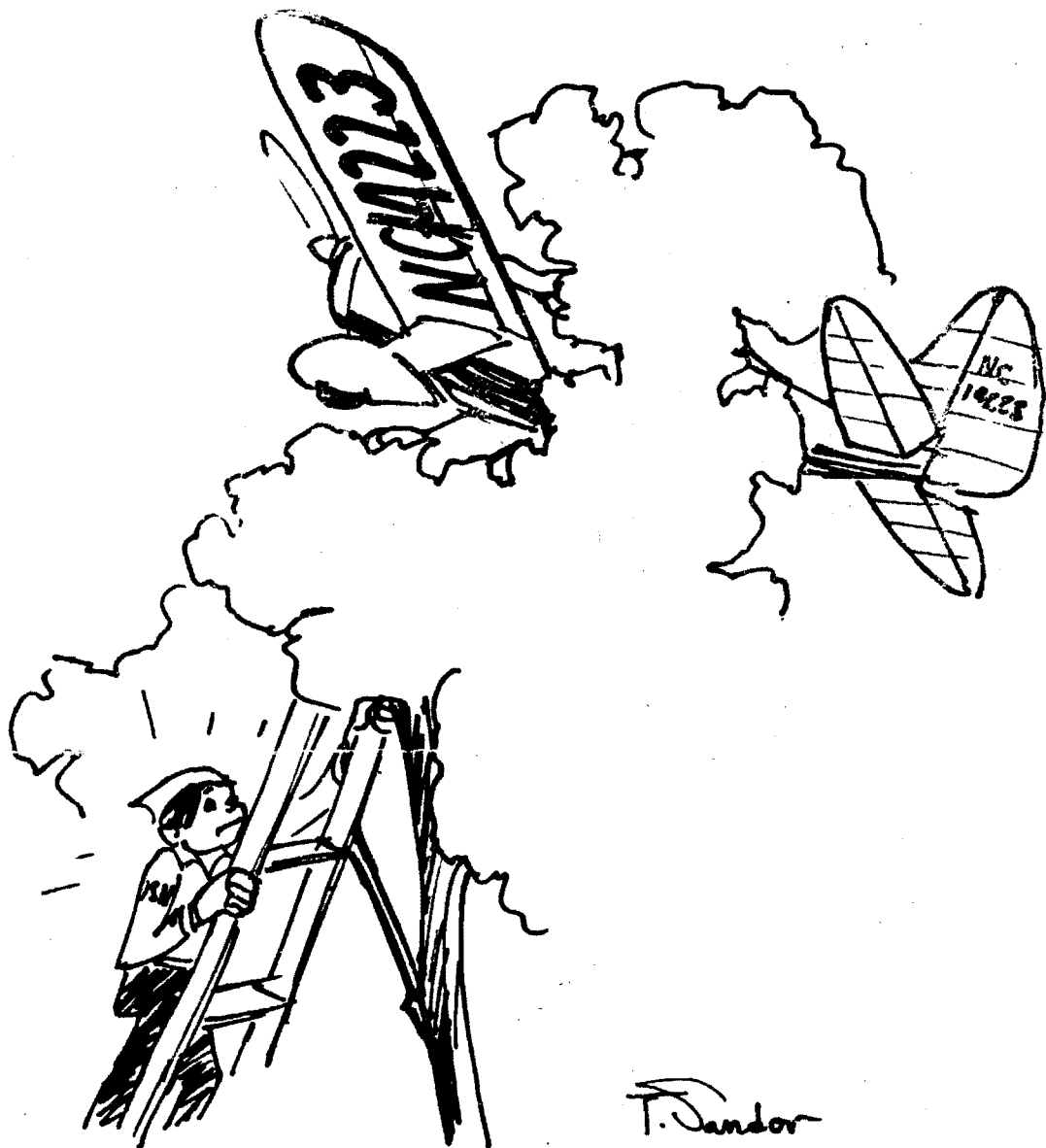


FLYING ACES

Club News

ISSUE #112-38 Nov./Dec. 1986



2.



We will start off this issue with some good news regarding the Flying Aces Nats "Mark VI". The Washington D.C. Maxecuters will be the host club and the Contest Director will be Allen Schanzle. The Maxecuters are a great bunch of Skysters and are very capable of putting on a great contest for us. We will have more information for you as things unravel, so stay tuned in.

Many of you have requested that we make Geneseo a permanent site foe the FAC Nats. Well, we have some good news for you on that subject, too. On May 16, 1987 we had a luncheon meeting with Mr. Albert Allard of the National Warplane Museum. In attendance were Mr. Allard and his wife, Bob Clemens and his wife, Vet Thomas and his wife and GHQ was represented by Vic Didelot, Ebbie Shores and Lin Reichel. Many things were discussed and agreed upon, with a few more details to be worked out, but nothing serious. The Board of Trustees of the museum has agreed to let us have the use of the field for the Nats as long as we respect the property and all that is on it.

The museum has added some more aircraft since the last Nats, too, with more to come. The new additions are a T-28, an AT-6, A P-47 and a PBY. Also due for construction before next year is a hanger big enough to house both the PBY and the B-17. So start making plans and models now!

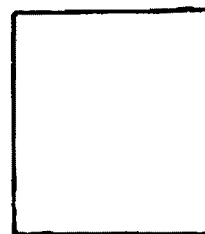
While recording times for the postal contest we made a big error in the final standings, published in the last issue. We inadvertantly put Jim Miller's time for his Itoh peanut entry into the No-Cal event. His time on the Itoh was 106 seconds which would place him in first place in that event. Corrections have been made and Jim will get the "Kanone" instead of Jack McGillivray, My apologies to both Jim and Jack.

Jon Zeisloft writes to tell us he is not the author of the Co/2 article which appeared in the last issue and this one. It originally appeared in the "Hanger Rash", a newsletter of the Denver area indoor club and he does not recall who the author was. Jon has added a few of his own ideas to the article though. Jon believes in giving credit to whom it is due--and he is not due the credit in this case. Jon, how is that article on props you are working on coming along? We are anxiously awaiting that one.

BUILD--FLY--WIN--EFF--AAA--CEEEE!!
Lt. Col. Lin Reichel, CincFac

If the box on the right has an "X" in it, it is time to renew your subscription. This is your last issue under your old subscription. Cost is NINE dollars per year in the U.S. and Canada. Overseas cost is Twelve Dollars. Six issues, published every other month. Send to;

FLYING ACES NEWS
3301 Cindy Lane
Erie, Pa. 16506



COVER STORY
NAVY TO THE RESCUE

By
Tom Sandor

3.

ologue;

The navy fire crew from Warminster Naval Air Base came to the rescue of a small two-seater, open cockpit, vintage, Ryan ST aircraft, on Sunday June 7. Tom Sandor and his son Mark, were test flying the plane and when coming in for a landing, became entangled atop a tree.

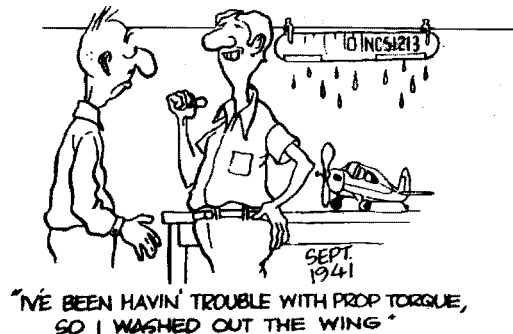
The Navy crew hustled a large 35 ft. ladder up between the branches and with some difficulty completed the rescue. Except for a few tears, the boy Mark, was O.K., but his father suffered a minor leg bruise during the rescue attempt.

Epilogue;

Relax, the real story was that the Ryan ST aircraft was only a 32" span free-flight model which sandor and his son Mark were test-flying on the field during a recent annual model airplane contest, being held at Warminster's Johnsville Naval Air Station in Penna.

Tom's minor leg injury came about as the men were swinging the ladder into position. Mark's tears came about as he watched his dad's brand new model airplane being lowered with shredded cuts in the tissue paper skin as the result of tree branches. But it was a happy ending as the navy crew resumed normal duties on the base, Sandor and son got their model airplane back again for some workbench repairs.

WISECRACK-UPS



TO: The A.M.A. Executive Council
1810 Samuel Morse Drive
Reston, Virginia 22090

CHARLES HAMPSON GRANT
(1894-1987)

The undersigned member of the Academy of Model Aeronautics duly petitions the A.M.A. Executive Council to vote in favor of honoring CHARLES H. GRANT by renaming the AMA's scholarship fund to....

