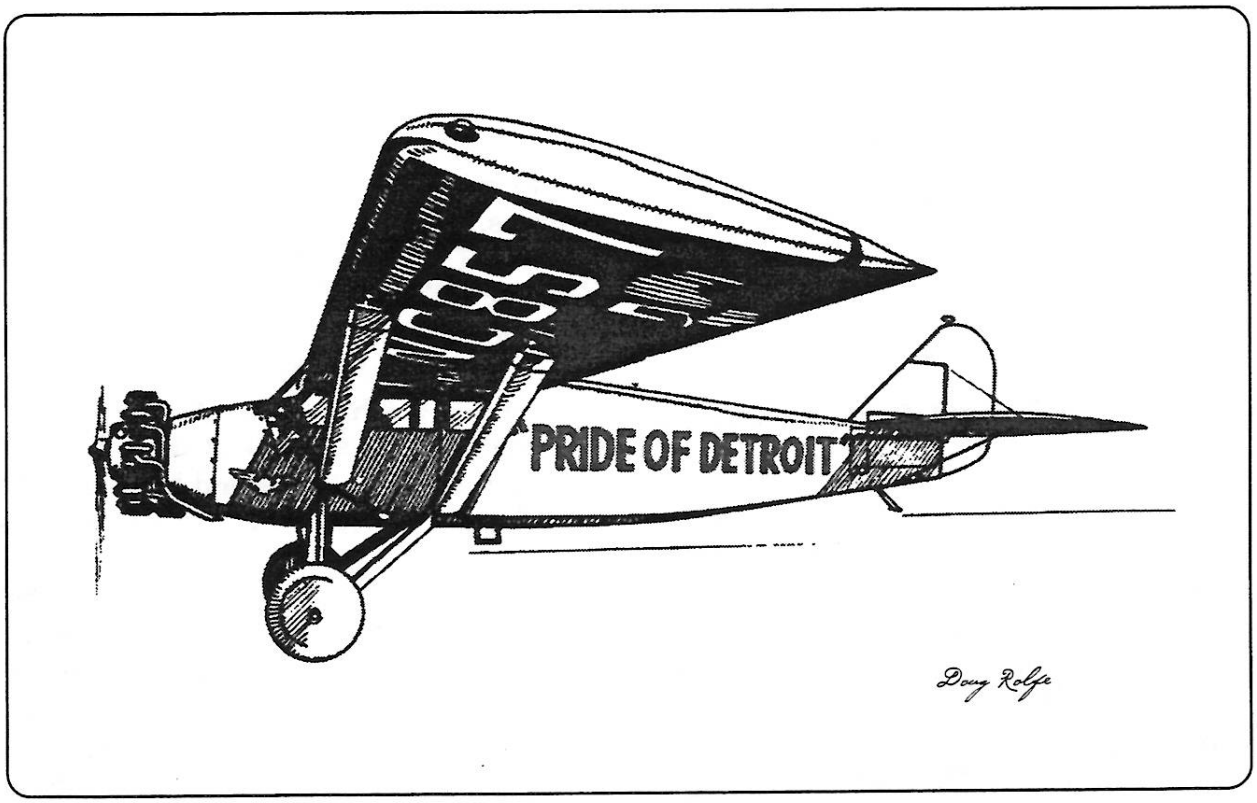
# MAXFAX

Journal of the D. C. Maxecuters

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

**Editor:** Hurst Bowers & Ray Rakow

**July - August 1997**


## *COMING ATTRACTIONS*

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| **August 9th** | **World Wide Charlie Grant "Cloud Tramp" mass launch on noon EST (see inside for details)** |
| **August 30 - 31** | **FLYING ACES OUTDOOR CHAMPS AMA National Flying Site Muncie, Indiana** |
| **September 6th** | **DC Maxecuters Summer Contest Comsat, MD** |
| **September 26 - 27** | **Kudzu Flying Corps Land & Lake, NC** |
| **November 2** | **DC Maxecuters National Building Museum indoor fun fly, 10AM - 4PM (see inside for details)** |

This issue contains two plans by Hurst Bowers, one old and one new. The Fairchild 22 was designed in 1961 for the Peewee .02 and published in the French magazine *MRA* in 1962 while Hurst was stationed in France. Some changes in wood sizes and it can be flown electric or rubber. Two FF plans from the 1940 Model Airplane Book by M.B. Kleckner, Dayton, Ohio, by way of Sam 1066 Clarion.

There will be an added event for our September 6 contest at COMSAT. This is a War-in-the-Pacific NO CAL event for fighters only, which actually fought in the Pacific 1940 to 1945. Plastic props only. FAC NOCAL rules apply. Questions or plans, call Russ Sandusky at (410) 668-3056.

Ray

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## A New Indoor Model Flying Facility in Washington, DC

On Sunday, April 2, the DC Maxecuters held a fun-fly in an extraordinary historic building in the heart of Washington, DC. The fun-fly was a test of the use of the building, and it was a complete success. The result was that we are invited to use the building again in the fall, on Sunday, November 2, to be exact. So mark your calendars now.

First, the building. It was built in 1887, the largest government office building of its time and for many years after, its purpose to administer pensions to Civil War veterans. The building has been restored to its original condition, and now houses the National Building Museum, one of the newest in Washington, and certainly one of the most interesting. To give an idea of its scope, recent exhibits include one on tools as art, another on the design of five and ten cent stores, and one on the roadways in our national parks. For a long while a Bell Air cobra P-39 was on display!

The museum director and staff are nothing short of terrific and were enthusiastic about the idea of model flying right from the start. The director is Susan Henshaw Jones, and we cannot praise her enough for her hospitality. Two members of her staff deserve equal gratitude and thanks, Crysanthe Broikos and Eileen Langholtz, who did all the detail arrangements. Thanks also to Patrick Neil.

Our hope is to be able to use this building twice a year, fall and spring. We may also be invited to give special flying shows in connection with other museum activities, the first next January '98. The museum's interest in us is twofold--that we are very much examples of the building arts, being a form of flying architecture, and that our models are fascinating to the museum's visitors. In fact (and for future reference) we should construe our events to maximize public enjoyment--hardly a problem for us.

The National Building Museum measures about 200 x 400 feet, about 1.8 acres, and occupies an entire city block. Its maximum exterior height is about 150 feet. But its glory is its interior, which includes not less than three atriums, large roofed courtyards. The central one measures 90 x 113 feet and has a clear height of 124 feet. Two flanking atriums, where we did our flying, measure 78 x 90 feet with a clear height of 92 feet. These are unobstructed dimensions. The sides of the atriums are open balconies, fully accessible for watching the models fly, or retrieving them.

The reason for this unusual design, by the way, was to have offices that could conventionally be heated in winter, had a lot of natural light, and could easily be cooled in summer through a natural "chimney effect." Outside air entered each office through a slot below each window and exited through the office's louvered door, drawn into the atrium by natural heat convection, and evacuated through the atrium roof vents. (A tepee is ventilated similarly.) Ingenious!. . . and a design principle still much in use in our high tech age.

Our flying events for the April 2 fun-fly were expertly planned and managed by the Maxecuter's own Allan Schanzle. We had the use of the building from 10:00 a.m. until closing, 4:00 p.m. The fun fly events included mass launches for WW I Golden Age and Dime Scale. There was a Spot Landing event, plus Bostonian, Manhattan, Penny Plane, Coconut, and Profile. Dan Belief provided some very helpful signs.

Tom Schmidt immortalized the events photographically. John Worth flew his show stopping radio control blimp and hot air balloon. In a word it was sure fun-fly and crowd-p leaser, really what our wonderful hobby is all about.

For future reference--our next event at the Building Museum is Sunday, November 2--the Museum has wonderful exhibits, it's right near Washington's Chinese restaurants. The Museum has its own parking area, plus plenty of on-street parking alongside. A "Metro" subway stop is right at the front door of the Museum, so you could easily come by subway from the far outreaches of Washington, lugging a model box -- not a problem on a Sunday. So it's a very easy place to get to, with plenty of ancillary attractions, something to bring the whole family into Washington to enjoy.

We hope to see you all next November 2!

