

FLYING FLANGES

Club News

ISSUE #174-100

MARCH/APRIL 1997

MORE PAGES!!!!



NEWS ON THE WING!

How do you like the excellent cover drawing? She was done by Clubster Bill Melvin. This is our first multi-colored cover, too. It also is a mile-stone issue that we used two colors for the first time. This issue is #174-100. Dave Stott and Bob Thompson did the first 74 issues and this one makes 100 issues for me! Where did all those years go? But I must say that they have been enjoyable for me. It would be great if we can get out another 100!

The plans this issue were done by Jake Larson (Cunningham-Hall), Dave Stott (Dixon Special and the BeeGee Baby) and Ted Dock (Bolkhovitinov). Thanks, Clubsters! Jake used the 3-views that appeared in the July/Aug. 1996 issue #170-96 for his Cunningham-Hall plan. Thanks go to all the other Skysters who contributed to this issue.

Elsewhere in this issue you will find a membership blank to join the National Free Flight Society. They can use our help to keep free flight alive. If you are a member please renew.

Now for some comments on the Geneseo contest for this year. We already have 16 contestants signed up and it is only March! Please get your entry in early to help us with the paper work later. Looks like another great turnout! There is an entry blank on the last page of this issue. As of this date we still don't know what dormitory we will be staying in. We will let you know soon as we find out.

The scale judging of the models will take place at Peter's Party Complex in Leicester, NY, just 4 miles from Geneseo. This is the same place we did it last year. Food will be available there also if you don't want to go back to the college for dinner if you are staying there. The judging will take place on Friday, July 18 starting at 2:00 PM. Come as soon after 2:00 PM as you can. We are also looking for volunteers to scale judge the models. If you always wanted to try your hand at it now is the time! It really isn't that difficult to do. There will be experienced judges to work with, so get your judging feet wet!

We are looking for sponsors for some of the events. Either manufacturers or individuals are welcome. If you are interested contact me, Lin Reichel at GHQ for more info on costs, etc.

Vendor tables will be available also during the scale judging. This gives the manufacturers and anyone with items to sell a chance to show their wares. It also gives the members something to do while the models are being judged. If you want a table or two, contact me at GHQ for prices and availability.

I have been asked by several Ozone chewers about having a special event just for foam models. This we can do, if, I have commitments from at least five members that they will have foam models there. I will also have to know this as soon as possible. This will be an event for foam models of scale aircraft only, any size. Scale judging as per FAC rules.

That does it for now as to Geneseo, we will keep you informed as time goes by on any other developments. If you have any questions don't hesitate to call or write.

BUILD...FLY...WIN...EFF--AAA--CEEE!!!!

Another new squadron has been formed in Spokane, Wa. Anyone in that area wishing to join them please contact John Robison listed below. They will be glad to have you join them. Welcome aboard!

Lt. Col. Lin Reichel, CinC-FAC

Squadron #59
Wing Warpers
John Robison
4102 E. 24th St.
Spokane, Wa.
99223

Wanted; Videos of last years FAC-Nats at Geneseo, NY and videos of the contest at Muncie, Ind. Will pay for them.
Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

David McCampbell, 86, Navy's top ace

FROM TRIBUNE NEWS SERVICES

RIVIERA BEACH, Fla.—David McCampbell, the Navy's all-time leading ace with 34 aerial victories during World War II, died at the age of 86.

Capt. McCampbell, who was awarded the Medal of Honor by President Franklin D. Roosevelt at the end of the war, died Sunday at the nearby Veterans' Affairs Medical Center.

In 1944, Capt. McCampbell was commander of Air Group 15, in charge of fighters, bombers and torpedo bombers aboard the aircraft carrier USS Essex. His squadron saw almost six months of continuous combat and participated in two major air-sea battles.

On one mission alone, he shot down nine enemy planes. "I just kept on shooting," he explained. "My wingman and I went on to take a total of 40 Japanese fighters."

The nine planes dispatched in 95 minutes by Capt. McCampbell and his Grumman Hellcat were regarded as the war's record for a mission.

Operating off the carrier Essex,



David McCampbell in 1945

the air group he commanded, which included bombers and torpedo planes as well as the fighter squadron he led, lost not a single bomber or torpedo plane to enemy aircraft in 200 missions. His group shot down 314 Japanese planes, destroyed 348 on the

ground and probably accounted for the destruction of 194 more, according to the military.

Capt. McCampbell's 34 victories made him the nation's fourth-leading ace of all time behind three Air Force pilots: Maj. Richard I. Bong, 40 kills; Maj. Thomas McGuire, 38, and Col. Francis S. Gabreski, 34.5.

His numerous honors also included the Navy Cross, the Silver Star and the Distinguished Flying Cross.

Born in Bessemer, Ala., in 1910, he moved with his family to West Palm Beach, where his father opened a furniture business. He attended Staunton Military Academy in Virginia and Georgia Tech in Atlanta before being appointed to the U.S. Naval Academy. He graduated with a degree in marine engineering in 1933. Before he retired from active duty in 1964 after 31 years of service, he commanded the attack aircraft carrier Bon Homme Richard and was chief of the plans division of the Joint Chiefs of Staff.

He is survived by his wife, Buffy; two sons, David and John, and four grandchildren.

FLYING ACES VIDEOS

1995 FAC Nationals at Geneseo, NY

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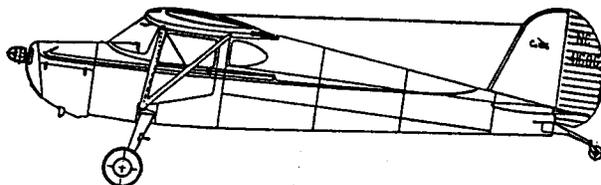
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Halton HAC-2 Minus	21 1/2" span
No. American P-51B Mustang	18 1/2" span
Hawker Hurrigan I	20" span
Gee Bee Model "E"	18 7/8" span

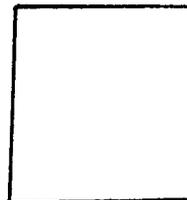
Plan packs #1-2-3-4 are still available. \$10.00 each postpaid.



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If the box on the right has the dreaded RED "X" in it, it is time to renew your membership which includes the newsletter. Cost is \$15.00 per year in the United States and Canada. Overseas the cost is \$20.00 per year. Six issues per year published every other month. This is your last issue under your old membership. Please make checks payable to "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.



LAIRD STORY

January 8, 1997

Lt. Col. Lin Reichel, CinC
Flying Aces Club

Dear Lin,

I must apologize for not getting my two Laird papers to you sooner. The one tracing the "Speedwing Jr." through it's rebuilds is not really complete since I hoped to have more information on the mid-thirties rebuild, but my source has not come through with this information.

I must have began building models about 1936 when I was 10 years old. One afternoon in the spring of 1940 I heard an unusually loud airplane flying over my parents home and I ran outside and saw a beautiful white biplane powered by a huge radial engine. The ship had large wheel pants and there was a beautiful chinese red scallop on the pants and a series of red scallops on the sides of the fuselage. It was a small ship, but was flying faster than I had ever seen a biplane go. Local daredevil pilot Al Whiteside had bought the extensively remodelled Laird "Solution" about a month earlier without an engine. He had a Wright Whirlwind J-6-9 installed in the ship and what I saw that afternoon was one of it's first flights. The Whirlwind sounded just like the ones that powered the Vultee "Vibrator" trainers of WWII, in other words it was so noisy it literally shook the ground when the ship flew over, and it was so fast the wing wires screamed. Thus began my love affair with Laird raceplanes.

Not to be outdone by Whiteside, Harry Porter who was Chattanooga's Mr. Aviation, had to have a Laird too, so he traded his highly modified Great Lakes "Lakester" stunt biplane for the Laird "Continental Comet", which was a 3rd generation rebuild of the "Speedwing Jr."

There was no airport security at Lovell field back in those days and I had hung around the hangars so much the pilots and mechanics knew that I was harmless, so I stood and admired the two Lairds for an hour or so on several occasions, looking into the cockpit close up. I took the frontal picture of the "Solution" sometime in the summer of 1940, and the two shots of the "Comet" at an air show the summer of 1941. Since I took these three pictures you are welcome to use them in the FAC News. I took the side shot of the "Solution" with Whiteside standing beside it with fast film, my camera on a tripod, and a polarid filter over the lens in the hope that the glare of the lights in the Harry Porter office museum would be filtered out from the reflective glass of the framed picture, but I still picked up some glare under the low wing. Whiteside thought that he had bought the "Super Solution", but note the registration on the rudder is the "Solution's". He must have found it from the old magazine ad that Dave Stott mentioned a while back in one of his "What Color Was It" articles. The ad offered for sale the Laird "Super Solution" refinished in white and red with a red leather interior, all of which describes the finish or Whiteside's ship.

I began talking with Robert Horner of the New England Air Museum in 1991 about the "Solution" that they were rebuilding. He assured me that it was the real airplane and not a replica, and that they had Matty Laird examine the "bones" and he stated that it was in fact the original "Solution" fuselage, but that the wings looked that they might have been the "Super's" which checks out with historical fact. Horner said that when they acquired the ship it had been stripped to the frame and the instruments were in a cardboard box. He said that during the 3 weeks time Laird designed and built the "Solution" many changes were made and that not all of them were noted on the plans, so there was never an accurate plan of it as it appeared on September 1, 1930 when it won the first Thompson Trophy. I told him to look at page 112 of THE GOLDEN AGE OF AIR RACING, by S. H. Schmid and Truman C. Weaver. this book is in my opinion, the Bible of 30's air racing with highly detailed articles about the significant ships, articles about each race, and articles by the racepilots themselves. Unfortunately it is out of print. It was published by the Experimental EAA Aviation Foundation. I am enclosing a photocopy of that page and a picture from Ton Palshaw who is currently doing the restoration of the "Solution".

I caught a mistake in the restoration and called it to Palshaw's attention and he finally agreed. They had painted the leading edge of the rudder fillet black where it joins the rear of the headrest. Pictures of 9/1/30 show the entire rudder in a light color, which was of course gold. I built a little 19 1/2 inch span model of the "Solution" last summer mostly from a Cleveland plan that I lightened up a bit and altered as shown on Paul Mott and Bob Hersch 3 views. Palshaw helped me to build a more accurate model in that he pointed out that the streamlined axle cover between the wheels was actually large enough to be a little winglet, and that it was gold, which none of the plans that I have showed. Also, the Cleveland plan did not show the characteristic Laird bulge in the bottom of the fuselage right at the trailing edge of the low wing. This bulge is the tail end of a line starting at the front of the fuselage where the cowl ends, and I understand that Laird plotted this line to be at the same angle of incidence as the low wing, which he felt gave him a bit more lifting area since the fuselage was nearly flat on the bottom at this point.

I am enclosing a picture of my little Laird which flies well for a small biplane, giving flights of 30 to 45 seconds so far with a 8 inch Peck prop and 3 loops of FAI 1/8 inch rubber 19 inches long and 500 winds. It has a very nice climb and I think that I got close to a minute with one untimed flight.

The 3 view drawing from AIR PROGRESS that was published in the Nov/Dec. issue of the FLYING ACES CLUB NEWS does not show the "Solution" as it looked when Dale Jackson flew it in the 31 Thompson. The 3 view shows the ship as it looked in early 1931 when it was owned by Lee Shoehair and Billy Brock. The "Sweet Kiss Toothpaste Co" bought the Laird from them in the summer of 1931 and replaced the landing gear struts with what may have been the struts from the original "Super Solution". Odd shaped wheel pants were added. The ship had a white cowl, fuselage, landing gear and rudder and the wings & stab were gold. The "Sweet Kiss Toothpaste Co" logo on the side of the fuselage was in gold and lavender. This is how the ship looked when Shoehair took off for California to fly it in the 1931 Bendix.

Shoenhair nosed over at his StLouis fuel stop when the wheel pants became fouled with mud and the engine crankcase was cracked which took him out of the race. The ship was repaired and Lee flew it to Cleveland, but the owner turned it over to Dale Jackson to fly in the Thompson, which he did superbly coming in 3rd after having grazed a tree and tearing most of the fabric from the bottom of his right low wing and bending the prop. Note the color painting of the 1931 Thompson in my report.

The black and white picture that I made in the Harry Porter museum of Harry standing beside the "Continental Comet" is very poor because I picked up reflection from the glass of the framed picture even though I had used a Polaroid filter and carefully angled it to the light and turned the filter to maximum darkness. It is hard to believe that this ship is a rebuild of the "Speedwing Jr." because they look so different. The "Jr." had a long nose with a Fairchild ranger engine, the "Continental Comet" a 7 cylinder radial Continental of 250 hp.

While all my generation were away in WWII or in college, Porter sold the "Comet" and none of the older pilots could remember who he sold it to. One fellow told me that his father told him that Harry sold it to a Florida pilot who was killed trying to stunt the ship in an air show somewhere in Florida. Through a friend I contacted an elderly pilot in Dunwoody Georgia, who had known Harry and he said that Harry sold the "Comet" to Klem Whittenbeck, who was a 30s race pilot and that Whittenbeck did crash the "Comet" in Florida. He said that Harry had cautioned Whittenbeck not to change the inverted fuel system. He said that in the air show Klem rolled the ship over on it's back and the engine quit and he did not have enough altitude to fire it up again after he leveled off.

In the summer of 1995 I built a clip wing Monocoupe 110 Special from the Butch Hadland peanut plan that I blew up to a fuselage length of 18.5 inches. That plan has several mistakes in it even the relationship between the fuselage length and the wingspan are way off. At any rate, I finished it in yellow with black scallops on the wing, tail, fuselage and wheel pants to resemble Bill Symmes real ship that he flies in air shows. I got his address from my membership in the Air Race Historians Society and called him to ask for a picture of his instrument panel. In talking with him I found that he had been an Eastern pilot during WW II, and that - from flying through Chattanooga he had got to know Harry Porter and that yes he was very familiar with Harry's Laird LC-DE that he sold to Klem Whittenbeck. He further stated that he saw Whittenbeck crash the ship during an air show at Tampa International in 1947. He said that a new 300 hp Continental had been installed in the ship and as I had heard it quit when Whittenbeck rolled the ship at low altitude and that in the ensuing crash Whittenbeck was severely injured and the ship was totaled. He said that the remains sat in Bill Skeltons hangar for a year or so and as best he could recall, they were hauled to a dump. So through my model building I heard the final tale of the racer that began life in 1930 as the "Speedwing Jr."


Raymond Payne Jr.

to be continued...



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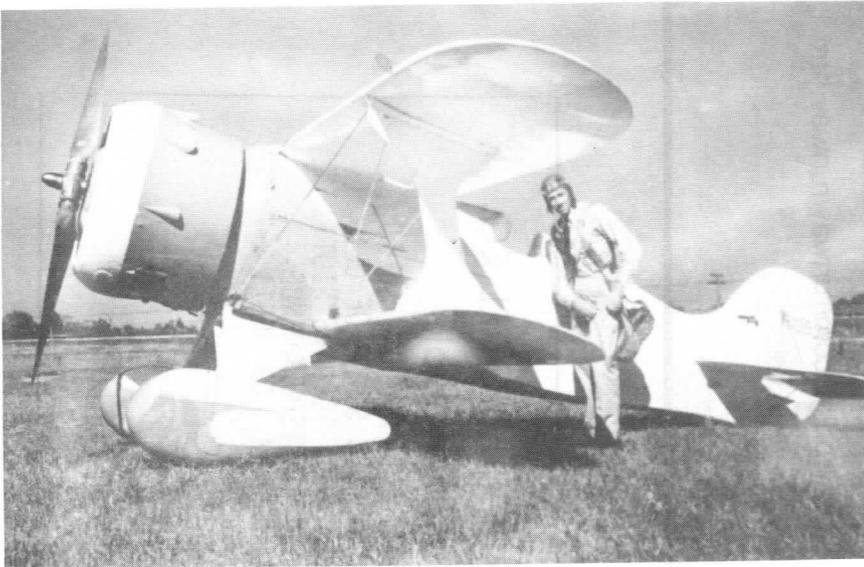
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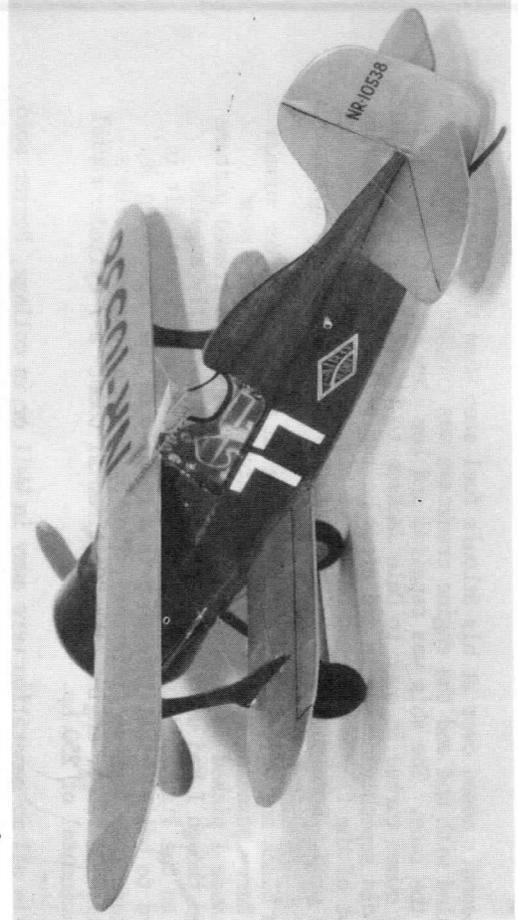
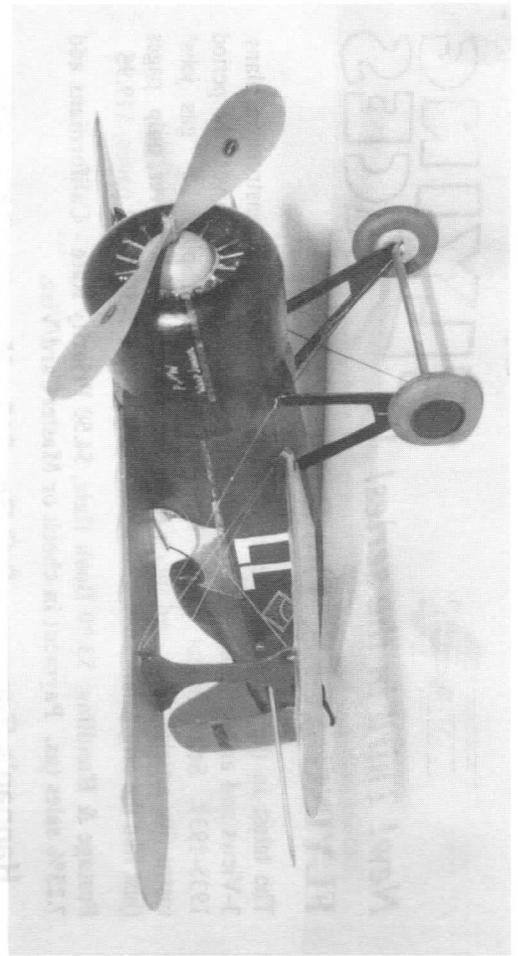


6.



Above photos as described in Ray's article.
 Right hand column is Ray's model.

Ray's 19½ inch wingspan model of the Laird LC-DW 300 "Solution" as it appeared when it won the first Thompson Trophy pylon race in 1930. Model was constructed from 1934 plan of Cleveland Model & Supply Co., with added details from Bob Hirsch and Paul Mott scale drawings and pictures and comments supplied by Tom Palshaw who is doing the restoring of the real "Solution" for the New England Air Museum. Model is rubber powered by 3, 19 inch loops of 1/8 inch FAI Tan rubber, braided, and wound 500 turns. Good flier. Finish is air brushed acrylic enamel.



ONE STAR SECTOR FLYAGES

1997 Club Meeting Notes

The Lone Star Sector Flying Aces Club held their annual Club meeting at the McDonald's Restaurant in Allen on Feb. 8. The following contest schedule was chosen for the following year- please note the new events. All contests, except as noted, will be held at the Valley Ranch flying site immediately off McArthur road.

Mar. 1, 1997 8am to noon Embryo Endurance

April 12-13 8am to 200 pm Multiple Event Contest including Rubber Scale, Peanut Scale, Power Scale, and other Events- "run what ya' bring!" (Note: Judging and "hangar flying" at Curt's Aerodrome on the 12th with flying on the 13th). (6:30 pm AT Curt's next to Hwy 41e. 12th)

May 3 7am to 1100 Old - Time Rubber (Pre -1945 Endurance or Sport types)

June 7 7am to 1100 Peanut Scale

July 4-5-6 Cloud Climbers Regional Contest at the Allen Texas flying site. Events are Rubber Scale, Power Scale, and Peanut Scale. AMA License Required. Note: Any Event started must be completed the same day. (8 AM to 2:30 PM)

Aug. 2 7am to 1100 am Rubber Scale - Valley Ranch flying site.

Aug. 30- Sept 1. Texas Cloud Climbers Regional Labor Day Contest at Allen. Same Events and requirements as July 4 C.C. Contest (8 AM to 2:30 PM)

Oct. 4 8am to noon Golden Age (Duration Only- No Scale Judging or Bonus Points)

Nov. 1 8 am to noon Power Scale

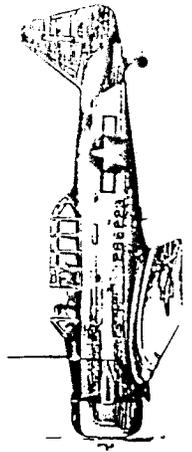
Dec. 6. 8 am to noon Dime Scale - FAC Rules 16" Max Span

Jan. 3, 1998 8am to noon Embryo Endurance

Feb. 4, 1998 8 am to noon 3- Flight Mass Launch Golden Age 1- Flight AULD Flying Plank Mass Launch

Please Direct Queries to : Jerry Porter 214-320-1783
Al Backstrom 972-294-1210 (See Ad Column)

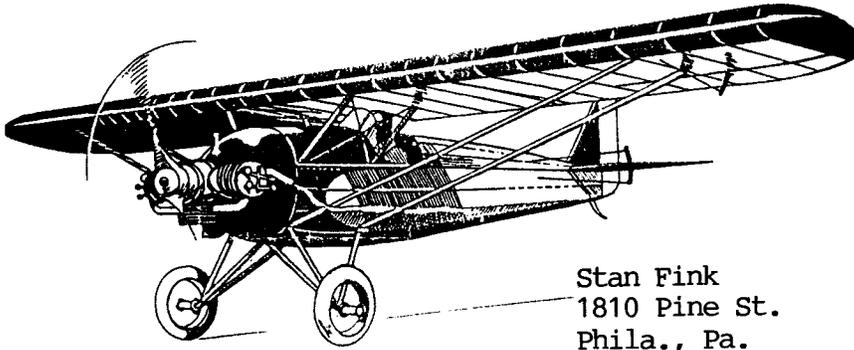
P.S. If you haven't renewed your club membership, please contact Bob DeRoster at (214) 327-1239... Thanks!!