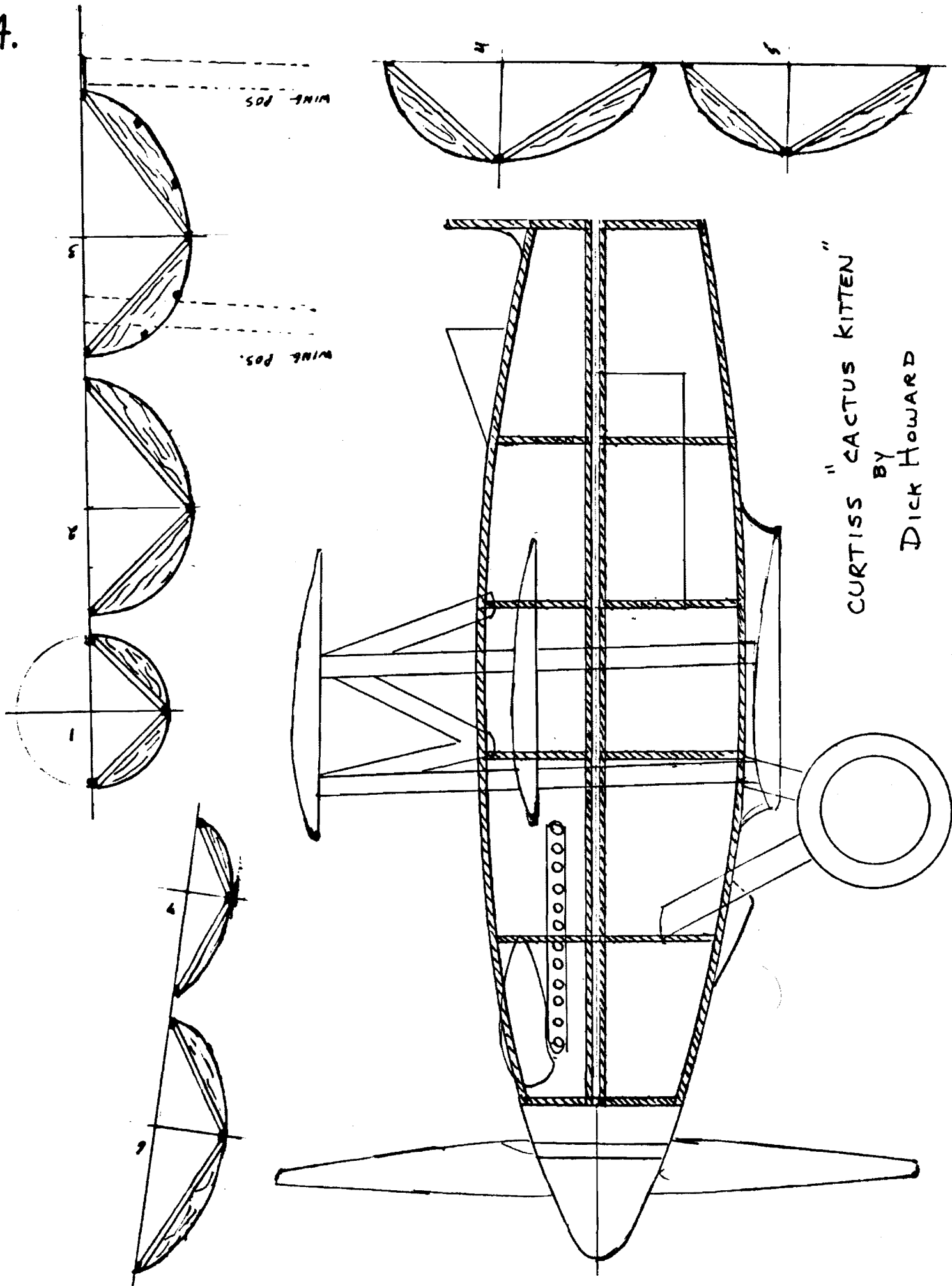
THE CHARLES HAMPSON GRANT A.M.A. SCHOLARSHIP FUND

Date

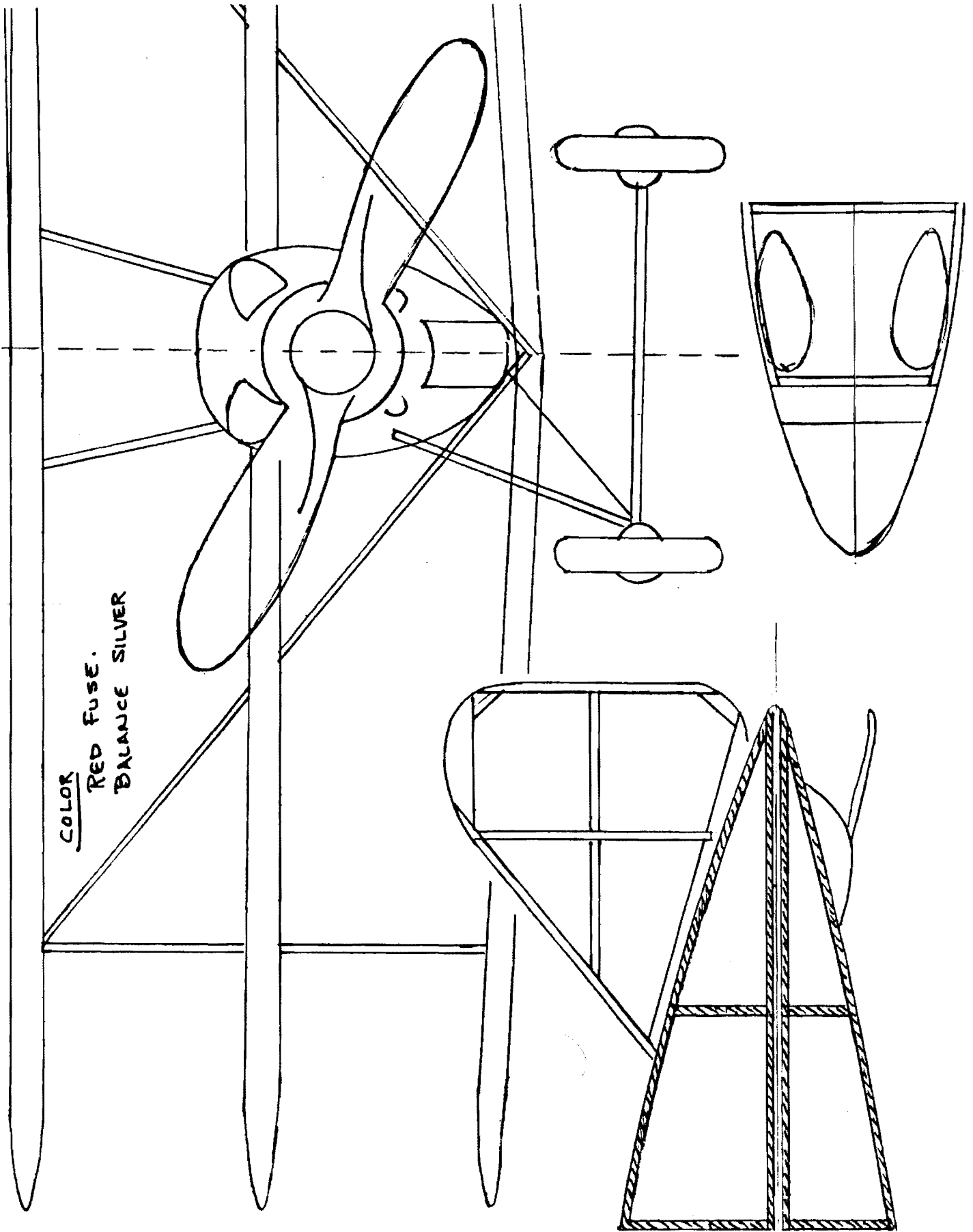
Member's Signature

AMA No.

4.



"CACTUS KITTEN"
BY
DICK HOWARD



6.

Erie Model Aircraft Assn.Picnic Meet

Date: Aug. 16, 1987

Place: Prangmore Aerodrome
Erie, Pa.

Time: 10:00 am till 5:00 pm

Entry fee: \$4.00 first event, \$1.00 each add. event. Jr/Sr \$2.00 flies all.

Events:

1.FAC scale	5.Thompson/ Greve Races	9. Golden Age Scale
2.FAC Peanut scale	6.WW I Dogfight	10.Comet kit/plan
3.Hi-Wing Peanut	7.Hand Launch Glider	11.No-Cal Scale
4.Embryo Endurance	8.Oldtime Comm. Rubber	12.FAC Jumbo scale

Prizes through third place when warranted.

