

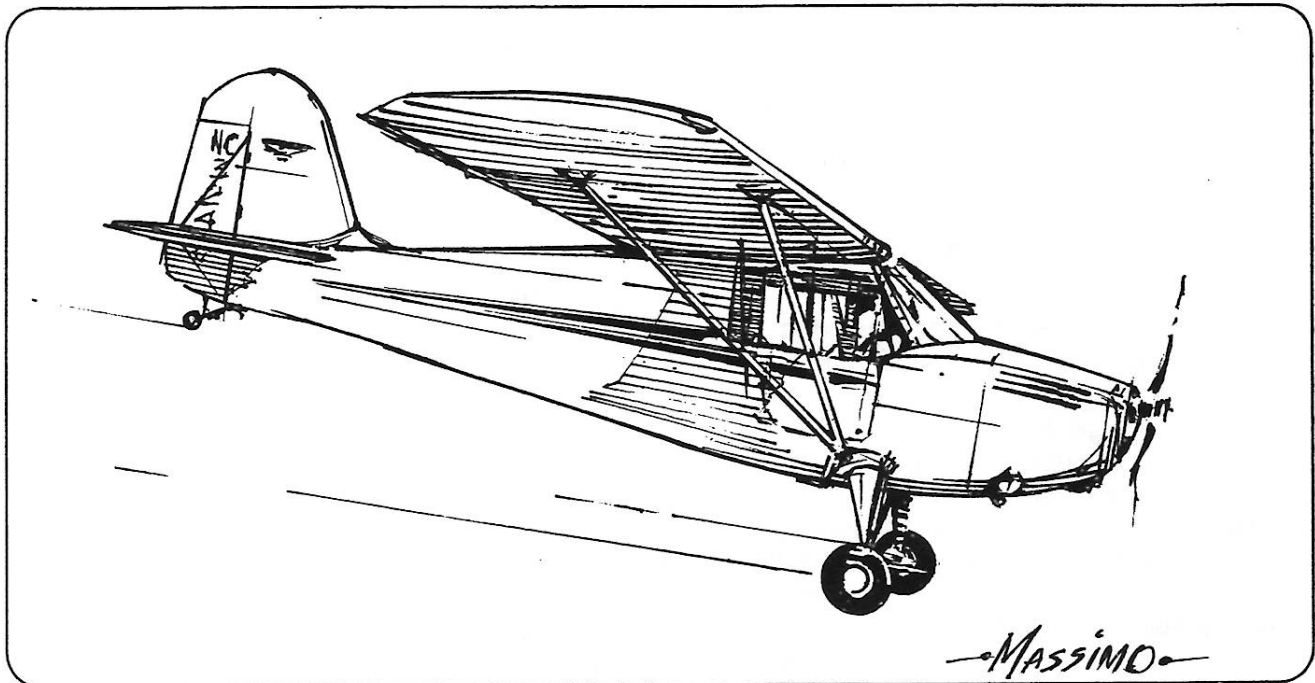
MAX FAX

Journal of the D. C. Maxcuters

...home of the dreaded POTOMAC PURSUIT SQUADRON of the Flying Aces Club

Editor : Allan Schanzle

July - August 1998



COMING ATTRACTIONS

July 17-19 1998

July 25, 1998

August 15, 16 1998

August 29, 1998

September 5,6 1998

September 13-18 1998

September 25,26 1998

October 10-12 1998

FAC NATS, Geneseo, NY.

FUN FLY AT BUFFALO BILLS FIELDHOUSE, 11:30 AM to 5:00 PM. Contact Bob Clemens, (716)392-3346 or E-Mail RClemens@compuserve.com

EIGHTH ANNUAL CUCKOO CHALLENGE, at Cuckoo, VA. In memory of Bill Saunders. Contact Dan Belieff, (703) 450-7877 or (703) 450-2808

DC MAXECUTERS SUMMER FUN FLY, New site at Petersburg, VA airport. See note in this issue for directions. Contact Allan Schanzle, 20008 Spur Hill Dr., Montgomery Village, MD 20886, (301) 840-5884. See Flyer on page 16.

FAC OUTDOOR CHAMPS at AMA Hqtrs., Muncie, IN. Contact Lin Reichel, 3301 Cindy Ln, Erie, PA 16506

SAM CHAMPS at AMA Hqtrs., Muncie, IN

KUDZU FAC LAKE AND LAND CONTESTS at Goldsboro and Raeford, NC. Contact Dave Rees, 606 Walnut Creek Dr., Goldsboro, NC 27534, (919) 778-6653

GATHERING OF THE TURKEYS F/F MEET at Pensacola, FL. Several FAC events. Contact Jack Bolton, (904) 939-3354

IN THIS ISSUE

The feature plan for this issue is a CO₂ version of the Rearwin Skyraider. It is a full-sized fold-out, so the total number of pages is reduced from what you've seen over the past few years in order to maintain the overall cost.

You'll also find photos by Tom Schmitt, a cover drawing by Bill Ceresa, an idea for next year's 1999 Summer Fun Fly, outlines for the Rhode St. Genesee 26 airfoil, a few 3-views, and a bunch of construction hints.

SUMMER FUN-FLY '99 WILL BE FINE, BUT PERHAPS DIFFERENT

Allan Schanzle

This issue's editor made a suggestion at a club meeting earlier this year concerning the annual contest in 1999 (*not this year*, next year). Here it is.... and I encourage everyone, especially those who usually come to our contest, to make suggestions, constructive criticisms, or compliments. Address all correspondence to Allan Schanzle, 20008 Spur Hill Dr., Montgomery Village, MD 20886, or call at (301) 840-5884. The city and zip of this address is new, but I still enter the same door as I have for the past 15 years. The Post Office decided to change the city name and the zip code.

Back in February 1998, it struck me that some type of commemorative should be developed in the last year of this century for those who promoted this hobby we love and enjoy, but specifically those contributing to the development of rubber-powered scale models. So in 1999, I propose we sponsor the **20TH CENTURY CLASSIC DESIGNER'S FUN FLY**. This event will be different from those of the past. It will be a true "FUN FLY", with only a few endurance events and no formal judging.

GENERAL RULES

1. All models must be rubber powered designs made available to the public from magazines or kits on or before Dec. 31, 1942.
2. It is the builder's responsibility to prove the submitted model qualifies under rule 1.
3. It will be a two-day contest. Saturday will be for plans published in magazines by some of the most prominent designers (listed below), and Sunday will be for any kit that fits rule 1.

4. Models must be built and flown as shown on the plan, which implies that 99.999% of all eligible models will fly with the gear down. You may:
 - a. Change prop and nose plug design.
 - b. Redesign rubber peg and location.
 - c. Use plug-in landing gears, but model must be flown as shown in plan.
 - d. Redesign fuselages that are "carved from balsa". (See page 14).
 - e. Make other minor changes, such as replacing bamboo with sheet balsa, use of one piece wing or stab, etc.; Simply maintain the spirit of the event.
5. The builder must supply a copy of the plan for any model entered in any event.

ELIGIBLE MAGAZINE DESIGNS FOR SATURDAY'S EVENTS

Any plan that was published in any model magazine prior to December 31, 1942 by the following designers is eligible for the magazine plans events:

Alan Booton	Henry Struck
Jesse Davidson	Herb Weiss
Paul Lindberg	Bill Winter
Earl Stahl	Avrum Zier

These designers have been selected based on the number of plans published in magazines (at least 15) and, to some extent, their contribution to the spirit of the Flying Aces Club. Others could (and perhaps should) be included, but my magazines indicate these designers produced 184 eligible plans, so you should have a large selection from which you can build. Elsewhere in this issue you will find (based on my magazine and plans collection) a list of eligible designs and the source of publication. It is your responsibility to prove that other models by these designers are eligible.

SATURDAY'S EVENTS

These events are open to models built from eligible magazine plans.

1. **MASS LAUNCH:** A single sortie for models by any one of the above designers with 3 or more entries. Trophies awarded.
2. **MASS LAUNCH:** A single sortie for all eligible models. Trophy awarded.
3. **BUILDERS SELECTED TARGET FLIGHT TIME:** The entrant selects a slip of paper from a hat that has a number between 20 and 60 written on it. This is their target flight time, in seconds. The entrant then has 2 minutes to

wind and launch. The contestant with the closest flight time to his selected time is the winner. Open to all eligible models. Fly-off to break tie. Trophy awarded.

4. SPOT LANDING: A single sortie mass launch for all eligible models. The model landing closest to the prescribed location is the winner. Trophy awarded.
5. CONTESTANT CHALLENGE: Any contestant can create his own challenge. The event must be run by the CD or his assistant and a kanone will be awarded for events that satisfy FAC rules. No trophies awarded.
6. BEST LOOKING MODEL: All contestants will be asked to vote for the best looking model, whatever that means. No formal judging will be done. Open to all eligible models. Trophy awarded.

