

STUNTLINES



www.control-line.org

\$5.00



Jul/Aug 2006

Mini-Katana ARF 3D by Frank Williams.
Photo by Frank Williams.

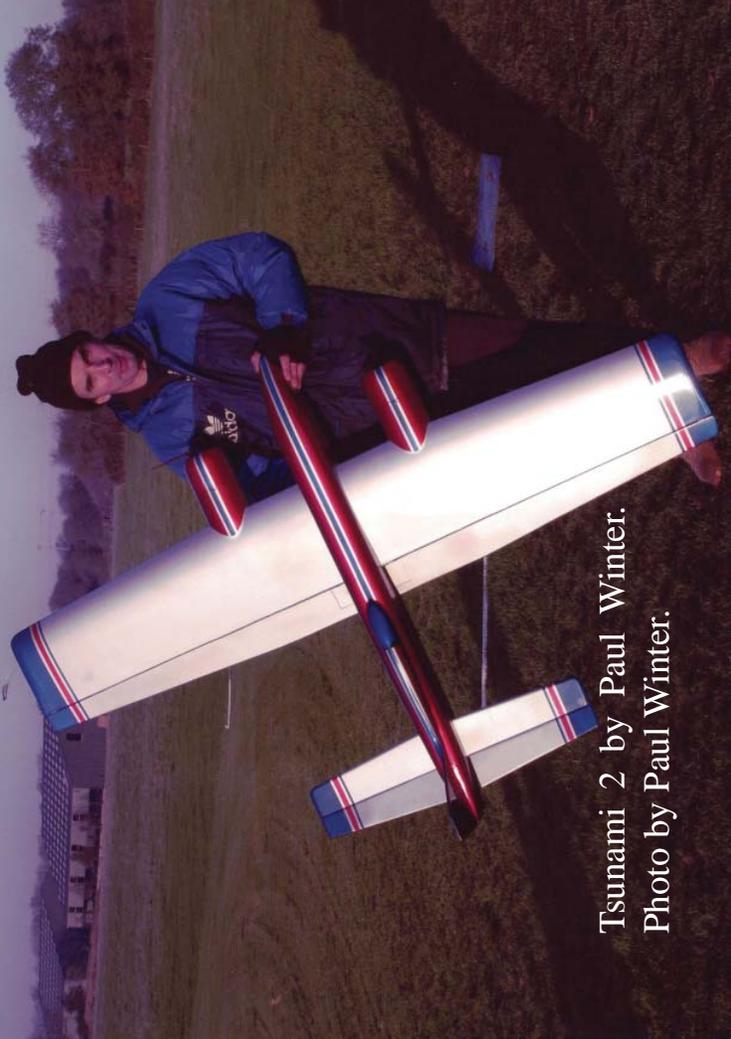


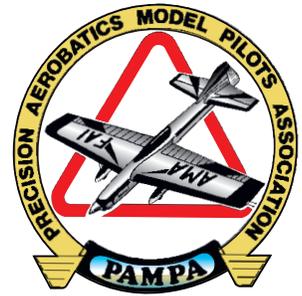
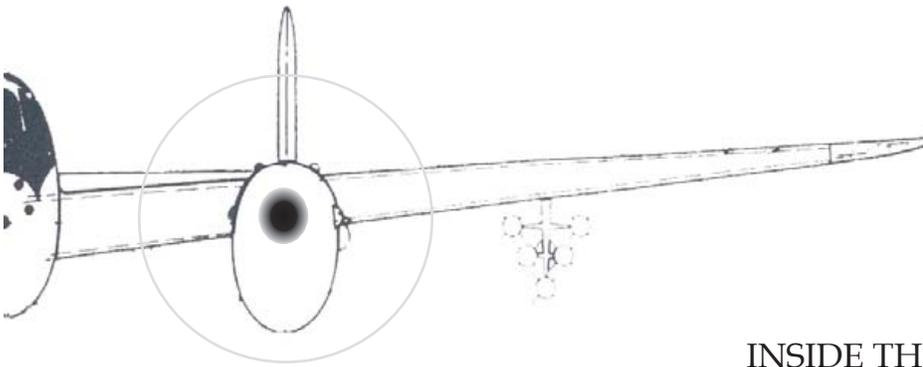
Shadow Profile by Dave Shirley Jr.
Photo by Dave Shirley Jr.

Electric Profile Roadrunner by Ron King.
Photo by Ron King.



Tsunami 2 by Paul Winter.
Photo by Paul Winter.





INSIDE THIS ISSUE:

Officer Reports.....	3
President.....	3
Vice President.....	6
Secretary/Treasurer	7
Editor	9
Stunt News Guidance.....	11
License Agreement	12
Director Reports	
District 1	No Report
District 2	13
District 3	14
District 4	16
District 5	18
District 6	19
District 7	22
District 8	25
District 9	27
District 10	28
District 11	31
Pampa News.....	35
Contest Calendar.....	36
Contest Reports	45
Columns	49
Pampa Rules	49
Pampa Products	50
Bad Boy Stunt	52
Ball Diamond Flyer.....	55
Beginning	55
Clubs	58
Classic Plans.....	61
Control Line Safety	63
Crash Repairs.....	65
Design/Finishing	65
Electric Flight.....	67
Fly on the Wall	71
Flying the Manuevers.....	73
Personalities.....	75
Sport Flying.....	76
The Trailing Edge.....	78
We Have the Technology.....	80
Why Do I Fly Stunt?	82



PAGE 34
Mike Haverly's Oriental Plus.



PAGE 16
Tom Hampshire's Cardinal

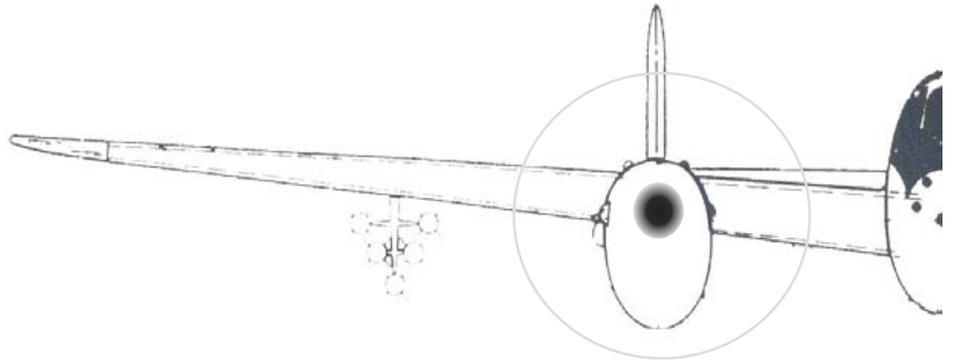


PAGE 94
Frank William's Mini Katana

COVER:
Ed Capitanelli's Bob Hunt F-105 Thunderchief

CENTERFOLD:
Thick airfoil and lack of dihedral help identify this one as Tom McClain's Martin B-26 stunter, the Sheryl Lynn. Mike Keville's 16x20 acrylic and ink on canvas shows a gear-up view—a result of 'artistic license' since the actual model has fixed gear. Regarding the portrait adorning the forward fuselage, Mike said, "Poor Sheryl is about to see I wasn't kidding when I said I can't paint people." He added, "Note the missing .50 cal. barrel protruding from the lower left blister. The, uh, gun was, umm, in for maintenance that day. Yeah, that's it...maintenance."





Featured Articles	84
Stunt Judging	84
Balsa Storage	86
Classic Nobler	87
Dangerous	87
F-105 Thunderchief	88
Lancaster	88
The Mini Katana	94
Mustang	96
Painting	100
The Stearman Saga	101
Supermarine Seafire	103
Tsunami Trilogy	104
Wild Bill	106
B-26 "Sheryl Lynn"	107
Advertising Index	81
International News	110
Disclaimer Page	114



PAGE 110
Brian Eather's "Firecracker"



PAGE 17
Willis Swindell's Brodak ME 109.



PAGE 34
Pat Johnston's Bearcat



PAGE 88
Randy Powell's Dangerous

SAM's Stuff & Hobbies

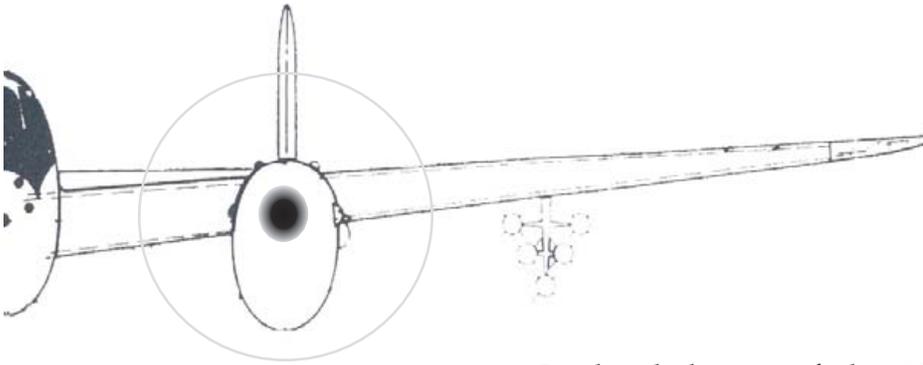
We stock Brodak, RSM, & SIG
Special Orders are specialty.

573-255-3514 E-mail freddie45@sshobbies.com

Secure website. Mastercard, Visa, PayPal accepted

www.sshobbies.com





President's Report



Paul Walker
25900 127TH Ave SE
Ken, WA 90831-7933
(253) 639-0448
pwimpact@earthlink.net

As this issue reaches your door, the contest season is upon us. The significant event in the US this year is the Nationals. Once again it will be held at the AMA facility in Muncie. And once again, Warren Tiaht will be the CLPA event director. If you are attending, please be sure to let him know how much you appreciate his efforts over the years in running this competition. Besides the excellent running of the event by Warren, we have become accustomed to the quality facilities and seamless running of the event. How did we get there? It was a result of past experiences that weren't so good, and the desire to improve the less than perfect situation. So let's look back, and see what things used to be like, and what they have changed to!

In the dark past of the 60's and early 70's, all the competitors were placed on a single circle and two rounds were flown. The single highest score counted, and determined the winner. There was a "loose" order to who flew when, and of course the last flight was the coveted flight and often times determined the winner. With only two flights each in the competition, there were opportunities for weather to also determine the outcome, as well as the flight order. While this system was used for years, it wasn't until the mid 70's that things got better. It was in 1977 that Arlie Preszler introduced the four circle qualifying concept. The total field was split into four groups. Each group then flew their own contest over two days to pick the top five to move on into the semi-finals. These groups flew in front of two different set of judges, one set on day one, and a different set on day two. The best single score from each set of judges counted, and the sum of those two flights determined the final ranking in that group. The top five from each group formed a group of twenty, and they flew the following day to determine the top five. This group of twenty each flew two flights, each flight being in front of a different set of judges. The two scores were added to determine the final ranking in this group. The top five then moved to the finals where each pilot had the opportunity to fly three flights in front of a single set of judges, and use their best two scores to determine the final placing. This is the basic format that Arlie started in 1977, and it became an instant hit. The result was more flying for everyone, and who could complain about that! Further, all the

flights were much closer together in terms of the weather, so significant differences didn't have as much of an impact on the outcome. With only a few small changes, this is the basic format that is used to this day.

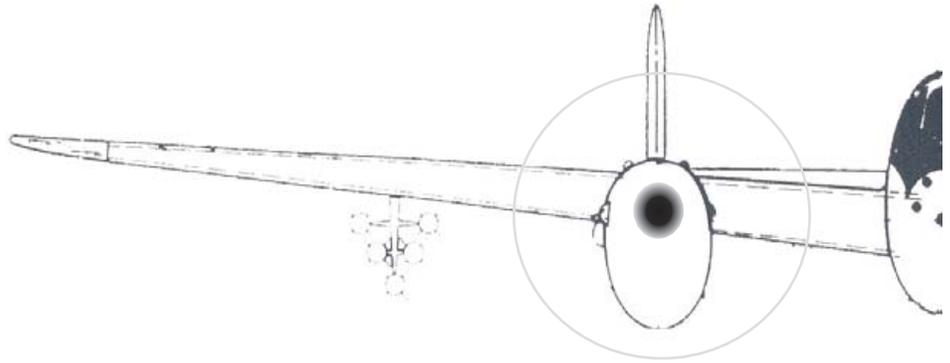
While everyone liked the improvement, there was still room for more improvement. There were occasions when the four circles were "imbalanced" in terms of caliber of flier. Some groups had more top name fliers, and others were shy. This kept a few top fliers out occasionally, and let a few "less experienced" fliers in. This resulted in the groups being "seeded" to more evenly balance them. This was based on past performance in Nationals and Team Trials. These top fliers were ranked each year and then positioned in the groups by rank, 1, 5, 9, 13, etc, 2, 6, 10, 14, etc, 3, 7, 11, 15, etc, 4, 8, 12, 16, etc. The fliers not in this top ranking were then ranked as best the NAT's event directors could, and were seeded in the same fashion. This led to more balanced groups. When a new flier showed up at the Nationals, it was sometimes difficult to get an accurate reading on their skill level before the competition. Once again, the Nationals event management placed them as accurately as they could. This was done to this level to give everyone as "fair" a chance as possible to do as good as they could, and maximize their enjoyment. It was still the object of this work to pick the "National Champion", and not necessarily pick the correct thirty fifth placing person.

There have been other changes since them as well. In 1988, the first Advanced class grouping was flown. They followed a similar format to the open class in that they were grouped for qualification, and flew the finals the following day, during the open semi-finals. There have been several approaches taken to how to "fit" them in with the open fliers. One method was to place all the advanced fliers in their own two groups and select the top ten from each group to move to the advanced finals. This left the open



class with just two qualifying groups as well. This method has been used in the past. Another method was to group all the advanced and open fliers together into four qualifying groups having five each move on from advanced and open, from each group. This method also has been used with success.

The beauty of this format is that it allows a "mistake" to be made during one of the qualifying flights, and still allow one to overcome that problem. I have just such an example in my history. It was at the 1978 Nationals in Lake Charles. This was my second Nat's, and I was looking to improve on my previous finish. It was the morning of the start of qualifying, and I was out before the sun was up to get a practice flight in. I had a trike gear plane that year, and as I was rolling out on takeoff, I clipped a tar strip in the runway, and shed 1/2 of a prop blade. The resultant vibration was incredible, as the engine continued to run, on and on and on and on. Pieces of aircraft were flying off left and right. The cowl had nothing left but a few screws holding on to the little that was left. Near the end of that endurance run, the nose wheel fell off and rolled down the runway out of sight. When finally stopped, I collected all the pieces I could find and quickly glued them back together for my first qualifying flight. As you could guess, I was slated for the number one flying position. I was feeling OK until I discovered that I didn't have a spare nose wheel. It was not an ordinary wheel; it was a press fit wheel where no wheel collar showed. I checked with everyone on the field without luck for a spare. In disgust, I started walking back to the scoring tent to let the contest director know I was finished. I went wide for one more look down the runway, and amazingly I found the wheel nestled in a clump of weeds in a crack in the runway. I ran back to put it back on, and get my flight in. With all that excitement, it wasn't that good, and it over ran. I was able to get in my second flight and get an OK score for that day.



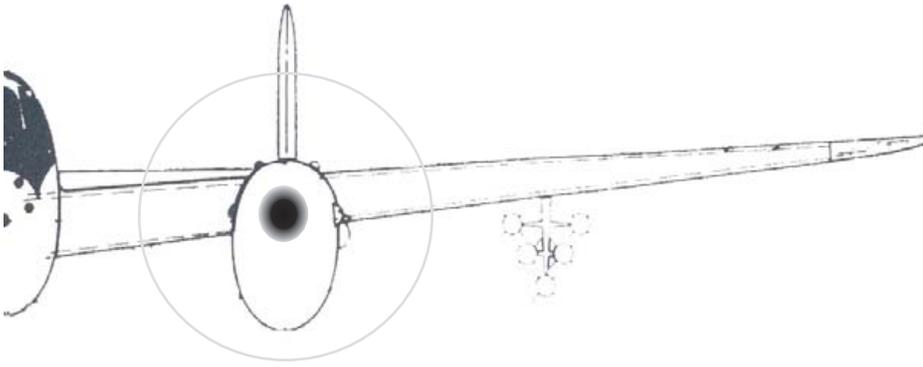
Day two dawned and all seemed well up until my pull test just prior to my flight. During the pull test, a lead-out broke at the bell crank attach. With next to no time left, I immediately let them know I was taking an attempt, and ran over to the AMA hobby shop and bought a piece of piano wire to fish in there to substitute for the lead-out. I cut into the bottom of the wing and quickly installed the new lead-out. I was able to get my flight in, but it wasn't all that good without a test flight. Once again, as you may have guessed, I was near the last in the first round and near the first up in the last round. While I was scrambling to fix things, Roger Barrett came to me, and put his arm on my shoulder and told me that he was sorry. "Some times you win, and some times you lose" he said to me. Well, I thought that nice, but I had work to do, as I was currently not making the cut, and Roger had slipped into the fifth spot due to my "problem". I got a couple of adjustment flights in and was ready to go in the last round. When my turn came, I swallowed the lump in my throat, and flew. I managed a reasonable score considering the situation. As the final round progressed, Roger had the last flight. As we stood at the score board together watching his score go up, I was surprised (no, stunned) to find out that I had placed fifth, making the cut, by beating out Roger by 1/2 of a point. He finished sixth, and out of the competition. Yes, you know what happened, as I couldn't hold back. I went over to Roger, put my arm around his shoulder, and said, "Sometimes you win, sometimes you lose". He

admitted that he deserved that for hitting me with that in the middle of the competition. We had no hard feelings there, and we remained good friends until his passing a few years ago. In this example, I had two "mistakes" that I was able to recover from, and if this format were not in use, I would have been WAY down the ranking. I finished in the top twenty, and was pleased as could be for that. However, in the grand scheme of things my exploits had absolutely no impact on the final placing (good job Bob Whitley), but did make me feel better. The format chose the correct winner, and still allowed me immense fun in the process.

This feature has been maintained throughout the years at the NAT's. The other feature that remains, much to some peoples dislike, is the semi-finals format. In this round two flights are flown and both added for the final ranking. This format does NOT allow for the slightest mistake. Just ask Lou Dudka about that. At the 1985 NAT's, Jimmy Casale had an "off day" in the semi-finals and was on the verge of being eliminated from the finals. Lou was putting up his last flight, and had an excellent chance of making the finals, when he all of a sudden did 4 inside loops, thus spoiling his chance for a top five finish. That mistake allowed Jimmy in, and the rest is history. He bloodied me on the finals day, and won his second NAT's easily. This format still exists today, and has been discussed on a regular basis as to how to improve it without overloading the judges, or running to long. To date, there are still no better solutions.

The finals are held using the





best two out of three scores to determine the winner. Once again, this does allow for "problems" to occur without hurting too much. One change that has occurred lately is the addition of a separate Walker Cup fly-off. In the past, the highest ranking Junior and Senior fliers were added to the fly-off. Art Adamisin had championed the idea of a separate fly-off between the junior, senior, and open champions for years, and it has finally been adopted.

Personally, I like the format as it gives everybody a chance to fly at least four flights, and does a good job of selecting the top flier. I wish other important competitions were flown this way (hint, hint, FAI).

One other aspect that has changed since the early days is the method of appearance judging. It has developed into a huge show, with all the planes together at one time. This gives a better chance for equitable scoring. Also, there is now a Concours trophy presented as voted on by the contestants. I also find this show entertaining, and don't wish for it to change either. Of course, while the appearance judging is going on, there is the ever popular pilots' meeting. It is plain boring now compared to some of the classic discussions in the past. I clearly remember, years ago, a nearly two hour long discussion on when the landing starts. It was interpreted that the landing started when the propeller stopped turning. All was well until someone suggested that they had such a large prop and poor

compression seal after running that the air flowing over the prop after the engine quit would turn the prop, thus making the start of landing sometime during rollout! Yes, the pilots meetings have been exciting, and necessary. We have discussed rule changes and contest procedures prior to flying so there would be fewer misunderstandings by the pilots during the competition. The meetings may seem unnecessary, but they do serve a purpose, and they are far smoother than they were in the past. Pay attention at the pilots meeting and turn it into an advantage for you. You might learn something that might score you additional points!

Overall, the format of the NAT's is set up to give the pilots as much "official" flying as possible within the time and manpower constraints. At a minimum, each pilot is allowed to fly four flights to rack up as many points as possible. The format of how the field is narrowed is fair, and allows the best pilots to rise to the top. In the end, I firmly believe the format does pick the best pilot. There have been numerous out of country guests flying at the NAT's, and many keep coming back as they enjoy the format as well. The format works well enough; the FAI

has adopted a multi-circle format for the qualifications at the World Championships now. The success of our Nationals was one reason it was adopted there. The format works!

The other major change that has occurred was the change from a rotating venue to a stationary spot at Muncie. As the NAT's rotated, you would never know what the facilities were going to be like. The first Lawrenceville NAT's had our circles not completely on asphalt, and the part that wasn't was in the dirt at the edge of the runway we were using. There was also a significant amount of dirt on the runway. While in Lake Charles, we had a good surface to fly on, but the heat and humidity was unbearable. There have been venues with a total of four circles for use. Some have been on sloped surfaces, next to highways. Don't forget the tar strips on the venues located on an old military base. Or the tie downs of the municipal airports. Now we have Muncie, and we complain about having to use a nicely groomed grass circle for six to eight practice circles, on top of the four paved circles. These additional facilities allow us to run beginner through open, classic and old time, all in the same week. Yes, we have made progress, and it is now much better than it was in the not too distant past. Please remember to count your blessings here!

For those going to the Nationals, please enjoy your time there. As you are working your way through the competition, remember back to the time when this competition was not so well formatted, organized and run. Then walk over and give a

BJM Enterprises has been a favorite control line sales/rep/consult for years. It now throws its hat into the ring with this new precision stunt profile model.

NEW!!

Price: \$79.95

Enterprise - PRO

For information or purchase, contact Bill Mandakis at (336)499-1192 or email Bill at mandakis@bjm-home.com

<ul style="list-style-type: none"> • Wing Span 54 in. • Length 32 3/4 in. • Wing Area 630 sq. in. • 40 to .51 Engine 2-cycle • Easy to build • 100% Laser Cut Parts 	<ul style="list-style-type: none"> • Laminated Profile Fuselage for Strength • Top Competition Stunt • Full Size Plans • Formed Aluminum Landing Gear 	<ul style="list-style-type: none"> • Deluxe Hardware • Adjustable Lead Outs • Contest Grade Balsa • Medium Sillspan • The Rule Special Adjustable Fuel Tank Mount
---	---	--



big "Thank You" to Warren for his years of hard work. OK, I said that twice now! I did so because of all the hard work he has put in. Dang, I said that twice as well! From me to you Warren, "THANK YOU" for all your hard work over the years. I appreciate it.

For the regular Nat's attendees, you will notice a slight re-adjustment of the weeks schedule this year. The AMA told us this was to be this year, and we were unable to change things. If any of the NAT's attendees don't like the format this year, please write me an e-mail explaining why. I will compile these and send them on to Dave Brown. I will have a discussion with him on this matter, asking him to return it to the previous format, but I will need your support. If most LIKE it the new way, then it is easy to leave it that way. However, I think I already know the answer. Please don't let this change diminish your enjoyment of this event.

I will close with a few comments about trim adjustments and humility. What is that you say? Well, everyone is human, and I also have an example to prove it. I generated a flow chart for how to trim a stunt plane. Many people have found it to be helpful, myself included. Like full scale pilots use, checklists should be included in all operations as "things" can easily be forgotten in heated times. I have memorized the checklist, so why bother having a copy at hand? Well, this season while adjusting my new plane, I was having trouble with certain maneuvers. Many things were tried, but none really solved the problems correctly. That was until I flew with my coach. Two flights in to the session, he carefully told me the wings were not level. Leveling the wings solved the problems, and one by one, the trim adjustments that were put in to "correct" the problem were removed. Those of you who use the chart probably know what the number ONE trim adjustment is, don't you? Yes, it's the one about making sure the wings are perfectly level before you proceed on. And, yes, I flew past

that adjustment without it being correct and it brought me nothing but grief! Moral of the story, follow the checklist and follow it correctly!

Please have fun at the NAT's.

- Paul Walker

Vice President's Report



Ted Fancher
158 Flying Cloud Isle
Foster City, CA 94404
(650) 345-0130
TED911@aol.com

Friday, May 19, 2006

Over the last thirty four years or so there have been a handful of hard working people who have made PAMPA the great success it has been. Several of these special people are household names wherever stunt is flown. People like founding President Keith Trostle; our first Secretary/Treasurer, Membership chairman, STUNT NEWS editor, printer, stamper, mailer "one man ten year long publishing firm", Wynn Paul; the recently retired one man whirlwind, Tom Morris and Shareen Fancher who has been our longest term volunteer ever, providing Tabulation services and historical administrative expertise at our National Championships and Team Trials ever since 1975 (a person

most of you know since you've sent her checks and letters every year for the last eight or nine years as our Secretary/Treasurer).