Bring proof of scale or no scale points.

You must be able to prove color scheme of No-Cal models.

Models must be presented for scale judging by 2:00 pm!!!!

Mass launch events starting times;

Races 1:00 pm WW I Dogfight 2:30 pm Golden Age 4:00 pm

Contest Director;

Ross Mayo

4327 Crosswinds Dr.

Erie, Pa. 16506 Ph. (814) 838-7828

18th Annual Midwest Scale Meet

Date: Sept. 20, 1987

Place: Prangmore Aerodrome
Erie, Pa.

Time: 10:00 am till 5:00 pm

Entry fee: \$4.00 first event, \$1.00 each add. event. Jr/Sr \$2.00 flies all.

Events:

1.FAC Scale	5.FAC Jumbo Scale	9. O.T. Comm. Rubber
2.FAC Peanut Scale	6.FAC Power Scale	10.Golden Age Scale
3.Hi-Wing Peanut	7.WW II Combat	11.Comet kit/plan Sca
4.Embryo Endurance	8.Hand Launch Glider	12.No-Cal Scale

Prizes through third place when warranted.

Bring proof of scale or no scale points.

You must be able to prove color scheme of No-Cal models.

Models must be presented for scale judging by 2:00 pm!!!!!!

Mass launch events starting times;

WW II Combat 2:00pm

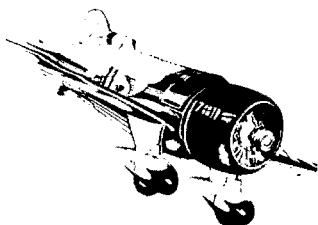
Contest Director;

Joe Barna

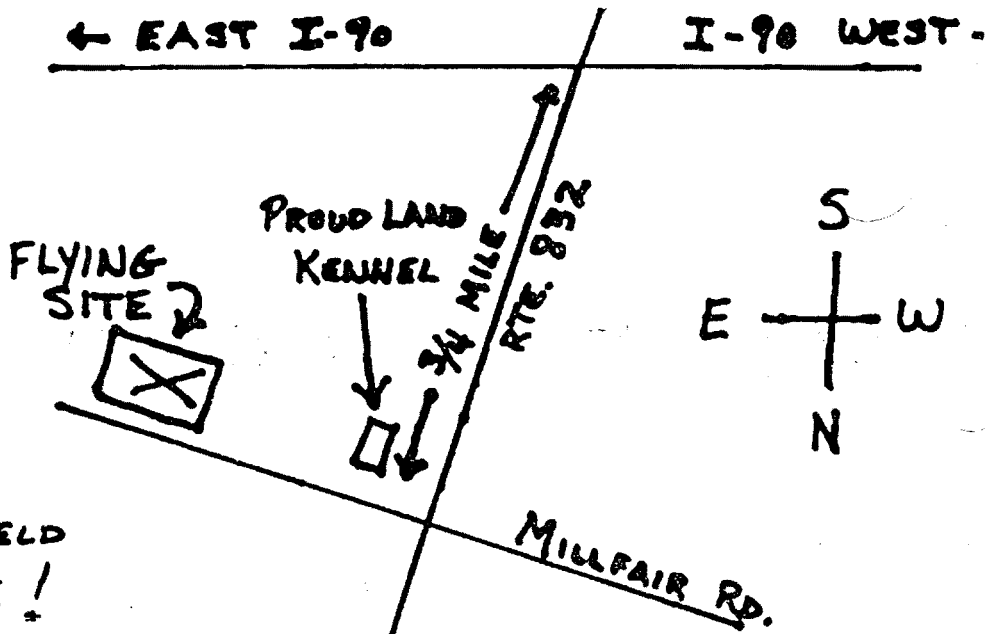
3517 Kristie Dr.

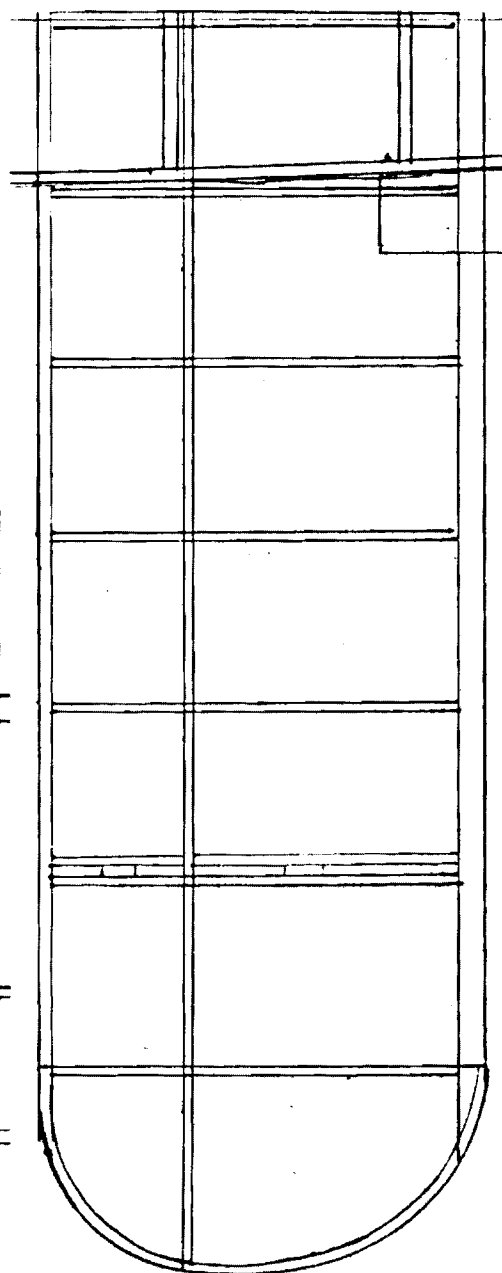
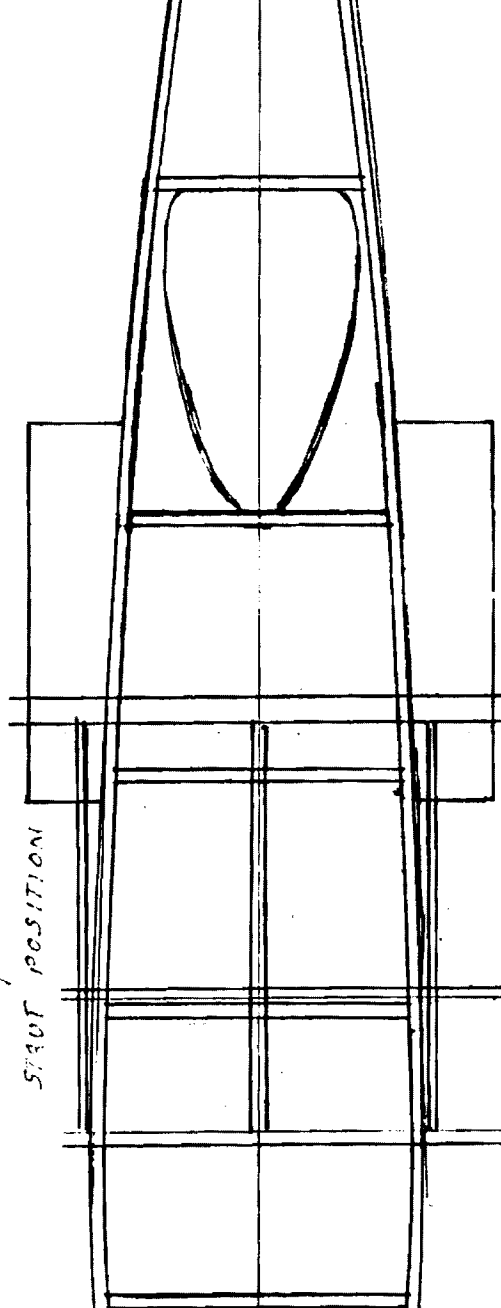
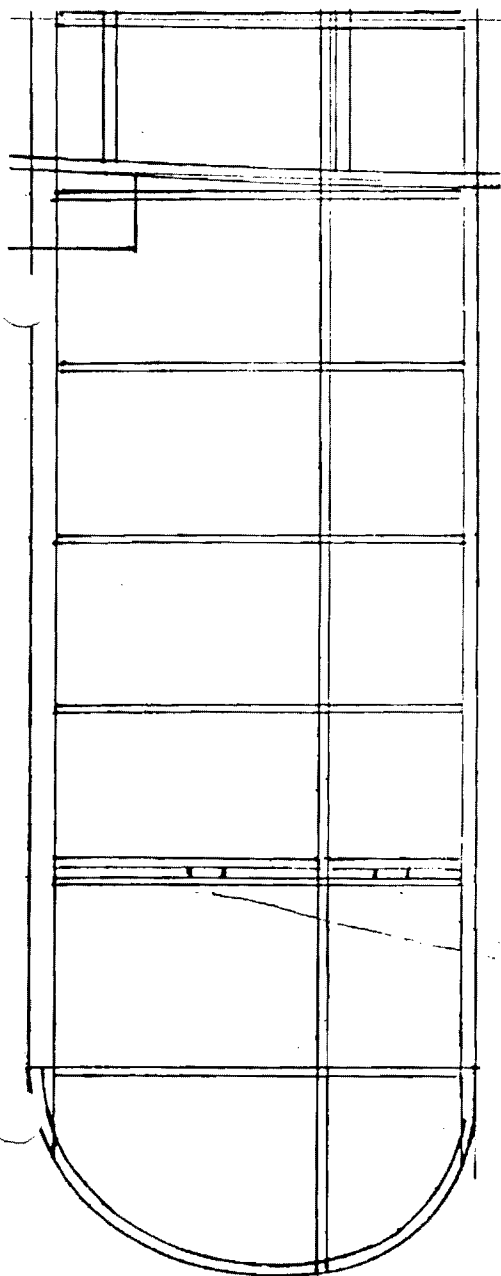
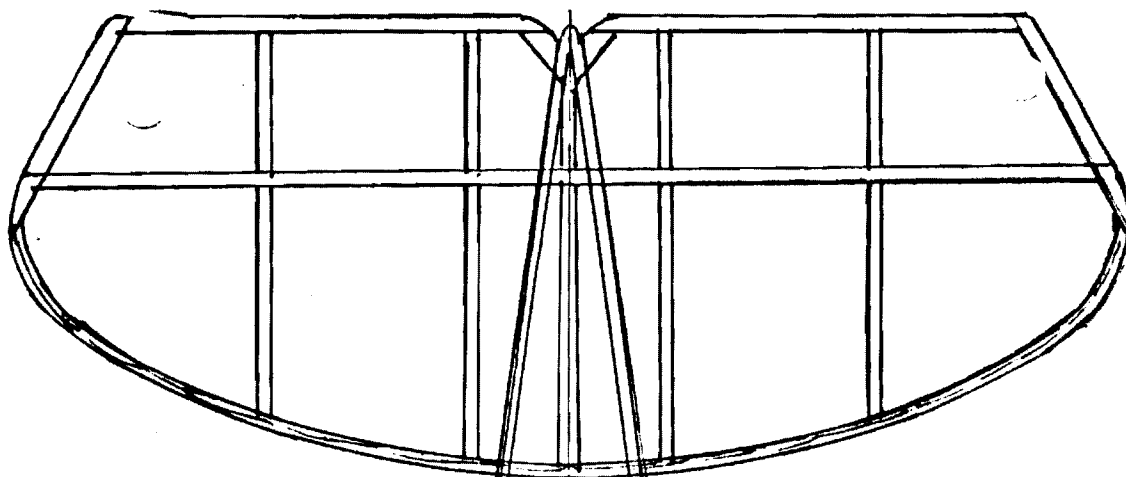
Erie, Pa. 16506