SUNDAY'S EVENTS

These events are open to models built from eligible kits.

1. SPEED AND NAVIGATION: The traditional event as run at our annual contest. Trophies awarded.
2. MASS LAUNCH: A single sortie open to eligible models with a wing span of 16 inches or less. Trophy awarded.
3. MASS LAUNCH: A single sortie open to eligible models with a wing span greater than 16 inches. Trophy awarded.
4. COMET WW-1 MASS LAUNCH: A multi-sortie limited to the Spad and Fokker D-7 Comet ten centers. The event director may, at his discretion, allow colorful models to launch from 1 to 5 (?) seconds later than the rest. (This is a Stew Meyers suggestion, and the CD likes it also.) Trophy awarded.
5. CONTESTANT CHALLENGE: Any contestant can create his own challenge. The event must be run by the CD or his assistant and a kanone will be awarded for events that satisfy FAC rules. No trophies awarded.
6. BEST LOOKING MODEL: All contestants will be asked to vote for the best looking model, whatever that means. No formal judging will be done. Open to all eligible models. Trophy awarded.

One more item needs addressing. As you look at the list of eligible models, they obviously come from old magazines, and many of you don't have access to these gems. So here's my offer. I'll make cop-

ies of any one plan and associated article (if I have the magazine, and not just the plan) provided you give me your word that you intend to bring the model to the '99 Summer Fun Fly. If you come to my place and pick up the plan, the cost is \$1.00. If I have to mail it, the cost is \$2.00, and I'll supply the envelope and postage. Complete that model, send me a photo, and I'll honor your request for another plan. In other words, I'm not going to accommodate "plans collectors". In some cases, I will have to make copies from copies, so there may be some distortion in the material you receive.

OK folks. This is my proposal. Do we try this wacky type of contest or revert to the traditional one? Please provide your input, even if you don't expect to attend. If there are no serious objections, we'll proceed with additional plans and try to arrange for overnight accommodations, Saturday night activities, and resolve other items that need attention.

WINDSHIELD SUPPORT STRUCTURE

Allan Schanzle

Most windshields are not just glass, but are held in place with supporting structure. This past winter I built a Sydney Struhl (alias Sidney, Captain Richard, and Dick Struhl) design of the Howard DGA 125 published in the August 1941 issue of **MODEL AIRPLANE NEWS**. This is a typical low wing trainer, similar to the PT-19, but with a radial engine. The open cockpit windshield was the typical flat plate front with flat sides bent rearwards. Obviously, there must be structure supporting the glass, not only at the location where the glass bends rearward, but also around the perimeter. In the past, I've used thin strips of black tissue held to the back side of the celluloid (the back side to minimize clumsy fingers tearing it off) with RC 56 or Microscale's Micro Kristal Klear glue.

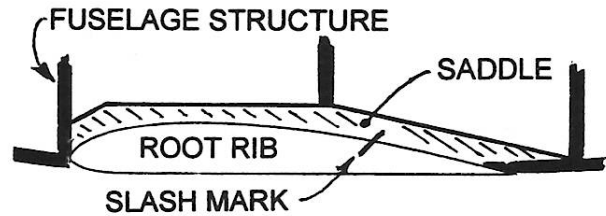
For the Howard, however, I tried something new. For years, I've used pens made by Sakura called Microperm (available at most art stores) for drawing plans on vellum. They write on practically everything .. paper, metal, plastic, etc., and come in different point widths. They are disposable, so when the ink runs out, toss them away and pull out another one (you do buy two of everything, ... right?). Sakura also makes a pen called Micron Pigma, but this version won't write on metal or plastic, and is OK but less than perfect for vellum.

right?). Sakura also makes a pen called Micron Pigma, but this version won't write on metal or plastic, and is OK but less than perfect for vellum.

To include structure for a windshield, first cut (then re-cut, re-re-cut, etc.) a piece of bond paper until you get the proper shape, including the side panels. Then place the pattern on celluloid and trace around the edge with a pen using water-soluble ink. Cut out the celluloid and then hold under the faucet to rinse off the perimeter ink. Pat dry with a paper towel.

Now use the Microperm pen to draw lines on the back side of the windshield to represent structure. Lightly score a line on the front side of the windshield with an XACTO knife where the side and front panels meet and gently bend the celluloid back until you feel the celluloid fracture. If done with tender loving care, the side panel will still be stuck to the front panel. Place a very thin bead of clear-drying glue (a two-hair brush or point of a straight pin works well here) on the crack and on the bottom edge of the windshield and place on the fuselage to dry.

acetone to the back side of the paper. Use a pencil to make a mark across the rib/saddle line so you can later associate which rib goes with a particular saddle. (See sketch).



Make a single cut with a sharp XACTO on the line that separates the top of the root rib and the bottom of the saddle and then proceed to cut out the remainder of the outlines. If you build the fuselage first, place the slash line on the inside of the structure so it won't show through the tissue. When you build the wing center section, be sure you place the root rib with the mark on the proper side of the wing so it fits into the associated saddle piece. Assuming you have built a nice square fuselage where the two saddle pieces are in proper alignment, the wing will fit perfectly into the saddle.

WING ROOT RIBS AND MOUNTING TECHNIQUES FOR LOW WINGERS

Allan Schanzle

I seem to be attracted to building and designing low wingers. My preferred method of mounting the wing for this type of aircraft is to build a "saddle" as part of the lower structure of the fuselage. This allows the wing to be built in one piece, which I find helps achieve the same angles of attack for the right and left wing panels. The wing root ribs are then glued to the saddle. The problem with this technique is that if the ribs don't fit the saddle precisely, gluing the wing to the fuselage can induce warps that are difficult to remove because they evolve as a result of a twisted center section.

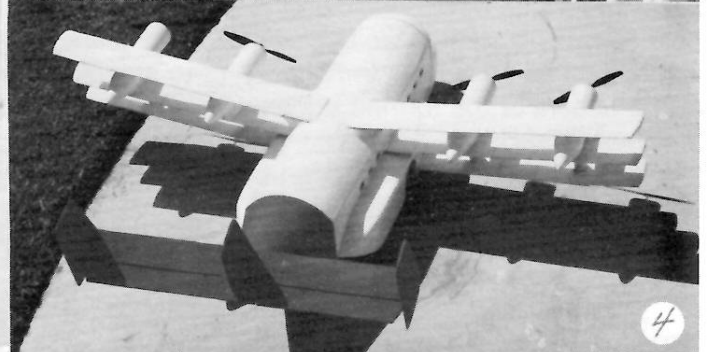
Some time ago, I began to use a very simple technique to ensure the root ribs fit perfectly into the saddle. In fact, it's so obvious, I wonder if I'm the only person to not have used it!

The idea is to cut one saddle and associated root rib in a coordinated and single step. (See the sketch). Draw the saddle and root rib as a single unit on a piece of paper, take it to your local copy machine, and produce two copies. Transfer one of the copies to a sheet of balsa by placing the printed side down against the balsa and brush or rub

PHOTO CAPTIONS

Tom Schmitt

1. The feature plan for this issue is Allan Schanzle's CO₂ Rearwin Skyranger.
2. Allan with a Göppingen Wolf glider from an old MAN plan.
3. Another of Allan's recent aircraft is this nifty Stinson from a Comet plan.
4. Bob Haight's photo of his R/C electric powered Beechcraft Cascade ("The World's Last Triplane").
5. Allan continues to crank out models from the old magazine plans. Here is Sydney Struhl's Howard DGA 125 Trainer.
6. We wish Paul Spreiregen a speedy recovery from by-pass surgery. Paul seen here with wife Rose-Helen.
7. We wish Doug Buchanan a happy 80th birthday. Doug went ashore at Omaha beach on his birthday with the 29th Division.
8. The finals at the National Building Museum workshop this spring. Paul arranged for this happening and a number of Maxcutters pitched in to make it a big success.



**MAKING AND MOUNTING
COWL BUMPS, IN LESS
TIME THAN IT TAKES TO
READ THIS**

Allan Schanzle

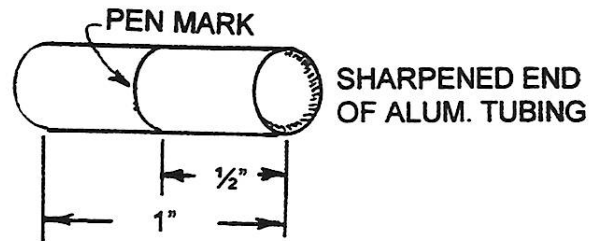
This past winter I built the Comet 25-inch span Stinson SR 7 Gullwing. Some of these aircraft didn't have cowl bumps, but when included, they sure add sex-appeal. But on this aircraft, with nine cylinders, you've got 18 "pieces" of sex appeal. Wow..... at my age, that's a whole years worth!

