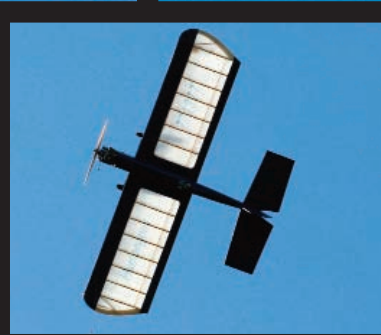


# Stunt News

Precision Aerobatics Model  
Pilot's Association

July/August 2009 \$5.00



## Vintage Stunt Championships!



# contents

July/August 2009



## features

**8** **VCS XXI**  
by Bill Byles  
A Vintage aerobatic celebration  
in the desert

**40** **Spinner Ring How-To**  
by Chris Brainard  
Making it match

**64** **Take-Apart Vector**  
by Sean Chuang  
Making it come apart



Charlie Reeves' Big Job is caught in a wingover (above). John Callentine's Caprice makes its way through the pattern (top right). Photos by David Russum.

**On the cover:** The skies above Christopher Columbus field were filled with beautiful vintage CL Stunt aircraft once again this past March. Models in the top row, left to right are: Roy DeCamara's Joker, Pete Peterson's Venus, Joe Gilbert's Humongous and Gregg Elling's Super Zilch. The models in the center row, left to right are: Bob Whitely's Chizzler and Bob McDonald's Strathmoor. And the models in the bottom row, left to right are John Callentine's Travel Air and Mike Haverly's Freedom 45. Photos by David Russum.

PAMPA, an AMA approved Special Interest Group, founded July 1973. Objectives include a means of communications among control line stunt fliers, voting on issues affecting control line stunt, and administration of the Control Line Precision Aerobatics Event at the Nats.

## extras

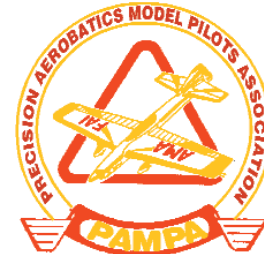
- 24 Her "First" Time
- 48 In 1964 ...
- 94 The Appearance Point  
White Cloud
- 96 The Appearance Point  
Gene Martine's Mariner



81



35



## columns

- 26 Beginnings
- 30 It's in the Details
- 33 CLPA Rules
- 35 Why I Fly Stunt
- 38 The Euro Scene
- 43 Crash Repairs
- 44 The Next Generation
- 46 We Have the Technology
- 49 Classic Stunt
- 52 Safety
- 54 Ask Ken
- 57 Clubs
- 59 Building
- 61 Hints, Tips, and SWAGs
- 63 News from Brazil



30

## pampa news and reports

- 2 President's Report  
*Bill Rich*
- 3 Starting Points
- 4 Level Laps  
*Bob Hunt*
- 7 Membership Application
- 69 Ad Index
- 71 PAMPA Products
  
- 73 Vice President's Report
- 75 Treasurer/Secretary
  
- District Reports
- 76 District I
- 77 District II
- 77 District III
- 78 District IV
- 80 District V
- 81 District VI
- 83 District VII
- 84 District VIII
- 85 District IX
- 87 District X
- 90 District XI



59



73



18

PAMPA Web site: [www.control-line.org](http://www.control-line.org)

# President's Column

By Bill Rich

Never underestimate the value of your past experiences; share them through *SN*.

Please note the date of this *SN*. Following is the explanation given to the EC for this move. I'm sure Bob Hunt will address this in his column as well. I just wanted to "highlight" some of our reasoning for this move.

It became all too apparent that trying to catch up on the actual cover date while producing current issues could not be accomplished. We are going to skip the May/June cover date and produce the July/August issue of *SN* instead. That will put us back onto the proper cover date.

To ensure that all PAMPA members get the six issues that they paid for, we have decided to begin work on a "Special Issue" that will, in essence, be the missing May/June issue. This special issue will be just that: special. This issue would be more or less like the old Annual issues that *American Modeler* produced. It should have more in-depth articles and special columns from the Directors and from the regular columnists as well. This move will allow us to start off 2010 right on cover date schedule and, hopefully, maintain that schedule

**The CLPA portion** of the 2009 AMA Nationals will be held from July 5 through July 10. This year, the pilots' meeting and appearance judging will be held at the 180 building on Sunday July 5 at 2:30 p.m. Please refer to Paul Walker's Nats information update for all details for the 2009 Nats. Please remember that the site will be closed to anything other than event flying until Friday, July 3. At that time you may fly on the L-Pad and grass field.

I would like to encourage all PAMPA Nats attendees to also attend our PAMPA Business Meeting. The meeting will be held on Tuesday, July 7 at the AMA Headquarters Building, in the second-floor conference room. The General Membership meeting will begin at 7 p.m. The Executive Council will meet from 5-7 p.m. There are a number of issues that necessitate the two-hour EC meeting. One key issue will be the change in responsibilities between the Secretary/Treasurer and Membership Secretary. Of all the offices in PAMPA, Secretary/Treasurer and Editor are the most labor intensive.

Steps will be taken to reduce the responsibilities of Secretary/Treasurer. Russ Gifford has indicated he will not be able to continue his duties as Membership Secretary. I would like to thank Russ for his contributions to PAMPA and his efforts to build the membership. Russ was instrumental in locating the printer for *SN* and has continued to work closely with the printer. The term for Membership Secretary does not

come up for election this year. I will appoint a Membership Secretary to serve out Russ's term as called for in our By-Laws.

I am in the process of building the Agenda for our Business Meeting; agenda items to date are:

1. Reading of EC Minutes
2. Nominations for 2010 Elections
3. Competition Committee update
4. Secured Website
5. Online membership renewal
6. 2010 Dues
7. Discussion concerning PAMPA Nationals

**Our *SN* Team**, Bob Hunt and Liz Helms, are doing a great job in producing a very professional publication. I would like to encourage all members to contribute material for *SN* so they can work their "magic." If you're not the greatest writer of all time don't let that stop you; Bob will do his "editor" thing when necessary. We all have stories, expertise and experience to share. Material on building, coaching, finishing, mentoring, and personal insights on CL Aerobatics would be welcomed. You never know when one of your experiences will serve as motivation for others.

When I first started flying CL, I bought every model magazine I could find to try to learn as much as possible about CL. I will never forget how motivated I was after reading Bob Gieseke's article about his journey to the World Championships. This was during my pre-PAMPA days. Since becoming active in PAMPA I have met many of the individuals I read about during this early period. I now count many of them as my friends. Never underestimate the value of your past experiences; share them through *SN*. Please remember to support our *SN* Advertisers whenever possible. Make sure you consider them when planning your next building project. Our event would truly be handicapped if these guys and their products were not available to us.

**Until next time**, remember, this is about having fun and enjoying all aspects of the hobby. Safe travels to all; hope to see a lot of you at the Nats. *SN*



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Please remember to support our *SN* Advertisers whenever possible.

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## Harold H. Carstens 1925 - 2009

# Starting Points

The hobby world is mourning the loss of a giant of the industry. Harold "Hal" Carstens passed away on June 23, 2009 at 84 years of age. He owned Carstens Publications and published many hobby-oriented magazines and books. Among the magazines published by Carstens Publications are *Railroad Model Craftsman*, *Railfan* and *Railroad* and *Flying Models*.

It is no secret that *Flying Models* has always been, and continues to be, a chief supporter of Control Line modeling, and that is a reflection of Hal's support of all aspects of all hobbies.

Hal's son, Henry Carstens assumed the role of publisher a couple of years ago, but Hal, as president of the corporation, still came into the office virtually every day and worked to promote the hobbies he loved. The following comes directly from a supplied biography of Hal Carstens and shows the depth of his involvement in the hobby industry.

Born in Fort Lee NJ, June 20, 1925. Life-long resident of Bergen County NJ until moving to Sussex County NJ in 1973.

President and former publisher, Carstens Publications Inc. In addition to the above-mentioned magazines, the firm also publishes soft- and hard-cover books primarily in the model hobby and railroad fields. Founded in 1933 by Emanuele Stieri, ownership passed in 1934 to Charles A. Penn, formerly with Bernarr MacFadden's publishing empire. In 1940 the company moved from New York City to Ramsey, NJ. In 1973 the company bought a 10-acre site in Fredon Township, Sussex County NJ, and built its present custom-tailored editorial building.

Carstens joined the publishing firm in 1952 as associate editor of *Railroad Model Craftsman* and *Toy Trains* magazines while attending Fairleigh Dickinson University at night. He studied journalism and art at the Philippine Institute for the Armed Forces in Manila. He was appointed managing editor of the two magazines in 1954, becoming editor and vice president in 1957 and president in 1962 following retirement of founder Charles A. Penn. He had his first article published in *Railroad Model Craftsman* while a student at Dwight Morrow High School, Englewood, NJ.

Carstens attended Wagner College, receiving his BS in Business Management from Fairleigh Dickinson University in 1952. He is a member of the Magazine Publishers of America.

Carstens enjoyed his British Morgan sports car and holds membership in the Morgan <sup>3</sup>/<sub>4</sub> Morgan Motor Car Club. He is a member of the Photographic Society of America and is a former associate editor of its *PSA Journal*. He is a past president of the Newton Rotary Club 1986-1987 and is a Paul Harris Fellow. A Lutheran, he is active in church affairs and has served on several church councils.

He graduated from the Army School of Roentgenology in Memphis, and served in the Philippines with the 103<sup>rd</sup> Medical Service Company, US Army Medical Department, during World War II. He is a member of the Veterans of Foreign Wars.

Carstens is listed in *Who's Who in America*, and *Who's Who in the World*. He was a past president and secretary of

the Hobby Industries of America, Inc., a 2000 member trade association with headquarters in Elmwood Park NJ, 1971-1972, and served 11 years on the HIAA Board of Directors. He served as chairman of the Public Relations, Management Review, Education and Awards committees. He was chairman of the Publishers Section and the Model Railroad Division, and was vice president of the Educational Foundation of the Hobby Industry Association.

He was a past president of the Train Collectors Association, Inc., as well as TCA's Metropolitan Division. Life member.

He was also a past president of the Model Railroad Industry Association, a manufacturer's trade association, now the Model Railroad Division of the Hobby Manufacturer's Association. He is a past chairman and secretary of the Eastern Model Railroad Manufacturer's Association.

Carstens served 11 years on the Wagner College Board of Trustees, two years as Secretary of the Wagner College Board of Trustees. He served three terms as President of the Friends of the New Jersey Railroad & Transportation Museum, Inc., working to establish a railroad and transportation museum in NJ.

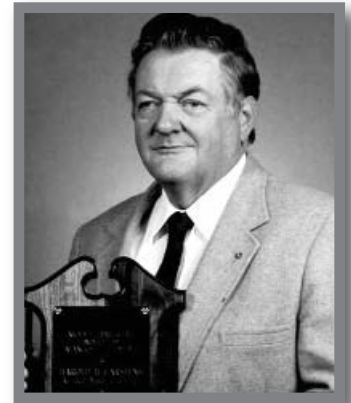
He was the author of many articles on model railroading, railroads, photography, lumber industry, and motor cars. Among publications in which his articles and photographs have appeared are *Railroad Model Craftsman*, *Toy Trains*, *Railroad Magazine*, *Railfan & Railroad*, *Creative Crafts & Miniatures*, *Flying Models*, *PSA Journal*, *The Lutheran*, *Ladies Home Journal*, *New York Lumber Trade Journal*, *Book of Knowledge* encyclopedia, *The Morganeer*, *Hobby Merchandiser*, and others. He edited many books on model railroading, railroads, crafts, miniatures and model aviation. His *150 Years of Train Models*, published in 1999, covers the history of the model railroad hobby and industry.

Carstens presented many seminars and programs on model railroad and railroad subjects at conventions and meetings in the United States, Canada and England. He has addressed hobby manufacturers and industry buyers in the USA, England, and Germany.

Carstens resided in Fredon Township, Newton NJ, with his wife, Phyllis. They have four children: Rebecca Collis, of Raleigh, North Carolina; Heidi Lynch, Jacksonville, Florida; Henry; and Harold G. Son Henry continues in the publishing business, becoming publisher in August 2006.

I can personally tell you that Hal was a friend to all who knew him and he was certainly a friend to all who enjoy hobbies of any kind. He will be sorely missed.

—Bob Hunt



# Level Laps

By Bob Hunt

We've pressed the cosmic reset button with this issue of *Stunt News* and presto, we are back on the correct cover date schedule ... sort of. If you read these things from front to back, then you've already read Bill Rich's President's column and know what I'm talking about.

Here's the deal: There was no way that Liz Helms and I could produce two issues of *Stunt News* in one deadline cycle and get it back on the proper cover date schedule. We have been able to produce one issue every two months as we are supposed to, but it was annoying to us, and apparently a few other members/readers that we could not get it back on cover date schedule.

By simply skipping the May/June cover date and going directly to the July/August cover date we have effectively put this thing on schedule. But, we are minus one issue. Not to worry, as we have decided to produce a "Special Issue" of *Stunt News* that will be delivered pretty much at the same time as the November/December issue. Perhaps not the ideal solution, but let's take a look at the pluses of the situation.

The idea is to produce whatever the current issue is, while also working on the Special Issue a bit each deadline cycle. Instead of having to try and produce two full issues now in a two-month cycle, we can essentially produce one and a third issues every two months and have the missing issue of *Stunt News* ready to go at the end of the year.

The Special Issue will contain some surprises. If you are old enough to remember the Annuals from *Air Trails*, *American Modeler*, and *Model Airplane News*, then you will also remember that those issues had more in-depth features and lots of fun and unusual articles that were not normally seen in the "regular" issues. That's what we are shooting for with our Special Issue of *Stunt News*. We want to fulfill the subscription requirement of six issues in a calendar year, certainly, but we also want to make that issue a memorable one.

We have put the call out for appropriate articles for such an issue, and we have asked the PAMPA District Directors to come up with something special to highlight a personality or club in their district in their reports in that issue.

Again, because of the manner

in which we "inherited" the production responsibilities of *Stunt News*, there was really no way that we could catch it up to the proper cover date and still maintain a normal private life. This is the only option we felt we had, and we hope to turn it into a huge plus for the PAMPA organization. 'Nuff said.

I'd like to take this opportunity to remind, prod, cajole, intimidate, and otherwise stimulate (that's the new "buzz" word, isn't it?) the district directors and columnists who have not already submitted their materials for the Special Issue to do so as soon as possible so Liz and I don't have to work around the clock at the eleventh hour to get the Special Issue out the door on time.

**Mystery Dude:** As of this writing, I have had no guesses as to who the person was in the mystery photo in the March/April issue. Well, it was me! Liz is totally to blame for this. She saw that photo of me and just made the decision to use it. She actually thought I was cute—at least back then ...

In that photo I was four-and-a-half years old and was holding a VECO Souix Free Flight model. While I didn't even nearly build that model all by myself, I did do a lot of the work on it (with a lot of Dad's help of course). I vividly remember screwing the landing gear to the firewall and then applying glue to the nuts to hold them secure. I also remember putting ribs in place, although Dad properly aligned them. I did get to glue some of them in place

... in



fact, Dad let me give a try to almost all of the building processes on that model, and then he fixed my mistakes. He had a policy when it came to working on my models: I had to be there and be involved or he would put everything down and stop working.

That model wasn't a beauty award winner, but it sure looked good to me, and it flew very well. I remember flying it at a contest in Millville, New Jersey in 1953. It landed in a tall tree and Richie Devlin volunteered to climb the tree and retrieve it.

**Each One Teach One:** The above "Mystery Photo" story gives me a perfect opportunity to write a bit about something that Bill Rich and I have been discussing. In the early 1950s my father, James A. Hunt, was the director of the New Jersey State Exchange Club model airplane program. That program included a number of very large contests and also a lot of instructional classes on model building.

In order to increase the participation of Juniors and Seniors, Dad instituted a rule that in order to enter and compete as an Open contestant you had to bring a Junior or Senior contestant with you, and they had to compete! Wow!

Talk about an incentive to cultivate interest in youngsters in modeling ...

Actually it wasn't as much of a problem for the Open members as you might think. In those days, modeling was very popular amongst youngsters and there were usually plenty of them to go around. Still, it did stimulate mentoring.

I know, that wouldn't work today, but it does offer food for thought about how we can stimulate modeling interest in not only the younger generation, but also in myriad 30-somethings who are looking for a hobby.

I know a way to increase the size of our hobby/sport 100 percent virtually



## “No good deed will ever go unpunished.”

overnight. If each one of us would search out and find one person each with an interest in modeling, and then take that person under our wing and teach them one-on-one everything we know, we'd double our size instantly!

A little far-fetched, you say? Perhaps, but it is a program that each one of us can institute on our own and start right away. It seems that we all are waiting for AMA or PAMPA to come up with a program that will perpetuate our hobby/sport. That will never happen! But, if each of us starts our own program, then we can be sure it will work, providing that we follow through and do our part.

The real payoff on this type of program is that each of us will have a new flying buddy, and that will make the hobby even more enjoyable. This is a Pay-It-Forward scheme. Once your “student” reaches a point at which he or she is an advanced builder/flier then it is up to them to find another “newbie” and pass on the lessons. Done right, it is perpetual. And, yes, I still believe in Santa Claus. Don't you?

I've done my part by having building classes in my shop over the past few years for several new modelers and even a few retreats. They have been fun, and I've actually learned a bunch from my students as well. If you don't try it you can't say that it doesn't work. Consider this a challenge to take your expertise and pay it forward!

One more thing: be sure to write about your experiences with your student or students. You will find new and better ways of imparting information and we all want to know about them. If this gets “legs,” we'll even start a column to support both the teachers and the students. This can work, but only if we all embrace the thought that the only programs that really succeed are the ones that we ourselves start and perpetuate. “Each One Teach One.” Make that your motto!

### New Stuff:

In this issue you will find first columns by Bob Whitely and Bob Storick. Bob Whitely has volunteered to write in his “Hints, Tips, and SWAGs” column about practical things that work in the real world of flying. Bob starts out with a rather unusual, unique approach to getting a consistent, reliable, and repeatable engine run. I'm sure his methods will raise some eyebrows and find some resistance. All I can say is, before you dismiss his ideas, try them first!

Bob will need input from everyone in PAMPALand to keep this column going. If you have ideas that work, send them to Bob for inclusion in future columns.

Those of you who visit the Stunt Hangar online forum already know about Bob “Sparky” Storick. Bob is an energetic go-getter who can build a beautiful stunt model faster than anyone I know of. Not only can he build fast, he can also build beautifully and he produces light models.

Bob introduces himself with this first column and lays out the plan for future columns. I for one am looking forward to learning the stuff he knows!

Also on board this month is Thomas Case who is writing about the dynamic and exciting CL Stunt scene in Brazil. The Brazilian CL fliers are a motivated group and Thomas is very supportive of them. His extremely generous sponsorship of large groups of Brazilian fliers is a matter of record. Thomas will alternate with Claudio Chacon who is writing the “News from the Tango Zone” column, essentially covering all of the CL Stunt news from South America.

### God laughs when man makes plans...

This piece is being written at the eleventh hour, and it concerns a huge monkey wrench that has been tossed into the

*Stunt News* production equation. At the beginning of this column I wrote about our plans to put *Stunt News* on schedule and keep it there. Well, we did not take in account the unforeseen.

Our graphic designer Liz is, like many of us, a dog lover. She cannot stand to see an animal mistreated in any way. Because of that, she has acquired a new “rescue pup” to add to the animals she already had.

The old saying goes, “No good deed will ever go unpunished.” Liz just had a bit of a setback. Her in-house menagerie got a bit rambunctious and while romping around playing, one of them knocked Liz clean off her feet and she fell. The result was multiple fractures of her upper right arm. She's okay, but she is in pain and her right arm will be pretty much useless for awhile.

She's a trouper, however, and is working through the pain to do as much as she can at a sitting in assembling this issue of *Stunt News*. Predictably it will be getting out later than we had planned.

We'll continue to try to put this publication back on schedule until we are successful. You can help by sending in feature article pieces. I'm also still looking for someone to write the “Old Time Stunt” column and someone to write the “Flying” column.

Till next time, fly stunt! *SN*

## Deadlines

### Ad and Editorial copy

#### Issue

March/April 2009  
May/June 2009  
July/Aug 2009  
Sept/Oct 2009  
Nov/Dec 2009

#### Deadline

January 20, 2009  
March 20, 2009  
May 20, 2009  
July 20, 2009  
September 20, 2009

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## Stunt News Publication Policy and Disclaimer

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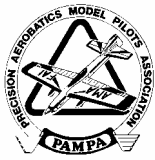
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**NOTE:**  
 Term of ALL Memberships and Subscriptions are from January 1<sup>st</sup> through December 31<sup>st</sup>.

**ALL DUES EXPIRE DECEMBER 31<sup>st</sup>!**

# VSC XXI

by Bill Byles

VSC XXI represents another chapter in a gathering (I call it a gathering rather than a contest) that has already achieved legendary status. In 1989 Mike Keville thought it would be neat to have a “contest” and invite as many of the “Legends of Stunt” as he could find. While I was not at that first VSC, held in California at the Whittier Narrows CL flying site, I understand that 17 fliers came to fly their period airplanes. The fliers included Dick Williams, Bart Klapinski, Ed Southwick, Bob Palmer, Bob Whitely, Tom Lay, George Aldrich, John Wright, Tom Dixon and several others. Mike Keville more than accomplished his goal of getting a few of the legends together for some vintage Stunt flying; he started a tradition that many of us look forward to every year.

Over the years the VSC has attracted fliers not only from the

USA but from many countries and continents all over the world including Australia, Japan, South America, and Europe, giving this “gathering” an international flavor. While attendance was down a bit this year (likely due to the status of the economy worldwide), the “fun factor” was as great as ever.

The Tucson, Arizona weather was, for the entire week, nothing short of Stunt Heaven. We had sunshine every day with temperatures in the mid to high 70s and a very mild breeze, which was appreciated by all except Bob Hunt, who was seen praying to the wind gods for 15 knots out of the sun. (He *likes* flying in the wind! Go figure ... ) Flying started shortly after daybreak and typically wasn't finished until near dark. Old Time Stunt was flown on Tuesday and Wednesday, with Classic Stunt being flown on Thursday, Friday, and Saturday.



A gaggle of Caprices, plus one! They belong to clockwise from back row left: Frank McMillan, John Callentine, Jerry Silver, Chris Brainard, Bob Hunt, and Stan Tyler. Photo by Ron Hook.

The pilot meeting on “officials” day was held at 7:30 a.m. with official flights beginning at 8 a.m.

Classic Stunt was flown this year on three asphalt circles with one official flight each day. One of the flights was a “throw-away” flight, allowing the flier to toss out his lowest score. In terms of allowing each flier to have fairly “equal air” with respect to wind, this format worked out well, in addition to enabling the official flights to be completed by 11:30 a.m. each day. Also, as a Classic judge with this format, I was able to appreciate only having to sit out in the sun for three-and-a-half hours or so instead of the usual 8 a.m. until 4 p.m. or later.

The most fun part of the VSC gathering for me is, without a doubt, getting together with friends that I get to see once a year. Charlie Reeves from Paducah, Kentucky, Don McClave from Portland, Oregon, Bob Hunt from Pennsylvania, Dale Barry from Georgia, Pete and Diana Peterson from Washington state, Gordan and Sandy Delaney from Salt Lake City, Utah, Jim Rhoades also from Salt Lake, John Miller also from Salt Lake, Don Hutchinson from Texas, Marvin Denny from Kansas, Jim Lee also from Kansas, as well as the Arizona group, whom I seem to see only infrequently for the past couple of years since I started back to school to get my Masters degree.

I arrived on Sunday as there was a judges’ meeting at noon on Monday. The socializing began shortly after I arrived Sunday

afternoon, and on Monday got into high gear in the late afternoon after the flying was finished for the day with the catered dinner at the field courtesy of Bill and Elaine Heyworth. The weather was perfect for a late afternoon dinner and we all enjoyed the outdoor barbeque.

Tuesday was the beginning of Old Time Stunt official flights and it is fun to have a chance to see some of the rare old designs come out of the woodwork. Jim Hoffman’s Upstart is the only example of that design that I have seen and he has flown it with good success in the OTS contests.

Tuesday evening Rickii Pyatt hosted an “open invitation” dinner party at her home for all VSC participants, with not only 22 pizzas for the entrée but with many delicious dishes furnished by many who came to the party. Although this year Bob Hunt was not able to bring his guitar, last year he and Ronnie Farmer had several jam sessions at the dinners. Others who have shown



Allen Brickhaus built this gorgeous version of Louis Van Den Hout’s Olympus and powered it with a PA .61.



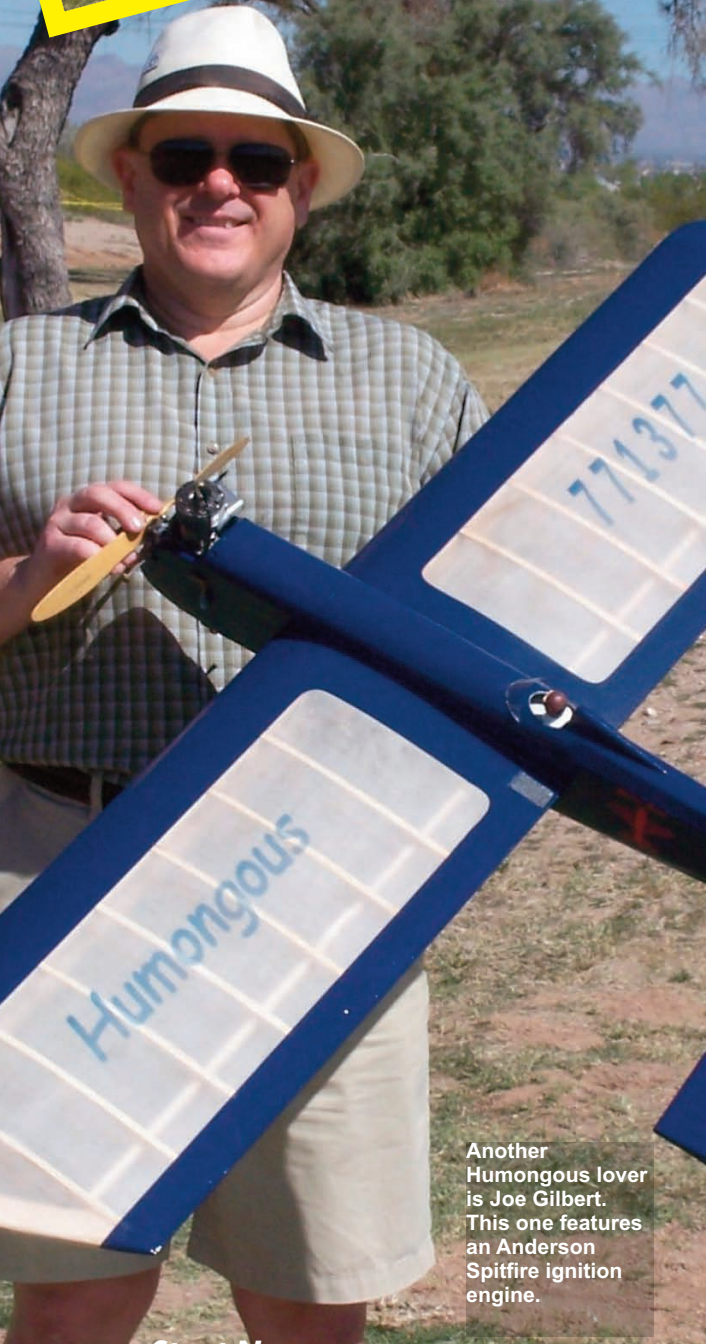
Here’s a view of the bottom of Mike Haverly’s Freedom 45. It is his second try at reprising the Jack Sheeks design from 1968. You’ll see the top later.



Gordan Delaney uses a PA .40 Merlin to power his fine example of Dave Gierke’s All American Eagle.



Roy Trantham really likes the Humongous! Here he is with this year's version that is powered by a Double Star .60.



Another Humongous lover is Joe Gilbert. This one features an Anderson Spitfire ignition engine.

considerable talent on guitar in the past have been Bill Werwage, Bob Whitley, and Jim Armour, just to mention a few.

Wednesday evening I went to dinner with Gordan, Sandy, and Cassidy Delaney, Bart Klapinski, along with Carl Shoup and the Don Dubie family. We went to the Pinnacle Peak steakhouse and had an excellent dinner and a great time. While waiting outside for dinner, Gordan developed a talent for twirling a lasso. Pinnacle Peak is set in an old Western town setting with "Cowboys" roving around twirling lassos, staging some "gunfights," and other old Western activities. The Cowboy twirling the lasso was standing in the street in front of where we were waiting and somebody bet Gordan a buck that he couldn't do that; well, if you're going to bet with Gordan, you better be ready to have him give it a shot. He won his buck.

On Thursday, the Classic official flights got under way with Round 1 on three circles. Each day the fliers moved to another circle and the judges stayed on the same circle. While I love flying, I felt that it was time to give back, so for the last two years I have judged Classic at the VSC.

I have found that there are many ways to improve your flying including having someone who is really good at trimming an airplane help you set it up. Another way is to fly with a coach who is knowledgeable enough about what to look for in your flying, and heed his or her comments about your flying. A third way to improve your flying is to judge several contests, and continue doing this over time. Judging really makes you aware of what is looked for in the pattern, including level flight, bottoms, heights of maneuvers, and shapes, and how these look to the judges. Using all of these concurrently will definitely improve your flying.

While I realize that this has been written about in the past, from my judge's standpoint I saw many fliers giving away points on take-offs, level flight, inverted flight, and the landings. These are worth, in the AMA pattern, 40 points each and they deserve and require all of the focus that you would give to square eights. Too many points are given away when, on takeoff, the flier thinks it is



See, we told you you'd see more of Mike Haverly's Freedom 45! The top is not quite as "busy" as the bottom, but both sides are beautiful. It's powered by an O.S. .46.

enough to just jump the airplane off the ground and get to altitude in a quarter lap or so. Watch the pros like Lou Wolgast, Bob Hunt, Bob Whitely, Gordan Delaney, Frank McMillan, Bob Gieseke, and others and notice their total concentration from the takeoff on. These guys don't give away a thing on these so-called "simple" maneuvers, and you can see their total concentration when they are flying.

Dennis and Bonnie Percival from Australia stayed at Rickii Pyatt's home along with me and I was glad to have the opportunity to meet them. Dennis and Bonnie are truly delightful people and were a lot of fun. Some of our other visitors from overseas included Jeff and Jennie Reeves from Australia, Claus Maikis from Germany, and Rene and Monique Berger from Switzerland (who have a winter home here in Tucson).

The second round of Classic flying got under way Friday morning and we judges got a look at the group of fliers that flew on Circle 1 the previous day. Fifteen-year-old Michael Duffy is becoming a force to be reckoned with on the Stunt circle; he flies his Nobler with steadily increasing finesse, placing 13<sup>th</sup> this year. Of course, Michael, flying at Tucson, is surrounded by some of the top fliers, including former Nats winners Keith Trostle and Bob Whitely, so the quality of his coaching is high level. Another facet of Michael's coaching includes showing him how to trim his airplane so that he can get the most out of his flights. Michael also, and very importantly, gets great support from his mom, who regularly brings him on a 45-minute drive to the field at Christopher Columbus Park to fly. His steady improvement over the past couple of years has been marked.

Again, on Friday, the weather conditions were perfect with sunny skies, near 80° temperature, and a light breeze.



Ken Ribardo built this nifty version of Bill Werwage's 1959 Ares. He powers it with an Aero Tiger .36.



Notice that the ladies of VSC are the only smart ones who found a place out of the sun! We owe it all to them...



Talk about a treat! That's Lloyd Curtiss on the left with his latest version of his own design International Stunt Champ (above). He's comparing notes with Bob Whitney who built Lloyd's design and powered it with a diesel engine. No one knew that Lloyd was going to attend this year. He was a hit and hopefully he'll become a regular. Veteran VSCer, Lew Woolard also flew a Humongous (right). Want to bet that there's a Silver Fox under the hood?



Friday evening brought the dinner party at Keith and Barbara Trostle's beautiful home, with its fabulous sunset view of the Arizona high desert with the mountains and the haunting Saguaro cactus.

On Saturday we finished up official flights at the usual 11:30 a.m., again with light breezes, sunshine, and near 80° temperatures. (Seems like a Tucson normal day—Stunt Heaven.) A group of us went to a pizza and sandwich shop not far from the field and had lunch. We had a great time with a group of Bob McDonald, Bob Hunt, Gordan and Sandy Delaney, and others. The models and flying are part of the fun equation in this hobby; the other part is getting together with longtime friends from all over the US and the rest of the world.

While there were a good variety of OTS and Classic models at VSC XXI, a few of them stand out to me. Jeff Reeves'



Captured in perfect level flight is Warren Tiaht's fantastic Jim Ebejer designed Venus. It's powered by an Aero Tiger .36.