Ph. (814)833-4985



DON'T DRIVE ON
RUNWAY! IF YOU DON'T
KNOW HOW TO GET ON FIELD
FIND OUT, PLEASE!





STRAUT POSITION

Mumbo Jumbo # 26 from the pen of the Glue Guru

Salutations, disciples! There is no excitement matching that of an FAC Nats. As I sped down the road, propelling my wheelbarrow towards Geneseo, my spirits were so high that I turned and waved to my wife. Trudging along in the classic position of tail end Charlie, grenade at the ready, head swiveling ceaselessly, she was hardly in the mood for levity and understandably so. With the recent unpleasantness over centripetal force vectors at Rocky Hill firmly in mind, the solution to which had cost a bomb or two, her vigilance was clearly essential. Still she managed a smile, for she was away from the cave, savouring her favorite role - that of a wealthy tourist.

I would like to thank those disciples who make these trips possible. The discrete placement of food-stuffs within steel bins behind supermarkets has supplied many superb repasts. Yet it should be noted that we are vegetarians and frankly have no use for the dead cats and other animal matter offered us. In the future - just vegetables, thank you.

Right on schedule, Mr Thumbsome joined our convoy on Route 28. "Why a week early, GG?"

I could only shrug, "Those are the orders."

"Well, I've got this important telephone call to make. When we come to a telephone booth, give me a few minutes."

"Of course." Whatever its nature, the call was incomplete. Mr Thumbsome retrieved his coin and we marched on - a sequence repeated over and over as we moved through the peaceful farm area. Yet, as we came upon the campus, tired feet and telephonic frustrations no longer mattered. Suddenly the environment turned odd indeed. Amid huge signs announcing an "Inner Vision" conference, some 26 Rolls Royces stood in line, motors running, chauffeurs at the wheel, awaiting the possible emergence of the Maharajah of Inner Vision and his entourage. Outside the conference headquarters, hundreds of true believers, each clad in red pantaloons, pigtails and little else, produced an extraordinary din as they banged on tambourines and screamed, "Rajah will win! Rajah will win!"

Stunned by the noise and convinced that some terrible mistake had been made, we approached the main office hesitantly. Only the presence of a small FAC sign offered hope. A week early? It appeared that we were years too late and that the world had succumbed to terminal madness.

Our leader, Col Run Likehell, is a tall, thin, middle aged man of quiet demeanor. I know him well and can easily identify him, even in the darkest of mine shafts or in the blinding light of the Sahara desert. Indeed in previous missions, I have done so. Yet I stared in confusion at the tall, thin, middle aged man who rose to greet me. Was this pigtailed figure clad in red pantaloons really . . .? He gave his tambourine a cursory shake and held out his other hand. "Ah, the Glue Guru. Glad you're here. There's urgent work to be done."

Mr Thumbsome was unable to make the connection. "Who's the weirdo, GG?"

"It's the Colonel." I whispered.

Mr Thumbsome's jaw dropped. At severe cost to his self-esteem, he snapped to attention. "You will always have my respect, sir, even if you have turned into a creep."

While sputtering noises emerged from the Col, Mr Thumbsome, always aware of his incomplete phone call, said "Mind if I use your phone, Chief?". The Col waited impatiently until the phone was cradled. Once again there was no answer.

"Men, we're onto something really big and I need your help. I know that some of these assignments have been rough, but this mission is a snap. Just help a beginner compete in the forthcoming NATS."

Completely at sea, I treaded water. "Of course. We are always glad to help a beginner."

The Col nodded. "Right, but there are beginners and beginners. In this case - well, let's go back to the starting point. The NATS takes place in a week. Our trophies are ready. They're in that closet. Go look at them. Go ahead, look at them!" A certain harshness had crept over the Col. His words were suddenly full of contempt.

I opened the closet. "They seem to be conventional awards - handsome walnut plaques."

"You've missed the point - read the bottom line - the credit line. Go ahead, read it out loud!"

I read, "Donated by the Rochester Others and the County Poorhouse."

The Col nodded sadly. "See what we've come to? Years of struggling and yet we remain poor. So poor that even our awards - the highest honors that we can bestow, depend entirely on handouts."

Mr Thumbsome began to weep.

"But suppose", the Col continued, "Just suppose we had money. Take a look at this award!" So saying, the Col produced a small canvas bag. "Now here we have a bag of gold. One dozen gold Napoleons. Just listen to the clink when you drop it!" The Col demonstrated. The clink was indeed impressive. "This prize has dignity. The clink says - your performance was noble. And this would be the last place award, say 34th. Imagine the first place trophy! What about a diamond encrusted Rolls Royce? Now there's something with real dignity! And all we have to do, to acquire dignity, is to help a certain beginner win some simple event!"