This last month it was my honor to do a tiny bit of work to help recognize the contributions of a PAMPA volunteer with whom many of you probably aren't as familiar. On the thirtieth of April I was part of a group who arranged a surprise banquet to honor the service of Arlie Preszler by presenting him with the plaque emblematic of his initiation into PAMPA's Hall of Fame. This was one of the pleasanter tasks I've ever performed in my long association with our organization. It was done locally because Arlie doesn't attend the Nats regularly nowadays and, thus, wouldn't be there for the presentation at the Nats PAMPA Banquet.

I won't take too much space describing Arlie's service to PAMPA. Those of you who read the last STUNT NEWS cover to cover (like most of us) I'm sure read Wynn Paul's very complete rundown of the numerous innovative ideas Arlie brought to PAMPA as well as the hard work he performed to make those ideas a significant part of the CLPA event in the United States. His most prominent contributions were: the development of our current National Championship CLPA event format; multiple days of qualifying, a semi-finals and a Finals; the now almost universal appearance point awarding method of aligning the ships in rows by points (now, possibly, the most enjoyable single aspect of any nats from a social perspective, gathering all the flyers at one place for the single purpose of viewing and talking about their airplanes ... sometimes even in clean clothes!); and the first ever awarding of one of stunt's most coveted awards, the Concours d'Elegance. These special contributions were in addition to service as our second President, a three times Nats event director and the volunteer producer of the uniformly admired hand carved and finished props presented to the



Concours and Rookie of the Year award winners for most of the last 25 or 30 years.

This is a guy who gives more than he gets. It was a great pleasure to witness the giving back of just a tiny bit of recognition for his generosity and talent.

With the help of Uncle Jimby (Aron) and Arlie's very good friend (and assistant Nats event Director, and later a Director himself) Lanny Shorts we arranged for a very nice banquet room at the Lockeford Inn and Restaurant near Arlie's hometown, Lodi, California. We had to arrange it on short notice because the announcement of the HOF awards was coming out in the May/June STUNT NEWS, due to hit members' mailboxes almost simultaneously. We wanted the award to be a surprise and I think we pulled it off.

Using an E-mail list of area stunt flyers compiled by Lewis and Cleon Lingwood for local contests, we were able to gather thirty plus stunt flyers anxious to chow down on salmon, steak or chicken, quaff a few brews and talk stunt while patting Arlie on the back. Uncle Jimby designed and PTG (Phil Granderson) produced a great, large and colorful banner with the PAMPA logo and appropriate kudos to Arlie, announcing his election. This was posted over the head table.

Everybody showed up about a half hour before Arlie (and lovely Margie, who helped us pull off the surprise) and we decided to try and confuse him up to the last instant. When they walked in the door everyone stood up and sang Happy Birthday to Arlie which, of course, was totally inappropriate because his birthday is nowhere near April 30th in this or any other year!

Taken aback at first, Arlie quickly, of course, saw the Banner above the head table and was clearly pleased to find that people really had noticed all his contributions for so many years and today was the day that they would make their thanks known.

The delicious dinner was



Control Line Central

a division of J & J Hobbies

Nothing but control line!

We now sell Tom Morris Products

For more information
visit us at: www.clcentral.com or
call us at: 505-332-8007

enjoyed by all and after dessert we settled down and talked about Arlie. Occasionally it was a bit of a "roast" but, for the most part, there just weren't too many opportunities to even make up anything roast-worthy about Arlie. He's just one of those people whose contributions are so uniformly positive and whose demeanor is always so gracious that it's tough to even pretend to make fun of him. We did our best, nonetheless.

Many of us in Northern California knew how much he had done for stunt locally in addition to his efforts on the national scene. For many years he was the Stunt event director for WAM, the Western Associated Modelers and, as such, ran literally hundreds of stunt events for the flyers in the '70 and '80s. Particularly poignant were remarks from young (in stunt flyer years) Jeff Anderson. Arlie was Jeff's mentor for many of Jeff's formative years and that mentoring lead to a National Senior Championship. Jeff doesn't fly regularly with us any more but there was no way he wasn't going to come to Arlie's banquet. His remarks made it clear why that was so. Any number of other attendees also stood and told stories about Arlie, all of which were amusing, poignant and worthy tributes to a guy who saw a need for something to be done ... and then went out and did it.

Typically of Arlie, when it was his turn to speak he talked not about himself but about those with whom he worked and tried to give the credit for his accomplishments to others.

Nobody was buying it.

PAMPA is a much better organization and the CLPA event is much richer because Arlie Preszler was and is a part of both. All of us who fly stunt enjoy it more because of his contributions. His initiation into our HOF was well deserved, a ton of fun for all who participated ... and sincerely appreciated by the recipient.

I wish you all could have been there.

- Ted Fancher

Secretary/ Treasurer's Report



Shareen Fancher

*158 Flying Cloud Isle
Foster City, CA 94404
(650) 345-0130*

shareenfancher1@aol.com

See next page for PAMPA Transaction Report.



PAMPA TRANSACTION REPORT

			Starting Balance 1/1/2006		\$79,606.21
1/1/2006	DEP	MC/Visa		Dues	\$35.00
1/3/2006	DEP	MC/Visa		Dues	\$115.00
1/8/2006	DEP/split	MC/Visa		Advertising	\$60.00
				Dues	\$444.00
1/13/2006	Check 1212/split	Curtis Nixon	Dec	Communications:Telephone	-\$26.69
			Oct/Nov/Dec	Postage:Pampa Products	-\$87.92
				Printing:Copying	-\$14.67
				Printing:Pampa Products	-\$47.70
1/13/2006	Check 1213	Benny Goodwin		Membership Refund	-\$35.00
1/13/2006	DEP/split	MC/Visa		Dues	\$260.00
				Pampa Products	\$212.95
1/14/2006	DEP	MC/Visa		Dues	\$35.00
1/14/2006	Check 1214	Kimberly Fusch, EA	2005 Tax filing Deposit	Tax Expenses:Tax Preparation	-\$225.00
1/14/2006	Bank Fees	MC/Visa		Bank Fees	-\$158.64
1/17/2006	DEP	MC/Visa		Dues	\$125.00
1/22/2006	Check 1215	Joseph Miller		Pampa Products Refund	-\$12.40
1/23/2006	DEP	MC/Visa			\$195.00
1/26/2006	DEP	MC/Visa		Dues	\$425.00
1/26/2006	Check 1216	Busby Printing & Mailing	Jan/Feb 2006 Issue	Postage:Stunt News	-\$3,519.89
1/27/2006			Bank mistake-over deposit		-\$385.00
1/28/2006	Check 1217	USPS		Postage:Officers	-\$26.91
1/29/2006	DEP	MC/Visa		Advertising	\$210.00
2/1/2006	DEP/split			Dues	\$3,055.50
				Donation:General Fund	\$10.00
				Pampa Products	\$255.36
				Stunt News Sales	\$30.00
				Advertising	\$1,065.00
2/1/2006	Check 1218	Shareen Fancher (Reinbursement for CC charge	NJ Corporate Annual Report filing	Tax Expenses	-\$25.00
2/4/2006	DEPsplit	MC/Visa		Stunt News Sales	\$15.00
				Dues	\$281.00
2/8/2006	Bank Fees	MC/Visa	January fees	Bank Fees	-\$138.42
2/8/2006	DEP	MC/Visa		Dues	\$220.00
2/18/2006	DEP	MC/Visa		Dues	\$185.00
2/18/2006	Check 1218	Kimberly Fusch, EA	2005 Tax filing	Tax Expenses:Tax Preparation	-\$250.00
2/26/2006	DEP/split	MC/Visa		Pampa Products	\$169.05
				Dues	\$171.00
2/26/2006		Balance Adjustment MC/Visa			\$425.00
2/26/2006	Check 1220/split	Curtis Nixon	6-Jan	Communications:Telephone	-\$26.55
				Postage:Pampa Products	-\$96.20
				Printing:Pampa Products	-\$24.80
3/1/2006	DEPsplit			Pampa Products	\$494.51
				Advertising	\$350.00
				Dues	\$984.00
3/11/2006	1221split	The Arlington Press		Printing:Stunt News	-\$5,500.00
				Stunt News Design	-\$600.00
				Postage:Stunt News	-\$3,747.90
				Stunt News Sales Tax	-\$492.39
3/22/2006	Bank Fees	MC/Visa	February fees	Bank Fees	-\$44.36
3/22/2006	DEP	MC/Visa		Dues	\$175.00
3/26/2006	DEP	MC/Visa		Dues	\$100.00
3/31/2006	DEPsplit			Dues	\$930.00
				Pampa Products	\$15.00
				Advertising	\$120.00
4/8/2006	Bank Fees	MC/Visa	March fees	Bank Fees	-\$25.88
4/8/2006	DEP	MC/Visa		Dues	\$130.00
4/13/2006	DEP			Dues	\$105.00
4/22/2006	1222	Wynn Paul	Hall of Fame Plaques	Awards	-\$225.52
4/22/2006	DEP			Dues	\$40.00
4/23/2006	DEP			Dues	\$50.00
4/29/2006	DEP			Dues	\$510.00
5/4/2006	1223split	Tom McClain		Postage:Stunt News	-\$19.97
				Supplies:Stunt News	-\$58.81
5/4/2006	DEP	MC/Visa		Dues	\$35.00
5/7/2006	DEP	MC/Visa		Dues	\$105.00
5/11/2006	Bank Fees	MC/Visa	April fees	Bank Fees	-\$26.17
5/11/2006	1224	Tom McClain		Postage:Stunt News	-\$22.93
5/11/2006	DEP	MC/Visa			\$70.00
5/17/2006	DEP			Dues	\$70.00
5/17/2006	1225/split	Tom McClain		Supplies:Stunt News	-\$20.98
				Postage:Stunt News	-\$4.36



5/21/2006	1226/split	The Fredericksburg Press (The Arlington Press)		Postage:Stunt News	-\$6,450.00
				Printing:Stunt News	-\$5,500.00
			Reference Manual	Printing	-\$2,875.00
			Centerfold	Printing	-\$950.00
			Envelopes	Supplies:Stunt News	-\$250.00
			Inserts		-\$250.00
			Design		-\$600.00
				Stunt News Sales Tax	-\$843.75
5/28/2006	DEP	MC/Visa		Dues	\$200.00
4/5/2006	Cash Acct	USPS		Postage:Officers	-\$0.87
5/4/2006	Cash Acct	USPS		Postage:Pampa Products	-\$0.63
Ending Balance 5/28/2006					\$58,478.27

Editor's Report



Tom McClain

6801 N. 28th Street
Arlington, VA 22213
(703) 241-8642

george.mcclain@verizon.net



Robert Storick

(Sparky)

(314) 724-2422

deskeditor@stuntnews.org

First things first. It is established policy of PAMPA Stunt News to correct errors. One such error occurred in the March/April 2006 issue. An excellent article on finishing and painting a stunt ship was provided by Hoyt Hawkins and printed under his byline. The actual author was Phil Granderson. Stunt News regrets this error and is publishing the article again under Phil's name. We apologize to Phil and have instituted a new procedure

using a "License Agreement" to prevent such occurrences in the future.

Good News for all PAMPA members. This issue has more color and content plus a removable centerfold. The index page has been changed to provide more detail on the various sections of the newsletter. There is a new column titled "Fly on the Wall" by Hoyt Hawkins. Hoyt is going to write about the early years of stunt. Claus Maikis has written an interesting article on why he flies stunt. There is a new Features section in which you will find articles by PJ Rowland, Matt Neumann, Joe Adamusko, Windy Urtnowski, Frank Williams, and others. These changes are now regular features.

Things to look forward to in the September/October and November/December 2006 issues are the AMA CLPA Nationals and Walker Cup, and the F2B World CLPA Championships in Spain. Speaking of the F2B team, you can help them by purchasing hats and t-shirts from Keith Trostle to defray the large travel expenses incurred by the individual members. AMA

and PAMPA are helping with funds, but those contributions are not enough to cover the expense of the trip.

It appears the attempt to prevent the USPS from implementing their magazine flow control policies has been successful.

This was accomplished by putting all 1500 plus newsletters in a white envelope with an actual postage stamp. The USPS apparently was convinced that Stunt News is official mail. First Class and International Air Mail arrived in record time.

Speaking of model aviation publications, many PAMPA members and Stunt News contributors provide articles and pictures to other periodicals. There is no prohibition in providing materials and pictures to other publications as long as legal formalities are observed. Due to the legal issues of intellectual rights and copyright infringement, PAMPA and Stunt News asks all Stunt News contributors to make sure that your Stunt News articles and pictures are unique to Stunt News.

Starting with this issue, PAMPA Stunt News requires all feature contributors to sign a "License Agreement" prior to work submission. The "License Agreement" (see page 12) can be found and downloaded from the PAMPA website. If a Stunt News contributor desires to publish a work from another publication, they

RGGRAPHIX

Computer Cut Vinyl Graphics

Letters, Numbers, Graphics, Paint Masks, Signs, Banners,
Magnetic Signs, Vehicle Lettering, Custom Designs.

Sizes from 1/4" to 23" wide. Top quality vinyl.

Digital Printing Now Available!!

Custom Decals!

Static Stickers!

Reasonable Pricing!

Quick Turn Around!

1214 Dakota Street
Farrell, PA 16121
724-981-2914

Web Site: www.rg-graphix.com
Email: info@rg-graphix.com



must give credit to that publication and/or author and obtain written permission from the publication that it came from for Stunt News to use the work. These requirements are to avoid problems with intellectual rights, copyright infringement, and to indemnify PAMPA Stunt News against such transgressions. This is a long established policy for all newsletters and magazines that are published on a regular basis.

Bob Kruger is working on converting the past 5 years or more of Stunt News to PDF. Once completed, Bob will send the PDFs to Curt Nixon (PAMPA Products) for sale at the same price of the printed newsletter. The 2006 issues will not be released in PDF to Curt until after Dec 31, 2006.

We are starting on the September/October 2006 issue and I remind everyone that the deadline is July 20, 2006 for submission of text and pictures. Please use the www.stuntnews.net FTP site for text and picture submissions if possible.

Thank you,

- Tom McClain
Managing Editor
PAMPA Stunt News

Guidance for 'Stunt News' submissions

Thank you for making Stunt News one of the best magazines on the market. The Officers, Directors, Associate Editors and other contributors work hard at keeping Stunt News informative and entertaining. We try to publish everything submitted with minimum editing, but please try to keep submissions brief. If someone submits something you disagree with, it is your responsibility to respectfully respond. You don't have to be a big name competitive flyer to contribute. So, don't be bashful about sending in your ideas or photos of yourself just because you're not a top twenty national competitor. We have over 1250 US members and 253 members from other nations. Stunt News is truly an international forum. We covet and appreciate your contributions.

1. Deadlines. Meeting the deadlines is the single most important issue in submitting items for publication to Stunt News. For all issues the deadline is the 20th of the month preceding the issue date (about 40 days before the mailing date). Deadlines are printed on the last page of each issue. Late submissions are difficult to accommodate! Mark your calendar and be on time!

2. File Names. Each text article must have a unique file name. Use your last name or if your last name is long, the first couple of syllables of your last name. For example: BRICK.rtf, RUTHER.rtf, and SUNDER.rtf. If you are submitting multiple stories add 01 to the first file name and 02 to the second, etc. Each photo must also have a unique file name. Using a ballpoint pen, write the file name on the back of each photo. Let the ink dry before you stack the photos. Again, use your last name or part of your last name as a file name, for example, BRICK01.tif, BRICK02.tif. If you have more than 10 photos be sure to use 01, 02, 03, etc. instead of just 1, 2, 3, etc. for the first nine photos. This keeps them in order in

the computer.

3. Text. Send text to the Desk/Text Editor, Robert Storick by e-mail text to deskeditor@stuntnews.org. The best way is to submit text on a CD in Rich Text Format (.rtf). Avoid using tabs. Do not have a bunch of old files on the CD. Body text should use Times New Roman font, size 10 point, fully justified. Photo captions should be included right in the text where you want the photos to appear. Photo captions should be in Arial, bold, italicized font, size 8 point, fully justified. Make it very clear where you want each photo to be placed in the text. Leave a couple of blank lines before and after each photo location. Type in the file name of the photo. For example: Photo BRICK01.tif here. Text can also be submitted as an attachment to an e-mail.

4. Photos. Send photos to the Photo Editor, Ken Budensiek, c/o Star Photo, 2522 E Milwaukee St, Janesville, WI 53545, or e-mail to kennyb@tds.net. The best way to submit photos is to send the negatives or put them on a compact disk. Most photo services will now put photos on a CD. The printer can handle 1 to 4 Meg photos up to 11x17 inches in size. If you send photos, you must put a piece of masking tape on the edge of each negative with the filename, or relate each negative to a file name by the negative's number. If you send photos by e-mail, send them in a compressed .tif or .jpg format. Strive for quality and not quantity in your photos. Treat tables, sketches and drawings as if they were photos. Better yet, take digital pictures of your tables, sketches, and drawings and put them on a CD with individual file names just like photos. Don't imbed tables, sketches and drawings in text. It makes it very difficult during page layout. Next best is to send hard copy of tables, sketches and drawings so they can be scanned just like photos. If you send a batch of photos with no article, such as a bunch of photos taken at a contest, give each photo a file name and type the captions as a single



separate text file. Use your name as a file name for the photos and the captions. Hand written captions on post it notes, stuck to the back of the photos, won't cut it. Please don't send entire rolls of film. You should do the culling before you send it to us.

5. Personal photos. If we do not have it, send us a good photo of you to use at the beginning of your article. If you have a new one or you are unhappy with the one we are using, send us the photo of you that you wish to use at the beginning of your article.

6. Stunt New Staff

- Desk/Text Editor - Robert Storick
- Photo Editor - Ken Budensiek
- Advertising - Floyd Layton
- PAMPA Products - Curt Nixon
- Contest Calendar - Howard Rush and

Jim Snelson

- Contest Reports - James Mills
- PAMPA Rules - Alice Cotton-Royer
- Competition/Judging - Gary McClellan
- Historian - Wynn Paul
- OTS/Classic Stunt - Mike Keville
- Designing/Finishing - Brett Buck and

Randy Powell

- Building - Robert Storick
- Crash Repairs - Windy Urtowski
- Safety - Ron King
- Clubs - Scott Richlen
- Beginning - Doug Dahlke
- Power Train - Randy Smith

- Ball Diamond Flyer - Jim Harris
- Personalities - Louis Rankin
- Flying - Owen Richards
- Sport Flying - John Ashford
- We Have the Technology - Noel Drindak
- "Fly on the Wall" - Hoyt Hawkins
- Bad Boy Stunt - Dan Rutherford
- Classic Plans - Tom McClain

7. Finally, in order that Stunt News provides you with the best information and entertainment possible suitable for all ages and audiences, we have a few rules of the road to inform all of you about. Here they are:

- Input from the membership is what makes Stunt News great. You are the source and the reason for Stunt News' success. Without your input, Stunt News will wither and die.
- Suggestions on how to improve the content and appearance of the newsletter are welcome.
- Anything control line aerobatics related is welcome.
- Please work through the assistant editors. If you have a doubt of which assistant editor to contact, send your input to either the managing editor or the desk editor.
- Deadlines are important. They give the staff adequate time to do their job and provide a quality product to the membership. Please make every attempt to provide your input on time.
- Constructive criticism is allowed, but it has to address an obvious problem, be positive in

nature, and must offer a reasonable solution.

- No profanity and personal attacks are allowed. If the editorial staff deems a submission to be a violation of this policy, the author will be contacted to amend his/her submission to make it acceptable.
- Finally, the mission of Stunt News is to promote and facilitate the flow of information that will benefit all Control Line Precision Aerobatics enthusiasts, regardless of skill level or their interest and participation in competition. This will be adhered to so that Stunt News will serve all of you in the furtherance of the PAMPA charter, which is to "Improve the Control Line Precision Aerobatics event."

- Tom McClain
Managing Editor
Stunt News

BJM Enterprises has been a favorite control line sales/rep/consult for years. It now throws its hat into the ring with this new precision stunt profile model.

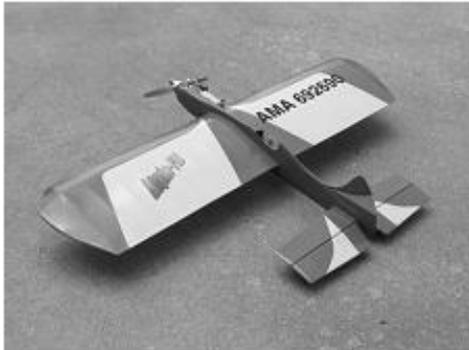
NEW!!

Price: \$79.95

For information or purchase, contact Bill Mandakis at (336)499-1192 or email Bill at mandakis@bjm-home.com

<ul style="list-style-type: none"> • Wing Span 54 in. • Length 32 3/4 in. • Wing Area 630 sq. in. • 40 to 51 Engine 2-cycle • Easy to build • 100% Laser Cut Parts 	<ul style="list-style-type: none"> • Laminated Profile Fuselage for Strength • Top Competition Stunt Full Size Plans • Formed Aluminum Landing Gear 	<ul style="list-style-type: none"> • Deluxe Hardware • Adjustable Lead Outs • Contest Grade Balsa • Medium Sillspan • The Rule Special Adjustable Fuel Tank Mount
--	--	--

Enterprise - PRO





NONEXCLUSIVE PUBLICATION LICENSE AGREEMENT

I, _____, am submitting herewith an article and/or other material entitled _____, (the "Work") to *PAMPA Stunt News*, a newsletter owned exclusively by the Precision Aerobatic Model Pilot's Association, *PAMPA, Inc.*, a nonprofit organization at 158 Flying Cloud Isle, Foster City, CA 94404, for consideration of publication in *PAMPA Stunt News*.

1) I retain all right, title, and interest to the Work, including (a) its title and theme; and (b) all copyright, including renewals and extensions, in the Work, and any adaptation or version of it in the United States or anywhere throughout the world. I am limited only as to the future dissemination of the work until publication of the same in *Stunt News*, refusal of the same, or the passage of 12 months from the date of submission. After the happening of any one of these events, I understand that I am free to disseminate the work as I see fit. Both parties to this agreement understand that the work may have been displayed publicly either before or after the date hereof, and that this Agreement does not limit the rights of others to publish photographs or other descriptions of the work made while the work was on public display notwithstanding this agreement.

2) I enclose with this signed and dated Agreement and a copy of the Work.

3) I respect and warrant that: (a) I am the sole author or one of the coauthors (if applicable each coauthor must provide a signed copy of this Agreement and Assignment) of the Work and have made no present commitments with anyone else with respect to the Work or its use; (b) the Work is an original and to the best of my knowledge, information and belief does not infringe upon statutory or common law copyright, proprietary right, or any other right of any other person; (c) the statements in the Work are true (unless the Work is described as a fiction).

4) I shall indemnify and hold *PAMPA Stunt News* harmless from any and all loss, damage, and/or author expense (including reasonable attorney's fees) that *PAMPA Stunt News* may suffer or incur by reason of any claim, arising from the breach or alleged breach of any of the representations or warranties that I have made.

5) *PAMPA Stunt News* will contact the author to coordinate and gain approval of any edits or changes of the Work. *PAMPA Stunt News* is under obligation to publish the Work or otherwise apply the Work within 12 months of receipt or return the Work to the contributor with waiver of this signed agreement. I hereby agree that I surrender all moral rights in the Work and *PAMPA Stunt News* may use my name, photograph, or other likeness in connection with the advertisement and promotion of the Work or any adaptation of versions thereof or the newsletter in which it appears.

6) I agree to take such actions and execute such documents, at *PAMPA Stunt News's* expense, as may reasonably be required by *PAMPA Stunt News* to secure and/or protect the rights obtained by *PAMPA Stunt News* according to this Agreement.

I acknowledge reading, accepting, and agreeing to the terms of this Agreement and Assignment by my signature.

Date _____ Signature _____



District 2 Report

New York, New Jersey



Windy Urtnowski
93 Elliott Place
Rutherford, NJ 07070
(201) 896-8740
WindyU@aol.com

Recently I visited the great R workshop of Jim Borelli out on Long Island. He and wife Debbie host a "Buildathon" in the shop every Sunday. Mike Rogers, Bob Lampione, and many others share the hospitality, help, and fun of building in a great atmosphere. The walls of Jim's shop are covered with photos that bring a tear to your eye—is it possible we were all that young not so long ago? Debbie cooks fabulous meals, and, of course, "Baby Lena" isn't a baby anymore. She even played the cello and piano for us when we were there. I'm still amazed when I remember Jim's first trip to the Nats and that he was in the front row, but it's his hospitality and lifelong friendship that mean the most.

Reuben and Stevie MacBride have built father and son Brodak Strega kits—both look to be very well built and finished. Ralph Geese did some custom lettering and graphics—724-981-2914 is his phone number, in case you're interested in some graphics for your next project. Having twin Stregas is sure to make for some intense competition and a fun rivalry this season.

Brian Manuet got a whole season of high-tech learning last

year from his Brodak Legacy and PA .51. He now pitches his own props and, of course, always helps out when one of the new guys has a problem at the field. A car mechanic by trade, Brian is able to pick up motor technology quickly, whether it's for his two-strokes or four-strokes. I flew his Brodak Cardinal, and it really is a great performer with an OS Max LA .46 that he tuned himself. Brian also pitches in whenever we do maintenance on any of the local flying fields.

