

# Stunt News

Precision Aerobatics Model  
Pilot's Association

September/October 2014 \$5.00



2014 Nats  
Coverage

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September/October 2014

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*On the cover:* A moment of history for PAMPA! Samantha Hines became the first woman to win a CL Precision Aerobatics Nats title since Dawn Cosmillo did it in 1965. "Sam," as she's known to the CL Stunt community, flew her Long Shot model that she built and finished herself. Photo by Bob Hunt.

*Inside cover story:* Five of the six United States F2B World Champions were on hand at this year's Nats. Left to right in the photo above are David Fitzgerald (2008 World Champion), Bob Gieseke (1974 World Champion), Bill Werwage (1970, '72, and '04 World Champion), Bob Hunt (1978 World Champion), and Paul Walker (1992 World Champion). Missing from the photo was three-time World Champion, Les McDonald (1976, '80 and '82). Photo by Gene Martine.

PAMPA, an AMA approved Special Interest Group, was founded in 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.

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# President's Report

by Warren Tiahrt

## Orestes Hernandez was the highest-placing USA team member ...

In the July/August issue of *Stunt News*, I wrote about the subject of the Expert class at the Nats, which began at the 2013 Nats. I stated that only one of the entrants received appearance points for building his own model. Apparently, I did not review what I wrote. The fact is that there were 11 entrants in Expert at the 2014 Nats. Of the 11 entrants, 10 received appearance points for complying with the BOM rule. Only one declared he didn't build his model.

It appears that about the only thing the addition of Expert at the Nats did was to dilute the Advanced entry. The numbers of the Advanced class entries have been steadily declining. Note that when the Advanced class was added to the Nats schedule, the object was to increase the entry numbers and get those modelers who felt they would not be competitive in the Open class, but would attend if there were a place for them to compete without going up against the top Open competitors.

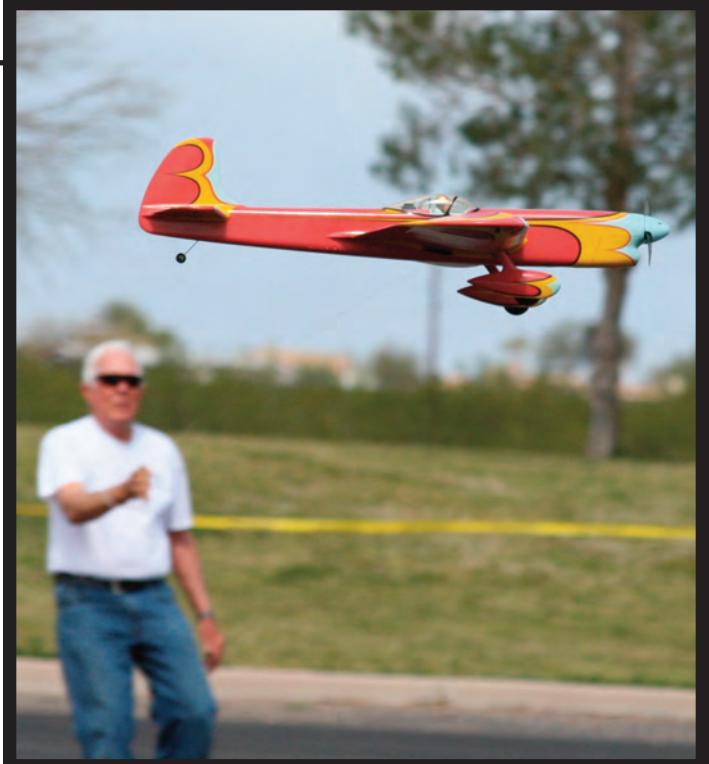
Many thought this to be a good idea but didn't know what to call it. It seemed natural to call it Advanced despite the fact that several of the potential entrants would be those who were competing in the PAMPA Expert class at the local level but were hesitant to enter Open at the Nats. In addition, there were those who wanted to use Advanced at the Nats as a stepping-stone to Open.

The Nats Advanced class had many years with more than 40 entries. I can recall that several winners of Advanced at the Nats moved up to Open and been quite successful. Also, there are some who made the move to Open without winning Advanced. Orestes Hernandez, Derek Berry, and Kenny Stevens are examples of Advanced winners who have moved up to Top Five Open territory.

Doug Moon moved himself up to Open without winning Advanced and has won the Walker Trophy. However, there are those who just can't get to the top of the mountain but still love to compete. The current Nats Advanced entrants fly on the same circles as the Open entrants, fly among the Open entrants, and have fun at the Nats.

In 2012 it was decided by the PAMPA Executive Council to give the Expert Class at the Nats a try. There was a feeling that there were some Nats Advanced winners who did not feel they would be competitive in Open or were highly skilled but chose to buy rather than build their own model. In 2013 there were 12 Expert entries, and in the 2014 Nats there were 11.

In addition, the Expert class added significant complexity to the Nats format, and the hoped-for-increase in entries has not materialized. The EC discussed at length the future of Expert, and after about six weeks a vote was taken; there were but three votes to retain Expert at the Nats. Therefore, there will be no Expert Class at the 2015 Nats.



As a result of this discussion, there were several suggestions as to possible modifications to the Nats Advanced event. There has even been a suggestion/proposal that would be a major change to the current Nats format. These discussions will continue.

In view of the Expert, Advanced, and other discussions, it is felt that there is a need for a procedure or protocol and timeline for proposed rule or policy adjustments. We will be working on this, as well.

The 2014 F2B World Championships are history. It seems that Igor Burger is clearly the best control line aerobatics flier on the planet at this time. The margins of his two WC victories are most significant. However, from second place on down to around 10<sup>th</sup> place, the scores are extremely close.

Orestes Hernandez was the highest-placing USA team member in fifth place. For some reason, it seems that first-time team members don't score as well as hoped. It is also a fact that while the USA had been the dominant country in F2B for many years, the other countries have virtually erased that dominance.

The flying site provided for this year's WC could be considered marginal at best. Kenny Stevens had a prop strike caused by the long grass that resulted in damage that was ultimately fatal to his model. Kaz Minato, from Japan, was in Poland for the F2B World Cup contest held the weekend prior the beginning of the World Championships, and due to family illness had to leave prematurely.

Kaz has been a many-time Nats entrant and is a most generous soul. He loaned Kenny his model—the one he flew at the 2014 Nats. Thanks, Kaz. Kenny did a remarkable job of competing with an unfamiliar model, finishing in 25<sup>th</sup> place. Howard Rush had the foresight to build a new landing gear that would accommodate a less-than-optimum flying field. Howard managed to finish in 22<sup>nd</sup> place with a nearly new, take-apart Impact that was still in the process of being trimmed. Howard

*continued on page 4*

# Level Laps

by Bob Hunt

people. Please take some time to read their stories.

Those who have a vote in the HOF process (and they are listed in Wynn's piece), please send your ballots to Wynn Paul as soon as possible. The deadline for voting is November 30, 2014.

Remember that any PAMPA member can nominate anyone they choose for this high honor. If you know of a modeler who is deserving of this recognition, but has not been so honored, please nominate him or her next year. The nomination process opens on January 1, 2016.

## A Milestone

I was a spectator on the field in Willow Grove in 1965 when Dawn Cosmillo won the Junior Stunt event and became a Nats CL Precision Aerobatics Champion. She was the first woman ever to achieve that title, and until this year no other woman has achieved that goal.

This year, Samantha Hines became only the second woman in Nats history to win a CL Precision Aerobatics championship crown. I predict that she will win many more. "Sam" (as she's known to the CL Stunt community) is the real deal.

Sam built and finished the plane with which she won this year. Her ship was a bit heavy and not flap-equipped, so it was limited as to how tight a corner it could achieve without stalling.

Those of us who watched Sam's flights in the Junior event (and there were a bunch of us) were amazed at how she was able to get all that her plane was capable of and not ask for even a tiny bit more. She was able to fly very clean shapes and good sizes. You could just *see* her thinking as she was flying.

Give Sam a few more years, a better plane, and more of her dad, Steve's, great coaching and I predict that she will blossom into one of the top pilots of the future. Well done, Sam! *SN*

—Bob Hunt



Another Nats has come and gone. It seems that many of us live our lives centered on this annual gathering, and even remember everyday things as they relate to a certain year's championships. I've heard things said by competitors like, "The year that Bob Baron won the Nats I had to put a new roof on my house." Or, "I remember when my kid graduated from high school; that was the year that Paul Walker won his first Nats." Truly, this contest permeates our very existence.

I remember vaguely going to the 1953 Nats. My father, James A. Hunt, and my brother, James C. Hunt, attended that Nats and stayed in the barracks on base at Willow Grove, Pennsylvania. My mother took me down to the base to watch them fly during the week.

The memories from that experience are fading but still there, and I remember it being a very big deal around our house. (By the way, the "C" in my brother's name stands for Curtiss. My real first name is "Robin." Put them together and you get Curtiss Robin, my father's favorite plane from the 1930s! He snuck that one right past my mother...)

"Lifer" stunt fliers will always treat the Nats as a sort of Mecca and will always revere the winners of that competition as true Champions. Perhaps this stems from the fact that the Nats draws the top competitors from around the country, and sometimes from around the globe. All early-year practice is aimed at having one's skills peak during that week of competition. Get enough fliers together who are all peaking at the same time, and, well, there you have a Nationals.

Enjoy the Nats coverage in this issue, and please make plans to attend next year's championships. If you've never been to one, you have no idea what you are missing.

## PAMPA HOF

In this issue you will find a listing of those who were nominated this year for inclusion into the PAMPA Hall of Fame. Our PAMPA Hall of Fame Chair/Historian, Wynn Paul, has gone to great lengths to assemble the biographies of these outstanding

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told me that he felt that the judges did a good job and pretty much got it right.

The 2014 team members did an excellent job of representing the USA. Unless you have been to a WC, it is tough to comprehend the amount of dedication required to commit the time and financial expense required to go to a foreign country and compete with the best F2B fliers in the WC under less-than-ideal conditions. It takes some very special people to compete in this event. A hearty "Well done, guys!" You have my highest respect and admiration.

It is also worth mentioning that the CL Team Manager, Bill Lee, and his assistant Team Manager, Keith Trostle, spend great amounts of time and dollars helping support the four teams that attended the Control Line World Championships. Both Bill and Keith have done this job at several WCs and deserve our thanks, as well.

Electric-powered models were in first and fifth place. A Super Tiger .60-powered model was flown by Richi Kornmeier to second place. The third place Chinese model was powered by a four-stroke engine. The fourth place model was a Yatsenko Shark flown by Andriy Yatsenko with Discovery Retro power, and Orestes used an electric-powered Shark to place fifth.

IC power is not dead, however, I have on good authority learned that Richi Kornmeier is flying with electric power, and the model flown with the ST .60 had "In honor of Tom Lay" inscribed on the wing of his model. Richi won the F2B WC in 2010 with this model.

My Shark 35 is ready for finish—not my favorite part of the building process. But, unless I get going it will never get done. My Tucson cohorts frown on e-powered Classic planes, but I am confident that they will get over it. At least all but Whitley. Hopefully, my next column will have a picture of the finished product. *SN*

—Warren

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# 2014 Nats

by Bob Hunt



Here are the Top 5 pilots at this year's Nats. In the back row, left to right, are Brett Buck (4th place), Paul Walker (3rd place), Doug Moon (2nd place), and Howard Rush (5th place). Kneeling in front is the new National Champion, David Fitzgerald.

Photos by Gene Martine except as noted.

**The hottest items** on sale at the AMA store during CL week at the 2014 Nats were sweatshirts and jackets. Truly, this was the coldest Stunt Nats in memory. How cold? Try high 40s to low 50s in the mornings early in the week. It did get progressively warmer as the week wore on, but, man, it was cold there for a while. And, as the weather warmed up, so did the competition. This was also the most competitive Nats in recent memory, with the overall best flying I can remember.

I was supposed to be on the field early Sunday morning to take photos and gather details for a report on the Beginner and Intermediate events. Liz Helms had asked me to write the reports on the CL Stunt event happenings for the daily AMA newsletter, *Nats News*. Actually, this was a real honor, as our *Nats News* reporter for the past several years had been Allen Brickhaus. I knew that would be a tough act to follow, and I was right; Allen's reporting was the very best, and I was just hoping to be able to make my reports somewhat interesting and informative.

My Nats adventure started out a bit shaky. I slept most of the day on Saturday before leaving for the Nats at 10 p.m. My plan was to drive through the night, be on the field



PAMPA Vice President Matt Neumann flew his brand-new, original-design Enterprise. This ship features an E-Flite 32 electric motor, a 3,300 mAh battery, a Will Hubin FM-9 timer, and a Castle Creations Phoenix 75 ESC. Matt says he's still fine-tuning the ship, but it appears to be a great flying plane. With it Matt finished in 10th place.

around 8 a.m. on Sunday, and be ready to take notes, shoot photos and do a good report on the Beginner and Intermediate Stunt events. Well, somewhere around midnight I was just coming into Carlisle PA, on Route 81 when the low tire pressure light came on in my van. I thought it was simply because the temperatures outside were very cool (a harbinger of things to come...), and the air had condensed in one of my tires, lowering the pressure.

I stopped just before getting onto the Pennsylvania Turnpike to check the tires and found that the left rear tire had a bad Schrader Valve that was leaking; only the cap on the stem was keeping the tire from going flat immediately. I quickly put the cap back onto the stem and started searching for an all-night car repair facility. There was none in Carlisle. None of the truck stops had any late night van or car service available, so I figured that I'd have to bite the bullet and check into a motel and find service in the morning.

As luck would have it, the motels were all filled with hot rodders because there was a Rod & Custom show at the Carlisle fairgrounds. There was a bunch of car guys trading stories in the courtyard at one motel, and I asked them for some help. They came to the rescue, fixed the valve, and I was soon back on track. Those car guys were just the best!

That little adventure cost me three hours in total, so I was very late in arriving at Muncie and missed all the

This year's Advanced class winner was Don Ogren. Don flew this electric-powered version of the Allen Brickhaus-designed Legacy 40. Don built this ship as a tribute to Allen. Don's ship features a Cobra 2826-10 motor and a Hyperion 2,950 mAh 4S battery.



Event Director, Bob McDonald (right), and the Assistant Event Director, Curt Nixon, pose in front of the L-Pad pavilion, which, for the week of the CL Stunt portion of the Nats, sported the new PAMPA banner. Bob and Curt did an outstanding job, with the help of many exceptional volunteers.



Left: Retired Air Force Colonel Frank McMillan flew this new-design model that is part of his Super Caudron series. Frank co-designed this ship with Bob Hunt. This was Frank's first foray into electric flight. His model features a Cobra 2826-10 motor, a Hyperion 3,300 mAh battery, a Hubin FM-9 timer, and an automotive paint finish.

Middle: Left to right are Randy Ryan, Stan Powell (sitting), Sam Neibel, and Bruce Hunt. Together they are weighing Sam's model to determine how much pull test it will require. Sam's ship is equipped with E-Flite retracts that are actuated by the Will Hubin timer.

Bottom: Jose Modesto prepares to start his original design Impact PM electric-powered ship for a qualification flight as Will DeMauro holds. Jose's model is powered by an E-Flite 32 motor.

Intermediate event action. However, I did manage to get a few shots of the Beginner competitors and the trophy presentation to publish in *NatsNews*. My apologies go out to the Intermediate fliers for not doing a better job for them; it was unavoidable. (Elsewhere in this issue you will find a



report about the Beginner and Intermediate action, written by the Event Directors of those events.)

The rest of Sunday was spent checking into the Baymont Motel and hooking up with Kevin and Will DeMauro. Kevin, Will, Bob McDonald, Curt Nixon, and I were treated to a great lunch on retired colonel Frank McMillan and Marilee McMillan. My thanks go out to them for not only the great lunch, but also for their lifelong support, generosity, and friendship.

One of my two roommates, Rich Giacobone, showed up later that day, and the other one, Bill Werwage, came in on Monday.

#### Monday

Practice for the “show” began in earnest on Monday morning at the L-Pad and on the grass circles.

Gene Martine, our intrepid PAMPA photographer, prepares to "burp" the PA 75RE in his gorgeous, Randy Smith-designed, SV-11. Gene's buddy, Stan Powell, holds. Gene's ship features a flawless Sig dope finish and was built using a Lost-Foam wing. Photo by Bob Hunt.



A nod goes out to AMA for once again preparing the grass circles for our use as a practice area and as a place to hold the Beginner and Intermediate Stunt events, as well as the old Time Stunt and Classic Stunt events. The circles were well mown and rolled for our use. It should also be noted that the L-Pad had been resurfaced and was in great shape with none of the seams that caused concern last year. Truly, AMA has done a great job in maintaining our Muncie facility and preparing it for use by all modeling disciplines. It might be a good idea to send your AMA District Representative a note thanking AMA for all they do for us.

For many of us, the opportunity to fly at Muncie is the only time each year when we get to fly in clean air. The conditions at Muncie always seem to make our planes fly better than ever. Those who fly at home on open-air fields cannot fully appreciate just what a joy this is for those of us who fly on turbulent fields most of the time.

Practice on this day was conducted with one eye on the clock, because the appearance point judging was scheduled at the 180 Building at 2:30 p.m. Most fliers put in a session that ended around noon and then retired to their respective motels in order to clean and polish their models.

The routine at the 180 Building is to get your model weighed (electric-powered models must be

The 2012 Nats Champ, Doug Moon fell just short of his second victory at the Nats this year, placing second. He flew his brand-new Riff Raff model that was co-designed by Bob Gieseke and Doug. It features a Lost-Foam built-up wing and a piped PA 65RE engine.

weighed with the battery onboard) and then hand it over to the Appearance Point judges, who in turn place it on the floor of the huge gymnasium in preparation for their inspection and row (points) placement. After all the planes are checked in, the doors are closed to the gymnasium and the Pilots' Meeting begins.

This year's Event Director was Bob McDonald, ably assisted by Curt Nixon. Bob addressed the assembled group of entries and fully explained the procedures for the week. For the "old hands"





Monty Summach visited us once again from Canada and flew his original-design, 57 Special. Monty's ship is powered by a piped PA 61RE. The design was developed using the airfoils of the Randy Smith-designed Shrike 25. Monty used Sig dope for the finish.

who have sat through many of these meetings, this orientation might seem unnecessary, but it is invaluable to those who have never competed at a Nats. Bob did an excellent job, aided by a very well-prepared Power Point presentation.

Apparently, the addition of the Expert class threw a bit of a monkey wrench into Howard Rush's Nats Excell program that took a couple of hours to fix. In fairness to Howard, the addition of the Expert Stunt event was not considered when the program was written. In the end, Bob and Curt got it right, after which the Advanced, Expert, and Open entrants drew Ping-Pong balls to determine the flight order for all qualification flights.

After the Pilots' Meeting the doors to the gymnasium were opened, and we all went in like kids on Christmas morning to see what goodies (in our case, points) we received

from Santa's helpers. Some received the equivalent of coal, and some received the equivalent of a new pony!

The level of craftsmanship and finishing has improved greatly over the past few years, and this year's crop of beauties proved that the participants in this event are continuing to learn about and apply great finishing techniques. The three planes in the front



Above: David Fitzgerald's Thunder Gazer flows through the pattern on its way to yet another Nats win. This was Nats Championship number eight for David. A PA 75RE powers David's original-design ship, and it featured Dallas Hanna take-apart hardware.

Right: Our E-Stunt columnist, Will DeMauro, gives his new-original design Voltron a pull test. Will's ship is powered by a Scorpion 3026-890 motor and a Turnigy Compact 3,700 mAh battery. A Hubin FM-9 timer and a Castle Creations Phoenix 45 ESC were also used by Will to complete the power system.





Above: This year's Beginner Nats Champ, Ben Mills, also flew in the Junior Stunt event. Here he is with his best friend, coach, and dad, James Mills. Ben is a very willing helper at the Nats, and did a great job as a score runner during the qualification and finals rounds. Ben placed second in the Junior event.

Right: Brett Buck starts the RoJett 61RE engine in his original-design Infinity as David Fitzgerald holds. Brett flew extremely well and finished in fourth place this year.



row received 19 points each; there was no 20-point ship this time. However, those ships were truly beautiful in every way. Kaz Minato (who received 20 points last year for his spectacular F6F Hellcat), Howard Rush, and Paul Walker paced the field. Notably, both Howard and Paul's ships featured vortex governors on the wings. There had been some concern by a few that the addition of

these seemingly unsightly do-dads would adversely affect the appearance point score. I guess that concern has been put to rest...

I was most pleased to have received 18 points for my year-old Crossfire Extreme XLTC—the very same number of points that I received with it last year.

All of the entrants were given ballots with which to vote for the coveted Concours award. The winner of that award would be revealed at the Saturday evening PAMPA banquet. Since I did not attend the banquet this year, I'll reveal the winner here; it was Kaz Minato once again!

Many of the entrants wanted to go back to the field after the Pilots' Meeting and Appearance Point judging, but a huge thunderstorm popped up, so we all had to wait for about half an hour before it let up enough to safely leave the 180 Building with our planes.

A huge nod of appreciation goes out to the wonderful folks who administer the 180 Building. I understand that Allen Goff is in large part responsible for our having the use of this great facility, and our thanks also go out to him.

By the way, the 180 Building is a purpose-built youth facility dedicated to accommodating young people from sixth through twelfth grades. The name on the building comes from the 180 Program in Texas and refers to the 180-degree turn in a young person's spiritual life. The people who we see there each year at the food service counter, the coffee bar, and the book store are volunteers from the Union Chapel Church.

## Tuesday

Practice flying continued on Tuesday morning on the L-Pad. Down on the grass circles the Old Time Stunt and Classic events were being contested. (A report on these events is presented elsewhere in this issue.) There was a bit of wind on Tuesday, but nothing too severe. We had no way of knowing at that point, but



This very neat Randy Smith-designed Dreadnought is a brand-new ship for Steve Fitton. Steve painted the ship in a full-size Sea Fury paint scheme that just continues to grow on you. The very neatly done ship is powered by a PA 61RE with a Smith/Werbage carbon tuned pipe.

## Wednesday

The contest for Advanced, Expert, and Open Precision Aerobatics began promptly at 8 a.m. on Wednesday. Two of the four circles on the L-Pad had Advanced fliers and Open fliers assigned to them, while the other two circles had Expert fliers and Open fliers competing together. The Advanced and Expert fliers flew first on their respective circles, and then the Open fliers flew. Two rounds were flown for each group, with the highest score being the one that counted. That score would be added to the pilot's highest score on Thursday to determine the finalists for the three classes.

There were a couple of new planes present that caught my eye this year. Matt Neumann brought his striking new Enterprise design, breaking a long streak of flying his fantastic Stuka models. Matt has been flying the Stukas for as long as I can remember. Matt's new ship is a very sharp departure for him design-wise, with tip plates on the stabilizer to enhance the elevator authority.

We are seeing this feature on more ships recently, and it really seems to work! Matt's ship has a very distinctive and patriotic red, white, and blue paint scheme that features a stylized bird sprawled across the bottom of the wing. It's very effective! Matt's ship is powered by an E-Flite 32 electric motor running on a 3,300 mAh 5S battery and a Phoenix 75 amp ESC. I had the opportunity to fly Matt's new plane after the Nats and found it to be a very nice-handling ship with tons of line tension. It was brand new at the Nats, and it will

we were to be treated to some of the nicest weather (except for the cold mornings) that we had seen in years at a Nats.

It seemed to me that the two practice days were relatively drama-free, with everyone having plenty of time with which to sort out and re-trim their ships for the amazingly good conditions. I love flying at Muncie!

On Tuesday evening there was a memorial flying session dedicated to Allen Brickhaus. Don Ogren was the organizer of this event, and there was a huge turnout of people; many of them brought along an Allen Brickhaus-designed model to fly. Kathy Brickhaus showed up for the event and was visibly touched by the outpouring of love for her husband's memory. There will never be another one like him... (A report about the memorial can be found elsewhere in this issue.)

Steve Moon's latest is this Furius 96S. It's powered by a side-mounted Discovery Retro 76 engine and features carbon-fiber cheek cowls, wing tips, and canopy. Like all recent Moon designs, this one also features tip plate on the stabilizer to increase elevator effectiveness.



Clockwise: Can you say "helpers?" At right we see all-star score runner, Ben Mills with PA judges Bruce Hunt, Jim Vornholt, and Doug Patterson.

Middle right: Here we see the Head Judge, Mark Overmier, with PA judges Steve Smith, and Randy Ryan.

Bottom right: Here we get to acknowledge our fantastic tabulating crew, Priscilla Rush and Elaine Brookins. Priscilla appears to be having too much fun...

Bottom left: Left to right in this photo are Nats judges Dale Barry, Wes Eakin (complete with newly trimmed fingers... Ouch!), and Gary McClellan.

Below left: Here's the last of the judging crew. From left to right are Warren Tiahrt (our current PAMPA President!), John Simpson, Dan Banjock, and judge in training, Samantha Hines.



only get better as Matt gets used to it and does a bit of fine tuning.

Another ship that caught my eye was Steve Fitton's new, Randy Smith-designed, Dreadnought. Steve's new ship is powered by a PA 61 RE with a Smith/Werwage carbon fiber tuned pipe and features a paint scheme adapted from the full-size, Sanders family, Hawker Sea Fury warbird. This plane at first glance appears to be a bit bland, as it has very little color trim over its base gray paint, but I found that I could not keep from looking at it admiringly.

There is a simple elegance to this plane that sets it apart from

the more ornate and flashy planes on the field. The old adage that "less is more" certainly applies here. Steve's plane appears to fly just as well as it looks. It's a brand-new ship for him, and I predict he'll make great strides with it. Nice job, Steve!

#### Thursday

The pilots changed circles on Thursday and flew two more qualification flights. These were pressure flights for many, as the finalists for the Advanced, Expert, and Open divisions would be determined. It was the last chance for many to lay in a great flight and move into a qualifying position.



Above: Rhiannon and PJ Rowland made the Nats a stop on their honeymoon trip. Good looking couple, eh?

Right: Our old friend, Kaz Minato, made the trip once again from Japan to attend. Kaz won the Concours Award for the second year in a row. This time he won it with his Blue Max Eternal design. Kaz placed eighth in Open this year.

Below: Another returnee from the other side of the globe was Joe Parisi. Fresh from his Australian Nats win, Joe flew his original-design, electric-powered Black Jack.



There was a bit of wind and turbulence during the second round on Thursday, and it certainly affected the scores for the flights flown late. It was really the only challenging weather during the qualification rounds. Because I was competing, I was not able to watch too many flights. One I did watch was Derek Barry's second-round flight on Thursday. Derek was flying exceptionally well, and he got paid for his efforts with a great score. I was pretty sure at that point that Derek would be one of the pilots to sail through Friday's finals.

Another pressure flight was put up by Bill Werwage with his razor-back Thunderbolt. Bill's flying is incredibly smooth and precise. He had not flown this particular ship until just before the Nats because he planned to bring his latest USA-1 design to this contest. At the last minute he decided to go with his old faithful T-Bolt. It took him a few rounds to get it working as we are all used to seeing, but in the end he was looking every bit the three-time World Champ he is.

One of the real surprises of this Nats was the return of Chris Rud. Chris was the Junior member of the 2006 FAI World Team that went to Spain. After that World

Championships Chris kind of disappeared. Turns out he was busy getting a college education, getting a job, getting married and is getting ready to welcome into the world his first child! His return to the fray was nothing short of spectacular. Chris flew his semiscale Hawker Typhoon to a very convincing win in the Expert class. He'll be big trouble for the Open guys next year and beyond I predict. Welcome back, Chris!

We had a number of visitors from other lands this year. From Australia we had Joe Parisi and PJ and Rhiannon Rowland. Both Joe and PJ have visited our Nats before, but this time PJ brought along his brand-new bride. He and Rhiannon made the Nats just one of many stops here in the US during their extended honeymoon. Rhiannon is just delightful, and she was instantly accepted by the CL community as one of the family. We certainly hope that PJ and Rhiannon visit here often.

Monty Summach made the trek from Canada to fly with us again this year, and his flying is noticeably improving. He'll be a threat for one of the top spots before too long.

And, once again our old friend, Kaz Minato, made the trip from Japan to attend the Nats. And, once again he won the Concours award, this time with his stunning, original-design Blue Max variant that was built from the RSM kit.

After the flying on Thursday, the finalists gathered at the pavilion and drew Ping-Pong balls for the next day's flying. The flight order draw is a real dramatic event. No one wants to be first up.

Derek Barry decided his luck would come from having his adorable daughter Layla pick his flight order. She rewarded her dad with a number one slot in one round in the Open Finals! The look on his face was priceless, but he gave Layla a big hug for her efforts. This is still a family-oriented sport, and it was a fun moment for everyone present. Well, maybe not so much for Derek...

## Workers at the 2014 NATS

**Event Director**  
Bob McDonald

**Assistant Event Director**  
Curt Nixon

**Judges:**  
Mark Overmier  
Bruce Hunt  
Wes Eakin  
Doug Patterson  
John Simpson  
Dale Barry  
Steve Smith  
Dan Banjock  
Warren Tiahrt  
Randy Ryan  
Jim Vornholt  
Gary McClellan

**Tabulators:**  
Priscilla Rush  
Elaine Brookins

**Pull Test:**  
Jeff Traxler  
Dave Wenzel

**Runners:** Marilee McMillan, Edie Oliver, Preston Thompson, Ben Mills, Mary Phelps, Jerry Phelps, John Park and sometimes Tom Morris.

**Unofficial Events and Administrative:**  
Mike Stenson- Beginner ED  
Bob Brookins- Intermediate ED  
Curt Nixon- Assistant ED

Darrell Harvin-Old Time/  
/Classic ED  
Bill Rutherford -Old Time/  
Classic ED  
Frank Williams-Old Time/  
Classic Assistant ED  
Old Time Judges: Frank Williams & Jim Vornholt  
Classic Judges : Ryan Young, Bill Rutherford, Doug Patterson and Steve Smith

**Banquet organizers:**  
Allen Goff & Jim Vornholt

**Special Trophy Sponsors**  
Derek Barry- Rookie of the year – won by Eric Taylor  
Eric Taylor- Concours – won by Kaz Minato



### Friday

The Finals for the top 20 pilots in the Open division was flown on Friday. Five pilots would qualify for the Top-5 Fly-Off on Saturday. The Finals is flown on two circles. Each flier gets two flights, one on each circle, with both flights counting. There are no “throwaways.” The pressure to deliver two outstanding, error-free flights is great, and there were some truly amazing patterns flown that day. In the end the Top-5 finalists were (in alphabetical order) Brett Buck, David Fitzgerald, Doug Moon, Howard Rush, and Paul Walker.

The Advanced and Expert finals were also flown on Friday. The Advanced winner was Don Ogren, who flew an electric-powered, Allen Brickhaus-designed Legacy 40. Chris Rud came out on top in Expert, flying his PA 61-powered, semiscale Typhoon that was co-designed by Chris and Windy Urtnowski.

### Saturday

The weather was just strange for the Top-5 and the Junior championships. It was a gray, dreary day with a constant but light mist. The dark sky background made seeing bottoms a problem for the fliers, and the moisture-heavy, thick air also made flying a challenge.

Sixth place finisher, Bill Werwage, and seventh place finisher, Derek Barry, flew the warm-up flights for the judges and the stage was set for the show. The fliers decided to use circle #4 for the Top-5 flights.

In the end it was David Fitzgerald who prevailed for the eighth time as the Open National Control Line Precision Aerobatics Champion, flying his veteran Thunder Gazer design. (David also has one Junior Championship and four Senior Championship crowns to his credit!) Doug Moon finished a very competitive second, with Paul Walker in third, Brett Buck in fourth, and Howard Rush in fifth. Despite the ugly conditions, all these fine fliers put in outstanding performances. In fact, the flying for the entire week, across the

Above left: Bill Rutherford built this very clean version of the Brett Buck-designed Infinity. Bill chose electric power for his ship, opting to use a Plettenburg motor. Bill's model featured a foam-core wing and tail.

Left: Alex Becerill flew this Sammy Crespo-designed Super Chipmunk in the Expert Stunt event. Alex powers this model with a PA 65RE, running on a muffler.



Above: In an outstanding show of class and good sportsmanship, Open Stunt winner, David Fitzgerald, invited the Junior Stunt winner, Samantha Hines, to join him in the circle while he flew his final Walker Trophy Fly-Off flight. It doesn't get any better than this!

Left: Here's Samantha Hines working through one of her Walker Trophy Fly-Off flights. Sam did an excellent job flying at this Nats, and she picked up a whole new group of fans and supporters along the way.

board, was the best I've ever seen at a Nats.

The Junior division championships had only two fliers entered, and there were no Senior entrants. This is really sad; we need to cultivate some youngsters to fly in this event so that it will be insured a long future.

As good as the show was on circle #4 with the Top-5, the show on circle #3 was even better. It must have been because most of the spectators were focused on the flights being flown there by second-place winner, Ben Mills, and especially those flown by the new Junior Nats Champ, Samantha Hines! If memory serves, this is the first female winner we've had in the CL Stunt event since Dawn Cosmillo won in Junior in 1965.

I had the pleasure a couple of years back to coach Sam on how to perform square loops. The progress she has made since then is simply astounding. Sam flew her Long Shot (a modification of my Hole-Shot design) through two very pretty patterns. The weather was—as mentioned earlier—not very good, but Sam handled it perfectly. Her model (which she built and finished herself) didn't have flaps and was a bit heavy, so flying sharp square maneuvers, or even tight round maneuvers, was a challenge.

You could see Sam thinking her way through each of the maneuvers and carefully piloting the model so as not to ask more of it than it could deliver. I think everyone who watched her fly that day—and there were a bunch—could see just how talented this young woman is.

I predict that with a few more years of flying, a better plane, and lots of coaching, she will be one of the top pilots in the

country. Remember that I wrote and predicted this...

Ben Mills also showed us some fine flying, and he'll continue to improve, as well. It was a great show over there on circle #3!

The finale of the flying portion of the Nats was the Walker Trophy Fly-Off between Sam and David. They each flew all three flights they were entitled to, and, in the end, David won the Fly-Off. Sam showed all of us that the pressure doesn't bother her a bit.

In a very classy and unexpected gesture, David invited Sam to come out into the circle with him while he flew his last Walker Trophy flight. He explained what he was doing in each maneuver, and Sam just seemed to love it. Nicely done, Mr Fitzgerald!