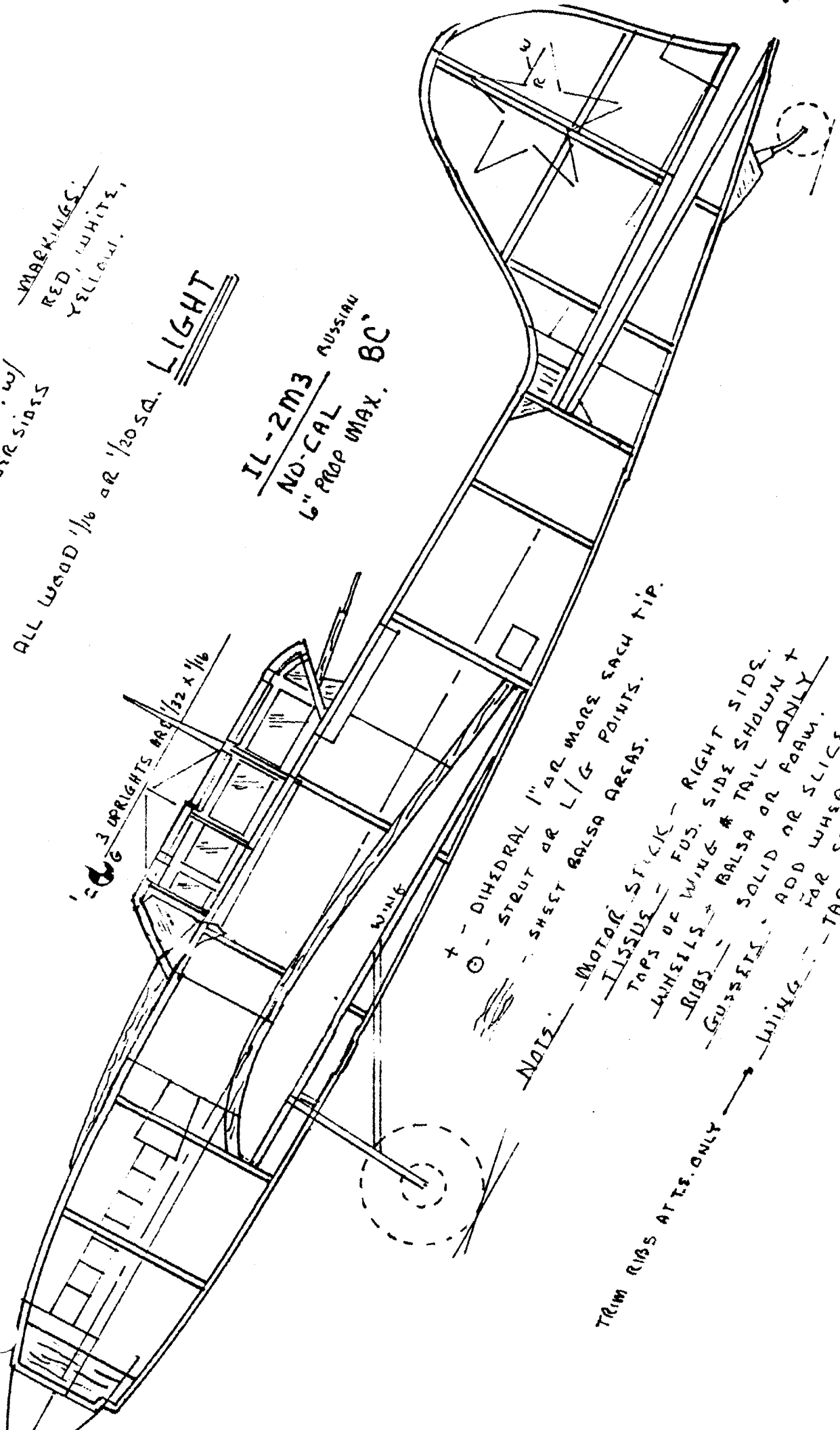
COLOR:
 GREEN, LT + DK
 GREEN CAMO. w/
 GREY UNDER SIDES

MARKINGS:
 RED, WHITE,
 YELLOW.

ALL WOOD $\frac{1}{16}$ OR $\frac{1}{20}$ SQ. LIGHT

IL-2M3 RUSSIAN
NO-CAL
 6" PROP MAX. BC"

3 UPRIGHTS ARE $\frac{1}{32} \times \frac{1}{16}$



+ - DIHEDRAL 1" OR MORE EACH TIP.
 O - STRUT OR L/G POINTS.
 - SHEET BALSA AREAS.

NOTES:
 - MOTOR STICK - RIGHT SIDE.
 - TISSUE - FUS. SIDE SHOWN +
 TAPS OF WING & TAIL ONLY
 - WHEELS - BALSA OR FOAM.
 - RIBS - SOLID OR SLICED.
 - GUSSETS - ADD WHERE NEEDED
 FOR STRENGTH.
 - WING - TAPERED

TRIM RIBS ATTS. ONLY

Long experience with the Col has produced a certain wariness on my part. "Sir, which beginner and what event?"

"Why Rajah of course. He's the leader of the Inner Vision movement. You may have seen some of his cars outside. He's got dignity in spades! And all that he wants from us is to win - Golden Age."

"How much experience does he have?"

"Well, he doesn't have what you might call heavy experience."

A sense of alarm began to envelop me. "Can Mr Rajah retrim in rain?"

"Well, actually, he's never seen a model, close up."

I stared at the Col, seeking some sense of reality in a world gone mad. "You mean Mr Rajah is entirely new to modeling? But he will be competing against some of the best fliers in the world! How can he possibly hope to win?"

"Well, you see that's the whole idea. It's because he knows nothing about modeling that he regards winning as his supreme test. He believes that the purity of his soul is so overpowering that mere technical considerations don't really matter - that our concern with wing loading and motor run are feeble substitutes for a true oneness with the universe. Now of course, as a true believer, I support Rajah's views to the hilt. But I think it best that you two men act as mechanics and smooth over the rough spots."

Mr Thumbsome struggled to master the situation. "You mean this guy Rajah thinks he can win because he has the right stuff and that's all you need?"

"Well put, Captain. You really grasp the essence of the matter."

"Yeah, I do. That guy is crazy."

"Captain, no man with that much dignity can be crazy. No man who has arranged for us to hold our NATS right in the middle of his own Inner Vision conference can be crazy. No man who will contribute millions to FAC, merely for giving a beginner a helping hand, can be crazy. And if we bring it off - if Rajah wins - I wouldn't call it a payoff you understand - but in his gratitude - well, we'll acquire a lot of dignity. Enough dignity to paper the walls of GHQ with the stuff."

"Now about the model. We should show some largeness of spirit here, to match that of Rajah. Hence, I'll suspend the BOM rule on a one time basis. We have a week before the contest - plenty of time for you two gentlemen to come up with a suitable model. Of course, the choice is yours."

"Speaking of models, I've always viewed Grillo models as falsely condemned for snobbish reasons. Here's our chance to make amends to Mr Grillo. After all, we can always use an alternate sponsor. Yes, Rajah winning with a Grillo has much to be said for it. Let us say that you gentlemen can prepare any Grillo model you deem appropriate."

"Aw, c'mon Chief, the building material in Grillo kits is chopped out of coconut husks. You can still see the hairs on it."

"Captain, those slurs ill serve our cause. Let us remember that Mr Grillo also possesses considerable dignity and certainly merits our respect. As for those reputed non-optimal materials, surely you gentlemen are equipped to effect a judicious substitution at key points. Concerning the design itself, I do not consider such renditions as inviolate. It is only necessary that the spirit be preserved. Yes, I would never act to stifle initiative. But the resulting model must pass as a Grillo to the casual observer!"

With freedom to modify the design, there might be some slight hope of winning. My thoughts turned to the flier. "The event is likely to be grueling. Perhaps 8 flights and retrievals will be required under a merciless sun. Can Mr Rajah cope physically?"

"I can assure you that Rajah is indestructable. He's been through wars, earthquakes, pestilence. Tough conditions mean nothing to him. There's one man who can survive anything - even mass launch."

Something about the reply made me uneasy. "Such a wealth of experience implies a lengthy life. How old is Mr Rajah?"

"In his case, age means nothing."

I became even more uneasy. "Sir, exactly how old is Mr Rajah?"

"Well - er - he claims to be 30,000 years old." The Col had the grace to be embarrassed.