Mike Kijesky had serious health issues last year but still managed to maintain the G.S.C.B. field in peak condition. He's done an exceptional job through floods and storms, and always does little extras that make hanging out at the field so much fun. This year he handcrafted a work bench and donated it to the club. Thanks, Mike!

Buddy Weider and I were teenagers together in the '50s and '60s when J.D. Falcons were the "Cadillacs of the skies." Not surprisingly, we're both still the same age: Buddy looks a lot younger and has a kit car Cobra—I look a bit more "mature" but still ride motorcycles. Last year at the Brodak Fly-In we both had car trouble, and he now has a new car ...while I have a 10-year old Windstar.

Buddy is building a copy of John D'Ottavio's Longhorn with a RO-Jett .77 and Brodak finish. Buddy has been over to the shop many times for custom parts, molded pieces, carbon gear, and tank. I bet he'll have it ready for the 2006 season, and it will be a great performer. John helped both Buddy and me when we were kids—in fact, he helped everyone, and that's why he's still so popular. John says he's only 87, but I saw his drivers' license...and he's a "lot" older! But like Buddy, he's still a handsome dude. Long ago it was rare for people to go out of their way to share what they knew. In my time, John D'Ottavio was one, as were Billy Simons, Lou Wolgast, Big Jim Greenaway, and, of course, Harold Price. They impressed me most for the shared knowledge,

and looking back now, I'm even more impressed.

The "bent wing" Stuka is moving along, thanks to Les Demmet helping Rich Giacobone. This project is very time consuming, but in the end I think it will be Rich's pride and joy. Les designed it over the course of many months and engineered many of its unique features. More on this as Rich and Les complete each step of the construction phase. And, of course, Les did the design work on my Testarossa, with some help from Ferrari owner John Cafaro.

Raimo Barak of Sweden has become a good friend over the past few years. He sent me great photos of ships in his air force, including an SV-11 and Cardinal, and I really hope he can visit us in District II soon and see what a great group of modelers we have here. Raimo has told me many times how much he likes building during Sweden's long cold winters. I agree—the coffee tastes best when you're done with snow shoveling. He'll be running a RO-Jett .77 this season in his new stunter, and I'm sure will get some nice photos for Stunt News, as his photography skills have really impressed me in the past. I was telling Raimo how Karyn and I love Gevalia coffee, and he said the factory it's made in is not far from his home. Small world!

Bill Rutherford promised to give me flying lessons when I'm in Texas this spring. His absolutely awesome homebuilt RV-6 blew me away when we did aerobatics in the Houston sky last year. This year Bill has pulled out all the stops to be as competitive as possible, and the last time I saw his new ship, it was a gem. Bill and Mary Ellen are very proud of the renovations to their home, and the workshop is unbelievable. You could build and paint a full-scale plane in it ... and he already has! Now if Bill can just get his novel published.

- Windy Urtnowski



District 3 Report

Ohio, Pennsylvania, West Virginia



Phil Spillman
350 Butterfly Lane
Hermitage, PA 16148
(724) 983-1677
p.g.spillman@att.net

I must say it was quite a treat to receive my May June 2006 Issue of Stunt News precisely on May 1st, 2006! Tom McClain really worked a miracle, for me at least, with the USPS! As for the content of the text I was quite pleased with the technical renderings by Ted Fancer and Bret Buck and associates. Trimming has always been a mystery to me, but the process as presented is most worthwhile. I anticipate adopting most if not all of Ted's suggestions when as and if I must trim or re-trim ships in the future.

Last issue I ended my remarks on a somber note regarding the affliction of one of my best friends with lung cancer. This time out I am cautiously optimistic to report that Gil Reedy's medical team is pleased with his progress during his therapy. I pray that he maintains this trend for the remainder of his course of treatments.

I too was saddened to read of the collapsed lung sustained by Roger Wildman. I have known him for several years and have always been impressed with his building, painting, designing, and flying. At this moment I don't know the cause of the trouble and hope that

he doesn't have to go through the painful course of treatment which lung cancer dictates. Good luck to you Roger.

For the past several weeks I have been corresponding with a new electronic friend, Mike Wada, in Hawaii. Mike is also enjoying the flying combination of an ARF Nobler powered by a Saito .40 4Cycle engine. Mike had some technical difficulties with his engine due to hydraulic lock. I am happy to report the broken connecting rod in Mike's engine has been replaced and the combination is running quite well as described. The prescription appears to be a 10 X 4 APC prop, 58' or 59' lines, and YS 20 20 fuel, all synthetic. Mike reports that his best times for flying are between the hours of 6 and 9:00 am! Boy I wish that I could get my old bones moving that early in the day!

From time to time I receive reports of unusual acts of generosity and kindness. This time is a note from Gil Reedy who has been mentoring a young man whose deceased grandfather was one of Gil's best friends. Well, Gil won an ARF Flite Streak at one of the HAM'S (Harrisburg Aero Modeling Society) past banquets. Put this plane on the shelf and forgot about it. At a HAM'S Combat bash, Roy Glen and Louis Lopez won a NIB O.S. LA .25. They proceeded to give this engine to the lad Joey Fabiankovitz who Gil's been mentoring! Gil and Joey assembled the plane and Joey took it home with him proud as punch. These several acts of kindness we all hope will produce a new flyer either Stunt or Combat or both!

In assembling material for this issue I have called all areas of my District and have been treated to many neat stories. Reciting from west to east, or left to right as we view the territory, My first chat was with John Jordan of the greater Dayton, OH area. John reports that he is well along on a smaller version of his beautiful Tucano Stunter which actually garnered 20 appearance points at the 2004 Brodak Fly-In. That plane was rather portly in its

flying ability. This one will be much more nimble.

John Jordan also reported that the Cincinnati Stunt Contest will have to cope with the loss of one circle at the Lunkin Airport site. Apparently the Airport Authority will be making another circle available to the Club to round out the commitment by the city of Cincinnati. I hope that the airport improvement out in Cincinnati goes better than the fiasco perpetrated by the Cleveland bunch. You may recall that the Cleveland site was commandeered for an office complex. The project never was finished but the flying filed long enjoyed by many was ruined and lost forever!

Moving east in Ohio I was delighted to have been able to chat with Ray Kidner regarding the up to the minute news from the Capital City Controliners. Ray is most excited by the possibility that the 2007 Stunt Contest will be held at the Rickenbacker Airport field. Apparently there will be a fly-in for P-51 Mustangs which will be held there in 2007. Over 100 Mustang fighters from WW II will be flown in for the event. What's really neat about this event is that the Columbus Stunt Contest for 2007 may just be held on the same site as the Mustang Rally and at the same time! Talk about a fun weekend, fly Stunt and get to look at one of the most storied planes in History! I think I just have to be there!

Ray was kind enough to send me an additional copy of their club's newsletter, Capital Quotes. This piece is authored by Mark Messmer and is stuffed with pertinent stunt



Shown L to R: Roy Glenn, Joey Fabiankovitz, Gil Reedy, and Louis Lopez, (HAMS PHOTO) Joey was the beneficiary of a new ARF Flite Streak and an OS LA .25 engine donated by the adults in this picture.



and UC information in general.

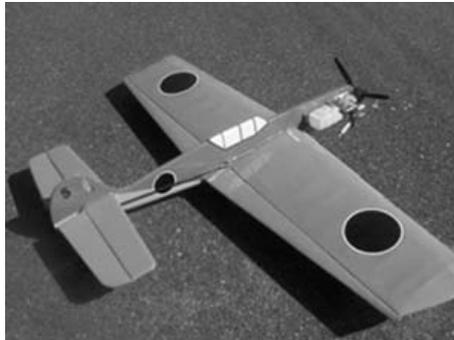
Moving east in the territory I had a nice chat with Jim Harris, That Ball Diamond Flyer, who reports that he's finished a new Barnstormer and a new Fino, both built from plans and both to be powered by Fox .35's. I am anxious to see these two fly and hope that this event takes place Sunday May 21, 2006. His old friend Roy, "Mr. Ringmaster" Phillips will be visiting up north from Wilmington, NC to attend his grandson's High School Graduation! Roy, Jim, Clyde Ritchie, Larry Pat Giles, and I hope to have an impromptu Fun Fly if the rains stay away! Guess my wife might have to cut the grass come Sunday if it is dry!

Serge Krauss has kept me in the loop for the North Coast Control Line Club doings. They, like many of the rest of us, must soon get out to the field to clean up winter's clutter of broken tree limbs and scattered leaves along the fence. Cleveland has another problem which is unusual in that they share their grounds with a horse riding Club whose members have been known to gouge the flying surface with hoof prints and divots.

Sumner Forrest has traveled the World for Uncle Sam in the service of Sam's Air Force! In his travels he's made a horde of friends and maintains those associations to this day in many instances. One of Sumner's past commanding officers was Phil Bailey now of the greater Tampa, FL area. Phil's club, The Tampa Bay Line Flyers, has a really fine newsletter named "Tangled Lines". Sumner and Gene Martine have been most kind in sending me a copy of this publication from time to time. Their most recent issue featured a treatise by Randy Smith on the care and fueling of our model engines. Randy dealt with many varieties of power plants and the preferred fuels for each and why. It was a fine effort and one, which I was happy to get. I'll refer to it from time to time going forward.

I have heard from Willis Swindell of Chesapeake, VA who has completed a new ME-109 profile

model of one of John Brodak's kits. Willis incorporates a technique of adding 1/8" to each of the rib stations indicated on the plan. This idea results in a wingspan of roughly two (2) inches larger than designed. He did this on the FW-190, which he gave to me back in 1997. It too remains an excellent flyer. Notice how Willis splayed the landing gear outward toward the wing tips to emulate the original's knocked knee appearance.



Willis Swindell's rendition of the Brodak ME 109.



Willis' ME 109 shows bent out landing gear. Model is Mono Coat finished completely.

In my territory wide quest I am going to end with a correspondence I received from Harry Freeland of the Philly Flyers. Harry is a widely versed modeler whose focus zooms in on free flight as well as U-Control. Harry sent the following picture of Jack Weston the elder as he currently looks and Jack Weston the younger as he looked when he was 14 years of age. Now I am a mere 68 years young and Jack is most likely either younger or older than I am. So if I was 14 in 1952 Jack's "old" Barnstormer might have been started in 1951! If he's older than Lord knows when he started it! This certainly is a novel way of giving us the ...before...

and the ...after!



Jack Weston of the Philly Flyers holding Barnstormer in 2006, on the left, and Jack holding his Barnstormer at age 14 on the right! Freeland photo.

Harry Freeland also mentioned a nice idea enjoyed by several of the older Philly Flyers, that being a coffee klatch attended by those members of their club who are retired. They, the retired ones, gather at a local diner once per month to enjoy each other's company and to discuss what ever may be on their collective minds! What a fine idea to maintain contact and to share information. Harry was kind enough to send me a picture of the group at its very first gathering.



Pictured here from left to right are: Charlie Danila, Bruce Stecker, Phil Sam, Pete Alexander, Fred Quedenfield, Jack Weston, Harry Freeland, Jim Van Sant, Steve Dinnerman, Joe Adamusko, (Freeland photo)

Every now and again we get a chance to help out a friend in need. And so it was for me when I received a call from the local Director of the Chamber of Commerce who had been cancelled by a speaker for his church's Men's Club dinner meeting. I had spoken before when this friend had been in the audience, and so he asked if I might help him out of a squeeze! Never one to pass an opportunity to talk up Control Line Model Airplanes I willingly

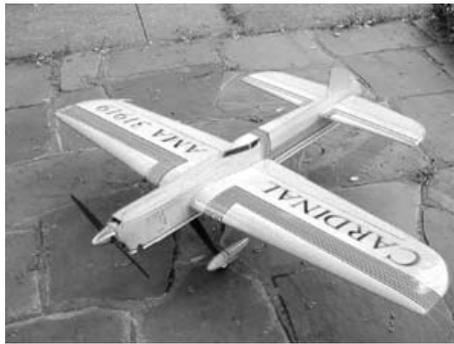


accepted his invitation! I still had the props I had used in my original speech and took them along as well as the video I had helped to make back in 1995 called "Flying The Patterns" in which my late friend, Bob Pitkin and I did the flying for the producers to film. From all the questions I had at the conclusion of remarks and film, the audience including my minister, enjoyed their evening! This sort of Public Relation effort is worth doing. It gives us all a chance to spread the good word about our world of model airplanes.



Phil Spillman gives a talk to local Church Men's Club about U Control model airplanes earlier this past March.

I am indeed fortunate to have in my acquaintance many quite talented folks who are always willing to answer my dumb questions! One of my technical advisors is Tom Hampshire, PAMPA'S legal advisor. Tom has recently completed and painted a new Cardinal, an Urtnowski design. Tom's plane pictured below is a foam wing rendition with Brodak Dope for color and automotive clear topcoat. This plane is at least the second in a series for Tom and it too will be powered by a Saito .72 4 C Engine. Tom knows that the best fuel for this engine is Power Master 20/20 all synthetic oil. Sadly this blend is hard on his dope acting almost like raw acetone. To offset this negative, Tom's solution is automotive clear topcoat. His brand of choice is Nason which Tom reports is quite reasonably priced. Since I have recently had problems with my dope being attacked by 4C fuel I intend to adopt Tom's solution too.



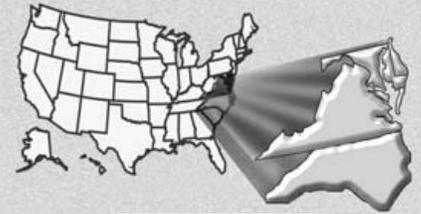
Tom Hampshire's new Cardinal PA plane powered by a Saito .72; Brodak Colored paint, nason automotive topcoat.

In closing I'd like to thank those who took the time to answer my email message and those who called me to share their area's events and activities. Without your input I am at a loss to construct columns of any interest except what I am doing! How boring!

Sunshine, tight lines, and smooth patterns to all!

- Phil Spillman

District 4 Report Delaware, Washington, D.C., Maryland, N. Carolina, Virginia



Bill Little
406 Sun Road
Aberdeen, NC 28315-2538
(910) 944-7864
wlittleiii@nc.rr.com

Hello District 4 and the rest of HPAMPA land!

This report is rather short due to various reasons. There has been very little contest activity since last issue with the exception of a few members visiting District 5 for the Marietta Contest hosted by the Cobb County Sky Rebels with Tom Dixon as the CD. A report from John Rakes is included as to who was there.

The Metroliners Club will be hosting their Spring Meet on the weekend of June 3-4, and will be over by the time this issue is printed and shipped.

I have received a few emails from District members and the following is from Willis Swindell of the Tidewater VA area:

"Hi BILL

My latest 4 stroke is a Me-109 that Germany sent Japan to test, but they didn't like the plane. They instead used the engine. The Brodak plane has 1/8 inch added between the ribs and now is 50 inches in wing span and has an inch added to the fuselage length. The landing gear was moved to the wing. The Saito 40 is perfect for the plane on 66 foot lines. It weighs 42 oz.

Willis"





Two pictures of his plane are included and I would like to call again for similar correspondence from other District Members!



I received the following from John Tate and the Norfolk

Aeromodellers:

"Hi Gang,
NEWS

"This past Saturday Willis and I were invited to the Hampton Roads R/C Club "Dick Ambrose Memorial Fun" to do a control-line demo. We met a few old control-line flyers from back in the 1950s. The guys and gals from the Hampton Roads R/C Club know how to put on a great fun fly and made us feel welcome. Willis put up a flight with his Me-109 to show the crowd the AMA Stunt Pattern. I put up a flight with the Bi-Slob to show the crowd some fun flying.

See you at the club meeting and out at Fentress."

John Tate

The following is a report from John Rakes of Virginia on the Marietta Contest:

"Hi Bill,

Small contest. I got there Friday around 1 pm. Here is a summary of the event.

Friday- Gusty winds around 20 mph. Things settled down around 5 or 6 pm. We got some practice flights for 4 or 5 people; Marshal Busby, Louis Rankin, Roy Trantham, Alan Buck and myself.

Saturday- winds 15 to gusts of 25 mph, which caused a few crashes, but nothing beyond repairing. Contest Results:

Profile OTS Classic/Nostalgia
 1 Marshal Busby 1 Chuck Feldman
 1 Derek Barry
 2 William Davis 2 Robert Compton
 2 Toby Arceno
 3 Louis Rankin 3 Roy Trantham
 3 Bob Dixon
 4 Roy Trantham 4 Jim Catevenus
 4 Chuck Feldman

District 4 had Jim Morris, William Davis, his daughter Sara, and myself.

The usual gang traveled in from Florida. Marshal and Louis Rankin came from Tennessee,

Alan Buck from Pennsylvania traveled the furthest and met me in Lynchburg VA. We arrived the next day in Atlanta GA. William Davis will provide some pictures with Sunday's contest results. Heard that Ty Marcucci injured his foot and was unable to make it. See you hopefully at the Huntersville NC Contest!"

Thanks John for providing this!

Since our contest calendar in District 4 is rather limited, I really need to hear from you guys and gals in District 4 as to the happenings in your area. The District report can only include what information you all provide! I will be attending the June Metroliners Contest in Huntersville NC and I will report on the happenings there. I hope I will be able to see and visit with many of you there.

Until next time, keep the lines tight!

- Bill Little

T & L Specialties, Tom Lay
 The **ONLY** U.S. Supplier of Brian Eather 2,3 & 4 Blade Carbon Fiber Props!
All sizes in stock and I ship the Same Day!
 (Send S.A.S.E. for a **FREE** Catalog)

I have reworked over 950 motors for **PAMPA** members worldwide!
 * Super Tiger .46 or .60, with custom made, hardened ring, delrin venturi, bearings and Stunt modifications only **\$80.00** plus shipping.
 I also have complete **ST .46's** and **.60's** in stock!
 Please note my **NEW ADDRESS**

Tom Lay (626) 964-5724
 1441 S. Paso Real Ave. #82 thelayster@aol.com
 Rowland Hts., CA 91748

VIRGINIA 5528 Port Royal Road
 Springfield, VA 22151

HOBBYSPORT

703-503-5205
 703-503-5204 FAX
 866-FLY-UCON (866-359-8266) Toll Free
 WWW.VIRGINIAHOBBYSPORT.COM

Control Line Spoken Here



District 5 Report

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



Dale Barry
5995 Tipton Ct.
Harlem, GA 30814-9377
(706) 556-1177
dalebarry@hotmail.com

Well, it's finally contest season in District 5 again. The drought from the KOI in January to Marietta in May is a drag, but I'm hearing rumors that that KOI may be moving to early Spring to try and get better weather. I'll keep you updated.

This past weekend, May 20th and 21st, I attended the Marietta contest, sponsored by the Cobb County Sky Rebels, held in the Lockheed-Martin parking lot. There was a fair turnout that had to contend with some very breezy conditions on Saturday and only slightly less on Sunday, but there was plenty of sun and no rain, so it balanced out O.K.

Saturday, as usual, had OTS, Profile and Nostalgia, which is open to designs 25 years old and older. First place in Old Time went to Chuck Feldman, flying a nice DS 40 powered Jamison Special, Robert Compton was second and Roy Trantham third. I'm not sure if it was the wind or a control failure, but Roy lost his very dependable Humongous.



Chuck Feldman with his Jamison Special



Derek Barry with a borrowed Oriental

Over on the other circle we had Profile. Marshall Busby was first and William Davis second, both flying Teosawki's. Louis Rankin was third flying a Tutor II modified to look like a Bear. It looked just as good as it flew.



Louis Rankin and his profile Bear



Toby Acierno's second place Thunderbird

flipped a switch and here came the wind. There were no Beginners this time, but there were five in Intermediate, seven in Advanced and six in Expert. John Rakes of Virginia took first in Intermediate with his first round flight, which was a good thing since the second one didn't go so well. Toby Acierno was second and Chuck Feldman third.

Advanced had Roy Trantham in first, Louis Rankin in second and William Davis third. Expert was Derek Barry first, Bob Dixon second and Robert Compton third.



Bill and Rob Gruber judging Profile and Nostalgia.

Nostalgia was a quick event. The winds had gotten pretty bad by then, so those that chose to fly only flew one round. When it was over Derek Barry was first, Toby Acierno second and Bob Dixon third. We had a bit of a scare during Bob's flight as he had a medical problem, but he quickly recovered and was able to return on Sunday.

Sunday started off as a much better day weather-wise, but just before the first flight someone



Robert Compton with his very light Cobra

Weather and a few crashes aside, everyone seemed to have a good time, and through the pilot's and judges efficiency most of us were on the road by lunch time. Thanks





Jim Smith with his model before the wind and asphalt redesigned it

to CD Tom Dixon, judges Richard Schneider, Bob Dixon, Bill Gruber and Rob Gruber. Also, tabulators Nancy Gruber, Jim Pearson and runner Eric Baron.

The next issue will be NATS results, I'll let you know who did what from District 5. And though it's kind of early, I thought I'd mention that instead of there being a fall contest in Marietta this year, Tom has given his dates to Louis Rankin and the Millington Barnstormers. The contest will be Sept. 16th and 17th in Millington, TN, which I believe is near Memphis. Plan ahead, it should be a great event.

Talk to you later.
- Dale Barry

District 6 Report

Illinois, Indiana, Kentucky, Missouri



Allen Brickhaus
PO Box 206

Golconda, IL 62938
(618) 683-7611

abkb801@shawneelink.com



Brian Harris assists James Mills at the Buder Park incident in February.



Mark Hughes is getting his semi-scaled racing stunter ready for his first flight in Expert. Gary Hajek is assisting and Mark placed third with a 515.

Total trips so far in the '04 Odyssey van include 11 days with Charlie Reeves to Florida and the KOI in January, a jaunt to the Ice-O-Lated contest in St. Louis at the end of February and 12 days to Tucson with Gary Hajek for the VSC in mid-March. 78,000 miles on an '04 Odyssey purchased in January of '04. Check out Crist Rigotti's website at cloguy.com for upcoming contest dates or the center of your May/June '06 issue of Stunt News. These shots include pictures from the St. Louis based Lafayette Esquadrielle Ice-O-Lated contest in late February and some District VI and VII flyers at the VSC in Tucson.



Bob "Sparky" Storick with his fabulous P-47 stunter is depicted at the Ice-O-Lated. Bob is a hard worker and does a yeoman's task of getting out Stunt News to all of us.

Blue Sky Models

Laser Cut Kits
Laser Rib Sets
Custom Building
Classic Plans
Custom Drawings
Laser Short Kits
Bluegrass Fuselage Jigs & More!

J.D. Falcon
John D. Ottavio's
Award Winning Classic
53.5" Span, 590 sq. in.
.35 to .46 Engines



Profile Roadrunner
Classic Stunters designed by Bill Melton & Jim Young
54" Span, 606 sq. in., .35 to .46 Engines



Roadrunner
Coming Soon!
A never before kitted
Old Time Stunter

Made IN USA

See our web site: www.blueskymodels.net
Contact: Tom Niebuhr,
Blue Sky Models, 7173 FM 1377, Blue Ridge, TX, 75424
972-736-3780, blueskymodels@earthlink.net



Allen Goff drove to the Ice-O-Lated and brought his Petra 3. Allen blazed to first with a 542 in Expert.



Steve Moore of Dexter spent some time with Bill Marvel and both got in some flight time prior to the actual contest in St. Louis. Steve placed second in Beginner.





Dave Gardner drove to Buder Park with Crist Rigotti. Dave's business trips get him to the Rigotti area and they get a chance to fly together every chance they can.



Michael Schmitt captured first in Advanced with his Randy Smith Tempest II. Michael is presently building an Encore 665, which is to be published in the future.



Dennis Van der Kurr and his Pathfinder kept the interest burning with Michael Schmitt's conversations on the trip from vast Chicago land.



Steve Smith is emptying more jugs of fuel than he was last year and took first in Intermediate.



Joe Thompson and his Brodak Smoothie invades the cool days of the Ice-O-Lated contest at Buder Park and eludes capturing the flap with a fourth place finish in Advanced.



"Doc" Holiday's granddaughter Emerald Dennison places third in Beginner. They had a nice trip from Kansas.



Charles Fowler traveled from the mid-state area of Illinois to compete at Buder Park. Charles placed first in Beginner with his ARF Top Flite Nobler.



Flying one of Gary Hajek's SV-11 machines, John Garrett takes second in Expert.



My "ink-plan" guy Frank Beatty helps with pull-tests at Buder Park. Frank does very nice ink and vellum work when I publish my articles. Thanks to Frank.



Dan McEntee is shown with his venerable Shark 45 at the Buder Park contest. Dan just missed third place with a 495.5 score.



Crist Rigotti shared the driving time with Dave Gardner and brought his Harbinger to St. Louis and Buder Park.



The other half of the Emerald Dennison crew and main pit-crew for Emerald stands still for a shot at Buder Park.