## VSC XXI IGNITION RESULTS: MARCH 2009

Name	AMA NO	IGN Plane	IGN Engine	1st Day	2nd Day	FINAL	Place
Bob Lipscomb	17556	Bandit	Anderson Spitfire	278.5	311.1	311.1	1
Dale Gleason	12938	OT-16 Madman	Torpedo 32	253.9	295.2	295.2	2
Joe Gilbert	771377	Humongous	Anderson Spitfire 65	268.7	293.5	293.5	3
Don Hutchinson	5402	Madman	TORP 32	281.7	273.7	281.7	4
Roy DeCamara	26434	Joker	Super Cyke	266.7	96.5	266.7	5
Glen Allison	5715	Humongous	Super Cyke	246.0	265.3	265.3	6
Gregg Elling	777306	Super Zilch	Anderson Spitfire 60	75.8	258.2	258.2	7

## MARCH 2009 VSC XXI JUDGES AND HELPERS

### VSC Banquet Organizers:

Jim & Sharon Hoffman

Jack Comer

Steve Holt

### Field Setup

Rene Berger

Bart Klapinski

John Callentine

Ed Capitanelli

Rick Green

Jack Comer

Michael Duffy

### OTS Ignition Event Director:

Jim Lee

### Score Sheet Runners:

Jack Comer

Rick Green

Linda Wolgast

Ed Capitanelli

Bob Emmett

### OTS Ignition Judges:

Doug Taffinder

Marvin Denny

### AirPlane Data: Registration Check-In

Lila Lee

### OTS Ignition Tabulation:

Mickey Taffinder

Ree Denny

### OTS & Classic Tabulation:

Elaine Brookins

Peggy Capitanelli

Ginny Emmett

### OTS Judges:

Bob Parker

John Wright

Pete Peterson

Al Hieger

### Appearance Judges:

Jim Beaman

Ken Gulliford

### Special Award Recipients:

Keeper of the Flame: Robin Sizemore

Gialdini Sportsmanship: Robin

Sizemore

Spirit of '46: Gregg Elling: (Super Zilch)

Spirit of '52: Bob Lipscomb (Bandit)

Spirit of '64: Mark Gerber (Palmer Hurricane)

GMA Memorial: 15 year old Michael Duffy (57 Nobler)

Most Unusual Entry: Frank McMillan (Gambler)

Classic Pilots Choice: Pete Peterson (Rondonelly Venus)

Best Appearing Old Time: Roy

DeCamara (Humongous)

Best I-Beam (Fred Carnes): Clint

Ormosen (Playboy)

Jack Sheeks Best Appearing: Mike

Haverly (New Freedom 45)

Jack Sheeks Highest Scoring: Mike

Haverly (New Freedom 45)

### Classic Judges:

Rickii Pyatt

Bill Byles

Linda Brainard

Mark Smith

Mike Scott

Walt Menges

### Score Sheets/Flight Order/Contest

#### Forms, & Scoreboards:

Nick Lemak

Leroy Black

Robin Sizemore

### Sale of T-shirts/Pins/Hats/etc.:

Linda Wolgast

Peggy Capitanelli

### Pit Bosses:

Linda Gleason

Bill Lee

Leroy Polk

### Official Hugger:

Cassidy Delaney

### Contest Director:

Lou Wolgast

### Pull Test:

Rod Claus

Rene Berger

Bill Lee

### Assistant Contest Director:

Robin Sizemore

## VCS XXI CLASSIC RESULTS: MARCH 2009

Name	AMA NO	CLS Plane	CLS Engine	1st Day	2nd Day	3rd Day	Final	Place
Bob Hunt	1114	Caprice	AeroTiger 36	584.5	577.5	597.5	1182.0	1
Frank McMillan	9080	Carrice	PA 40 Lite	542.0	583.0	583.0	1166.0	2
Bob Whitely	68900	Chizler	DS 54	564.5	579.5	585.0	1164.5	3
Gordan Delaney	219000	All American Eagle	PA 40 Lite	561.5	573.0	577.5	1150.5	4
Bob McDonald	61882	Strathmoor I-Beam	PA 40 Lite	579.5	559.5	551.0	1139.0	5
Lou Wolgast	7442	Fury	Brodak 40	580.5	547.5	553.5	1134.0	6
Keith Trostle	3533	Gulf Stream Bearcat	Aldrich Jet 50	564.0	545.0	566.0	1130.0	7
Bob Smiley	18672	RSM Shark 45	PA 65	562.0	525.5	537.5	1099.5	8
Jim Hoffman	59362	USA-1	ST 60	519.5	524.5	561.5	1086.0	9
Don McClave	52273	Tucker S-6	AeroTiger 36	528.5	542.5	541.0	1083.5	10
Joe Gilbert	771377	Tucker Special	Tower 40	555.0	522.5	522.5	1077.5	11
Allen Brickhaus	801	Olympus	PA 61 Muff	521.0	464.5	545.5	1066.5	12
Mike Duffy	792544	Nobler	Brodak 40	533.5	523.5	480.0	1057.0	13
Stan Tyler	323905	Chizler	Brodak 40	496.0	523.5	530.5	1054.0	14
Wesley Dick	11334	62 Ares	AeroTiger 36	543.5	505.5	498.5	1049.0	15
Chris Brainard	606049	Caprice	OS 46LA	508.0	539.0	504.5	1047.0	16
Robert Compton	492221	Wardon Continental	AeroTiger 36	537.5	509.0	505.0	1046.5	17
John Wright	13567	Nobler	OS 40FP	529.5	511.0	494.0	1040.5	18
Ray Firkins	557055	Heinz 57	AeroTiger 36	506.5	515.5	525.0	1040.5	19
Jerry Silver	18093	Caprice	AeroTiger 36	502.0	509.0	531.0	1040.0	20
John Callentine	720292	Caprice	AeroTigre 36	498.0	524.0	515.0	1039.0	21
Dale Gleason	12938	Skyklark	ST 51	469.0	520.0	517.0	1037.0	22
Antone Kephart	7504	Neptune II	Brodak 40	492.0	519.0	518.0	1037.0	23
Gaylord Elling	8164	Venus	AeroTiger 36	509.0	514.0	521.5	1035.5	24
Carl Shoup	14296	Belfrey Bound	OS 46LA	529.0	464.0	504.5	1033.5	25
LeRoy Black	5900	Southwick Skylark	ST 51	439.5	528.0	499.0	1027.0	26
Dale Barry	2220	Thunderbird I	FOX 35	495.5	498.0	528.5	1026.5	27
Mike Haverly	710882	Freedom 45	OS 46LA	507.5	502.0	507.0	1014.5	28
Robin Sizemore	70985	RSM Ruffy	ABC OS 35S	492.0	494.5	520.0	1014.5	29
Jeff Reeves	167639	Thunderbird	ST 46	501.0	495.5	502.5	1003.5	30
Warren Tiaht	1751	Ebejer Venus	AeroTiger 36	466.5	521.5	479.0	1000.5	31
Mike Donovan	427764	Tucker Special	OS 40FP	473.5	493.0	503.5	996.5	32
Pete Peterson	449214	Rondonelly Venus	Brodak 40	482.5	510.5	160.5	993.0	33
Clete Maikis	FAI 118	Stuka	OS 25 FSR	429.0	481.5	507.5	989.0	34
John Miller	1601	All American Eagle	Stalker 40	481.0	472.0	503.0	984.0	35
Ken Ribardo	846862			428.0	483.0	468.5	951.5	36
Carter Fickes	860973	USA-1	OS 46LA	475.5	472.0	464.0	947.5	37
Roy DeCamara	26434	Oriental	OS 40FP	449.0	444.0	494.0	943.0	38
Lew Corbett	759259	Blue Angel	OS 46LA	478.5	464.0	86.5	942.5	39
Rod Claus	794322	Nobler	Brodak 40	454.0	464.5	477.0	941.5	40
Glen Allison	5715	E-Oriental	AXI 2814-12	448.5	483.0	456.5	939.5	41
Jim Rhoades	31047	Humongous	Magnum 36	469.0	464.0	455.0	933.0	42
Jeff Welliver	20094	Klapinski Tempest	Brodak 40	473.5	458.0	0.0	931.5	43
Lew Woolard	2765	Humongous	OS 46LA	461.5	463.0	466.0	929.0	44
Don Hutchinson	5402	S-6-B Tucker	Magumn 36XL	443.0	466.5	462.0	928.5	45
Pete Cunha	57499	Sheeks Ryan SC	Brodak 40	445.5	446.5	470.5	917.0	46
Larry Lindburg	95707	Nobler ARF	AeroTiger 36	449.5	464.5	380.0	914.0	47
Mark Gerber	220057	Palmer Hurricane	ST 46	461.5	449.5	419.0	911.0	48
Sean Chaung	896877	Nobler	OS 46LA	431.5	427.0	467.0	898.5	49
Nick Lemak	209256	Skylark	Elec AXI2826/10	424.0	470.5	419.0	894.5	50
Floyd Layton	32524	Dolphin	Big Art OS 35S	373.5	434.5	438.0	872.5	51
Gary Gingerich	870223			415.5	430.5	436.0	866.5	52
Clint Ormosen	559593	Playboy	Smith 40FP	424.5	409.5	437.5	862.0	53
Russ Gritzo	357804	Smoothie	Brodak 40	341.5	431.0	428.5	859.5	54
Dave Gardner	717	NAKKE	RM MM 40	442.5	406.5	416.5	859.0	55
Steve Helmick	7781	Skylark	OS 46LA	444.5	410.0	383.0	854.5	56
Gregg Elling	777306	Gambler	40	423.5	428.0	366.0	851.5	57
Robert Brookins	7818	Vega	Silver FOX 40FP	402.0	423.0	423.0	846.0	58
Larry Renger	9246	Baby Clown	Tee Dee 049	221.5	438.5	389.0	827.5	59
Rick Green	102324	Smoothie	Brodak 40	0.0	443.0	372.5	815.5	60
Leo Mehl	5080	57 Nobler	AeroTiger 36	379.0	430.0	384.0	814.0	61
Bob Whitney	RAD	Internation Stunt						
		Champ	Brodak 25	386.0	366.0	411.0	797.0	62
Andrew Borgogna	19340	Humongous	ST 51	376.5	398.5	393.0	791.5	63
Bob Hazle	28801	Vulcan	AeroTiger 36	439.5	208.5	345.5	785.0	64
John (Doc)								
Holliday	23530	Umland P-39 AirCorbra		276.0	367.0	383.5	750.5	65



Name	AMA NO	CLS Plane	CLS Engine	1st Day	2nd Day	3rd Day	Final	Place
Jerry Leuty	61539	Rayett	OS 40LA	301.5	248.5	0.0	550.0	66
Richard Wolsey	25323	Nobler	OS 40FP	391.0	0.0	0.0	391.0	67
Gary Marchand	53728	Sheek's Sheik	OS 35S	0.0	179.0	0.0	179.0	68

## VCS XXI OLD TIME RESULTS: MARCH 2009

Name	AMA NO	OTS Plane	OTS Engine	1st Day	2nd Day	Final	Place
Bob Whitely	68900	Humongous	DS 60	323.5	316.5	640.0	1
Joe Gilbert	771377	Humongous	Anderson Spitfire 65	319.5	320.0	639.5	2
LeRoy Black	5900	Jamison Special	Brodak 40	307.5	321.5	629.0	3
Dale Barry	2220	Humongous	PA 51 SE	311.0	316.0	627.0	4
Lou Wolgast	7442	Jamason Special	Magnum 36	300.5	325.0	625.5	5
Keith Trostle	3533	Big Job	DS 60	304.0	321.0	625.0	6
Jim Lee	50050	Humongous	Maxwell 49	307.0	313.5	620.5	7
Jim Hoffman	59362	UpStart	Brodak 40	313.5	304.0	617.5	8
Charlie Reeves	141	Big Job	Long Nose Fox 59	299.0	317.0	616.0	9
Allen Brickhaus	801	Adam's Special	L & J Fox 35	307.5	307.5	615.0	10
Robin Sizemore	70985	Jamison Special	Brodak 40	310.0	304.0	614.0	11
Bob Smiley	18672	Jamison Special	Brodak 40	303.0	310.0	613.0	12
Frank McMillan	9080	Gambler	ST 60	310.0	302.5	612.5	13
Mike Duffy	792544	UpStart	Brodak 40	311.5	298.0	609.5	14
Roy Trantham	606666	Humongous	DS 60	302.5	306.0	608.5	15
Gaylord Elling	8164	All Australian	Brodak 40	287.5	318.0	605.5	16
Mike Scott	164852	Jamison Special	AeroTiger 36	297.0	308.5	605.5	17
John Callentine	720292	Travel Air	OS 46LA	301.5	300.0	601.5	18
Ed Capitanelli	77319	Jamison Special	OS 35S	295.5	299.5	595.0	19
Mike Donovan	427764	Jamison	Tower 40	296.5	298.0	594.5	20
Jim Rhoades	31047	Humongous	Magnum 36	302.0	291.0	593.0	21
Chris Brainard	606049	Jamison Special	Brodak 40	283.0	304.0	587.0	22
Don Hutchinson	5402	Madman	Tower 40	291.0	291.0	582.0	23
Dennis Toth	38032	Ringmaster	OS 25S	297.5	272.5	570.0	24
Stan Tyler	323905	Adam's Special	Brodak 40	272.0	298.0	570.0	25
Lew Woolard	2765	Humongous	OS 46LA	282.0	286.0	568.0	26
Nick Lemak	209256	Super Duper Zilch	MOKI 51	287.5	278.5	566.0	27
Rene Berger	562007	Squaw	FOX 35	288.5	274.5	563.0	28
Richard Wolsey	25323	Madman	DS 40	283.0	278.5	561.5	29
Andrew Borgogna	19340	Humongous	ST 51	203.5	356.5	560.0	30
Roy DeCamara	26434	Humongous	OS 46LA	271.0	288.0	559.0	31
Floyd Layton	32524	Barnstormer	FOX 35	277.0	278.0	555.0	32
Claus Maikis	FAI 118	Stuka	OS 25 FSR	255.5	299.5	555.0	33
Gregg Elling	777306	Ringmaster	25	287.5	266.0	553.5	34
Glen Allison	5715	Humongous	OS 46LA	271.5	278.5	550.0	35
Robert Brookins	7818	Barnstormer	Silver FOXX 35	258.0	288.0	546.0	36
Steve Holt	753562	Feno	Brodakk 25	257.0	275.5	532.5	37
Jim Thomerson	77317	Demon	FOX 35	265.5	262.0	527.5	38
Larry Lindburg	95707	Cheek Cowl Barnstormer	FOX 35	245.0	275.5	520.5	39
LeRoy Polk	14004	Jamison Special	Brodak 40	260.5	240.5	501.0	40
Larry Renger	9246	Baby Clown	TeeDee 049	219.5	273.0	492.5	41
Ty Marcucci	3429	Barnstormer	L & J Fox 35	222.5	227.5	450.0	42
Bob Whitney	RAD	Internation Stunt Champ	Brodak 25	210.0	234.5	444.5	43
Russ Gritzo	357804	Easy	Brodak 40	193.5	242.0	435.5	44
Steven Diaz	870894	Ringmaster	OS 25FP	178.0	247.0	425.0	45
Dennis Percival	AUS 556	All Australian	OS 40LA	219.5	204.5	424.0	46
Bob Lipscomb	17556	Bandit	Anderson Spitfire	290.5	127.0	417.5	47
Gary Marchand	53728	All American Sr.	K&B 29 Green Head	195.0	165.5	360.5	48
John (Doc) Holliday	23530	Thirteen	OS 25LA	202.5	139.5	342.0	49
Dale Gleason	12938	OT-16 Madman	Torpedo 32	225.0	0.0	225.0	50
Dave Gardner	717	All American	FOX 09 (1954)	0.0	181.5	181.5	51





Russ Grizo and Big Art Adamisin chat a bit about Russ's Frank Ehling designed Easy. It's powered by a Brodak .40 engine.

Thunderbird was a particularly beautiful rendition of the design with an outstanding paint scheme. Pete Peterson's version of Mario Rondinelli's Venus was beautiful with its transparent dope paint scheme (and won Pilots' Choice). I saw six of Bob Hunt's Caprice designs in a group photo; this airplane flies really well, and is an excellent windy weather airplane. The popular engine for this airplane seems to be the AeroTiger .36 by Randy Smith.

Carl Shoup flew his Dale Kirn-designed Belfry Bound OTS airplane in Classic and turned in an excellent AMA pattern on the circle on which I was judging. It was outstanding since, as an OTS non-flapped design, it was turning corners really well and was very well flown by Carl. Another one of my personal favorites was the Veco Hurricane by Mark Gerber. Although I have never flown or built one, I just like the looks of the Palmer design.

Joe Gilbert was the flight instructor extraordinaire,



Dale and Faye Barry pose with Dale's Humongous. We are beginning to think that the Humongous might be a pretty good choice for OTS!



Carl Shoup built yet another Dale Kirn designed Belfrey Bound for OTS competition. It's powered by an LA .46 engine and it flies beautifully.



Don and Joanne Dubie are very proud of Steve Diaz who flew his colorful Ringmaster in OTS. The ship features an O.S. FP.25 for power. Steve had a great time flying at VSC and is just what is needed in this sport: new, young talent. Watch out for this fine young competitor in the years to come. Hey Grace, how about featuring Steve in a "Next Generation" column?



Ignition OTS specialist, Don Hutchison flew this immaculate Yates Dragon. It is powered by an Orwick .29. Don is the new District VIII PAMPA Director.

teaching Linda (Mike Keville's sweetheart) to fly and land solo in two flights only!

John Brodak came all the way out to Arizona to attend the gathering at VSC. I last saw John and Keith Trostle in Keith's office at the Trostle's home.

Keith's office, by the way, is something not to be missed for those of us who live and breathe aviation. His walls seem to be lined with books and could pass for a great aviation library. Looking more closely at the walls of his office, you begin to notice his numerous achievement awards from the U.S. Air Force, AMA, and PAMPA, to mention just a few. Hanging on one wall is his scale model of the Russian Tu-95 "Bear" turboprop bomber. This is a *large* (54-inch-span, I believe) airplane powered by four .061 engines; the closer I looked the more impressed I was with the level of detail, including the articulating main landing gear trucks (with a scale four wheels per side) and the nose gear brake. Until you look closely, you don't really notice that it is a profile fuselage. Keith built this "Bear" for the 1/2A contest for multi-engine airplanes held at Tucson in October—another Mike Keville-initiated event that is rapidly growing in popularity.

There was a good crowd at the new venue for the appearance judging on Wednesday afternoon and then for the banquet at the River Park Inn south of the field. While there were a couple of minor issues regarding the new official hotel and banquet location, it seems like a good place to have it next year. Mike (the Emcee) Keville did a good job of reprising his original microphone management, and 10-year old Cassidy Delaney was the official hugger for the trophy presentations. Cassidy is becoming quite the personality and all-around sweetie pie. I found out from talking with Gordan the other evening on the phone that Cassidy has experience with being the official hugger at the Nats last year.

This year Rusty Brown could not make it; Rusty had become a fixture at VSC and was sorely missed by all who knew him. He passed away at his home in Greeley, Colorado on the previous Thursday. A lot of us were very concerned about what would happen to Rusty's ever-lovin' dog "Sugar Babe." We were pleased to learn that she has gone to live with a close relative of Rusty's. I can't remember a VSC that I have attended at which Rusty was not there.

The VSC gets better each year and is a gathering not to be missed if it is at all possible to get there. *SN*



John Miller likes twins—usually twin-engine models, but this time a twin-boom model! He built this Jack Sheeks designed Torino for Classic Stunt. It's powered by a Fox .35.



Jeff Welliver's weapon of choice for Classic Stunt is Bart Klapinski's Tempest. This one features a Brodak .40 for impetus.



Left: Claus Maikis made it once again to VSC all the way from Germany. He flew this stunning Don Still designed Stuka. It's powered by an O.S. .25FSR. Claus is well known throughout the world for his building and especially his amazing finishes.

Below: This colorful USA-1 belongs to Carter Fickes. He powers it with an ST .46. It's unusual to see a USA-1 in anything but the original Billy Werwage paint scheme of all white with red-and-blue trim. A refreshing change!



Above: Roy DeCamara always shows up with an unusual and beautiful model. This time he flew OTS Ignition with his Joker and a Super Cycke. Roy's finishes are artwork of the first degree. Note that he flies clockwise!

Caught in flight, Bob Whitely's slick Humongous looks very stable. It features a Double Star .60 in the nose for power. With this ship Bob won the OTS event!



# E-FLITE LETS



\*Optional pilots are not included

Many modelers got their start in model airplanes with a PT-19 and E-flite is here to help recapture the excitement of the early days with this great-looking ARF. Configured as an RC sport model, E-flite's PT-19 is a low-wing follow-up to their successful Taylorcraft 450. It comes 90% pre-built out of the box, featuring a convenient bolt-on tail and large magnetic hatch for easy access to the battery and radio equipment. The PT-19 is constructed of lightweight balsa and plywood, a high quality prepainted fiberglass cowling and a genuine USAAC UltraCote® trim scheme. This ARF can be completed with the recommended Park 450 or high-powered Park 480 setup.

E-flite's PT-19 is more than just another RC model. It can also be completed as a control-line model with all the convenience of modern brushless Li-Po power. What's more, it can be converted back and forth between RC and control line in just a few minutes. All of the internal hardware required for control line flight is included, including the bellcrank and leadouts. An ESC timer, wooden control handle and control lines (available separately) are all that is required to relive the early days of park flying, when blue-and-yellow trainers were hand-guided by eager young pilots in search of airborne thrills. Whether you choose to fly RC or control line, rediscover the thrill today with the E-flite PT-19.

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**STEP 1** Find a large open space that is better than 125 feet in diameter.

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**STEP 3** Start the plane and fly.



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HORIZON  
H O B B Y



Mark Gerber produced yet another outstanding Palmer Hurricane. With it he captured the coveted Spirit of '64 award. Mark powers this beauty with an ST .46.



Jeff and Jenni Reeves came from down under to once again attend VSC. Jeff flew this colorful and very well-finished Thunderbird II. It is powered by an ST .46.



Each morning there was a pilot's meeting. Assistant Contest Director, Robin Sizemore, made sure that everyone knew where to be and when to be there!





Left: Tom Warden's Continental is one of the most sleek and graceful stunt models of all time. Robert Compton chose this design as his Classic Stunt weapon for this year's VSC. He powers it with an Aero Tiger .36.

Below: John Callentine stuffed a few more ponies in the nose of his Jim Hunt designed Travel Air biplane. It now sports an LA .46. An outstanding piece of craftsmanship!



Left: The Classic appearance point judges, Jim Beaman (left) and Ken Gulliford scrutinize Bob Smiley's Shark 45. They did a great job!

Below: Jerry Silver's gorgeous Caprice circulates in Classic Stunt competition. The finish on this model is virtually flawless. He powers it with an Aero Tiger .36.



# Her "First Time"

By Mike Keville

It's been said that everyone remembers his or her "first time." Keeping this in the context of CL flying, my own "first time" was somewhere around 1951—but this isn't about me; it's about a



certain grandmother who lives in North Las Vegas and works, on average, 10 days each month, as an Operating Room Technician at a hospital in Winfield, Illinois.

Linda Beck was my high school sweetheart, 1956-1958. Through a series of fortunate events, we re-connected in 2008. As part of our "getting to know you" process, she agreed to attend the 21<sup>st</sup> annual Vintage Stunt Championships (VSC) in March 2009.

We spent most of that week observing the action, with me explaining the pattern and what to watch for. To her credit, Linda soon began spotting various errors. More to the point, she also began spotting excellently executed maneuvers—leading me to believe that she may someday become a competent Stunt judge. She is extraordinarily alert, intelligent, and has a genuine interest in CL Precision Aerobatics.

Eventually, she succumbed to the desire of wanting to know what it felt like on the handle. Since I had no model on-site, I began looking for a likely candidate who might want to take her out on the handle. I found him in the person of the outgoing, gregarious, kind, and helpful Joe Gilbert from Sapulpa, Oklahoma. As it turned out, Joe was flying Classic with a Tucker Special on loan from Mike Donovan, Vicksburg, Mississippi. Mike immediately agreed to have Joe also use his model as a "trainer" for Linda's first flight.

On Thursday, following the close of official flying, Joe short-tanked the Tucker then took Linda out on the handle. Initially, she was concerned about getting dizzy (or, as she put it, "falling on my a\*\*")—though that was soon dispelled as she learned to "spot," using a red tent canopy as a target.

With Joe's hand on hers, the flight proceeded smoothly. As the engine (Tower .40) quit, he turned

her loose, with the admonition to "just hold it steady." On the grass circle, she amazed all of us by planting a perfect "40-pointer" to the cheers of the assembled crowd. Grinning widely, she and Joe exited the circle—to a high five for Joe and a big hug for each from this reporter. Linda was *stoked*! That flight was all she talked about all night—even during our dinner date.

Try as I might, I could not get her to repeat the effort the following day, but that was because she was still on a "high" from Thursday's success. However ...

Following his final official flight on Saturday, Joe came by our sunshade, looked at Linda, and beckoned her with a "come with me" signal. She was out of there like a shot. In fact it took me (and photographer Clint Ormosen) a moment to catch up with them. Just like the old Army Airborne days, it was then "Stand Up, Hook Up," and off they went—same airplane, same routine. But there was a difference.

After several laps I noticed that Joe's fingers were no longer on the "Up" end of the Fancher handle, but rather resting behind his back. He wasn't touching Linda *or* the handle. Suddenly it occurred to me that she was flying solo! (This also occurred to Clint Ormosen, who rapidly began snapping photos.) What it boiled down to was this: my sweetheart, who'd never seen a CL model until this week, was actually flying a full Stunt model—unassisted.

Naturally I began "whooping" and "woo-hooing," as did everyone else nearby. That may have scared her because Joe then began placing a finger or two on the handle as the engine began running down. With a bit of assistance, Linda again planted the Tucker safely back on the ground. All this was followed by another big grin, another big hug, and high fives.

Here's the best part: Linda is now intensely interested in CLPA, and in March of this year she became a PAMPA member. And I love her. *SN*



# Robin's View Productions' CUSTOM FOAM WING SERVICES



*Bob Hunt's Crossfire featured a foam wing with integral foam flaps and a foam stabilizer and elevator. It also featured wing-mounted landing gear installed using Bob's innovative foam wing landing gear system.*

Bob Hunt has been supplying the Control Line Stunt community with World Class, foam-based model airplane components since 1969. Stunt models built with foam components produced in his shop have won more World and National Championships than all others combined!

The vast majority of CL foam component innovations are traceable to his shop. He was the first to use triple-section coring for reduced weight, and the first to offer foam flaps that are cut as an integral part of the wing core and then separated from the wing after covering, ensuring a perfect fit between the flap and the wing.

Bob developed the system of using Lite-Ply landing gear ribs that install between the leading edge and the spar, and accept lightweight, load-dispersing landing gear plates instead of the heavier maple blocks. More recently, he has developed a system of accurately cutting fully rounded foam leading edges on the cores that he produces, along with a foolproof method for attaching molded balsa leading edge caps on the cores. This system yields extremely accurate wings that are lighter and easier to construct.

These innovations and many, many more were born from constant research and development in the competition arena. Bob was the first to win a World Championship Gold Medal flying a CL Stunt model fitted with a foam-core wing. Foam wing cores and wings built by him have enabled

hundreds of CL Stunt enthusiasts to realize superior model performance and have helped them to win consistently in aerobatic competition.

When you are preparing to build that next "World Beater" stunt model, remember that Bob has been producing wings for just such models for 40 years! He's serious about light, accurate, and innovative stunt model components. If you want to win, you should be too!

Robin's View Productions offers custom-cut foam wing cores, covered foam wings that are ready for control system installation and joining, and also fully built wings complete with flaps, tips, adjustable leadout guide, tip weight box, and control system installed. RVP has templates for all the popular CL Stunt and Classic Stunt models, and can custom template and produce your original design wing for you. Bob personally cuts each wing core using only top-quality virgin bead foam. Covered wings are produced using only the finest, hand-selected, contest-grade balsa.

For a complete listing of the myriad products and services offered by Robin's View Productions, please send a large SASE to: Robin's View Productions, PO Box 68, Stockertown PA 18083, call (610) 746-0106, or e-mail Bob at [robinhunt@rcn.com](mailto:robinhunt@rcn.com). Phone orders are welcome and RVP accepts Visa and MasterCard for your convenience. Along with all RVP products comes the invitation to call with any questions about model building. RVP offers an evening "Hot Line" for questions you might have while you are building in your shop.



*Here's Bob with his original-design, three-time Nats Classic Champion and three-time USC-winning Caprice. It features a foam core wing with triple internal coring. The original, built in 1967, also utilized a foam core wing.*

Remember our motto:  
**RELENTLESS INNOVATION!**

# Beginnings

By Doug Dahlke

**R**eaders input: Here's more from Dave Shipton, top banana of Hobby Hideaway, Delevan, Illinois, amidst the corn and soybeans next to his shop/museum during a local Brotherhood of the Ring get together.



Brotherhood of the Ring shindig, October '08, at Dave's Hobby Hideaway. Dr. Crowley (Ret.), Illinois State University, at left, and Smilin' Dave, right.

Also at the Hobby Hideaway is Tim Muller, shown testing out one of the new ukie chairs.

Finally, Dave "The Man" likes Grumman products from their Iron Works, as is shown by this collection. Ships here are powered by everything from a McCoy .049 to McCoy "Custom" Blue Heads.



Right: Also down Delevan way is Tim Muller, shown testing one of the new ukie chairs.

Tim also races pigeons, the feathered type, not to be confused with gullible trends.



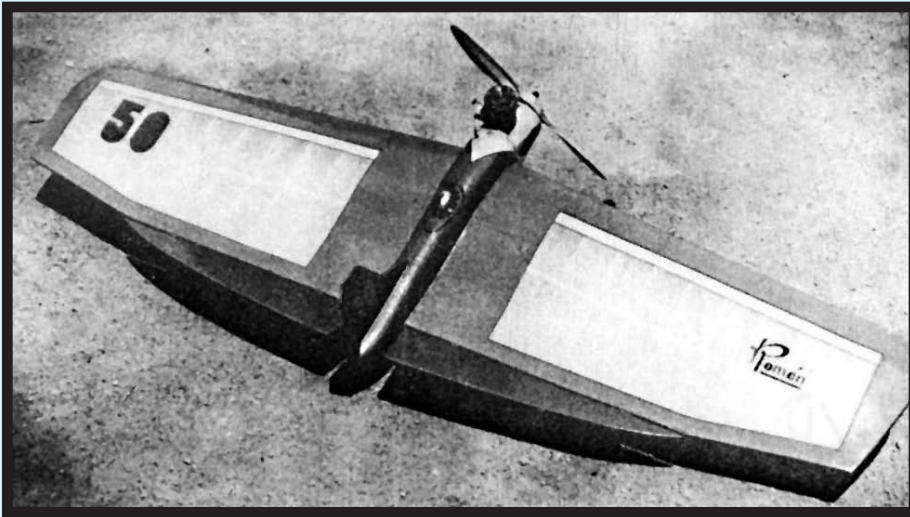
Really interesting stuff came out of the Bethpage Iron Works. Until 1956, the fastest interceptor in the world, jet or not, from takeoff to 10,000 feet, was the F8F. Put that in your pipe and smoke it!

Tim Pansic, Wood River, Illinois, shows his Walker Firebaby. Good pilots like Larry Renger have done the full O.T. pattern with a properly set-up Firebaby. Aluminum clips around inboard wing hold line guides under wing. This is as classical as it gets.



Anderson .045 Baby Spitfire makes snarl up front. Ground adjustable K&B aluminum prop used.

**Non-reader input:** Luis Roman Diaz of Mexico shows his stunning, stunting wing. It uses 80-foot lines to do the *full* AMA pattern—at 100 mph! This speed is very near the Stuntwagon 58's advertised speed of "102 mph horizontal eights." Growl is the mighty Mel Anderson Spitfire .65. It's pretty, too!



Luis Roman Diaz's 100 mph Stunt wing is mind-numbing. Those who've not heard an open-stack Anderson .65 at full-throat are missing one of life's visceral titillations. Line length and speed required hint at the possible existence of some elevator blanketing or a bit of nose heaviness.

Al Evans shows one of the very first *big* ukie Stunters built during 1959, long before the days of 1/2 scale. The 52-inch Zilch span was scaled up to 78 inches! The model uses a Power Products two-stroke that originally weighed 15 pounds and whacked off the pork down to 48 ounces! This unusual Stunter runs three engine speeds!

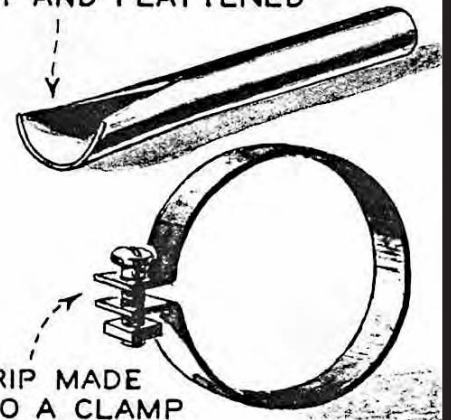
The lines are doubled .018 at 70 feet for an effective .036 diameter. Since torque is a function of cubic inches, I'll bet this sucker really makes grunt. So what's a little line drag? I think these rigs ran about 50cc or so. Step to one side, boy, with your tiny little .91 engine. Let "big boy" pass!

**Building tip:** It's fairly common to use a clamp to hold your muffler on. But often it's hard to find a clamp of reasonable weight, at a reasonable price. If that's the case, as we Depression babies say, "Make your own."

As a sidebar, you can distress anything of pure copper, whether plug washers or clamps, like this. Just heat it in flame and let it air-cool. Bending stress is gone.

Now don't overheat and melt it; just bring it up to a nice, solid red. Works with steel too; it is called annealing.

### COPPER TUBING SPLIT AND FLATTENED



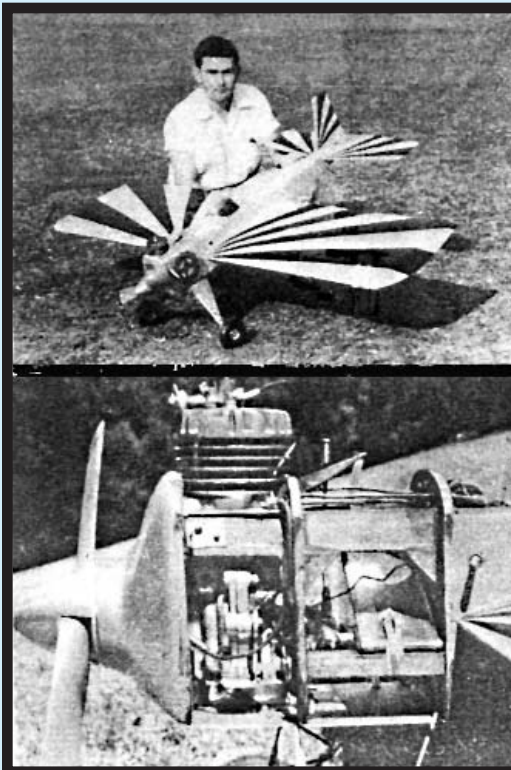
Seldom do we have the right-size clamp on hand when wanted. Here's how to make one. Note square nut used for self-locking.

**Useful chart:** Sometimes, you may be building a non-U.S. design and find strange descriptions of wire you've not heard of, especially for Old Time Stunters.

Also, if you have a bunch of "music wire" (or what you think is music wire), put a micrometer to it; you may be surprised to find that your wire is a few thousandths off. I'll bet that you have one of "the other" gauges.

Of course, given the way imports move these days, there could be a separate gauge for Albanian Work Release Programs, too, for that matter.

Why not just photocopy this chart and throw it in your wire box?



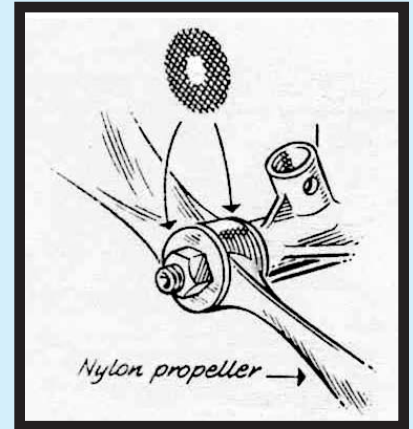
**More he-man stuff:** Al Evans shows what likely is "the first" big Stunter. Scaled-up span of 52 inches is now 78 inches! Wind penetration would seem to be one of his lesser problems. Power Products two-stroke lawn mower mill should make oodles, gobs and scads of torque grunt for vertical climbs. Move to the side, wimps!

**KidVenture 2009:** Have you made plans to attend yet? What can we do to help you? See you there.

**TABLE XI COMPARISON OF WIRE GAUGES  
(WIRE DIA IN INCHES)**

GAUGE No.	BRITISH S.W.G.	AMERICAN W & M GAUGE	AMERICAN MUSIC WIRE GAUGE
8	.160	.1620	.020
10	.128	.1350	.024
12	.104	.1055	.029
14	.080	.080	.033
16	.064	.0625	.037
18	.048	.0475	.041
20	.036	.0348	.045
22	.028	.0286	.049
24	.072	.0230	.055
26	.018	.0181	.063
28	.0148	.0162	.071
30	.0124	.0140	.080

**Flying tip:** Trying to find prop nuts and washers that come loose is really entertaining. It can use up far more time than you imagine. Lacking spares, you could end up packing it in for the day. Here's a better way to keep the prop on that's moisture proof, unlike sandpaper discs.



Dave Bollinger of Kansas City, Missouri, suggests use of wire screen discs to help hold prop nuts and washers in place.

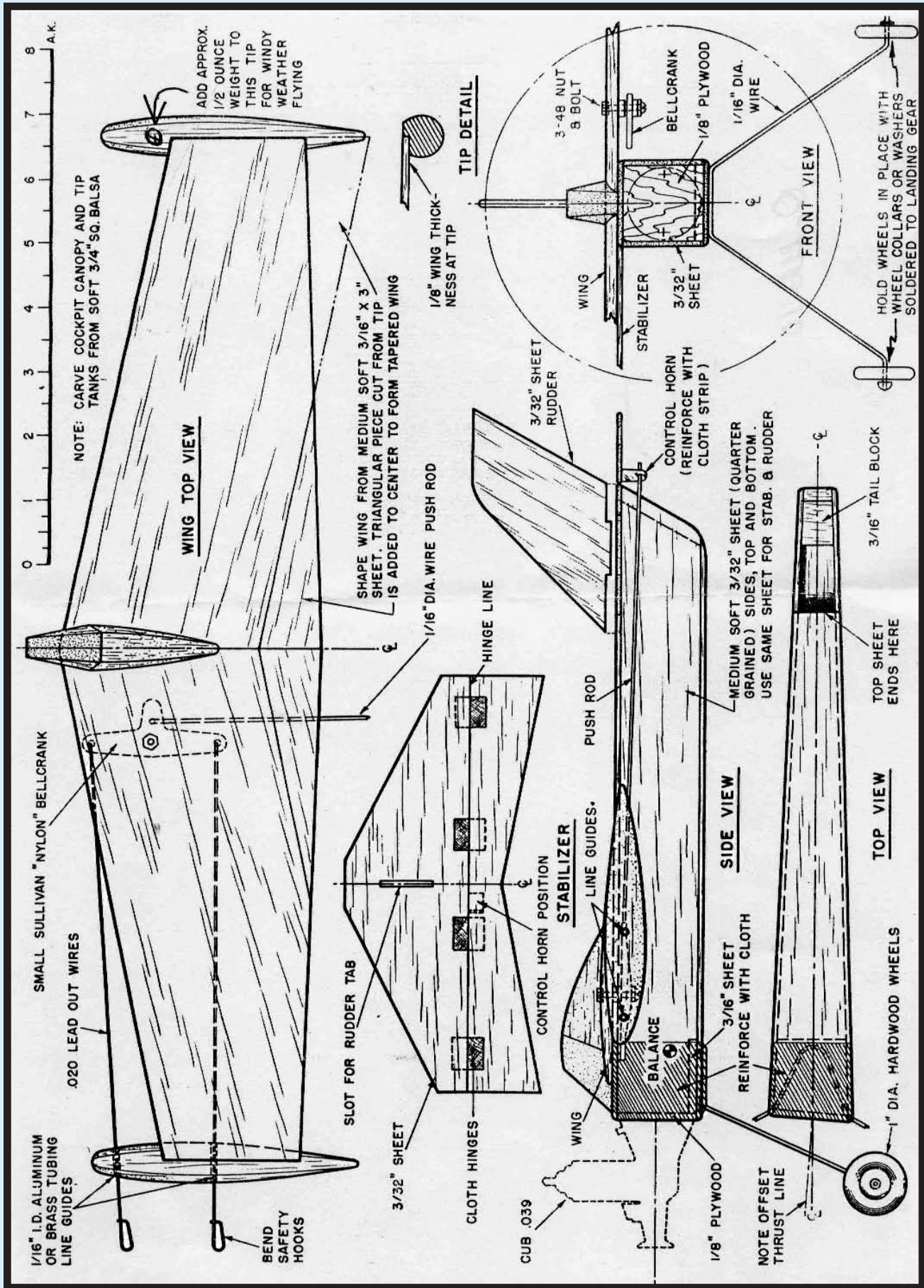
"British S.W.G" means Standard Wire Gauge. American W & M gauge means "Washburn & Moen." This likely explains "why" I have what looks to be music wire, but is just a few thousandths off.

*Fiction 'n Fact,  
from Doug's Almanac  
Good Stunter Design: The slowest rate of  
model wear--while maintaining full  
pattern performance. (d.d.)*



"That guy will do anything to pick-up a few extra points!"

**Cartoon:** Bill Hutchinson makes a sharp point most competitive-level fliers are well aware of.



M.O.M. Our model of the month is a 1/2A trainer, circa late '50s or so. Unfortunately, there's no name to give credit to here. If anyone recognizes it and has a name, let me know so the person can be credited. SN

# It's in the Details

By Matthew Neumann

**B**olt holes. These are a personal bugaboo of mine. I am one who, if at all possible, likes to eliminate them, or at least put them in such a place as to not make them too noticeable. However, bolt holes are a fact of life for our airplanes. There will always be some sort of hatch or other item that needs to be attached with some kind of bolt. So, how do we make these as attractive as possible? Keep reading and I will show you what I have done.

