



Photo Captions

- 1. Jack Kacian's Giant Scale Waco was shown sitting on a table in the last issue. Here we see it airborne on a test flight. It has had flights of over a minute already, and shows promise of much more. Tom Nallen II photo
- 2. You get a sense of how much power it takes to get that Waco to fly in this pic. Jack gets a hand from Chris Parent as he preps a motor for the big bird. The dog is unidentified. Nallen photo
- 3. Here is the latest from the IserWerks Flug Platz. Mike Isermann has been working on her for about 5 months on and off. Specs: GAR P-51 kit, 24" span, 9.25 x 1.12 carved prop, 45 grams w/o rubber JCI silver tissue, D.M.'s India ink invasion stripes, Black Sheep Squadron pilot and no D.T. Mike chronicled this build on the Hip Pocket web forum. The finish and detailing are remarkable. Look for it in the D-Day event at the Nats this year. Isermann photo
- 4. & 5. A classic "before and after" photo combo. Tom Hallman wanted to get into the D-Day event too so he put together a Seafire with a 27" wingspan. You can see a time lapse photo essay of how the process went by visiting YouTube and checking out the video he posted:

https://www.youtube.com/watch?v=YSHRAdEsCBk

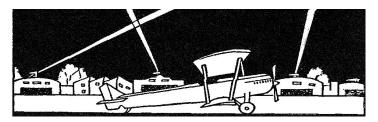
Tom's Seafire and Mike's Mustang should both be in the running for "best looking" models in the D-Day event, and they have the skill to be in the final round of the flying part too. Should be a great event!

Hallman photos

6. Here's another pic that ties into the last issue. Remember that shot of Tom Nallen II's Giant Scale Westwind? Well it takes a giant prop to fly a Giant Scale model. This hand carved beauty should do the job. Nallen photo



Our cover - Howard Koverman is one of the newer guys in the Cleveland Free Flight Society. He arrived with a great deal of modeling enthusiasm, and a healthy dose of artistic talent too. He graciously shared one of his creations, and even did the layout work for our cover. Thanks Howard!



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Plans - Something old, something new, something borrowed, and something that flew! OK, all of it is borrowed and old. Some are just older than others. But they all flew!

Allan Schanzle's **Klemm KL 31** first appeared in the Max Fax newsletter back in '89. It's an elegant design of a Golden Age classic. It's a big one at $30^{\prime\prime}$ span, but it's easy to scale up or down to suit your preferences.

The Bristol Scout Type D is a perennial favorite for WWI modelers. Good proportions and simple structure help to make it a great flier. Mike Nassise captured the little fighter very nicely in this plan. Another one that will scale up or down without much trouble. 16.275" span.

Peanut Scale models can put off some modelers who are more comfortable with bigger chunks of lumber. The Hutchinson WLH-1 could be the ticket to get these folks into the Peanut game. It's a BIG Peanut. Rich Zapf designed this wannabe racer and successfully campaigned it for several years.

For those who are looking for a more traditional Peanut with some real Hung-tempting flight potential, the **PAMA motor glider** by J.F. Frugoli should fill the bill. Bill Passarelli shared this one with us a long time ago, and we're *finally* getting it published.

Thanks to all our contributors!



Greetings Junior Birdmen,

No, you didn't pick up an old newsletter by mistake. The look of this issue is a little different. On purpose. I'm hoping that the retro style will help to hide the fact that I'm goofing off! I wanted to get a few things done before the big show in Geneseo so I cut a couple of corners on the newsletter this time around. Shouldn't affect the content. That, as always, is completely dependent upon what is submitted by you, the membership. The looser format just gives me more leeway in the layout. We'll be going back to our usual way of doing things next time around...unless we hear that everybody has fallen head over heels in love with this version.

Those old **Tan II charts** in the middle of this issue are from my own files. I've had them for years, and don't remember where they came from. Another flier at the field asked me about them as I was consulting my notebook at a recent contest. I was surprised that he hadn't seen them before as he was an experienced flier. After checking around, I found that lots of guys had never seen them... or maybe forgot about them. So here they are. They are a reasonable shortcut for those of us too lazy to test our motors. They could probably use some tweaking for Super Sport, but I've found they still work well enough to keep me out of trouble.

See you on the flying field! Wingnut

OMACI Answer on page 16

Comments From the Keeper of Kanone's:

Based on some recent correspondence received, it appears it's time for a couple of reminders to the masses.

When you send in your Kanone report(s) please have someone look it over first. If they can't easily read it, there is a good chance that neither I nor my translator/wife can either. We get complaints that names are spelled wrong on the Kanone List despite our best efforts in deciphering some of cryptic messages that are submitted. Sometimes we just have to take our best shot.

When someone in your local club passes away, please let either Newsletter Editor Rich Weber or me know. Both our email and postal address's are listed in the FAC Newsletter each month and we are in constant communication regarding this issue. For the old timer guys without computers; we still accept US Mail.

When you see a misspelled name, or if a deceased member is listed, please bear in mind that it is not our mistake if we weren't informed. It gets a bit discouraging when you get a note that says something like: "You people screwed up again, our club member "Fictitious Smitty" died last year and he is still on the Kanone List" or "You have "Fictitious Smitty" listed in more than one place." After receiving multiple Kanone Reports from different CD's with two or more different spellings over many years, Smitty's listing can easily get scrambled. We could use your help keeping it straight.

Please remember we are working with a large list of members and past members, not just a few guys in a local club.

If anyone wants to take over the Keeper of Kanone's job of keeping all contest records, keeping track of individual winners, keeping track of how many times each event is flown each year, who gets Blue Max's in a given year, who gets a Milestone Award in a given year along with finding a source for, purchasing and assembling Blue Max Awards & Ribbons, you can certainly have it.

Keep in mind that this outfit is run on volunteer work and we put in a lot of time and effort for absolutely no reimbursement other than the odd pat on the back. We all do the best we can with what we are given to work with. Thanks in advance for your help.

Mike Welshans

FAC Book Nook

"Unlearning to Fly" by Jennifer Brice which I just finished. I liked it well enough to write a fan letter which was acknowledged! She



by the age of twenty is a pilot for her father's North Slope construction business in Alaska. Like a good reporter (writing obituaries for the next edition) and later, like a good English professor, she recounts her life in 49th state. It is spiced by Alaskan history, Jane Austen novels, and even aviation works by Antoine de Saint-Exupery and Wolfgang Langewiesche. Keeping pace with the narrative is the warp and woof of being human. How can I say that emotions and feelings are here too?

Bruce Foster



Hello Clubsters!

Many of you know that I'm just a little behind in my duties. Some of you know that I'm a little behind the curve when it comes to computer skills, picking a reliable internet provider and managing my time at the keyboard. And some of you even know that in the past several months I sold my house, moved in with Wendy, renovated her house, made two twelve hundred mile house hunting trips, sold Wendy's house and then moved to North Carolina...putting me way behind this beloved hobby of building and flying free flight models.