In the past, I've tried an assortment of ways to make these little devils, including making a single mold and use a Mattel Vac-U-Form to create identical bumps, but this gets tedious trying to smooth off the bottom of the formed edges with a razor or sanding block. Here's a simple way to make these little buggers, two at a time. Start by collecting the following materials:

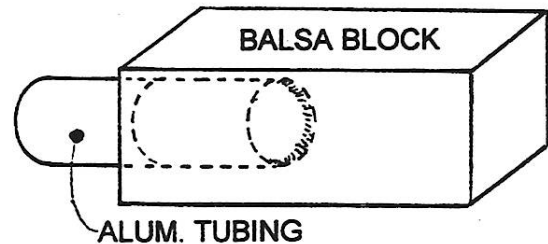
1. Aluminum tubing with outside diameter (OD) *twice* the height of a single bump.
2. Balsa strip that is approximately square with a cross section that is at least 1/8th inch longer on each side than the tube OD. Use reasonably soft balsa.
3. An electric drill or Dremel tool.
4. Sanding blocks. (ADC brand works OK, but I prefer the "RINO" brand that I've bought at model railroad shows. These are about 2"x3" and 1/2" thick with rounded corners. They come in four different grits. They also wash clean under a faucet using an old toothbrush)
5. Your favorite brand of sanding sealer. (I use clear dope mixed with baby powder - my models may not fly well, but they sure smell good.)
6. Although this last item may not be necessary for you, I don't know how I'd build anything without a 3-power magnifying desk lamp.

OK. Here we go, step-by-step.

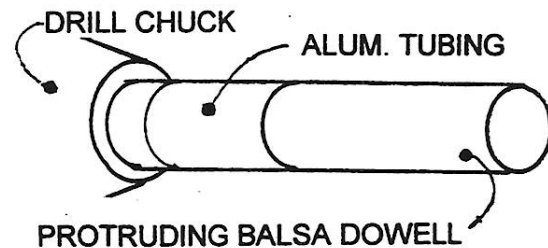
- A. Let's assume you're going to need 18 cowl bumps. Start by cutting 9 pieces of tubing, each about 1" long. Clean out the burrs on the inside edge of one end of the tubing with a small round file or No. 11 XACTO blade. It will help if you create a sharp edge on the end of the tube when cleaning the burrs. Put a mark, with a fine pointed permanent marker, on the outside of the tube exactly 1/2" from the cleaned end.



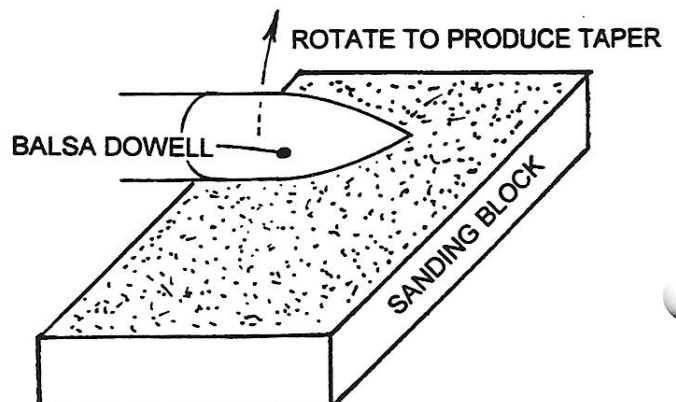
- B. Cut 9 equal-length pieces from the balsa strip, each 5/8" longer than the desired length of the cowl bump. Press the end of each piece of balsa onto the "sharpened" end of a tube up to the felt tip mark, making it line up with the tube as straight as possible.



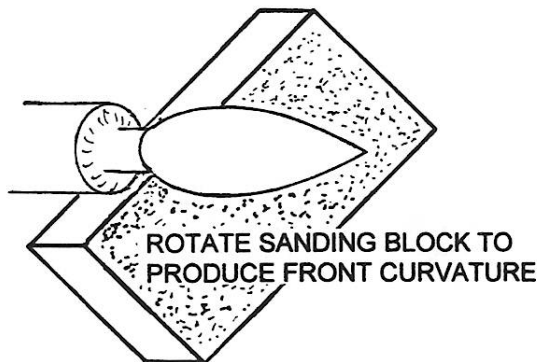
- C. Insert the uncovered end of the tube into the drill, turn it on, hold the sanding surface parallel to the centerline of the tube, and *gently and slowly* sand the balsa to the shape of a circular dowel until the balsa is removed from the *outside* of the tubing.



- D. Again using the drill, gently press the balsa dowel against the sanding block with a slight rotation to form the cone-shaped (rear) end of the cowl bump. Sand to a sharp point.

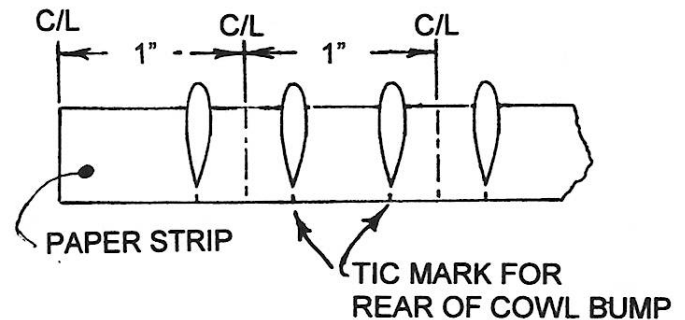


- E. Now use the edge of the sanding block to grind away about half of the front end of the cowl bump. Leave the balsa cowl bump in the tubing but remove the tubing from the drill and repeat the process for the other eight pieces of tubing, trying to sand each piece to the same shape. If you've been precise in marking the tubes and cutting the lengths of balsa, each sanded piece should be the same length and diameter. The shape of the curvature is something you will have to work at to get identical cowl bumps.



- F. Apply two coats of clear dope to each sanded balsa form and then one coat of sanding sealer, letting each coat dry thoroughly. Place one of the tubes into the drill and use a very fine grit sanding block to smooth and polish the balsa surface.
- G. Use a sharp single-edged razor blade to cut off the balsa at the end of the aluminum tube and hand sand to final shape. Smooth the front end with dope and sanding sealer.
- H. Split the balsa cowl in half with a razor blade. (Here's where the magnifying glass is really useful) and grind away a small amount of the center section of the flat surface you just cut with the razor to accommodate the curvature of the cowl surface.
- I. After you've made all these little devils, it remains to apply them at properly spaced intervals. Cut a strip of bond paper about $\frac{1}{2}$ " wide and long enough to wrap around the outside of the fuselage cowl, with some extra left over. Place the paper strip around the cowl where the bumps are to be located. Mark on the wrapped around end of the paper the point where the paper strip begins to overlap the end of the paper you first placed on the cowl. This tells you the circumference of the cowl. To make things easy, let's assume the circumference is 9

inches. Divide the circumference (9") by the number of cylinders (9) to give a value of "1". This is the distance (in inches) on the cowl between the centerline of each cylinder. See sketch. Lay the paper strip out flat and put 9 lines on the paper that are the computed distance ($9" \div 9 \text{ cylinders} = 1"$) apart.



Place a few sets of the cowl bumps on each side of the lines representing the cylinder head centerlines until the spacing looks right. Measure the distance of the rear end of a single cowl bump from the centerline and make corresponding tic marks on the rear edge of the paper strip on each side of each centerline. Wrap the paper strip around the fuselage cowl again with one centerline directly above the middle of one cylinder head and then mark on the cowl the location of the rear of each bump. Remove the paper, and glue on the bumps. When dry, use a three-hair brush to apply a thin bead of sanding sealer where the bump meets the cowl. And that's it!

BEADING AROUND WINDSHIELDS

Allan Schanzle

Photos of the real Stinson SR-7 aircraft indicated beading at the base of the windshield where it meets the fuselage. I've used small thread held in place with clear-drying glue for this detail in the past, but the thread usually gives a fuzzy appearance, so I looked through my junk for something that would be better suited for the Stinson. I found some two-pound monofilament fishing line, but it was translucent. So I took a black-tipped permanent marker to color the fishing line and held it in place with clear-drying glue. It sure looks better than thread!