One idea is to incorporate the hole into the paint scheme in such a way that it blends into the surrounding area. Think of how you are going to paint the plane. Would it be possible to move the hole slightly one way or another to be able to incorporate it into the paint scheme somehow?

A way that I have handled this for the cowl bolts on my 2002

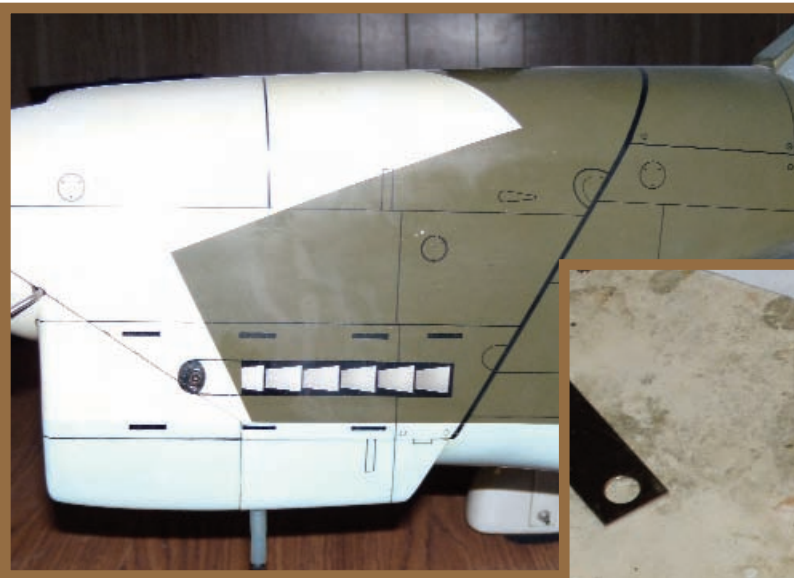
plane (which I jokingly call my "Frankenstein bolts" because they come in from the side) was to incorporate the bolt hole into the front of the painted exhaust stack. I still had to use the method of dressing off the bolt hole that I will describe later on in this article, but at least the hole is not as noticeable as it would have been had I just left it out in the middle of a panel.

Another idea is to put the screw hole attachment points on the bottom of the plane. However, there are some applications for which, no matter how hard you rack your gray matter, you just can't come up with a good way to hide the bolt holes. The cowl mounting bolt holes on my Mustang is one of those cases.

Ok, so now what? No matter where you put the holes, you still have to dress them off so that they at least look nice. Here are a couple of different ways to do this depending upon the situation.

First is the type of hole that has some depth to it. On my 2005 and later planes, I figured out an attachment system for the cowl that allowed me to put the bolts on the bottom on the plane where I would prefer them: out of sight. The method described here would fit any bolt hole situation that has a depth greater than the thickness of the bolt head.

The first thing to do is get some aluminum



Here is a picture of the exhaust stacks on my 2002 plane. The full-scale Stuka has a fairing of some kind over the front of the first exhaust pipe with an opening in the front of the fairing. I just put the screw hole where the front hole of the fairing would be. This helps to "hide" the bolt hole even though it is in plain sight.



Above: Here is a shot of my cowl with the bolts snug enough against the balsa wood to hold the cowl in place but not so tight as to crush the balsa. I then drew a line around the bolt heads so I could use this as a locator for the outside diameter of the aluminum tubing.



Left: Here is a side shot of the nose of my Mustang. No matter what, I just could not come up with a good way to hide the bolt holes on the bottom. So I had to just put them on the side. Although, I did not do it here, some people will paint the heads of the bolts the surrounding color in order to make them less noticeable.



tubing that is the smallest diameter that you can find that will still slip over the bolt head. Now, I am assuming you are using socket head bolts. You are, aren't you? If not, get some and use them! These are much easier to work with because you have much less chance of the tightening/loosening tool slipping, not to mention the fact that the tool itself will fit much easier inside the tube.

Now that you have the tubing, the next thing to do is to bolt everything together. This is to ensure that everything will be aligned properly giving you a better chance of getting the hole location correct. Now mark exactly where the bolt head is by tracing around it with a pencil. A dull pencil is actually a good thing to use here because it will produce a thicker line which will show you how much bigger you have to drill to accommodate the aluminum tubing.

Another method would be to place the tubing over the bolt head and gently press down in a twisting motion making an impression with the tube—builder's choice.

Remove the screw now that you have everything marked and drill a hole all the way down to where the base of the screw head will sit—preferably against a washer. You need to seat it against a washer. It is unwise to have the screw head push up against bare plywood or worse, balsa wood. Over time, the screw will

wind up pushing its way through the wood making a hole the size of the outside of the screw head. Not good.

Make sure one end of the tube is square and cleanly cut. If you used a tubing cutter, the end that the tubing cutter was used on will need to have its end opened up so that the screw head will slip through the end of the tube. Now put the screw back into the hole and tighten it.

Insert the tube with the squared off end over the bolt head and mark the tube where the end of the hole and the tube meet. It is usually best to mark all the way around the tube for clarity sake. Cut the tube off slightly long. Then simply glue the piece of tubing into the hole as a liner (with the washer already seated at the bottom). You can use instant or epoxy glue for this task.

When the glue is dry, you can take a motor tool with a grinding attachment and grind off the excess tube so that it is just barely too long. Be careful with this, however. The grinding action heats up the aluminum tubing and can soften the glue to the point where the tube will want to move. If this happens, just stop, and the glue will cool off and reattach everything. The last little bit can be then sanded off with a sanding block and 180-grit sandpaper.

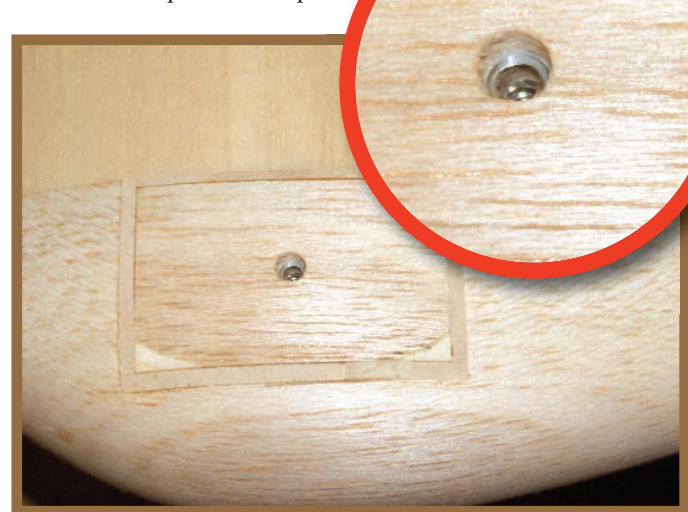
If you don't want to use aluminum tubing to line the bolt holes, there are two other choices I might suggest. One is brass/copper tubing, although you need to be aware that this material is actually harder than aluminum so it will therefore be harder to shape to the final size. The other material would be a carbon-fiber shaft of the appropriate size. This would probably be the best material if you can find the right size because it is the lightest, easiest to sand, and the glue will stick to it the best. Also, when grinding it down with the motor tool, it won't heat up and melt the glue.

Now, what do you do if you have a hole that is shorter than the bolt head? You could still use the method above but because the length of the tubing is so short, it will be much more difficult to accomplish. Here is a method I used on this type of hole.

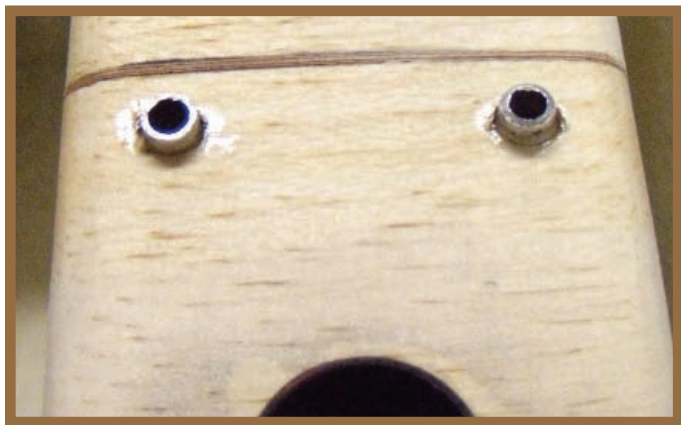
The first thing I do is bolt everything together again. Mark the location of the bolt head as described above except I am not worried about making a thin line around the hole this time. I then drill out a much larger hole than necessary. I make it big enough so I can put a washer in the bottom of this hole.

I then cover the head of the bolt with a thin layer of petroleum jelly. Notice I said cover it with a thin layer, not glob on a bunch of it. Everything is bolted together again with the now "greased up" bolt head.

The next step is to mix up



Here is the hole drilled and the washer placed in the bottom of the hole. I am using this method for the tip weight box lid.



Above: This is what it looks like when the bolts are tightened up and the pieces of tubing glued in. Note that the tubing at this point is cut slightly long. The tubing goes all the way down to the bottom of the hole and touches the washer imbedded underneath.



This is how the end result should look. The tubes have been carefully ground off and finished with a sanding block and 180-grit sandpaper. You may have to take the end of a dull number 11 blade and clean out the inside of the hole. Notice I said dull blade. If it is not dull before, it will be after you clean out the hole. This is one of the few cases where a dull blade is actually preferable to a sharp one.

some epoxy putty and put it in the oversize hole with the bolt in it. The Vaseline is used as a mold release agent. Do not pile up the putty over the head of the bolt. Try to keep the putty about the same level as the surrounding area. Remember, I said this method works best if the hole is the same or shorter in height than the bolt head.

If you happen to get some putty in the hexagon hole in the head, just use an old knife blade and pick the putty out of the hole. With the "greased" up head, it should just pop out very

easily. Once the putty is dry, you can do some sanding with the bolt head in place to get a rough leveling out job. Once that is accomplished you should then be able to easily remove the bolt revealing a nice round crisp hole. Some light touch-up sanding may be necessary at this point.

Well, that is how I make nice neat holes for the bolt heads in my planes. The method is not that difficult and it really does not take that much time but it really dresses off those areas nicely. They not only add to the looks of the plane, but they hold up over time with many removals and attachments of the pieces. The 2002 plane is seven years old with over 2,500 flights on it and it still is in fairly good shape in these areas.

It is all in the details. Until next time...SN



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# CLPA Rules

By Keith Trostle  
stunteagle@cox.net

**C**ontest Board Procedures: Now, in the fifth month of the year, the AMA has posted their current Contest Board Procedures on the AMA website. The updated changes were made last year and approved by the AMA Executive Council on October 25, 2008. There are two changes to be aware of for anyone who is planning to submit any change proposals during this 2009/2010 change cycle.

1. Proposals must be submitted by December 31, 2009. (The deadline in previous change cycles was September.)

2. The Change Proposal Form has changed in that it requires only the signature of any AMA member. (The previous form required the signatures of three AMA members, and one of those had to be a Contest Director.)

The Contest Board Procedures can be found by starting at the AMA website home, then click on "Rules," then click on "Rules Proposals," then click on "Contest Board Procedures." At that same "Rules Proposals" location, click on "Rules Change Proposal Form" to access the new revised form. (The AMA Documents listing for Document #333 is the now out-of-date form and should not be used. In other words, the AMA has not yet updated their Documents listing in that separate part of their website.)

## AMA CLPA Rulebook

After repeated suggestions to do so and assurances by the AMA that the corrections would be made, errors in the preparation of the current CLPA rules on the AMA website still remain. Please be aware that the metric line diameters in the line size and pull test chart for multi-strand are incorrect and hopefully will be corrected by the time you read this. Similarly, the 10-40 scoring range for the Horizontal Square Eights on the sample score sheet should also be shown in the rulebook by the time you read this. And a similar correction to the Beginners sample score sheet should change the "two Horizontal Square Eights" to simply "Two Horizontal Eights," as has always been the AMA Beginners pattern. There are a few other very minor corrections yet to be made by the AMA in the rulebook that is posted on their website. I suggest that you visit the website to check the

"Amendment Listing" to see if and when the AMA gets around to correcting a number of errors that were made when this current rulebook went on line in January.

## 2009/2010 Rules Change Cycle

This is a reminder that rules change proposals are to be received by the AMA by December 31, 2009. We are already half way through the year, and it is not too soon to submit change proposals. Remember that only one signature by an AMA member is required on the change proposal form as explained above.

## Required Laps Between Maneuvers

There has been recent discussion on one of the Stunt forums regarding the required laps between maneuvers. At issue is the number of laps required prior to the start of the overhead eights. At most contests, including the Nationals, the rule is understood to require at least 2<sup>1/2</sup> laps prior to the overhead eights. Evidently, some interpret that the rulebook only requires 1<sup>1/2</sup> laps prior to the overhead eights.

It could be argued that our rulebook is not completely clear.

**"11.1.** At least two (2) laps of level flight shall precede each maneuver, including landing. *(A nominal interpretation of the "two (2) lap" level flight requirement is the accepted interpretation allowing the starting point of one (1) maneuver to begin slightly less than two (2) full laps after the exit point of the prior maneuver due to the width of the maneuvers.)* Judges shall not require more than two (2) level laps between maneuvers due to the time limit imposed by these regulations...."

Also from Paragraph 11.: "Any maneuver flown without a minimum of the nominal two laps interval after the previous maneuver will be scored zero."

Yes, the rule states that "more than two (2) level laps between maneuvers" will not be required. However, for the manner that most patterns are flown, the 2<sup>1/2</sup> laps required prior to the overhead eights does not exceed the judges' limitation to not require more than two laps between maneuvers. Though the intent is understood by most, there is a slight dichotomy in the rulebook wording and

could be made clearer. Suggestions or ideas to your Contest Board representative would be appreciated. Or submit your own change proposal.

At contests flown in some parts of the country, the word "nominal" has been interpreted to require only 1<sup>1/2</sup> laps prior to the overhead eights. It is my opinion and that of most Contest Directors and the Nationals Event Directors that the term "nominal" does not allow only 1<sup>1/2</sup> laps after the hourglass to satisfy the two-lap requirement prior to the start of the overhead eights. If a Contest Director allows a "relaxed" interpretation of the "nominal" two-lap requirement, that interpretation should be made clear by informing the judges and pilots prior to the start of a contest.

## BOM and Appearance Points

Some argue that CLPA is a flying event. Others maintain that CLPA is a modeling event that requires the skills to fly as well as to build. There has been a Builder of the Model (BOM) requirement for CLPA since sometime around 1950, which essentially validates those who feel that CLPA is more than a flying event. The rulebook BOM requirement has an interpretation that added words to specifically address CLPA models. That interpretation was generated prior to the beginning of a Nationals several years ago by AMA officials to avoid the impact of threatened protests that could have essentially prevented the CLPA event to be flown at that Nationals. That interpretation served its purpose at the time, but the definition provided at that time for the "average kit" remains in the rulebook. That interpretation has been often disparaged while the overall BOM requirement is the subject for many heated and emotional discussions.

In past rules change cycles, there have been proposals to eliminate the BOM requirement for our CLPA event. No doubt, there will again be such proposals. However, based on comments that appear in the on-line Stunt forums, there are other related proposals being considered. One is for a graduated schedule that awards appearance points for having completed various elements in the construction of a model. Another proposal is based on the competitor completing at least 51% of the effort to prepare the model for competition. There may be more such proposals.

I will be reviewing these in this column. However, due to the lead time of this publication, there may not be much opportunity to print these proposals and have much feedback from you to your CLACB representative. I highly recommend checking for change proposals on the AMA website as they are posted there. Your comments are valuable to the members of the Contest Board. Please be aware that even if the wording of a specific proposal is not precisely what you would like to see, if the proposal has any merit, it can pass the initial vote of the Contest Board and be refined by cross proposals next year prior to any final vote and approval.

As always, comments on this column or any ideas on our rules are appreciated. *SN*



## PAMPA Rules Change Proposal Form

Proposal Number: \_\_\_\_\_ Postmark Date: \_\_\_\_\_  
(Filled in by PAMPA)

Send completed form to PAMPA rules committee chairman. A copy will be forwarded to the appropriate committee members.

Rule Category:     Old Time     Nostalgia     CD Guide

1. A brief summary of the proposed change. Attach additional sheets if necessary.

2. The exact wording proposed for the PAMPA rules (list paragraph numbers where applicable). Example: Change "quote present rule wording" to "exact wording desired". Attach additional sheets if necessary. The PAMPA rules committee chairman may at any time prior to submitting a proposal to the appropriate PAMPA committee for final vote, edit proposal wording to increase clarity and to avoid ambiguity, provided the proposal intent is not changed.

3. Specify the logic behind change, including alleged shortcomings of present rules. Attach additional sheets if necessary.

4. Signature of two Pampa Members:

(1) Proposer: \_\_\_\_\_ Date of Signature: \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

(2) Proposer: \_\_\_\_\_ Date of Signature: \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

The cutoff date for rules change proposals is August 1 (post mark).

# Why I Fly Stunt

When I was young, there were always airplanes flying overhead, and after a while I was able to identify the LaGuardia traffic by type and sound. The beautiful Connies were both majestic and loud. There were B-25s, Lockheed Loadstars, and of course the C-46s, DC-3s, DC-4s and DC6s. Although they had early problems, the distinguished sound of the Lockheed Electra II during the '60s always announced their presence. How could you not become addicted to aviation from your earliest years with such influences?

John LoRe lived "around the block" and introduced me to CL flying. John's big brother Bill taught me how to fly. They also told me that, "If you cut out the parts you now have a kit, except that the pieces will fit." That's when I started designing my own airplanes. We were in the fifth grade or sixth grade and when I first saw an All American Sr. decked out like a flag, I thought "That it is the biggest airplane that I have ever seen."

A few years later I saw Frank McMillan fly his Gambler at Pelham Bay Park. I built one from the *Model Airplane News* plans, and have been hooked on Stunt ever since.

Why fly Stunt? Stunt presents a challenge for design, building, finishing, competition and that impossible quest for the perfect pattern. With the exception of the Gambler, J.D. Falcon and Impala—all of which were designed by friends, and airplanes I've built and flown in the Classic and Old Time Stunt events—I have always competed with my own designs. I am proud to say that I have never used a Nobler wing. In fact, I have never had a Nobler. It just does not appeal to me, so I have no reason to break my personal record.

Stunt airplanes are simply beautiful. This is what, in my opinion, separates our event from all the other events in CL. To me, and many others, appearance is the heart of the event and was a major draw. It is sad that so many people don't understand this.

To this day the single most impressive beauty was Charles Lickliter's Ballerina III that I saw flown to second place at the 1961 Willow Grove Nats. It had a very detailed cockpit, unique hinges, and an impeccable metallic blue finish. That particular airplane would still be a 20-pointer, and it was painted with a brush!

There is much more, however. I have

## Featuring Tom Niebuhr

Right: Argus times three: (L-R) Tom Niebuhr, Tim Meeks, and Henk DeJong.



Three Falcons: (L-R) Rich Oliver, Tom Niebuhr, and Joe Bowman.



The Falcon, John, and Tom.



Above: Gambler Pelham Bay, 1958.



Left: Uwe Degman, Claus, Makis, and Tom at the 2001 Nats.



been lucky to meet, fly with, and compete against some of the finest people. This outcome of competition is the part that I truly cherish, and sadly is missed by many who don't go to contests.

**Above: Tom and Lou at VSC IX.**

**Right: Bob Palmer, Bill Byles, Tom, and Dale Gleason at VSC IX.**



In my teens it was people like my longtime coach and mentor, John D'Ottavio, Larry Scarinzi, Gene Shaffer, Ed Elasic, Windy, Bob Baron, Andy Lee, Bill Simons, Bill Suarez, Bob Lampione, and a kid named Bob Hunt, to name a few. When I went to Parks College in the St. Louis area, I flew in a meet and placed second behind Bob Gialdini at a contest in Alton, Illinois and drooled over his Sting Ray. Several years ago at VSC, Bob tapped me on the shoulder and gave me a picture of Linda and me with Bob Palmer that he took the previous year, and then he told me how much he liked my airplane. The ultimate compliment, for sure.



I participated in the inaugural Old Time Stunt meet held by John Miske and the Garden State Circle Burners, October 1970. That pesky kid named Hunt took first, John D'Ottavio was second, and I placed third. That weekend was topped off when Linda and I got engaged. The following summer I was contest director for the second OTS contest held at Buder Park in the St. Louis area. John Davis won that one.



**Above: Wife Linda poses with Tom's Fox .35-powered Barnstormer. *Model Airplane News* 1971.**

**Right: Left: John D'Ottavio and Bill Rutherford at the Dallas in September 2001.**

We would never have dreamed that OTS would be flown world wide, and it would help spawn the Vintage Stunt Championships. That Hunt kid beat me again at the VSC; he got the Pachyderm award two times. I only got it once! VSC is that special event where you get together with old friends, make new friends and meet many of the people you have read about.

I also can't forget the wonderful Adamisin clan headed by Big Art and Betty, and of course, Jack and Shirley Sheeks, Ted and Shareen Fancher and Mike Keville.



John Davis and Jack Sheeks at the 1988 Nats.

It has been a pleasure to meet some of our international friends. Claus Makais and Uwe Degman (Germany), Henk DeYoung (Netherlands), Rene and Monique Berger (Switzerland), Jeff Reeves and Brian Eather (Australia), and Paul Winter (Great Britain).

Now living in the Dallas, Texas area, my flying companions include fine people like Bob Gieseke, Mike Scott, Don Hutchinson, Dale and Linda Gleason, and the approximately 100 members of the Dallas Model Aircraft Association.

A few months ago, I received a telephone call from a voice in the past. 40 years in my past. It was John LoRe who is back flying! We hope to meet again at a future VSC.

Why do I fly Stunt? Above all, it's the people! *SN*

## 2009 CL Stunt Nats Schedule

### Sunday, July 5

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Beginner & Intermediate Stunt Registration*	Grass Circles
8:30 a.m.	Beginner & Intermediate Stunt Pilots' Meeting*	Grass Circles
9:00 a.m.	Beginner & Intermediate Stunt Event*	Grass Circles
12:00 noon	Old Time and Classic Stunt Registration*	Grass Circles
12:00 noon	Jr./Sr./Open/Advanced entries close	Nats Headquarters
2:30 p.m.	Open/Advanced Models Presented for Appearance Judging	180 Building
3:00 p.m.	Pilots' meeting/Forum	180 Building
4:30 p.m.	Concours Voting	180 Building
6:30 p.m.	Judges' Seminar Review	TBD

### Monday, July 6

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Old Time & Classic Stunt Events Pilots' Meeting*	Grass Circles
8:30 a.m.	Old Time & Classic Stunt Events*	Grass Circles
9:00 a.m.	Judges' Seminar Phase II (Flight, may move earlier)	L-Pad Circle 4
6:00 p.m.	Judges' Seminar Review	TBD

### Tuesday, July 7

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open/Advanced Qualifications Rounds 1 & 2	L-Pad

### Wednesday, July 8

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open/Advanced Qualifications Rounds 3 & 4	L-Pad

### Thursday, July 9

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open Top 20	L-Pad
8:00 a.m.	Advanced Finals	L-Pad

### Friday, July 10

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circle
7:30 a.m.	Jr./Sr. processing and Appearance Judging	L-Pad
8:00 a.m.	Jr./Sr. Finals	L-Pad
8:00 a.m.	Open Finals	L-Pad Circle of choice
12:00 noon	Walker Cup Fly-off	L-Pad Circle of choice
6:00 p.m.	PAMPA Reception	Horizon Convention Center
7:00 p.m.	PAMPA Banquet	Horizon Convention Center

\* Unofficial Event

If you are flying only unofficial events, you must register with Nats Headquarters as a mechanic.

# The Euro Scene

→ By Peter Germann

## The European Control Line Community

Stretching over something like 18 countries where almost as many languages are spoken, the CL community in Europe is quite big, as can be seen from the fact that from April until the end of October, as many as 29 open international contests are held. Unlike in other parts of the world, CL sites in Europe are typically not too far apart and often located near populated areas. From this it is obvious that noise over here definitely is a big issue of great concern. Sites have been lost and others may follow. Our roof organization CIAM (the Aeromodelling branch of FAI) is well advised to encourage, if not to enforce, efficient noise reduction programs in the very near future.

Some of the contests held are organized bi-annually in exchange with partner clubs, such as Jura-Cup in Switzerland in 2009 and the Salzburg contest in Austria, to be held again in 2010. From what I believe to know, the European CL community is oriented toward competition flying while the number of those fun-flying over grass fields somewhere is not really big. One of the reasons for this is the limited availability of materials. Just about everything has to be purchased over the Internet and the cost for overseas shipping is significant. Add to this the amount of red tape resulting from innovative bureaucracy such as customs and tax authorities, plus a potential language problem and it is easy to understand why potential CL fliers are sometimes reluctant to go the extra mile and prefer to buy a plastic RC helicopter locally instead.

However, fueled by the availability of related information on the Internet and motivated by the increasing number of attractive websites dedicated to CL flying, it is nice to observe a growing number of CL fliers, many of them after a long absence from the hobby, showing up on the fields again. Here is a number of sites contributing to our common cause: [www.fesselflug.eu](http://www.fesselflug.eu), [www.fesselflug.ch](http://www.fesselflug.ch), [www.f2cmlb.org](http://www.f2cmlb.org), [www.go-cl.se/cl.html](http://www.go-cl.se/cl.html), [www.controlline.org.uk](http://www.controlline.org.uk), [www.lassogeier.de](http://www.lassogeier.de), and <http://digilander.libero.it/ucontrol2000/U-Control-2000/>.

The following is a non-complete list of CL sites and local contacts all over Europe:

### Austria

There are two permanent CL sites and approximately 20 active fliers. Contacts are: Max Dillinger: [mdill@aon.at](mailto:mdill@aon.at), Walter Reinisch: [walter.reinisch@sbg.at](mailto:walter.reinisch@sbg.at), Walter Weinseisen: [moni.wolti@a1.net](mailto:moni.wolti@a1.net).

### Belgium

There are four permanent CL sites and approximately 40 active fliers. Contacts are: Jan Odeyn: [jan.odeyn@skynet.be](mailto:jan.odeyn@skynet.be), Salvatore Barile: [salvabarile@euphony.net](mailto:salvabarile@euphony.net), Luc Dessaucy: [dessaucy.luc@hotmail.com](mailto:dessaucy.luc@hotmail.com).

### Czech and Slovak Republics

There are three permanent CL sites and approximately 75 active fliers. Contacts are: Jiří Vejmla: [vejmla@laser-tech.cz](mailto:vejmla@laser-tech.cz), Igor Burger: [igor-hexoft@netax.sk](mailto:igor-hexoft@netax.sk).

### Denmark

There are five permanent CL sites and approximately 60 active fliers. Contacts are: Aage Wiberg (F2B): [fam.wiberg@mail.tele.dk](mailto:fam.wiberg@mail.tele.dk), Henning Forbech (F2D): [henning@forbech.dk](mailto:henning@forbech.dk), Niels Lyhne Hansen (F2A): [nilh@ucl.dk](mailto:nilh@ucl.dk), Jesper B. Rasmussen (F2C): [j.buth@rasmussen.mail.dk](mailto:j.buth@rasmussen.mail.dk).

### England

There are no permanent CL sites, but there are approximately 300 active fliers. Contacts are: John Bonner: [BnJayBee@aol.com](mailto:BnJayBee@aol.com), Mick Castell: [secretary.mick.castell@tiscali.co.uk](mailto:secretary.mick.castell@tiscali.co.uk), Bill Smith: [officer.bill.alan01@tiscali.co.uk](mailto:officer.bill.alan01@tiscali.co.uk).

### Finland

There are three permanent CL sites and approximately 30 active fliers. Contact is Lasse Aaltio: [lasse.aaltio@hel.fi](mailto:lasse.aaltio@hel.fi).

### France

There are six permanent CL sites and approximately 150 active fliers. Contacts are: Serge Delabarde: [serge.delabarde@orange.fr](mailto:serge.delabarde@orange.fr), Jean-Paul Perret: [jpperret@wanadoo.fr](mailto:jpperret@wanadoo.fr), Veronique Beringer: [control.line.info.circulaire@wanadoo.fr](mailto:control.line.info.circulaire@wanadoo.fr), Aime Gilbert: [gilbertai@aol.com](mailto:gilbertai@aol.com).

### Germany

There are three permanent CL sites and approximately 80 active fliers. Contacts are: Michael Thoma: [m.thoma@daec.de](mailto:m.thoma@daec.de),



The Landres CL site has hosted two World Championships so far.



Uwe Kehnen: fesselflug@gmx.eu, Claus Maikis: CMaikis@t-online.de.

### Italy

There are 10 permanent CL sites and 170 active fliers. Contact is Alberto Maggi: maggi00@libero.it.

### Netherlands

There are no permanent CL sites, but there are approximately 40 active fliers. Contacts are: Henk de Jong: h.j.t. de.jong@freeler.nl, Bruno van Hoek: b.van.hoek@hccnet.nl.

### Norway

There are no permanent CL sites, but there are approximately 30 active fliers. Contact is Steinar Settern: stesette@online.no.

### Poland

There are five permanent CL sites and approximately 40 active fliers. Contacts are: Piotr Zawada (F2B & F4B): epzawada@icpnet.pl, [www.aeroklubpolski.pl](http://www.aeroklubpolski.pl).

### Portugal

There are four permanent CL sites and approximately 100 active fliers. Contacts are: Amilcar Contente: amilcar.contente@netvisao.pt, J. Pereira da Costa: jpereiradacosta@yahoo.com, Loureiro da Sousa: slajslaj@gmail.com.

### Serbia

There is one permanent CL site and approximately 15 active fliers. Contacts are: Radosavljevic Ljubomir: aerolux@sezampro.yu, Vladimir Zivanovic: vzivan@ptt.yu.

### Sweden

There are 10 permanent CL sites and approximately 100 active fliers. Contacts are: info@linflyg.se grenchefen@linflyg.se, sekreteraren@linflyg.se.

### Switzerland

There are two permanent CL sites and approximately 25 active fliers. Contacts are: Peter Germann: peterdgermann@bluwin.ch, Heiner Borer: heinerborer@datacomm.ch, Andy Sweetland: andy.sweetland@aesaviation.ch.

### Ukraine

There are 10 permanent CL sites and approximately 400



Kiev, Ukraine.

active fliers. Contacts are: Valeriy Kramarenko: vakram@gala.net, Alexander Osovik: ex\_osovik@yahoo.co.uk, Yuriy Yatsenko: retro@ic.kharkov.ua, Andriy Umrihin: umryhin\_model@ukr.net.

**While not being complete**, the above adds up to an impressive number of 68 permanent CL sites and 1,675 fliers ranging from Sunday afternoon fun fliers to ambitious competition pilots of all F2 classes.

Many, perhaps even most of the sites, are of the hard surface type. All contacts are of course looking forward to providing CL inclined visitors with whichever information needed. Whenever travelling, just make sure to carry your handle.

### The 2009 European Championships

This limited access (National teams only) event hosting something like 250 participants of all FAI CL classes is to be held in Belgrade, Serbia from July 26 until August 3, 2009. For details, please go to: [www.akaerolux.com](http://www.akaerolux.com). For the first time an attempt is being made to incorporate a number of evening events in order to add a touch convention atmosphere to the Championships. As per today in March '09, the presentations planned are:

- Design of an electrical power train for a competition F2B aircraft. Igor Burger
- Aspects of F2C judging. Andy Sweetland
  - Hints for F2B pilots. Roger Ladds
  - F2B future projects. Peter Germann
  - Noise reduction in F2D and rule revisions in F2D. The F2D Group
  - An F2 supporting and promoting program. Jean-Paul Perret (tentative)

**This completes the two** first reports from the European CL community. I hope I have been able to describe both the scene in general and the current activities in particular. It is obvious that such reports cannot be really complete and apologize to those I have not mentioned. Please feel free to share what you are doing in your area. I will be happy to cover your activities in *SN*. *SN*



The circle in Breitenbach, Switzerland.

# SPINNER RING

By Chris Brainard

HowTo



I love building model airplanes—at least most of the time. Although there are certain portions of the building process which have enhanced my reputation for procrastination. One of these that *used* to drive me crazy was installing spinner rings. I tried a bunch of different methods, but could never really find one which consistently gave excellent results. Perhaps you have faced this same frustration. If so, maybe the solution that worked for me will work for you too.

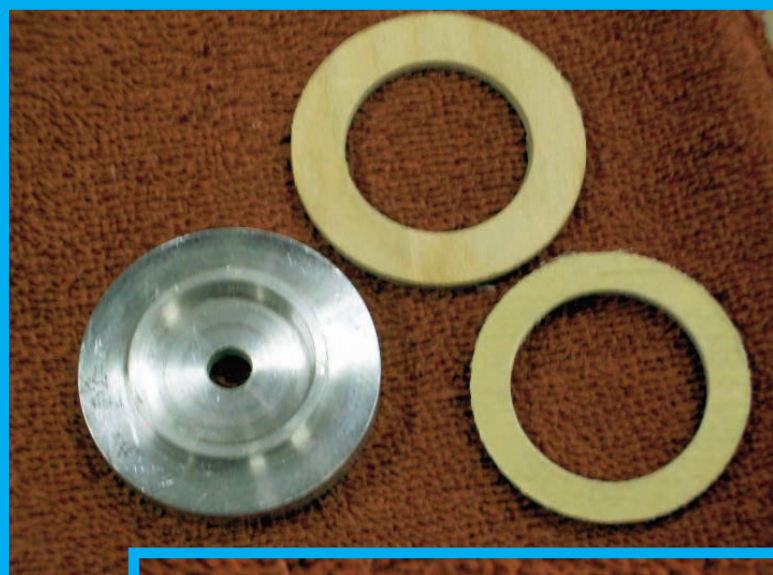
The difficulty in locating a spinner ring properly is that we are trying to align it in a plane defined by three different axis. 1. Aligning the radial centerlines of the spinner ring with the radial centerlines of the crankshaft prop mounting stud, 2. Aligning the face

of the spinner ring perpendicular to the longitudinal centerline of the prop mounting stud, and 3. Locating it the correct distance from the spinner back plate for proper clearance.

The solution which worked for me was to design a jig (affectionately referred to as Chris's Spinner Ring Jig) which bolts to the engine and automatically aligns it in all three axes. To use it, the engine is mounted in the airplane to the crutch in what will be its final location (complete with whatever down/right thrust is desired) and the jig (with the spinner ring temporarily mounted) bolted onto the prop mounting stud.

This will place the spinner ring in its proper position, making it easy to trim the fuse sides or fit a

## My first spinner ring jig was carefully built from multiple pieces of plywood and worked very well.



filler block up to the ring. Then it is simply glued in place and once the glue has cured, the prop nut removed, the ring “popped” loose from the alignment jig and the jig slipped off the end of the prop mounting stud.

My preferred method is to fit the sides leaving a gap of a few thousandths of an inch, remove the jig/spinner ring, mix a batch of epoxy/micro balloons, apply it and then bolt the jig/spinner ring back on. I leave the slight gap because if the initial fit is too tight, chances are that it will spring back slightly and lose the alignment accuracy once the prop nut is loosened.

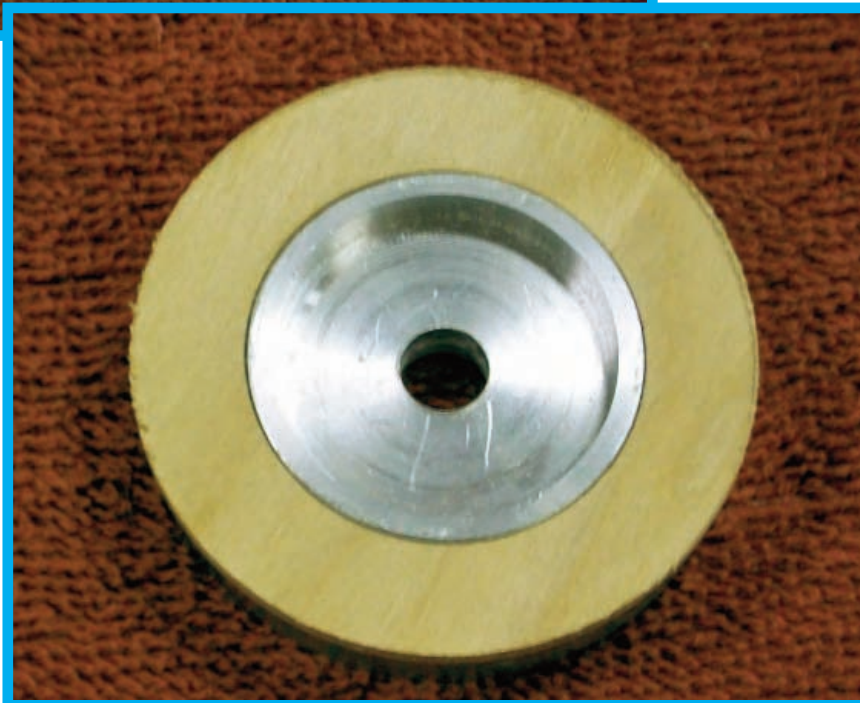
There are a several things to note about this jig. 1. The normal thicknesses of plywood chosen for spinner rings have no effect on

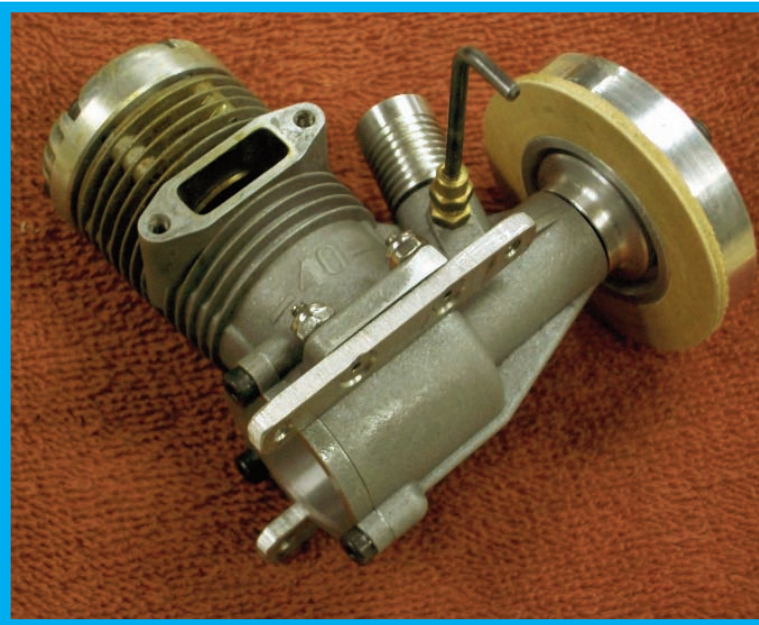
them working properly. 2.