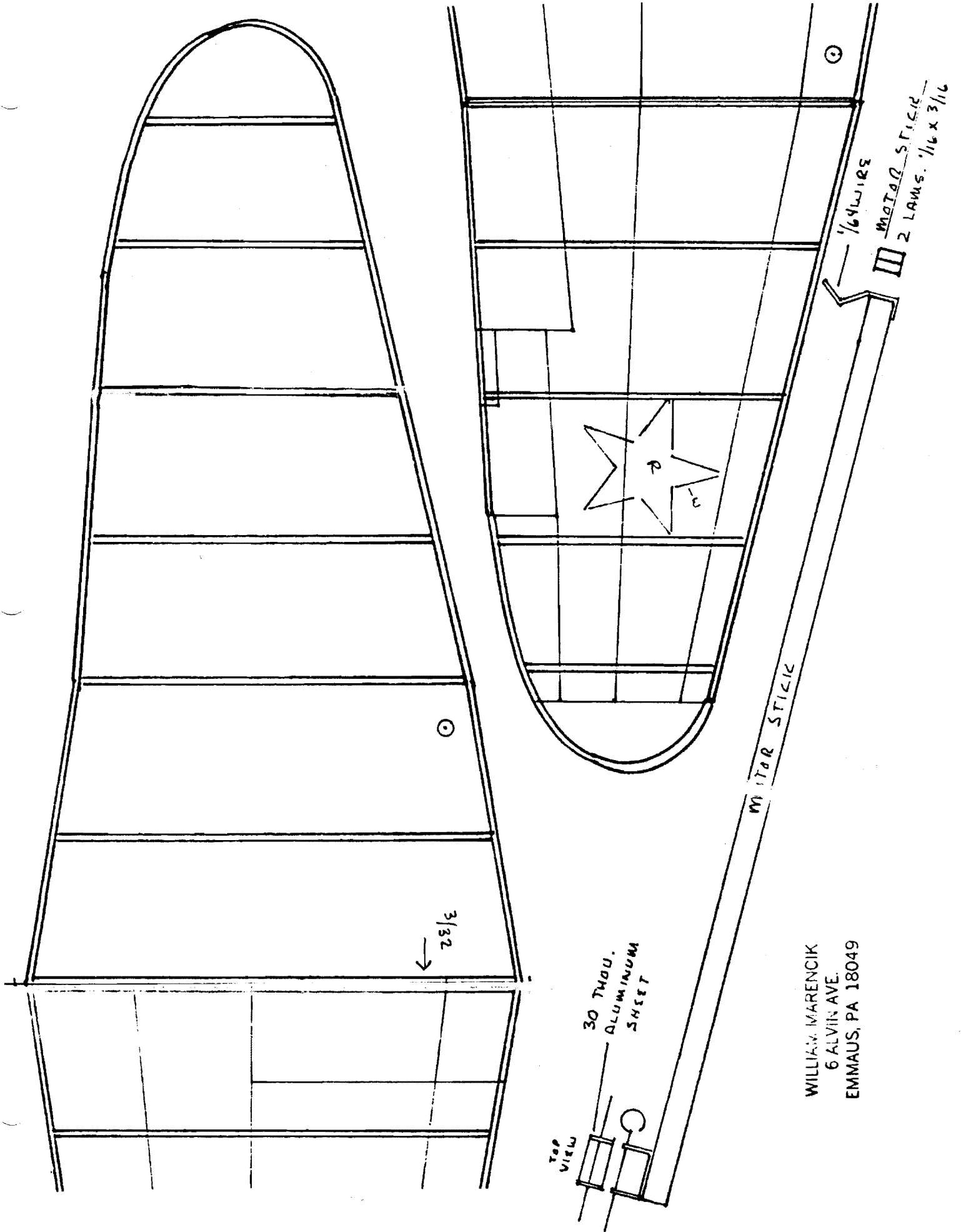
"Er - 30,000 years old?"

"Yes, but he doesn't look it. He's really in great shape. That's why he wants to win Golden Age of all possible events. If ever a man has arrived at a Golden Age, that man is Rajah. He's really a very deserving fellow."

Mr Thumbsome suddenly dived for the telephone and dialed his number again, to the annoyance of the Col. As before, there was no answer.

"Who the devil are you calling? And right in the middle of this important conference, too!"

"I'm trying to reach Reynolds. I've got my Reynolds telephone number at last. It's hard to find out his number, but if you can just get through to that guy, he gives you this great advice about aerodynamics. He would know what to do - how to win this contest!"



WILLIAM MARENCIK
6 ALVIN AVE.
EMMAUS, PA 18049

The Col grew pale." But he's dead. He's been dead for 100 years! "

Mr Thumbsome reflected upon this development for a moment." Serves him right. The least the guy could do is to put in an answering machine."

" But he died before mass launch events were even invented - before there was even an FAC organization. How could he possibly have helped us? "

" You mean he was just some dumb Other? Well good riddance, I say."

Mr Thumbsome was clearly remiss concerning Reynolds numbers. I intervened hastily to preserve the reputation of Mr Reynolds. " They're not telephone numbers. Reynolds numbers establish the ease of flight. A full size airplane with a Reynolds number in the millions, finds air almost without friction, whereas insects with a number as low as 20, find flight very draggy. Still smaller insects abandon wings entirely and employ hairs, named Cilia, from the Latin, to . . . "

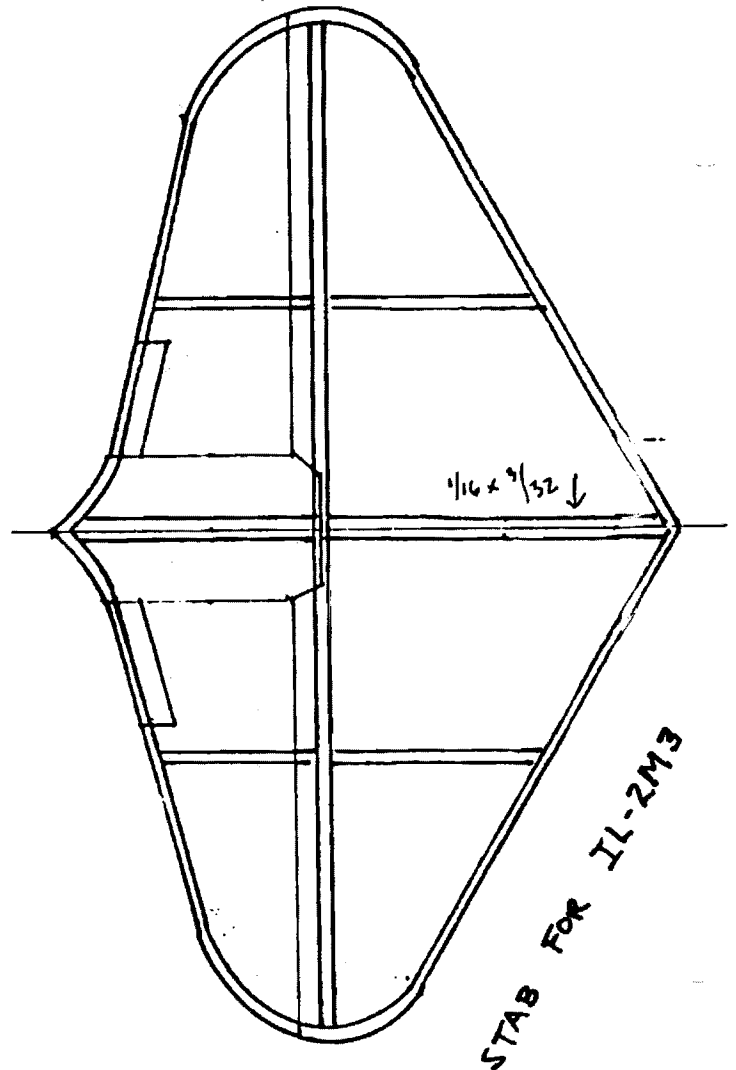
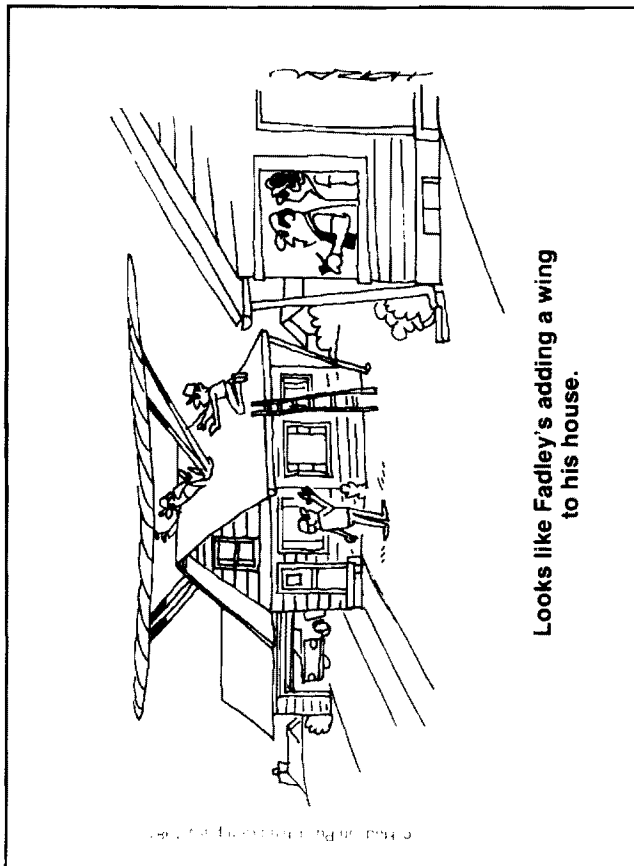
I was interrupted by a furious Col, " Stop that stupid babbling! At least the Captain has an excuse. Years of CD'ing have left him brain damaged. He really is stupid. But in your case . . . "