Paul Spreiregen

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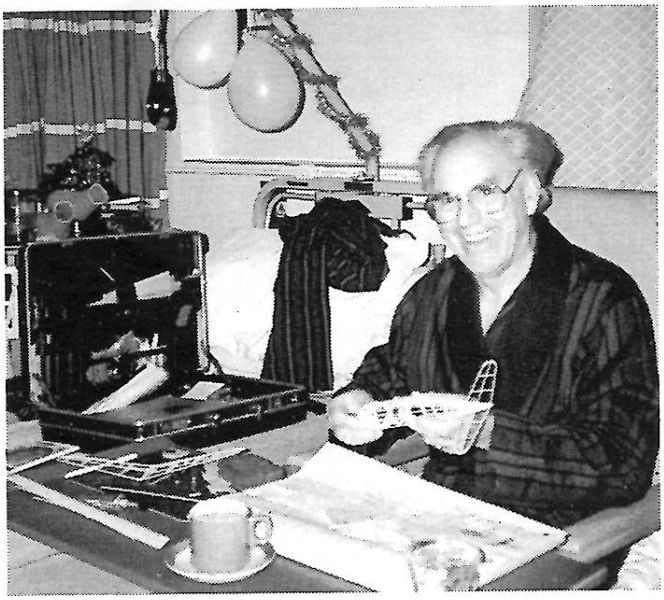
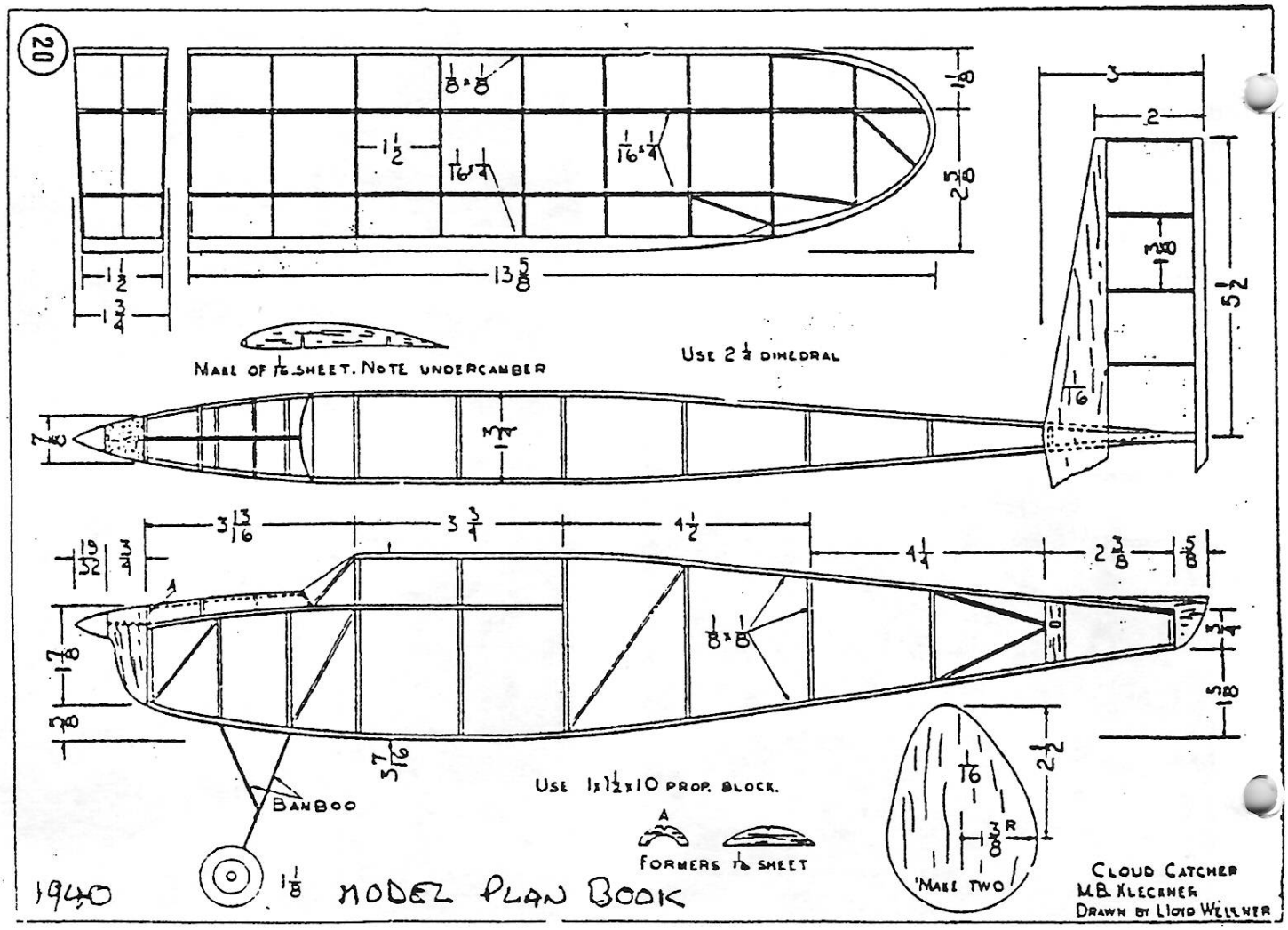
## The Maxecuters and Their Workshops

Lindsey Smith one of our good friends in England is the guest Maxecuter for this issue. Lindsey is truly a 'man for all seasons' or at least for all workshops! Not only does he model at his home in England but also in hospitals and on the high seas, plus an occasional repair job in the States every two years when competing in the FAC Nats. It has been our pleasure to know Lindsey and his delightful wife Jane for a number of years and we always look forward to their visits to this side of the Atlantic. Last year Jane joined her husband in building a model and we regret we do not have a photo of her in their workshop. However we do have here a photo of Lindsey mystifying the hospital staff working on a PEANUT while bedridden for a hip reconstruction. We hope the doctors did as good a job on his hip as Lindsey does with his finely crafted models. There is also a photo in this issue of Lindsey working on another PEANUT while cruising the Nile during his recuperation. The Navion bones shot is one of Lindsey's Earl Stahl models. We are all looking forward to welcoming Lindsey and Jane back to the States for the '98 FAC Nats.



## NATIONAL BUILDING MUSEUM FUN FLY APRIL 20, 1997

1. Paul Spreiregen, a Maxecuter and resident Washington DC architect seen here with his wife Rose-Helene, was instrumental in making the National Building Museum Fun Fly happen.
2. Another architect, Katie O'Meara, visiting with her art students from Baltimore enjoyed the show. Dan Belieff, CAAMA President made the sign and demonstrated. lightweight Pennyplanes.
3. Bill Weaver came down from Middletown, Maryland with his Farman to join in the fun.
4. Dave Rees journeyed from Goldsboro and was busy all afternoon launching his many aircraft. Here he is feeding his JUMBO Aristocrat.
5. This a new Santos Dumont created by Don Srull for the fun fly.
6. The 14bis in the upper reaches of the Building museum.
7. Jerry Paisley came from Smithfield with his Dave Smith designed Reggiane. See the Jan/Feb 1996 issue of MAXFAX for Dave's great full size plans (four versions) no less.
8. More happy spectators at the fun fly, the Photo editor's grandchildren with their dad. Isabelle is a little overwhelmed by the festivities.

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D.C. MAXECUTERS
INDOOR MODEL AIRPLANES
DEMONSTRATION!
Come Enjoy the Fun
2