The inside and outside diameters of the spinner ring must be concentric. 3.

The inside diameter of the spinner ring (1 inch) must be accurate and a snug fit to the raised alignment lip on the jig. 4.

This jig is set up for spinners with flat back plates. If you use a back plate which is recessed for the prop drive washer, the recess that the prop drive washer contacts will have to be recessed by whatever the offset is plus  $\frac{1}{32}$  inch for proper clearance between the spinner ring and spinner back plate. 5. Through experimentation, I have settled on  $\frac{1}{32}$  inch *initial gap* between the spinner





may seem like overkill, but after the fuselage is faired into the spinner ring, I use a Dremel hand tool fitted with a  $\frac{1}{2}$ -inch-diameter sanding drum and sand out the inside of the spinner ring—usually until there is only about  $\frac{3}{16}$  inch left, except at the bottom where I leave it full depth. I leave the full depth at the bottom because lately I've been mounting my cowls with magnets and by using the  $\frac{1}{8}$ -inch ply and leaving extra material at the bottom, I have room for a pin to key the cowl to the spinner ring. Once I've finished sanding it to shape, the inside of the cowl ring represents a large "D" with the flat part of the "D" on the bottom. I've included a picture of how this looks on my latest Caprice. If this isn't a feature you need, the bottom can be sanded out also to remove extra weight.

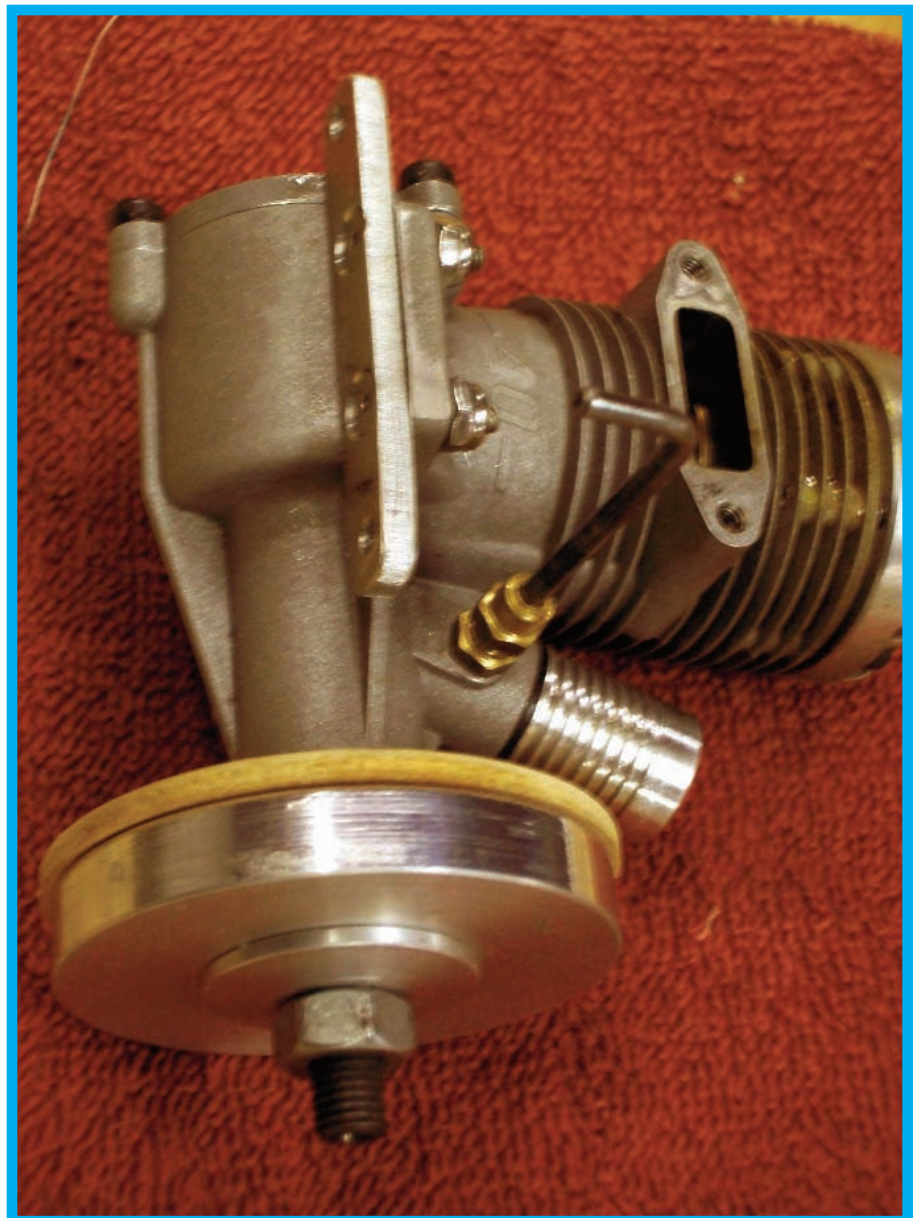
#### Disclaimer

Modelers are ingenious in their craft. Even though I have never seen a jig like this before, someone, somewhere, may have already invented it. If so, my apologies for any implications claiming credit for it. *SN*

ring and back plate. This gap will become smaller with the application of a finish. I prefer to err on the side of too small a gap, since it is easy to shim the back plate away from the drive washer. 6. I believe a realistic range of spinner rings this jig will accommodate to be from  $1\frac{1}{2}$  inches to  $2\frac{1}{2}$  inches. Smaller diameters won't have enough "meat" left in the ring. Larger diameters may not have enough support at the outside to keep them flat.

My first spinner ring jig was carefully built from multiple pieces of plywood and worked very well. The biggest problem was that over time it became damaged when inadvertent drops of glue would stick it to the spinner ring, and when pried apart, chunks of the jig would end up stuck to the spinner ring (or chunks of the ring stuck to the jig). Later I purchased a small metal lathe from Harbor Freight and made one out of aluminum, eliminating that problem. Although this jig is set up for a  $\frac{1}{4}$ -inch-diameter prop mounting stud, it can be drilled for whatever size is required or, better yet, machined to accommodate various bushings for different prop stud diameters. If the recess for the prop drive washer is machined deeper, these bushings could be made with a head of various heights to allow spinners with recessed back plates to be mounted.

After trying various thicknesses of ply for making spinner rings, I've settled on using  $\frac{1}{8}$ -inch aircraft (five layers) ply. I use a 1-inch-diameter Forstner drill bit for the 1-inch-I.D. hole. I drill this hole first and then rough cut the outside diameter. A stack of eight to 10 of these is mounted on a mandrel and the whole bunch clamped tightly together and machined to the final outside diameter. The  $\frac{1}{8}$ -inch aircraft ply



# Crash Repairs

By Windy Urtnowski

**A**fter any major repair, it's a good idea to recheck the vertical and horizontal CGs, as they may have shifted due to the weight of the repair. Almost always, a repair adds weight—typically most of it is behind the horizontal CG, so expect the new bench trim after repair to include some nose weight.

For example, the Novanta repair after my 2007 Nats accident was rather extensive and added about 6 ounces total weight. It shifted both the vertical and horizontal CG. The ship required about an ounce of nose weight to regain the original horizontal CG location—the vertical CG hadn't changed.

Having an *accurate* location for where the CG should be is a real time-saver when you're doing a repair. When I bench trim a new ship before its maiden flight, I locate the horizontal CG at about 20% of the MAC and get the vertical CG as close as possible by using lighter or heavier wheels or wheel pants—and I measure the locations very accurately and *record* them. (I use the Big Jim Greenaway method of "wood block with two sticks topped with pencil erasers" to check the horizontal CG and a plumb bob to verify the vertical CG.) After final trim,

I record the actual "best" CG location.

After a repair, then, I can look up in the record where I had finally found the best CG location to be and add or subtract weight as necessary to get the repaired ship bench trimmed the way it was before the crash. Before I adopted this as a firm policy, I'd sometimes get to the field for a post-repair maiden flight and have a terribly tail-heavy ship wallowing around for seven minutes.

After the Novanta repair, I removed 100% of the tip weight, as most of the repair was to the outer wing panel. During original bench trimming I had used a gram scale under the outer tip to be sure I showed at least 2 ounces of true weight before the first flight. After the repair, I redid this test and found that I didn't need any tip weight at all—in fact, I even hollowed out the tip weight box cover.

All this paid big dividends, as the Novanta flew very well on its first flight after the repair. Although heavier, the wing didn't approach stall, and I always use taped hinge lines to maximize lift. Two years have passed, and the Novanta is still one of my favorite ships, especially in swirling air where the extra ounces help it

penetrate. Many of our local meets are flown on fields surrounded by trees, and it's nice to have a ship that handles these conditions the way the Novanta does with the extra repair weight.

I learned that composite wings are relatively easy to repair—save all parts, as always! Also, the Brodak dope finish is easy to repair, match, and blend, unlike many two-part systems (such as Imron) that require a complete refinishing.

As I always do during a crash repair, I videotaped the whole thing so other pilots who may want to see this "live" can benefit from the crash. This has helped me advise many crash victims how to save a crashed ship, especially if it's a favorite.

Many times pilots say things such as "I'd never know it was a crash repair." That makes me feel good, of course, but not as good as the feeling when the launcher releases the ship on the first flight *after* repair. That's the best feeling of all. *SN*

**That makes me feel good, of course, but not as good as the feeling when the launcher releases the ship on the first flight after repair.**



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*Windy Urtnowski*

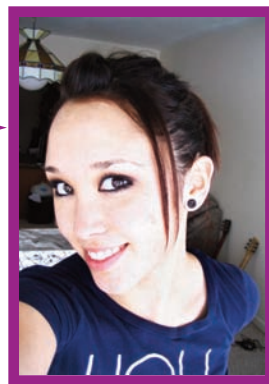
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# The Next Generation

By Grace Paris



Ever notice that when you are on the field, the youngest flier usually is flashing pictures of his grandkids?

**H**ey there everyone in Stunt world! Ever notice that when you are on the field, the youngest flier usually is flashing pictures of his grandkids? Well, have no fear, there are young ones out there and I would like you to get to know them. I asked Matt Colan, a fellow flier of 14, to give me a history of why he flies. He is an avid baseball fan and is on his school's team as a freshman. Matt's story follows:

**Ever since I was a baby**, I would stare up at the planes flying across the sky. As soon as I was able to walk, I would go into my grandfather's workshop (Don Herdman) and just watch him build. One time, I saw him using a knife, and he put it down and I went to pick it up, but I was holding the blade instead of the handle. He told me to put it down, asked me not to cry and he showed me how to hold a knife. He also built this little peashooter back in the 1970s that he never finished. This plane was just the perfect size for a toddler like me (more like an SV-11 compared to my size then),

and I would practice landings and takeoffs with it.

When I was 4, Grandpa took me to Defense Hill. I had been there numerous times before, but this time he took me inside the circle for my first ever flight. It was nothing special, but I got my first taste of flying. After a move to Vermont, I didn't fly again until I was 7 when my grandparents moved up to Vermont.

This time I was flying RC instead of CL. My first plane was a trainer that went into the ground after I started flying right-hand turns. After that, I got my second plane for RC and that one also went in after a season of flying. By this time every time I flew RC, my knees would shake. In 2005, Grandpa took me to a contest in Wrentham, Massachusetts, during September. At that contest, I saw guys competing for the Mass Cup (this part comes to reason later on). Also, when I was there, I started to learn how to fly CL. It took me until April of 2006 to get over the dizziness. Grandpa bought me a Smoothie ARF at that

contest, and I still have that plane and it is still in one piece.

The first maneuver I learned was a regular, non-reverse wingover. After that, I started flying loops, and trying to fly them right instead of a nice start, and a very tight pullout. When I went inverted for the first time, the plane did a roller coaster-like flight and pancaked in upside down. Never fear, the next day that plane was back in the air.

By the end of 2006, I knew how to fly a wingover, do lazy 8s, fly inverted and fly inside loops. The first contest I went to was in May of 2007 at Wrentham, Mass. again. By that point Vic Macaluso had given me a Brodak Fw 190 kit that he had. I built it over the winter and flew it in 2007.

Up to that point I had learned only one maneuver since the previous year. On the last day of practice we had before going to the contest I taught myself the entire Beginner pattern—except for the Overhead Eight. At that contest, I was the only Beginner, so I won Beginner. My next contest was at Lee, Mass. in



Matt Colan and his Ares and Smoothie.

August. By that time I learned the Overhead Eight. I won Beginner by a wide margin, and got booted up to Intermediate. Also at that contest, I met Windy Urtnowski for the first time.

The next flying day after that contest, I learned the reverse-wingover. Sometime later, Grandpa let me fly his P-51. I had been tempted before to try a Triangle. Well with his plane, I did a somewhat recognizable triangle. When I landed, Grandpa asked if what I tried doing was a triangle, and I said yes. The first contest of 2008 was at Flushing, in Queens, New York. I built another Smoothie; this time it was an ARC. I decided to compete in Intermediate, even though I didn't know how to perform the Hourglass or the Four-Leaf Clover. I came in fourth, which I feel is pretty good for not knowing two maneuvers. The next contest was at Lee, Mass. in August. The next two contests were very memorable.

We arrived at Lee on a Friday, and had a nice flying session with most of the guys that were there that weekend. I was talking to Noel Drindak and watching Dave Eyskens, who was flying Windy's Novanta when it hit a bush and crashed. One hour and 55 minutes later, the Novanta was airworthy and was flown the next day. Windy gave me his video camera to tape the flight. I now knew the entire pattern as well as the Old Time pattern. That day I flew in both Old Time and Classic. The next day I flew in Intermediate and came in first.

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**My best score was a 470 and I tried my hardest to beat it. The final score was a 485, and I won the Mass Cup.**

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The next contest was a month later, again at Lee, and this one was for the Mass Cup. I had been debating whether or not to fly in Advanced, and decided to go in Intermediate. I flew with the Advanced guys, but, since I registered as an Intermediate, I could fly for the Mass Cup. The way the Mass Cup works is the winner from each class has to fly again and try to better his or her score. My best score was a 470 and I tried my hardest to beat it. The final score was a 485, and I



won the Mass Cup.

At Lee in 2007 Bill Hummel gave me a Brodak Ares kit, which is now flying. That plane was featured in the Appearance Point in the March/April *SN*. As of the time this was written, the Ares is still being trimmed. Bill Hummel gave me an Oriental Plus kit at Lee when I competed for the Mass Cup. That model is now under construction.

Okay, enough of the history. Some of my flying heroes would be Windy Urtnowski, Bill Werwage, Bob Hunt, Don Herdman (aka Grandpa), Bill Hummel, Mike Chiodo, Bob Lampione and others, but those guys stick out in my mind the most. I also admire Paul Walker, Dave Fitzgerald and Brett Buck. I haven't met Bob Hunt in person yet, but have been sending him emails and have talked to him on the phone. I haven't met Billy Werwage either but I enjoy the articles, he's written in *Model Aviation* and am amazed at the flying he's done. I haven't met Paul Walker, Dave Fitzgerald, or Brett Buck either, but I've seen them fly on video and their flying is impressive. Grandpa, Bill Hummel, Mike Chiodo, Mr. Lampione and Windy have offered me advice, given me feedback. They are basically my coaches.

My favorite plane in terms of flying would be grandpa's P-40 with an ST 60 up front. My favorite plane I've finished is my Ares. My favorite plane that I would love to build someday would be Bill Werwage's USA-1. My dream setup would be building a USA-1 styled airplane (I redesigned that plane by tracing an SV-11 airfoil on it) and

powering with one of Randy's PA engines.

**I have not met Matt in person** yet, but have been talking to him quite often. He is one of those honest to goodness kids. He is very respectful and very open to advice and coaching. You can tell by his words that he truly loves flying. He is a young man that anyone would enjoy being around. I can't wait for the chance to meet him.

Well there's nothing really new on my end. I was recently flying my ARF Nobler with the Evo .36 in it and it seems to me that the engine has not been fully broken in yet. The runs are erratic, but that's just because it needs to be tuned and broken in even more. Otherwise it seems to have a good amount of power. You can feel more power when you get into eights and when you fly into some heavy wind. I have not had a lot of time to fly or build because of my busy teenage life! Ha.

I am open to any suggestions to what I should write about. I was thinking about a young person's perspective on some equipment or some controversial issues, like the "misplaced maneuver" issue or the debate over glow and electric.

Hopefully Matt will be my partner in crime with this column. I'd like to get his opinions on things too. I am sure we will clash somewhere along the line. Email me at [Parisgy2@aol.com](mailto:Parisgy2@aol.com), snail me at 10120 N. Jennings Rd., Clio, MI 48420. You can contact Matt at [ecolan@comcast.net](mailto:ecolan@comcast.net). I will be in contact; don't be afraid to say something to me! *SN*

## Super Smooth Controls

**M**oving my plane at contests, I frequently have someone carry my handle while I get the plane. Often, for no particular reason they will wiggle the handle. When they do this, a frequent reaction is: "Wow. That's really smooth. How do you do that?" I work hard to build smooth control systems, and in this column I'm going to tell you how to do it. First I'll discuss hardware, and then I'll cover putting it all together.

### Hardware:

We are lucky to have available today high-quality hardware that is specifically designed for our control systems. This wasn't always the case. I'm sure that many of you remember the days when you had to build things for yourself—making pushrods from fiberglass arrow shafts, making inserts from dowels, bending ends from music wire, gluing it all together, and soldering the ends. (How many planes were lost because of

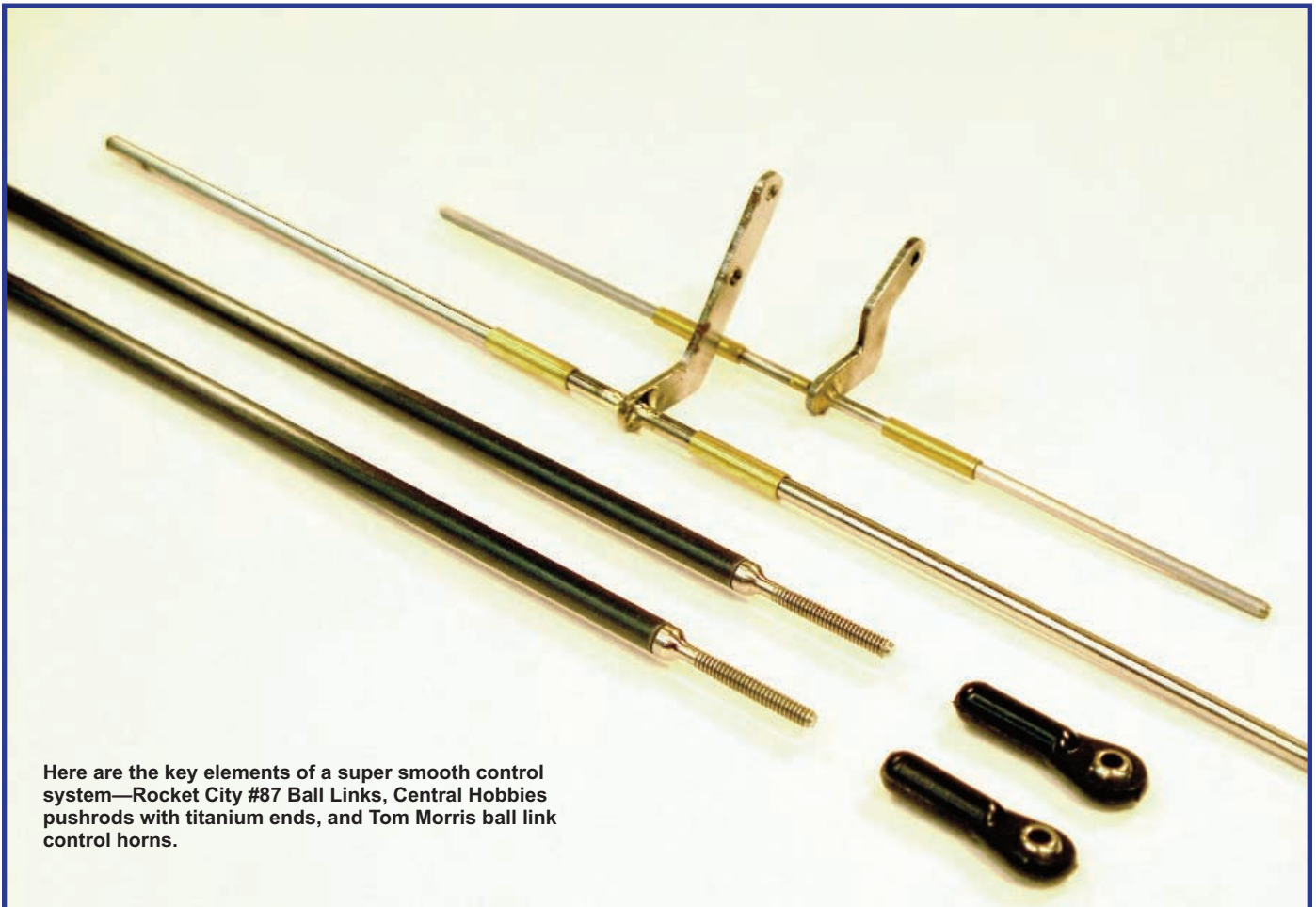
bad solder joints?) The end result was often a control system that was stiff and had lumpy spots. Today, building a smooth control system is much easier. Mostly it's just a matter of screwing things together.

**Ball links:** The key to smooth control systems, the thing that started all the changes, is the Rocket City Ball Link. (I call it a ball link because Rocket City does, but technically it's a spherical bearing rod end.) Ball links offer a number of advantages over music wire pushrod ends:

1) *Ball links accommodate the motion of the flap pushrod.* Music wire pushrod ends use sleeve bearings (also known as journal bearings) on the pushrod ends. (A wire pushrod end in a bushed control horn constitutes a sleeve bearing.) Sleeve bearings are good for simple rotation that is confined to one plane. They are well

suited for use on the elevator pushrod since both ends (one attached to the flap horn and the other to the elevator horn) rotate in the same plane. Sleeve bearings *are not* well suited for use on the flap pushrod because the two ends (one attached to the flap horn and the other to the bellcrank) rotate in different planes. In fact, this is the worst case for using sleeve bearings—the two planes are actually perpendicular to each other.

Consider the bearing on the end attached to the flap horn. It provides rotation in the vertical plane of the flap horn with no problem. The problem comes when the pushrod tries to rotate in the horizontal plane as the other end follows the motion of the bellcrank. The only way the bearing on the flap horn can accommodate this motion (without something bending) is for extra clearance to be provided in the bearing. Extra clearance means free play in the controls and results in rapid wear of the bearing.



Here are the key elements of a super smooth control system—Rocket City #87 Ball Links, Central Hobbies pushrods with titanium ends, and Tom Morris ball link control horns.



The bearing on the bellcrank end has the same problem as the bearing on the flap end, so there are two bearings with extra clearance contributing free play to the system.

The two bearings are also subject to rapid wear. Back in the day it wasn't uncommon for fliers to cut open one- or two-year-old airplanes to rebush the flap horn bearing. It's ironic that in a model made of balsa and tissue a metal bearing wore out before the plane.

2) *Ball links are self-aligning.* Because ball links use a spherical bearing, they can accommodate motion in more than one plane. When ball links are used on both ends of a flap pushrod, no extra clearance is required to allow free motion—the ball links give minimum free play and are self-aligning.

3) *Ball links are easy to adjust.* If you're using a ball link with 4-40 threads in the barrel, it can be adjusted in increments of  $1/80$  (0.0125) of an inch, certainly adequate for most fliers. If you want finer adjustment, ball links are available with left-hand threads. Make your pushrod with right-hand threads on one end and left-hand threads on the other end, and it works like a turnbuckle, giving infinitely variable adjustment.

4) *Ball links require no soldering.* Making reliable soldered connections is a skill. You must practice to be good at it. It's a lot easier to make a reliable threaded connection than a soldered one. Also, threaded connections are many times stronger than soldered connections.

5) *Ball links don't wear out.* I've been using ball links for a decade now, and I've never seen any signs of wear.

6) *Ball links don't come loose.* I've crashed a few planes with ball link control systems (one straight in on the tarmac), and in every case the pushrod with its ball link ends wound up holding the pieces together.

Rocket City no longer markets its ball links. However, they're available from Control Line Central and also from Don's Hobby Shop.

**Pushrods:** Ball links require pushrods with threaded ends. The first manufacturer to provide push rod kits with threaded ends was Central Hobbies. I've been using them for 10 years, and I still think they're the best. They are stronger, lighter, and easier to assemble than any other option. Whether you use ball links or clevises they're the best choice.

Central Hobbies kits consist of a pair of carbon-fiber tubes with four threaded

titanium end fittings. The tubes come in three sizes— $1/8$ -,  $5/32$ -, and  $3/16$ -inch diameters. End fittings are available with 4-40, 6-32, or 8-32 threads. I use  $3/16$ -inch rods with 4-40 ends. The end fittings are attached to the carbon-fiber rods using slow-cure epoxy (J.B. Weld is recommended). Although end fittings are also available in stainless steel, I recommend against using them. Titanium is both stronger and lighter than stainless steel. Speaking of strength, I once load-tested a  $3/16$ -inch Central Hobbies pushrod to 400 pounds. If you don't think that's strong enough, try hanging 400 pounds on the tail of your Stunt ship.

Making pushrods with the Central Hobbies kit is a piece of cake. All you do is measure, cut, and glue. If you're using Rocket City ball links, the tube should be  $25/8$  inches less than the horn-to-horn distance. This allows each ball link to be adjusted  $1/8$  inch in or out and still have a minimum of  $3/8$  inch of thread engagement. When cutting the carbon-fiber tube, be careful not to split the ends. Also, after cutting the tube, sand the end square so the titanium fitting will fit tight. Clean the components with alcohol or lacquer thinner before assembly. With J.B. Weld on them, the end fittings act like little pistons in a cylinder. When you push them into the carbon-fiber rod, air pressure wants to push them back out. I place the pushrod between a couple of building weights to keep the ends in place while the epoxy cures.

A set of pushrods, with ball links added, will weigh about  $3/4$  of an ounce. A kit costs \$16.95. Again, they're stronger, lighter, and easier to assemble than any other option—spend the money.

**Horns:** Ball links require control horns with 4-40 threaded holes. Tom Morris was the first to address this need. Tom Morris ball link control horns are available from Control Line Central.

**Bellcrank:** Good bellcranks have been available for a long time. Control Line Central offers Tom Morris bellcranks and Brett Buck-style bellcranks. Brodak offers their Strong Arm bellcrank and PSP bellcranks from Windy. They're all good. Mount ball links to bellcranks using a conical standoff to provide clearance so the ball link will have freedom of movement.

**Hinges:** If you hold one half of a hinge horizontal, the other half should swing freely. If it doesn't, it's because of friction in the hinge. What's a little

friction, you ask? When you multiply it by 16 to 20 (the number of hinges in a typical Stunt ship), it's a lot of friction. With the ball link control systems we're using today, it's the major source of friction. I don't want friction in my control systems. Control force is limited (by line tension) and I don't want to waste it to overcome friction.

Many will tell you not to worry about a little friction in the hinges—that they'll loosen up after a few flights. *Wrong!* Nylon is very tough. The barrel of a nylon hinge rubbing against another barrel or against the hinge pin will not wear. That's why it's a good bearing material. The friction in the hinges you use is there for keeps. It won't go away.

I use Du-Bro Heavy Duty Hinges. They come disassembled and there is lots of clearance between the barrels so they don't require any modification. The only reworking necessary is to remove a little flashing and shorten the tab (you don't need a  $3/4$ -inch tab in a  $3/8$ -inch trailing edge). I reassemble them with a Sig #20 pin, which gives plenty of clearance.

Be sure to use plenty of hinges. Randy Smith has observed that the flaps on many Stunt ships flex under load to the extent that there are visible gaps between the flaps and the trailing edge of the wing. I listen to Randy. My last plane used six hinges per flap and I'm going to use seven in the future.

**Assembly:** There are a few key points to remember as you assemble your control system:

- 1) Always use high-quality alloy screws to assemble your ball link control system. A good source of quality fasteners is Micro Fasteners. My personal favorite is the big industrial supply house, McMaster-Carr. When I order stuff before 5 p.m. I get it the next day.
- 2) When you mount ball links to a horn, the threads in the horn are the primary fastener. Use a screw with enough extra length to accommodate a locking nut on the other side of the horn (a plain nut is all you need here).
- 3) When you do the *final assembly* of your controls, use a high-quality thread locker such as Loctite 271 (available from McMaster-Carr). It only takes a few drops on the threads to ensure your fastener will never come loose. Wipe off any excess and ensure that none gets in the bearing area of the ball link.

- 4) After the thread locker has fully cured (about 24 hours), I put a drop of 3-IN-ONE oil on all the bearings in the system. It's the only lubrication I use.
- 5) *The hardest part of making a super smooth control system is doing the hinges. All the hinges for the flaps (and elevators) must rotate on exactly the same centerline. The control horn must also rotate on the same centerline. A few key points:*
- You must acquire the skills and tools necessary to make precisely accurate hinge pockets in the flaps, elevators, and trailing edges. If your hinges are cocked, your control system is doomed to mediocrity.
  - When you glue the hinges into the flaps and elevators, you must ensure that they are all exactly in line.
  - Always be very careful that glue doesn't get into the barrel of your hinges.

**Wrap Up:** We are lucky to have available high-quality hardware that is specifically designed for our control systems. Building a super smooth control system is mostly a matter of choosing the right hardware and screwing it together. Doing the hinges is the hardest part—that's where building skill and focused attention is required.

**Good luck with your next plane. SN**

**Sources:**

Don's Hobby Shop  
1819 S. Broadway  
Salinas KS 67401  
www.donshobbyshop.com  
(800) 972-6273

Control Line Central  
7200 Montgomery Blvd. NE #287  
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www.clcentral.com  
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(800) 892-6917

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Robbinsville NJ 08691  
www.mcmastercarr.com  
(609) 689-3000

## In 1964 ...

- The Beatles perform on The Ed Sullivan Show, which breaks television ratings records.
- John Glenn, the first American to orbit the earth, resigns from the space program. The following he announces that he will seek the Democratic nomination for U.S. Senator from Ohio.
- Indiana Governor Matthew E. Welsh declares the song "Louie, Louie" by the Kingsmen pornographic. He requests that the Indiana Broadcasters Association ban the record. Governor Welsh claimed that hearing the song made his "ears tingle." Publisher Max Firetag offers \$1,000 to anyone that can find anything "suggestive" in the song's lyrics.
- The first Ford Mustang rolls off the assembly line at Ford Motor Company.
- Merv Griffin's game show Jeopardy! debuts on NBC; Art Fleming is its first host.
- Shea Stadium opens in Flushing, New York.
- President Lyndon Johnson signs

the Civil Rights Act of 1964 into law, abolishing racial segregation in the United States.

- Vietnam War: The U.S. sends 5,000 more military advisers to South Vietnam, bringing the total number of United States forces in Vietnam to 21,000.
- The Warren Commission Report, the first official investigation of the assassination of United States President John F. Kennedy, is published.
- The Warren Commission Report, the first official investigation of the assassination of United States President John F. Kennedy, is published.
- ABC sitcom Bewitched goes live in the US.
- The first Moog synthesizer is designed by Robert Moog.
- Nicolas Cage, American actor, and Jeff Bezos, American Internet entrepreneur, and José Canseco, Cuban baseball player were born.
- Second Vatican Council: The third period of the Catholic Church's ecumenical council closes.
- Dr. Martin Luther King, Jr. is

awarded the Nobel Peace Prize in Oslo, Norway.

- US presidential election, 1964: Incumbent U.S. President Lyndon B. Johnson defeats Republican challenger Barry Goldwater with over 60 percent of the popular vote.
- Shindig! premieres live on the American Broadcasting Corporation (ABC), featuring the top musical acts of the Sixties.



... and the young man on the right was flying model airplanes and contemplating a career in music.

Send your guesses to Bob Hunt.

# Classic Stunt

By Bob Hunt

One of the main reasons I decided to write this column for *SN* is my interest in finding and “exposing” legitimate Classic-legal designs that may have been lost, forgotten or overlooked. Remember, the rules for Classic state (at least at this point . . . ) that a model that was designed, built, kitted *or* flown prior to midnight December 31, 1969 is legal for use in Classic Stunt competition. There were thousands of Stunt models built during the Classic era that were either not constructed from kits or from formal plans. Many, many fliers either used the ubiquitous Nobler wing and tail group, or wing designs from other models of the era, to construct their own “original” designs. Many also altered existing airfoils and force arrangements to suit their own particular flying style. Actually relatively few Stunt models were built strictly according to plan, as personal touches were very often added.

Sadly, many of the models that were built as “originals” through the Classic-era years were one-offs for which no plans were ever drawn. It was common practice to just draw lines directly on the balsa wood from which the model was built and not document the shapes. If the models built in this manner cannot be located and measured, then those designs are probably lost forever.

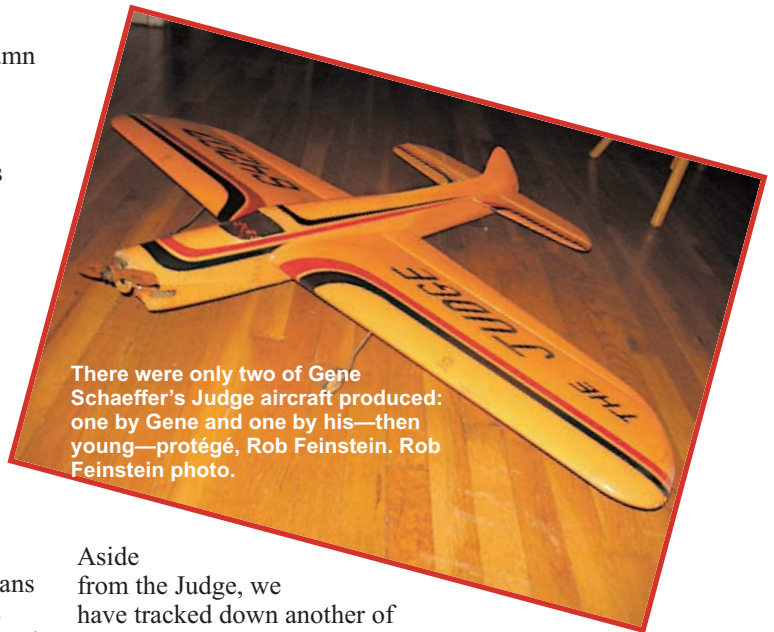
Fortunately there are always “new” old Classic Stunt designs being discovered. Some of the most famous Classic-era designs still exist in personal collections, and many of these are being discovered, documented and drawn in accurate detail, thus filling in at least a few of the voids.

One of these that I’m aware of—and have volunteered to draw plans for—is Gene Schaeffer’s Judge. There were only two of these produced: one by Gene and one by his—then young—protégé, Rob Feinstein. Gene’s Judge was lost in a meaningless manner, and that is a story that I will save for the article that will go along with the plans that will soon be offered for that model. The second one—Rob’s—still exists and is still in fairly good condition. I’ve been in touch with Rob and hope to soon have the model in my possession for as long as it takes to do the proper documentation.

The Judge was one of those designs that was developed from an existing airfoil set. It utilized a modified Chipmunk wing. The wings for both Gene’s and Rob’s Judges were balsa-covered foam units that were produced by Mike and Arnie Stott’s Foam Flite company. In fact, many of the late-1960 East Coast designs were built around Mike and Arnie’s fine foam wings.

The Judge’s wing was made from longer-than-stock foam Chipmunk wing panels. The dramatically swept tips were made by cutting the ends of the wing panels at an angle, thus allowing a more narrow balsa block to be used and still achieve the impressive tip sweep.

Gene, Bob Lampione, Billy Simons, Vic Macaluso and I all used modified foam-core Chipmunk wings in many of our “original” designs in those days. True, we rarely used the Chipmunk wing at stock panel lengths, but we did like the performance of the airfoil and shamelessly “stole” it. In fact, my Avanti design (See the photo of that ship in the Classic Column in the March/April issue of *SN*) and my F-105 Thunderchief design (which *is not* Classic legal) featured generously extended Chipmunk wings.



There were only two of Gene Schaeffer’s Judge aircraft produced: one by Gene and one by his—then young—protégé, Rob Feinstein. Rob Feinstein photo.

Aside from the Judge, we have tracked down another of Gene Schaeffer’s designs that used an extended Chipmunk wing. (Another Foam Flite unit.) He built what was essentially the first Stunt Machine around that format. He never did name that plane or draw plans for it. He painted a huge “USA” on the left wing and an equally sized “AMA” on the right wing. We just naturally started calling it the Usaama (Pronounced: Oosa-amma). He just hated that! Gene designed the Oosa-amma in the fall of 1969—thus making it legal for Classic competition—and built it over that winter. It first flew in the spring of 1970.