#### Final thoughts

I was pretty busy competing myself and gathering information and photos for the daily *NatsNews* articles, so a blow-by-blow account of the flying was just not possible. I can report that the flying quality and equipment quality across the board continues to improve greatly. Electric power continues to grow in popularity, but there were still more IC-powered models present than those with batteries. It's obvious that both types of systems are competitive at the very highest levels, and I predict that we'll see both power modes in use for many years to come.

I didn't include too much airplane/power train information in this article because Noel Drindak's Nats 2014 Technology Report in this issue has all that detailed information in an easy-to-read format. Our thanks go out once more to Noel for compiling this information, and to Rich Giacobone for distributing the Tech

## Scores

### Event 322 Open

Place	Contestant	AMA	Wednesday		Thursday		Qual. Total	Fraction of group	Friday		Semifinal Total	Saturday		Finals Total	
			Round 1	Round 2	Round 1	Round 2			Round 1	Round 2		Round 1	Round 2		
1	Dave Fitzgerald	68520	569.00	575.33	585.00	578.67	1160.33		576.67	586.33	1163.00	573.00	579.67	586.67	1166.33
2	Doug Moon	496454	564.33	567.67	566.00	0	1133.67		562.67	585.67	1148.33	572.83	579.00	579.17	1158.17
3	Paul Walker	30702	567.67	573.33	566.00	564.67	1139.33		572.67	577.33	1150.00	568.67	572.00	580.00	1152.00
4	Brett Buck	97012	571.00	569.00	556.33	566.67	1137.67		570.00	587.00	1157.00	570.67	571.00	577.17	1148.17
5	Howard Rush	18230	565.33	560.33	586.67	582.67	1152.00		571.67	565.67	1137.33	565.33	572.00	569.33	1141.33
6	Bill Werwage	17280	550.67	548.00	580.67	574.33	1131.33		561.00	574.67	1135.67				
7	Derek Barry	233413	552.33	564.67	591.67	596.33	1161.00		558.00	575.33	1133.33				
8	Kaz Minato	217221	544.33	568.00	564.33	561.67	1132.33		570.33	561.33	1131.67				
9	Bob Hunt	1114	546.00	554.33	560.33	573.00	1127.33		566.33	565.33	1131.67				
10	Matt Neumann	64805	554.67	560.00	525.67	519.67	1085.67		562.00	559.00	1121.00				
11	Joe Gilbert	771377	539.67	541.67	529.00	550.00	1091.67		544.67	573.33	1118.00				
12	Joe Parisi	924707	550.33	554.67	566.33	573.33	1128.00		568.00	549.33	1117.33				
13	Richard Oliver	95762	574.67	0	519.00	523.67	1098.33		537.67	566.33	1104.00				
14	Eric Taylor	511970	517.00	552.67	499.67	505.00	1057.67		554.67	537.00	1091.67				
15	Steve Moon	521164	524.33	536.67	528.33	535.33	1072.00		529.67	546.33	1076.00				
16	Gene Martine	2903	545.00	557.00	519.67	499.00	1076.67		525.33	550.00	1075.33				
17	James Smith	41899	0	529.33	520.33	511.67	1049.67		521.00	541.67	1062.67				
18	David Trible	20934	509.33	517.33	530.33	516.00	1047.67		539.00	522.33	1061.33				
19	Jose Modesto	258375	530.33	554.00	502.00	510.33	1064.33		533.00	517.00	1050.00				
20	PJ Rowland	809970	548.67	545.00	578.00	0	1126.67		479.67	552.67	1032.33				
21	Frank Williams	4831	537.67	543.00	497.00	511.00	1054.00	.960							
22	Ryan Young	817409	528.67	546.00	501.33	504.00	1050.00	.956							
23	Frank McMillan	9080	538.67	537.67	550.67	565.00	1103.67	.951							
24	Steve Fitton	543999	535.00	539.33	552.00	564.00	1103.33	.950							
25	Bill Rutherford	4367	515.00	514.00	495.67	487.67	1010.67	.920							
26	Jason Greer	518858	507.33	516.00	493.00	523.00	1039.00	.912							
27	Wesley Dick	11334	489.00	510.67	473.67	484.00	994.67	.906							
28	Joe Bowman	464907	522.67	510.67	509.00	502.67	1031.67	.906							
29	Robert Storick	12366	486.00	500.33	522.67	512.67	1023.00	.898							
30	Robert Harness, Jr.	28127	0	517.00	505.67	501.00	1022.67	.888							
31	John Leidle	412528	505.67	499.67	479.67	472.33	985.33	.897							
32	Wayne N. Smith	41898	510.33	517.67	516.67	508.00	1034.33	.891							
33	Jim Lee	50050	490.67	469.00	543.00	524.00	1033.67	.890							
34	Allen Goff	3303	510.67	512.67	516.33	513.00	1029.00	.887							
35	Eric Viglione	76070	504.33	513.67	509.00	496.00	1022.67	.881							
36	Monty Summach	948053	436.00	469.33	534.67	526.00	1004.00	.881							
37	Mike Haverly	710882	504.33	487.00	515.67	490.00	1020.00	.879							
38	John Hill	82974	0	0	0	0	0	0							

### Event 322 Junior

Place	Name	Score	AMA #
1	Samantha	840.60	280
2	Ben Mills	155.80	929703

### Walker Cup Flyoff

Place	Name	Score	AMA #
1	Dave Fitzg	1129.40	68520
2	Samantha	869.80	280

### Event 325 (Advanced)

Place	Contestant	AMA	Wednesday		Thursday		Qual. Total	of group leader	Friday		Finals Total
			Round 1	Round 2	Round 1	Round 2			Round 1	Round 2	
1	Donald Ogren (A)	A	4029	206.33	482.00	487.00	478.67	969.00	484.00	484.00	968.00
2	Samuel Niebel (A)	A	890295	275.00	478.33	489.00	503.67	982.00	483.67	480.33	964.00
3	Scott Harness (A)	A	763415	436.00	450.67	484.00	486.00	936.67	473.33	487.00	960.33
4	Mark McKinney (A)	A	506963	469.33	485.33	501.33	504.67	990.00	462.33	493.67	958.00
5	Ronnie Thompson (A)	A	327893	455.00	467.00	500.00	490.00	967.00	476.33	479.67	956.00
6	Vincent Bodde (A)	A	533375	69.67	471.33	518.00	506.33	989.33	472.33	479.00	951.33
7	James Mills (A)	A	491167	429.00	447.33	493.00	474.00	940.33	463.67	476.67	940.33
8	Jerry Haupt (A)	A	10364	464.00	459.33	486.00	469.33	950.00	460.33	476.33	936.67
9	Steve Drake (A)	A	201246	408.00	446.33	481.00	462.67	927.33	0	0	0
10	Greg Voumard (A)	A	537879	461.00	426.67	472.00	476.33	937.33	0	0	0
11	Alan Buck (A)	A	662471	428.00	435.67	459.33	451.67	895.00			
12	Robert Krug (A)	A	120841	329.67	448.67	443.67	394.33	892.33			
13	Kevin DeMauro (A)	A	785724	430.33	427.33	446.67	452.67	883.00			
14	Roger Wildman (A)	A	6842	383.67	399.33	175.67	0	575.00			
15	Robert Brookins (A)	A	7818	363.33	0	0	0	363.33			
16	Michael F. Stinson (A)	A	8441	0	0	0	0	0			

### Event 326 (Expert)

Place	Contestant	AMA	Wednesday		Thursday		Qual. Total	of group leader	Friday		Finals Total
			Round 1	Round 2	Round 1	Round 2			Round 1	Round 2	
1	Chris Rud (E)	E	726353	483.67	563.33	532.67	545.67	1109.00	541.00	552.00	1093.00
2	Michael McHenry (E)	E	548562	511.67	534.33	487.00	521.67	1056.00	496.33	522.67	1019.00
3	Germanico Becerril (E)	E	545927	504.67	512.33	525.00	521.33	1037.33	465.33	530.33	995.67
4	Scott Reynolds (E)	E	87274	491.67	492.00	493.00	500.67	992.67	484.33	509.67	994.00
5	William DeMauro (E)	E	98010	483.00	493.33	504.00	482.67	997.33	488.67	492.00	980.67
6	John Wright (E)	E	13567	483.00	501.33	464.33	493.67	995.00	478.33	487.67	966.00
7	Tom Dixon (E)	E	1028	450.00	413.33	491.00	492.00	942.00	0	0	0
8	Richard Giacobone (E)	E	3133	479.00	479.00	501.33	485.33	980.33	0	0	0
9	Larry Robertson (E)	E	39330	471.33	455.33	478.00	484.67	956.00	0	0	0
10	Michael Schmitt (E)	E	26702	492.00	490.33	471.00	488.33	980.33	0	0	0
11	Wes Eakin (E)	E	71880	0	0	0	0	0			

Richard and Edie Oliver walk Rich's original-design Maverick back to their tent after a qualifications flight. Rich's ship is powered by his own RoJett 65RE engine, and features a foam wing and tail. Rich placed 13th this year.



report forms to the contestants in Noel's absence.

No contest of this magnitude can hope to be successful without the event directors, judges, tabulators, runners, pit bosses, and trophy sponsors. (All of them are listed in the workers section of this article.) Please note who worked hard that week so the rest of us could play, and please thank them when you see them on the field.

If you've never attended a Nats, you simply don't know what you are missing. Please make plans to attend next year's championships, and please be sure to check the Schrader Valves in your tires before starting your trip! **SN**

—Bob Hunt

Returning to the "stunt wars" after a short sabbatical to graduate from college, get married, start a family, and get a job, Chris Rud showed that he hasn't forgot a thing, as he won the Expert class event.



Known to his fellow competitors as "The Man," Bill Werwage is just ageless. His first appearance at a Nats was in 1957! Bill flew his veteran P-47 Razorback Thunderbolt again this year and just missed making the Top 5, placing sixth.



Derek Barry flew extremely well at this Nats with his modified, Randy Smith-designed Cutlass. The plane is powered by a PA 65RE with a Smith/Werwage carbon fiber tuned pipe. The paint job on Derek's plane was inspired by one on a full-scale aerobatic plane.



Left: Jim Lee's new, original-design Gee Bee Model Y Senior Sportster stunter flies very well indeed, and with it Jim appeared to be having more than the legal amount of fun. It's powered by an Evolution 60 engine.

# Beginner Nats

by Michael Stinson



**With the tragic loss of Allen Brickhaus, it has become apparent just how much he did for our hobby. It has taken quite a number of fliers/volunteers to accomplish just some of the things he did for the hobby, especially at the Nats. One of the events he sponsored and ran in recent years was the Beginner Stunt portion of the CL Nats.**

Early this year, it looked as though no one else was going to be able run it, so I said those ever fateful words, "If no one else will, I will." Well,

Photos by Gene Martine.  
Above: Open Beginner winner, Terry Bentley, concentrates on his pattern. Terry flew a very nice profile P-51.

Left: Beth Mills launches her son, Ben's, electric-powered Sig Sky Ray stunter. His dad, James, lends moral support in the circle with Ben. Ben's model was powered by a Rocket Exceed 3015 motor with a Zippy 2,200 mAh battery.

Below: Mike Stinson volunteered to take over running the Beginner Stunt event. He has some big shoes to fill, as Allen Brickhaus has been the director for the past several years. Mike did a great job, and one of which Allen would be proud.

no one else volunteered, so it was up to me.

In the past, many of you have supported Allen's efforts through giving your time and donating items for the event. I sent out word that I needed help through friends, "Stunt Hangar," and "Stuka Stunt." The response was more than I could have hoped for. Modelers from all over the country started sending items. Members of a club in Las Vegas went out and purchased items, including an engine and a matching kit. From Tennessee came a kit that had been purchased from Allen's estate.

Other donations came in from RC fliers who used to fly control line and still had items lying around. Additional items came from RSM, Brodak, Sig, Tower Hobbies, Lee's Machine, and Aero Products, to mention just a few donors. Thanks to all of you, and I hope to





## Beginner Placings

Jr/Sr

- 1<sup>st</sup> place - Ben Mills
- 2<sup>nd</sup> place - Aedin Woods

Open

- 1<sup>st</sup> place - Terry Bentley
- 2<sup>nd</sup> place - John Park
- 3<sup>rd</sup> place - David Betz
- 4<sup>th</sup> place - Andrew Saunders
- 5<sup>th</sup> place - Carl Wiener
- 6<sup>th</sup> place - Bill Gray

get thank-you emails out shortly.

Volunteers also called in. For judges, we had Wes Eakin and Mark Overmier. Steve Smith and Dale Josephson coached the contestants, giving constructive critiques of their flights. Steve Drake acted as runner and helped keep things moving. Ruth Schroder and Ruth Trevino tallied the scores. Roland Trevino pull-tested all models and kept us smiling. Several other people helped keep thing going, including organizing all the prizes and awards. Again, I thank all volunteers.

While attendance was down due to the loss of Allen, and the "Texas Boys" not being able to attend, we still had a reasonable attendance. There were two Jr/Sr fliers and six Open fliers. There was a great deal of flying and everyone seemed to have fun. Hopefully, the word will get out that we are keeping Allen's traditional style of the event going and that there will be plenty of prizes. We will be back next year, and I hope to see more fliers. *SN*

—Michael Stinson  
dc8driver@hotmail.com



Top: Last year's Junior Beginner Stunt Champion, Kevin DeMauro (center), was on hand to congratulate this year's winner, Ben Mills (right), and the second-place entrant, Aedin Woods.

Above: These are the Open Beginner entrants.

Right: And the judges and helpers were (left to right): Dale Josephson, Wes Eakin, Ruth Shroder, Steve Smith, Ruth Trevino, Mark Overmier, and Roland Trevino.



A number of generous people contributed merchandise for the competitors to pick from in descending order of placing. Everyone got something of value.

# Intermediate Nats

by Bob Brookins

**On Sunday morning**, July 13, at 8 a.m., registration for the Intermediate Stunt event took place, followed by the pilots' meeting at 8:30. Registration was very light this year, as all other control line classes were. Old Time and Classic entries were also very light.

We had only five entrants this year, so we flew two rounds on one circle, with the high score of the two rounds counting. The grass circles were in great shape, thanks to the AMA ground crew personnel. The weather was nice but windy.

The contestants: In the finishing order from first to fifth were Jeff Traxler, Dan Bregar, LeRoy Polk, Don Sopka, and Samantha Hines.

Dan Bregar also received awards for Best Brodak Kit and Best Appearing Model. Jeff Traxler went on to participate in Advanced CLPA.

The event workers made the event go smoothly. A big thank-you goes out to my great crew! The tabulators were Elaine Brookins and Merry Phelps; the judges were Don Ogren and Greg Voumard; the score sheet runner was Teresa Voumard; the weigh master was Joe Peters; and the pull tester and pit boss was Vince Bodde.

I served as the event director.

Intermediate was sponsored by Brodak Manufacturing. **SN**

—by Bob Brookins



Intermediate winner, Jeff Traxler, poses proudly with his electric-powered ship. Jeff has been working very hard practicing. He has a secret goal in mind, and he took a step closer to it with this victory. Photo by Gene Martine.

# OTS and Classic

by Darrell Harvin

I was most pleased to once again be the Event Director for the OTS and Classic Stunt programs at the Nats. As with every contest, there are lots of things that go on behind the scenes and lots of work required by volunteers so that the competitors can fly and have fun.

As much as I like to try to do everything myself, I know I can't. With that being said, I would like to thank these special people for helping to make my life easier: Assistant EDs Frank Williams and Bill Rutherford; Tabulation Elaine Brookins, Merry Phelps, and Melanie McHenry; OTS Judges Frank Williams and Jim

Vornholt; Classic Judges Ryan Young, Doug Patterson, Bill Rutherford, and Steve Smith; Score sheet runners Preston Thompson and Melanie McHenry; and Pit boss Brent Rogillio.

Last, but not least, I would like to thank Nats ED Bob McDonald for arranging everything else that made this contest possible. The only thing different this year from the norm was the cooler-than-average weather. Coming from Texas, I didn't mind so much ... *SN*

—Darrell Harvin

Derek Barry flew his dad, Dale's, Nakke, sans appearance points, to a first-place finish in the Classic Stunt event.





Left: This pit area photo shows just a small portion of the models entered in the Classic Stunt event. Classic continues to be very popular at the Nats.

Below: Left to right are OTS and Classic Event Director, Darrell Harvin; Tabulator, Elaine Brookins; Pit Boss, Brent Rogillio; and Tabulator, Merry Phelps.

Photos by Gene Martine.



Left: This judging thing can be very stressful ... Hard at work here are Classic Stunt judges Bill Rutherford and Steve Smith.



Above: The OTS judges, Jim Vornholt (left in photo) and Frank Williams (right in photo) confer with Nats Open judge, Bruce Hunt, between OTS flights.



Left: Dan Banjock flew his fabulous rendition of Harold "Red" Reinhardt's Galloping Comedian in both the OTS and Classic events. Dan's model features a flawless spun-aluminum cowling, and beautiful, hand-hammered aluminum wheel pants that Dan made himself.



Above: Rich Giacobone seems pleased with his Bob Hunt-designed Caprice. It features an e-Flite 15 electric motor that runs on a 2,500 mAh 4S Hyperion battery and a Hubin FM-9 timer.



Above right: The Bill Werwage-designed 1962 Ares is the airplane choice of Wesley Dick for Classic Stunt. Wes uses an Aero Tiger .36 and a chip-type muffler.

Right: The Caprice is also the plane that Roger Wildman prefers for Classic. This is his second one, and it is beautifully finished. Roger uses a Thunder Tiger 40 for power.



Judges Ryan Young (L) and Doug Patterson carefully watch a maneuver during a Classic flight. A huge thank-you goes out to all the Nats judges. Where would we be without them?



Left: Michael Schmitt built this very nice replica of the Bob Gialdini-designed Sting Ray to replace his Gialdini-designed Eclipse that met an untimely demise last year. An Aero Tiger 36 was used to power the Sting Ray.



Above: One of the most popular Classic designs is the Cavalier. Here we see the designer of this ship, "Southern Gentleman" John Simpson with his latest rendition of his creation. John also uses the Aero Tiger 36 for power. He placed third in Classic this year.

Above right: Allen Goff paid tribute to Bob Gieseke by flying his Gieseke Nobler in Classic this year. Allen's ship features a Brodak 40 for power.

Right: Texan, John Hill flew his beautiful Cavalier in Classic. John uses a RoJett 40 to power his sleek ship.





Above: It's great to see Gerry Phelps back on the contest trail. Gerry flew his original-design Patriot. With this design Gerry flew on two US World Teams in the 1970s.

Above right: Scott Harness flew this very sporty version of the Dennis Shauer-designed Gladiator. Scott uses an ST 51 to power this great-looking ship.



Above: Mike McHenry built this very clean version of his father's semiscale A-7 Corsair design. An Aero Tiger .36 is used for power.

Left: Charlie Reeves competed at the highest levels back in the 1960s with a Lew McFarland-designed Shark 45. He reprised that ship for use in Classic Stunt competition. A PA 51 SE powers this flawlessly finished ship.



Left: The Bill Werwage-designed Super Ares is the airplane choice for Jim Lynch for Classic competition. Jim is well known for his gorgeous finishes, and this ship certainly has one of those! A PA 40 big-case engine is used for power.



Above right: These two icons of the stunt event also happen to be father and son. Dennis Adamisin and his dad, Big Art give us a look at Dennis' Henry Bourgeois-designed Joker OTS ship. It's electric powered!



Above: Joe Gilbert flew this Walton Hughes-designed Guided Whistle in OTS this year. It's powered by a Super Cyclone ignition 60 engine. Joe likes a challenge!

Right: The big winner in OTS was Charlie Reeves. Charlie used his veteran Addie Naccarato-designed Big Job to capture the top spot. A front intake Fox .59 powers this gorgeous model.

## Classic

Name	Aircraft & Powerplant	1st Flight	2nd Flight	Total score	Place
Derek Barry	Nakke PA 40	543	543	1086	1
Joe Gilbert	Gypsy ST 60	555.5	524.5	1080	2
John Simpson	Cavalier Aerotiger 36	559.5	517.5	1077	3
Mike McHenry	A-7 Corsair II Aerotiger 36	527.5	541.5	1069	4
Joe Bowman	Shark 45 RO-Jett 61	527	533.5	1060.5	5
Dennis Adamisin	48 Joker Arrowind 2815	529	512.5	1041.5	6
Dan Banjock	Comedian Fox 35	543	487	1030	7
Wesley Dick	62 Ares Aerotiger 36	522	505	1027.5	8
Tom Dixon	Predator Double Star 54	525	490.5	1015.5	9
Allen Goff	Gieseke Nobler Brodak 40	507.5	502	1009.5	10
Charles Reeves	Humbler PA 51 Side exh	515	489.5	1004.5	11
Jim Lynch	Super Ares PA 40 Big case	479.5	495.5	975	12
Scott Harness	Gladiator ST 51	486.5	487.5	974	13
Mike Schmitt	Stingray Aerotiger 36	513.5	442.5	956	14
Ronnie Thompson	Cavalier Profile Brodak 40	483.5	404.5	888	15
Robert Brookins	Oriental Brodak 40 Silver Fox	471	401.5	872.5	16
Roger Wildman	Caprice Thundertiger 40	484	370	854	17
Scott Condon	ARF Nobler Magnum 36	469	362	831	18
Rich Giacobone	Caprice E-Flite 15	511	Pass	511	19
Gerald R. Phelps	Patriot Aerotiger 36	510	Pass	510	20
John Hill	Cavalier Jett 40	509	Pass	509	21
Vince Bodde	Shark 35 Aerotiger 36	483.5	Pass	483.5	22
Steve Drake	Cavalier E-Flite 15	459	Pass	459	23
Best Appearing Spirit of 64	Jim Lynch Super Ares Gerald R. Phelps Patriot				

## OTS

Name	Aircraft & Powerplant	1st round	2nd Round	Best score	Place
Charles Reeves	Big Job Fox 59 front Intake	287	Pass	287	1
Dennis Adamisin	48 Joker Arrowind 2815	276.5	260.5	276.5	2
John Wright	Box Car Chief OS 35	261.5	240	261.5	3
Dan Banjock	Comedian Fox 35	253	260	260	4
Vince Bodde	Barnstormer FP 25	248	Pass	248	5
Jim Lee	Barnstormer Fox 35	240.5	245	245	6
Tom Dixon	All Australian Fox 40	180.5	239	239	7
Mike Schmitt	Jamison Special FP 40	237.5	226.5	237.5	8
Robert Harness	Viking Aerotiger 36	232	Pass	232	9
Leroy Polk Jr.	Time Machine LA 46	227.5	194.5	227.5	10
Dale Barry	All American Sr Fox 35	222.5	Pass	222.5	11
Scott Condon	Ringmaster LA 25	216	Pass	216	12
Dale Josephson	All American Sr Fox 35	215	Pass	215	13
Robert Brookins	Humongous Silver Fox 46	207.5	Pass	207.5	14
Joe Gilbert	Guided Whistle Super Cyc.60 Ignition	174.5	173.5	174.5	15
Best Appearing Spirit of 52	Robert Brookins Humongous Dennis Adamisin 48 Joker				

# A Gathering for Allen

by Don Ogren



**After not flying Stunt since 1962, I got the control line bug again in the early 2000s. The first time I went back to the Stunt Nationals since 1958 was 2002. I had taken my Green Box Nobler to the Brodak Fly-In that year and saw that I had a lot to catch up on. Allen Brickhaus was the CD at Brodak's, but I didn't get to know him there.**

While trying to get a couple practice flights in on the Nats L-pads in 2002, Allen came into my life. He could hear that my antique Johnson .35 wasn't running very well, so he said hello and introduced himself.

That's where my flying days and my life changed, as he quickly identified a fuel/oil mix problem and also noticed that I was using an ancient glow plug. Needless to say, it wasn't long until the Johnson .35 was purring like a kitten. After that, I

realized that this man was not only smart but was also a "giver," a friend, a teacher, an expert flier, and my next mentor.

I didn't have to nurture our friendship, as we quickly became close friends. I soon learned that he was a great "people person," as he wasn't self-centered (as most of us are), always thinking of how he might help me become a better builder and flier. And I observed that he took such a position and relationship with everyone. He was well respected in the circle of Stunt fliers (pun intended).

Allen and I would talk on the phone often and exchange emails on model construction problems and ideas. Many times he would just call to say hello and to chat for a while. At the Nats each year, we often had a fun time eating out at different Muncie restaurants, usually with four or five other Stunt pilots.

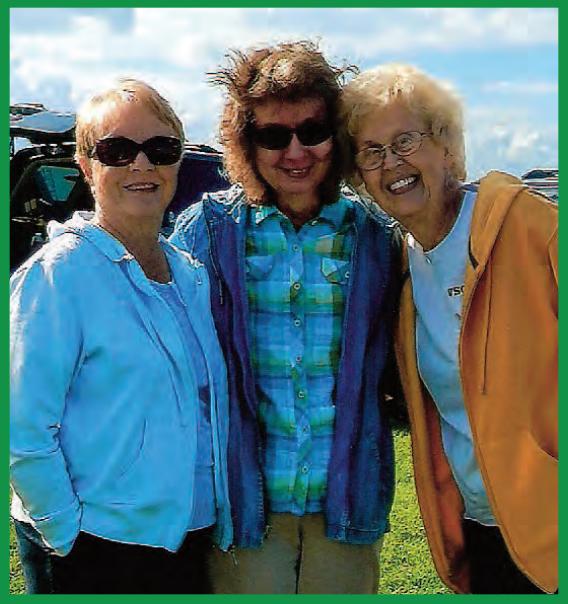
Each winter season he would ask what plane I had in mind to build for the coming year, and I would tell him. He must have been disappointed that my choices weren't one of his designs, but he never let me know it, nor did he ever come right out and say that one of his designs would work well for me. Allen was modest and not the forceful type. Then in the fall of 2013, I needed a new plane for the 2014 season, and I asked him which of his designs would work best for me. He said, "The Legacy 40."

I bought the Legacy 40 plans from our PAMPA secretary and looked them over very carefully and critically, realizing right away that I should have built this design years ago. I asked Allen if he could suggest any up-date-type changes that I should make. The only suggestion he made was to move the landing gear from

Photos by Gene Martine.



In an outstanding tribute to Allen Brickhaus, many of his friends brought models that he designed and flew them at the Tuesday night gathering on the grass circles at Muncie in his memory.



Left: Kathy Brickhaus (center), JoAnn Lynch (left), and Nancy Reeves (right) take a moment to reflect on the great times they all had together with their husbands at modeling affairs.



the fuselage to the wing (an easy change to make).

Sadly, Allen Brickhaus died in December 2013, before my Legacy was finished. I had in mind to have him take it for a whirl at the 2014 Nats. The Stunt Nationals would never be the same again, as a void in the Stunt world will remain.

My thoughts turned to giving something back—this time to Allen's memory. That's when I thought about a memorial to him, in the way of a gathering of modelers who loved Allen and his designs. Modelers who had built his designs, and a gathering to pay tribute to him, might be just the ticket.

I called our PAMPA president, Warren Tiahrt, the CLPA Event Director, Bob McDonald, and *Stunt News* Editor, Bob Hunt, to get their ideas and blessings for this get-together. I suggested Tuesday, July 15, at 5 p.m. on one of the grass circles, as that date didn't interfere with any planned Nationals function. All three said, "Go for it"!

Quickly I called and recruited Allen's close friend, Charlie Reeves, as I sure I would need some help in making this work. The grass circles would be ideal, for a "fly 'em if you wish" type of evening where each plane and flight would be a tribute to Allen Brickhaus's memory.

So the event happened as planned, at 5 p.m. on July 15. Kathy Brickhaus arrived and was nearly in tears as she came to observe the large turnout. Many modeling friends—numbering more than 60—came to the grass circle to pay tribute to the late Allen Brickhaus.

Stunt pilots brought nine of Allen-designed planes, which were proudly displayed for photo opportunities. Gene Martine took many memorable pictures of Allen's circle of friends. He was known around the world.

Mike Stinson had assembled and passed around a loose-leaf album with pictures of Allen's modeling associations, then asked us to write tribute notes in the album. (The book was given to Kathy Brickhaus at the Paducah, Kentucky, contest in August.) The accompanying pictures clearly show that thoughts of Allen will remain in our hearts.

The 2014 Nationals could not forget Allen this year, and his spirit will be ever present at the Stunt Nationals in the coming years. To conclude, we lost one great man in our model airplane world.

May God rest Allen Brickhaus. SN

—Don Ogren, AMA 4029  
Updated September 21, 2014

#### Modelers and their Brickhaus-designed planes

Ken Armish: Legacy 40 – Electric, E-Flite 25

Alan Buck: Legacy 40 – O.S. .46 LA

Tom Dixon: Teosawki/Fanfare – O.S. LA .40  
(Dixon modified)

Jim Lynch: Barracuda – O.S. .46 LA

Don Ogren: Legacy 40 Electric – Cobra 2628/10

Charles Reeves: Adam's Special – Fox .35

Andrew Saunders: Envoy – ST .60

Mike Schmitt: (2) Encores

Bill Rutherford: Legacy 40 – O.S. .46 LA



Don Ogren looks well pleased with his Allen Brickhaus-designed Legacy 40. He was also well pleased with the gathering that he had envisioned, and how much it meant to all who attended.

# PAMPA Hall of Fame

by Noel Drindak

## Voting Procedure for 2014

The nominations for the 2014 Hall of Fame Inductees listed in this issue will be voted upon by three groups of individuals: (1) Living members of the PAMPA Hall of Fame – 29; (2) Current elected officers of PAMPA – 14; and (3) Past Presidents of PAMPA – 12. An individual who appears in more than one group may cast only one ballot.

Voters should consider that the purpose of the PAMPA Hall of Fame is to honor those individuals who have contributed significantly on a National or International level in the hobby/sport of model aircraft control line precision aerobatics.

A nominee needs a simple majority of votes cast to be selected.

Those persons eligible to vote should send their ballots via email to Wynn Paul, Chair, PAMPA Hall of Fame Committee ([wynnpaul@twc.com](mailto:wynnpaul@twc.com)). Persons who do not have email capability should request a ballot from Wynn Paul at 3332 Carriage Lane, Lexington, Kentucky 40517 (telephone 859-361-8965). The deadline for voting is November 30, 2014.

Voting members may vote for any number of nominees from zero (no one) to all of the nominees—that is, any number from zero (0) to nine (9). There is no order of voting preference; just vote for the persons considered to be worthy of the Hall of Fame. There is no arbitrary number of persons who can be voted into the Hall of Fame.

The voting members are listed below:

Hall of Fame members (with date of induction): Wynn Paul (Charter '92), Bob Gieseke ('94), Les McDonald ('94), Keith Trostle ('94), Bill Werwage ('94), Bob Gialdini ('96), Bob Hunt ('96), Paul Walker ('96), Art Adamisin ('98), Al Rabe ('00), Don Still ('00), Jim Casale ('02), Jack Sheeks ('02), Jim Silhavy ('02), Davis Slagle ('02), Larry Scarinzi ('04), Charles Mackey ('06), Dennis Adamisin ('08), John Miske ('08), Leon Shulman ('08), Don Ferguson ('10), Bill Zimmer ('10), John D'Ottavio ('12), Shareen Fancher ('12), Ted Fancher ('12), David Fitzgerald ('12), Frank McMillan ('12), Tom Morris ('12), Windy Urtnowski ('12), and Bob Whited ('12).

Current (2014) elected Officers of PAMPA: Warren Tiahrt, Mathew Neumann, Jim Vornholt, Steven Yampolsky, Bud Wieder, Ken Armish, Steve Fitton, Derek Barry, Dennis Adamisin, Bob McDonald, Doug Moon, Jack Pitcher, Jim Hoffman, and Mike Haverly.

Past Presidents of PAMPA (in order of service): Keith Trostle, Dennis Adamisin, George Higgins, Tom Dixon, Ted Fancher, Steve Buso, Mike Keville, Frank McMillan, John Brodak, Paul Walker, Bill Rich, and Don McClave.

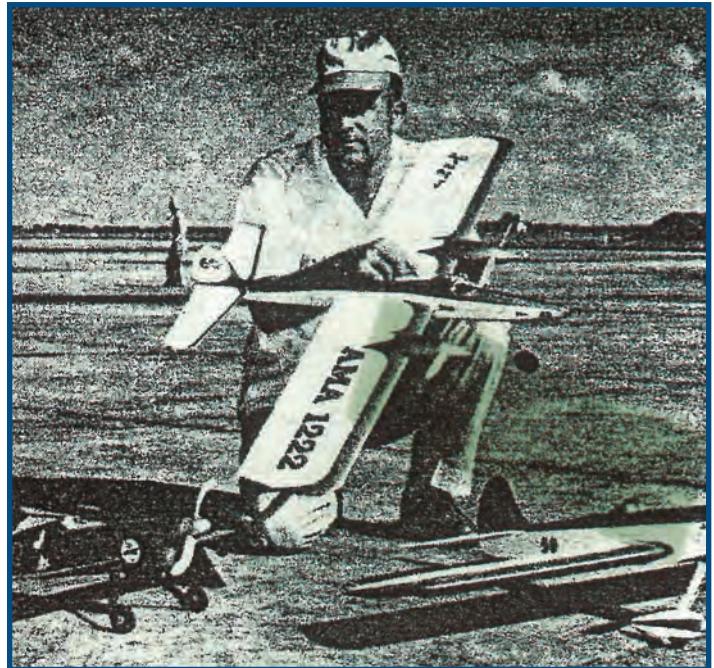
All eligible voters, numbering a total of 50 (four persons are doubles; one is a triple) are encouraged to vote for the 2014 PAMPA Control Line Precision Aerobatics Hall of Fame.

The nominees are as follows and are listed in alphabetical order:

## Henry (Hank) Bourgeois

Hank Bourgeois was fortunate to combine model flying and a career in the Marine Air Force. He was a fighter pilot in World War II, followed by service until retirement.

After flying free flight since 1929 in his native Louisiana, he became interested in control line flying while stationed at San Diego, California, in 1942. This new interest was interrupted



when he was shipped to the Solomon Islands to fly Wildcats and later Corsairs.