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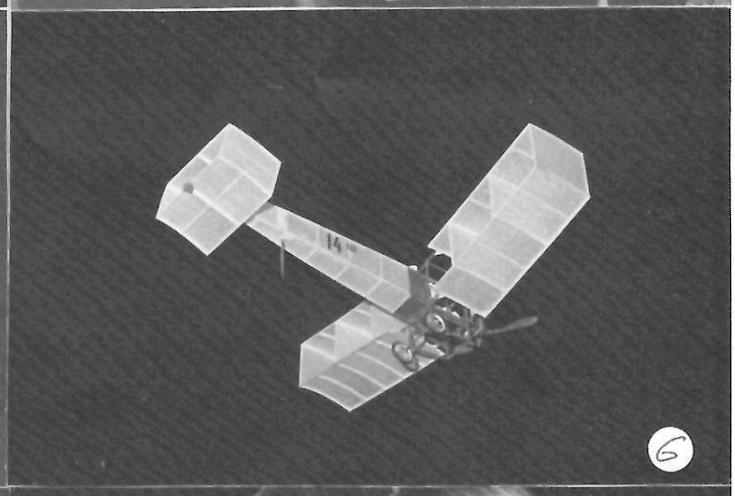
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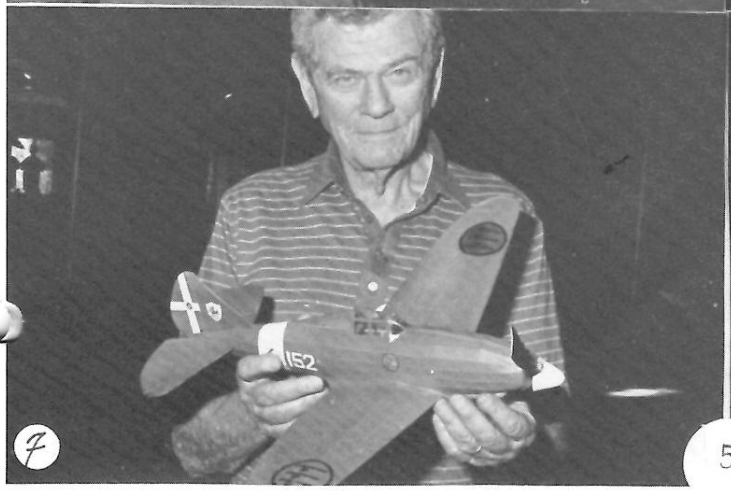
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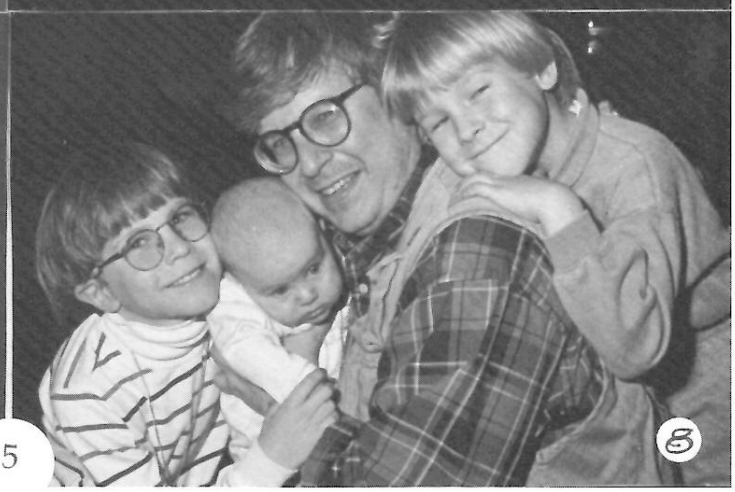
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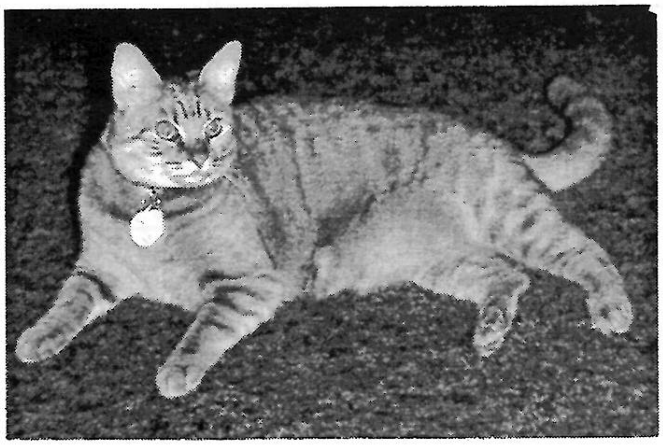
## In Defense of Clutter

The last few issues of MAX FAX contained pictures of exemplary displays of work benches and associated areas. Tools in their proper places; clean, neat and shiny. This may be an ill disguised ploy to undermine the morale of those of us who don't ascribe to that apple pie order in our hobby workplaces (I suspect the numbers are legion). Sort of a subtle ploy that might render us easier to subdue on the flying field by infusing a sense of inferiority.

Clutter can be good. Now I want to make it clear from the onset that I don't live like the slob half of the "Odd Couple"--it's just the model domain that seems to have effected its own comfort zone of clutter. There are certain benefits. For instance, when my small grandchildren visit and get loose in my sanctuary, they are overwhelmed by the sheer magnitude of tools, plane parts, gadgets, and the like that adorn the available space and are, therefore, less likely to get their little mitts on things.

Then there's the problem with the cat. We have this cat who is not your average tabby. In terms of our model world this guy is Jumbo, maybe even Giant scale. Weighs-in at 17 pounds and is devoid of fat! To go with size, he's also feisty. For example, the neighborhood dogs--or at least the smart ones--run a great circle route around our yard. Like the proverbial elephant who sleeps wherever he wants to, "Jet" picks his own spots in the house. I've drawn a line in the sand regarding my work bench however. Sticks, tissue, and 17-pound cats do not a good mix make. The battle of wills raged for some time until I discovered that leaving no horizontal surfaces open rendered his potential sack space lumpy and uncomfortable so he finally gave up that quest. Problem solved by clutter.



Meanwhile, we of the clutter ilk gaze on those pictures of the neatniks' pristine work areas with a bit of awe and envy but at the same time wrapped in our security blanks of strewn "treasures.' Call us CLUTTER COMMANDOS. Now let's see, what DID I do with that #10 Exacto. . .

Al Lawton
March 1997

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## Bill Hannan's Latest Publication

Bill Hannan continues to be busy creating literary gems concerning our favorite pastime, model aircraft and their venerable ancestors. His latest is the second in a "PLANNED SERIES" entitled "Model Plans & 3-views International". The attention is usually on those 'golden age' aircraft that most of us like so much. This latest book is no exception. It has 3-views, photographs, and historical articles to please everyone. We can hardly wait 'til Otto produces a $CO_2$ version of the 1923 Gerhardt Cycleplane; or perhaps Terry will beat him to it!! This writer's fancy was tickled by the great article and 3-view of the Curtiss-Wright T. I. Bunting 1 by J. H. Robinson. It is a great subject for a scale flyer; rubber or dare we mention a Maxecuter R/C (Texaco) scale. There are too many other goodies to list them all but suffice to say no purchaser will be disappointed. To order, Bill and Joan Hannan can be reached at HANNAN'S RUNWAY, BOX 210, MAGALIA,, CALIFORNIA 95954. Their phone and fax numbers are (916) 873-6421 and (916) 873-6329, respectively. The price is $10.95 plus $2.50 postage. Ask for their latest catalog of aviation books and plans. You will find many items that are difficult to locate elsewhere. Bill and Joan will accept Visa and Mastercard orders for over $15.00.

# Ned Kragness
# A Remembrance

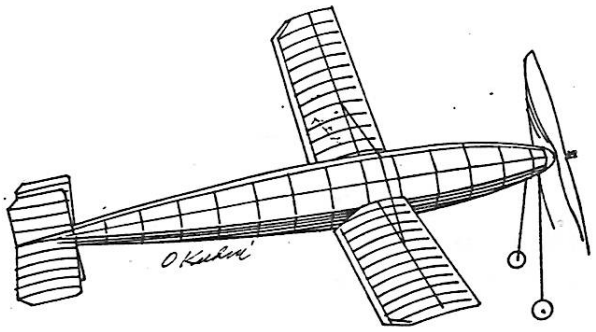
There are many ways to remember our departed friends and fellow Maxecuters and we all do this in our own individual way. It usually is very personal and private. But there is always that one remembrance that stands out and is appropriate for all. Ned was a person who enjoyed sharing his many ideas with us. This was most evident in his entertaining talk to the local Maxecuters and their wives at a Christmas dinner several years ago. We feel his words should be shared by all our readers. What follows is Ned's testimonial to his love affair with aviation and aviation modeling. Enjoy!!

## Model Airplanes

I started building model airplanes in the early nineteen twenties. Then about ten years old, I didn't know any better and I knew no-one else who tried model airplanes, or had even heard of such foolish things, particularly in the eyes of my father. I made small wood strips by planing and ripping 1 x 1/4 pine, small, to me meant 1/4 square. Nothing worked, then a local 16 year old (later in life, a proven genius) showed me a model that flew. He was a closet model builder.

Finally about 1920, I found advertisements for Ideal and Broadfield model kits, and I got the Ideal Jenny which cost $7.00 -- big money at the time. It came with spruce sticks, reed for outlines of wing and tail surfaces, a beautiful carved propeller and equally fine ball bearing propeller shaft. It had a rubber strand which developed about a quarter horsepower. It actually flew; a fifty foot takeoff run, a hundred feet of projectile speed flight about two feet above the ground, and then broke something. Lots of repair work.