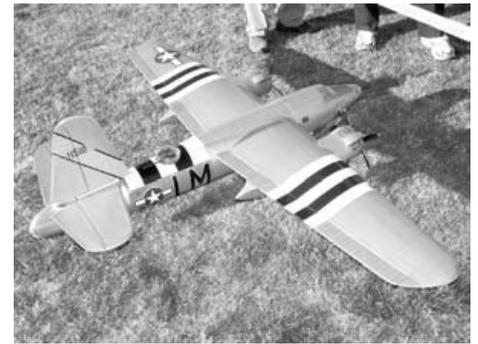




I know, a rare shot with no shorts showing, that comment to be taken in a good way, as this columnist prepares for one of his four flights that day. Allen flew the Excalibur in Expert and P-40 and received a first in P-40 of seven pilots.



Robin Sizemore (right) helps Wesley Dick at the 2006 VSC.



Tom McClain found an R/C B-26 published prior to 1970 and turned it into a Classic era stunt model. Watched it fly and it does go.



Bob Arata and the Lafayette Esquadrielle use old trophies and new attachment plaques for prizes at the Ice-O-Lated contest. You are given the attachment plaque and you choose which trophy you covet and that hardware goes home with you.



Floyd Layton runs a very successful District VI event in Peoria each year. Come and join him and the Peoria Wyreflyers on the second Sunday of September.



Charlie Bruce and I are working on publishing Odell Reynolds' Foxy OTS model. A Fox .59 powers Charlie's model version of Odell's original design at Christopher Columbus Park in Tucson



Jason Pearson, from southern Illinois, but farther north than where I live, takes second in P-40 with a Twister that is totally made of hardwood and NO balsa. The Twister weighs 64 ounces and lives to tell the tale.



Larry Lindburg, Lutefish Man, of Galva, IL accompanied Floyd on their run to the sands of Tucson. Nice Ringmaster.



Jim Renkar, of Chicago proper, brought his ARC Smoothie to the VSC this year. If Jim can just empty multiple gallons of fuel, he will be a serious threat in PAMPA.



Gary Hajek being assisted by Mike Keville at this year's VSC.



Two former District VI pilots are Jim Thomerson and Bob Hazle. Jim prevailed in the St. Louis area while Bob and Mary resided in the Schaumburg, IL before moving to California.



Bob Lipscomb's rendition of Dave Gierke's Novi III took top honors with the I-Beam Award and Pilot's Choice.





Scott Dinger and Bill Netzeband (former District VI pilot) display two of Bill's designs to include a Half Fast and a sidewinder engine Humbug.

District 7 Report
Iowa, Michigan, Minnesota,
Wisconsin




Crist Rigotti
1629 Grizzly Trail
North Liberty, IA 52317
(319) 329-6232
crigotti@mchsi.com

day contest. I had some fuel issues that dogged me all weekend but my flying buddies supplied me with the proper mix when I needed it. It was good to see everybody again and this contest kicks off the new season. Allen Brickhaus, Gary Hajek, Bill Marvel, and Steve Moore met at a rest area on the freeway on the way to the contest Friday. After a hearty noon time meal at the OX Yoke Inn, near the Amana's, we made a quick stop at Sig in Montezuma to see Mike Gretz and do some shopping.

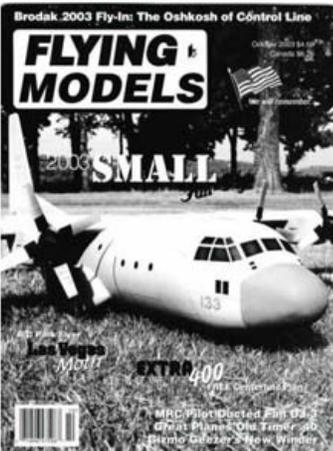


Here's the traveling crew that visited Sig Friday.

It was a bit windy Friday but we all managed to get it some flying in and trimming till we left for dinner.

Saturday's weather was stunt heaven air. It sure made up for last year's cold and blustery weather. A large group of us had dinner together and the fellowship couldn't have been better. I really enjoyed myself that night. After we got back to the motel, Gary Hajek and Allen Brickhaus sat me down and had a little talking to me. They stressed that my bottoms were too high and that they knew that I could fly better than that. I guess it sank in and come Sunday I put in a decent first flight but put in a real good one on the second one. That's what is nice about the stunt community, they are always willing to help anybody fly better. Thanks guys. The weather on Sunday was almost as good as it was on Saturday. Bob Baldus was the event director and he and his crew did a great job hosting this contest. As usual, the circles were well groomed and all the contestants were well taken care of with a free lunch provided

DISCOVER...



**We cover everything from
Control Line to Giant RC
Plans, how-to articles,
construction articles,
product reviews,
and more.**

Subscribe today!
800-474-6995

www.flying-models.com
P.O. Box 700, Newton, NJ 07860

Well by the time you get this, the summer flying season should be in full swing. I hope all of you are taking advantage of it. Let's first cover the upcoming contests for July and August.

July 2 - Fermi Stunt in Batavia IL Contact Fred Krueger at 630.897.2941

July 9 - 14 Nationals in Muncie IN

July 29 & 30 - Red River Valley Championships 50th Anniversary in Fargo ND Contact Mike Olson at 701.232.3647 Yes that's no typo... 50th anniversary!

August 12 & 13 - FCM in Muncie IN Contact Allen Goff at 765.759.7473

August 19 & 20 - Michigan C/L Championships in Westland MI Contact Curt Nixon at 734.261.8134

August 27 - Rockford Stunt Classic Machesney IL Contact Art Johnson at 815.398.3490

The word is that the Minneapolis Piston Poppers have a new field. It'll be for this year only, but the chances are very good they'll have permanent site in the future.

Well I got my profile 40 ship going in time for the Mid-Iowa Control Liners contest the 6 & 7 of May. It went pretty well over the 2



on Saturday by Jim Phillips and his family. There was plenty of food left over and we had another free lunch on Sunday too! You can't tell me there ain't no free lunch anymore! Here are some pictures I took of the Mid-Iowa Control Liners contest in Polk City.



Dennis VanderKuur shows off his Banshee on Saturday. His lethal Pathfinder hadn't shaken off the cobwebs yet.



Paul Smith was traveling through the area and made the stop with his airplanes. Interesting pilots figures too! I enjoyed flying with you. Paul has a couple of well behaved and cute dogs too.



Ed Prohaska from the Omaha area, displays a very nice Skylark built from Sterling plans.



Bob Baldus doing his thing at the pilots meeting Saturday.



Mike Schmitt with a very nice Jamison Special and a modified Twister. Mike hosts the Windy City Classic in Chicago on Saturday of the Memorial Day weekend.



Paul Christensen from the Minneapolis area holding his P.40 entry. Sometimes I think the snow hasn't melted up there and here we are having a contest!



Allen Brickhaus with his TEOSAWKI. This airplane can fly! Allen's lap times were pretty slow but he flew up a storm with it.



Doc Holiday with his Primary Force. Doc brought along his grand-daughter Emerald.



Elaine Brookins tabulated for both days. Hubby Bob, also judged both days too. Both worked hard and their efforts were appreciated by all.



Jeff Welliver cranks his RSM Tempest while John Christensen holds. Jeff got the airplane repaired since VSC, flew it well in Classic, but came up a bit short on fuel on Sunday. Minor damage and Jeff took it all in stride.



The three amigos! Allen Brickhaus, Steve Moore, and Bill Marvel. You can tell they had a good time.





Sam Sciorrota helped out by judging Sunday. Sam I want to see those Impala's of yours.



Jim Funk and his Palmer Smoothie.



Steve Moore with his brightly colored Twister. Steve managed to get a few extra days off from work to attend Polk City.



A Saito 56 powered Legacy built and flown very nicely by Keith Sandberg. This combo shows off Keith's ability to fly very smooth.



Mike Ternstrom and his enlarged Gieske Nobler.



Russ Gifford holds his Primary Force. Russ is always willing to lend me a helping hand on the circle. A big thanks to Randi who helped out with the judging too.



Another Saito 56 powered stunter. The Tempest is held by Gary Hajek.



John Bender came up from Missouri to compete.



My Phacade. It flew pretty well, though it has some more trimming to do.



Sina Goudarzi holds his brightly colored Force. Somehow I like those colors.



Holding his Tudor II is Ivars Greizens. Ivars is progressing along nicely and the report is that he'll be a pilot that will have to be reckoned with.



Emerald shows off her plaque she won flying in Beginner. She flew a Flite Streak and did very well.





Jared Hayes put up a very nice flight to capture 1st place in Intermediate.



Ryan Heath gets a helping hand from John.

I'd like to close the column with this. Floyd Layton sent me this about his grandson.

"It only took a year and a half for this one. We're getting faster. This is my grandson Andrew Ratliff and this is his first stunt plane of his own creation. We helped along the way, but he did much of the work himself."

**BURAN'S ANTIQUES
COLLECTIBLES AND HOBBIES**

Primitive Americana & Control
Line Our Specialty
Contact us for ALL your Control
Line needs.

WE STOCK

BRODAK, RSM, FOX, O.S.
KITS, MOTORS, SUPPLIES
Send .75 cents S.A.S.E. for cata-
log

Wayne and Donna Buran
5430 Treetop Circle
Medina, Ohio 44256
Phone: 330-722-4374
wburan@zoominternet.net

I was at the Mt. Joy circle flying the Phacade when Floyd and his grand kids pulled in. Andrew 10, had his Snapper and Emily 12, flew Floyd's 1/2A Skyray. I really enjoyed watching the kid's faces as they flew. The concentration and excitement! It brought back a lot of memories of when I was just learning to fly. Looking forward to seeing them at the circle this summer.



Andrew with his first plane.

- Crist Rigotti

LONE STAR MODELS

SPECIALIZING IN CONTROL LINE
MODEL SUPPLIES

FEATURED ITEMS

- ◆ Highest Quality Contest Balsa Available
- ◆ Brodak Kits, Engines, Dope, Props and Accessories
- ◆ Bulk Control Line Hardware and Accessories
- ◆ RSM and Walter Umland Kits and Products
- ◆ Stig Kits and Accessories
- ◆ AME, O/S, Magnum, Cox, Norvol and Fox Engines
- ◆ GRW Tanks and Much More

Telephone Orders: 800-687-5555
Information: 972-218-9663
E-Mail: Sales@Lonestar-Models.com
Web Site: www.Lonestar-Models.com

PLEASE COME BY AND VISIT WHEN YOU ARE
IN THE DALLAS AREA!
Address: 115 Industrial Street, Lancaster, TX 75134

District 8 Report
*Arkansas, Louisiana, New Mexico,
Oklahoma, Texas*

Steve Moon
9930 Edgecliff Cir.
Dallas, TX 75238
(214) 348-3962
stevemoon@cs.com

WIND, wind, rain, WIND, rain, RAIN, RAIN, hey got a flight in today, wind, WIND, WIND, rain and more WIND and RAIN. This is pretty much how the past couple of months have gone here in North Texas and Oklahoma. Lots of wind and rain, very little flying.

The weather didn't deter the crowd that gathered for the annual Friends of the Park contest put on by John Gunn in Texarkana, though. With 5 flyers in Intermediate, 9 in Advanced, and 6 in Expert this contest had its usual good turnout. This is a very competitive contest with 2 flights flown on Saturday and 2 on Sunday and the top score from each day added together for the final tally. John Hill took top honors in Expert, Dale Gleason had a successful debut with his new Impact winning Advanced, and John Ashford took home the first place trophy in Intermediate. Next up on the contest calendar is the Texas State Control Line Championships in Houston over Memorial Day weekend.

Elwyn Aud sent me a disc loaded with pics from VSC-18, great stuff! Elwyn does a great job shooting photos at contests and his work is greatly appreciated. If you



get a chance to get a disc full of pics from Elwyn, don't hesitate!!



District Eight's photographer extraordinaire Elwyn Aud

Dave Ek, Phil Dunlap, and Mike Greb contemplate Dale Gleason's Twin Terror; "I'm not getting near that thing", "Who me? Not a chance", "You want me to touch that thing, are you kidding?"



Bill Rutherford puts in a flight with his newly completed Caprice

The gang down in Houston has been experimenting with converting RC ARFs to Control Line. Frank Williams has been flying a Mini Katana (which is normally electric powered) with an OS 25 for power. From what I've heard the Mini Katana is a fantastic flying plane for stunt. Others have begun trying their luck with larger planes, and so far the reports are all positive. Several years ago Doug and I messed around with a couple of Hangar 9 ARFs that we converted to CL, a Giles and a Cap 232. The planes showed some promise, but were just simply too large at almost 800 sq. in. of wing area. We powered them with Saito 72s and have always been convinced that the right size plane would yield positive results. With more and more aerobatic RC ARF choices it appears we now have another route to go in the ongoing search for effective CL Stunt planes. With some of the RC ARFs available for



The Texarkana Contest group gather for a group photo and display their hardware

less than \$100 this is a great way to quickly assemble a competent practice aircraft. With only a few hours of assembly time involved one shouldn't be too emotionally attached to get out there and aggressively practice 5 foot bottoms and tight corners. As Windy and many others have said before, these really are the good old days of CL Stunt.

'em Flying!



Bob Lipscomb's beautiful Novi III makes an inverted pass

- Steve Moon



The Twin Terror really does fly!!



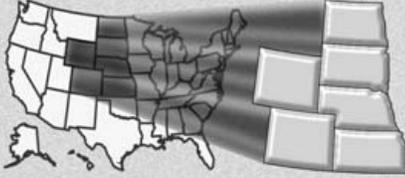
Dave Ek gives Joe Gilbert a launch

I've got to get out and put in some practice flights as this contest season heats up. I'll see many of you at the NATS; for the rest: Keep



District 9 Report

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



Carl Shoup

3172 Glendarm Dr.

Grand Junction, CO 81504-6034

(970) 434-0906

shoupentstatorrepair@prodigy.net

I received two letters this month the first one is from the Orbiting Eagles of Omaha NE. "We had a fun fly and learn to fly at the Strategic Air Command museum on 4-8-06. Part of one parking lot was roped off for us to fly. The morning started off rather cold, but by noon the coats came off and everyone got to fly. There was a light breeze which made for a stunt good stunt day. We had 9 girl scouts who came for the express purpose of completing an aeronautics merit badge. This entailed flying a model airplane. I got everyone a flight and they all got their badges, and had a lot of fun in the process. Even one of the church sponsors, who was the minister, got in a flight. Later in the afternoon two young women, employees at the museum, got a flying lesson. One of them was the program director for the museum. In all 14 lessons were given that day. By the way, I'm the lesson giver. Seven club members participated and they are Bob Furr, Wade Pearson, Ed Prohaska, Jared Hayes, Tom Egbert, Don Dugan, and myself Gary Hetrick."

"Here are some pictures from the Rocky Mountain Aeromodelers annual Buckingham Mall Show. Usually we have a static display

of the many models the club flies inside the mall, except this year it was only the outside demo flying. The mall is due to be demolished,



Entrance to the SAC museum



Three of the girl scouts getting a flight and completing their merit badges, with Gary Hetrick.



The 2 young women employees from the museum getting a flying lesson. The one on the handle is the program director.



A line up of planes that were there.



Ed Prohaska(L) Jared Hayes(C) and Tom Egbert (R).



The minister and Gary Hetrick.

so it looks like this will be the last mall show for us. The first one is really cute because a Trumpet instructor and Bugler was watching our demo flying and witnessed the crash of one of the flyers plane. He stopped his lesson and came over with his student and was kind enough to play Taps for the model. His student also received two free lessons for learning to play in Public. His mother was very proud. The crash was due to a line breakage. Jerry had a defective Crimp on his flying line. The fourth picture is Jerry returning from circle center listening to his pit man trying to say something to cheer him up. Jerry's main concern was for the Veco 19 Engine, not necessarily the plane. The remainder of the pictures are the variety of planes the club flies. Stunt, speed and precision aerobatics. That's just about it for the Mall show this year. Happy and Safe Flying." George Wodtke.

I am trying to get ready for the Topeka Kansas Top Class Contest, which will be over by the time you read this. There will be more information on that contest in the next issue. Signed Abigail Shoup, Carl's lovely and helpful wife.





Taps being played for Jerry Chambers trainer.



Tom and Jerry Chambers getting Jerry's plane off.



Line up of airplanes at the mall show.



Alex McMahan and David Meyers kicking back after flying at the mall show.

-Carl Shoup

District 10 Report

Arizona, California, Hawaii, Nevada, Utah



David Fitzgerald
2063 Monticello Rd.
Napa, CA 94558-2001
(707) 259-0626

DavidLFitzgerald@sbcglobal.net

Well, Napa has dried out over the last few weeks. Just when you think the rainy season is over and the cars are washed, it rains—again. I was able to do the Seattle thing and go flying in the rain. Ya gotta do what cha gotta do. Barry Bonds finally hit #714 and is waiting to break Babe's record. Quite a slump he's been in. Speaking of slumps, as many of you know there has been some continuing litigation against some PAMPA members. The reason I mention this is there's a new proposed publication start up featuring everything control-line. For this reason, and I think Paul Walker and Tom McClain will speak further about this, PAMPA has instituted an article submission policy. It's fairly simple but may be a bit restrictive about material submitted to SN. We feel this is necessary, not to restrict the flow of information, but to protect PAMPA from the litigant. It is unfortunate that this is necessary, but I feel prudent. We have had quite a bit of feedback on the issue already, both positive and negative. Bottom line is, PAMPA doesn't want to get sued over publishing an article in more than one place. So, submit material as you see fit, but it will require

your signature on the submission policy. This policy is very similar to what you have at either Flying Models, or Model Aviation.

We had a rather important event here is district 10 a few weeks ago. As you have just read from the last SN, our own Arlie Preszler was inducted into the PAMPA Hall of Fame. We tried to keep this a surprise and invited both Arlie and his wife, Margie, to a lunch to discuss a stunt clinic. The lunch was in a small town by Lodi, CA, Arlie's home town, on April 30th in Lockford. Many of the west coast's finest were in attendance. VP Ted Fancher, myself, Gary McClellan, my dad Bill Fitzgerald, Brett Buck, Jim Aron, Lanny Shorts, and too many others to name. As Wynn Paul's nomination article stated, Arlie was instrumental in changing the Nats format to what we have today. I remember quite a few dinners after local WAM contests, at Denny's, discussing the change in format. Remember I was just a kid then. But Arlie did something that just blew me away at one of these dinners. He said that I had been at all the contests and meetings; then he asked me what I thought of the new Walker fly-off format. He was asking me my opinion—a kid. That was when I knew Arlie was something special. Oh, by the way he actually listened. I said something like—wow; we'd get to fly against the top 5 open fliers? Pretty Cool.

Arlie took the surprise in stride and was totally taken by the moment. Everyone had a chance to speak and tell an Arlie story. Then we let Jeff Anderson have the podium for a minute, and when order was restored, Ted also had a few words to say as MC. Arlie spoke and there wasn't a dry eye in the house. This is an honor well deserved for all Arlie's contributions to the world of CLPA, running and revising the NATS, donating and building the NATS Concours prop for most of the years we've had the award. Arlie, by the way, was also instrumental in the present appearance judging, and the term,



"Front Row."

What many of you in other parts of the country may not know is that Arlie had for years helped to administer CLPA in the Western Associated Modelers, (WAM.) He has been the stunt director many times and developed his fine sense of administration long before running his first NATS in Riverside, 1977. Arlie's teammate, assistant, and replacement, Lanny Shorts, also went on to run several NATS himself. Again, thanks Arlie for all your dedication over the years. This is a well deserved honor.

Charles Mackey and Ed Southwick were also inducted into the PAMPA HOF. Charles and Ed are both noted District 10 people and have contributed greatly to the sport through their designs. Charles also of late for his history of CL flight. I believe an award ceremony is also planned in the SoCal area. Another well deserved election. Ed, for anyone who knew him, was a shoe in from the start. He was one of the most encouraging, helpful people in the sport. The amazing thing for Ed was the fact that he was building all out competition pipe ship. Ed was a competitive soul right to the end. I think there may be another article about Charles induction somewhere in this issue.

The PA 75 test program is drawing to a close. Right now, I am very happy with the engine and setup. I have made a few changes, including modifying Star Geezer IV to take the new larger pipe and engine. I had to cut into the pipe tunnel and lengthen it about 2" for the longer running lengths. The pipe is now out to 18.75" and ground release RPM of 9,300 on the 13" Eather 3-blade. The head is shimmed to .028".

This gives a very mellow run with good steady power. I've tried to make it misbehave, and it won't—which is good. So, I've ordered a second engine for Spain, and I'm pretty sure this will be the setup for the World's. The interesting thing is I've been flying this plane for about 8 years now. You'd think I'd have the plane figured out by now. I've had

to take out my carbon tank and go to a Brett Buck metal tank for more capacity. With that and the engine/pipe combination, everything in the nose is 12g heavier, requiring a little tail weight. The thing is, the trim setup is completely different than anything I have ever run on this plane before. Baffling. The only thing I can think of is, it likes a little more nose heavy and is tolerating it with the larger diameter prop and more airflow over the wings and tail. The net result is the plane

tracks better and is more stable than ever before. Who knew?

I have news from the Ed Southwick memorial held Feb. 11th-12th:

The Ed Southwick Memorial Friendship Award was presented to Eric Rule by past awardees Robin Sizemore and Mark Smith. The Memorial award is given in recognition of the person's contribution to the sport of model airplane building and flying. CD: Mark Smith, Assistant CD: Ken

C. F. SLATTERY

BYRON BARKER
2101 LOGAN AVE.
NEW ALBANY, IN. 47150
PH. 812-948-9167 FAX 812-948-0758
E-MAIL: LINECONTR@AOL.COM

NEW

THUNDER TIGER 36 STUNT \$135.00
IRVINE 36 STUNT \$140.00
PAINT STAND, WING JIG, BODY JIG & ALIGNMENT JIG
VENTURIS - TOUNGE MUFFLER-TUBE MUFFLER
STUNT MOTORS
IRVINES-MAGMUM -ST-THUNDER TIGER
DEALER FOR : SIG, BRODAK & RSM
CATALOG S. A. S. E.

RSM DISTRIBUTION PRESENTS IT'S

NEWEST KITS



Mosquito
Semi-Scale Stunter
By Jack Sheeks
\$169.95



Chizler
By Dick Mathis
Classic Legal
\$119.95



Stunt King
By Bill Winter
Old Time Legal
\$109.95

In Time for
VSC

Bob Whitely's
Hawker Hunter
Classic Legal

PROFESSIONAL WEB SITE

- DOWNLOADABLE CATALOG
- SECURE ON-LINE ORDERING
- BUILDING GUIDES

WWW.RSMDISTRIBUTION.COM

Phone: 951-678-1406
Email: rsm1rule@rsmdistribution.com





Gulliford, Stunt ED: LeRoy Black, Balloon Bust ED: Jeff Hanauer. A special thanks goes out to the gracious volunteers. Their support makes flying enjoyable for the big boys with their toy airplanes. Tabulators: Monica and Peggy; Pit Bosses/Pull Testers: Ken Gulliford, Gary Grimstad and Bill Heyworth; Registration: Nick Lemak; Runners: Tricia Duffy and Ed Capitanelli. The results should be posted in the contest section.

I have had a few calls lately from people that have been out of the sport for a long time, interested in getting back in. This is a great trend, and I hope it continues. Many are interested in flying at the Napa circle, just give me a call and I'll fill you in on the details. Here is a note from John Murphy:

"Hi Dave, My name is John Murphy and I am interested in learning to fly control line. I built a Brodak FS trainer powered by an old (80'ish) Enya 19. I enjoy building and have a Buster wing built so far and a Chipmunk kit waiting. I would love to meet you. I have read about your early success with the chipmunk, pretty cool. I have crashed several planes and flew one 10 years ago. Thankfully I enjoy building and find it relaxing.

I live in Petaluma with my wife and youngest son and work as a Fire Captain for Millbrae. I spoke with Ted and Shareen Fancher last year and joined PAMPA (need to renew). They recommended I contact you. Looking forward to hearing from you. Thanks JGM."

Sincerely,
- Dave Fitzgerald



Coolest Reno Air Race picture ever, look at the top right corner. Pict. from Jim Tichey



Old Time Winners at the Palmer



Arlie Preszler lunch at Woodland circle



Kirk Mullinix with his Corsair



Bob Whitely at the Palmer



Bob Palmer in Spirit



Classic Winners at the Palmer



Kirk's Corsair





The Head Table



Memorial Pachyderm Award



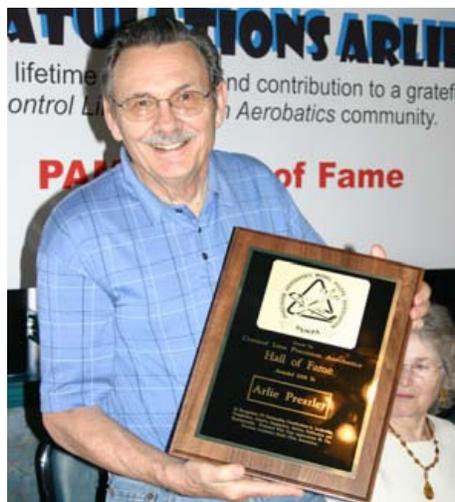
Jeff Anderson and Arlie



Ted presenting Arlie his HOF Award



Arlie and his wife



Arlie with his plaque



Lanny Shorts



Group Photo Op

District 11 Report
*Alaska, Idaho, Montana, Oregon,
 Washington*

Bruce Hunt
 2237 Joseph St S
 Salem, OR 97302
 (503) 361-7491
 bhunt@swbell.net

The Northwest has been blessed with an active and dedicated group of control line organizers. Up on the top of the list would have to be John Thompson and Mike Hazel who both put in endless hours of work running contests, preparing newsletters and generally keeping all the fliers in the Northwest in close contact. Now to top it off, John Thompson has gone digital with the Northwest's premier newsletter,

*The Stunt Fuel by Which
 All others are measured....*

*Signature Blend
 Manufactured exactly to George Aldrich's
 Time-proven formulas by*

POWERMASTER
The most respected name in model engine fuel!