After World War II, he was stationed at El Toro, California, where he and Keith Foster established Models Unlimited to manufacture control line kits in 1947. Their first design was the Joker, using ignition Super Cyclone engines. Hank began competing in contests and stated, "Our toughest competitor was Jim Saftig, who always seemed to ace us out at the bigger contests." Hank and Keith also kitted the Jester for .29-size engines and the Jeepers for .23-size engines. Hank has stated that they manufactured and sold over 500 kits during the time he was in the area.

Hank flew stunt and speed at the 1948 Nationals in Olathe, Kansas. He placed third in the Open Stunt event flying a single-engine Joker. Jim Saftig finished in first place with his Zilch and a Torpedo .29 engine.

At the 1949 Nationals, again in Kansas, Hank had a twin-engine Joker with Torpedo .29s. During the finals of the 1949 stunt event, Hank flew one maneuver out of sequence and lost enough points to cost him first place. He finished in third place with what was probably the first use of a twin-engine plane in the Nationals stunt event.

After the 1949 Nationals the Marines transferred Hank to Memphis and later kept him busy flying off carriers during the Korean War. Hank's last combat mission was flown on October 21, 1943. He had completed the required three combat tours and he was extremely tired. He had three enemy planes shot down to his credit. Henry Bourgeois retired from the Marines as a full colonel in 1961. When he retired in 1961, he had over 2,500 hours in prop-driven Corsairs, as well as experience with all of the Marine jet fighters of the 1950s and 1960s.

After working for Kearfott in New Jersey, a manufacturer of navigation systems for airplanes, Hank moved to Maryland, then Niceville, Florida, and in 1993 purchased a 30-acre farm in Abita Springs, Louisiana, just north of New Orleans. He had his own

RC flying strip on the farm. He flew some RC and helped to raise two nephews.

Wynn Paul first contacted Henry in 1977 in New Jersey, but it was not until June, 1994, that he received biographical information, pictures and telephone interviews from Henry Bourgeois.

Henry Bourgeois' contributions to the model aircraft control line precision aerobatics event were his twin-engine Joker airplane, the early CL kits sold through Models Unlimited, and his use of a twin-engine plane in the 1949 National Model Airplane Championships.

Henry Bourgeois died in 2009, one of the many Americans who served their country with honor and patriotism during World War II and the Korean War.

### **John Brodak**

John Brodak's first model airplane was an Aeromite that he received as a Christmas present in 1952. With the help of his mother, he opened his own hobby shop in 1955, at the age of 15, in the corner of the family gas station. He married Coral ("Buzz") in 1960 and moved to Washington, PA, to work in a machine shop; he brought the hobby shop with him. In 1962 John and Buzz moved back to Carmichaels to run the family grocery business. A renewed interest in control line in the late 1980s brought to light that hobby supplies for control line were scarce. John opened another hobby shop in his garage in 1987. In 1988 John moved the shop to Brodak Commons in Carmichaels. He began purchasing control line supplies from "cottage industries," as well as from most of the well-known manufacturers.



John Brodak discovered in 1991 that manufacturers and supplies for control line model flying were dwindling, although there were a number of cottage industries supplying items, as well as some businesses on a more firm footing. Putting together the available cottage industries into one catalog, John began advertising in the model magazines. He also began purchasing some of the "basement production industries" and producing supplies himself. The first Brodak Manufacturing Company catalog for model airplanes and supplies was published in 1991.

Since 1991 the Brodak Manufacturing Company has released

for sale over 100 control line kits, which include profiles and full-fuselage planes. Many of these stunt planes have been flown to National Championship honors. John demands that every kit follow the original design of the plane. His kits include full-size plans, step-by-step instructions, and a list of additional parts needed to complete the plane. He has introduced many ARF (Almost Ready to Fly) kits, which allow beginners to get a good start in the hobby. John introduced the first modern electric ARF kit for beginners and old timers alike in 2006. He introduced Brodak Paint Products in 1998, specifically for model airplanes.

It is the opinion of many that John Brodak literally saved control line events from near extinction by producing kits and supplies.

John, at the suggestion of Bob Hunt, organized a control line contest on the grounds of his home in 1997. This has grown each year, with as many as 165 entries and 741 flights on one occasion. The 18<sup>th</sup> Edition of the Brodak Fly-In in 2014 was still another success. He has been a trophy sponsor for the unofficial PAMPA Intermediate Stunt Event at the USA Nationals since 1995.

John Brodak served as the President of the Precision Aerobatics Model Pilots Association from 2004-2005.

John has always been a scale model airplane fan and was the C.L. Scale Grand National Champion at the 2010 Nationals with his scale Shoestring. At the Nationals, John won the Profile scale event (2007) and the Sport Scale event (2011).

John was inducted into the AMA Model Aviation Hall of Fame in 2011

In addition to his model airplane enterprises, John operates a grocery chain, video stores, a printing company, a hobby shop, a mobile home park, and retail spaces around his home in Carmichaels, Pennsylvania. He has been the President of the Carmichaels Area Chamber of Commerce and is an Honorary Life Member of the Knights of Columbus. He has also been a serious fan of baseball all his life and has a fantastic collection of 1950s and 1960s Rock and Roll music.

In a short time span since 1991, John Brodak has contributed to the preservation of control line events with the production of thousands of control line products.

### **David "Dave" Cook**

Dave Cook was born in 1930 in Brockton, Massachusetts. At age nine he joined the Jordan Marsh Junior Aviation League in Boston. He built models for, and competed in, rubber-powered and towline free flight, and hand-launch glider. He made solid "Aircraft Spotter Models" for the war effort.



Dave began flying control line during the 1945-1946 period with a Stanzel Super V Shark with an OK .60 engine. In the 1940s and 1950s flew stunt and speed. He also flew a Miss Behave that he purchased from Polks Hobby Shop in New York City; its engine was an ignition Phantom P-30. He also flew Stunt Wagons, Super Duper Zilches, and Trixter Inverts. Dave became friends with Lou Andrews, who flew control line and also radio control.

Dave married his wife, Dorothy, in 1950. They have five children and now ten grandchildren.

Dave entered the U.S. Army for service in 1950. After graduating from Officer Candidate School in 1951, he went on to be a Company Commander at the Aberdeen Proving Grounds. After mustering out of the service in 1953, he went to North Eastern University for study in mechanical engineering. He worked at the Quincy Mass shipyard for 20 years in various management and engineering capacities, eventually becoming the Manager of Manufacturing Engineering for the entire yard.

He left Quincy and worked at MIT's Laboratory of Nuclear Science for three years. He then worked in heavy industry as a Manager of Manufacturing Engineering for 15 years, heavily involved in programming and setup of CAD/CAM and computerized production control systems. Later, Dave went to work for the Massachusetts Department of Correction for 13 years as Director of Engineering and Director of Operations. He ran their Prison Industries system with 80 staff and over 1,000 inmates. He also developed and implemented management information systems, video court hearing systems, and security systems.

Dave became a Contest Director for AMA in 1955. Subsequently, he CDed many contests in the New England area. He was the president of the New England Model Aircraft Council in the 1950s, an organization of some 15 clubs that he was instrumental in forming. He also served as the President of the South Shore Radio Control Club (275 members). He negotiated with the state of Massachusetts to obtain permanent flying sites that are still in use in the 2000s.

Dave wrote the original rules for Control Line Rat Racing that were adopted into the AMA rule book. He also wrote rule changes for the Stunt event and developed stunt judge training systems for use at major New England meets in the late 1950s through the early 1960s.

Dave flew stunt as a serious competitor in the 1950s and 1960s, with contest wins at such venues as Flushing Meadows, Edison, Lakehurst, Falls Church, and White Plains, plus many other wins in the New England area. He competed in the famous New York Mirror Model Flying Fair (1957). During that time he was flying Noblers, Ares models, and his own design, the Lightning.

During the 1970s Dave began competitive running and cycling, participating in the 40-and-over Masters Class in 10K running and 10-mile bike racing. He was quite successful in these events.

Returning to stunt in the 1980s, Dave competed in the National Model Airplane Championships with the following finishes: 17<sup>th</sup> (1983), 16<sup>th</sup> (1985), 17<sup>th</sup> (1986) and 22<sup>nd</sup> (1988). During this period he further developed his own Lightning design, powered by a Super Tige .60 engine.

Dave was instrumental in forming the New England Stunt Team that has supported CLPA and PAMPA events in New England since 1982. This group organizes and administers CLPA/PAMPA contests each year, and Dave has been the chair of the group for over 10 years. Dave participated in the setup and publishing of the Northeast newsletter on control line stunt called *The Handle*. He was the editor of that publication for seven years.

Dave then served as a Precision Aerobatics Judge and Head Judge at the 1990, 1991, 1992, and 1993 Nationals, and was the Assistant Event Director at the 1996 Nationals. He served as a judge at the 1991 Team Trials and then was the Chief Tabulator for the 1995 and 1997 Team Trials, as he brought the tabulation into the computer world. During that time Dave wrote a fully illustrated Nationals CLPA Judges Training Guide that was adopted for use at the Nationals. This guide has also been used in Australia, New Zealand, England, and Germany. He has been a member of the F2B Team Selection Program Committee for a number of years.

Dave wrote the first successful Control Line Precision Aerobatics computer tabulation program and introduced it at the 1991 FAI F2B Team Trials. It was the basis for the system currently in use for precision aerobatics at the U.S. Nationals in the 2000s. He also evolved computer-based judge tracking and supplied FAI Team members with computer analysis of their performances in the Team Trials.

Dave contributed the Lightning article to *Stunt News*, Jan/Feb 2002. This was the version of his original design that he flew in the Nationals in the 1980s. His Rare Bear was published in the May/June, 2003 issue of *Stunt News*. He wrote a complete article about Lou Andrews' 1951 Barnstormer that was published in the March/April 2004 issue of *Stunt News*.

In 2012 Dave Cook was awarded the Carl Goldberg Vital People Award and also the AMA Distinguished Service Award.

Dave Cook has been a lifelong model airplane enthusiast with equal interests of competition and administration. He published his own Lightning stunt plane and introduced the stunt world to the little-known 1951 Barnstormer of Lou Andrews. He has had a full range of administration service in stunt on the local, New England area, and National fronts, as well as being the early leader in developing computer programs for scoring of stunt events.

### Nathaniel J. Gifford

Nathaniel J. Gifford, the winner of three Junior National Championships (1984, 1985, 1986) and four Senior National Championships (1987, 1988, 1989, 1990) was born in 1971. At the age of 11 he followed in his father's footsteps and began modeling. He was also mentored by Windy Urtnowski but gives



credit to many others who assisted him over the years. "My primary coach for my entire career was my father."

Nat entered his first Nationals in 1983, flying a Tutor profile with one of Bruce Gifford's engines—a well-worn K&B Tornado. He placed second in that first Nationals behind Justin Sparr of New Jersey. In 1984 in Reno, Nevada, with a built-up stunt plane named simply Newt, he won his first Championship. He won using the same plane in 1985. In 1986, he had a new Newt painted in the Bob Hunt style of bronze and gold (it was not a Bronze Dog) and moved up to a Super Tiger .46 engine for power. The plane had many characteristics of the Genesis.

Moving to Nebraska for the 1987 Nationals, Nat had a new plane, this one painted white with blue trim. He not only won the Senior Division but also placed second in the newly created Advanced Division. Another new plane in 1988 (a new Newt with a ST .60 engine) resulted in another Senior win, and he also won the Advanced Division.

Nat earned his private pilot's license in September 1988. He graduated from high school in 1989. His plane for 1989 was the Newt Mk IV/ST .60, and he won the Senior Division again at the USA Nationals. He enrolled at the University of Maine in the fall of 1989. In 1990 his plane was the Newt '90/ST .60, and he completed his sweep of the Senior division.

Nat served in the Navy as an air traffic controller from 1990-1993. He worked in the family construction business from 1993-1999 and completed his college education at Southern Illinois University in 1999. He was hired by Continental Express (Express Jet Airlines) in March 2000, and eventually became a Captain and Check Airman for EMB-145. He married Krishna in 2001 and they live in Worthington, Massachusetts.

While Nathaniel Gifford has not competed against Open Division fliers at the Nationals, excepting his entry into the Advanced Division in 1987 and 1988, his record in the Junior and Senior Divisions is unparalleled. With a total of seven Championships for the Junior and Senior Divisions, in consecutive years 1984 to 1990, he has won more times than anyone else.

### Bart Klapinski

Bart Klapinski has had a unique career in the stunt world. As the Walker Trophy winner in 1967 in his first Open Division entry, he achieved the highest USA honor for a stunt flier. His only previous Nationals experience was as a Senior Division flier in 1963, finishing second. At the 1967 Nationals, he beat Bob Gieseke, Lew McFarland, and Jim Silhavy, who collectively had

five Open Division championships to date. However, after his victory in 1967 he did not fly again in the USA Nationals until 1987, where he finished in 10<sup>th</sup> place.

Bart was born in the mining town of Ely, Nevada, in 1942. At the age of two he had his father assemble a Tinker Toy set into an airplane. At age four he was building Comet models. Bart got his first real airplane ride at age eight. He flew a control line model plane at age 12. By the age of 16, he was living in Anaheim, California. He learned the stunt pattern on a much-repaired Jim Walker Firecat and was a member of the Orange County Thunderbugs Model Plane Club. He met two of the better stunt fliers in California, Dick Williams and Gerald Cheney, through the Thunderbugs.

Bart got to fly a Thunderbird that belonged to Williams and was hooked on stunt. By 1959, Bart was flying in California contests and actually beat Bob Palmer at a local contest at the Hollywood Race Track while Ed Southwick finished just ahead of him. At the 1963 Nationals in Los Alameda, California, Bart was flying a Dick Williams-designed Electra. By then Dick had taken Bart under his wing. Bart won the Southwest Regionals on more than one occasion, beating many of the outstanding fliers from California and Arizona.

Bart worked at the Disneyland Flight Circle in California from 1961 to 1965. He learned to fly three Cox P-40s at the same time. The third P-40 was controlled by a handle held in Bart's mouth! He would perform as many as 10 flying shows a day at the park.

Bart's second Nationals appearance was in 1967 when he flew his own design called the Tempest. He initiated the plane by winning the 1967 Southwest Regionals in January. He drew up the plans on his kitchen table at 1 a.m.; he wanted the plane to resemble a modern sport aerobatic plane. The fuselage outline was slim and trim, with a swept-back fin/rudder and a nose gear. (Bart preferred tricycle gear for ease in flying off of grass.) The plane had a sliding canopy that looked good during appearance judging. He used a McCoy .40 engine that was given to him by Dick McCoy. The plane was never published, but Jim Mayfield published a small two-view of the plane in the June, 1968 issue of *Model Airplane News*. At this time Bart was working for the Pacific Telephone & Telegraph Company during the day and part time at Disneyland at night, trying to fit practice sessions in between.

Directly after the 1967 Nationals, Bart was drafted into the U.S. Army and spent time overseas. After his service, he served as the Assistant Event Director for Stunt at the 1971, 1972, and 1973 Nationals working with his mentor, Dick Williams. Bart was the Event Director for the 1976 Nationals in Dayton, Ohio. He also served as a judge at the 1995 USA Team Trials.

The 1987 Nationals in Nebraska did not kindle the fire for Bart to return to the Open competition, but then Mike Keville asked Bart to help him plan for a contest comprised of Old Time Stunt and Nostalgia Stunt. The result was the Vintage Stunt Championships first held in 1989 in Whittier Narrows, California.

Bart did get into the flying mode for the VSC and competed from 1991 to 2011, winning the Old Time Stunt Event seven times (Ringmaster, Fleet Biplane, and Madman) and finished in the Top 5 of the Old Time event a total of 15 times.

Bart has always been considered one of those gifted "Stick Men" with the ability to pick up a strange airplane and on the first flight execute dynamite maneuvers with five-foot bottoms and perfect intersections.

While Bart Klapinski's association with the control line precision aerobatics event is convoluted at best, and quite unique in his accomplishments, the fact remains that his name is engraved on the Walker Trophy.



## **Rolland McDonald**

Rolland was born in 1929 and was raised in the Detroit, Michigan area. He worked for the Ford Motor Company for 35 years as a stylist/modeler.

He drew up his first stunt plane in 1951 and also entered his first contest that year. Flying in the Detroit area at that time, he became friends with Robert Dailey, the inventor of the I-beam wing stunt plane, and also flew with Richard Schneider (1949 Nationals-Detroiter), Sam Dehelean (1950-Nuts and Bolts), Rodney Pharis (Jupiter), Jim Ebejer (Neptune), Tom Ebejer (Comet), Art Pawloski (Lunar and Atom), and later his friend from Toledo, Milton Boos (Neptune).



Bill Werwage wrote in 2003, "It was at the 1954 Cleveland Junior Air Races that I first met Rolland McDonald. Eventually, Rollie came up and flew, and his whole flight stuck in my mind. You could feel the difference, the intensity, the overall grasp of what he was doing in the event." Rolland entered the Nationals shortly after his first contest.

Records show Rolland's first placing in the Nationals in 1954. Evidently, he immediately got into the swing of things as at the 1954 Nationals where he placed second, only 2.6 points behind the winner, Don Still. Rollie was flying his Strathmore design with a Fox .35 engine. This was followed by a fourth in 1957 (tied with Milton Boos), a second in 1958, third in 1960 (uniquely, the second time that he tied with Milton Boos, his close friend), and fourth in 1961.

Extensive results of the 1950s and 1960s Nationals have not been found. Only after 1971 have full listings been kept. Rolland finished 15<sup>th</sup> in 1973 at Oshkosh. His last appearance at the Nationals was in 1980. In 1960 he finished in second place in the FAI Team Trials Mid-West Regional Contest behind Steve Wooley.

As a proponent of the I-Beam wing, Rollie published the Strathmore in the February, 1959 issue of *Model Airplane News*. His Strathmore was one of the earliest of the Detroiter-style airplanes, first built around 1953-1954. This was the earliest publication of one of the Detroiter; however, he chose to illustrate the plans with a conventional D-tube wing, as this was an easier method of construction for most modelers who might have read the article. The Strathmore was named for the Detroit Control Line Club and the site of their model field. He published

the Challenger III in the October, 1962 issue of *American Modeler*. This plane had the I-beam wing shown in the plans and also had a tricycle gear.

Rolland was one of the original members of the Precision Aerobatics Model Pilots Association. Rolland and Jack Sheeks pushed to include the Advanced PAMPA class competition at the Nationals, and in 1987 this unofficial event was added to the program.

Rolland's son, Bob, broke into the Nationals program in 1975, and the McDonalds became one of the few father/son teams in stunt history. In addition, both would be qualifiers in the Nationals.

Rolland coached his son as well as many other fliers during the many years that he was one of the "stunt family." Starting in 1956, he would drive to Cleveland, pick up the novice Bill Werwage, and take him to contests to fly and learn. Rolland died April 18, 2003, at the age of 74. Again, from Bill Werwage, "To me, I will always respect the fact that Rollie not only danced to his own drummer, but he never heard anybody else's drummer. He influenced me as much if not more than anyone else."

## **Bill Rich**

Bill Rich attended his first Nationals in 1986 flying a B J (Big Jim) Pattern Master with a S.T. 60 engine and finished in 24<sup>th</sup> place. He stayed with the Pattern Master in 1987 and 1988, and then he broke into the Top 20, finishing 12<sup>th</sup> in 1989 flying one of James "Randy" Smith's designs.

Bill was born in the Panama Canal Zone, and by the age of 10



he was building and flying 1/2A-size model airplanes, followed by Sterling Mustangs with Fox .35 engines. Living in Ocala, Florida during junior high school, he became friends with the owner of a local hobby shop who was able to fly the complete stunt pattern, and Bill was fascinated with the four-leaf clover. He served in the United States Marine Corps from 1963 to 1969. He graduated from Florida Atlantic University and went into the pharmaceutical sales profession. He ended up in West Chester, Pennsylvania, in the early 1980s where he bought ten Sterling Mustang kits at \$5.00 each from a friend who owned a Hobby Shop. Nine were totally destroyed before he learned to fly inverted

with number 10. He then began flying a Magician with a Tom Dixon Fox .40, and with that he learned the rest of the stunt pattern.

In 1982 he ventured to the annual contest in Johnsville, Pennsylvania, at the Johnsville Naval Air Station, where he met the likes of Jimmy Casale, Windy Urtnowski, Bob Hunt, Glen Meador, Lou Dudka, and other PAMPA members. He began visiting Windy Urtnowski for help in building the well-known Pattern Master series of planes. By 1985 Bill moved to Valrico, Florida, to continue his career in Pharmaceutical Sales on the managerial level.

Upon meeting Randy Smith at the 1988 Nationals, he became a devotee to the SV series of planes. He wrote of that design, "I made one half-hearted attempt to design a model, but I realized my shortcomings early and decided my time would be better spent building and flying proven models." Bill latched onto the Randy Smith-designed SV-11 in 1991 and with a few alterations used this basic design in many competitions.

From 1986 to 2013 Bill competed in 24 Nationals, finishing in the Top 20 a total of 21 times, with fifteen Top 10 finishes and seven Top 5 finishes. His highest finish was second place in 1995, with third places in 1991, 1992, and 2002.

Recognizing good designs, Bill also made use of the Randy Smith-designed Intrepid, Nova, Astra, Tempest II, SV-12, and the SV-22. Some of his planes sported the name Stunt Mongrel. After abandoning the Super Tigre .60 for the piped engines in 1993, he then jumped right on the new PA .40 of Aero Products in 1995 and later made use of the PA .61 and .65 engines.

Bill competed in 11 USA Team Trials, starting in 1991, finishing in the Top 10 every time with six Top 5 finishes. After finishing fifth at the 2009 Team Trials, he was added to the USA team for 2010 when Bill Werwage (first) and Brett Buck (fourth) were unable to attend. Bill's trip to Hungary for the World Championships was not much fun, as he finished in 31<sup>st</sup> place.

Bill was the Southeast representative (later District V) for PAMPA from 1990 to 1996. He served as the PAMPA President from 2008 to 2011 and was responsible for strengthening the organization and rebuilding the membership. He served as the Event Director at the 2011 USA Nationals.

Known primarily as a serious competitor in the precision aerobatics world, Bill Rich has a distinguished record in Nationals and Team Trials competitions. Along with several high finishes in the National Championships and the F2B Team Trials, he represented the USA in the 2010 World Championships. His service to the event consisted of leading PAMPA as the President, as well as serving as District Representative for six years and as Event Director at the USA National Championships.

### James "Randy" Smith

James "Randy" Smith has made a significant contribution to the precision aerobatics event as a designer, manufacturer, and distributor of airplanes, engines, and components. He has also been a top competitor in Nationals and USA Team Trials competitions.

Randy was born in Cedartown, Georgia, in 1942. He graduated from Chamblee High School and attended Dekalb College. He worked in the publishing and printing fields, as well the early computer sales. He had an interest in things mechanical, which included building drag cars and engines, reading tech books on engine metals, and repairing early computers. His first model airplane was a Cox P-40 in 1961, followed by Ringmasters in 1969.

Randy's first appearance at a model airplane Nationals was in 1975, where he finished in 18th place flying a Nobler with a Fox .35 engine. Over the years he has competed in 22 Nationals with 19 Top 20 finishes and five Top 10 finishes with his best outings being



a 4<sup>th</sup> in 2003 and a 5<sup>th</sup> in 2005. He has competed in 10 USA Team Trials with six Top 10 finishes with his best finish at 5<sup>th</sup> in 2001. Randy won the prestigious King Orange Internationals Fly-off in 2001 and also won the Expert Class in 2004 and 2006. He finished in the Top 5 several times at this contest.

Of note was Randy's appearance at the 1991 Nationals with a Mike Pratt-designed Magnum, powered by his own custom-built Smith .64 engine featuring a Scott Bair-designed contra-rotating propeller system. He received the Jack Sheeks Technical Achievement Award for this combination.

Some of Randy's early stunt plane designs included the Stuntcraft 725 (1975), Stuntcraft 700 (1976), Vector E (1986), Apex (1986), Vector (1986), Vector 40 (1989), and the Vectra (1987). He produced perhaps the only fully elliptical foam wing airplane, a special Vectra nicknamed the Dreadnought, in 1988.

Then, in 1989 Randy launched his Aero Products company with airplane plans, engine rebuilding, foam wings, props, and various types of equipment offered. This venture soon became the most popular and the most sought after distributorship for both the novice and the expert competitive fliers from around the entire globe. As his products became used by winners in the circle, the demand for more of his excellent engineered products increased, so he expanded the business to include just about everything for the stunt event.

In 1991, the SV-11 was flown in competition by Bill Rich, Carl Raichle, and Jim Rettick. This Randy Smith design would prove to be a championship stunt plane. Also in 1991 Randy designed the Intrepid, which was followed by the IntrepidXL (1992).

Randy started offering custom-prepared kits in 1991, starting with the SV-11, Intrepid, Vector, and the Juno of Bill Werwage. This was followed by kits of many of his designs, including the SV-22, Astra, Starion, Satona, Shrike, Tempest II, and others. Randy was perhaps the first person to offer full laser-cut kits for control line stunt airplanes.

Randy Smith offered tuned pipe systems in 1990 and then teamed up with Bill Werwage in 1991 to start producing Smith-designed Grunt, Standard, and Resonator carbon-fiber tuned pipes, headers, and mufflers for various engines. This announcement was

in the Nov/Dec 1991 issue of *Stunt News*. The equipment was added to Randy's Aero Products line of products. Randy devised the idea of different heights or "rise" of the rear exhaust header pipes for finite adjustments.

Working with the legendary Henry Nelson, in 1994 Randy produced the revolutionary PA .40 rear exhaust engine, tailored for the tuned pipe exhaust system. There was also the PA .40 side exhaust. This was followed by the introduction of the PA .51 (1995), the PA 61 (1997), the PA 65 (1999), the PA .40 Ultra Lite (2004), and finally the PA .75 (2005). He has produced over 6,700 engines that have been used in every type of competition throughout the world. Randy's PA engines have proved to be among the most powerful and the most dependable engines of the 1990s and 2000s.

More of Randy's airplane designs appeared, including the Eclipse (1993), Nova (1993), Novar (1993), Evolution (1993), Astra (1994), Typhoon (1994), Tempest II (1994), Dreadnought 95 (1995), Brodak Vector 40 (1998), SV-22 (1999), Exel (1999), Katana (1999), Tempest 40 (1999), SV 40 (1999), Dreadnought 40 (1999), Satana (2002), Satona (2002), and the Staris (2004).

Randy's engines and airplane designs have won World Championships, many USA National Championships, and other championships in many countries and are employed worldwide. His contribution to the stunt event in the combination of airplane designs and engine production is unmatched by anyone.

### Warren Tiahrt

Warren Tiahrt transferred his skills as a Chrysler executive to the administration of the control line precision aerobatics event at the USA National Championships for a period of 12 years from 1996 to 2007. He served as Event Director and as Assistant Event Director in 2008. (The next closest in service as Event Directors were Earl Witt and Bruce Gifford with five each). Serving as the Event Director, he was responsible for the entire Stunt Week calendar, with emphasis on selection of judges, appearance point judging, and accurate score keeping for the Junior, Senior, and Open division fliers (including the Advanced fliers). Warren earned the respect and admiration of competitors, workers, and AMA officials as a very level-headed, fair, and well-organized administrator who was never reluctant to make difficult decisions regarding the conduct of the event. His dealings with the AMA administration were exemplary.

Prior to 1996, Warren was a precision aerobatics judge at the Nationals in 1991, 1992, 1993, and 1995. He also served as a judge at the 1989 USA Team Trials, and he was initiated to the stunt world administration when he volunteered to be the Event Director for the first Nostalgia event to be held at a USA Nationals in 1991.

In addition to the administration of the Nationals, Warren was the Event Director for ten USA F2B Team Trials from 1991 to 2009. (Next closest in service was Keith Trostle with five Team Trial directorships.) While the number of competitors is usually a modest fifteen to twenty, there is a sense of very high tension as the fliers vie for the prestigious membership on the USA team. As with the Nationals, Warren was regarded as a true professional in dealing with the competitors and event workers.

Warren also took on the responsibility of administering the FAI Control Line World Championships in precision aerobatics in 2004 when the event was held at International Modeling Center in Muncie, Indiana. A staggering number of 61 participants from 23 nations were entered in the event, taxing the administrators to the limit.

Warren Tiahrt was born in Nebraska in 1936. He graduated from Iowa State and worked at Ingersoll-Rand for four years and then for the Chrysler Corporation for 33½ years. He retired from

Chrysler in 1996 and moved from Michigan to Kitty Hawk, North Carolina.

Warren first became interested in airplanes in 1942 and then discovered model airplanes in 1948. His first model was a Goldberg Trainee. His mentors were his father, Dick Clark, and Oscar Olson in Omaha, Nebraska. His first competition was a local Plymouth meet in 1948.



Warren has also been active in transcribing into accurate plans the stunt airplanes of Bill Werwage, Gene Schaffer, Art Pawloski, and Jim Ebejer. He drew up plans for the 1959 Ares, the 1962 Ares, the USA-1, the Super Ares, and the Vulcan of Bill Werwage. He corrected errors on the *Flying Models* plans (December, 1971) of the Stunt Machine (Lou Wolgast has the original model.) Using Caprice plans from Bob Hunt, Warren drew in the subtle changes which accurately transformed the Caprice to the 1967 Schaffer Blackbird (rudder shape, wing tips, stab/elevator tips, front of the turtle deck) and then transferred these to a small set of plans.

Warren drew full-size plans of the 1954 Lunar of Art Pawloski and the 1952 Venus of Jim Ebejer, both outstanding early Detroiter-type stunt planes.

Warren has also competed frequently at the Vintage Stunt Championships, starting in 1991 with a Walt Musciano-designed Stunt Rocket, then again in 1997 with a Lou Andrews-designed Trixter Invert, and later a Chief. He flew the Pawloski Lunar and the Ebejer Venus for several years, and then flew the Schaffer Black Bird to eighth place in the Classic Event in 2011.

After distinguished service to the stunt event at the Nationals and the Team Trials for a period of twenty years from 1989 to 2009, Warren was elected as the President of the Precision Aerobatics Model Pilots Association to serve from 2014 to 2016.

With the longest number of service years as Event Director for control line precision aerobatics at the USA National Championships (12) and also for the F2B Team Trials (10), Warren Tiahrt will be remembered as the consummate administrator for these events, combining the highest level of professionalism with a compassion for both the competitor and the volunteer workers. *SN*

# We Have the Technology

by Noel Drindak

## Nats 2014 technology report

Photos by Gene Martine.



The latest in "high tech" pit person garb is clothing that matches the pilot's model. Nothing new you say? Well Rhiannon Rowland has taken that notion to a new place ... Seriously, our most heartfelt congratulations go out to PJ and his new bride. Rhiannon is a most welcome addition to the CL Stunt family.

**This is the 14<sup>th</sup>** annual technology report detailing the equipment used by the Open, Expert, and Advanced fliers at the Nationals. As usual, we passed out questionnaires at the pilots' meeting, and almost everyone responded.

A few notes on the data: The Open and Advanced classes are combined and listed alphabetically. Note that there are separate data tables for IC engines and for electrics. If you want to look at the Open fliers, the Top 20, or some other grouping, the information is there. Sorting it is left as an exercise for the reader. As before, I'm not going to analyze the data for you. It's more fun to do it for yourself. I'll confine myself to a few comments:

**1) Power Train:** The 2014 survey shows 33 planes with IC engines and 24 with electric power. The number of electrics continues to grow; last year there were 36 planes with IC engines and 19 with electric power. Most of the planes with IC engines are using Precision Aero engines. For electric power there aren't any clear favorites in the hardware department (not surprising for new technology). There is one exception—almost all electric fliers are using Hubin timers.

**2) Props Tell a Story:** I'm going to repeat an observation that I made last year. I've observed in the past that it seemed every flier with an IC engine was using a different prop, and it's the

same this year. On the other hand, most electric pilots used either an 11 x 5.5, a 13 x 4.5, or a 13 x 5.5 APC prop. I think that this points out a big difference between IC engines and electric motors. IC engines typically have a sweet spot where they perform best, while electric motors are happy to run where the electronic speed control (ESC) dictates.

Flying with an IC engine, you adjust the engine to run where



Matt Neumann's new, original-design Enterprise has many high-tech features, but it also has a high-tech paint job that includes this great stylized bird across the bottom of the wing. It's stunning in the air! Matt's ship is electric powered.

Frank McMillan and Bob Hunt joined forces to come up with a new look Caudron for Frank. This one borrows the Crossfire Extreme XLS aerodynamics, which include a swept-forward trailing edge.



Paul Walker's Predator is a technological tour de force, with a logarithmic control system, an Igor Auto Throttle (from Igor Burger), and a high-tech paint scheme designed by Sina Goudarzi. Also featured is a mechanical flap-adjusting system that allows one flap to be accurately adjusted up or down in relation to the other flap.