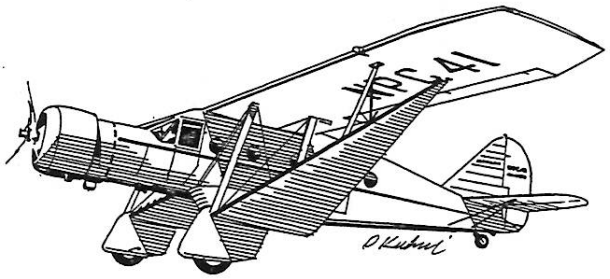
Frustrated with models, I encountered a barnstormer on our frozen lake. His airplane flew on purpose and didn't break. This really got my full intention. Then in the spring of 1926, our local Chevrolet dealer bought a WW-I surplus Curtiss Seagull flying boat. It came in two boxcars. I was the most devoted teen-age helper you ever saw. Getting it to the lake shore and assembled was great fun. An experienced pilot was found to fly it and rides were sold to the public. The new owners were getting checked out, and I got some flying time on a regular basis. I soloed the thing after about six hours. When winter came on, I found slave labor ways to get more flight instruction. To do this, I rode the street car to within a couple of miles of the Minneapolis airport, cleaned airplanes, hangars, disassembled old engines, cleaned the good parts, put them in bins for sale. Got flying time for this. It was a whole new world. Fun. A real ego kick. I went with the barnstormers, sold ride tickets, tacked up advertising bills; anything to make enough to keep alive and keep flying. As time went on and my logbook grew, so did the depression. I entered college to become an engineer, paid tuition with ROTC money, flew when I could, instructed, ferried airplanes, delivered Cubs from Lockhaven, Pa. to Minneapolis. Did what was possible during the depression. Now, back to models.



The American Boy magazine had, about 1930 sponsored the AMLA series of models. They started with the Baby ROG and sold a mail order kit for 50 cents. Balsa had been invented! I won third place in the Minneapolis regional contest. Flying scale models were not even tried at this stage of the hobby. The AMLA scale contest was for 24" span non-flying models. Louis Proctor won the first year with a Curtiss P-1 Hawk. Sixty years later we find him marketing a line of beautiful scale kits. Also in 1930, accompany started by a man

named Ed Pachasa, later know as Ed Packard, put out a kit for the Great lakes sport trainer. It was scale and it flew very well. It was well designed and rarely broke anything. The later Cleveland models were not so well done--- much more beautiful, but not really flyable and breakable. Meanwhile, I finished college and had become an engineer, and of course models again were a spare time thing.

Soon I had access to aircraft company drawing files, and began to design 'engineered' scale models. Then came WW-II. I flew airplanes, and as usual when actually flying, did not do much with models. After the war, working for TWA, I found that new materials, engines, and other stuff made modeling different. Always a scale devotee, I worked on improving scale models. In 1947 I was first published when MAN ran my small piece on making wire wheel look-alikes from balsa and bamboo.



To me, the 'engineered model is one that uses full-scale design practices and engineering principles wherever possible. In these, unlike some well known kit designs, the landing gear, wings, are attached only at the intersection of framing braces, not on unsupported longeron midpoints. Framed fuselages use diagonal bracing everywhere, attached with gussets, not just corner blocks. And most important, models musty be designed for the crash!

Exceptions to total scale. Much has been published about model airfoils. Most of this material has ignored or misinterpreted the effects of Reynold's Number. Much of the rest is not very useful or even true. The recent issue of model Aviation contains a letter of protest on Hal DeBolt's recent article on aerodynamics. Years ago, Frank Zaic, one of our great modelers, noted and published his finding that model wings stall at an angle of attack of about six degrees instead of thirteen as in full scale. He also noted that airfoil choice doesn't make a lot of difference. If you doubt this, consider how well the 'cracked rib' airfoil works.

Another engineering principle or 'scale effect' has to do with the Square-Cube Law. This law states that if the length of an object is changed by some multiplier like two or one-half, the surface area changes by the square of the multiplier; if two, area is multiplied by four. It also states that volume changes by the cube of the multiple; if two, the volume is multiplied by eight. Peanut scale models fly best because of this. The penalties of size are easily shown. If we double a peanut wingspan, the wing area increases fourfold, but its weight of volume increase is eight-fold. Wing loading for the larger model is thus twice that of the Peanut and it must fly 41% faster. The smaller Peanut with the lower wing loading flies only 71% as fast as the larger model, and with one-eighth as much weight, hits the wall with much less energy. This square-cube law works on structural pieces too. If the longeron and spar sizes are half those of the larger model, their cross sectional area is one fourth that of the larger model and relative to the reduced weight, much stronger. Small is not only beautiful, it works better.

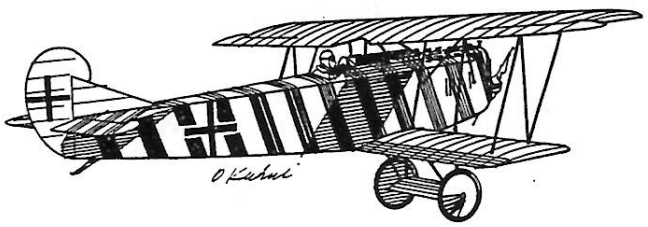
Some of you have seen my model of the Curtiss flying boat in the AMA museum. This is an example of an engineered model. It's design was governed by the Square-Cube Law. The full scale airplane weighed 2400 lbs., and for a 1/12 scale model to float at the scale waterline the model could weigh no more than 2400 x 1/12 cubed. This is 1.39 lbs. ,or 22.2 ounces. The model has a wing area of 410 sq. in., or 2.84 sq. ft., and has a wing loading of 7.8 ounces per square foot. The model could not have made this weight limit without using functional 'wire' bracing. The 'wire' is monofilament and without this new material, could not have had functional 'wire' bracing. This simply allowed taking advantage of the well engineered full scale structure. The airframe weight is just under 16 ounces. Engine and radio add the rest of the weight.

An example of failing to understand the

square-cube law occurs in a recent MAN review of a model PBY kit. The review mentioned with dismay, how deep it floated. Using the weight and wingspan given for the model, a square-cube law calculation showed it to be 150% of full scale weight.

Stability in models works just as it does in full scale. Much has been published in model magazines about this---about as bad as the material on airfoils.

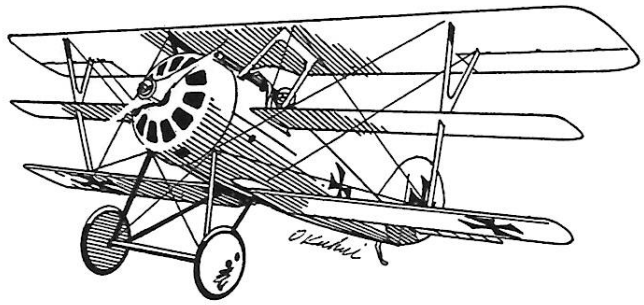
If the center of gravity, and wing and tail incidence, are correctly chosen the model will be stable in pitch---but only if not overpowered. Excess power de-stabilizes very powerfully. Many WW-II pilot trainees on first entering high performance aircraft died while discovering this. Sudden application of large excess power at low speed produces violent pitch-up. This is often done by models too. Very few full scale airplanes have much, or even any, roll or directional stability. Rudder and/or aileron control is necessary for both full scale and scale model airplanes.



Here too, much of the published material on model stability is not very helpful. Our ability to analyze model flight behavior by watching from the ground is poor. Bad stability performances are very brief; too brief to learn from. Good ones need no analysis, what's to learn from a non-event?

Instructing student pilots is very instructive to a model builder instructor pilot. A student pilot can take a long time to figure out the behavior and use of elevator trim in controlling airspeed. When the effects of power changes are added, more time is needed. I noticed that usable writing on model stability is most often done by full scale pilots.

Before 1940, no model kit or drawing showed an appropriate center of gravity or mentioned its importance. For that matter, few full scale pilots knew much about it either. It's hard to get a Piper Cub loaded with the wrong center of gravity. This is true of most airplanes. Pilots get to fly only the 'good' ones. Only test pilots get personal experience with the bad ones.