And now you'll all know that I'm a little behind due to a health issue that blindsided me the day after I retired in mid-January. It took two surgical procedures to determine and remove a gangrenous gallbladder that caused me to become septic. I was so septic that after the cholecystectomy I experienced a second episode of respiratory arrest. I was re-intubated and eventually placed in an induced coma for four days to allow my lungs to heal. My recovery has been slow...about 98% now...putting me a little behind.

So what can I say? I'm alive, the new house is wonderful…also about 98% complete…and I'm looking forward to FAC'ing…even though I'm a little behind.

But this column isn't about me! No...it's about all the volunteers that kept the FAC flying as I was knocking on Hung's door. This is about those volunteers that keep the FAC running as smoothly as possible. I thank them and you should also thank them. The FAC is a family of hundreds strong, but without the Board of Directors, the GHQ Council and all the others who volunteer...who knows what F-A-C would stand for?

I was once told that to run the FAC, I would need to be blind in one eye, deaf in one ear and have very thick skin. I have found that to be quite the opposite. I need extra eyes, ears and very sensitive skin. And that's where the volunteers come in. They are my extra eyes and ears; however, they do not need thick skin to protect them from the occasional flack barrage aimed at the FAC. They need to remain soft and sweet.

As in any organization, here in the FAC there will be issues that someone will take up as a cause and take a volunteer to task. They often don't offer constructive criticism, but assign blame for imagined damages, pain and suffering. Really? Isn't this a hobby? And what is the root of this mayhem? Why plain and simple it's a lack of communication.

Two short examples: the membership and Kanone lists. If you move and don't notify our volunteer treasurer of your new address...don't attack him if you miss issues of the newsletter. If your Kanone count is incorrect by your records...don't attack the Keeper of Kanones. He is a volunteer recorder of information passed on to him. In short, FAC volunteers are just that...volunteers working with information that you send. They are NOT professional private detectives at your disposal to dig up information not sent on to them.

Therefore, as I value my friendship with all the FAC volunteers, I am removing them from $\,$

'harm's way.' I am hiring professional people with MBA's to keep our books, our mailing lists, our Kanone count, our merchandise sales, our web site, our community relations, our public relations, our education program, our design team, our rules and regulation department, our editorial department, our plans department, our legal representative and whatever else our volunteers now handle. Of course this means I'll change from CinC to CEO with a very large salary. All these professionals will be offered big money so we can hire the very best. They will of course need health and dental insurance. I draw the line on vision.

Preliminary estimates for total salaries will necessitate a dues increase of the membership by some 2500%. Once the new professional billing and mailing departments are up and running...that will be as soon as suitable office space can be located and renovated...make that 3500% now...you will receive a new dues statement. I'm not that good at math, so looks like we'll also need a profession accountant to figure out your new dues amount, but hopefully we can keep it below \$700.00 per year.

So thanks for being a loyal member of the FAC and very soon you'll be able to vent your complaints to the official complaint department on our toll free number 24/7.

As I started this column by admitting I was a little behind...with this column originally slated for the March / April issue...let me finish by saying, "APRIL FOOLS!"

Now where did I pack that building board?

YEAH, IT HAS A GREAT CLIMB, BUT IT COMES DOWN THE SAME WAY.

Wants & Disposals

Books -

The Aviation Careers of Igor Sikorsky Cochran, Hardesty, Lee \$15.00 A Review of Ray Matthews Free Flight Designs Walker \$20.00 Another Icarus Jarrett \$10.00 British Aircraft 1809-1914 Lewis \$60.00 British Aviation, The Pioneer Years Penrose \$40.00

Complete Book of World War II Combat Aircraft

Angelucci, Matricardi, Pinto \$20.00

Early Flight Oppel (Ed) \$10.00

French Aeroplanes Before the Great War Opdycke \$45.00 German Aircraft of the First World War Gray, Tetford \$40.00

Ghosts The Great War Makanna \$20.00

Igor Sikorsky The Russian Years Bobrow and Hardesty \$20.00

Indoor Flying Models Gitlow \$70.00

Jane's All the World's Aircraft 1913 Jane \$10.00

Jane's All the World's Airships 1909 Jane \$10.00

Jane's Fighting Aircraft of WW I Jane \$20.00

Lindbergh Alone Gill \$10.00

Making Scale Model Airplanes Fly McCombs \$20.00

Men, Women and 10,000 Kites Voisin \$75.00

One Day at Kittyhawk Walsh \$5.00

Piece of Cake Robinson \$20.00

Rand McNally Enclyclopedia of Military Aircraft, 1914-1980

Angelucci \$40.00

Richthofen Burroughs \$5.00

Scale Aircraft Drawings Air Age \$15.00

Scratch Built Alcorn Lee Cook \$20.00

Taube, Dove of War de Vries \$20.00

The American Heritage History of Flight Josephy \$60.00

The German Giants Haddow, Groz \$90.00

The Imperial Russian Air Service Darcey, Durkota, Kulikov \$140.00

The Red Baron Richthoffen \$10.00

The Wright Brothers Crouch and Jakab \$20.00

This Was Air Travel Palmer \$10.00

Winning Indoor Designs, 1987-1989 NFFS (2) \$20.00

Free Flight equipment-

Oppegard Nordskiver rubber stripper in very good condition with an extra blade \$200

New Superior Props Winder - with turn counter \$75

Dan Marek 210 W. 101st St, #10F, NYC, NY 10025 (212) 222-1546 Marekdanann@aol.com



Worthwhile Website

By the time you read this, the D-Day 70th anniversary commemoration activities in Normandy will be over. To read about the participation of the National Warplane Museum's C-47 in the event, check out the Return to Normandy website:

http://www.rtn2014.org/

It's an amazing story!

The Budd Kicker

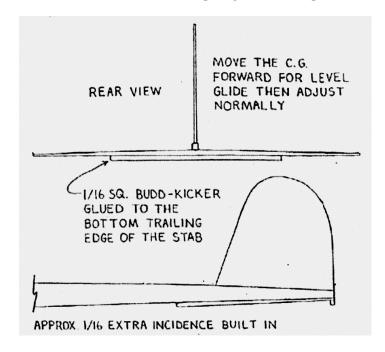
How to Make Your Gliders Go Better

By Stan Buddenbolm

From the October 1997 issue of the NFFS Digest.

What does it do? HLGs & catapult gliders have tremendous launch speeds requiring only a small amount of angular difference between the wing and the stab. This reduces glide time, stability, and thermaling ability. The Budd-Kicker allows the CG to be moved forward with the incidence increased for level glide.

At launch speed, 1/16" incidence would normally cause the model to loop like crazy, but with the Budd-Kicker you get a nearly ver-



tical launch with a beautiful transition, a stable, bouncy, improved glide, and a model that loves to thermal.

The technique also simplifies construction. No longer do you have to take the time and trouble to get the wing and stab near zero incidence (think of all the bent wood you've rejected). Simply glue the Budd-Kicker-equipped stab on with more than normal incidence (I use 3/64" to 3/32" but don't normally measure it) and move the CG forward from its usual position.

If the model is too zero on launch, add a little incidence or remove a little Budd-Kicker; if it's too loopy add a little Budd-Kicker. It's not hard to get that perfect transition.