*Available in these fine formulas –
 28% Oil, All-Castor - 6%, 10%, 15% Nitro
 22% Oil, 50% Synth./ 60% Castor - 6%, 10%, 15% Nitro*

See your local hobby dealer or call

**POWERMASTER
 HOBBY PRODUCTS, INC.**
 P.O. Box 660, Elgin, TX 78621
 (800)847-9086 - E-Mail sales@powermasterfuels.com



Flying Lines. Check out featured articles on all the events around the Northwest including lots of pictures at flyinglines.org. I hadn't looked at it for a few weeks and was amazed at all the new articles, pictures, and even a fledgling discussion board. If you want to know who's who and what's what in the Northwest this is the place to go. The following is directly plagiarized from the Flying Lines website.

A series of Oregon fun-flies was named "Winter Flying Fun" last year, but this year it spilled into spring with the finale in McMinnville, Ore., and it was truly a fabulous spring day for the gathering at DeAlton-Bibbee Field, the control-line and RC model aviation complex alongside the Evergreen Aviation Museum (home of the Spruce Goose). About a dozen fliers showed up, along with lots of spectators spilling out of the museum. It was partly cloudy, partly sunny, and almost windless. Flying went on continuously from before 10 a.m. until well after the prize drawing at 3 p.m. This event was sponsored by the Evergreen Aero Modelers, the local club in McMinnville with Jerry Eichten acting as event director. As has become a custom the flying was followed with a drawing for prizes donated just for the event. A few new and old faces show up for these fun-flies and there are always new models to trim. Gerald Schamp brought his refinished and appropriately named Re-Run. Greg Hart brought his reworked Banshee that he dubbed Banshero. The Banshero was in need of some trimming and provided some enjoyable time at the handle while trying to improve its handling.

The first contest of the 2006 season is history. And the winner is.....THE WIND. Each year the Portland Fireballs hosts the Jim Walker Memorial Contest and this year the date was April 21 - 23. The events vary a little each year and this year was no exception to the rule. Besides the Old Time, Classic and PAMPA stunt events there was Combat, Carrier, Racing

and Speed. The days were bright and sunny with wind playing an important role in Sunday's PAMPA stunt competition. While relatively calmer for the Beginner and Advanced fliers, things got really interesting for the Expert field with gust over 15 mph rolling over the tops of surrounding trees. Pat Johnston flying his All American Bearcat pulled out the win with hardly a bobble while flying a tight controlled pattern. I had a lesson in local wind conditions when I was blown out of my reverse wing over because the wind at ground level was 45 degrees off the prevailing wind above the tree line. The second attempt was much improved and good enough for second place. Jerry Eichten flew his SV-11 in its first contest since being repaired and took third. Don McClave and Scott Riese were the wisest of all and left their models to sun in the pit.

The big news of the contest was Don McClave's conversion from Fox .35's. As usual he won the Classic event but with a LA40 powered Tucker Special using a Bolly prop. Everyone should know that Don has for years worked and fretted over get the last ounce of performance out of his Fox .35 powered models of the year. This year at VSC Don's Fox engine just wouldn't perform and he found himself talked into trying a LA40 as a replacement and with a Bolly prop to replace his usual stash of BY&O 10 X 6's. He was amazed to find power to spare and the Tucker Special never flew as well. Classic will never be the same. It was even rumored that Don has started giving away his trove of BY&O props.

Next up will be the Northwest Regionals to be held in Eugene, Oregon over the Memorial Day weekend. Make sure you check out the results at the Flying Lines Website. You'll be glad you did.

- Bruce Hunt



Scott Riese shows Gerald Schamp how he keeps his spinner in place. "This is a ball driver"



Scott Riese's Cobra. All done with metal flake that sparkles in the sun.



John Thompson gives Mike Hazel some last second instructions as Mike starts out to fly John's plane. Mike and John have been racing in the Northwest for years as the Nitroholics.



Jerry Eichten's SV-11 being repaired. You can tell the repaired spots by the lack of spots.





Jerry's SV-11 all repaired. Jerry did a great job of matching the colors to the original.



Part of the flight line at the McMinnville fun-fly. Beautiful weather and a great flying field.



Gerald Schamp with his Re-Run at the McMinnville fun-fly. A bit more engine tweaking and this will be a very good model for Gerald.



Greg Hart shows off his Banshero. I never could land it on the grass circle's asphalt launch strip. It just wanted to keep on gliding.



Jerry Eichten having fun at his own fun-fly



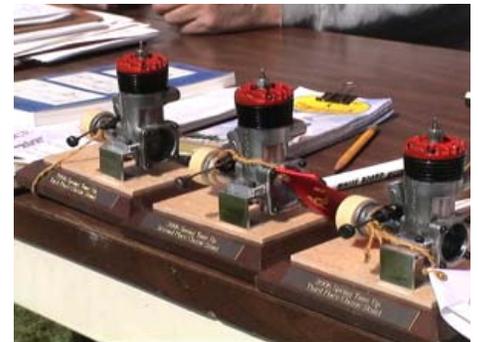
As you can see by the wind ribbon. When you can read "Caution" its time to roll up the lines in Portland.



The flight line at the Jim Walker Memorial contest. Beautiful day but sometimes clouds and drizzle make for better flying conditions.



As you can tell by the hat on the ground, it was hard to keep everything nailed down in a 15 MPH breeze at Portland.



Scott Riese made these Classic Trophies with restored McCoy .35's. Beautiful engines and he made another set with McCoy .19's for Old Time Trophies. Why do I always miss the good stuff.



Here's my Shark pilot still looking good after 4 seasons. I get 15 appearance points from University of Oregon Duck Judges but only 12 points from Oregon State Beaver Judges.



Pat Johnston's pair of beautiful American Eagle stunters, a P-51 and a Bearcat. And they fly as good as they look.

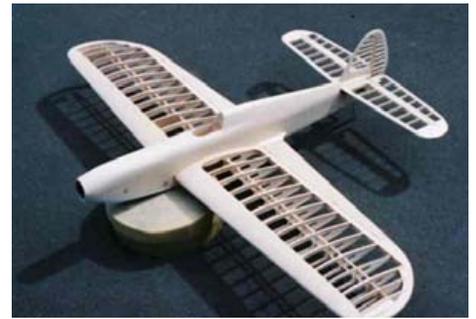




Here's a cover photo shot of Pat Johnston's Bearcat. Even with its dihedral wing the wind just didn't have much effect on this great flying model.



OH NO!! Don McClave has traded in all his Fox .35's for LA.40's. And what is that strange prop on the front?



Floyd Carter shared this picture of his latest Hurricane model project.



Gary Nelson with his ST.51 powered Cardinal. Gary continues to fly at the top of the Advanced Class.



Don McClaves Tucker Special sits out the wind at the Portland Contest.



Floyd Carter setting out his lines for his 4-Stroker Wildman60. When this one flew at McMinnville it really drew the crowds out from the Museum.



Jim Holmack with a very nice profile Nobler.



Pat Johnston holds for Mike Foley as Mike starts his engine in the Advanced competition.



Mike Haverly's expertly finished Oriental Plus. Three Blade Prop, tuned pipe, beautiful finish... now Mike's getting serious.



Leo Mehl with his latest unnamed original design for a .19 to .25 at McMinnville. He named his larger design the Grinder. I've decided I'll name this one Gumby.



Randy Powell's latest creation. I'm taking bets on how this plane does at the NW Regionals. Will this model see competition?



PAMPA NEWS



The May PAMPA EC meeting was held the week of May 13th through the 19th. There were four items presented for discussion. They were:

1) It was suggested to continue to list Tom Morris as "Editor Emeritus" in all succeeding SN issues.

2) There was a proposal to modify the way we vote. I have included it here in its original form.

This is a method that I think we could implement for future elections that would allow collating the votes by district as we do now, make the vote anonymous and cost PAMPA no money!

Print the ballot in the Sept/Oct issue of Stunt News. Format it such that after cutting it out of the S/N, the voter would mark his/her selections and then fold and tape shut so that the vote is not visible. Note: The voter does not put his name on the ballot.

The voter would then put it in a regular business size envelope, mark it with his return address and the district from which the vote comes, put a stamp on it and mail to whomever will collect the votes

The person receiving the votes can verify the voter is valid, mark him/her off the list, open the

envelope and toss the sealed ballot into the correct district receptacle, box, sack etc.

When voting period ends, open the ballots and count the results.

With this method, all campaign statements could appear in the same issue with the ballot so that the voter would have the opportunity to compare each one's statement and make their choice with a fair evaluation. Those who have sufficient interest to vote would pop for the stamp, the person/persons receiving the votes would not know how any individual voted and PAMPA would be out no money!

The PAMPA renewal form could also be printed in that same issue of S/N and could be returned in the same envelope along with the sealed ballot, the renewal and check being put into the "renewal receptacle" and the anonymous ballot into the proper district receptacle to keep the voter's ID anonymous. If you feel this may lose some renewals, P A M P A

A could still mail these out but now you must spend some money. Or maybe after the election, only mail to those who do not renew with the ballot. That would cost less but require more effort by the office staff.

3) Should P A M P A support the FAI team with a donation to each member?

3 B) Should that amount be \$500 each?

Note: The president suggested that any team member that was on the EC be exempt from receiving those funds. The discussion was unanimous (other than Paul and David) in opposition to that position. None the less, I will not be accepting PAMPA funds for my trip to Spain. I consider voting on that a significant conflict of interest as well as accepting the money that might result from that vote.

4) Should we include the names of the individuals submitting proposals to the EC?

The results of that voting are as follows:

Submitted by Paul Walker
PAMPA President

Voting Subject	1	2	3A	3B	4
EC Member					
President					
Paul Walker					
Vice President					
Ted Fancher	No	No	Yes	Yes	Yes
Sec./Treas.					
Shareen Fancher	No	No	Yes	Yes	Yes
District 1					
Dave Midgley	No	No	Yes	Yes	Yes
District 2	-	-	-	-	-
Windy Urtnowski					
District 3	Yes	No	Yes	Yes	Yes
Phil Spilman					
District 4	Yes	No	Yes	Yes	Yes
Bill Little					
District 5	No	No	Yes	Yes	No
Dale Barry					
District 6	Yes	No	Yes	Yes	Yes
Allen Brickhaus					
District 7	No	No	Yes	Yes	Yes
Crist Rigotti					
District 8	Yes	No	Yes	Yes	Yes
Steve Moon					
District 9	No	No	Yes	Yes	Yes
Carl Shoup					
District 10	No	No	Abstain	Abstain	Yes
David Fitzgerald					
District 11	No	Yes	Yes	-	Yes
Bruce Hunt					
Newsletter Editor					
Tom McClain	-	No	Yes	Yes	Yes
Membership Sec.					
Jim Renkar	-	-	-	-	-
Yes	4	1	12	11	12
No	8	12	0	0	1
Result	Fail	Fail	Pass	Pass	Pass

CONTEST CALENDAR



Howard Rush
14321 SE 63rd St.
Bellevue WA 98006
(425) 746-5997
hmrush@comcast.net



Jim Snelson
7200 Montgomery BlvdNE #287
Albuquerque NM 87109
(505) 296-2884
janjhobbies@msn.com

Stunt News Contest Calendar

Listings are what we had at the Stunt News deadline. For up-to-date listings and additional information, see the PAMPA Web site: <http://www.control-line.org/DesktopDefault.aspx?tabid=24> and the AMA Web site: <http://modelaircraft.org/comp/ContestCalendar/Webcalendar/Flying%20Events/calendar.htm>. Be sure to confirm with the CD before going to a contest. Submit new listings to Howard Rush, hmrush@comcast.net, or Jim Snelson, jandjhobbies@msn.com. See <http://www.controllinecentral.com/Calendar.asp> for links to contests outside North America. Submit contest ads to Floyd Layton, roadworrier@mchsi.com.

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

2006 Contests:

July 1-2

Tulsa Glue Dobbers' Firecracker Meet, Glue Dobbers' Field, 13376 S. Peoria, Glenpool, OK

Saturday: Stunt, Racing and Balloon Bust Triathalon*

Sunday: The Mirror Meet*: the stunt portion of the 1946-1961 Mirror Meet

CD: De Hill, 5811 S. Utica, Tulsa, OK. 74105 (918) 743-4912, dfhill@juno.com

Tulsa Glue Dobbers' Web site: <http://www.tulsacl.com>

July 2

Fermilab Barnstormers' Fermi Stunt, Fermilab, Batavia, IL Enter site from Kirk Rd. (Pine St entrance). <http://www.fnal.gov/pub/visiting/map/site.html> Register in advance with CD to facilitate security access on contest day.

Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)

CD: Fred Krueger, 2070 Sapphire Ln., Aurora, IL 60506, (630) 840-5516, fkpampa9@sbcglobal.net, cell phone at contest (630) 849-7298

July 9-14

U. S. Control Line National Championships, AMA, E. Memorial Drive, Muncie, IN

Sunday: Precision Aerobatics (Beginner*, Intermediate) (unofficial Nats events), Precision Aerobatics* (Advanced, Open) appearance judging. Advanced and Open entry deadline is noon Sunday.

Monday: Old Time, Classic (unofficial Nats events)

Tuesday: Precision Aerobatics* (Advanced, Open) qualifying rounds 1 and 2.

Wednesday: Precision Aerobatics* (Advanced, Open) qualifying rounds 3 and 4.

Thursday: Open Precision Aerobatics* Top 20, Advanced Precision Aerobatics* finals. Jr. and Sr. entry deadline is noon Thursday.

Friday: Precision Aerobatics (Jr., Sr., Open*) finals, Walker Cup flyoff.

Beginner Precision Aerobatics ED: Allen Brickhaus, abkb801@shawneelink.net

Official-events ED: Warren Tiaht, tiaht@mindspring.com

Get registration form from AMA Events Department, 5151 E. Memorial Dr., Muncie, IN 47302, (765) 287-1256, ext. 204, lonniee@modelaircraft.org, or

<http://www.modelaircraft.org/events/Entry%20Forms/2006%20CLPA%20Entry%20Form.pdf>

EXEMPLARY STUNT PLANES

World Class Designs by World Class Flyers

• **Classic Legal U-2** \$165
Warburton

• **Blue Pearl** \$190
Henk de Jong

• **China Clipper** \$200
Claus Makis

• **Sky Writer** \$215
Xaing Dong Zhang

Kits are laser cut with jigging built in,
CAD plans, molded parts.
Ships USPS Priority Mail for Domestic orders.
Will ship Internationally.
Allow up to three weeks for order delivery

2632 Edgewood Lane • Lake Charles, La 70605
337-477-7948 • steve.stunt@yahoo.com

Call Steve Hand for more information!



July 29
Royal Oak Cloudbusters' CL Fun Fly and Stunt Contest,
Stanley Broome Park, Flint, MI
Cancelled
Contact: Paul Smith, (586) 939-1076, crickballs01@aol.com

July 29-30
Vancouver Gas Model Club Western Canada Stunt
Championships, Rice Mill Road site, Richmond, B.C.
Saturday: Old Time, Classic
Sunday: Precision Aerobatics (Beginner, Intermediate,
Advanced, Expert)
CD: Chris Cox, (604) 596-7635, ccox1@telus.net

July 29-30
50th Annual Red River Valley Championships, Skylarks
Field, Trefoil Park, Fargo, ND
Precision Aerobatics (Beginner, Advanced)
CD: Mike Olson, 305 27th Ave N., Fargo, ND 58102,
(701) 232-3647

July 29-30
SW Ohio CL Stunt and Scale Meet, Lunken Airport,
Cincinnati, OH
Saturday: Old Time, Classic, ARF*
Sunday: Precision Aerobatics (Beginner, Intermediate,
Advanced, Expert)
CD: Charles Snyder, 10759 Moss Hill Ln, Cincinnati,
OH, 45249, (513) 489-8681, crsbjs@cinci.rr.com

July 30
Philly Flyers contest, Neshaminy State Park, on State
Rd. about half a mile north of Street Rd. At Street Rd and
State Rd., turn left onto State Rd. After the 2nd traffic light,
turn right into the Playmasters parking lot.
Old Time* (Beginner and Intermediate combined,
Advanced and Expert combined)
Precision Aerobatics* (Beginner, Intermediate,
Advanced, Expert)
CD: Randy Holcroft, (215) 393-8018, FILLIFLIER@aol.com

August 5-6
Prairie Fire Stunt Contest, Namao Field, Edmonton,
AB
Saturday: Old Time, Classic
Sunday: Precision Aerobatics (Beginner, Intermediate,
Advanced, Expert), Basic Flight*
CD: Bruce Perry, 419 Klarvatten Lake Wynd, Edmonton,
AB, T5Z 3B9 Canada, (780) 472-9000, abperry@telus.net

August 12-13
FCM.Championships, AMA, E. Memorial Drive,
Muncie, IN
Saturday: Classic, Old Time, Profile Stunt*
Sunday: Precision Aerobatics (Beginner, Intermediate,
Advanced, Expert)

CD: Allen Goff, 2100 N Carrollton Dr., Muncie, IN 47304,
(765) 759-7473, jangof@aol.com
www.fcmodelers.com

August 12-13
The Evergreen Aeromodelers' Country Classic,
Evergreen Aviation Museum, 500 NE Captain Michael King
Smith Way, McMinnville, OR
Saturday: Classic, P-40*
Sunday: Precision Aerobatics (Beginner, Intermediate,
Advanced, Expert)
Contact: Jerry Eichten, (503) 554-0034, JEichten@aol.com
<http://www.egam.org/>

August 13
Wichihawks' Pik Capital CL Championships, Planeview
Park, 2819 Fees St., Wichita, KS
Classic, P-40*, Old Time, Precision Aerobatics
(Intermediate, Advanced, Expert)
CD: Mike Tallman, 3014 Exchange, Wichita, KS 67217,
(316) 524-4004, mike.tallman@webtv.net

August 13
Roland Baltes contest, Sepulveda Basin, Van Nuys, CA
Turn south off Victory Blvd across the tracks and past the
first access road on the right. Continue on to a road that
goes off at a Y on the right.
P-40* (two classes)
CDs: Lee Strickland, 7650 Kraft Ave, N Hollywood, CA
91605-2915, (818) 764-2217, leestr@pacbell.net ; Ron Duly,
1806 Karen St, Burbank CA 91504, (818) 843-1748, rduly@earthlink.net

August 13
Middlesex Modelers' Precision Aerobatics Contest,
Middlesex Modelers' Field, Mountain View Park, Van Ness
Dr. north of state highway 28, Middlesex, NJ
Old Time, Classic, Precision Aerobatics (Beginner,
Intermediate, Advanced, Expert)
CD: Carlos Serra, 509 Elsie Ave, South Plainfield, NJ
07080-2766, (908) 756-6941, carlos.a@comcast.net

August 19-20
High Desert Control Line Fiesta, George Maloof Air
Park, Albuquerque, NM, N 35° 8.970', W106° 43.906' See
Web site below or call CD for directions.
Saturday: Precision Aerobatics (Intermediate,
Advanced, Expert)
Sunday: Old Time, Precision Aerobatics (Beginner)
CD: Richard Perry, 427 Line Oak Ln NE, Albuquerque,
NM 87122, (505) 856-7008, tailhooker@comcast.net
<http://www.arconline.com/flying-field.htm>

August 19-20
Hampton Beach Cook-out and Stunt Contest
CD: Dave Midgley, 2 Elm Dr, Hampton, NH 03842-
1168, (603) 926-4176, dmidgley@welchfluorocarbon.com



August 19-20

Western Kentucky/Southern Illinois Stunt Championships, McCracken County Model Air Park, County Park Rd. west of Stewart Nelson Park, NW side of Paducah, KY

Saturday: Beginner Precision Aerobatics*, Basic Flight*, Profile Stunt*, Classic, Old Time

Sunday: Precision Aerobatics (Intermediate, Advanced, Expert)

CD: Allen W. Brickhaus, PO Box 206, Golconda, IL 62938, (618)-683-7611, abkb801@shawneelink.com

August 19-20

The Ninth Annual Ted Goyet Stunt Classic, Mavis Henson Field, County Road 102, 2.5 mi south of I-5 exit 536, Woodland, CA

Saturday: Old Time, Classic, P-40* (two classes)

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

CD: Dave Shirley, Jr., 9336 Binning Ct., Orangevale, CA 95662, (916) 987-5818, DSHIRLEY@sbcglobal.net

August 19-20

Michigan CL Championships, Signal Seekers' field, S Henry Ruff south of US 12, Westland, MI <http://www.michsignalseekers.com/local.htm>

Sat: Old Time, Classic, Profile*

Sun: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)

CD: Curt Nixon, 8836 Utah, Livonia, MI, (734) 261-8134, captcurt@flash.net

August 26-27

The New England Stunt Team Presents Stunt in the Berkshires, the Boyd Co., 501 Pleasant St (Rt 102), Lee, MA

Sat: Old Time, Classic*

Sun: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)

CDs: Guerry Byers, (617) 327-3531; Bill Hummel, 260 Lape Road, Nassau, NY 12123, (518) 766-9432, Camphummel@aol.com

August 26-27

Fourth Annual Western Pennsylvania Stunt Championships, club field, Transfer, PA

Saturday: Old Time, ARF*, Classic, Profile* (All Saturday events have Beginner and Intermediate combined with handicap for Beginner; Advanced and Expert combined with handicap for Advanced)

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

CD: Phil Spillman, 350 Butterfly Ln, Hermitage PA 16148, (724) 983-1677, p.g.spillman@worldnet.att.net

August 27

Rockford Stunt Classic, Kieselberg Forest Preserve, Machney Park, IL

Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)

CD: Arthur Johnson, 1818 Oslo Drive, Rockford, IL 61108-6612, (815) 398-3490, RCBLIMPPILLOT@aol.com

September 2-3

22nd Annual Rocky Mountain Control Line Championships, Front Range Airport, Watkins, CO

Saturday: Old Time, Classic, Profile*

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

Contact: Chris Jacobsen, 9961 W 86th Pl, Arvada, CO 80005-1210, (303) 420-3346, CJRJFLYER@MSN.COM

September 2-3

Charles Ash Memorial Greater Southwestern Championships, E. Northwest Highway and Garland Rd, Dallas, TX

Saturday: Old Time, Classic

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

Contact: Dale Gleason, 6003 E Lone Oak Rd, Valley View, TX 76272-9479, (940) 637-2169, N42222@nortexinfo.net

September 2-3

Northwest Skyraiders' Stevenson Memorial Contest, Sand Point NAS/Magnuson Park, Seattle, WA

Saturday: Old Time, Classic, P-40*

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

CD: Chris Gomez, PO Box 7838, Covington, WA 98042, (206) 369-5603, gomez580l@comcast.net

Contact: Steve Helmick, 2104 Aberdeen Pl SE, Renton, WA 98055-4529, (425)255-1887, sbasser@yahoo.com

<http://www.nwskyraiders.com/>

September 3

Treetown Modelaires' Midwest Regional Championships, Aurora Municipal Airport, Route 30, Sugar Grove, IL,

Precision Aerobatics (Beginner, Intermediate, Advanced, Expert), P-40* or ARF*

CD: Bill Calkins, 317 Snow St., Sugar Grove, IL 60554, (630) 466-1531, clflyer@mchsi.com

<http://www.clflyer.com>

September 9

Michigan Control Line State Championships, Rouge Park, Detroit, MI

Old Time, Classic, P-40*, 1/2A Demo*, Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)

CD: Ron Colombo, 14907 Garden, Livonia, MI 48154, (734) 522-5399

Contact: Paul Smith, (586) 939-1076, crickballs01@aol.com

September 10

ERMAC Fall CL Aerobatics Contest, Middlesex Modelers' Field, Mountain View Park, Van Ness Dr. north of state highway 28, Middlesex, NJ



Precision Aerobatics (Beginner, Intermediate, Advanced, Expert), Old Time* (GSCB rules)
CD: William Lindemann, 44 High St, Metuchen, NJ 08840-2339, (732) 494-0993

September 14-15
SAM Champs, AMA, E. Memorial Drive, Muncie, IN
Thursday: Old Time
Friday: Classic
CD: Randy Ryan, (734) 697-8982, iflyff@comcast.net
Stunt ED: Allen Goff, jangof@aol.com