DOMEDUSTER

Plan Packet

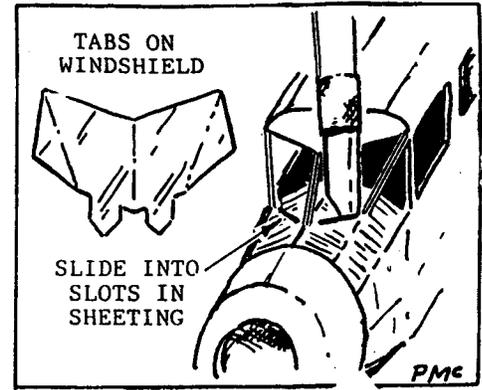
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CONTRIBUTORS

Bob Stralick	"F.A.C. Kaydet" Bostonian
Bob Dunham	"Roll-Out" Catapult Glider
Andy Tagliafico	"Miquark" World Record Ministick
Doug McLean	"Pennybipe" Biplane Pennyplane
Stan Fink	"Bucky's" F1L (EZB)
Carl Hedley	"Basic" Bostonian
Bob Romash	"Alfonse" Catapult Glider
Greg Peters	Nakajima Ki43 WWII Peanut
Stan Fink	1919 McMahan Monoplane Peanut
Stan Fink	1922 "Bee Line" Navy Racer Peanut
Stan Fink	1930 Polish RWD4 15" Walnut Scale
Stan Fink	1935 Rearwin 7000 "Sportster" 16" Walnut



Trying to fit a transparent windshield neatly in place has always been a nerve-racking job for me. But I have used this trick several times now, and it helps a lot. To use the arrangement your fuselage must have sheet balsa or foam covering in the windshield area.

With a long, sharp blade held against the windshield frame in the plane of the "glass," cut two slots in the sheeting. As you shape the pattern for your windshield, leave two projecting tabs on the lower edge. The pattern can then be accurately positioned and repositioned while the fitting and trimming is in progress and when final glueing is done.

I have also used this system, with slight variations, on the round fuselage of a Vega and the frameless windshields of an open cockpit Fairchild 22.

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Indoor Peanut

Pilot	Plane	Time
1. Rick Choate	Pottier	94 sec.
2. Don Brimmer	Lacey M-10	86 "
3. Doc Martin	Lemberger	85 "
4. Jim Holland	Lacey M-10	83 "
5. Barrie Taylor	Waterman Gosling	82 "
5. George Nunez	Turbo-Beaver	82 "
7. Sidney Gilbert	Lacey M-10	78 "
8. Jonathon Nunez(Jr)	Blackburn Airdale	77 "
9. Stan Fink	Huntington H-12	69 "
10. Dave Linstrum	Lacey M-10	58 "
11. George Nunez	Fike	52 "
11. Larry Kruse	Facetmobile	52 "
13. Lin Reichel	Cougar	39 "

Outdoor No-Cal

Pilot	Plane	Time
1. Tom Hallman	Hawker Typhoon	90 sec.
2. Paul Stott, Sr.	Taylor Cub	46 "
3. Paul Stott, Jr.	Piper Cub	30 "

Peanut & No-Cal Scale Postal Meet

Our annual Winter Postal contest is now in full flight Skysters! Fly that model and send those times in to GHQ. We have four divisions or "Wings" which are; Outdoor Peanut, Indoor Peanut, Outdoor No-Cal and Indoor No-Cal. Enter as many models as you wish in each event, send in your time along with the name of the model and the event. Contest times count too. Every time you better a time with a particular model send that time in also. Send your entries to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

This contest closes on April 30, 1997. Entries postmarked after May 1, 1997 will not be accepted.

Indoor No-Cal

Pilot	Plane	Time
1. Lincoln Ross	F4F Wildcat	276 sec.
2. George Lewis	Waterman Gosling	244 "
3. Mike Morrow	XP-47H	240 "
4. Rich MacEntee	Lacey M-10	215 "
5. Larry Kruse	Boo-Ray	207 "
6. W-yne Trivin	Farman	204 "
7. Dave Linstrum	Farman	187 "
8. Larry Kruse	Fairey Barracuda	185 "
9. Sidney Gilbert	Piper Cub	150 "
10. Dave Linstrum	Porter	149 "
11. John Tudor	Mustang	118 "
12. Bill McDow	F4F Wildcat	107 "
13. Dick Obarski	Farman	102 "
14. Frank Hirlenan	HE-112	97 "
15. Ken McConnell	Maule M-5	95 "
16. Don Brimmer	B-70	95 "
17. Mike Ditrich	Sweet-Pea	83 "
18. Alan Clarkson	Tiger Moth	70 "
19. Doc Martin	Windham	65 "
20. Charles Nelson	F4F Wildcat	24 "
21. Walt Schlesinger	Nieuport 17	14 "

Outdoor Peanut

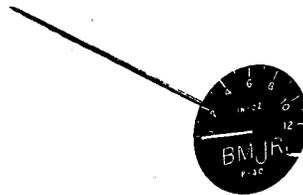
Pilot	Plane	Time
1. Don Reed	Cougar	328 sec.
2. Ollie Benton	Chambermaid	107 "
3. Tom Hallman	Martinsyde Buzz.	76 "
4. Ron Hummel	Monocoupe	70 "
5. Curt Sanford	Lacey M-10	64 "
6. Ron Hummel	Lemberger LD-206	52 "
7. Paul Stott, Sr.	Farman Renault	41 "
8. Tim Hayward-Brown	Bloch 120	34 "

TORQUE METER

Blown motors cause serious damage to rubber powered models. We therefore have a tendency to wind to less than maximum turns in practice and then wind to a calculated or derived "safe maximum" number of turns at contests. Maximum winds for a 1/8" X 6 strand 10 gram rubber motor is calculated to be 1120. However, depending on temperature, humidity, lubrication, etc. a motor may blow at 80% or 120% of max. A winding tube and wire offers some protection to the model from blown motors, but does nothing for producing consistent flight performance, unless the winding wire can also measure torque. The energy in a rubber motor is stored as "torque", a twisting force. A model trimmed to fly at low power, or low torque (low number of winds) may not behave the same at high torque (max number of winds).

Frank Zaic in his 1951-52 Model Aeronautics Year Book said, " Our advise is to check torque of the motor as you fly. Even if it means carrying a gadget along. Only by doing so will you be able to duplicate flights, time after time." The **BMJR Torque Meter** is just the gadget. Torque winding is much safer and more accurate than counting turns alone and with practice you can consistently get a lot more turns in a rubber motor safely. Or you can trim your scale masterpiece with confidence that flight performance can be duplicated.

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THE GOLDEN AGE

by Fran Ptaszkiwicz

BUILD A GLIDER TO SOAR IN MARCH WINDS

Primary Model Recommended For Beginners.

With spring just around the corner, some modelers are once more turning their thoughts to gliders. Winds that normally ground the average stick or fuselage craft can lift glider models high into the clouds and oftentimes carry them for great distances. There is a thrill to model glider flying and every model builder should try one.

The Primary Glider which is the design presented, got its name from the fact that it is the first on which new students learn the fundamentals of glider flight. They then graduate from the primary to the secondary machines and then to the soaring glider. This design is similar to the one used by the Schweizer brothers and other gliding enthusiasts many years ago.

Present training would involve work in a two place enclosed cockpit machine such as a Schweizer 2-22 or 2-33 and then after solo, moving on to a Schweizer 1-26 or similar machine and finally into one of those sleek all fibre-glass ships, finances permitting.

This model is an excellent flyer and modelers building the craft are cautioned to make it as solid as possible. Cementing all joints carefully and if necessary brace the wings with thread or fishing line. March winds can give a model such as this plenty of abuse and it must be made sturdy enough to withstand this punishment.

FUSELAGE:

The fuselage skid is made of solid balsa, then build the balance of the frame around this member. A hollow brass paper rivet is placed in the nose of the skid for the tow-line attachment and to also balance the craft. Builders may make their crossbraces (diagonals) heavier if they wish, without impairing the flying qualities of this ship.

WING:

Construct the wing as illustrated. Cover with tissue and give the paper a coat of dope to make it more durable. Watch for warps!

TAIL UNITS:

Build the tail section as shown, cover with tissue and dope, once again watch for those warps!

ASSEMBLY:

Attach the wing to the fuselage and also the stabilizer. The rudder of course is built as part of the fuselage. Check all parts for alignment and trueness to one another. Give the model several test glides to make sure it is properly adjusted and correct with the elevators, if any correction is necessary to improve the hard glide. It is possible to fly this model as a kite, or as a regular tow-line glider, jerking the line loose when the model has gained the proper altitude.

This model design appeared in the Aviation page of our local paper about 1937. I had built three increasing the size of the plan and model each time. The first one I had built directly to the size indicated on the plans and although

an 8 inch wing span seemed diminutive, the model flew quite well and using sewing thread for a tow-line, I was amazed at the performance of this miniature.

The drawings were then doubled which increased the wingspan to 16 inches. Now using kite string for a tow-line, the models performance improved as I was able to get more altitude on the tow and better glide times. On the third go-around I increased the span to 24 inches and now began to get some good soaring flights. The model met its end however not with a fly-away, but by landing in a creek which was running quite rapidly and washed the model away, destroying it in bits and pieces as it did.

So, that was the way we would sometimes do it in the Golden Age, Not enough money for a small kit, buy a few balsa strips, use the plan from the newspaper and draw a set of crude building plans on wrapping paper. Besides building, we learned drafting, blue print reading and scaling dimensions, and in some cases the yen to be an engineer or craftsman of some type.

CAMPBELL MODEL SUPPLY CO.

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TELEPHONE (810) 478-7846

PRESS RELEASE

CAMPBELL MODEL SUPPLY IS PLEASED TO ANNOUNCE THE AVAILABILITY OF ESAKI/CAMPBELL GAMPPI-SHI AFTER INVESTIGATING MORE THAN A DOZEN DIFFERENT GAMPPI MAKERS. A SUITABLE ULTRA LIGHT SUPPLY HAS BEEN ESTABLISHED.

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INTRODUCTORY PRICING FOR THE FULL 20X32 INCH SHEET IS \$6.95 PLUS \$3.00 POSTAGE AND HANDLING. SINGLE ORDERS OF 10 OR MORE SHEETS ARE POSTAGE PAID.

IN ADDITION, WE ARE ALSO OFFERING TWO PLASTIC FOLDING PROPS COMPLETE WITH A STICK FUSELAGE TYPE BEARING IN 8 1/4 INCH AND 9 1/2 INCH SIZES. A BEARING FOR USE IN A NOSEBLOCK TYPE CONFIGURATION IS EASILY SUBSTITUTED.

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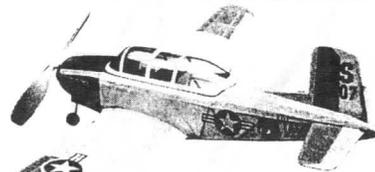
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Kit #202 Over 60 Laser Cut Parts



STINSON VOYAGER

Kit #203 Over 50 Laser Cut Parts



T-34

Kit #204 Over 50 Laser Cut Parts



CITABRIA

Kit #205 Over 50 Laser Cut Parts

Introducing five laser cut kits from the biggest new name in Free Flight Aircraft...Dumas Products.

These walnut scale (17-1/2" wing span) models come with Precision Laser Cut Parts, hand selected balsa, injection molded propeller, F.A.I. Contest rubber, plastic wheels, vacuum molded plastic parts, full color peel and stick decal set, light weight colored tissue, and the most comprehensive plans and instructions of any rubber powered kit.

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DUMAS PRODUCTS, INC.
909FM E. 17th St. Tucson, AZ. 85719
Phone: 520-623-3742 Fax: 520-620-1329
E-MAIL: dumas@azstarnet.com

WANTED...

3-views for the Rearwin Sportster 7000. Stan Fink, 1810 Pine St. #2R Philadelphia, Pa. 19103

Wanted...

Plans for the Waco CG-4 scale glider, also plan for Airspeed Horsa. Craig Baker, 515 N. Carpenter Rd., Titusville, Fla. 32796.

There's lovin whiskey and Fightin whiskey.. laughin whiskey and cryin whiskey...but there just aint any flyin whiskey.....

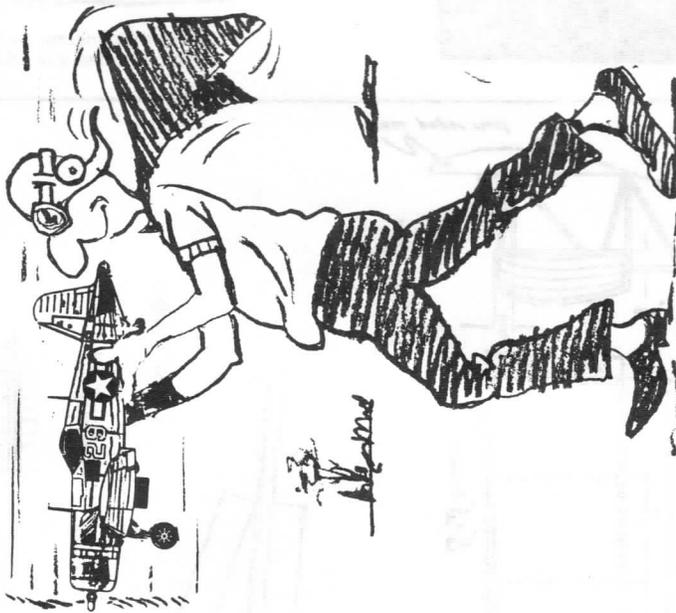


PHOTO PAGE--LEFT COLUMN;

Oscar Smith signing up for the World War One mass launch at Muncie last September with Ralph Kuenz. Photo by Fred Wunsche.

Ollie Benton sent in this photo of his Dornier "Wal", electric power. Great flyer!

Grumman Skyrocket, static scale by Doug Worthy. His photo.

RIGHT COLUMN;

Photo by Fred Wunsche of Lin Reichel, center and Jim Miller, left, admiring Mel Roth's Chambermaid.

Another pic by Fred, This one of Herb Kothe with a Classic, hands-off launch of his Embryo entry. That's the way they should be launched Skysters! That's Miller again in the background.

STINSON 5K-10

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3317 Pine Timbers Drive
Johnson City, TN 37604-1404

Dues include an annual fee of \$.50 for membership in the National Free Flight Society. The balance of the dues is for subscription to *Free Flight*, the NFFS Digest. Subscriptions or memberships are not available separately. Ages are as of July 1 of the current year.

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	2 years \$39.00 (\$1.00 membership fee plus \$38.00 subscription)
Junior (US only) Age 18 & under	1 year \$7.50 (\$5.00 membership fee plus \$2.50 subscription)
Supply proof of age.	2 years \$13.50 (\$1.00 membership fee plus \$12.50 subscription)
All Non-US Residents	1 year \$24.00 (\$5.00 membership fee plus \$23.50 subscription)
	2 years \$47.00 (\$1.00 membership fee plus \$46.00 subscription)
Life Membership US Residents	\$450.00
Life Membership Non-US Residents	\$500.00

Include payment in US dollars and this form:

New Member Renewal Address change

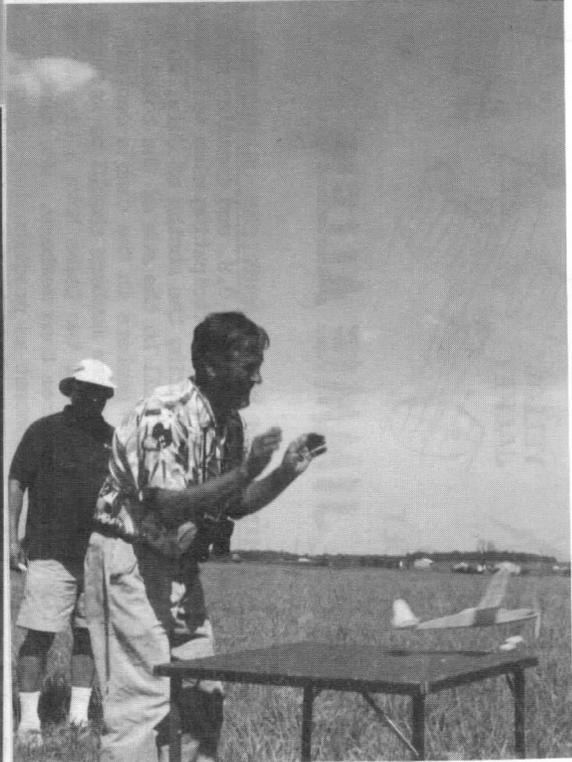
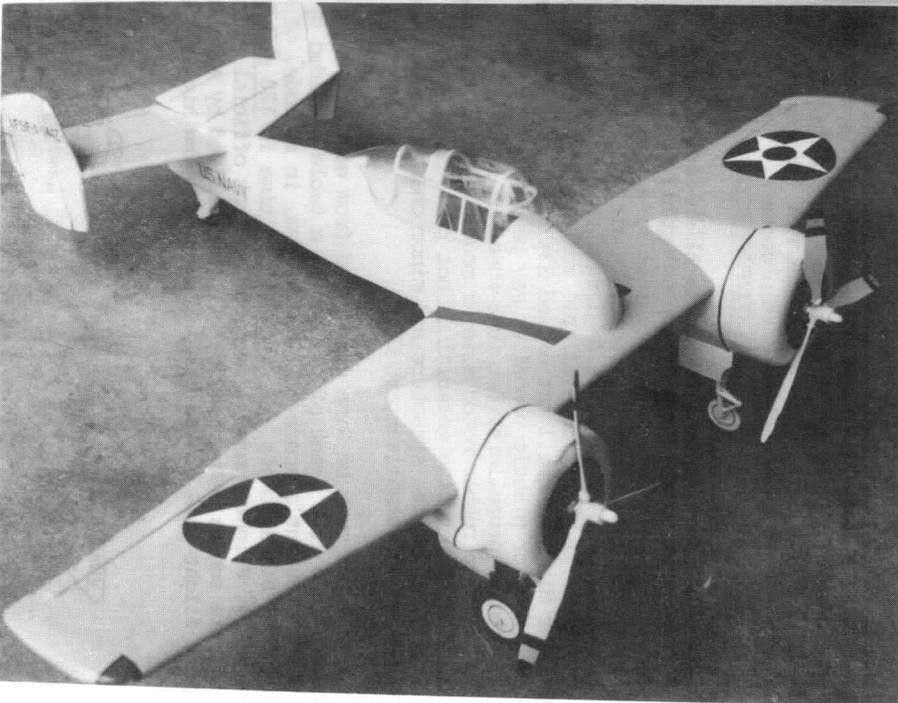
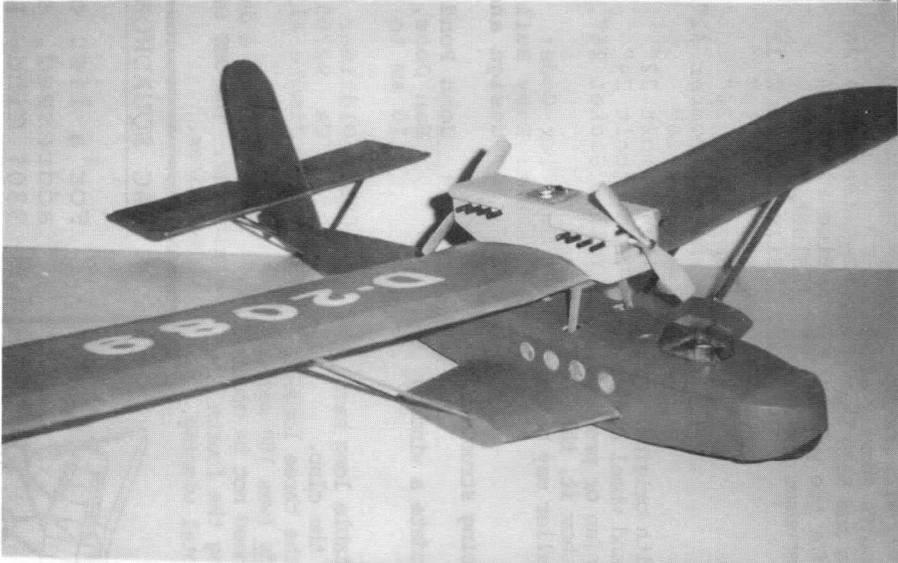
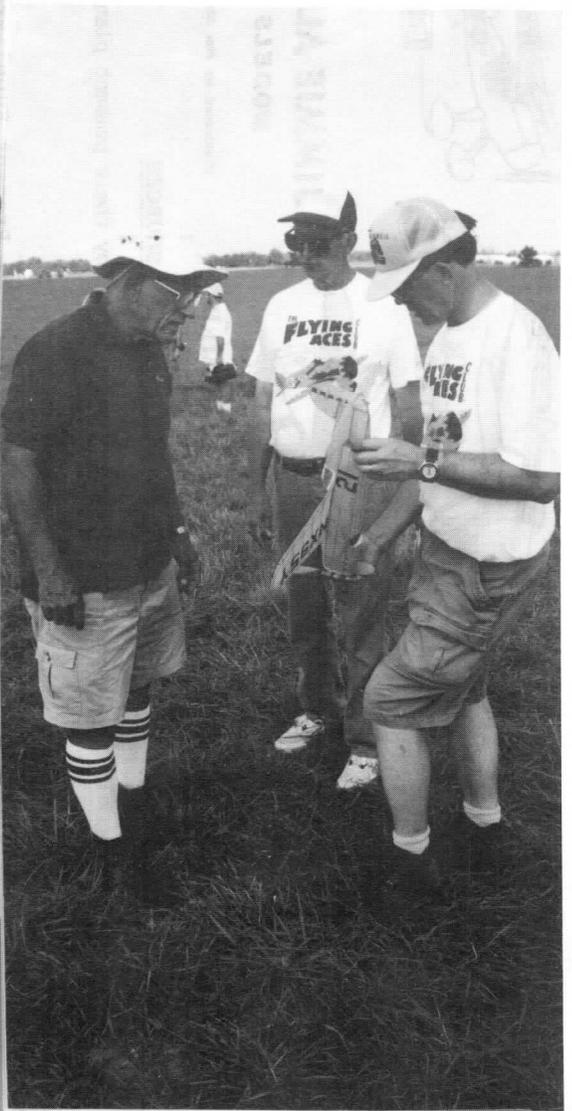
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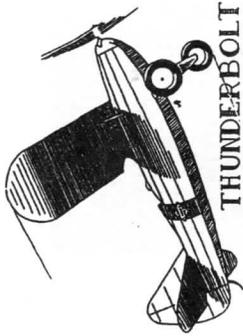
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Address _____ Telephone # (US only) _____

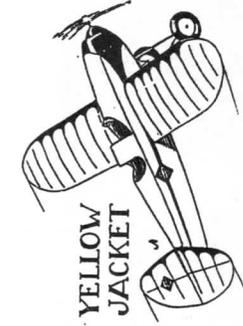
City, State _____ Zip _____

Send *all* renewals, changes-of-address, new applications, and membership questions to the Membership Office.