**NATS 2014 Technology Survey, IC Engine Data**  
**(Open, Advanced, and Expert Fliers)**

NAME	DESIGN	DESIGNER(S)	WING AREA	WT (oz)	ENGINE	PROP # of blades in ( )	Exhaust	LINES	FUEL
Germanico Becerril	Super Chipmunk	Sammy Crespo	680	68	PA65RE	13x5 (2) BYO	Muffler	67x.018 Braid	SIG 5%
Vince Bodde	Shark 35	Lew McFarland	570	46	Aero Tiger 36	10.5x4 (2) McDonald	Muffler	62x.015 Braid	Rick's Brew 5%
Joe Bowman	Juggernaut	Smith/Bowman	690	71	RO-Jett 65	12.5x4.5 (3) Mejzlik	Pipe	62x.018 Braid	Power Master 10%
Robert Brookins	Air Bender	Lew Wolland		54	LA46	11.5x5 (2) APC	Muffler	66x.018 Braid	Brodak 10%
Alan Buck	SV22 Exel	Randy Smith	675	65	PA65RE	13x4 (3) Bolly	Pipe	66x.018 Braid	SIG 10 %
Wesley Dick	Velvet <sup>3</sup>	Wesley Dick	558	66	PA65RE	13x4.5 McDonald	Pipe	66x.018 Braid	Power Master 5%
Tom Dixon	Thunderbird 670	Dixon/Palmer			Evolution 60	12.5x6 (2) Top Flite (Old)	Muffler	65x.015 Braid	SIG Synthetic Plus 10%
Steve Fitton	Dreadnought	Randy Smith	680	63	PA61RE	12.4x4.2 (3) Bolly	Pipe	64x.018 Braid	SIG 7.5%
Dave Fitzgerald	Thunder Gazer	Dave Fitzgerald	630	64	PA75RE	13x4.2 Eather	Pipe	64x.018 Braid	Power Master 12.5%
Joe Gilbert	Hawker Hurricane	Gilbert	700	69	RO-Jett 67	12.75x3.8 (3) Mejzlik	Pipe	62x.018 Braid	Power Master 17.5%
Allen Goff	Petra 6	Allen Goff	680	65	PA75RE	13.75x4.5 (3) Smith	Muffler	65x.018 Braid	SIG 5%
Robert Harness	50/50	Robert Harness			PA65RE	12x4.5 (3) Bolly	Pipe	65x.018 Braid	Byron 10 %
Scott Harness	Gladiator	Dennis Shauer			ST 51	12x4 (3) Bolly	Muffler	62x.015 Braid	Byron 10 %
James Lee	Gee Bee Model Y	James Lee	675	76	Evolution 60	12.75x4.5 (2)	Muffler	65x.018 Braid	SIG 10 %
John Leidle	Master	John Leidle	700	66	PA65RE	12x7 (2) APC	Muffler	66x.018 Braid	Byron 15 %
Gene Martine	SV-11	Randy Smith	690	69	PA75RE	13.5x4.2 (3) Mejzlik	Pipe	65x.018 Braid	SIG 7.5 %
Mike McHenry	A-7 Corsair II	Mike McHenry	680	70	PA65RE	13x4 (3) Mejzlik	Pipe	66x.018 Braid	SIG 5%
Kaz Minato	Blue Max Eternal	Kaz Minato	682	63	PA75RE	11.5x5.2 (4) Carbon	Pipe	65x.018 Braid	RO-Jett 12.5 %
Doug Moon	Riff Raff	Doug Moon/ Bob Gieseke	700	71	PA65RE	13.25x4.25 (2) Eather	Pipe	65x.014 Solid	SIG 15%
Steve Moon	Furiás 96S	Moon Brothers	670	67	Discovery Retro 76	13x5 (2) Xoar	Muffler	64x.018 Braid	SIG 0%
PJ Rowland	Tiger 2012	PJ Rowland	650	70	PA75RE (5-port)	12x4.25 (3) Eather	Pipe	64x.018 Braid	SIG 10 %
Chris Rud	Typhoon	Rud/Urtnowski	740	66	RO Jett 65	12x2.8 (3) Eather	Pipe	64x.018 Braid	SIG 15%
Michael Schmitt	Stiletto	Les McDonald	660	66	PA61RE	12x4 (2) Bolly	Pipe	65x.018 Braid	Fox-Cat 10%
Michael Stinson	SV-22	Randy Smith	650	65	PA65RE	13x3 (3) Eliminator	Pipe	64x.018 Braid	SIG 5-10%
Robert Storick	Continental XL	Robert Storick	700	70	PA75RE	13.7x5 (3) Mejzlik	Pipe	64x.018 Braid	SIG 10 %
Monty Summach	57 Special	Monty Summach	635	56	PA61RE	12x4 (2) Eather	Pipe	64x.018 Braid	SIG 7.5 %
Ronnie Thompson	Strega	Urtnowski	746	65	ST 60	12x5 (2) Brodak	Muffler	65x.018 Braid	SIG 5%
Dave Trible	Desperado	Dave Trible	700	70	RO-Jett 76	(3) Mejzlik	Pipe	66x.018 Braid	Byron 15%
Eric Viglione	Katana	Randy Smith	685	64	PA75RE	13.7x4.8(3) Meszlik	Pipe	64x.018 Braid	Mixed

Greg Voumard	Legacy	Allen Brickhaus	660	68	RO-Jett 67	13x5 BYO (2)	Muffler	64x.018 Braid
Bill Werwage	Thunderbolt	Bill Werwage	710	54.5	PA61RE	13x3.75 (2) Own	Pipe	65x.015 Solid
Frank Williams	Thunder Gazer	Fitzgerald	675	71	PA75RE	12x4 (3) Meszlik	Pipe	65x.018 Braid
John Wright	Tempest	Randy Smith		65	ST60	13x6 Rev-Up	Muffler	64x.018 Braid
								Omega 7.5%

GLOW PLUG	SPECIAL FEATURES
T-Bolt	Ukrainian made hardware, Yatsenko aerodynamics, take-apart.
Merlin	Automotive finish.
T-Bolt	Brodak Dope
T-Bolt	Dope finish, Tom Morris Controls, 6 years old.
T-Bird	Bidirectional, double-slotted, blown flaps.
Evolution	Open bay, multi-panel, foam wing, Brodak Dope, SPI Auto clear, evolved from Bob Palmer's T-Bird II
T-Bolt	Sheeted foam wing, SIG dope finish, 480S clear.
T-Bolt, 4-cycle	Dallas Hanna take-apart hardware..
SIG	Auto finish.
T-Bolt	
Thunder Tiger	
Evolution	Molded-balsa fuselage, internal muffler, tissue and dope finish.
Hanger 9 4-stroke	Impact wing.
T-Bolt 4-stroke	Lost-Foam geo design, SIG finish. Third year at the Nats, 17 appearance points each year.
T-Bolt	Tom Morris controls, carbon veil on solid surfaces, Polyspan on wing, Wicks dope finish.
Enya #3	RSM kit.
Enya #3	Built up with Lost-Foam wing.
Discovery Universal	Side-mount engine. Carbon cheek cowls, carbon wing tips, and canopy.
Enya	Full take-apart, air brush finish, PPG clear. Vortex generators, swept-rear stab hinge line, swept-forward wing hinge line. Lost-Foam wing, foam stab, carbon-glass flaps, boost tabs.
T-Bolt	
T-Bolt	
Glow Devil	
T-Bolt	
T-Bolt	SV-25 Shrike airfoil (Randy Smith). SIG Dope finish.
SIG	Light Jap tissue, Tom Morris bellcrank, ball links.
Glow Devil	
T-Bolt	Klass Kote Epoxy Colors, 2 Part polyurthane clear.



Wesley Dick has been flying his Velvet design in competition for the past couple of years. This model features what Wes calls "Bidirectional, double-slotted, blown flaps." Most of us just think that he was frightened by a Venetian blind when he was young ... All kidding aside, Wes is making great strides with this technology and now has a kit of parts available to allow others to fit this system to their planes if desired.

it's happy and then find a prop to produce the right lap time. Power can be adjusted with nitro percentage, venturi size, and compression ratio (using head shims). However, when the weather changes, power changes, and fliers are continually making adjustments to compensate. The weather effects aren't trivial. I've flown at contests where the temperature for my first official flight was in the 40s and my second flight was made with temperatures in the 80s. Electric motors don't care about weather; they still run as the ESC settings dictate.

That's it for my observations. Have fun analyzing the data. I hope it you find some ideas for your program.

Good luck with your next plane. *SN*

OS#6	
T-Bolt	Lost-Foam wing, molded own pipe. One of my favorite airplanes.
T-Bolt Big Bore	Dual cone tether can pipe by ES composites.
T-Bolt	Take-apart plane: wing, cowling, fuselage, stab and elevators, wing and stab hatches.

**NATS 2014 Technology Survey, Electric Power Data**  
**(Open, Advanced, and Expert Fliers)**

NAME	DESIGN	DESIGNER(S)	WING AREA	WT (oz)	MOTOR	PROP # of blades in ()	LINES	BATTERY	TIMER	SPEED CONTROL
Kevin DeMauro	Genesis Extreme	Bob Hunt	650	58	E-Flite Power 25	13x4.5 (2) APC	64x.015 Braid	Turnigy Compact 2700mAh 4S	Hubin FM9	Castle Phoenix 45
William DeMauro	Voltron	DeMauro/ Hunt	675	67	Scorpion 3026-890	13x5.5 (2) APC	64x.018 Braid	Turnigy Compact, 3700mAh 4S	Hubin FM9	Castle Phoenix 45
Steve Drake	Cavilar	John Simpson	540		E-Flite Power 15	11x5.5 (2) APC	60x.015 Braid	Hyperion 2500mAh 4S		Castle Lite 50
Rich Giacobone	Caprice	Hunt	560	49	Power 15	11x5.5 (2) APC	62x.015 Braid	Hyperion 2500mAh	Hubin FM9	Castle Edge
Sina Goudarzi	E-Tweener	Jose Modesto	765	66	E-Flite 32	13x5.5 (2) APC	65x.018 Braid	Turnigy 3000mAh 4S	Hubin FM9	Castle Phoenix 60
Jason Greer	Impact	Paul Walker	700	55	Scorpion 3026 710kV	13x4.5 (2) APC	67x.015 Braid	Thunder Power 2700mAh 5S	Igor Burger	Jeti Spin 66
Mike Haverly	Sultan	Norm Whittle	690	69	E-Flite Power 32	13x5.5 (2) APC		Zippy 2700mAh 5S	Hubin FM9	Castle Phoenix 60
Bob Hunt	Crossfire XLTC	Bob Hunt	650	63	Cobra 28-2610	11x6 (3) Ressinger/Cox	67x.014 Solid	Hyperion 3300mAh 4S	Hubin FM9	Castle Phoenix 45
Frank McMillan	E Caudron	McMillan/Hunt	660	63	Cobra 28-2610	13.5XAPC (2)	65x.014 Solid	Hyperion 25C 3300mAh 4S	Hubin FM9	Castle
James Miller	Junar	Bill Werwage	720	65	E-Flite Power 25	13x4.5 (2) APC	64x.018 Braid	Zippy 3700 4S	Hubin FM9	Castle Phoenix 45
Matt Neumann	Enterprise	Matt Neumann	700	73	E-Flite 32	14x7 (2) APC Chinese	67x.018 Braid	Horeson 35C 3300mAh 5S	Hubin FM9	Phoenix Lite 75
Sam Nebel	E-Tracer	Sam Nebel	690	66	Plettenberg 20-11	11x5.5 (3) Ressinger	64x.018 Braid	Glacier 3300mAh 5S	Hubin	Schulze
Don Ogren	Legacy 40	Allen Brickhaus	572	58	Cobra 2826/10	11x5.5 (2) APC	63x.015 Braid	Hyperion 2950mAh 4S	Hubin FM9	Castle Ice Lite 50
Joe Parisi	Black Jack	Joe Parisi	660	63	Cobra	11x5.5 (3) APC	64x.018 Braid	Thunder Power 5C 2700mAh 5S	Igor Active	Jeti Spin 66
Bob Redmon	Kura	Redmon/ Brickhaus	690	64	E-Flite r 32	12x6.5 (2) APC	64x.018 Braid	Nanotech 3300mAh	KR2	ZTW
Scott Reynolds	Voltaire	Wm. Reynolds	635	64	EMP 1100w	13x4.5 (2) APC	64x.018 Braid	Taraegy	Hubin FM9	Phoenix Ice Lite 50
Howard Rush	Impact	Paul Walker	700	73	Plettenberg 20-16	11x6 (3) Ressinger	68x.018 Braid	Thunder Power 25C 2700mAh 5S	Igor Burger TimWescott	Jeti Spin 66
Bill Rutherford	Infinity	Buck			Plettenberg	13x4.5 (2) APC	64x.014 Solid			
Wayne Smith	E-Tracer	Wayne and Jim Smith	690	71	Plettenberg 20-16	11x5.5 (2) Ressinger	64x.018 Braid	Glacier 5S 3300mAh	Hubin	Schulze

Jim Smith	E-Tracer	Wayne and Jim Smith	690	68	Plettenberg 20-16	11x5.5 (2) Ressinger	64x.018 Braid	Thunder Power 3300mAh 5S	Hubin FM9	Schulze
Robert Storick	Beamfire	Storick/Hunt	660	60	E 25	12x6 (2) APC	63x.015 Braid	Hyperion 3300mAh	Hubin FM9	Castle 45
Paul Walker	Predator	Paul Walker	700	65	E-Flite Power 32	11x5.5(3) Meszlik	68x.018 Braid	Thunder Power G8 2700mAh 5S	Igor	Jeti Spin 66

SETTINGS	SPECIAL FEATURES
CL-High governor, 9409 RPM	
CL-High governor, 9500 RPM	
10,780 RPM	Tom Morris kit, Ultrakote wing and stab, spray can fuse
50% gain	
50% gain	Full composite – wing, fuse, stab. Wing has no ribs, only foam insert. Impact fuse, stab, elevator, Big Jim Tweener wing with high aspect ratio.
9437 rpm, high gain	Take apart, dope with automotive clear coat.
	Foam wing, flaps, stab, and elev, molded LE and fuse shells, Dupont Chroma base finish, Tom Morris control hardware, trike gear.
	Automotive paint, 1st electric.
	Geo XI wing with Lost-Foam construction, Randolph and Brodak Dope, Global Systems urethane clear.
8400 gain	Brand new for me — molded fuse. Lost-Foam wing.
	E-Flite 10-15 size electric retracts.
18 sec delay, 6 min flight time	Wings and tail - Ultracote cream w/red and blue trim. Fuse – Rustoleum almond,
10,300 RPM	Full take apart construction using Mike Haverly wing joiners, Automotive acrylic lacquer finish.
KR2, gain = 6 ESC timing med	Ultracote.
	3-D printed FAI compliant spinner, Igor's non-linear flaps, three mode auto throttle. Lots of vortex generators, but not as many as Dave Fitzgerald
	Stock.

Too many to list	2013 Nats winner, Randolph Dope finish, built-up wing, logarithmic flap control.



Howard Rush's, Impact has a number of interesting features. Howard installed lights that indicate if his battery is charged, and what auto throttle mode is engaged. Howard's model has two different timers onboard—the Igor Auto Throttle, and the TUT (Tim's Universal Timer) that was designed by Tim Wescott. Note the "gluten-free," 3-D printed vortex generators on the wing that Howard emphasizes are made without synthetic growth hormones (yes, Howard is weird). Also featured is Igor Burger's logarithmic control system. The model has Paul Walker-designed, and Mike Haverly-manufactured take-apart hardware. Note the extremely fine fit between the wing and the fuselage fillet.

## Tom Morris Products

*Stunthanger.com/hobby*

*327 Pueblo Pass*

*Anniston, AL 36206*

**256-820-1983**

# Flying

by Paul Walker

**Welcome back!** Once again this discussion involves the trim chart in Figure 1. This installment will focus upon criterion 5 (turn/track the same), which is still in the “basic trim” section. This single criterion deserves more attention than a simple few words in a flow chart.

Many of the trim changes that affect the turn rates also impact the tracking. To wade through this, there is another flow chart to follow to systematically work through these trim changes to minimize time and headaches solving these criteria. The new



Bill Werwage's venerable Razorback P-47 Thunderbolt just keeps on going. This model was designed and built in 1995, and it has been flown at several Nats and World Championships. It's very light at 54 ounces and is in impeccable trim.

flow chart is all inside criterion 5 in Figure 1 and is seen in Figure 2.

This flow chart could be inserted into Figure 1 but would become more difficult to put on a single page for your reference. It is still inside the basic trim section, which means that the questions asked can *easily* be answered objectively. They depend on an observation that is straightforward to answer. It does require *some* qualitative assessment of maneuvers, both inside and outside, and with a little practice will become easier to see and assess.

The goal of criterion 5 is to have the turn rates of inside and outside corners the same, as well as having the plane track the same both upright and inverted. The previous criteria from Figure 1 adjusted the CG to make the corners manageable, leveled the wings, adjusted the leadouts, and got the tip weight in the ballpark. With that, there are still numerous adjustments that will make the corners the same if they are not. These numerous adjustments are generally, but not limited to, the elevator to flap neutral, the handle adjustment, thrustline offset, the overall 0-0-0 alignment, and possible flap warps. One

item that will not be discussed here (at this point) is the engine thrust alignment.

To start the process through the flow chart in Figure 2, carefully evaluate the turn rates between insides and outsides as suggested in Box 1. This can be a little tricky early on, as the handle can be “out of adjustment” to compensate for this difference. If this is the case, it will usually show up as a tracking difference further along.

Fixing the tracking issue will wind you back at this square one (Box 1), to reevaluate the turning rates. If the turns inside and outside are not the same, start by re-examining the elevator to flap neutrals, Box 2. A description of this is shown in Figure 3.

Make sure that both the flaps and the elevators are at zero degrees relative to a horizontal plane. In my shop I have a jig that the wing can sit in to locate it in a horizontal plane above the horizontal plane of the worktable. There is also a jig the stab sits in to fully support the plane. Then knowing the distance the wing centerline is above the table, the trailing edge of the flap can be measured to set it at zero degrees relative.

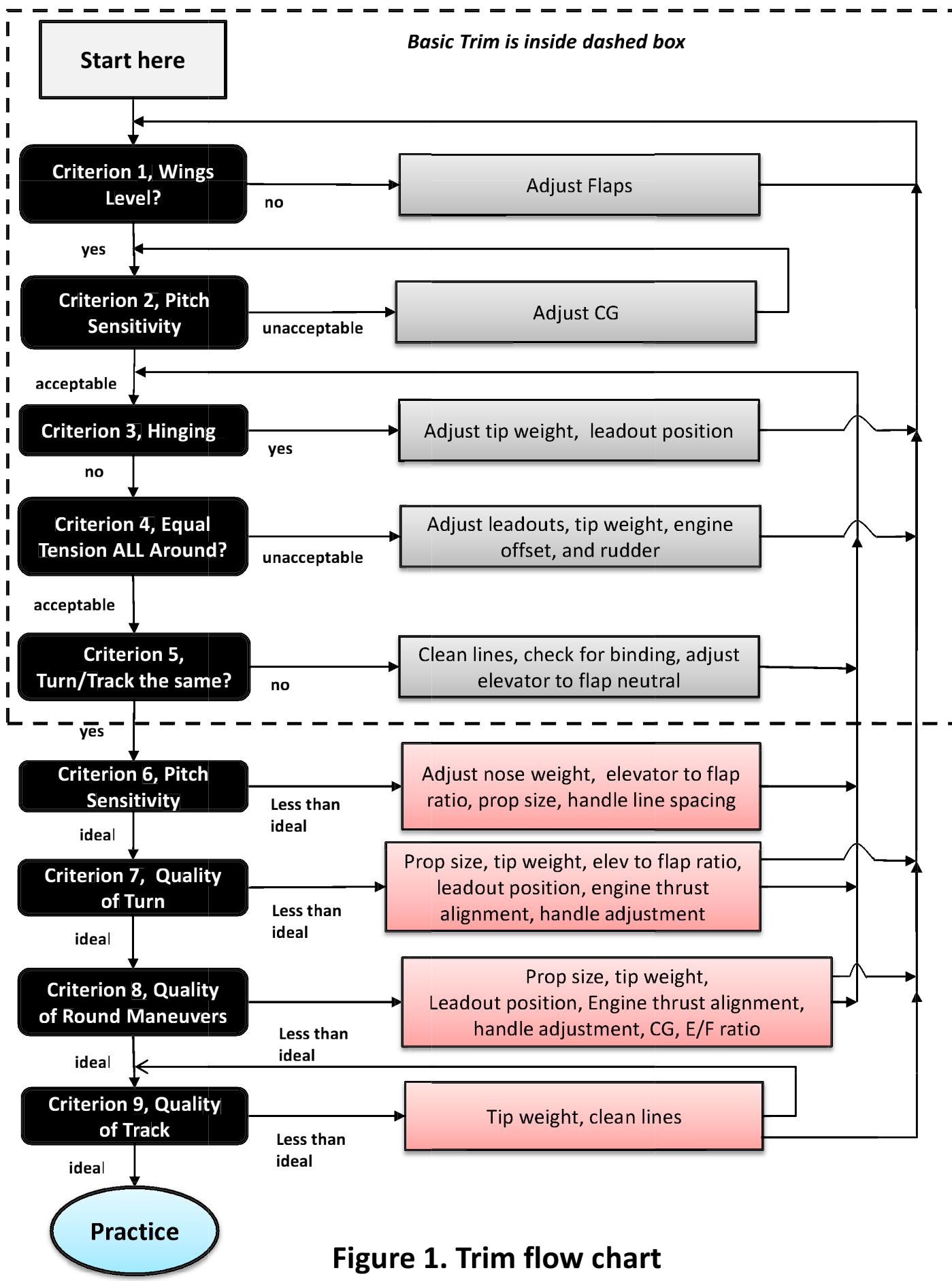
The same procedure occurs at the elevators. The pushrod is adjusted until the flaps and elevators are both at zero degrees relative. This is then the starting point for moving to Box 3. Earlier 0-0-0 alignment was mentioned. It is my preference to have the engine thrustline, wing centerline and stab center line 0-0-0. This can be described using a coordinate system for the plane.

This coordinate system applied to the plane is called a global coordinate system. In this system the x-axis is fore and aft, the y-axis is lateral (wingtip to wingtip), and the z-axis is vertical. To be 0-0-0, the engine thrustline is in an x-y plane, the wing centerline in an x-y plane as well as the stab.

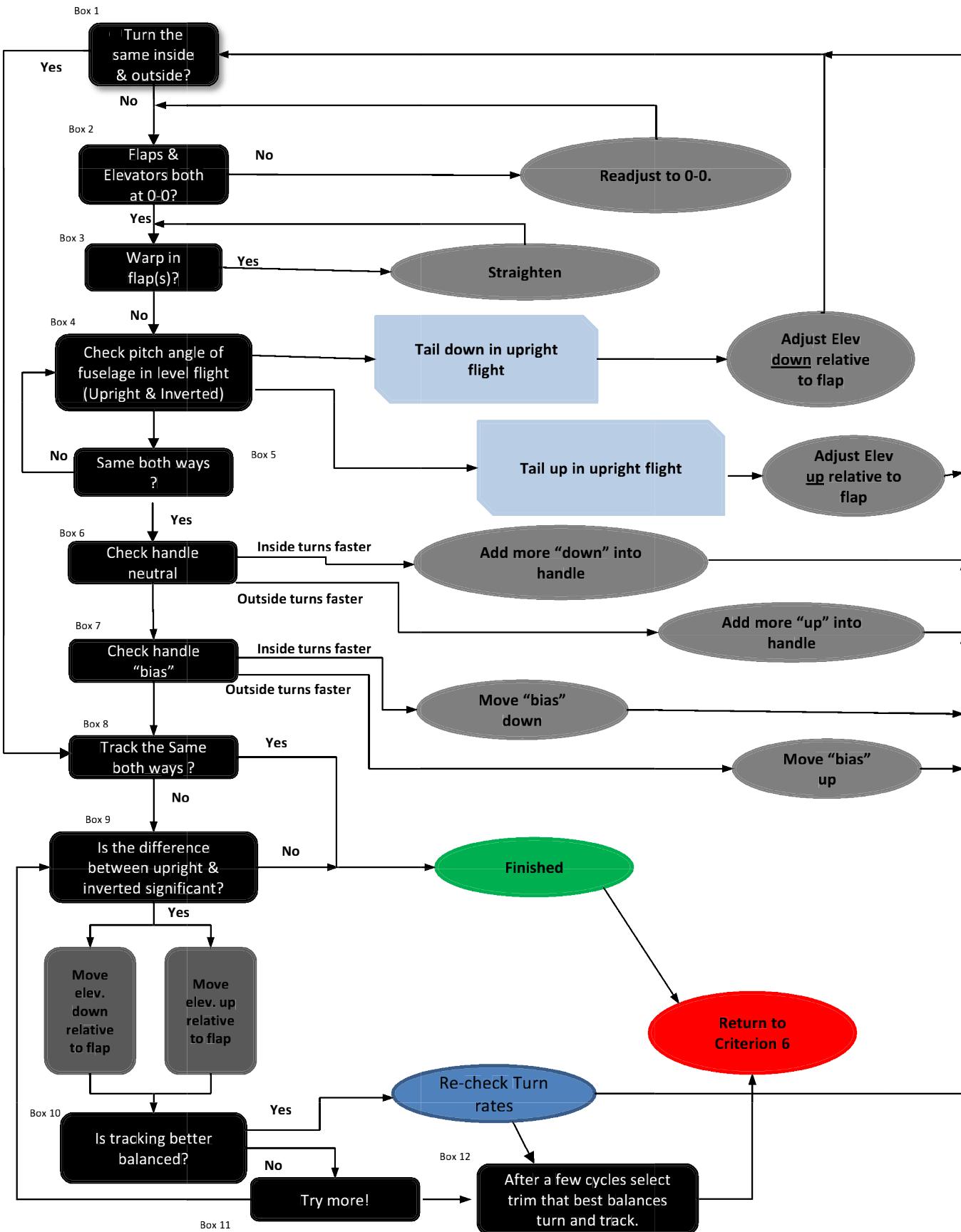
Each of these planes can be located in a different z, but they are all parallel. This makes the relative angle between them 0, thus the 0-0-0. Many advocate down thrust in the engine and others positive incidence in the stab, but I prefer to have mine at 0-0-0. Fiddling with one of these can be tried in the advanced trim section later on. For now, let's set it at 0-0-0 and the flaps and elevators at 0-0, as well.

Doug Moon won the 2012 Nats with his Riff Raff. This model was co-designed by Doug and Bob Gieseke and features a built-up wing that was made using the Lost-Foam process.





**Figure 1. Trim flow chart**

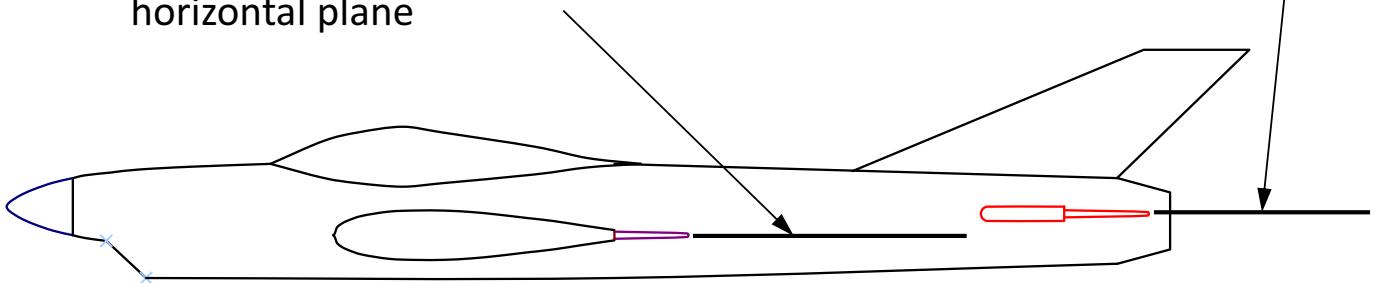


**Figure 2. Criterion 5 Flow Chart**

Figure 3. Flap and elevator alignment.

Elevators at 0 degrees relative to the horizontal plane

Flaps at 0 degrees relative to the horizontal plane



Wing and stab in a horizontal plane

If the flaps and elevators are both at 0-0 and the plane still doesn't turn the same, try looking closely at the flaps. Check carefully to make sure they are still straight. Yes, they came out of the shop straight, but sometimes the sun, humidity, and heat can move the balsa that most are made from. If they found their way not to be straight, straighten them at this point. There are many different ways to apply heat to soften the paint/covering to allow a flex and then cool.

Once it is at room temperature again, recheck for the warp. If now straight, reinstall on the plane and re-test. Note that when twisting the flap you are likely to have to re-level the wing, which sends you back to criterion 1 in Figure 1. Re-level the wing and carefully work your way back to this box in Figure 2 with careful observation of all the criteria in Figure 1 that gets to criterion 5.

The next step is Box 4, which evaluates the pitch angle the plane makes relative to a horizontal flight path. A perfect attitude is seen in Figure 4. The wing and stab are parallel to the horizontal flight path. This is what it *should* look like if all is well. However, such is not always the case. Figure 5 shows a

in inverted flight, as well. If the tail is down in upright flight and up in inverted flight, adjust the elevator down relative to the flaps. Shortening the flap to elevator pushrod will accomplish this. Keep working this loop until the question in Box 5 can be answered in the affirmative. *The same both ways* doesn't need to be perfectly level both ways, but the same amount of pitch angle both ways. For instance, the tail can be two degrees low both upright and inverted.

This is an acceptable solution at this time. In fact, I have seen many stunt planes that sit tail low both ways and fly just fine. Don't get hung up on this loop trying to get it perfectly level both ways. It may never happen!

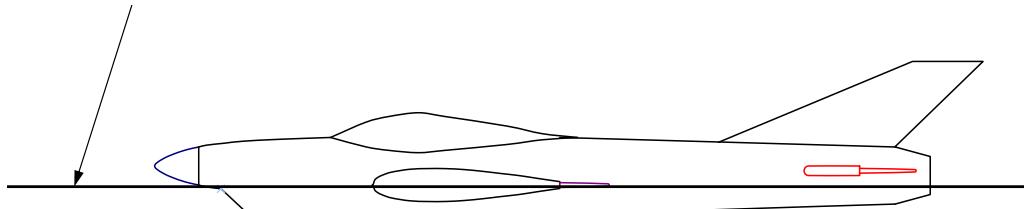
So far everything has been done following the chart, but still the plane doesn't turn the same. Many times the adjustment of the handle is the culprit. I continue to be surprised at how I can adapt to maladjusted handles yet still fly well. This could be getting you, as well! It's time to take a close look at the handle. The first step is to check the handle neutral. If the inside corners are faster than the outside corners, then shorten the down line and try again.

Conversely, if the outsides are faster, shorten the upline and

try again. If this does or doesn't solve the issue, proceed to Box 7 and evaluate the handle *bias*. Figure 6 shows a handle with no bias. The upline and the downline are evenly spaced about the hand and provide a balanced input to the plane. However, consider adding bias to the handle as

Horizontal flight path

Figure 4. Level flight attitude in "level" position.

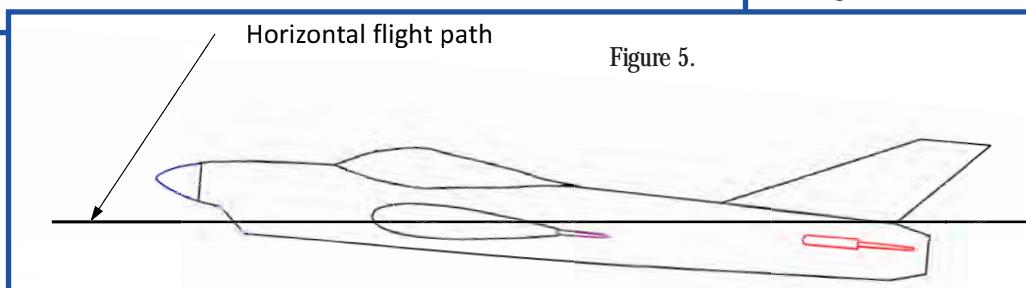


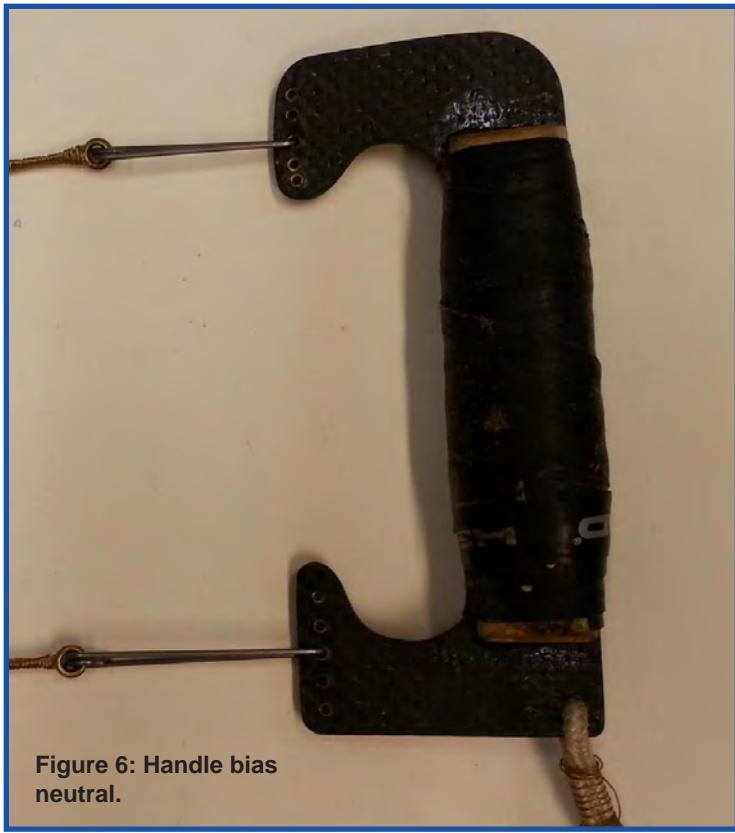
configuration where there is a positive pitch angle, where the tail is low relative to the wing. (Note that the tail could be up relative to the horizontal line as easily as down.) These figures show upright flight.

Observe what is happening

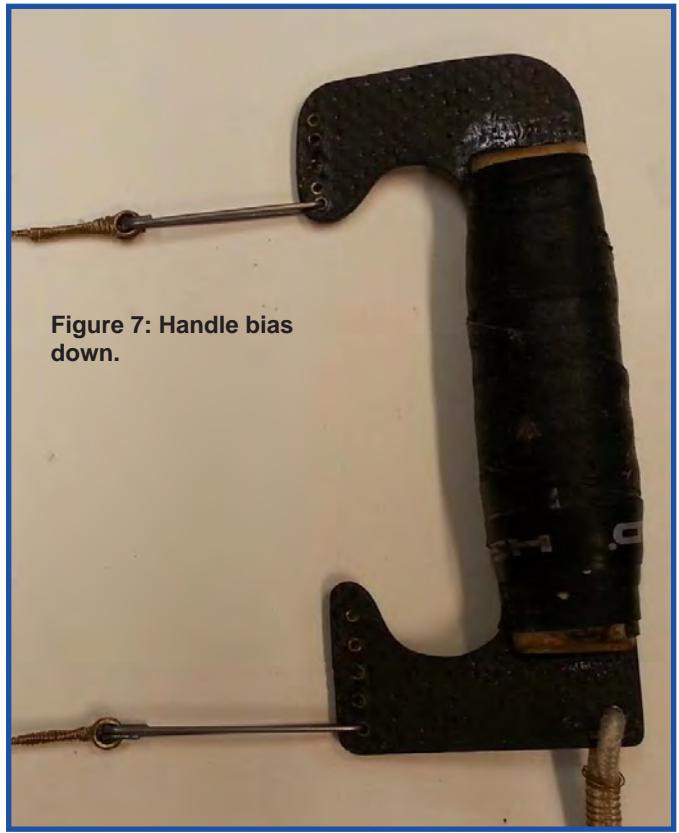
Horizontal flight path

Figure 5.





