

Stunt News

Precision Aerobatics Model
Pilot's Association

January/February 2015 \$5.00



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On the cover: Steve Wooley and Allen Brickhaus were inducted into the AMA Model Aviation Hall of Fame in 2014. Here's Steve with his original-design Argus at the 1960 World Championships in Hungary. Steve finished in fourth place and the USA won the Team Championships. That team consisted of Don Still, Bob Palmer, and Steve Wooley. Steve's Argus was voted "The most beautiful airplane in the world" by the competitors. Photo by Don Still.

Inside cover photo: Gene Schaffer's Stunt Machine I was designed in 1969 and first flown in 1970. Under the existing PAMPA rules, this ship is legal for Classic Stunt competition. Bill Simons took one look at Gene's ship at its first meet and gave it the nickname Oosa-Amma for obvious reasons. It is the subject of this month's construction feature. Photo by Bob Hunt.

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.

pampa news and reports

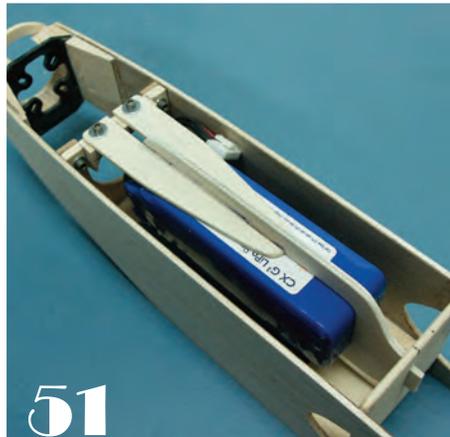
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President's Report

by Warren Tiaht

A simple "thanks" goes a long way ...

I would like to bring your attention to some of the recent changes in the list of trustees of our organization. Scott Richlen is replacing Steve Fitton in District IV. Steve represented the district for six years and felt that it was time for a change, and Scott was willing to take the reins. Thank you, Steve, for your contributions.

Derek Barry has been swamped with additional responsibilities with his job and has been busy rebuilding/remodeling his recently acquired house and raising a young family. He resigned last fall, and Don Ogren agreed to serve out Derek's term of office. Derek was the District V Trustee for several terms and did an excellent job, as well as honing his skills to garner multiple top-five Nats placings. Thanks, Derek, for your efforts and service to PAMPA. Don has contributed several articles for *SN*, and I am confident he will do a great job.

Mike Haverly found himself a bit guilty of over commitment. Mike has several irons in the fire and found it difficult to do the job as well as he wanted. Something had to give and, unfortunately for us, it was his decision to resign. Mike did say that he will continue his quest toward the improvement of his flying skills. Thanks, Mike, and I look forward to seeing you at future Golden State events.

Mark Scarborough has agreed to take over the District XI Trustee position. Mark wrote the "Finishing" column for several issues of *SN*. He is an excellent craftsman and will do justice to the task of keeping us abreast of the District XI happenings.

I struggled a great deal with the previous paragraphs. PAMPA is blessed with volunteers who make us a premier organization. Sometimes these folks just find themselves in the position where they just have to move on. Don't forget to let them know how much you appreciate their efforts. A simple "thanks" goes a long way.

Last weekend, the Cholla Choppers held the Southwest Regionals, an annual event held to test our abilities to do battle on the stunt circle. Battle we did, with several contestants coming in from out of state. Brett Buck took time out from his seven-day-per-week schedule of moving satellites to their proper orbits to leave Sunnyvale, California, and give us a lesson in flying CLPA. A good time was had by all.

Brett managed to be victorious with that several-year-old Infinity with its old RO Jett .61. Incidentally, it still looks like new. Apparently the IC engine is alive and well. After his serious business was over, Brett retrieved his real weapon of destruction, the infamous Skyray powered by an out-of-the-box LA .25. Just about everybody left on the field took their turn flying the Skyray. What a hoot! After we all took our turn, Brett took the handle and gave us a demo of square vertical eights, and



horizontal and overhead hourglasses. The most fun I've had in years! I'm gonna build me a Skyray. Thanks, Brett.

I have been carefully (as in slowly) working on my Shark 35 and can see the light at the end of the tunnel. I have been spraying clear but have been slowed by the high humidity caused by a year's worth of rain in the last few days. I will be done before VSC, but cannot be sure about entering an electric-powered model in Classic. Some folks think that it's okay to use modern IC power in Classic, but not electric power. Aero Tigers and LA .46s really perk up the older designs. 'Tis a puzzlement. Time will tell. Sometimes we have a tendency to forget that it's just a hobby.

Membership renewals are coming in but we are still behind 2014. It is still the best deal on the planet. Paul Walker's trimming articles are masterpieces. Don Ogren shows the neat, easy way to fabricate a carbon pushrod.

It is not real difficult to come up with a little tip or how-to that we haven't thought of. A case in point follows: A dear friend of mine and master craftsman, Roy DeCamara, gave me this little gem a couple of years ago. Roy discovered a sandpaper made by Norton called No-Fil Adalox A275. I have used the 320 and 400 grits. The 320 grit P/N is 66261131626. The 400 grit P/N is 66261131624.

The bottom line is that it is a dry paper that is very resistant to filling. The sanding residue just powders off. In addition, the paper is incredibly durable. The only downside is that it usually has to be special ordered from the local auto body paint store. The stuff comes in packs of 100 sheets. Try it, you will like it. Get together with your buddies and buy some and split it up. It ends up costing about 75 cents per sheet.

Bob McDonald still needs volunteers for the Nats. If interested, email Bob at bobsp47@sbcglobal.net.

The website is getting more friendly, and Chris Rud is continuing to make it better. Thanks, Chris.

Until next time...

—Warren

Level Laps

by Bob Hunt

passing of Bob Gieseke is deep and personal; Bob was a longtime great friend and trusted advisor. He was also a fantastic builder and flier, a fierce competitor, a wonderful ambassador for our hobby/sport and for our country, a consummate gentleman, and a father figure to many who knew him. He will be missed by all who ever picked up a control line handle. Bob was stunt.

Bob's passing came at a point in production of the newsletter at which a proper acknowledgment of his legacy could not be produced in time to be included here. I know that many of you have favorite Bob Gieseke stories, and if we could gather as many of those here as possible, a fitting tribute to this great man can be presented. Please send your stories, remembrances, and photos of Bob to me at robinhunt@rcn.com, and I'll try to publish as many of them as space permits. (Photos should be a minimum of 300 dpi at 5 x 7 inches.)

New PAMPA Hall of Famers

The timing of the voting for the new PAMPA Hall of Fame inductees didn't allow us to properly congratulate them. So, for the record, the new HOF members are, in alphabetical order: John Brodak, David "Dave" Cook, Bart Klapinski, Roland McDonald, Bill Rich, James "Randy" Smith, and Warren Tiaht.

To be inducted into any Hall of Fame means that a person has not only excelled personally, but has also done so in the eyes of peers. In the case of the PAMPA Hall of Fame, that excellence may come in the form of on-the-field accomplishments, or it may be manifested by outstanding and enduring service to the organization, or both.

In looking over the list of names of those inducted this year, I can certainly understand why each of them was singled out for this high honor. Each has achieved far above the norm in their field of endeavor. I'm honored to have known them all, and I'm sure I speak for all PAMPA members when I say that we as a group are extremely proud of them. Well done, gentlemen!

New editorial policy

I was taken to task by Howard Rush over the editing of his World Championships report that was presented in the November/December issue of *Stunt News*. Howard was not happy with some of the

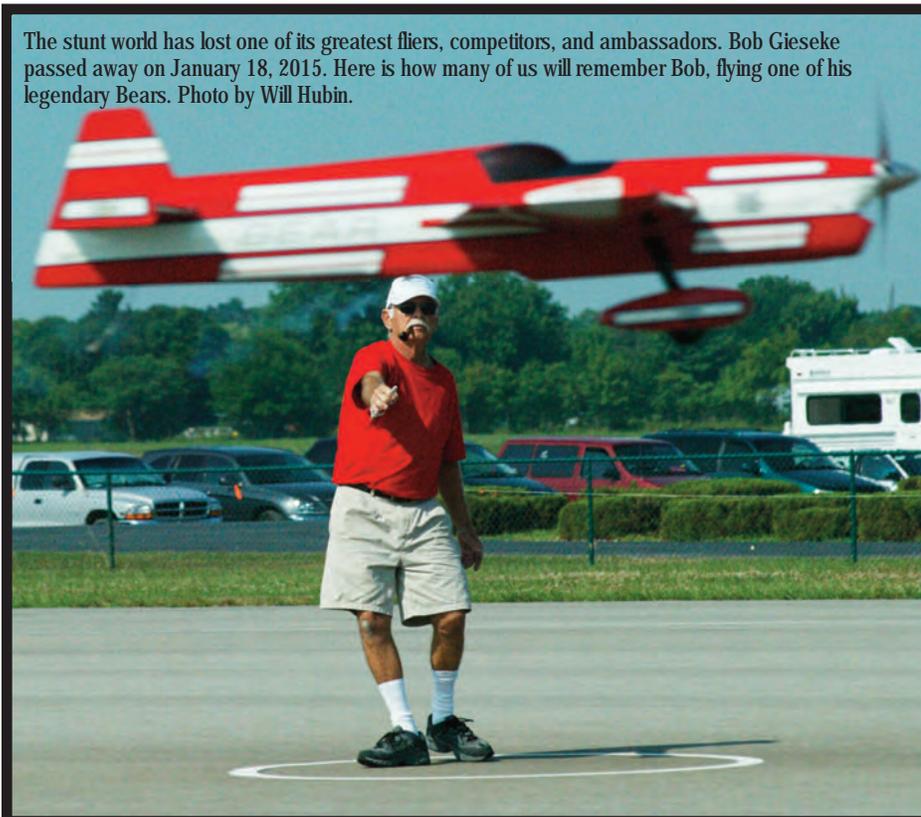
continued on page 4



This column is becoming increasingly difficult to write. It seems that each time I have to sit down and produce one, there is more sad news to report about the loss of a friend or friends. The sorrow I feel regarding the news I recently heard about the

allow us to properly congratulate them. So, for the record, the new HOF members are, in alphabetical order: John Brodak, David "Dave" Cook, Bart Klapinski, Roland McDonald, Bill Rich, James "Randy" Smith, and Warren Tiaht.

The stunt world has lost one of its greatest fliers, competitors, and ambassadors. Bob Gieseke passed away on January 18, 2015. Here is how many of us will remember Bob, flying one of his legendary Bears. Photo by Will Hubin.



continued from page 3

editing decisions and changes made to his provided text. Any article that is submitted to a magazine or newsletter is subject to some modifications by the editor for various reasons. Sometimes the changes made are not agreed upon by the author, and he or she usually finds out about those changes when they read the published piece. Perhaps it's time to change that policy somewhat at *Stunt News*.

From this point forward, the first-proof layouts for articles, special interest columns, and the district director columns will be sent to the author in question for review. That doesn't mean that anything the author doesn't agree with will be changed back to its original form, or even changed at all. It does mean that the editor (at this point, me...) will at least speak with the author about the suggested changes or the areas in question and come to a mutual agreement on a way of presenting the material that will satisfy both parties. The author will have 48 hours (at least) to review the layout before the newsletter goes to press.

My apologies go out to Howard for any grief the editing changes caused him. There was no harm meant.

New CL Stunt inductees to the AMA HOF

I'm very pleased to report that our fallen comrade, Allen Brickhaus has been inducted to the AMA Model Aviation Hall of Fame (more commonly known as the AMA HOF). I won't go into detail here about Allen's many accomplishments as we have listed them several times over the past year in these pages. I only wish that this great and deserved honor could have been bestowed upon Allen before his passing.

About two years ago I was contacted by the AMA District III Vice President, Mark Radcliff, with a request to write a testimonial piece about Steve Wooley. Mark said that it would be used in an AMA Model Aviation Hall of Fame nomination package that he was preparing in an effort to get Steve inducted. Naturally, I enthusiastically said, "Yes."

Mark also received stories about Steve for his nomination effort from Wynn Paul and Dr. Laird "Doc" Jackson. Unfortunately, Steve was not inducted in that first effort, but I'm very pleased to report that Mark resubmitted the package this past year and Steve was inducted!

Sadly, as most of you know, Steve is no longer with us. He was killed in an auto racing accident in 1971. Unfortunately, none of Steve's relations are still alive, so there was no family member available to receive Steve's HOF plaque.

Mark decided to approach the club that Steve had belonged to, the Vienna Skysharks of Vienna, West Virginia, and offer the award to them. The members of that club in turn suggested that Mark should keep the award, as it was only through his diligent work that this long overdue honor had been bestowed on Steve in the first place.

David Fitzgerald had been looking for some information about Steve a while back to post on the PAMPA website. David had posted a request for information about Steve on the Stuka Stunt Works forum. Mark saw that post and sent a message to David and copied me in. The following is an excerpt from that note from Mark to David, and it explains why Mark was so motivated to get Steve inducted.



Two influential fliers and two equally influential designs: Steve Wooley and Bill Werwage are shown here in 1959 with their stunt planes. Steve's model is his Argus, and Bill's model is his 1959 Ares. Photo from the Wynn Paul collection.

"Hello, Mr. Fitzgerald:

"You don't know me and we have never met to my knowledge. I was on the Stuka Stunt Works Forums and saw a post you made in 2009 about the late Steve Wooley. You wanted information about him for the PAMPA website. I'm not sure if you're still interested, but I made a power point presentation about Steve three years ago. The reason I did it was because I nominated Steve to the AMA Hall of Fame in 2013. Please allow me to explain my interest in Steve.

"As a youngster Steve and my dad flew together. Steve would come to our house in the early to mid-60s, and as a 7- to 13-year-old, I would tag along with my dad and Steve to watch them fly, mostly my dad's RC airplanes. I always admired Steve because he traveled the world with model airplanes.

"As I got older I became involved in RC and learned to fly pattern. Steve was beginning to get interested in pattern, and I was looking forward to the day we could fly together and go to contests, etc. Sadly that day never came because Steve was tragically killed in an auto racing accident. Steve's larger-than-life image always stayed with me, and I always used Steve's image as an example of what a world-class competition flier should be.

"Long story short, I went on to be on four US RC F3A aerobatics teams in 1975, '77, '79, and '81. As a team, we won first place every team I was on, and individually I was third in the Worlds in South Africa in 1979. In all this, Steve's image was in my mind. That image has never left me and that is why I nominated Steve for the HOF."

—Mark Radcliff
AMA District III VP

I think I can safely comment here on behalf of all PAMPA members in thanking Mark for his successful efforts to get Steve inducted into this prestigious group. Thanks also to John Brodak for his successful nomination of Allen Brickhaus to this prestigious group. *sw*

—Bob Hunt



PAMPA Membership Renewal Instructions

The best way to join or renew your P.A.M.P.A membership is to log into the web page at (www.pampacl.org) and sign up.

RENEWALS:

You may also chose to print and mail the membership form with an attached check or money order to the address below.

For all renewals to be considered timely, they must be **postmarked** by December 31st.

Late renewals will **NOT** get back issues mailed to them; they are available on-line.

NEW:

Members joining after **October 1st.** will get full credit for the next year's membership. They will also receive Stunt News for November / December issues as a bonus.

Your first issue of Stunt News will arrive with the next issue.

All members have full access to the website and all on-line back issues. These can be read or downloaded to your computer. You can file them, burn them to a CD's or print them directly from Stunt News in color..

Seasonal address changes (Snowbirds) must notify the Membership Chairman of address change and dates of the change; there are no automatic transfers of mailing addresses.

(Both your addresses will be kept on file)

You are responsible to notify PAMPA of any address change.....it up to you to be timely!

MIKE STRAND

PAMPA Membership Secretary

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Phone# 262-352-0645

www.pampamembership@gartekinc.com



PAMPA Membership Application or Renewal Form

Please print legibly. Use one form per member. Make photocopies for multiple registrations.

Membership Year 2015	New Member	Renewal	Address change:
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Comp Member: check box: HOF AMA CB Other Date: _____

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NOTE:

Term of ALL Memberships and Subscriptions are from January 1st through December 31st.

Mail to: PAMPA Secretary N2 W31920 Twin Oaks Dr Delafield, WI 53018	Phone: 262-352-0645 Email: pampamembership@gartekinc.com
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Outside Back Cover	1 @ \$275.00
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“Oosa-Amma”

designed by Gene Schaffer
story by Bob Hunt

**STUNT
MACHINE I,
A CLASSIC-
LEGAL
DESIGN BY
GENE
SCHAFFER**



It's easy to see how Gene Schaffer's Stunt Machine I got its nickname, Oosa-Amma. He took a lot of teasing over that... Gene's design featured a number of styling cues borrowed from Dave Gierke's Novi Four. Photo by Bob Hunt.

The model that is the subject of this article was designed in 1969, making it a Classic-legal ship. I guess I could just state that fact and then go into a building sequence how-to, and that would be sufficient. That would, however, remove the opportunity for me to tell you a bit about my friend, flying buddy, fellow competitor, hero, and designer of this model, Gene Schaffer.

I've always thought that a published model should have an accompanying story included with the plans and building

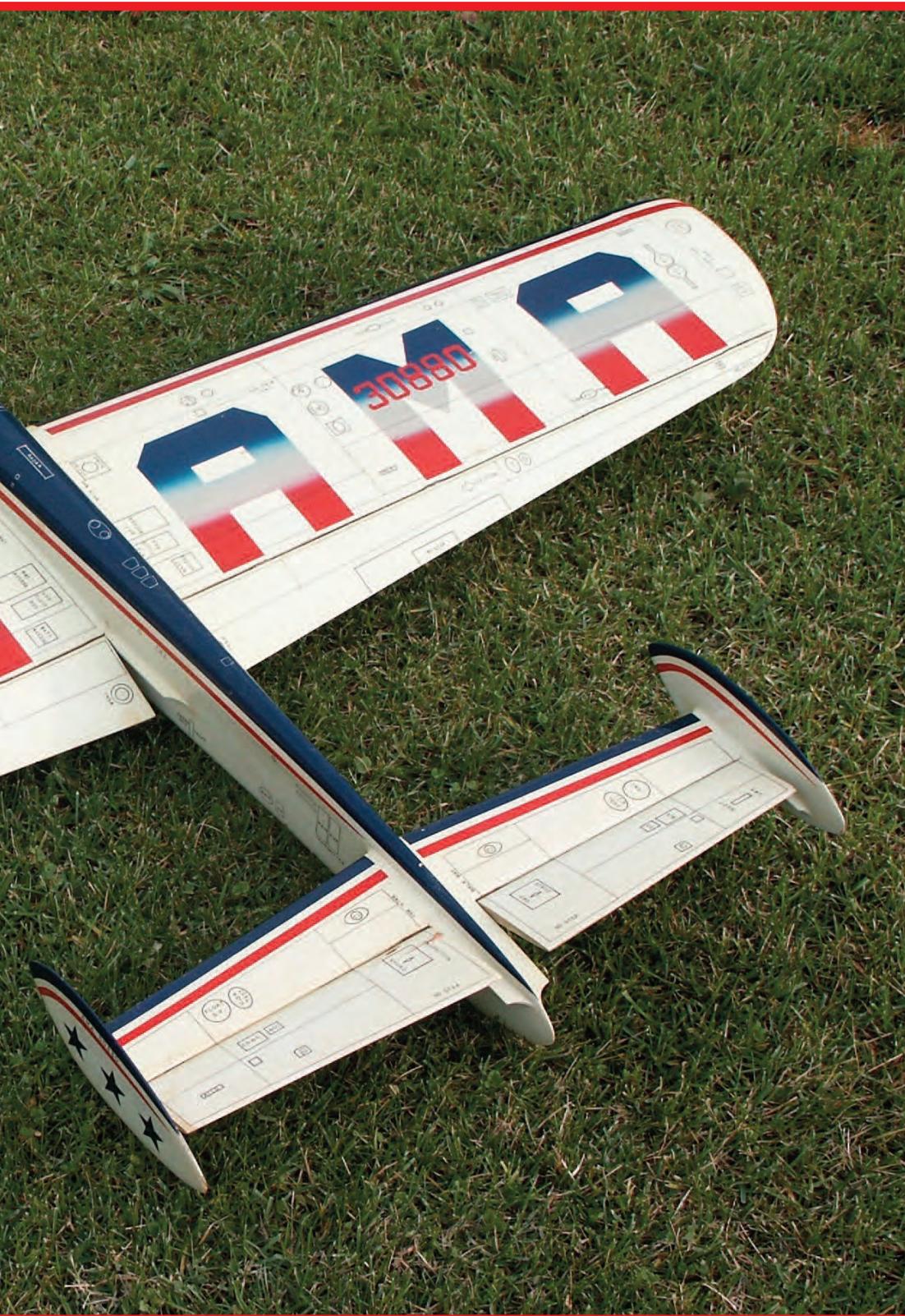
instructions that explains how that particular model came into being and how it fits into the fabric of its time and place of origin. Most new models are not really new at all; most are developed as part of an ongoing design series. This is really the case with the Stunt Machine I, or, as it is known on the East Coast Stunt scene, Oosa-Amma. I prefer to call it the Oosa-Amma, so for the remainder of this article, that's how I'll refer to it. I'll explain later why it has two names.

Over the winter of 1964-'65, Gene Schaffer purchased his first foam wing from Mike and Arnie Stott's Foam Flite concern. It was among the first (if not the first) CL Stunt foam wing set delivered to the East Coast. With it Gene built a semiscale, jet-styled design that featured tricycle landing gear. That model was very sparse on detail, and it was quickly built so that Gene could evaluate that type of wing construction for competition use. It flew outstandingly well, and Gene seemed to really like the model. I first saw it fly at the 1965 Memorial Day meet in Union, New Jersey, and immediately liked the way it presented.

The first foam wings from Foam Flite were not internally cored, so they weighed a good deal more than an equivalent-size built-up wing. They did, however, offer the builder an absolutely accurate wing with no warps or twists, and they built up fast, so a competitor could make more than one model per year by using them. A heavier model would have to travel faster around the circle in order to generate the required lift to fly cleanly through the pattern. Gene's style was to fly a bit faster than most of the other Eastern competitors, so the early foam wing just seemed to fit him well.

Gene must have liked the performance of his foam wing equipped "Jet," because the next ship he showed up with at the field also had one installed, and again Gene flew that ship on the fast side. That was in 1966. Gene's new design was a more classically-styled ship, and it featured a painted-on canopy. The fuselage design was low and sleek—a look that Gene would become known for in the coming years.

Both the Jet-styled ship and this new model used the ubiquitous Nobler airfoils and planform, as did most of the other ships of the era. The next year, 1967, Gene refined the look of his model to be even lower and sleeker. It was that model that really caught my eye as a young senior competitor, and I asked Gene if I could borrow the "numbers" from his new ship around which to build my



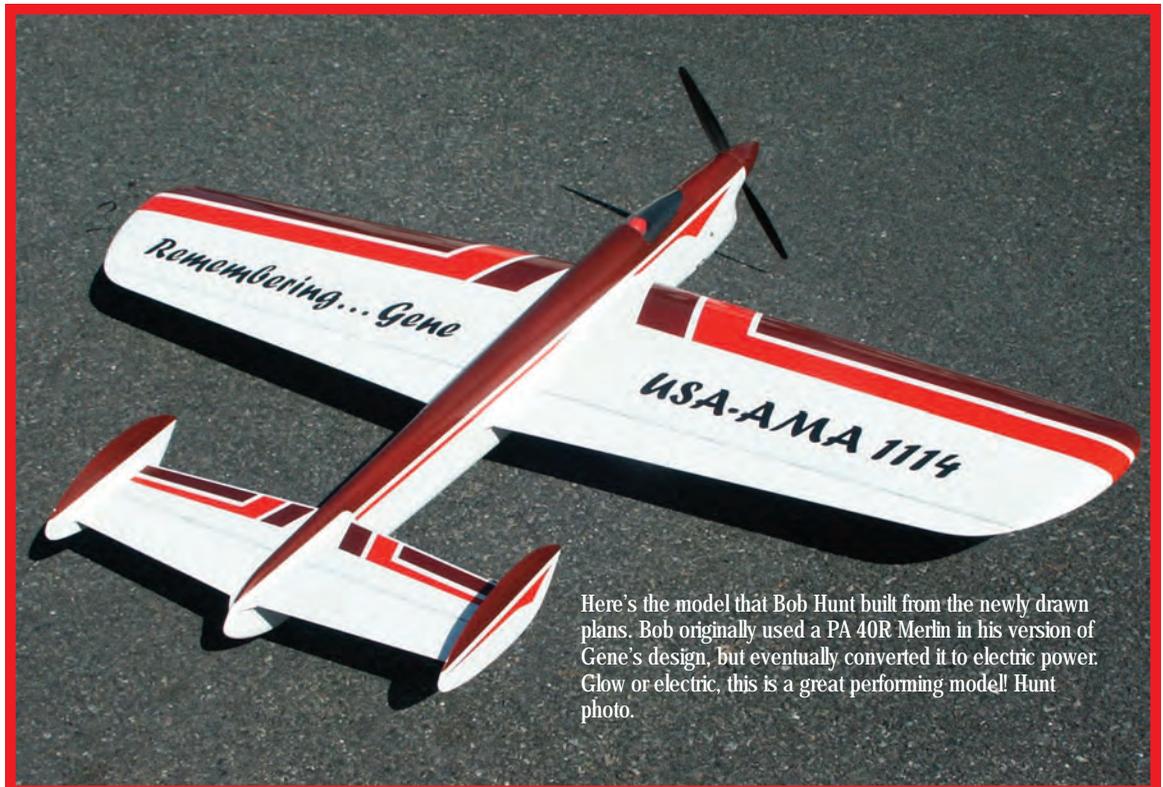


This model was designed in 1969 and first flown in 1970. It is still in fairly good shape today, and it was an easy job to carefully measure Gene's ship and draw a set of very accurate plans for it. Note the "canted-in" landing gear and the stylish twin rudders. Hunt photo.

next ship. Gene agreed, and I quickly produced a model that I called the Caprice.

In late 1968, Gene designed a model called the Judge. Gene was a fan of hot Detroit machinery and always had a flashy and fast car. When the new Pontiac Judge was announced, Gene latched onto the name and even painted his model in flamboyant Judge Orange. In those days Gene had a young protégé, Robbie Feinstein, who flew with him and Bob Lampione at Flushing Meadows Park in Queens, New York.

Robbie wanted to build a full Stunt model at that time, so they built their Judges



Here's the model that Bob Hunt built from the newly drawn plans. Bob originally used a PA 40R Merlin in his version of Gene's design, but eventually converted it to electric power. Glow or electric, this is a great performing model! Hunt photo.



This design has a very low profile, and that makes it less affected by wind and turbulence. Bob's rendition came out weighing 46 ounces with the 2,500 mAh battery on board. That's very light on the 620 square inch wing! Hunt photo.

together. When finished, the only way you could tell them apart was where the leadouts exited. Robbie flew in the normal counterclockwise direction, while Gene flew “backwards” (that was just for you, Rich). The two models were gorgeous, and they seemed to fly well, also.

The Judge was larger than Gene's previous ships, and it incorporated a different airfoil, as well. Gene also used quite a bit less leading edge sweep than he did on his earlier ships. Gene only flew the Judge for a short time before going back to his smaller, Nobler-wing-equipped model. Even though the Judge flew well, it was underpowered with the Fox .35, and in wind it just didn't perform up to his standards. Gene was well known for his prowess in the wind, and the Judge fell short in those conditions. It was soon relegated to the wall of his shop.

All this was happening just before the O.S. Max .35S engine came onto the scene. That engine had much more power than the Fox .35 engines that almost all of us were using. I converted my Caprice from Fox to O.S. power and found a huge performance gain. Gene also had converted to O.S. power in his smaller ships. In his hands the extra power translated to even better performance, and I could see the wheels turning in his head. He could now upgrade the Judge and have sufficient power to pull it competitively.

The 1969 Nationals were approaching fast, and Gene opted to delay the conversion of the Judge to O.S. power until after the Nats. He had refinished one of his sleek, Classic-style ships and flew that at Willow Grove. At that Nats there were a few of what my friend Bill Simons called “New Wave” stunters. The jet-style stunter had fully come of age, and there were several outstanding models there that just looked amazingly modern. Among these were Leroy “Boom-Boom” Guenther's Galaxy, Jerry Worth's

Apteryx, Bill Werwage's USA-1 (in its initial form), Don Bambrick's Ultra Sonic, and Jim Kostecky's Spirit of America.

But the one that stole the show from an aesthetic standpoint was Dave Gierke's super sleek, elliptical-winged Novi IV. Truly, this was a trend-setting design, and for the next few years it seemed that everyone was trying to capture the effect that Dave's model had in their own “originals.”

After that Nats, Gene decided to build a new ship that incorporated many of the sleek design features of the Novi IV. He opted to use twin rudders and a very wide-spread landing gear that canted in at a rakish angle and had stylish spats attached. The fuselage was very similar to the one on Dave's Novi IV, and Gene even chose to paint his model in a similar manner to Dave's in white with red and blue trim.

Gene still liked the way the Judge flew, and now that more power was available, he decided to use the same wing design in his new ship as he did in the Judge. The result was the ship featured here. Gene designed and started the build on that ship in the fall of 1969, making it fully Classic legal. The rules read that a Classic eligible design must have been designed, built, *or* flown prior to December 31, 1969. As the rule is written, this design qualifies, even though Gene didn't fly it until the spring of 1970.

When Gene did bring it out to the Garden State Circle Burners field in the spring, he set it on the ground and we all gathered around for an “ooh and ahhh” session. Bill Simons looked long and hard at the ship and then asked Gene what the name Oosa-Amma stood for. Gene looked puzzled. He replied that there was no name on the ship.

Bill pointed to the large “USA” on the left wing panel and then to the equally large “AMA” on the right wing panel and said, “Sure there's a name: U-S-A-A-M-A—*Oosa-Amma*.”



Above: In this close-up photo of the nose of the original model you can see that age has taken a slight toll. The wood seams have started to split a bit, but you can also see just how sleek and detailed this model was when it was new. Hunt photo.



Left: The size of the wing is very evident in this shot of the bottom of the plane. It was a large model for a .35-size engine in its day. A modern 40 would be ideal as a glow option. An E-Flite Power 15 powers Bob's replica. Hunt photo.



Left: Here we see the foam core wing and the tail assembly complete and ready for installation. Note that the fuse sides are cut but not yet joined into a crutch. Hunt photo.

Below: Bob makes slots in his fuselage shell mold bucks to allow him to generate absolutely accurate shell formers. Bob has a free PDF manual available that explains his entire fuselage construction system, and can email that to you on request. Hunt photo.



Everyone laughed ... except Gene. He hated that name, and so it stuck! And since that day this model has been affectionately known as the Oosa-Amma!

Except for the Judge, Gene had not named a plane for many years. We all called his Classic-style stunters "Blackbirds," because they were all painted black. Gene's next design after the Oosa-Amma was a tribute to the aesthetics of Jerry Worth's Aptyx and Billy Werwage's USA-1, and Gene named that one the Air Boss. But, when Gene designed his next twin-rudder stunter in late 1971, he opted not to name it.