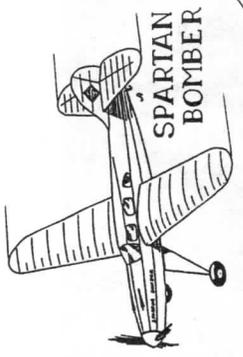




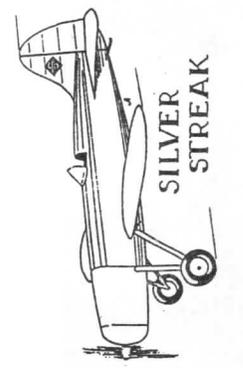
THUNDERBOLT



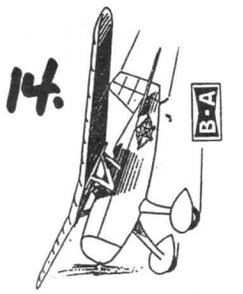
YELLOW JACKET



SPARTAN BOMBER



SILVER STREAK



B-A

JIMMIE ALLEN

JIMMIE ALLEN

1997 JIMMIE ALLEN NORTH AMERICAN CHAMPIONSHIP

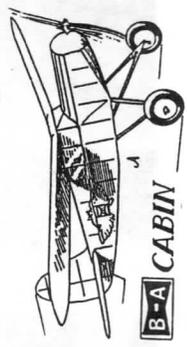
This is a postal championship contest for U.S. and Canadian model airplane clubs flying Jimmie Allen models. A participating club will select any desired date to hold its contest during the months of July, August or September, 1997. The club score will be the sum of the total 3-flight scores of the three highest-scoring club members in the club's contest. The fourth-highest time for the three team members should be reported too, as this will be used as a tie-breaker if two teams have a tie score based on the first three flights of the three team members. The club results should be reported as soon after the contest as practicable, using the attached form. Entries postmarked later than the 6th of October, 1997, will not be eligible. Each team that enters will receive the final results shortly after the close of the contest, and the winning club will receive and hold the perpetual Jimmie Allen North American Championship Trophy for one year. The winning club agrees, as a condition of this entry, to sponsor the following year's postal championship contest.

CONTEST RULES

1. Entry must be a recognized Jimmie Allen design.
2. Entrant must be the builder of the model.
3. Model must be flown in its original size (no scaling) with original outlines and cross-sections, including airfoils, dihedral and wheel diameter.
4. Propeller diameter will be no larger than shown on the plan or provided in the kit. If no kit is available and the plan does not show it, the propeller diameter shall not exceed 33% of wingspan. Propeller may be any pitch. Wood or plastic propeller may be used.
5. No folding propellers, but free-wheeling is OK.
6. No limit on rubber motor size or model weight, but reducing structure, wood sizes or covering material is not permitted.
7. Strengthening the structure and minor changes to accommodate a winding tube and/or dethermalizer are OK.

FLIGHT RULES

1. All flights must be Rise-Off-Ground from earth or a suitable long hard surface, such as a sheet of plywood or a table provided by the club.
2. The contestant's score will be the sum, in seconds, of the three longest flights of six attempts. Maximum flight time is 120 seconds (was 180 seconds last year). Flights under 20 seconds are not official and need not be counted.
3. Any tie scores between clubs will be resolved by totaling the fourth highest flight time of the team's 3 members, the highest total winning.



B-A CABIN



JIMMIE ALLEN MODELS AND PLAN SOURCES

These models have been identified as "Jimmie Allen" by their present plan suppliers, as listed below:

Name/Wingspan	by or for	Present Supplier*
B-A ("Skokie") 25"	Easy Built	EBM (kit), JP, OMS
B-A (Parasol) 28"	Ontario Model	EBM (kit), JP
Blue Flash 24"	Pocahontas Oil	JP, OMS
Bluebird 38"	Skelly Oil	JP, OMS**
Silver Streak 32"	Skelly Oil	JP, OMS
Sky Chief 40"	Country Club Aero	JP
Skyraider 26"	Skelly Oil	JP, OMS
Spartan Bomber 32"	Skelly Oil	JP, OMS
Special 20"	Reginald Denny	JP
Thunderbolt 22"	Toledo Model	JP
Thunderbolt 24"	Skelly Oil	JP, OMS
Yellow Jacket 26"	Skelly Oil	JP, OMS

* Supplier Code:

- EBM: Easy Built Models. Kit #FF-12 is the "Skokie" cabin design and kit #FF-68 is the parasol design.

- JP: John Pond Old Time Plan Service, P.O. Box 90310, San Jose, CA 95109; telephone (408) 292-3382, 10 am to 3pm, Tuesday and Friday only.

- OMS: Oldtimer Model Supply, 1924 E. Edinger, Santa Ana, CA 92705. Tel. (714) 258-0805. (OMS also carries Jimmie Allen wheels, prop blanks, etc.)

** The JP plan is a duplicate of the original, and authentic, but is half-size. The OMS is full size, redrawn by Jim Noonan, but contains some alterations.

FAC SQUADRONS

For a list of all FAC Squadrans send a self addressed, stamped envelope to; FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

Illustrated by Jim Aleback

MODELS

THE 1997 SPRING INDOOR FLING

An AMA Sanctioned Class AAA Contest



Presented by:

When: Sunday, May 4th from 8:00AM - 8:00 PM

Where: "INSIDE SWING" Golf Dome, Flint, MI

A CATEGORY III SITE

Event Schedule:

- 8:00 AM - 9:45 AM.....HLG plus Standard and Unlimited Class Catapult Glider
- 9:00 AM.....Bostonian Judging
- 9:45 AM - 2:30 PM.....7 Gram Bostonian, 7 Gram No-Cal Scale, Limited Penny Plane, EZB, Mini-Stick and Mini-Stick Mass Launch

1:00 PM.....Scale Judging

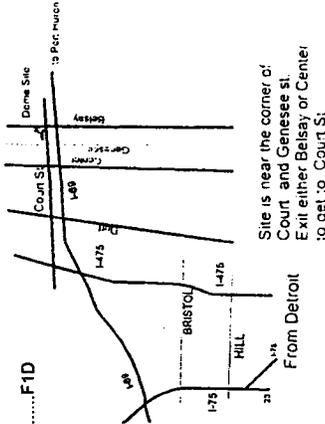
2:30 PM - 5:00 PM.....FAC Scale, FAC Peanut, Golden Age Scale, WWI and WWII Mass Launches

5:00 PM - 8:00 PM.....F1D

Entry Fee \$20.00

CONTEST DIRECTORS:

- George Lewis (810) 329-6833
- Dave Livesay (810) 232-0354
- Don Lang (810) 751-3281



Site is near the corner of Court and Genesee St. Exit either Betsy or Center to get to Court St.

1997 Erie Contest Calendar, Prangmore Field	MAY 10			
	JUNE 7			
	AUGUST 9			
	SEPTEMBER 27 (sample)			

PRIZES AND KANONES AWARDED AS WARRANTED

FAC Scale	X	X	X	X
FAC Peanut	X	X	X	X
Hi-wing Peanut	X	X	X	X
Embryo	X	X	X	X
Golden Age Civil Scale	X	X	X	X
FAC O.T. Rubber	X	X	X	X
Jumbo	X	X	X	X
Dime Scale	X	X	X	X

MASS LAUNCH EVENTS - PRIZES AND KANONE AS WARRANTED

Greve Race	X	X	X	X
Thompson Race	X	X	X	X
WWI Dogfight	X	X	X	X
WWII Combat	X	X	X	X

KANONE AWARDED AS WARRANTED

Modern Military	X	X	X
Golden Age Military	X	X	X
Experimental/Homebuilt/Ultralight Peanut	X	X	X
Comet kit/plan Scale	X	X	X
Pioneer	X	X	X
FAC Power Scale	X	X	X
No-Cal	X	X	X

CLUB INFORMATION For more information call: Area code: (814)-
 Lin Reichel.... 833-0314 Vic Didelot... 838-3263 Joe Barna.... 833-4985
 Ross Mayo... 833-6855 Dave Niedzielski... 474-2268

June 14, 1997...Dayton Sector Skirmish, PAC, Wright Field, WP-AFB, Dayton, Ohio. 10 FAC events plus others. CD, Frank Scott, 6633 Lefevre Rd., Casstown, Ohio, 45312. (937) 335-3057.



READING INDOOR AIR RACES
 SATURDAY MAY 10, 1997 - 9AM to 4PM
 DK1 HANGAR - READING AIRPORT - READING, PA

EVENTS FLOWN ALL DAY MASS LAUNCH EVENTS ***

- FAC SCALE **** WORLD WAR I 11AM
- POWER SCALE POST WWI MILITARY* 12PM
- DIME SCALE ** DIME SCALE 12:45PM
- GOLDEN AGE SCALE ** PEANUT SCALE 1:30PM
- 5 GM NO-CAL NO-CAL 2PM
- 10 GM BOSTONIAN BOSTONIAN 3PM
- HARVEY WALLBANGER*****

FAC RULES - JUDGING STARTS AT 10AM
TROPHIES AWARDED THROUGH THIRD PLACE

- AIRCRAFT ENTERED IN A DIME EVENT, CAN ONLY FLY IN OTHER DIME EVENTS
- * ANY MILITARY AIRCRAFT FROM 1919 TO THE PRESENT
- ** TOTAL OF THREE OFFICIAL FLIGHTS IS SCORE
- *** ONE MASS LAUNCH PER AIRCRAFT
- **** INCLUDES PEANUT AND JUMBO AIRCRAFT
- ***** HARVEY WALLBANGER AWARD GOES TO FLYER WITH ALTITUDE

SPONSORED BY THE SKYSCALERS

CONTEST DIRECTORS:

- TOM HALLMAN - 610-395-5656
- JOHN HOUCK - 610-488-6235



SKYSTERS LOST

Since the last issue of the newsletter we have lost five club members. They are; Jim McPheat, Ed Bergman, Dick Johnson, Bob Wynne and Lloyd Wood. They will be sadly missed by family and friends. Our sympathies go out to their loved ones.

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SASE for complete price list Shop hours: 8:00AM to 3:00PM Mon. - Fri.

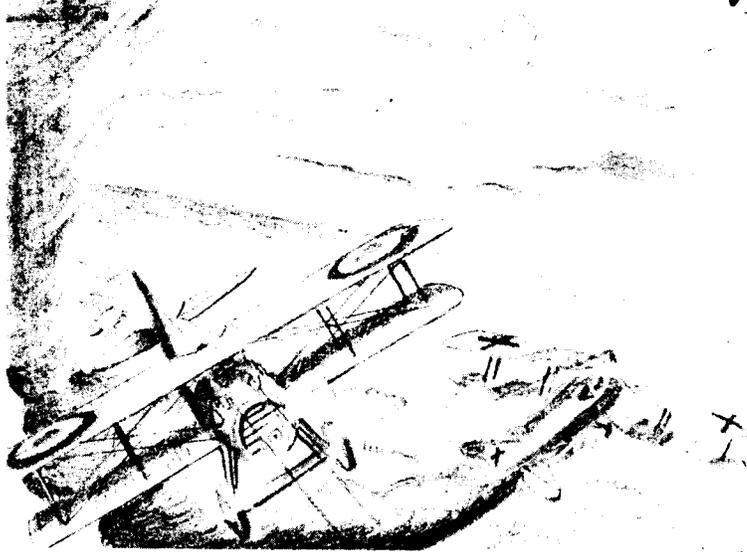
GRAIN & DENSITY SELECTION (50% SURCHARGE)
MFGRS & DEALERS: SEND FOR RESELLER PROGRAM
Prices subject to change