THE REARWIN SKYRANGER, THE LAST OF A FAMOUS NAME

Allan Schanzle

The Rearwin aircraft story begins with father Rae Rearwin wanting to get into the aviation business. His two teenaged sons, Ken and Royce, were enthusiastic about the idea, but his wife, Leila, was less than pleased. But in January 1929, the "Ken-Royce" two-seat tandem biplane first took to the air in Salina, Kansas. It won several races and was considered a complete success. But it became another of the victims of the depression and only 7 were built. In March 1929, Rae decided to move to the new Fairfax Airport in Kansas City, Kansas.

The next design was a two seat tandem monoplane called the "Junior", and was test flown in April 1931. It was very similar to the American Eagle Eaglet, and had an enclosed cabin. The depression was in full swing and took its toll, but Rae was an outstanding businessman and survived the worst years, even though only 23 Juniors were built.

In 1933, the Rearwin Speedster was designed and first flown in mid 1934. The Speedster could not meet the "hands and power off" spin recovery requirements. It would, however, respond to full power and opposite control inputs. Many modifications were made, but by 1936, the aircraft was outdated. It did, however, receive certification in late 1937.

In 1934, with the Speedster flying but still having spin recovery problems, Rae initiated the design of the tandem seat Sportster series, the prototype of which first took to the air in April 1935. This became a success, but the side-by-side seating arrangement was now in vogue, and a new design was initiated.

The Rearwin Cloudster (originally dubbed the "Coupe") first flew in April 1939. The Iranian government bought 25 of these and mounted a 30-caliber machine gun on the left wing strut. Good grief!!!.... could this be a legitimate WW-II entry??? Zack Moseley of "Smilin' Jack" fame bought one and used it in his cartoon series.

And now, at last, we get to the subject of this article... the Skyranger, the last of the Rearwin designs. It was originally called the "Model 165", (it used a 65 hp Continental) and used wing slots to

render better flight and landing characteristics. When introduced to the public in April 1940, it was designated the "Ranger". However, the engine manufacturer with the same name complained, and the aircraft was renamed "Skyranger" when it was certified in August 1940 with a 75 hp Continental. Eighty hp Continental and Franklin engines were also offered. The final pre-war version used a 90 hp Franklin. With the outbreak of WW-II, production was stopped after a total of 82 aircraft.

After the war, Rae was convinced it was time to sell the business. He was 64 years old, and decided to sell to Commonwealth, who built an additional 276 Skyrangers before they too ceased production.

To the best of my knowledge, only 3 models of this aircraft have been published. The first was by Gregory Kohn in the March 1943 issue of Air Trails. Walt Mooney also built one, but I only have a copy of the plan, and do not know its source. The last is an R/C version (MAN, Nov. 1970) by Gene Salvay, who was an engineer at Rearwin. His plan is somewhat complicated, but his outlines and contours appear to duplicate photos of the full size aircraft. So I decided to take the easy way out and enlarge Gene's magazine plan and adapt it to a F/F structure.

I used many of the photos in Reference A noted on the plan to include details, some of which were not shown on Salvay's plan. This was not a simple model to build, at least as presented. It represented my attempt to build a "real" scale aircraft, so if I saw it on the photos, I put it on the model, right down to simulating rivets and the rubber pads on the steps. The plan could, however, be easily reduced and adapted to "pseudo" Dime scale.

Generally, the model is straightforward in construction, except for the wing slots and rudder/stab/fuselage junction design. The plan shows an isometric sketch of the construction of the tail section. For the wing slots, (see section B-B at top of plan) I took a 1/2 inch thick strip of balsa, cut it to a width of 3/8 inches and 5 inches long, and then used my bench saw to make a 60-degree cut 1/16 inch from the top edge. The rear portion of the cut was then trimmed to proper length to fit between the two W4 ribs. Two pieces of 1/32 balsa scrap were tack-glued with a tiny amount of Ambroid to the 60-degree cut surface. The leading edge portion was then cut to length, pressed against the scrap balsa, glued to W4, and the whole thing sanded to shape. Remove the scrap pieces of

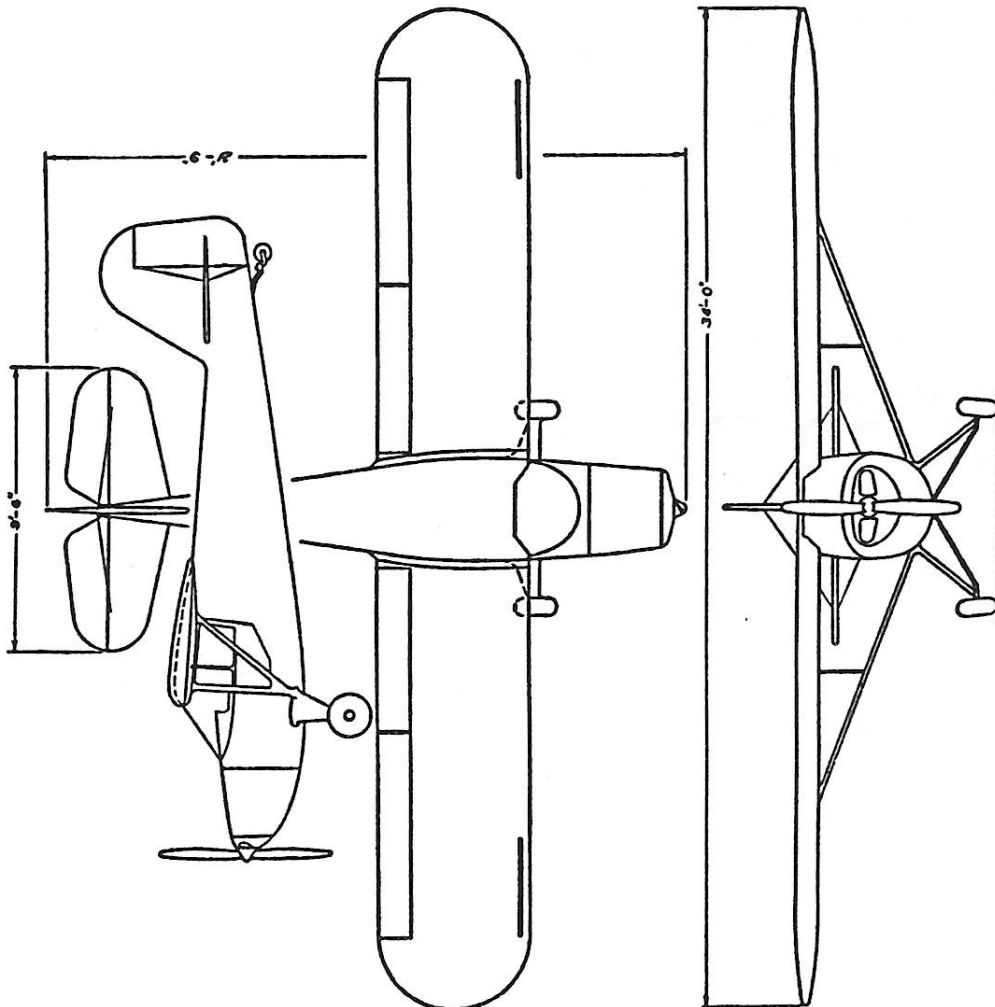
1/32 balsa with acetone and you have a realistic looking wing slot.

Aircraft colors can be a difficult subject, and those of the Skyranger seem to fall in line with this rule of thumb. Kohn's article says his model was painted "berry red", and the black and white photos of his model indicate a light (probably white) trim. The May 1986 issue of "*The Vintage Airplane*", shows a restoration project for a Skyranger (NC34827) and states "Colors are the original Insignia Blue and Waco Vermilion with a gold pinstripe." This particular aircraft was modeled by Eduardo Esteves of Brazil, flown in the 1992 R/C Top Gun event, and shown in the September 1992 issue of MAN. The wings and stab are Waco Vermilion (red) and the fuselage and rudder Insignia blue. Wheel pants (red) were included in the photos of this restoration project, but Dan Driscoll says he talked to the owner and the aircraft was flown *without* wheel pants. Based on black and white photos in the book "*REARWIN, A Story of Men, Planes, and Aircraft Manufacturing During the Great De-*

pression" (see reference on plan), some planes appear to have been all red with blue registration letters and blue pinstripes outlined in gold. This is the color I've chosen, with an appropriate registration number. Other photos suggest all blue with red registration numbers and pinstripes (outlined in gold).

A 3-view of the Skyranger is presented below, but the nose section, windshield, and rudder/stab/fuselage portion do not agree with photos. I have made changes in these areas, as well as to the plans presented by Gene Salvey, where the tail wheel, wing strut width, and aileron width don't agree with photos and/or 3-view.

Flying is a snap. A little left rudder and a tad of down and right thrust for the Brown Peanut A-23 engine was all it took, except for the 2 grams of weight I had to add to the *tail!!!* Total weight, with engine and empty tank, is 38 grams, or about 1 and a third ounces.