Don McGovern asked to publish that model in *Flying Models*, and wanted to know what to call it for the article title. When Gene said that it didn't have a name, Don coined the moniker Stunt Machine on the spot. I've taken the liberty of retroactively formally naming the design published here the Stunt Machine I, as it was the first of Gene's twin rudder stunters. I'm sure he wouldn't mind. (He'd like it better than Oosa-Amma, I can tell you...)

Right from the start the Stunt Machine I/Oosa-Amma flew extremely well. It came out weighing 52 ounces and had a 620-square-inch wing. The O.S. .35S had no problem pulling this very sleek ship, even in high winds. Gene used this ship in several local meets and also flew it at the 1970 Nats in Glenview, Illinois. It remains a local legend on the East Coast, and I always wanted to build one.

I found out that Gene had given the original ship to his friend, Ray Moore. I found that out when Ray passed away. Someone told me that the ship was hanging in Ray's basement shop. I called Ray's widow Andrea and asked if she would consider letting me borrow the plane just long enough to measure it and draw an accurate set of plans. She was delighted to do that! My thanks go out to Andrea for making this dream come true for me and for many of the fliers who still fondly remember this design and how Gene flew it.

I have many memories of Gene flying this ship in 1970, but one of them stands out, and I'd like to pass it along here. In the

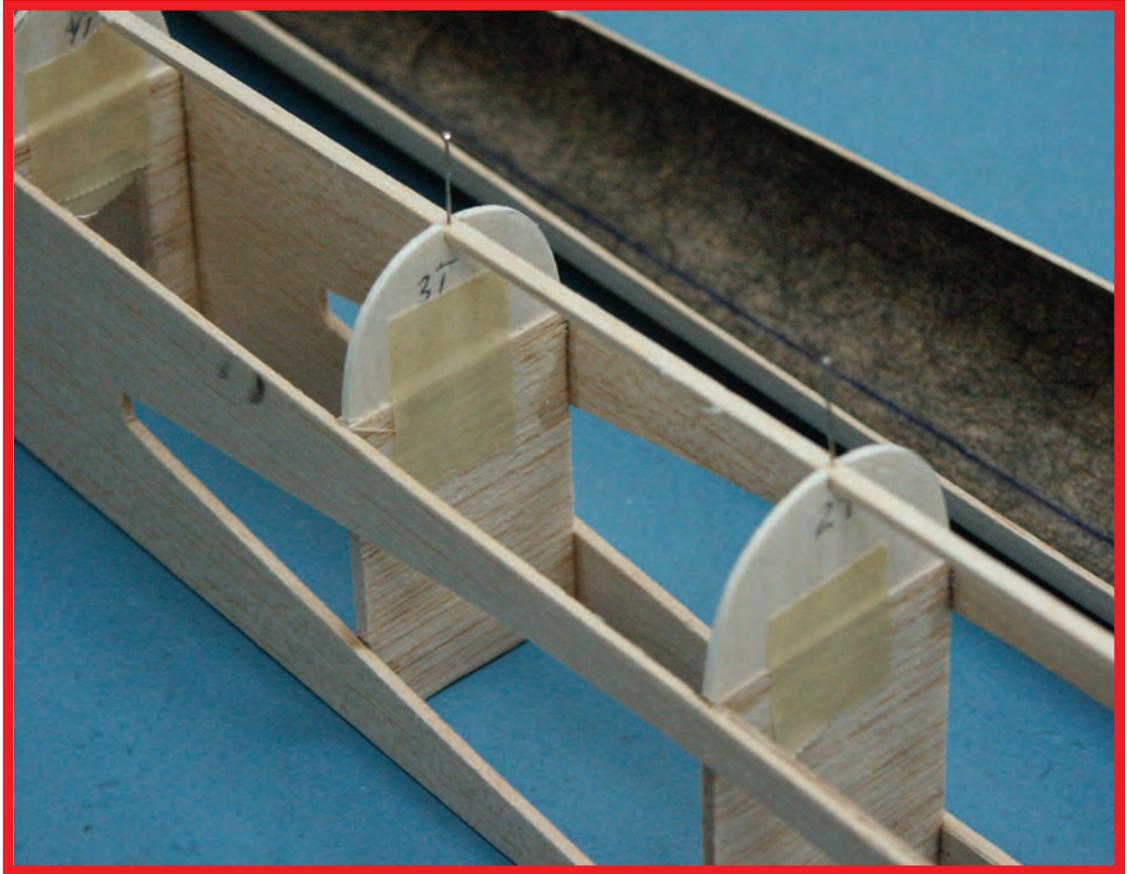
summer of 1970, Gene and his wife Sue, Bill Simons, and I were invited by Dave and Kitty Chapman to stay over at their huge, beautiful Victorian home on a Saturday night, and then attend a Stunt contest in Plymouth, Massachusetts, the next day. We all drove up together in Gene's two-door 327 Chevelle.

We managed to get all the planes into the diminutive trunk, along with our flight boxes and some luggage. Naturally, the planes we flew back then were on average much smaller than the ones we would take to such a contest today. I was flying my Veco Mustang; Bill was flying his original-design Yank; and Gene was flying the Oosa-Amma. It was actually the fact that Gene was flying that ship that allowed us to pack so many ships in the trunk. The low profile of the Oosa-Amma due to the twin rudders was a huge factor there!

My model was the only one of the three that had removable landing gears, so I removed them to allow for more room under the trunk lid. When we arrived at the Chapman's, everyone wanted to go and practice fly at Dave's local ballpark field, which was about a quarter mile from his house. When I started to reassemble my Mustang, I found that one of the landing gear legs was missing. I realized that, in my haste to get everything packed, I had left the leg on the streets of Astoria, in Queens, New York, in front of Gene's apartment building.

Dave told me to go to his basement shop and use whatever I

Right: After the formers have been made, they are taped to the corresponding fuselage former. Note the 1/8-inch square stringer that is recessed into the shell formers. Hunt photo.



needed to fabricate a new gear leg, and then walk down to the field where they would be flying. Well, I did that, which took me about a half hour. The resulting leg was a bit longer than the original one had been, so the ship sat a bit lopsided, and there was no painted spat on it, either. It looked pretty sad, but at least I would be able to fly in the contest on Sunday.

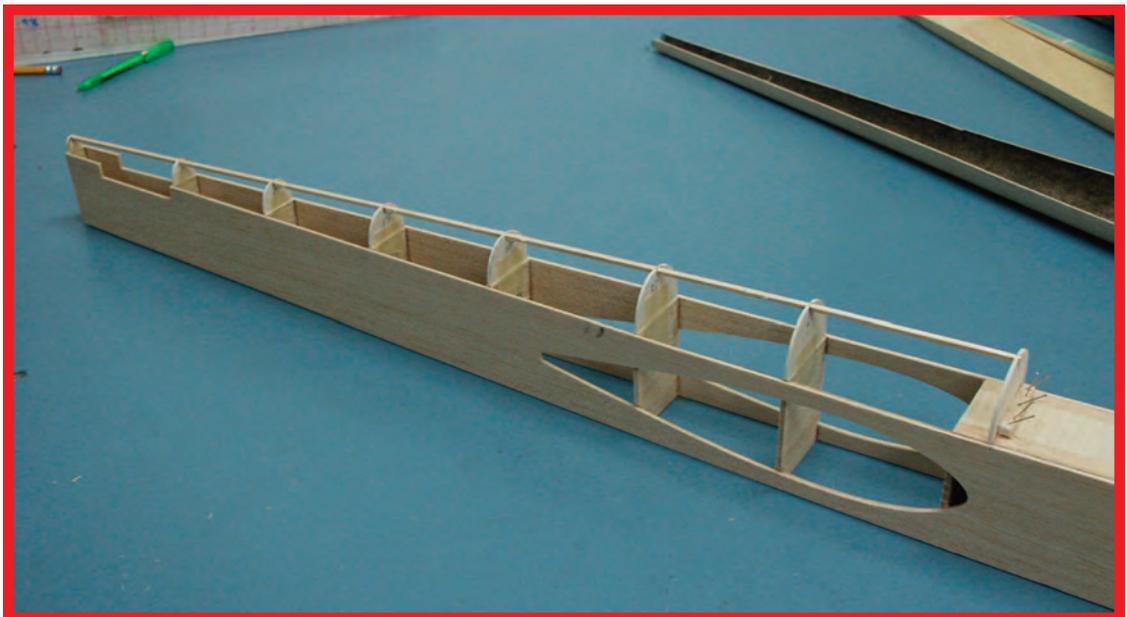
I walked down to the field where everyone was flying and showed them the fix. They all busted my chops plenty about the longer gear leg and the lack of a spat. Then, just as I was about to get ready to fuel the ship, Sue reached into her purse and pulled out the missing gear leg! She asked, "Does the missing part look anything like this?" Needless to say, everyone had a great laugh over that. I had to live with the fallout from that prank for years.

We finished our practice session and went back to Dave and Kitty's house for an amazing chicken dinner. At dinner the conversation turned to Gene's prowess at wind flying. Dave had

told Kitty all about how Gene could fly maneuvers with a deadstick model. It was true; Gene was the East Coast master of wind flying, as we called it. Kitty was intrigued and asked Gene if he would give her a demonstration of that during the contest the next day. Now, Plymouth is near the coast of Massachusetts, and it is normally very windy there; at least it always was when we went up there to fly. Gene agreed and promised Kitty a wind flying show.

The next day dawned clear, warm, and dead calm! There was not a breath of wind to be found, and that's pretty much the way it stayed all day. Gene flew his first flight and at the end of the

Right: Here the crutch is ready for the fitting of the top fuselage molded shell. The shell will be glued to the formers at the point where the 1/8-inch square stringer meets them. The tape will then be removed and the shell removed for final trimming and former gluing. Hunt photo.





Here the shell has been trimmed and sized to perfectly fit the fuselage crutch assembly. It gets glued in place after the wing and tail assemblies have been installed and the controls have been hooked up. Hunt photo.

round was solidly in first place. He didn't have to fly his second round flight to secure the win, but he fueled up for it anyway.

Gene laid in an even better pattern than his first. Then after the flight, as the engine began to lean out before quitting, he began doing lazy eights. When the engine quit, Gene began running from left to right and back again as the ship went through the eights, whipping it to achieve enough airspeed to enable the model to get over



This view of the inside of the top fuselage shell shows the perfect fit between the formers and the shell curvature. Note that a layer of .2-ounce carbon mat has been applied to the inside of the shell. This helps to ensure that the shell won't sag between the formers. Hunt photo.



Left: Bob uses fixtures that fit the airfoil to accurately install the wing into the fuselage. Note that he uses an assembly platform that is cut from 2-pound foam and is perfectly flat for this step. Hunt photo.

Below: Here's a close-up of one of the wing assembly fixtures. The centerline on these fixture plates match the wing centerline to table top distance, yielding four places where the wing is held accurately above the assembly platform. Hunt photo.

the tops of the loops. Everyone watched in amazement as Gene completed the first eight, and thought for sure that he'd land after that.

Nope, Gene was bound and determined to keep his promise to Kitty and give her a real show. Gene continued running back and forth in the whipping motion and did several more lazy eights with the



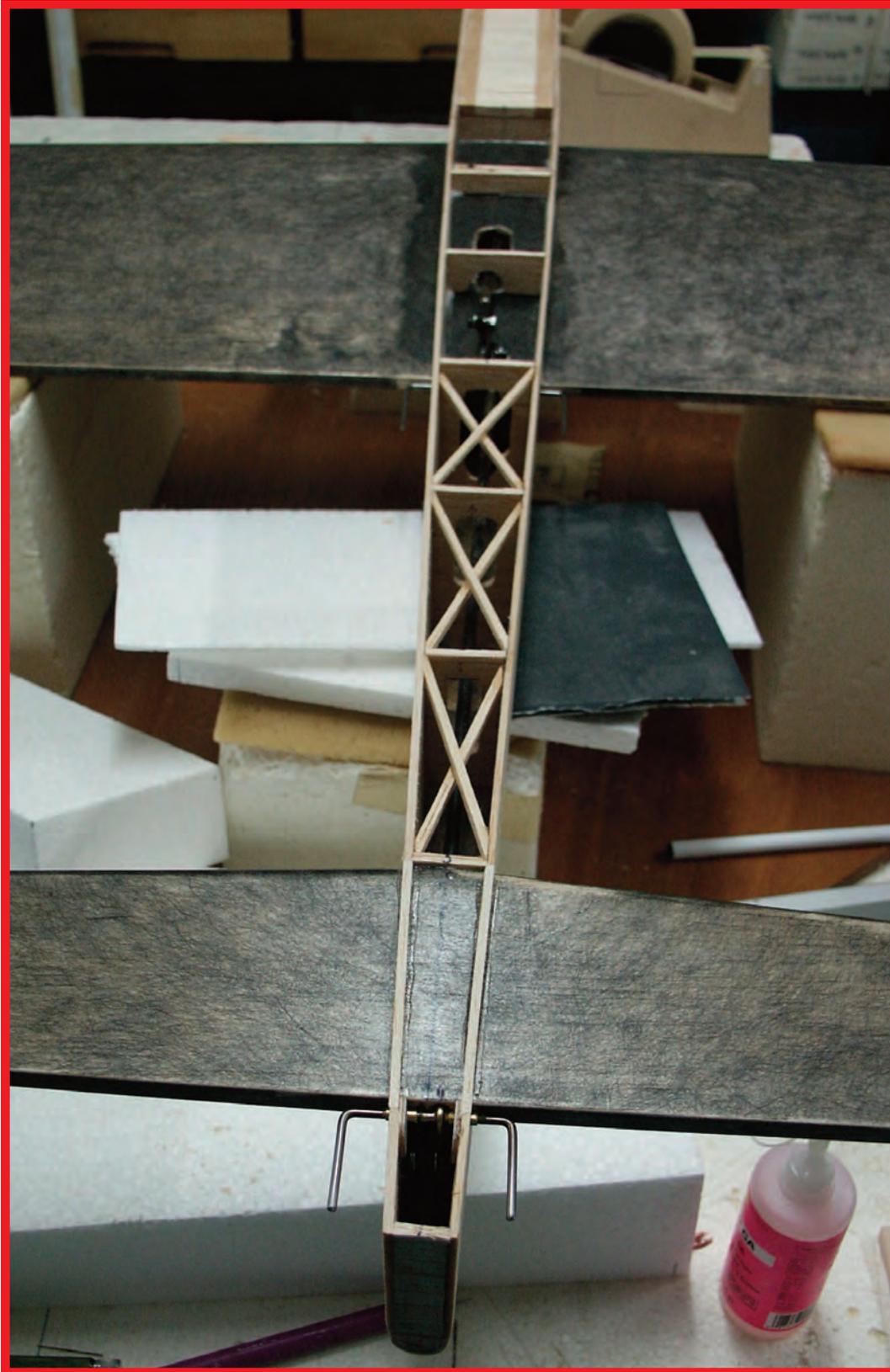
After the wing has been accurately installed and glued, the bottom fuselage saddle piece is glued in place. Note that no shimming or sanding is required to achieve a perfect wing fit into the fuselage. Hunt photo.



Oosa-Amma. The ship was just barely crawling over the tops of the loops that form the eights, and I was sure that it would stall and fall in on him at any moment. It didn't, and Gene received a huge ovation for his efforts and a big hug from Kitty. Gene's impromptu deadstick "airshow" was one of the most impressive things I've ever seen in modeling.

The Build

The Classic rules allow for some modifications to the internal structure, so long as the outside dimensions and the character of the plane are not altered. I opted to use a triple-section, fully-cored foam wing, where the original had a solid core foam wing. I also decided to go with molded top and bottom shells in place of carved and hollowed blocks.



The bottom fuselage shell has already been installed at this point. One eighth square balsa crossbraces are fitted between the formers as shown before the top shell is installed. These braces add tremendous rigidity to the plane. Hunt photo.

allow the tank to be shimmed upwards by $\frac{1}{4}$ inch if required. Other than those internal mods, the ship is an exact airframe copy of the original. I also changed the paint scheme so that I wouldn't have to go through the teasing that Gene endured!

Other than the mods to the bottom of the fuselage to accept the Aero Products rear exhaust muffler (which will be the subject of a separate how-to article in these pages), the build sequence is the same as for most any foam wing-equipped model, so I won't go into a "Glue tab A into slot B" dissertation. And, while this model is not as simple to build as a profile stunt trainer, it is a relatively easy to build a built-up ship and would be a good choice for a first full-bodied model.

I've included a lot of photos taken during the build, so most questions will be answered by studying those. If anyone building this ship has any question during construction, please feel free to call or email me, and I'll do my best to answer them. My phone number is (610) 746-0106, and my email address is robinhunt@rcn.com.

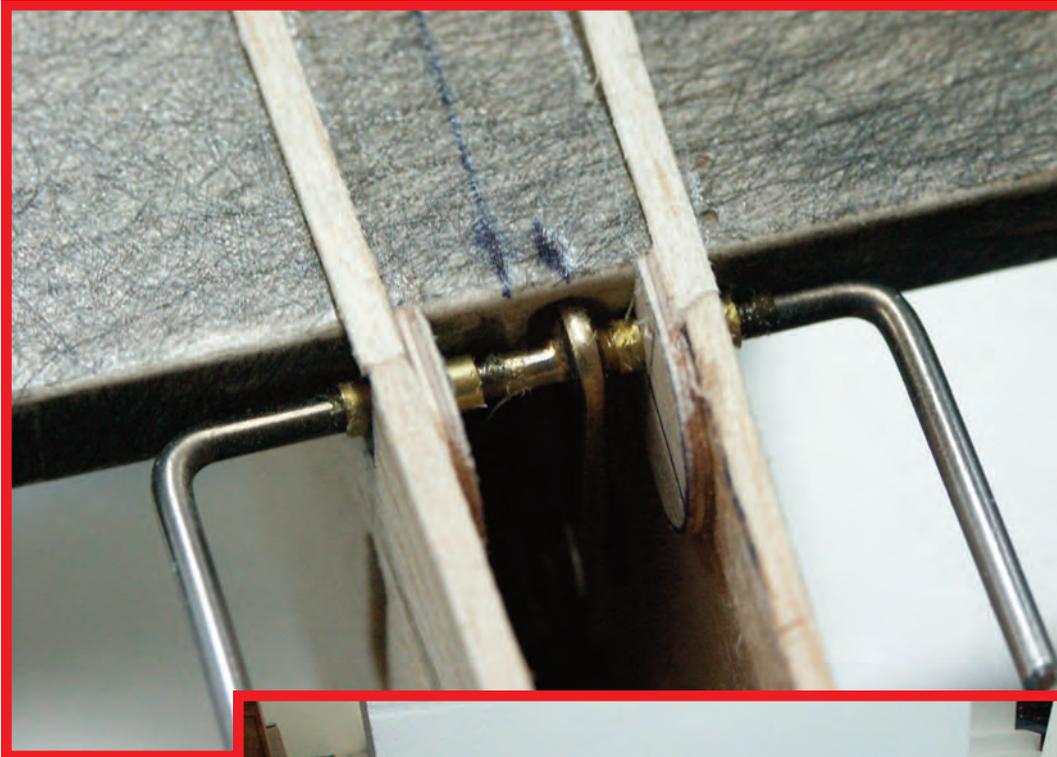
My Stunt Machine I (the urge to write Oosa-Amma here is almost overwhelming...) came out weighing in the mid-40-ounce range. I flew it with the glow engine only a few times before deciding to

Naturally, I also added adjustable leadout guides and an adjustable tip weight box.

The original model had landing gear glued permanently into the wing, and I made them removable on my ship. A fully adjustable control system with a 4-inch bellcrank was used, and that system was purchased from Tom Morris. I initially built this model to accept an Aero Products PA 40 R Merlin rear-exhaust engine. The engine bearers aft of the firewall were relieved to

convert it to electric power. I retrofitted it with an E-Flite Power 15 motor, a Castle Creations Phoenix 45 ESC, a will Hubin FM-9 timer, and a Hyperion 4S 2,500 mAh 25C LiPo battery.

An APC 11 x 5EP prop is currently on the ship and seems to be a perfect choice. The all-up weight with those components on board is 46 ounces! That's very light on a 620-square-inch wing. The model performs extremely well, especially in wind with that setup. I highly recommend powering this model with that system.



Left: To ensure that the elevator horn will not separate from the back of the stabilizer, Bob has installed plywood horn retainers that glue to the fuselage sides. Hunt photo.

Below: The construction is nearing completion here. The top shell has been installed and the hollowed balsa tail block has been installed. This is not a difficult plane to build, but it needs to be built light! Hunt photo.



Below: In this close-up of the tail assembly the slot for the elevator travel adjustment can be seen just under the elevator horn arm. Tom Morris can supply a fully adjustable control system for this plane. Hunt photo.



The thing that impressed me most about the flying qualities of this ship is the elevator authority.

The model has a very quick and effortless turn, even in high wind conditions. With such a quick turn you would think that the model would be "touchy" or oversensitive to control inputs. Not so with the Stunt Machine I; it feels very solid and groovy but has an effortless turn. I've been told by many, who have either flown twin rudder designs or have retrofitted tip plate onto the ends of the stabilizers of their ships,

that they have experienced the same feel from their models. Apparently, the twin rudders yield better elevator authority without making the model sensitive. I like the feel so much that I've incorporated twin rudders into my new twin design.

I have asked the powers that be at PAMPA to keep track of how many plans for this model are sold, and that the profit from those sales go into the Junior FAI fund in Gene's



Above: Bob chose to finish his rendition of Gene's ship with DuPont ChromaBase paints and clear. He says that this is one of his all-time favorite flying models! Hunt photo.



Above: The tunnel treatment to accept the rear exhaust PA 40 Merlin engine that was initially installed will be covered in a near future how-to. Hunt photo.

Bill Werwage and Bob served as the warm-up pilots for the judges at the 2013 FAI Team Selection in Muncie. Bob loaned his well-traveled Genesis Extreme to Bill to fly. Bob chose to fly his Stunt Machine I/Oosa-Amma. Photo by Allen Brickhaus.

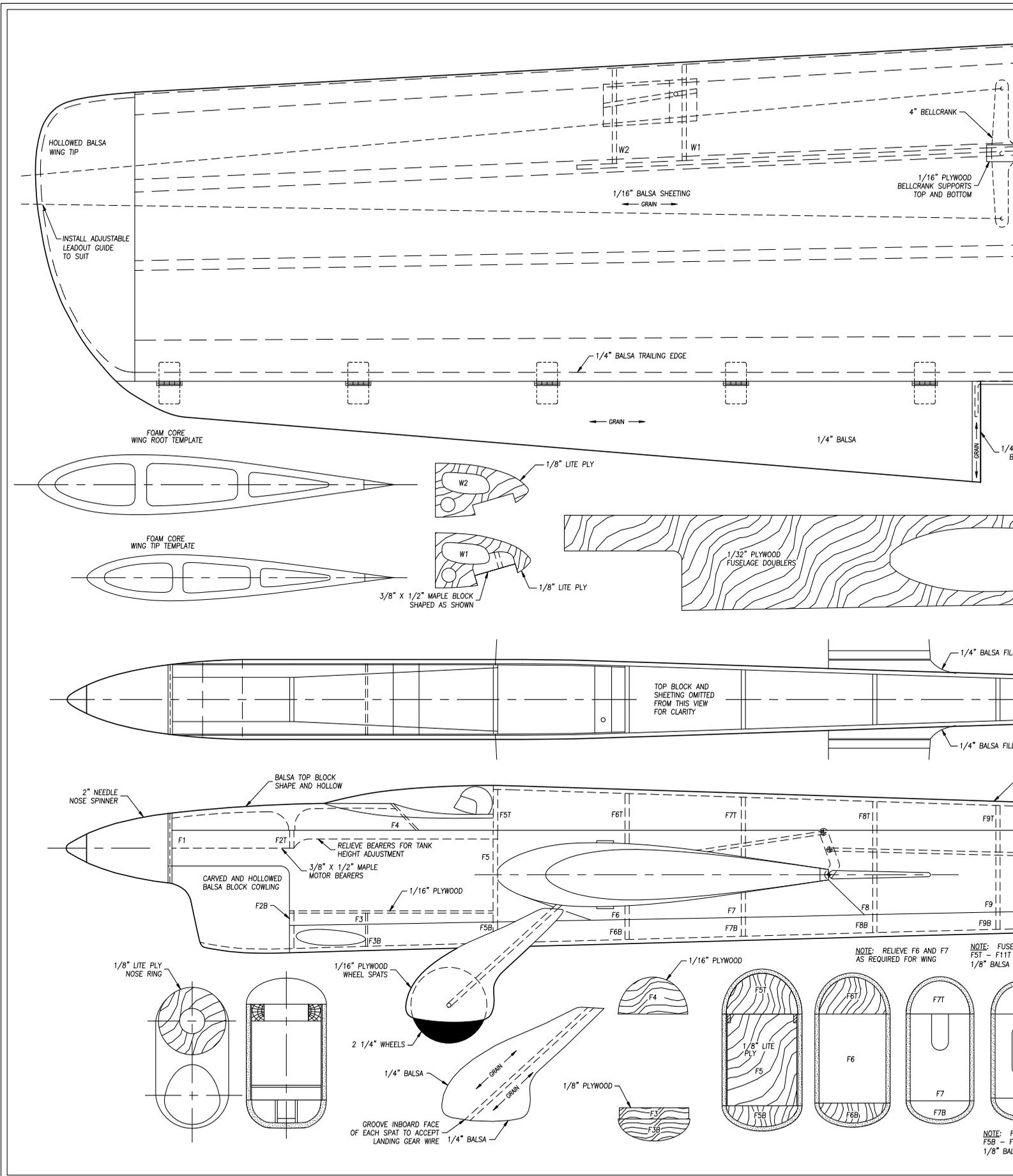
name. I think he'd like that.

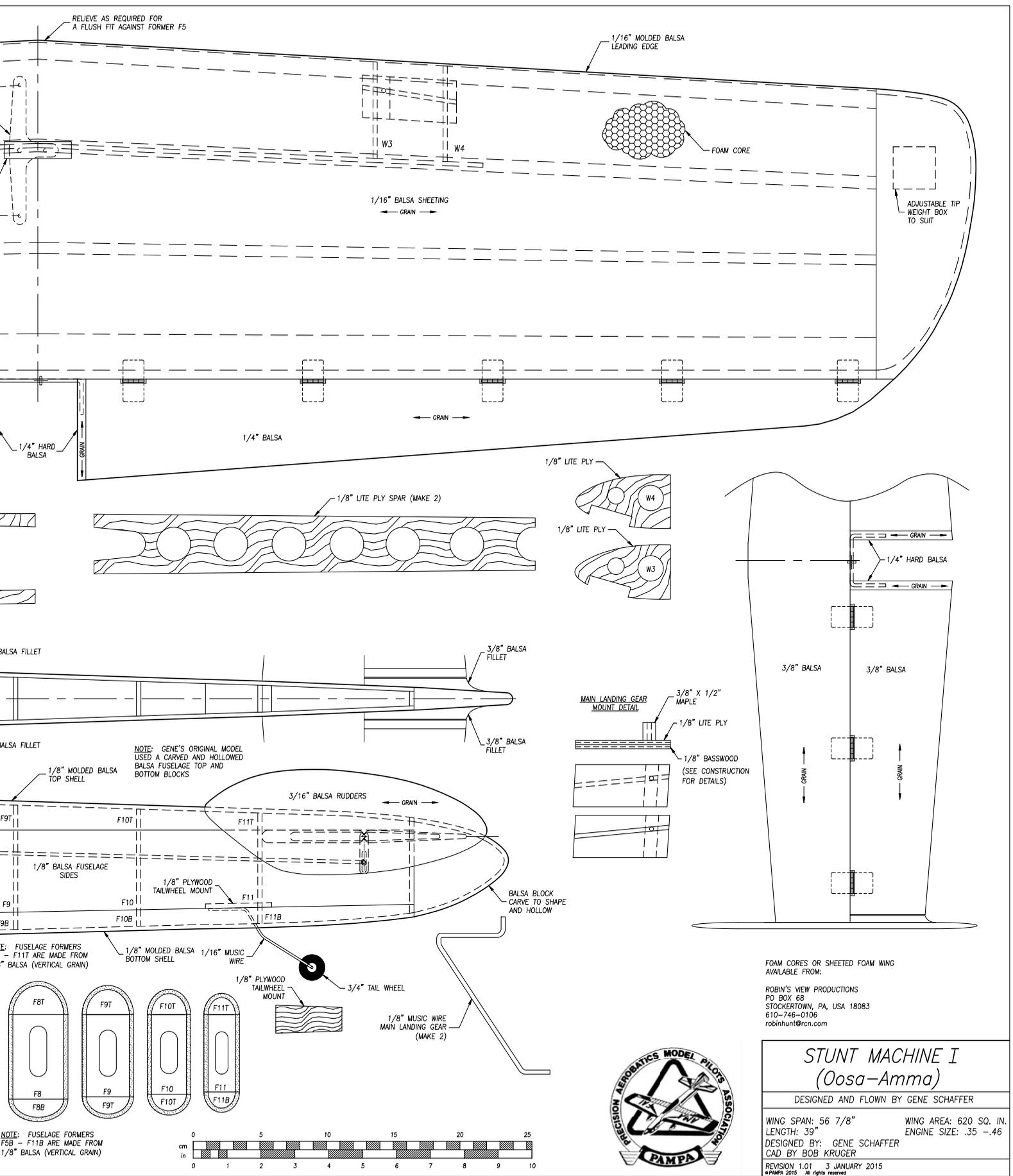
Special thanks go out to Joel Costantino for the use of his professional spray booth and for his expertise in applying the Chroma Clear over the Chroma Base colors. He is truly an artist with a spray gun!