4/97

BALSA STICKS <table border="1"> <tr><th colspan="2">1/16 INCH</th><th colspan="2">3/32 INCH</th><th colspan="2">1/4 INCH</th><th colspan="2">3/8 INCH</th><th colspan="2">1/2 INCH</th></tr> <tr><td>1/16 x 1/16</td><td>.10</td><td>3/32 x 1/16</td><td>.10</td><td>1/4 x 1/4</td><td>.22</td><td>3/8 x 3/8</td><td>.27</td><td>1/2 x 1/2</td><td>.30</td></tr> <tr><td>1/16 x 3/32</td><td>.10</td><td>3/32 x 3/32</td><td>.11</td><td>1/4 x 3/8</td><td>.27</td><td>3/8 x 1/2</td><td>.33</td><td>1/2 x 3/4</td><td>.37</td></tr> <tr><td>1/16 x 1/8</td><td>.10</td><td>3/32 x 1/8</td><td>.14</td><td>1/4 x 1/2</td><td>.29</td><td>3/8 x 1/2</td><td>.37</td><td>1/2 x 1/2</td><td>.42</td></tr> <tr><td>1/16 x 3/16</td><td>.11</td><td>3/32 x 3/16</td><td>.15</td><td>1/4 x 5/8</td><td>.37</td><td>3/8 x 1/2</td><td>.42</td><td>1/2 x 3/4</td><td>.48</td></tr> <tr><td>1/16 x 1/4</td><td>.12</td><td>3/32 x 1/4</td><td>.16</td><td>1/4 x 3/4</td><td>.42</td><td>3/8 x 1/2</td><td>.48</td><td>1/2 x 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3/4</td><td>2.00</td></tr> <tr><td>3/4 INCH</td><td>.58</td><td>3/32 x 3/8</td><td>.15</td><td>3/8 x 3/8</td><td>2.00</td><td>3/8 x 1/2</td><td>2.15</td><td>1/2 x 3/4</td><td>2.30</td></tr> <tr><td>1 INCH</td><td>.68</td><td>3/32 x 1/2</td><td>.19</td><td>3/8 x 3/8</td><td>2.30</td><td>3/8 x 1/2</td><td>2.45</td><td>1/2 x 3/4</td><td>2.60</td></tr> <tr><td>1 1/2 INCH</td><td>.78</td><td>3/32 x 3/4</td><td>.26</td><td>3/8 x 3/8</td><td>2.60</td><td>3/8 x 1/2</td><td>2.75</td><td>1/2 x 3/4</td><td>2.90</td></tr> <tr><td>2 INCH</td><td>.88</td><td>3/32 x 1/8</td><td>.12</td><td>3/8 x 3/8</td><td>2.90</td><td>3/8 x 1/2</td><td>3.00</td><td>1/2 x 3/4</td><td>3.15</td></tr> <tr><td>3 INCH</td><td>.98</td><td>3/32 x 3/16</td><td>.13</td><td>3/8 x 3/8</td><td>3.15</td><td>3/8 x 1/2</td><td>3.30</td><td>1/2 x 3/4</td><td>3.45</td></tr> <tr><td>4 INCH</td><td>1.08</td><td>3/32 x 1/4</td><td>.14</td><td>3/8 x 3/8</td><td>3.45</td><td>3/8 x 1/2</td><td>3.60</td><td>1/2 x 3/4</td><td>3.75</td></tr> <tr><td>5 INCH</td><td>1.18</td><td>3/32 x 3/8</td><td>.15</td><td>3/8 x 3/8</td><td>3.75</td><td>3/8 x 1/2</td><td>3.90</td><td>1/2 x 3/4</td><td>4.05</td></tr> <tr><td>6 INCH</td><td>1.28</td><td>3/32 x 1/2</td><td>.19</td><td>3/8 x 3/8</td><td>4.05</td><td>3/8 x 1/2</td><td>4.20</td><td>1/2 x 3/4</td><td>4.35</td></tr> <tr><td>8 INCH</td><td>1.48</td><td>3/32 x 3/4</td><td>.26</td><td>3/8 x 3/8</td><td>4.35</td><td>3/8 x 1/2</td><td>4.50</td><td>1/2 x 3/4</td><td>4.65</td></tr> <tr><td>10 INCH</td><td>1.68</td><td>3/32 x 1/8</td><td>.12</td><td>3/8 x 3/8</td><td>4.65</td><td>3/8 x 1/2</td><td>4.80</td><td>1/2 x 3/4</td><td>4.95</td></tr> <tr><td>12 INCH</td><td>1.88</td><td>3/32 x 3/16</td><td>.13</td><td>3/8 x 3/8</td><td>4.95</td><td>3/8 x 1/2</td><td>5.10</td><td>1/2 x 3/4</td><td>5.25</td></tr> <tr><td>14 INCH</td><td>2.08</td><td>3/32 x 1/4</td><td>.14</td><td>3/8 x 3/8</td><td>5.25</td><td>3/8 x 1/2</td><td>5.40</td><td>1/2 x 3/4</td><td>5.55</td></tr> <tr><td>16 INCH</td><td>2.28</td><td>3/32 x 3/8</td><td>.15</td><td>3/8 x 3/8</td><td>5.55</td><td>3/8 x 1/2</td><td>5.70</td><td>1/2 x 3/4</td><td>5.85</td></tr> <tr><td>18 INCH</td><td>2.48</td><td>3/32 x 1/2</td><td>.19</td><td>3/8 x 3/8</td><td>5.85</td><td>3/8 x 1/2</td><td>6.00</td><td>1/2 x 3/4</td><td>6.15</td></tr> <tr><td>20 INCH</td><td>2.68</td><td>3/32 x 3/4</td><td>.26</td><td>3/8 x 3/8</td><td>6.15</td><td>3/8 x 1/2</td><td>6.30</td><td>1/2 x 3/4</td><td>6.45</td></tr> <tr><td>24 INCH</td><td>3.08</td><td>3/32 x 1/8</td><td>.12</td><td>3/8 x 3/8</td><td>6.45</td><td>3/8 x 1/2</td><td>6.60</td><td>1/2 x 3/4</td><td>6.75</td></tr> <tr><td>30 INCH</td><td>3.68</td><td>3/32 x 3/16</td><td>.13</td><td>3/8 x 3/8</td><td>6.75</td><td>3/8 x 1/2</td><td>6.90</td><td>1/2 x 3/4</td><td>7.05</td></tr> <tr><td>36 INCH</td><td>4.28</td><td>3/32 x 1/4</td><td>.14</td><td>3/8 x 3/8</td><td>7.05</td><td>3/8 x 1/2</td><td>7.20</td><td>1/2 x 3/4</td><td>7.35</td></tr> <tr><td>42 INCH</td><td>4.88</td><td>3/32 x 3/8</td><td>.15</td><td>3/8 x 3/8</td><td>7.35</td><td>3/8 x 1/2</td><td>7.50</td><td>1/2 x 3/4</td><td>7.65</td></tr> <tr><td>48 INCH</td><td>5.48</td><td>3/32 x 1/2</td><td>.19</td><td>3/8 x 3/8</td><td>7.65</td><td>3/8 x 1/2</td><td>7.80</td><td>1/2 x 3/4</td><td>7.95</td></tr> <tr><td>54 INCH</td><td>6.08</td><td>3/32 x 3/4</td><td>.26</td><td>3/8 x 3/8</td><td>7.95</td><td>3/8 x 1/2</td><td>8.10</td><td>1/2 x 3/4</td><td>8.25</td></tr> <tr><td>60 INCH</td><td>6.68</td><td>3/32 x 1/8</td><td>.12</td><td>3/8 x 3/8</td><td>8.25</td><td>3/8 x 1/2</td><td>8.40</td><td>1/2 x 3/4</td><td>8.55</td></tr> <tr><td>72 INCH</td><td>7.68</td><td>3/32 x 3/16</td><td>.13</td><td>3/8 x 3/8</td><td>8.55</td><td>3/8 x 1/2</td><td>8.70</td><td>1/2 x 3/4</td><td>8.85</td></tr> <tr><td>84 INCH</td><td>8.68</td><td>3/32 x 1/4</td><td>.14</td><td>3/8 x 3/8</td><td>8.85</td><td>3/8 x 1/2</td><td>9.00</td><td>1/2 x 3/4</td><td>9.15</td></tr> <tr><td>96 INCH</td><td>9.68</td><td>3/32 x 3/8</td><td>.15</td><td>3/8 x 3/8</td><td>9.15</td><td>3/8 x 1/2</td><td>9.30</td><td>1/2 x 3/4</td><td>9.45</td></tr> <tr><td>108 INCH</td><td>10.68</td><td>3/32 x 1/2</td><td>.19</td><td>3/8 x 3/8</td><td>9.45</td><td>3/8 x 1/2</td><td>9.60</td><td>1/2 x 3/4</td><td>9.75</td></tr> <tr><td>120 INCH</td><td>11.68</td><td>3/32 x 3/4</td><td>.26</td><td>3/8 x 3/8</td><td>9.75</td><td>3/8 x 1/2</td><td>9.90</td><td>1/2 x 3/4</td><td>10.05</td></tr> </table>		1/16 INCH		3/32 INCH		1/4 INCH		3/8 INCH		1/2 INCH		1/16 x 1/16	.10	3/32 x 1/16	.10	1/4 x 1/4	.22	3/8 x 3/8	.27	1/2 x 1/2	.30	1/16 x 3/32	.10	3/32 x 3/32	.11	1/4 x 3/8	.27	3/8 x 1/2	.33	1/2 x 3/4	.37	1/16 x 1/8	.10	3/32 x 1/8	.14	1/4 x 1/2	.29	3/8 x 1/2	.37	1/2 x 1/2	.42	1/16 x 3/16	.11	3/32 x 3/16	.15	1/4 x 5/8	.37	3/8 x 1/2	.42	1/2 x 3/4	.48	1/16 x 1/4	.12	3/32 x 1/4	.16	1/4 x 3/4	.42	3/8 x 1/2	.48	1/2 x 3/4	.58	1/16 x 3/8	.13	3/32 x 3/8	.17	3/8 x 3/8	.48	3/8 x 1/2	.58	1/2 x 3/4	.70	1/16 x 1/2	.15	3/32 x 1/2	.21	3/8 x 3/8	.58	3/8 x 1/2	.70	1/2 x 3/4	.85	1/16 x 3/4	.22	3/32 x 3/4	.29	3/8 x 3/8	.85	3/8 x 1/2	.95	1/2 x 3/4	1.10	1/8 INCH	.28	3/32 x 1/8	.12	3/8 x 3/8	1.10	3/8 x 1/2	1.25	1/2 x 3/4	1.40	3/16 INCH	.38	3/32 x 3/16	.13	3/8 x 3/8	1.40	3/8 x 1/2	1.55	1/2 x 3/4	1.70	1/2 INCH	.48	3/32 x 1/4	.14	3/8 x 3/8	1.70	3/8 x 1/2	1.85	1/2 x 3/4	2.00	3/4 INCH	.58	3/32 x 3/8	.15	3/8 x 3/8	2.00	3/8 x 1/2	2.15	1/2 x 3/4	2.30	1 INCH	.68	3/32 x 1/2	.19	3/8 x 3/8	2.30	3/8 x 1/2	2.45	1/2 x 3/4	2.60	1 1/2 INCH	.78	3/32 x 3/4	.26	3/8 x 3/8	2.60	3/8 x 1/2	2.75	1/2 x 3/4	2.90	2 INCH	.88	3/32 x 1/8	.12	3/8 x 3/8	2.90	3/8 x 1/2	3.00	1/2 x 3/4	3.15	3 INCH	.98	3/32 x 3/16	.13	3/8 x 3/8	3.15	3/8 x 1/2	3.30	1/2 x 3/4	3.45	4 INCH	1.08	3/32 x 1/4	.14	3/8 x 3/8	3.45	3/8 x 1/2	3.60	1/2 x 3/4	3.75	5 INCH	1.18	3/32 x 3/8	.15	3/8 x 3/8	3.75	3/8 x 1/2	3.90	1/2 x 3/4	4.05	6 INCH	1.28	3/32 x 1/2	.19	3/8 x 3/8	4.05	3/8 x 1/2	4.20	1/2 x 3/4	4.35	8 INCH	1.48	3/32 x 3/4	.26	3/8 x 3/8	4.35	3/8 x 1/2	4.50	1/2 x 3/4	4.65	10 INCH	1.68	3/32 x 1/8	.12	3/8 x 3/8	4.65	3/8 x 1/2	4.80	1/2 x 3/4	4.95	12 INCH	1.88	3/32 x 3/16	.13	3/8 x 3/8	4.95	3/8 x 1/2	5.10	1/2 x 3/4	5.25	14 INCH	2.08	3/32 x 1/4	.14	3/8 x 3/8	5.25	3/8 x 1/2	5.40	1/2 x 3/4	5.55	16 INCH	2.28	3/32 x 3/8	.15	3/8 x 3/8	5.55	3/8 x 1/2	5.70	1/2 x 3/4	5.85	18 INCH	2.48	3/32 x 1/2	.19	3/8 x 3/8	5.85	3/8 x 1/2	6.00	1/2 x 3/4	6.15	20 INCH	2.68	3/32 x 3/4	.26	3/8 x 3/8	6.15	3/8 x 1/2	6.30	1/2 x 3/4	6.45	24 INCH	3.08	3/32 x 1/8	.12	3/8 x 3/8	6.45	3/8 x 1/2	6.60	1/2 x 3/4	6.75	30 INCH	3.68	3/32 x 3/16	.13	3/8 x 3/8	6.75	3/8 x 1/2	6.90	1/2 x 3/4	7.05	36 INCH	4.28	3/32 x 1/4	.14	3/8 x 3/8	7.05	3/8 x 1/2	7.20	1/2 x 3/4	7.35	42 INCH	4.88	3/32 x 3/8	.15	3/8 x 3/8	7.35	3/8 x 1/2	7.50	1/2 x 3/4	7.65	48 INCH	5.48	3/32 x 1/2	.19	3/8 x 3/8	7.65	3/8 x 1/2	7.80	1/2 x 3/4	7.95	54 INCH	6.08	3/32 x 3/4	.26	3/8 x 3/8	7.95	3/8 x 1/2	8.10	1/2 x 3/4	8.25	60 INCH	6.68	3/32 x 1/8	.12	3/8 x 3/8	8.25	3/8 x 1/2	8.40	1/2 x 3/4	8.55	72 INCH	7.68	3/32 x 3/16	.13	3/8 x 3/8	8.55	3/8 x 1/2	8.70	1/2 x 3/4	8.85	84 INCH	8.68	3/32 x 1/4	.14	3/8 x 3/8	8.85	3/8 x 1/2	9.00	1/2 x 3/4	9.15	96 INCH	9.68	3/32 x 3/8	.15	3/8 x 3/8	9.15	3/8 x 1/2	9.30	1/2 x 3/4	9.45	108 INCH	10.68	3/32 x 1/2	.19	3/8 x 3/8	9.45	3/8 x 1/2	9.60	1/2 x 3/4	9.75	120 INCH	11.68	3/32 x 3/4	.26	3/8 x 3/8	9.75	3/8 x 1/2	9.90	1/2 x 3/4	10.05	BALSA SHEETS <table border="1"> <tr><th colspan="2">1 INCH</th><th colspan="2">3/8 INCH</th><th colspan="2">1/2 INCH</th></tr> <tr><td>1/16 x 1</td><td>29</td><td>1/16 x 1/2</td><td>29</td><td>1/16 x 1</td><td>29</td></tr> <tr><td>3/32 x 1</td><td>31</td><td>3/32 x 1/2</td><td>31</td><td>3/32 x 1</td><td>31</td></tr> <tr><td>1/8 x 1</td><td>35</td><td>1/8 x 1/2</td><td>35</td><td>1/8 x 1</td><td>35</td></tr> <tr><td>3/16 x 1</td><td>38</td><td>3/16 x 1/2</td><td>38</td><td>3/16 x 1</td><td>38</td></tr> <tr><td>1/4 x 1</td><td>42</td><td>1/4 x 1/2</td><td>42</td><td>1/4 x 1</td><td>42</td></tr> <tr><td>3/8 x 1</td><td>47</td><td>3/8 x 1/2</td><td>47</td><td>3/8 x 1</td><td>47</td></tr> <tr><td>1/2 x 1</td><td>52</td><td>1/2 x 1/2</td><td>52</td><td>1/2 x 1</td><td>52</td></tr> <tr><td>3/4 x 1</td><td>57</td><td>3/4 x 1/2</td><td>57</td><td>3/4 x 1</td><td>57</td></tr> <tr><td>1 x 1</td><td>62</td><td>1 x 1/2</td><td>62</td><td>1 x 1</td><td>62</td></tr> <tr><td>1 1/2 x 1</td><td>67</td><td>1 1/2 x 1/2</td><td>67</td><td>1 1/2 x 1</td><td>67</td></tr> <tr><td>2 x 1</td><td>72</td><td>2 x 1/2</td><td>72</td><td>2 x 1</td><td>72</td></tr> <tr><td>2 1/2 x 1</td><td>77</td><td>2 1/2 x 1/2</td><td>77</td><td>2 1/2 x 1</td><td>77</td></tr> <tr><td>3 x 1</td><td>82</td><td>3 x 1/2</td><td>82</td><td>3 x 1</td><td>82</td></tr> <tr><td>3 1/2 x 1</td><td>87</td><td>3 1/2 x 1/2</td><td>87</td><td>3 1/2 x 1</td><td>87</td></tr> <tr><td>4 x 1</td><td>92</td><td>4 x 1/2</td><td>92</td><td>4 x 1</td><td>92</td></tr> <tr><td>4 1/2 x 1</td><td>97</td><td>4 1/2 x 1/2</td><td>97</td><td>4 1/2 x 1</td><td>97</td></tr> <tr><td>5 x 1</td><td>102</td><td>5 x 1/2</td><td>102</td><td>5 x 1</td><td>102</td></tr> <tr><td>5 1/2 x 1</td><td>107</td><td>5 1/2 x 1/2</td><td>107</td><td>5 1/2 x 1</td><td>107</td></tr> <tr><td>6 x 1</td><td>112</td><td>6 x 1/2</td><td>112</td><td>6 x 1</td><td>112</td></tr> <tr><td>6 1/2 x 1</td><td>117</td><td>6 1/2 x 1/2</td><td>117</td><td>6 1/2 x 1</td><td>117</td></tr> <tr><td>7 x 1</td><td>122</td><td>7 x 1/2</td><td>122</td><td>7 x 1</td><td>122</td></tr> <tr><td>7 1/2 x 1</td><td>127</td><td>7 1/2 x 1/2</td><td>127</td><td>7 1/2 x 1</td><td>127</td></tr> <tr><td>8 x 1</td><td>132</td><td>8 x 1/2</td><td>132</td><td>8 x 1</td><td>132</td></tr> <tr><td>8 1/2 x 1</td><td>137</td><td>8 1/2 x 1/2</td><td>137</td><td>8 1/2 x 1</td><td>137</td></tr> <tr><td>9 x 1</td><td>142</td><td>9 x 1/2</td><td>142</td><td>9 x 1</td><td>142</td></tr> <tr><td>9 1/2 x 1</td><td>147</td><td>9 1/2 x 1/2</td><td>147</td><td>9 1/2 x 1</td><td>147</td></tr> <tr><td>10 x 1</td><td>152</td><td>10 x 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1/2	57	3/4 x 1	57	1 x 1	62	1 x 1/2	62	1 x 1	62	1 1/2 x 1	67	1 1/2 x 1/2	67	1 1/2 x 1	67	2 x 1	72	2 x 1/2	72	2 x 1	72	2 1/2 x 1	77	2 1/2 x 1/2	77	2 1/2 x 1	77	3 x 1	82	3 x 1/2	82	3 x 1	82	3 1/2 x 1	87	3 1/2 x 1/2	87	3 1/2 x 1	87	4 x 1	92	4 x 1/2	92	4 x 1	92	4 1/2 x 1	97	4 1/2 x 1/2	97	4 1/2 x 1	97	5 x 1	102	5 x 1/2	102	5 x 1	102	5 1/2 x 1	107	5 1/2 x 1/2	107	5 1/2 x 1	107	6 x 1	112	6 x 1/2	112	6 x 1	112	6 1/2 x 1	117	6 1/2 x 1/2	117	6 1/2 x 1	117	7 x 1	122	7 x 1/2	122	7 x 1	122	7 1/2 x 1	127	7 1/2 x 1/2	127	7 1/2 x 1	127	8 x 1	132	8 x 1/2	132	8 x 1	132	8 1/2 x 1	137	8 1/2 x 1/2	137	8 1/2 x 1	137	9 x 1	142	9 x 1/2	142	9 x 1	142	9 1/2 x 1	147	9 1/2 x 1/2	147	9 1/2 x 1	147	10 x 1	152	10 x 1/2	152	10 x 1	152	10 1/2 x 1	157	10 1/2 x 1/2	157	10 1/2 x 1	157	11 x 1	162	11 x 1/2	162	11 x 1	162	11 1/2 x 1	167	11 1/2 x 1/2	167	11 1/2 x 1	167	12 x 1	172	12 x 1/2	172	12 x 1	172	12 1/2 x 1	177	12 1/2 x 1/2	177	12 1/2 x 1	177	13 x 1	182	13 x 1/2	182	13 x 1	182	13 1/2 x 1	187	13 1/2 x 1/2	187	13 1/2 x 1	187	14 x 1	192	14 x 1/2	192	14 x 1	192	14 1/2 x 1	197	14 1/2 x 1/2	197	14 1/2 x 1	197	15 x 1	202	15 x 1/2	202	15 x 1	202	15 1/2 x 1	207	15 1/2 x 1/2	207	15 1/2 x 1	207	16 x 1	212	16 x 1/2	212	16 x 1	212	16 1/2 x 1	217	16 1/2 x 1/2	217	16 1/2 x 1	217	17 x 1	222	17 x 1/2	222	17 x 1	222	17 1/2 x 1	227	17 1/2 x 1/2	227	17 1/2 x 1	227	18 x 1	232	18 x 1/2	232	18 x 1	232	18 1/2 x 1	237	18 1/2 x 1/2	237	18 1/2 x 1	237	19 x 1	242	19 x 1/2	242	19 x 1	242	19 1/2 x 1	247	19 1/2 x 1/2	247	19 1/2 x 1	247	20 x 1	252	20 x 1/2	252	20 x 1	252	20 1/2 x 1	257	20 1/2 x 1/2	257	20 1/2 x 1	257	21 x 1	262	21 x 1/2	262	21 x 1	262	21 1/2 x 1	267	21 1/2 x 1/2	267	21 1/2 x 1	267	22 x 1	272	22 x 1/2	272	22 x 1	272	22 1/2 x 1	277	22 1/2 x 1/2	277	22 1/2 x 1	277	23 x 1	282	23 x 1/2	282	23 x 1	282	23 1/2 x 1	287	23 1/2 x 1/2	287	23 1/2 x 1	287	24 x 1	292	24 x 1/2	292	24 x 1	292	24 1/2 x 1	297	24 1/2 x 1/2	297	24 1/2 x 1	297	25 x 1	302	25 x 1/2	302	25 x 1	302	25 1/2 x 1	307	25 1/2 x 1/2	307	25 1/2 x 1	307	26 x 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1/2	432	38 x 1	432	38 1/2 x 1	437	38 1/2 x 1/2	437	38 1/2 x 1	437	39 x 1	442	39 x 1/2	442	39 x 1	442	39 1/2 x 1	447	39 1/2 x 1/2	447	39 1/2 x 1	447	40 x 1	452	40 x 1/2	452	40 x 1	452	40 1/2 x 1	457	40 1/2 x 1/2	457	40 1/2 x 1	457	41 x 1	462	41 x 1/2	462	41 x 1	462	41 1/2 x 1	467	41 1/2 x 1/2	467	41 1/2 x 1	467	42 x 1	472	42 x 1/2	472	42 x 1	472	42 1/2 x 1	477	42 1/2 x 1/2	477	42 1/2 x 1	477	43 x 1	482	43 x 1/2	482	43 x 1	482	43 1/2 x 1	487	43 1/2 x 1/2	487	43 1/2 x 1	487	44 x 1	492	44 x 1/2	492	44 x 1	492	44 1/2 x 1	497	44 1/2 x 1/2	497	44 1/2 x 1	497	45 x 1	502	45 x 1/2	502	45 x 1	502	45 1/2 x 1	507	45 1/2 x 1/2	507	45 1/2 x 1	507	46 x 1	512	46 x 1/2	512	46 x 1	512	46 1/2 x 1	517	46 1/2 x 1/2	517	46 1/2 x 1	517	47 x 1	522	47 x 1/2	522	47 x 1	522	47 1/2 x 1	527	47 1/2 x 1/2	527	47 1/2 x 1	527	48 x 1	532	48 x 1/2	532	48 x 1	532	48 1/2 x 1	537	48 1/2 x 1/2	537	48 1/2 x 1	537	49 x 1	542	49 x 1/2	542	49 x 1	542	49 1/2 x 1	547	49 1/2 x 1/2	547	49 1/2 x 1	547	50 x 1	552	50 x 1/2	552	50 x 1	552	50 1/2 x 1	557	50 1/2 x 1/2	557	50 1/2 x 1	557	51 x 1	562	51 x 1/2	562	51 x 1	562	51 1/2 x 1	567	51 1/2 x 1/2	567	51 1/2 x 1	567	52 x 1	572	52 x 1/2	572	52 x 1	572	52 1/2 x 1	577	52 1/2 x 1/2	577	52 1/2 x 1	577	53 x 1	582	53 x 1/2	582	53 x 1	582	53 1/2 x 1	587
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did you know...?

- That one of the most outstanding aerial marksmen of the war was a Frenchman?
- That he often dispatched of an opponent with fewer bullets than probably any other airman of the war?
- That in all his flying and in his fighting career he always remained untouched by enemy bullets?
- That he was such a master of aerial tactics, continually out-thinking his adversaries that he returned from countless aerial battles with fewer bullet holes in his machine than probably any other fighter pilot of the war, and was never touched by a single enemy bullet?
- That on 30 September 1917 he downed a German two-seater piloted by Lt. Wissmann to whom the Germans had credited with the victory over Guynemer?
- That he scored a majority of his victories in multiple series; once bringing down five in one day, and six aircraft on another occasion?
- That not only was he France's Ace of Aces with 75 officially confirmed kills, but he was the Allied Ace of Aces as well?
- That he was *Capitaine René Paul Fonck of SPA 103 !*



* * Motor Sticks and Blown Motors * * Mumbo Jumbo #78 from the pen of the Glue Guru

Salutations, disciples! Today we shall ponder the results of motor stick experiments undertaken to develop explosion-proof rubber powered models, with results gathered in the course of flying three Jumbos equipped with generous SIG motors.

The motor stick, an ancient idea, employs a pole or bar running from noseblock to rear peg serving to mount the motor and carry all motor loads - tension and torque. Designed to be easily removed from the fuselage, the motor stick + motor is wound externally, and inserted only after going to full winds. Sturdily constructed, the stick shrugs off damage should the motor blow. Shards of motor are removed, a fresh motor inserted - right out in the open, where manipulation is easy - and the stick is ready to serve again. No matter what the fate of the motor, it would seem impossible to damage the fuselage. Does it work?

Not quite. The worst drawback is that fuselage damage can occur despite all the precautions. These result from mid-air bursts. I've had two, each shortly after launching, and suspect that it is possible to tear SIG strands just short of ultimate failure in the course of ordinary winding. The additional stress posed by strands thrashing about in power release is enough to complete the ripping process, and the motor lets go. The mid-air burst effect is somewhat muted by the presence of the motor stick, acting as a buffer, but fuselage damage can result. For comparison, I've blown at least a dozen motors over the same period while winding externally, without damage of any kind. In short, the stick does work most the time - but not always. It's possible that the very freedom of concern over winding explosions acts to spur the modeler on, to crank in more turns than prudent; those mid-air bursts may reflect only lack of prudence. Still, they did happen, and no matter what the source, remain a major disappointment.

A second drawback is the added weight of the stick. Three designs were tried: hollow single, hollow twin and solid punk single. Of these, the solid punk seemed best (about 9/16 inch square). This stick was fashioned of slightly rotten wood sent to me as packing by a foolish vendor who couldn't grasp the concept of punk wood as valuable. It is indeed, and at an honest 5 #/cubic foot punk wood lends itself to simple, light construction. Even so, the motor stick weight plus latching mechanism came to roughly 10% of the all-up flying weight - a significant damper on performance. If you are determined to squeeze every possible second out of your model, eschew motor sticks.

As for that 'latching mechanism', some device is necessary to keep the stick + prop + motor entity from simply departing the model in mid-air, to take on new life as a helicopter model. I've had it happen. There's something disturbing about this form of divorce and sex change. A quick acting, positive latch is essential after insertion - tape or a tight fit won't do.

Winding is best accomplished from the rear end. Instead of the usual rear peg, a hook is wanted to gather the strands and permit easy release from the stick, so as to attach to the winder. A stooze is best for the prop end. A long pin through both prop hook and stooze secures the motor and permits spirited winding.

All in all, the motor stick is best suited to the flier who is interested in long model life, even at the cost of a certain amount of performance. It isn't complicated, and it usually works - but unfortunately, sometimes it doesn't.

Send the new kid out for 100 feet of flight
line and five gallons of prop wash....

A GOODYEAR MIDGET RACER
IN PEANUT SCALE.

By Dave Stott.

Shortly after the end of World War Two some old hands at the racing game came up with the idea of a class for small airplanes that would keep costs down and spectator popularity up. By the nature of their size, the midgets powered by a Continental C-85 engine were within the price range of the avid enthusiast who was willing to build his own racer. Also, by the nature of their size, the entire race course would be within sight of all spectators. Something long missing from the traditional races flown by hopped up ex-warplanes. Rules were laid down that not only defined the machinery involved, but also pilot qualifications. Safety was the major ingredient. There would be no more of those flush cockpits that limited pilot vision so severely.

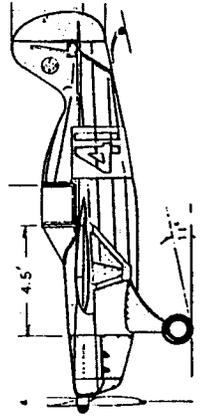
With a few exceptions, the early Goodyear racers were not a slick looking as they later became. Our subject, the Dixon Special, is one of those. It was built in Bulingham, N.C. by its designer, Tom Dixon, and raced in the 1948 Goodyear event piloted by Charles Bing. Let's have a look at the model plan.

No prototype has been built from these plans as yet, but having built another midget, experience has been gained. Make every effort to keep the nose light. To keep rubber knots from rubbing on the inside of the top of the fuselage no stringers have been used from formers #1 thru #4. Cover this area with light bond paper. LIGHT BOND. Do not add cheek cowl formers C1 and C2 until after the nose of the fuselage has been covered. Wrap a light bond paper covering around these formers adding an extension of the same material after the wing panels are in place to complete the cheek cowls as shown on the plan. The bottom aft end of each cheek cowl is open, while the top is closed by intersecting the wing upper surface.

Wing and stabilizer were colored a blue and white sunburst pattern, as indicated on the plan by "B" and "W". The vertical tail is blue with white registration lettering and the Kendall Oil logo which was a red disc with yellow lettering. Landing gear legs and fuselage were blue. The cheek cowls were white with the white continuing aft to form a tapered stripe that included a rectangle containing the race number "41". Wing struts and wheel hubs were white. Because the wing race number and registration overlay the sunburst pattern it is thought they might have been a contrasting color to both the blue and the white. Possibly red.

Info source for this plan is a 3-view drawing by Bob Hirsch and a photo in "Experimental Light Aircraft and Midget Racers" circa 1958 by Underwood and Galer. Incidentally, Bob Hirsch is working on a book dealing with the Midget Racer and has 3-view drawings for over 130 of them. He is at 8439 Dale St., Buena Park, CA 90620. Why not send him a buck and an SASE for his list. Included are many golden age and Schneider ships as well. Three views include cross sections and color schemes.

Well Peanutteers, you have a lot of airplane crammed into those 13 inches with this baby, Whattaya think....a mass launch event some day????



ANOTHER GOODYEAR MIDGET RACER — By Dave Stott.
IN PEANUT SCALE.

THIS

As a follow-up to the Dixon Special presented in the ~~last~~ issue of our good ol' newsletter, we offer all you stringer benders another chance at producing a neat pylon polisher with a name that sure rings some bells! Yep gang, this little aero tyke was dubbed the "BeeGee Baby" and was built in 1948 by Bob Granville. Was it the Bob Granville of pre-war Gee Bee fame? I have no idea, I am sorry to say. I am in hopes that Bob Hirsch's comming book on the midget racers will clear it up. Or perhaps Tom Mallen, our own GeeBee expert can do it for us. Regardless of it's parentage, she's a fine looking ship and worth a close look.

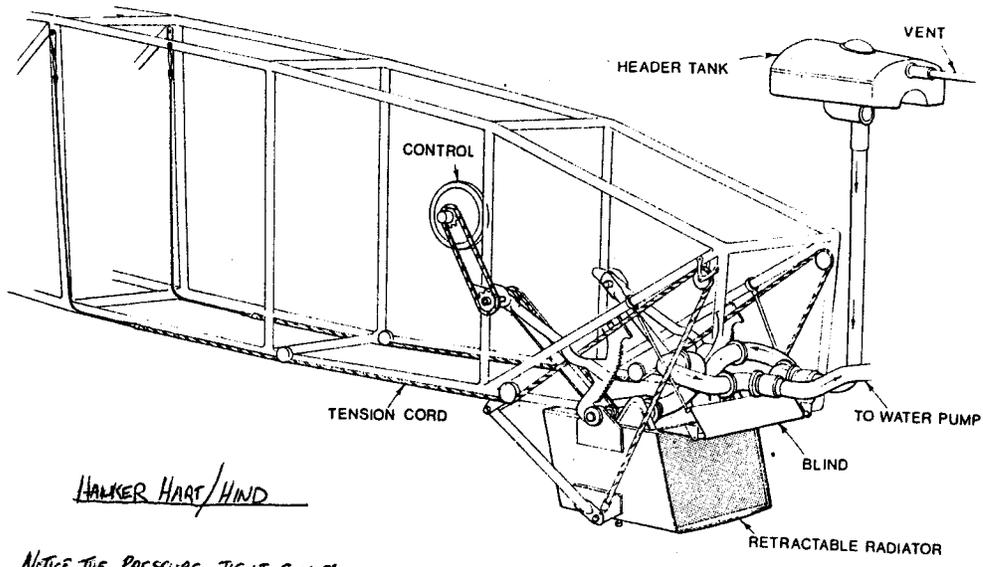
As with the Dixon Spl, no prototype model has been built from these drawings as yet. The general layout of the Bee Gee and the Dixon are very similar, so the same techniques are used in both design and building. Keep the nose as light as possible and use no center stringer on top to keep the rubber knots from hanging up as the motor unwinds. Use only light bond paper to cover nose areas. The cheek cowl formers are added after the nose has been covered. Cover only the outer curved portion of the cheek cowl with bond paper, fitting and trimming the after end to nest against the wing leading edges. The cheek cowls were left open at the ends to allow engine cooling air to escape and pass around the wing root to reduce drag.

The lower nose cowl is best made of foam in order to shape the radical contour change from the carburator inlet at former 1 to the belly shape at former 10. The step between former 10 and former 11 represents another exit for cooling air. The landing gear is simple and best made of .025 wire with bond paper fairings and balsa wheels. An extra cross member is in order in the fuselage where the flying wires tie into the lower longeron. Oddest of all is the clown's cap spinner. I wonder what the thinking was here?