**Figure 6: Handle bias neutral.**



**Figure 7: Handle bias down.**

described in Figure 7. This then provides more input on the down side and less on the up side, helping a plane that is too quick on the inside corners. Try this change and reevaluate. Handle neutral and bias can be both off and one compensates for the other. I would suggest that the bias be set to neutral before re-adjusting the neutral.

After reaching this point in the flow chart and the plane still doesn't turn the same both ways, the basic geometry of the control system should be considered. In days past, the flap and elevator horns were both oriented vertically.

While this is easy to see and align, it doesn't provide a linear response with respect to bellcrank rotation. This can cause a difference in turn rates inside to outside that can be difficult to resolve. What geometry is correct to provide a linear response? There are many variables, thus there are no "simple" answers to that question.

Because of this, Howard Rush developed an Excel program that does just that task. He has shared that program with a few people, and I have used it to develop the geometry for the non-linear system in the Predator. It has two options, one for a standard linear system and one for an Igor type non-linear system. Howard has agreed to share this with anyone who asks him for a copy. If interested, e-mail him a request at [hmrush@comcast.net](mailto:hmrush@comcast.net). Some knowledge of running spreadsheets and simple engineering sign convention are required to use the program correctly.

As with any analysis, getting the sign convention correct is absolutely necessary for the correct answer. He will have two separate sheets defining the sign convention for both options. Study them carefully and don't be a typical male and ignore these instructions, as your results *will* suffer. Unfortunately, once a full-fuselage stunter is built, it is almost impossible to resolve after the build. This is part of the reason this isn't included in the flow chart. Use this program *before* you build your next project.

At this point in the process of following this flow chart, the emphasis turns to the tracking of the plane. The turn rates will have been dealt with as much as possible. Box 8 evaluates the

tracking in level flight upright and inverted. If they track the same both ways, exit back to criterion 6 in Figure 1.

However, if they are not the same, Box 9 asks if the difference is "significant." Once again, if you feel the difference can be lived with, return to criterion 6 in Figure 1. However, don't let this be a compromise at this point in time. If the plane tracks better inverted, move the elevator down relative to the flap and reevaluate. If it tracks better upright, move the elevator up relative to the flap and re-evaluate.

After these changes, Box 10 asks if the balance between upright and inverted tracking is better. If not, readjust and reevaluate. Two options exist here. The first is that tracking is now balanced between upright and inverted, in which case the chart directs the user to Box 1 to re-evaluate the balance of the turn rates.

The second option is that after a number of cycles through this entire chart there is no satisfying the desire to have the turn rates the same and the tracking the same both inside and outside. Box 12 suggests that you select the trim adjustment that balances the turn rates as much as possible and balances the tracking inequities as much as possible and then return to criterion 6 in Figure 1.

There are many things that affect tracking. Some of them are the right amount of tip weight, wing level condition, leadout position, and any myriad of warps. It was assumed that before entering this section that those were taken care of in the previous criteria in Figure 1. However, small amounts of each of these *can* make a difference between upright and inverted. Since this is still in the "basic trim" section, they have not been fine-tuned and may be the cause of poor tracking. The Figure 2 flow chart is intended to cover some of the "gross" issues that need to be addressed. In the advanced section, more emphasis will be placed on these issues.

This is the end of the "Basic Trim" section of Figure 1. This has been the "easy" part of the trim process. Starting next issue, the more advanced trim aspects will start to be discussed. Start thinking about what you really want your plane to do for you. *SN*

by Will DeMauro

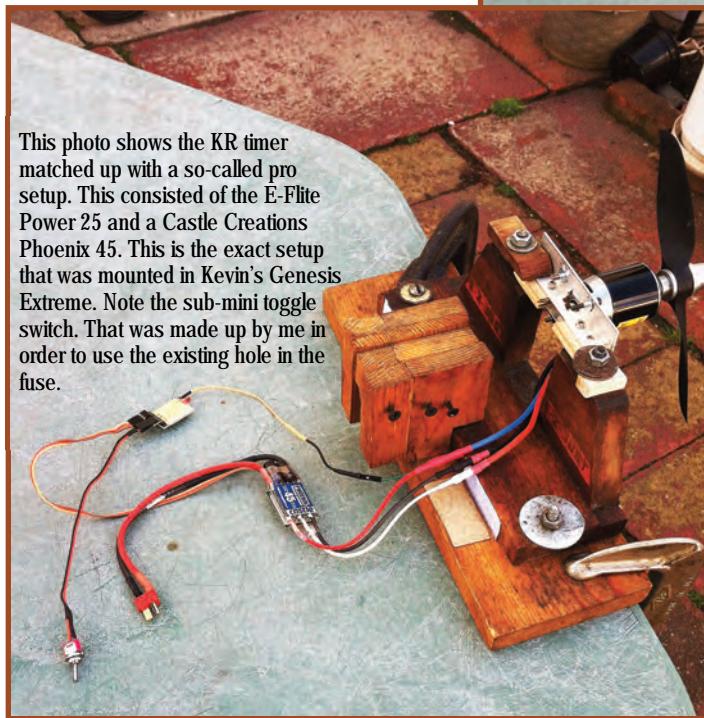
I would like to start off by thanking Bob Hunt for stepping in and helping me out by guest-writing my last column. I was working very hard to get my new plane, Voltron, finished and trimmed out in time for the 2014 Nats. While speaking of the Nats, I know this is the Nats issue, but I am still waiting for some info from a few people that I want to include, so I am going to provide my Nats coverage in the next issue.

If you have been following my columns, you already know that I have wanted to write a column on the KR timer for a long time. I have repeatedly asked for someone to step up and help me out, as I knew very little about that timer and felt unqualified to write about it.

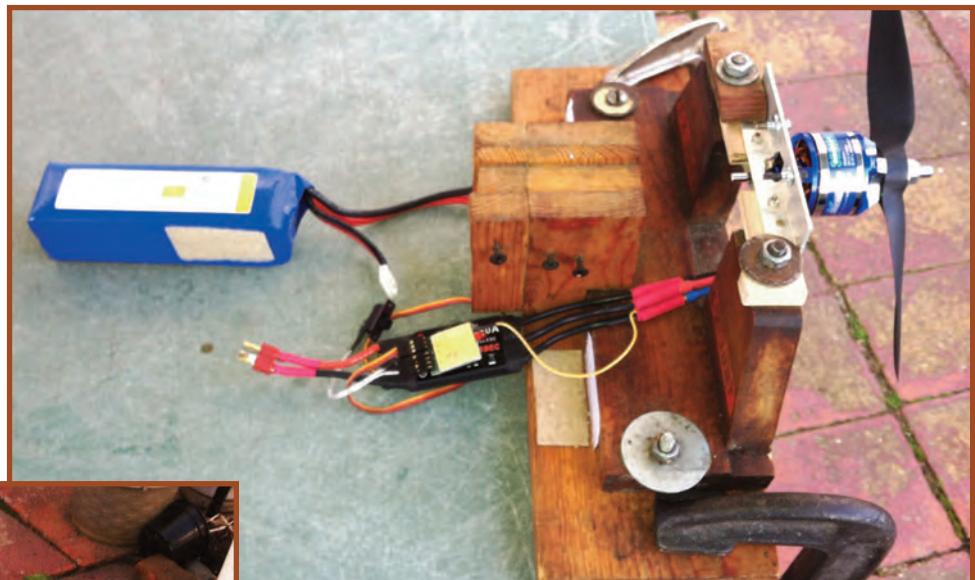
Early in 2014 I contacted Eric Rule, owner of RSM Distribution, and asked him for help in writing about the KR Governor Timer. Since he is the US distributor, I felt that he would be able to help. He quickly offered to send me one to try out. A few days later, a package arrived at my house, which included a programing card (or stick, as I like to call it), a 50-amp ZTW speed control, one on-off switch, and not one but two KR Governor Timers. Now I would be able to test it exactly as sold and do some experimenting without having to separate the pre-packaged components.

I would also like to add that the timers came with a very well-written instruction manual that is completely broken down into sections so that when programming the timer you can easily go through each step. This is also good if you want to change just one setting (usually RPM or total time) after it has been initially set up.

I decided to use the prepackaged setup



This photo shows the KR timer matched up with a so-called pro setup. This consisted of the E-Flite Power 25 and a Castle Creations Phoenix 45. This is the exact setup that was mounted in Kevin's Genesis Extreme. Note the sub-mini toggle switch. That was made up by me in order to use the existing hole in the fuse.



This photo shows the KR Timer, together with the 50 amp ZTW speed control and the standard slide switch. Also shown is the Exceed 3015-910 and my small 6-inch diameter test-running prop. This is the exact unit that we mounted to the Flite Streak for the test flights.

easy and I settled in at about 10,000 rpm. Next, I set the flight time for 5 minutes. This again was the exact same flight time I had been using on that plane. The timer comes preprogrammed for a 25-second start-up delay. We only usually use a 2-second delay, as we have a helper start our planes while we are out at the handle. We chose to use a 7-second delay for testing purposes, since I wanted something that we could easily measure. It too worked perfectly on the bench and we decided to leave it for the test flights.

The final setting was the governor gain. This setting increases the power when you put a load on the motor to keep you flying at a constant speed through maneuvers. If you set this too low, the power will lag when you climb. If you set it too high, it could surge. This comes preset at a four out of seven. This is a pretty mild all around setting and is good for most applications. For



Here's a close-up of the sub-mini toggle switch as it comes packaged from Radio Shack. This was a real easy mod and made mounting the setup very easy in a full-fuse model.

small rag into the prop while standing behind the motor for safety purposes. The motor instantly shut down and no electrical components were damaged.

I repeated this test three more times with the same results. This is a very well thought out feature and is especially useful to those who fly off grass and tend to nose over. I now felt confident enough to mount this setup onto the Flite Streak and to put the 9 x 6 fly prop on it and wait for my chance to fly this plane.

While waiting for my chance to fly the Streak, I decided to set up the other governor/timer to a so-called "pro setup." I had to see how well this would work using a Castle Phoenix 45 and an E-Flite Power 25. I knew that since the KR Governor would be responsible for most of the setting, I would have to "dumb" down the Phoenix 45 to the default RC settings and leave the brake set.

I also knew that I was going to fly this in a Genesis Extreme that was originally built by Bob Hunt, which was then passed to Jose Modesto, who in turn graciously passed it on to my son Kevin. This plane had been flown as an electric before and had a hole where the original start button went through the fuse.

I did not want to alter the hole for the included slide type switch, so I went to Radio Shack and bought a sub-mini toggle switch (part # 275-0645). I modified an old servo connector to work with the timer and soldered it up (see pictures). Once everything was set, I put the whole setup on the bench and repeated all the same tests that I ran on the prepackaged setup. The only thing I did differently was to set my RPM for 9,300 and my flight time for 5 minutes and 30 second, as those were going to be the setting that would be used in the Genesis Extreme.

I did get one surprisingly different result in my testing. While running the motor at 9,300 RPM, my tachometer never once

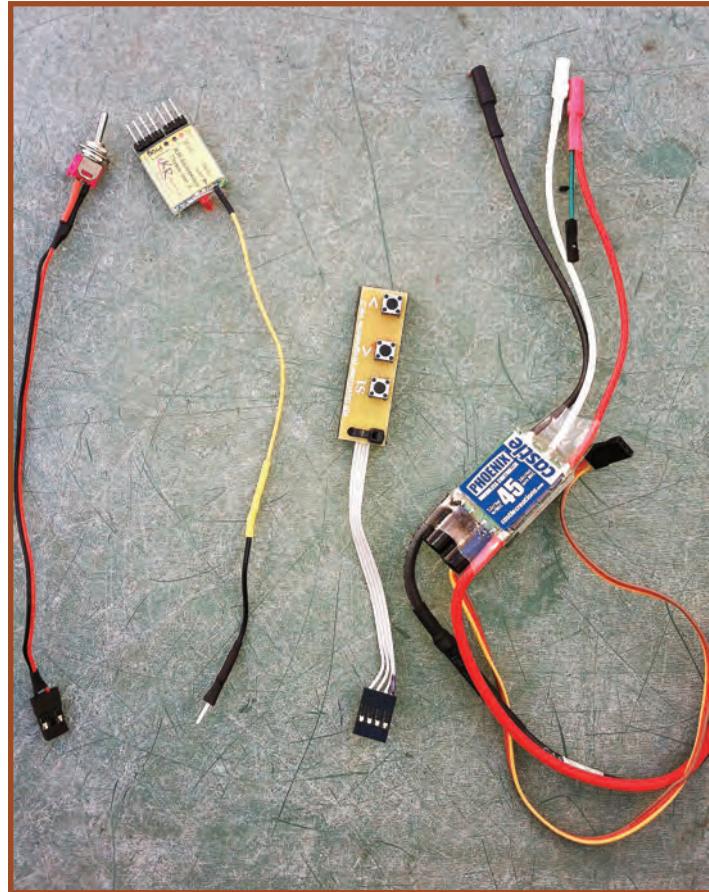
testing purposes I wanted it to be just a little noticeable and set it for five.

Now that the timer was programmed, I wanted to run it a few times on the bench to test all of the features and to see how well it held all my programmed settings. For the first run, I did nothing except time it and tach it. I was mostly interested in seeing how well it held the RPM thought the 5-minute programmed flight time. While running, the rpm never varied more than 100 RPM either way of 10,000, and it may have been less as my tachometer is only accurate to 100 RPM. I ran it twice and got the same results both times.

Next, I had to test the shutdown feature in case of prop strike. I started it up and let it run up to speed. After waiting about 30 seconds, I tossed a

wavered from that number for the whole 5-minute, 30-second run. This was repeated three times. Now while the Flite Streak tests were way more than good, I was totally surprised by the completely stable run by the "pro setup."

Because I did not run the Power 25 with the ZTW timer or the Exceed motor with the Phoenix 45, I do not know if those results were because of the so-called "better motor" or the so-called "better speed control." I also don't feel that it really matters



This view shows the Castle Phoenix 45, the programming stick, the KR timer, and the switch assembly. If you look closely, you can see a small wire coming out of one of the red motor wires and a short black wire at the end of the KR timer. That is the sensor wires that, when plugged together, counts the pulses from the motor and regulates the RPM. This wire is normally soldered in place. For testing purposes I wanted to have the ability to take it apart. Having this custom feature made things real easy for us.

anyway, as both setups were more than stable for our purposes, and any slight variations like 100 RPM would never be detected in the air anyway.

After a harsh winter, and a colder-than-normal spring in the New York area, Kevin and I were finally able to get out in late April or early May to do our anxiously awaited flight testing. First plane up was the Flite Streak. I flew it and put it through a series of loops and wingovers; everything worked great. Kevin then flew it, and he also flew it through most of the pattern and claimed it worked perfectly. I had three more batteries and passed the plane around to some club members who were there, and all had a blast flying that plane.

Next up was the Genesis Extreme, which we knew was most likely going to be Kevin's Nats plane. (See, I did get something about the Nats in this issue after all.) Kevin wanted the first flight, so, since it was his plane, who was I to argue? Kevin, being his usual fearless self, decided to fly the plane through the complete AMA Pattern.



This is the Genesis Extreme that we used for most of our testing with the pro setup.



This photo shows the Power 25 holding 9,300 RPM. The runs on the pro setup never changed. It was 9,300 RPM from start to finish every time!

When he landed, he said that the setup ran extremely smoothly and it had worked even better than he expected it to. Kevin continued to fly this setup up until about a week before the Nats when he put his original timer and settings back into the plane. He *did not* do this because he didn't trust it in Nationals competition; he did it because he wanted to be able to do quick RPM changes at the Nats without having to run up his plane near the flight line at the Nats.

While preparing for this article, I exchanged a few e-mails with Keith Renecle (maker and inventor of the KR

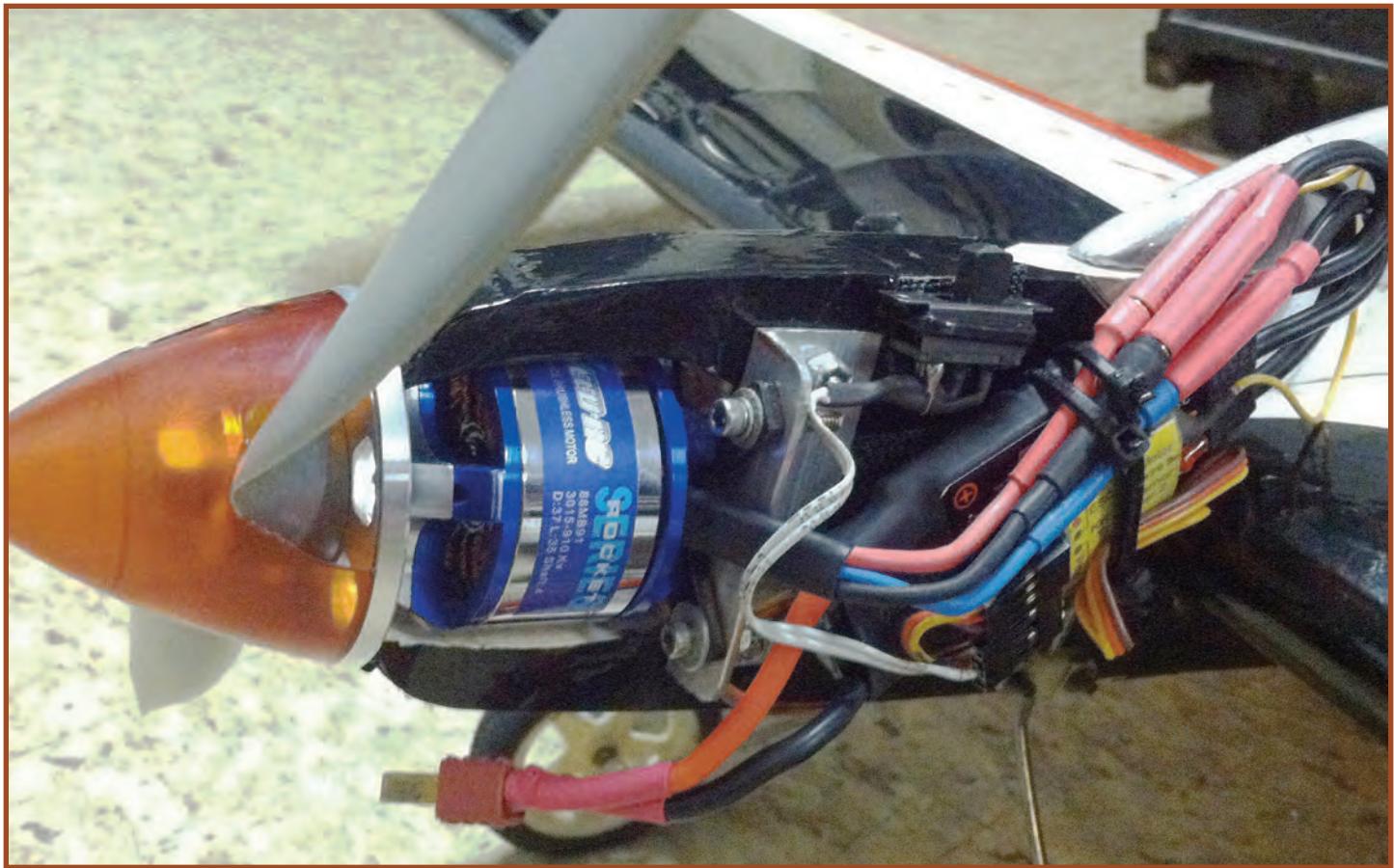
Governor/Timer). I wanted to learn a little about the history and development of this device. I found it very interesting and thought I would share it with everyone. Here is what Keith has to say in his own words:

"What got me going on this was that I had one of Igor Burger's basic timers and a Jeti Spin esc when I flew my first electric stunter, the Electron, in the 2008 World Champs in France. It had an MVVS in/out runner in it, and I found out the hard way that it was too small for the model weight. I burnt out two motors and two Jeti Spin ESC's playing with that setup.

"Then Igor's timer popped and it would take about two weeks for him to send me another one. He told me to just go and buy the same PIC chip and explained how to wire it. He sent me the code to program it and told me what programmer to buy. That worked okay, and then I burnt out my third Jeti Spin.

"Now it became too expensive for me, and also I wanted to share my new-found electric stunt experience with other local club members. The price of the Jeti was too much for most of them, so I tried to find cheaper ESCs with heli governors in them, but nothing worked like the Jeti.

"I took the plunge and started to learn how to program the PIC chips with lots of help from Igor and my good friend Henry Kurowski, who is an electronics guru and one of our modelers here, as well. I tried the idea of adding RPM as the battery goes down like the JMP and Hubin timers of the day, but that felt like



This is how I mounted the KR Timer to the front of the Flite Streak. I want to note that the Exceed motor is available from Hobby Partz.com. This is a four-cell setup and uses a 4s 2,200 on the Flite Streak. The KDA A36-12M Brushless Motor—1370 Kv is a rough equivalent to the Exceed and would use a 3s 3,300. This is the setup that one would get if buying the complete package from RSM Distributions. Either setup will work very well on a Flite Streak-size plane.

flying with a pukey low-torque glow engine to me. It slowed down on the uphills and went faster on the downhills.

"When I figured out that maybe I could monitor the rpm from one of the motor wires and make an external governor, I bounced this off Igor and also Henry. Both said that it did not sound like a good idea because there would be delays in reaction time. Igor said that I should try it anyway and maybe it will work well enough at least for sport flying.

"After a few weeks, I made the first prototype. I had an Eagle Tree data recorder, so I sent Igor a chart of my first test flight. I can remember his comments. He said, 'So why I buy Jeti?' in his usual Slovakian English. He was most impressed, and so was I.

"When I figured that to be able to supply timers easily, I would have to go down that road of surface mounted parts and machine assembled boards. I found out that you need quantity to make it all practical. I had to order at least 60 boards for a local company to look at it. One of our club members told me I was crazy because how would I ever sell 60 timers?

"I told him that to break even I only needed to sell 28, and he still laughed at this and told me I would be sitting with a lot of boards in my workshop. I put it all out on my website, and two weeks later I had sold all 60. To date I have sold just over 800 timers and I still can't believe this. I was also told by a well-known modeler in Europe that it was too cheap and the experts would not buy it. My answer was, 'Who cares; there are a handful of experts and thousands of sport fliers!'

"Of course there were many glitches along the way, but as things developed I managed to make it work well enough for serious competition. The variable gain system in one direction

only was a big step forward to make it much better for competition work. I keep on trying to improve the system all the time, and for sure a basic display system for programming is still on my list of to-dos.

"The ESC in the Protron is a Hobbywing Pentium 40 amp. These days, most of the low-price ESC's work very well with a smooth throttle resolution. A few years ago, some of the cheapo's had some jumps in the throttle range that used to give my system a few problems. I've used the budget priced Spacewalker ESC's from Hobbywing recently, and they work well but only have an instant cutoff on the low battery setting.

"These days with the huge demand for electric power, I believe that all of the ESC manufacturers need to supply good products, so lately I have not found one that gives my system problems. Eric had one particular make that had a fuzzy voltage regulator that upset my processor, but that's about the last time we found any baddies."

To wrap things up, I would like to thank Eric Rule of RSM Distributions for his technical assistance in writing this article and for providing the governor/timers for both Kevin and me to test. I would also like to thank Keith Renecle for providing me with some interesting history of how this whole thing came to be.

Thank you, Kevin DeMauro, for doing most of the test flying and providing feedback. Most of all, please don't forget that we control line fliers don't have much support from major companies anymore. Please support people like Eric Rule and his company RSM Distributions. Without people like him, we would really be out here on our own. **SN**

# IC Engines, Props, and Setups

by Brett Buck

## Engines at the Nats

I think someone probably mentioned this somewhere else in the magazine, but since the last time, we had a big contest in a soybean field in the Midwest. The Nats, we called it.

In terms of internal combustion engines, it showed we aren't quite dinosaurs yet. David won using his usual PA75; Doug was second with a PA65; Paul was third with his Igor-type electric; I was forth with a RO-51 BSE set exactly as it had been in 2003—eleven long years ago; and Howard was fifth with another Igor electric.

It was about like that all the way through. Neither system seems to have a tremendous advantage. So don't take all your PA61s out in the driveway and smash them with a sledgehammer. They aren't going to be obsolete any time soon.

David's and my engines were set up exactly per the Tuned Pipe article he wrote with some input from me in the 2009 Special Issue of *Stunt News*, so there are no secrets!

### Fuel Fun

As many of you may have discovered, recently Powermaster started using a deep purple dye in at least some of their model airplane fuels. For those of you who don't know, VP is an absolutely huge supplier of specialty fuels for all sorts of competition.

Look around at an NHRA event, and you will see drums of VP nitromethane all around. They make or at least distribute limited run batches of 130/145 aviation fuel for Reno—stuff like that. It's a big firm. Model airplane fuel is just a tiny part of it.

Anyway, we had noticed that the color of the fuels we were using (mostly Powermaster RO-Jett (10% nitro, 22% oil, 25/75 castor/synthetic) varied from batch to batch. It started out clear, was red for a while and then clear again, etc. It always worked the same, so no problem.

Then we got a batch that was deep purple, and I mean deep! It was like a cover from a Deep Purple album. That one is for the aging ex-hippies in the audience. (*Thanks for that, Brett. Richie Blackmore and I appreciate it... Ed.*)

The red never seemed to cause any problems. The purple definitely does. It varies depending on what paint you used, but the raw fuel can definitely leave a stain, and in some cases people have reported that the exhaust was staining, too. It ran just like the other stuff, just with a stain.

After a bunch of us got in touch with Powermaster, it turns out that they were putting in the color dye as requested by some people, and they ran out of red. David at first told me it wasn't a problem, but by the end of the Nats there were purple stains on his cowl—not too bad, but unmistakable.

I am not sure who is requesting dark purple dye, but I doubt it is stunt guys. If you are asking for it, please stop! At least RO-Jett has little application outside CL stunt, and random purple stains are not going to help you in appearance judging, I guarantee.

As of the last discussion I had, they were going to stop for at least the RO-Jett fuel. They shipped me a last-minute case of the new clear stuff right before the Nats (and I mean, right before; it got here less than 24 hours before I left), and sure enough, it is clear and works fine. And no purple stains.

### Engine run characteristics, fuel, and Obsessive-Compulsive Disorder.

RO-Jett? Doesn't David have a PA, so what is he doing with RO-Jett fuel? The answer is that it seems to have some interesting characteristics that result in subtle changes in the run. Limiting it to the obvious (big-name) choices for fuel are summarized in this table:

Note that this is my best guess, based on what I have been able to find out and some boil-down tests, not a result of gas chromatograph testing. Fuel guys are notoriously secretive, but this is close.

First and foremost—you don't need a lot (or maybe any) castor to keep your modern AAC engine alive, as long as you don't rust the bearings. You probably *do* need to use it in older iron-liner engines, so most of the rest of this does not apply to the Fox/McCoy/Johnson/Forster crowd. Although experiments might be interesting, it's a little tough to call up the Forster factory to get a new liner these days.

What others and I have found is that a combination of the oil characteristics and the viscosity (which affects the supply and atomization) has drastic effects on the run, and in the long-term, on the overall performance.

The long-term effect is easy to explain—an AAC piston/cylinder system doesn't need lots of thick castor to fill up gaps in the fit. Even "consumer-level" engines have micron-range fits to a startling accuracy. The last thing you need is a bunch of baked-on carbon gunking it up.

In other words, varnishing just kills the performance, just like a Cox .049, which was the *first* engine to have these ultra-precise fits. In fact, I have de-varnished my 2006 Nats engine because it just wouldn't put out much power any more, as though it was worn out. After a day with the piston and liner in the crock pot with antifreeze, it was like new again. So, too much castor definitely has a detrimental long-term effect.

The run characteristics are a lot harder to describe, and, for the time being, impossible to explain. In corners, the response of the engine changes with the fuel. The first approximation is the more castor, the more RPM and apparent "mixture" change there is (variation in the four-stroke or more "break").

RO-Jett fuel has *much less* of this effect than Powermaster RC sport fuel. You can feel it more than hear it, although it is audible. With a lot of castor there is a substantial backing-off in the corners, particular in braking (like the down leg of the hourglass). So it slows noticeably, and then picks back up—a sort of start-stop effect.

With the RO-Jett fuel it has much less of this effect; it just sort of keeps pulling in the corner. It also unloads from ground to air much less to the point I have to set the RO-Jett fuel something like 150 RPM faster on the ground, since it unloads a lot less. It's closer to the way an electric runs than it is with the RC Sport fuel.

Dave tested it in the PA and found something very similar. Whether it's the oil inside the engine doing something to the combustion, or the viscosity of the fuel going through the tubing, spraybar, and spigot, I have no idea. I suspect it is a combination. Some of the same effect can be achieved by simply

increasing the fuel line diameter and the holes in the spraybar, so viscosity is a part of it for sure. Or by thinning the fuel with a regenerative fuel preheater—but that is the topic for another time.

The other thing I noticed was that when switching back and forth between fuel types, it takes a while for the full effect to take hold. It's different on the first flight, but the run characteristics keep changing for maybe 15-20 flights, after which it is stabilized. It's my theory that the fuel is altering the degree of carbon buildup; the RO-Jett cleans it a bit, and the RC Sport fuel adds it back.

I got through almost the entire week at the Nats running about like normal even though I switched to 15% RC sport for Muncie after having used 10% RO-Jett at home for a long time. Only on Saturday did I notice anything like it starting to back off (like in the down leg of the hourglass) and then it was just detectable. The guys who have run SIG Syn-power extensively tell me that for that, the difference is substantial and takes even longer to stabilize.

The fact that it takes an extended time to get to the full effect also tells you that it's not the old "cooling" theory from the days of 4-2 break motors. It has the same coolant flowing through it on flight #1 that it does on flight #20.

Interestingly, my engine won't run through round loops on Powermaster GMA! It loads up a little on the first loop, more on

the second, and then just about flames out in the third. That's a setup issue, and I am sure I could get it to work with some fiddling, but it's not a figment of my imagination.

At the '09 FAI Team Trials, I also tried some home-brew of the same nominal content that Howard made and I experienced exactly the same thing! I was out on the L-pad mixing fuel and then testing it about 15 minutes after sundown—and everybody knows I am not one of the last-guy-at-the-field types. I need my beauty sleep.

Note that I am not telling you that RO-Jett fuel is "better" in any objective way. I prefer the more-constant-in-the-corners feeling, but you might not. I would, however, suggest it is worth a fair bit of time at the field to test, and to keep with it for long enough to see the full effects. It is not a subtle thing; it has quite significant effect on how you can do the corners and bottoms. Try it and let us know what happens!

#### Fox Is dead

Or at least in suspended animation. Numerous reliable Internet posters (if that is not an oxymoron) have reported that Fox has suspended production of model aircraft engines due to low sales. Not necessarily forever, but at least for the time being. Sad if true. More to follow next time. *SN*

—Brett Buck

*brettbuck@comcast.net*

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# PAMPA News & Reports

## Vice President's Report

by Matt Neumann

The 2014 Nats is now in the books. As expected, it was again quite memorable. We had some of the nicest weather ever for official flights... all week long! This resulted in some excellent flying, since the pilots could just fly the plane and not have to fight Mother Nature. If you goofed, there was no blaming the weather this year.

My journey to the Nats started a few days prior to the actual official start date. My parents live between me and Muncie, so I typically stop by the weekend before and do the final prep work there. This year was no exception.

Since the plane was new (three weeks old just before the Nats), I had not had a chance to really get it buffed out, so I tried to finish that at my parents' house. When I left home I knew I had a few trim issues left in the plane that I had hoped I could figure out at Muncie.

Not really a good way to leave for the Nats, but that is what I had so away I went. The weekend was filled with buffing and doing lots of little things needed to get ready. At the end of the weekend I still did not get as much of a shine as I would have liked, but I was just out of time. It would have to do.

Monday came and the appearance point judging and pilots' meeting began in the One Eighty Building. It was nice to see friends again that I have not seen in a year.

We had a nice contingent from Australia this year. PJ Rowland was there with his new bride Rhianon, along with fellow countryman Joe Parisi. It was nice seeing them again since they cannot come all the time.

Kaz Minato was also able to make the long trip from his home country of Japan. And Monty Summach made it down from Canada once again. Of course, I cannot forget how nice it was to see all my US friends who are just too numerous to mention.

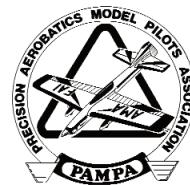
During the pilots meeting the wind was kicking up and the rain started to come down. Dad and I figured that practice after the meeting would not be possible. After eating, however, we noticed that the wind calmed down and that there was no immediate chance of rain, so we headed out to the field to see if we could get the plane into shape.

Chris Rud was there after a several year layoff, and we shared a circle together practicing. I made some changes but still was not really close to where I wanted the plane to be.

The next morning we got up early (I am on vacation and I am getting up early? Something just seems wrong about that!) and headed out to the field again. There I got to chat with other people about my problems with trim.

After talking things through with several people, I decided to add a little down thrust in the plane by putting 4-40 washers behind the two lower motor mount bolts. That small change made a *huge* difference in the way the plane flew. It still hunted slightly but much, much less than before, and the turn rate between inside and outside became the same. I next moved the leadouts a little farther forward, and that helped cure the hunting some more. So now I knew I was on the right track to solving my trim issues, as the plane was now starting to fly as it should.

This is one of the things people don't think about when coming to the Nats—the huge amount of knowledge that can be gained by coming and competing, even if you are not a top



caliber flier. That knowledge and experience will help your flying for quite some time to come. So even if you know that you do not have a chance to win, the knowledge gained will help you improve your abilities.

After my practice session was finished on Tuesday, we went down to the Classic and OTS circles to see a little bit of what was going on. The rest of the day was spent resting. One thing about the Nats—you have to pace yourself. It is a long contest, and wearing yourself out early is usually a recipe for a terrible showing.