So far I've tested this technique on 16" catapult gliders and 24" HLGs with good results. The famous glider designer, Lee Hines, said, "Hey you've really got something here," while flying one of my Budd Kicker-equipped HLGs.

I would like to give credit to my friend Dick Baxter for the original design inspiration.

Model Airplane

Stuff



We ran across these propellers on eBay, and thought they looked interesting. FACer Andrew Ricci bought a small batch of them in assorted sizes and sent along this appraisal. The outfit, DBA bigdotunclercstore, is based in (where else?) Hong Kong and has been doing business on eBay for many years selling mostly rc and electrical model supplies. We don't know anything else about them so you're on your own from here!



I bit the bait and bought a set of these props. Here's the lowdown:

- 1. Made from a hard orange plastic with a very fine molded roughened texture -- it's weird but it almost feels like the plastic you find on the interior molding of cars, around the cup holders, map lights and such.
- 2. The 7" prop weighs just over 4 grams, about a half gram heavier than a 7" peck.
- 3. The hub on all size props are the same size. The hub and ramp is very heavy duty and feels like it won't shear and give way like a Peck's will. The shaft hole diameter is about 0.0625" or 1/16", so if you use 3/64" shafts, you'll have to bush the hole with some brass tubing.
- 4. The blade shape and area is similar to a Pecks, except for the swept tip.
- 5. The pitch is slightly higher than a Pecks.
- 6. It feels like it might be difficult to shave the plastic off the blades to lighten the prop.
- 7. The larger props feel better and look better to me in that they are proportionally better shaped and lighter than the smaller props if that makes any sense. In other words, the 9 and 10 props might be better than similar sized Pecks or the large blue props we use.

Andrew Ricci

Regal Prop Bearings

I have resumed "production" of an improved nose button. It features an aluminum front clamping flange for very positive locking of the ball in the socket. In fact, a crash may now result in a broken propeller rather than a change in the thrust setting.

Available in the following sizes:

Large 047 rear adjustable Large 047 front adjustable Medium 032 front adjustable PNUT 032 front adjustable

Pricing is \$7 for the Medium and Large. The peanut price is \$8 since the 00-90 screws are so expensive. Shipping is \$2.50 for any amount of buttons ordered.

John Regalbuto 11 East Street Georgetown, MA 01833-2534



978-352-4834

WESTFAC - News from Out West

Out here in the West it's time for final preparations for the FAC Nationals coming up in July. A lot of building and trimming is underway with gusto. Here in Southern California we have been blessed by the acquisition of a new "flight trimming" field. The field is about three miles from TAIBI FIELD where free flight is flown. It consists of about ½ square mile of alfalfa and is owned by a farmer who builds and flies rc. He has allowed everyone to trim their new scale models and says its available all the time. When he cuts the alfalfa, he moves us to another field nearby...what a guy!!

In Arizona the CONDOR Squadron FAC-72, is expanding its model fleet as the temperatures reach 110 outside. Lot's of building inside. This new Squadron meets at least once a month during the super hot season for a breakfast where all can share what's happening on their



building boards and show off their new creations (pic 1). Under the Squadron Leadership of Chuck Michalovic and John Eppich (1 to r pic 2) the Squadron has just finished its 3rd building class in their community. It looks like they are using a pool table

so untrimmed models may be arriving at

for their new model display (pic 3 and 4).

In Wyoming Tom Arnold (pic 5) is

hitching up his covered wagon and getting his horses ready for the NATS. For those of you who are old enough to remember Fibber Magee on the radio, "don't open that door Magee" or about 100 models will fly

out. Tom is an avid builder, but those Wyoming winds can stifle flying a bit,

Geneseo.



The Vulture Squadron in Nevada will be ably represented by Bob Hodes (pic 6) who is driving all the way to Geneseo, with his Bride to navigate. Bob has just won his 16th victory and hopes to be honored with a BLUE MAX at this years NATS.

The Scale
Staffel Squadron is
having fun indoors
too. The local college in San Diego
has let them use
their gym for flying and the Squadron really enjoys
indoor.



In closing, let me announce that the WESTFAC Working Committee is currently finalizing WESTFAC V. It will be held in October of 2015 in Buckeye Arizona and the host Squadron will be the Arizona CONDOR Squadron. Duke Horn will be the Contest Director (pic 7 - Duke and his lovely wife). He flies with the Lone Star Squadron FAC-17 in Texas. Our head Score Keeper will be Ed De-Loach who also flies with that Squadron. It looks like a lot of Texans will be invading Arizona in 2015 for WESTFAC V.

Bob Hodes will be kicking off our publicity with Flyers, Flight box stickers, and a Banner on the field at the Nats. Let it be known that over 10 flyers are coming to the Nationals from way out WEST. We sure hope the folks from the East side of the Mississippi will come West in 2015.

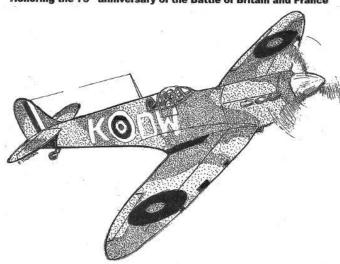
Roger Willis WESTFAC Hq.