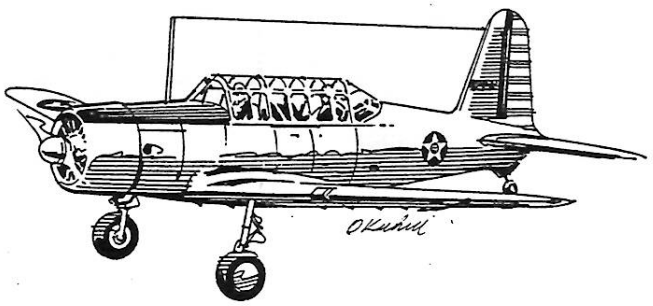


Engineering test pilot trainees were given rides in an airplane with two water tanks, one forward, one aft, to allow changing the CG in flight. The trainee, an experienced pilot, was quite sure he knew that all he had to do was keep a correct and constant airspeed, and based on past experience, he was certain he could do it by watching the dial. As water was transferred aft, the CG moved rearward, he soon found out he could only pass through the correct number, never stay on it. In about three minutes, his flight suit was properly perspiration soaked, and his instructor would dump the rear tank for both their sakes.

Without an on-board pilot, our models must have a proper CG. With the elevator control in whatever setting is neutral, the model must seek a constant trim speed by virtue of its own inherent pitch stability.

During my time as an engineer/pilot, I had access to company drawings and data which I could use in building scale models. There was always an interesting "company process and specification manual". This contained information on making decals, glues, cements, tube bending, insignia and lettering, plastic molding, and about a thousand other wonders of technology. I don't know, but I'll bet Fulton Hungerford of wire wheel fame, once worked in this area. Another wonderful information source was the HIAD, the 'Handbook of Instructions for Aircraft Designers'. It was

begun by the US Air Service, and continually updated and expanded since. One or more volumes provided dimensioned drawings of instruments, guns, bombs, knobs, handles, radios, and everything else that could be standardized. Our hobby shop landing wheels are not often scale to any real world airplane wheel. We can find out about wheels. The U.S. Tire and Rim Ass'n has published annually, since WW-I, dimensioned wheel and tire drawings. Incidentally, for models, wood wheels work very well, and rubber tires are bad for models. This is because if wheels can slip sideways, groundlooping is much less likely. Groundloops result from a swerve, the center of gravity being behind the main wheels, causes the swerve to increase. If the wheels can slip sideways, this effect is much reduced. The tailwheel barely touches the ground and is little help. Wheels far forward are bad news. Scale models will not suffer from this. Widely spaced wheels make little difference. For this reason, a student pilot trained on a grass strip gets a real shock on a hard runway. Avoiding a groundloop is much more difficult.



'Scale color' is another unnecessary problem for model builders. If nothing else it sets up endless debate. Contest judging is more complicated and controversial. Airplanes are painted by painters, whatever the color specified, it turns out to be what is mixed in the paint shop. Aluminum cowls are primed with zinc chromate as an undercoat. Fabric surfaces are usually given an aluminum pigment undercoat to prevent damage by sunlight. The undercoat makes a variable difference, depending on the number of overcoats. Old pigmented paint from the tag ends of drums, is usually loaded with heavy pigment sludge never well mixed into the original material, and this gets mixed with the new stock. You've seen some of the Peter Bowers photos with the oddly incorrect insignia. These were not returned to be stripped and repainted. Cost and delivery date overrode such niceties. Aircraft pigments are unstable, newly painted and three year old finishes are often very different. Airplanes are repainted often. They are more or less glossy, depending on the number of coats, whether hand rubbed, and the brand of paint. My own war surplus Vultee had one outer wing panel replaced. It was a very different yellow. Let's settle for 'believable color' in our contest judging.

The availability of all this information and its conversion to model uses, kept me going on scale models in my own way. Much of this, I wrote about, and some of it has been published.

My career as a pilot has been an odd one. I learned to fly on surplus WW-I aeroplanes and my flight training was boondocks style. I transitioned over the years into succeeding generations of airplane design. As late as the mid-fifties I was asked and did fly WW-I airplanes on exhibition. These birds do not fly at all like modern airplanes and can be very dangerous for the younger, later generation of pilots. Ask the Blue Angels pilot who did away with the Old Rhinebeck Fokker triplane before flying a mile.

It has all been a lot of fun---and has kept my full attention for almost seventy years. Being asked to talk to you is a big part of the fun too. Thank you for inviting me.

Ned Kragness, Dec. 1992

## EPILOGUE

A good example of Ned's modeling skills and their application can be found in a edition of 'Skyways'. The July 1995 No. 35 issue included an informative article authored by Ned on the application of functional prestressed flying wires to biplane model aircraft structures. An example of Ned's work, the Curtiss Seagull may be seen at the Curtiss Museum in Hammonsport, New York.

## C.A..V.U.

*By Rolfe Gregory*

One of the advantages in judging is, of course, having the opportunity of examining a whole gaggle of different models up close. As usual, looking at models of some older airplanes will bring back a flood of memories. I was examining a Curtiss P-40 when my memory floated back over the years to a warm, carefree day in Trenton, N.J., when my friend and fellow model builder Dale and I worked at Luscombe.

Dale learned to fly at Trenton ina piper J-3 Cub. He was a natural-born flyer if there ever was such a thing. Not just flying, but precision aerobatic flying. There is a big difference! He was doing simple aerobatic stuff with the Cub before he had 25 hours solo! When he had about 75 hours, I went to Philadelphia with him, in the Cub, to an air show. We entered the paper cutting contest. That's where you throw a rolled up paper streamer from the airplane at 2,000 feet and see how many times you can cut it with your prop before it (or the airplane) hits the ground. He won, against stiff competition, and I rode back to Trenton with the first-place trophy in my lap.

Dale kept practicing and finally got a Waco taperwing. Then he was able to do everything in the book. He even put on exhibitions at some Air Shows. Major Al Williams, of Gulfhawk fame and dean of aerobatic flyers, once saw Dale fly at an air show and said he would rate him among the top ten aerobatic pilots in the world!

Dale could do anything he wanted with an airplane. His real ambition, however, was unattainable. He wanted to get into the Air Corps and fly fighters. The war was coming, and he wanted to mix it up with the Luftwaffe. But it was not to be. Uncle Sam didn't want him.

On that warm carefree day, long ago, an Air Corps Major, whom we knew, flew into Trenton in a P-40 to visit someone. As he left in a cab, Dale yelled to him, "Major, I'll let you fly my taperwing if you let me fly the P-40!" "Go ahead," he answered. "Let's go," Dale said to us, "You heard what the man said!" To dissuade him was hopeless. We told him that even if he didn't kill himself, and he got caught, they would put him in jail and throw away the key. It was useless. This was his one and only chance to fly a military fighter, and he wasn't going to pass it up. He sat in it a long time studying everything in the cockpit. After a while he got it fired up and took off. He flew it around until he got the feel of it, and then he put on a show. He really wrung it out. The he landed, parked it where the Major had left it, and shut her down. He had his day!

Why wouldn't the Army like to have a really hot pilot like him to tangle with the enemy? For the same reason the government wouldn't give him a commercial license--only a private. You see, poor Dale couldn't. See, that is. Without his thick-lens eyeglasses, he couldn't recognize his own mother standing six feet away!

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### Correction and Apology

The last issue of MAXFAX erroneously attributed to Bob Clemens the suggestion that he liked to see the ink on the print wood of dime scale models to prove the printed parts were thick enough. Actually that suggestion, with tongue in cheek, came from Bill Warner.