Wednesday morning came and it was off to the practice circles in the grass before the official flights. Overnight an Arctic Vortex came through and it was a bit chilly out on the field. I think this is the first time I can ever remember having to turn on the heater in the car in July! Everyone was bundled up except for those who did not think to bring some warmer clothes. Those people wound up going to a clothing store and getting something warmer, because the day started out in the low 50s. Nobody was complaining about global warming this year.

My practice started out with the plane going a little fast in the cool dense air. I lowered the RPM to compensate and also moved the leadouts farther forward. Both adjustments worked well. Just before heading up for an official, I moved the leadouts a little bit farther forward.

Some may think it is crazy to make an adjustment before an official flight without actually trying it out first, but I knew this was helping so it was not really a risk. That first official wound up being the best flight I had put on the plane to that point. Official flights are certainly the time to do that. The day ended with my being in second place on my circle.

## **... the \$5,000 gift donated to PAMPA in the name of Allen Brickhaus after his passing would be given in the form of scholarships in Allen's name to the youth in his school where he taught.**

After flying, Dad and I went back to the motel to clean up so I could get to the PAMPA meeting to fulfill my duties as VP. At the meeting it was decided to give each of the US team members \$500 and the manager \$250 in order to help offset costs for representing the US in the world competition.

The formal announcement was also made that the new website we have been talking about—like forever—is actually up and running! While it was announced earlier that Bob Storick would be shepherding the site, he decided that he bit off a bit more than he could chew, but to his credit he found someone who was willing *and* able to do the job. Now the site is finally up and running.

Also at the meeting it was decided that the \$5,000 gift donated to PAMPA in the name of Allen Brickhaus after his passing would be given in the form of scholarships in Allen's name to the youth in his school where he taught. This would be given once a year in the form of \$500 a year until the money is spent. Since Allen was always very youth-oriented, it was decided this was the best way to honor his memory with the donation.

Bob Hunt was also there and asked that we put out a call for articles for him to put in *Stunt News*. This is an entire group effort, and I define “group” as the entire membership. We need the membership, *you*, to help us by submitting something of your own design or technique or suggesting something of someone else’s that could be submitted to *Stunt News*. It does not have to be big, long, or high tech. Even a half-page little tidbit can be a great benefit to other modelers.

So, we need *you*! It was also decided to move the deadline for submissions up to the 10th instead of the 20<sup>th</sup> of the odd number months. This is to give Bob more time to get the issues out on time.

Thursday came around with more pleasant weather of light winds and a cool day. I ended the day by winning my circle for the day with a 525 score and an improved flight over the previous day, even though the score was lower. I was starting to get used to the plane.

Now some may say that seemed like a low score to win a circle for the day, and I have to admit that if you compare that to the other circles with other judges, it was. There was a bit of disgruntlement going on with some of the fliers on the scores being so low, so I will state here what I told them.

The job of the judges is to decide who is 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and so forth and not worry about inflating the pilots’ egos with a high score. We pilots have big enough egos the way it is. We don’t need any help! As long as the judges are consistently high or low is what matters. If they are consistent they will get the placement order right, and that is the ultimate goal of a judge.

After Thursday’s flying, we got to draw the infamous ping-pong balls for the flight order on Top 20 day.

Derek Berry had his six-year-old daughter, Layla, with him, and he let her draw one of his picks. The whole time he was saying over and over, “Whatever you do, don’t draw number one!” So what does she do? She draws number one, much to the

delight of everyone there. Well, everyone except maybe Derek. But even he saw the humor in it, especially since she was standing there looking up at him with a typical little six-year-old girl smile. I mean, how could you resist that?

Friday came along for Top 20 day. Again, it was light winds and only slightly warmer. A local friend of mine, Eric Taylor, was in his first Top 20, and he was nervous—*very nervous*. So I did double duty about keeping my nerves in check along with trying to keep him calm. I must have done a good job, because by the end of the day, he got Rookie of the Year with a 14<sup>th</sup>-place finish. Way to go, Eric!

As for me, I got 10<sup>th</sup> place with the best flights I have put in with the new plane to date, which to some may be considered a failure, since I have placed higher in the past. However, I consider it quite an accomplishment, since just a few days earlier I was figuring I would not get anywhere near that close. So to me it was quite a victory to get that high, especially if you consider that this year was one of, if not the toughest, Top 20 field in quite some time.

It was a venerable who’s-who of stunt. There was only a 1.5% difference in scores between me and 5<sup>th</sup> place. And then consider that there were four other people between me and 5<sup>th</sup>. It gets tough at the top.

Top 5 Fly-off came around on Saturday with again a cool and light wind day. At the end of the day with the cream of the crop flying and in true dramatic fashion, we had to wait for the final score to be posted to find out who won. That honor went to David Fitzgerald, with Doug Moon 2<sup>nd</sup>, Paul Walker 3<sup>rd</sup>, Brett Buck 4<sup>th</sup>, and Howard Rush in his first Top Five appearance at 5<sup>th</sup>. Good show, guys!

After the official flying was over, I let Paul Walker and Bob Hunt fly my new plane. This gave me some idea what it looked like outside the circle and had hoped they would give some ideas on trimming. They were happy to oblige and gave me some really good advice as to how to finish trimming out the plane.

I will again mention that this is one thing I think many people forget about when coming to the Nats. While the main objective of the Nats is to crown the National Champion, there are two other things that it is known for: the renewed friendships and the opportunity to learn. I am sure that there are many people out there who do not come to the Nats because they just don’t want to get used as a mop, but they forget that the week at the Nats can be the single, most valuable learning experience of the entire year.

So what if you get beat? The knowledge that you will gain from being there that one week can greatly improve your flying and building skills for a long time to come. I have said this in the past and I will say it again, that this is one of, if not the greatest thing, about this hobby. Everyone is willing to help out everyone else, even if that means your getting beat by the competitor you just helped. That is what makes this hobby strong. And boy is it strong. I am glad that I am part of it.

You are coming to next year’s Nats, aren’t you? You should!

—Matt



# Secretary/Treasurer

by Jim Vornholt

The E.C. voted unanimously to award \$500 to each PAMPA member traveling to Poland for the FAI World Championships competition.

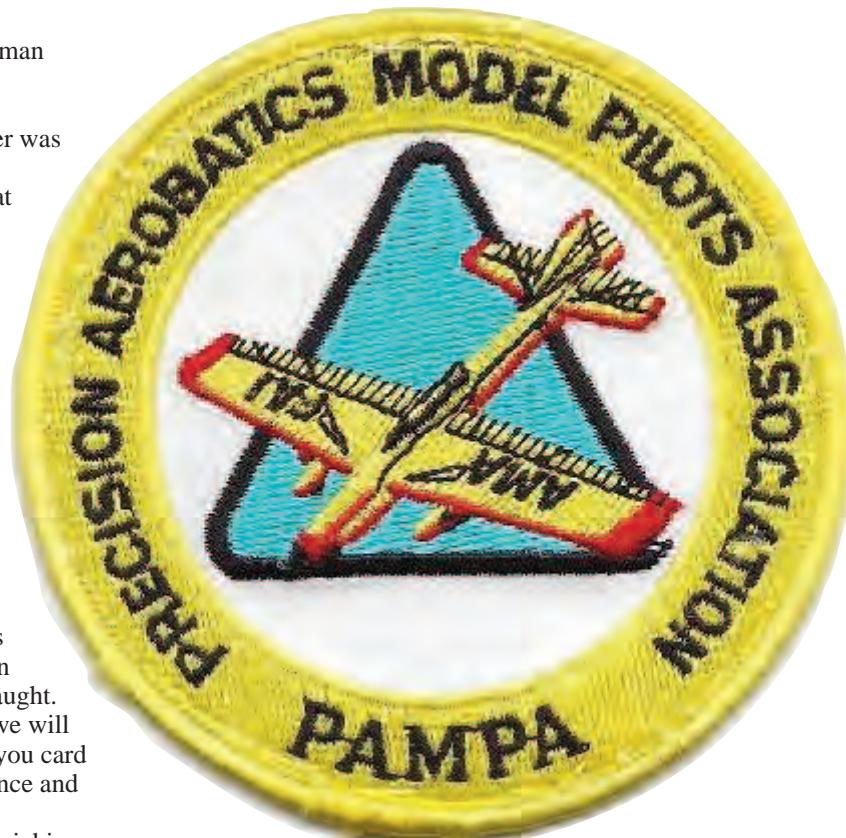
Bob McDonald announced that as of Wednesday only a very small number of people had signed up for the Saturday Awards Banquet. (*We lost around \$500 this year on Banquet; if this does not change, the E.C. should consider dropping the Banquet – J.V.*)

Twenty-six people attended the banquet. Six were workers; four were from another country. This leaves only sixteen U.S. contestants. Derek Barry suggested we find a more suitable facility for next year.

(*Note: An e-mail from Bob Kane, Event Director for the 2014 AMA RC Precision Aerobatics events, advised that this year's NSRCA banquet was held at Vera Mae's in Muncie. They have a 120-person limit, and they sold out all seats. The cost was \$25/person. Beer/wine/mixed drinks not included. PAMPA could follow the lead of RC Aerobatics and have the banquet on Thursday while most people are still in Muncie. – J.V.*)

Jim Vornholt noted that PAMPA was completely out of color water transfer decals. John Brodak donated 1,100 PAMPA decals at no cost to PAMPA. Jim suggested that we order cloth PAMPA patches. PAMPA member, Russ Main, is in the process of making a minimal number of these patches for purchases from PAMPA Products.

President Tiahrt closed the meeting at 18:05 hours. SN



The annual meeting of the PAMPA Executive Board was held at AMA Headquarters on July 16, 2014, at 15:00 hours. In attendance were the following:

President Warren Tiahrt  
Vice President Matt Neumann  
Secretary-Treasurer Jim Vornholt  
Membership Secretary Mike Strand  
*Stunt News* Editor Bob Hunt  
District II Rep. Will DeMauro sitting in for Buddy Wieder  
District IV Rep. Scott Richlen  
District V Rep. Derek Barry  
District VII Rep. Bob McDonald  
District VIII Doug Moon  
District X Rep. Dave Fitzgerald sitting in for Jim Hoffman  
District XI Rep. Mike Haverly

**President Tiahrt** opened the meeting. The first speaker was Bob Hunt. Bob had previously been asked to review printing costs for *Stunt News*. He advised the board that Pinney Printing was still the most reasonably priced company. He advised that PAMPA should not change printing companies at this time.

Bob requested that the deadline for submitting the Officer and Director columns to *Stunt News* be moved up by ten days. Also, it was noted that Brett Buck will begin a column dedicated to IC model engines.

President Tiahrt announced that the new PAMPACL.org was now online thanks to Bud Morrison. Bud has worked countless hours along with Eric Viglione to make the new website possible.

Mr. Robert Shaw donated \$5,000 in the name of Allen Brickhaus. A question was raised as to what intended use PAMPA had for the money. A motion was made and passed by the board to set up a scholarship in Allen's name for a student at the school where Allen taught. Mrs. Brickhaus has been contacted to determine how we will pick a student to be awarded the scholarship. A thank-you card was signed by all board members who were in attendance and sent to Mr. Shaw.

Tuesday evening Mr. Don Ogren organized a memorial in honor of Allen Brickhaus. The show of support for Allen was overwhelming. (*I hope we can do it again next year- J.V.*)

The new PAMPA patch is available through PAMPA Products. See pages 96-97.

Get inspired!



PPN046 Speed King



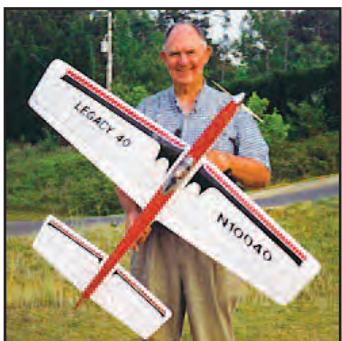
PPN040 Tucker 4



PPN010 Doctor



PPN038 Trivial Pursuit



PPN017 Legacy 40

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PPN028 Profile Nobler by Jim Harris (1 sheet 36 x 52)	\$10.00
PPN029 Profile P-51D by Tom McClain (1 sheet 36 x 48)	\$10.00
PPN030 Ruffy by Lew McFarland (1 sheet 36 x 46)	\$10.00
PPN031 Saturn by Don Ogren (1 sheet 36 x 59)	\$11.00
PPN032 Scared Kitten by Bill Netzeband (1 sheet 30 x 48)	\$10.00
PPN033 Shaman by Steve Moon (1 sheet 36 x 50)	\$10.00
PPN034 Stuka by Matt Neumann (2 sheets 34 x 45)	\$20.00
PPN035 Stuntress by Joe Adamusko (2 sheets 36 x 52)	\$20.00
PPN036 Stunt Trainer by Pat Johnston (1 sheet 22 x 34)	\$8.00
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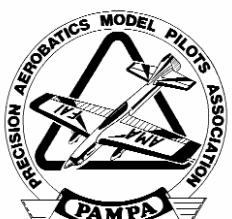
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Note: this order form may be photocopied or downloaded from the PAMPA website.

# District I

by Steve Yampolsky

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

**Today I'm bringing** two pieces of news, one local and one global. Yes, as the District I PAMPA Director (he he), my job is to report on CL Stunt-related happenings in the five states. Another job is to get the stunt pilots of New England motivated to build, fly, and improve their skills. I hope this report does both.

## Summer Solstice Fun-Fly

The Summer Solstice is the longest day of the year, and it is celebrated by many cultures in a form of burning fires. Well, we *did* burn a whole bunch of stunt fuel that day! It is hard to tell who came up with an idea of a stunt fun-fly on the Summer Solstice, but I suspect it is our resident energetic trio, Damian Sheehy, Steve Teerlink, and Chris Sarnowski. Okay, guys, fess up! Which one of you came up with this great idea?

The idea is simple: Show up at the field around 3 p.m. and fly until sunset. It seemed as though few folks would come, because this was communicated via the New England Stunt Team's email list, but I was pleasantly surprised to see many faces come from Connecticut, Massachusetts, and Rhode Island. The weather cooperated with us and provided low winds and cloud cover until the sun set. Lesson to all District I stunt pilots: It's worth joining the New England Stunt Team email list! Please contact our NEST Grand Dictator Damian Sheehy at [damiansheehy@gmail.com](mailto:damiansheehy@gmail.com).

Before I go to another story, I'd like to tell you two people stories from the Summer Solstice Fun-Fly. Will Moore is a longtime stunt pilot, who, in his youth, was a hotshot from New England who flew as a Junior at the Nats and would have won if it wasn't for that meddling kid named Billy Werwage.

As happens with so many of us, life's responsibilities took over and Will did not pick up a handle again until 2005 or so, when he showed up at a field to see if anyone still flew Control Line Stunt. That day, I happened to be practicing by myself, trying to prepare to enter my first Intermediate contest. When I learned who Will was, I offered to let him fly my model, thinking that this guy, who hasn't flown in 35 years, will take it easy and fly level with a few loops.

As I learned later, it's not like Will to take it easy, oh no! Will took off and proceeded to put in a pattern that was a beauty to watch! That day, Will and I became friends and competitors. Will and I came up the class ranks at about the same speed, so we've been competing against one another. I was always impressed with Will's competitive drive and the mutual respect that we've

developed. I could have not asked for a classier opponent! Will is constantly improving, making it difficult for me to slack off.

**Fast forward** to the Solstice Fun-Fly. Will was present, and unlike in years prior, I noticed that he was flying the same airframe that flew in 2013, the electric Impact. In previous years Will had a new model every season (who can forget The Bomber?). This is an important change in Will's competitive strategy. It shows that he is focusing on his skills, which can, at his level, only be improved by flying the same model over a long period of time. As in years past, Will and I flew each other's models and shared with one another our thoughts. As a result, both of us walked away from the fun-fly with good ideas on how to improve the trim of our models.

Another flier at the fun-fly was Steve Teerlink. Steve is an up-and-coming flier who has been working his way through the classes over the past several years. This year he brought a new model to the fun-fly. It is an Allen Brickhaus-designed Legacy. It took to the air for the first time at the fun-fly, and it flew superbly right off the bat! It was a perfect tribute to Allen's memory, and the fact that it was adorned with "John 3:16" made it particularly poignant. I may not be Christian, but the significance is not lost on me. Thank you, Steve, for making such a special airplane!



## Evolution revolution of EVE

A few years ago, my oldest kid started taking Russian lessons. Pretty soon she started bringing enough homework home that she asked me for help. The last time I wrote anything in Russian was in 1989. Needless to say, my help was “subpar.”

Thoroughly embarrassed, I decided to brush up on my Russian. I have always been curious about the stunt community in Russia, so off I went searching for a way to connect with Russian-speaking stunt pilots. I found a fairly lively control line forum (<http://forum.rcdesign.ru/f95>) and, with the aid of Google Translate, I started slowly making my way back to Russian proficiency. After six months I was able to read and write with an acceptable level of proficiency without consulting Google Translate. What I discovered is an amazing project which I would like to tell you about.

Russia is a large country, full of folks who love flying control line. What's even more impressive, the average age of stunt pilots there is the high 20s. The young kids build and fly stunt planes all around the country. Unlike the US and other Western countries, they do not have access to stunt engines, kits, or the plethora of published designs (language is a big barrier). Everything they make is from scratch.

That said, the youth-being-youth *did not* accept the status quo and decided to design a modern stunt plane that was easy to build and could use any suitable size engine. The design features laser-cut self-aligning parts and a radial-mounted engine. This may seem like the norm here, but it is quite an achievement, especially considering the design. It is called EVE and was born in a city smack in the middle of Siberia!



Being of the Internet and Facebook generation, they openly published their design on the Internet and asked others to build and suggest changes to the model. The design came in a form of electronic plans that could easily be printed, and a laser-cutter file so that anyone with access to a laser cutter could cut their own kit! For those who did not have access to a laser cutter, they would cut the kit for just the price of materials. In a matter of one year, there were dozens of examples of the design built and flown. The design became so popular, a stunt contest was organized where the only model allowed was EVE.



If you would like to build for yourself an exotic design from another country, EVE is for you. If you would like to become a part of an international fraternity of EVE, consider EVE as your next model. As of this writing, I am aware of EVE's either built or being built in the Ukraine, Spain, Germany, Israel, and France. Feel free contact me via email ([syampolsky@hotmail.com](mailto:syampolsky@hotmail.com)) and I will email you the electronic plans. **SN**

# District II

by Bud Wieder

New Jersey, New York

**Hi, all.** Labor Day is over and the contest season is winding down. There were a number of stunt-related events that happened in District II over the summer, and we have reports on them.

In June, the Garden State Circle Burners held their annual stunt contest. My good friend - and GSCB President, Ron Testa, was once again nice enough to take pictures and cover the event for me:

## GSCB June Meet

Our June stunt meet was held on June 29<sup>th</sup>, and we had a fairly good turnout and some great weather. The PAMPA stunt classes were flown. Unfortunately, we didn't have any Beginner class entrants, but the other classes were well represented. At the end of this contest we traditionally have a fly-off between the class winners to determine who will win the Reinhardt Cup. This cup was donated to the club by the Hunt family to be awarded in memory of Harold "Red" Reinhardt.

The winners of each of the PAMPA classes fly in front of the same judges who watched and scored their class competition flights. The winner of the cup is determined by which flier scores the highest percentage of their winning flights in class. This makes it possible for any one of them to win the cup.



Jim Damerell brought along his newest original creation, a Cosmic Wind. Jim designed this ship around the aerodynamic numbers of John D'Ottavio's Silencer. Jim's ship is electric powered and features a 2.4 GHz radio receiver on board to allow powered takeoffs and landings. Testa photo.



George Martin guides his venerable, Bob Palmer-designed, Thunderbird II through an outside loop during a flight in Advanced at the GSCB meet. Testa photo.



Ryan Barry's Bob Palmer-designed Smoothie ARF wings its way to a win in Advanced at the GSCB June PAMPA Stunt Contest. Photo by Ron Testa.



Ed Barry, Jim Damerell, Bob Hunt, and Ryan Barry (L-R) discuss the proceedings at the GSCB June meet. Jim and Bob were the Advanced/Expert judges. Testa photo.



Frank Imbriaco (in chair) and Mike Cooper chat about the flying at the GSCB contest. Testa photo.

This year the Advanced class winner, Ryan Barry, flew against the Expert winner, Mike Ostella, and the Intermediate class winner, Tom Luciano. All three flew great flights, but Ryan flew his ARF Smoothie through an exceptional flight to beat out Mike and Tom for the cup.

For the Advanced and Expert classes we had two guest judges who sat out in the sun all day. Many thanks go out to Jimmy Damerell and Bob Hunt for taking on the task of judging those flights. Jimmy and Bob also offered critiques on the flights they were judging, and that went over very well. I know I learned a lot from them. Our Intermediate judges were GSCB members, Mike Cooper and Mike Ostella.

Mike Ostella took an ARF Nobler and converted it to electric. What a beautiful job he did! The only thing is whoever launches him has to wear white gloves as not to get any oil on it from their hands...



Mike Ostella did an outstanding job in converting this ARF Nobler to electric power. He installed an E-flite Power 15. Note the great Coast Guard trim scheme. Testa photo.



Here's a close-up look at Ryan Barry's Advanced-winning ARF Smoothie. Ryan got a lot of flights on this ship! Testa photo.



Tom Luciano won the Intermediate class at the GSCB meet flying his trusty Sig Twister. Testa photo.



Ryan Barry receives the coveted Reinhardt Cup from GSCB club president, Ron Testa (R), and CD Mike Cooper (center). Testa photo.

It was a fun day at our club field with a great turnout. We had the most delicious food provided by The Deli Guy. (How's that for a plug?)

Don't forget the Garden State Circle Burners Swap meet on Sunday Nov. 23, 2014, at the Wayne fire hall.

—Ron Testa

Thanks, Ron, for that great report and photos!

Yet another Ron covered the August Middlesex Modelers contest for me, as I was busy competing. This time it is Ron Heckler:

#### Middlesex Modelers PAMPA Stunt Contest

Will DeMauro called me on Saturday and asked if I wanted to join him to attend the PAMPA contest on Sunday, August 3, in Middlesex, New Jersey. I told him I would love to go and would cover the event for Buddy Wieder's column in *Stunt News*.

It was a drizzly morning. We arrived at the contest site around 8:30 a.m. and were the only ones there. We are both used to seeing people arrive at that time for a 9:00 a.m. start. At 9:15 we were still the only ones there, so we started to wonder if people were going to show up at all.

Will suggested we get some flights in ahead of time, and, as we started to unload our equipment, Bob Hunt arrived. That's when we found out some very important news; there is a city ordinance that prohibits flying model planes until 11 a.m. so the neighbors surrounding the site are not annoyed by the noise.

It's a good thing we did not fly ahead of time. Otherwise, we might have ruined the contest and jeopardized the club's use of the field! So if you ever decide to go to the Middlesex flying site located behind the Middlesex High School, do not fly until 11 a.m. or later. On this contest day, however, the flying was allowed to start at 10:30 a.m. for the electric-powered models. Those "quiet fliers" got in a practice flight each, and then, at 11 a.m., those with glow-powered models were allowed to get in a practice flight, as well.



The pilots' meeting at the Middlesex Modelers PAMPA Stunt Contest was conducted in a light drizzle. The weather did get better and there was little to no wind to contend with. Photo by Ron Heckler.



Expert Stunt winner at Middlesex was Dan Banjock. Dan flew his very long-in-the-tooth original Vista design. It was the last win for this storied ship... but that's another story! Heckler photo.



Here's that Barry kid again... and he's shown here winning the Advanced class... again. He's getting good, guys! Heckler photo.

It turned out to be a great day. It was overcast and winds were about 3 mph. The contest was sponsored by the Middlesex Modelers, and the CD was Jim Vigani. There were a total of 10 participants: three in Expert, two in Intermediate, and five in Advanced. The judges for all three were Bob Hunt and Keith Ferguson.

In Expert, Dan Banjock, flying his well-used, original-design Vista, narrowly won out over Buddy Wieder, who was flying his

three-year-old, original-design Ryan's Eagle. Will DeMauro took third with his brand new, and beautiful, Voltron original.

In Advanced the winner was Ryan Barry, flying his ARF Smoothie (a Bob Palmer design), followed by his father Ed Barry in second with his Allen Brickhaus-designed Legacy, and in third was Bob Krug who flew a Windy Urtnowski-designed Strega.



Dan Banjock receives his first place Expert plaque from Middlesex CD Jim Vigani. Heckler photo.



Ryan Barry is getting used to collecting first place plaques in Advanced. He gets another one here from Jim Vigani. Heckler photo.



Tom Luciano captured first in Intermediate at Middlesex with his new ARF Vector 40. Jim Vigani hands over the goods. Heckler photo.

The Intermediate class winner was Tom Luciano. Tom flew his new ARF Vector 40 and showed that he has some serious skills. He'll be moving up in class very soon! Second place in Intermediate was captured by Tom Schaffer. Tom flew a Brodak P-40 profile, and he's another flier that will soon move up in rank. The same goes for Jim Vigani. Jim placed third in the Intermediate class flying an electric-powered Vector 40.

—Ron Heckler

Thanks for that fine report, Ron!

**In September** Bill Hummel did his usual great job of running the Lee, Massachusetts, contest that I was lucky enough to be able to attend. As usual the weather was great, which I'm sure has something to do with Bill having a lot of pull "upstairs." The grass circles were perfectly cut and everything went smoothly. Lunch was provided by Bill with burgers, dogs, chips, and drinks. Thanks goes out to Bill and the rest of the guys who put together a wonderful day of contest flying.

Being able to get together with Noel Drindak, Will Moore (who I flew against at the Nats in the early 1960s), and Steve Yampolsky is always a plus and a pleasure.

My good friend Bob Lampione supplied the pictures below. They are just a few shots of a typical Saturday of flying at their site in Flushing Meadow Queens, New York.



Bob Hunt designed and built this Genesis Extreme many years ago and then sold it to Jose Modesto. Jose gave it to Jim Borrelli. They converted it from glow to electric. Photo by Bob Lampione.



This is Will DeMauro's great looking new Voltron original. As the name implies, it's also electric-powered. Lampione photo.



Here's Jose Modesto's latest composite beauty. Yup, it's electric-powered, also. Lampione photo.



Bob Lampione's newest United was built from the Brodak kit. Bob designed this stunning, glow-powered plane. Great colors, Bob! Lampione photo.

As some of you probably already know, Bob Hunt and I have been working on a couple of new electric projects. We are building twin electric-motor stunt ships with retractable landing

gear. The test-bed airplane we built is now flying and is coming along great! We are working out the kinks, but everything so far has been extremely positive.

I'm sure Bob could have completed the test bed airplane a lot faster without me helping, but everyone has a cross to bear. Bob's cross is me! I build something... he fixes it. I come up with an idea and he says, "Don't think, just sand!"

I'm including here a few pictures of the test-bed twin.



Bob Hunt and Buddy Wieder built this test-bed electric twin to evaluate electric motors and also to learn to use electric retracts before building fully finished competition twins. Photo by Robby Hunt.



Bob and Bud's test-bed twin features a "Lost-Sheeting" wing. The raw foam wing has inset basswood spars top and bottom that are reinforced by shear webs. The wing is covered with .2 ounce carbon mat applied with water-thinned Titebond II glue. Robby Hunt photo.



Bob Hunt puts the test bed twin through its paces. The ship is powered by two 1100 Kv, E-Flite Power 10 motors and features a prototype Will Hubin twin timer with retract function. It flies great! Robby Hunt photo.

#### A note from Will DeMauro

Just before this column was due for submission, I received the following note from Will DeMauro.

"The members of District II, and especially the New York Control Line Stunt Team, would like to express our sincerest condolences To Joe Daly and his family on the passing of his mother, Bernice Frances Kolm Daly."

—William DeMauro

**That's it** for this time. Please send in your District II photos and stories and support this column! *SN*

—Bud Wieder

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# District III

by Ken Armish

The big event for District III in June was the Brodak Fly-In. This past June marked the 18<sup>th</sup> year for the event. Brodak's is more than a contest; it's a family reunion to which we all bring our planes and fly a little! Being in District III, we are always very well represented with approximately 20 or more participants.

## Ohio, Pennsylvania, West Virginia

In CLPA alone, we had four D-III members finish with hardware. Mike Palko took second in CLPA Expert; Dan Banjock took third in CLPA; Dan Bregar took first in Intermediate CLPA; and George Waters took third in Advanced CLPA. Job well done by all! Seeing how Dan Bregar is flying, it's about time he moves to Advanced and shows us all how it is to be done correctly.



This is why John Saunders is so good—particularly in Old Time... Just look at the concentration on his face.



Erik Keller and Bob Hudak doing what they do best. These guys are pretty good fliers, also.



Joe Adamusco is one of the best builders in the country, if not the world. Joe's designs are as much art as they are models.



Jenn Fedorick keeps giving Bernie Suhamski flying tips. He will eventually learn to fly stunt. Bernie is extremely good at the Old Time pattern.



Mike, the electron guy, flew his Bob Hunt-designed P-51. This electric version has been around for a while and is as pristine today as it was when new. Mike is a master at steering the "Stang" through the pattern.



Here's Erik Keller and his lovely wife. Erik just moved to Advanced and is already a force to be reckoned with flying his Viking.



Jerry and Merry Phelps are some of the nicest people you will ever meet. If Jerry would just fly the plane the right direction, maybe he could become good someday. Ha ha!



Erik Keller built this very well done rendition of Roland McDonald's Strathmoor. This design just screams Classic!



Dave Hienzman built this absolutely beautiful rendition of Billy Werwage's Junar, one of my favorite designs. Oh, by the way, it flies fantastically.



Bob Hudak's F-105 is another electric conversion of an older design. This plane is from the drawing board of Bob Hunt. Bob Hudak modernized it with electric and retractable landing gear.



A Gypsy. A Jim Silheavy design by my little buddy, Alan (Hooligan) Buck. PA powered and a very good flyer.



No show runs smoothly without a good leader, and Brodak's is no exception. When we lost Allen Brickhaus, Mark Weiss (shown here in his scooter for the week), and our good friend from North Carolina, William Davis, stepped in and did a fantastic job. A very large thank-you goes out to these outstanding men from all who participated.



Here's Alan Buck and his newest granddaughter, Zoe. Alan is doing his part to bring the youngsters into the hobby.



Philly Flyers' Dan Banjock and Randy Holcroft do some judging. Dan and Randy are always willing to help and give back. By the way, Dan is the oldest "kid" in the hobby. The rest of us are just old....

I would like to publicly thank John and Buzz Brodak for their kindness and hospitality during the fly-in (how would you like about 150 of us in your backyard for a week?) Their patience is beyond belief. Mark Weiss and William Davis were the co-CDs and did an outstanding job. It was not easy losing our good friend and CD, Allen Brickhaus, but I know he was watching and is proud of how well the event was run. And, a big thanks to Tommy and Brian for the field maintenance; Vicki and Nikki in the concession stand; and Sandy and the girls at the tabulation tent. You all deserve our gratitude.

#### *Stunt News*

We need your help. We would like to run more "How-To" articles in *Stunt News*. If you have a special technique for building or finishing, no matter how basic you think it may be, send it in. You can send it to me or to Mr. Hunt, and it will be put to good use. It can be ideas about any aspect of our hobby: how to pack or transport your 20 pointers; how your van or trailer is laid out (I am looking for ideas here); special tools; tool box layouts, etc. You get the idea. Don't think your idea is too trivial or basic. Someone out there needs to know.

#### New website

If you have not been on the PAMPA website recently, you are missing the new site layout. You can register on line, pay for the product online, and see all sorts of new conveniences. I would encourage all PAMPA members to recommend the site to our non-member stunt fliers. We need to build our membership, and the site should make it much easier to participate.

Please keep the photos coming. You, too, could become famous in the pages of *Stunt News*.

Until next time, fly safe. *SN*

—Ken Armish



My wife and best friend, Norine (sitting in photo), and Merry Phelps look to be hard at it researching something on the net. I don't know if this search is for chairs or for new paint designs.

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

Hello again, everybody. I hope you have had a great summer out at the flying field and the contest trail!

I attended the Nats in Muncie where this year's theme was the

"Frozen" Nats. A so-called polar vortex made July seem like early spring, with temperatures seldom reaching 70 and mornings down in the 40s! Vendors on site, as well as the new hobby shop

## District IV

by Steve Fitton

in town, saw a big run on 5% fuel, and clothing stores saw a run on long pants and coats to ward off the unseasonable chill that persisted most of the week.

Congratulations to David Fitzgerald, who held off Doug Moon for the Open win, and for winning the Walker Trophy yet again. Congratulations also to Samantha Hines (the Junior winner) for her fine performance in the Walker Trophy fly-off. It was a great time and I know it will get a full write-up, as well as a Nats technical report for the interested to look through.

Most of the District, it seems, enjoyed much more seasonable conditions at the 2014 Brodak Fly-In this June. The contest itself was written up in *Stunt News* in the last issue, but I wanted to make a few mentions here. Congrats to Brian Moore for a first place in Intermediate OTS, a second in PAMPA Intermediate, a third in Classic Intermediate, and for bringing home the Spirit of '52 award for his Yo Yo OTS entry! That's a busy week!

Congrats also go out to Bub Reese, who beat out Tom Morris to garner first-place honors in Profile Advanced!

Some of the many other mentions include Jack Rosemere, 12<sup>th</sup> place in PAMPA Intermediate, and a shout-out to Dick Houser and Scott Richlen for judging that event. PAMPA Advanced had John Tate in fourth, Artie Jessup in eighth, Terry McDowell in 10<sup>th</sup>, Bill Mandakis in, Bub Reese in 16<sup>th</sup>, and Scott Bolton in eighteenth. PAMPA Expert had Tim Stagg in 12<sup>th</sup>, Scott Richlen in 16<sup>th</sup>, Gary Lutz in 19<sup>th</sup>, and John Rakes, who recovered from his official flight face-plant to come in 22<sup>nd</sup>. Phil Spillman contributed his talents as one of the judges for this event, as well. I know Phil took no prisoners!

Tim Stagg also used his profile F-86 to get a second in Profile Expert right behind the formidable Joe Gilbert and his very well-used SN-J model. Tim also got a second in Nostalgia 30 with the Chipmunk model that graced the pages of this article last time around.

Terry McDowell got a second-place trophy for his efforts in Classic Advanced. Jack Rosemere had a third in Old Time Intermediate and Bill Mandakis a third in Old Time Advanced. In OTS Phase 2 Bub Reese got second in Advanced, followed by Watt Moore in third, while Phil Spillman earned a second place in Phase 2 Expert.