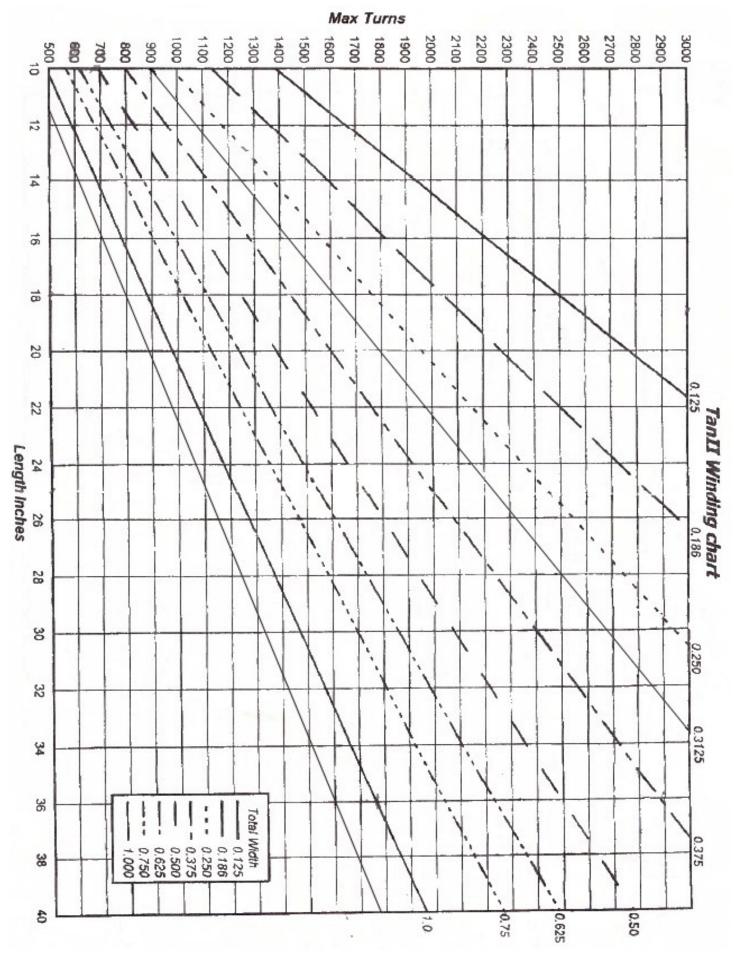
FLYTING

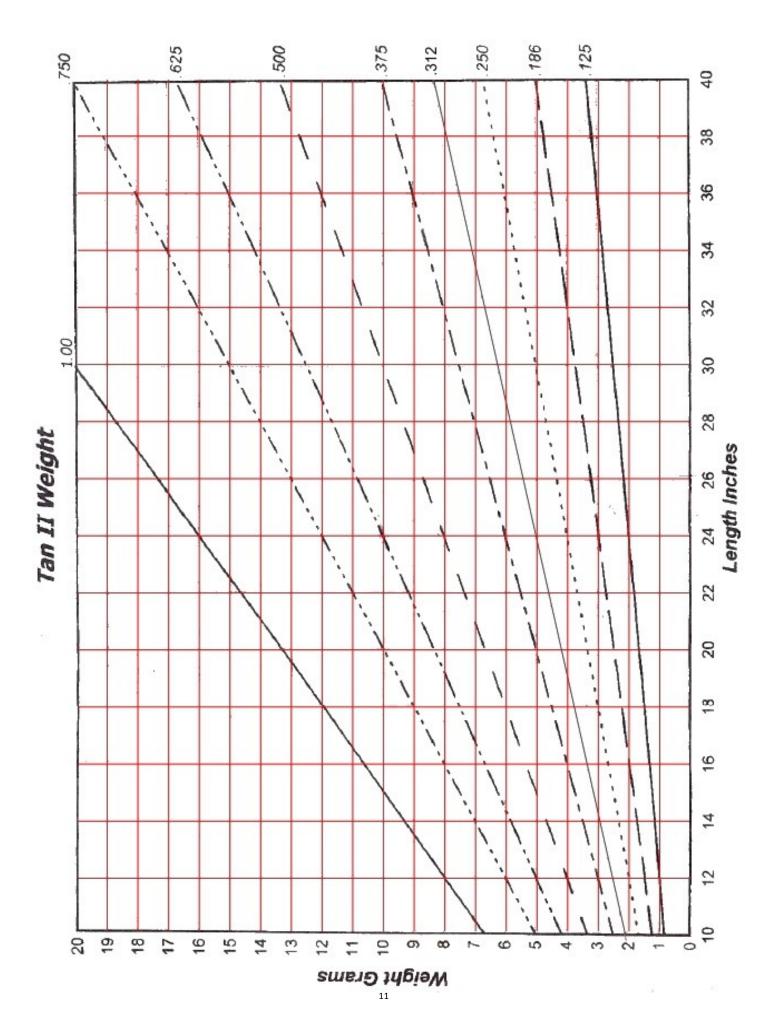
WESTFAC V

Honoring the 75th anniversary of the Battle of Britain and France



OCTOBER 21 – 24 2015 BUCKEYE, ARIZONA





Peanut Scale WLH-1 Hutchinson Rich Zapf

The famous yacht designer L. Francis Herreshoff once noted that a good big yacht will still beat a great little yacht. I've taken these words to heart as far a P-nuts go as I've had very little success getting these micro machines to fly. However, over the years and several failures I'm happy to report some success on the P-nut front. The solution was to build the biggest P-nuts I could find!

This leads us to the present subject the Hutchinson WLH-1. History would indicate that if wasn't much of a racer but its proportions make it ideal for Peanut Scale.

She is big for her class and as a result can carry a bunch of rubber for long duration. Proportions are quite good as she has a big wing with about a $4\ 1/2$ in. cord and a fuselage over 14in long.

Construction was straight forward box, which should pose no problem for even a builder of modest skill. The only problem was in the trimming which took the better part of a year. The problem with pitch stability was enough to drive me to tears. She would either dive or pitch up for no apparent reason. Well, there is always a reason and it turned out of be related to those ridiculously large engine cheeks which effectively function as a wing. The solution was to enlarge the horizontal stab which was accomplished by trial and error. The result has been a reliable and stable ${\it fl}{\it yer}$. She as been dominant in local contests and taken three firsts and a second at Geneseo and a second at Munci.

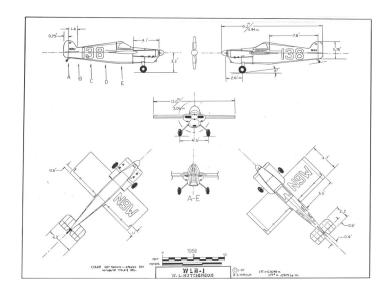
I started with a 24in. Loop of 1/8in rub-

1958 W L H-1 W. L. HUTCHINSON





William L. Hutchinson of Huntington, NY built the WLH-1 pre-racer test vehicle in 1957 at a cost of \$3,000 with all new parts. It grossed out at 750 pounds, or 250 pounds over the PRPA minimum. It used a 90 hp Franklin engine. Construction was started in mid 1956 and took one and a half years, so if they been 1958. It used the Cessna spring gear originally developed by Steve Wittman. As far as is known, it never raced on any of the circuits. With the extra weight and low power, it would not have been able to qualify although performance calculations indicated it had a top speed of 180 mph and could cruise at 150 mph.



ber for indoors with a 6in. Pecks prop which worked so so. The epiphany came outdoors as I gradually increased the cross section from 1/8 to 3/16 and eventually to a braided 40in loop of $2\times1/8$. This was combined with a 7in Pecks prop set a 1.6p/d (27.5 degree tip angle). Pack in 2000-2300 winds and there are few model aircraft that can touch her---- P-nut or otherwise.

One bright wag at the Nats commented on the amount of washout in her left wing and noted that the incidence in her wings and tail seemed to defy all known rules of aerodynamics but the she seemed to be flying in spite of herself! Not so. All the twisting and warping were there to adjust for the large amount of torque and the need to establish glide. She takes off with a right turn due to the right side thrust and will make a climbing turn for about 360 degrees and then settle into a left powered flight and glide.

If you consider the WLH-1 as a subject you may want to consult Hirsch's book as there are several Cassutt racers that are very similar and some modification of the plan might just fill the bill.

Editor's note: Robert Hirsch is the author of a series of books on air racers. The images on this page are much-reduced reproductions of the pertinent pages on the WLH-1 taken from Goodyear and Formula One Racing 1947 - 1967 Volume One. This two volume set is by far the best thing out there for documentation on these birds. If you have any interest in air racers, you should have these books. They are still readily available, which is why we won't reproduce the pages at full size.

Also note that this bird doesn't qualify for the FAC Goodyear Race event. According to Hirsch, it didn't race. I checked a couple of other air racing reference books and I couldn't find any mention of it. If you can find some evidence that it was in a race, I hope you'll share it with us.

It's still a great way to get into Peanut Scale, and the plan is easily adapted to one of the similar Cassutt racers that would qualify for the mass launch event.