September 15-17
Memphis Stunt Classic, Millington Barnstormers' Club, Millington, TN, approximately 13 miles north of Memphis at 4256 Sykes Road
Friday: practice
Saturday: Nostalgia*, Profile*
Sunday: Precision Aerobatics* (Beginner, Intermediate, Advanced, Expert)
CD: Louis Rankin, 1262 Mathis Rd, Atoka, TN 38004-7902, (901) 837-1511, lwr_@msn.com

September 16-17
Bergen County Controline Flyers' Stunt Contest, Palisades Park swimming pool parking lot, 275 Broad Ave, Palisades Park, NJ
Saturday: ARF*, Profile*, Classic* (Beginner, Intermediate; Advanced and Expert combined with handicap for Advanced)
Sunday: Precision Aerobatics* (Beginner, Intermediate, Advanced, Expert)
CD: Rich Giacobone, (201) 947-0336 days, ceramicprd@aol.com

September 16-17
Cholla Choppers' Karl Marschinke Memorial, Christopher Columbus Park, 4600 N. Silverbell Rd, Tucson, AZ
Saturday: Old Time, Classic
Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Lou Crane, 2163 Sonoita Dr., Sierra Vista, AZ 85635, (520) 459-0546, loucrane@cox.net

September 16-17
Cleveland Area Stunt Champs, Cuyahoga County Fairgrounds, W of I-71 on Bagley Rd., Berea, OH
Saturday: Classic, Old Time, ARF/ARC*, Profile*
Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Wayne Buran, 5433 Treaty Circle, Medina, OH 44256, (330) 722-4374, email: wburan@zoominternet.net
<http://www.control-line.net/wc/index.htm>

September 23-24
Lafayette Esquadrielle Broken Arrow 19 Stunt and Scale, Buder Park, exit 272 N from I-44, Valley Park, MO
Saturday: Old Time, Classic, P-40*

Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Robert Arata, 561 Goldwood Dr, Ballwin MO 63021-6315, (636) 391-0272

September 23-24
Meet 'n' Meat, Mavis Henson Field, County Road 102, 2.5 mi south of I-5 exit 536, Woodland, CA
Saturday: Old Time, Classic
Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Jim Aron (510) 654-2200 work, (510) 527-5377 home, UncleJimby@aol.com

September 23-24
N.E.S.T. Mitch Lily Memorial Mass Cup Championship, Wrentham State School, Wrentham, MA
Saturday: Old Time, Classic
Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Frederick Clark, 55 Free St., Hingham, MA 02043, (781) 424-9843, rchobby34@aol.com
Contact: Dick Wolsey, 112 Haverhill St, N Reading, MA 01864-2551, (978) 664-8670 wolsey@comcast.net

September 23-24
Capital City Championships, Cooper Stadium, I-70 exit 98, Columbus, OH
Saturday: Old Time, Classic, Profile*, ARF*
Sunday: Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Keith Bryant, (740) 756-4468, kbryant@greenapple.com

September 30-October 1
Tulsa Glue Dobbers' Stunt Contest, 13376 South Peoria Ave, Glenpool, Oklahoma
Saturday: Old Time* (GSCB Rules), Classic*, P-40*
Sunday: Precision Aerobatics (Beginner Jr., Beginner Sr.-Open, Intermediate*, Advanced, Expert)
CD: De Hill, 5811 S. Utica, Tulsa, OK 74105, (918) 743-4912, dfhill@juno.com
Tulsa Glue Dobbers' Web site: <http://www.tulsacl.com>

October 1
New York Stuntmasters' Stunt Contest, Flushing Meadows Corona Park, Queens, New York, NY
ARF*, Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
CD: Bob Lampione, (917) 518-0295, rlampione@nyc.rr.com

October 7
Royal Oak Cloudbusters' CL Fun Fly and Stunt Contest, Stanley Broome Park, Flint, MI
Old Time, Classic, P-40*, 1/2A Demo*, Precision Aerobatics (Beginner, Intermediate, Advanced, Expert)
Contact: Paul Smith, (586) 939-1076, crickballs01@aol.



com

October 7-8

Hi Johnson Memorial, Sepulveda Basin, Van Nuys, CA
Turn south off Victory Blvd across the tracks and past the first access road on the right. Continue on to a road that goes off at a Y on the right.

Saturday: Old Time, Classic, 1cc*, Beginner Precision Aerobatics

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

CD: Scott Dinger, 1367 Patricia Ave, Simi Valley, CA 93065-2812, (805) 526-9074, hyflo@dslextreme.com

October 7-8

Fall Stunt Clinic and Contest, E. Northwest Highway and Garland Rd, Dallas, TX

Saturday: Stunt Clinic

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

CD: Phillip Nickles, 6640 Champion Rd, Midlothian, TX 76065-5200, (972) 723-2311, debbienickles@aol.com

www.dmaa-1902.org

October 7-8

West Ohio CL Stunt Contest, Wegerzyn Garden Center, 1301 E. Siebenthaler Ave., Dayton, OH

Saturday: Classic, Profile*, ARF*

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

CD: John Jordan, 2332 S Dixie Dr., Kettering, OH 45409 (937) 294-7971, balsadust1956@woh.rr.com

October 7-8 (tentative)

Napa Valley Vintage Stunt Regional, Kennedy Park, Napa, CA

Saturday: Old Time

Sunday: Classic

CDs: Jim Aron (510) 654-2200 work, (510) 527-5377 home, UncleJimby@aol.com

Jim Goss (408) 531-9374

October 7-8

Fall Follies, Bill Riegel Field, Salem Airport, Salem, OR

Saturday: P-40*, Classic

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

Contact: Mike Hazel, PO Box 126, Mehama, OR 97384, (503) 859-2905, zzclspeed@aol.com

October 8

G.S.C.B. Fall Air Show Part I,

George L. Gaydos Field, Two Bridges Rd., Lincoln Park, NJ
Old Time*, OTS II*, Classic* (Beginner, Intermediate, Advanced, Expert), Precision Aerobatics (Beginner)

Mike Cooper, CD: (973) 770-0263 or (201) 704-7081 day of event, mcooper@asco.com

October 15

G.S.C.B. Fall Air Show Part II, George L. Gaydos Field, Two Bridges Rd., Lincoln Park, NJ

Precision Aerobatics* (Intermediate, Advanced, Expert)

CD: Mike Ostella, (973) 364-1105, or (201) 704-7081 day of event, mike.ostella@verizon.net

October 15

Old Time Contest, Buder Park, exit 272 N from I-44, Valley Park, MO

Old Time

CD: John Moll, 7315 Elm Grove Ct, Hazelwood, MO 63042 (314) 831-4001

October 21-22

27th Annual Golden State Stunt Championships,

LONE STAR MODELS

SPECIALIZING IN CONTROL LINE MODEL SUPPLIES

FEATURED ITEMS

- ◆ Highest Quality Contest Balsa Available
- ◆ Brodak Kits, Engines, Dope, Props and Accessories
- ◆ Bulk Control Line Hardware and Accessories
- ◆ RSM and Walter Umland Kits and Products
- ◆ Sig Kits and Accessories
- ◆ AME, O/S, Magnum, Cox, Norvel and Fox Engines
- ◆ GRW Tanks and Much More

Telephone Orders: 800-687-5555

Information: 972-218-9663

E-Mail: Sales@Lonestar-Models.com

Web Site: www.Lonestar-Models.com

**PLEASE COME BY AND VISIT WHEN YOU ARE
IN THE DALLAS AREA!**

Address: 115 Industrial Street, Lancaster, TX 75134



Buchanan Educational Center, North Minnewawa Avenue,
Clovis, CA

Saturday: Old Time, Classic

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

CD Jerry Silver, jsilverflyer@adelphia.net; Co-CD
Douglas Barton, 160 Park Ave, Woodland CA 95695, (530)
662-6469, dougb@woodlandaviation.com

October 21-22

Lee Lorio Memorial, Independence Park, Baton Rouge,
LA

Saturday: P-40*

Sunday: Precision Aerobatics* (Beginner Jr., Beginner
Sr.-Open, Intermediate, Advanced, Expert)

CD: Gil Causey, 3229 Meadowood Dr., Slaughter, LA
70777, (225) 658-6139

October 21-22

Carolina Criterium, Waymer flying field, Huntersville,
NC. Take exit 23 E from I-77 to Hwy 115, go S on Hwy
115 to Holbrooks Rd. Field is 1.3 mi. E of 115 on Holbrooks
Rd.

Basic Flight*, Profile*, Old Time, Classic, Precision
Aerobatics (Beginner, Intermediate, Advanced, Expert)

CD: William Francis, contact Watt Moore, 981
Meadowlark Dr., Rock Hill, SC, (803) 366-9430, medplans@
cetlink.net

November 4

Royal Oak Cloudbusters' CL Fun Fly and Stunt Contest,
Stanley Broome Park, Flint, MI

Old Time, Classic, P-40*, 1/2A Demo*, Precision
Aerobatics (Beginner, Intermediate, Advanced, Expert)

Contact: Paul Smith, (586) 939-1076, crickballs01@aol.
com

November 19

G.S.C.B. Stunt Forum, Wayne PAL

Contact: Mike Ostella, (973) 364-1105, or (201) 704-7081
day of event, mike.ostella@verizon.net



Palmer Thunderbird



Bob Hunt F-105 by Ed Capitanelli

57 Nobler by Michael Duffy



MICHIGAN C/L CHAMPIONSHIPS

August 19-20, 2006



Hosted by

Michigan Signal Seekers
Westland, MI



Saturday

NEW

- Profile Stunt—No BOM, No Appearance Judging Bring it—Fly it.
- Old Time Stunt—PAMPA Rules
- Classic Stunt—PAMPA Rules

Sunday

NEW

- PAMPA Stunt—Beg, Int, Adv, Exp—JSO
- Combat is Back! —Speed Limit, AMA, F2D

\$10.00 for first event, \$5.00 for second. \$20.00 for all events
Spectators Free

- All events flown from three manicured grass circles
- Food will be available on-site
- Only 5 miles from Metro Airport
- Plentiful lodging and restaurants nearby
- Prizes through 3rd in each stunt event

No un-muffled flights before 10:00 AM

Muffled practice open at 8:00 AM

Official flying begins at 10:00 AM

Valid AMA card required

All AMA Safety and Conduct rules will be enforced

Bring the Family

*Stay an extra day and Play!
Plenty to do and see in the area*

Toledo zoo, COSI science center 1hr
Greenfield Village/Henry
Ford Museum 15min
Yankee Air Museum--15min
Kelloggs--Battle Creek 1.5hr
Detroit and Windsor Casino's 30min
Historic Rouge Park C/L site 20min



AMA Sanction No. 06-1175

Field is located on the SE corner of
Michigan Ave and Meriman Road,
Westland, MI

Access is from Henry Ruff
1 Blk South of Michigan Ave

CD: Curt Nixon—734-261-8134 captcurt@flash.net

Combat Event Coordinator: John Brzys-- jbrzys@globalconnected.net

www.michsignalseekers.com



Heart of Illinois Stunt Championships

26th Annual

Date: *September 10, 2006*

AMA Sanction: **06-1572**

Site: **Detweiller Park
Peoria, IL**

Sponsored by:
Peoria Area Wyreflyers



CDs:

Floyd Layton
1841 E. 32nd Street
Davenport, IA 52807
(563) 386 2487
Email: roadwarrior@mchsi.com

Bill Zimmer

Box 72
Varna, IL 61375
(309) 463-2131 (6pm – 10 pm)

Events: **PAMPA Stunt** (Beginner, Intermediate, Advanced, & Expert)
Old-Time Stunt (flown after PAMPA awards ceremony)

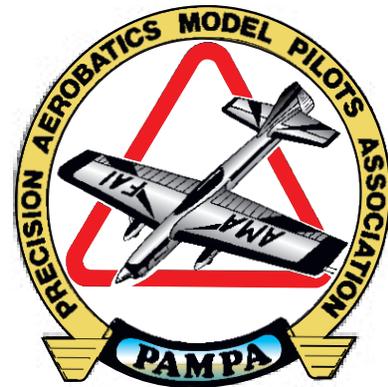
Per suggestions from contestants: A sign-up sheet will be posted for practice flights prior to the start of the contest. **PLEASE!** Take your turn and give others a chance to practice.

Awards: Plaque Awards (Special award for highest scoring Junior and Senior)

Fees: Open: \$10.00
Senior: \$5.00
Junior: FREE! No registration fee!

Registration: 8:30 - 11:30 a.m.

Appearance Judging: 9:30 a.m.



Flying starts at: 10:00 a.m. SHARP!!

Two smooth flying circles with short grass (1 inch or less) and 10 ft. diameter blacktop pilots circle.

We will fly Beginner & Intermediate on one circle and Advanced & Expert on a second circle. The CLPA Rule 7. Flight Procedure will be enforced!

AMA license number required on all airplanes!

Concession Stand will be operating during the contest.



Memphis Stunt Classic

Presented by the Millington Barnstormers

September 16th and 17th
Circles available for practice on the 15th

AMA Sanction #06-0333

Contest Director: Louis Rankin, 901-837-1511

Location: Millington Barnstormers flying field, Sykes Road, Millington,
TN 38054

Saturday, Sept. 16th
12 Noon

Classic Stunt (JSO)
OTS (JSO)
Profile - No engine limit (JSO)

Sunday, Sept. 17th
9:00AM

PAMPA Beginner (JSO)
PAMPA Intermediate (JSO)
PAMPA Advanced (JSO)
PAMPA Expert (JSO)

Entry Fee

1st Event \$15.00
2nd Event \$10.00
3rd Event \$5.00
18 years of age and under FREE!

No appearance points or BOM in all events!

Site has 4 grass circles and will be open for practice on Friday,
September 15th

Toilet and water available on the field



CONTEST REPORTS



James Mills
 1403 S 5th Ave.
 Ozark, MO 65721
 (417) 581-3929
 mllscal@quixnet.net

Contest Report Rouge Park, May 20, 2006

Combat Sponsored by Detroit Combat Team, Ron Colombo
 Carrier, Strathmoor Model Airplane Club, Mark Warwashana
 Stunt, royal Oak Cloudbusters, Paul Smith

Old Time Stunt

Judged by Curt Nixon & Bob MacDonald

1st	John Paris	286
2nd	Dick Kirk	274
3rd	Paul Smith	239
4th	Dave Keats	

Profile 40

Judged by Dick Kirk, & John Paris and Frank Carlisle

1st	John Paris	499
2nd	Frank Carlisle	451
3rd	Bob Branch	488
4th	Paul Smith	387
5th	Brad LaPointe	381.5

Classic Stunt

Judged by Curt Nixon, Dick Kirk, & John Paris and Frank Carlisle

1st	Bob MacDonald	555.5
2nd	John Paris	528
3rd	Paul Smith	368

Modern AMA Stunt, aka PAMPA CLPA

Expert

Judged by Curt Nixon and Dick Kirk

1st	Bob MacDonald	546.5
2nd	John Paris	516
3rd	Frank Carlisle	466

Advanced

Judged by Curt Nixon and Dick Kirk

1st	Curt Nixon	494
2nd	Paul Smith	400
3rd	Dave Keats	160
4th	Jim Morway	

Intermediate

Judged by Curt Nixon and Dick Kirk

1st	Bob Branch	446.5
2nd	Brad LaPoint	391.5

Best of Show

Best looking model that flew, official or not.
 Judged by Richard Sawicki and Paul Smith

1st	Bob MacDonald	P-47
2nd	Randy Ryan	Jetco Sabre Stunt
3rd	Curt Nixon	Imperative



Thanks again for coming back to our roots, the big circle at Rouge. It was gusty and turbulent 50 years ago, and nothing has changed.
 The scores were "blown down" some, but losses were within acceptable limits. We found out how they build AFR's so light.

See you at RCCD, Saturday, June 3rd.

27 Mile & Werdermann Road, in the farthest eastern corner of Macomb County. Pretty much the same event lineup as Flint & Rouge.
 Big difference - This will be a Frank Carlisle Operation.
 Do not miss it. That's an order!



Texarkana

May 6 & 7, 2006

CONTEST DIRECTOR - JOHN GUNN

ASSISTANT CD - DALE GLEASON

Precision Stunt Aerobatics

** Highest score for each day added together for final score **

Contestant	AMA#	Plane	Engine	Saturday		Sunday		Score	Place		
				Flt 1	Flt 2	Flt 1	Flt 2				
Beginner:											
Jerry Neafus	362686	Doodle Bug	FP-40	186	190.5	195.5	194.5	=	386	2nd	
Bryan Norton	774551	Tutor II	LA-40	151	191.5	218	211.5	=	409.5	1st	
Intermediate:											
Ty Marcucci	3429	UHP Imitation	OS-46 LA-S	364.5	321	attempts	358	=	722.5	4th	
John Ashford	993	Skylark	Brodak 40	455.5	397	478.5	485	=	940.5	1st	
Mike Donovan	427764	SIG Mustang	Magnum 36	460	450	463	435	=	923	2nd	
Daryl McComb	97446	ARF Nobler	FP-40	234.5	317.5	Pass	Pass	=	317.5	5th	
Roger Johnson	637532	Tutor	46	384.5	353	374.5	360	=	759	3rd	
Advanced:											
Dale Gleason	12938	Impact	RoJett 76	510.5	526	535.5	549	=	1075	1st	
Louis Rankin	10859	Bear Profile	ST-51	506.5	522	528	534.5	=	1056.5	4th	
Robert Corrales	479185	Bear	Tiger 60	250	486.5	496.5	490.5	=	983	8th	
Jim Phillips	703783	Sooner Special	ST-60	475.5	495	Pass	511.5	=	1006.5	7th	
Mike Greb	1326	Impact	RoJett 65	498.5	519	529.5	543.5	=	1062.5	2nd	
Don Hutchinson	5402	T-Bird	Magnum 36XL	482.5	516	529.5	514	=	1045.5	5th	
Andy Stokey	93291	Forerunner	OS-40FP	412.5	Pass	474	478.5	=	891	9th	
Dave Ek	17358	F86	40 FP		473	499.5	197	=	512.5	1012	6th
Mike Finnigan	78962	Saturn	RoJett 61	467	525	531.5	537	=	1062	3rd	
Expert:											
Richard Oliver	95762	ARF Giles 202	RoJett 61	541	563.5	571.5	568.5	=	1135	2nd	
Tom Farmer	6150	Forerunner	ST-60	525.5	530.5	548.5	554.5	=	1085	5th	
Bill Wilson	500612	Hunter 8	ST-51		490	552.5	558	558	=	1110.5	3rd
Joe Bowman	464907	JD Falcon	Brodak 40	511.5	534	545	546.5	=	1080.5	6th	
Dee Rice	582380	RingMaster	OSFP 25	517.5	541	547.5	548.5	=	1089.5	4th	
John Hill	82974	Caudron	RoJett 65		554.5	543.5	577	590.5	=	1145	1st

PILOT'S CHOICE AWARD - 1ST PLACE : BILL WILSON 2ND PLACE: JOE BOWMAN

BEST ARF: RICHARD OLIVER

Event Director: Tom Nuchols

Judges - Beginner/ Intermediate: De Hill / Phil Dunlap

Advanced/Expert: Terry Tucker / Gil Causey

Tabulators: Rachel Wilson / Nan Beavers

Runners: Bob Nuchols, Steve Kocher, John Gunn, John Ashford, Linda Gleason, David Rice

Raffle: Linda Gleason, John Gunn, LeAnn Gilbert, Cathy Causey



TopClass Stunt results 2006

Basic

1) Neal Baughman	220.5
2) Ian Veselic	28.5
3) Aaron Veselic	26.5

Beginner (Jr-Sr)

1) Emerald Dennison	56
---------------------	----

Intermediate

1) John Bender	ARF Nobler Double Star 40	331
----------------	---------------------------	-----

Advanced

1) John Holliday	Cotton Candy OS 40 LA	170
------------------	-----------------------	-----

Expert

1) Carl Shoup	Eagle OS 46 SF	486	484
2) Bud Burroughs	NoName OS 40 FP	461	471
3) Lew Woolard	Windy Lew OS 46 LA	372	464

Concours - Eagle - Carl Shoup

Old Time Stunt

1) Bud Burroughs	Jamison Special McCoy 40	264.5	285
2) Carl Shoup	Belfry Bound OS 46 SF	274.5	284
3) Keith McMahan	Humongous Tower 40	272	283
4) Lew Woolard	Humongous OS 46 LA	266	265
5) Jim Kraft	Viking Fox 59	255	
6) John Holliday	Dragon Fox 35	199.5	

Spirit of '52 - Humongous - Keith McMahan

Basic, Beginner, OTS Judges - Dale Hrenchir, Pete Lee

Intermediated, Advanced, Expert Judges - Bob Brookins, Neal Baughman, Jim Lee

Tabulators - Patty Chilton, Gayle Taylor

HOT and WINDY



May 27th 2006 Texas State Championships
Houston, Texas

P40

- 1 David Gresen 450.5 469.5
- 2 Dee Rice 464.5 438.0
- 3 Bill Wilson 453.5 453.5
- 4 Joe Bowman 437.0 -
- 5 Gaylord Elling 425.5 432.5
- 6 John Ashford 430.0 -
- 7 Mike Greb 399.5 422.0
- 8 Dale McCord 414.0 -
- 9 Don Hutchinson - 408.0
- 10 Dave Ek 405.0 384.5
- 11 Walter Hicks 328.5 375.5
- 12 Norm Faith 354.5 346.5
- 13 Jose Vargas 354.5 333.0
- 14 Andy Stokey 353.5 -
- 15 Carl Clark 343.0 -
- 16 Roger Olsen 296.5 250.0
- 17 Gil Causey 242.5 -
- 18 Richard Staight 55.0 112.0

Classic

- 1 Bill Rutherford 496.5 511.5
- 2 Dee Rice 495.0 470.0
- 3 Darrell Harvin 446.5 465.5
- 4 David Gresens 460.5 465.0
- 5 Don Hutchinson 448.0 -
- 6 Bill Wilson 365.0 444.5
- 7 Joe Bowman 438.0 -
- 8 Dale McCord 412.5 -
- 9 Dave Ek 354.0 398.0
- 10 Jose Vargas 195.0 371.0
- 11 Norm Faith 356.0 368.0
- 12 Roger Olsen 358.5 -
- 13 Gaylord Elling - -

May 28th 2006

Beginner

- 1 Ryan Young 224.5 254.5
- 2 Richard Staight 208.5 247.5
- 3 Jake Moon 79.5 -
- 4 Ashley Hollier - 55.0
- 5 Juan Vargas - -

Intermediate

- 1 Dale McCord 458.0 461.3
- 2 John Ashford 385.0 441.3
- 3 Norm Faith 390.3 401.0
- 4 Jose Vargas - 379.6
- 5 Gregg Elling 301.0 369.0

Advanced

- 1 Dale Gleason 482.0 455.0
- 2 Mike Greb 475.0 447.5
- 3 Don Hutchinson 453.5 -
- 4 Gaylord Elling 445.0 384.5
- 5 Miek Finnigan 443.5 430.5
- 6 Steven Hollier 439.0 416.5
- 7 Dave Ek 428.0 426.5
- 8 Carl Clark 418.0 -
- 9 Andy Stokey 400.0 -
- 10 Roger Olsen - 403.5
- 11 Walter Hicks 327.5 -
- 12 Gil Causey - -

Expert

- 1 Richard Oliver 524.0 -
- 2 Bill Wilson 495.6 518.0
- 3 Mike Scott 512.3 473.3
- 4 Steve Moon 506.3 473.3
- 5 Dee Rice 481.6 472
- 6 David Gresen 476.6 477.3
- 7 Joe Bowman 475.0 -
- 8 Tom Farmer 464.3 449.6
- 9 Windy Urtnowski - -
- 10 Rich Giacobone - -



Second Bob Palmer Memorial Results

Lucky Pyatt Classic

- 1 Keith Trostle 547.5
- 2 Bob Whitley 535
- 3 Dave Sabon 531.5

Old Time Stunt

- 1 Bart Klapinsky 498
- 2 Keith Trostle 477
- 3 John Wright 451.5

Advanced

- 1 Antone Kephart 488.5
- 2 Jim Lally 475.5
- 3 Stan Tyler 473.5

Expert

- 1 Keith Trostle 563.5
- 2 Bob Whitley 546.5
- 3 Steve Harris 538

Intermediate

- 1 Matt Shorey 470
- 2 Joe Hildreth 441.5
- 3 Al Shorey 401.5

Beginner

- 1 Stan Kitzes 216
- 2 Fred Staley 149
- 3 no entrant -

P-40 Sportsman

- 1 Matt Shorey 439
- 2 Al Shorey 420
- 3 Parrish Jacoby 411.5

P-40 Competitor

- 1 John Wright 524.5
- 2 Scott Dinger 508
- 3 Bill Netzeband 489

1cc/Leprechaun

- 1 Bob Whitley 496.5
- 2 John Wright 480
- 3 Scott Urabe 469.5

Special Awards

- Spirit of '52** Bart Klapinski
- Spirit of '65** Bob Whiten
- Concourse** Mullinix
- Bob Palmer** Glen Allison
- Leprechaun** Scott Dinger
- Palmer** Keith Trostle
- Special Award for Continuing Support** Bill and Elaine Heyworth



PAMPA RULES



Alice Cotton-Royer

2435 NE 84th Ave.,
Portland, OR 97220
(503) 254-3173

alice@artemisillustration.com

Let's start with some interesting questions that were emailed to me:

Question:

Alice, I have a rules question. I have come back to CL as many people do. I read that people advance from one level to the next (ex. from Advanced to Expert). How does this work? Who decides that you can go up a level?

