ glue at land from wire.

*Sugges



J.J. Tudor/87

DUES DUE



FIRST CLASS

2008 Spur Hill Dr.
Gathersburg MD 20879

JAN '88
FEB

max-fax