Glory Days

My first exposure to the FAC was at the Warminster, Pennsylvania, Naval Air Station in 1982. Knowing nothing about the FAC at that time, nor their rules and regulations, or that the event was a national meet, my son and I drove down one Sunday. I registered as a contestant, but only when I went to fly was I told that I must first have my models judged. I had the necessary documentation, fortunately, but later I was surprised to see that my static score showed a negative five points! A penalty, actually, for entering a

single-engine, high-wing monoplane. Nevertheless, the meet was fun, and we enjoyed meeting and

flying with a new group of accomplished modelers.

Participating in an FAC Nats is an adventure. In 1986 the meet was moved to Geneseo, New York, the home of the National Warplane Museum, with a large and beautiful grass air field which is truly a site for soar eyes (puns intended). As its popularity and number of events increased, the Nats was expanded from two to three days. In fact, the Nats became so popular that it was decided to have an interim meet. Now these interim meets have grown as large as many of the previous two-day meets, and competition is just as keen.

My venture at the Warminster FAC Nats led me to join the FAC and compete at most of the Nats,

interim meets, and many local meets. Each was an exciting and rewarding experience -- meeting old friends, exchanging ideas, and flying in competition. My association with the FAC has always been pleasurable and wonderful, and win or lose, I always return home looking forward to the next time. Bill Passarelli

Cool recollections. My first FAC NATS was 1988. I was a 15-year old punk kid in awe to be on the same FIELD with those guys let alone enter the contest... Intimidating! Anyway, some recollections: -Don Srull won six events.

Six. And there were only like 14 events in those days

-Mark Fineman's SM-92 was brand new and was the first model I saw when unpacking for judging. Resisting the urge to drive back to the airport, I waited until he was inside before dejectedly unloading my high-wing "best effort".

-Mac McJunkin's jet Bell X-1, Stunning.

-Met Walt Mooney and Earl Stahl at the banquet. Surreal.

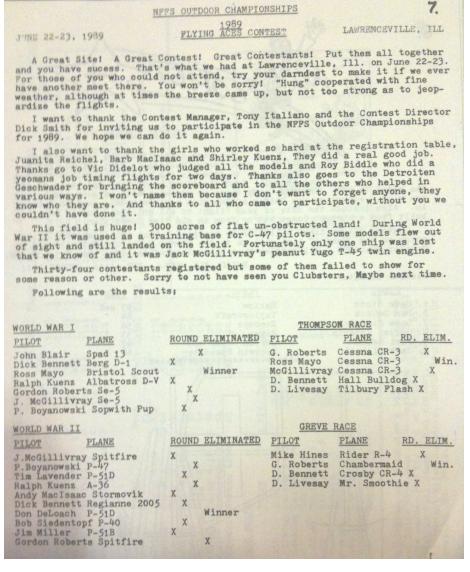
-Don Srull flew the DO-X for the first time. Awe-inspiring.

-Vance and his rubber YB-49 ...spectacular. With a prop that appeared to be two feet in diameter

-Al Lawton's Hughes H-1 winning Thompson. Crazy good flyer. And, The Event (stop me if you've heard this one): Don had a young kid chasing for him in the wind in Greve. The kid was tired but happy, and Don GAVE him the model prior to the last round. Don borrowed it back for *one more flight*, won the event in a huge OOS flight, then gave the kid ANOTHER museum piece.

Witnessing that moment sealed the deal for me as a lifetime member of FAC. And 24 years later it still gives me goose bumps.

Don DeLoach



And the capper (above) - Check out the winner in the WWI mass launch at the '89 Outdoor Champs!

Better Ballast

The modeling clay commonly used for ballast by modelers is oil-based. Oil-based clays are referred to by a number of genericized trademarks. They have been around for quite a while. Plastilin, was patented in Germany by Franz Kolb in 1880. Plasteline was developed by Claude Chavant in 1892. Plasticine was invented in 1897 by William Harbutt of Bathampton, England. Plastilina is trademarked as Roma Plastilina by Sculpture House, Inc. And Crayola® Modeling Clay is widely available today.

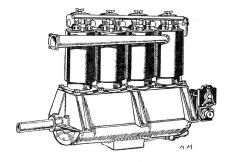
Oil-based clays are made from various combinations of oils, waxes, and clay minerals. Although the exact composition is a secret, Plasticine is composed of calcium salts (principally calcium carbonate), petroleum jelly, and long-chain aliphatic acids (principally stearic acid). Because the oils do not evaporate as does water, oil-based clays remain malleable even when left for long periods in dry environments. Articles made from oil-based clays cannot be fired, and therefore are not ceramics. Oil-based clay melts when exposed to heat, and is flammable at much higher temperatures. Because the viscosity of oils decreases as temperature rises, the malleability is influenced by heating or cooling the clay.

There are some problems with oil-based clay however. It smears on a hot day and won't adhere very well on cold days. It's greasy and the oil may seep out into the paper and balsa it's adhered to. The dyes commonly present also can stain structure. Eventually it can harden a bit due to migration or out gassing of the oils.

There is an modern alternative; Duct Seal Compound, aka "Monkey Shit". This compound seals conduit openings against drafts, dust moisture and noise. It also protects terminal boxes, pot heads and bushings from corrosive elements and deadens switch gear panel noise. The dough-like compound is easily "thumbed" over holes and gaps. It will not harden or form a skin under normal conditions. It has much better temperature properties than clay. It adheres at $^-20$ °F ($^-29$ °C) and will not slump after 1 hr. at 350 °F (175 °C). It is at least as dense as modeling clay. I recall we used it to seal vacuum chamber leaks. It has much lower out gassing properties than oil-based clays and does not get greasy on hot days. It comes in one pound bricks for under \$5. Your local hardware store will probably have it and know it as "Monkey Shit". If not, ask for Gardner Bender Duct Seal Compound - DS-130. Try it, you'll like it.

This is not "Plumbers Putty" which goes hard all too soon.

Stew Meyers



Indoor Jet Cat

Indoor Jet Cat--- yes, it is a double negative and all the fun of outdoor without waiting for air. My buddy John Jackson got all fired up about the indoor jet cat at the CFFS KSU indoor contest this winter. His enthusiasm rubbed off on me and we decided to give it a go. We are fortunate to have a couple of world class indoor glider guys in the Cloudbusters so John borrowed some knowledge. The craft of choice was the U2 which was a prefect fit for my finishing skills: cover it in black ink and your done. John got a 3 view and built the prototype that had about a 14 inch wingspan, and was encouraged by the results. So I jumped in and stole his work to produce my own 14 inch version. The outside testing results were good, getting about 20 seconds, but I could tell that at that size I would be able to shoot it thought the roof at Kent. So using the scientific theory that bigger is better I blew it up 30%, resulting in about a 18 inch version. Construction is standard Jet cat allsheet, everything set at 0-0 degrees. Both of us have a bamboo spar the length of the fuse because we know we're are going to hit something. The big version got its first flight at Kent and I wound up with officials of 15, 15 and 13 all of which hit some thing in the process, because I could not get the lunch direction correct for the right-to-left pattern. Naturally, after all my flights were in I figured it out and got two flights of about 25. I was still able to get to the roof with stretch to spare so next up is a 20% bigger one.