REARWIN MODEL 175
A two-place private plane Continental powered.

THE RHODE ST. GENESE 26 AIRFOIL

Allan Schanzle

In the Nov./Dec 1996 issue of MAX-FAX, I presented a page of Clark-Y airfoil contours with chord lengths from 1.4 to 4.4 inches. I use this airfoil almost exclusively because it looks scale for many Golden Age aircraft and it gives reasonable, but perhaps not optimum, performance. Dave Stott told me he uses the Rhode St. Genese 26 airfoil, and he obviously gets excellent performance. It would take an idiot (a category for which I easily qualify..... just keep on reading), to ignore such a recommendation, so I plotted one chord length and used a copy machine to enlarge and reduce the original size. The result is given on the following page.

The experts (whoever they are) have been expounding for years about the virtues of a sharp leading edge for model aircraft. If this is true, the Rhode St. Genese should give better performance on our models than the Clark-Y. But I don't even try to optimize the prop/rubber combination, (I'm still using some old black FAI rubber!!.... See, I told you I qualify for the "idiot" category) so the use of a particular airfoil has never been big on my list of items to try. If you are so inclined, try the two airfoils on one of your models and let me know the results. No doubt you'll be about the 113th person to try and confirm the result, and that may even get me to try an experiment myself.

RIVETS WITH A SCALE APPEARANCE ON PAINTED MODELS

Allan Schanzle

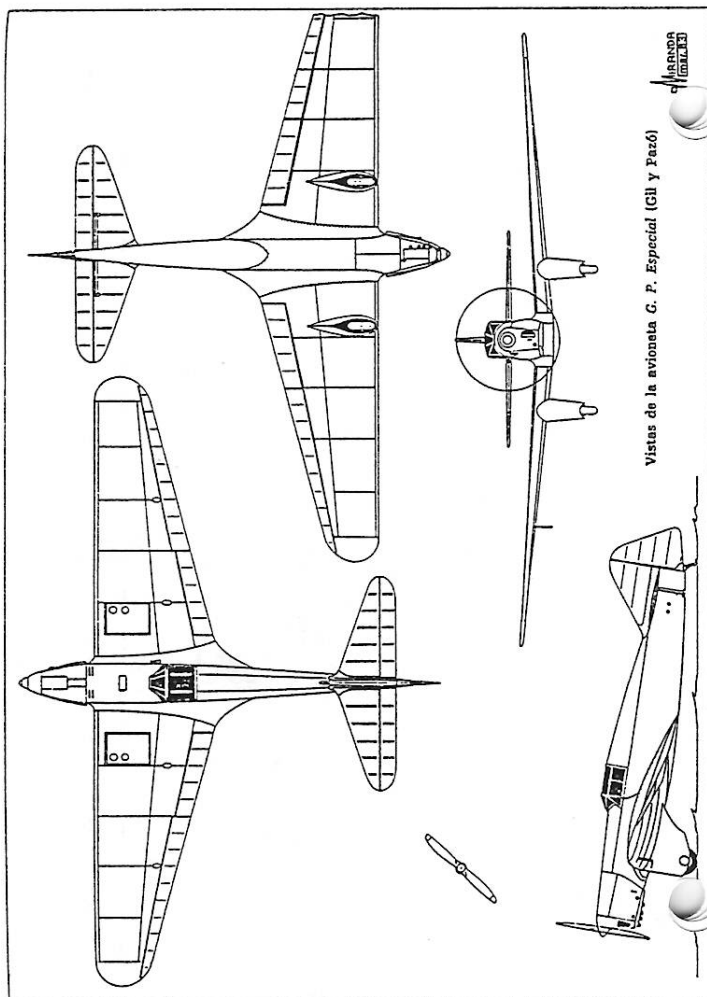
As noted in the Rearwin Skyranger write-up in this issue, I tried to create a very scale-looking model, and that included such details as rubber pads on the steps (*Gads!!.... this guy is ready for the Maryland State Home for the Bewildered*), three-dimensional looking doors, rivets, etc.. The latter of these (rivets) has always been a pain in the center hip pocket, but I found a technique for painted models that any idiot (*boy, ... does he qualify for lots of these ideas*) can use to get a very scale-looking simulation for these fasteners.

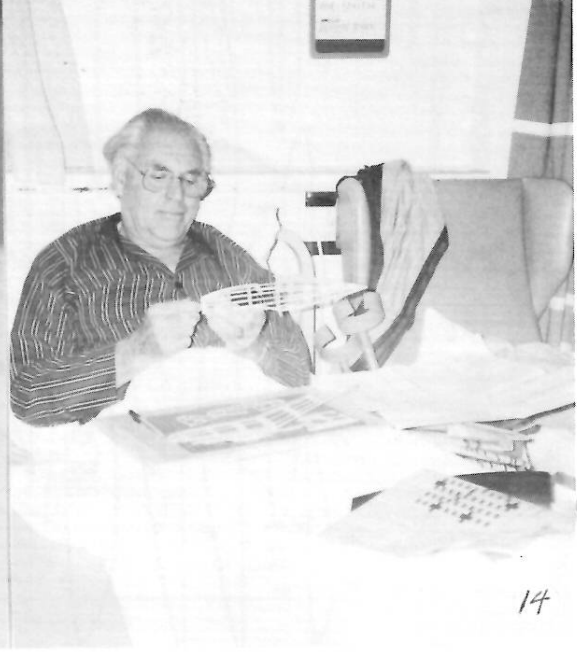
If you're a chicken, like me, you'll first mark the location of each rivet using a sharp-pointed water-based pen. When all marks are on the model, take

a good look to make sure every one is properly located. If not, use a damp Q-tip to remove the offending mark(s) and relocate. When all are properly aligned, take one of the "005" Sakura Micron Pigma black pens and put a dot over each water-based point. Let dry, and then wipe the area with a damp paper towel to remove all remaining water-based ink.

Let's say the cowl of the model was painted with Sig Fokker Red, as in the case of the Rearwin Skyranger featured in this issue. Grab your two hair brush and dip into some thinned paint. Using that 3-power magnifying glass that we all have (and need), put the smallest possible drop of paint over the black dot. Let dry, and you're finished. If the paint has been properly thinned, the black will just barely show through the red to give the illusion of a raised dimple. Neat, eh-what?

I haven't tried this concept for tissue covered models, but you might try Micron Pigma pens in different colors. I've seen them at art stores in red, green, blue, and black.





**THIS YEARS SUMMER
FUN FLY IS NOT AT
COMSAT**

Allan Schanzle

As many of you know, COMSAT is no longer available for model flying. We have looked at other known facilities, but the only one we have been able to get approval for on relatively short notice has been compliments of the Brainbusters Club in the Norfolk, VA area. They fly at the Petersburg, VA airport, and have granted and obtained permission for us to also use the field. Without their generous help, we wouldn't have a contest this year. Many thanks, fellows.

The airport is a much better flying site than COMSAT (much larger), but it is about 3 hours drive south of Washington DC. To get there, take I-95 south from Washington to the south end of Petersburg Va. Take I-85 (Exit 51) west for about 4 miles and exit at U.S. Rt. 1 south (exit 63). The entrance to the airport is about 2 miles down Rt. 1 on the right side of the road. You go under an overpass about ½ mile before the airport access, which is kind of obscure but is a two lane asphalt road. We will have a sign at the entrance to this road. About 1/3 mile in, you will see the airport. Go through the chain link fence gate (it should be open), past the hanger and operations buildings and look left. You should see the CD's tent about ½ mile down a taxi way. Drive down the ramp **slowly!** This is an active airport, so planes may be on the taxi way.

The wind may dictate that we won't be at the location noted above. If this is the case, park outside the gate and walk around until you find us. Go into the Operations building and ask them how to get to our area. You may have to go back out to the highway and drive around to the other side of the field. **YOU CANNOT DRIVE ACROSS THE ACTIVE RUNWAY!!**

SYMPATHIES

Tom Schmitt

The D.C. Maxecuters wish to extend their heartfelt condolences to Bob and Jane Schlosberg on the recent tragic death of their daughter Carol, and to Carol's sister Lynda Bazin and her husband Jim who have been instrumental in trying to obtain official assistance in resolving this heinous crime. You can help through the following two web sites:
1. <http://world.std.com/~wsd/petition.htm>

2. <http://www.his.com/~tschmitt/>

The Maxecuters also wish to extend their sympathies to Otto Kuhni on the death of his wife Leslie. Otto has been a long-time Maxecuter and benefactor of the modeling world with his marvelous aircraft drawings graciously donated for trophies and newsletters. Thanks, Otto, and our thoughts are with you now.