Thanks also go out to my very good buddy, Bob Kruger, who did the outstanding CAD plans from the pencil drawing I sent him. *sw*

—Bob Hunt

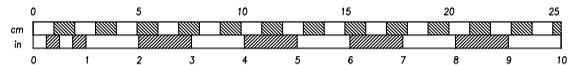
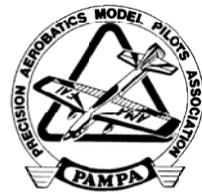




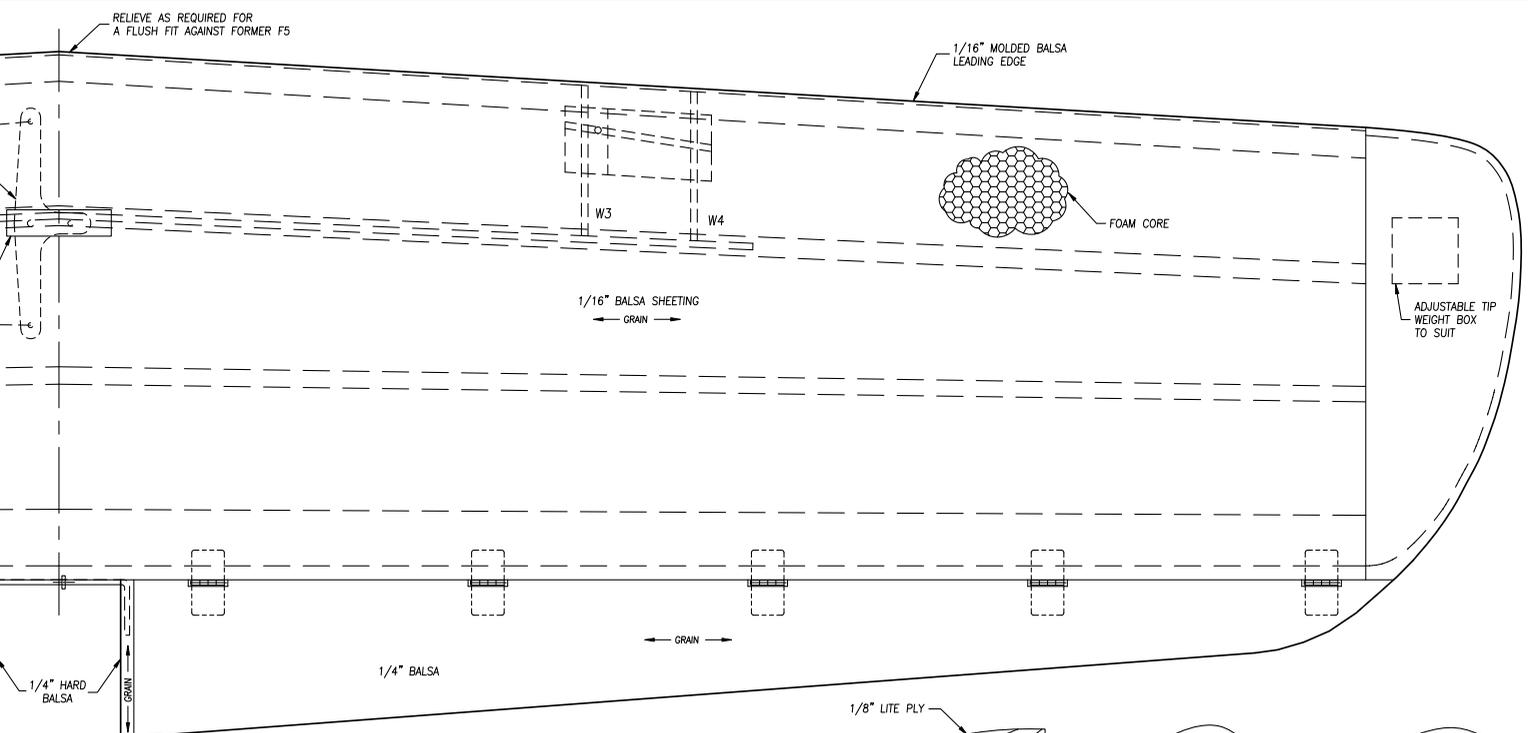
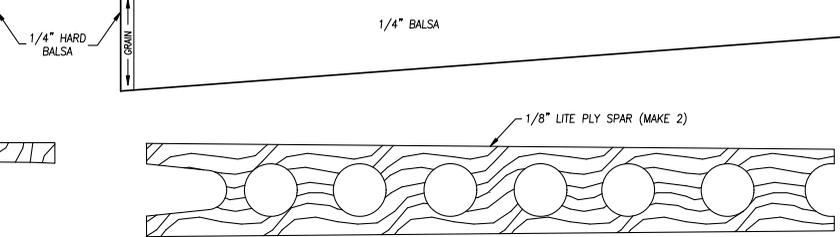
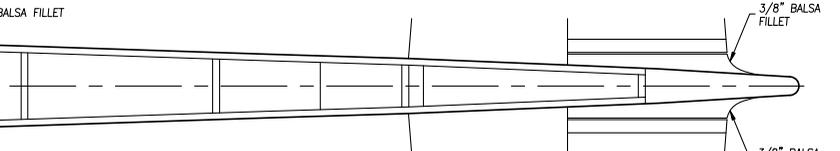
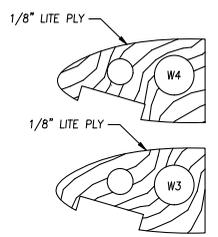
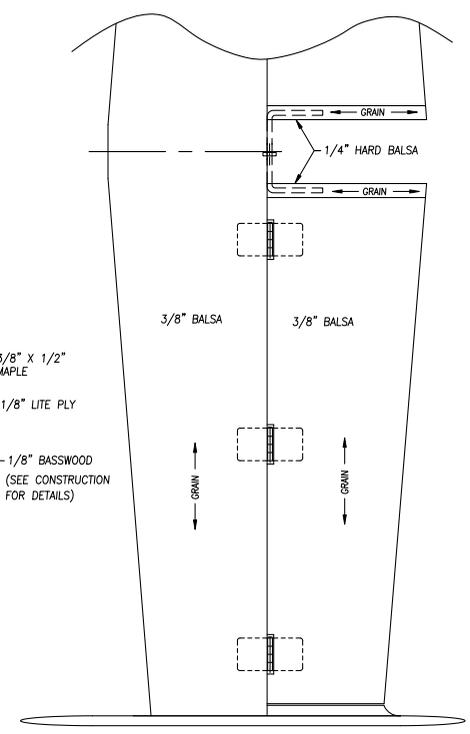
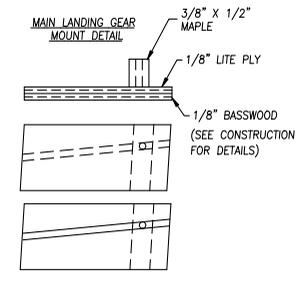
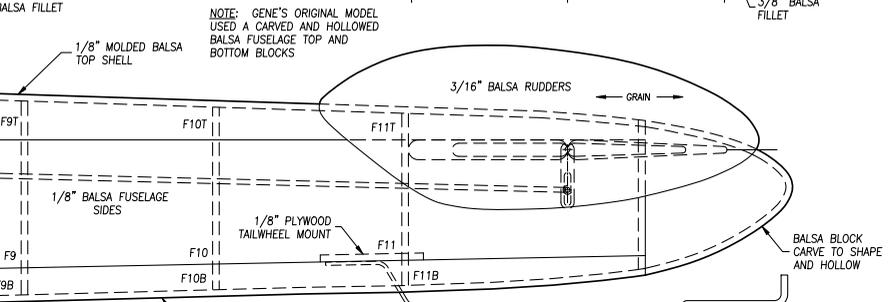
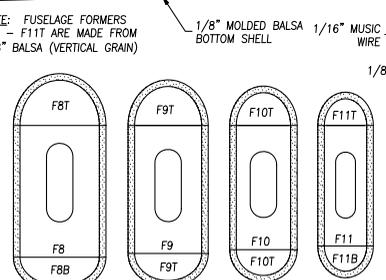


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DESIGNED AND FLOWN BY GENE SCHAFFER	
WING SPAN: 56 7/8"	WING AREA: 620 SQ. IN.
LENGTH: 39"	ENGINE SIZE: .35 -.46
DESIGNED BY: GENE SCHAFFER	
CAD BY BOB KRUGER	
REVISION 1.01 3 JANUARY 2015	
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NOTE: FUSELAGE FORMERS
F5B - F11B ARE MADE FROM
1/8" BALSА (VERTICAL GRAIN)



The “New Wave” Stunters

by Bob Hunt



styling trend to the event. In fact, the jet-styled model became quite prominent. Lew won the Nats with his jet-styled ship in 1961 and '62, and Bob won a Nats with each of his jet-like stunters. He used the Sting Ray to capture the Open title in 1963 and the Eclipse in 1965.

Those designs kicked the door open to an onslaught of jet-styled models. The late 1960s saw a number of jet-styled models, some of which were semiscale versions of full-scale jets, and some which were fictitious shapes featuring very modern military aesthetics.

The 1960s ended with a win in Open by Bob Lampione with a very scalelike F-86D Sabre Jet stunter. In fact, the 1969 Nats was a showcase of both semiscale and original-concept jet-like models.

The one model that stopped the show at the 1969 Nats in respect to modern design and paint concepts was Dave Gierke's Novi Four. It was not jet styled, but it was very futuristic, and everyone swarmed around it when Dave first brought it onto the field. It was Jerry Worth who first used the phrase “New Wave” to describe this type of model. It was

certainly the first of its kind, and it had a huge effect on the event for the next several years, because many other designers tried to capture the flavor of Dave's styling in



Throughout most of the 1950s and the early 1960s, the most commonly seen Stunt models at Nats competitions had styling cues that came from either the Nobler or the Atom/Ares/Strathmoor camps. Of course there were notable exceptions to that.

Lew McFarland's Shark 45 and Bob Gialdini's Sting Ray and Eclipse designs brought an early “Jet”
Stunt News 22





Novi Four in mind when he sketched out the fuselage shape for his new twin-rudder design. Gene even borrowed the red, white, and blue paint scheme, although he changed the actual trim pattern somewhat. Other notable “New Wave” models from the late 1960s were Jim Kostecky’s Talon and Formula S, Jerry Worth’s Apteryx, LeRoy Gunther’s Galaxy, and Don Bambrick’s Ultra Sonic. I’m sure there were others, but these are the models that influenced many of us in that timeframe, and from that point forward many of our models featured similar-styling cues to those futuristic designs. I know that my series of Genesis designs were inspired greatly by them, and the same is true for many of Bill Simons’ planes. Another landmark design, Les McDonald’s Stiletto, was also a product of this new type of aesthetic thinking. In an event that is

their subsequent “originals.”

One model that can trace its basic appearance to Dave’s masterpiece is the model presented as this month’s *Stunt News* construction feature. There is no doubt that Gene Schaffer had the

fiercely traditional, the trend set by Dave was significant. He moved the paradigm of design a good bit. *sw*

—Bob Hunt



2014 Western Kentucky Illinois Stunt Champion

This year's contest celebrated the memory and legacy of our fallen friend, Allen Brickhaus. I have attended this contest dating back to the days when it was held in St. Louis due to lack of a flying site, except for one or two years when job situations intervened.

This year, my son, Ben, and I (Beth's new job prevented her from attending) left Friday morning, planning to get some practice before supper. I was apprehensive about what our emotions might be without Allen being there, but I feel confident saying that everyone who was able to attend came away blessed. Charlie Reeves enlisted the assistance of Jim Lynch to run the contest, and with the help of a great bunch of judges, they did a

wonderful job. I told Charlie and Jim they did Allen proud, and I'm sure he was smiling.

For those who are able to arrive Friday, there is an annual tradition of having supper at Charlie and Mrs. Nancy's beautiful home. The ladies provide a fantastic meal; if you come away hungry it's your fault. It's a great night of hospitality, food, and fellowship. We also had the opportunity to visit Charlie's well-supplied shop.

Saturday

Saturday's events included Old Time, Nostalgia 30, Profile, Basic, and Beginner. We had good weather—hot, but not too



y/Southern nships

by James Mills

windy. The lone flier in Basic flight was my son, Ben Mills, who flew the entire flight without assistance (I stood on the outside of the circle), and is very close to being able to complete the entire Beginner program.

Beginner had three contestants, with Ed Palacios placing first, followed by Andrew Saunders, and Bill Gray. Profile had 16 fliers, with Eric Taylor placing first, followed by Tom Dixon, and Mike Schmitt. I believe we had the only crashes of the weekend in Profile and Beginner; the ships in each case were easily repaired.

Old Time and Nostalgia 30 were also well represented. Old Time had five fliers, with Jim Lee coming out on top, followed by Tom Dixon, James Mills, Dan McEntee, and Mike Schmitt. Nostalgia 30 had 15 pilots. John Simpson came out on top, followed by Tom Dixon, and Eric Taylor.



A
celebration
in the
memory of
our fallen
friend,
Allen
Brickhaus



Above: Charlie Reeves helped Allen Brickhaus run this contest for many years with, and now carries on the tradition as the CD.



Left: Jim Lee discusses some of the finer points of his Gee Bee design with Bob "Sparky" Storick. If you haven't had the opportunity to see this plane in person, it is the definition of cool both on the ground and in the air.

and beans were awesome, dude! (You missed out.)

Sunday

Sunday morning began with a devotional given by Jim Lynch. Jim's message was very moving, with many smiles and nods of acknowledgement, remembering Allen while recalling some of the lessons he

learned from our late friend.

After Jim's talk we began flying Intermediate, Advanced, and Expert. During the previous night some storms had passed through, and there were more in the forecast, but all flying was completed in good time.

Intermediate had four contestants, with Leroy Polk placing first, followed by Charles Fowler, Ryan Taylor, and Ty Marcucci. Advanced had eight contestants. Steve Drake took first (and will probably be hearing the chants, "Move up."), followed by Jason Pearson and Mike Waldron. Expert saw 11 pilots, with Matt Newmann placing first, John Simpson second, and Eric Taylor in third (that guy was on his game this weekend).

This event always has some very pretty planes displayed.

Jim Lynch was gracious (and trusting) enough to loan his Super Ares to Zuriel Armstrong and me for Nostalgia. It's a pretty airplane that also flies very well. If I had a couple of weeks with it, I could make it mine (although after flying electric for a while now, it was a little hard concentrating with all the noise on the end of the lines).

I would be remiss to not mention the great support of the Paducah club providing lunch at the field. The only charge was a donation bucket at the end of the chow line. Saturday, you had a choice of a hamburger/cheeseburger or catfish, along with fries or hush puppies. I need to mention this for Louis Rankin: the ham



Above: Dan "I Do My Own Stunts" McEntee and Mark Hughes teamed up to make the trip from St. Louis. They are fun to hang out with and compete with.

Below: Ty Marcucci made the trip from Alabama. His Cavalier served him well in Nostalgia 30 and Intermediate.

We also had special awards, either chosen by the judges or fellow pilots. Louis Rankin won the Oops award for having memory lapses while flying the pattern (Zuriel was happy to lend his support). Jim Lee won the Pilots' Choice award for his Gee Bee. If you haven't seen this plane in the air you are missing out. Larry Robertson won the Best Warbird trophy for his Mustang.

I mentioned at the beginning of this write-up that the theme of the weekend was a memorial to Allen. It was posted on one of the Stunt sites that the weekend felt more like a celebration than a contest, and I can't think of a better description. Everywhere you went there were people swapping stories about time they shared with Allen.

We also had the opportunity to visit with Mrs. Kathy, and I hope we blessed her as much as she blessed us. I mentioned that Jim spoke about some of the lessons he gleaned from Allen. Jim noted that one of the greatest lessons was that the people are giving the greatest gift they have, their time. Once we spend it, it's gone.

I'd like to mention another lesson I learned that was brought home to me at a family conference my wife and I attended this past





Jo Ann Lynch (L) and Kathy Brickhaus took care of score tabulation and kept us all "in line. Kathy received many hugs, and heard stories of time spent with Allen from his many friends. I hope we blessed her as much as she blessed us.



Steve Drake flew his profile Cavalier very well, taking home hardware in Advanced as well as placing high in Profile and Nostalgia 30.



Above: Mike Schmitt (my fellow Bears fan) is sporting a new Stiletto after the loss of his Eclipse in St. Louis. Mike used the Stiletto effectively in Expert and Nostalgia 30, as well as having it voted Best Nostalgia 30 model.

Left: Dennis Vander Kuur has collected several trophies the past few years with his PA/pipe-powered Legacy. Dennis and Mike Schmitt make a good team, traveling together to contests every year.

weekend. One of the speakers made the comment that the happiest people in the world are givers. Givers give of themselves, not just material things. They are encouragers who look for solutions rather than focus on problems. Allen was one of the best examples of a giver I have been blessed to know.

I encourage you to clear your calendar for next year and come celebrate with us.

A contest of this size requires lots of manpower. Here is a listing of all those who judged or served in other necessary capacities: the Basic Flight judges were Paul Taylor and Wes Eakin; the AMA



Our PAMPA VP, Matt Newmann flew his new electric design Enterprise. His new plane has a very nice paint scheme; the Eagle on the bottom is very cool. Matt had the good fortune of having a fellow pilot sign up twice in Expert and throw off the flight order (sorry dude, I think I needed more caffeine that morning).





Matt has his game face working during an official on Sunday.

Beginner judges were Paul Taylor and Wes Eakin; the Profile judge was Roland Trevino; the Nostalgia 30 judges were Matt Neumann and Charles Reeves; the Old Time Stunt judges were Jim Lynch and Mike Stinson. Registration on Saturday was handled by Randall Hopkins and Phil Rudd.

The AMA Intermediate judges were Jason Pearson and Wes Eakin; the AMA Advanced judges were Mike Stinson and Zuriel Armstrong; the AMA Expert judges were Jim Lynch and Charles Reeves. Registration on Sunday was handled by Jo Ann Lynch and Phil Rudd. Weighing and pull-testing both days was handled by Doug Vasseur; the cooking was handled by Jim Nygaard, Jim McBride, Mike Woods, Terry Herrin, and Jerry Smith; tabulation both days was handled by Jo Ann Lynch with help from Kathy Brickhaus and Nancy Reeves; the score sheet runners were Angela Pearson, Ben Mill, and Ed Palacios.

By the way, the results from this contest were published in the Contest Report section in the November/December issue of *Stunt News*. ^{SN}

—James Mills



Ronnie Thompson flew his ST 60-powered Strega to a very close fourth place in Advanced.



Here is Ryan, the younger member of "Team Taylor" with his profile Tutor II. Ryan is very talented with the old-school camera and film.



Above: John Simpson is a very tough competitor with his own classic legal-design Cavalier. He made his presence felt in Expert and Nostalgia 30.



Below: Larry Robertson won the best warbird with his version of Paul Walker's P-51. Larry's building and finishing skills are first class.

Left: Dan McEntee provides a launch for Mark Hughes' original design Macchi-Castoldi. Mark is always in the hunt with this bird.



Fellow Missourian Dave Tribble has a great flying combination with his ROJETT-powered, original-design Desperado (maybe he's an Eagles fan).



Above left: Former Nats Advanced and Open Rookie of the Year winner, Eric Taylor, continues to have a winning combination with his Katana, placing third in a tough Expert class.

Above right: Jason Pearson purchased Allen's Savoy and placed second in Advanced. It was a nice tribute to our friend.

As you can see, we had a great turnout for the weekend. I'm sure Allen was smiling.





Above: Jim Lee took the top spot in Old Time, followed by Tom Dixon (that's Leroy Polk standing in since Tom had to leave before the awards ceremony), and James Mills (that's me!) in third.



Above: Our Beginner winners were Ed Palacios in first, Andy Saunders in second, and Bill Gray in third.



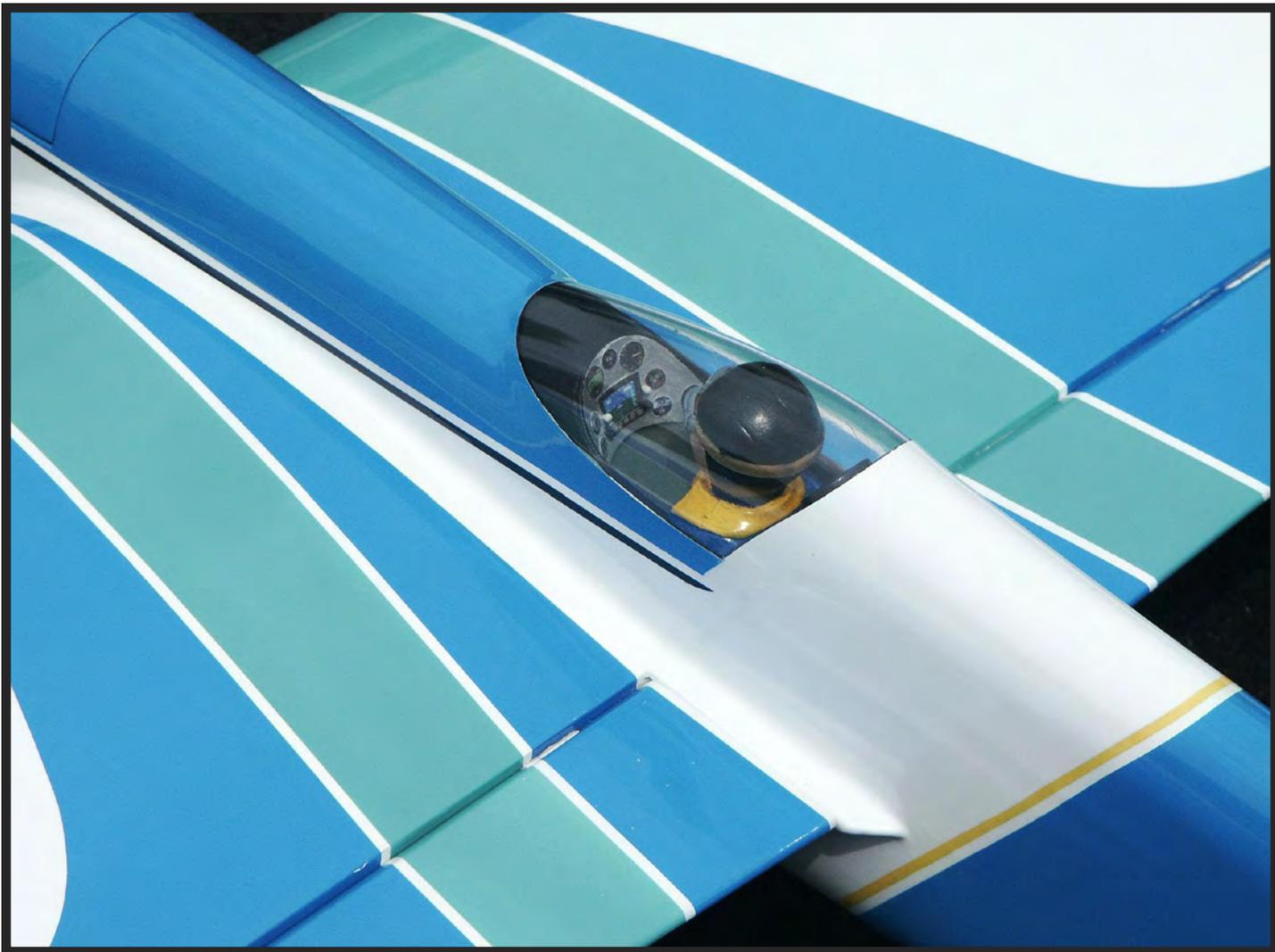
Left: The top three fliers in Profile were Eric Taylor in first, Tom Dixon (with Mr. Polk standing in again) in second, and Mike Schmit in third.



Left: First place in Intermediate was Leroy Polk (standing in for himself), followed by Charles Fowler in second, and Ryan Taylor in third.

Below: Our Advanced winner was Steve Drake (time to move on up dude), followed by Jason Pearson in second, and Mike Waldron in third.





Stunt News How-To

Installing Perfect Fillets

by Bob Hunt

One of the first things a savvy modeler will examine when seeing a new ship is how well the fillets are installed. These are troublesome for many to properly install, so when a perfect set of fillets is seen on a new ship, the respect is great. Actually, fillets are easy to install if you have the correct materials, tools, and technique.

One of the common misconceptions is that fillets should be installed using the tip of a finger. The tip of your finger should *never* be used to form a fillet, *or to smooth one* after it has been installed.

Your finger does not supply the perfect, consistent shape for a fillet, and running the tip of your finger over a freshly installed fillet will only seal the surface over. You want an open-pore surface to allow the finish some “tooth” to grip the finish without “bubbling.”

Actually, your finger also contains lanolin, and that hinders paint adhesion, too. Keep your fingers out of your fillets

throughout the construction and finishing of your model!

I have used a variety of fillet materials over the years. For many years I used the SIG product, Epoxolite, and it worked very well. That product was actually just a two-part mix of epoxy with a lot of phenolic microballoons mixed into one of the parts. It worked well, but was difficult to sand after the epoxy had completely cured.

For the past 12 or so years I’ve been using a product called Super Fil. This is a two-part, epoxy-based product that is mixed 2 to 1 by weight or volume. It is light blue in color when mixed, and is very easy to sand when cured, but also very strong and crack resistant.

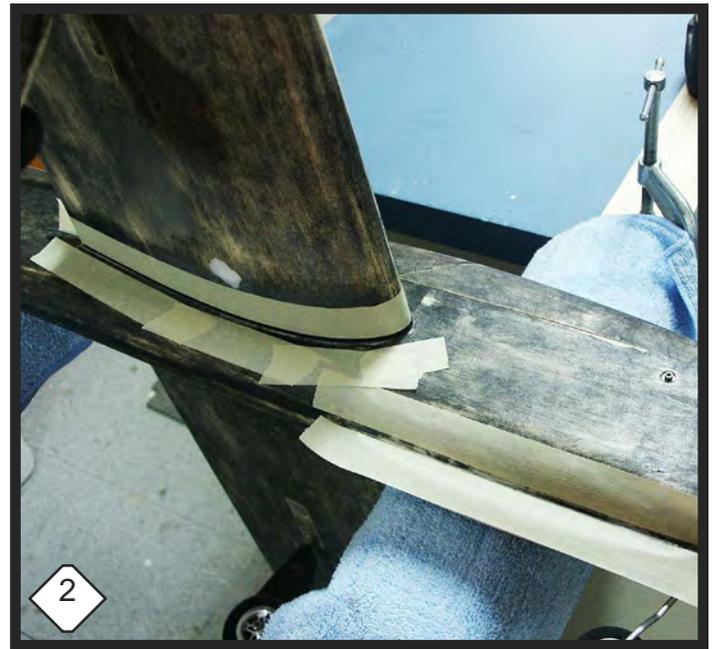
Super Fil is used on many homebuilt full-size airplanes, and it is available from Aircraft Spruce & Specialty Co. The website address for Aircraft Spruce is www.aircraftspruce.com. Super Fil is available in several size containers. We would typically use the smallest containers that they sell.



Super Fil is an excellent material from which to form fillets. It's available from Aircraft Spruce & Specialty Co.

Fillet installation

Be sure your model is clean and dust free, especially in the fillet areas. Make up some fillet tools as shown in Photo 1. These tools can be made from $\frac{1}{32}$ - to $\frac{1}{16}$ -inch thick plywood. Make up as many as needed to form the various size fillets on your ship. Typically I use a $\frac{1}{4}$ - to $\frac{3}{8}$ -inch radius tool for my wing fillets and a $\frac{1}{8}$ - to $\frac{3}{16}$ -inch radius tool for the stabilizer and fin/rudder fillets.



Next, use masking tape to protect the areas on your model outside of where the fillets will be installed. The tape will prevent the Super Fil from making a mess on the sides and surfaces of your model. The tape should be placed just outboard of where the edges of the fillets will extend.

See photos 2 and 3.

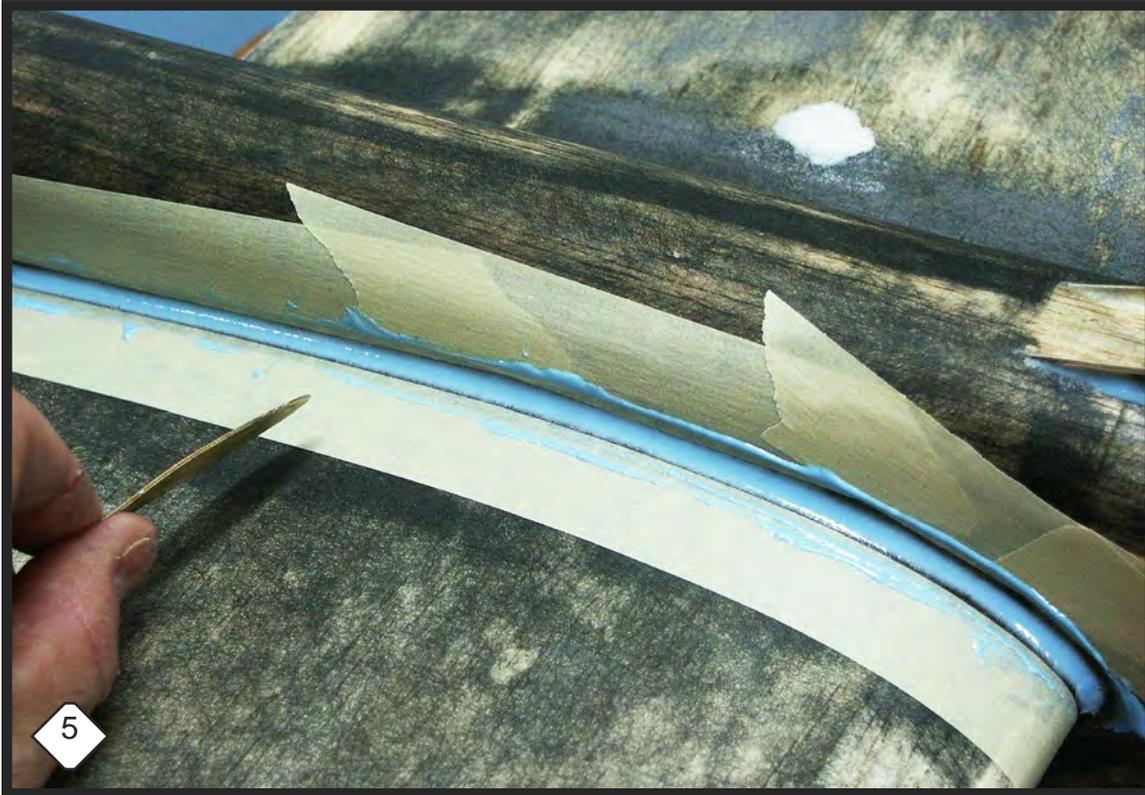
Mix up a batch of Super Fil and use the appropriate radius tool to apply the material into the fillet area. Do one fillet at a time. See photo 4.

Once there is enough material on the model to form the fillet without voids, use the radius tool to smooth the fillet from one end to the other in one smooth pass. See photo 5.

Carefully remove the tape and scrape away any excess filler. Resist the urge to run your finger across the fillet! See photo 6.

Continue in this manner until all of the fillets have been installed. I like to install all of the fillets on the bottom of the model in one session, and then install the fillets on the top side of the model in a separate session. In that way I remove the chance of accidentally ruining a freshly installed fillet.

After all the fillets have been installed, use a piece of #220-grit sandpaper wrapped around a dowel of appropriate radius to sand out any



imperfections and smooth the fillets for finishing.

Again, do not let your fingers (or anyone else's...) touch the fillets after they have been installed and sanded.

Your reward for using this method to install your fillets will be a model on which the surfaces just seem to flow one into another. See photo 8. *SN*



Vintage Stunt Championships XXVII

Five Days: March 17 – 21, 2015

Pre-Registration Required.

VSC-XXVII (27) will be held at Christopher Columbus Park on Silverbell Rd., Tucson, Arizona between Grant and El Camino Del Cerro (see map).

VSC Headquarters Hotel is the Hotel Tucson City Center. A second hotel option is also available, see page 2 for details. Mention Vintage Stunt when making your reservation to get the room rate.

The Judges Meeting for all VSC judges will take place at the Hotel Tucson City Center on Mon. Mar 16, starting at 3PM.

Pilots meeting daily at 8:00 AM. Official flights start no later than 8:30AM.

Old Time Stunt (OTS), Ignition OTS and Ringmaster OTS will be held Tuesday & Wednesday, March 17 & 18, one round per day. OTS on asphalt circles, IGN & Ringmaster on grass. You may enter all three if you wish.