Colors of the Bee Gee were basic airplane yellow with dark blue trim. This means the nose and belly of the fuselage and wing leading edges were blue. There is a color separation line on the plan to show this. It is assumed that the lettering was also dark blue as it appears the same shade as the trim in the one photo available. The clown cap spinner was yellow with a small blue stripe that began at the tip and spiraled down and around 3 times to end at the back plate. On a model this size, the spinner virtually disappears because of the size of our prop hubs. Wheel hubs have a dark blue and yellow "ying-yang" pattern on them. Kendall Oil logo is a red disc with yellow lettering. Prop was wood, so should be a yellowish hue.

Next issue will offer yet another Goodyear midget plan with a familiar name. The Thompson/Balboni Spl. Sure, we all know who Thompson is, but Balboni??

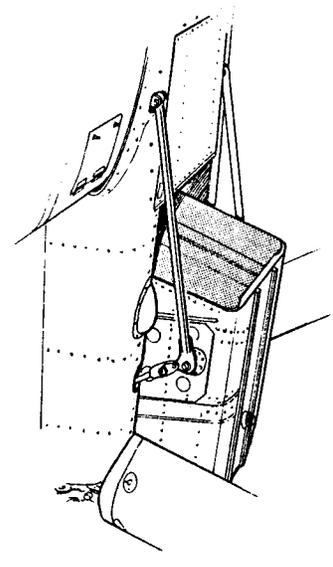
Here is a tip for safe indoor model recovery from Ken Hark, tape a feather, such as a large goose, chicken or turkey feather on the tip of your fishing pole. It is much more gentle!



HAWKER HART/HIND

NOTICE THE PRESSURE TIGHT SWIVEL JOINTS ON THE FORMED METAL RADIATOR HOSES.

JW



RETRACTABLE RADIATOR

HAWKER HART/HIND

FORWARD

FORWARD

VIM NEWMAN
 A CLEVELAND TERRACE
 HOBBART
 TN 46342-3418

DEAR LIND,

TO DATE I HAVE RECEIVED TWO COPIES OF FLYING ALES CLUB NEWS, AND I FIND THEM MOST ENJOYABLE AND INFORMATIVE. ALTHOUGH I AM LARGELY A SPORT AND SCULPTOR I HAVE NEVER LOST THE LOVE OF MY ROOTS I.E. FREE FLIGHT, AND IN THE WINTER I TRY TO FIND TIME FOR A LITTLE INDOOR RUBBER FLYING. SADLY - PRESSURE OF BUSINESS AND STAYING AHEAD OF THE REQUIREMENTS OF MODEL AIRPLANE NEWS AND ITS SISTER PUBLICATIONS GREATLY LIMITS MY BUILDING TIME. HAPPILY MY GOOD LADY ENCOURAGES ME TO TAKE UP THE X-ACTO KNIFE WHEN I'M ABLE AND I NOTICED, JUST BEFORE I POPPED INTO MY OFFICE TO DASH OFF THIS, THAT SHE HAD SET MY 20 YEAR OLD PEANUT ABC BORN RESERVATION PROJECT ON THE DINING TABLE, ALONG WITH MY SHEET OF GLASS AND ORANGE TISSUE. IF THAT ISN'T LOVING THEN I DON'T KNOW WHAT IS.....

ANYWAY, THE POINT OF MY NOTE IS THE DELIGHTFUL HAWKER HIND/HART PLAN IN THE SEPT. OCT '96 ISSUE. I NOTICED THE REMARK THAT THE AIRCRAFT'S RADIATOR VARIED IN SIZE ACCORDING TO ITS DUTY IN TROPICAL OR TEMPERATE CLIMES. IF THE MEMBERS WOULD NOT MIND A FEW WORDS OF ENLIGHTENMENT FROM AN OLD, LONG SERVICE, CAREER ROYAL AIR FORCE VETERAN THEY, MAY I SAY THAT IT WAS NOT SO. THESE TWO-SEAT AEROPLANES HAD RETRACTABLE RADIATORS. CONSEQUENTLY, WHILE FLYING IN COOLER TEMPERATURES THE RADIATOR WAS BARELY VISIBLE, BECAUSE MOST OF IT WAS UP INSIDE THE FUSELAGE WHERE IT HAD BEEN CRANKED ON ITS BUNGEE RUBBER COUNTER BALANCED MECHANISM.

I HAVE ENCLOSED TWO COPIES OF THE RADIATOR SYSTEM RIGHT OUT OF THE AEROPLANE'S MANUAL. UNLIKE THE HURRICANE'S BEAUTIFUL, PRESSURE RECOVERY DUCTED RADIATOR, THE BIPLANES HAD NO DUCT. THE CALDE COOKIE TIN LIKE CORE JUST HUNG OUT FOR ALL TO VIEW! COMPARE THE SHAPE OF THE RADIATOR WITH THE INCORRECT VERSION ON THE PLAN. I HOPE THE FOREGOING WILL BE OF INTEREST TO MEMBERS.

AND NOW A QUESTION. MY GOOD FRIEND AND FORMER COLLEAGUE, TOM HERR HAD A BEAUTIFULLY MACHINED, ALL ALUMINUM, VERNIER ADJUSTED RUBBER STRIPPED. WHEN I ASKED WHO MADE IT HE COULD NOT QUOTE RECALL FROM WHOM IT CAME. DOES ANYONE KNOW WHO MAKES THIS FINE PRODUCT AND ITS CURRENT PRICE?

WARM REGARDS

VIM
 S
 "PER AQUA AD ASTRA"

LOW GUMBANDERY

This note was inspired by Mr. Rottensox's "High Gumbandery" of FAC News Mar./April, 1996. This is a true story!

Some 50 years ago I became interested in gas powered model airplanes.

I took the bus downtown to the only hobby shop in town and announced to the proprietor, I would like to build a gas powered model airplane. He promptly disappeared into the back of the store and amid a cloud of dust emerged with a kit for me. The "Zombie". I took it home and did a fair job of building it. I'm still proud of that wing! It was true and as tight as a drum with nitrate dope.

Once it was built, I found engines were not too plentiful yet after the war (money too). So one fine day I took a large package of pudding from my Mother's cupboard and tied it into the engine bed of my Zombie.

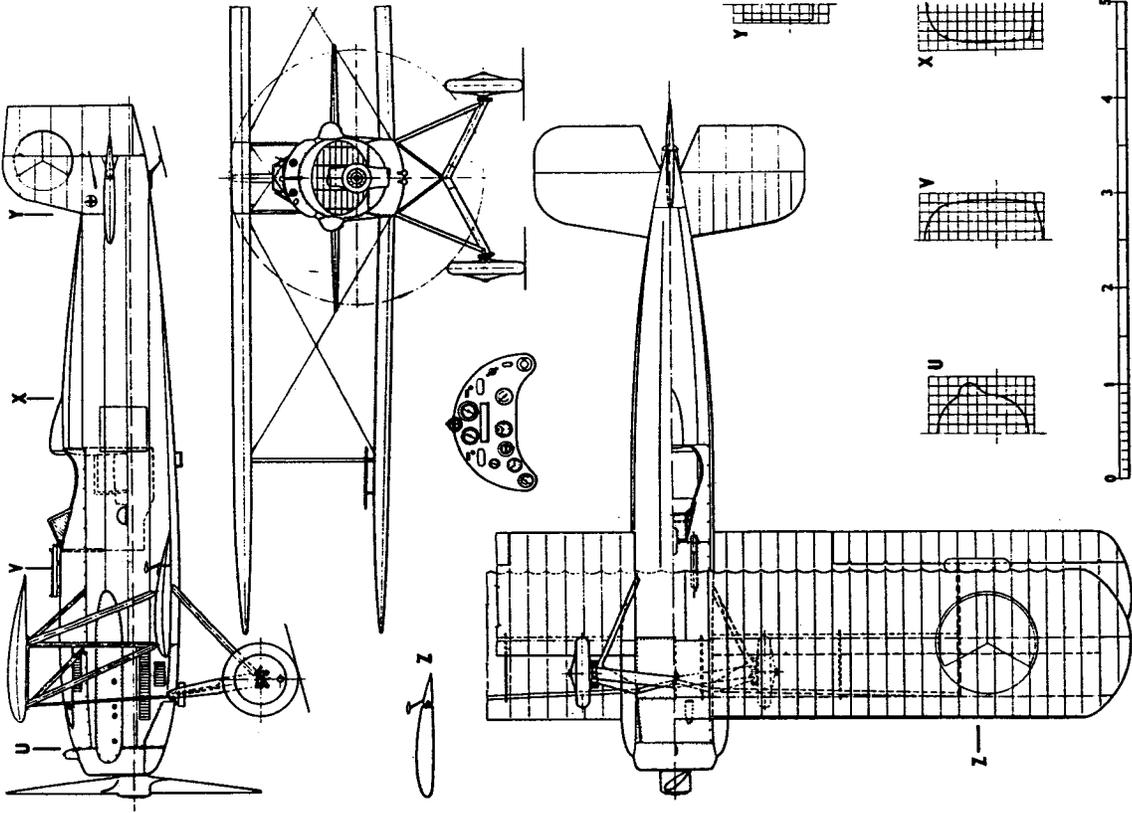
I attached a string to the nose and took it out into the driveway between our house and our neighbor's house. While towing it down the driveway, a strong gust of wind came up and the Zombie pulled the string out of my hand. My Zombie soared up, up and away, over the house next door! I recovered it in good shape, but, soon after, I discovered U-Control. I bought a Hurricane (.24) engine and put it in a Misbehave control line model and began my flying career.

Bill Stoutenburg

P.S., I ate the pudding, I don't remember what happened to the Zombie!

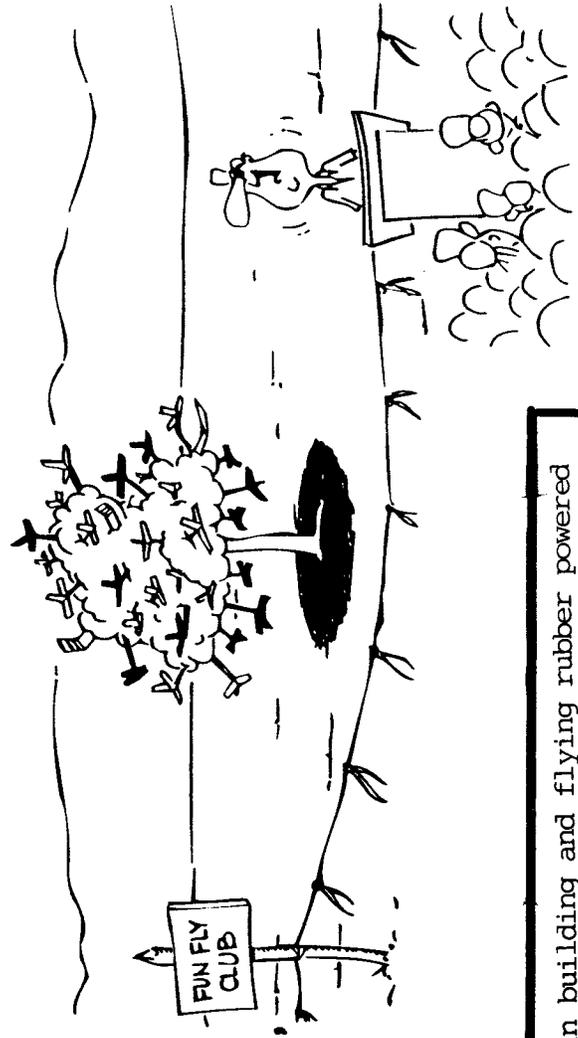
Submitted by Rick Dort

Avia Ba-33



Color scheme; Fuselage, rudder and tops of wing and stab are olive drab with the bottoms pale blue.

WANTED: Persons interested in building and flying rubber powered model airplanes only. Only people in the Lexington, Ky. area please. Jim McGaughran, 120 E. Main St., Apt. #1407, Lexington, Ky. 40507.



All in favor of cutting down the tree, say aye!

NOSE PLUGS AND THRUST SETTINGS

By Tim Lavender

I don't know a lot, but one thing I do know is that, when it comes to trimming out that beauty you have been working on, "It's what's up front that counts." To begin with, make sure that your nose plug fits snugly; otherwise, you will never know if the thrust is changing in flight or is always the same after each wind. The best way to achieve a snug fit is to make the nose plug longer with 1/8" sticks glued around the back plate. When the fit is right, it will not fall out in flight either.

I have tried various ways to set the thrust, such as using shims behind the nose piece, which is all right in the field as you trim out a model, but looks a mess and causes the nose to fall out in flight. I have also tried the tin bracket and screw combination, which works fine, but is somewhat troublesome, and can come loose. Lately, I have tried a new method for me which is simple, effective, and does not add any weight.

Start by using 1/16" inside diameter brass tubing in your nose block. Make it at least one half inch long so that it passes all the way through the block and protrudes out both sides about 1/16". Now rough it up with some coarse sand paper, and glue it in with only Ambroid (I keep mine in a syringe with the biggest needle I can find; grind the point off). You may want to begin with two degrees down thrust and three degrees right thrust. Now put on the propeller as normal, and go fly the plane. While at the field, trim it by gluing shims on like before to get the thrust right.

Once you are back at the shop, drill a 3/32" hole in the back of the plug right next to the brass tubing in the direction that you need to adjust the thrust (you do not need to remove the propeller). For example, if you need more down thrust, then drill this hole at the top of the tubing so that you can that you can push the tubing up in the back and thus get a few degrees down thrust. Be sure to put a drop of acetone in the hole and around the back of the brass tubing to dissolve the glue. Using a needle, fill the hole with glue around the tube and jam a small piece of balsa in the gap on the bottom. Let it dry, and then fly it again. I recently tried this method on my Bristol fighter and was able to get it just right after three tries (I got a ninety-second flight out of her-look out, Ollie, the war is heating up). Give this a try. It works, is so simple, and stays where you put it. Happy flying.

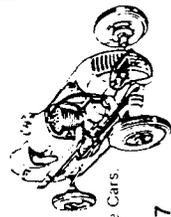
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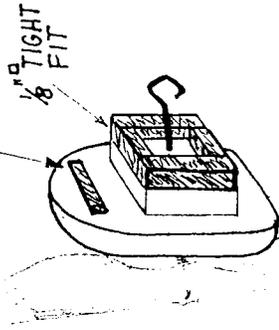
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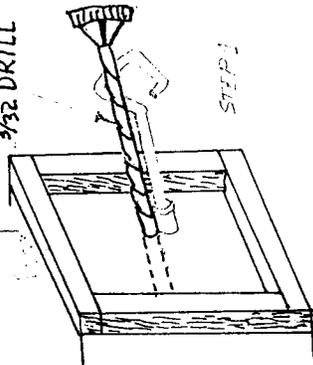
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TRIM SHIM

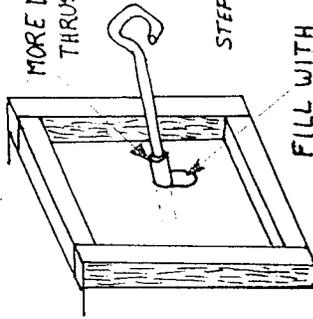


3/32" DRILL



STEP 1

MORE DOWN
THRUST



STEP 2

FILL WITH
GLUE & Balsa

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accessories, Polyspan/analine dye, and huge
bunch of great FF kits.

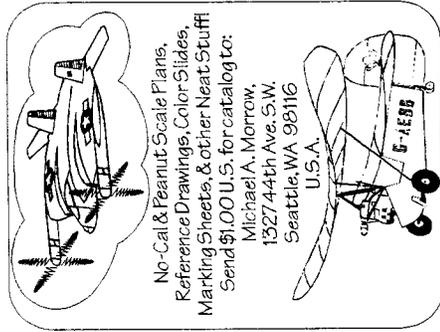
Catalog F.A.I. Model Supply
\$2.00

P O Box 366

Sayre, PA 18840-0366

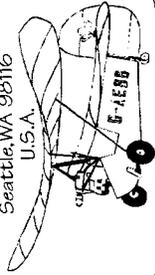
Phone/Fax: 717-882-9873

Please use new address • Calif. phone to be disconnected



No-Cal & Foamut Scale Plans,
Reference Drawings, Color Slides,
Marking Sheets, & other Neat Stuff!
Send \$1.00 U.S. for catalog to:

Michael A. Morrow,
1327 44th Ave. SW,
Seattle, WA 98116
U.S.A.



GENESEO, NEW YORK FLYING ACES CONTEST

July 19-20, 1997

Time 8:30 am until 5:00 pm

Registration Form

Please print

Name _____ AMA or MAAC No. _____
 Street _____ Jr./Sr. ___ Open _____
 City _____ State _____ Zip _____

Entry fee \$25.00 flies all events. No fee for under 18 years of age. Please remit by June 30, 1997 to ease paper work later. Mail entry fee to; Lin Reichel, 3301 Cindy Lane, Erie, Pa. 16506.

Awards through third place. All contestants must be members of the A.M.A. or the M.A.A.C.

Schedule

Saturday July 19

Sunday July 20

- | | |
|-------------------------------------|---------------------------------|
| FAC Scale | Hi-Wing Peanut |
| FAC Peanut | Golden Age Scale |
| Embryo Endurance | Jumbo Scale |
| Pioneer Scale | FAC Power Scale (single engine) |
| Greve Race * | FAC Power Scale (multi-engine) |
| World War One Dogfight * | Thompson Race * |
| Goodyear Midget Race * | World War Two Combat * |
| FAC Old Time Rubber | Modern Military * |
| Giant Scale | FAC Old Time Stick |
| Dime Scale | No-Cal Scale |
| FAC Old Time Electric Replica (gas) | Jimmy Allen |

* These events are Mass launch events. We will use the 15% rubber rule in all mass launch events except for the Goodyear Midget Races, give 'em all you got!

All events are for rubber powered models except for Power Scale and O.T. Electric Gas Replica. You must show proof of scale to get past the 45 point rule in mass launch events. All Pioneer Scale models will be flown in the Pioneer event only, regardless of size. Dime Scale models can only fly in the Dime Scale event.

I wish to make the following advanced reservations for the contest.

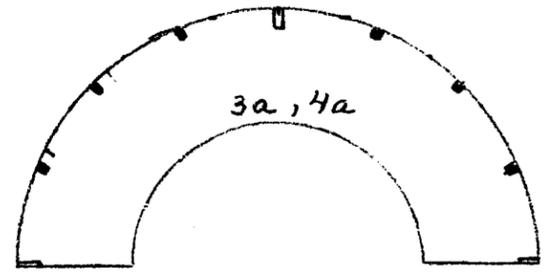
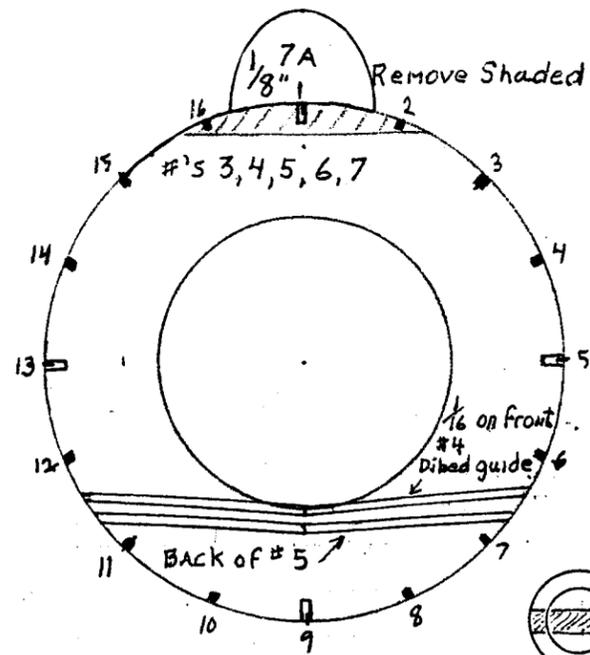
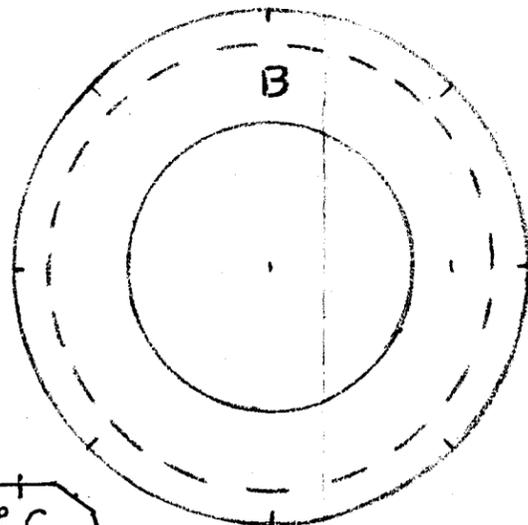
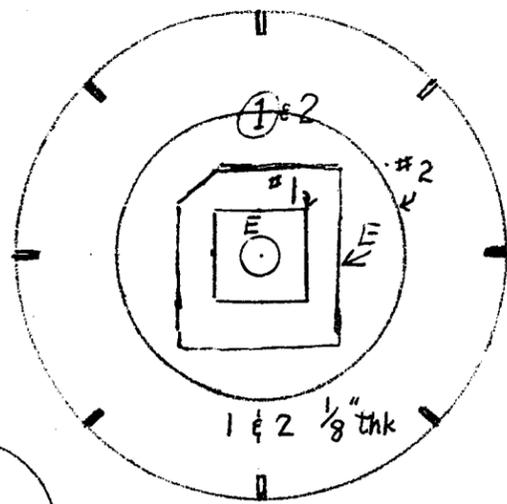
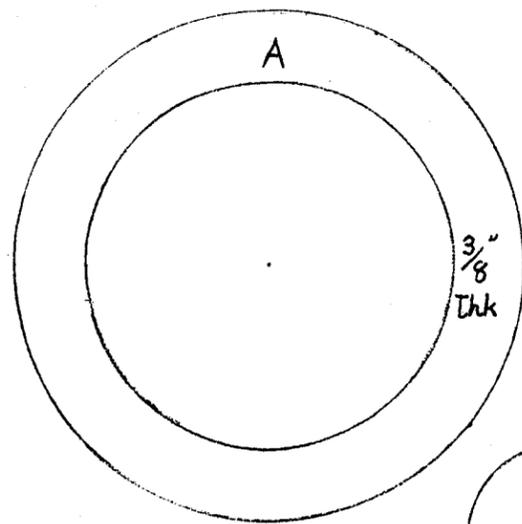
_____ entry fees at \$25.00 each	_____	\$ _____
_____ reservations for double occupancy with meals, \$130.00 per person	_____	\$ _____
_____ reservations for single occupancy with meals, \$160.00 per person	_____	\$ _____
	Total	\$ _____

Please note, we will not be able to refund cancellations received after June 30, 1997. If you plan to share a room with someone, please indicate their name so we can direct the University to set up the proper room arrangements.

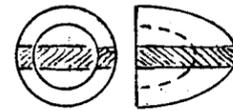
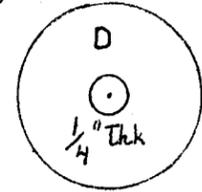
Your meals at the University will include dinner on Friday July 18th, Breakfast and dinner on Saturday July 19th, breakfast and dinner on Sunday July 20th and breakfast on Monday July 21st.