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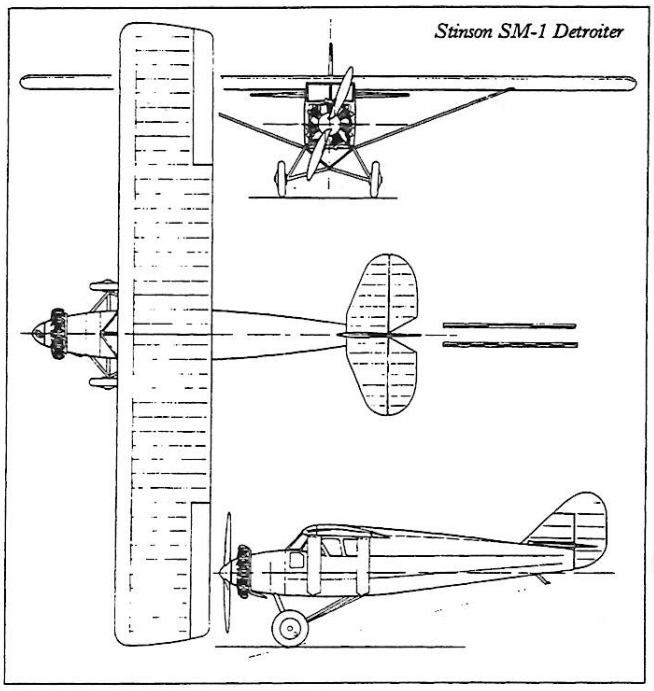
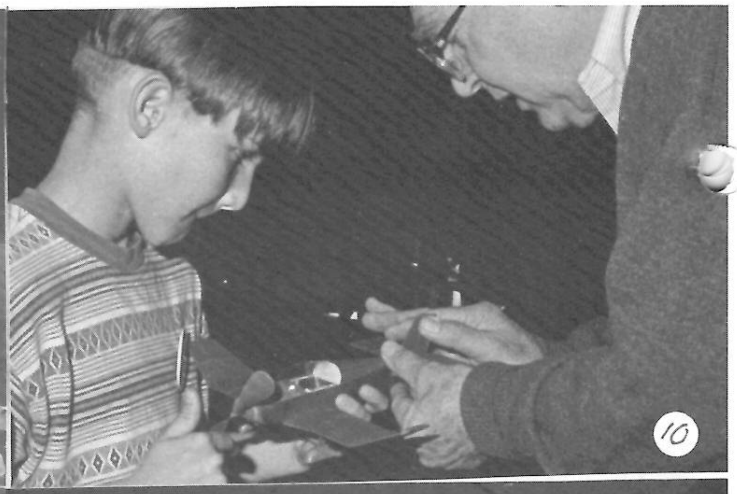


*Stinson SM-1 Detroiter*

9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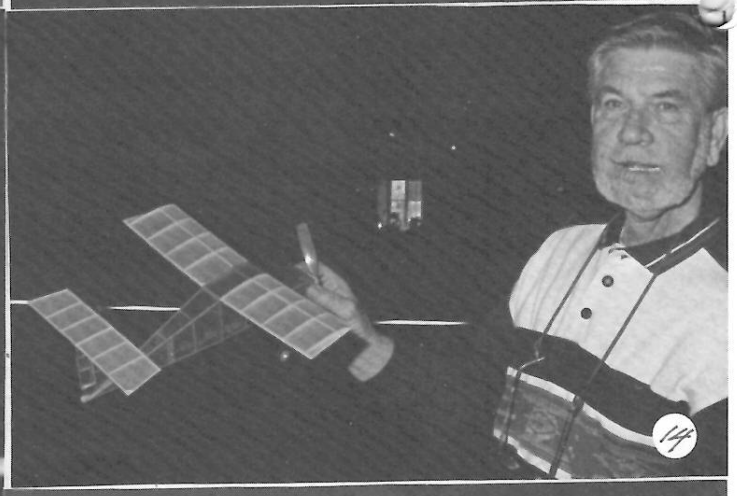
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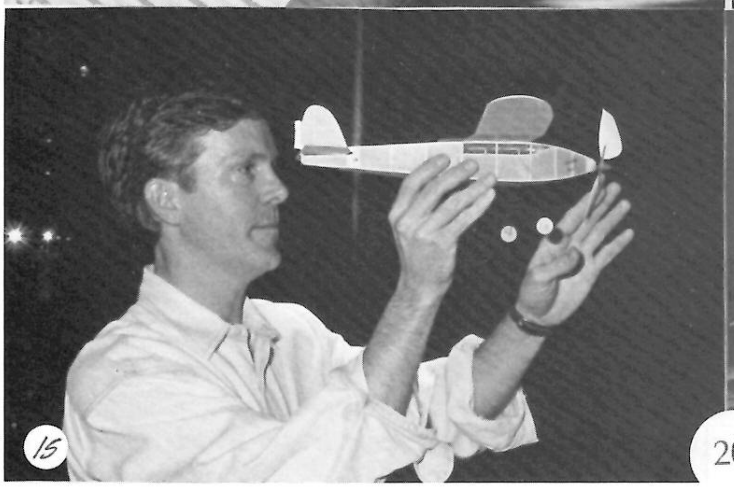
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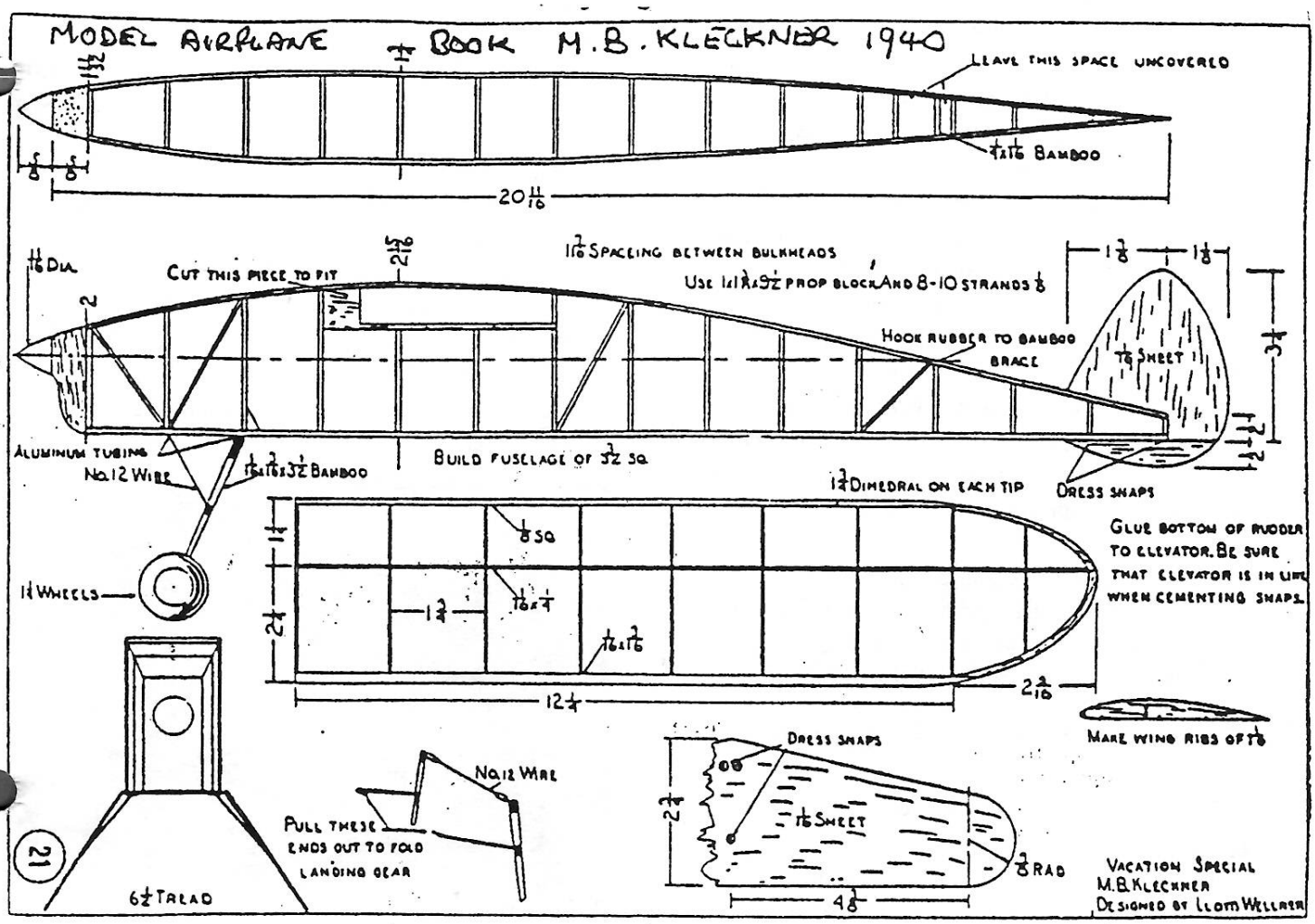
## MORE NATIONAL BUILDING MUSEUM PHOTOS

9. John Worth demonstrated his R/C airship and balloon all day to the delight of the many spectators, seen here over the model display tables.
10. Jon Hallman gets a helping hand with his Jodel from Don. Jon is now a FAC enthusiast after many successful flights.
11. His dad Tom, resident artist in Macungie Pennsylvania, is seen here launching his Loose racer.
12. Rich Gillis came from Lexington Park with his high flying and winning NOCAL Grumman Bearcat racer.
13. John Houck traveled from Bernville, Pennsylvania to fly his fleet of aircraft. His Eastbourne is a good flyer.
14. Many BOSTONIANS were in the air. Claude Powell brought this one along from Ridge, Maryland.
15. Another BOSTONIAN by Terry Pittman. Terry's whole family also came to enjoy the flying.
16. David Aronstein our lightweight 'guru' from Delaplane, Virginia brings his cheering section whenever he flys. His flying wing is a terrific flyer well suited to the confines of the National Building Museum.