Stunt News is the best of all magazines. Keep up the good work. I have not competed (yet), but I have learned an incredible amount from the experts in the hobby who have written articles in Stunt News. Some people write that Stunt News (and PAMPA) are just for the elite. Nonsense. I love it. Read it from front to back as soon as it comes. Best money I ever spend is PAMPA dues.

I also play chess. In chess there is a numerical rating system, so you always know where you are at and whether you are getting better or worse. And, of course, someone is the best, someone is the second best, etc. Has PAMPA ever thought of this type of system. It makes for good competition.

Answer:

Hi, I am afraid that as of this point, scoring is somewhat subjective and moving from class to class, the same. Usually one does not move to the next class until he/she has scored a certain number. For instance: If you are a Beginner, you should move to Intermediate as soon as you hit a score of 300, then move to Advanced as soon as you score 400, and finally go on to Expert when you have scored a 500 or more.

Some say you should not move up a level until you are consistent at that 300, 400, or 500 score. Some say you better move as soon as you hit that number. Note: "Sandbagger" is a term used for a competitor who stays in a class because he or she is sure to win it, not for the sake of consistency. This tends to upset the rest of the contestants.

Some say you can move up if you are consistently "almost" hitting that score. This is what I did when I went from Advanced to Expert. I was just under 500 consistently so I decided to move on up and learn from folks much better than I. I have since reached scores of 500+. So you see, there are no fixed rules. The people you fly with will have their own preference.

Your question is a good one and you will get a variety of answers. And yes, judging is a bit subjective and not always consistent as well. You have to be in the hobby for the fun of it and not take it too seriously.

Enjoy!

- Alice

Question:

Alice, As I believe in maximum information, you might also consider mentioning the number of women in PAMPA (you are the first I have known about, especially at the Expert level) and perhaps (if you have the information) the number of people at each level.

Answer:

I can answer the first question,

but not the second for there is no way to track it effectively.

I am aware of a handful of women who are Pampa members, some fly, some judge, one is the secretary of Pampa. In fact, it would be nice to hear from the women in Pampa. Tell me what you do in the hobby? You can email me at alicot@earthlink.net.

Now, getting down to OTS rules there seems to be a problem. The 2006 PAMPA reference manual did not include the latest diesel bonus rule for OTS, so I have included it in the following. Here are the complete OTS rules. Please use these for your contest. The score sheets in the reference manual are correct so I will not repeat them here.

PAMPA Rules For Old Time Stunt

1.0 Applicability. All Pertinent AMA regulations (see sections titled Sanctioned Competition and General in AMA rule book), the General control Line Rules and CL Aerobatics rules shall be applicable except as specified below. Any deviations from the above or those specified below should be clearly spelled out in contest advertisements.

2.0 Philosophy. Old Time Stunt offers stunt fliers an additional event intended for enjoyment, for more relaxed competition and for nostalgic recreation of the era which led to modern stunt. Because its figures are simpler than those required for modern Precision Aerobatics, Old Time Stunt may attract new fliers to CL aerobatics events and competition. Above all, the event should be fun.

3.0 Model Requirements. The model must have been designed, published or kitted prior to December 31, 1952. Eligible published designs must have been published with a cover date prior to Dec.31, 1952. The contest director, at his discretion, may require proof of model eligibility for Old Time Stunt. Proof of eligibility lies with the contestant. Challenged contestants may show dated published plans, magazine construction article,



dated photographs and/or letters of confirmation of the date of the design. Plans of un-kitted, unpublished designs must be made available to PAMPA membership.

3.1 Allowable Modifications

3.1.1 Undercarriage.

3.1.1.1 Tailwheel. A tailwheel may be added to those designs which originally had a skid, providing the model's angle of attack (on the ground) closely approximates the original design.

3.1.1.2 Landing gear. Landing gear material may be changed. The landing gear length need not exactly duplicate the original, providing the models angle of attack (on the ground) closely approximates the original design. Landing gear must exit in the same location as the original design. It shall not be relocated to provide for perceived advantages in ground handling.

3.1.2 Adjustable leadouts

3.1.3 Adjustable tip weight

3.1.4 Structural changes to strengthen the aircraft.

3.1.5 Control ratios and control mechanism location.

3.1.6 Building material substitutions (hinges, glue, paint, covering material, landing gear material, etc.)

3.1.7 Use of muffler pressure and uniflow fuel tanks.

3.1.8 Trim tabs.

3.1.9 Fuselage width may be modified to accommodate commercial two-inch (2") fuel tanks and allow them to be replaced or serviced.

3.1.10 External doublers may be changed to internal, and doublers may be added to any design without penalty.

3.2 No Modifications, other than those listed above, shall be permitted. Any modifications (other than those listed in section 3.1) which, in the opinion of the judges or contest director, significantly change the appearance and/or performance of the aircraft as originally designed, shall be grounds for disqualification; to: change of airfoil, change of

moments, rudder articulated by control system, change of asymmetry or symmetry, size, etc. Drop-off landing gear will not be permitted (Note: Where drop-off gear was a feature of the original design, contestants should preserve the appearance and location of the original gear, but must disable its drop-off function for competition.)

4.0 Builder of the Model. The BOM rule shall not apply to the Old Time Stunt event.

5.0 Appearance Points. Appearance point shall not apply to the Old Time Stunt event.

6.0 Flight Pattern Points. 25 flight pattern points will be awarded flights in which all maneuvers are attempted or completed in the correct sequence. Pilots may omit maneuvers and remain eligible for FLIGHT PATTERN POINTS providing he/she notifies the judges before each flight of those maneuvers which will be omitted, and execute the remaining maneuvers in the proper sequence. A crash shall not be grounds for deduction of flight pattern points, providing all maneuvers prior to the crash are performed in the proper sequence. Exceeding the eight minute time period shall result in a loss of flight pattern points.

7.0 No Flap Bonus. A bonus of 10 points will be awarded for use of an aircraft design which does not include operating wing flaps. (When using Garden State Circle Burner's (GSCB) scoring, this bonus shall be 20 points.

7.1 In the event that OTS Phase II is flown (all applicable OTS rules except that models shall have operating wing flaps), the 10 (or 20) point No Flap bonus will be waived.

8.0 Spark Ignition Engine Bonus. A bonus of 10 points shall be awarded for use of an operating spark ignition engine.

8.1 Glow engines converted to ignition may not be used. Ignition engines must either have been manufactured during the Old Time Stunt era or be a reproduction engine that has been approved by the Society of Antique Modelers

(SAM).

8.2 Diesel engine bonus. A bonus of 5 points shall be awarded for use of an operating diesel engine

9.0 Maneuvers. Maneuvers and maneuver descriptions from the 1951-1952 AMA rule book shall apply. A minimum of two laps is suggested between each maneuver to allow judges time to register scores (Not completing two laps will not result in a loss of pattern points.)

9.1 Takeoff and Level Flight. These are two separate maneuvers. Correct takeoff consists of model rolling some distance after release, rising smoothly, and climbing to normal level flight height of 6 to 10 feet, within one lap. Two level laps follow.

10.0 Scoring of Maneuvers. The PAMPA 1-10 x K-factor, or alternate GSCB system, will be used. See sample score sheets at the end of this document. Pre-contest announcements shall state which system is to be used, PAMPA or GSCB.

10.1 U n a t t e m p t e d Maneuvers will receive no score (0).

11.0 Rules Change Procedure. The procedure for changing, amending or adding rules is similar to those procedures used by AMA. Rules change procedures and forms are available from the PAMPA Rules Chairperson.

- Alice Cotton-Royer



PAMPA PRODUCTS



Curt Nixon
 8836 Utah
 Livonia, MI 48150
 (734) 261-8134
 Captcurt@flash.net

Hi Again folks:

I'm kind of between projects this month and have nothing in the way of regular products. We do have this wonderful addition to our growing list of PAMPA Products plans however. As you can see, the CAD work by Bob Kruger is outstanding. This is one of those planes that we haven't seen around for a while but has been eagerly awaited. To top it all off, Walter Umland is going ahead with the production of a limited edition, laser-cut kit to this plan.

This plane should appeal to those of you looking for a very capable upgrade plane to replace the entry-level ship. I would encourage anyone that is thinking of trying their first scratch-build to try this design--I don't believe you will be disappointed and the plan details alot of the small areas that can be confusing for the new builder. If you aren't quite ready to try a full build from plans, give Walter a call and get on the kit list.

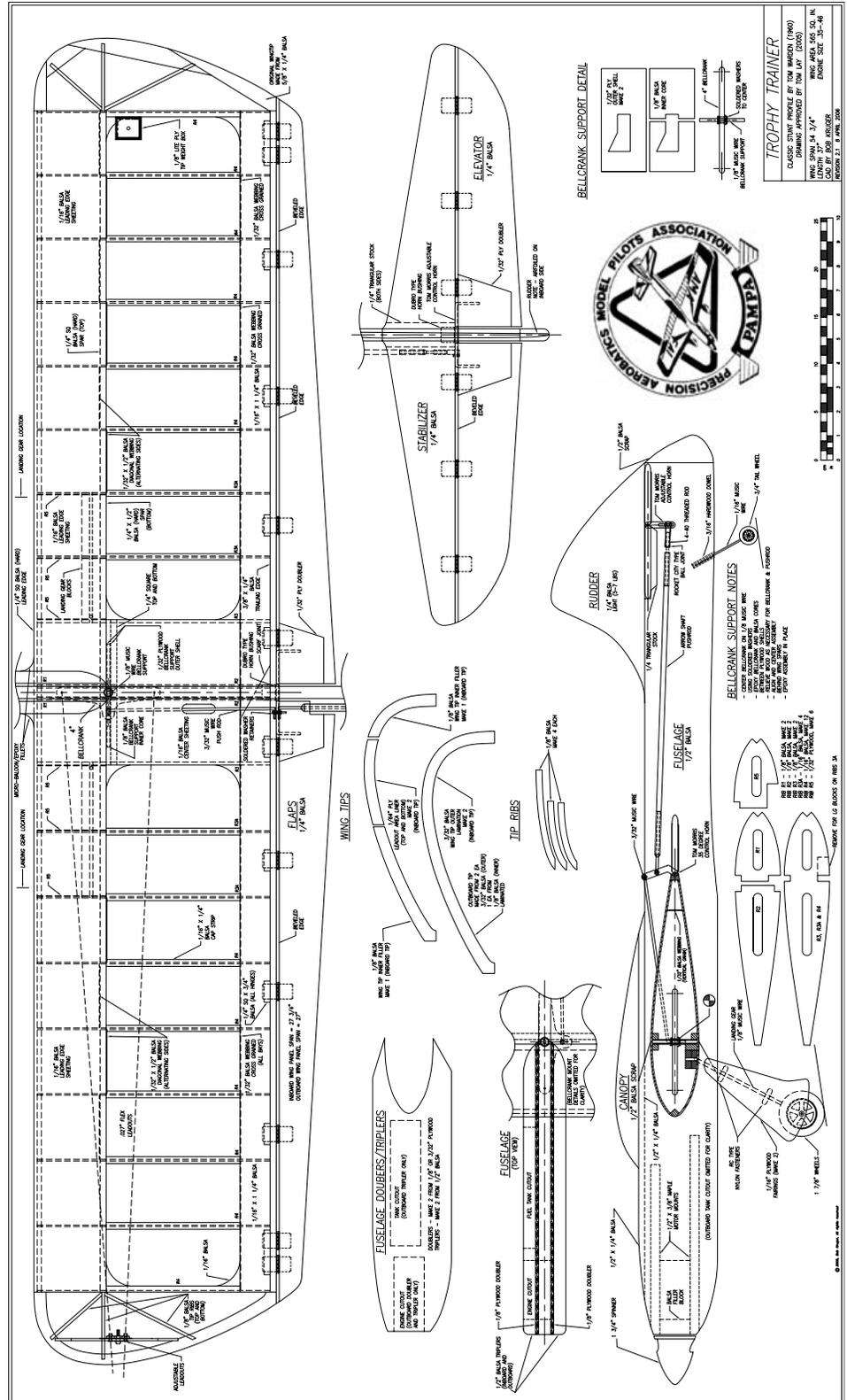
By the time you get this issue, the plan should be available for delivery from us at PAMPA Products.

Until next month, fly safe and enjoy the heart of the summer--I

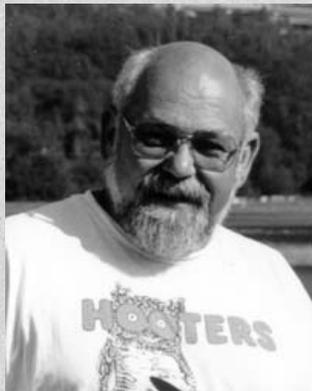
should have a few more interesting items for review next time.

- Curt Nixon

Trophy Trainer by Tom Warden/Plans by Bob Kruger.



BAD BOY STUNT



Dan Rutherford

4705 237th Pl. SE

Bothell, WA 98021

(425) 481-5760

dlrlll845@yahoo.com

Fun Fly at Olë's Place!

I had never been to what is, in my opinion, optimistically referred to as a "Fun Fly." Granted, flying is fun, that is self-evident. But to make the straight-line projection that applying loose organization to this pleasurable leisure time activity equates to fun, fun and more fun is just a bit presumptuous. Blame it on having spent some time on the Dark Side.

A couple times during those years several of us arrived at the Marymoor Park RC site only to find the premises fully occupied by--and reserved exclusively for--some sort of RC Fun Fly. If you have never heard the advance publicity for one of these things, same centers on the fact that there is no competition, as if that is a bad thing. Worse, it is a false premise.

No competition?! From my admittedly small personal sampling--augmented by reading about same in the enthusiastic mags--there is loads of competition: The biggest. The smallest. The fastest. The slowest. The ugliest. The most beautiful. The most flights*. Best crash. Best save. Best electric. Best glow. Weirdest. Heaviest tool box.

Largest tool box. Largest tool box owned by a guy who forgot to pack his transmitter and fuel. Tool box which most closely resembles a child's transformer toy. Reference: Flying Models, June 2006, page 34.

*There really should be a category "No flights at all," but it would be heavily over-subscribed.

So it was that when the CL Fun Fly concept began popping up in the NW two or three years ago, I simply took a pass. Repeatedly. Not only did I have a built-in bias against this sort of thing (see above) I was not particularly interested in dedicating a whole day of quality practice time while in the presence of a group also interested in getting some circle time. You know, on "my" circle.

Ah, but 2006 is different. My son and I spent four weekends hauling much of Dad's estate from Yakima, Washington. No, no, Dad is still with us, but the house will be put up for sale, he has moved into an assisted-living center, one-bedroom apartment, meals, and lots o' wimmen and so on. (He's doing great, thank you.)

No room for (literally) Tons of Stuff, this including a 9-inch South Bend lathe, a monstrosously heavy mill, generous tooling for both, a couple fully stocked roll-away tool boxes, the Delta wood lathe I was raised on, generous tooling, ditto.

Chips, you want to see me make chips? Come on by. Don't expect to see anything useful produced, of course, but the chips will fly. As

Steve Helmick noted, "Whee! You can make...venturis!"

Included in the booty was the single tool to which I have never had home workshop access. "There's a planer in one of the spare bedrooms. It's just a Grizzly, and it's only a 12-incher; take it if you want."

Joshua looked at me and shrugged, "Well, we've got room on the trailer; I suppose we should load it up."

As if to seal the deal Dad said, "It's new, I've tuned it up and there's a spare set of fresh blades. Uh, if we can find them."

Whoa! Do you know how kewl one of these things can be? I renewed all the cutting boards made for family and neighbors years ago, did so in a flash, almost instantly creating a satisfying pile of wood chips.

Looking around for more opportunity to play, there was a profile fuselage in my shop. I tend to build motor crutches and profile fuselages a good bit oversize, shooting these assemblies through a table saw in bringing them to finished dimensions. But when one does this act with a fuselage for a Pukey Profile, it's less than perfect. The hard maple tends to push the blade aside, so the finished piece is not really flat from nose to tail, top to bottom. Okay, one has to put a dial indicator to it, but still...

I grabbed the fuselage abuilding, two or three passes through the planer later it was flat and squared up. "It's just a Grizzly..." indeed.

DOCTOR DIESEL

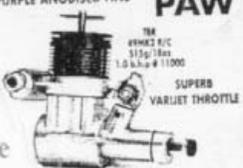
Eric Clutton, 913 Cedar Lane, Tullahoma TN, 37388, USA
PHONE: 1-931-455-2256 <http://www.cafes.net/doctordiesel>

WOULDN'T IT BE GREAT IF SOMEONE INVENTED A MODEL AIRCRAFT ENGINE WHICH USED NO BATTERIES, HAD NO PLUGS TO BURN OUT, RAN COOLER, USED LESS FUEL AND WAS MUCH QUIETER, PLUS HAVING EXTRA TORQUE TO SWING BIG PROPS ?

FLY STUNT WITH DIESEL!
NO TUNED PIPES --
SAME SPEED THROUGHOUT .

Complete catalog and info, \$1.00 post free

PURPLE ANODISED FINS **PAW**



THE ENGINE R/C
1/10g/10cc
1.0 L.B.S. # 11000
SUPERB
VARIABLE THROTTLE



Works for me.

Where were we? Oh, yeah. No flying for Da Dirt since the October 2005 Fall Follies. Two branny-new models, one for Classic; the other for P.40, maybe even some PA competition. Didn't even go to the first contest of the season: New models, no practice, and no time.

Olë Johansen's place is on Highway 9, north of my place close to H-9. A big-time highway back before I-5 was built. Now it's just fairly ordinary two-lane, although the scenery is sometimes spectacular.

The problem was that I didn't really know where I was going. We've spent a lot of time flying at the Arlington airport, just off Highway 9, Olë is further north, and the directions said something about it being behind a fire station. How many fire stations can there be on this highway? At least two as it turns out.

The first was every bit of 28 miles from my ultimate destination. I stopped in at the next-door Bryant General Store for road food/flying food, your choice. While it no doubt was at one time a general store, it is now pretty much a convenience store. And I had noticed that north of Arlington I had gone from the 'burbs to decidedly rural to what was beginning to look a lot like country.

While asking for directions and buying some grits, I noticed rather low-quality snap shots under the thick glass covering the counter. One of the people pictured was the woman to whom I was talking; the other certainly was her daughter. And between them--naw, this can't be!--was Larry the Cable Guy. I pretended to not recognize LCG, and am loathe to tell you I even knew who it was...

She laughed when I told her where I was headed. "Oh, my! You still have to go through Sedro-Woolley. That's 25 miles or so. I'll tell you how to get to I-5."

"Nope, haven't been on this portion of Highway 9 in years. Thanks, dear."

("Sedro-Woolley" is a real name

for a real town. I have no idea how the founders came up with such a name, and it is likely that you and I do not want to know. So there.)

The country aspects to the journey continued. At a wide spot in the road called Clear Lake, a general store which appears to still deserve the name displayed on their sign the following: 2PER¢ MILK. Probably an interesting story there, but I was laughing so hard I was well past before even thinking about turning around.

Besides, there was not much time for turning around. The road went from mostly straight and mostly efficient, as it is in my area, to seriously twisty and seriously interesting. Instead of driving the Hated Honda I needed something agile. After strafing the apex of each corner I would review the list of cars appropriate for this trip, quickly eliminating anything from Acura, at least one of their sporty models prone to becoming high-centered if blithely driven off a strip of asphalt. As demonstrated by PW, 2005 NW Regionals, "You're good, lookin' good, keep comin'..." assistance provided by one of our hobby's biggest kidders, Gordan Delaney.

Remember, H-9 was once a main route north. So where did all the cautionary signs come from? I didn't see much need to haul down from nearly 70 mph to 25 mph for the first tight corner. At least not until noticing that a trucker had--inadvertently, no doubt--trail-braked well past the apex, as shown by still-black, long strips of rubber. A few signs even advise 20 mph, and while in general I was able to corner substantially over the posted speed without running out of road, I am ashamed to admit this was not always the case.

Just about the time I was beginning to have way too much fun, up pops Sedro-Woolley; real name, real town. Six miles later, a total of 65 miles from my home--not that far from Canada surely--was Olë's place.

It did not appear to be The Place. But I followed orange tape between houses, trees and outbuildings

to emerge at an actual flying site. Two grass circles were laid out, one closely mown, the other edge-mown, this meaning only one edge of the circle was clipped while mowing the primary circle.

Good stuff here, crashers there, I suppose.

My buddy Buzz Wilson was at the latter circle, even though he didn't crash all day. As he and I are fully capable circle hogs, that's where I parked. We had almost exclusive use of this circle for the rest of the day, the other used for informal D-Bat competition.

D-Bat? One of the most unusual of all CL Combat events has a hold in this region, equipment restricted to old-crock FAI Combat models, powered by 2.5cc diesels. The Warlord appears to be a very popular design. I don't want to go into details on the engines, both because I don't know exactly what is allowed and the rules have "evolved" over the years, depending upon whom is going "too fast" and what engines the promoter is selling. Or not selling, these generally being of the too-fast variety. Let's just say the noise-makers are equally as clunky as the models, although those flying this event do appear to be having a real good time.

And sometimes even making it pay for contestants, not just from promotion and the selling of equipment, some of it in ARF form. Shortly after Buzz and I got set up, Robert Smith rolled in, announcing that during 2005 he won an even \$1,000.00 in flying D-Bat. If you don't think that is funny, I'll be coming over to give you a humor transplant in the next few days. Hint for the humor-impaired: Flying D-Bat for money is roughly equivalent to Money Meets in CL Stunt where one must fly a Goldberg Li'l Wizard, complete with rubber band-activated "save" feature, and powered by a Cox reed-valve engine which first saw life in a Plastic Nasty RTF.

Having had a full load of coffee on the way up, I needed some relief. Olë had an on-site Honey



Bucket! Good idea. One really does not want riff-raff, especially riff-raff of the modeling type, tracking in when one's own home is involved.

Buzz is fixin' to fly CL Stunt and still has the Combat mentality of needing racks of models prior to making a serious effort. So I gleefully added to his woes by giving him the Skyray 35, a.k.a. Skyray 20, I have used over the last couple years. It's still good, but repairs have blimped it up some, finally taking it out of contention in Expert PA. Even though I thought of it several times, ultimately I couldn't bear to break it up just to rip out the controls. As he already has a 20FP w/Brett Buck Tune-Up, at least Buzz will painlessly find out how a more than merely competent model for CL Stunt handles.

With the gift exchanges over we started flying almost immediately. Buzz had a whole raft of 1/2A Combat models to trim. I began with the 20FP-powered Dirtmobile II, just to shake off the cobwebs.

Mel Lyne once came over, asked how many times my model has been repaired. I pointed out a single hole in the covering which has been taped over, replying, "Once." He didn't believe me. Note to self: Mel didn't get the memo which says Dirtmobile II is a Q-ship. As Mel is a huge fan of the Red Green show, neither the memo nor an overt definition of "irony" seemed to be required. My mistake...

This thing is really fun. I know that a lot of you simply do not understand the attractiveness of an ARF Flite Streak fitted with a small-bore motor such as the O.S. 20FP ABN w/BB T-U. That's okay, it was the perfect vehicle for first flights of the 2006 season.

Not too much later a complete lunch was laid out for us. A very generous lunch, I must add. There are few things better than a mid-day feed with like-minded folk.

Back to flying, the D-Bat guys were still hogging the "good" circle; Buzz continued with his 1/2A screamers, I kept putting fuel to the ARF. Jeff Rein showed up with F2D models to test and what appeared to

be a hopeless task, that of getting his girl friend up to speed for D-Bat and 80-mph Combat at the NW Regionals.

Late in the day Kenny Johansen, son of Olë, put up some Stunt flights, closely followed by Olë himself, a profile of some kind powered by a 35-sized diesel. Alas, as I was turning away to leave, Olë crashed it a real good lick. Didn't seem fair somehow after the great day he selflessly provided for the rest of us.

And of course I enjoyed a spectacular day of flying, leaving for home with two new models perfectly trimmed.

That's a lie.

The stupid ARF proved too compelling. Burned well over 1/2 gallon of fuel with it, 2.75 ounces at a whack.

The new models only left the HH one time, and that was to demonstrate that just given decent techniques LustreKote paint can be the Real Deal.



NEW STALKER
Pro stunt engines
the big assortment of engines, mufflers, spinner, props, spare parts

76RE/81RE
Weight - 370g
Mount size same as 61



61 LT-EX
61 LT-LS
61 RE
51 RE
46 RE
40 RE

The exclusiv dealer:
Kaz Minato
3-12-6 Higashi
Niiza-shi Saitama
352-0002 Japan

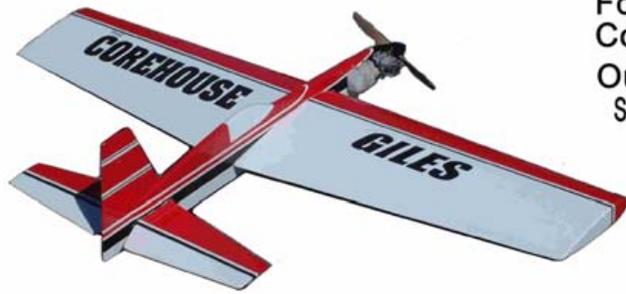
fax: +81-48-474-8079
e-mail: bluemax.minato@nifty.com

Many thanks to a good friend to CL and CL fliers, my new friend Olë Johansen. Nice to discover that a CL Fun Fly really can be...Fun.