Winn Moore



This item in the Scale Staffel newsletter caught our attention. We're delighted to see that someone has switched on the lights at the old runway. Bill Hannan's and Frank Ziac's books, along with a lot of other Scale Free Flight goodies are available once again.

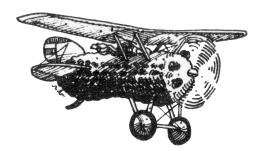
Plans and Things

by William Scott

At the contest in April, Jim Lueken came by and shared with all of us that he has begun or is continuing a business once operated by his neighbor W.C.(Bill) Hannan. Jim was carrying a large folder of plans, there were a few different sets by W. C. Hannan, a 1957 Waterman Aerobile 21" CO2, a DB-4 peanut scale, and a Waterman "Mercury Gosling" were the three that I picked out, because they looked like interesting planes to build.

Jim told us, "As some of you may know, I grew up around the corner from Bill Hannan. My father Jack and I flew models with Bill and his son Ken quite often and our families became good friends. About a year ago, during a visit to the Hannan's I came up with the idea of selling his plans as they had been off the market for quite some time. As the months went by and we were putting the "deal" together Bill and Joan decided to retire and close the Runway business. Bill suggested adding the books to my catalog. How could I say no! My wife DeAnn and I made two more trips to the Hannan's to pick up plans, books, stuff, and so on. While getting things set up in the garage good friend Joe Mekina back in Ohio has been putting together my website which is just about done. I should be up and running some time next week. Looking forward to serving the free flight community, especially the Scale Staffel! Go to plansandthings.com to see the goodies."

When I last checked, the website is up and running. There are three different categories of products offered; W.C. Plans, W.C. Books, such as "Model Plans & 3-Views International", and Frank Zaic books. I would highly recommend taking a look.



PLANS & THINGS

PlansAndThings.com

A web based cottage industry offering high quality scale free flight plans and modeling publications.



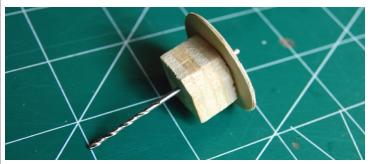
Noseblock Basics

A noseblock is made of two basic parts, a plug and an attached retaining disk. Who hasn't had these come apart, chip or in some other way fail? Here are some tips on noseblocks:

1. For small to medium models, make the disk of 1/32" plywood, even 1/16" is OK, if you prefer, particularly for larger models.



- 2. The plug should be made of cross-laminations of balsa. Spread white glue, Tite-bond or the like on sheets of balsa, laminated with the grain alternating at right angles from sheet to sheet. Clamp these securely together until dry and then cut out the noseblock.
- 3. Find the center of the plug and the disk, and drill a 1/16" diameter hole in each. Hold on to that drill! Join the two parts together with Gorilla Glue, which requires lightly wetting the two surfaces before applying a thin layer of glue to the plug. Align the two parts with the shank of the drill, and once in place, securely clamp them together while the glue dries.



4. Gorilla glue really expands as it dries, so you may have to cut away the excess glue after the parts dry. Then it is a simple matter to drill the noseblock to accept any thrust bearing you like. I favor Peck nylon bearings.



2014 CIA / FAC Ted Dock Meet In Memory of Lonnie Kinder

Sat. Sept. 27th, 8:00 am-5:00 pm	Sun. Sept. 28th, 8:00am -4:00 pm
FAC (#25) WWI COMBAT ML	FAC (#26) WWII COMBAT ML
FAC (#6) LOW WING MILITARY TRAINER	FAC (#7) GOLDEN AGE COMBINED
FAC (#10) OT RUBBER STICK	FAC (#11) OT RUBBER FUSELAGE
FAC (#13) JIMMY ALLEN ROG	FAC (#12) 2 BIT + 1 RUBBER ROG
FAC (#15) SIMPLIFIED SCALE	FAC (#16) DIME SCALE
FAC (#17) NO-CAL SCALE	FAC (#18) PHANTOM FLASH ROG
FAC (#19) EMBRYO ROG	FAC (#20) JET CATAPULT SCALE
FAC (#29) 1/2 WAKEFIELD ROG	FAC (#23/24) COMBINED GREVE/THOMPSON ML
AMA (#124) P-30 (JR)* (SO)*	AMA (#142) CAT. GLIDER (JR)* (SO)*

AMA (#140) HAND LAUNCH GLIDER (JR)* (SO)*

THE FOLLOWING EVENTS CAN BE FLOWN EITHER DAY, START & FINISH THE SAME DAY:

FAC (#1) PEANUT SCALE

FAC (#2) RUBBER SCALE

FAC (#3) JUMBO SCALE

FAC (#5) POWER SCALE

\$10.00 1ST EVENT, \$2.00 EACH ADDITIONAL, \$20.00 MAX, JUNIORS FREE PRIZES: 1ST = PLAQUE 2ND AND 3RD = CERTIFICATES

ENTRY & JUDGING ON SITE FRIDAY NOON TIL 3:00 & DURING MEET
ALL MODELS MUST BE PROCESSED AND JUDGED PRIOR TO OFFICIAL FLIGHTS
FAC 2014-2015 rules apply

Stay tuned to the weather! We have combined all Events into one day before to avoid inclement weather.

Also, flying to dark to squeeze it all in has happened too! It sure makes it fun. You never know what's going to happen. CD will be present 30 minutes prior to contest to determine Flying Site and weather.

ALL NON-SCALE MODELS MUST HAVE PROPER SIZED AMA NUMBERS
GLIDERS MUST FLY FROM PENS
*NATIONAL CUP EVENTS

INTERIM CD: PAT MURRAY 6361 W 800 N McCORDSVILLE, IN 46055 CELL:317-410-2200 EMAIL: PMURRAY@CENTERLINEDESIGNLLC.COM

BP Quiz Answer

Canard 5 points

Pusher prop 5 points

Grand total 10 bonus points

Not a huge BP advantage here. The ship does offer a layout that looks to be friendly to Free Flight (always capitalized). It's a boxy structure that's aerodynamically clean, The real one actually flew in the early $80 \, \mathrm{s}$ too.

Gone West

"My husband, Larry Haralambou, was a member of the Flying Aces. I am sorry to report that Larry passed away on March 30th of this year.

Larry was the owner of Fantasy Flyers, Inc. etc. Larry always said how much he looked forward to receiving the Flying Aces Newsletter.

Sincerely, Jo Ann Haralambou

Dick Adams passed away Wednesday night, April 30, 2014 after a full 89 years. Mr. Adams was educated at the George Washington University, the University of Geneva, and the John Hopkins School of International Affairs. He served his country through service in the Navy and as a Foreign Service Officer. He was an active modeler, member of the AMA since 1936, and participant or member of the Flying Aces Alamo Escadrille, Tri City Fliers, and others.



Half Price! New Member* Offer Two-year memberships \$58 now \$29

*new members (U.S.), or members who've lapsed for 12 months or more. International dues: \$37.50; Youth dues (18 and under): \$9.