I remember going to dinner at Gene’s apartment in early 1970 (around March I guess) and at that time he was just putting the last of the trim colors on the Oosa-amma. He had taped off a really neat trim pattern for the bottom of the fuselage and was going to spray the colors after we had eaten. Bob Lampione lived on the same floor of the same apartment building as Gene and he stopped in just before dinner to say hello. Bob was at the very same point in the finish of his Vulcan design. (It’s Classic legal as well, and for the same reasons as the Oosa-amma.) Bob really liked the trim pattern that Gene had come up with and while we were eating at Gene’s, Bob went back to his apartment, duplicated Gene’s trim idea (and even improved on it a bit), sprayed the paint and came back to Gene’s apartment as we were finishing up dessert. He showed us the ship with the trim painted on and Gene just went ballistic! He was really angry that Bob had done that. By the end of the evening he had calmed down and actually saw the humor in the whole thing. I think that because Gene and Bob lived in such close proximity and were both fiercely competitive, they both profited. They drove each other to ever greater achievements in building and flying.

The really good news about the Oosa-amma (I guess we should start calling it the “original” Stunt Machine) is the fact that the model still exists and is in excellent condition. It resides in the basement shop of the late Ray Moore. Ray’s wife Andrea has indicated that she might be willing to let Jose Modesto—one of Ray’s good friends—borrow the ship long enough to take measurements and draw accurate plans for it. That’s a good thing, because it was an excellent-flying model and I know of many East Coasters who would relish the chance

to build one and compete with it.

I actually have many memories of the Oosa-amma, but, again, I think I'll save them for Jose to use in the article that will hopefully accompany the plans for that ship.

**Before the Chipmunk airfoil** came on the scene, the Nobler was the design from which we all copied. I remember building a couple of fairly stock Noblers and then "ripping off" the wing and tail designs and drawing different tip shapes and fuselage shapes around them. Gene Schaeffer also liked the Nobler wing, but soon began extending the panel lengths and also adding both more chord and more thickness to the stock airfoils to come up with what we on the East Coast called the "Super Wing." Variations of the Super Wing were used in Gene's 1967 "Blackbird" (no, that was not the name Gene gave it; it was just what we all called it) and in my Caprice design, which was essentially just a copy of Gene's '67 ship, only with different tip, cowl, wheel spat and fin shapes.



Gene bounced back and forth a bit in those days between the Chipmunk airfoils and the modified Nobler airfoils. The Stunt Machine that was published in *Flying Models* in December of 1971 used a version of the

Super Wing that was actually very close to real Nobler airfoil shapes, just with longer panels.

Billy Simons also used the Super Wing in several of his original designs. Unfortunately, Billy didn't actually draw plans for his original designs unless he eventually sold them to model magazines in article form. Then he would sit down and draw up formal plans. Pity, as he produced a bunch of very beautiful airplanes that would now be popular Classic-legal designs, I'm sure, had plans been drawn. All of those planes are long gone and there is no hope to now produce accurate drawings for them. As a brief aside, the Shoestring Stunter that Billy Simons built in 1968 used a foam Skylark wing that was made for Billy by Foam Flite. The plans for that ship were drawn by a person who didn't understand that the airfoil shape was important, and he missed those shapes by a mile! So, the plans published for that model are not accurate to the actual plane. The Shoestring, by the way, was not published until 1971, but it was flown by Billy in the 1969 Nats, so we know



Billy Simons and his Shoestring. Don Shultz photo.

for sure that it was Classic legal. The fact that it was published with an incorrect wing design in 1971 leaves it open to "discussion" as to whether this one is actually legal if built from the published plans. Ah, controversy ...



### Falcon II

The Jay Dee Falcon was one of the most popular East Coast Stunt model designs of the early 1960s. It was designed by John D'Ottavio and was published in *Model Airplane News* in the April, 1961 issue. Many noted Eastern fliers made their early reputations flying a Falcon. Among these was a group of fiercely competitive Junior- and Senior-class fliers that included Buddy Wieder and George Jones. I remember being on the spectator side of the fence at many contests and watching these amazing young guns go at each other with their trusty, colorful Falcons.

The Falcon is still a great choice for Classic competition and my very good friend, Tom Niebuhr, has a beautiful kit for this model available through his company, Blue Sky Models.

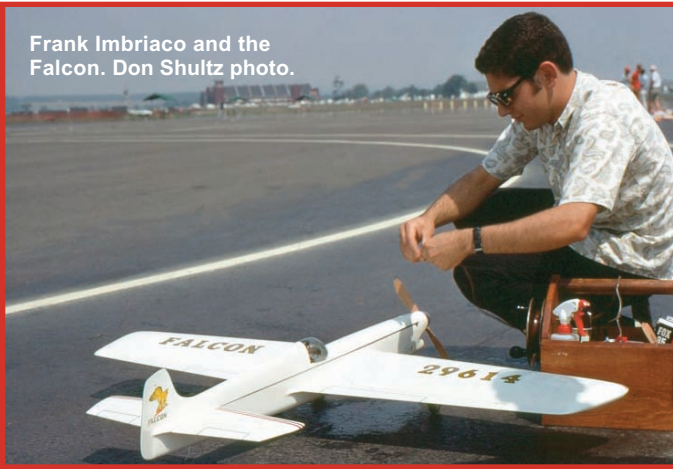
Not too long back I re-established contact with another old friend who was a fellow member of the Union Model Airplane Club in Union, New Jersey. Frank Imbriaco was an all-around good flier who did not specialize in Stunt, but still had a great interest in the event. Frank won Open Combat at the Nats one year!

I had been busy making some RC wings for the local precision RC Pattern group and they had begun sending some emails around about the wings and my services. It came up that I am a CL flier and the subject of the emails turned for a while to their experiences in CL. Frank is now flying RC Pattern and he was a recipient of those emails. He chimed in with a note that I found quite interesting and asked him if I could share it with you. Here's what Frank had to say ...

"Hey Guys, here's a photo from the 1969 Willow Grove, PA Nats that, up until today, I never knew existed. Thanks to Tom Luciano for discovering it on the internet! The model is the JD Falcon II, designed by John D'Ottavio. For those who don't know John, he was (and still is) an extremely talented builder/flier who was a dominant force on the Eastern Seaboard in the 50s and 60s. He also ran Stunt at some of the Nats and trained the Navy judges there.

"John is in his mid-late 80's now. He was an RC pilot in the 70s and 80s, from what I've been told. He sketched the fuselage [for the Falcon II] on a piece of poster board and gave me a cardboard template for the ribs. The wood was all hand-picked

Frank Imbriaco and the Falcon. Don Shultz photo.



from the wood bin at Tiny Tots (A local favorite hobby shop a few years back. —Bob) in Greenbrook, New Jersey. The guy running the place didn't take too kindly to me rummaging through his wood. I would drive to John's house once a month (usually on a Sunday afternoon) for him to check my progress, then I took notes (similar to what one would do in a class) on a steno pad for the next couple of weeks worth of work. A few times, we met at the Peter Pan Diner in Union and I also think I brought the ship (partially completed) once or twice into the eatery for his scrutiny. The reaction of the patrons was very positive; if my memory serves me 40 years later. Why I didn't record what John had to say I'll never know. It took 7 months to build; a bit long because I was in college at the time and my father complained about the smell of glue (C-77) and Aerogloss dope, so I had only a few hours each day to work on it.

"The 18 year old punk getting ready to run out the lines in the photo is me. I was so nervous that I never saw the photographer. I crashed it a month later at a contest at Mitchell Field, Long Island. It was very windy and I had too rich a setting on the Fox 35. The lines went slack on the Reverse Wingover and all control was lost. I rebuilt it only to crash it again a year later.

"Thanks for reminiscing with me. —Frank"

After reading Frank's email I immediately called him and asked if he still had the plans for the Falcon II. It had a bit different fuselage design than the original Falcon, with the cockpit area moved a bit aft from that of the original. I jumped on the chance to snag yet another lost Classic-legal design.

Alas, he said that he did at one time have those plans, but had long since lost or misplaced them. Oh well ...

A day or so later he sent me an email and excitedly informed me that he had done some searching and found the missing plans and sketches! We made arrangements to meet at the WRAM Show a few days later and he loaned me the plans. He also loaned me a photo taken of him and the Falcon II taken just after it had been built. The photo that he referred to in his email that was taken at the Nats in 1969 was actually posted on the Stunt Hangar website, but it was just too small (8kb!) to run here in print, and Frank did not have a larger version of that photo. It dawned on me that it might be one of the many great images from the 1969 Nats that Don Shultz has been posting on the Stunt Hangar website. A quick call to Don confirmed this, and Don even remembered Frank's name! Don re-scanned the slide which contained that image and forwarded it to me. Talk about networking! A very special thanks goes out to Don for this service.

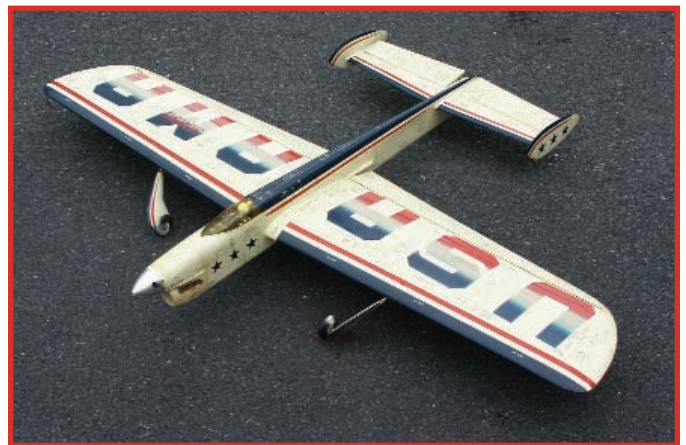
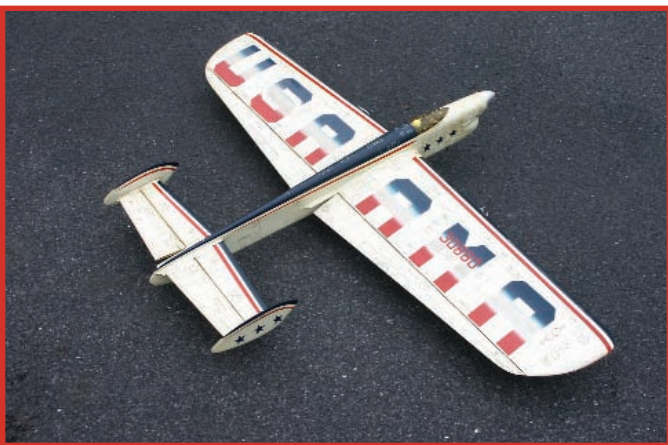
If there is sufficient interest in this one I will ink his plans and make them available, with all proceeds, after printing costs, going to John D'Ottavio. My thanks go out to Frank for his generosity.

I passed this column by my old buddy, Tom Niebuhr, so he could read it for accuracy prior to sending it off to layout. He informed me that John D'Ottavio actually had designed several versions of the Falcon. One had a bubble canopy and there was even one that was jet styled! Tom is looking for some photos of those models for use here.

**Tracking down these old designs** and establishing their legality for use in Classic Stunt is fun. Perhaps you might know of a ship that is laying around in the back of someone's shop that might be an old Classic Stunt-legal design. Please don't wait too long to find out if it is. If you find one, please make the effort to draw accurate plans and get the whole story of the design. Then let us know about it and we'll publicize it so that others might purchase a set of the plans and enjoy building it. *SN*

#### Sources:

Jay Dee Falcon kit  
Blue Sky Models  
Tom Niebuhr  
blueskymodels@mypbmail.com  
(469) 487-1256



Gene Schaffer's Oosa-ama was so named by his "buddies" because of the very large "USA" on one wing panel and the equally sized "AMA" on the other panel. It is actually the first Stunt Machine and it was designed and built in 1969. It was powered by an O.S. Max .35S engine and featured an extended-span Chipmonk foam core wing. Photos by Bob Hunt.

## Did you know that there are more accidents and injuries that occur at home than outside the home?

The subject of safety covers all aspects of modeling. Usually when we mention the subject of safety, we think primarily of flying. And then our first thought is that of the airplane—keeping it safe. I always consider it a good flying session (or contest) when everyone brings his or her airplane home again, all in one piece. Of course, we also want to bring the fliers home unhurt as well, along with any spectators who many have been watching. And, additionally, we want to make sure that we didn't damage someone else's property along the way. (There is a lot to think about here.)

But what about some safety thoughts before the airplane is even ready to fly? What about the building stages? Did you know that there are more accidents and injuries that occur at home than outside the home? It's true. So I would like to address the subject of safety while building.

Once again I tapped into the resource of those who use our Stuka Stunt Forum for ideas, helps, hints, and suggestions.

The first suggestion to appear on the forum, and a good way to begin, is to remind you to wear safety glasses at all times while working in the shop. Even as a spectator this is a good idea. I remember one time while I was "touring" the Sig Manufacturing factory, we stopped to watch a worker machining a part. We were standing a fair distance away and yet I got a small speck of metal in my eye. It didn't cause any permanent damage. I didn't have to go to the hospital. But my eye was red and irritated for a few days after the incident. It could have been worse. But it could have been avoided had I been wearing some type of safety glasses.



"... it could have been avoided had I been wearing some type of safety glasses."

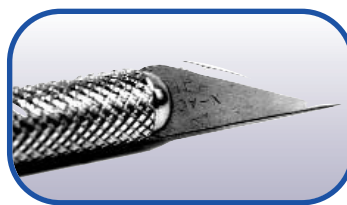
There are various types of safety glasses that one can get, but the type that has side shields or fits over your regular glasses if you wear them would be the type to look for. And there are added benefits in using these, even if you aren't thinking about slivers of something getting into your eye.

One modeler mentioned tipping over a bottle of thin CA and the fumes stung his eyes so that it bothered him for several days after. Have you ever tried to unplug a bottle of CA glue and have it squirt out once you get it opened? Just

imagine if it were aimed towards your eye. Some people have gotten CA on their fingers and then subconsciously rubbed their eye. (Not a good idea.) Again, if you were wearing safety glasses you couldn't do this. For all sorts of reasons this should be your starting point.

While on the subject of CA, I should maybe remind you that one brand calls itself "Hot Stuff" and for a reason. Yes, it is a "hot" glue to use, but it does, indeed, get hot when it kicks off. I remember a notable modeler a number of years ago mentioning the fact that he was gluing some parts and got up to change the channel on his TV. While doing so, he set the bottle of CA down on the stool that he was sitting on and accidentally tipped it over. He sat down on the stool again not thinking about it and the stuff kicked off. The story ended with him spending several hours in the bathtub soaking a tender spot on his, uh, body.

One of the problems with this hobby of ours is that we often work on things when we are tired. We may go out flying first and then come back and work on a project (maybe a plane we are trying to finish or a repair on one we just did). Even in the building season when we begin to work on a new project we always seem to extend that building time just a little longer than intended so we can get this or that part finished.



"Don't play with sharp knives when you are tired."

The advice given by one modeler and seconded by another is "don't play with sharp knives when you are tired." Yes, I know, we have used these types of knives since we were how old?

That sounds like an invitation to disaster. The moment we think we have "got it covered" is the moment it strikes back to bite. One modeler mentioned having just had 10 stitches removed from his index finger as a result of one such incident. If you are tired, if you are at a point where you might get a little rushed or a little careless, maybe it would be good to put it off until tomorrow.

And when you use your little modeling knife with its razor-sharp #11 Scalpel Blade that comes to an extreme point, in what direction do you carve or cut with it? You should take care to never cut towards yourself. One slip, one moment of indiscretion, and that story of the 10 stitches in some part of your anatomy could be you. In the real world there is a saying that "There are two types of people who fly retractable wheel

airplanes: Those who have landed wheels up, and those who will.” Well, “There are two types of people playing with sharp knives: Those who have cut themselves, and ... ”

Do you still have a round handle on your knife? And do you still just set it down on your workbench while you are working on a project? And how often, now, has it rolled off and hit the floor (or your foot or the cat)? There are some neat little three-sided sleeves that are made to fit over pencils that you can get at the office supply store that also work nicely on our thin X-Acto knives. You slide one on the handle and it will keep it from rolling when you set it down. They are two for a quarter or thereabouts. One enterprising modeler even cut them in half and got four for his money. Put these on all of your knives and your cat will thank you.

Another solution for the same problem is to drill a small hole in the end of the handle of a size large enough to slip a split ring key ring through the handle. This will not only keep it from rolling, but give you a ring that can be used to hang it up when you are done with it. I guess I am just a bit squeamish about the latter application because I hate to see a knife hung up with the blade hanging down. If this should ever slip off of its hook, then it is a dart looking for a target. I have always felt that those dogs that you see with their tails bobbed weren't all done that way on purpose.

You do wear shoes in the shop, don't you? I have a nasty habit of taking my shoes off whenever I step into the house.



“You do wear shoes in the shop, don't you?”

Maybe it is not so bad when you are lounging around in your carpeted living room, but don't get into this habit while in the workshop. It isn't just knives that hit the floor, and our feet always seem to go where this stuff has landed. You don't want to drop something onto your foot, and you don't want to drop your foot onto something that you hadn't intended. It is bad enough that our workbenches are cluttered, but you would be surprised what is on some people's floors! (Or maybe not.)

Oh, by the way, what do you do with your used blades when you are done with them? The problem with disposable blades is we have to dispose of them. If you ever go to a doctor's office (like when you need stitches after getting cut) you will notice that they have a “sharps container” into which they deposit all of their used needles. It is not a bad idea to have such a contraption to use for our blades that we have disposed of. You could use a quart milk jug for this or a small jar, or some other plastic container. It is best that you use plastic so that if you drop it you don't have broken glass and sharp knife blades all over the floor.

I haven't even gotten into power tool safety, and this might be a subject for another whole column. A quick item here is watch for loose clothing around belts, drills, lathes,

and the like. These critters just reach out and grab you when you are not looking.

Does anyone have a main power switch where they can turn everything off in their workshop? When we fixed up Matt's workshop in his basement, we wired up good overhead lighting with three-way switches and put in extra outlets, but it never occurred to us to add a switch for the outlets. Having such a switch, you can flip it when you leave and you can know that you have everything turned off.

Oh, and you do have a fire extinguisher handy, don't you? I didn't start that way, but I am going to end on this note.

“Oh, and you do have a fire extinguisher handy, don't you?”



Everyone needs to have a fire extinguisher and a first-aid kit in the car and in the workshop.

Accidents do happen. So we need to be as careful as we can be in the use of our tools and equipment, and also be prepared for that moment when we turned off the brain just a little bit sooner than we should have.

Next time I will be back with more tips. Until then, whenever you build or fly, always think safety. And if you have an idea or a tip, please pass it on by e-mail ([MrStuka@CLStunt.com](mailto:MrStuka@CLStunt.com)) or join us on the forum at [www.clstunt.com/htdocs/dc/dcboard.php](http://www.clstunt.com/htdocs/dc/dcboard.php). You can post your suggestions there.

Until next time, keep your fingers out of the prop and your toes away from those sharp knives. *SN*

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**Q**uestion: **How do I pay my dues?** I asked this question, of course, tongue-in-cheek. I decided to take a short break from the technical and treat it as a regular question.

**Short Answer:** If you have to ask, you haven't; it's not a monetary thing.

**Long Answer:** This question addresses the age old act of volunteerism, and its not so cleanly defined inner and outer edges. "Paying your dues" is a neatly designed phrase that is meant to encapsulate a set of contributions, usually life-long contributions, that requires energy and momentum above and beyond simple membership or participation.

It would be something like club or organization officers, or the people that take care of the paperwork on contest day, or even your family members pitching in for the cause. If you are in the doers, movers, and shakers category, you are said (by others) to be "paying your dues." Once you don't have the energy to support or sustain your volunteerism at or near your previously set level, or for one reason or another can't support any longer, then you are said to have "paid your dues."

You can declare yourself to have paid your dues; however, that is usually met with some polite silence since it is politically incorrect to declare yourself "paid" in comparison to someone else (anyone else) doing so. The biggest problem with contributing is that once you do, you are then expected to. But, that is more than offset by the rewards of having contributed.

Inside the modeling community you will find folks paying their dues as the spark plugs that get or keep a club or event running. The fact that they are still doing it, year after thankless year of expected or assumed task performance, tells you they obviously don't think that their dues are paid up yet. Some people, crazy as they are, actually enjoy the "administrivia" of the team play that keeps a club or event running smoothly.

Most expect no thanks or recognition, but believe me, they are eminently grateful for even the smallest thanks or recognition.

Who are these tireless workers? The fellow who runs the score sheets back and forth from the judges to the scoring table—all day—then sticks around to help pick up the trash on the field at the end of the day. The lady who judges, or tabulates, or makes sure there is some kind of snack or drink available for the workers to keep on going. The guy and his son that come out to the field through the week to mow it, mark it, and make sure the pit, and shelter, and the half-full trash cans are taken care of.

The gal who runs the pull-test like a combat veteran for every single flight, then helps with the trophies and awards during the presentations. These are the seen, but not recognized, minority that an organization like ours would

shrivel and die without. They are paying their dues every day to keep the Stunt machine, and all its tiny pieces, going and going and going.

So, how about those people who think they have "paid their dues"? They probably have, wish they could do more, and can't find any good reason not to, except that maybe they can't keep up the pace any longer. Be kind to them; they probably are just a little embarrassed that they can't keep up that pace.

It's their way of letting you know they still want to, but can't.

**Question: Can I use one of the new .25 engines in my .35 size plane?**

I can't tell you how many times I've been asked this question, or even how many more times it will be asked. It's a great question, and it deserves a great answer. I did not get to stay at the VSC very long this year (work got in the way) but in the short time that I was there, the use of new .25s came up no less than four times from four different people.

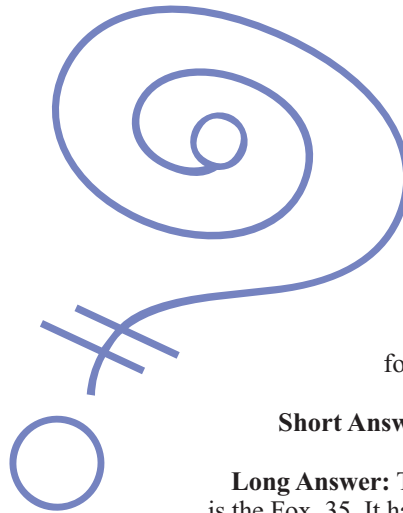
**Short Answer:** Yes.

**Long Answer:** The measuring stick for Stunt, engine wise, is the Fox .35. It has been around since 1948, and basically Duke Fox got the power/weight/rpm/fuel consumption thing correct the first time out. Too many planes to count have been designed for the Fox, and since it is still available today in essentially the same form-fit-and-function, and it is still the first choice for many Stunt fliers. I know that I still have a few, and use them.

Need a little more power than the Fox? Mount a Brodak .40. Need a little less power? Mount a Veco .19. I noticed there are very few .19s being used these days, but the Veco .19 can be used to power most .35 sized planes and nearly all the early profiles and combat planes. At a slightly higher penalty for weight, you can also use the Enya .19, and slightly less power can be had with a McCoy .19.

Many of us used .19s on our planes in the day, and a well built Ringmaster, or Flite Streak, or Tomahawk, or even a Shoestring could hold its own in the Stunt circle. Voodoos and Combat Cats didn't suffer much from the reduced power either. Between the .19s and .35s are several .29s that are more than acceptable; the Johnson, Fox, Enya, McCoy, and O.S. all come to mind, but those engines will usually be run at a two-four break instead of a constant two-cycle like would be done with the .19s.

So, how about those new .25s? Logic tells you that if a .19 would do the job in years past, then a .25 should do even better. The question is not so much displacement, as it is the style of use. A Fox .35, in proper environment and use, will run at the famous two-four break, peaking in a two-cycle at around 9,000 rpm, and wasting fuel all through the four-cycle at a slightly lower rpm. While it is esthetically pleasing, it is not efficient, or cost effective.





The key to flying those old Stunt planes with a .19 was higher rpm, and that is what kept them in the air as well. A steady two-cycle between 10 and 12,000 rpm usually did the job. The new .25s are the same way, and they have noticeably more punch at higher rpm, with excellent fuel economy to boot! You need to get the rpm up into their "power band" and they will outfly the standard Stunt .35s of the past.

How do the engines compare? Well, if you look at the parts list comparison between the O.S. .25 FP-S and O.S. LA .25, you will see that most of the internals are the same, and only the externals differ. In fact, of the 20 parts listed for the FP-S, 10 are identical including the crankshaft, connecting rod, venturi and muffler.

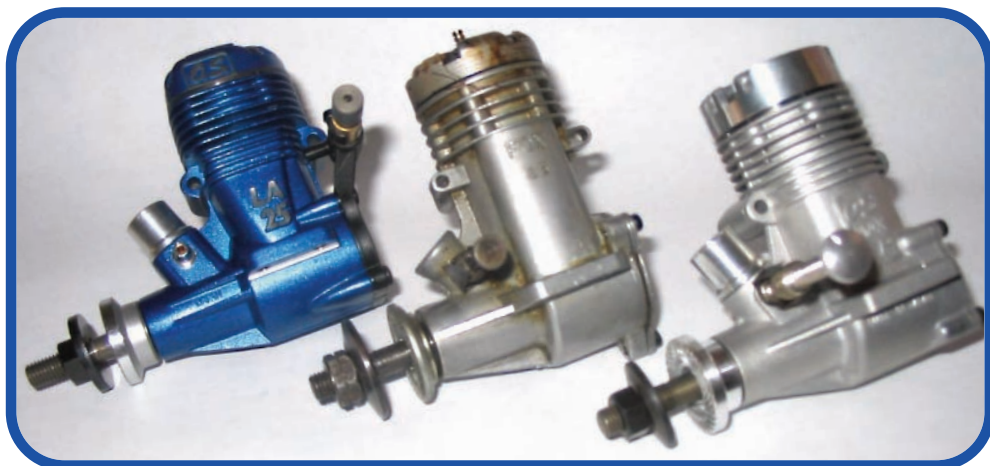
The piston and cylinders part numbers differ, but my guess (since I really don't know) is that they may be interchangeable as well. The LA has a power range of around 0.6 Brake Horsepower (BHP) at 15,000 rpm, and the FP-S has the same. A normal Fox .35, on a normal day, will produce around 0.45 BHP at 9,500 rpm. Granted, the Fox

swings a more meaty 10 x 6 prop than the usual 9 x 4 used on most modern .25s, but the gas mileage is significantly different, with the new .25s producing more BHP on 4 ounces of fuel than the Fox will produce on 6 ounces.

Now that we've established the possibility of using one of the new .25s in place of a Fox (or similar engine), let's look at a couple of other engines. The .28s are also a good deal, as well as the .32s and 34s.

Are they CL engines like the LA and FP-S? Well, no. Do they have more power and great gas mileage? Yes. You should also consider the GMS .25 with 0.85 BHP at 18,000 rpm, the Magnum .28 with 0.87 BHP between 16 and 18,000 rpm, and the Thunder Tiger .28 with 0.70 BHP at 16,000 rpm. These last three will need to be fitted for a venturi to replace the carburetor, or wire the carburetor open.

To take advantage of the increased safety, some Stunt fliers have moved to the remote type needle valve, like the one shown on the .25 LA. Although the .25 remote is part of the backplate on the .24 LA, you can convert any engine to this



A new .25 LA (Stunt), a slightly used Fox, and a new .25 FP-S shown for size comparison. Note the .25s will interchange, but the Fox has a slightly shorter crankshaft. If you are worried about balance, remember the shorter shaft will move the weight further away from the balance point (like sliding back on the schoolyard see-saw). The .25s will seem lighter because their weight is closer to the balance point, and you know what happens to tail-heavy airplanes ...



The three engines again, this time with a better view of the venturi and mounting lugs. The .25s do exactly interchange, and depending on your skills at finessing an engine they can be put into place with the Fox as well. Best bet is to re-measure and use two of the existing Fox mount holes with two new .25 holes.



The backplates are the key feature for this shot. You can't help but notice the LA has a remote built-in needle valve, the other two have the conventional backplates, and the just-behind-the-prop arrangement for needle valves. Many .25 LA fliers opt for the metal backplate and either the standard needle valve, or the remote needle valve like the .40-.46 needle valve noted in the text.

style of needle valve with the following three parts: *O.S. Nozzle 20-40FPS RN* (Spraybar), O.S. Number 21381980, Tower Hobbies Number LXMU30. *O.S. Valve Assembly 40-65LA* (valve body), O.S. Number 26582900, Tower Hobbies Number LXMW56. *O.S. Needle Stay New 40LA* (mount bracket), O.S. Number 24007120, Tower Hobbies Number LXPV85. Not bad for under \$30 plus shipping.

The .25 size through .46 O.S. Venturi is: *O.S. Venturi Large 40FP/S*, O.S. Number 23312000, Tower Hobbies Number LXCX05. In case you want to try and convert any of the RC engines mentioned to CL, these venturis are a good place to start. Some fliers swear by the smaller engines, some even use tuned pipes to steady the run and peak the power, but that is another set of questions entirely.

Happy Trails. *SN*

#### Editor's note:

I'm sure that Ken was writing above only about engines with which he has had some experience. There is another line of engines out there that fit the criteria outlined by Ken splendidly. The Enya SS line of engines includes a .25 that runs exceptionally well and even has a great two-four break! Enya engines have long been known and revered for their power, reliability, quality and longevity. Enya has recently released several new engines in the .25 to .32 size range, and a couple of them even feature rear exhaust. Enya has also supported us CL types by making a large number of their engines already setup for CL with venturis. I understand that Randy Smith of Aero Products is now an Enya distributor and he can answer your questions about the entire Enya CL line of engines I'm sure.

—Bob Hunt

## Mid Iowa Control Liners' Contest Results

—Des Moines, Iowa

We held our 12<sup>th</sup> Early Bird Contest May 2-3. We had two well-manicured grass circles and also an on site rest room, as we are located in Big Creek State Park. The weather was perfect with light winds and a high of 72 degrees. We provided lunch both days which proved to be a good time.

We had 18 stunt flyers and three of them were new to the event. We have lanes and numbers painted in the pits, so that each pilot has a marked lane and can feel comfortable leaving their lines out. We used the new pull test based on weight and all went well. We also used the no-pattern-points rule in PAMPA again with out any problems.

A big thank you goes to John Brodak, Hobby Haven, Bob Brookins, Crist Rigotti, and Bob Jennings for the merchandise they gave the club.

#### OLD TIME

Judges: Jim Funk and Paul McElrath

Jim Lee	292
Sina Goudarzi	285.5
Keith Sandberg	280.5
Mike Schmitt	277.5
Christ Rigotti	273
Floyd Layton	260.5
Larry Lindberg	247.5

#### PAMPA EXPERT

Judges: Bob Brookins and Greg Voumard

Jim Lee	539
Dennis Vanderkur	536.5
Ed Prohaska	530
Keith Sandberg	529
Larry Lindberg	525
Mike Schmitt	510.5
Christ Rigotti	506.5
Sina Goudarzi	505

#### ADVANCED

Judges: Mike Anderson & Sam Sciorrotta

Jared Hayes	469
Greg Voumard	459
Bill Calkins	436.5
Ivars Greizins	435.5
Jim Funk	434
Bud Budzioch	433.5

#### 56 Stunt News

#### INTERMEDIATE

John Christensen	425.5
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#### BEGINNING

David Smith	222
Tony Kubes	206
Clark Baldus	67.5

#### P-40

Judges: Bob Brookins and Greg Voumard

#### EXPERT AND ADVANCED

Dennis Vanderkur	530
Jim Lee	527
Keith Sandberg	519.5
Sina Goudarzi	511.5
Crist Rigotti	496
Larry Lindberg	494
Mike Schmitt	492
Bud Bodzioch	489
Ivars Greizin	479.5
Floyd Layton	81.5

#### CLASSIC

Judges: Paul McElrath and Jim Funk

Ed Prohaska	543
Mike Schmitt	522.5
Jeff Welliver	502.5
Larry Lindberg	497
Floyd Layton	450

A big thank you goes to all of the people who helped make our contest a success.

Tabulators Elaine Brookins-Theresa Voumard  
 Pit Layouts & Pit Boss Randy McMahl  
 Registration Fred Miller  
 Food Pat Anderson  
 Raffle Jim Funk  
 Runner Clark Baldus (my grandson)  
 Mowers Mal Fawley-Dave Wicks- Bob Baldus  
 Judges Bob Brookins-Greg Voumard -Jim Funk-Sam Sciorrotta-Mike Anderson-Paul McElrath

CONTEST DIRECTOR Mike Anderson  
 STUNT DIRECTOR Bob Baldus

By Scott Richlen ←

## This Month's Topic: The Club Contest

**D**oes your club sponsor a contest? Many of us visit Stunt contests held by other clubs, but do we reciprocate? When is it your club's turn in the barrel? I know that hosting a contest can be a lot of work and that may result in the reluctance of some members to help out. Or maybe you are in a club where there are not enough members interested in PA to want to sponsor a contest. What then? Well, how about holding a Club Contest?

What's a Club Contest? As opposed to a standard sanctioned event such as PA, it's a contest that the club holds mainly for itself. Because of that, it can be designed to meet the interests of the club. Do you have members who like scale and others who like racing? Combine these two interests and hold your own little Reno Race. Have a larger mix of interests? Hold a multi-event contest. Years ago NVCL held the NOVACLONE contest (meaning Northern Virginia ControlLine ONE design contest). It started with minimal

design requirements (everyone had to use the same rib profile and certain minimum measurements), and the events included a building component, Beauty, along with three flying components: Stunt, Duration, and Rat Race. Some of these contests can really take off and capture the interest of a club—at least for a few years. But these things seem to have a cycle and, after about five years, the interest in the NOVACLONE contest slackened and we moved on to balloon bust and 1/2A Combat and then we settled in on the Musciano Commemorative for quite a few years.

**These various Club Contests** led us to the point of having enough confidence that four years ago we hosted our first PA contest. By its third year, we had added Old-Time Stunt. The contest is run for all four classes. So for the last three years we held two AMA sanctioned contests a year—our NVCL Stunt Contest and our Musciano Commemorative. But, like other specialty contests, the Musciano

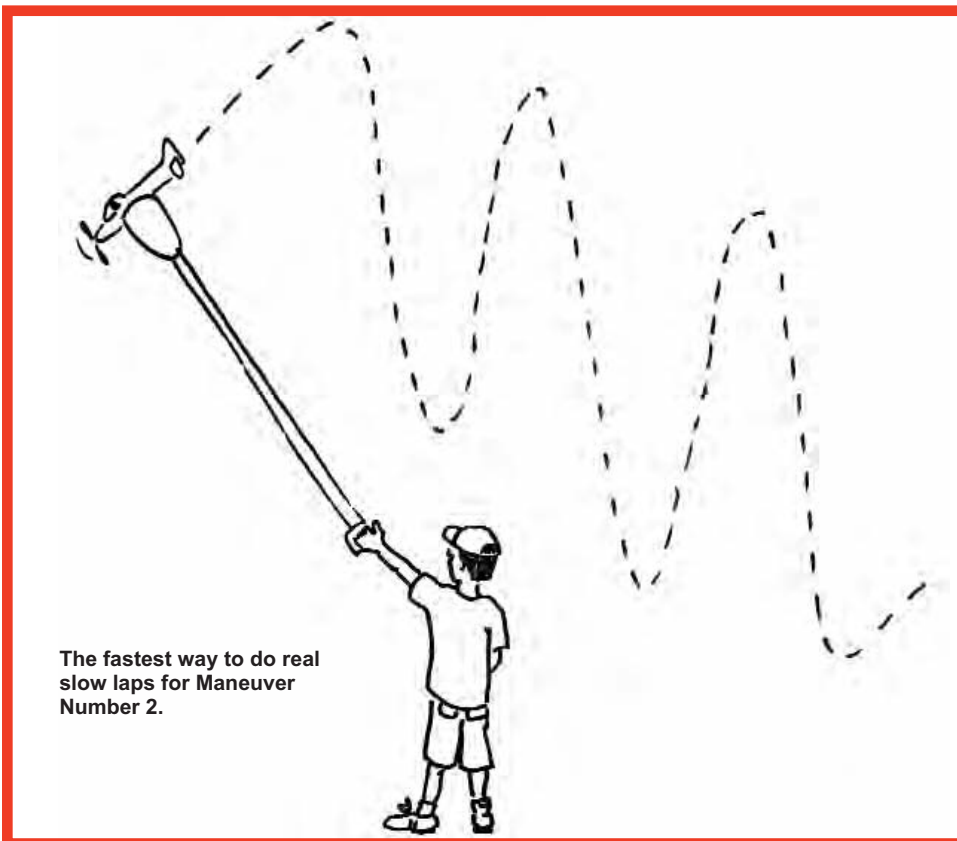
Commemorative had its cycle and for the last couple years had been on the decline with fewer members participating. At a meeting last fall we had a long and serious discussion as to whether or not we would hold it again, and if not, what would we do instead? We put off the decision until this spring so everyone could ponder their options and decide if they wanted to stay with the Musciano or propose something new. So this last winter was time to decide: would we keep the Musciano contest or move on to a new event?