PHOTO CAPTIONS

Tom Schmitt

9. A long time ago, Bob Spink, a resident of South Dakota and long-time Maxecuter, sent photos of his model aircraft emporium, but they have slipped through the cracks in the club files. He is seen here with his Jimmy Allen Skyraider. We hope to have a review of his workshop in one of the next few issues.
10. Pete Azure was at the Buffalo indoor contest with his Demoiselle, not the easiest model to fly with rubber power.
11. From Japan, Nathan Sturman sent many great photos of his scale models. He is seen here with his 1930 Nakajima A1N2, a modified Gloster Gampet, Gamecock variant built by this Japanese company.
12. Another of Nate's models is this nifty 1931 vintage Nakajima Type 91 fighter used by the Japanese Army. Nate has sent several plans of his models and we anticipate publishing one or more later this year or early '99.
13. Jane Schlosberg sent this terrific photo of her Peanut Found Centennial from Walt Mooney plans. Your photo editor built a 26 inch version from Walt's plans but it never looked like Jane's.
14. Once again, Lindsey Smith shows us how to endure a stay in the hospital. Here he is working on a model while convalescing from his second hip replacement.

ELIGIBLE MODEL DESIGNS FOR THE CLASSIC DESIGNERS CONTEST

ABBREVIATIONS AND NOTES	
WING SPAN NOTED AFTER NAME	
AT	AIRTRAILS
CF	CARVED FUSELAGE DESIGN
F	FUSELAGE PLAN NOT FULL SIZE
FA	FLYING ACES
MAN	MODEL AIRPLANE NEWS
PA	POPULAR AVIATION
W	WING PLAN NOT FULL SIZE

MODEL DESIGNS BY AVRUM ZIER

AIR SPEED COURIER	24"	FA '34/07
BERLINER JOYCE OJ-2	25"	FA '35/01
BERLINER JOYCE XFJ2	27"	FA '34/08
CURTISS WRIGHT COUP	20"	FA '33/12
DE HAVILLAND LEOPARD MOTH	21"	FA '35/05
FAIRCHILD 24	24"	FA '34/10
GEE BEE EIGHTSTER	24"	FA '34/11
GREAT LAKES TRAINER	16"	FA '34/03
GREAT LAKES TRAINER	28"	FA '35/04
GUERCHAISS STRATOSPHERE	28"	FA '34/09
LUSCOMBE SPORT	27"	FA '34/12
NORTHROP GAMMA VICTORIA	26"	FA '35/02
RYAN B-3	20"	FA '34/01
SEVERSKY AMPHIBIAN (NOTE CF)	22"	FA '34/02
STINSON RELIANT	26"	FA '34/05
VOUGHT CORSAIR V-80	20"	FA '34/06
WACO F-3 UMF	24"	FA '35/03
WENDELL WILLIAMS RACER	20"	FA '33/11

MODEL DESIGNS BY JESSE DAVIDSON

BELLANCA SR. PACEMAKER	23"	FA '36/07
CURTISS HAWK 75 (NOTE CF)	20"	FA '37/12
CURTISS ROBIN	22"	FA '38/11
CURTISS XP-40 (NOTE CF)	20"	FA '39/04
CURTISS XP-42 (NOTE CF)	20"	FA '40/02
FAIRCHILD 82 (NOTES F & W)	25"	MAN '39/09
HAWKS' TIME FLIES (NOTE CF)	22"	FA '37/03
HEINKEL 51 (NOTES F & W)	27"	MAN '38/07
KEEN ACE	23"	FA '37/06
MARTIN DIVE BOMBER (NOTE CF)	19"	FA '35/08
MILES MOHAWK	21"	FA '37/08
REARWIN SPEEDSTER (NOTE CF)	20"	FA '35/10
RYAN ST (NOTE CF)	20"	MAN '36/01
SAVOIA S-55	25"	MAN '30/03
STINSON SR. TRAINER	20"	MAN '37/10

MODEL DESIGNS BY HERB WEISS

BREWSTER XF2A-1	13"	MAN '38/10
CURTISS Y1A-18	24"	FA '38/06
CURTISS XP-40	13"	MAN '39/06
DOUGLAS TBD-1	13"	MAN '39/04

FOKKER D-21	23"	FA '38/02
GRUMMAN XF4F-2	21"	MAN '40/01
MAUBOUSSIN TANDEM	13"	MAN '38/05
ME 109	13"	MAN '38/08
NIEUPORT 161	10"	MAN '38/06
NORTHROP XBT-1	24"	FA '38/10
PIPER CUB	13"	MAN '38/12
PIPER CUB '39 COUP	27"	AT '39/03
REARWIN SPORTSTER	26"	MAN '38/02
SEVERSKY EXECUTIVE	12"	MAN '39/08
VOUGHT OS2U-1	15"	MAN '39/12
VOUGHT SB2U-1	20"	FA '36/12
VOUGHT SBU-1	16"	MAN '37/11
VOUGHT V-143	26"	FA '37/07

MODEL DESIGNS BY ALAN BOOTON

AERONCA K	26"	AT '37/07
ANT 25 (NOTE CF)	34"	AT '36/12
ARROW SPORT F	25"	AT '37/05
BEECH STAGGERWING '37	19"	AT '37/08
BLACKBURN SKUA	23"	AT '37/11
BLERIOT 510	18"	AT '38/03
BURNELLI TRANSPORT	27"	MAN '37/08
CESSNA C-34	20"	AT '38/01
CURTISS F11C-3 (BF2C-1)	21"	AT '36/11
CURTISS SBC-3 (NOTE CF)	17"	AT '38/02
DOUGLAS O-46A	20"	AT '37/10
DOUGLAS TBD-1	26"	AT '38/08
FAHLIN SF-2 PLYMACOUP	24"	AT '36/08
FAIRCHILD 24	22"	AT '36/10
FAIREY FANTOME (SEE NOTE CF)	24"	MAN '36/07
FOKKER G-1	27"	AT '37/04
FOKKERT'S SPECIAL SK-2	12"	AT '37/01
GREAT LAKES XTBG-1	20"	AT '39/02
GRUMMAN GULFHAWK	18"	AT '37/12
HAWKS' HM-1 TIME FLIES	18"	AT '37/02
HUGHES RACER	19"	FA '36/03
KOOLHOVEN FK-58	24"	AT '39/07
NORTHROP XA-17	23"	AT '36/06
NORTHROP XFT-1	22"	FA '35/09
RYAN SC	39"	AT '38/05
SPARTEN EXECUTIVE	30"	AT '38/09
STINSON '37 RELIANT	21"	AT '37/09
VICKERS SUPERMARINE SPITFIRE	18"	AT '37/03
WACO N	21"	AT '38/12
WESTLAND LYSANDER	24"	AT '37/06

MODEL DESIGNS BY BILL WINTER

BOEING F4B-4	24"	MAN '36/02
CAPRONI CH-1	24"	MAN '36/01
CURTISS OSPREY	24"	MAN '36/01
CURTISS SOC-1 SCOUT	24"	MAN '36/10
CURTISS XF13C-1	21"	MAN '35/07

ELIGIBLE MODEL DESIGNS FOR THE CLASSIC DESIGNERS CONTEST

DEWOITINE D-535	24"	MAN '36/06
FIAT G-50	26"	MAN '40/06
GREAT LAKES TORPEDO BOMBER	24"	MAN '35/06
GRUMMAN F3F-1	22"	MAN '37/02
HAWKER HURRICANE	28"	MAN '36/04
HOWARD MR. MULLIGAN	23"	FA '36/02
MESSERSCHMIDT UDET FLAMINGO	25"	MAN '35/03
MILITARY AIRCRAFT FIGHTER	25"	FA '36/11
STINSON 1936 GULLWING	22"	FA '36/06
STINSON SR-6	31"	FA '35/12
VICKERS SUPERMARINE SPITFIRE	22"	FA '37/04
VOUGHT V-143	24"	MAN '37/09
VULTEE ATTACK	20"	FA '37/01
VULTEE TRANSPORT	18"	MAN '35/05
WACO CABIN EXPORT FIGHTER	20"	MAN '35/09