Scale judging will take place at Peter's Party Complex in Leicester, N.Y. on Friday July 18 starting at 2:00 pm. Bring your models there to be scale judged. Giant and Jumbo models will be judged on the field on Saturday July 19. Food will be available at Peter's if you wish to eat there. This is the same place we did the scale judging last year.

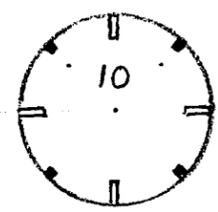
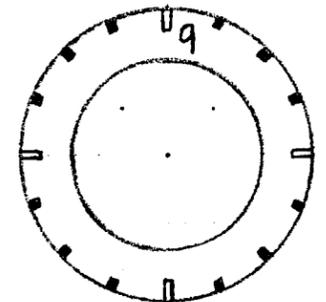
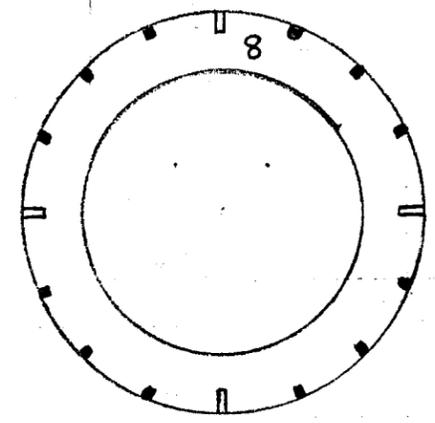
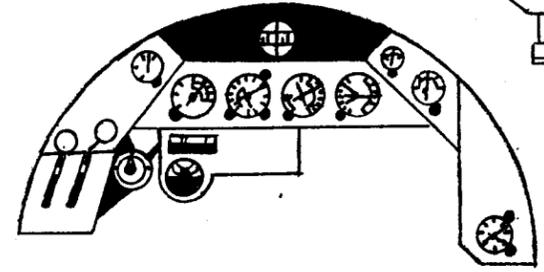
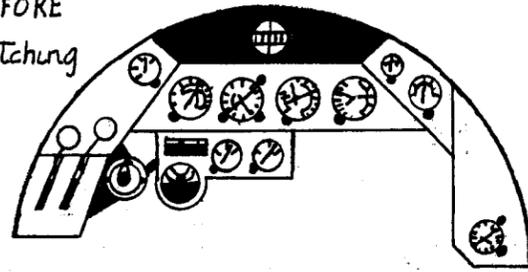
Contest Director; Lin Reichel



Cut out Inst. Panels, glue to 1/32" sht., trim, glue to 3A & 5 BEFORE Notching



Tail cone. Remove Shaded Area AFTER Shaping



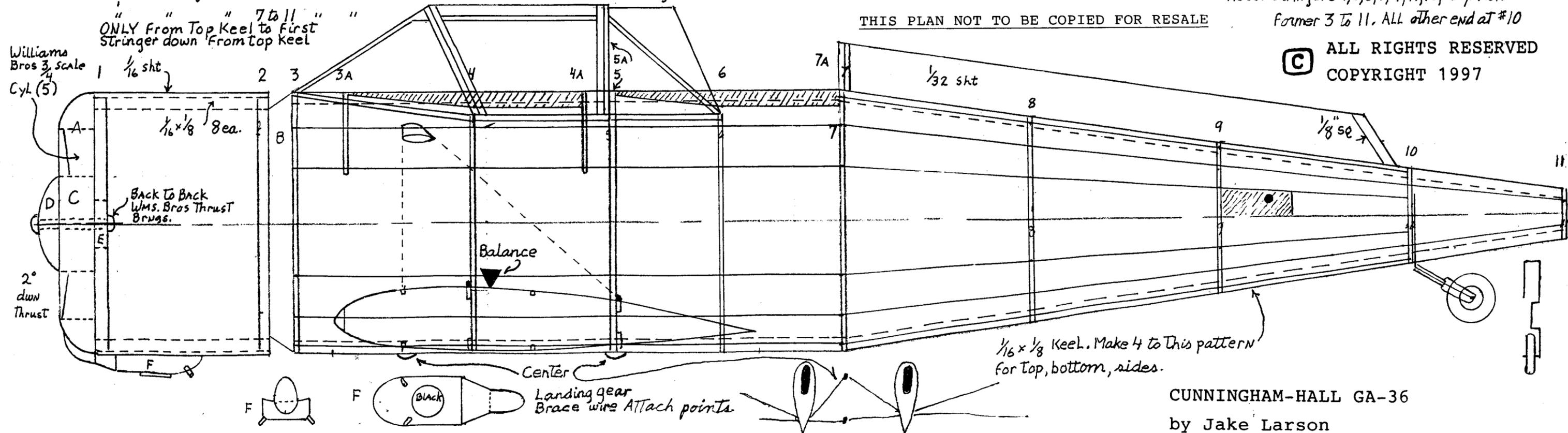
Note: Sheet fuselage from 3 to 7 with 1/32" - Remove Shaded Area After Sheeting

ONLY From Top Keel to First Stringer down From top Keel

THIS PLAN NOT TO BE COPIED FOR RESALE

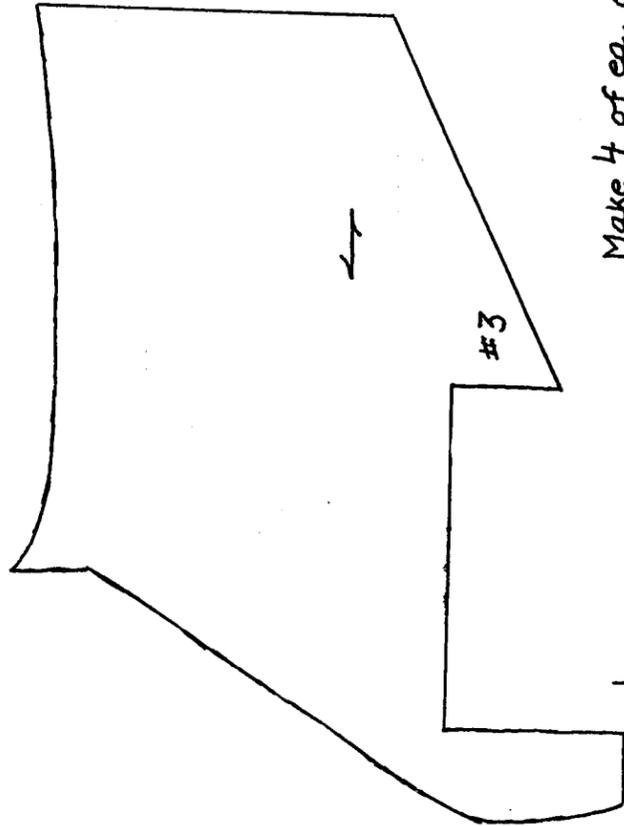
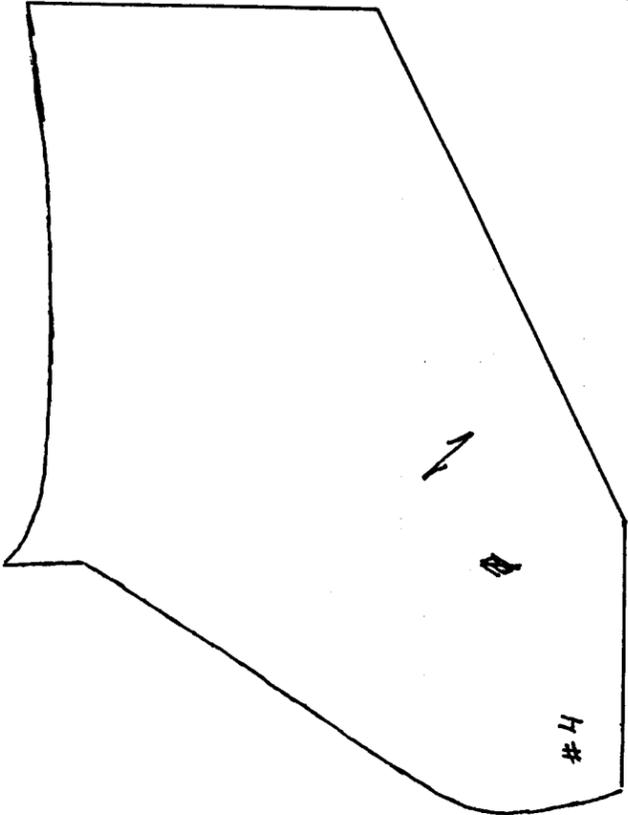
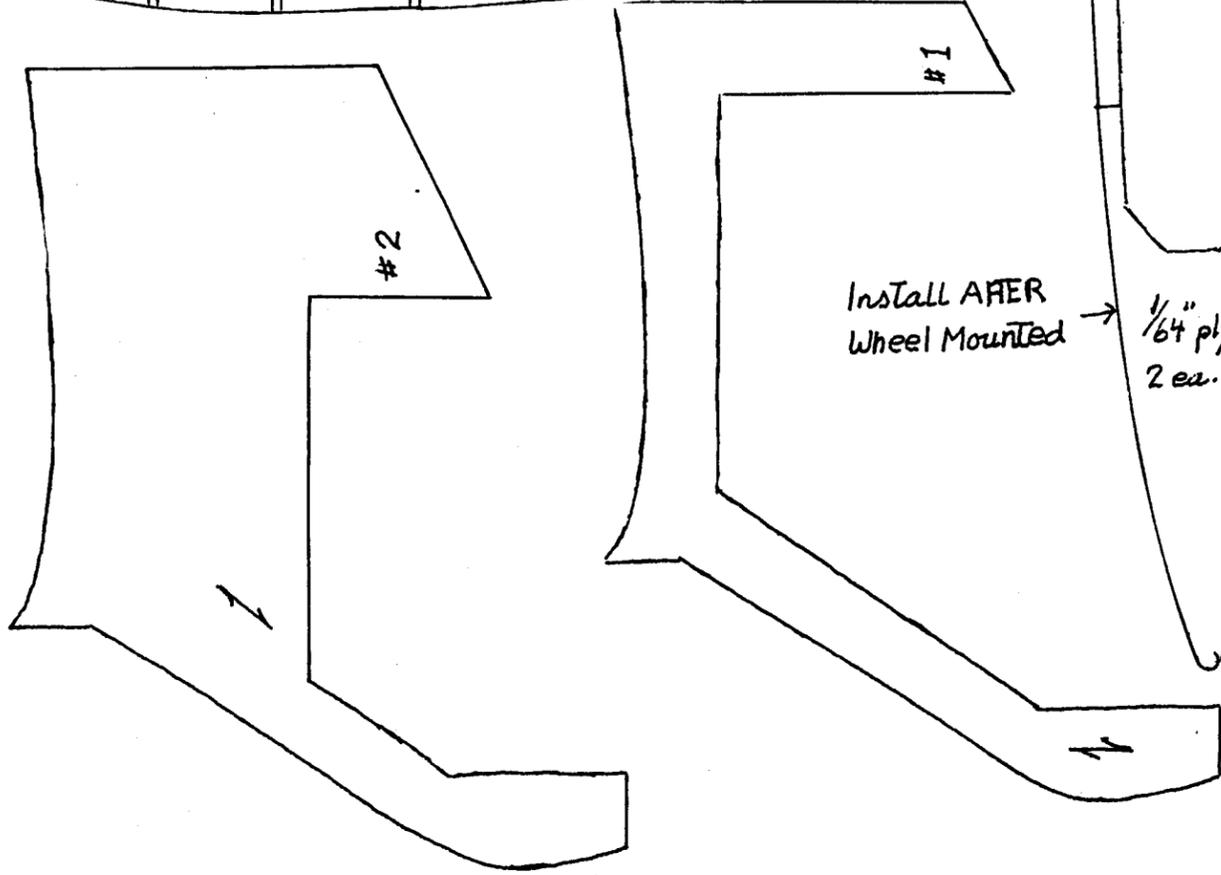
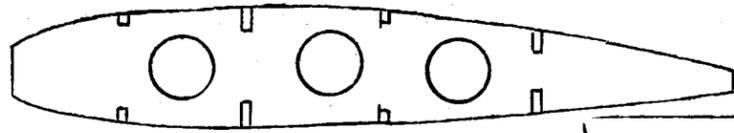
Note: Stringers 1, 3, 5, 7, 9, 11, 13, 15 go from former 3 to 11. All other end at #10

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CUNNINGHAM-HALL GA-36
by Jake Larson

2 ea. of $\frac{1}{8}$ sht, 12 ea of $\frac{1}{16}$ sht (Lightening holes Optional)

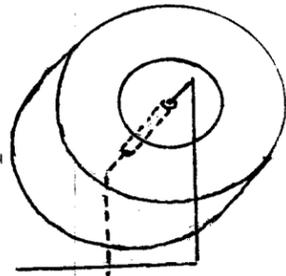


Install APER Wheel Mounted

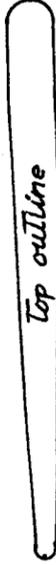
$\frac{1}{64}$ " ply
2 ea.

Make 4 of ea. of $\frac{1}{8}$ sht

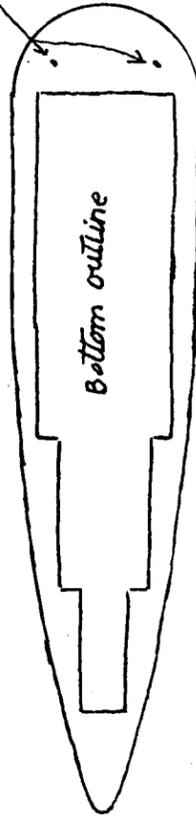
1, 1
2, 2
3, 3
4, 4



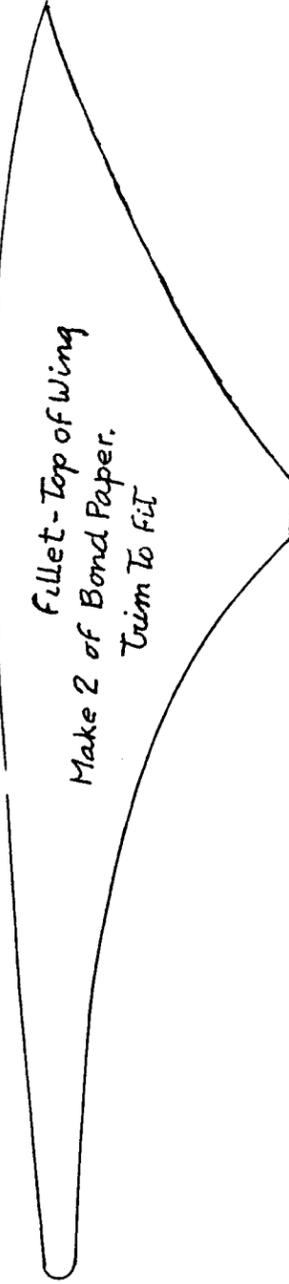
Crack Line



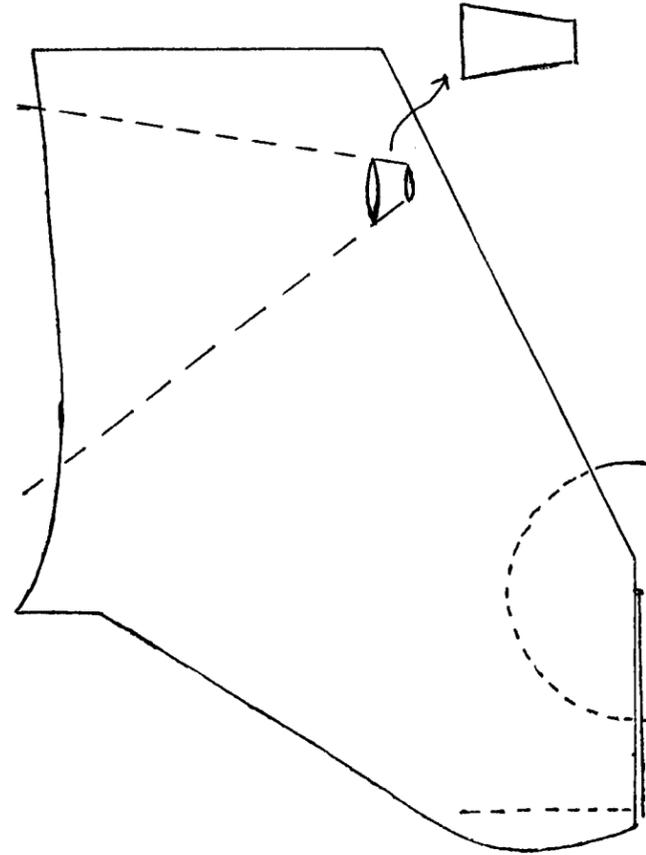
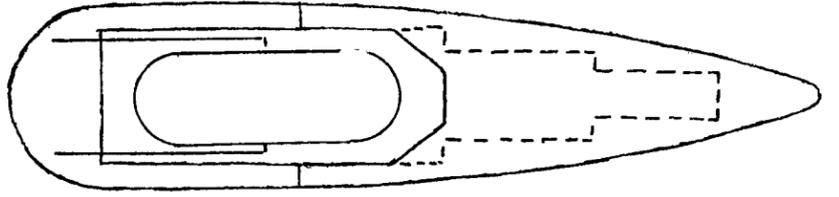
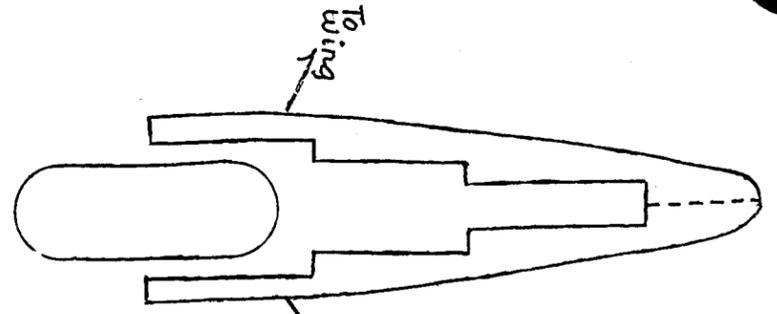
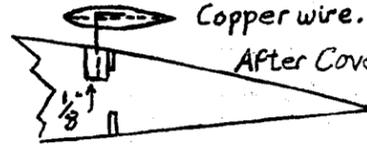
INSERT LG wire Here. Then SOAK AREA with C.A. - glue for strength



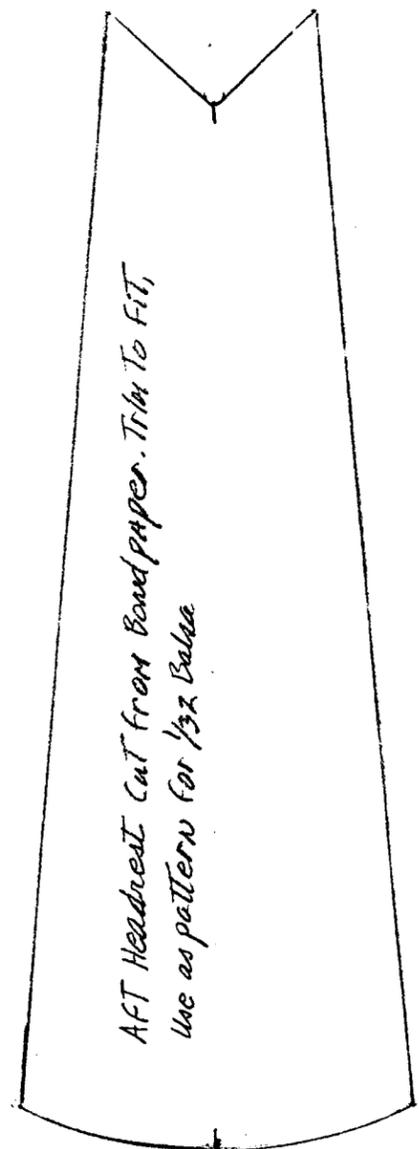
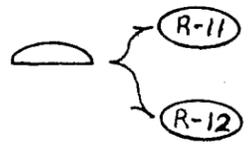
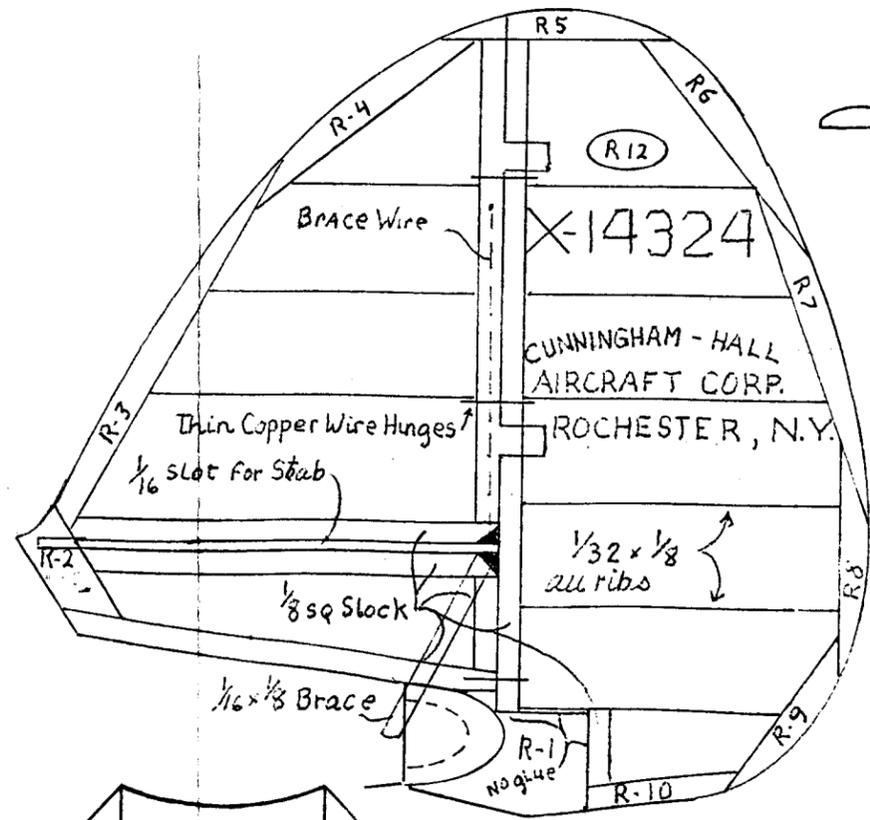
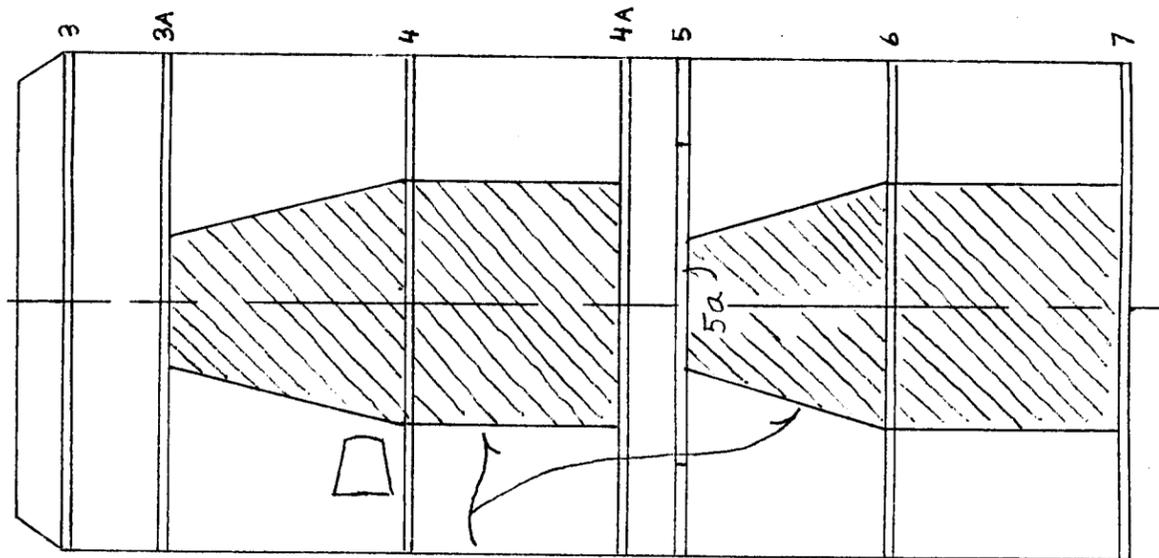
Fillet - Top of Wing
Make 2 of Bond Paper.
Trim to fit