Sadly, we just didn't see enough support in the club to run another Musciano contest. A couple of us die-hards were willing but recognized that there were only a few of us and it was probably time to move on. We discussed a number of candidates for a mid-summer event and decided on a new contest very much focused on fun with as much luck as skill involved. As mentioned above, we already sponsor a Stunt contest in the fall, in which some

of our members participate but others don't, as they feel they can't perform acrobatics well enough to win. So we wanted to pick something a bit more inclusive. We wanted to pick something that incorporated aerobatics but that almost anyone who could fly would have a competitive chance at winning. We also wanted simplicity, so we specified almost no restrictions on plane or engine as long as safety rules are adhered to. We came up with an event in which almost any plane could fly but with the only restriction being that the engine cannot be throttled. A confession: the event was partially inspired by Dave Cook's article on the Masters Pattern, except this is perhaps on the opposite end of the skill ladder—maybe. A description of the event follows.

### NVCL Olympiad

The NVCL Olympiad consists of a single flight containing six maneuvers. The original event only had five maneuvers to correspond with the five rings of the Olympic



The fastest way to do real slow laps for Maneuver Number 2.

symbol—thus Olympiad. But of course we couldn't leave a good thing alone and had to add a sixth maneuver. As was pointed out: "Well, you do have to land, don't cha?"

**The maneuvers in order:**

- 1) Quickest wing-over after take-off (roll-out starting from the beginning of the launch pad or hand-launch from the beginning of the launch pad)
- 2) Slowest two (2) consecutive laps without inverting
- 3) Highest (angle) five (5) consecutive laps (your body must turn with the plane, i.e., you cannot stand stationary and do the five loops at the top of the circle)
- 4) One (1) non-turning level lap (you stand still and the airplane transits one level lap, i.e., your arm holding the control handle will most probably move like you are twirling a lasso)
- 5) Opposite hand two (2) consecutive laps with included loop\*
- 6) Land on launch pad

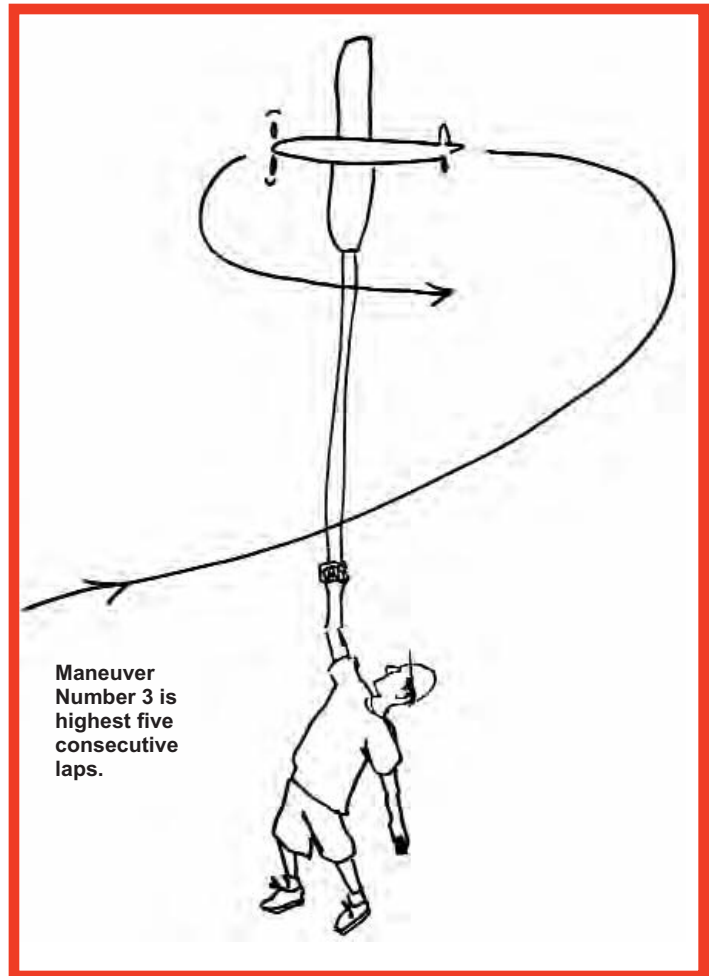
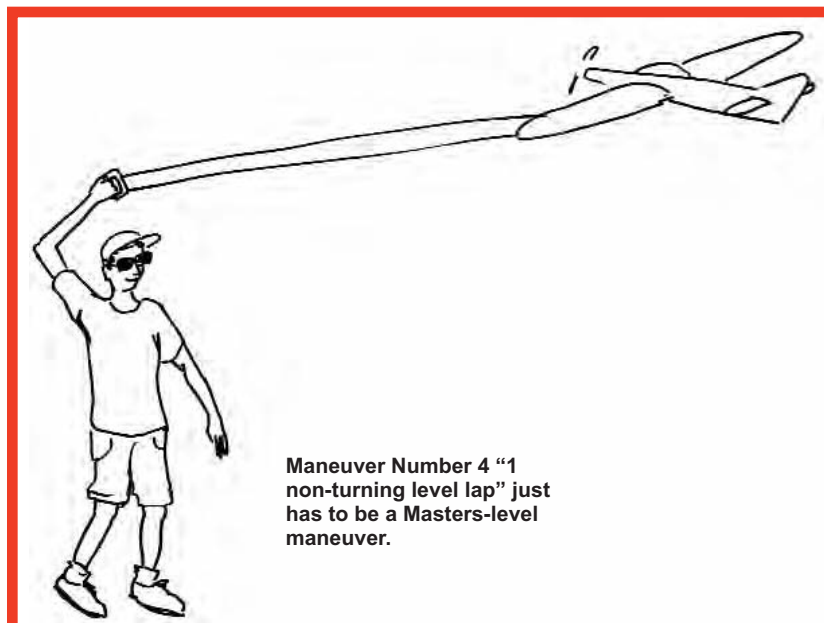
\* Bonus of 10 points if maneuver, 2 laps plus loop, performed inverted.

Scoring is 10 points for best maneuver, 7 for second best, 3 for third best for maneuvers 1, 2, 3, and 6. Scoring for maneuvers 4 and 5 is either 10 or zero; in the case of maneuver 5 in the bonus situation, 20 or zero. The potential high score of 60 points with 70 if bonus is successfully performed on maneuver 5.

[Photo Clubs 17 Richlen 03.jpg goes here]  
**Maneuver Number 4 "1 non-turning level lap" just has to be a Masters-level maneuver.**

**Comments on the maneuvers:**

- 1) Seems like a high power to weight ratio would be a good thing for this maneuver and that line tension is king. However, if power to weight ratio results in high speeds, you'll pay for it in the very next maneuver.



- 2) This looks like it would take either some kind of helicopter/saber-dance maneuver or a series of steep climbs and dives to make the slowest circuit. But watch those climbs and dives! If they go past vertical, you've just inverted—a big No! No!
- 3) This one is actually a physical challenge—Can you turn five times looking straight up and then not fall on your can (and crash)?
- 4) Pure Machiavellian! If Dave Cook really wants a Masters Pattern maneuver—well, here it is! Difficulty multiplier of about 1.3 zillionth! Hey, if this maneuver catches on, I want it named after me! Don't you get nominated for the PAMPA Hall of Fame for inventing stuff like this? (*Only posthumously!* —Ed)
- 5) Okay, well this one is a gimme for those of you who are ambidextrous. But if we know that about you ahead of time, we get to blindfold you!
- 6) Yeah, I already know what you are thinking! But the maneuver is described as "land," not "crash," "auger in," or "vertically-abrupt landing."

Scheduled date for this contest is July 11.

(I want to add a special thanks to my daughter, Gwen Jones, for doing the drawings for this column.) SN

By Robert Storick



Here's Bob's SV-100 ready for the clear coat. All of Bob's models are well finished and carefully detailed.



Bob and his dad pose for the clickers at the 2008 Nats with Bob's magnificent Continental. This model was inspired by the original Continental by Tom Warden. Bob's is a bit larger and packs more power with a tuned-pipe setup and a PA.75 engine.

**S**orry for not having a full article for your first introduction to my building column. I volunteered a few days before deadline. As I always have a building project going year round, this will not be hard for the next issue. In my column I will show how I build so fast and with accuracy.

I have been building model airplanes since the 60s. I had the luxury of having a father who was very supportive of my hobby. My parents owned a hobby shop in the Los Angeles area and I had an endless supply of parts. One funny story I can tell is about when my parents gave up the master bedroom for my airplanes. After some time I ran out of space there, so the two-car garage was cleared out and I set up shop out there. No cars or lawn equipment allowed, just airplanes.

**You can build** what you see! Let me explain. My S6B is nothing more than a Billy Werwage Thunderbolt—same numbers, different aesthetics. I am quite sure many of you have done the same thing. In the next few issues I will be building a new Viper which is a whole set of numbers unto its own. Meaning, I copied no existing airplane!

This type of building was quite prevalent in years past. I would draw on a napkin and build from there. There were no rules no set airfoils or magic numbers. If it looks right it probably is right. A wealth of knowledge is gained from experimentation. After building hundreds of airplanes you will kind of get a grip on what will work. You can make anything fly if it straight, light and ridged.

The true joy of building for me is to create something that looks in motion as if it was formed by the wind. The flowing lines of the earlier cars are a good example of this. Innovation comes from free thinking.

Look at Jack Sheeks: now there was a prolific builder. When I was young he was pumping out an airplane a month

and they were all different. Jack was probably the biggest influence on my building in my youth, even though I had never met him. As a 40-year-old kid, I finally did meet Jack at a contest at Ft.

Benjamin Harris. It was such a thrill for me. He still is the builder I wish I was.

The next influences on me were Tom Warden and Bill Noyes. At the time Tom was flying his Continental and Bill was flying his Pieces. These two airplanes were stunning pieces of art. The Minado and Continental are still sometimes shown, and if you have ever seen them you would know what drew me to this hobby. Bill's Pieces was a metallic blue Jet and it was a true masterpiece.

As a young man I asked them each how much did they pay for them? They answered, "You can't buy these; you have to build them." I was hooked. I had to have an airplane that looked that good. Tom worked for the Testors Corporation and had the best wood in the Los Angeles area. He gave me enough wood to build two planes. A friend of mine and I built Futra profiles. These were large. ST.46-powered ships and were the predecessors of his full-body Futra.

My Viper came into being around 1990 and I have built many of them and in many different configurations. The saga has come full circle and I am back to yesterday's numbers with today's power trains and materials. In my next column I will explain in detail how I developed this airplane.

To me it has the *look* of classic but the *punch* of one of today's designs. Plans will be made available as the final version is ready for release. I still might do an I-Beam version of it, as now the carbon fiber products available makes it possible to build one that is very strong. Nothing looks better to me than an I-Beam done right.

My Viper has been powered by everything from an FP .40 to a piped FP .40, an O.S. .32, a VF .40, a VF .46, a PA .40UL, and now a PA.65.

**I think the hardest thing** in building for someone to grasp is sanding. Sanding makes the airplane. It would be impossible for me to teach sanding or carving in print. I can however give you some tips. Look at shapes that appeal to you (I like cars from the 1950s) and try to copy those shapes into your model. Draw it in full-scale and tape the drawing to the wall. Stand back and see if it really is what your mind sees. If not, adjust the shape on paper. This step will save added grief later.

Now that you have the shape it's time to rough cut it in wood. Leave plenty of excess wood for carving later. Use your favorite method for rough cutting a band saw works best for me. If it's a top block, tack glue it into position. A razor plane or #27 Whittlers blade works well for shaping.

Draw a center line down the top and then carve the block to rough shape. After shaping I use #30 grit sand paper to remove the high spots. Be careful as the #30 grit sandpaper will remove a ton of material quickly. Progress down in sandpaper grit till you reach #220 grit. At this #220 mark is where the final shape is achieved.

Use a 100-watt light bulb in a lamp with no shade to *candle* the project. If you're going to use carbon mat on the fuselage you can stop sanding at #220 grit paper. If not, and you're going to use tissue, you probably should keep reducing the grit to #320.

Proper sanding techniques take years of practice to truly master and you will continue to learn along the way. Always use a sanding block (soft or hard, depending on the shapes you want to achieve). Don't be afraid to ask the pros how they get such great lines.

Ask other modelers for their shaping and sanding secrets, but also think outside the box and ask auto body repair professionals for their tips and secrets as well. Ask them how they achieve such straight lines when they are shaping and sanding.

Straight lines on your work are the most difficult things to achieve. Stop by any small body shop and ask questions. I am quite sure the professionals there will talk to you and show you their tricks. Most are happy to help. While you're there ask them paint questions; most of them know it all.

Well that's it for this issue. I need to get started on next issue's project: my new Viper 1.0.

If you have any questions just ask. You can find me on the Web at [www.stunthanger.com/smf](http://www.stunthanger.com/smf). *SN*



One of Bob's most unusual projects was his Supermarine S6B which was built around Billy Werwage's Thunderbolt "numbers." It is powered by a PA 65 that is fitted with a muffler. It weighs a svelte 58 ounces!



Bob built three Billy Werwage P-47 Thunderbolts. This is the third one and it is powered by a PA .75 with a pipe. Note the intricate panel detailing and the abundance of fine paint trim.



Here's Bob's original design Viper 8. It weighs 52 1/2 ounces and is powered by a PA.65 with a pipe. Bob likes lightweight stunt models and his building techniques will help others to achieve lighter models as well.

# Tips, Hints, and SWAGs

By Bob Whitley

“Cause you can always add weight if needed!”



It has been my experience that there are many Stunt models being flown that do not perform as well as they might. This performance deficiency is almost always due to a combination of many things that are not routinely obvious or that the builder/pilot is aware of. In this column I will try to address these items and suggest ways to get the most performance out of a given model.

The most important thing needed to have a good-flying model is to match the engine and airframe. For instance, you should always have an abundance of power to work with. Very few of our Stunt models have an excess of power, which in turn leads to a condition of “I don’t have enough power!”

The first step or decision you must make is the type of model you want and then you must match the engine to that plane. This will ensure that after all the hard work and labor, you will have a successful and good-flying model. I anticipate that this column may cover a lot of ground and some of the suggestions and conclusions might seem obvious. I do hope that it will help shed some light and make more sense out of a myriad of ideas.

## The Plane

The size/type of model that you decide on is usually what determines the size/type of engine that should be used. In virtually all cases, it will be the wing loading and airfoil that determines how well a given model will perform.

Always, always strive to build the lightest finished model you possibly can. No one can build a model that is too light! Why? ‘Cause you can always add

weight if needed! On the other hand, a model that is heavy is not fixable, since there is no way to reduce the weight after it is finished. Not possible. The above is an absolute and in concrete.

## The Engine

Once you have decided on the model that you are going to build, you will be able to choose the engine. I always follow the rule that if a little is good and a lot is better, then way too much is

just about right!

There are many model designs to choose from and usually the designer will tell you which engine to use. The recommended engine/airframe combination is usually a compromise that works in the realm of pretty good, but not great. It will almost always be an average performer unless we fix the problem first.

Kit manufacturers will usually say that a range of two to three different engine sizes will fly a given model. The largest is the one that should be used. Power to weight is a vital component in having a good-flying plane. There are no “heavy” planes; only planes with heavy wing loadings. A small wing trying to carry a lot of weight will never fly as well as a large wing with light weight. There is no argument about this—it is fact.

In our world of Stunt models, we generally use the term “Ounces per square foot” to designate light, medium and heavy models. The acceptable wing loadings are 10 ounces and below for a light one; between 10 and 12 for a medium weight; anything over 12 ounces is heavy. There will, of course, be some overlap; but, not much.

Let’s assume that the plane that we’re going to build has a 10-11 oz./sq. ft. wing loading and will have a 50- to 54-inch wingspan. A good strong .40 engine will be sufficient if everything works perfectly all the time. Since this is not possible, we want to use a .46 or a .61 in this plane.

What we will have now is more adjustability and a wider power band to work with. It also means more propeller

variety to fine-tune the engine/prop combo.

So, a general rule might read: “Always use one size larger engine than you think is needed.” Remember, you can always de-tune an engine; but, never can you get more power than it is capable of.

## The Big One

This is the make or break rule that *must* be observed at all times! One must never vary or lose sight of it, no matter what! You must persevere at all cost to build your model “straight and accurate” and without any warps. There is no room for errors or mistakes in alignment. An otherwise great model will be junk if it is not aligned perfectly when built. This is the one thing that will trump light weight and power. Enough said.

## Making the engine run the way you want it to

Over the past few years I have been educated on two-stroke engines and how to tune them for Stunt use. I will leave the tuned pipe set-ups for another day. Everything that follows will work on any two-stroke model engine—with or without mufflers. Hang in, this gets pretty good!

Most of us were raised on the idea that the four-two-four break was the way to go. And so it was for a very long time. Not too difficult to figure out and fairly user-friendly. For the sport flier or Sunday flier this will suffice. To get the most out of your engine/plane combo though, you will want to follow along, as things are about to change for the better.

We are all after that ideal engine run that makes for a smooth and powerful pattern. In the old days, that meant a steady four-stroke with a two-stroke break at the tops of the maneuvers and then returning to a steady four-stroke. Any number of ways have been tried to achieve this and a lot of them did provide the wanted result. I am here to tell you that you can have a steady, repeatable run every time regardless of the weather conditions and/or time of day.

Almost always, pilots will adjust the needle valve for the style or type of run desired. This works for your average engine and plane. If you are happy with this minimum ability to tune your

engine, then read no further. Everyone else needs to pay close attention as “How to Tune Your Engine” begins.

The single largest factor that one must have is what I wrote above: A strong, steady and repeatable engine run. The steady application and the required amount of torque at a given time is the basis for our discussion.

Torque turns things. Crankshafts turn props. Therefore, it takes a certain amount of torque to turn the crankshaft. The more torque one has available, the larger and/or more pitch one can use in a given situation.

As my friend and mentor says, we should always operate on the left side of the torque curve, also known as the fat side. As model airplane pilots, this is usually the middle range of the four-stroke.

We as Stunt pilots like the steady four-stroke run, as this will enable us to present a smooth pattern. Getting an engine to run in this four-stroke mode is not as difficult as it seems when a few tuning tricks are used. We can do this to any engine; but, since I am presently using Double Star engines, these will be the basis for what follows. The model design we will use for now will be the Chizler, which was designed by Dick “Fast Richard” Mathis. It is essentially a re-worked Nobler. (Aren’t they all?)

This model weighs 46.5 ounces and I am using a Double Star .54 with a 10.5 x 5.75-inch carbon three-blade prop from Brian Eather. I’m using a 4-ounce clunk tank with muffler pressure connected to the uni-flow pick-up. As for fuel, this is where things begin to change from what is normally done.

Depending on weather conditions, I will use anywhere between 5% and 30% nitro. The amount of nitro varies flight to flight. As temperatures increase or density attitude goes up, so does the amount of nitro that is needed.

We all know that on a cold morning, we usually open up the needle valve so as to keep from having a lean run. This happens because the fuel mixture changes due to the density of the air. An air/fuel mixture of around 12.5/13 to one is about right for most engines. As the temperature of the air goes up, if we don’t turn the needle in or lean out the mixture, the engine will run in a richer condition. By turning the needle valve in, we are leaning out the fuel and keeping the air/fuel ratio at the desired 13/1. However, we are also reducing the power because we are now limiting the amount of mixture that the engine sees. Sure, it sounds good, but will be down

on power as compared to the morning runs. How to get the power back, that is the question.

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**As the air warms up  
or we go to a higher  
altitude, the air gets  
less dense, which  
means less oxygen.**

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As the air warms up or we go to a higher altitude, the air gets less dense, which means less oxygen. This is why we end up with a leaner mixture. A leaner mixture means less power and no one wants less power! The answer then is to put back the oxygen by increasing the nitro percentage. Think of it as supercharging your engine. The result of increasing the amount of nitro is that the engine now thinks it is running at a lower altitude. This in turn means you must open up the needle valve so as to allow more mixture into the engine. The more mixture the engine receives, the more power it will make.

Once it is set up correctly, you will very rarely adjust the needle valve. All the power adjustments will be done now by varying the amount of nitro, venturi size and compression. I can start in the morning using 10% nitro and end up using 25% later in the day. My engine run never changes; it always runs in a very strong four-stroke. I never move the needle and have the same power at 2 p.m. as I did at 7 a.m.

All this is achieved by just changing the amount or percentage of nitro. Remember, the bigger the boom, the more power you make. By upping the nitro during the course of the day, we are maintaining the same power from beginning to end. And that’s a good thing!

I find the easiest way to accomplish this is by using two jugs of fuel that have been pre-mixed; one at 10% and one at 25% nitro. Just mix what ratio you need in your fuel syringe for each flight. You’ll be amazed at how well this will work and how much more fun it is to have power all day.

### **The Propeller**

Props come in an almost infinite number of sizes and shapes and are made from a variety of different materials. Many generalizations can be made as to

which prop to use with which engine and model set-up. There is no “perfect” prop that can be used for a particular airplane/engine combo. Those who want the ultimate performance out of their equipment will have two to three props from which to choose. The only way to find the best-performing prop is to test each one under different conditions. This takes some time but will pay off later when you really need it. There are some basic rules that get us started and then come the “SWAG” (Scientific Wild A - - Guess) that get us to the best prop for the engine/plane combo.

First rule: Use the smallest-diameter prop that will work. This reduces the gyroscopic precession and lets the model corner better.

Second rule: Use as much pitch as possible and still maintain the desired speed. More pitch equals more line tension, always.

Third rule: The airfoil and the blade thickness will have an effect on how the engine runs by the amount of load it puts on the engine.

---

**Remember, the  
bigger the boom, the  
more power you  
make.**

---

After you have settled on a prop that works well, then go back to setting up the engine run so that you get that steady, strong four-stroke we talked about.

The biggest difference in props is the change from a two-blade to a three-blade. One rule of thumb is to use a smaller diameter when changing to a three-blade. If you are using a 12 x 6 two-blade prop, then you would replace it with an 11 x 6 three-blade prop. There are variations, of course, but this is a good starting point. One thing you will notice is that there will be less line tension when using a three-blade over a two-blade. On the plus side, you will also find that your model will groove better and/or be less twitchy in level flight.

There will also be a softer corner using a three-blade prop. This is easily fixable by widening the handle or adding more elevator movement.

Every model responds differently, so the choice of a two- or three-blade prop is mostly a personal preference.

Till next time, keep an open mind and try some of this stuff. *SN*



# News from Brazil



By Tomas Case



Entrance to the beautiful RC and Control Line site.



Far left: Third place Rogerio Alves with his Enya .61 powered Derringer.

Left: Fernando Monteiro and his "beautiful" Tempest, finished with aid of Windy Urтинowski's videos.



The rains came and the planes took cover under the wonderful covered work area.



Above: First-place Amilton Magri's Impact (bottom) with PA .65 piped is beautifully finished. Roberto Andrade's beautifully finished Trivial Pursuit (top).

Right: Second place Bene Rodrigues with a borrowed Cheyenne Special Edition. His son Mauro and my son Thomas Case Jr. are the put crew.



Limeira is beautiful city 150 km north of the city of São Paulo. It is city in the middle of an agricultural area famous for the production of oranges and sugar cane.

March 21<sup>st</sup> and 22<sup>nd</sup> was the F2B Competition of Copa ALA (Associação Limeirense de Aeromodelismo). The flying site is simply wonderful. It has a nice asphalt circle with a covered work area beside a much larger RC area. Clean restrooms and a restaurant complete the ambiance.

Fourteen stunt pilots showed up for the event. Saturday was beautiful with practically no wind and two rounds were flown. We were going to fly the third and final round on Saturday, but the rains came and forced us to return to this wonderful site on Sunday.

The perennial favorite, Bene Rodrigues, brought his wonderful Super Tucano. He started tweaking the flaps and disaster hit. The flap horn broke. I lent him my spare plane, a Special Edition Cheyenne with a 4-stroke O.S. .70 ultimate. Bene flew this plane (designed by Bene) well, but came in second. Amilton Magri won the event with his Impact, powered by a piped PA .65.

F2B does not give appearance points but the planes were beautiful. Special mention goes to Roberto Andrade's Trivial Pursuit (PA .75), Fernando Monteiro's Tempest with a piped (PA .65) and Amilton Magri's Impact. All had gorgeous planes.

The importance of the pull test cannot be underestimated. One of the pull tests broke a line right in the middle. Thankfully the failure did not occur during flight, which would have destroyed the plane and perhaps caused bodily harm.

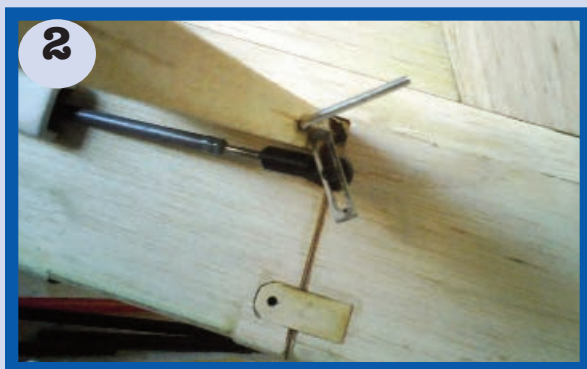
The next report will be after April 18<sup>th</sup> when we inaugurate the new flying site in the city of Belo Horizonte. SN

# Take-Apart Vector

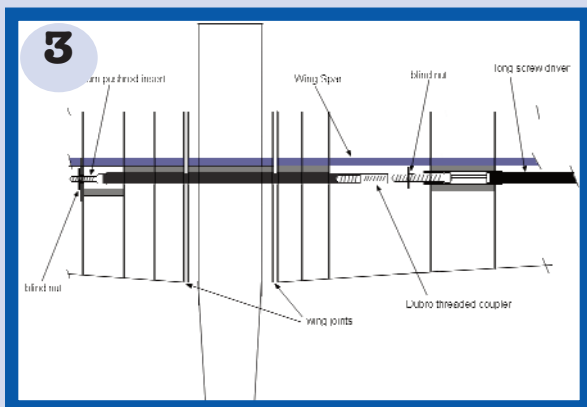
By Sean Chuang  
Tucson, Arizona



**1**  
Tail section is nothing special. Remember to use plywood-to-plywood for the joint surfaces. I also brush thin epoxy onto the joint surfaces to serve as fuel-proofing and also to harden the joint surfaces.



**2**  
This photo shows the other side of the tail. The pushrod is purposely sticking out of the left side of the fuselage for easy elevator adjustments as well as being able to remove the tail assembly without having to remove the pushrod.



**3**  
The mechanical drawing of the proposed take-apart construction. All parts are easy to obtain, and no complicated machined parts are required. Wing tubes are nothing but regular pushrods and they weigh only 0.8 ounce.

**S**ince coming back to fly CL about one and a half years ago (after a 25 year sabbatical) I obtained two ARFs (a Top Flite Nobler and a Brodak Vector 40) and I expected both of them to be gone by now. Fortunately (or unfortunately), I lost one, the Vector 40 ARF, due to the engine trouble roughly 8 months ago. I've since purchased another ARF Nobler and another Vector .40. The first Nobler has been crashed at least 12 times and it weighs and flies like a brick (yes, I glue it all back together each time it goes in, guys!), and the second Nobler flies OK. I thought, "What should I do with the last un-built Vector 40 ARF?" The idea of a take-apart plane has been on my mind for quite a while. I decided to try this idea on the un-assembled Vector.

The idea I had was to implement a new concept of take-apart construction. It had to be one for which the necessary components would be easy to obtain. It also had to be one that was easy to build and yet practical to use. This project is based on the Vector 40 ARC (ARF with skin removed). By the way, don't be afraid to saw off the tail and the wing halves during the construction. You can always put them back!

## Take-apart Tail

Since the overall horizontal stab is not too long, I engineered it as a whole stab take-apart rather than one that is in two separate halves. Originally I was thinking about breaking the fuse right in the middle,



**4**  
The wing joints are molded with Superfil and separated with waxed paper. I mistakenly used peel ply for the release agent the first time and ended up destroying both wings while trying to take them apart. It took me a week to fix them!

but I found that it is not easy to build another precise joint at the fuselage. Also, the control linkage needs to be take-apart again. Instead, I just simply made the vertical stab a removable unit. Photo 1 to 2 shows the tail section.

### Take-apart Wing

A little bit more thought was put into the wing portion. The take-apart seams have been purposely moved away from the fuselage by about 1 inch so that Moores' Crystal Clear tape (or something similar) can be used to tape the joint seams. This prevents oil-soaking problems and prolongs the life of the plane. It also helps to stiffen the wing.

The take-apart component has been implemented somewhat differently than that which is normally seen. The wing is held together by two 1-foot-long  $\frac{3}{16}$ -inch-O.D. carbon-fiber wing tubes and a trailing edge dowel pin. One side of the wing tube is J.B. Weld-ed to a 4-40 Titanium pushrod insert so that it can



RTF Vector 40 take-apart ARF.

be screwed into the inboard wing via a 4-40 blind nut. The other end is J.B. Weld-ed to a 4-40 Du-Bro threaded coupler. The inside of the coupler is threaded with a 4-40 tap and will later be attached by the outboard wing screw. Six pieces of guiding carbon-fiber tubes ( $\frac{3}{16}$ -inch I.D.—two each for the inboard wing, outboard wing and the center section) need to be aligned so that wing tubes can be screwed in to hold the wing panels together. A long socket-head screwdriver is implemented to bolt on both wing tubes from the outboard wing. In order to save weight, straws are used as the guide tubes for the long socket-head screwdriver. Since the wing loading will be transferred to a tension load at both ends of the wing tubes, reinforcements are always required. Figure 1 shows the mechanical drawing of the proposed construction. The reinforcement is done by tying the guiding tubes to the wing spar (highlighted in grey color). Photos 3 to 7 show the detail of the construction. The total take-apart weight penalty is roughly 2 ounces.



5

This photo shows the wing tubes screwed onto the inboard wing. Make sure that reinforcement is done properly around this area.



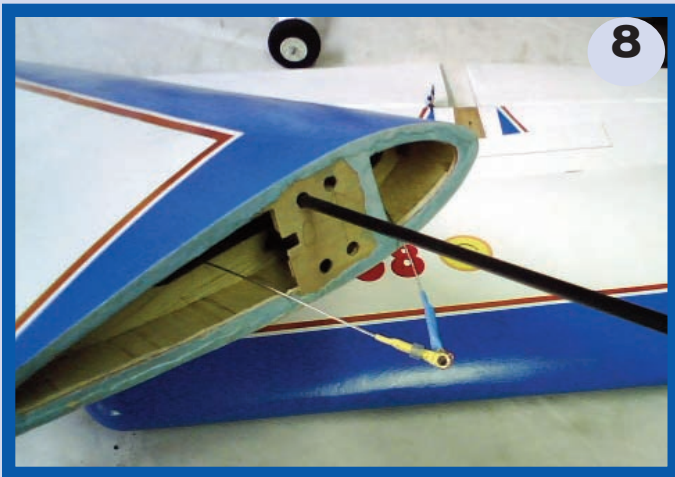
6

This photo shows the wing tubes screwed on to the outboard wing. A 2-inch-long 4-40 bolt is inserted into one of the  $\frac{3}{16}$ -inch-I.D. carbon tubes and the blind nut is glued to the bolt so that it won't fall out from the right side of the carbon tube. What prevents the bolt from falling on the left side? A  $\frac{1}{2}$ -inch-long,  $\frac{3}{16}$ -inch-O.D carbon tube is glued into the  $\frac{3}{16}$ -inch-I.D. guide tube. They need to be glued properly since all forces are transferred to this area when both wings are tied together.



7

A "Lucky Box" is used so that it is possible to slide the control horn wire into the end of the flap. The control horn wire needs to snugly slide into the Lucky Box to avoid the sloppy control. The Lucky Box is constructed from plywood.



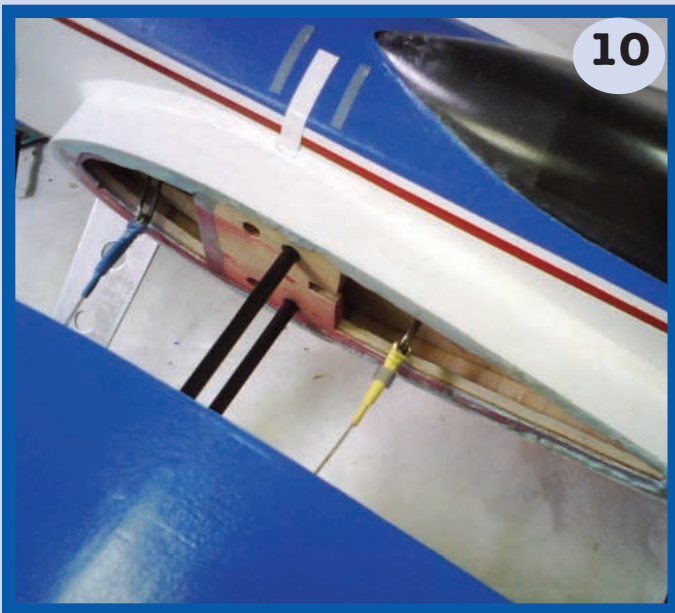
8

Screw the first wing tube to the inboard wing. Two holes in front of the wing tubes were mistakenly drilled because they hit the bellcrank shaft. I simply left them there to save some weight!



9

Screw the second wing tube to the inboard wing.



10

Slide the inboard wing into the fuselage and hook on the leadout wires. Two 1.5-inch-long clips are bushed and hook directly to the bellcrank so that leadout wires won't fall and interfere with controls.

## Assembly procedure

Time does fly for sure. Fast-forward four months and this take-apart Vector 40 was glued/sanded/doped/covered/sanded/filled/painted/masked/painted/repainted/buffed. Photos 8 to 18 illustrate how to put the plane together.



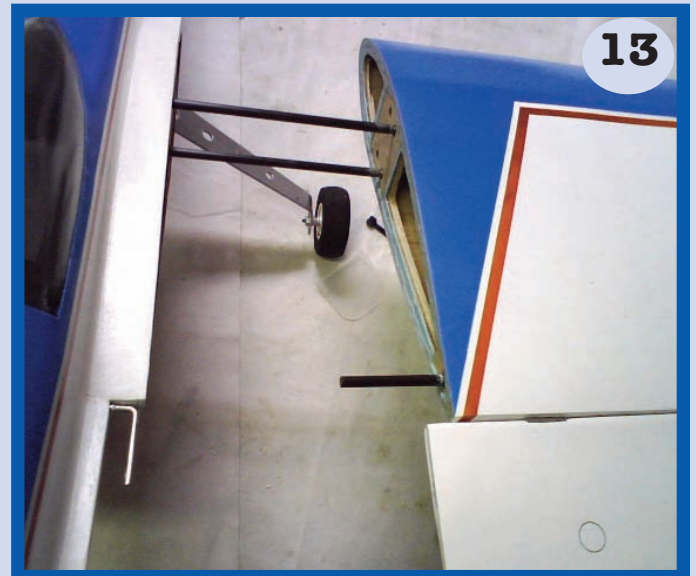
11

Slide the inboard wing in so that the flap control wire goes into the Lucky Box.



12

The inboard wing is in and two wing tubes are out to the right side of the fuse.



13

Slide the outboard wing to the fuselage through the wing tubes. Two trailing dowel pins are glued on both the inboard and outboard wing halves.

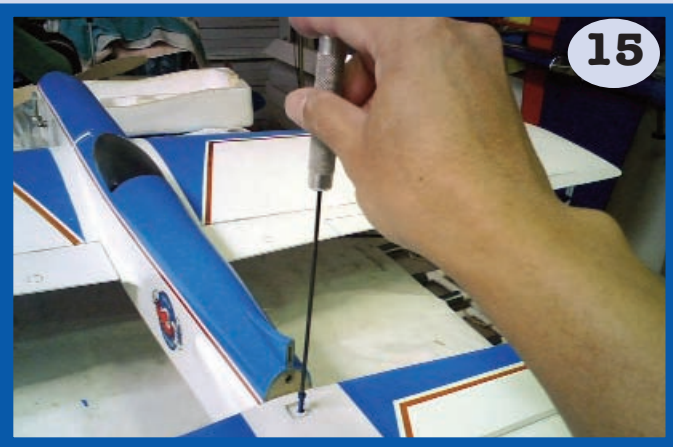


Screw in the holding bolts to the wing tubes through the outboard wing tip. The long screw driver is made of  $\frac{3}{16}$ -inch-O.D. carbon-fiber rod with a sawn-off socket-head ball driver glued to the tip.

### The initial flight

Thanks to Bob Whitely for helping me a lot for the first couple of flights. For the first flight we moved the leadouts very far aft and used  $\frac{3}{4}$  of an ounce of tip weight to make sure it stayed in air. Immediately we noticed that it was tail-heavy. Since it was tail-heavy, Bob moved handle line spacing close to slow down the control and slowed down the flap by making the elevator deflect more. It was still tail-heavy and we ended up adding  $\frac{1}{2}$  ounce of weight to the nose.

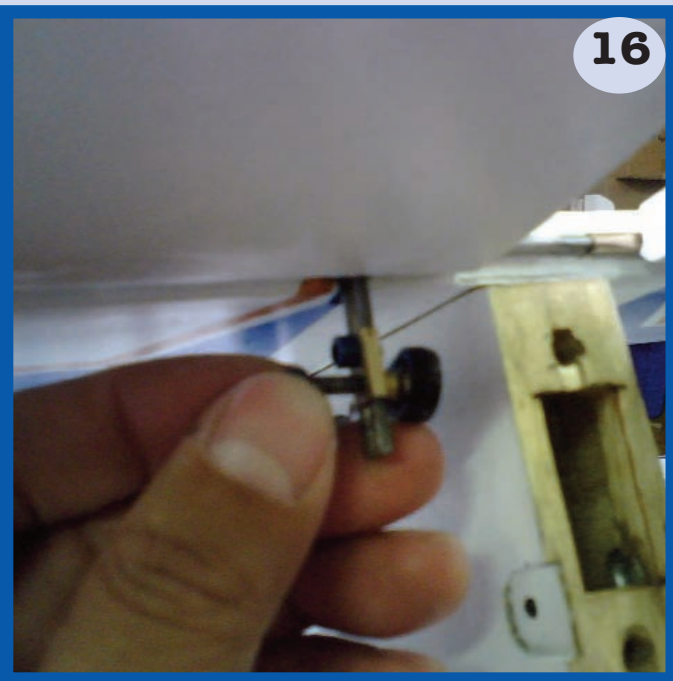
Boy, this thing really turns quick and it brings back the memory of my first Vector ARF that I crashed. (The engine quit with the nose pointed up!) The most joyful feeling is that the take-apart wings hold perfectly! I've had a brief chat with Paul Walker on the Stuka Stunt Forum regarding this take-apart structure and he pointed out that one connecting rod compresses and the other pulls away (during wind loading) and this may cause failure. I guess the tape around the joints really helps to relieve the stress on the wing tubes. Only time will tell.