MODEL DESIGNS BY EARL STAHL

BELL AIRACOBRE	21"	MAN '41/06
BLACKBURN SKUA	28"	MAN '42/06
CAUDRON C-371	22"	MAN '40/04
CURTISS P-40D	24"	MAN '42/10
CURTISS SO3C-1	24"	MAN '41/12
FAIRCHILD 24 K	26"	MAN '40/02
FAIRCHILD PT-19	22"	AT '40/12
GENERAL SKYFARER	29"	MAN '41/11
GRUMMAN WILDCAT	18"	AT '42/11
HAWKER HURRICANE	26"	MAN '41/09
HOWARD GH-1 MR. MULLIGAN	24"	MAN '42/08
INTERSTATE CADET	30"	MAN '41/01
ME-109 E	21"	MAN '40/11
MILES MAGISTER	28"	MAN '42/02
REARWIN SPEEDSTER	26"	MAN '40/01
STINSON O-49	24"	MAN '41/07
TAYLORCRAFT O-57	24"	MAN '42/04
VICKERS SUPERMARINE SPITFIRE	26"	MAN '40/08
VULTEE VANGUARD	24"	MAN '40/10
WACO E	20"	MAN '40/07

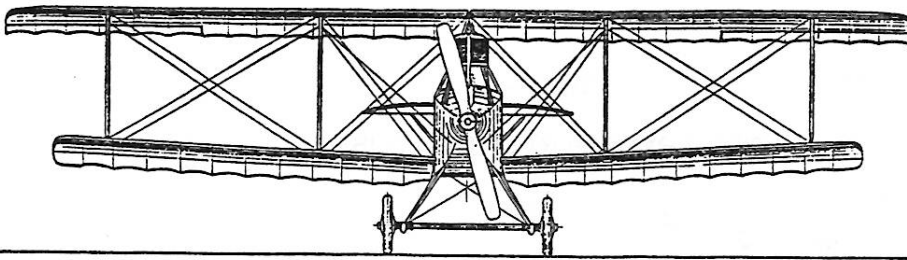
MODEL DESIGNS BY HANK STRUCK

BLERIOT CHANNEL CROSSER	15"	FA '37/05
BROWN B-3	22"	AT '36/09
CAUDRON 1911	28"	MAN '39/02
CIERVA '24 AUTOGYRO	14"	FA '40/03
CURTISS JENNY	22"	FA '38/06
CURTISS NC-4	32"	FA '39/01
CURTISS TRIPOD PUSHER	16"	FA '37/06
DAVIS D1W	20"	FA '37/02
DEPERDUSSIN CUP RACER	17"	FA '37/07
DOUGLAS WORLD CRUISER	26"	FA '39/05
FOKKER C-14	23"	AT '38/04
FOKKER D-7	14"	FA '38/04
HANDLEY PAGE 100	17"	FA '38/08
INTERSTATE CADET	36"	MAN '42/01
RUMPLER TAUBE '14	22"	FA '37/09

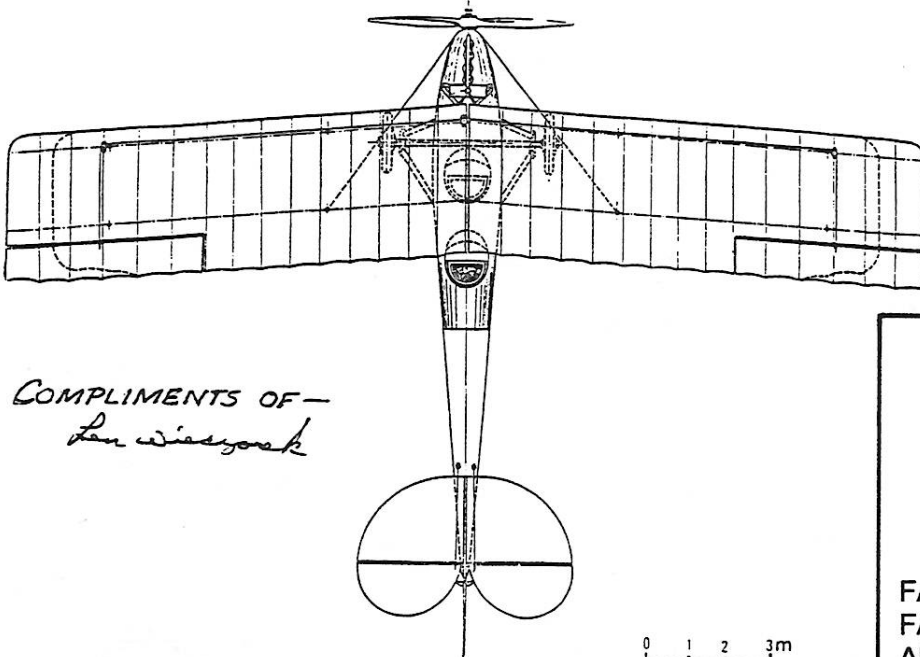
RYAN SPIRIT OF ST. LOUIS	23"	FA '37/08
SPAD 13	13"	FA '38/02
VICKERS GUB BUS	19"	FA '37/10
WRIGHT ORIGINAL BIPLANE	17"	FA '37/04

MODEL DESIGNS BY PAUL LINDBERG

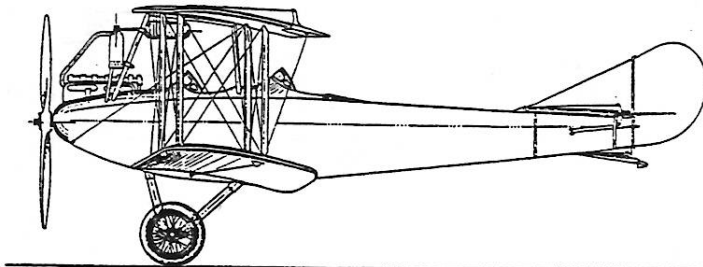
AERONCA C-70	26"	PA '36/05
BEECH D17L STAGGERWING	20"	PA '35/02
BELLANCA AIRCRUISER	20"	PA '34/05
BOEING P-26	17"	PA '34/12
BOEING XP 940 (YP-29)	17"	PA '37/05
BRISTOL F2B	19"	PA '35/01
CAUDRON RENAULT RACER	17"	PA '36/11
CESSNA C-34	27"	PA '36/08
CHESTER RACER	17"	PA '35/06
CONSOLIDATED P-30	20"	PA '34/10
CONSOLIDATED PB-2A	24"	PA '37/02
CORBIN SUPER ACE	17"	PA '35/04
CURTISS F11C-2 GOSHAWK	20"	PA '34/03
CURTISS P-37	19"	PA '38/05
CURTISS WRIGHT COUP	24"	PA '36/12
DOUGLAS O-43	23"	PA '35/03
FAIRCHILD 22	16"	PA '34/02
FAIRCHILD 91 AMPHIBIAN	21"	PA '35/09
GRUMMAN F3F-1	20"	PA '37/01
GRUMMAN SCOUT SF-1	21"	PA '35/05
HAWKER HURRICANE	27"	PA '36/10
HAWKER SUPER FURY	18"	PA '34/06
HOWARD DGA 8	24"	PA '37/03
HOWARD MR. MULLIGAN	25"	PA '35/12
HUGHES RACER	19"	PA '36/07
MARTIN B-M-2	26"	PA '35/10
MONOCOUE D-145	19"	PA '34/08
MORANE SAULNIER PURSUIT	26"	PA '35/07
NORTH AMERICAN O-47	27"	PA '37/07
NORTHROP A-17 ATTACK	24"	PA '36/06
PERCIVAL MEW GULL	24"	PA '36/04
RYAN ST	19"	PA '34/11
SEVERSKY 3-L	22"	PA '34/09
SEVERSKY P-35	15"	PA '39/03
SOPWITH CAMEL	20"	PA '35/08
STINSON TRIMOTOR AIRLINER	21"	PA '34/04
STINSON SR-6	24"	PA '36/01
TAYLOR CUB	23"	PA '37/06
VALE PURSUIT TRAINER	22"	PA '36/02
VOUGHT SBU-1	28"	PA '36/03
VOUGHT SCOUT XSB2U-1	28"	PA '36/09
WACO CUSTOM CABIN	26"	PA '35/11
WACO D PURSUIT	20"	PA '34/07
WESTLAND LYSANDER	24"	PA '37/04



S.A.M.L. S.2



COMPLIMENTS OF—
San Diego



D.C. MAXECUTERS 1998 SUMMER FUN FLY

August 29, 1998, 9:00 - 4:30
Petersburg, VA Airport
(See page 13 of this issue)

FAC Scale: Judging starts at 11:00 AM
FAC Power Scale: Same as FAC Scale
AMA Catapult Glider

Mass Launch Events

WW-I	12:30
WW-II	1:15
Dime Scale Vega	2:00
Dime Scale	2:45
Golden Age	3:30
Speed & Navig.	4:30