National Free Flight Society

Preserving, enhancing and promoting the art, sport and science of Free Flight Model Aviation in all its forms.

Membership includes access to the NFFS Plans Catalog of over 800 plans, scholarship and volunteer opportunities, rulebooks, committee support, and 6 issues/year of Free Flight Diqest, the world's most respected journal of its type. Each 40+ page bimonthly issue includes in-depth content on building and flying all types of Free Flight models: indoor and outdoor rubber, electric, glow, glider, duration, scale, Old Timer and more!

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Country_			_ Email_			
Card#	-	-	-	Visa/M.C. E	xp. Date /	/

Secure Online payments at <www.freeflight.org>

FAC GHQ & Council

When contacting FAC officers via email, please be sure to include "FAC" in the subject line so that your message isn't overlooked.

Ross P. Mayo - President & CinC 47 Saint Andrews Drive Etowah, NC 28729-9748 H - 828-595-2712

H - 828-595-2712 C - 814-397-5202 cinc@flyingacesclub.com

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Ronny Gosselin CP 3604 Saint-Remi QUEBEC JOL 2LO Canada 514-808 1808 ronny@total.net

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281-480-6430 Balsabug@gmail.com

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301-365-1749 stew.meyers@verizon.net

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Paul Stott 175 Thoreau Dr. Shelton, CT 06484 alfa28@aol.com

Rich Weber - FAC News Editor 9154 Eldorado Trail Strongsville, OH 44136 newsletter@flyingacesclub.com Mike Welshans - Keeper of the Kanones & Board Member 976 Pearson

976 Pearson Ferndale, MI 48220 mbwelshans@aol.com

George White - Keeper of the Squadron List 10100 Hillview Drive #234 Pensacola, FL 32514 850-473-0866 white76@cox.net

Councilmen Emeritus

Pete Azure Fred Gregg Tom Nallen I Tom Nallen II Mike Nassise Jack Moses Bob Schlosberg Chris Starleaf

*Note - Names in **bold type** are FAC Board members.



Membership Information



- Membership brings you six issues of the Flying Aces Club News, and all the grins that come with being a Junior Bridman.
- When the **Dreaded Red X** shows up in that circle next to your address label, it is time to renew your membership. Please note: the **DRX** is the only notice you will receive. Memberships will not be back dated so any missed issues of the newsletter will have to be purchased. (For back issues, see below.)
- Your renewal date will be printed on your newsletter mailing label so the DRX won't sneak up on you.
- If you would like to use the **PayPal** option to send your dues, go to: **flyingacesclub.com** and click on "membership." The PayPal button is at the bottom of the page. Pick your location (US, Canada, or Overseas) and hit the button.

- You can still send a check through the good old mail service. Use the form below, or any reasonable facsimile.
 Please make checks payable to: Flying Aces Club
- Canadian and Overseas members, please use PayPal (preferred) or send checks payable in US dollars.
- Change of address please note the post office does not forward bulk mail so be sure to handle this promptly or you will miss an issue! Send your new address, or any questions about your membership to:

Flying Aces Club 3447 Adelaide Drive Erie, PA 16510

or email to - join@flyingacesclub.com

FAC News **BACK ISSUES** in limited numbers are available for \$5.00 each. Send orders for all back issues to the same address as above.

Flying Aces Club Membership Form	New	Renewal	Annual dues in \$US: • \$20 USA
	AMA or		• \$28 Canada
Name:	MAAC No		• \$40 Overseas
			Please make checks payable to:
Address:			Flying Aces Club and send to:
City:			3447 Adelaide Drive
State/Prov:Postal Code:	Country:		Erie, PA 16510
Email:	_Phone:		



FAC Contest Calendar



Muncie, IN	July 7 - Aug 7	AMA NATS		nπp://www.modelaircraπ.org/ events/nats.aspx
Geneseo, NY	Jul 16 - 19	FAC NATS	Ross Mayo	CinC@flyingacesclub.com
Elyria, OH	July 27	CFFS Outdoor Contest	Jim Gaffney	jamesfgaffney@hotmail.com
Muncie, IN	Jul 28 - Aug 1	AMA / NFFS FREE FLIGHT WEEK	AMA / NFFS	Details TBA
Flint, MI	Aug 3	CLOUDBUSTERS Outdoor Contest	Winn Moore	winn_moore@yahoo.com
Geneseo, NY	Aug 8 - 10	EMPIRE STATE FREE FLIGHT CHAMPIONSHIPS	Ruth Bane	585 765 9363 windwhip47@aol.com
Elyria, OH	Aug 10	CFFS Outdoor Contest	Jim Gaffney	jamesfgaffney@hotmail.com
Geneseo, NY	Aug 22 - 24	THE PIRATE CHALLENGE		http://wnyffs.org/
Perris, CA	Aug 23 - 24	SCALE STAFFEL CONTEST	John Hutchison	http://www.scalestaffel.org/
Muncie, IN	Sept 11- 12	FAC OUTDOOR CHAMPIONSHIPS	Ralph Kuenz	rdkuenz@yahoo.com
Geneseo, NY	Sept 12 - 14	The Great Grape Gathering		http://wnyffs.org/
Elyria, OH	Sept 14	CFFS Outdoor Contest	Jim Gaffney	jamesfgaffney@hotmail.com
Flint, MI	Sept 21	CLOUDBUSTERS Outdoor Contest	George Bredehoft	volare61@gmail.com
Whitesburg, GA	Sept. 27	TTOMA FAC Outdoor Contest	Jim Altenbern	864 848 0705 jaltenburn0705@charter.net
Muncie, IN	Sept 27 -28	CIA / FAC TED DOCK MEET	Pat Murray	317 410 2200 pmur- ray@centerlinedesignllc.com
Flint, MI	Oct 4	CLOUDBUSTERS Outdoor Contest	Mike Welshans	mbwelshans@aol.com
Elyria, OH	Oct 5	CFFS Outdoor Contest	Jim Gaffney	jamesfgaffney@hotmail.com
Flint, MI	Oct 19	CLOUDBUSTERS Outdoor Contest	Winn Moore	winn_moore@yahoo.com
Flint, MI	Nov 2	CLOUDBUSTERS Outdoor Contest	George Bredehoft	volare61@gmail.com
Perris, CA	Nov 8 - 9	SCALE STAFFEL CONTEST	John Hutchison	http://www.scalestaffel.org/ 386 409 0406
Palm Bay, FL	Dec 29 - 31	FAC WINTER OUTDOOR CHAMPIONSHIPS - KING ORANGE	Steve Bacom	goldfinger82003@yahoo.com

To get your event listed on this page, send the info to the editor. To get your event listed on the website contest page, send your stuff to our esteemed Webmaster, Dave Mitchell. Contact information is on the Membership Information page.

Happy Birthday Cloudbusters!