I have probably missed half the accomplishments of our guys. What a turnout from District IV! The Brodak Fly-In is an awesome event and I'm glad so many of our people make it there. Heck, this year we even ran the fly-in! William Davis stepped up to replace our departed friend, Allen Brickhaus, as the Contest Director (aided by Mark Weiss), and by all accounts he did a fantastic job. (Most of you also know that Will not only had to get ready to run Brodaks this spring but also managed to squeeze in a little event called the wedding of his daughter Sarah to David Smith!) Well done, William, for making a *huge* contribution for the hobby!



Brian Moore and his Yo Yo Old Time Stunt model received the Spirit of '52 award at Brodaks. Davis photo.



William Davis took over as CD for the Brodak Fly-In and did a fantastic job, along with Mark Weiss. Here Will is seen presenting Lew Woolard with the Spirit of the Sport trophy. Davis photo.



Brian Moore's ST .51-powered Tony sits ready for Classic competition at Brodaks. Davis photo.



The NVCL club was well represented at Brodaks. Here, Dick Houser and Scott Richlen judge PAMPA Intermediate. Davis photo.



Here's the obligatory "Carolina Gang" picture from Brodaks. Every year more and more people end up in the picture. I figure by the end of the Brodak events, everybody at the contest will be in the picture, and that would sum up the spirit of the Metrolina club perfectly. Davis photo.



Take a look at the fantastic cockpit detail Tim Stagg has incorporated into his F-86. The whole model is a first rate job. Richlen photo.



Jack Rosemere has been paying attention to the NVCL building sessions, featuring clinics put on by Tim Stagg. Jack did a great job putting those skills to use on this P-47. Richlen photo.

Just because I can, I have some pictures from the Frozen Nats I mentioned above. It's a bit hard to feature District IV pilots at the Nats when there really aren't any there, but I chose some pictures of people who are familiar faces at places like the Huntersville contest.

And, as always, I will repeat my comment that if you have ever thought of the Nats, you should try to go at least once. If you love to fly, you can fly your butt off at the Nats and really understand what flying in good air is like. My logbook shows that I got 38 flights in at frozen Muncie, down from 57 the year before, but what the heck. It was still a fantastic time.



Gene Martine brings in his SV for a 40-point landing on a Nats Top 20 flight.



Oklahoma's Joe Gilbert hits pretty much every contest from east to west. Straight back from Brodaks, and then here he is at the Nats. This picture shows the size and activity level of a typical day of Top 20 action. Most likely we will see him again at Huntersville this October!



Gavin Barry gives his dad's Cutlass a launch on Top 20 day.

Right: With a better lens we could see what the instruments read as the Cutlass goes knife edge in the Overhead Eight.



We will see you out on the circle next season! *SN*

## District V

by Derek Barry

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

**Hello,** fellow District V members. I regret to inform you that there will be no column for our district in this issue. Work obligations and personal issues have consumed all my time, so I was unable to put together something that I would be proud to publish.

There are many things that I would like to write about,

including the Nats and all of the guys from our area who showed up to compete, and at least one of them won a National Championship. I will work hard to put together something entertaining for all of you to read in the next issue of *Stunt News*. I hope to see all of you soon at one of our local contests. *SN*

—Derek Barry

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## Illinois, Indiana, Kentucky, Missouri

# District VI

by Dennis Adamisin

I had a pretty good June and July, making it to the Brodak Fly-In and one day of the Nats. I had not been to Brodak's since 2009, so it was great to go back. I passed through Detroit to get Dad, and we had a great chat in the car. When we got to Carmichaels, he had a *great* time reconnecting with all his buddies. I took eight airplanes, a bushel of batteries, and flew three-and-a-half events.

I had intended to fly the tricked-out Cadi-Yak 9 in Profile, but instead I *sold it* the day before the competition! I ended up flying the Cosmic Wind, which came up short when compared to large flapped profiles. I was happy with my flights even though I finished well back.

I flew the Joker in Old Time (second place) and Classic (third), and was very happy with both of those. In both cases I finished behind Dan Banjock, who was flying his Galloping Comedian—meaning OTS airplanes took second and third in Classic behind John Simpson and his excellent Cavalier.

In Expert I only flew one round—and not very well, at that. Dad and I hit the road first thing Saturday to make it back for a family birthday party, so we missed out on the final round. I always enjoy the Brodak Fly-In, and this time was no exception. It's always nice to reconnect with old friends. I also met quite a few new folks whom I look forward to seeing again.



Here in the world-famous Brodak gazebo, posing for my OTS Trophy picture, I again was reminded that Stunt flying is not just about Fortune and Glory, it's also about the *babes!*

I got to fly just one day at the Nats, so I flew the Joker again in OTS and Classic. It was a good show for District VI in OTS with Charlie Reeves flying his reliable Big Job to the win, followed by me in second.

I was also awarded the Spirit of '52, which came as a very pleasant surprise. I placed sixth in Classic, which is not bad for a flapless 1948 design! I was kind of miffed because I messed up *every* bottom in my first round Classic flight by flying through the sun—bleah! Hey, that's show biz...

### Pioneer Park Flyers Demo

I work in Indy during the week, then return home to Fort Wayne on weekends. While in Indy, I have hooked up with the Indy Sportliners club and a sub-set of that club that flies out at Pioneer Park in Mooresville, southwest of town. Gary Alspaugh is the leader of that group and scored us a nice place to fly.

This year the park administration asked Gary to be part of the annual open house. He organized a static display, numerous flight demos, and some training sessions. The powers that be there moved them right up front by one of the pavilions for the static display. The park officials set up a temporary fence around the circle, and even set up some grandstands.



Indy's Pioneer Park Control Line Flyers National Model Aviation Day show included a static display under one of the park pavilions. The club worked closely with the park board for a successful, albeit rain-shortened, event.



A while back, *Stunt News* featured a history piece on Jim Vornholt's Carousel. Jim brought the still-gorgeous model to the display at Pioneer Park.

The morning of the event started out rainy. Still, there were lots of people taking in the static display. Gary had an airplane zip-tied to one of the tables and a control handle tied to the

leadouts with some Dacron line so spectators could work the controls. Finally, around 10:30, the rains abated and the flying started. Some people started sitting in the stands, and others were lining up for flight training.

All that came to an abrupt halt about one hour later when the rains returned and the spectators dispersed. So even though it fell a little short of best hopes, all in all it was a great effort by Gary, supported by area fliers, and it certainly helped solidify the Pioneer Park Flyers relationship with the park board and the local community.

### Don't Stop Trimming! (Lesson relearned)

A while back there was an "Appearance Point" piece here in *Stunt News* about my Typhoon profile with the internalized electric installation. I am on my third season flying this model, and, incredibly, I have made more trim changes on it this season than in the previous two seasons combined.

So far in season three, I have tested two new motors, switched props twice, and tweaked the rpm numerous times. I removed the down-elevator trim, added tip weight, and moved the leadouts forward twice. I also changed the handle I was using. qThis all sounds like pretty basic trimming, and most of the changes made an improvement. What made this a head scratcher for me is that this is the third season for this airplane, and I had been reasonably happy with how it was flying the previous two seasons. Indeed, last summer (2013) it was the airplane I flew the most. Probably the lesson (re-) learned is this: Get the airplane to a flyable trim as soon as you can, but do not be afraid to try further trimming as you gain experience with the bird.

I had resolved to try some ideas aimed at getting rid of a hunting tendency in level flight, especially during inverted flight. That's what drove me to try removing the down-elevator preset (elevator down when flaps neutral). I also let the CG drift forward. These things helped but still did not entirely solve the problem.

I first switched motors to get a better Kv match. I also stiffened the front-mounted G10 motor plate to chase away a harmonic vibration. The stiffened mount is performing great and had a side benefit—the power system seems very quiet even by electric standards.

The Tiffie is a little heavy and is not happy flying in the dead calm conditions; I needed more thrust! I was using an APC 10 x 5.5 prop that was created by clipping down an 11 x 5.5 prop. I switched this to a 10 x 5.8EP and also bumped the rpm up a little. It was better with this setup but still a little lacking. I installed a larger motor and 11 x 5.5EP prop and finally found the thrust I was seeking in dead air conditions. Now I need to fly it in all weather conditions to see if it suffers in the wind; I really do not think it will be a problem there.

Line tension was incredible in level flight, but just this year I realized it should be better above 45°. Of course, those are calling signs pointing to leadout position and tip weight. I moved the leadouts forward  $\frac{1}{8}$  inch and found an improvement. Next I added a  $\frac{1}{4}$ -ounce of tip weight, and it got better again.

Next I moved the leadouts forward another  $\frac{1}{8}$  inch, and it was better yet, plus there was a small improvement in the hunting condition. This last change also slightly reduced the level flight line tension and the battery usage—which in this case was actually a welcome benefit. Since then I have substituted a heavier motor—CG forward—and I *think* I may be able to move the leadouts forward again.

The incredible line tension has a downside; the pilot has to work too hard! I switched from the hard-point handle I had been using back to a cable handle to restore the control power I needed and netted a nice improvement. I plan to rework the hard point to see if I can overcome the basic flaw that hard-point handles share with bar-type handles; all of the loading is in front of the hand grip, not through it. Thus line tension results in an increase of control effort and an overpowering (deadening) of control feel. I am sure the layout can be improved. Hey, there's a new study brewing!

### Stoopid Modeler Tricks

So there I was, finishing off a couple of sport flyers; cockpit details were complete and I was ready to install the canopies. "Gosh," I thought, "the canopies would look better if they were tinted." As latent youthful exuberance enhanced learned laziness, I decided I could dye a *bunch* of canopies at the same time! Unfortunately, that's when the "genius" kicked in.



This is what happens when you get the bright idea to try to tint canopies using Rit dye and nearly boiling water. Can you identify any of them? All have since been replaced.

I got out the Rit dye and a bucket. I know this stuff works better when the water is warm, and I was concerned that the hot tap water just would not be warm enough and that the bucket would let it cool too much.

So I started a pot of water boiling (I can hear you starting to groan out there) and poured it into the bucket with the dye. It instantly dissolved and I figured that I had it whupped. Then I tossed in eight (!) canopies. Somewhere in the back of my brain started the uh-ohs, but I persevered. I did not comprehend that the boiling water was way over the forming temperature of the canopy plastic!

Twenty minutes later I started pulling the canopies out. All of them were severely deformed (see the photos...), but they had also severely shrunk. The long and short of it was that I ordered eight new canopies later that afternoon. *SN*

## Iowa, Michigan, Minnesota, Wisconsin

# District VII

by Bob McDonald

This time we have some input from the Tour D' Michigan in Lansing, which was flown the second weekend of June. The tour, as you may know, is a series of control line fun-fly events, including a version of Beginner stunt and other events like Balloon Bust and Fun Racing.

It is intended to get beginner pilots, who are interested in competition, some coaching, and it has worked. We now have Samantha Hines and several others who have competed at the Nats in Beginner, Intermediate, and Junior as a result.



John Paris and Jay Williams in discussion with an unidentified modeler. John is back in the States for a short time on leave from his position in Korea. He and Jay are longtime supporters of the Tour D' Michigan events.



Frank Carlisle coaches Al Rohostaff before competition starts. Frank and John Paris are an integral part of the group that started these Tour events.



Max Dollarhite's Twister in action.



Jeff Hitchcock's Midwest Airacobra in action. A long time ago I leaned the pattern on the Messerschmidt version of this. They also, I believe, made a Mustang.



Participants doing what comes naturally.

These events this year in Lansing, Kalamazoo, and Flint are always great fun and helpful to those who participate. By the time you read this, they will be completed for the year, but you should look them up next season.

I hope to include next year's schedule in my column in time to let you know of the first event usually held in early or mid-June.

That's all for now. Please send me stuff for the column. *sn*

—Bob McDonald

# District VIII

by Doug Moon

Arkansas, Louisiana, New Mexico,  
Oklahoma, Texas

We are halfway through the summer as I write this, and what a summer it has been. Sometimes it's hot and other times it's not, but it is *always* windy in Dallas. There have been a couple of contests in our district since the last addition of *SN* hit the stands.

We tried to have the Dallas Aero Summer Heat (DASH) on Father's Day weekend. Saturday was the profile portion of the event. It was far, very far, from stunt heaven. The winds made most of the day barely flyable. A few brave souls took to the skies, but it was stunt survival at best.

There was a good amount of time spent just sitting around talking, and then finally everyone decided it was time to adjourn and head for Chubby's for dinner. Their Farmer's Omelet...awesome!



Here's Linda Gleason and Bob Gieseke.



John Hill and Frank McMillan discuss the finer points of stunt. These two always have good information on hand when it comes to all things stunt.

**Stunt News 78**



Don Cranfill's offerings to the wind gods were not enough to calm the winds that weekend.

Sunday was even worse. There was no flying, just some talking, and by midmorning everyone was headed out for an early start on their trip home. Thanks to those who were on hand to work the contest and put out all the normal things we need to have: pits and pull test areas, and getting the circles ready. Also, thanks to those who made the trip. We hope you will come again next year, and maybe we can get some flyable weather.



Max showed us how fast he can run in his new shoes.

Mark Troutman sent me a quick note and some pics from Houston, taken at the contest over Memorial Day weekend in Katy, Texas. The winds held off just enough to let everyone fly. The flying, fellowship, and the ladies, along with great food, made for a very nice weekend at the field. Frank Williams, Darrell Harvin, and Carl Chapman co-CDed/judged the event, and everyone seemed to have a great time.

The two Caudrons of Gaylord Elling and Frank McMillian are beautiful examples of the San Antonio crowd's abilities. Frank has made the jump to electric and the model flew very well.



Here's Gaylord Elling's beautiful Caudron.



Frank McMillian's new electric Caudron has a noticeable swept-forward trailing edge.



Don Cranfill was his usual fly-everything self with a nice Ro Jett .67-powered original design called the Whats It. The design is based on a T-Rex.



Richard Oliver had his Maverick humming and won Expert.

July 4<sup>th</sup> passed us by, we still had no flying in Dallas, and my new plane was still not finished for the Nats. Would it make it to the big show this year? I was beginning to think I would have to take the old one I flew in 2012 and 2013. With the winds at an all-time high, and the birds at the field doing their best to kill us and our planes, I forged ahead and kept buffing and polishing on the plane. Finally, the weekend before the Nats it looked as though Sunday morning would give us some poor but flyable weather.

Mike Scott met me at the field where I put in five patterns with the new plane. With those flights it was easy to see about 10-12 changes that would be needed to get it close. I headed home and made the changes and got back to buffing. Thank you, Mike, for meeting me out there for those five test patterns; they really went a long way in getting my model headed in the right direction so the final trim in Muncie would only take a few more flights.

A few days later we were headed to the Nats and all was good. Only this year we would be staying in a new hotel. The Baymont—which was formerly known as the Signature Inn—was to be our stomping grounds for the week. I thought it was a great place, and they made our beds every day! Right next door was Derek Barry and crew, which consisted of Dale, Gavin, and the cute one, Layla. Next door to them were Bob Hunt, Rich Giacobone, and Billy Werwage. This was a regular stunt hangout, for sure. The Lee's Inn and Suites was closed down due to foreclosure or something. We drove by it several times and Beer Tree was gone. It was a sad day.

Monday came and it was time to practice. Steve and I (and anyone else from the North Texas/Southern Oklahoma area) were in some need of stick time to get things in trim for the week. We got in a few flights on the L-Pad and all seemed to be working well.

After the morning passed, it was time to get ready for the show. Appearance judging was finally here. This is where the hours of buffing and polishing pay off. Every point counts. The check-in time for the appearance point judging was 2:30 p.m. Steve and I were watching *American Dad* in the hotel room and waxing our planes when we noticed we were about to be late for the check-in process. We hustled to the 180 Building and we were the last ones to be checked in. On the scales they go and then it's off to the scrutiny of this year's judges. I can tell you that is a job I never want to have.

Several hours later after the pilots meeting they open up the doors to allow us in to view the placement of the planes and choose the Concours winner. This year there was no 20 pointer. On the front row with 19 points were Kaz Minato, Paul Walker, and Howard Rush. On the second row with 18 points were Roger Wildman, David Fitzgerald, Bob Hunt, Derek Barry, Frank

McMillan, and myself. District VIII members Joe Bowman, Joe Gilbert, and John Hill were on the 17-point row. Steve found his plane on the 16-point row, sitting right next to Billy's razorback P-47.



Appearance Judging at the 2014 Nats. Photo by Derek Barry.

District VIII was a big player at the Nats this year. There were 38 total entries in Open. From our district were Doug Moon, Steve Moon, Joe Gilbert, Richard Oliver, Frank Williams, Ryan Young, Frank McMillan, Bill Rutherford, Jason Greer, Joe Bowman, and John Hill. That's almost 30% of the field! Way to go District VIII!

Also, there were many who came from out of the country to compete. Just to name a few, PJ Rowland and his wife Rhiannon, and Joe Parisi came from Australia. Monty Summach came from Canada. Kaz Minato flew in again from Japan. From the Dominican Republic we had Germanico Becerril. There may have been others, as well. It's a well-attended event for sure.

On Tuesday Derek found himself on the handle end of the Nakke his dad had brought to fly in Classic, and with it Derek won over Joe Gilbert and John Simpson. He did this with no appearance points. Way to go, Derek. Congrats goes out to all those who competed and had fun. Joe and Connie Gilbert made a good showing for District VIII with their efforts, bringing home second place.

Meanwhile Steve Fitton, Eric Viglione, Steve Moon, and I were practicing on the grass circles next to the Combat circles. The grass circles were really nice this year. Thank you, Allen Goff and crew, for your hard work; it has really paid off.

A CL Combat streamer blew over into our circle, and I thought it would be cool to do the pattern with a streamer attached to the ship. I mean, it's only my brand-new Nats plane with about 10 flights on it at that point. It was so cool to see that thing on there in flight. It was a blast. Try it some time. The wingover exit is awesome. But don't stare at the streamer too long, as you could plant your model.



Streamer time!



In level flight, the streamer really shows you where the bumps in the air are.



No cuts on this streamer.

Bob Gieseke and his daughter, Christie, came up for the Nats. He was able to get to talk with longtime rival/friend Billy Werwage and spent the week watching flights and helping us see some things

we needed to work on. It was a huge help. It was even better to spend time with him at the field. He watched one of my practice flights and told me, "Other than a few little things, that was a damn good pattern." That was so great to hear and really helped me feel good about my setup going into the later part of the week. Thanks, Bob!

Wednesday and Thursday, the qualification rounds were flown to determine who would make the Top 20. The field is split up across four circles. The top five pilots from each circle would move onto the Top 20. Steve Moon, Joe Gilbert, Richard Oliver, and I all moved on to fly in the Top 20 on Friday.

The qualification rounds were pretty tough, for sure. There were many Nats champions and World champions across the entire field, and each circle was packed with top-notch fliers. Just making the Top 20 this year was a feat in itself.



Steve Moon's plane waits in the pits while Brett Buck heads for the pull-test scales. Matt Neumann is flying in the background on Circle Four.



Dennis Moritz talks with Connie Gilbert as she stands guard over Joe's excellent-flying model.

C/L Precision Aerobatics AMA National Championships, 2014						
Contestant	Circle 3		Circle 4		Total Score	Place
	Flight Order	Score	Flight Order	Score		
Derek Barry	11	575.33	2	558	1133.33	7
Brett Buck	18	587	7	570	1157	Q
Dave Fitzgerald	1	576.67	19	586.33	1163	Q
Joe Gilbert	20	573.33	6	544.67	1118	11
Bob Hunt	7	566.33	20	565.33	1131.66	9
Gene Martine	15	550	1	525.33	1075.33	16
Kaz Minato	8	570.33	13	561.33	1131.66	8
Jose Modesto	6	533	12	517	1050	19
Doug Moon	17	585.67	5	562.67	1148.34	Q
Steve Moon	19	546.33	9	529.67	1076	15
Matt Neumann	10	562	14	559	1121	10
Richard Oliver	14	566.33	3	537.67	1104	13
Joe Parisi	5	568	17	549.33	1117.33	12
PJ Rowland	16	552.67	4	479.67	1032.34	20
Howard Rush	9	571.67	18	565.67	1137.34	Q
James Smith	12	541.67	8	521	1062.67	17
Eric Taylor	2	554.67	16	537	1091.67	14
David Trible	3	539	11	522.33	1061.33	18
Paul Walker	4	572.67	15	577.33	1150	Q
Bill Werwage	13	574.67	10	561	1135.67	6

The scoreboard shows our qualifiers for the Top 5 and a look at how the rest of the field finished out for the week.

After the dust had settled and the scores were confirmed, the Top 5 for the 2014 Nats would be David Fitzgerald, Brett Buck, Paul Walker, Doug Moon, and Howard Rush. Wow (to say the least)! There would be three former Nats champs, along with the current Nats champ, and a member of the USA F2B WC team all gunning for the top spot in Open and the chance to be able to fly against the Junior winner (there were no senior entrants this year, I'm sorry to report) for the overall win. Joe Gilbert finished 11<sup>th</sup>, Richard Oliver finished 13<sup>th</sup>, and Steve Moon was 15<sup>th</sup>.

Friday evening is usually when there is some serious practice

from the Top 5 fliers, but the winds came up pretty strong and there was no point in flying when the forecast was calling for 0-2 mph the next morning. We took the night off and just took it easy, cruising around Muncie for a while checking out the scene around town. It was pretty much the same as it always is.

Saturday morning dawned, and what did we see out the window? Dreary clouds with mist in the air and temps in the low 60s. The winds were light and there would be no background, just gray sky. I mentioned it was going to be just like going to the Northwest Regionals. After Billy Werwage and Derek Barry warmed up the judges, it was time to get things rolling.

Right out of the gate the flying was solid everywhere, but the planes seemed to want to float in the thick morning air. I was on solid, non-stainless lines and had to use acetone and No Touch Rain Shield to keep them clean. (That's a little trick I learned from Bob Hunt in 2012.)

The other fliers were on braided lines and were having no issues. Mike Haverly said it best: "It's like taking a boat from fresh water to salt water; they just float higher." I had to fly down to the bottoms. If I used my normal timing I would exit high. Many of the onlookers noticed the same thing. After round one the scores were pretty tight across the board.

Round two and three were just as tight, but the scores were improving as the morning wore on. I watched the flights as I waited for my turn on the stage, and they all seemed very solid with minimal errors. The flying was top-notch across the board.

At the end of the third round, we were waiting around the score board for the final flight score for David to be posted. I flew first in that round and had solid flights in rounds two and three. David would need better than a 578 to beat me. I watched closely as Bob McDonald began to write the score: 5 space, 6.67. If that last number was a 7, I would be looking at a first in Open.

But it was not to be. He wrote an 8 for a 586.67 which put David in first by quite a large margin, me in second, followed by Paul Walker, Brett Buck, and Howard Rush. It was a well-fought battle all morning, and I am certainly glad to have been a part of it. Second place stings at first, but I am very proud of my efforts and vow to make it even tougher on those guys next year. Maybe I should travel to the NWR to get ready for the Nats. Hmm...

David would go on to fly against Samantha Hines, the Junior class winner. She was putting on a show during her contest with Ben Mills. Ben Mills put up a strong effort, and it was evident why he was able to win Junior Beginner this year. Congratulations to Ben and his mom and dad for his efforts that week.

But Samantha Hines was too much. She is an excellent flier, and many times the crowd was watching her flights over ours, as it is so refreshing to see the young talent and hard work pay off in the circle. She flew her own plane that she built herself—a customized, Bob Hunt-designed Hole Shot called the Long Shot. She shot herself right onto the Junior Nats championship trophy and found herself in a battle with one of stunt's most widely recognized names. She didn't give an inch and went right for it. She battled her best, but in the end David and his Thundergazer, sporting a PA .75 on an Eather pipe, was just too much to handle.

In the third round David invited her to sit in the circle and watch the flight from his view as he pointed out what he was doing and how. That was a cool gesture, for sure. I have always heard there is such great sportsmanship in stunt, and each year when I travel to the Nats, great sportsmanship is what I experience.

After it was all said and done, there was a picture taken of five of the six United States World Champions. David Fitzgerald, Bob Gieseke, Billy Werwage, Bob Hunt, and Paul Walker posed together for a very memorable shot. (Only Les McDonald was

missing from this photo.) Talk about stunt legends, and all of them right there together. I am telling you, the Nats is the place to be!



Five of the six United States World Champions were on hand: David Fitzgerald, Bob Gieseke, Billy Werwage, Bob Hunt, and Paul Walker. Nothing more to say...

One of the other great things about the Nats is the evening goof-around sessions at the AMA site. After practice is over, all kinds of planes come out of the cars and it's time to have some real fun! With the beautiful weather, this year didn't disappoint. Dan Banjock flew the jet-powered stunter, and it even caught on fire once.

On the first Sunday when we arrived, it was too windy to fly in the midday, so Steve built an RC discus launch glider that he had purchased a few weeks before we left. I had one with me, too. Steve Fitton launched some rockets. He launched his most recent build, a scale Saturn 5. Some great shots of it can be seen on StuntHanger.com during the ignition. I flew one of my larger helicopters, with a rotor span of 1100mm. It was so nice not to have to battle 15-20 mph winds and have some actual space to get that thing really moving.

Dan flew his circle of death. This is an odd-looking flying rotor that spins on an axis and goes upward. It's long and skinny, like a really small boat oar I guess is one way to describe it. It has a .049 on one end and a wing on the other with a small elevator on top and counterweight. It rests on a pole, and once it starts spinning around the pole, it just lifts off and it flies off as far as the motor will run. It was really cool. I got many launches on my discus launch glider. Eventually, I tore the wing off during a launch. No big deal; it will be an easy repair.

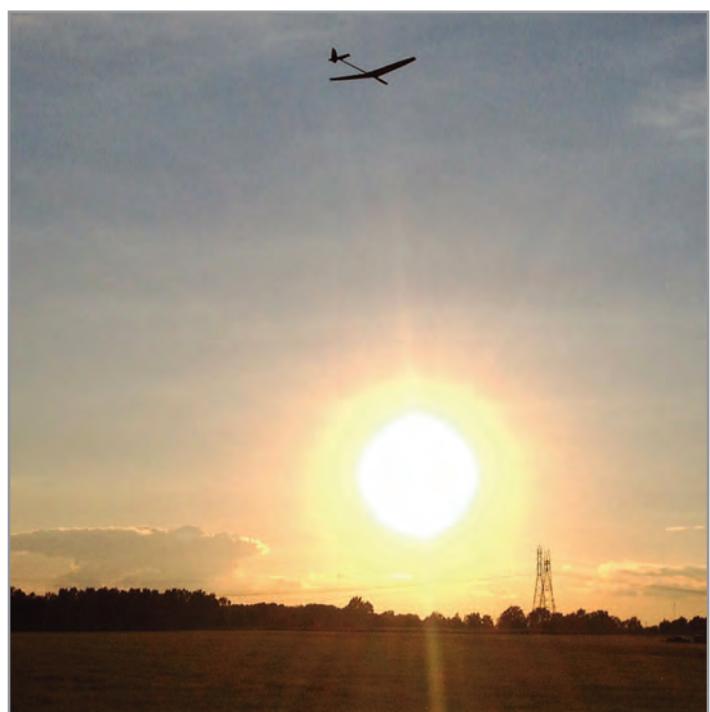
For me the evenings at the field provide some of the best memories from the Nats—getting to mess around like a kid, and getting to know people on a totally different level away from competition. That is one of the things I really look forward to

every year—that and some awesome naps in the hotel room.



Flying the Gaui X5 after evening practice.

All in all it was another excellent Nats trip. I fell short by one spot, but that will make me work that much harder next year. Thanks to all those who worked so hard so we could fly our planes for a week. You have no idea how much we really appreciate your hard work before during and after the event. Without you it can't be done, thanks again. SN



The discus-launch glider floats effortlessly over the fields in the warm Muncie evenings.

## District IX

by Jack Pitcher

**Topclassical 2014:** The 2014 running of the Topclassical contest took place over the weekend of May 24-25 in Topeka, Kansas.

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## Colorado, Kansas, Nebraska, North Dakota, South Dakota, Wyoming

Good weather prevailed over the weekend with mostly light winds. Dave Trible was busy with his camera as usual and sent some pictures of the action.



Jim and Todd Lee check out Gary Mondry's Primary Force. Photo by Dave Trible.



Doc Holliday is prepping his International Stunt Winner. Trible photo.

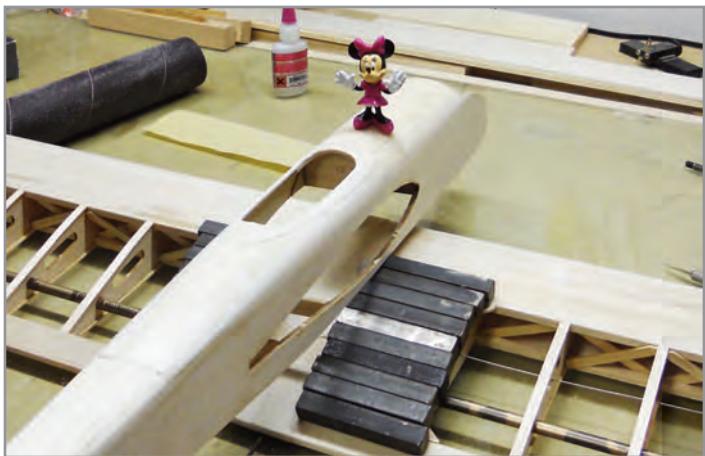


Here's Bob Brookins with his Humongous. Trible photo.



Here's Doug Burright with his Twister. Trible photo.

Our last district column featured photos of an OTS Barnstormer recently finished by Linda Brainard. Linda forwarded some additional pictures of details of her cockpit and canopy installation. Linda selected a discount store figure of Minnie Mouse to take on the piloting duties. Linda's husband, Chris, provided some captions for these pictures.



Here is Minnie examining her future ride. Photo by Chris Brainard.



Unfortunately, less than 24 hours after that picture was taken Minnie was involved in a serious industrial accident with a band saw. She is now only half the mouse she used to be. She also suffered injury to her right arm after too close of an encounter with a heat gun. Happily, Minnie is a real trooper and has adapted in her new home. Brainard photo.

#### Seen at the Nats

Jim Lee was on scene with his new Gee Bee Model Y. This model is quite new with a limited number of flights on it. Jim and his son, Todd, were working hard to get it into trim. The Gee Bee



is powered by an Evolution .60. Jim has been very pleased with this motor so far. One thing's for sure. With the Gee Bee's size and bulk and the roar of that big .60, this airplane makes quite a statement.



Jim and Todd Lee preparing to launch an official on Circle 4 at the Nats.

District IX member, Dave Trible, turned in a strong performance at the Nats, breaking into the Top 20 for the first time and flying on Friday with his new Desperado. This is one of three Desperado variants that Dave has built this year. Dave has done some initial trimming on all of them and then hung two up to await later use while concentrating on trim and practice with the current version. Looks like the plan paid off. Congratulations to Dave on a good performance.



If you have pictures or comments you'd like to see published here in our district column, send them to me at my contact information in the trustees list in this magazine.

In addition, *Stunt News* Editor Bob Hunt is again asking for increased contributions of how-to, technical, and other types of feature articles. Bob would like to shift the magazine content towards more feature articles with a reduction in size of the district columns. In particular, it is the how-to features that are the real meat and potatoes of the value of *Stunt News*.

As one who has a collection of *Stunt News* that goes clear back to the "Alligator" days, I find that those articles contain a lot of useful information on how to do things that are still valid today. So consider what you can contribute to add to our body of stunt knowledge. *SN*

—Jack

## Arizona, California, Guam, Hawaii, Nevada, Utah

**Bob Duncan** of Fair Oaks, California, has designed and built some very attractive stunter the past few years: the Tazer, the Lazer, and the Razer. All feature balsa, D-Tube built-up wings and are based on Thunder Gazer aerodynamics and the Werwage-Hunt influenced Geo-Bolt wing (660 sq. inch, 60 $\frac{3}{4}$  inch wingspan).



Bob Duncan's Tazer has inverted thrustline, and wing and tail heights. Photo by Bob Duncan.



Bob Duncan's Lazer looks very much like the Bendix racers of the '20s and '30s. Duncan photo.



Here's Bob Duncan's very distinctive-looking Razer. It's the latest in Bob's unique series of stunters. Duncan photo.

# District X

by Jim Hoffman

The finish on Bob's models is traditional silkspan and Sig Butyrate dope. All three are powered by AXI 2826/10 electric motors turning APC 13x4.5 props. The dry weight varies from 54 to 61 ounces.

**Ed Capitanelli** has become one of the most prolific builders I know and seems to have a new airplane every time I see him in Tucson. A few weeks ago he completed a stunning red stunter named the Matador. It is based on his Starduster design and set up with two cowls to accommodate a ST-46 or a ST-51. The paint is Randolph's Cadillac red and automotive clear coat.



Ed Capitanelli calls his latest Starduster variant the Matador. Photo by Ed Capitanelli.



Note the nice graphics on the tail of the Matador. Capatanelli photo.

**Australians** at the US Nats: Dave Fitzgerald shared some photos from Australia a few weeks before the US Nats. Both Joe Parisi and PJ Rowland attended and competed at the Nats in July. Joe built a new E-powered model for the occasion. Joe's model features an Igor Burger active timer setup. This very attractive model appears to have strong Impact influence and came out at 63 ounces with battery.



Joe Parisi's new E-stunter, the Black Jack, is shown here ready for the US Nats. Photo by Joe Parisi.

PJ had a beautiful travel box constructed for his stunter. The information provided indicates it may have been built by a company named PolyCase. All up, the box with plane weighs 28 pounds and has two under cart slots cut for two different wheels—one for tarmac and one for grass. This PolyCase is constructed from 7mm polypropylene panels, weighing half that of the equivalent 7mm structural plywood, yet providing the same strength and impact resistance. This affords an overall weight saving of up to 30%, depending upon fittings used, e.g., corners, catches, handles, wheels, etc.



PJ Rowland's high-end travel box has some interesting features (see text). Photo by PJ Rowland.

PJ's box features: 30mm double angle/corner framing; dust/weather-sealing extruded section between lid and base; all-riveted construction; metal corner pieces; recessed catches and handles; metal dome corners. The foam was cut by hand using a saw and two large foam blanks. The model breaks down into typical take-apart fashion—two wing halves, stab, and landing gear plus spares. The wings reside in the lid. The case has already seen lots of travel without incident.