Classic & Super 70's will be held Thursday - Saturday March 19 thru 21; one round per day over three (3) days. The two highest scores will be added together for a final score and placing. The events will be run concurrently and the entries will be co-mingled on the circles. You may enter only one of the two events.

Classic & Super 70's Appearance judging will be held Wed. (Mar 18) starting promptly at **4:30PM at the Hotel Tucson City Center** (See map).

ARF's, ARC's, purchased, or borrowed models can compete in Classic and Super 70's, but receive a zero (0) for appearance.

No more than two contestants can fly the same plane in the same event. Example: Contestant 'X' and contestant 'Y' can fly the same plane in Classic but no one else. This goes for OTS, OTS Ign, and Ringmaster as well.

Ignition OTS - will be held Tue. & Wed. (Mar 17 & 18) on grass. Pilots meeting promptly at 8:00 AM each day.

Ringmaster OTS will be held Tue & Wed. (Mar 17 & 18) on grass. S-1 Ringmaster required, no BOM. This event will be held on a non-interference OTS. You may enter OTS, IGN OTS, and Ringmaster OTS if you wish.

Exhibition – We invite you to fly or exhibit something COOL, interesting or representative of any early era of control line. Exhibition to be held immediately after OTS on Tue & Wed. No pre-entry or fee required. Just show up with a current AMA license and show us something cool.

VSC Banquet - Saturday evening Mar 21 at a new venue, (See map). Cash Bar at 5:00PM and Dinner served at 6:30PM. This is a sit down dinner plus award presentations.

Entry Deadline: Friday March 6th, 2015. By this date and time we need to have received your entry. John Callentine's mailing address is on the registration form. Registration form is available for download at www.ccmaonline.org. Our policy is to return your entry fees if you have registered and cannot attend for any reason.

Shipping – contact us if you need assistance shipping models to VSC.

The Banquet sign-up is held open until after the start of VSC. If you wish to attend the banquet and have not signed-up, check with John Callentine at the flying site by **8 AM, Wed. March 18th**. Refunds for the banquet are handled by John Callentine **and cannot be made after 8 AM, Wed. March 18th**.

The Banquet info is on page 2 – We need to know your meal choice on the entry form. The menu choices are:

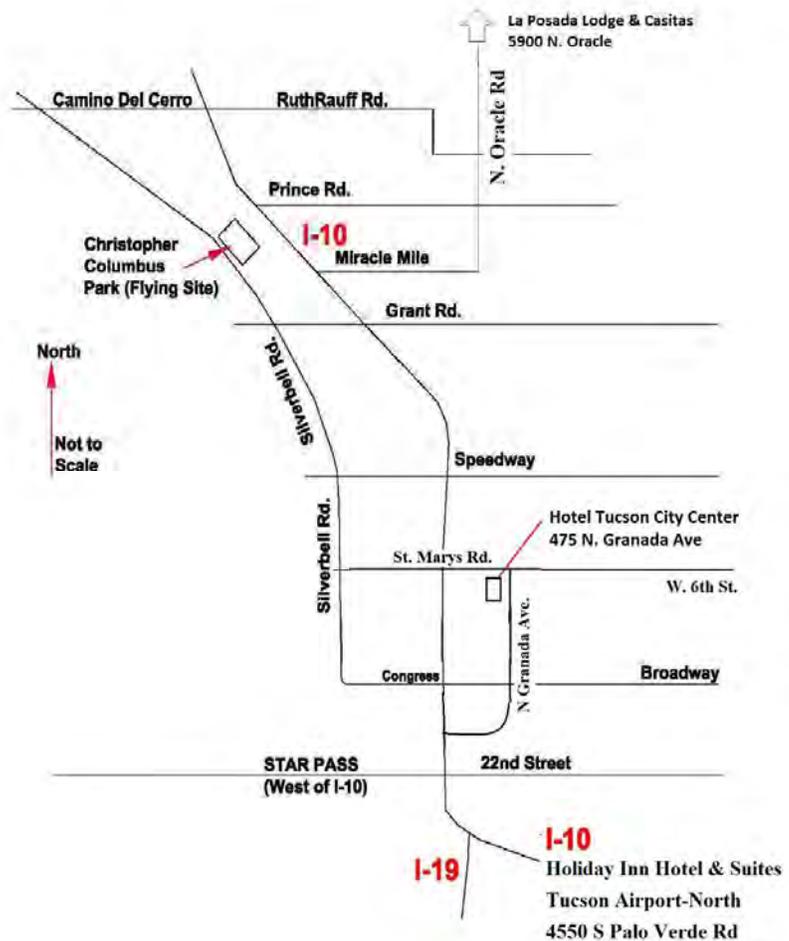
Beef, Chicken or Vegetarian. All meals include house salad, rolls, side vegetable, potato, dessert, coffee or tea.

Entry fee is \$20 per event – Please include address, AMA number, events entered, banquet attendance, and signature (required). If you have an email address, please list it so that John Callentine can send conformation that he has received your entry.

CD: Jim Hoffman
2658 W. Montgomery Drive
Chandler, Az. 853224
Home 480-897-0630
Cell: 480-329-3316
Email: windswept4@cox.net

Assistant CD: Leroy Black
25526 W. Rio Vista Lane
Buckeye, AZ 85326
Home: 623-327-9227
Cell: 623-326-4110
Email: Lindyle1@yahoo.com

John Callentine
5625 W. Owl Ridge Rd
Tucson, Az. 85745
Home: 520-743-7835
Cell: 520-631-5420
Email: Johncallentine@Gmail.com



ENTRY FORM IS ON PAGE 2

REGISTRATION FORM: VSC-XXVII (27) March 17 –21, 2015 (Five Days)

NAME: _____ AMA # _____
STREET: _____ CITY: _____ STATE: _____ Zip _____
EMAIL ADDRESS: _____ License Plate # and State: _____
Needed if you would like entry conformation (Only if staying at flying site overnight)

FOR ANY AND ALL EVENTS: I hereby certify that I have read all information accompanying the entry form, and that the model(s) entered by me will be built by me (if required) and flown in compliance with the current Competition Regulations (both AMA and PAMPA), and will previously have been successfully flight tested and proved to be airworthy in accordance with the Official AMA Safety Code.

Signature: _____

EVENTS ENTERED:

OTS @ \$20.00 _____ (Tues. 17th – Wed. 18th)
IGN OTS @ \$20.00 _____ (Tues. 17th – Wed. 18th)
OTS Ringmaster @ \$20.00 _____ (Tues. 17th – Wed. 18th)
Classic @ \$20.00 _____ (Thru. 19th – Sat. 21st)
Super 70s @ \$20.00 _____ (Thru. 19th – Sat. 21st)

ARF's, ARC's, purchased or borrowed models are allowed in all events, but, models entered in Classic or Super 70s receive a zero (0) for appearance points. No more than two contestants can fly the same plane in the same event. Example: Contestant 'X' and contestant 'Y' can fly the same plane in Classic but no one else. This goes for OTS, OTS Ign, and Ringmaster as well. For details refer to the Cholla Chopper web site; www.ccmaconline.org

BANQUET Selections (Sat Night March 21)

Beef Top Sirloin & Mushroom Demi-Glace _____ @ \$37.50, Names: _____
Chicken Breast Garlic Mornay Sauce _____ @ \$37.50, Names: _____
Pasta Primavera Aglio Olio (Vegetarian) _____ @ \$34.00, Names: _____

Entry must be received no later than Friday March 6, 2015
Make Checks Payable to John Callentine (Email Johncallentine@gmail.com)
Mail to: John Callentine, 5625 W. Owl Ridge Rd., Tucson, AZ 85745

Rules & Flyer – All are posted on the Cholla Chopper web site: www.ccmaconline.org. All rules can be printed or downloaded. We use PAMPA OTS rules. If you do not have internet access, please call & we will send by snail mail.

PAMPA OTS / OTS IGN / OTS Ringmaster - will run concurrently Tue & Wed (Mar 17 & 18).

- OTS will be run on two paved circles.
- OTS IGN / OTS Ringmaster will be run on two separate grass circles

Classic/Super 70s competition will run concurrently Thu, Fri, Sat (Mar 19, 20, 21).

- Three rounds, one round each day using all three asphalt circles.
- Two highest scores will be added together for the final score & placing.
- 25 pattern points will be included in the scoring per the 2011 – 2012 AMA Precision Aerobatics rules
- Appearance judging at Hotel Tucson City Center Wed Mar 19, 4:30 PM
- We will try to post the flight order at the Hotel Tucson City Center during appearance judging.

Builder of the Model (BOM)

- BOM rule, as it applies to VSC is posted on the Cholla Chopper Web Site
- OTS/OTS IGN-current PAMPA rules BOM not req'd, self-built model gets a 5 point bonus. No flap bonus is 5 pts.
- Ringmaster OTS - no BOM rule & no bonus for self-built models. S-1 Ringmaster is required.
- Classic & S/70 – No BOM. Zero (0) for appearance if the contestant did not build the airplane

Dinner & Awards Banquet - Sat Mar 21nd at The Holiday Inn & Suites, Tucson Airport, 4550 S. Palo Verde Rd, Tucson Cash bar 5:00 PM; Dinner 6:30 PM.

HOTELS (2 choices) Mention Vintage Stunt when making your reservation to get the room rate

Hotel Tucson City Center– 475 N. Granada Ave. Tucson, Az 85701 (520-622-3000)

- Located at I-10 and St Mary's, nearer to the flying site,
- Free full breakfast buffet @ 6:30AM and free happy hour 5:00 to 6:30 PM
- \$65 + tax 2 queens or one king suite (Must reserve by Feb 13, 2015)
- \$75 + tax 2 bedroom suite, 2 queens or one king + sleeper Sofa in the 2nd room

La Posada Lodge and Casitas – 5900 N. Oracle, Tucson Az. 85704 near to Tucson Mall. (520-887-4800)

- Nicer facilities, but slightly further away from flying site (suspect traffic might be heavy at AM rush hour)
- \$69 + tax per room per night for either a standard king or double queen guest room. (Must book by Feb 28, 2015)
- \$89 + tax per room per night for a Casita upgrade
- Free full breakfast buffet @ 6:30AM

IC Engines, Props, and Setups

by Brett Buck

Fuel viscosity

A few people have emailed me about my previous notation of fuel viscosity, like, “What the heck difference does that make, you moron!” and other such helpful commentary. Thinking about it, I can’t recall seeing a lot of what I consider fairly common knowledge about the vagaries of fuel flow, air flow (and leaks), venturis, spraybars, etc., in print.

Actually, about the only thing that my buddies (mostly David Fitzgerald and myself) have spent any significant experimental/developmental time on in the past 15 years or so is in the fuel and venturi system, particularly trying to ensure consistent fuel atomization and consistent fuel flow. Again, this involves the fuel viscosity, largely determined by the oil content, the drag in the fuel lines, and the details of the venturi and fuel input.

And as a recurrent theme, the supposed mystical effects of oil on the combustion process, with all the “fencepost wisdom” associated with it, seems to be largely nonsense. So, I have a multipart series about what I think we currently know about the topic. Some of it is guesswork—but my engine runs pretty well. There are bunches of other things that matter, like air or fuel going into places it’s not supposed to, the venturi, where the fuel/air is mixed, etc.

The most straightforward aspect is an air leak somewhere, and usually it is easy to fix.

Air leaks and you

The first and most obvious place you can have an air leak is somewhere around the venturi. On the test bench, or on the ground, the engine should run at a nearly perfectly constant rpm. Most of them don’t; they tend to surge up and down. When we had Fox and McCoy needle valves with their incredibly sloppy fits, people quickly realized that it was leaking air and found ways around it, like using collet-type spraybars like the Super Tigre. In some ways, these simple spraybars through the venturi are better, because the only leak area that matters is through the threads (Figure 1).



Figure 1: Original Fox .35 needle/spraybar assembly. Only relevant leak path is through (sloppy) threads.

Modern engines, dating back to the ST.46 days, have tended toward metering the fuel in a spraybar behind the venturi and then introducing the fuel through a hole in the side. The intent seems to have been to improve the fuel suction for a given airflow rate by removing the bluff body aerodynamic drag of the spraybar in favor of a “true venturi” that measures (on the bench) better in terms of power for a given fuel suction—or conversely, lets you run a bigger venturi and still be able to adequately draw fuel.

I contend that this might have been a good idea at one point, and that it clearly provides some additional power in the simple steady state conditions of a test, but that it is a very bad idea in the unlimited power era. It’s certainly not necessary to get good performance in a stunt plane. But it can cause many more, and more complex, problems in flight. There will be more on that in a future installment (to give the numerous very vocal critics of my opinions time to line up their arguments).

The side-entry spraybar (used on the ST.46/.60, PA, RO-Jett) has many more spots for significant air leaks. This will result in speed variations on the ground and unpredictable performance in the air. The first approximation, once you set the engine (bench or in the airplane on the ground), the speed or mixture (4 or 2) shouldn’t change. There are a few effects of heat that can make it slowly speed up or slow down over the periods of tens of seconds, but for the most part it should just sit there.

The most obvious place to leak is between the case and the spraybar (Figure 2). On cast-case engines, this area has a slightly rough surface that seemingly flattens after a few cycles of spraybar removal. On bar-stock engines, it’s nearly a mirror-finish with a few minor machining marks.

You would think that this is a nearly ideal surface to seal, but, for whatever the reason, it’s not. David discovered this back in the days of the PA.40 and .51. The engine would sometimes surge up and down on the ground, and not a little bit, but maybe a few hundred rpm.

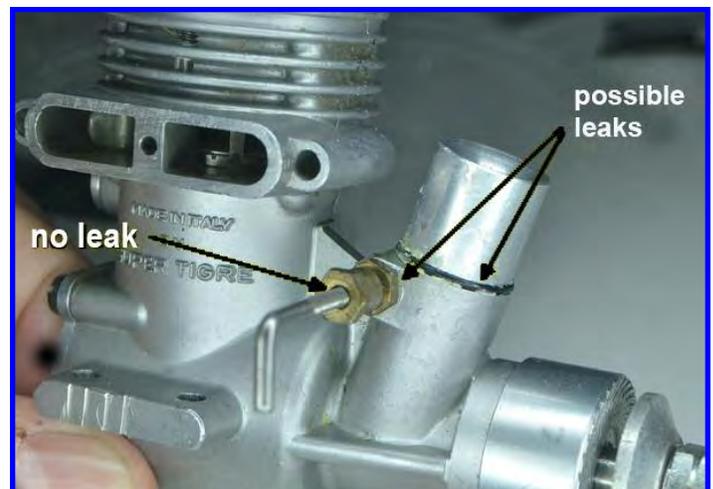


Figure 2: ST.46 side-entry spraybar and potential air leak areas. Note the original 1988 white silicone on O-ring.

After looking for leaks, particularly in the pipe, and finding none, he decided to seal the venturi to the case with silicone sealant. That instantly fixed it. As soon as I went to the PA (from the O.S. .40, which does *not* have this issue), I had the same problem and sealed the venturi—immediate fix. Same with *many* other people we have helped to get their engines running.

Interestingly, you can hear it easily on other people's airplanes. I mentioned on Stuka Stunt in about 2001 that once you know what to listen for, you can identify the people who sealed it up (a few) and those who did not (many) sitting in the pagoda at the Nats while doing something else. One of the guys with the most blatantly leaky systems took me to task for suggesting that it could leak, and how silly it was, and how that couldn't possibly be a problem.

And sure enough, his engine run was also all over the place in the air, maybe the worst I have seen at that level of competition. It was as though someone was randomly blipping the throttle. (As always, I was impressed with the skill required of him to compensate for it and still be successful.) When I had a similar problem (without knowing how to fix it) at the '97 Nats, I was about to withdraw! But there's no reason to live with it, nor is there any great nobility with trying to compete with a big problem that could easily be fixed.

I think you should just do it automatically; don't wait for a problem. Done correctly, it doesn't hurt anything and eliminates a problem source.

First, clean everything up perfectly, inside and out (Figure 3). Most people know the film-can trick. Put all the spraybar parts in a 35mm film can, fill it about halfway with your favorite solvent (I use lacquer thinner or anhydrous IPA), put on the top, and shake furiously.



Figure 3: Parts out of cleaner (35mm film can).

Clean the surfaces where the spraybar mates to the case, and clean very carefully around the ends of the spraybar with lacquer thinner. Remove any old silicone. I use the red, copper-filled type intended for automotive header gaskets. The heat resistance is unnecessary for this purpose, and probably for model airplane exhaust gaskets (see what follows), but it's easy to see so you know when you have removed it. Any little shreds should be removed from the engine venturi and spraybar "boss," and make sure that the spraybar is free of debris inside and out.

Use the little bottle brushes that come in the Sullivan fuel system cleaning kit or drugstore dental brushes to clean the spraybar on the inside (Figure 4). Don't just rely on squirting fuel or something through it. Run the brush through and make sure

you get it all, and any "hair" or fibers that might have gotten in there.



Figure 4: Use the Sullivan bottle brush and cleaner to clean inside—every time. You can also use the kind made for dental cleaning.

Then put a *small* bead of silicone on the fixed end of the venturi where it bears on the case (Figure 5). This is the fuel inlet side on the RO-Jett and ST, and the needle-valve side on the PA.



Figure 5: A bead of silicone around the fixed end of spraybar. This is a RO-Jett so it's the inlet side. It's on the needle side on the PA.

Insert the venturi and then start pushing the spraybar through. On the PA and ST, you have to push it in against the O-ring pressure. For the RO-Jett the O-ring is in the venturi bore and applies no force to the spraybar, which actually helps keep the venturi from tilting which is also significant.

Don't force it too much. If it is not lined up properly, the threads on the spraybar will cut off little bits of the venturi and leave the shards in the fuel path. Then push it the rest of the way in. Rotate it to line up the holes as normal. (You did mark which way the fuel outlet hole is, right?)

Then, very carefully apply a bit of sealant to the spraybar where it comes out of the case (Figure 6) and a tiny bit on the face of the nut, and screw everything down tightly. *Do not ... repeat, do not* get any in the bore of the spraybar. If you do, remove everything, clean out the spraybar with lacquer thinner and bottle brushes until it comes out clean, then do it about 10 times more. I would even be tempted to just toss the spraybar, because if there is any sealant inside, it can easily screw

something up. Once it cures, it's going to be almost impossible to remove.

Clean up the squeezed-out sealant with lacquer thinner. It tends to stick to everything, so be careful not to transfer it by using the same part of the paper towel over again. Wait overnight *if possible*, but I have used it in as little as maybe 15 minutes in a pinch. Done.



Figure 6: Sealant on the "free" side with threads. Needle side on the RO-Jett and ST; inlet side on the PA. *Do not* get it in the spraybar.

BTW, when tightening, use good quality wrenches that actually fit properly. Don't use pliers. You can get two 1/4-inch combination wrenches at Sears for a few dollars, and they won't bugger up the soft brass spraybar parts.



Figure 7: Tighten the nut (don't let the spraybar rotate out of position) and then clean everything up. The stuff gets everywhere if you let it.

The seal will last indefinitely if not disturbed. If you want to change venturis, start over at the cleaning step. I would also recommend, although it is tempting, that you *not* leave off the seal in a pinch just to switch venturis as a test. The difference

of sealing it or not can give you false indications that you will tend to attribute to the venturi which are actually just leaks.

Leaks around the venturi external seal

Another item to check for leaks while you are fiddling with the venturi is the O-ring. On the PA and ST engines, it relies on compression up against a shoulder. Sometimes, the O-ring "squirts out" under compression, usually at the rear where the compression is highest.

Needless to say, this is bad. On the ST, some of the stock O-rings had a flat cross-section which was somewhat resistant to the problem. Unfortunately, it also got hard as a rock after a while, and at the end I was using silicone sealant there, too. The ST arrangement was particularly bad in that there was a fuel manifold groove that went all the way around the venturi, and air leaks into the manifold caused all sorts of havoc.

On the PA and most STs (like the one above), the O-ring is round and is rather prone to squirting out. You can solve it several ways, but in most cases the problem is using an O-ring that is the right diameter but the wrong, too large cross-section. The center of the bearing surface gets up in the edge of the venturi where the corner is relieved, and slightly over, and slightly oily, and out it squirts.

For a while Randy Smith supplied a red silicone ring that was probably better than Buna-N, or whatever the black ones were made of, and it was just a tiny bit fatter and was particularly prone to this effect. Some venturis were made with a slight undercut (again, like the ST), and this solved it.

The RO-Jett doesn't have this problem, because it seals on the bore of the venturi boss rather than the end. It has a different problem in that there is a sharp end where it is chamfered, and you have to push the O-ring across it. It's almost impossible to put enough force on it to go in dry, so oil it up with something. But running across the sharp edge can sometimes cut the ring slightly so it doesn't seal perfectly. I relieve the sharp edge by burnishing it with a round screwdriver shaft (Figure 8). Then it goes in without any chance of it getting cut.

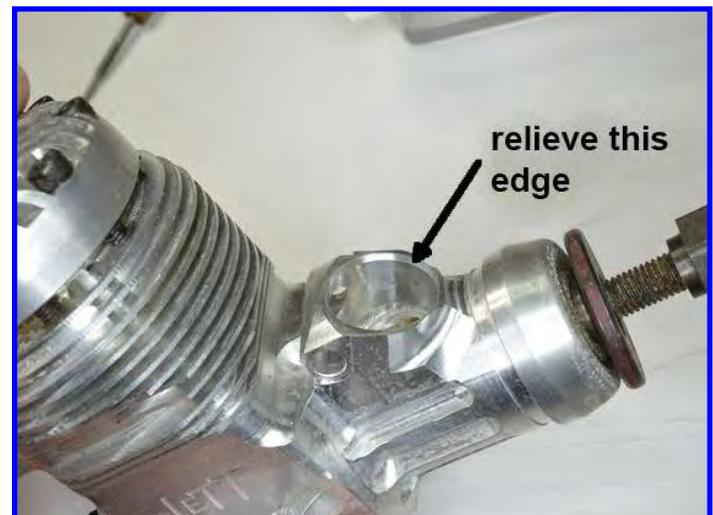


Figure 8: Sharp edge on chamfer in RO-Jett BSE case. Burnish this with a round screwdriver shaft, and use lot of oil when inserting the venturi. Make sure it actually goes into the bore and doesn't hang up on the corner.

The O-rings themselves don't need to be anything special. It's not as if anyone custom designs O-rings for model engines, and the application is not terribly demanding. Regular old Buna-N,

neoprene, etc. O-rings from the hardware store will work fine, assuming you can find the right size and cross-section.

O.S. Right Angle fitting—generalized evil

One arrangement to watch out for is the O.S. “Right Angle” fitting. It looks like a great idea, and the fuel line fits in the cowl much more neatly with no pinches. However, it is nearly impossible to seal. The right angle fitting is a donut that goes on the end of the spraybar. The fuel comes in from the edge and goes into a hollow in the back of the fitting, and is held on with an acorn nut. The end of the spraybar has some holes that let the fuel from the hollow into the bore of the spraybar, which is otherwise a normal (very good) O.S. “clicky” needle arrangement.

The problem is that this can leak air, leak fuel, or both, at almost random. And it’s nearly impossible to seal completely with any known method. The acorn nut can be sealed if you use silicone very carefully, but it’s possible to leak fuel between the spraybar and case from the “hollow,” and there’s no practical way to seal it up.

We discovered this one day when a local modeler went to lean out his engine and found that the needle was bottomed out, but it was still 4-stroking rich! We assumed the problem was a bent needle or defective seat, but when we tested it, it closed perfectly.

An interesting observation was that although it had clearly been injecting the fuel in three different places—the regular spraybar hole, the inner edge of the venturi, and in-between the case and venturi—it otherwise ran more-or-less okay, and until he switched fuel, the engine could still be needled acceptably

well. We put in a regular spraybar, and all of a sudden a whole bunch of issues that we hadn’t even noticed went away.

We had also been struggling with fuel and compression trying to alter the run a bit, to no effect. Now, the fuel and compression were mostly fine, and subsequent changes did exactly what was predicted. This was in the mid to late 1980’s, and it was this that made me realize that we were fooling ourselves that there was some subtle “engine guru” type issue with the compression/prop/fuel/plug, when it was the simplest problem ever. I very strongly suspect most of the fiddling and the sort of weird things we attribute to tricky problems are really very simple. If you fix the simple stuff, the weird problems tend to go away.

A final observation

Interestingly, the most straightforward and reliable stunt engine ever used is the OS .40VF, with a “crude” venturi (disparagingly referred to as a “restrictor”) with that horrible inefficient bluff body spraybar like a Fox.

You never needed to fiddle with the compression, but rather only alter the pipe length when you needed to change it. The engine ran the same way on inside and outside corners and ran like an electric motor on a governor on the ground. You could run any fuel you wanted within reason; it just kept plugging.

The only important difference between the arrangement of the spraybar (out of a Super Tigre .60) and the venturi on a .40VF from the 1946 McCoy is that it fixed the leak around the threads. How about that? *SN*

—Brett Buck
brettbuck@comcast.net

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Flying

by Paul Walker

This is the final discussion on the trim flow chart. We are down to criteria 8 and 9. These two criteria, in general, are in opposition to criteria 6 and 7. Criteria 6 and 7 work to make tight/responsive corners while criteria 8 and 9 generally require a less responsive reaction to control inputs to maximize smoothness. Of course, one would like to have both sets of criteria optimized at the same time. It is a rare plane that can do both very well on the same flight.

Criterion 8 is "Quality of Round Maneuvers." Before the items that affect this are discussed, a definition of what is wanted is required. Ideally, I would like my plane to do perfect round loops with only the initial control input entered. That means no

corrections as the plane goes through the entire round maneuver, wind or still air.

Sounds great, but it can be an elusive target. The listed items in the Figure 1 flow chart are drivers in meeting this criterion. These items are as follows: prop size, tip weight, leadout position, engine thrust alignment, handle adjustment, CG, and elevator-to-flap ratio.

In sequence, the prop diameter is first. The larger the diameter of prop, the greater the resistance there is to change in pitch. To get the same radius round loop with a larger diameter prop, more elevator deflection is required. With that comes more flap deflection. This will tend to smooth the round maneuvers, which

is the desired result of this criterion. One side effect of the larger diameter prop (in general) is the mass of the prop increases, and as a result there will be more noticeable yaw differences in inside and outside maneuvers.

Note on the Figure 1 flow chart that this change sends you back to criterion 3 to re-evaluate hinging and equal tension in all maneuvers. If there is a change in the yaw effects, it is time to decide if the increased diameter is something you want to pursue, or not. If you do, you may have to investigate a re-trim to get more equal line tension in all maneuvers.

Did I ever mention that this process is never simple to maximize the plane's performance? Sometimes I find that I can spend a day to a week working on one single change to verify that I did or did not like the effect of that change.

There is also the direct comparison to criterion 7 that you will feel immediately. Here is the first of the compromises you will likely make. Again, this comes back to your decision on what performance envelope you are trying to work to.

You now have to balance your plan with the turn and track criteria. Work through this change until you are satisfied with the result. You will either like the change or go back to the previous prop! The next thing you might notice is in the transitions between insides and outsides on the horizontal and vertical eights.

The items that make it groove better can also make a clean

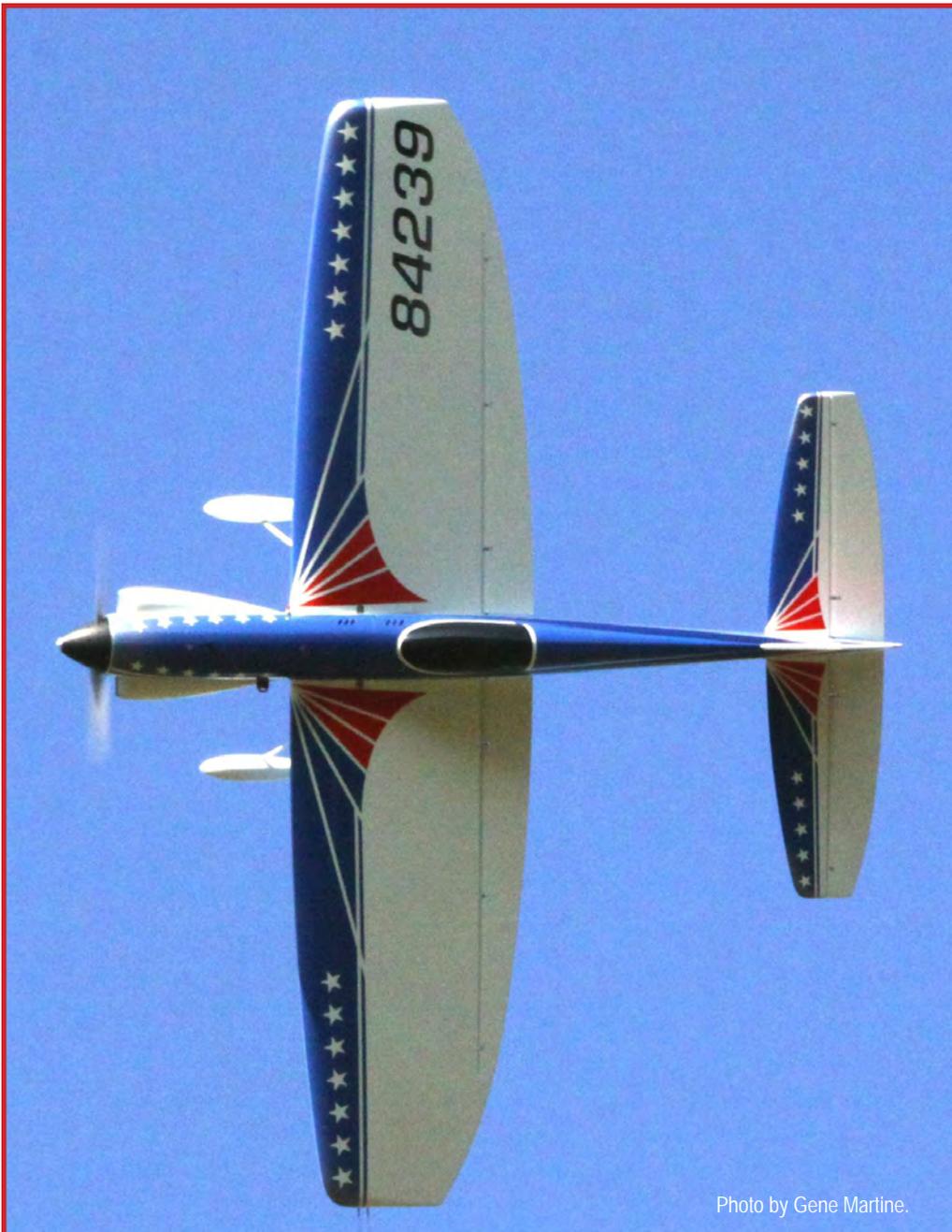


Photo by Gene Martine.