- 1. The Cloudbusters Model Airplane Club was honored with a plaque marking the 75th year of continuous operation. It was presented to Mike Welshans (club pres.) by Tim Jesky (AMA District VII V.P.). Mike also received a certificate from the AMA recognizing his many years of service to model aviation in multiple capacities. Bruce Thoms photo and captions
- 2. The appropriately decorated cake was shared among all who wished to partake. Thoms
- 3. Marie Moore ROG's her Phantom Flash at a Cloubuster indoor meet. Thoms
- 4. George Bredehoft had his camera ready at the Cleveland Free Flight indoor contest at the KSU Field House. He sent along a couple of pics, with bits of the conversations that he swears he overheard. John Jackson says "Winn, if I don't hear the wings whistle on launch, I know you're not really trying."
- 5. Winn Moore says "Rich, I really would like to do an article for the FAC News on Indoor Jet Catapult. I have a feeling that I will do really well in that event today." Bredehoft
- 6. Cloudbuster Jack Moses passing it on to grandson, Eli Moses. Thoms

The rest of the photos and captions come from Scott Richlen:

- 7. Here are some pictures of the Junior High kids I have been working with in an after-school program. Alex has his fuselage skinned and is ready to move on to his wing.
- 8. Ben is an 8th grader and has really developed his skills. He printed his own "skin" for his No-Cal P-40. I wish mine came out that well the first time I tried. He found a 3-view of a captured P-40.
- 9. Here is Heston working on his Z-15
- 10. Here is Hanna with her Z-15 and her Yard Ranger.

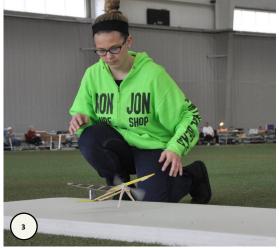
BUILD...What you really like

FLY...All you can

WIN...Just let it happen

























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Above: FAC stalwart Mark Fineman showing his launch form at Wawayanda, NY last October. Below: The latest creation from Tom Hallman's workshop. The Bleriot XXVI is a Peanut Scale canard, and has already demonstrated solid flying performance...unlike the original. Look for this one in the skies over Geneseo.



CLOUDBUSTERS

2014



Flying Aces Club

Outdoor Championships MODEL AIRPLANE CLUB

A.M.A. Flying Site - Muncie Indiana Sept 11 & 12 8:30 AM to 4:30 PM

A.M.A. Sanction #14-198 (Field #4 use confirmed)



CD Ralph D. Kuenz – rdkuenz@yahoo.com

Co-CD Winn Moore - winn moore @vahoo.com

EVENTS					
	Thursday 9/11		Friday 9/12		
#2	FAC Scale*	#2	FAC Scale*		
#3	FAC Jumbo Scale*	#3	FAC Jumbo Scale*		
#5	FAC Power Scale*	#5	FAC Power Scale*		
#1	FAC Peanut Scale	#29	Half Size Wakefield (ROG)		
#7	Golden Age Scale	#10	OT Rubber Stick		
#99	One-Design Comet Piper J-5	#6	Low Wing Trainer		
#19	Embryo Endurance (ROG) ****	#98	AMA P-30 ***		
#25	WWI Dogfight**	#24	Goodyear/Formula Race**		
#14	OT Gas Replica	#16	FAC Dime Scale		
#11	OT Rubber Fuselage (ROG)	#26	WWII Combat**		
#23	Greve Race**	#22	Thompson Trophy Race**		
#17	No-Cal Profile Scale	#97	GHQ Peanut****		
nedule changes due to inclement weather are at the discretion of the CD					

Schedule changes due to inclement weather are at the discretion of the CD.

All planes for scale judging (events 1, 2, 3, & 5) must be turned in by 12:00 noon on Thur. 9/11 for both days events.

All Models (except for events 1, 2, 3, & 5) must pass Compliance Check (initialed "First Flight" time slip) for event rules & PPLC.

A Compliance Check official will be at the Officials canopy from 8:30 AM – 4:30 PM both days.

Posting of flight times or Mass Launch entry requires an initialed "First Flight" timing slip.

O.T. rubber times must be turned in by 3:00 PM for fly-offs (Will be Mass launch or target time).

*These judged events will be flown both days. Judging however, is on Thur. 9/11 only.

- **Mass launch. Compliance Check (initialed "First Flight" time slip) required for entry. Launch times will be posted at sign-up sheet.
- ***This event flown to current A.M.A. rules (not Kanone worthy).
- ****Embryo models built from a Dave Stott published plan will receive 15 additional bonus points
- *****Flown to original GHQ Peanut Rules. (see Cloudbuster website & Contestant packet)

One-Design event is flown to Golden Age rules for models built from the Comet Piper J-5 plan. Permitted modifications came with the plan in 2013. (plan and mods on the Cloudbuster web site Cloudbustermac.tripod.com)

\$25.00 Entry fee includes all events. Trophies (Laser Etched Glasses) awarded to third place. All entrants must hold valid A.M.A. or M.A.A.C. license (May purchase A.M.A license on site or at A.M.A. HQ). Entry includes:

A. Complimentary Theme "T" Shirt (circle size on your early entry form to insure availability) B. The Theme Model plan, "Hung Aereon" (the One-Design model for 2015)

is available on the Cloudbuster web site or as kitted by EasyBuilt Models.

Note: Additional Theme "T" shirts will be available for \$10.00 after 2 PM Thursday 9/11.

EVENT SPONSORS ARE WELCOME. (SPONSORSHIP \$40 /EVENT)

Sponsors will receive a special "T" Shirt and be recognized when trophies are awarded. (Bring something from your excess model "stuff" for the raffle.)

Registration: Make checks payable to Cloudbuster MAC and mail to Ralph Kuenz 46127 Hampton Dr. Shelby TWP, MI 48315 (Mail before 7/15 to insure ""T" Shirt size.)

Name	A.M.A. #_	A.M.A. #		
Street	City	State	Zip	
Email Address		"T" Shirt siz	ue S – M L – XI	2XL

GHQ PEANUT SCALE RULES

- Open to any scale model of not more than 13 inches wingspan.
- Flight score determined by total of three official flights.
- There will be no maximum flight time.
- All models must be covered with Japanese tissue or equivalent.
- All surfaces must be double covered, unless the real ship was single covered.
- Planes with retractable gear my be built with the gear represented in the up position with no penalty.
- Proof of scale must be presented for scale points,

SCALE POINTS

SCHEET ON (IS	
A) COLOR	
reasonable effort to use tissue and/or dope to simulate realistic coloring	3 points
B) MARKINGS	
civil registration and striping or military insignia, serial numbers, squadron markings, etc	3 points
C) DETAILS	•
struts, cowls, cylinders, pilots, rigging, armament, steps, windshields, exhausts,	
control surface outlines, and other outstanding details shall be scored as:	

STARK ----- 3 points LAX----- 0 points GOOD----- 3 points GREAT---- 6 points

Scale score determined by multiplying scale points by the first two digits of the best GHQ Peanut flight (total of three) score of the day.

EXAMPLE: If the best three flight total is 279 seconds, everyone's scale score os multiplied by "27". However, if only two digits comprise the top score(i.e.: 97 seconds) then only the first digit will be used as the multiplier and everyone's score will be multiplied by "9".

- Highest total of flight and scale points wins.
- 10 Ties broken by single fly off flight multiplied by 3 and the added to the scale score.

Reprinted from the 2010-2012 Flying Aces Club Rule Book.