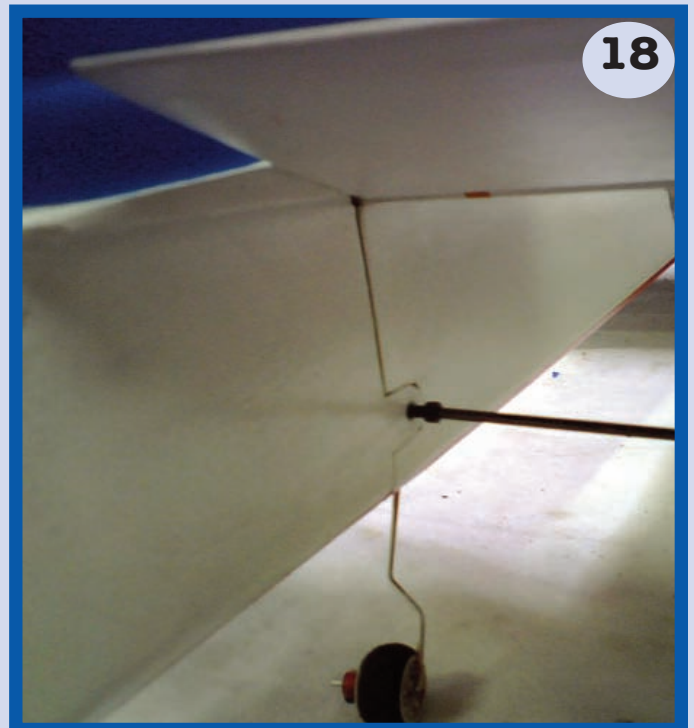
The inboard wing is in and two wing tubes are out to the right side of the fuse.



Slide in the vertical stab.



Connect the push rod to the control horn. A crushed copper tube is used to slide around the slotted control horn. A top set screw is used so that the pushrod is set to the same location every time.



The vertical stab is held in by two 4-40 bolts on each side of the fuse.

**As always, the story continues ...**

On the next flight session (which it was very windy), Bart Klapinski took a flight on this and noticed that the model turns quicker outside than inside. For the very last two flights, we adjusted in some down elevator and added an additional 1 ounce to the nose. At this point the added nose weight was 2.5 ounces and the total flying weight was almost 52 ounces! It did fly good, but I have decided to build a lighter stab and elevator to eliminate the need for the extra nose weight.

**Lesson learned**

It is very important to build a light-tailed ship rather than the other way around. This means if the CG is right on target prior to the finish, it will come out tail-heavy. Assuming the total weight of the finish is 6 ounces, the tail portion will be around 4 ounces. Since stab/elevator/rudder are located at the very end of the fuselage, the surface area can be as much as 3 times (or more) than the nose. Therefore, tail portions have more levering effect for the finish to shift the CG far aft.

I noticed that the cross bar for the stab was very heavy but not very strong, so I used carbon fiber and epoxy to reinforce both top and bottom. I must have overdone it. The total weight of the stab/elevator assembly is 3.57 ounces! A new tail is required!

The nice thing about take-apart technology is that I can rebuild wings/stab easily. The goal was to scratch build a

lighter tail so that no extra nose weight would be required. I ended up making a new stab that was 1 ounce lighter than the original. I also went ahead and hollowed more wood out of the rudder. I also opened up the end of the fuselage piece that serves no structure advantage. I ended up removing a total of 3.5 ounces out of the plane. The next few photos showed the lengths I went to reduce the weight in the tail. **SN**



When it's all together, tape around wing joints and you're ready to fly. (What a messy garage workshop, I just realized!)



Extra stab/elevator. BI-stab-plane?



The old tail weighs 3.52 ounces!



The new tail weighs 2.47 ounces.



Lightening up the vertical stab saved only 2 grams. Still, it was worth it!

# Take-apart Brodak Vector 40

## technical specifications

**Project started:** October 25, 2008

**Finished date:** April 3, 2009

**Total flying weight:** 49 ounces (without fuel)

**Wing loading:** 13.16 oz/square foot

**Fuel tank:** 6 ounce rectangular plastic tank with uniflow configuration

**Motor:** SuperTigre 46

**Fuel:** Home-brew 15/18/6 (nitro/castor/synthetic)

**Prop:** XOAR 11 x 6 inch PJA Sport Prop Type A Beech wood

**Finish:** Polyspan/Silkspan/carbon-fiber veil with dope finish

**Line:** .018 cable by 60 foot eyelet to eyelet

**CG location:** 21% of the chord line from the leading edge

**Leadout location:** 1 inch aft of CG

**Tip weight:**  $\frac{3}{4}$  ounce



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32	RSM Eric Rule
43	Windy Urtnowski
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**Q.S. .35-S** Rework includes: 1. Deburr the factory port burrs, with a rubber tip Dremel tool, 2. Then I send the piston out to be heat-treated, (which also expands it slightly), 3. Then I hand-lap the piston to the cylinder using a very mild lapping compound, 4. I install a custom made stunt venturi, 5. I install Allen Screws. These motors will 1-flip start, every time! If you supply a NEW motor the cost is \$75 (I CANNOT rework a used .35-S) If I supply the motor = \$125

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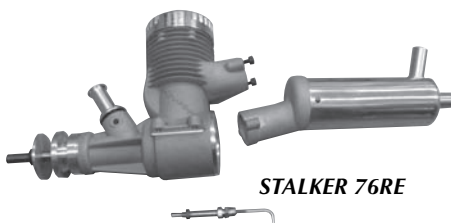
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### STALKER ENGINES



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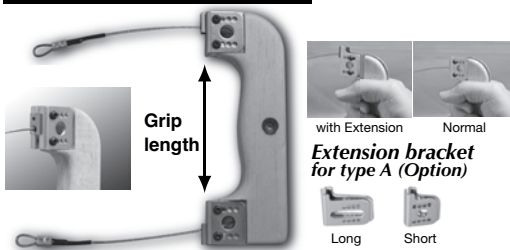
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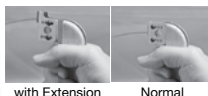
### MNT HANDLES



#### MNT Handle Type A

Grip length 80(A-80),85(A-85),  
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Adjustable Control-Line Handle  
Up & Down Space, Reach, Neutral adjust



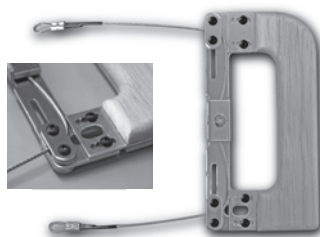
Extension bracket  
for type A (Option)



Long Short



Spare wire (Option)



#### MNT Handle Type B

Grip length 85 mm

For Compact Stunt model.  
Adjustable Control-Line Handle  
Up & Down Space, Reach, Neutral adjust



#### MNT Handle Type C

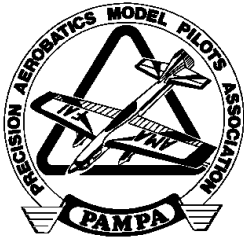
Grip length 85(C-85) or 90(C-90) mm

Adjustable Control-Line Handle  
Up & Down Space, Reach, Neutral adjust,  
with Extension Bracket (Long & Short)

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Prices Effective January 2008

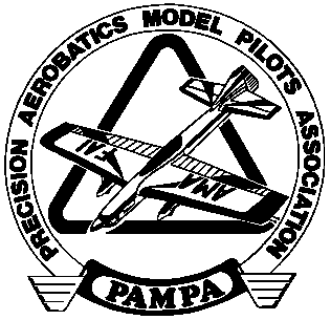
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# PAMPA News and Reports

PAMPA officer reports and organizational information.

## Vice President's Report

By Brett Buck

**C**orrection, or, "I'm just a rocket scientist, not a brain surgeon" department: In the January *SN*, I mentioned some very nice websites that you should take advantage of—and unfortunately, one hasn't existed in two years! Phil Brown's CL message board is actually on the Hangar Flying website at: <http://hangarflying.proboards18.com/index.cgi?board=wire>.

Phil's older message board on Flitelines is long gone—although I had visited the real site quite a few times since then, I still thought it was called the same thing. Highly embarrassing, sorry, Phil! Phil also maintains a giant CL link site at: <http://home.att.net/~philbrown36641s5/clhomepage.html>, which is certainly a great service to the event. At any rate, I apologize for any confusion I may have caused.

### Winter flying in California

This will all be water under the bridge by the time of publication, but since I don't have a time machine—*yet*—to go forward and take pictures from June, I am sticking in a few from our December and January flying sessions. Just to show our suffering during a time when our East Coast

buddies were huddling around the fireplace during one of the worst cold snaps of the new century.

### Southwest Regionals

By the time you read this, it will be well into flying season, but as I write it, VSC is in progress. I had to miss it again this year for work reasons, but I did manage to get down to the Southwest Regionals, also in Tucson, in January. So I think that tends to make up for it. I appreciate the great hospitality I got from the Cholla Choppers—made me feel like family. Of course, I knew everybody, but I went down without my regular flying buddies, so it meant a lot to me to be one of the guys anyway. I can certainly recommend the



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Southwest Regionals to anyone who can manage to make it. We may have lucked out a bit this time, but the weather was perfect both days. On the drive down, it rained every inch of the way, but the next morning it was clear, negligible wind, and pretty warm. I am also told on good authority that the cold winter evenings hold down on what would otherwise be a rattlesnake haven! The contest itself ran like clockwork—presumably the experience of running 200+ fliers at VSC has taught them all the processes to follow. It was a pretty decent turnout, but to me it was low, given

**I certainly know that look! Jim just said something that was probably wrong. Or at least that's the look I get when I say something silly. Buck photo.**

the quality of the contest and the competitors. I loved it and will almost certainly be going again. Driving back was almost perfect, and I just missed getting stopped when they closed I-5 at the infamous Grapevine due to snow!



Winter flying in California—it's really cold. Dave had to wear a light jacket. "Oh, the humanity!"—suffering through a rough Napa winter! Buck photo.

## Feedback on CLW/PAMPA Ad Deal

As most saw, we did a deal with Control Line World/John Brodak to have mutual advertisements, quid pro quo. When it was first announced, there were quite a range of reactions across the spectrum—but largely negative! Of course those with a perceived beef in either direction are the most likely to, uh, “comment” on such a thing. And almost everyone, pro or con, read a lot more into it than there really was. Sounds familiar, no?

However, since it ran, the reaction has been largely positive. I can also report that the interactions between PAMPA EC, PAMPA members and John and the CLW subscribers have been quite cordial. As it should be—this relationship is to the benefit of all parties. John even sent me a complimentary copy of CLW with our ad. That was appreciated.

For those who continue to harbor doubts, please be advised that we are *all moving on*. No one on either (*and I hate this word, but I don't think some people are able to see beyond it*) “side” is likely to forget the past. But we don't have to dwell on it, either.

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One thing I can tell you right now, for those who have suggested that they think this is a situation to be exploited to grind all the same old axes—PAMPA is not going to be used to “settle the score” or for revenge. If that's your goal, then you are going to be disappointed.

We are going to be operating in the best interests of *all* the members, and in the best interests of the event, which, in my opinion, is to go forward, not back.

## Health of Stunt

In response to some interesting threads on the BOM, etc. on Bob “Sparky” Storick's Stunthangar site (that one, I know exists, as of 3/20/09!) I did a few very quick statistics on the ages of the competitors in big Stunt contests. I counted the entrants and also listed their ages—guessing when I didn't know. I figure the guesses averaged out. There's

a healthy margin of error, but the characteristics were interesting—it was a sort of “horseshoe” curve of age distribution. Open-end-up horseshoe so the luck doesn't run out, naturally.

Currently (2008 Nats and 2008 Golden State [*74 entries from 52 individuals ranging from 7 to about 70—I told you it was big, and this was a bit of an off year!*]), there were a fair number of people in the under-40 bracket, just a few in the 40s, and then another big group above 50. The average was around 46. Figure that in general most kids and teenagers couldn't make it to a distant contest, and figure that most people hang it up around 70. So if there was a perfectly even distribution of people of all ages, we would expect that the average age would be 45 (there's 50 years from 20 to 70, half that is 25, add to 20 [or subtract from 70] and you get 45). And, within the bounds of error, that's what we have!

That is somewhat at odds with the often-stated assertion that we are all going to die out in a few years. I was a little surprised myself.

Even more interesting, I tried the same thing with the 1993 Nats, and got a higher average age and a different distribution (many more in the 40s and early 50s, and relatively few in the under-40 group). It's as if the entire thing was shifted by 15 years, the old guys fell out, but the influx of young people cancelled it out.

What this cries out for is a better data set, and more analysis. In many cases I was making some pretty wild guesses as to ages—I didn't intentionally skew it, but it could easily be off by five years either way. I don't have the necessary information to do any better right now, but if someone wants to take a stab at it I am sure we can find a good bit of the necessary data and research the ages. If anyone would like to take on such a project, please contact me, and I will try to assist you in any way possible.

## New Rules Again

By now you are also experiencing the new pull test and pattern points rules. Since I wrote the previous comments (in January), it appears that several people have been surprised by the new rules and are more-than-willing to talk about it at length on the Internet. That may be underplaying it, for about a week there, it was like someone painted eyebrows on the Mona Lisa. I think there were some good points made either way, but some people got—as could have been predicted—nearly hysterical with the

associated tearing of hair and rending of garments.

It's not that big a deal—maybe it's better, maybe it's worse, but none of us is going to die because we don't have pattern points anymore. It's fine to have your say with the CLACB member, since that's what they are there for, but there's no reason to get personal about it.

I also found it somewhere between annoying to unbelievable that some people were complaining, but nonetheless asserted that *they never bothered to read the proposals in MA and on the website*. Just like voting, if you don't even bother to find out what the proposed rules are and provide feedback, you have no one to blame but yourself when something passes that you don't like.

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The proposals are on the AMA website—go to [www.modelaircraft.org](http://www.modelaircraft.org). Near the bottom, dead center, under “Competition/Events” is a link labeled “Rules.” Click that, it opens a page with links to all the current rules in the middle, and a frame on the left. In that frame, about halfway down, is a link labeled “+Rule Proposals.” Go there, and I think you can figure it out. Note that the proposals must be submitted electronically in some unwieldy Microsoft Word form, but the rules to follow are on the same page. Also on the frame on the left is a link labeled “Contest Board Members”; this will tell you who your CLACB member is. Keith Trostle is the chairman (taking over for Gary McClellan—whom we owe a big Thank You for serving for years).

I think you will get this issue in time to submit a proposal, but in any case, the event is in your hands, and the CLACB will certainly appreciate any feedback—rational, well-reasoned feedback, not a paranoid or conspiratorial rant, please—and *will listen*. January 2011, I don't want to hear people complaining that they didn't know! **SN**

# Secretary/Treasurer's Report

By Dave Gardner



The photo above was taken at Pima Air Museum in Tucson, in 2008.

The significance of the airplane behind me is that my FIRST EVER airplane ride was in the T-33, while in AFROTC in my first year of college at Caltech.

After that, never finished at Tech, never joined the Air Force and never learned to fly full scale airplanes.

Another story, another time.....

At mid-year, we're on the right track, with the efforts of our officers, Bill Rich and Brett Buck, along with the Executive Committee, our webmaster Bob Kruger and our esteemed *Stunt News* editor, Bob Hunt. Part of this, too, has been the membership! Hovering near the 1,000 mark, we've had positive response to the new *Stunt News* format.

Here's the current membership, by categories:

Category	USA	International
Basic Internet	107	32
Bulk Mail	353	(n.a.)
Family	25	0
First Class Mail	304	60
CD	84	50

The total membership is not quite the sum of all these categories, since several folks have more than one option.

Financially, too, we're in pretty good shape. The first three issues of *Stunt News* (includes Nov-Dec 2008) have been paid for this year, at a cost of about \$6,000 per issue, all costs involved. We have more than enough in the bank to publish the next three issues, as well.

For Membership dues, we have been accepting Visa and MasterCard for several years now. About 25% of the members, including most of the international members, use this option. It costs us about \$600 per year to offer this service, with all the bank card charges. That's about 1.5% of our budget or about 6% of the cost of membership for those who use the service. It may seem a bit high, but nearly \$400 of that cost is just

the monthly cost of maintaining the service. Banks don't give anything away!

There has been some discussion of using PayPal as an optional payment plan, but the financial analysis has not been made yet. It does look promising, however.

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Any of our  
tech/business-savvy  
members got an idea  
on this one?

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Potentially, for 2010 some Membership activities will be moved over to the Membership Secretary. This is under discussion by the EC, but many Membership questions and actions will be handled separately from our financial operations, to spread some of the work around!

We're also still working on a plan to have a list of contact folks, for various issues, maybe even an FAQ section, to simplify your connection with PAMPA and provide you with quicker answers to your questions.

One item is questions about the mailing of *Stunt News*. We'll note the mailing schedule on the Web site, so you'll have a reference date. We're working on a "point person" for such inquiries and other membership items.

On-line membership sign-up is still in the discussion stage. It is a foregone conclusion that this can be a good thing for PAMPA and the membership, but the "technical problems" need to be resolved to get the information to the right person, with as few steps as possible, particularly when it involves money! Any of our tech/business-savvy members got an idea on this one?

With the great success of *Stunt News*, we get some misconceptions about what *Stunt News* really is. It has turned from a basic newsletter for PAMPA to being a solid magazine in its own right. It is,

however, fundamentally still the "news organ" for PAMPA. It is NOT a "magazine subscription;" it is a benefit of belonging to PAMPA, and having a PAMPA membership.

Separate subscriptions have been considered but most of the cost of PAMPA is due to the cost of producing *Stunt News*. We are not supported by extensive advertising like the major magazines. Our ads are low cost, for the cottage industries we all try to support, so they are generally of interest to us. That advertising is beneficial to our income, but only represents about 5% of our actual costs.

PAMPA Products is also a contributor, but it is primarily a convenience for our members. The transition of PAMPA Products is nearly complete! We're all looking forward to Jim Snelson's takeover of the operation, after a good run for several years by Curt!

There is some talk of separating the plans service from the basic PP operations, to provide electronic files for the printing and distribution. Our plans can be scanned into files, to be sent to a printer electronically, then printed and delivered from one source of responsibility. Welcome to the 21<sup>st</sup> Century!

With all of THAT news, I'm reminding the membership that this position will be open at the end of this year, as I "retire!" The membership has to consider someone to succeed me, and preferably for a longer term.

Give some thought to some folks you know, and even look inward to yourselves. Both these jobs give great insight into how PAMPA operates, and you can have a strong voice in the future direction of this great organization. This is a great opportunity to be involved with PAMPA, and be part of this vibrant organization!

Again, please do think about possible candidates for this position and/or the Membership Secretary. Thanks again to all of you who have helped make PAMPA what it is today!

# District I

By Dave Cook

Connecticut, Maine,  
Massachusetts, New Hampshire,  
Rhode Island, Vermont

In memory of Roy Tucker: District I has lost one of its best. Roy Tucker passed away in March. Although he was not active in modeling since the 1970s, he was one of the outstanding model builders and fliers in District I history. He was 78 and succumbed after a long illness.

We first met in our early teens and, sharing a common interest in modeling, quickly became close friends. His heyday was in the '40s, '50s and '60s. He contributed both as an administrator and flier. He was a prolific and meticulous builder, turning out many front row quality Stunt ships. He flew Stunt, Scale and Speed. Each of his models was a masterpiece. He won High Point honors three years in a row at the prestigious New Bedford, MA meet gaining permanent possession of the 5-foot tall high point trophy.

He turned out some of the best CL Scale models in the country capturing highest static points at the Nats with his 8-foot span, four engine XB-35 flying wing. The model was judged good enough to be accepted for display in The Smithsonian where it still resides. He was also involved in RC for many years building some of the best RC planes on the East Coast. He became one of the first to produce ARF RC models turning out many copies of his T Pin model that became a very popular model in the Northeast.

Roy's superb craftsmanship became evident when in his late teens made an exact copy of a Gibson Guitar that you could not tell from the original. He was versatile in his talents ranging from guitar playing, model making, finish carpentering and on to manufacturing engineer. His many unique and varied talents supported his avocations.

I was Manager of Manufacturing Engineering at General Dynamics, Quincy Shipyard and I needed model makers to develop and build ship models and compartment mockups. I brought Roy in as a model builder and he produced several outstanding projects. He soon progressed to manufacturing engineer. He was innovative and developed patents on shipbuilding practices and methods. He was heavily involved in the production planning and building of the giant liquid natural gas tankers. These ships had four 150-foot diameter spherical aluminum tanks made

up of 3-inch thick orange peel sections. Roy was instrumental in the success of this building program.

He was always interested in restoring classic cars and went at it in earnest in the late 1960s. As in everything he did, he was fully consumed with doing the best and created several masterpieces. His first restoration was a 1948 Lincoln Club Coupe. This car took first place in class as well as best of show in his first national meet. He diligently researched the car for restoration, even going to Ford to get the specs on the original factory paint right down to the drive shaft. He obtained the specs on the leather upholstery, obtained the leather skins, taught himself how to sew and produced a leather interior that was the envy of the Pros. He went on to produce several show winning restorations, replicas and one of a kind cars including a wood sided Chrysler convertible, a replica of a 1926 rose wood body Hispano and his version of a Tucker.

Roy was a dedicated model builder, superb craftsman, amazing innovator and a lifelong friend—he will be sorely missed. *SN*



Roy, as CD of 500 Meet in Brockton MA, awarding a young Dick Wolsey.



XB-35 ready for test flight. Four McCoy .35 engines buried in the wing driving props through extension shafts.



XB-35 under construction.



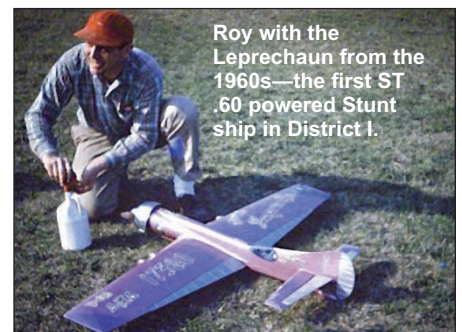
XB-35 on the bench for a tune up.



Roy's Jet style Lightning.



Roy being awarded the New Bedford high point trophy.



Roy with the Leprechaun from the 1960s—the first ST .60 powered Stunt ship in District I.



Roy's Sammy Mason scale Stunter being fueled for a test flight.

## New Jersey, New York

The winter of 2009 was so cold that I didn't get in as much flying as I wanted, but I did get to work on my new Tribute ship in between all the things going on at 93 Elliott Place.

The new ship is dedicated to my late shop bird, Chickie, who lived in my workshop for nearly six years and was my constant companion. After he passed away, it took me a few years to finalize the ship I wanted to do in his memory. Chickie was small—only 29 grams—so the ship is smaller than most that I've done and is powered by a RO-Jett .61, smaller than my normal size engine. Bob Brookins has mixed some very special colors for the Tribute ship, using Brodak dope, and Dave Midgley and the "Buildathon" crew teamed to

make the wing skins for the composite Midgley wing. We've got lots of hand-made carbon fiber parts, of course, and if all goes as planned, I'll have photos for the next issue.

**Rich Giacobone decided to refinish** his favorite Strega, and as this is written, he's got all the old finish off. When you have a favorite ship, a thorough refinish can be a good way to add many enjoyable years to its service life.

**Dave Eyskens is working on** a Tribute of his own, as is Elliot Scott, Dave Midgley, and Les Demmet. Elliot plans to do CAD drawings, and I'll let you know when they will be available.

## District II

By Windy Urtnowski

Elliot drew the plans for Paul Walker's P-51, my Typhoon 91 and Miss Ashley II, as well as the Cardinal Evolution. He's got a fabulous new shop and work area, too.

**Raimo Barck had some health issues** over the winter, but he's back to 100% now and looking forward to the flying season. His son, Jonathan, helped us groom our local field a few years back, and Jonathan's now one of the official guards of the King of Sweden.

**Henry Forbes also has had** some health issues, but the word is that they have him back in the air at Flushing. The Flushing group is among the best and most fun to fly with, for sure. *SN*

## Ohio, Pennsylvania, West Virginia

Finally some nice weather. It was another tough winter in District III. In October I went to and flew at the Akron Circle Burners fun fly. Good timing as I needed to do some trimming on a couple of Stunters. Taking the idea from the west coast guys they had a McCoy 19 Hurler. Ron Lutz won it with a 124 foot, 2 inch toss.

Will Hubin brought along his Wom Bat electric profile Stunt plane. Low aspect ratio wing, huge stabilizer and elevators. Will and Les Nering put this package together. Way "Out of the box" thinking. I got to fly it and did the whole Stunt pattern. With just a bit of trimming it will be competitive.



Les Nering's Atom powered by a Fox 35. Les does nice work. He lives in Kent, OH. Akron fun fly.



Gary Tultz's Ignition powered Fireball. Gary lives in Akron, OH. Akron fun fly.



Mike Alimov's four-stroke powered Score. Good flying ARF. Mike lives in Stow, OH. Akron fun fly.

## District III

By Patrick Rowan



Will Hubin is holding his electric Wom Bat. It has a lot of potential. Will lives in Kent, OH. Akron Fun Fly.



Ron Lutz McCoy 19 Hurler winner at 124 feet 2 inches. He is holding his fuel prize and McCoy. Ron lives in Wadsworth, OH. Akron fun fly.



Ron Lutz winning Hurle. Akron fun fly.



Alan Buck is also building a Jamison for OTS. Buck photo.



Dave's Jaguar in his fuselage jig. It will be powered by an LA 46. Heinzman photo.



Dave Evar showing his best Hurle style. Dave lives in Brooklyn, OH near Cleveland. Akron fun fly.



Dave Heinzman is building a Buso Jaguar. Front end detail. Dave lives in North Olmstead, OH near Cleveland. Dave Heinzman photo.



This is a Tom Morris plastic fuel tank unflow setup. It works well and is simple.



Alan Buck's new SV PA 40 powered piped Stunter. Alan lives in Danville, PA. Alan Buck photo.



This photo shows Dave's Jaguar fuselage rear end detail. He used 1/64-inch plywood to shape the fuselage sides to give more room for the controls. Heinzman photo.

Till next time, Fly Stunt. SN



# District IV

By Steve Fitton

Delaware, District of Columbia, Maryland, North Carolina, Virginia

Hey everybody, I hope you are looking at a great summer of flying right now! Winter hasn't quite finished with us as I write this column, but spring is getting closer. Over parts of District IV we did have one glorious weekend of 70° temps and moderate wind, and some people finally

got out to fly. I also got an email from Scott Richlen up in the DC area saying how bummed they were because they didn't get the weather break the rest of us had!

As I touched on in my last column, one person not letting the winter go to waste was Virginia Beach's Jimmy

Welch. Not only did he build an entire air force of Stunters over the winter, but he also learned some new skills including how to cut his own foam wings. The scary thing is that with the foam, he will be able to produce planes even faster, leading to the situation of having more planes than any one man



could possibly fly and trim out! Jimmy also took a Strega ARC that had been suffering from excessive weight and completely rebuilt it, reducing the weight by 10 ounces in the process. There is a lot of lumber in that Strega.

I spoke to Jimmy Paul a few days ago. While not building anything, Jimmy and flying buddy Bill Ballinger are ready for the new season, Jimmy with his well traveled "new" Sig Chipmunk and Bill with his excellent Brodak Legacy and his new Sig Magnum ready to go. The Richmond guys suffered a bit of a setback this past fall, as the main flying site became overrun with other users, but spring seems to have better results with competition for the field, and Jimmy and Bill have been busy scouting potential new flying sites as well. John Rakes is busy scratch building a built up fuselage Cardinal 40 off of some Tom Dixon plans and wing core. John plans to use an LA46 for this Cardinal, and, with any luck, we should see it at the field this summer. John has some very nice planes already such as his full-size Vector or his Strega, but his practice field is rough enough that he needs a slightly smaller ship to take the abuse without tearing up the really nice stuff.

Your intrepid director has been toiling along very slowly on a Dreadnought. When I finally get it finished, it will get a PA-61/pipe. I'm using a fully sheeted foam wing and the finish is going to be silkspan and Sig dope.

That's it for right now, but we should have a good report on the May Huntersville contest, among other things, next time. See ya at the field! *SN*



**Jimmy Welch's Strega ARC cuts through the sky over the field after its rebuild. A Saito 62 powers this model with authority.**

This is one of the ways Jimmy got so much weight out of the Strega. Every other rib has been removed, as well as a whole bunch of sanding, and wood removal from inside the fuselage. Jimmy was able to create a 68-ounce Saito 62-powered model from a 76-ounce K&B 61-powered model. It flies considerably better now!



**Kent Tysor and William Davis enjoy the brisk weather at this year's King Orange International.**



**William Davis's ST-60-powered Dancer growled through the wind at King Orange International with ease. William finished third in Advanced with this ship.**



**William also won Profile Stunt at the KOI with his LA 46-powered Teosawki. Here he receives the Profile Stunt trophy from Lyn Weedman while Lyn's brother Tom looks on.**



**Ever the tinkerer, Willis Swindell tries to improve the performance of his Evo 36-powered Brodak Bf 109.**



**Slowly, a Randy Smith Dreadnought takes shape on your director's bench ...**



**Seen at the October Carolina Criterion contest, Tom Hampshire admires his flight box. Since he was educated at one of the finest engineering schools in the country, the box is a masterpiece of mechanical ingenuity. William Davis photo.**



**A picture from William Davis of the mob that showed up at Huntersville to enjoy the impromptu New Year's fly-in.**

# District V

By Dale Barry

Alabama, Florida, Georgia,  
Mississippi, Puerto Rico, South  
Carolina, Tennessee

Well, here we are in Stunt season again. District was quiet February through April, but May got us going, again. The first contest is not in our district, but it's so close that I have to mention it. Huntersville, NC is 23 miles into District IV, but is well attended by our district. Saturday has Basic, OTS, Profile and Nostalgia '79.

Bob Zambelli was second in OTS, Gene Martine was fourth and Bob Whitney was fifth. Nostalgia had Derek Barry first flying my old Thunderbird and Bob Zambelli was fourth flying a Brodak Nobler. Curtis Comer won Profile. The weather was breezy, but it came from the right direction, not over the trees.

Sunday had the PAMPA classes. My grandson, Gavin, flew in his first Beginner contest and finished in third. We had no Intermediate fliers, but Watt Moore was fourth in Advanced. Expert had Derek second, with the T-bird again, Dave Hemstrought fourth and Bob Zambelli fifth. This is a great site and a well-run contest. Join us there in the fall.



Gavin Barry launches his dad in an Expert official flight.



Watt Moore receives his second-place Scale award.



Dave Hemstrought prepares for his official flight.



Gene Martine's new SV-11.

May 16 and 17 brought us back to Marietta, GA after a one-year lay-off. This contest is held in the Lockheed parking lot on Delk Road right off I-75. Saturday began with a rocky start; just after the pilots' meeting the skies opened up. After waiting for an hour, CD Tom Dixon decided to give it until 2 p.m. to make a decision, and it turned out to be a good one. There was a slight drizzle at 2:00 when we started, but within 30 minutes the skies cleared and the rest of the day was near perfect with light wind and overcast skies.

The turnout was low: There were only two entrants in OTS, with Roy Trantham first with his DS60-powered Humongous and first-time OTS flier David Shad second with his ARF Smoothie. David went through both officials with minor problems. On the other circle there were three in Profile, with Kenny Stevens first, flying a Tutor II powered by an LA46; Jim Welch was second and Jim Catevenis was third. On the same circle Kenny Stevens was first again in Nostalgia with his Aero Tiger .36-powered Caprice. Bob Dixon was second with his red Nobler and a Fox 35 and

Roy Trantham was third with his Shark 35/DS 54 combination. Kenny was also the recipient of the John Brock trophy for his Nostalgia/Classic win. Rob Gruber, home from Yale, and his dad Bill judged Profile and Nostalgia while Derek and I judged OTS.

Sunday was cool and overcast with 5-10 mph winds. With the low turnout and no Beginners, we flew all classes in front of two judges, Ronnie Farmer and myself. Jim Welch from Virginia was first in Intermediate, David Shad was second and Jim Catevenis was third. Roy was the only Advanced flier, so he was first, Kenny Stevens made it a sweep by winning Expert with Bob Dixon second.

I don't know if the low turnout was due to predicted problems, the economy or other things. It would be a shame if this was the last Marietta contest. It's been around since the early '70s and I've gone to it for the last 22 years. I would appreciate any input you could give me as to whether you'd like this contest to continue and whether you could commit to at least trying to make it next year. Situated almost in the dead center of District V with I-75, 85 and 20 leading you right to its door, it's an easy contest drive. Let me know what you think. Til next time, fly Stunt. *SN*



Bill and Rob Gruber judge a Nostalgia flight.



Roy Trantham starting an official OTS flight.

## Illinois, Indiana, Kentucky, Missouri

# District VI

By Allen Brickhaus

This month we are gathering shots from the 2008 Michael Schmitt Contest in Schaumburg IL, the 2008 Lexington Model Airplane Club contest, our 2008 AMA Nats, the 2008 Broken Arrow at Buder Park and the 2009 Ice-O-Lated event also sponsored by the Lafayette Esquadrielle of St. Louis. Each will offer a small vignette of flying in District VI at the end of 2008 and the beginning of 2009.

I have just returned from the 2009 Vintage Stunt Championships in Tucson. The weather was fantastic this year. The three-day Classic event avoided the high winds that often occur after the noon lunch break. All flying on OTS and Classic Days ended around 11:30 a.m. Three great evenings at the Heyworth dinner at the field, at Rickii Pyatt's house and the Trostle family's house, gave all an opportunity to say hello and "Until we see you again" moments. The banquet was the best yet and wishes for a safe journey home and "See you next year" resounded as we left the Saturday evening closing of the 2009 VSC. A report on VSC is presented elsewhere in this issue of *SN*. *SN*



Larry Robertson readies his model for a flight at the Lexington Model Airplane Club event held at the end of July 2008. Lexington has a nice circle and the club is always ready to host a nice event.



Larry Lindburg, Terry Bolin and Crist Rigotti take in a morning's refreshment at the Fenton MO Bob Evans prior to the Ice-O-Lated contest held on the last Sunday of February 2009. Further pictures taken outside would only show the blur of cold freezing pilots.



Columnist and Jerry Norin are shown with their models at the Lexington MAC site on a hot day in late July. Jerry does not get the opportunity to go to events, but he was able to squeeze in Lexington and he makes a great travel partner.



Rickii Pyatt, Bill Marvell and John Grigsby take the time to work the Nats for PAMPA and AMA. Thanks for your work. Bill is one of our District VI members and a fine fellow.



Enclosed is a shot of the Ozark Control Liners located in the southwest Missouri area.



Marvin Babcock Junior and Michael Schmitt offer advice to each other as they prepare to host the Michael Schmitt's Control Line contest at Ned Brown's Woods near Woodfield Mall shopping center in Schaumburg, Illinois.



Charles Fowler checks the needle on this ARF Nobler for a flight at the Broken Arrow event held at Buder Park in the southwest St. Louis area.



Jack Dock's wife, Jack Dock himself and Bob "Sparky" Storick enjoy breakfast at Bob Evans just before the 2009 Ice-O-Lated in St. Louis.



Bill Marvell, Dan McEntee, Tim Pansic, Ken Nash and Terry Bolin await orders at the Ice-O-Lated at Buder Park in late February 2009.



Bob Arata of the Lafayette Esquadriille/St. Louis opens the 2009 season at the Ice-O-Lated Stunt Contest at Buder Park.



Ken Nash of Joplin MO is as well bundled up for the cold day at Buder Park. At least we did not have to shovel off the snow this year as we did last year.



Bob "Sparky" Storick brought out his new Viper 8 and accompanied his Continental XL to the flying field. Bob managed to get in some first flight experiences with the Viper 8 at the conclusion of the Ice-O-Lated.



Jason Pearson of Mcleansboro IL takes in an Advanced event flight at the Ice-O-Lated at Buder Park in southwest MO.



Crist Rigotti is also wrapped to the hilt in cold-weather gear for one of his many flights at Buder Park. The whirling sound you hear is his electric motors humming along quite well even in the cold temperatures.



This is the "Name That Flyer" part of this column. Who is the flyer and which are his scores from 1978?



Here is the whole crew at the Ice-O-Lated in St. Louis. The bunch is still coated up at the end of the day. This was the warmest part of the time at Buder Park that day. Temperatures ran from 35 to lower 40s.

**B**y now the flying season should be in full swing. I certainly hope that it is going well for you. I've already had the Resolve EP electric profile out flying and I'm rubbing out the Harbinger 40 O.S. 46LA-powered Stunter. Enough about me; let's see what else is happening in our District. Here is a report that was sent in to me from Rich Kacmarsky.