He groaned and suddenly put his head in his hands. " The future of the whole FAC movement hangs in the balance. This is our hour of need - a time for eagles - and who can I turn to? I'm surrounded by hopeless morons! Where is Col South now that we need him! "

Mr Thumbsome became considerate. " Don't worry, Chief, the Eagles have gathered. Leave it to us. Everything is going to be OK. Rajah will win that thing or die trying. Now just relax and go bang your tambourine."

* * * * *

(This behind the scenes report will continue in our next issue)





Get in on the fun Skysters! Fly your Comet scale model and send in the times to GHQ. Enter as many times as you wish with as many models as you want. If you better a previous time with a certain model, send it in.

Models can be of a current Comet kit or from one of the oldtime series. Just be sure it is a scale model. Contest closes on Oct. 25, 1987

Up to date scores as we have them; Let's have some more activity!

<u>Pilot</u>	<u>Plane</u>	<u>Time</u>
1. Padre Anderson	Fairchild 24	76 sec.
2 Paul Helman	Bellanca	61 "

CONTEST SCHEDULE

- Aug. 16....EMAA Picnic Meet at Prangmore Aerodrome, flyer this issue.
- Sept. 12...Maxecuters Summer Fun Fly at Comsat, CD Allan Schanzle, 20008 Spur Hill Rd., Gaithersburg, Md. 20879 Ph. (301) 840-5884
- Sept 13....CFPS 14th Annual Fall Free Flight Contest, at LCCC, CD Dave Pishnery, Ph. (216) 943-2640
- Sept.20....18th Annual Midwest Scale Meet at Prangmore Aerodrome, flyer this issue.
- Sept.26....FAC Contest at Fayetteville, No. Carolina.
- Oct. 3.....Lindbergh/Trans-Atlantic Commemorative At COMSAT, CD Allan Schanzle see above.
- Oct.4.....FAC Contest at Wright/Patterson Air Force Base, FAC scale, Jumbo scale, Peanut scale, Embryo Endurance, Dime scale, WWII Combat, WWI Dogfight, Thompson/Greve Races, CD Frank Scott, 4283 Honeybrook Ave., Dayton, Ohio 45415 Ph.(513) 890-5989

ATTENTION ALL FLOSSING AVIATORS!!



This is not a tip from your local Dr. Pulley, DMD! What we got here skysters is a tip for rigging your biplanes, triplanes, etc...Just take a floss threader (used for under bridges) slip your rigging through the loop, and weave away! It's easy to handle, especially if you got the knack from flossing daily! So fellow skysters, now you can keep your smile clean and your rigging taught!



FLYING ACES

PULP PURSUIT INTELLIGENCE DATA

NO. 1 - NAZI FLYING WING BOMBER

Pride of Hitler's Luftwaffe, this speedy, modernistic bomber was a well - kept secret until one was sighted at an archaeological dig in Egypt. Intended as a high - speed transport to carry some important cargo back to Germany, the plane was accidentally destroyed in a fire and explosion.

FLYING ACES' crack intelligence team combed through the wreckage to produce the reconstruction you see here. Performance figures are our estimates, since German authorities still refuse to admit this machine's existence.

SPECIFICATIONS:

TYPE: Light bomber or "destroyer"

MANUFACTURER: Unknown

CONSTRUCTION: Tail-less flying wing with twin pusher engines and fixed tricycle landing gear.

CREW: Two-- pilot and tail-gunner.

POWERPLANTS: Two in-line liquid-cooled diesel engines.

MAXIMUM SPEED: Secret, but estimated at 300 mph +.

RANGE: Estimated at least 1200 miles.

SERVICE CEILING: Military secret.

WINGSPAN: 60'

LENGTH: 25'

HEIGHT: 14'

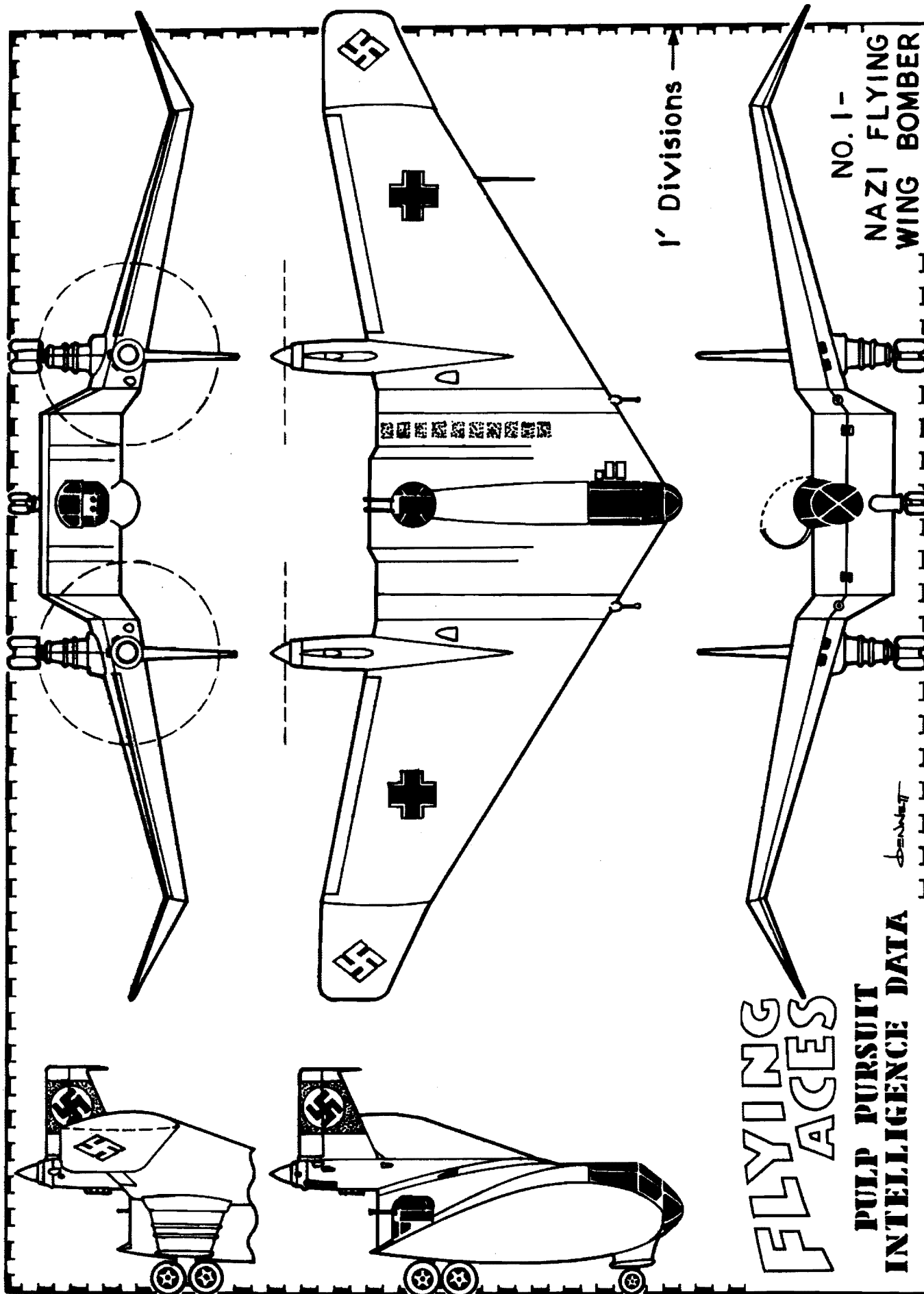
WEIGHT EMPTY: Military secret.

MAXIMUM BOMB LOAD: Military secret.