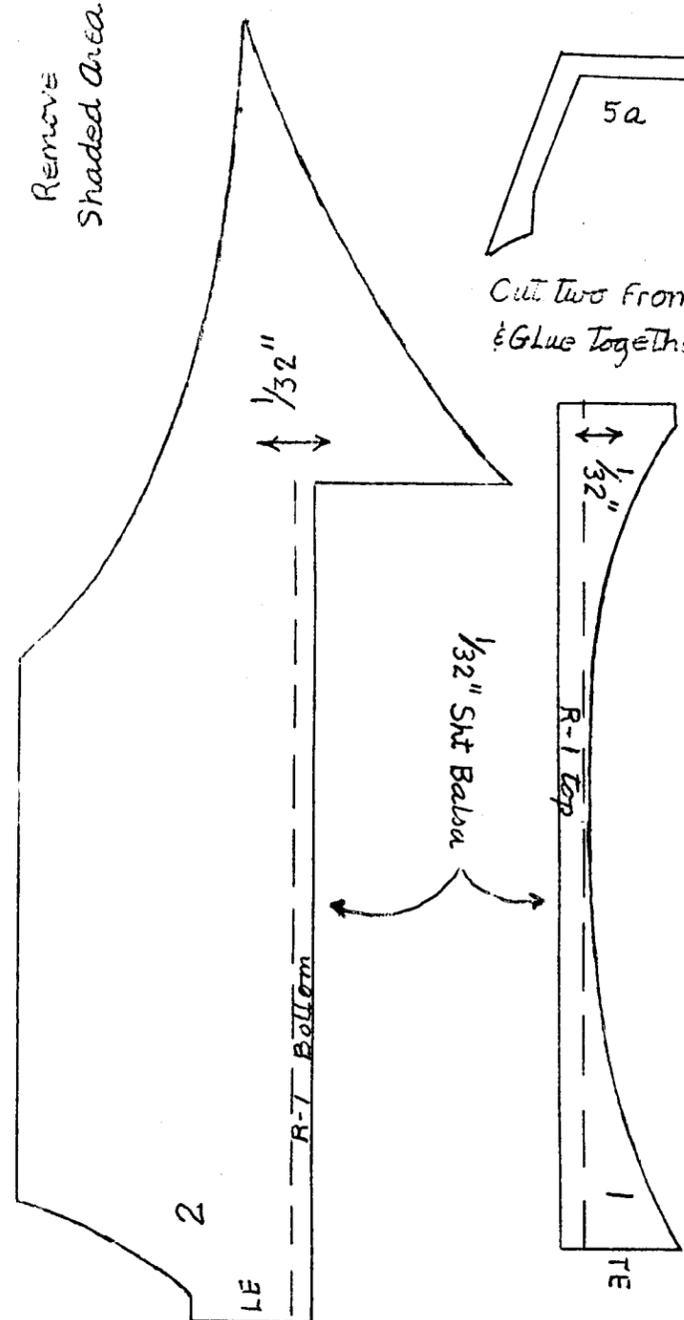
"Flying" Aileron
 $17" \times \frac{1}{16}" \times \frac{5}{8}"$ sht. Sand to Airfoil, Cut to $4\frac{1}{4}"$ & Laminate with Copper wire. Insert After Covering Wing



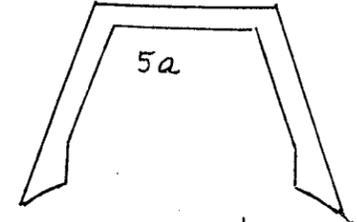
Ribs 1, 2, 3 = $\frac{1}{8}$ sht - All others = $\frac{1}{16}$ sht



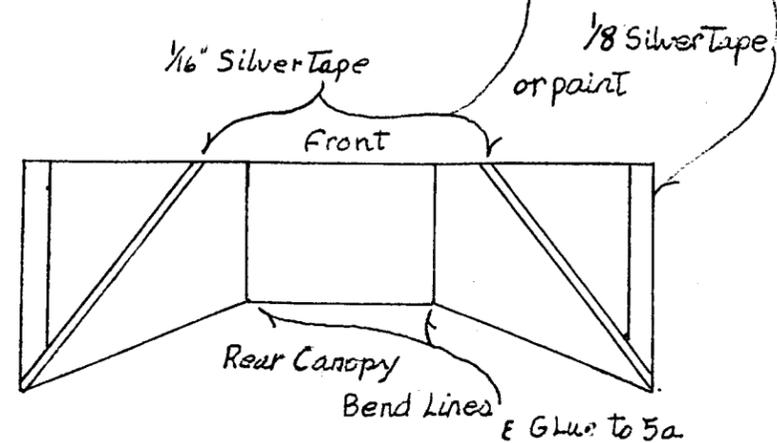
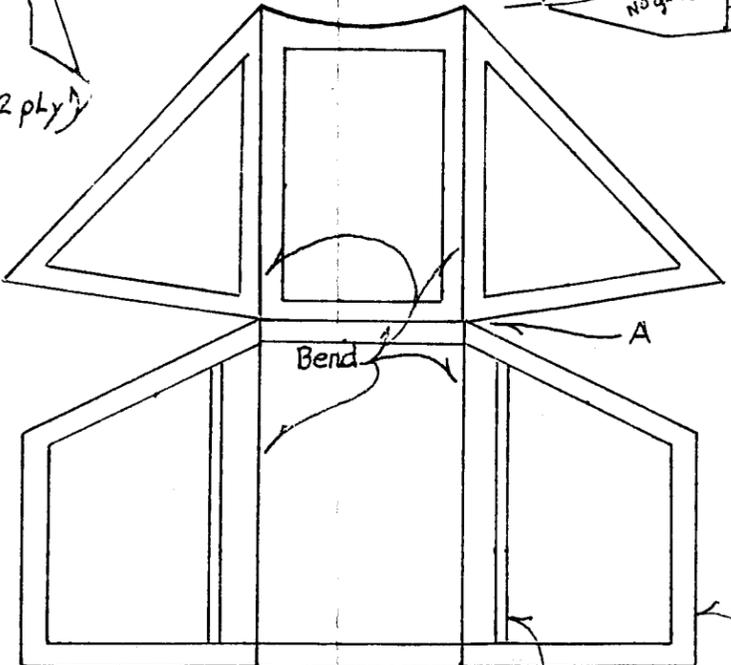
AFT Headrest Cut from Bond paper. Trim to fit, use as pattern for 1/32 Balsa



Remove Shaded Area



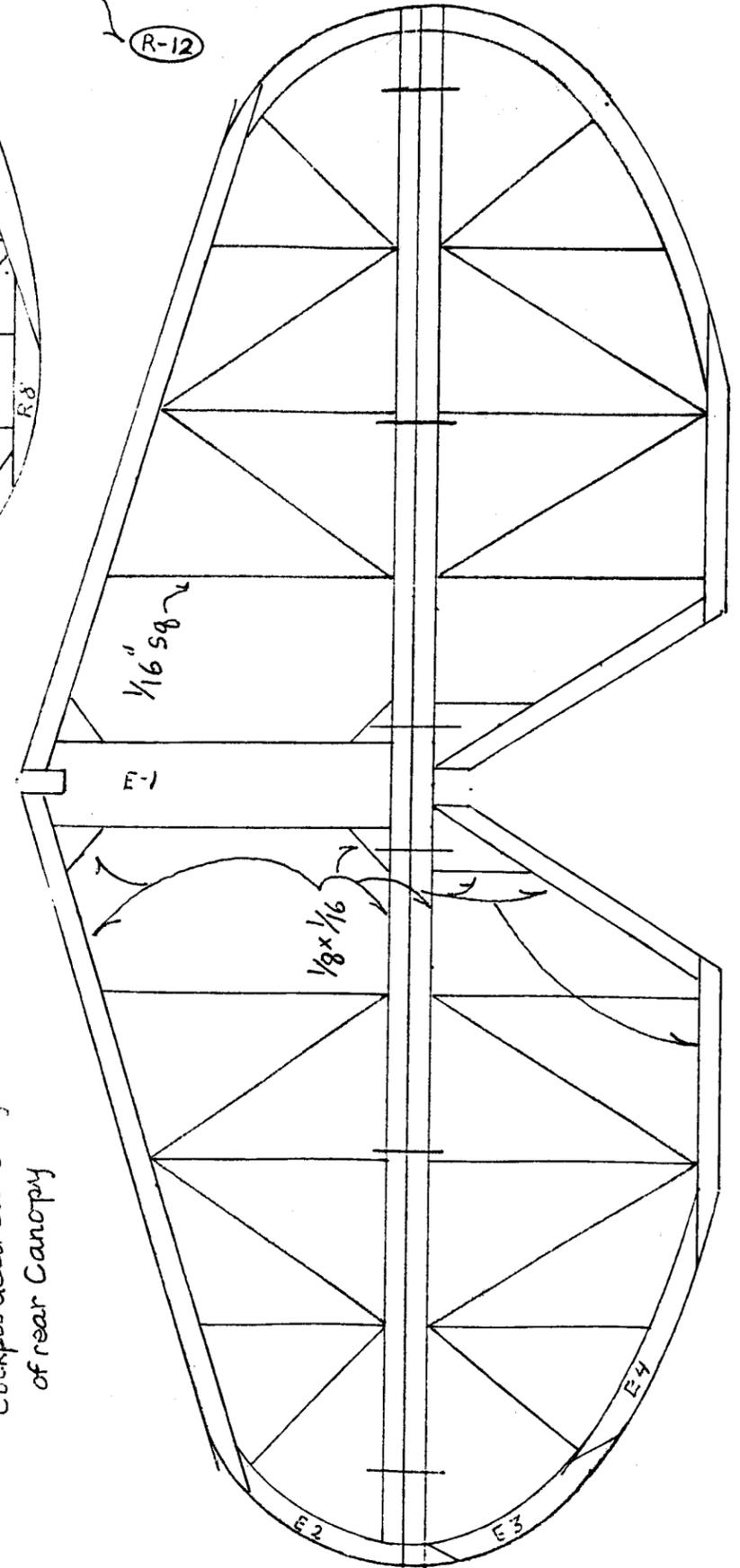
Cut two from 1/32 ply & Glue Together



1/16" Silver Tape

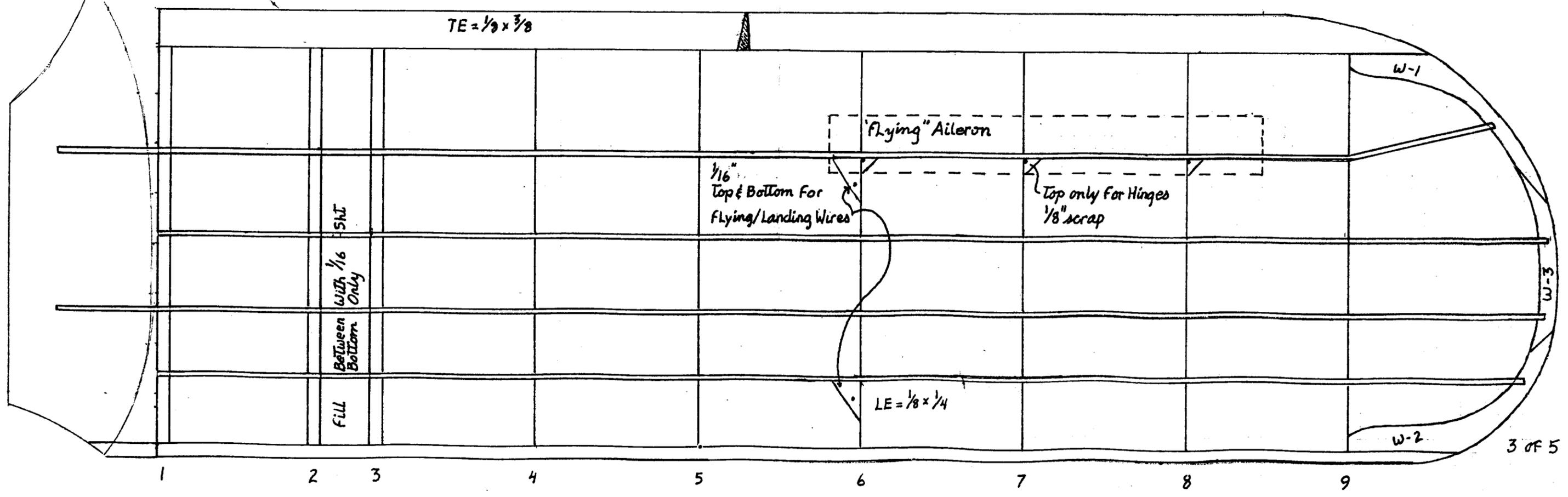
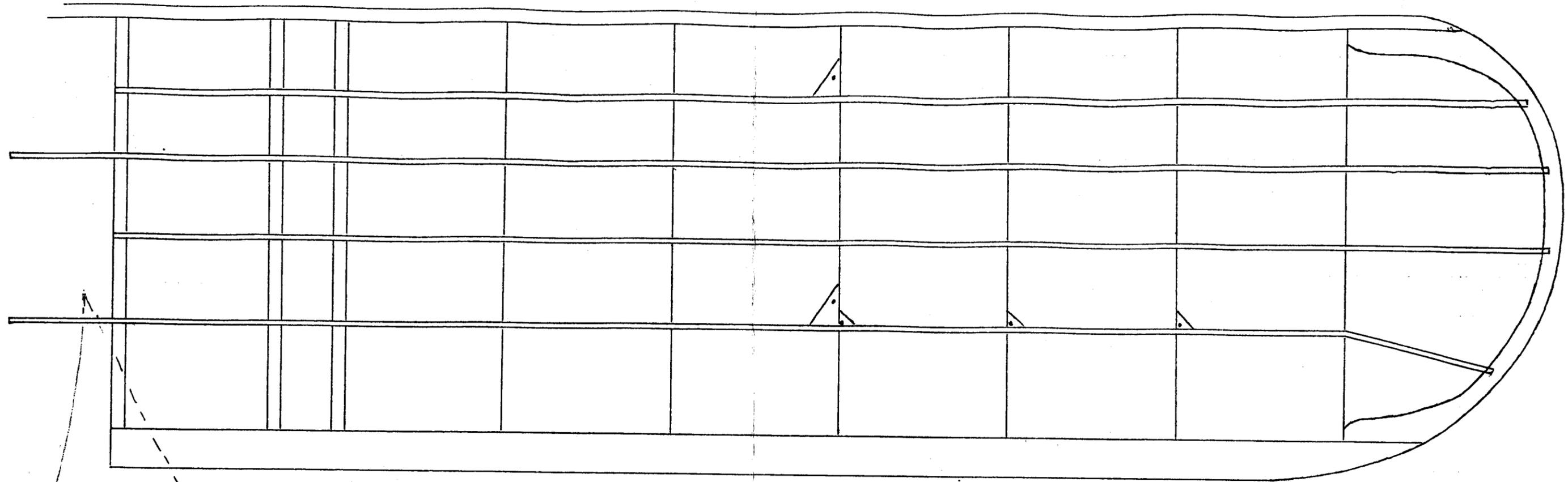
1/8 Silver Tape or paint

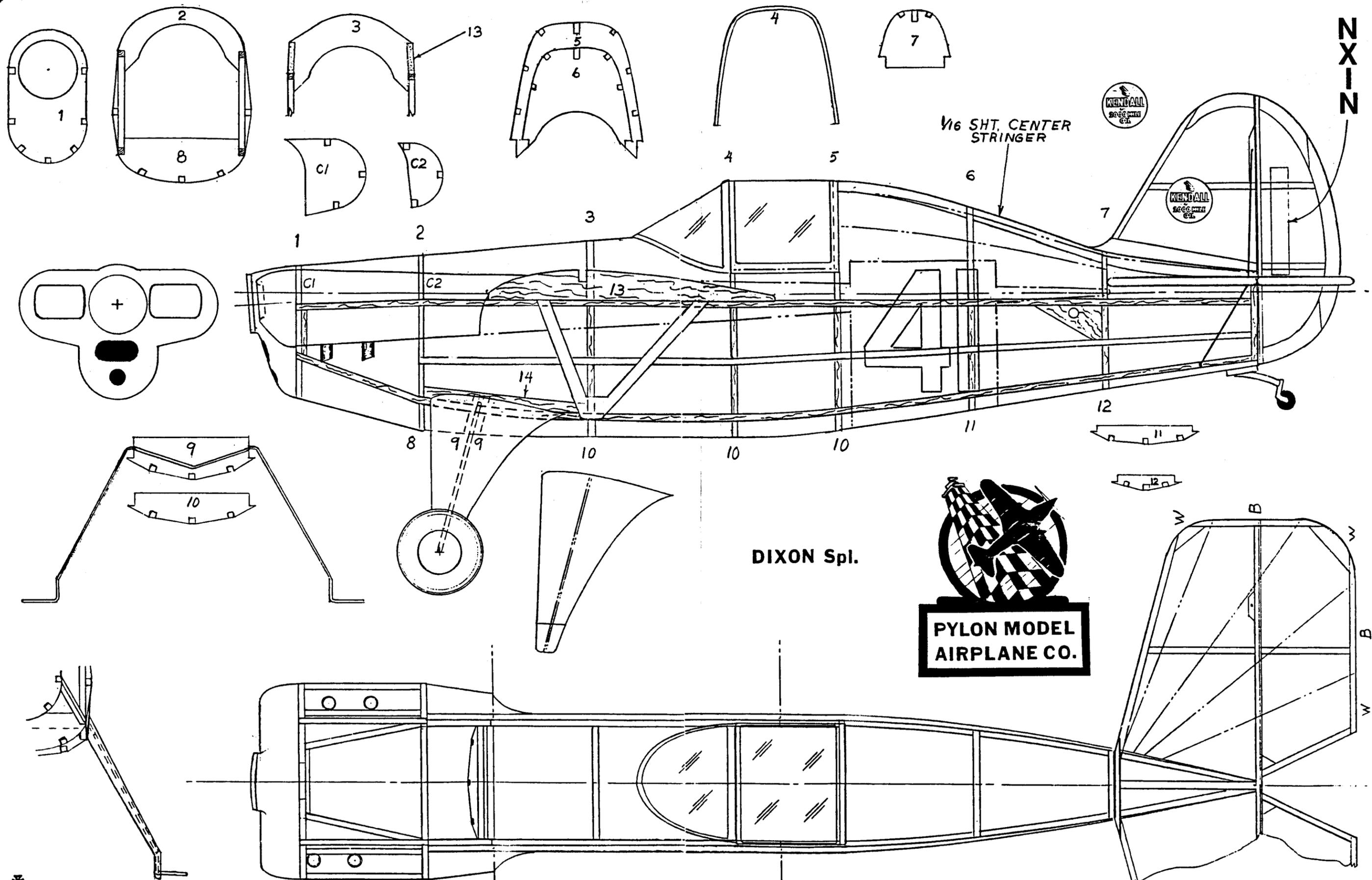
Bend Lines & Glue to 5a



Front Canopy. Separate at A and glue Rear half over rear Canopy if Open Cockpit desired. Align A with Front of rear Canopy

Copper wire hinges





N-X-1

1/16 SHT. CENTER STRINGER

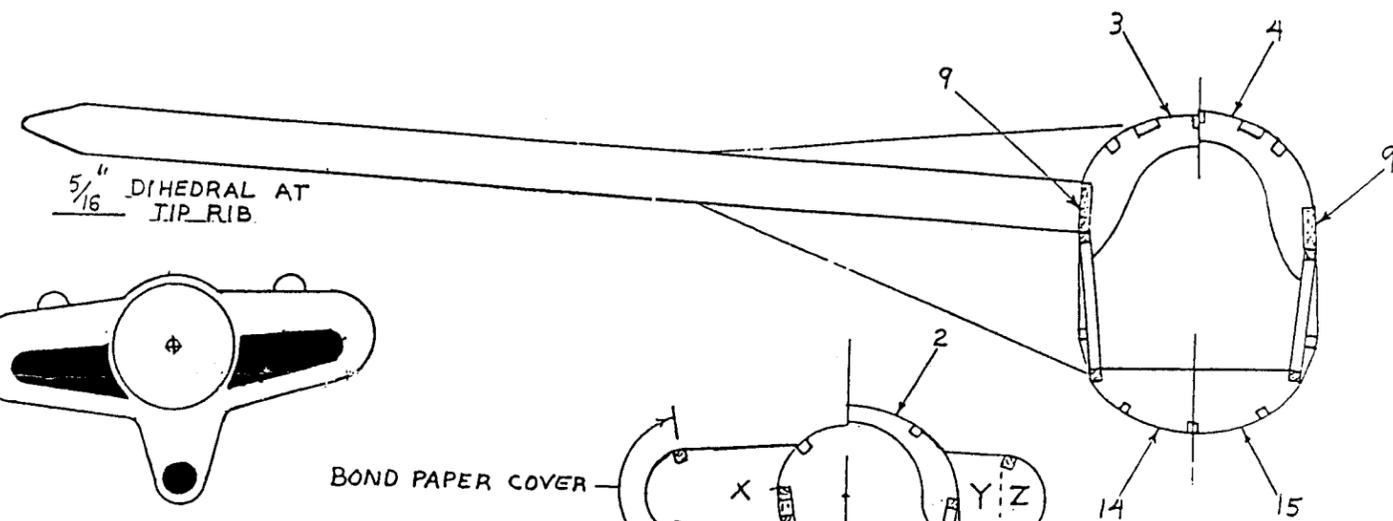
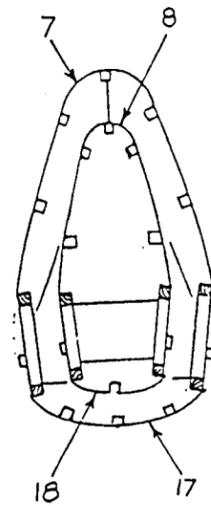
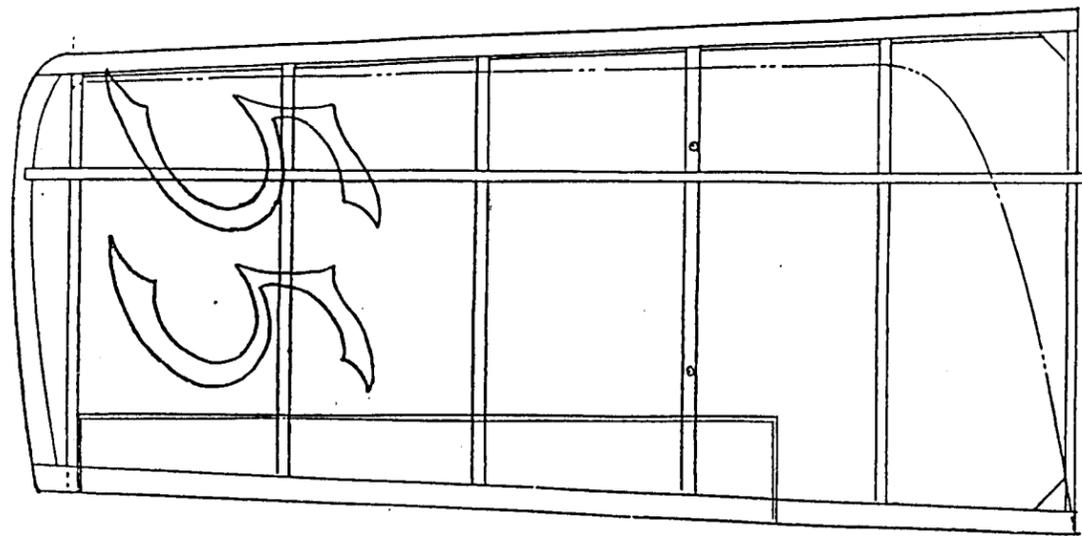
DIXON Spl.