# Charlie Grant's 'Cloud Tramp'

In 1996, Mike Parker of England and Loren Dietrich of the USA organized and promoted a world-wide mass launch of one of Charles H. Grant's models. They selected the 'Cloud Tramp' which was published in the August 1954 issue of *Model Airplane News* magazine. No prizes, just an event to commemorate Charlie Grant's many contributions to aviation with the top flight time, winner and list of competitors to be published in *Aeromodeller* and other magazines. Two of our local Maxecuters participated in 1996, Allan Luehrman and Earl Stahl. The world-wide event is on again for 1997 and launching should take place on August 9 at 17:00 hours British Summer time. That is noon daylight saving time on the East coast and 9:00 AM on the West coast. We will let the other time zones determine their own launch times.

Earl was kind enough to send some copies of the MAN article and we believe Earl intends to participate once again. Let's get a few more Maxecuters in the competition. It is a simple model and there is time. Perhaps we can spark a local one-design event next year or later this fall? The flight times, individual or clubs should be sent to Mike Parker, 7 Tranby Ride. Anlaby, Hull, HU10 7ED, England or Loren Dietrich, 192 West Palm Avenue, Reedley, California, 93654, USA. An announcement plus small drawing was in a recent issue of *Aeromodeller* magazine, Volume 62, Issue 737.

The original plan is reproduced in this MAXFAX. Since the plan does not indicate wood sizes and the article is too long to reproduce here, we will list them below.

Wing, stabilizer and fin -- 3/64 sheet -- use 1/20 or sand 1/16.

Wing incidence block , wing ribs -- 1/8 sheet.

Wing center block -- 3/16 sheet.

Wing mount strips -- 1/16 sheet.

Stick -- balsa 1/4 inch square 18 inches long.

Wheels -- hardwood - 1 1/4 in. dia., 1/4 inch thick.

Wire parts --.032.

Motor -- 10 feet 1/8 -- make two loops (four strands).

Propeller --8 inch plastic OK but higher pitch 8 inch balsa better.

The plan and construction are reasonably self-explanatory. The prop hanger bearing can be a commercial unit or homemade. Note that it does not allow for thrust line adjustments -- no modifications allowed here. See you on the flying field at high noon (east coast)!

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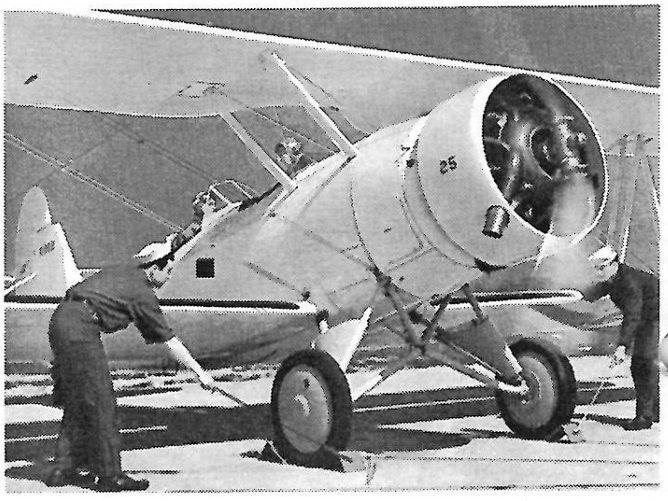
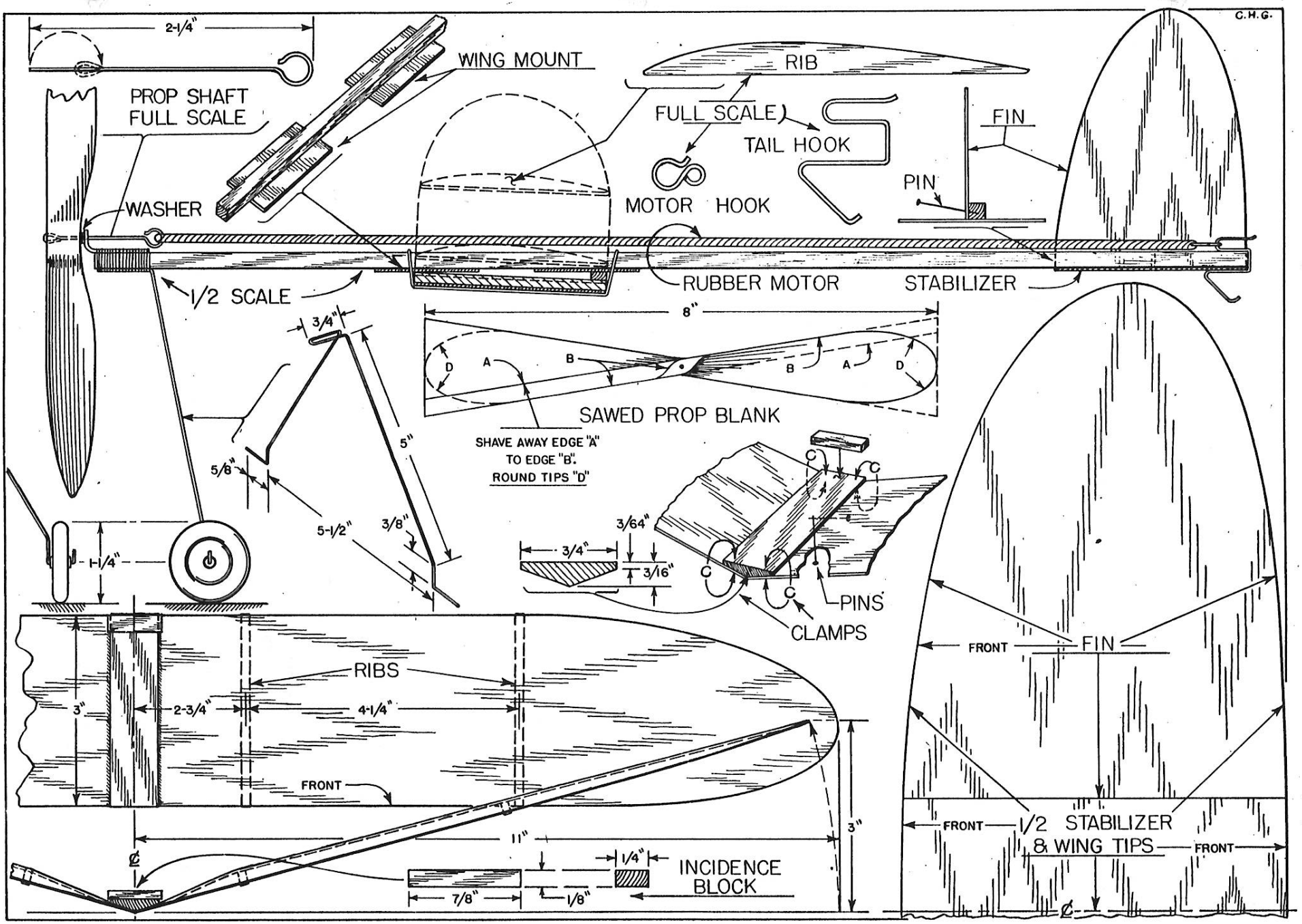
# N3N-3 With A Speed Ring

We located some photos of an N3N-3 with a cowling installed for those fainthearted builders that are deterred by all the engine detail on the completely exposed Wright Whirlwind. (See the Jan/Feb for the N3N-3 plan by John Low.) The cowling in these photos appears to be the same as installed on the earlier N3N-1 aircraft. A photo of an N3N-1 with cowling is included to give a better view of the installation. This N3N-3 was owned by Barrett Tillman and the article by him appeared in the Winter 1968 issue of *American Aviation Historical Society Journal* You scale modelers out there should really subscribe to this publication.