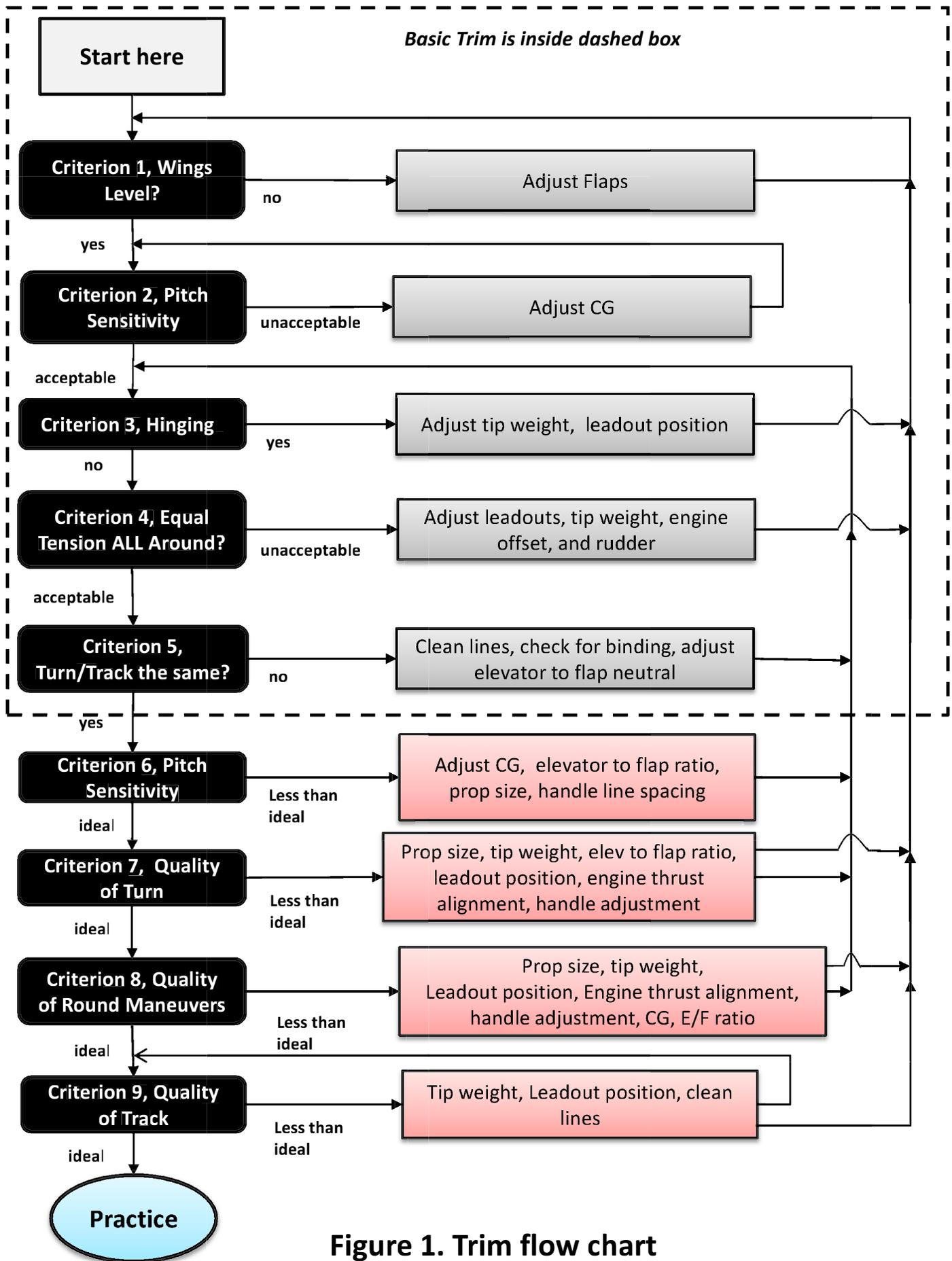


Figure 1. Trim flow chart

Photo by Will Hubin.



transition harder when switching from inside to outside, and vice versa. If there is much of a lag at that point, the intersection can easily have a flat spot that stands out for the judges to see. This issue needs to be watched with all the listed items.

The next item, tip weight, may surprise many of you. However, too much or too little tip weight *can* adversely affect the “Quality of Round Maneuvers.” Too much tip weight rolls the plane out in the round maneuvers. This causes issues when the maneuver starts and stops with a roll out at the start and a roll in at the completion.

It also affects how well the maneuver tracks when “bumps” in the air occur. Too little tip weight is the inverse of this on entry and exit and causes less line tension in those maneuvers, also creating issues with “bumps” in the air.

Too little or too much tip weight will require you to monitor the shape of the maneuver more closely than when the balance is correct. If your round maneuvers are not tracking as well as you desire, try changing the tip weight and re-evaluate how well it tracks after the change. This change will affect the corners as well, so be alert and consider both after this change. As mentioned earlier, the transitions will be severely affected by incorrect amounts of tip weight. Be aware!

Leadout position can also affect the “Quality of Round Maneuvers.” Under ideal conditions, this isn’t a significant player, but when the wind gets stronger or rougher, it does matter.

If the leadouts are too far back, the line tension will lessen near the tops of the rounds and increase at the bottoms. In calm

air this is not much of a bother, but as the wind picks up, this difference makes it more difficult to keep the maneuvers round. If you notice this, move the leadouts farther forward and try again. This starts to become more difficult to compare because you are at the mercy of nature with the wind speed and roughness. It may take more than a single flight to evaluate the change adequately.

At my flying field, there are times that I call the conditions “confidence destroying air.” It seems that the plane will not track in level flight, becomes impossible to put two maneuvers in the same place, and consistent bottoms are impossible. In those kinds of conditions, it becomes difficult to evaluate subtle changes to the trim.

In those conditions, it is best to either stop flying or simply just practice in the trim it is in. Sometimes a five mph wind like this is next to impossible to fly well in, yet the next day a twenty mph wind is just fine! Be aware of the conditions you are flying in. As before, try a change in leadout position and evaluate the difference. Pick the best configuration.

The engine thrust alignment is another option to consider. There are two variables here. One is down/up thrust (pitch axis) and the other is out thrust (yaw axis). My designs don’t like engine down thrust. Yes, I have tried it, but it is no help on the Impact. However, I have heard that others have found help with down thrust.

If you have trouble tracking in rounds, try some down thrust to see if it improves. If it does help the tracking, make sure the balance between inside and outside corners is not upset. If it is,



I Hubin photo.

an adjustment to the flap-to-elevator pushrod length may be required to balance the corners, which in turn may change the tracking in the rounds.

Engine out thrust is another option to consider. It will help to keep the yaw issues more balanced and may even out the line tension in rounds. This can lead to better rounds. I now include offset in all my new construction, as I have found no ill effect with the trim with engine offset with the electric power.

The handle adjustment can also impact the “Quality of Rounds.” If the spacing is too wide, minor control inputs can easily cause changes in radius in rounds, causing them not to be “round.” Likewise, if the handle neutral bias is off, there will be a difference between insides and outsides, forcing the pilot to make conscious changes to make the sizes the same. This extra focus will reduce the focus on “roundness” and cause more “unconscious” adjustments in the rounds.

Be very conscious of the relative sizes of the rounds, and if they are not the same, consider an adjustment to your handle. This is another place for a good coach. The coach can watch for the sizes and help you make them the same. Be very honest with yourself with this.

If you have to really bear down to make the sizes the same, it is likely your handle needs adjustment. When adjusted correctly, it should be second nature to make the sizes the same and “easy” to do.

The next item, center of gravity, goes hand-in-hand with the handle adjustment. In exactly the same vein as handle spacing,

the more aft the CG the harder it will be to do round rounds. I know, as I have flown very tail heavy for years. However, it’s not impossible.

Flying more tail heavy makes the transitions easier and cleaner (a good thing), however, will require more continual input to keep round. Moving the CG forward will make rounds smoother but the transitions harder to do correctly. This adjustment needs to be coordinated with the handle spacing.

Move the CG forward and increase the handle spacing and evaluate that result. Of course, that is going to change the feel of the corners, so this needs to be a consideration, as well.

I have heard people say that if the CG is too far aft, the nose will rise when the power comes off. Likewise, if too nose heavy, the nose will drop when the power stops. This might be an indication of the CG, but I find that this is an indication of the plane being out of trim.

I have moved my CG nearly an inch from one flight to another while in good trim, and there was no difference in pitch attitude when the power stopped. This might be an indication of the thrust line being off (up or down) or an incorrect alignment between the flaps and elevator.

If you are flying an established design with a defined CG, I would suggest that you start with the CG where the designer indicates, and work with other parameters if it doesn’t track as well as you would like. However, the designer usually has a set building process, and his planes are built with a very similar mass distribution, and thus fly similarly. However, you may have built

Martine photo.



it and used heavier wood in extreme places, and even though it might have the same mass, it could easily have a different mass distribution.

Also, your choice of wood may have a different stiffness than the designer's plane, and that will affect the trim condition. This may require a different CG to get similar results; thus, you may have to experiment with the CG to establish the best combination for you.

The last item that affects "Quality of Round Maneuvers" is the elevator-to-flap ratio. In general, the more the flap moves relative to the elevators (based on the same CG), the better the plane will track in round maneuvers. Of course, this is in direct opposition to what is necessary in corners.

And, of course, you have already decided what type of performance envelope you are shooting for, so that will dictate what you want to do with this adjustment. This, as well, is going

to take some experimenting to determine what the best balance is for you. Make the flaps move more and see what the effect is. If you feel the stick force is too high, move the CG back some and try again.

Of course, you are going to have to balance this with the "type" of corner you want. In general, if you have too much flap the rounds will be harder to keep the right size, as they can tend to grow in size in some wind. If there is too little flap, it becomes easier to make consecutive rounds' tops tighten up, but the bottoms will be harder to find repeatedly.

Fly the plane in both perfect air and a good wind to establish where you want the flap-to-elevator ratio.

This concludes the discussion on the flow chart. Next time I will summarize and present some general "rules" that I follow in using this tool.

Until next time. *SN*

by Will DeMauro

Battery Mounting Part 1

One of the common questions that I get from people when setting up an electric-powered plane for the first time is, “How do I mount the battery?” or “What’s the best way to mount my battery?”

When I sent out my emails back in November to solicit pictures and statements for this article, I didn’t realize that I would get such a good response with many good and creative ways to mount batteries that people have come up with. This has

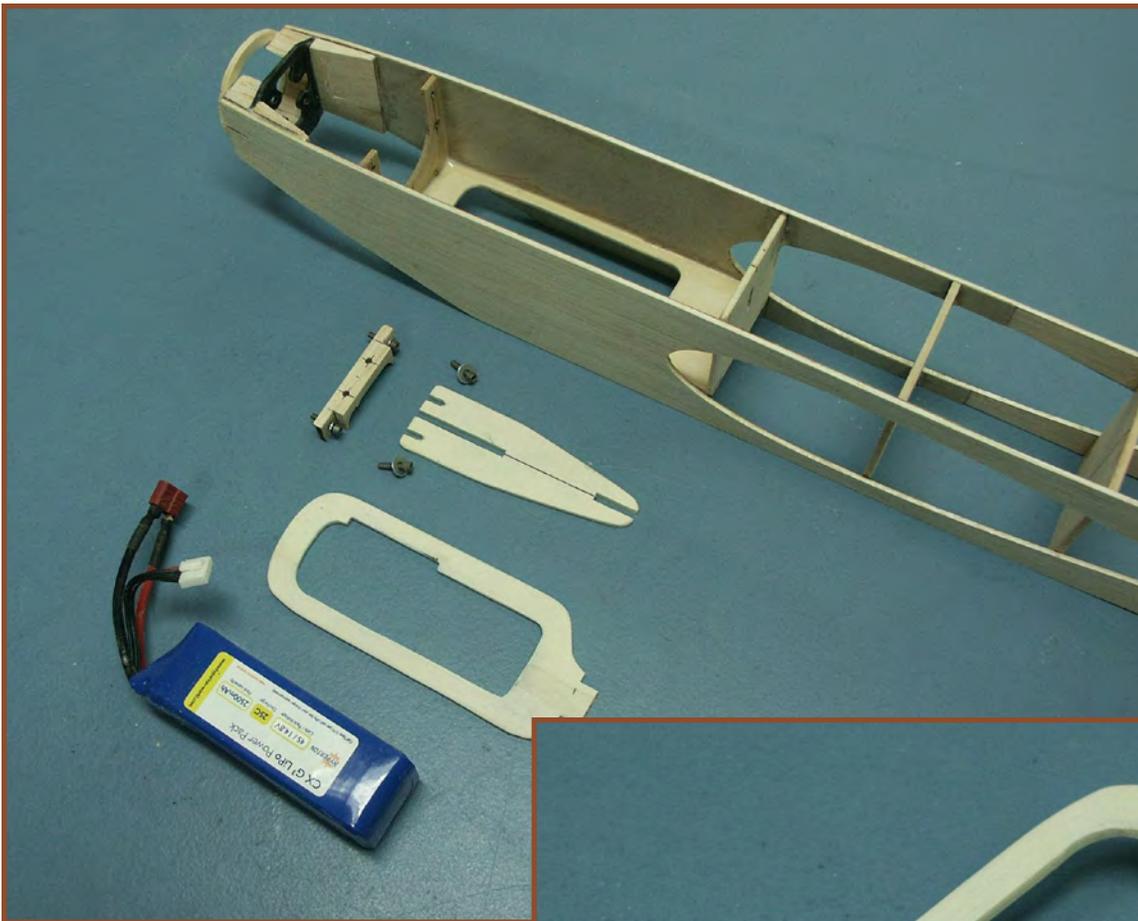
turned into a learning experience for me, too. For this issue and the next one I am going to focus on built-up or full-fuselage control line planes, and in a third and possibly a fourth issue, I will cover battery mounting on profiles.

The first method that I would like to cover is an interlocking screw down method that our editor, Bob Hunt, has been using in all his planes. This method, which will be best shown in the pictures Bob provided, is extremely secure and as close to fail

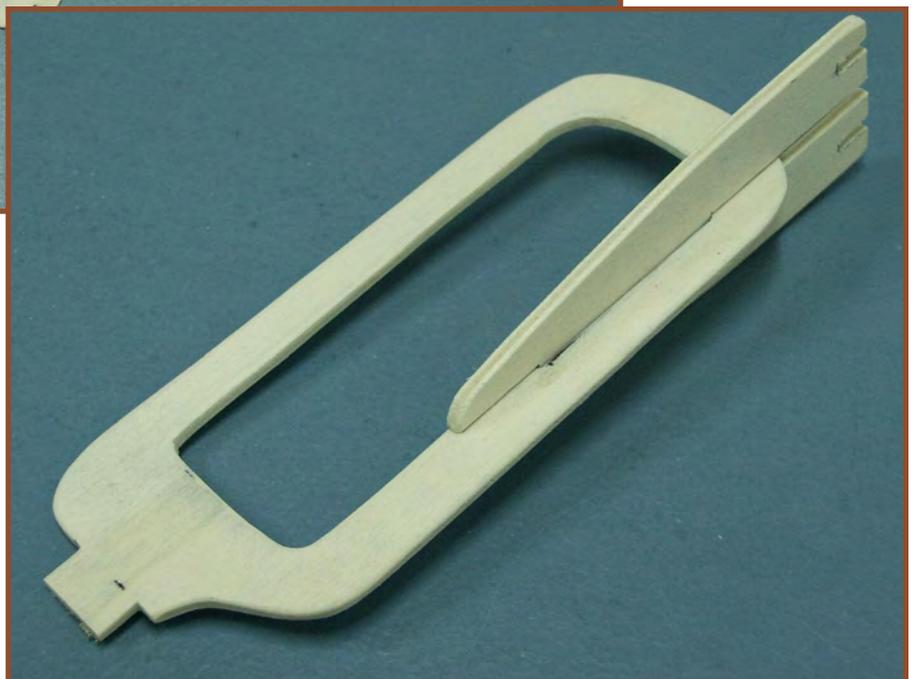
proof as one can most likely get.

To speed up his battery changes, Bob makes up a separate holder for each battery. This method also ensures that every battery stays in the exact same place, guaranteeing that his CG never moves one bit from flight to flight. So, although this is a little more work, it is extremely secure and accurate. It is also very neat and clean. In the next issue, my goal is to show the ways that Paul Walker, Joe Parisi, and I are mounting our batteries.

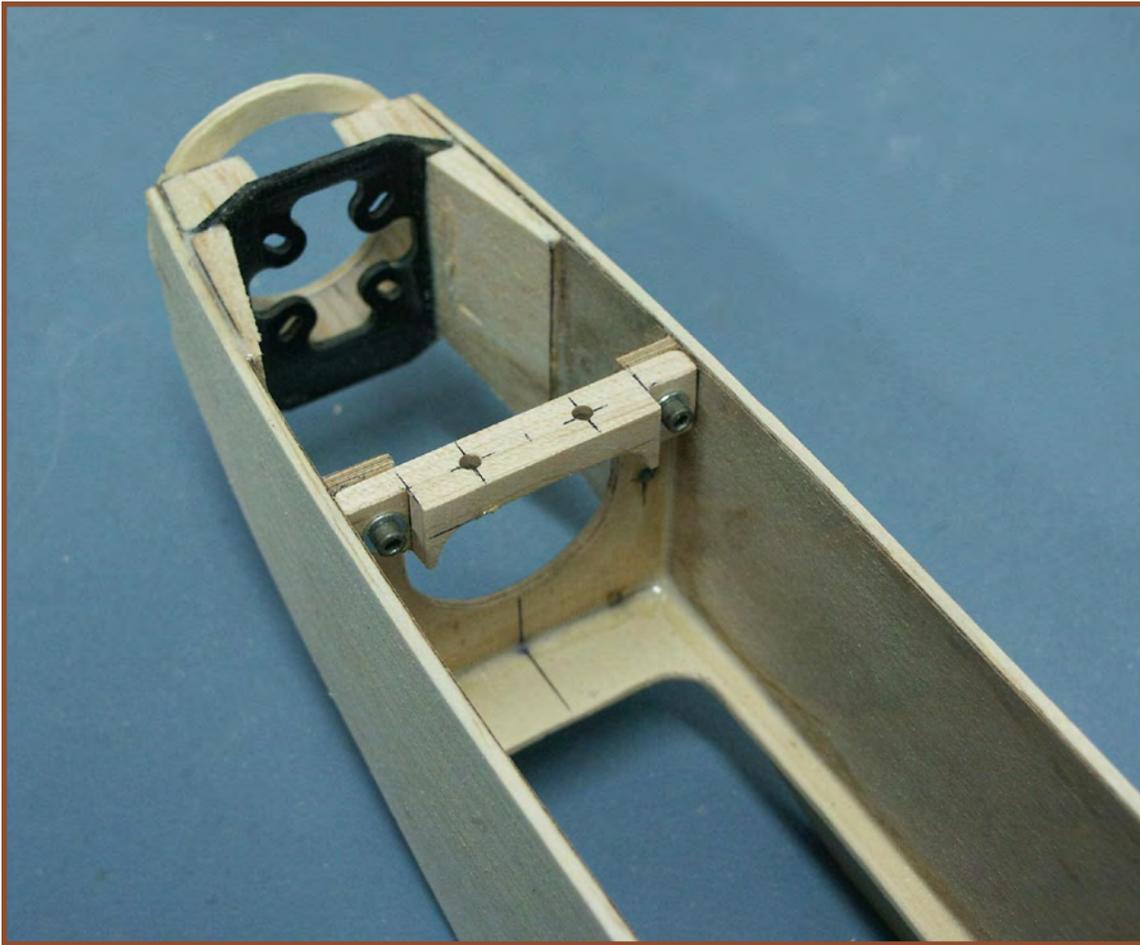
One thing I need to



Above: This photo shows the battery and all the mounting system parts as they are made before they are assembled. (Photo by Bob Hunt.)

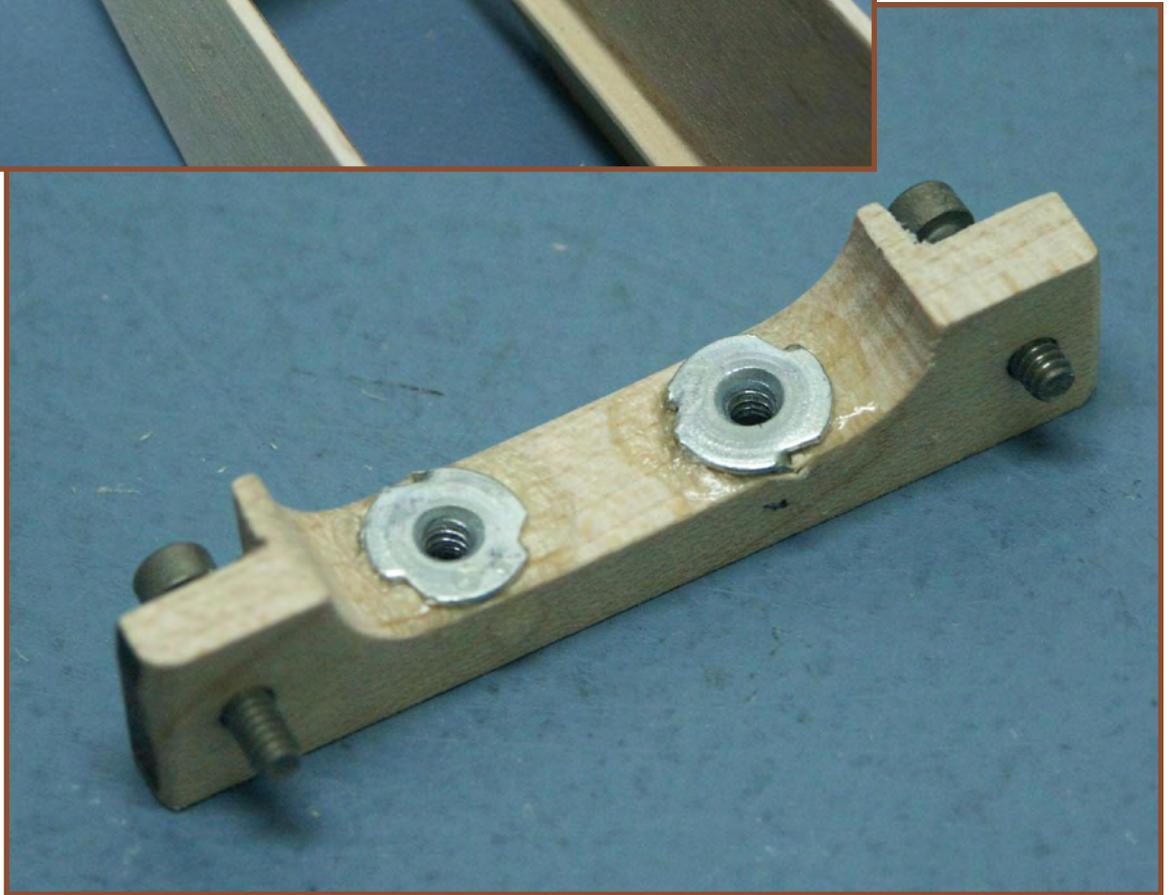


Right: This is the actual battery holder. After it is assembled, the battery is slipped into this holder before it is put into the plane. Bob uses a separate one for each battery, but you could just use one or two and slip the batteries into them as needed. (Hunt photo.)



Left: This is the removable hardwood bracket as it sits in the fuselage. It has two blind nuts on the bottom to hold the 4-40 screws that hold the battery holder in place. (Hunt photo.)

Below: This shows the removable hardwood bracket from the bottom before it is mounted into the plane. The two blind nuts can clearly be seen. (Hunt photo.)



get out of the way right now is to say that even though I and many others use Velcro to mount our batteries, it is *not* the most secure way! If it is not done properly, you most likely can, and probably will, eject your battery from your plane at some point. If you are going to use Velcro, make sure you use a good quality or industrial grade.

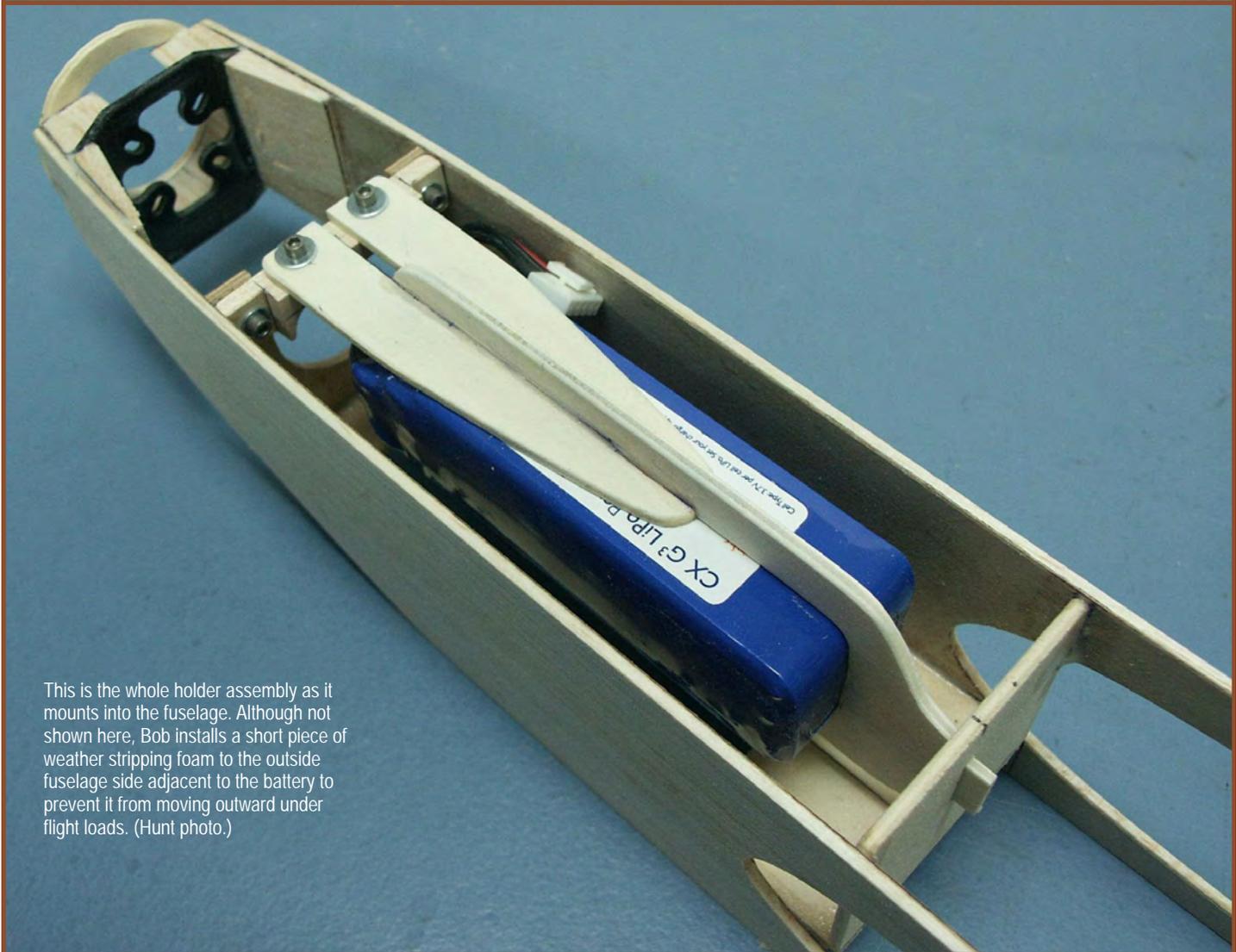
Do not use those cheap straps that one can get from many of those Chinese online hobby shops or the straps that come from electrical or computer stores for bundling wires together. We pull a lot more Gs than most RC planes and we will eject the battery sooner or later! Kevin and I have close to 2,000 flights using the Velcro method and have never ever lost a battery. I am only using very high-grade Velcro.

My SV 22 has over 500 flights using the same Velcro straps, and it's still harder to remove than to put in place. The advantage

to this system is that it allows for a very quick change of batteries, it allows me to try different sizes and brands of batteries easily, and it will allow me to borrow a battery in a pinch if I have to. Again, let me caution you: If this is not done properly your battery *can be ejected!* This will be shown in more detail in my next column, and pictures will be included.



This shows how the battery is fitted into the holder. It is now ready to mount into the plane. (Hunt photo.)



This is the whole holder assembly as it mounts into the fuselage. Although not shown here, Bob installs a short piece of weather stripping foam to the outside fuselage side adjacent to the battery to prevent it from moving outward under flight loads. (Hunt photo.)



Above: This is how the holder and mounting assembly look from the bottom. (Hunt photo.)



Left: Kevin DeMauro poses for a picture on the night of his Eagle Scout ceremony. Congratulations, Kevin! (William DeMauro photo.)

In a future column, I will have some really good photos and explanations of profile-mounted batteries with pictures from Crist Rigotti and Bob Hunt. If anyone else wants to send me pictures of their profile mounting system, I will include as many as I can in my allotted space. You can send them to my email address at demaui@verizon.net.

The following is not control line or ECL related, but since my son, Kevin, does fly with us and participates as much as he can, I would like to congratulate him on his attaining the rank of Eagle Scout from the Boy Scouts of America. *sv*

—Will DeMauro

Appearance Point



model by Dave Riggs
story by Jim Hoffman

A Recreation of Steve Wooley's Argus

Dave Riggs, of Prescott Arizona, has a deep fondness for classic stunt models. He has built and flown some beautiful classic models in the southwest these past few years, including a “green box” Nobler and two Tom Warden-designed profile Trophy Trainers.

This past year he dedicated himself to recreating a Steve Wooley Argus. Dave endeavored to reproduce the Argus as accurately as possible (outside of the color scheme) as depicted in the August 1961 issue of *American Modeler*. The plane is built from a Windancer Models kit that was produced by the late Bill Sawyer.

Look closely at the beautifully shaped cowl, the fuselage shape as it blends front to back, and the arrow on the belly, as was on Wooley's original. Dave elected to not run the engine cooling air outlets back behind the leading edge as depicted on the photos of Wooley's model but more closely followed the location shown on the plans.

The Argus features a pair of clever and attractive tip-weight tubes built by Dave. The tubes are actually Dave Brown fiberglass pushrods and they extend to the tip rib. The tip-weight fittings allow easy addition and removal of weight and

integrate unobtrusively into the I-beam platform. The externally visible portions are covered with a small polished aluminum “escutcheon” shaped to the tip profile. Each tip-weight assembly weighs less than one gram.





Specifications:

Model name: Argus

Designer: Steve Wooley

Construction type: I-beam wing with built-up stab/elevator (original used solid stab/elevator)

Wingspan: 50 inches

Length: 39 inches (tip of spinner to back of tail post)

Moment arms: Nose: 9 inches (measured from the front of the wing to the back of the spinner); Tail: 13.75 inches (flap hinge line to elevator hinge line)

Weight dry: 52 ounces

Power package: Aero Tiger 36, Aero Products tongue muffler, and Jett Engineering 2-inch aluminum spinner

Tank: Custom Kaz Minato Carbon/Epoxy (5 ounce capacity)

Propeller: Eliminator Props S-4 (Phelps-style two-blade prop 10.625 x 4.25, wide chord, deep undercamber (cut to 10-inch diameter for ground clearance)

Line length: .015 braided cable, 60 foot, eyelet to eyelet

Covering: Entire model was covered with .2-oz. carbon veil with the wing, stab, and elevators, then covered with Sig Medium Silkspar.