While perhaps not the name that immediately comes to mind when discussing Stunt competition, Walt Musciano designed a number of Stunt ships which many of us find in the list of planes we grew up flying. Certainly his 1/2A "hollow log" designs were among our first attempts at model aviation. The 3<sup>rd</sup> Annual Michigan Musciano Fun Fly, held on August 16, provides competitive fun flying these diminutive planes of the '50s and '60s.

Although not likely to fly the complete pattern, these planes provided quite a show as the Stunt, Proto Speed, Rat Race, Craftmanship, and the Musciano Unlimited events were contested.

In the end, Tom Alberty won the Stunt competition, followed by Leroy Heikes in second and Frank Carlisle in third. Twelve-year-old Jacob Evans won the top spot in Proto Speed with Rich Kacmarsky taking the second spot and Skip Gizowski placing third with his Cessna 182. The always exciting Rat Race saw Leroy Heikes win top honors while Keith Trimmer placed second and Terry Bentley won third.

The entries in the Musciano Unlimited were enlarged versions of popular 1950s 1/2A kits. Rich Kacmarsky won first place with a .35 sized Gulfhawk Bearcat and Frank Carlisle took second with his giant version of the Golden Hawk. Skip Gizowski, won Craftmanship with the same Cessna 182 that placed third in Proto Speed, proving that Skip's planes fly as good as they look. Rich Kacmarsky took second and Tom Kasinec placed third. Finally, the Sportsmanship award was awarded to Currell Pattie who could not attend the event, but sent several beautifully crafted planes for others to pilot.

Planning has already begun for next year's event which will be bigger and better with the addition of a scale competition for the many semi-scale hollow log designs produced by Walt Musciano. If you are in the area, put this one on your 2009 calendar!

**Not really knowing** when this will hit your mailbox, I'll mention some contests in our area. The Wisconsin State Control Line Championships will be June 7. Contact Pete Mick at (262) 377-6137. Then there's the Sig Contest June 27



Skip Gizowski's  
Golden Hawk.  
Kacmarsky photo.



Skip Gizowski's  
Cessna 152.  
Kacmarsky photo.



Rich Kacmarsky's Bearcat. Kacmarsky photo.



Frank Carlisle's Golden Hawk. Kacmarsky photo.

and 28. Mike Gretz is the CD at (641) 623-5154. Then July is basically the Nats.

I have served District VII for two terms now and I have enjoyed it very much, but it is time that I step down and I will not be running again as your District Director. Please consider serving the District as I have. SN



The 2008 Musciano Fun-Fly participants. Kacmarsky photo.



An airplane from the Lansing Fun Fly! Kacmarsky photo.



Frank Carlisle and John Paris get his Flite Streak ready for a flight in July—not! Paris photo.



Grace being cold. Paris photo.



Bob McDonald's new USA-1.

A PA 40UL powers the USA-1. Polk photos.



Above: John flies his Bi-Slob. Paris photo.



Above right: Some pilots at the Lansing Fun Fly. Kacmarsky photo.



Right: Some more unidentified pilots at the Lansing Fun Fly. Kacmarsky photo.

# District VIII

By Don Hutchinson

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

It was a dark and stormy night that disrupted the annual Texarkana Stunt contest. Normally a two-day, four-round meet with the total of the best score from each day determining the

placings. This year it wasn't to be. Saturday was superb Stunt weather 'til mid afternoon and then the rains came! And the thunder and lightning and tornado watches and power outages

which wiped out our planned Saturday night activities. Rain continued on Sunday, so based on Saturday results, trophies were awarded. The usual raffle was then held and it was "Off to home

we go.” Hopefully, the results will show up in the contest report section.

That’s how it went this year. Normally we have good weather up there, so if you live anywhere near Texarkana, plan on being there next year. CD John Gunn puts a lot into this meet. Where else can you get a contest, plus biscuits and gravy breakfasts, ribs and chicken lunches, all included in the entry fee? This is a great meet for newcomers to the contest trail, kind of laid back, low pressure and all the good advice or help one could ask for.

**Well, here I am again,** your District VIII rep. I kicked this report off with the Texarkana stuff so I could use the “’Twas a dark ... ” as an opener. Not having been your scribe for several years, I needed something to “prime the pump” so to speak to get back into the writing mode which brings us to the next item on my agenda. Yes, I have an agenda. I need input to this column from all you great Stunt fliers in this district. I may be your rep but I can’t generate copy for the column alone.

Y’all don’t want to hear about how we flew Stunt in the ’40’s in Minnesota (again) so help me out here.

As I type this I am also etching the copper to make circuit boards for transistorized ignition modules. These will be a little different as this circuit will shut off the power to the coil if the engine stops with the breaker points closed. I have built and bench tested a “qual” unit and it has been tested on an Anderson Spitfire by my field test engineer Jim Kraft who reports that it works great, and try as he might, he could not make it fail. If you have an interest in adding a cool 10 points to your OTS score before you even take off, one of these might help.

**We started off with contest info** so let’s continue with more. There is a lot of activity and a lot of contests in this district each year, so to get the schedule of what and where, the Dallas Model Aircraft Association runs a web site with a schedule of activities plus lots of other good info. You can check it out at [dmaa-1902.org](http://dmaa-1902.org) and keep up with the

latest stuff. Matter of fact, if you aren’t already a member, you ought to join the DMAA; we have members all over the country. The monthly newsletter has great David Russum photos plus the comedy writing team of Dale and Linda Gleason to keep you entertained.

I’m writing this in early May as the rest of the month is pretty much gone! Our schedule is to attend the NASCAR All-Star Race in Charlotte, then up to Annapolis where my granddaughter will graduate from the U.S. Naval Academy.

A week later my step granddaughter graduates from High School here and the next week her sister is getting married. Have to brag a little about my granddaughter; we’re a bit proud of her. Then she’s off to Pensacola, Florida for flight training!

**So endeth the column.** Next time I will try to make it more “*Stunt Newsy*” cause y’all are going to send me some great copy and photos and suggestions for what you want in future District VIII reports. **SN**

Colorado, Kansas, Nebraska,  
North Dakota, South Dakota,  
Wyoming

## District IX

By Carl Shoup

**H**ello. I have bad news; we lost a good friend in March. I was working on my fourth Belfrey Bound for VSC XXI when Keith McMahan called to let me know that Rusty Brown had passed away. I was very saddened over this news. Rusty took me to my first VSC in 1998 and we had a very good time that year. I am adding this note from Mark Gerber.

“Many people have been asking for more information about Rusty. Despite all the time we spent with him at contests and club meetings, the talk was always about model aviation. He never mentioned a family or said much about his past. This obituary was in the Greeley Tribune. We miss him.”

“W. Russell Brown

“June 20, 1934-March 12, 2009

“Age: 74

“Residence: Greeley

“William Russell Brown, 74, of Greeley passed away on Thursday, March 12, 2009. He was the son of C. Lynn and Willa (Hamic) Brown. Russell had worked for the Great Western and

Amalgamated Sugar Company as a machinist and technician.

“Russell was an active member of the Rocky Mountain Aeromodelers Model Airplane Club, the Academy of Model Aeronautics and the Teamsters.

“Survivors include a sister-in-law, Elizabeth I. Brown, and nephews Samuel and Jonathan Brown of Denver. His parents and a brother, Tony Brown, predeceased.

**Steven Diaz sent me this story** about his time at VSC this past March. Steven rode to Tucson with me, and Don and Joanne followed us so they had their own car.

**“Cry Havoc and Let Slip The Dogs Of War ... My Totally Awesome Vacation!”**

“M.M.A.A. (Montrose Model Aviation Association): At our first Club meeting we meet this guy named Carl Shoup. Ever since then I have been flying control line planes. Eventually my dad and I thought it would be cool if we went to fly in a competition. We went to VSC last year but I had not finished my

plane yet, so I flew dad’s plane. This year I made my own plane that was pink with purple sun burst and on the bottom it is pink with purple polka-dots.

“The trip down to VSC took 10 hours and 27 minutes, and along the way we got to see many rock formations and multiple landscapes; it was cool! We got in Tucson and it was a very bright town with many lights. It is very hot down there.

“On the first day of competition I had to fly seventh in the flight order so it was a good thing we got a good night rest. I had yet to trim out my new model, but when I got down to the flying field at VSC I didn’t have enough time to do that. I had to fly without knowing how it would perform at that altitude. It was scary but on the second day I knew and was prepared and did much better.

“We also went to the Pima Air and Space Museum. It was so big and it took us two days to complete the tour! Then there was the banquet. I had the London Broil and it was good. Doc Holliday presented me with a Sig Acrobat at the banquet! Then we had to say our good-byes to our friends. If you didn’t go to

VSC you really missed out on some sugar-coated (or MonoKoted) Awesomness!”

Steven flew his first complete Old Time pattern on his first official flight and it was a little rough. On his second official flight he had a 69-point improvement. Steven’s dad and I were watching, and after his square loop we looked at each other and said, “That flight was smooth!” And then we both laughed, because during all of Steven’s practice flights he messed up the pattern.

We had 11 people from Dist. IX attend VSC XXI. They were Don Dubie, Steven Diaz, Chris and Linda Brainard, Jim Lee, Doc Holliday, Lew Woolard, Marvin and Ree Denny, Mark Gerber and Carl Shoup.

Linda Brainard spent most of her time judging Classic. Ree Denny helped in the OTS Ignition tabulation. Mark Gerber flew his new Bob Palmer Hawker Hurricane and received the Spirit of ’64 award. The three days of Classic were great and we were done flying by noon everyday. The weather was great throughout the contest. Thank you to the Cholla Choppers Control Line Model Airplane Club for the great contest and good times and great people.



Mark Gerber flying his Palmer Hurricane. (Photo by Steven Diaz.)



Here is my Belfrey Bound on March 11, 2009. (Photo by Carl Shoup.)



Lew Woolard flying his Smoothie. (Photo by Steven Diaz.)



And here it is flying one of my official flights. (Photo by David Russum.)



Mark Gerber’s Spirit of ’64 Palmer Hurricane. (Photo by Steven Diaz.)



Steven Diaz as he signals for his official flight. (Photo by Don Dubie.)



Doc Holliday’s P-39. (Photo by Steven Diaz.)



The nose of Mark Gerber’s Palmer Hurricane. (Photo by Steven Diaz.)



Chris Brainard with his Jamison Special. (Photo by Carl Shoup.)



Doc Holliday’s Dudel Bug. (Photo by Steven Diaz.)





Doc Holliday starting his 13 and Steven Diaz launching. (Photo by Don Dubie.)



Here is the bottom of Steven's Ringmaster with Don Dubie holding. (Photo by Steven Diaz.)



Steven's neon-pink and metallic-plum Ringmaster. (Photo by Steven Diaz.)



Can you name this crack? (Photo by Carl Shoup.)



Rusty Brown and Sugar Baby at VSC in 2005. (Photo by Carl Shoup.)

Please send me reports on what is going on in your area. *SN*

Arizona, California, Guam,  
Hawaii, Nevada, Utah

## District X

By Dave Fitzgerald

I've been getting a lot of projects done around the house. I was able to wire my mom's house for cable and DSL, and I was finally able to change the front oil seal in my '74 Capri. But as these things go, I had to take out the radiator, which entailed changing the radiator fluid, while I was at it, changed all the radiator hoses, which of course led to a pressure wash of all the oil and gunk built up underneath.

It's amazing what you can see when things are clean, which leads me to a modeling observation. I noticed my perfectly behaved PA 75 was acting a bit skittish the other day—definitely not normal. I was also getting a bit of residue on the fuselage side aft of the tank. Hmmm. Tank leak?

I wiped it off several times, and noted that the leak was just aft of the overflow cap. Then I cleaned off the overflow cap and noticed that the cap had split right behind the tie wrap I use to seal off the front of a short bit of fuel line to form the cap. I couldn't see the split unless I took the cap off and bent the fuel line to the side. Insidious to say the least.

It's amazing the small details that can affect us. It seems the trick is to recognize when something weird is happening. The next weird thing to fix on the Capri, it has mysteriously started to stumble. It runs fine, up to the point it quits, starts right back up. I'm thinking points or condenser, possible the ignition coil. I've only had the points in there for around 40,000 miles. Might be time to check the contacts.

Details...no wonder everyone ditched carburetors and ignition coils a long time ago.

Well, the Woodland new flying field has taken another U-turn. It seems that the seller has decided they want to change the deal again. Doug Barton said they were within days of closing escrow when someone wanted to change the terms of sale, again. The saga continues. Stay tuned, for now it is back on hold.

I was going to try to attend the contest Kaz Minato was planning on holding in Japan with a widespread invitation to fliers in the states. I heard from Kaz a

few days ago that he did not get the response he was hoping for and has decided to not hold the contest. He sends his regrets, but says that many people were initially hoping to attend but that spending money and the economy was just not going to let people travel that far for the event.

I hope Kaz is able to consider holding the event sometime in the future; it could be one of those once-in-a-lifetime events. Kaz, thanks for making the effort.

**A short report** on Jimby's new ARF Vector: as I wrote in my last column, Jim called one night and asked, "How crooked can a plane be and still fly?" This is the Vector with a RoJet 61—yes, 61. Very large engine, small plane. Kind of like the Thunder Gazer.

The engine/plane combination works great! The engine loafers around the circle and pulls like gangbusters overhead and everywhere you really need power. It flies very well in the wind. The problem starts when you try to trim out the funny wiggles in the corners during good air. I

think we can answer the question how crooked can a plane be and fly, no amount of trimming has been able to settle the corners and bottoms. I guess we found the planes should be built straight.

**DISCLAIMER:** I had nothing to do with the assembly of the plane or experimentation of the project; I am merely the reporter and consultant.

A few days ago, I got a note from my friend Gunter Wagner, "Dear Dave, I was flying this weekend. First flight with the PA 75, the engine ran great on the first try. I think it's just a matter of fine tuning. I have made four flights, and the model must also be trimmed. Greetings, Gunter"



Gunter Wagner's New PA 75 LightWave.



Another view of the Super LightWave.

Some of you may know Erik Rogers. He is fairly new to the CLPA scene in the Bay Area. He has been playing around with ARFs and converting them to electric. Each region seems to have their local electric gurus and Eric is one of ours. He is fearless and keeps an open mind on anything new related to electric stunt, and asks a lot of questions.

Eric's newest project is an electric-powered Thunder Gazer. I'm a bit concerned about the wing carrying the extra weight of the batteries, but he is willing to put in the work and do the research. All that ended around April 11. Erik and his wife just had their first baby a few weeks ago. All that free time just evaporated.

Erik, all of us in District X wish you

and your family the best and congratulations.



Anya Rogers was born April 11 and weighed 7 lbs., 6 oz.

I also got a note from Rich Walbridge:

"Let me introduce myself. My name is Rich Walbridge and I'm a mid-to-upper-range Advanced flyer/builder from Fresno, CA. I regularly fly (and judge) most stunt events on the West Coast and know who's who. I've been a member of PAMPA since 2002 when Bruce Hunt got me to join. I've seen you on many of Windy's DVDs over the years in his documentation of the Nats. I've never been to the Nats but a goal is to go sometime soon in the up and coming years. With juggling a marriage, a career in architecture, and 18-month-old twin girls, one's building time occurs at some of the oddest hours of the day!"

Rich has some ideas about returning to a traveling Nats or at least a West Coast regionals contest. We already have the NW regionals at Eugene, SW regionals in Tucson, and the Golden State contest in Clovis at the end of the year. What do you guys think about the idea? Send me some feedback and let's hear what you have to say.

Now for a few long delayed pictures from Golden State last year.



Carter Fickes: USA1.



Clint Ormasen: Sig Mustang powered by a Brodak 40.



Doc Saldivar: Vector.



Erik Rogers: electric Score.



Phil Granderson: Zealot.



Igor Panchenko: Hopak.



Jim Aron: Boogaloo powered by a PA 75.



John Wright.



John Miller: Pathfinder.



Kirk: Dreamer.



Marshall Palmer: Scirocco O.S. .46 VF.



Rudy Taube: electric P40.



Sergei Byelko: Stunt Special R8B75.

I just got back from the NW Regionals in Eugene. I'm sure Bruce Hunt will have results and pictures so I won't go into it much here except to say that the weather was generally good. Cool and overcast in the mornings, with a bit of a breeze in the afternoon. Nothing a PA75 couldn't handle. Eric and Rachael went and each flew in Beginner, but they spent a lot of time over watching Combat.

The really important news was, no rain. I brought all the equipment for rain, jackets, umbrellas, kids' rain gear, and nothing. Maybe next year I'll get my money's worth. And now for the rest of the story.

It always seems that there is a story of note for each contest. Each contest has its own flavor, humor, etc. It seems that the same people fall victim to our generally macabre humor, time and again. This time, once again, it was Phil Granderson.

As Phil and Kathleen were leaving the house, Kathleen was making sure Phil had done, and gotten all the stuff for the long road trip. A ways down the hill from the house Kathleen asks Phil if they remembered to set the house alarm. Phil says, "I think we did, besides, we are not going back to the house. We are going to Eugene."

After Phil pulls into the flying site (9-hour drive), he discovers that the pile of props he set down by the door is still by the door in the house. If he had gone home to check the alarm, he surely would have found the props and been fine. This was all the props except the one on the plane. You see the problem.

But wait there's more. Phil was going to run the Paul Walker-Brett Buck O.S. .40VF setup which normally requires a Bolly 11.25 x 4.25" 2-blade—which he doesn't have with him. Paul Walker overhears this story—who hasn't run this setup in years—and just happens to have a prop with him, aaaannndd walks up to Phil and hands him the magic prop for this engine combination.

I don't know, but this could very well have been the prop, the one that won the World Champs, I mean, for all Phil knows. Anyway, Phil has the prop for all of about 30 seconds, is talking, telling stories, bull, ect. When he turns around to face Paul about something, and not only drops the prop on the asphalt, but kind of loses his grip and throws it at the ground as he tries to catch it, right in front of Paul.

The prop was fine, but I think I actually saw Phil blush. It's a good thing Phil has a great sense of humor about these things, and thus this story was born. I tell this story, because I thought I might have a shot at the Concours award, but alas, Phil aced me out and once again snapped up another well deserved trophy.

**You should be** getting this just before the Nats. Good luck and fair winds to all who are able to attend.

Next column, Rickii Pyatt has sent me a whole bunch of pictures I haven't had a chance to use yet but will be here in the future. I think that's all the model news for now. Now I'm playing with Microsoft's RC version of Windows 7: looks good, stable.

Sincerely, Dave Fitzgerald. *SN*

# District XI

By Bruce Hunt

Alaska, Idaho, Montana, Oregon,  
Washington

Spring has arrived. Here in the Northwest that means intermittent showers with brief periods of sun. The last three Fun Flies of the spring are a perfect example. Salem's "Fun" Fly was a complete blow out, literally. Temperature in the forties, wind in the 20 mph range, and random showers pushed all the diehard fliers into the local restaurant to consume the large amounts of caffeine necessary to keep a Northwest resident's mood up. The previous Fun Fly in Eugene, Oregon was all shadows and crisp spring weather. And the last event at McMinnville was absolutely gorgeous, sunny, light wind and short-sleeve warm (that's 60° around here). At McMinnville we learned the sad news that the Evergreen Aviation Museum has plans to develop yet another attraction on our flying site. It seems that a water theme park will be erasing one of the best flying sites in the Northwest. We'll miss having this great venue.

**Moving on to the first contest** of the 2009 season, the Portland Fireballs hosted their annual Jim Walker Memorial Contest with what has to be the best contest weather since the event began. Two days of clear skies and warm weather brought out the best in all the pilots. This first contest is also the first opportunity for the builders among us to show off their winter creations.

Mike Haverly had his Jack Sheeks Freedom 45, fresh from its VSC appearance, flying well. Mike built this second rendition of the Freedom 45 after last year's model met its demise at the 2008 VSC. With allowance for more forward line adjustment in the swept-wing design, it is now trimmed well and will be very competitive in Classic competition. Scott Riese also brought his new Nobler and had it flying well enough to take first in Classic. The metallic flake paint job on Scott's Nobler looked great in the sun. Randy Powell also brought a couple of his new designs including a jet-styled model he named "Dramatic Effect" with a creative candy apple paint scheme over undercoats of silver, gray, gold, and white. Randy's second model was his version of a Ringmaster updated with all the modern design features to make it competitive in NW Profile competition. He calls it the

Ringmaster Deluxe. At last, and least, was a new profile by Dan Rutherford that takes the Flightstreak into the 21<sup>st</sup> century. It has a thicker foam wing, longer tail and nose moments and a MonoKote covering that looks very much like the American Flag.

As always you can get an excellent report on everything going on in the Northwest by checking out the news on the website: <http://flyinglines.org/>. *SN*



The hardy souls that came to the Salem Fun Fly just to take a picture in the 20 mph gale, rain and cold. Left to right: Bruce Hunt, Richard Entwistle, Doug Powers, Jerry Echiten, Mike Hazel, and Gene Pape. John Thompson took the picture.



Look at that blue sky in the background at the Eugene, Oregon Fun Fly. Left to right: Floyd Carter, Mike Denlis, Mike Massey, Jim Corbet, Tom Kopriva, Mike Hazel, John Thompson, and Bruce Hunt.



The sun and great weather came out for what may be the last event at the McMinnville flying site at the Evergreen Aviation Museum.



Mike Haverly takes in some sun along with his PAMPA Expert entry, Shrike.



A close up of Mike Haverly's Freedom 45 cockpit. Mike received the Jack Sheeks trophy for the best Sheeks design at this year's VSC.



Bruce Hunt prepares to fly at the McMinnville Fun Fly. The Fun Flies are good ways to get in practice before the start of the contest season.



Gerald Schamp flies a Pat Johnston-designed and -built Corsair at McMinnville.



Scott Riese poses with his new Nobler at the Walker Memorial contest in Portland.



Scott sets the engine for his winning flight in Classic.



With the new pull test rules this year, everyone gets to watch while your building skills go on display. Here, Randy Powell's Flightstreak Deluxe gets its first test while Jerry Olsen struggles to maintain his balance. Hey, why is Randy holding onto the leadouts?



Another picture of Randy Powell's Flightstreak Deluxe.



Randy Powell also brought his latest creation, Dramatic Effect, to the Portland contest. The candy apple color scheme over undercoats of shades of silver and gold has a dramatic effect in the bright sunlight.



Pete Ferguson launches Dan Covey's model at Portland.



Steve Helmick's "Haverlized" Twister rests between rounds.



Dan Rutherford continues his experimentation with small engines and known designs. With the "Wimpack," a scaled down version of the Impact, in the background, Dan's modified Flightstreak takes center stage. Of course that paint scheme is all MonoKote.



Joe Just brought out his P-38 to the McMinnville fun fly. Joe knows how to have fun and make the beautiful sound to a twin at the same time.

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Hanging out with a former member of the former Soviet Union (remind you of the Artist Formally Known As Prince?) can have a strange effect on a guy. Steve Yampolsky's always sending me cool photos of those classic bubble-canopied eastern European stunters.

I guess this scarred my psyche so much I had to design one of my own. I draw and design my models using a computer

application called Canvas. Throughout the design process I emailed drawing to Steve for his input. (Make the rudder *bigger*, Rick ...) Along the way I threw a few .pdfs to Bill Hummel and he got excited about building one, too.

Three EuroStyles were built during a marathon weekend session at Bill Hummel's house. I had prefabbed the fuse boxes and engine crutches. Steve Yampolsky made the molds and formed the shells for the fuse top and bottom. Bill Hummel sheeted the wings for himself and Steve. I bought my foam core from Bob Hunt with the molded LE option. Very cool: Saves time, weight and is more accurate and repeatable than carving.

The EuroStyle was originally designed for the Discovery Retro 60, after using that engine in my review of the Top Flite Score. The Retro did a fine job of shlepping the Score's 67 ounces, but I noticed the models from the Ukraine designed for this engine all weighed in the mid 50 ounce range. I did what I could to keep weight down and the EuroStyle flew off the bench at 54 ounces. Initially, I had trouble getting the lap speeds slower than 5 seconds.

Thanks to the Internet, I learned that Yuri Yatsenko's thin wooden props for the Retro can be re-pitched using boiling water just like carbon fiber props. Reducing the pitch to a bit more than 5 inches got the laps to 5.2 seconds or so.

After a season flying the Retro, the



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## Specifications:

conversion to the PA was done because I decided to simplify my approach and only run one type of engine. Dragging two different types of fuel and two different assortments of props to the field for both the Retro and piped PA powered models was a hassle. I already had a couple of PA 61s, and they are terrific engines. I sold the Retro and modified the EuroStyle for the piped PA. In addition to the addition of a pipe tunnel and cooling port, the landing gear had to be moved higher in the fuse to clear the pipe. A new, taller landing gear was also necessary. The bit of weight gain from the surgery and heavier power plant and prop made the plane feel more positive on the lines. I like it!

Lots of folks here in the northeast have flown the EuroStyle and were extremely positive. There is a second version drawn up for which José "The Shark" Modesto provided input. This one incorporates even more features from the Ukrainian stunters: Smaller flaps,  $\frac{2}{3}$  controls, all in line engine/wing/tail, and the self-centering reversed bellcrank.

Now if only I could give up playing and writing music and find time to build and fly ...

Free plans are available for the EuroStyle via email from Rick Campbell at RickPlaysSlide@gmail.com.

**Model Name:** EuroStyle

**Designer:** Rick Campbell/Dave Cook. Eurostyle is my evolution (7 ships) of Dave Cook's Lightning design

**Construction type:** Foam wing/flaps/stab/elev. Sheeted w/cap strips to resemble a built-up wing. Never again! More trouble than it's worth. Uses molded leading edge sheeting and I'd definitely do that again.

**Wingspan:** 59.1 inches

**Area:** 650 square inches

**Length:** 44.7 inches

**Moment arms** (measured from the front of the wing to the back of the spinner and from hinge line to hinge line: NMA: 10.25 inches TMA: 17.75 inches

**Weight dry:** 54 ounces w/Discovery Retro 60; 58 ounces w/ piped PA 61

**Power package:** Originally DR60, then modified to accept piped PA 61. The Retro drinks about 4 ounces of no nitro fuel per pattern. My PA does it on 6.5 oz of 10%.

**Propeller** (Type and size): 13.4 X 5-inch re-pitched Yuri prop for Retro, 12.5 inch or 13 inch 3B Bolly with more or less 4 inches of pitch.

**Finish:** Sig Dope on fuse, Ultracote on wing & tail.

**Line length:** 67 feet .018 braids.

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# White Cloud

White Cloud was totally built to accept an electric power package, and all it needed was paint. Then I received when I got a phone call from David Cook, suggesting (strongly) that I should try a 4-stroke engine in this bird. Since he has been my mentor for about 45 years, and counting, I decided (wisely) that it might be better to listen to the good teacher because there might be good reason to.

I still fly electric, of course, and am a proponent of electric, but David wanted me to try it out. So I agreed. I wanted some experience using 4-stroke, anyway, as it seems so different than the normal glow engines. And, to be honest, I love the sound of these things even though they are wet power. David said 4-stroke characteristics are in some ways similar to electric, and I wanted to find out, exactly how similar, so therefore, the airplane.

## Specifications:

**Model Name:** White Cloud

**Designer:** Will Moore

**Construction Type:** Built up D-Tube balsa wing and stab/elevator, and conventional "box" fuselage.

**Wingspan:** 65 inches

**Length:** 49 inches

**Moment Arms:** Nose - 10<sup>7</sup>/<sub>8</sub> inches. Tail - 17<sup>3</sup>/<sub>4</sub> inches

**Weight Dry:** 7 ounces

**Power Package:** Saito 62cl, with modified carburetor. Plastic round 4 ounce clunk tank, modified for non-uniflow muffler pressure.

**Prop:** Several, but currently APC 13 x 7

**Fuel:** Power Master YS/Saito 20/20

**Finish:** Silkspan with Brodak Dope.

**Line Size and Length:** .018 cables @ 66 feet eye to eye

So then, it began. The front end of White Cloud had to be rebuilt to accept the Saito and the fuel tank. That meant I had to install motor mounts in an already built fuselage that was ready to accept an electric motor in a radial configuration. (Why is it we do these things to ourselves?)

The bird has the backbones and lines of Randy Smith's SV-11, just because I like those lines. Having said that, only the airfoils remained the same as the SV-11 on this bird. Everything else was changed to accommodate electric. The wing was extended a few inches to increase aspect ratio (to increase lift).

The nose moment was left untouched, but the fuselage was originally deepened, widened and the tail moment lengthened, to adjust for the additional weight of the electric system that originally was to be installed and to allow a wide range of battery choices and placement. As it turns out, it was equally sufficient to allow the 15-ounce Saito installment way up front, without balance penalties. Increasing the tail moment helps to turn and stabilize the bird better, as does increasing the areas of the rudder, stab and elevator.

This airplane flies incredibly smooth and feels like it is on rails. It presents itself very well, and gives the impression of having "authority" in flight. White Cloud

moves through squares effortlessly, and you can count cadence going through the square eights. The higher-aspect ratio wing was a little experiment, and this bird does have lift! High-aspect-ratio wings have down sides, like they can get a little more jittery in some fluky thermal conditions than shorter-aspect-ratio wings, but I do not mind the trade off. Understanding the

power of the Saito 62, though, I would probably not do it again, and bring the wing back to about 60 inches in span.

I am an advocate of low rpm, high pitch and high load runs on this Saito 62 which means the engine likes large diameter (13 inches) and higher (7 inch) pitch props. It is important to "load up" these 4-stroke machines with such props, so that its power can be more easily governed, lessening the tendency to "run away."

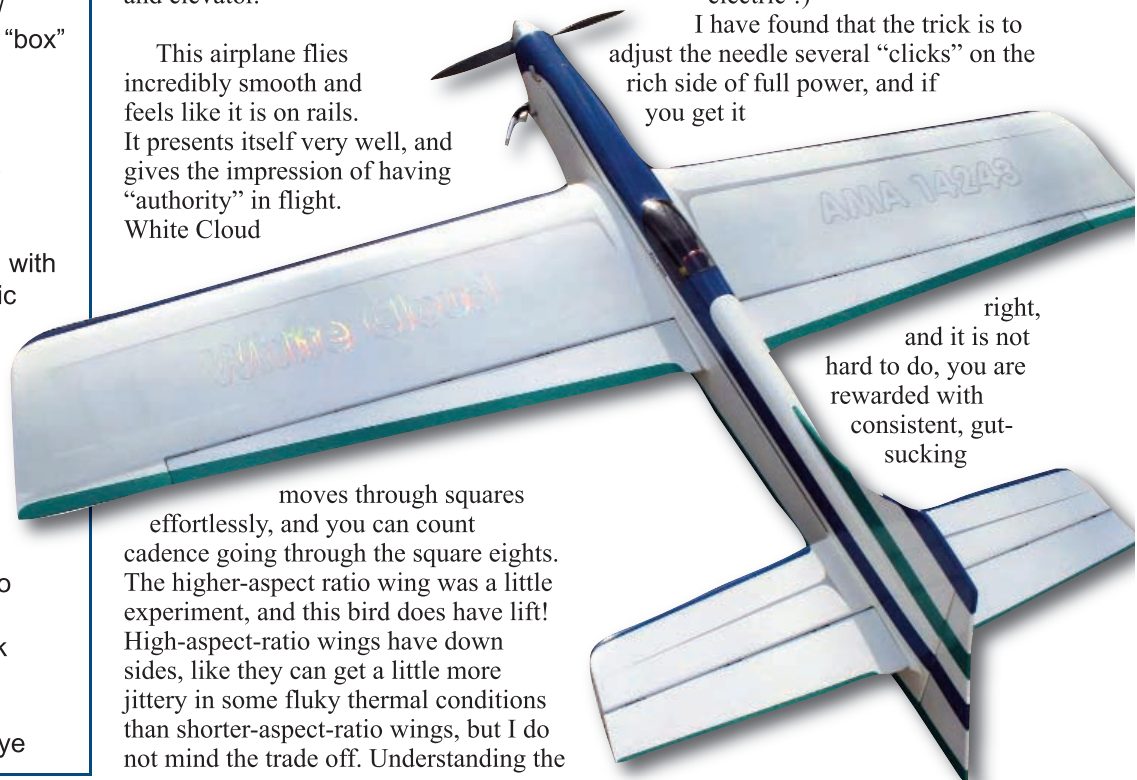
I aim for a 7200 to 7500 static rpm before launch verifying it with a digital tachometer. Probably level flight rpm is about 8,000 once the prop unloads. I could measure that with Eagletree, I suppose, but why the fuss. It works. I usually use about 3.5 ounces of fuel for the pattern flight of about 7 minutes.

I always start this baby with a battery operated engine starter (never by hand because I like my fingers right where they are, thank you very much) and utilize a remote glow plug igniter for safety reasons. And of course I use a battery powered digital tachometer every time. These tools just make everything

so much easier. (See, I'm still electric !)

I have found that the trick is to adjust the needle several "clicks" on the rich side of full power, and if you get it

right, and it is not hard to do, you are rewarded with consistent, gut-sucking







The drawback, of course, is that it is very "wet" as it burns Powermaster YS/Saito 20/20 exclusively. I have found this fuel very consistent for contest work.

I am very pleased with White Cloud and while not forgetting electric, I am continuing my studies in 4-stroke. The modifications to the design seem to work well and it is a thrill to fly it every time it goes up. **SN**



sweet power that takes this bird anywhere it wants to go in the hemisphere, with nearly constant speed. It tolerates level lap speeds of 5.1 to 5.5 seconds on 66 foot, eye to eye lines, depending on wind conditions.

White Cloud's noise threshold is remarkably quiet and I have been flying it everywhere my electrics have flown, with no complaints. The engine has a sweet, non-irritating, low-sounding pulse as it moves around the circle, and I have thoroughly enjoyed the sensation of flying with 4-stroke power up front.

I got real excited about the mellow sound when someone else flew White Cloud, and I watched from outside the circle.

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Gene Martine's "20 Point" Mariner

The first Mariner started out with Bob Hunt's design Genesis 40 in 1978. The fuselage was immediately changed to include a canopy and a short, stocky rudder. As all of you know, we are always looking to make changes to see if we can make something that was good just a bit better.

The 79 version had the root core thickness increased by  $\frac{1}{16}$  inch and the trailing edge moved forward by  $\frac{1}{4}$  inch. The leading edge remained the same. This also increased the flap area. This plane turned better than the previous one.

Since it seemed I was moving in the right direction the 80 Mariner incorporated more changes. The core was increased by another  $\frac{1}{16}$  inch to  $\frac{2}{4}$  inches and the trailing edge moved forward another  $\frac{1}{4}$  inch. I added  $\frac{1}{4}$  inch to the nose to increase that dimension to  $10\frac{1}{4}$  inches.

A cheek cowl was added along with an internal muffler, a starter plug in the air exhaust vent, two pilots (looked neat), and three exhaust air outlets, (one in each cheek and the third in the bottom cowl). I also installed an adjustable clevis on the control system with an access panel on the inboard side of the fuselage.

I started playing with ink lines on this version and an exhaust fading in the three air outlets to represent exhaust burns (the ink lines and the fading worked out better than expected).

When I'm doing something new or different on a painted plane, I always practice on white poster board. If you make a mistake just move to a different

area on the poster board until you get it the way you like it.

This version flew even better than the last and with a new paint design, (base tan, metallic brown, metallic green-and-orange trim) the plane looked great in the air and also on the ground.

After appearance judging at the 1980 Nats, we were out practicing and coming out of the second outside loop in the four-leaf clover when the plane level off inverted and was completely destroyed. As it turned out, I didn't go home empty handed. This Mariner was a 19 pointer and received the PAMPA Concours d'Elegance award.

After the 1980 Nats, I ordered a new set of wings and stab set-up from Bob Hunt with more changes. Another  $\frac{1}{16}$  inch was added to the core thickness (to  $2\frac{3}{16}$  inches) and another  $\frac{1}{4}$  inch to the trailing edge taper making a total of  $\frac{3}{4}$  inch taper to the wing. This created a lot more flap area and I decided to make the flaps as stiff as possible.

When the flaps were finished they were covered with carbon fiber. I kept the same color design as the 1980 model with a few minor changes, and I paid more attention to all the ink lines and the appearance of the plane. Aero gloss was the finish with a lot of wet sanding between coats.

I tried to incorporate all the remarks made by my fellow fliers as to the appearance and finish. It all paid off. At the 1981 Nats in Seguin TX, the Mariner sat on the front row by itself. From what I remember, there were quite a few 19 pointers that year, but, only one 20

pointer. The Mariner stood alone, the first perfect score in finish and workmanship in AMA history. *SN*

## Specifications:

**Model Name:** Mariner

**Designer:** Gene Martine

**Construction type:** Foam wing, flaps, stabilizer & elevators

**Wingspan:**  $56\frac{1}{4}$  inches

**Wing Area:** 621 square inches

**Length:**  $40\frac{1}{2}$  inches

**Moment Arms:** (measured from the front of the wing to the back of the spinner and from hinge line to hinge line) Nose—10 inches. Tail—16 inches

**Weight Dry:** 61 ounces

**Power Package:** Reworked O.S. Max 45FSR with a  $5\frac{1}{2}$  ounce uniflow pressure tank  
**Prop:** REV-UP  $11\frac{1}{2}$ W 3 Blade (custom made)

**Finish:** Aero gloss Nitrate base over silkspan then finished with Aero Gloss custom color mixture.

**Line length:** Stranded .018 X 65 feet W/CMP Fully adjustable handle.



Gene Martine's Mariner: The first 20 pointer in AMA history. Seguin, TX 1981.

27



Bob Hunt guides his original design Caprice to a third straight win at VSC.



Lou Wolgast's original design Fury is now an RSM kit! Here it flies at VSC XXI. Both photos by David Russum.