C.H.G.
2-1/4"
PROP SHAFT
FULL SCALE
WASHER
WING MOUNT
RIB
FULL SCALE
TAIL HOOK
MOTOR HOOK
FIN
PIN
1/2 SCALE
RUBBER MOTOR
STABILIZER
8"
3/4"
D
A
B
B
A
D
SAWED PROP BLANK
SHAVE AWAY EDGE "A"
TO EDGE "B".
ROUND TIPS "D"
5"
5/8"
5-1/2"
3/8"
1-1/4"
3/64"
3/4"
3/16"
C
C
C
C
PINS
CLAMPS
RIBS
3"
2-3/4"
4-1/4"
FRONT
11"
3"
INCIDENCE
BLOCK
1/4"
7/8"
1/8"
FRONT
FIN
FRONT
1/2 STABILIZER
& WING TIPS
FRONT

# An E-Mail Testimonial By Our Friend Mike Escalante

Subject: how it started
From: rzdl50@dgavi.sps.mot.com (Mike Escalante)
Date: Sun, 2 Feb 1997 01:13:31 -0700

hi all,

Here's how I got into freeflight. As young brats, we (my brothers and I) would fly control line planes that my father built. I still have the "lil wizard" that I flew in kindergarten although the engine has since gone into an r/c "qt". My father had built a few rubber band planes but he swore that they were just for show. (I remember destroying a "javelin" he built trying to prove him wrong.) we had our fair share of "sleek streaks" but never anything more than that.

Well, one September in 1978 my brother came rushing home telling fanciful stories about rubber band airplanes flying at COMSAT. My father didn't believe it but I went to check it out. I can still see Pat Daily's beautiful Fiat G-50 as it came in for a landing just I got to the field. It looked great, it flew great, I couldn't believe my eyes! I spent the whole day watching the D.C. Maxecuters fly their planes. Nick Ropar (now in Alb. NM) even let me fly his WACO a few times. After the contest was over they awarded me a kit for being the best spectator. I ran home and built it and was back at the field the next weekend. I probably had every club member there trying to get my plane to fly. (it didn't!). Well, I spent every Friday night with the Maxecuters and they eventually started to rub off on me. Panes got lighter, warps disappeared, and nose blocks got tight. I think I was fifteen when I won my first WWII combat event flying a Heinkel 100d from a Fyline kit (Allan Schanzle wouldn't let me try and get his MIG out of a tree for the final round so I won by default). When it's all said and done, the Maxecuters were the best thing that could have happened to me. They were (and still are) my second family and I credit them for a lot of what I am today.

I now fly with the Cactus Squadron in AZ, they are the same wonderful people that I've found in all freeflighters. Unfortunately I'm working full time and trying to go school so my building and flying has been drastically reduced but I still hang around some.

So all this leads to a question. I'm building my first Pistachio (a Boulton-Paul Defiant). I plan on covering it with prepainted condenser paper but I'll need a prop. Does anyone have any suggestions on simple, effective propellers for Pistachio's?~

Mike Escalante~
(Mesa, AZ)~

**NOTE : Your Dues Are Due**

**CLUB OFFICERS** President: Hurst Bowers, 1640 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 operating airport in the U.S.

**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.

1/32 PLY. SPAR JOINERS

1" DIHEDRAL

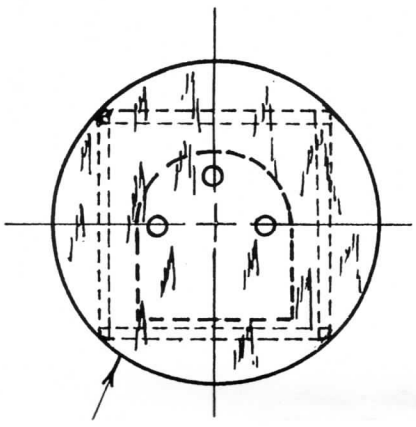
1/8 SQ. LEADING EDGE

STRUT POINTS

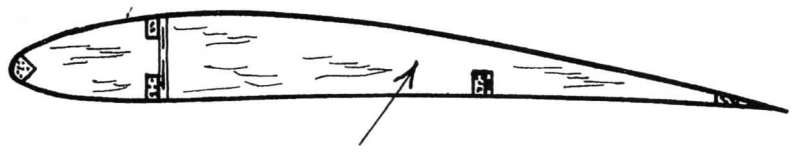
AILERON OUTLINE

SCRAP GUSSET

3/32 X 1/4 1/16 X 1/8 SPARS



1/16 SHEET BALSA RIBS, 23 REQ.



COLOR SCHEME- WINGS & TAIL WHITE, FUSELAGE BLACK, NOSE AND COWLING ARE SILVER

NOTE - ALL PARTS ARE BALSA UNLESS OTHERWISE STATED.

1/32 PLY FIREWALL

BATTERY POSITION

BALANCE POINT

1/8 BALSA FAIRING CAP

3/32 SQ. LONGERONS AND

3/32 SHEET

SOFT BALSA

3/32 SQ

MINI-6 OUTLINE

SWITCH /CHARGER

SCRAP GUSSET

SHOCK STRUT

1 5/8" BALSA WHEELS

THIS MODEL IS BASED ON AN ORIGINAL DESIGN BY A 15 OR 30 INCH MODEL, AND APPEARED IN HIS B BUILDING AND FLYING;ENLARGED UP TO 45 INCH S APPEARED IN AERO MODELLER MAGAZINE (NOV.'91) ALEX IMRIE. PICTURED IS A 45 INCH BEAUTIFULL MODEL BY MIKE HETHERINGTON. THIS PLAN IS 27 SQ. INCH AREA; IDEAL FOR FREE FLIGHT ELECTRI LINE MINI-6 MOTOR. THE MODEL HAS BEEN MODIF SCALE LIKE PRESENTATION, THUS THE "IMPRESSIC NATION OF THE STINSON "DETROITER".

BALSA WING STRUTS
TYPICAL CROSS SECTION

1/32 X 1/8 BALSA LAMINATIONS

SCRAP GUSSET

TRAILING EDGE

SHOCK STRUT

3/32 SHEET

PLASTIC TUBE WITH
THREAD BINDING

COVER LANDING GEAR WIRE
STRUTS WITH BLACK HEAT
SHRINK TUBING

WIRE HINGES

3/32 SQ

1/32 X 3/32
BALSA LAMINATIONS

ELEVATOR
OPTIONAL

3/32 X 1/8

WIRE HINGES

3/32 SQ

3/32 X 1/8

UPRIGHTS

3/32 X 1/16 DIAGONALS

3/32 SHEET

TAIL WHEEL

REAR ANCHOR FOR
RUBBER POWER



JOE OTT IN 1931 FOR
OOK, MODEL AIRPLANES -
PAN. A REDUCED PLAN
, IN AN ARTICLE BY
Y BUILT AND FLOWN
INCH SPAN WITH 108
C POWER WITH THE HI
IED TO REFLECT A MORE
NISTIC SCALE" DESIG-

# STINSON "Detroiter"

## (IMPRESSIONISTIC SCALE)

**27" Span; 108 Sq."Area; Mini-6 Elect. Power**

**Designed & Drawn By Hurst Bowers, 1-97**

# MAQUETTE VOLANTE.. FAIRCHILD "22" (1934)

31 ½" SPAN (0m80)

DE

H.G. BOWERS

C

A&B

A

B

C

3x2

3x3

3x2

3x3

15/10e

MATS 5x2

30/10e

B d'A. 10x10

C.a.P. 12/10e

4

30/10e

3x3

3x2

3x3

C.a.P. 15/10e

D

80/10e

C.T.P. 10/10e

3x3

B de F en 80/10e

7

8

PLAN M.R.A.

PLASTRON

1

2

3

4
20/10

5
20/10

6

C

A&B

D

NERVURES EN 20/10

C.à.P. 12/10e
et balsa profilé

Balsa Profilé

BLOC BALSA

Coffrage en 15/10e

A

B

C

3x3

LISSES 3x2

3x3

3x3

LISSES 3x2

3x3

3x3

POUR LE COLLAGE DE CE MODELE
EMPLOYEZ DE PREFERENCE
SOUDE-GRÈS

7

8

1

2

3

4

5

6

7