Finish: Substrate all Brodak Butyrate, filler was Aero Products zinc stearate in Brodak Clear. All color paints are R-M Diamont auto paint mixed with Brodak Butyrate Clear ($\frac{1}{3}$ auto paint, $\frac{2}{3}$ Brodak Clear). This color mixture was thinned with at least 65% Brodak thinner. This blend seems to cover well and is easy to use. Fairly extensive testing with this finishing methodology has indicated no compatibility, adhesion, or aging issues that one might understandably be concerned about. All experience is based on Butyrate from bare wood. The base color coat used approximately three fluid ounces of auto paint in the mixture described above and added 0.9 ounce of weight to the airframe.

Base coat color is metallic maroon (2011 Ford Bordeaux Reserve Metallic). Trim colors are: Silver (1993 Chevrolet Ultra Silver Metallic); Gray (2013 Nissan Gun Metal); Top clear coat is Brodak Crystal Clear. The finish was then wet sanded and hand buffed. Vinyl paint masks for most of the graphics were provided by CFC Graphics.



The Argus wheel pants are of two-piece split construction to allow easy replacement of the wheels as well as the option of completely removing them for flying off of non-optimal surfaces. (It certainly made



finishing easier as well.)

There are small aluminum plates imbedded in the balsa pants to clamp the 1/8-inch diameter music wire landing gear. There is a hatch on the aft belly to provide access to the elevator horn and ball link. When the hatch is removed, an internal hollow tail weight tube (Dave Brown fiberglass pushrod material again) is uncovered.

Test flights in July 2014 were very successful. The wings were dead level right from the first flight and line tension and corners pleasantly surprising for initial trim flights. Despite the model's weight, combined with the 105-plus-degree temperature and 1,100-foot field elevation, the AeroTiger 36 on 10% nitro seemed to power the model without issue. Initial concerns with potential engine cooling problems, given the very "tight" cowling, proved not to be an issue. sv



Joe Nall 2015

Be Part of History for the First Time!

May of 2014 marked the third anniversary of Control Line at the prestigious Joe Nall Fly-In. And for the third consecutive year, we had hundreds of newcomers in the training circle as well as a growing cadre of some of the finest CL pilots and companions anywhere. In total, the circles have produced more than 1,350 introductory flights to Joe Nall attendees and hundreds and hundreds of flights on the experienced circles by a great group of CL legends.

Add to this week of camaraderie the spectacle of the Triple Tree Aerodrome in Woodruff, South Carolina. With six full-time

flightlines going from dawn until dusk over the 450 acres of model aviation heaven, we have the finest three CL circles you could ever imagine. Made of a special Bermuda grass (the same used on the finest golf greens), these are actually smoother than most hard surface sites you will ever see. Last year, Pat Hartness, Bob Shaw, and the Triple Tree volunteers added a permanent gazebo for the CL community. It is gorgeous!

And Announcing for the First Time...

For the first time in the history of the Joe Nall Fly-In, there will be a contest during the Joe Nall week: The Inaugural Bob Shaw Control Line Precision Aerobatics Contest!

Based on the feedback received, PAMPA members wanted an AMA sanctioned contest and here it is!

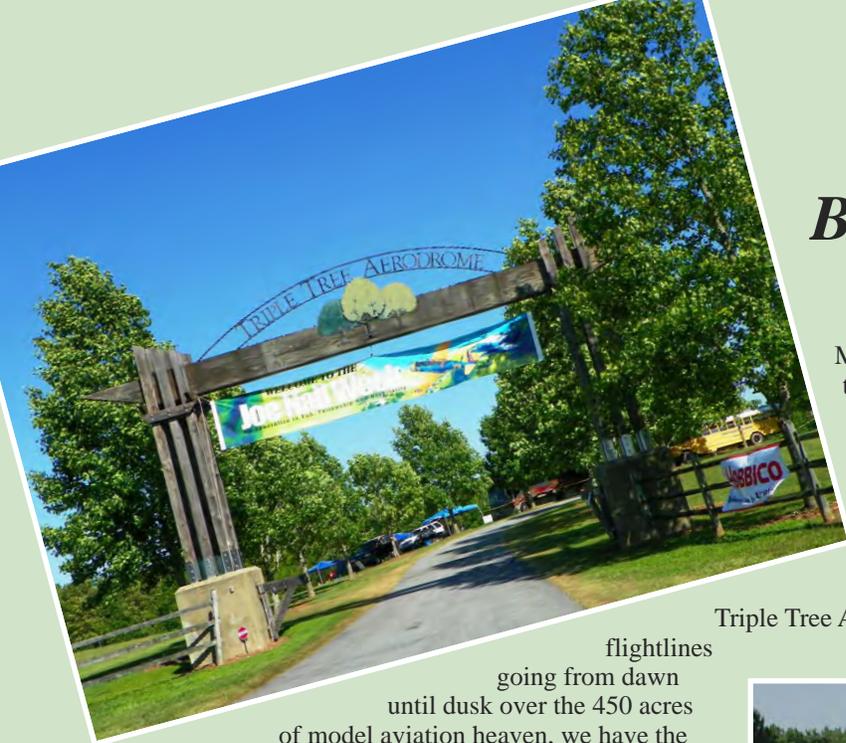
- Event:** CLPA in Beginner, Intermediate, Advanced, and Expert.
- Rules:** No BOM rule and no appearance points. Three attempts for two flights, based on highest single flight score.
- Date:** Saturday, May 16, 2015. One day only.
- Location:** Triple Tree Aerodrome, Woodruff, South Carolina.
- Contest Director:** Mark Weiss (302)547-4917; or email to: ama82824@yahoo.com.

Note: Practice circles will be available all week. Special lower rates will be provided for those who plan to arrive at Triple Tree the previous Thursday or Friday. There will be no entry fee for participating in the contest.

Why a Contest?

Pat Hartness and Bob Shaw have created for the CL community an incredible and permanent facility. We did not pay one cent for all their labor, materials, and sweat equity. We want to reciprocate by getting as many CL pilots in the country to visit Triple Tree and see for themselves what a gift we have been given. Everyone connected with the establishment of this facility wants it to be used as often as possible, not only during the Joe Nall week. A contest should bring more folks to the circles than a fly-in. Who knows what the future of this site can hold for us. Team Trials? World Championships? Who knows? Finally, the future of these circles is in all our hands. We need to show the founders that their money was well spent. We have put smiles onto over 1,350 attendees and cannot think of a better reason to make these efforts grow and grow.

C'mon down this May. Visit the Triple Tree website: www.tripletreeaerodrome.com.



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Stunt News Wants You!

Wanted: Articles and Columnists for the pages of *Stunt News*.

Reward: Everlasting satisfaction that you have contributed to the advancement and enjoyment of the greatest hobby/sport on earth!

Seriously, we need for all our members to put on their thinking caps and come up with something for these pages. It could be a "How-To" article about a building or flying technique that you have developed, a contest coverage report, a personality piece, or even a full-blown construction article on an original design model.

Without your contributions we simply will not be able to continue filling these pages with pertinent and interesting material about the art and sport of CL Stunt flying.

We also need some new columnists. The subjects of Finishing, Building, Flying and Competition need to be addressed on a continuing basis. If you would care to take on the responsibility of writing one of these columns, or have an idea for another column subject, please contact Bob Hunt via email at: robinhunt@rcn.com, or by phone at: 610-746-0106.

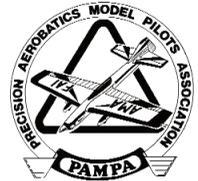
**We need your help – Now! Please join
the ranks of those who share
information and write something for
Stunt News.**



PAMPA News & Reports

Vice President's Report

by Matt Neumann



As I write this, I'd like to mention that last night's low here was around 0°. Area schools were delayed because of the bitter cold. For a high today it got up to a balmy 17°, with temperatures predicted to fall during the day tomorrow, taking the temperature down to around zero again. Way too cold (not to mention windy) to even think about flying at this time. I get kidded at work by my customers once in a while about flying this time of year. I tell them I can get the plane to work in this temperature; I just can't get the pilot to work in this temperature.

However, the good news is by the time you will be reading this, spring will be starting to bloom for most of us and the urge to go flying will be growing even more. Hopefully, you will have your new project either done or nearing completion. Or maybe you are like me and have decided to fly last year's plane. As I mentioned before, I got my last plane done quite late and have decided this year to concentrate on some of my plastic models, since my plane is still quite young. As an update, I have one of my Enterprise plastic models in its base colors (NX-10 refit), one in primer (C), and another almost assembled ready for primer (NX-01). I got a new airbrush for Christmas, and it is about to get a workout!

Since most of you are now getting the itch to go flying and the weather is starting to cooperate to allow you to scratch that itch, I will go through a few things that I do when I start to fly again in the spring. The first thing, of course, is to make sure that I have all the items needed to fly put back into my tool box again. This year is not so bad, since I have not built a new plane. When I do build a new plane, the tool box that I take to the field seems to get raided for the wrenches, extra nuts, bolts, and other odds and ends that I take out to the field. Now is a good time to take stock and replenish the supplies that got raided and return the wrenches to their rightful place in the toolbox.

Make sure you have charged your battery (or batteries...). I know that not all of you fly electric, but you still have to make sure your igniter battery or the battery for the glow plug driver is charged. Nothing would be more frustrating as to finally get a chance to fly in the spring for the first time, only to get everything out to the field and find a dead glow plug igniter. It may not hurt to make sure the spare (you have one right?) is even charged *and* brought along.

Also, before heading out to the field, it probably would be prudent to go back over Paul Walker's excellent series on trimming again. What? You are flying last year's plane and you absolutely know for a fact it is perfectly trimmed? I bet you are wrong. If you are like me, toward the end of the season I learned to fly the plane slightly out of trim. I figured it was so slight that it really was not that bad and I could live with it. Sometimes it takes a break from flying (like over the winter) to notice it. Sort of like having someone else fly your plane and they notice something you did not. I have on several occasions taken out last year's plane the following spring and noticed a bad tendency that I did not realize I had because I learned to live with it. As Paul has mentioned many times in his articles, don't live with bad trim tendencies. Fix them! Now is a good time to do that.

On my first flights I never go whole hog and try to fly 5-foot bottoms the first couple of sessions out. As our experience grows, the ability to get into the swing of things gets shorter. It used to



take me a couple hundred flights to get there, but now not so much. I still, however, take just a little time to get back into things. I find certain maneuvers will "come in" quicker than others. Round loops are usually the first to come in, while the wingover and clover are the last. They are also the first to go after a layoff from flying, at least in my case. So again, take it easy and go at your pace and not what the other guys do. It does not help you to crash your new—or even old—creation because you just were not ready. This also goes for the weather. I know the temperature is a nice 75° but the wind is 15 mph. That much wind speed is not good to start out with on the first day of flying, no matter how great the itch. Remember when I said take it easy? Just be patient and wait for 5 mph winds first, and then work your way up to flying in the nastier winds.

Also, take this time to do a little experimenting, even if it was something you did in past seasons. Although you may keep a good record of what you did in the form of a log book, it is sometimes good to do the experiment again for no other reason than to remind yourself of why this did or did not work. A good example would be changing props. You may be surprised and find out that what you thought did not work as well last time works better this time. Sometimes that's just because your tastes have changed over the winter. I have found that out. The most common change I make is the sensitivity of the plane by either widening the narrowing the handle spacing to make the plane more or less sensitive. My tastes change over the winter.

To sum everything up, do things in a methodical fashion when starting back up in the spring to fly. Be patient. You will have an easier time getting into the swing of things which will make flying even more enjoyable throughout the year. *SN*

—Matt

Get inspired!

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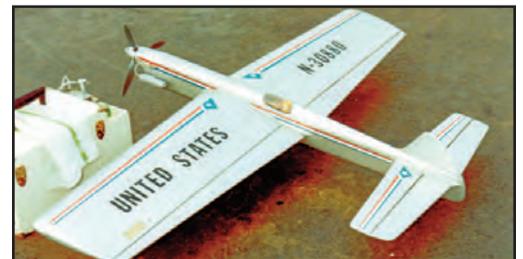
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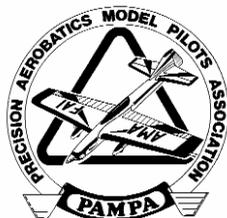
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2015 AMA Control Line Aerobatics National Championships July 12-18, 2015

Friday, July 10-Saturday July 11

After FF Control Line Precision Aerobatics Practice L-Pad, Grass Circles

Sunday, July 12

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

8:00 a.m. Beginner & Intermediate Stunt Registration* Grass Circles

8:30 a.m. Beginner & Intermediate Stunt Pilots Meeting* Grass Circles

9:00 a.m. Beginner & Intermediate Stunt Event* Grass Circles

12:00 noon Old Time and Classic Stunt Registration* Grass Circles

Monday, July 13

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

12:00 noon Jr/Sr/Open/Advanced entries close Nats Headquarters

2:30 p.m. Open/Advanced Models Presented for Appearance Judging 180 Building

3:00 p.m. Pilots meeting 180 Building

4:30 p.m. Concours Voting 180 Building

Tuesday, July 14

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

7:00 a.m. Judges Seminar Phase (Flight) L-Pad Circle 4

8:00 a.m. Old Time & Classic Stunt Events Pilots Meeting* Grass Circles

8:30 a.m. Old Time & Classic Stunt Events* Grass Circles

6:00 p.m. Judges Seminar Review (Rules review) AMA Board Room

Wednesday, July 15

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

8:00 a.m. Open/Advanced Qualifications Rounds 1 & 2 L-Pad

5:00 p.m. PAMPA EC meeting AMA Board Room

6:00 p.m. PAMPA General meeting AMA Board Room

Thursday, July 16

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

8:00 a.m. Open/Advanced Qualifications Rounds 3 & 4 L-Pad

Friday, July 17

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circles

8:00 a.m. Open Top 20 L-Pad

8:00 a.m. Advanced Finals L-Pad

Saturday, July 18

7:00 a.m. Control Line Precision Aerobatics Practice L-Pad, Grass Circle

7:30 a.m. Jr/Sr processing and Appearance Judging L-Pad

8:00 a.m. Jr/Sr Finals L-Pad

8:00 a.m. Open Finals L-Pad Circle of choice

12:00 noon. Walker Cup Fly-off L-Pad Circle of choice

6:00 p.m. PAMPA Reception Horizon Center

7:00 p.m. PAMPA Banquet Muncie

*Unofficial Event

If you are flying only unofficial events, you still must register with NATs headquarters and pay a site use fee, \$10.

The official PAMPA hotel for the 2015 Nats is the Baymont in Muncie, Indiana. The phone number for reservations is 765-284-4200. They have a block of rooms set aside under PAMPA, so please reference PAMPA when you call. – Bob McDonald, CL Aerobatics Event Director.

District I

by Steve Yampolsky

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

This will be a short report but a good one!

Big news: New England's very own Dave Cook has been elected into the PAMPA Hall of Fame! To celebrate this special occasion, I invite everyone to come and join us on May 16 at our field in Wrentham, Massachusetts at 11:30 a.m. There will be food, drinks, speeches, and of course, flying!

Dave's celebration will take place during the annual Spring Fun-Fly that will be held on May 16-17, at our Wrentham field! The theme for this year's is "The Good Old Days in New England," so bring something old, something good, and something that only a Yankee will have. Flying begins both days at 8 a.m. so come early!

For newcomers, the field is located at the Nicholas Aluisio Recreational Fields and Fairgrounds. To get to the field, use 54 Emerald St., Wrentham, Massachusetts 02093, in your GPS. The flying area is located behind a gray, low and long concession-stand building.

If you plan to stay overnight, I suggest either the luxurious Renaissance Hotel by Marriott, (508) 543-5500 at the Patriot Place or the affordable Americas Best Value Inn, (508) 543-4000. Both hotels are located within 10 minutes of the field, near the Gillette Stadium shopping complex with excellent shopping and dining options. *SN*



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New Jersey, New York

District II

by Bud Wieder

Hi, all. In this column I will be covering a few different areas: an up and coming flier, a note from our District II Vice President Eric Williams, some information about vandalism at the legendary Garden State Circle Burner flying site, and the passing of modeling giant, John Miske.

Tom Luciano

The up and coming new “kid” on the block is not really so new. Tom Luciano’s dad, Mike, joined Union Model Airplane Club in 1962. The senior Luciano is now 80 years old and still flies RC regularly with the Union club.

In 1968, at around age six, Tom had graduated to flying a Fox .36-powered Flight Streak. For the next seven years Tom flew whenever he had a chance and learned some of the basic maneuvers. In 1975 Tom switched over to flying RC and didn’t fly Control Line again until 2012. Up until that time, Tom had never flown competitively and had never done the “pattern.”

In 2012, Tom got serious about his flying and learned how to do the Beginner pattern. In 2013, he learned how to fly the complete Stunt pattern and entered his first two contests, flying an LA .36-powered Twister in the Intermediate class.

Last year, with only three flights on his new ARF Vector 40, Tom entered the Brodak Fly-In and finished a very respectable seventh place in the Intermediate class.

After the Brodak meet, the Vector had a mechanical failure and crashed, so Tom had to go back to flying his Twister. His next contest was at the Garden State Circle Burners June contest where Tom finished first in Intermediate.

For the next two contests—one in Middlesex and one at Palisades Park—Tom flew a new ARF Vector 40 and again finished first in Intermediate at both contests.



Tom Luciano (L) accepts the Intermediate Stunt First-Place certificate from CD Jim Vignani at the Middlesex Modelers 2014 Stunt Contest. Since then, Tom has graduated to Advanced and has already won a contest in that division. He’s coming up fast! Photo by Ron Heckler.

At the next Circle Burners contest held at Palisades Park, Tom entered in the Advanced class for the first time and again took first place.

I saw Tom fly quite a few times last year and his improvement was amazing. He is extremely enthusiastic, wants to fly all the time, accepts and acts on coaching suggestions, and is going to be someone to be reckoned with in the upcoming contest season.

Tom is currently working on an all new electric-powered, Bob Hunt-designed Crossfire to hopefully be ready for the Brodak Fly-In this year. I predict that Tom will quickly transition to the Expert class and be competitive there in a short amount of time!

A note from Eric Williams

Eric Williams, our District II AMA Vice President, has written something that I think could help promote our hobby quite a bit:

“Frequently, I hear from clubs and [AMA] members who ask how they can promote our hobby and keep alive some of our traditional building skills. Of course, many of those I hear from about this need are Control Line pilots.

“About a year ago, some modelers asked me why CL was not represented at the WRAM Show. I pursued the question with the new WRAM show managers who agreed that CL is an integral part of our hobby that needed more representation. In fact, their response was welcoming and enthusiastic!

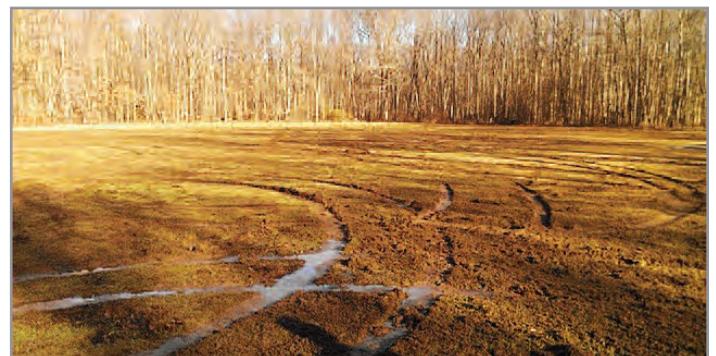
“For the February 20-22, 2015, WRAM Show, show managers have graciously accepted my request to provide a full vendor display booth at no charge for Control Line clubs and pilots who would like to tell other modelers and the public about the skills, rewards, and fun of CL flying.

“This is a great opportunity to display CL models and tell the story to fellow modelers and the public. It’s also a good way to promote CL clubs and invite people to visit CL flying sites. If you or your club has interest in being part of the CL booth at the WRAM Show for one or more days, please contact me at (518) 356-2057 or via email at rcpilot@nycap.rr.com.”

—Eric Williams

Circle Burners field vandalism

Today I spoke to Mike Cooper, vice president of the Garden State Circle Burners model airplane club, regarding a problem that has come about. Someone drove a vehicle on the club field flying circles, leaving deep ruts in the grass.



The legendary Garden State Circle Burners club field was vandalized in late December 2014. Apparently a four-wheel-drive truck got onto the field and had, well, a field day. This shot shows the ruts that were left in the back circle. Photo by Ron Testa.



Here's another view of the truck ruts at the GSCB field. This photo shows the damage to the front circle. Testa photo.

I asked Mike what we, as area modelers, could do to help out with this situation. Almost everyone from our District II area knows the history of this great flying site. In the late '50s and early 1960s, all of the great fliers from this area flew there and the competition was fierce.

Mike Cooper, Ron Testa, and Mike Ostella are doing everything possible to keep this great club going, and I think it is important that we all chip in and help out in any way possible. When spring comes maybe we could help roll the field and put down some grass seed.

It is really important that we all help out in some way to keep this great and legendary club going. Please keep this in mind; spring is only a few months away. I'm sure anything we could do to help with this problem would be greatly appreciated.

Remembering John Miske

In closing, I asked Tom Hampshire to write his thoughts on the passing of one of the truly great guys in our hobby, John Miske:



John Miske has been called the "Father of Old-Time Stunt," and rightly so, as he was the driving force behind the GSCB club's decision to first offer the event on a contest menu in 1970. Here John is shown at the GSCB field with his Fox .35-powered, Lew Andrews-designed Barnstormer in the early 1970s.

"I first met John Miske in the fall of 1985 at the local flying field. He was very low key, but friendly. His manner was open, and he put everyone he spoke with at ease. Then I found out that he had flown with Larry Scarinzi in the early '50s. That became a common bond. An invitation from John to come out and watch an OTS contest followed, and my interest developed from there. John and his wife Elaine were friendly, happy, and sociable.

"As time passed, it became apparent that John was very knowledgeable about early Control Line flying. Then I began to see that he had a national following in the preservation aspect of CL history and practices. He had developed an extensive plans library which he shared with all comers at pricing, which didn't begin to repay him for the effort he put forth in digging old kits and plans out of the past.

"John was never pushy or loud, but he skillfully led me into running contests. First, he asked me to help out a little, and before I knew it, he was in the background, always cheerful and helpful, steering me away from problems before they arose. It became clear to me that a very good administrator was leading me down the straight path.



John was a tireless worker for the GSCB club. He was engaged at almost every level with promoting the hobby/sport, and always found time to help out in any capacity required. Here he is running the 50-50 drawing at a club function.

"When John was asked to describe his OTS career, he became self-effacing, saying only that he started it in 1970 just because he thought guys would enjoy flying the old stuff again.

"One night a gang of us had supper at Mario's restaurant in Clifton, New Jersey, John and Elaine's home town. Many nights, come to think of it. But the one that stands out was when the conversation turned to his track record as a longtime CD. It turned out that the more I listened, the more John turned into a hero for me. He tried to change the topic, but the guys kept on telling stories about him and his persistent work effort in OTS.

"Contests wax and wane; some are very successful, and some not so much. John's contests were kind of like the oldest established permanent floating crap game in New York. He had kept OTS alive, sometimes with a lot of entries, and sometimes only a few. Without his patient effort, it would have fallen by

the wayside. After 25 or 30 years of this, OTS took off and became popular coast to coast. This aspect of his contribution is known to only a few who were in his neck of the woods to see it over the long pull. He managed this with only occasional help from a few folks who showed interest. All without ever showing any strain at all. To my way of thinking, his efforts on behalf of all of us set a standard which others can only try to reach.

“Fair winds and blue skies, old friend.”

Thanks for that wonderful tribute, Tom. John will certainly be missed. Here’s a thought: Let’s all try as best we can to attend the GSCB events this year in memory of John. I think he’d like that. *SN*

—Bud

Ohio, Pennsylvania, West Virginia

District III by Ken Armish

Well, it’s the first week in November as I write this column. This time of the year for District III generally marks the end of flying and the beginning of building season. The national weather keeps threatening us with a very cold and, possibly, very snowy winter. It’s time to get the wood burner fired up in the shop, keep the hot coffee on, and make a lot of balsa dust!

I, like all of you, have the next world beater in mind. As you are creating, keep a camera near and document your builds so you will have lots of high resolution pictures to send to your District III representative (that would be me), so I can make you and your work a star in the forthcoming issues of *Stunt News*. (This is a shameless plea for new material.)

Chuck Holtzapple sent me a nice write-up of his club, the Starrliners Control Line Club, with some great photos. I’ll now let Chuck tell you a little more about the Starrliners:

“The Starrliners CLC is mostly a group of formerly predominant RC fliers who have chosen to venture back to their roots—Control Line. Although small in number, we are notably active and intent upon a purpose; that is, to learn and to master precision aerobatics as best as possible for a group of... well, let’s say, men of years. Yes, we lose things, misplace our keys, blame our cerebral laxity on Murphy, and forget birthdays, anniversaries, and just about anything else that ought to be remembered. Nevertheless, we’re thrilled to be a genuine part of the Stunt modeling formula, despite our shortcomings.

“Our flying site is located at the end of a full-scale grass runway, leased and beautifully maintained by our founder, Tom Smeltzer. It lies far south in Central Pennsylvania, close to the village of Fawn Grove, Pennsylvania, and enveloped in picturesque farmland. Cross over the road at the southeast end of the runway and you’re in White Hall, Maryland.

“We had the good fortune in late August to be visited by Austin Gunder. Austin is a Naval officer and part of the Naval Special Warfare unit. He is, among countless other distinctions, a full-scale aerobatics pilot, and he took some time to stop by in his Pitts S1S before being deployed overseas with his group.”

—Chuck Holtzapple

Thanks, Chuck! And now here’s a bit more about the StarrLiners and its “Hangar” Flying Sessions from Bruce Jennings:

“The Starrliners Control Line Club, headquartered in White Hall, Maryland, is not going to let winter’s blast dampen its enthusiasm for Control Line Stunt. About three years ago the group, comprised mainly of RC Pattern and IMAC converts, took up Stunt to reconnect with their past. What has ensued is a frenzy of not only building to produce some really nice IC and electric

Stunt models, but also to showcase a passionate effort for each to learn the Stunt pattern. The group flies nearly every weekend in the summer.

“Now that the weather is beginning to deteriorate in the Northeast, the group held its first ‘Hangar Flying Session’ on October 19. We gathered in my basement shop to look over our latest building projects and our plans to complete the new generation of models for the 2015 flying season.”

A bit more from Chuck:

“We commend to your attention the notion that time does indeed fly, and before you know it, the Control Line circles will beg for attention and activity. Therefore, we challenge all District III members to effect a productive and eventful building season and to relish the forthcoming activities of 2015.”



Bruce Jennings’ new electric Cobra.



Bruce Jennings with his e-powered Cavalier Profile.



Mark Weiss, Bruce Jennings, and Scott Bolton.



Flightline, awaiting next flight.



Craig Gunder and his son, Austin, with a "1-to-1" Scale Pitts.



Craig Gunder discusses particulars of his e-powered Cavalier with Dave Grantham.



Austin Gunder does a high-speed flyby as Joe Adamusco takes a photo.



The Starrliners enjoy a beautiful day at their field.

Huntersville, North Carolina, Fall Contest

The last contest for many of us in District III is the fall Huntersville, North Carolina, contest sponsored by the Metrolina Control Line Society of Huntersville. This year, there were 51 contestants with nine first-timers. There were 15 states and Canada represented.

District III had 10 flyers—almost 20% of the participants! It just happened that all 10 came from Pennsylvania. I would encourage everyone from our district to consider this contest. The southern hospitality is second to none and the key word for the event is "FUN." As you can see in the photos, we did quite well. (Those Southern boys knew that we Yankees were there!)



Dan Banjock receiving one of four trophies that he won.



Dan—second place in Old Time Stunt.



John Saunders—first place in Profile Stunt.



Our newest friend and life of the party, Shug Emery. First place in Intermediate Stunt...all the way from Minnesota.



John with Dan Banjock—second in Profile Stunt.



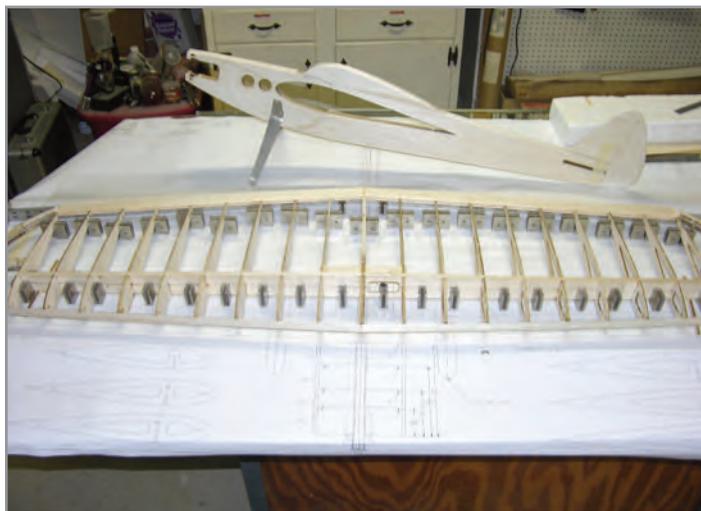
First place, Shug Emery; second, my good friend and traveling partner, Dennis Lipsett; and third place, Rusty Knowlton from South Carolina. (I am working on Dennis to join PAMPA.)

Since I asked for pictures of your winter projects, I figured I had better show what I am working on for next year. As the pictures will show, I am about halfway done with an electric version of Pat King's Shoestring design. Dennis Lipsett and I collaborated on the glow version that Pat designed, and I liked it so much that we asked Pat to do an e-version. Pat has also done the Lazer and an Extra 300 in electric. All of the planes are in the 600- to 630-

square-inch wing area. These are flapless designs, which are very easy to build and a blast to fly. You can find Pat's work in the vendor section of Stunt Hangar under PDK Laser Cut Kits.

Well, that's all I have for this issue. Keep the pictures and information coming. I will get it into print. *SN*

—Ken



Shoestring subassemblies coming along.



Further progress on the Shoestring.

District IV

by Scott Richlen

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

Building season is well underway in District IV. I'm one of the guys who loves to build, so when I got this picture from John Tate, I had to show it. It's not enough to build a plane, and I forgive those of you who paint their canopy, but who is flying the plane? You, just gotta have a pilot!

And if you have a pilot, he's gotta have a hat! And not just any hat! So, John has been working on a Legacy with a pilot with a Krispy Kreme hat. He even had to make the Krispy Kreme decal. He says that making the decal takes more time than cutting and gluing balsa. But, ahhhh the satisfaction!

What's a plane without a pilot, and what's a pilot without a hat?



This year's building projects for NVCL include both the Pat Johnston P-51 B/C profile and the NOVACLone profile. I've been hosting building sessions in my shop to help the guys get their planes built. And they are coming along nicely. Carl Cisneros of our club took a few "progress pictures" for your pleasure. Here is John Murphy's P-51 wing. He has just finished sheeting the outboard leading edge.



John Murphy's P-51 leading edge is sheeted.