ARMAMENT: Two fixed forward-firing 20 mm shell-firing cannon in the wings plus two flexible rear-firing 8 mm machine guns in a power-driven turret.

Source: "Raiders of The Lost Ark", Lucasfilm Ltd.

Submitted by Dick Bennett



ROUNDEL AND ROUNDEL WE GO

by
Barnet Frommer

Quick! What was the color-pattern of the roundel on American aircraft in World War I? Red center, white middle and blue outer circle? No! Blue center, white middle and red border? Wrong again! The first decorated British planes. The second, French. Planes flown by American airmen bore a roundel with a white center, Blue mid-ring, and red outer circle.

Now, you may have known that, but I only just learned it--to my amazement. You see, I grew up with the air-war pulp magazines of the '30's, and the magazine covers--how well I remember those wonderful cover paintings--invariably showed the roundels with blue centers. Of course you realize that the stories within those covers were always about American flyers, and nothing else. I guess the blue-center roundels looked prettier on the covers. Anyway, by implication, I came to associate the blue center with all the Allied aircraft in that war.

You live and you learn.

BUILDING TIPS

by
Joe Wagner

If the free wheel cam on your plastic prop gets chewed away, it can be reconstructed. First, lightly grease the shaft, without getting any grease on the plastic hub. Then clean the hub by wiping thoroughly with a paper towel or the like. Now the freewheel area can be built up with repeated applications of Plasti-Zap, put on a little at a time and hardened after each application with Zip-Kicker. Add more material than you need, then shape it with the point of a #11 X-Acto back to the cam contour. It won't break again!

This works so well that I now cut off the existing freewheel before I ever install a plastic prop on a model. I beef up the hub and make a new freewheel cam with Plasti-Zap right from the start. It's easier with the shaft out of the way, too. Of course, I use a greased shaft in the prop hole when I add the Plasti-Zap, to keep from blocking the hole. But I take the shaft out when I do the shaping, which saves time and trouble.

S.O.S.-S.O.S.-S.O.S.

Wanted; Three-views, specs. etc. for the Spartan C2-165 and info on any other of the Spartan aircraft. W.Ross Richardson, 82 Pardo Ave., Pointe Claire, Quebec, Canada H9R3H3

For Sale; Old model magazines, Model Airplane News, Flying Aces, Popular Aviation, Air World. Also want M.A.N. for June & Aug. 1938 and M.A.N. for July & Nov. 1939. Send for list to; Doug Wendt, 910 Kuhns Rd., Whitefish, Mt. 59937

For Sale; Souvenir plan from the Flying Aces Nats Mark "V", Curtiss JN-4 "Jenny" 30" span, \$2.50 Postpaid, Vet Thomas, 974 Clarkson Parma, Town Line Rd., Hilton, NY 14468

PART TWO

THROTTLING:

I have no real experience with the Brown units, except to say that they are very (and how!--JZ) sensitive to head adjustment, which is a necessary corollary to the Brown's method of throttling. I haven't run my flat-twin Brown as yet, so I don't know how hard it is to synch the two heads (see below--JZ). The throttle nut on the Telco units should be adjusted with pliers--the "wrench" furnished with the motor is useless. (I also have a flat-twin Brown. I had no idea how to synch the heads, so I called the factory. Mr. Brown said that you charge the motor, and pull the prop through, feeling the difference in "oomph" as each head "fires". Apparently, the adjustment is really not as critical as one would think--or no one (including Brown) has been able to figure out a good way to do it.--JZ)

VENTILATION:

Both the cylinder head and the tank should be in a fairly unrestricted space to prevent a cold air envelope from surrounding the motor or tank. Instead of opening bays in your fuselage framework, you can duct warm outside air into the fuselage via a flexible straw in the "freeze wall" or a portion of the fuselage. Even with a well vented motor and tank, at a temperature of 55 Degrees F, flight attempts can become pretty marginal. You'll know that all your carefully planned ventilation won't help when you see hoarfrost form on the cylinder head during charging. Since the Co/2 requires warm outside air to boil it to gas, you'll be better off to go home and wait for a warmer day.

REPLACEMENT PARTS:

Brown and Telco parts are available from both Sig and Peck-Polymers. With time and use, the Telco can develop leaks in the cylinder inside the nylon check valve.

CO/2 SOURCES:

All Co/2 sources leak once tapped, and some are worse than others. Sorry, but the news doesn't get any better than that. You have three sources for Co/2;

1. Hand-held chargers: These little devils are available from both Telco and Brown, are not interchangeable, and will ruin your bank balance once you start buying "sparklett" cartridges by the case. IMPORTANT: NEVER EVER use a BB gun Co/2 cartridge for motor charging! They contain a silicone lubricant for the BB gun that can ruin a Co/2 motor! (see lubrication section in last issue.)
2. The Ansul Charger: The big cartridges cost \$15.95, and are refilled for \$4.00. Unfortunately, the Brown charger for this unit leaks, so you should plan to use all of the cartridge within about a week. Even if you waste some, \$4.00 for a weekend of fun is pretty reasonable. The rest of the bad news about the Ansul tanks is as follows: Their "real" purpose is as an energy source for rechargeable fire Extinguishers. Consequently, no real pains are taken to keep the Co/2 pure. The tanks can contain some water and rust. A wad of cotton between the tank and the Brown charger can keep this problem to a minimum.
3. The Cryodyne Tank: This is an economical source of Co/2, and does provide the most consistent charges. It is pharmaceutical-grade Co/2 and is very pure. However, it may be difficult (read: illegal) to recharge these tanks. Also, you'll have to make sure that you have a source of pharmaceutical grade Co/2, or the same problems that exist with the Ansul tanks may apply.

4. The Universal Co/2 Source?: Simple. There ain't none - yet. I've been kicking around the idea of attaching a flexible high pressure hose to a cryodyne tank, and welding the other end into a spent "sparklett" cartridge. The cartridge could then be inserted into either the Brown or the Telco hand-held charger, yielding a power source for either engine. If anyone has some ideas on this project, I'd be delighted to swap ideas.

SUPERCHARGING:

There are some evenings in Denver when there is no wind at any altitude, and you'll want to run your motor longer than the 30-45 seconds that a normal charge will yield with the 2.8 cc tank. You can! All that you need is a piece of 1/4" dowel 4"-6" long into which you have inserted a common pin. You then:

1. Give the tank a modest GAS ONLY charge.
2. Stick the pin in the filler nozzle, and permit the gas charge to escape from the tank in one rapid "whoosh".
3. IMMEDIATELY re-charge the motor with a LIQUID charge. Six seconds of charging should do the trick on even the largest Brown tank.
4. Blow on the tank with your breath, or allow it to warm slightly. IF YOU ARE DUMB ENOUGH TO FLICK YOUR BIC ON THE TANK, YOU WILL DESERVE THE DAMAGE THE EXPLOSION WILL DO TO THE MOTOR, YOUR PLANE AND YOUR FACE!!!!

Properly done, "supercharging" should increase your motor-run to about 90 seconds. If you do not permit the tank to warm after charging, then the Co/2 will not gassify well, your throttle setting will be screwed up and you will be likely to ice-up.

MULTIENGINE SET UPS:

Since they run in any direction, Co/2 motors are particularly nice for multiengine ships. There are two basic motor/tank configurations:

1. Multi-motor/Single Tank: This method uses a Brown-type tank that has been modified to accept an additional motor-tube. This is done either by drilling an additional hole in the top of the tank, or by replacing the small single motor-tube with a larger single tube. This larger tube then becomes the receptical for the number of motor tubes required by your model, or dictated by your pocketbook, or indicated by your courage and/or stupidity.
2. Multi-motor/Multi-tank/Single-filler: With this method (particularly applicable to the Telco motors with integral tanks) a single filler nozzle is drilled to accept multiple filler tubes. With this method, the pressure in the multiple tanks is equalized, providing equal motor runs if the power settings are the same. If you have any questions, please let me know.

PHOTO PAGE

More photos from the FAC Nats Mark V taken by Kevin Higley via Bob Clemens.
 Top left, Bob Anderson and his nice Jumbo Douglas O-46.
 Top right, Co-Director Rob Clemens talking over something important with Don Steeb, probably when are we going to get a beer?
 Bottom left, Good flying jumbo Blackburn Skua by Jack "Storkmeister" Moses.
 Plan is enlargement of Earl Stahl's 24 incher.
 Bottom right, Jurgen Kurtenbach from Canada with a real good flying Langley Aerodrome. Jurgen is a real up/an coming modeler, watch him!