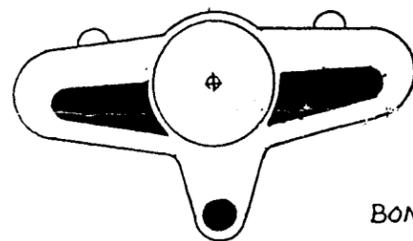
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Mar 1937

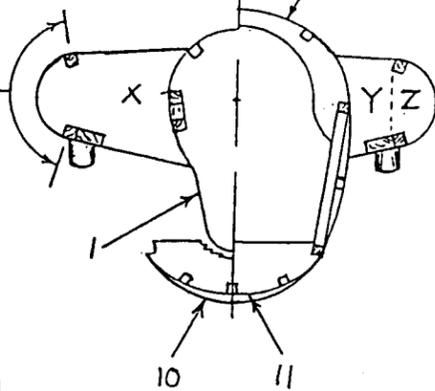
6-96



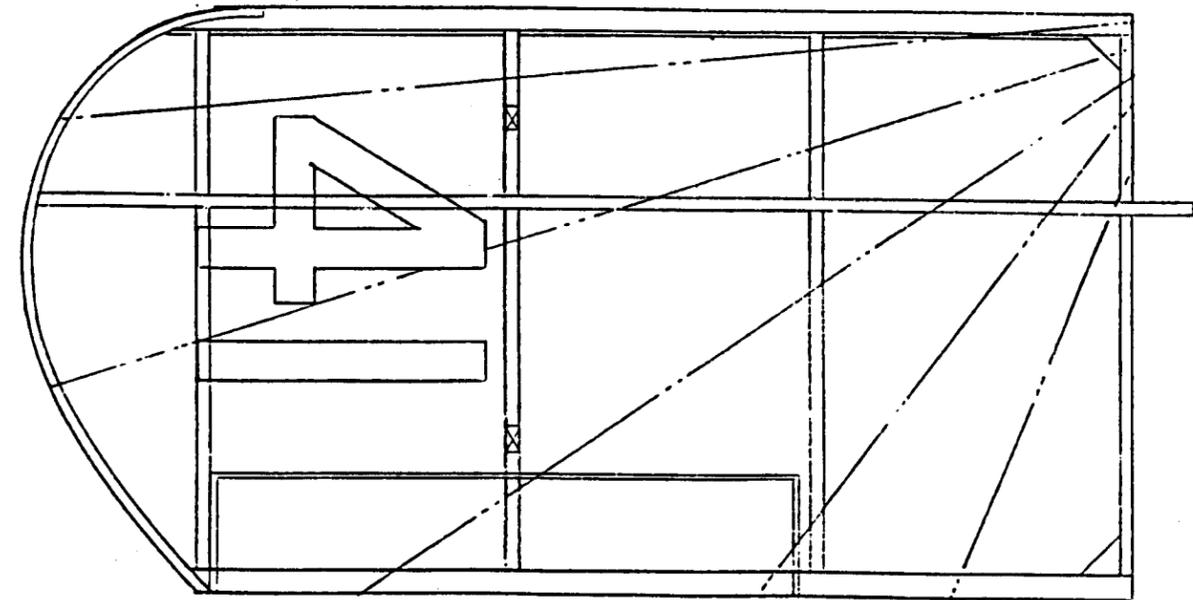
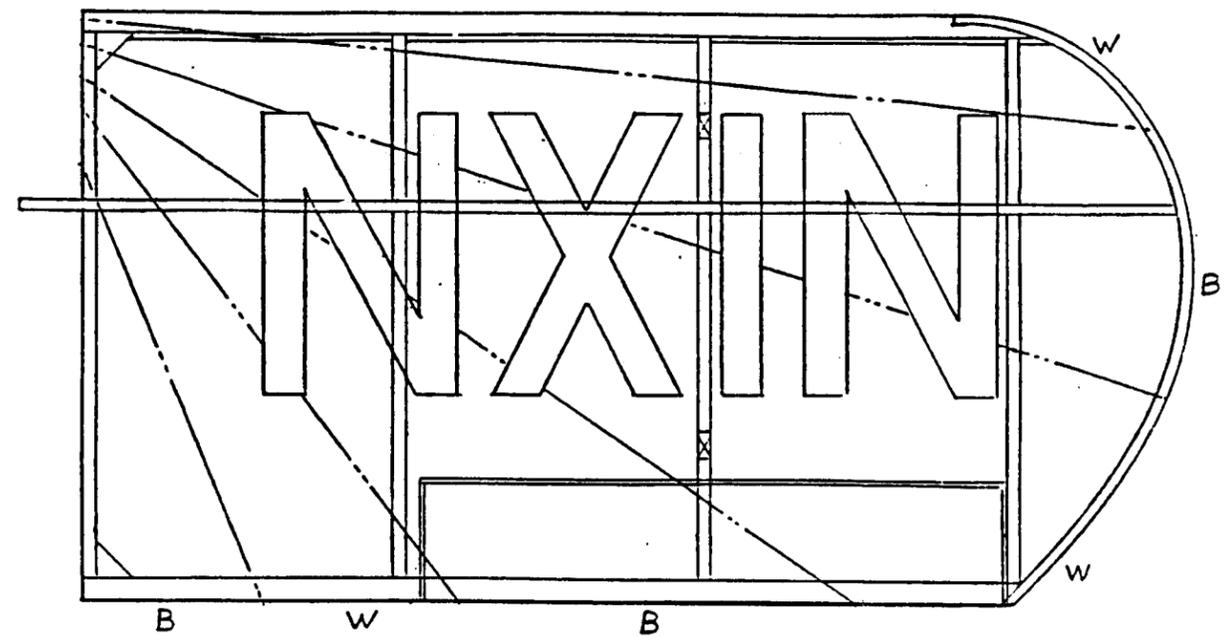
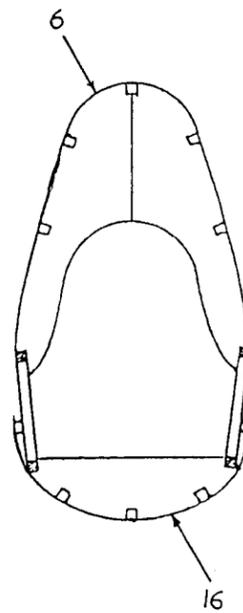
5/16" DIHEDRAL AT TIP RIB



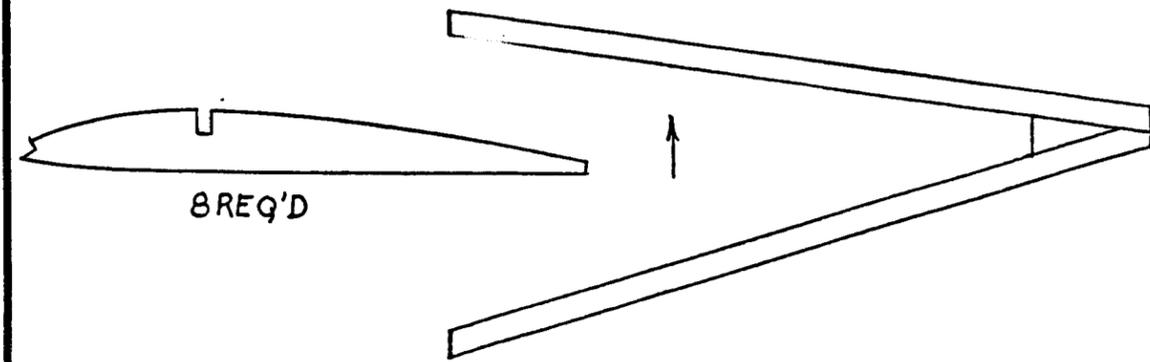
BOND PAPER COVER



BEEGEE BABY

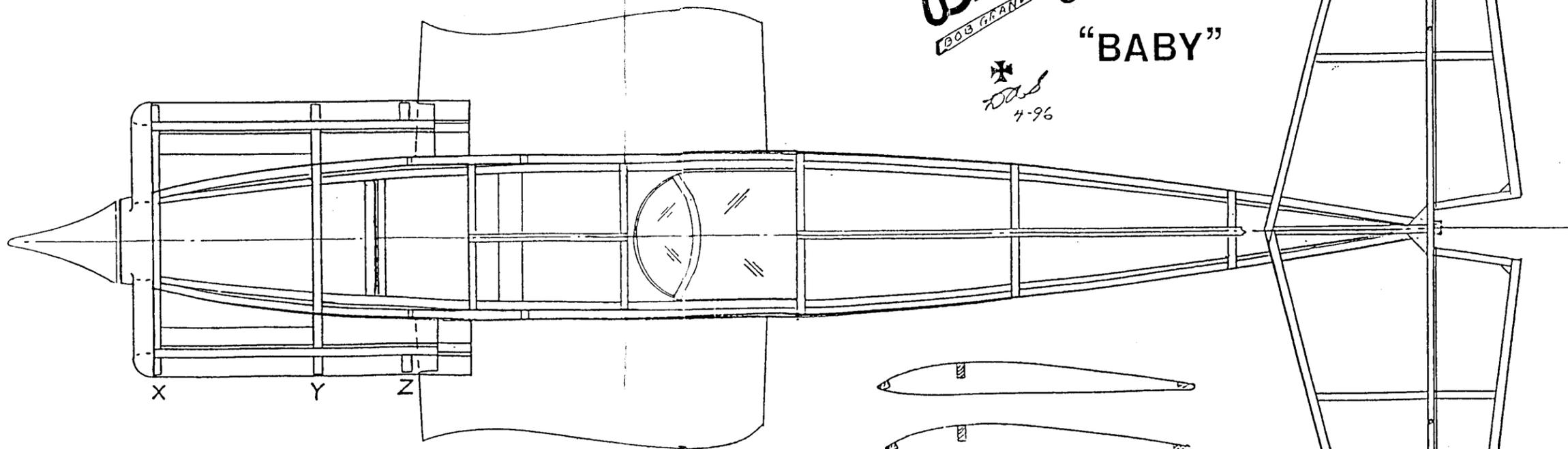
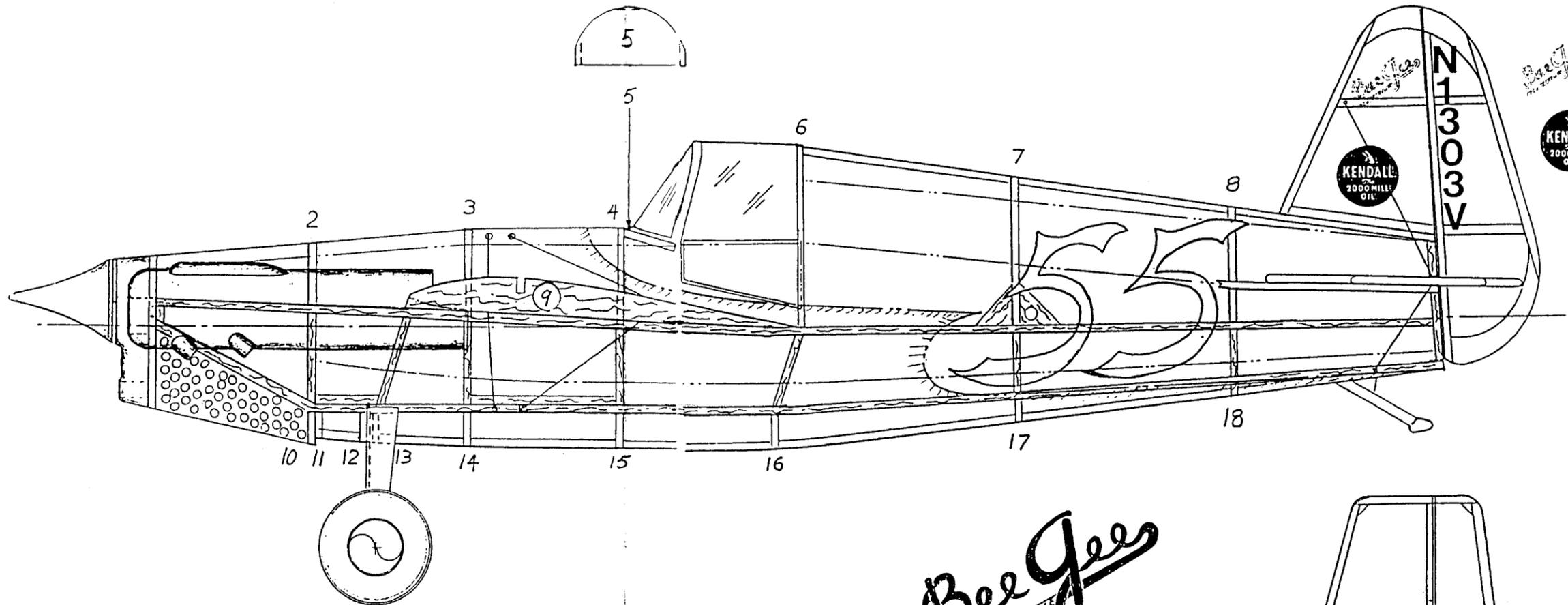
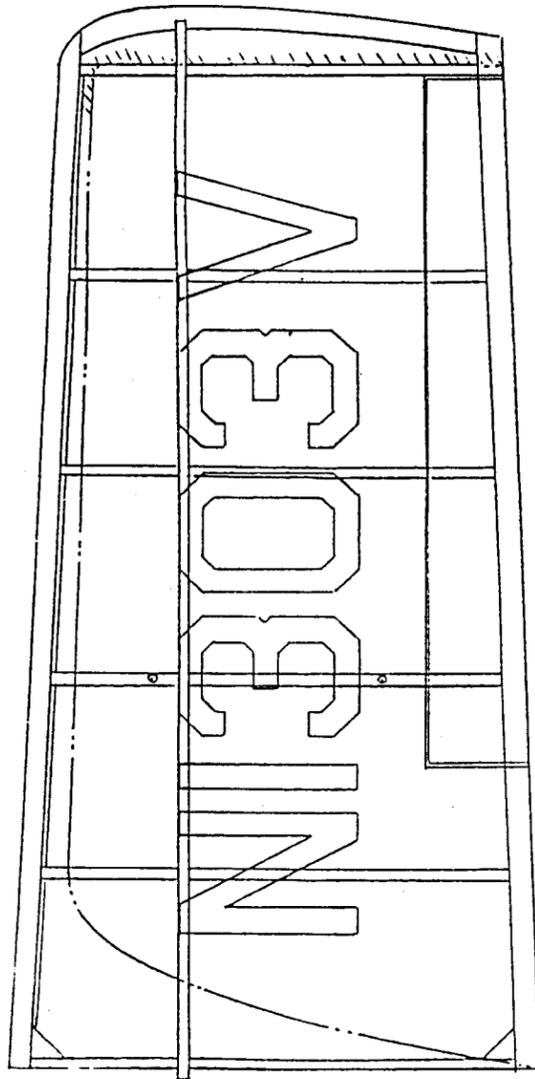


DIXON SPECIAL



8REQ'D

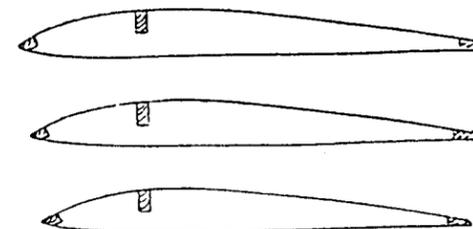
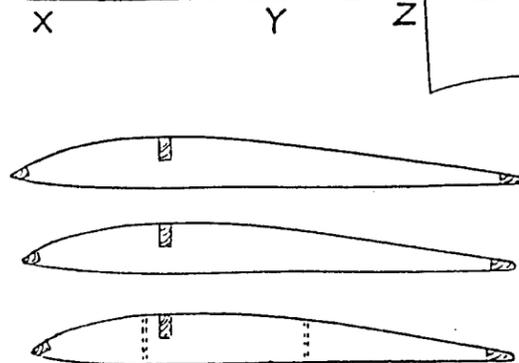
ESAKI "LITE FLITE" TISSUE
 BEST PRICES
 \$.85/SHEET
 YELLOW, WHITE, RED, BLUE, ORANGE, BLACK,
 GREEN
 3 to 3.5 GRAMS/SHEET
 POSTAGE/HANDLING: \$3.00/U.S. ♦ \$4.00/CANADA/MEXICO ♦ \$5.00/OVERSEAS (SURFACE)
CAMPBELL MODEL SUPPLY COMPANY
 37742 CARSON STREET ♦ FARMINGTON HILLS, MI 48331
 CHECK/M.O. ON U.S. BANK ♦ FREE PEANUT PLAN W/ORDER
 MICHIGAN RESIDENTS ADD 6% SALES TAX



Bee Gee
BOB GRANVILLE

"BABY"

✠
DAS
4-96

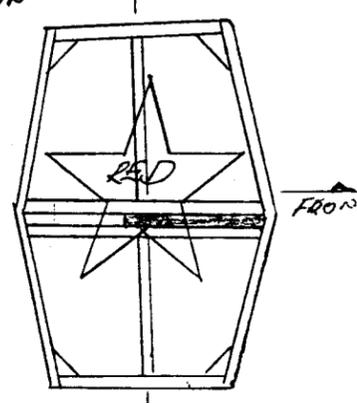
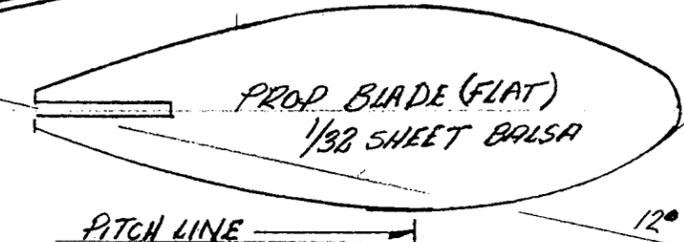
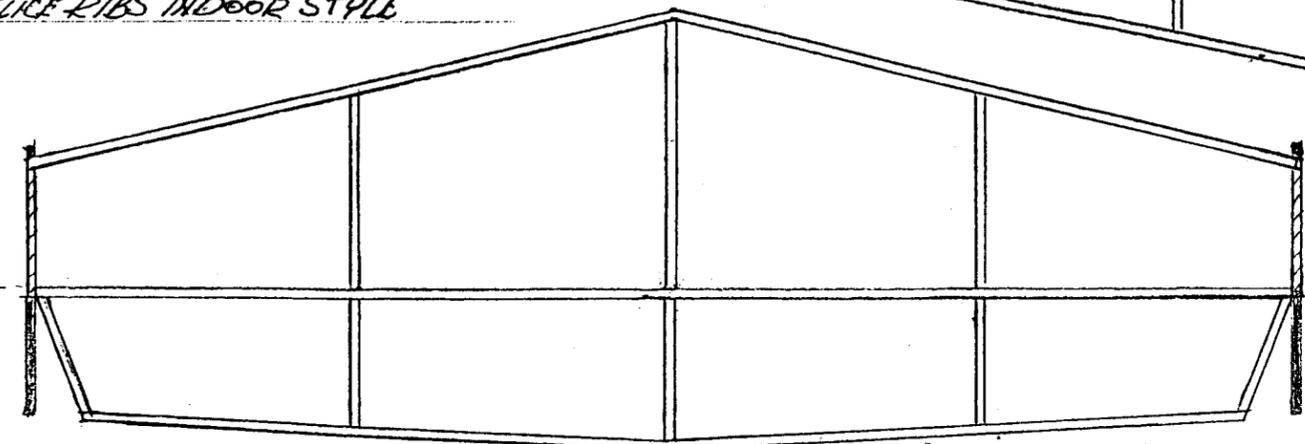
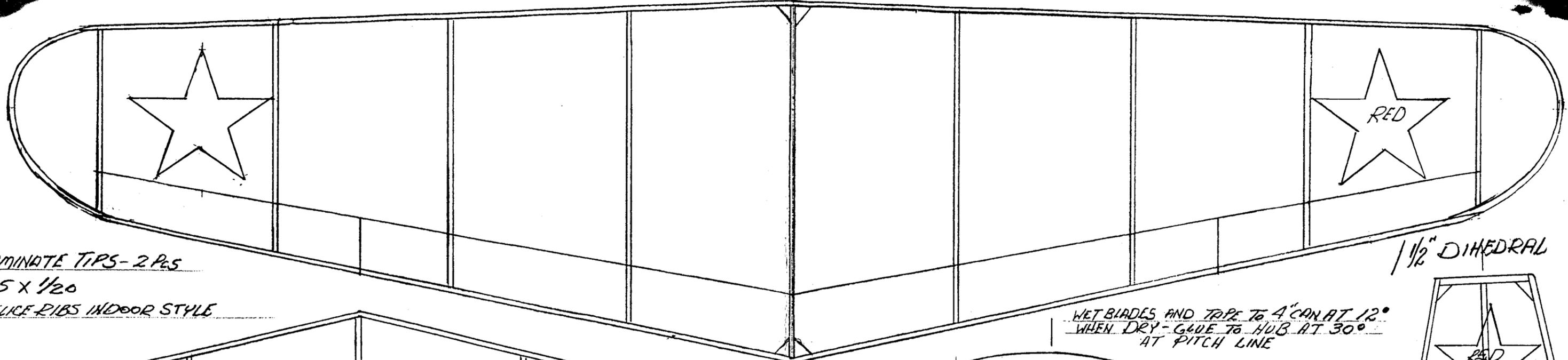


**PYLON MODEL
AIRPLANE CO.**

A DIVISION OF THE
AIRDEVIL MODEL CO.

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mar/apr 97



BOLKHOVITINOV "5"
A RUSSIAN TANDER ENGINE TWO SEAT LIGHT ATTACK BomBER
REFERENCE: FLYING REVIEW INTERNATIONAL - JUNE 1968
DESIGNED FOR THE F.A.C. NO-CAL EVENT
DRAWN BY - TED DICK 10-2-95

ALL SURFACES - GREEN EXCEPT AS NOTED

1/200 or 1/16