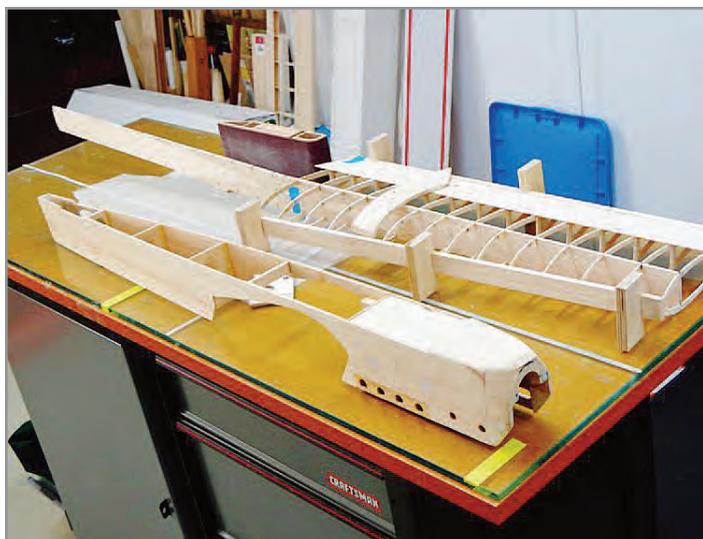
Here is our newest member, Eddie Alfaro, working on his P-51 elevators. This is Eddie's first Control Line build! We met Eddie because we are sponsoring a little Free Flight building club at the local junior high as an after-school activity and Eddie is our school sponsor (and also the school's safety officer.) We'll talk

about this some more in the future. Eddie is learning fast and he's already completed his wing build.



Eddie sanding his P-51 elevator.

Frank Dobrydney is the new NVCL president and is trying to get his Time Machine done in time for Brodaks. He's the proud owner of an ST-60 and can't wait to get it into the air. Here is his fuselage on the table in front of Jon Thatcher's P-51 wing. By the way, does that wing structure look sorta familiar? If you've ever built a Tom Morris wing, it should be! Tom kitted the P-51s for us and they are superb!



Frank's Time Machine fuselage and Jon's P-51 wing.

I also received an early report from Steve Fitton on the KOI. Steve sent a few pictures of the goings on and of the other two District IV fliers present.

We'll start with an illustration of the "tension" of flying Control Line Stunt. Here is William Davis walking out in the morning with his E power Allen Brickhaus Fanfare model. If you've seen Will's planes up close, you know that he does nice work.



Will Davis and his beautiful new Fanfare.

Here is the Fanfare on its official flight in Expert on Sunday. It turned out to be the last photo of the plane intact as disaster was seconds away!



The fanfare making an inverted pass.

The high winds pushed the plane into the ground on the triangle. It bounced back into flight as William struggled to control it but the outboard wing fell off and the plane fell back to the ground. The motor shutoff did not work and the plane, with a damaged prop but still at full power veered into the center of the circle, forcing Will to leap out of its way!



Disaster in the triangles.

It zoomed past William and careened toward the pit area full of Expert planes while people dove out of the way just off camera!

William saw that it might reach the pits and ran the other way. When the plane hit the end of the lines it exploded, ripping the motor out of the plane and stopping the runaway!



Death of a Stunt ship.

It's painful to watch a beautiful ship meet its end. But that's what we do: we build as beautiful an airplane as we can and then throw it against the whims of chance. Very few of us haven't had this experience, so we can all feel for Will. It's sad to lose a beauty.

But not to end on a down note, Steve got a picture of one of NVCL's rising stars: Gerry Glier. Gerry has been flying up a storm over the past two years and the results are starting to show on the contest circuit.



Gerry Glier and his Pathfinder.

Finally, congratulations to Steve Fitton upon winning Expert at the KOI! *sv*

District V

by Don Ogren

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

This first column of mine will be a short introduction on how I got to be your new District V director. One day in December, I got a landline call from PAMPA President Warren Tiaht. Warren asked me to consider taking on the task of the PAMPA District V Director to follow Derek Barry. Then he went on to tell me that I would be like a "shoe-in" for the job, and that I could probably carry on the task with my hands tied. (He could hear me chuckling.)

My response was that I sure felt honored to be asked, and that I'd think about it for a couple of days. Our *Stunt News* editor, Bob Hunt, called me about two hours later to reinforce what Warren had expressed. (Obviously, the two of them were conspirators.) My wife soon gave me her thoughts when I told her about the phone calls.

To make a long story short, I called Warren the next day with my answer that, "I'd do it!" Our editor heard about my answer and soon emailed Warren w/copy to me that, "He fell for it!"

So here I am, drafting my first column for *Stunt News* as the District V director. (Any day now I expect to receive a "job responsibility" summary from the prez.)

My background may be of interest to you in how I grew up in this world of model airplanes: Comet Model airplanes were a costly 10 cents per kit when I was *much* younger, at about the age of eight. My twin brother and I would save each week's allowance so we could buy and build another plane. I specifically remember a Stinson 105 that would ROG from the basement floor and fly as high as a card table. What a thrill that was!

Moving to West Virginia at the age of 12 put me in the company of a VFW Model Airplane Club. Our mentor, Carl Hopkins, furnished the space every week in the "VFW barn" for building sessions. Free Flight was the modeling activity then

(1944) and I jumped in with both feet.

I was in the company of Joe Williams, O.C. Stewart, and Bob Perkins, to name a few. These boys, who were our age, taught my brother and me how to build and fly. I qualified for the Plymouth contest in Detroit in 1947 and 1948, and in 1948 I won the West Virginia State Championship.

Control Line had only started to enter the scene, but I was getting hooked. I built a Super Zilch and all the Veco CL kits, and I started to really like Control Line Stunt flying.

From 1951 through 1955 I was in the USAF, and upon discharge I took employment in Indianapolis where I met Charles Mackey, Bob Randall, Jack Sheeks, and other Control Line Stunt fliers in that area. My first *real* Stunt ship was of the Saturn design by Rolland McDonald. (I named all my planes "Detroiter.") That Indiana relationship energized me enough to keep me serious about Control Line Stunt.

Pursuing a degree in mechanical engineering took my attention until 1962, where employment and sailing in the Rochester, New York, area kept me away from models until about 1997. That's when we moved to Florida, following the path of our growing grandson. And that's when I was attracted to Control Line flying again, as my son Mike kept after me until the bug bit again. For a short time I was a member of the Tampa Bay Line Fliers. Since about 2002, I've progressed from the PAMPA Beginner class to the Advanced class.

So, now I'm taking on a new interest, that being your District V director. But following the paths of Eric Viglione, Derek Barry, and others, setting a benchmark for me will be my challenge. I'll attempt to live up to what you modelers in District V want.

You expect a good column from me, and you deserve it. But I can't go that route alone. I need you to advise me in my new

endeavor by letting me hear from you. I'd like pictures of new planes and building ideas, as well as mistakes you may have lived through. (Be humble.) Are there safety issues that have caused concerns? I would like you to keep me abreast of what your clubs are doing, the contests that are being planned, and the results (with pictures) after the contests. Also, I'll be receptive to "how to" ideas. With that kind of information, my columns will be a cinch.



The Bi-Slob ARF is one of our current playthings, and I built this one for Mike Waldron. This airplane will give any pilot a new outlook on the stunt pattern.

I'm taking on this task, thinking that I can do it. My primary objective is to do my best in doing something I've never done before, and with the help of my District V members, I know that I'll have lots of fun. So, steer me in the right direction, as this column is for you.

In the next issue, along with your input, I'll tell you the story of my Legacy 40.

Wishing you tight lines always. *sw*



My Legacy 40 served me well, and carried me to the Advanced Finals at the 2014 Nationals. The scratch-built plane with an electric power system flew without faltering, and brought home the Advanced Class win.

—Don Ogren
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Illinois, Indiana, Kentucky, Missouri

I am writing this on the day we achieved a record cold temperature. Flying is not in the cards for a while, so it's nice to look at a stack of photos from Mike Schmitt from the Chicago



Attendees at the Windy City Classic. How many planes and pilots can you name? (Mike Schmitt photo.)

District VI

by Dennis Adamisin



In the end, it's about the fortune and glory. These are some of the prizes awarded at the Windy City Classic.

area Circle Masters Flying Club's Windy City Classic last summer.

Man. Everything is green, folks wearing short sleeves—seems



Gene Schneider holds Mark McKinney's Bare Bones (Mike Schmitt photo).



Crist Rigotti signals to launch his Thundervolt. This had to be one of the last Midwestern contests Crist attended before he moved to Texas. Our loss is your gain. You guys take good care of him down there! (Mike Schmitt photo.)



Mike Rebbe helping his nephew, Kyle, through the basic flight pattern (Mike Schmitt photo).



Mal Fawley helps Bob Baldus get his Impact airborne (Mike Schmitt photo).

like ages! The results of the meet should be in that section of this magazine. Thanks to Mike for the stack of photos.

"A man who views the world the same at fifty as he did at twenty has wasted thirty years of his life"

—Muhammad Ali

Funny how perspectives change. I know that's *sacrilege* for a kid from Detroit and former member of the Strathmoor club, but I used to avoid I-beams like the plague. They were structurally too flexible and terrible to paint and finish. By contrast, fully sheeted wings were rigid, stable, and much easier to finish.

However, I also used to be able to go to my local hobby shop and routinely pick out some pretty good wood. Not so anymore. Heck, awhile back I went to my hobby shop and could not buy a sheet of 1/16 balsa of *any* size or grade!

After over 40 years of building—and a change in perspectives—I finally built my first I-beam just a few years ago. The Jack Sheeks' Swinger called on some unique structural techniques versus a "normal" I-beam, but I really got a kick out of building it. I have also never been crazy about "classic" styling (with the exception of Steve Wooley's Cobra), and avoided it.

Now I find myself trying to reinterpret it in my own way, which also means revisiting the source material. I've been gathering up old "beamer" plans dating all the way back to Sam Dehlean's Nuts & Bolts from PAMPA plans. Of course I have about a dozen Jack Sheeks' plans. All are pretty good, some are better.

As you can imagine, I have found quite a few similarities. And of course, Jack's plans exhibit a lot of creativity on how to make the I-Beam fit his purposes. These, along with a few of my own ideas, formed the backdrop when I designed my MythBuster and the new super-secret Q-Ship. After consulting with "Eddy R" down in North Carolina, I included a trussed rib layout on the latter, which added quite a bit of torsional stiffness. I'm counting on it being the best one yet. Gosh, now that I am building I-beams, can a lost foam wing be far behind?

All of the above is a part of the windy introduction of a new/old I-Beam Classic in the shop. When I first saw Billy Werwege, he was flying his Super Ares, actually a derivative he named Vulcan. It was powered by the worst-sounding engine (a K&B 45GH) I have ever heard, but it got the job done. I never saw him fly the "little" Ares; heck I never knew there *was* a '59 Ares and a '62 Ares.



From *deep* in the family photo archives, Arch Adamisin poses his new Ambroid Ares. Note the tricked out fin—originality you know! It was moved forward a little with a trailing fillet that ran into an emphasized stinger tail. I should try to duplicate that (along with the red and black scallops) on my new Ares...

My brother had built an Ares from the Ambroid kit, but it did not fly well. It was only recently that I have seen the smaller Ares and what it can do. My regular flying buddy, Wesley Dick, has a couple of '62 Ares/Aero Tiger 36 combos. His birds are in the 42-43 ounce range with great power and are extremely consistent. Wes flies them well.

You could say I've developed "Ares envy." A while back, I started a '59 Ares from the Brodak kit as the mule for illustrating an assembly manual for an electric conversion kit. The fuselage was built, photos taken, conversion manual written, and the fuse has been sitting on the shelf in the basement for nearly a year while other conversions got worked on.

However, the Ares is moving to the front of the build list. Indeed, with the fuselage built by the standards of I-beam building a good weekend of work should get it sitting on its feet—maybe by the time you read this? I also look forward to finishing a Stuka Stunt, but that story will have to wait for another issue.

With more than a dozen flyable airplanes on hand and a *bunch* of builds in progress, I have reached the saturation point on storage space and usage. Several birds on hand will have to go—some more regrettably than others!

Some will be sold, some given away, some may be *burned!* It's that last group that really perplexes. I hate giving up on a bird that has not lived up to expectations, still figuring the burden is on me to find and exploit some magic tweak that I have not used yet to unlock the performance the bird has to offer.

It also remains true that we can learn more from salvaging "dogs" than we can by minimalist trimming that most good airplanes require. Unfortunately, it's all the extra effort, too often with dubious payoff. I mean, how much more time shall I spend on trimming an OTS dog when at its best it will never be better than (much less as good as) three other OTS birds already flying? Sometimes you have to say *enough* and spend the time more productively.

50th Anniversary

The Adamisin family flew in our first Nats in 1965 at the Willow Grove NAS. Collectively we flew Stunt, Rat Race, and Carrier, so we were busy all week. The memories are as vivid

now as when they happened.

We stayed in the Navy barracks, had our meals on the base, and generally lived in total model airplane immersion for the entire week. MOBA (my Much Older Brother Arch) flew his modified Gialdini Sting Ray. Dave had a 56 oz. Nobler with the then-new O.S. Max .35S—the engine the Fox guys laughed at.

Dad did not fly Stunt that year, but he had one of the first of the original blackhead Rossi 61s in a J. Roberts Mauler and it was *fast!* I had learned to fly inverted and the full pattern two weeks earlier and was flying in my first contest, using a Buster with a Fox .29.

Turn the page, actually a lot of pages. 2015 will mark the 50th anniversary of our first Nats and we are conspiring to see how many of us can show up at the Nats this year to mark the occasion. Appropriately, we all hope to fly Classic and maybe OTS.



Arch Adamisin poses with his modified Sting Ray at the 1965 Nats. 2015 will mark the 50th anniversary of the Adamisin family's first Nats.



Another photo from the 1965 Nats. Dave Adamisin and Big Art (just Art back then) started cranking the O.S. .35 in Dave's Nobler.

MOBA has his Blue Jet design laid out for the laser cutter. He also has a couple of his other Classic-era designs in the works. Don't know what I will bring just yet. Could be the aforementioned '59 Ares, could be a copy of my 1969 Typhoon, could be something else altogether.

For OTS, I am working on a design that my dad and his brother, Paul, built in 1950. The carcass of that airplane still exists as do dated photos (*perfect* documentation!), and I am creating a set of plans and laser files. Dad and Paul did not compete back then, but their airplane will be perfectly capable of the OTS pattern. It's going to be a real crowd-pleaser, too. Stay tuned! *SN*

Iowa, Michigan, Minnesota, Wisconsin

District VII

by Bob McDonald

Hello everybody. It's time again for stuff from District VII. This time we have some info from the Michigan Stunt championships in Westland, Michigan, at the Signal Seekers field. This event was flown on the second weekend of August.

On Saturday, we had Old-Time, Classic, and Profile on a bright sunny day with *lots of wind*. Sunday we had the PAMPA classes after the early morning rain stopped, but the air was much better as far as competition went.



The flightline on Saturday with some of the entrants for Old-Time, Classic, and Profile. Photo from Rick Sawicki.



Vince Bodde's Tigercat Twin and his Old-Time Fancy Pants behind. The Tigercat is the same one I featured in a prior column when it was under construction. It is powered by two FP .25's and the airfoil is a .40-size Legacy. After a little tuning and trim work, he and I were doing during the contest this thing really flies. Photo from Rick Sawicki.



John Paris helps Jay Williams to the flightline for his Old-Time flight. John was my predecessor as District VII representative until he took a position in Korea for the past three years or so. John is back full time, so I suspect we will see much more of him on the contest circuit. Photo from Rick Sawicki.



Frank Carlisle helps John Paris get ready for his Old-Time flight. Frank has been a longtime supporter around these part especially with the Tour 'D Michigan series. Photo from Rick Sawicki.



Contest central at the Signal Seekers' field. That's Wes Dick and Vince Bodde in the foreground and Curt Nixon and me doing something in the back. Photo from Rick Sawicki.

Now for the really important stuff. The Saturday evening hot dog roast at Randy Ryan's house has been a traditional bull session pretty much since we started having our contest at this site. Randy, this year's CD, lives in Bellville MI. That's about 10 miles southwest of the field, not far from Willow Run Airport where they built the B-24 during World War II.

Well, that's all I have for now. Fly Stunt and send me stuff for the column.

Till next issue. *SN*

—Bob McDonald

Right: Stunt fliers doing what we do best—sitting around eating free food and telling lies. Photo from Rick Sawicki.



District VIII

by Doug Moon

We are starting a new year and I am here again as your District VIII rep. I would like to start off the new year by thanking all of those who contributed to the columns during the past two years. You all have been a huge help. There is no way I could have filled the columns without your help. I do hope you will continue to help along the way as we work our way through another year of Stunt.

District VIII gets busy at the end of the season. After a hot summer, people are ready to get out and get some flights in during the cool fall. Usually there is good enough weather here and there for some pleasant flying sessions and some good contests with some really great people.

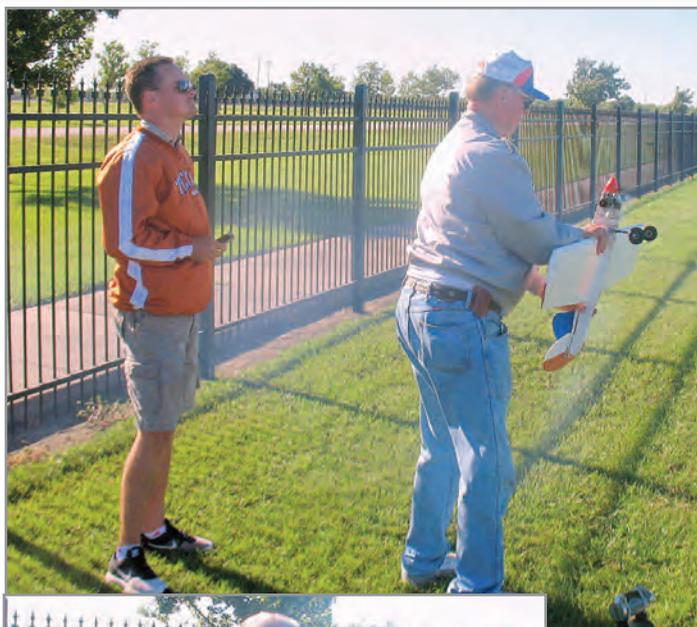
Mark Troutman sent me some pictures and information from the Ringmaster Roundup. The 2014 Ringmaster Roundup was held on October 3-5 at Scobee field in Katy, Texas. There was a good turnout with very nice, slightly breezy weather. There was lots of good flying and fun.

The winners in class were Joe Gilbert in Expert and Old-Time, Richard Stubblefield in Advanced, Mark Troutman in Intermediate, and Ben Anderson in Beginner. Richard Stubblefield also won the High/Low competition. John McCollum came all the way from Maine and won the best Non S-1 Ringmaster with a three engine Ringmaster powered with a two McCoy 19s and a McCoy 40. It was quite a sight/sound seeing it loop.



2014 Ringmaster Roundup.

Arkansas, Louisiana, New Mexico,
Oklahoma, Texas



Above: Colin and Ben Anderson tune their Ringmasters for the upcoming action.



Left: John McCollum made the trip from Maine to fly in this event!



The trimotor Ringmaster waits in the pits. Two McCoy .19s and a McCoy .40 haul this beast around nicely.

The 2014 Charlie Melancon Memorial Stunt Contest in Baton Rouge, Louisiana, was held on October 18-19. Fred and Steve Kocher sent some photos of the event. Looks like perfect weather conditions and great field as well. I will let Fred and Steve's photos tell the story.



The warbirds are getting ready for battle.



Darrel Harvin assists Tom Dixon.



Don Hutchinson prepares his model for the next flight.



Joe Gilbert pits for Don Cranfill.



Bill Rutherford looking very relaxed on the handle.

Eldorado, Arkansas, was a hot spot this year, hosting two contests. The fall event took place on November 1-2. Saturday was the Profile event and Sunday was PAMPA classes. Fred Kocher sent photos of the event.



Tom Farmer and his large Forerunner show us how it's done.



Tom Farmer's Forerunner.



John Hill under the watchful eyes of the judges.



Jason Greer in action.

The Oklahoma Control Line Championships was held on September 27-28 2014. De Hill sent the results and I have forwarded them to Howard Rush. They should be in this issue in the contests section. Please see this thread on stunthanger.com for a whole slew of Elwyn Aud photos. He is the master! <http://stunthanger.com/smf/index.php/topic,36773.0.html>

Don Hutchinson sent me a story about a DMAA member. I think this is really cool and I will let Don tell the story.

DMAA member honored: On November 10, Flora and I were privileged to be invited to attend a luncheon ceremony at the Cavanaugh Flight Museum in Addison, Texas, where DMAA member Gary McClellan was awarded the FAA Wright Brothers Master Pilot Award. Gary has a long history in aviation, having flown the Ford (Douglas F4D) in the Marine Corp and at American Airlines about every Boeing and Douglas jet airliner ever built.

Among the attendees were members of his family, other aviation friends, and much to my surprise, 2014 Nats winner, David Fitzgerald! David, Dan, and Jim McClellan were Gary's first real airplane flight students. They were also all Junior and Senior Nationals champions. They are now captains for major

airlines. Flying model airplanes can make dreams come true! The award presentation was followed by a delicious lunch, much hangar flying, and tours of the museum. Here are some photos from the event.



Gary McClellan receives his Master Pilot Award.



Some of Gary's memorabilia.



Don Hutchinson, David Fitzgerald, and Gary McClellan.



The cake! I heard it was really good!

Thanks again to all who have sent me and continue to send me information and pics of all the happenings in District VIII. I look forward to another year of great stunt flying. *SM*

—Doug Moon

Stunthanger.com

Control line forum

District IX

by Jack Pitcher

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

At this writing, November has set in around District IX and most of us are heading to our workshops for our wintertime Stunt entertainment.

I have just a few photos on hand that I've received from around the district that might serve to remind us of the warm-weather days past.



Doc Holliday sent in this photo and comments. "My latest that has not been flown yet. It is my version of the Ringmaster Imperial. It was built from a Walter Umland kit. Power is LA .46." Holliday photo.



Another shot of Doc's Ringmaster Imperial. Holliday photo.



Gary Hetrick, of Fremont NE, sent this photo of his latest Ringmaster built from a Brodak kit and powered by a Randy Smith reworked Fox .35. Weighs in at 26 oz. Gary Hetrick photo.



Jerry Higgins seen at Brodaks last summer with his recently completed RH-1. This model is based on the Pathfinder wing, stab and layout with Jerry's restyled fuselage and is powered by an O.S. .46 LA. Jerry reports that it exhibits the same excellent flight characteristics of the original Pathfinder. Mark Gerber photo.



Mark Gerber is making steady progress on his Parrott P-40 seen here in silver. Mark reports it's just about ready for color. Power will be an Aero Tiger .36. Mark Gerber photo.

If you have shop projects underway, or have the good fortune to still be flying this season, send me some pictures so I can include them in our district *Stunt News* column. *SN*

—Jack

Arizona, California, Guam, Hawaii, Nevada, Utah

District X

by Jim Hoffman

Karl Marschinke Memorial Control Line Contest: The Cholla Choppers of Tucson held the annual Marschinke Contest at the Christopher Columbus Park in Tucson, Arizona, on the weekend of September 27 and 28. The weather was a little warm and the breeze made it interesting. Thanks go to the CD Lou Crane and the Cholla Choppers members who all pulled together and make this stuff happen.

Results ought to be posted elsewhere in *Stunt News*. It was nice to have Grady Widener of Phoenix reappear in the Stunt circle and also welcome Larry Davis to the Stunt circles. Thanks to Keith and Barbara Trostle for again hosting a Saturday night party at their home.

If you think Stunt is exciting in the wind, come visit the Carrier circles during the breeze. Burt Brokaw, Lou Wolgast, and I all fly Carrier as well as Stunt. Burt showed us in the wind why he is a national Carrier champ, while Lou and I are mere enthusiasts.

Golden State Stunt Championships: The PC Flyers of Fresno held the annual Golden State Stunt Championships (GSSC) at the Madera Airport in Madera, California on the weekend of October 18 and 19. The weather cooperated with sunny days and reasonable breezes.

The heavy lifting was done by CD Brian Massey, his brother Mike Massey, another pair of brothers Bob and Bill Swan, Norm Gayer, and a variety of other PC Flyers club members. Great job guys!



Brian and Mike Massey were able to do some flying at GSSC in between their other duties.



Alan Rensinger did a great job decorating his superbly built electric Crossfire. Look at the airbrush work on the tail.



Brian Massey and Bob Swan award the Concourse award to John Callentine at GSSC.



Bill and Bob Swan take a break from working and flying at GSSC to show us their fine-flying Yak 9.



Charles Carter really enjoyed his first CL competition; he flew Intermediate at GSSC.



Jim Hoffman's ancient Impact at GSSC now sports Paul Walker's signature.



Grady Widener and his Pratt Profile Force powered by a Moki 51.



This is Mr. Hiroshi Kiyomoto's Blue Max. PA 75 on pipe. Mr. Kiyomoto makes the carbon tanks that Kaz sells.



Peggy Capitanelli and Kathy Comer doing the math at the tabulating table at the Marschinke contest .



Larry Davis preps for a flight at the Marschinke contest.



Ray Firkins give a launch to the beautiful classic Zlin built and flown by Jerry Silver at GSSC.



Check out the neckwear adorning fashionista Larry Renger at the GSSC banquet.

I cannot say enough complementary things about the event. The organization, the site, the hotel, and the camaraderie were all top notch. Brian kept us all posted via email so that when we arrived the contestants and volunteers knew the schedule and any needed details.

There were 22 entered in Expert and 27 in Classic, and slightly fewer in OTS and the other PAMPA classes. This solid organization and the cooperation of the pilots, pull testers, tabulators, and judges permitted the flying events to be moved along as fast as possible. Don't forget the yummy hot dog and hamburger lunch at the field served Friday through Sunday. Free food and a voluntary donation jar nearby worked well for everybody.

John Callentine of Tucson competed in Expert with his new Rabe Seafury. John's model is exquisitely built and finished. He received 20 appearance points and won the pilots' vote for Concours award by a landslide. The Saturday night banquet was well attended. We enjoyed an entertaining slide show featuring the recent US Nats and the World Championships in Poland. Thank you Howard Rush and Dave Fitzgerald.

Two noteworthy aspects of GSSC are the incredibly high levels of both craftsmanship and flying prowess. At appearance judging the planes were placed in point rows as done at VSC and the Nats. Three planes were in the front row (20 points). Most planes were between 15 and 20 points. Let me tell you, a 15 pointer is still a very nice model and would be viewed as exceptional at nearly any other venue.

The flying skills exhibited were exceptional. The PAMPA Expert class included four of the top five 2014 Nats finishers, as well as many past Nats winners, Nats Top-5 fliers, FAI team members, and one World Champ. The scores ought to be elsewhere in *Stunt News*; take a look, you will notice that there

were 22 experts entered and the fourth-place winner scored more than 600 points. Unfortunately, Brett Buck got ill Saturday night and could not attend or fly on Sunday.

Perhaps the sentiment that stayed with me longest was the obvious gratitude the participants expressed in their words and deeds. The contestants demonstrated a very high level of volunteerism; they served as judges, runners, and financially sponsored the awards.

GSSC draws the Stunt fliers from the entire West Coast of the US—from Tucson to the south and Vancouver, Canada, to the north. Consider putting it on your calendar. This year's dates are October 18 and 19, 2015.

Larry Renger was awarded the Barton Award at the GSSC Saturday night banquet. This award is given to the California modeler who has supported our hobby in those non-glamorous ways by doing the hard, behind-the-scenes work associated our hobby. Larry was noticeably overwhelmed by the award.

Atta boy Larry, you are a deserving guy.

Joe Hoppa: Longtime modeler, Joe Hoppa spectated at GSSC and followed up with a few emails and photos to Dave Fitzgerald and Howard Rush. Dave was kind enough to share the photos with me for use in this column.

Joe is a mechanical engineer and lives in San Jose, California. He flew Control Line in the '50s, '60s, and '70s while living in western Pennsylvania. He then relocated to California and flew there in the 1980s. Following a long gap, Joe is now interested in flying Stunt again.

Welcome back, Joe. SN



Above: Joe Hoppa's last Stunt ship, built in 1987, is based on a 60-inch Magnum wing with a piped .O.S. 40VF.

Left: Marschinke Contest CD Lou Crane.

District XI

by Mark Scarborough

Greetings! Well, this is my first appearance as your interim District XI PAMPA Director. A short while ago I received an unexpected call from Warren, who mentioned that Mike had needed to step down from his position as your director and that one of my friends had suggested me as a replacement to fill the void.

I tried, I really tried, to come up with a good reason I couldn't do it, but since he caught me off guard, well, I had no choice but to accept, considering I could only come up with lame excuses. Then Bob Hunt talked to me and mentioned all the fame, glory, and women that come with this illustrious position, so how could I refuse? (That's a lie, Mark. I never said word one about fame

Alaska, Idaho, Montana, Oregon, Washington

finished creations, which is flattering. Thanks.

Now on to some relevant news. I see that there have been a couple local contests which have not been covered in *Stunt News* yet, so I will touch base on them for you briefly.

The first was the R.F. Stevenson Raider Roundup held in Auburn, September 13 and 14. This was my first time attending a contest in Auburn. All I can say is that all the hype I heard was right. This is a great facility. Nice smooth blacktop, room for two circles, and a generous pit area. It was helped by the awesome weather we had.

Unfortunately, despite the fantastic location and weather, attendance was a bit lighter than hoped. We had six Experts and



Bruce Hunt's new Skylark. Mike Haverly photo.

and glory...—Ed.) Considering my lady, Linda, would frown upon the women, and you already know me, the fame is of marginal benefit. I think I will hold out for endorsements and all the riches.

A lot of you already know me or know of me, but it's still probably worth a moment to let you know something about me. I started flying Stunt in 2006 with some of the gang from Kennewick. I had flown a bit of recreational Control Line in my teens, but the Air Force and marriage kind of put an end to that. I did fly a bit with a friend while stationed in Sumter, South Carolina, but it was all just sport flying.

After a change in my marital status, I needed something to occupy my time. Nothing better than modeling, right? So here I am now, an Advanced (almost ready to move up) pilot learning to build and fly better all the time, or so I tell myself. I basically just fly our local contests, though I did make the trek to VSC a couple years ago and would like to attend and compete in the Nats one time, at least.

My favorite part of building is finishing; I love to sand and paint. I have been told it shows in my



Bruce Skylark from overhead. Mike Haverly photo.

three Advanced pilots. Expert was a shootout between Paul Walker and Chris Cox, with Paul coming out on top. Advanced saw Rex Abbot finish first this go around. Profile and Classic each had four entries, with Bruce Hunt taking honors in Classic and Mike Haverly in Profile.

Old Time had three entries, with John Thompson taking winning with a four-stroke-powered Ringmaster that has enjoyed being at the hands of several local pilots. Of note, this was the contest debut for Randy Powell's new electric Hard Magic and my new profile. Randy's bird is quite different and very well executed, as we have come to expect from Randy.

The next contest was the season ending Fall Follies in Salem. This contest is held in October, and here in the Northwest this can mean anything from rain and snow to warm, sunny days. This year we had great weather again, which was appreciated by all in attendance. This was especially appreciated during Sunday's feast of burgers prepared by the local burger guru, Mike Hazel. The feast is a treasured part of the Follies every year, and this year was no exception.