**Lou Wolgast Twin Chopper:** The late Ted Snow of Tucson was a prolific model builder and designer. The Humongous is perhaps Ted's most widely known design. Ted had started a Twin Chopper (his own design), but it was never finished.

Recently, our own Lou Wolgast decided to finish it up. Lou started with Ted's partially built airframe and added the wing flaps and probably a lot more. He finished it in tissue and dope with a very tasteful paint scheme. It flies very nicely and is powered by a pair of O.S. .10 engines that are fitted with custom tongue mufflers. He makes it look easy.



Lou Wolgast and the twin Chopper, which was originally designed by Ted Snow. Everybody loves a twin, and this duel Max .10-powered Chopper is no exception.

**Looking forward**, VSC planning is well underway. The dates are March 17-21, 2015. The flying schedule and hotel info was posted in both online forums in June. I hope to have the flyer posted before this edition of *Stunt News* is published.

As always, I solicit your input for this column. *SN*

—Jim

## District XI

by Mike Haverly

There will be no report this issue. *SN*

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**Alaska, Idaho, Montana, Oregon, Washington**

# Contests

# Contest Calendar

For up-to-date listings see the PAMPA Web site: [www.control-line.org](http://www.control-line.org). Be sure to confirm with the CD before going to a contest. Please submit new listings and contest results to Howard Rush, [hmrush@comcast.net](mailto:hmrush@comcast.net). Submit contest ads to Gene Martine, [gmflying@bellsouth.net](mailto:gmflying@bellsouth.net).

Events marked with an asterisk use nonstandard rules. Contact CD for details.

## 2014 Contests:

October 4-5

Memphis Stunt Classic, 4236 Sykes Rd., Millington, TN  
35.311N 89.92W

Saturday: Old Time\*, Classic/N30\*, Profile\*

Sunday: Precision Aerobatics (Beginner, Intermediate\*, Advanced\*, Expert\*)

CDs: Jim Lynch, (901) 683-0492, [stunt@bellsouth.net](mailto:stunt@bellsouth.net)  
Paul Taylor (901) 626-5519, [flybywires@yahoo.com](mailto:flybywires@yahoo.com)

October 4-5

Fall Follies, Bill Riegel Model Airpark, Salem Airport, Salem, OR  
Saturday: Old Time, Classic-Nostalgia 30,  
Profile\* (Sportsman, Expert)  
Sunday: Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)  
CD: John Thompson, 2456 Quince St., Eugene, OR 97434,  
[johnt4051@aol.com](mailto:johnt4051@aol.com), <http://flyinglines.org/14.ff.flyer.pdf>

October 4-5

Ringmaster Roundup, Scobee Flying Park,  
Westheimer Pkwy and FM 1464, Houston, TX  
S1 Ringmasters only, loaners available  
Saturday: Old Time\*, Precision Aerobatics\*  
Sunday: Team Stunt\*  
CDs: David Gresens, David Strawn, [dstrawntx@verizon.net](mailto:dstrawntx@verizon.net)  
Contact: Dee Rice, [golfrice1@yahoo.com](mailto:golfrice1@yahoo.com)  
[www.brotherhoodofthering.info](http://www.brotherhoodofthering.info)

October 4-5

Hi Johnson Memorial  
Apollo 11 Model Field, Sepulveda Basin, Van Nuys, CA  
Take Burbank Blvd. (just north of Hwy 101) exit west from I-405, turn right on Woodley Ave., turn left into Woodley Park parking area, drive slowly south beyond parking area to the field.  
Saturday: Classic, Old Time, Profile\*,  
Precision Aerobatics (Beginner, Intermediate)  
Sunday: 1cc Stunt\*, Precision Aerobatics (Advanced, Expert)  
CD: Bill Barber, (805) 241-0453, [barcam@verizon.net](mailto:barcam@verizon.net)  
[sites.google.com/site/valleycircleburners/](http://sites.google.com/site/valleycircleburners/)

October 5

Jim Tichy Memorial Vintage Stunt Contest  
John F. Kennedy Memorial Park, Napa CA  
Old Time, Classic  
CD: Jim Aron, c/o Pacific Western Mortgage Group,  
2354 Powell Street, Suite B, Emeryville, CA 94608,

(510) 654-2200, [UncleJimby@aol.com](mailto:UncleJimby@aol.com)  
[www.concentricbehavior.com](http://www.concentricbehavior.com)

October 12

GSCB Fall Air Show, 288 Roosevelt Drive, Palisades Park, NJ  
Take path by the river to south end of facility.  
Old Time I and II (flapped models only)  
Classic\* (Beginner, Intermediate, Advanced, Expert)  
Precision Aerobatics (Beginner, Intermediate\*, Adv.\*, Expert\*)

October 12

Florida Control Line Championships  
9201 SW Fox Brown Rd. Indiantown, FL, 27.112N, 80.516W  
Old Time, Super 52\*,  
Precision Aerobatics (Beginner, Intermediate\*, Adv.\*, Expert\*)  
CD: Richard Peabody, (201) 669-2605, [rpeabody@verizon.net](mailto:rpeabody@verizon.net)  
[www.richpeabody.com](http://www.richpeabody.com)

October 18-19

36th Annual Golden State Stunt Championships  
Madera Airport, Madera, CA, <http://g.co/maps/deq47>  
Saturday: Old Time, Classic  
Sunday: Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)  
Contact: Brian Massey (559) 645.8018, [bjmassey2@gmail.com](mailto:bjmassey2@gmail.com)  
<http://www.californiacarclubs.com/GSSC.htm> October 18-19  
Carolina Criterium  
Waymer Field, 15401 Holbrooks Rd., Huntersville, NC.  
Take exit 23 east from I-77, turn right on Old Statesville Rd., turn left on Holbrooks.  
Saturday: Basic Flight\*, Old Time, Nostalgia 30\*, Profile\*  
Sunday: Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)  
CD: Everett Shoemaker, (252) 633-4128,  
[evjoshoe@embargmail.com](mailto:evjoshoe@embargmail.com)

October 18-19

Charlie Melancon Memorial Stunt Championship  
Independence Park, 7500 Independence Blvd., Baton Rouge, LA  
Circles are immediately east of Liberty Lagoon water park.  
Saturday: Old Time\*, Classic/N30, Warbird\*, Profile\*  
Sunday: Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)  
CD: Brent Rogillio, (225) 683-9041, (225) 939-6385 (cell)  
Assistant CDs: Tommy Mansur, Doug Patterson, (225) 629-0290  
(home), (225) 270-2181 (cell), [id3patterson@gmail.com](mailto:id3patterson@gmail.com)

November 1-2

Southeast Stunt n Fun, MCRC Field, 7315 71st Ave E., Palmetto, FL, N27.58588, W82.490896, <http://tinyurl.com/mcrcmap>  
Saturday: Beginner Precision Aerobatics, Old Time, Nostalgia 30\*  
Sunday: Precision Aerobatics\* (Intermediate, Advanced, Expert)  
CD: Wayne Smith, (813) 251-0575, [kamwns@verizon.net](mailto:kamwns@verizon.net)  
[www.manateerc.com](http://www.manateerc.com)

November 1-2

South Arkansas Stunt Championships, Kenneth Makepeace Field, Industrial Rd., El Dorado, AR, N33.208282102696, W92.616339377099 . Take Hwy 63 east of El Dorado, turn right on Industrial Rd. Field is ½ mile on right.  
Saturday: Profile\*, Old Time, Classic  
Sunday: Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)  
CD: Norman E. Faith, 157 West Lake Rd., El Dorado, AR 71730, (870) 310-3525, [circlepilot@suddenlink.net](mailto:circlepilot@suddenlink.net)  
Contact also: Jason Cunningham, [jcunningham50@hotmail.com](mailto:jcunningham50@hotmail.com)

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**Jim Walker Memorial**  
 April 26-27, 2014, Portland, OR  
 Results from flyinglines.org  
<http://flyinglines.org/jimwalker.14.html>

**Expert**

Judges: Scott Riese, Bruce Hunt

1 Paul Walker	596
2 Chris Cox	569
3 Alan Resinger	564
4 John Leidle	535
5 Mike Haverly	518
6 John Thompson	488

**Advanced**

Judges: Scott Riese, Bruce Hunt

1 Tim Wescott	505
2 Greg Hart	462
3 Mike Hazel	453
4 Floyd Carter	340.5

**Intermediate**

Judges: Dave Royer,

Alice Cotton-Royer

1 Tom Brightbill	394.5
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**Beginner**

Judges: Dave Royer,  
 Alice Cotton-Royer

1 Jerry Olson	220
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**Classic**

Judges: Dave Royer, Scott Riese

1 John Thompson	317
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**Nostalgia 30**

Judges: Dave Royer, Scott Riese

1 Bruce Hunt	522
2 Leo Mehl	447.5

**Old Time**

Judges: Scott Riese,  
 Alice Cotton-Royer

1 Chris Sackett	272.25
2 John Thompson	131.75
4 Russell Shaffer	184.5

**Profile Expert**

Judges: Leo Mehl, Scott Riese

1 John Thompson	445
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**Profile Sportsman**

Judges: Leo Mehl, Scott Riese

1 Mike Hazel	453, 451
2 Tim Wescott	453, 420
3 Tom Brightbill	431.5

CD: Dave Royer

**Mid Iowa Control Liners**

May 3-4, 2014, Polk City, IA  
 Results from Bob Baldus, CD

**Expert**

1 Chris Rud	533
2 Crist Rigotti	491
3 Keith Sandberg	465

**Classic**

1 Jim Lee	554
2 Keith Sandberg	553
3 Larry Lindberg	493

**1/2 A**

1 Keith Sandberg	
2 Tony Kubes	
3 Larry Lindberg	

**Advanced**

1 Scott Molck	464
2 Tony Kubes	458
3 John Christensen	434

**Profile**

1 Keith Sandberg	538
2 Crist Rigotti	533
3 Ivars Greizins	496

**Woodland/Davis Aeromodelers Fun Day**

May 4, 2014, Davis, CA  
 Results from Clint Ormosen, CD

**Expert**

Judges: Bob Duncan, Brian Moore

1 David Fitzgerald	606
2 Brett Buck	595
3 Jim Aron	575
4 Pete Cunha	521

**Advanced**

1 Carter Fickes	500
2 Brian Moore	489.5
3 Jerry Arana	478
4 Mike Scholtes	457
5 Bob Duncan	315

**Classic**

Judge: Heman Lee	
1 Pete Cunha	522
2 Carter Fickes	504
3 Brian Moore	494
4 Jerry Arana	476

**Stunt 25**

Judge: Clint Ormosen	
1 Brett Buck	527
2 Mike Scholtes	486
3 Pete Cunha	484

Co-CD: Walt Ghio

<p style="text-align: center;"><b>John Gunn Open Invitational</b>        May 17-18, 2014, El Dorado, AR        Results from Doug Moon</p>		
<b>Expert</b>	<b>Beginner</b>	<b>Profile Intermediate</b>
1 John Hill 580	1 Stew Moore 78.5	1 Mike Makepeace 374.5
2 Don Cranfill 573.5, 571	2 Ron Rasberry 50.5	<b>Profile Beginner</b>
3 Steve Moon 573.5, 567	<b>Profile Expert</b>	1 Stan Fronabarger 149
4 Doug Moon 571	1 Don Cranfill 554.5	2 Stew Moore 67.5
5 Jason Greer 566.5	2 Jason Greer 547	3 Ron Rasberry 48
<b>Advanced</b>	<b>Profile Advanced</b>	CDs: Norm Faith, Doug Patterson, Jason Cunningham
1 Louis Keller 519.5	1 Louis Keller 527	
2 Andy Stokey 487	2 Norm Faith 496.5	
3 Norm Faith 423.5	3 Andy Stokey 409.5	
<p style="text-align: center;"><b>Northwest Stunt and Combat Championships</b>        May 24-25, 2014, Eugene, OR        Results from flyinglines.org  <a href="http://flyinglines.org/nwstuntcombat.14.html">http://flyinglines.org/nwstuntcombat.14.html</a></p>		
<b>Expert</b>	<b>Intermediate</b>	<b>Old Time</b>
Judges: Scott Riese, Bruce Hunt	Judges: Richard Entwhistle, Alice Cotton-Royer	Judges: Leo Mehl, Alan Resinger
1 Paul Walker 591.5, 589	1 Fred Underwood 442.5	1 Dave Royer 307
2 David Fitzgerald 591.5, 587.5	2 Tom Brightbill 416.5	2 Scott Riese 305
3 Chris Cox 570	3 Marc Winz 410	3 Bob Duncan 281.75
4 Alan Resinger 543	<b>Beginner</b>	4 John Thompson 277.5
5 Mike Haverly 516.5	Judges: Richard Entwhistle, Alice Cotton-Royer	5 Tom Brightbill 259.5
6 John Leidle 512.5	1 Jerry Olson 222.5	6 Marc Winz 238.5
7 Tim Wescott 475	<b>Classic</b>	7 Robert Moseley 232.25
8 Keith Varley 473.5	Judges: Paul Walker, David Fitzgerald	<b>Profile Expert</b>
9 Leo Mehl 452.5	1 Scott Riese 529.5	Judges: Dave Royer, Scott Riese
<b>Advanced</b>	2 Mark Scarborough 489.5	1 Mike Haverly 481.5
Judges: Chris Cox, John Leidle	3 Mike Massey 450.5	2 John Thompson 444.5
1 Mark Scarborough 491.5	4 John Thompson 447, 161	3 Tim Wescott 439.5
2 Steve Helmick 489.5	5 Tim Wescott 447, 0	<b>Profile Sportsman</b>
3 Bob Duncan 478	6 Gordon Rea 445.5	Judges: Dave Royer, Scott Riese
4 Mike Hazel 462.5	7 Rex Abbott 430.5	1 Bob Duncan 464
5 Rex Abbott 461	8 Leo Mehl 424	2 Gordon Rea 458.5
6 Greg Hart 458	9 Marc Winz 410	3 Mike Hazel 449.5
7 Gordon Rea 445.5	<b>Nostalgia 30</b>	4 Marc Winz 444.5
8 Floyd Carter 444	Judges: Paul Walker, David Fitzgerald	5 Tom Brightbill 423
9 Mike Massey 441.5	1 Bruce Hunt 515	6 Dave Denison 419
	2 Bob Duncan 470	CD: Mike Hazel Stunt ED: Don McClave

**Topclassical 37th Annual**May 25, 2014, Topeka, KS  
Results from James Lee, CD**Expert**

Judges: Jim Lee, Todd Lee

1 Jared Hays	501	Strega ARF	Supertigre .60
2 Darwin Ulledahl	492	Millennium Mustang	RO-Jett .75
3 Gary Hays	488	Stiletto 770	Supertigre .60

**Advanced**

Judges: Jim Lee, Todd Lee

1 Andrew Hathaway	483	Nobler	OS Max-S ABC
2 Gary Mondry	482.5	ARF Primary Force	OS .25FP
3 Jerry Higgins	475.5	ARF Tutor II	T&L Supertigre .51
4 Bob Brookins	318.5	Airbender	OS .46LA
5 John Holliday	116	Magician	OS .25LA
6 Kevin Prier	71	Formula S	Big Art OS .40FP

**Intermediate**

Judges: Jim Lee, Todd Lee

1 Jim Pescetto	303.5	ARF Nobler	OS .46LA
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**Beginner**

Judges: Pete Lee, Dale Hrenchir

1 Doug Burright	253	Fancherized Twister	Evolution .36
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**Basic Stunt**

Judges: Pete Lee, Dale Hrenchir

1 Dylan Prier	177	Grandpa's A-Bomb	McCoy .19
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**Old Time**

Judges: Pete Lee, Dale Hrenchir

1 Jerry Higgins	286.5	Jamison	OS .40FP
2 Jim Kraft	285.5	Humongous	Anderson .65 Spark
3 Bob Brookins	277	Humongous	S. Foxx Tower .46
4 Andrew Hathaway	266	Humongous	Anderson .60 Spark
5 Gary Mondry	146.5	Super Clown	Veco .19
6 John Holliday	136	Int'l Stunt Winner	Fox .35
Spirit of '52: Concours:		Andrew Hathaway, Humongous Darwin Ulledahl, Millennium Mustang	
Tabulators:		Erika Hrenchir, Tiffany Lee	
Score Runner:		Dylan Prier	
Pull test:		Melvin Schuette	

**Stunt-A-Thon**

June 7-8, 2014, Puyallup, WA

Results from <http://flyinglines.org/Stuntathon.14.html>**Expert**

Judges: Steve Helmick, Dave Gardner

1 Paul Walker	582
2 Alan Resinger	557.5
3 Chris Cox	550.5
4 Bruce Hunt	539.5
5 Mike Haverly	541.5
6 Keith Varley	493
7 John Thompson	487

**Advanced**

1 Tom Strom	481
2 Pete Ferguson	480.5
3 Rex Abbott	461.5
4 Marc Winz	430

**Classic-Nostalgia 30**

Judges: Steve Helmick, Mike Haverly

1 Bruce Hunt	539
2 John Thompson	477.5
3 Marc Winz	4135
4 Rex Abbott	394.5

**Old Time**

Judges: Dave Gardner, Gary Letsinger

1 John Thompson	263
2 Tom Brightbill	235

**Profile**

Judges: Bruce Hunt, Dave Gardner

1 Mike Haverly	504
2 Tim Wescott	479.5
3 John Thompson	476.5
4 Marc Winz	427.5
5 Tom Brightbill	379

CD: Steve Helmick

**Sir Dale Kirn Memorial Knights Joust**

August 16-17, 2014, South El Monte, CA

Results from Jim Hoffman

**Expert**

1 Jim Hoffman	574
2 Dave Sabon	564
3 Kestas Dvarvydis	557
4 Leroy Black	546.5

**Intermediate**

1 Charles Carter	419.5
2 Randy Doll	333.5

**Classic**

1 Leroy Black	557.5
2 Dave Sabon	547.5
3 Burt Brokaw	450
4 Randy Doll	443

**Old Time**

1 Jim Hoffman	483
2 Leroy Black	464
3 Ken Gulliford	458
4 Burt Brokaw	452.5
5 Bill Byles	441
6 Randy Doll	324

**Profile**

1 Burt Brokaw	520.5
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### Wisconsin Stunt and Scale Championships

June 8, 2014, Pewaukee, WI

Results from Peter Mick, CD

#### **Expert**

1	Chris Rud	555	Strega	RO-Jett .65
2	Mark McKinney	539	Bear	PA .61
3	Michael Schmitt	516.5	Encore 46	OS .46LA
4	Jim Schuette	490	Dazzler	Supertigre .46
5	Crist Rigotti	483.5	Thundervolt	Electric
6	Fred Krueger	478	Primary Force	Evo .36

#### **Classic**

1	Michael Schmitt	490
2	Jordan Segal	484.5 RSM Hurricane
3	Fred Krueger	474 Tucker Special
4	Jim Schuette	467 Dazzler Supertigre .46

#### **Advanced**

1	Jordan Segal	483	RSM Hurricane
2	Gene Scheiderer	477	Oriental ARF Brodak .40
3	William Smith	463.5	Cardinal Profile K&B .40

#### **1/2 A Expert**

1	Jim Schuette	497
2	Fred Krueger	341 Jr. Ringmaster

#### **1/2 A Beginner**

1	Larry Lindberg	225	Dewey Bird	Wen Mac .049
2	Crist Rigotti	36.5	Self Design	Electric

#### **Beginner**

1	Dave Siegler	72	Twister	OS .40FP
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#### From the CD:

In spite of the high winds our intrepid contestants persevered through the first round with only one crash. The number of passes in the second round are an indication of just how windy it was. A total of three planes were lost.

### 58<sup>th</sup> Annual Red River Valley Championships

July 26-27, 2014, Fargo, ND

Results from Jim Varno

#### **Advanced Flyoff**

Judges: Paul Kegel, Jim Varno

1	Scott Molck	804	Magnum	Supertigre .51
2	Pete Plunkett	525	Magnum	Supertigre G21 .46

#### **Beginner**

Judges: Orvin Fossen, Jim Varno

1	Mick Shogren	566	Nobler	OS .46LA
2	Steve Wilk	194	S.B. SEA 5	Supertigre .35

#### **Advanced**

Judges: Orvin Fossen, Jim Varno

1	George Muellerleile	1831	Tudor	Electric
2	Bob Baldus	1802	Bear	Supertigre .51
3	Scott Molck	1799	Magnum	Supertigre .51
4	Glen Peterson	1718	Megas Aetos	OS .40FP
5	Pete Plunkett	1702	Magnum	Supertigre G21 .46
6	John Christensen	1631	Cardinal	OS .46LA
7	Ivars Greizins	1517	Das Stunter	Electric
8	Jim Jorgensen	1490	Jr. Nobler	Electric
9	Stan Bidowski	1389	Sig Twister	Double Star .40
10	Mike Anderson	866	Scratch Built	Electric
11	Cary Minor	763	(S.B.)FW190D	RO-Jett .40

#### **Classic**

Judges: Orvin Fossen, Jim Varno

1	Bob Baldus	1852	Gieseke	Nobler OS .40FP
2	Darcy Neibeling	1669	Smoothie	OS .40LA
3	Jim Jorgensen	734	TF GB	Nobler Electric
4	Scott Molck	611	Oriental	Fox .35

Co-CD: Aimee Bagley

Scores are totals of two flights.

Because of Sunday's wind many did not fly.

### Middlesex Modelers Stunt Competition

August 3, 2014, Middlesex, NJ

Results from Jim Vigani, CD

#### **Expert**

1	Dan Banjock	569
2	Bud Wieder	565.5
3	Will DeMauro	548

#### **Advanced**

1	Ryan Barry	537.5
2	Ed Barry	529
3	Bob Krug	522
4	Frank Imbriaco	510.5

#### **Intermediate**

1	Tom Luciano	517
2	Tom Schaefer	503
3	Jim Vigani	478.5

### **Western Canada Stunt Championships**

July 26-27, 2014, Richmond, B. C.

Results from flyinglines.org

<http://flyinglines.org/WCanada.14.html>

#### **Expert**

Judges: Keith Varley, Mike Conner

1	Chris Cox	594.25†
2	Mike Haverly	561
3	Alan Resinger	558.5
4	Steve Helmick	481

#### **Advanced**

Judges: Mike Conner, Steve Helmick

1	Joe Yau	474
2	Hube Start	466
3	Lanny Shorts	454
4	Rex Abbott	415.5

†Explanation from Chris Cox:  
Mr. Resinger did the Appearance  
judging, awarding himself 19 points  
(which I felt was rather generous) and  
18.75 for me.

#### **Intermediate**

Judges: Mike Conner, Chris Cox

1	Bryan Carr	373
2	Dennis Cousineau	343.5

#### **Beginner**

Judges: Mike Conner, Alan Resinger

1	Warren Herbachewski	228.5
2	Paul Bedford	208.5

#### **Classic**

Judges: Alan Resinger, Chris Cox

1	Lanny Shorts	466
2	Rex Abbott	458.5
3	Bryan Carr	376.5
4	Dennis Cousineau	345
5	Warren Herbachewski	263

#### **Old Time**

Judges: Alan Resinger, Keith Varley

1	Dennis Cousineau	227.25
2	Rex Abbott	227

#### **Profile**

Judges: Chris Cox, Steve Helmick

1	Joe Yau	492.5
2	Lanny Shorts	466
3	Bryan Carr	444.5
4	Dennis Cousineau	417.5
5	Bob Baldock	369.5

CD: Keith Varley

#### **Expert**

1	Mike Palko	565
2	Dan Banjock	558.5
3	John Saunders	543.5
4	Mike Cooper	530
5	Joe Adamusko	528.5

#### **Advanced**

1	Price Reese	442.5
2	Rob Roberts	439
3	Rich Siefert	430.5
4	Bob Krug	421.5
5	Brad Smith	384
6	Dennis Moritz	370
7	Bernie Suhamski	347

#### **Intermediate**

1	Jim Vigani	416.5
2	Steve Dinnerman	344
3	Jack Rosemere	322.5
4	Ron Testa	310
5	Rich Martinez	272

#### **Beginner**

1	Dennis Hastings	234.5
2	Jen Fedorick	202
3	Rich Gorrell	161

#### **Old Time Advanced-Expert**

1	John Saunders	329.5
2	Dan Banjock	321
3	Bernie Suhamski	307
4	Price Reese	286.5
5	Brad Smith	286

#### **Old Time Intermediate**

1	Jack Rosemere	231.5
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PA Concours: Mike Cooper, Cobra  
OT Concours: Bernie Suhamski, Viking  
Best Chef: Shenna Roberts

CD: Lawrence Wilks

#### **Expert**

Judges: Bruce Hunt, Pete Peterson

1	Alan Resinger	567
2	Paul Walker	564
3	Chris Cox	560
4	Mike Haverly	544.5
5	John Leidle	541.5
6	Randy Powell	529
7	Tim Wescott	525.5
8	Steve Helmick	513.5
9	Keith Varley	496

#### **Advanced**

Judges: Paul Walker, Steve Helmick

1	Pete Ferguson	453
2	Tom Strom	451

#### **Intermediate**

Judges: Randy Powell, Tim Wescott

1	Tom Brightbill	435
2	Marc Winz	416.5

#### **Classic**

Judges: Steve Helmick, Dave Gardner

1	John Leidle	502.5
2	Mike Haverly	481.5
3	Tom Brightbill	463.5

#### **Old Time**

Judges: Pete Peterson, Gary Letsinger

1	Mike Haverly	288.5
2	Tom Brightbill	194

#### **Profile**

Judges: Pete Peterson, Steve Helmick

1	Paul Walker	561.5
2	Tim Wescott	524
3	Tom Strom	509.5
4	Mike Haverly	506
5	Fred Underwood	497

CD: Pete Ferguson

**Jim Coll Memorial Stunt Contest**

August 9-10, 2014, Hurlock, MD  
Results from Tom Taylor and Jack Rosemere, CD

**Expert**

1	Mike Palko	563.5
2	John Saunders	552.5
3	Tim Stagg	544.5
4	Scott Richlen	522.5
5	Joe Adamusko	508
6	Phil Spillman	484
7	Dan Banjock	43

**Beginner**

1	Jen Fedorick	125.5
2	Colton Smith	118
3	Logan Gregory	86.5
4	Aiden Gregory	20.5

**Profile Advanced**

1	John Lindberg	542.5
2	Price Reese	541
3	Gerry Glier	533.5
4	Rick Wetzel	532
5	Alan Buck	529.5
6	Brad Smith	496.5
7	Jerry Raimo	465
8	Bernie Suhamski	102.5

**Advanced**

1	John Tate	479.5
2	Alan Buck	475
3	Lou Ruger	473.5
4	Price Reese	473
5	Bob Krug	461
6	Gerry Glier	459
7	Rick Wetzel	458.5
8	Ken Armish	454.5
9	Bernie Suhamski	450.5
10	Jerry Raimo	447
11	Brad Smith	445.5

**Old Time Expert-Advanced**

1	Dan Banjock	337
2	John Saunders	321.5
3	Phil Spillman	316
4	Bernie Suhamski	290.5
5	Rick Wetzel	285.5
6	Price Reese	264.25
7	Brad Smith	217.5
8	Dick Houser	175.25

**Profile Intermediate**

1	Denny Thomas	399
2	Jack Rosemere	390.5
3	Dave Reichard	373.5
4	Dennis Hastings	359.5
5	Tom Taylor	354.5
6	Sleepy Dawson	340.5

**Intermediate**

1	Dave Reichard	422.5
2	Denny Thomas	414.5
3	Tom Taylor	406
4	Dennis Hastings	371.5
5	John Murphy	362.5

**Profile Expert**

1	Tim Stagg	574
2	Phil Spillman	508.5
3	John Saunders	506
4	Scott Richlen	489.5
5	Dick Houser	477
6	Dan Banjock	469.5

**Ted Goyet Memorial**

August 16-17, 2014, Davis, CA  
Results from Walt Ghio, CD

**Expert**

1	David Fitzgerald	603
2	Brett Buck	595.5
3	Jim Aron	580
4	Ted Fancher	573.5
5	Paul Pomposo	566
6	Mark Wasnick	552.5
7	Cleon Lingwood	530.5
8	Pete Cunha	498.5

**Intermediate**

1	Shawn Lenci	476
2	Jeremy Schulz	467.5
3	Doug Barton	464
4	Don Chandler	383
5	Gordon Tarbell	338

**Old Time**

1	Bob Duncan	283.5
2	Paul Pomposo	282
	<b>Stunt 25</b>	
1	Jim Aron	512
2	Brett Buck	510

**Advanced**

1	Lanny Shorts	515
2	Bob Duncan	507
3	Carter Fickes	504.5
4	Brian Moore	503.5
5	Lewis Lingwood	490.5
6	Fred Staley	489
7	Larry Wong	481.5
8	Jerry Arana	472

**Beginner**

1	Fred Cadiente	166.5
2	Jim Cunningham	132.5
	<b>Classic</b>	
1	Ted Fancher	564.5
2	Jim Aron	563
3	Paul Pomposo	530.5
4	Mark Wasnick	519.5
5	Carter Fickes	509.5
6	Pete Cunha	505
7	Lanny Shorts	494.5
8	Brian Moore	474
9	Fred Staley	471.5
10	Heman Lee	461.5
11	Jerry Arana	457.5

### Fellowship of Christian Modelers FCM at AMA

August 23-24, 2014, Muncie, IN

Results from Allen Goff, CD

#### **Masters**

1 Bob McDonald	545.5
2 Matt Neumann	544
3 Allen Goff	536.5
4 Mike McHenry	522.5
5 Dennis Vander Kuur	495

#### **Expert**

1 Scott Reynolds	497
2 Vince Bodde	492
3 Wes Dick	488.5
4 Mike Schmitt	487
5 Mark McKinney	471.5
6 Gary Lutz	458.5

#### **Advanced**

1 Jerry Haupt	509.5
2 Larry Fruits	490
3 Jordan Segal	473
4 Will Hinton	471.5
5 John Jordan	443.5

#### **Intermediate**

1 Gary Alspaugh	476
2 Samantha Hines	461
3 Bob Schroeder	356

#### **Beginner**

1 David Betz	170.5
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#### **Classic**

1 Mike McHenry	573.5
2 Bob McDonald	570
3 Wes Dick	537.5
4 Mike Schmitt	535.5
5 Vince Bodde	518
6 Jordan Segal	498.5

#### **Old Time**

1 Mike Schmitt	262
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#### **Profile**

1 Dennis Vander Kuur	535
2 Vince Bodde	513.5
3 Mike Schmitt	510
4 Gary Alspaugh	475.5
5 Jordan Segal	462.5
6 John Jordan	457

Concours: John Jordan

Judges: Will Hinton, Mike Eber,  
Mike McHenry, Matt Neumann,  
Bob McDonald, Scott Reynolds

Tabulators: Jan Goff, Dawn Lark

### Charles Ash Memorial Greater Southwestern Championships

August 30-31, 2014, Dallas, TX

Results from Crist Rigotti

#### **Expert**

1 Doug Moon	609
2 Richard Oliver	606
3 John Hill	581
4 Frank McMillen	579.5
5 Joe Gilbert	578
6 Steve Moon	572
7 Gaylord Elling	543.5
8 Don Cranfill	540.5
9 Mike Greb	526.5
10 Crist Rigotti	517
11 Joe Bowman	495

#### **Advanced**

1 Jim Svitko	475.5
2 John Bender	460
3 Andy Stokey	418
4 Dave Ek	374.5

#### **Intermediate**

1 Gregg Elling	435.5
2 Mark Troutman	385

#### **Beginner**

1 Max Moon	37.5
2 Don Cranfill	529
3 Gaylord Elling	505.5
4 John Bender	486, 483.5
5 Sean McEntee	486, 0
6 Jim Svitko	484
7 Bruce Cunningham	469.5
8 Gregg Elling	456
9 Mark Troutman	402

#### **Profile**

1 Joe Gilbert	548
2 Joe Bowman	509
3 Don Cranfill	495
4 Gaylord Elling	493
5 Crist Rigotti	478.5
6 John Bender	476
7 Bruce Cunningham	446.5
8 Dave Ek	435
9 Andy Stokey	425
10 Louis Keller	415
11 Mark Troutman	414

CD: Dale Gleason

#### **Old Time**

1 Gaylord Elling	324, 319.5
2 Frank McMillen	324, 318.5
3 Sean McEntee	320
4 Don Cranfill	316.5
5 Crist Rigotti	311
6 John Bender	307.5
7 Gregg Elling	299
8 Mark Troutman	278.5
9 Bruce Cunningham	174.5

**Books:**

**Classic Era Construction Drawings** compiled by Tom Morris \$12.00

**Old-Time Stunt Construction Drawings** compiled by Tom Morris \$ 8.00

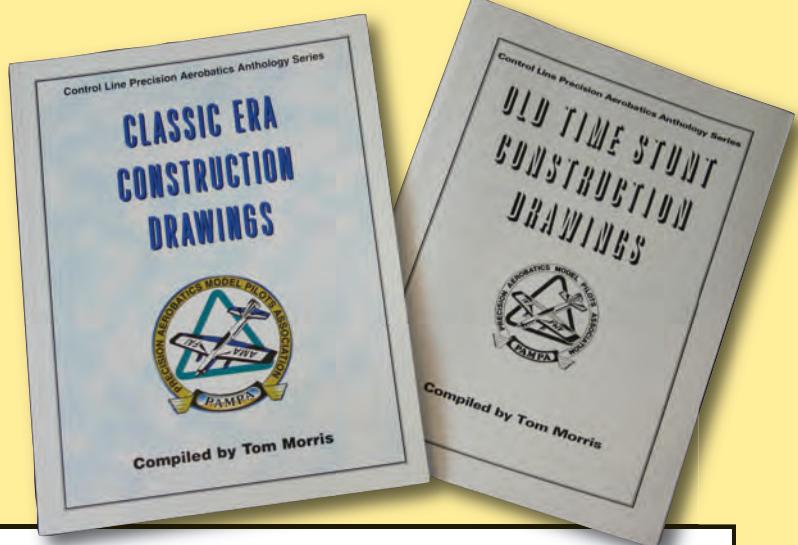
**Pioneers of Control Line Flying** by Charles Mackey \$12.00

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