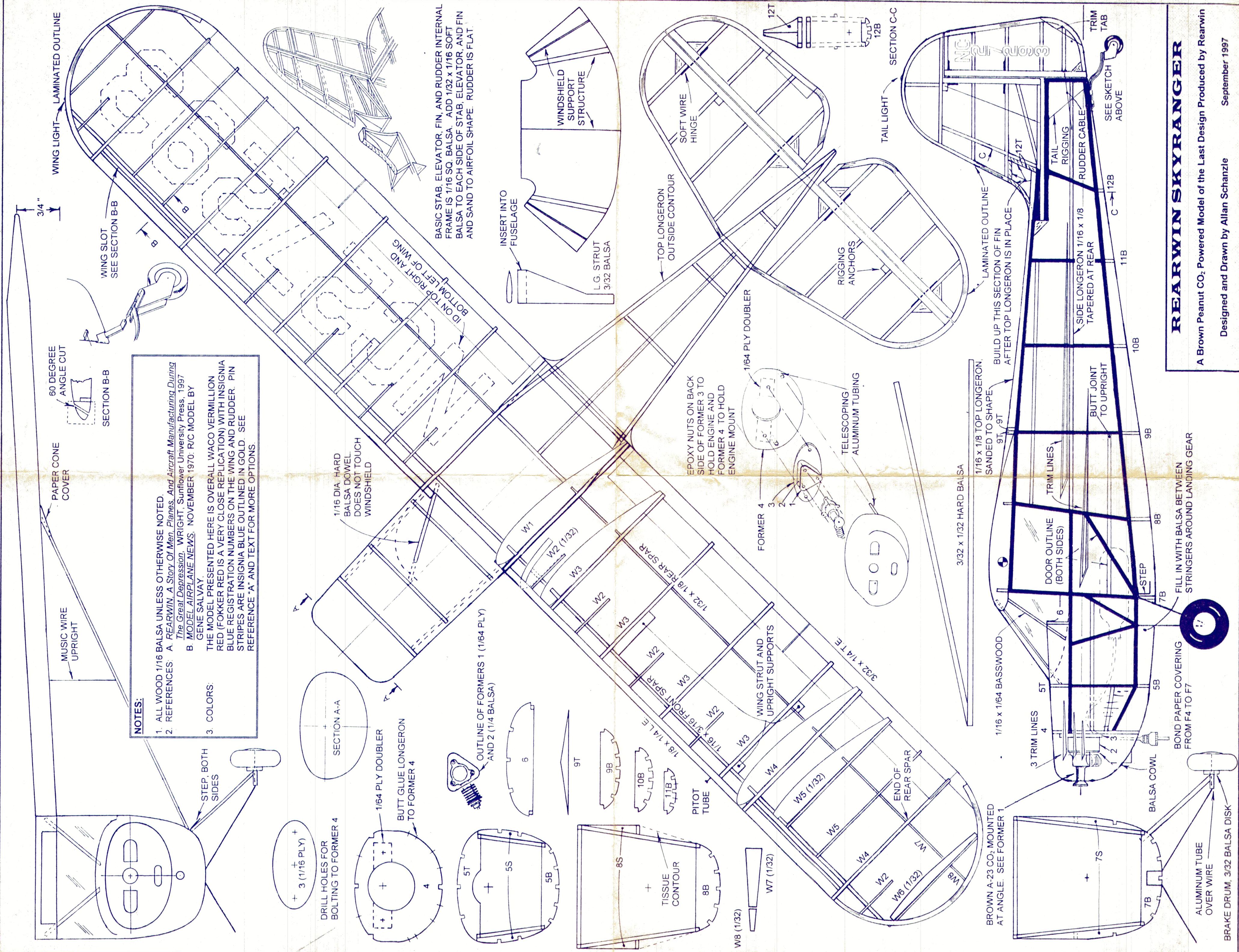


NOTE : Your Dues Are Due

CLUB OFFICERS President: Hurst Bowers, 1649 Birch Rd., Mclean, VA 22101
Secretary: Bert Phillips, 1709 Crofton Pky, Crofton, MD 21114-2305
Treasurer: Stew Meyers, 8304 Whitman Dr., Bethesda, MD 20817

MEETINGS - The D.C. MAXECUTERS hold meetings on the first Tuesday of every month at the College Park Airport, the oldest continuously operating airport in the world.

MEMBERSHIP - Dues for membership in the D.C. MAXECUTERS are \$15 per year for residents of the USA, Canada, and Mexico, and \$25 for all other countries. Your mailing label indicates the year and month of the last issue of your current membership. A red "X" in the box above is a reminder that your dues are due. Send a check, payable to the "D.C. MAXECUTERS", to the treasurer.



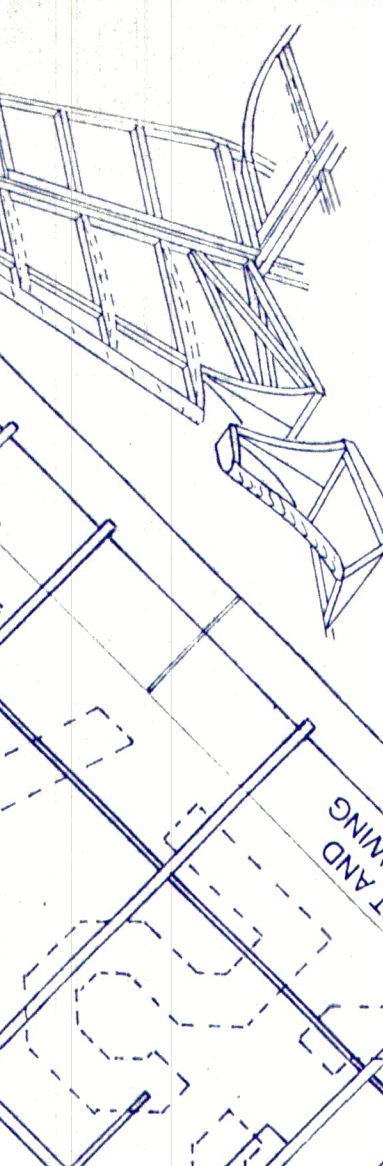
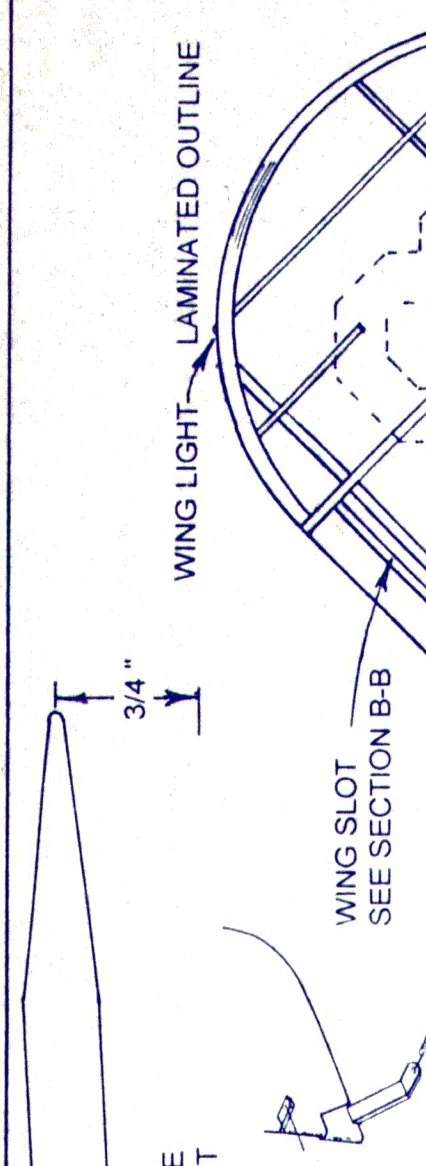
NOTES:

1. ALL WOOD 1/16 Balsa UNLESS OTHERWISE NOTED.

2. REFERENCES: A. REARWIN, *A Story Of Men, Planes, And Aircraft Manufacturing During The Great Depression*, WRIGHT Sunflower University Press, 1997

B. MODEL AIRPLANE NEWS, NOVEMBER 1970: R/C MODEL BY GENE SALVAY.

3. COLORS: THE MODEL PRESENTED HERE IS OVERALL WACO VERMILLION RED (FOKKER RED IS A VERY CLOSE REPLICATION) WITH INSIGNIA BLUE REGISTRATION NUMBERS ON THE WING AND RUDDER. PIN STRIPES ARE INSIGNIA BLUE OUTLINED IN GOLD. SEE REFERENCE "A" AND TEXT FOR MORE OPTIONS.



BASIC STAB, ELEVATOR, FIN, AND RUDDER INTERNAL FRAME IS 1/16 SQ. Balsa. ADD 1/32 x 1/16 SOFT Balsa TO EACH SIDE OF STAB, ELEVATOR, AND FIN AND SAND TO AIRFOIL SHAPE. RUDDER IS FLAT.