Classic stunt had six entries with Mark Scarborough pulling out his first ever Classic win. Old time was won by Dave Royer. Profile was divided into Sportsman and Expert. Mark Scarborough won Sportsman and Mike Haverly took Expert honors.

Sadly, we had no entries in Beginner and only one in Intermediate. Advanced had four entries and was won by Fred Underwood, and Expert had a healthy nine entries. Paul Walker came home with top honors while Howard Rush was chasing him. The Canadian contingent was not present this go around. It was great to see Pat Johnston back at a contest; it's been a while.

This contest is also where the Vintage Stunt Trophy is awarded based upon the regional points for the pilot scoring the



Mark Scarborough's electric profile. Mike Haverly Photo.

Roundup the top four in Expert were electric.

Randy Powell's new creation is quite something to look at. He calls it Hard Magic. As can be the case whenever someone undertakes new technology, he has had a few teething issues, but it is showing promise. It is quite imaginative and has a typically Randy paint scheme—interesting colors and layout which accent the very unique lines of the airframe.

I don't have a good high resolution shot of his plane, but there are pictures of it in the Raider Roundup report on Flying Lines.org. It has also been seen on *Stunthanger*, if you frequent that board. As I recall, Randy is using an E-flight .32, Castle ESC, and a Hubin Timer. It really looks different in the air and on the ground.



Paul Walker's Impact as seen at Auburn, interesting view with Chris Cox's Crossfire behind it and another bird in the air behind it. John Thompson/Flying Lines photo.

most points in Old Time and Classic combined over the course of the year. This year it was sponsored by FLynglines.org and was won by John Thompson, who scored points in both Old Time and Classic.

Of note, electrics are becoming far more prevalent at our local contests. It is interesting to watch the progress and people become more and more comfortable with the technology. I know I, for one, have been sold for a while, and while I will not say that electrics present a leap in performance, the consistency is well noted. At the fall Follies I believe the top five models in Expert and the top two in Advanced were electric. At the Raider

The other new plane at Auburn was my electric profile. It is based on full-scale Impact numbers, though it really doesn't resemble an Impact. I have had some interesting issues. It was flying pretty darn well, except it would hunt in level flight. I received some quality feedback from outside the circle and was making good progress getting it trimmed but really could not eliminate the hunt. No binding, no weirdness in the controls, and CG adjustments weren't fixing it.

After some time, Howard came over and mentioned he saw the tail moving around. Interesting indeed. We strapped his little digital camcorder to the nose looking back at the tail. The story is

now told; in level flight the aft of the airplane was deflecting outboard about ½ inch on the downwind side of the circle. This deflection was causing the elevator to deflect because of the tail moving and the pushrod being stationary.



Fred Underwood's "Similar 2" electric profile. John Thompson/*Flying Lines* photo.

I have since built and installed some flap fairings that run from the wing trailing edge to the tail of the airplane. This has resolved the hunt in level flight and now she is flying pretty well. I am using an e-Flight .32, Castle ESC, and Hubin timer with the APC 13 x 4.5 prop. The 5S batteries I'm using provide the electrical motivation to spin all the rotating bits.

Auburn was also my first exposure to Bruce Hunt's new Classic bird. It's a Skylark, but I don't know much more than that about it. It is showing promise, though I think he suffered an issue with the nose during an official flight. Again, I don't have the details on hand.

We have also acquired a new pilot, stolen from the eastern states. Robby Hunt is living in Seattle and now has an airplane to fly. So we look forward to sharing the circle with him, and I look forward to meeting him outside of Facebook.

There are some interesting things going on here in the Northwest with regards to Stunt. I will try to gather some information for my next column. A teaser: Howard Rush has been using a timer, designed and programmed by Tim Westcott, which is showing some progress.

One tidbit I would like to relate: During a recent conversation with Pat Johnston, who does some custom laser cutting and has well over 100 plan sets drawn up in CAD, I was lamenting my frustration at replicating the Paul Walker-style leadout guide. I struggle to make a piece which meets my expectations.

After some conversation the idea came up of cutting them on his laser. He took the idea and ran with it. I now have several sets made up and they are really trick. They are cut from layers of ply with the holes and slots cut and include 1/16-inch holes for alignment pins when gluing the layers together. I have installed them in the tips on my new PA Impact and can attest to their being "the cat's pajamas."

To ease the installation without distortion, he thoughtfully left one of the spaces between the holes bridged, but only on one layer so that the leadouts can remain in proper orientation

during installation and no distortion of the parts occurs. It's a really slick idea and one of those things that makes it much neater to build.

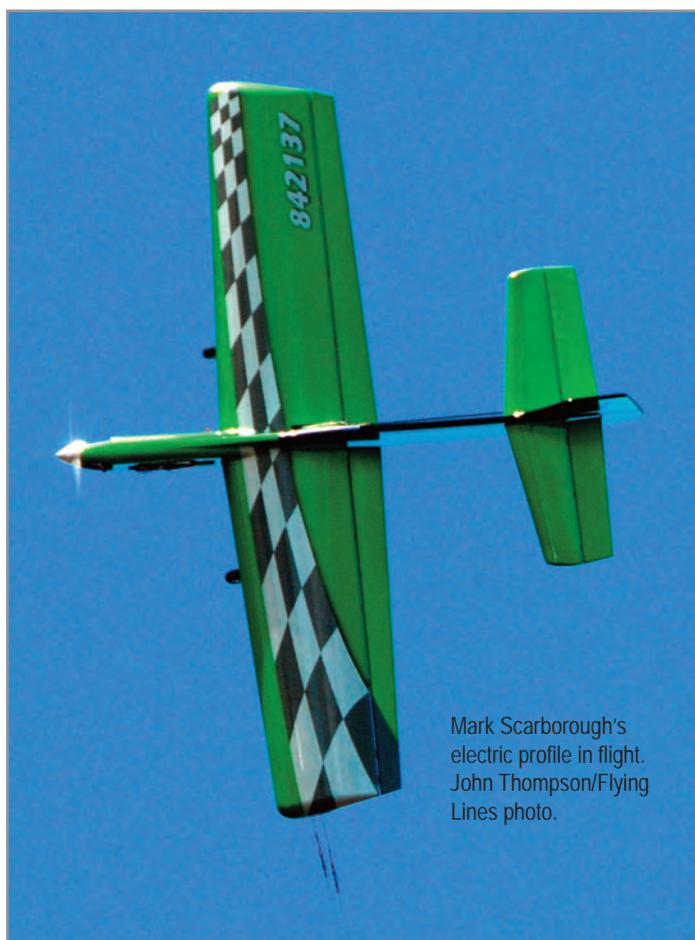
Well, I think that's all I have for my first go around. I will see you all in a couple months. Hopefully, all of you will help me out with pictures of what you are building and planning for next year.

As always, go to Flying Lines.org for more detailed information about regional contests and goings on. Don't neglect reading up on the other tidbits, as there is some interesting stuff to be seen.

For example, there is a recently posted article by Orin Humphries about some testing he did on I-Beam spars and longerons for his ongoing Scale project. It contains some valid information and observations which are well worth the time to read.

Hopefully, I will have more photos and information in

upcoming issues.



Mark Scarborough's electric profile in flight. John Thompson/*Flying Lines* photo.

Until next time, build light and paint pretty. *sv*

—Mark

Contests

Contest Calendar

For up-to-date listings see the PAMPA website: www.pampacl.org . See also the AMA Web site: modelaircraft.org/events/calendar.aspx. 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. Submit contest ads to Gene Martine, gmflying@bellsouth.net .

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

2015 Contests:

February 7

New Zealand CL Stunt Series Round 3
Horotiu Soccer Field, Horotiu, Waikato

<http://goo.gl/maps/9wZTU>

F2B, Sportsman

CD: Brian Howser, b-h.howser@clear.net.nz

February 14

Presidents' Day Contest

Garland Hobby Park,

E. Northwest Highway and Garland Rd., Dallas, TX

Old Time, Classic

Contact: Bill Bischoff, billbisch@hotmail.com

www.dmaa-1902.org

February 22

Ice-O-Lated Stunt, Perky, and Fox .35 Speed Contest

Buder Park, Valley Park, MO

Take exit 272 north from I-44, turn right at Meramec St.

Basic Flight*, Profile*,

Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)

CD: Fred Cronenwett, (316) 680-1515,

clscale@rocketmail.com

March 7

New Zealand CL Stunt Series Round 4

Portland Sports Club, McGill Rd., Portland,

-35.805298, 174.326329

F2B, Sportsman

CD: Kim Webby kwebbyharp@xtra.co.nz

March 17-21

Vintage Stunt Championships

Christopher Columbus Park,

4600 N. Silverbell Rd, Tucson, AZ

Tuesday-Wednesday: Old Time, Ignition Old Time,

Ringmaster Old Time

Thursday-Saturday: Classic & Super 70s*

Entry deadline: March 6, 2015

CD: Jim Hoffman, 2658 W Montgomery Dr, Chandler, AZ

85224, (480) 897-0630, (480) 329-3316, windswept4@cox.net

www.cmaconline.org

April 4

New Zealand CL Stunt Series Round 5

NPMAC CL site, Junction Rd, New Plymouth, Taranaki,

-39.117977, 174.117294

F2B, Sportsman

CD: Andrew Robinson, a_robinson_nz@hotmail.com

May 2-3

Carolina Classic, 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*,

Advanced*, Expert*)

CD: Everett Shoemaker, (252) 633-4128,

evjoshoe@embarqmail.com

May 9

New Zealand CL Stunt Series Round 6

RMAC Field, Mead Rd, SE of Rotorua

-38.217596, 176.355735

F2B, Sportsman

CD: David Thornley, dthornley47@clear.net.nz

May 16

Bob Shaw CLPA Contest, Joe Nall Week

Triple Tree Aerodrome, 330 Mary Hanna Rd. Woodruff, SC

Precision Aerobatics (Beginner, Intermediate, Adv., Exp.)

CD: Mark Weiss, (302) 547-4917, ama82824@yahoo.com

tripletreeaerodrome.com

May 16

Jim Morway Memorial Contest

River Rouge Park, Detroit, MI, 42.361833, -83.254862

Classic

Contact: Paul Smith, crickballs01@aol.com

May 22-24

Northwest Control Line Regionals,

Roseburg Municipal Airport, Roseburg, OR

Details tentative

Contact: John Thompson, john4051@aol.com

<http://www.flyinglines.org/Action.html>

May 23

May Stunt Meet,

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 south beyond parking area to the field.

Precision Aerobatics*

Contact: Bill Barber, (805) 241-0453, barcam@verizon.net
<http://sites.google.com/site/valleycircleburners/>

May 30-31

Toronto & District Championships, 55th Anniversary
Centennial Park, Toronto, Ontario

Saturday: Old Time

Sunday: Profile, F2B

<http://www.balsabeavers.com>

June 7

Wisconsin Stunt and Scale Championship

Site TBD

Classic, 1/2A*,

Precision Aerobatics (Beginner, Intermediate, Adv., Expert)

CD: Peter Mick, (262) 377-6137, pmick82541@aol.com

June 13-14

Mid-Iowa Controliners Fathers' Day Contest

Big Creek State Park, Polk City IA

Saturday: Old Time, Classic, 1/2A*, Ringmaster*,

Profile* (Beginner-Intermediate combined,

Adv.-Exp. combined),

Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)

CD: Bob Baldus, (515) 240-1196, bstudeman@aol.com

June 13-14

Stunt-a-Thon, Auburn Municipal Airport,

16th St NE and D St NE, Auburn, WA

Saturday: Old Time*, Classic, Profile*

Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)

Contact: Pete Ferguson, (206) 930-6221, pferg3@comcast.net

<http://www.flyinglines.org/Action.html>

June 15-20

Brodak Fly-In, Brodak flying field, Carmichaels, PA

39.8812N, 79.9595W See Web site for map and directions.

Schedule to be announced

CD: William Davis, (704)860-1079, willddavis@msn.com

Contact: Sandy Bruce,

Brodak Manufacturing and Distributing Company, Inc.

100 Park Avenue, Carmichaels, PA 15320, (724) 966-7335

flyin@brodak.com

<http://brodak.com/fly-in/>

June 21

Nearly 1/2A Day

Rice Mill Road flying site, Richmond, B.C.

Nearly 1/2A Fun Stunt *

Contact: Keith Varley, kvarley3@gmail.com

<http://www.flyinglines.org/Action.html>

June 27-28

Bean Field Grand Prix, The Bean Field, 30167 Esterville Rd.,
Dresden, Ontario, N 42° 37.533' W 082° 08.639'

Saturday: Old Time

Sunday: Profile, F2B

<http://www.balsabeavers.com>

July 13-18

US Nationals

Stunt ED: Bob McDonald, 28746 Westfield St,

Livonia, MI 48150, (734) 421-0429, bobsp47@sbcglobal.net

August 1-2

Western Canada Stunt Championships

Saturday: Old Time, Classic, Profile *

Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)

Rice Mill Road flying site, Richmond, B.C.

Contact: Keith Varley, kvarley3@gmail.com

August 8-9

Jim Coll Memorial Stunt Contest

6035 Shiloh Camp Road, 2 miles SW of Hurlock, MD

Saturday: Old Time, Profile*

Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)

CD: Jack Rosemere (410) 330-4663, jrosemere@verizon.net

Contact: Tim Stagg, tstagg@goeaston.net

<http://www.esacclub.org/>

August 8-9

59th Annual Red River Valley Championships

Trefoil Park, Fargo, ND

Park entrance is at Elm St. and 14th Ave. N.

Saturday: Classic, Precision Aerobatics

(Beginner, Intermediate-Advanced-Expert) preliminary rounds

Sunday: Precision Aerobatics (Int.-Adv.-Exp.) finals

CD: Paul Kegel, (701) 237-3901, paulsmo@aol.com

August 9

Summer Stunt

Crowland Park, Niagara Falls, Ontario

Profile, F2B

<http://www.balsabeavers.com>

August 15-16

Dick Scobee Memorial, Auburn Municipal Airport,
16th St. NE and D St. NE, Auburn, WA
Saturday: Old Time*, Classic, Profile*
Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)
Contact: Pete Ferguson, (206) 930-6221, pferg3@comcast.net
<http://www.flyinglines.org/Action.html>

August 15-16

Western Kentucky/Southern Illinois Stunt Championships
Allen Brickhaus Memorial
McCracken County Model Air Park, Paducah, KY:
Saturday: Beginner Precision Aerobatics, Basic Flight*,
Profile*, Nostalgia 30, Old Time
Sunday: Precision Aerobatics (Intermediate, Advanced, Expert)
CDs: Charles Reeves, 8310 Moore Road, Paducah, KY 42001,
(270) 554-9920, chasreeves@comcast.net ;
Jim Lynch, 1249 West Perkins Rd, Memphis, TN 38117,
(901) 683-0492, stunt@bellsouth.net
<http://www.paducahaeromodelers.com/>

August 20-24

Prairie Fire Stunt Contest, Namao School,
corner of Hwy 37 and Hwy 28, Namao, Alberta,
goo.gl/maps/ptTzz
Thursday, Friday: coaching, trim assistance, practice
Saturday: Precision Aerobatics (Beginner, Int., Adv., Exp.)
Sunday: Classic/N30, Profile*
Monday: coaching clinic
Events flown by AMA, PAMPA rules
CD: Bruce Perry, 419 Klarvatten Lake Wynd,
Edmonton AB T5Z 3B9, (780) 478-0429, Bruce@magicbus.ca

August 22-23

Fellowship of Christian Modelers FCM at AMA
AMA, E. Memorial Drive, Muncie, IN
Saturday: Classic, Old Time, Profile *
Sunday: Precision Aerobatics (Beg., Int., Adv., Exp., Masters*)
Contact: Allen Goff, 2100 N Carrolton Dr., Muncie, IN 47304,
(765) 759-7473, fcm95@comcast.net
www.fcmodelers.com

August 29-30

Southern Ontario Control Line Championships
The Bean Field, 30167 Esterville Rd., Dresden, Ontario,
N 42° 37.533' W 082° 08.639'
Saturday: Old Time
Sunday: Profile, F2B
<http://www.balsabeavers.com>

September 12-13

R. F. Stevenson Memorial, Auburn Municipal Airport,
16th St. NE and D St. NE, Auburn, WA
Saturday: Old Time*, Classic, Profile*
Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)
Contact: Howard Rush, (425) 746-5997, hmrush@comcast.net
<http://www.flyinglines.org/Action.html>

September 19-20

Cleveland Area Stunt Championship
Cuyahoga Co Fairgrounds,
19201 East Bagley Road, Middleburg Heights, OH
Saturday: Old Time, Classic, Profile*, ARF/ARC*
Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)
CD: David Heinzman, (440) 734-6491, dheinz6746@cs.com

September 19-20

Broken Arrow 28 Stunt and Scale Contest,
Allen Brickhaus Memorial
Buder Park, 200 Valley Park Rd, Valley Park, MO
Take exit 272 north from I-44, turn right at Meramec St.
Saturday: Old Time, Profile*, Classic/Nostalgia
Sunday: Basic Flight (Junior and Senior)*,
Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)
Contact: Fred Cronenwett, (316) 680-1515,
clscale@rocketmail.com

September 19-20

Fall Stunt and F2B Team Trials
Crowland Park, Niagara Falls, Ontario
Saturday: F2B, F2B Team Trials
Sunday: alternate date for weather
<http://www.balsabeavers.com>

September 26-27

Oklahoma Control Line Championships
Reeves Field, Catoosa, OK, 36.166307N, 95.686659W. On the
east side of Tulsa, take Highway 412 2.9 miles east from I-44,
turn left (north) at Admiral (265th E). Turn left on access road
(E 586). Field is ¼ mile west on the right between buildings
with red and green roofs.
Saturday: Old Time Plus,* Classic/N30, Profile*
Sunday: Precision Aerobatics (Beginner Junior,
Beginner Senior-Open, Intermediate*, Advanced*, Expert*)
CDs: De Hill, 5811 So. Utica, Tulsa, OK 74105, (918) 743-
4912, dfhill@juno.com ; Lee Thiel, (918) 691-2717,
fox4now@valornet.com
www.tulsacl.com

October 3-4

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 south beyond parking area to the field.

Saturday: Classic, Old Time, Profile *

Precision Aerobatics (Beginner)

Sunday: Precision Aerobatics (Intermediate, Advanced, Expert)

CD: Bill Barber, (805) 241-0453, barcam@verizon.net

sites.google.com/site/valleycircleburners/

October 17-18

Golden State Stunt Championships,

Madera Airport, Madera, CA, <http://g.co/maps/deq47>

Saturday: Old Time, Classic

Sunday: Precision Aerobatics (Beginner, Int., Adv., Exp.)

CD: Brian Massey (559) 645.8018, bjmassey2@gmail.com

<http://www.californiacarclubs.com/GSSC.htm>

October 17-18

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, Int., Adv., Exp.)

CD: Everett Shoemaker, (252) 633-4128,

evjoshoe@embarqmail.com

October 18

Olde Time Contest

Buder Park, 200 Valley Park Rd, Valley Park, MO

Take exit 272 north from I-44, turn right at Meramec St.

Old Time

Contact: Fred Cronenwett, (316) 680-1515,

clscale@rocketmail.com



Control Line WORLD

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dedicated to
all things related
to control line*

Plans • Builds • Electric • Flying • Scale • Speed • Stunt

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Contest Results

Windy City Classic May 25, 2014, Rolling Meadows, IL Results from Michael Schmitt, CD			
Expert Judges: Jordan Segal, Michael Schmitt		Intermediate Judges: Dick Ferrel, Bill Allen	
1 Chris Rud 595 2 Mark McKinney 552.5 3 Crist Rigotti 528.5 4 James Schuett 496 5 Fred Krueger 470		1 Steve Gerding 388.5 2 John Broughton 351 3 Mal Fawley 272 4 Mike Rebie 151.5	
Advanced Judges: Jordan Segal, Michael Schmitt		Beginner Judges: Dick Ferrel, Bill Allen	
1 William Smith 492.5 2 Mike Waldern 475 3 Gene Scheiderer 473 4 Bob Baldus 466.5 5 Peter Mick 449.5		1 Scott Pahlow 204.5 2 Steve Rebie 124.5 3 Art Johnson 85	
Top Class II August 24, 2014, Topeka, KS Results from Jim Lee, CD			
Classic/Nostalgia 30 Judges: Jim Lee, Ginger Taylor		Profile Judges: Jim Lee, Ginger Taylor	
1 Andrew Hathaway 529.5 Nobler OS Max-S .35ABC 2 Bob Brookins 484.5 Oriental Brodak .40 3 Richard Spoula 339 Nobler Electric		1 Richard Spoula 410 Profile Force OS .40FP 2 Kevin Prier 394.5 Sukhoi OS .40FP 3 Cary Minor 385 FW 190 RO-Jett .40 4 Andrew Hathaway 339.5 Profile Force OS .32F 5 Bob Brookins 283.5 Super Magician Supertigre .46	
Stunt ED: Jim Lee Pit Boss, Pull Tester: Melvin Schuette Tabulator, Score Runner: Dan Kinder			
Hi Johnson Memorial October 4-5, 2014, Van Nuys, CA Results from <i>The Burner</i>			
Expert		Advanced	
1 Bob Harness 561 2 Kestutis Dvarvydis 554.5 3 Ray Firkins 550.5 4 Leroy Black 542 5 Stan Tyler 533 6 John Wright 486		1 Osvaldo Campos 467 2 Erik Duggie 460 3 Stan Kitzes 446 4 Alon Yehezkelof 433 5 Bill Barber 426.5 6 Fred Staley 498.5	
Intermediate 1 Charles Carter 380.5			
Beginner 1 Steve Sobel 209			
1CC 1 John Wright 488			

Carolina Criterium

October 18-19, 2014, Huntersville, NC

Results from Howard Shenton

Expert

Judges: Kent Tysor, Dave Wenzel

1	Dan Banjock	518.5	P-51 Mustang	PA .51
2	Steve Fitton	509	Dreadnought	PA .61
3	Mike Chiodo	490	P-47 Thunderbolt	OS .46LA
4	Matt Colan	488	Vector 40 ARF	PA .40UL
5	John Saunders	483.5	Legacy 40	ST .60
6	Ken Cerney	469.5	Marionette	RO-Jett .67
7	Charles Reeves	465	Southwick Lark	OS .46LA
8	Don Herdman	462	P-47 Thunderbolt	OS .46LA
9	James Lee	455	Gee Bee Model Y	Evo .60
10	Derek Barry	372	Cutlass	PA .65
11	Phil Cartier	363.5	Streak III	OS .40LA
12	John Rakes	118	Vector 50	PA .40

Advanced

Judges: Wayne Robinson, Doug Taffinder

1	Mike Waldron	507	Legacy 40	Electric
2	Don Ogren	505	Legacy 40	Electric
3	Don Jenkins	503	Vector 40	OS .46LA
4	Brian Moore	498.5	Stiletto	Evo .60
5	David Smith	497	Fanfair	Electric
6	Bob Krug	494	Strega	RO-Jett .76
7	John Tate	493	Vector 40	Electric
8	Ken Armish	492.5	Genesis	Electric
9	Alan Buck	490	SV-11 Exel	PA .65
10	Artie Jessup	483.5	Cardinal Profile	Saito .50
11	Gustavo Urtubey	482		Brodak .40
12	Gerry Glier	476.5	Super Caribe	PA .51
13	Dennis Moritz	467	JD Falcon Profile	Tower .40
14	Bernard Suhamski	388	Smoothie	OS .40LA

Intermediate

Judges: William Davis, Pat Robinson

1	Shug Emery	452.5	Prowler	OS Fp40
2	Dennis Lipsett	422	Brodak Zero	Evo .36
3	Rusty Knowlton	388	Osprey (Skyray)	OS .40FP

Beginner

Judges: William Davis, Pat Robinson

1	Roger Altizer	250.5	Oriental ARF	Enya .45
2	Brian Malin	242	Stormovic	OS .46LA
3	Mike Londke	227	Easy	Thunder
	Tiger	.36		
4	Jennifer Fedorick	153	Cardinal	OS .40LA

Basic Flight

Judge: Watt Moore

1	Robert Bowser	224.5	Banshee	OS .40FP
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Nostalgia 30/Classic

Judges: Ken Armish, Wayne Robinson

1	Dan Banjock	557	Galloping Comedian	Fox .35
2	Don Herdman	553	P-47 Thunderbolt	OS .46LA
3	Charles Reeves	552.5	Southwick Lark	OS .46LA
4	James Lee	551	Nobler ARF	Fox .35
5	Mike Chiodo	531	P-47 Thunderbolt	OS .46LA
6	John Tate	501	Dolphin	Electric
7	Ed Ruane	491.5	Falcon	ST .46
8	Don Jenkins	478	Gieseke Nobler	OS .40LA
9	Dennis Moritz	455.5	JD Falcon Profile	Tower .40
10	Bob Krug	444.5	Junar	RO-Jett .61
11	Bob Zambelli	366	Red Hot Angel	OS .25LA

Old Time

Judges: William Davis, Doug Taffinder

1	Charles Reeves	302	Big Job	Fox .59
2	Dan Banjock	299.5	Galloping Comedian	Fox .35
3	James Lee	296.5	Cheekcowl B'stormer	Fox .35
4	John Saunders	296	Humongous	ST .46
5	Bernard Suhamski	280	Viking	OS .35S
6	Bob Zambelli	274.5	Vampire	Fox .29
7	Roger Altizer	262	Humongous	ST .46
8	Brian Moore	259	YoYo	Fox .35
9	Artie Jessup	80.5	Squaw W/Flaps	Fox .35

Profile

Judges: Alan Buck, Dave Wenzel

1	John Saunders	497.5	P-40 Warhawk	ST .46
2	Dan Banjock	488.5	Ringmaster	Fox .35
3	William Davis	478.5	TEOSAWKI	OS .46LA
4	Mike Waldron	473	Pathfinder	ST .51
5	Don Ogren	467	Cardinal Profile	OS .40FP
6	Ken Cerney	459	Twister	Electric
7	Artie Jessup	457	Cardinal Profile	Saito .50
8	Gerry Glier	453	Pathfinder	ST .46
9	Shug Emery	452	Prowler	OS .40FP
10	John Tate	438	P-47 Thunderbolt	ST .51
11	Rusty Knowlton	417.5	Osprey (Skyray)	OS .25FP
12	Dennis Moritz	414	JD Falcon Profile	Tower .40
13	John Rakes	388	Pathfinder	ST .51
14	Brian Malin	329.5	Nobler Profile	Brodak .40
15	Phil Cartier	292	Streak RST	OS .40LA

S. H. Ringo Trophy

Mike Waldron

CD:

Everett Shoemaker

Stunt ED:

William Davis

Registration, Tabulation:

James Duckworth,

Clark Macomber

Results Recording:

Gene Martine

Essential Supplies:

Holly Sparkman

Circle Mowing:

Max Flowe

Southeast Stunt 'N Fun

November 1-2, 2014, Palmetto, FL

Results from Wayne Smith, CD

Expert

Judges: Bill Rich, Gene Martine, Wayne Smith

1	Matt Colan	543.0	P-47	OS .46LA
2	Jim Smith	534.5	e-Tracer	Plett
2	Wayne Smith	534.5	e-Tracer	Plett
4	Tom Dixon	532.5	Predator	Double Star .54
5	Eric Viglione	524.5	Rapier	PA .65
6	James Lee	476.5	Gee Bee "Y"	EVO .60
7	Bob Whitney	446.0	Formula "S"	Electric

Advanced

Judges: Bill Rich, Gene Martine, Wayne Smith

1	Mike Waldron	495.5	Legacy	e-Flite 32
2	Don Ogren	493.0	Legacy	Electric
3	Sam Niebel	485.5	e-Tracer	Plett
4	Rich Peabody	401.0	Vector	OS .46LA

Intermediate

Judges: Bill Rich, Gene Martine, Wayne Smith

1	Jim Mynes	425.5	Shark 35	Brodak .40
2	David Hallas	390.5	Cavalier	e-Flite 25

Beginner

Judges: Bill Rich, Gene Martine, Wayne Smith

1	Jerry Austin	117.5	Flite Streak	Fox .35
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Old Time

Judges: Dale Josephson, Brian Cook

1	Wayne Smith	299.5	Barnstormer	OS .25LA
2	Jim Lee	259.5	Barnstormer	Electric
3	Dennis Toth	255.0	El Diablo	Fox .35
4	Sam Niebel	254.5	Barnstormer	OS .25LA
5	Jim Smith	238.0	Barnstormer	OS .25LA
6	Bob Whitney	233.0	Big Job	Supertigre .60
7	Jim Mynes	225.0	Jamison	Double Star .40

Nostalgia 30

Judges: Dale Josephson, Brian Cook

1	Tom Dixon	553.0	Predator	Double Star .54
2	Robert Compton	523.5	Chipmunk	TT .36
3	James Lee	511.0	Nobler	Fox .35
4	Matt Colan	479.5	P-47	OS .46LA
5	Jim Mynes	458.5	Shark 35	Brodak .40
6	Bob Whitney	426.0	Formula "S"	Electric
7	Dave Hallas	424.0	Cavalier	e-Flite 25

Perpetual Trophy Expert Flyoff

Judges: Eric Viglione, Dale Josephson, Brian Cook

1	Matt Colan	554.3	P-47	OS .46LA
2	Wayne Smith	548.3	e-Tracer	Plett
3	Jim Smith	489.5	e-Tracer	Plett

Registration: Kathy Smith, Ray Thompson

Weigh-in and Pull Test: Brian Cook

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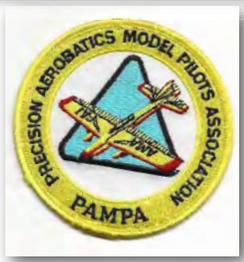
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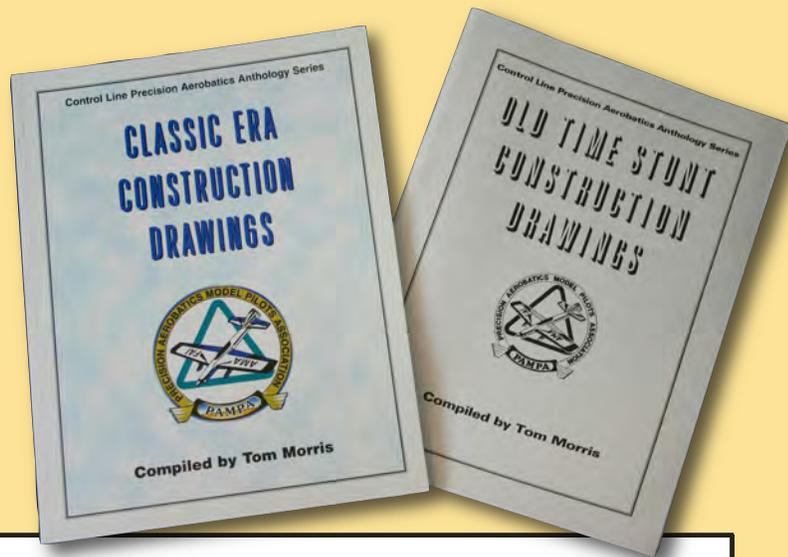
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