- Dan Rutherford

GILES SUPER STUNTER

Build It!(tm) Guarantee
If the wing cores are damaged during construction return them to us and we will ship a replacement free of charge



Foam Fuselage Core <<>>
Outstanding C/L Stunt Trainer
<<>> **Easy to Build and Fly**
<<>> **Computer Cut Foam Wing**

features TrueBeam Self-Jigging Construction

WGT-45oz. typ. AREA- 740 sq. in. SPAN- 60 in.
include \$10 per order for shipping and handling
On the Web at <http://home.earthlink.net/~philcartier>

THE COREHOUSE 1249 JILL DRIVE 
HUMMELSTOWN, PA. 17036

\$99.95



BALL DIAMOND FLYER



Jim Harris

136 South Main St.
Marion, OH 43302
(740) 389-2985

harrisebertlaw@marion.net

The Coyote was designed by Dick Mathis. I think he is from Texas. He wrote some of the most interesting articles for Flying Models Magazine in the 1970's. Two of his best profiles were the Excalibur and the Coyote. The coyote was my personal favorite but I am not sure it was the best ship. The Coyote did not have flap, but it could fly well. The Excalibur has won many Classic and Profile contests. I won a few Intermediate contests with my Coyote. I built several Coyotes and one Excalibur.

The first Coyote I built was around 1975 or so. The first one was covered with MonoKote. Red on the wings and metallic blue on the body. All these planes flew well this one included. At about this time I was using O.S. .35S engines, so I guess this was what I had in this one. I think this is a good choice for a non-flaped airplane, but above all else keep this ship LIGHT. This ship will not square if it is overweight. I don't remember what this one weighed, but it was light. Keep this one light; under 40 oz. if you can. Some ships can carry a little extra weight, this one can not. After a year of flying this one, I tried an upright engine mount; this worked

OK but I would not recommend it. I never tried this one at a contest.

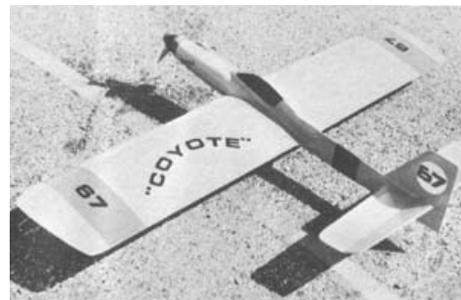
Mike Coutts built the next one around here. This one was done in red silk with a black body. It was a super effort. We took it to a contest in Dayton Ohio in the 70's. Keith Throstle was the judge, a Nats winner. He was very complementary of Mike's effort. The plane did not do well but this was not the planes fault. We had a S.T. .35 for power, no good, this thing was either fast or slow. No 4-2 break. Could anyone make these things fly stunt? I was sorry we could not make this thing work at the contest level because this was the best one I ever saw.

My next one was yellow MonoKote on the wings and light green on the body. I took this Intermediate flying with Mike Mustain. Mike also built one. My second effort won Profile at one contest and got a second in Intermediate. I still have this one in the garage. I had several engines in this one. The best was a detuned S.T. .46. It ran fine, but today I would suggest an LA .40 or .46. Maybe even a Double Star. Mike and I went to a contest in Indiana about this time. This was the most wind I had ever flown in; I thought sure I would crash but I didn't. Of the three I built this was the best flyer. None of mine were heavy. I guess what made this one good was the right power and prop. The prop was a 11 and 1\2 by 6 Rev Up. After I had gone on to other planes, I retrofitted this one with flaps. I think this helped a little but I would not suggest you to do the same. If you want flaps chose the Excalibur.

This makes a good Intermediate airplane. This is easy to build. Select good wood. The big cheek doublers help with engine vibration. When I first built mine I was surprised that it would square as good as it does. Putting the tank at the right height requires some adjusting. A light one with a Double Star or an LA would be a nice combination.

The picture is one of my Coyotes. Dick Mathis if you read this please come back to stunt, we need guys

like you.



Dick Mathis' Coyote 1968

- Jim Harris

BEGINNING



Doug Dahlke

1393 E. Black Wolf Ave
Oshkosh, WI 54902-9118
(920) 699-3203

Yikes! It's Yer Yoicks!

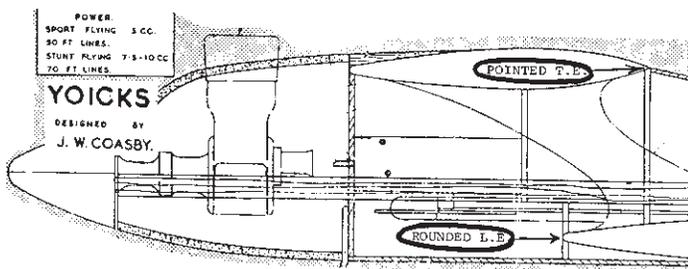
Back in 2004, the Beginners column sported a profile view of the mighty "Yoicks", a late '40s Brit biplane similar to deBolt's "Bipec". I looked at it and said the deceased Aeromodeller screwed up, somehow, by running the plane with the wings on backwards! This was so obvious, I failed to take a magnifying glass and c-a-r-e-f-u-l-l-y examine both wing edges to see which edge was rounded and which edge was sharp. Shame on me! That being the case, I have knife, plate



and fork – please pass the crow, for it's appropriate to nibble some at this time. In short, Aeromodeller did not foul up, I did.

The Yoicks wing section and general hubbub generator. The first glance made me as nervous as a vegetarian eating animal crackers. Since an immediate conversion of all SV-22 wings is somewhat unlikely, Nervous Nellies can now calm their fears.

After the column ran, letters began to come in. Although approaching the question from different views, they were most interesting. While originally run in the Beginners column, maybe we can all learn something here – besides reading plans with a magnifying glass, that is! Because of the mass of material, I've had to shorten things somewhat and here's what the guys had to say:



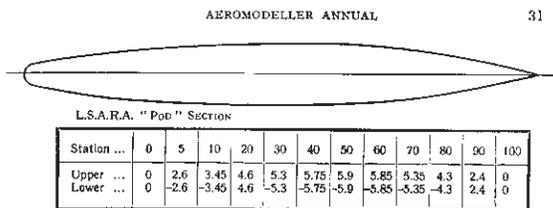
Jim Thomerson, long-time OT stunt fellah (successfully, I might add), now flying in Austin, Texas, "... it is clear from photos in various Aeromodeller plans catalogs that the wing airfoils are as pictured. I also have a photo of a Yoicks from Ian Russell (a.k.a. "Mr. Merco" to Stunt News readers - d.d.). The wings are not on backwards! Those are laminar flow airfoils and supposed to be that way. Stewart Fletcher published a construction article with full-size plans for a .10 size "Yoicks Junior" in the March, 1995 Aeromodeller. His model is a 5/8th scale version of John Coasby's design. Fletcher's final comment is, "I am sure you will have fun with your Yoicks Junior, but please don't tire too quickly of people asking why you fixed the wings on back to front."

As a sidebar, Jim also pointed out that "Aeromodeller is not deceased, but rather lives on in reduced circumstances in the inside of each issue of Aviation Modeller International, sometimes referred to as 'Aeromodeller Inside', a total of some 27 pages in the April, 2004 issue." (Yeah, Jim, I guess I knew about Aeromodeller's hiding place "inside", but didn't really attach any importance to it, sort of like when Flying Models took over Flying Aces. Sorry if anyone was misled, I should have made Jim's point. Secondly, Jim knows his stuff – you do well to listen when he talks. This got me to wondering if there might be more to the story – indeed there was.)

Jim Thomerson (a second, follow-up letter), quoting from the original 1949 article, "... Lightweight construction, 10cc of

raw power and those distinctive laminar flow section wings combined effectively to fulfill these exciting performance criteria." Jim:

"My 1948 Aeromodeller Annual has favorable mention of the L.S.A.R.A. laminar flow series developed by Walker and Annenberg. Several different laminar flow airfoils are presented, one of which is very similar to the section used on the Yoicks. There's also a photo of Henry J. Nicholls' highly modified Super Bipe which incorporates a laminar flow wing section 'which has proved its worth'. I do notice that later Coasby designs have conventional stunt airfoils."



This symmetrical laminar flow airfoil may be used for the longitudinal section of "pods," "suitcases," and pylons, where it has the advantage of low drag. In these cases, however, it is usually best to use twin fins on the tailplane to avoid blanketing by the wake. Nose radius = 2%.

Is this (or one like it) the section

that inspired Henry Nicholls to write notes, which in turn inspired John Coasby's Yoicks wing section? The timing is correct ...

Thanks, Jim, for both letters! You've got a ton of experience on this stuff – why don't you shoot in an article to Stunt News now and then?

Jerry Price, ex-scribe for the Beginners column, from Colorado, sez: "... Now about that biplane with the wings on backwards, it should at least fly. It may not maneuver too well from being overly stable, but it should at least fly ... maybe. I say this for several reasons. First of all, it comes pretty close to a "laminar flow" airfoil. My experience with laminar flow airfoils on model airplanes indicates an excess of stability ... normally. I did have a "Smoothie" that flew pretty well but all other examples were overly stable and had a tendency to stall easily. Secondly, back in my youth, we traveled to Olathe, Kansas to observe a free flight contest. One of the entrants was trying desperately to trim a "Civy Boy" to fly. The model was a disaster. On climb, it would turn right for a while, then left before the engine quit... sometimes. In the glide, it was the most stalling airplane I ever did see.

"But the owner would not give up and kept trying to trim the recalcitrant beast to fly in spite of itself. Finally, it appeared to attain a fairly decent climb and, when the engine quit, it was doing a mush but stable glide and not stalling all over the sky when ... one of the spectators noticed, 'You have your wings on backwards.' The owner asked, 'How can you tell?' 'Your AMA number is supposed to be on the other wing,' replied the spectator. The model was covered with silk and the AMA number was clearly visible ... on the wrong side of the model. What the owner said at this point was unprintable, even if I could remember it. Anyway, to make a long story short, as they say, the flyer finally damaged the model so badly that it could not be easily repaired and he gave up for the day.



"Finally, in my own F/F days, I had a friend who would occasionally provide retrieval assistance on his big ol' Harley 'Hawg'. I noticed when riding behind him that, if I held the model backwards, it was more stable than if I held it nose forward. Don't ask 'Why', 'cause I don't know, but it was so on every model that I ever retrieved that way."

Thanks, Jerry! I wrote back to Jerry and opined that perhaps both instances were cases of "wedge stability" - lacking the correct term.

Ian "Mr. Merco" Russell, Stunt News advertiser and ramrod of Rustler U/C, Ealing, London, sez: "... For the record, the wings on the Yoicks are quite correct. Coasby, the designer, worked for Aeromodeller as a designer and draughtsman so, apart from anything else, he knew his own model. Many Aeromodellers are inclined to incorporate the latest aeronautical advances into their models, regardless of the fact they may be totally inappropriate for our purposes. Towards the end of WW II, aircraft were beginning to appear with laminar flow airfoils, with the high point much more rearwards than previously. The Spitful (Spitfire successor) was one such, and I believe I read once that your own Mustang had a laminar flow section. Thus, the Yoicks wing. This is documented in the write-up and given glowing testimonials! Wonder why it didn't catch on for stunt, then?

Incidentally, regardless of suitability or not, Yoicks's fly quite well. The best I have seen is flown by Ron Davenport (second place W/C's speed, the last time it was for 10cc motors) powered by a Fred Carter-tuned Nordec motor. Actually, Yoicks looks remarkably like a model of Henry Nicholls'; a photo was published in Aeromodeller, and when I get my mags sorted once more, I'll copy for you. This also incorporated the laminar flow section. If I remember correctly, Henry's model had "HN7" on the fuse, so maybe it was

his 7th C/L model. Henry owned J.J. Nicholls Model Shop, at 308 Holloway Road, London, a famous emporium in its day. 308 became a computer games shop some years ago, still in the ownership of the Nicholls family, but has recently been bought by Richard Harris and reopened as a bona fide model shop. The family has given its blessing and a lot of old photos and the old 308 visitors book, with signatures which are virtually a 'Hall of Fame' of international aeromodelling, is displayed in a glass case."

Thanks for the interesting historical background, Ian! Over-engineering models remains stylish.

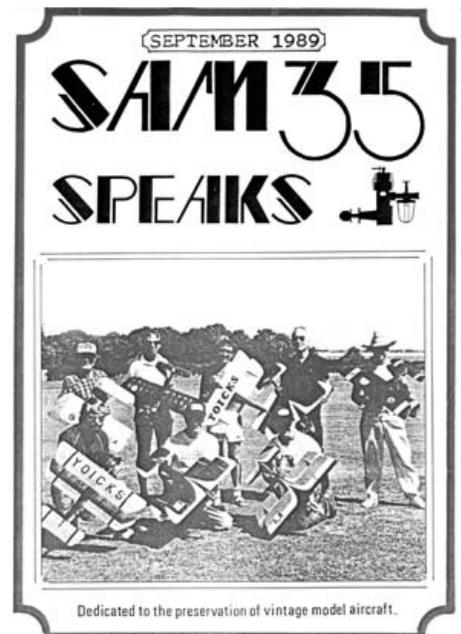
Dennis Saydak, Manitoba, Canada, was kind enough to contact Tom Jolley, Northhampton, England and forward this letter from Tom. "...I don't know if you have the original magazine; the text states the model was powered by a Fox .59 (now called the 'long shaft 59') which would cost ~\$900 now). This engine weighed 9.5 oz. The Nordec was a poor copy of the very early McCoy .60 - before the series 20. The Nordec power output was abysmal; the series 2 was much better but that was somewhat later. The Nordec weighed 16.3 oz. You can imagine what that would do for the CG and the amount of tail weight required. This would have made an impossible situation for a model that already had a high wing loading. There was also some juggling with the plans because the tank needed to be under the bearers to line up with the low level Fox rear intake and the bottom of the Fox mounting lugs were 1/4" between the bearers so you can see that the fuselage was widened quite a lot. The only good bit about the nose is the length, which is correct for the Fox. No one that I know has any information as to the reason for putting the wing section backwards. There was exotic talk of laminar flow but I think it was false thinking and a lack of real understanding surrounding the wing of the P-51 Mustang.

The upshot is a potential lack of

lift on a bulky and draggy design. With a Fox up front, the name 'Yoicks' came about because it is one of those rather odd expressions shouted (likewise Tally-ho) during the heat of the chase whilst carrying out that strange pastime of hunting foxes with a pack of dogs ... For two years we had an annual Yoicks contest over here and most quickly realised that you had to fly this thing fast (no 4-2-4) to get enough lift and needed long lines (and tip weight) to get enough room to manoeuvre. Vertical eights can be a real problem. Incidentally, we don't have your line thickness regulations here, so most/all flyers used .015 lines at least 70, and sometimes 80, feet long. The better ones used Fox .45 Schneurle or similar, some used ST 46. You are on the right track with an ST 51 ... "

Thanks, Dennis, for forwarding Tom's letter - and thanks, Tom, for your inadvertent, helpful insight into this design! Finally, we have a letter from the winner of an All Yoicks Stunt Contest, presumably as referred to in Tom's letter.

Mick Taylor of Peterborough, England, has been there, done it and flown that. Take it Mick: "Sorry to have to put you right but you are maligning a model that can stunt and in fact has won a competition! Admittedly, the competition was actually intended



to prove that the 'Yoicks' is stunnable notwithstanding the odd section, which was described in the October, 1949, *Aeromodeller*, when published, as 'laminar flow'. The competition was held at the annual Vintage Weekend, Old Warden Aerodrome, in August, 1989. Eight models were flown to the following rules, the normal OTS schedule being used for the stunt elements: (1) Only true 'Yoicks' replicas eligible, (2) Powerplant at builder's discretion, (3) One flight, during which the model will be timed over five laps level, from moment of takeoff, and then fly as much as possible of the OTS schedule, (4) Scoring in three elements: (a) appearance, (b) speed, and (c) stunt, (5) Line length 60 feet minimum.

Perhaps the rarest group pic known in OT Stunt modeldom? A gaggle of eight .60-powered bipes together at one meet has not been seen that I'm aware of—much less that many Yoicks in one place. A rough Yank equivalent would be eight "Moitel" bipes having their own contest.

"All the models flew successfully, but only two completed the full stunt schedule, including mine which was the winner. I enclose a copy of the 1949 *Aeromodeller* article, plus a copy of the front cover of SAM 35 *Speaks*, September, 1989, which showed all the entrants at Old Warden. My model is bottom left, with 'Yoicks' on the wing and had (has—I've still got it in flying order!) yellow wing/tail and black fuselage/trim, powered by an ST 46, flown on 68 feet of .015 lines. The only really difficult manoeuvre was the vertical eight which took up a lot of room ... It would be interesting to know how it would have flown with a conventional wing section, but the competition rules required models to be built 'per plans' ..."

Much thanks, Mick! Interesting, to say the least.

Odsbodikins, Zounds, Gadzooks and Egads! There it is, folks. If you didn't know such existed, now you do. If you knew it existed, but didn't think it

could stunt (like me), here's the proof—complete with vertical eight warning labels. As several contributors point out, it would be really interesting to build and fly a Yoicks with same 'foil wing reversible at the field. It would tell us if it stunts because of – or in spite of – the wing section. My highly limited understanding of laminar 'foils is that "things get funny" once the point of max thickness moves aft more than 45 to 50% of chord. You have to wonder what happens to center-of-pressure travel here, being greater on a low aspect ratio wing. Maybe we could coax "Wild Bill" Netzeband into sharing his views on the subject? What say, Bill? (Mechanically predictable was the lack of input here by any of those claiming to have "done it all in ukie" – surprise.)

Finally, to elaborate a smidgen on Tom Jolly's explanation of the highly creative name is this: Yoicks = words of encouragement by the huntmaster to the hounds when fox hunting. It is an onomatopoeic imitation of the hounds' bark. Try it by saying the name quickly. Since the hounds chase the living fox, the model "chases" Duke's metallic Fox (which was the original motor



used), get it? Cool!

Dennis Saydak's Yoicks awaits covering. He hails from Manitoba, Canada. An ST 51 makes moxie.

- Doug Dahlke

CLUBS



Scott Richlen
5133 Bradfield Dr.
Annandale, VA 22003
(703) 425-1689
drichlen@erols.com

Now that we are in the middle of the flying season (oh-oh, I suddenly realized that I am being North Hemisphere - centric! So, if my column doesn't appear for the next couple of months, you'll know that they came for me to send me back to Political Correctness school: Good-by all!)

Anyway, if your club is lucky enough to have some public exposure, or if you have an activist club that has an aggressive outreach program (or is planning to have one) then you will be faced with the challenge of setting up and conducting a flight-training program. Now there is a lot involved in this, but this month I would like to cover the actual flight-training part. For those of you who are already doing flight-training: bless you! Hopefully what I write below will encourage and help a little. For those of you who have not previously done flight-training and are about to embark.....read on!

General Introduction - when the up-side is really up and the down-side really isn't down.

Let's talk about the "up-side" first. And it really is UP! And the reason for that is.....

---"The Learning Moment"---



Well, what is "The Learning Moment"? When you first introduce a group or a person to model airplanes and they are close up to one of your models for the very first time, you have created what is called "The Learning Moment". Knowingly or not, you have created a situation where, because of the curiosity and interest in your audience, they are more open and receptive and more likely to retain what you teach them in the next few minutes. What you say at this time is much more likely to stay with them than other things they have seen or heard this day. If there is something you want them to retain, now is the time to show or explain it to them. This is a perfect opportunity to implant knowledge of model airplanes, favorable attitudes towards model airplanes, etc. It doesn't come often, but when it does, make sure you take advantage of it! Look for it! Prepare for it - (what will you say when you have that golden opportunity because the audience is with you 100%?) And then, USE it!



Curiosity leads to "The Learning Moment"

The Down Side? Not really! NVCL does a lot of flight-training and we have noticed that we get about one crash per six flights and most of these are minor. We do flight-training over grass and concrete. For most of us, when we think of concrete we get nervous. Not to worry - if you know what you are doing, the crashes are quite rare. Develop a procedure and follow it! Learn from your mistakes and work on your training technique. Frankly, my goal is to never crash during flight training.

General Procedure - what do

we do before the take-off?

Use your "learning moment" to explain control line. By that I mean explain the control system: handle, lines, belcrank, pushrod, control horn, elevator; what happens when you pull back on the stick (handle) "yes, this flies just like a big airplane that you can ride in. If you pull back on the stick the elevator goes up and that makes the nose turn up and the plane flies higher. If you push forward on the stick, the elevator goes down and that makes the nose go down and the plane flies lower." Sorry professors, this is not the time for Bernoulli, or Euler, or Navier-Stokes.

It is also the time to talk about the engines: "These are control line airplanes with a two-cycle engine. They use fuel made of alcohol and castor oil, a glow plug...."

It is also the time to introduce some etiquette and safety rules: "We always stand or walk around the right (outboard) wing - never in-board. And we are always careful to never step on our lines..... stainless steel.....safety - kinking..... replacement costs.....you might get "yelled" at!....etc"

You can do these explanations to a group or to an individual. When we do flight-training with a lot of kids waiting their turn, we often run a "ground school" with one of our members going over these things with our next prospective "pilot". When they finish ground school, they're up! One thing that Jerry Raimo does when he is running ground school is to use an extra handle. It is easy to know which child flies next: they are the one holding the handle!

Some really important issues:

You have probably noticed in my writing above that I have assumed that we are flight-training children. This is true for two reasons: more kids than adults line up for flight-training at our public demos and we usually do not train adults at our public demos. The reason for this is actually pretty simple: too many bad experiences with adults at demos. Too many of the male adults want to "take control" of the

airplane and that leads to its quick demise. We usually tell them to come by our field.

You should also realize that there is often a big difference between flight-training conducted at a public demo and flight training conducted at your field. In general, flight training at a public demo is done for PR purposes and is viewed by the participants as entertainment. Keep that straight and you'll be fine. When you do flight training at your field (and it isn't with a group) you are usually serious about teaching this individual(s) to fly control line. This is not PR, this is you expecting them to learn to fly for a purpose: to join your club, to build a relationship with a public ally, etc.

Goal: you always want a short flight - 5 to 10 laps. Why?

-give them just enough to interest and tempt, not sate.

-won't get dizzy.

-minimize the effect of the coordination factor (can't turn in a circle).

-be able to maximize the number of flights (no kids go home disappointed).

-minimize trainer fatigue (bending or hunching over and turning).

The Walk-Out:

Make sure you narrate as you guide your "trainee". Walk your trainee out to the handle and then have other club members start the engine after you are completely ready, having completed all explanations.

There is a specific process of "walking out" the lines. Explain the purpose of walk out - pick up lines at the wing tip. Have them pick up the lines the same as you do.

Explain how you look for kinks and frays, how nothing should be hanging on the lines.

While you are walking out the lines, now is a good time to practice a little preventive maintenance. In the case where this first flight does not result in a solo flight or even ends up in a crash, you don't want your new trainee to go away disappointed and discouraged. For



some people, flying a model airplane by control line is so natural that they take to it almost immediately. We have had many, many children "solo" on their first flight. But for others, flying a control line model airplane can be a significant challenge. There are, indeed, many people who cannot chew gum and walk at the same time. And because of that, your trainee may be one of those for whom turning in a circle and smoothly controlling a model airplane without reactionary/spastic hand and arm motions is very hard to do. So while you are walking out your lines, this is an opportunity to inoculate your new trainee against discouragements. You need to say something like this, "I know it looks pretty easy to fly these planes, but they can be a little bit tricky sometimes. It takes a little practice to fly them well, so I don't want you to be discouraged if you don't get it exactly right this first time".

As a side note, over the next few minutes you are going to have a tremendous influence over this person's long-term view of control line model aviation. Depending on what you say or do, they will become a person with a very positive view towards our hobby, or someone for whom this was not a pleasant, positive experience and they will carry that attitude with them from here on out. You must be consistently, unremittingly positive and encouraging.

1) Pick up the handle and put the safety tether on their wrist as you explain how we never let go of the handle and explain the purpose of the tether.

2) Demonstrate up and down and explain the effect of the handle's movement on the plane.

3) Explain how you'll help them fly by holding over their hand as they hold the handle ("I am going to let you be the co-pilot until I think you are ready to solo") and how you'll begin to release their hand to see how they are doing and to see if they are at the point where they're ready to "solo". Remind them to leave their wrist loose.

4) Explain how when you take the plane off you'll be giving a lot of "up" (physically demonstrate this movement.) "Now is the only time you would normally give this much "up"". Explain how the control inputs are sensitive and the rest of the flying time you'll be giving very minor input. Tell them what happens when the engine stops.

5) Now signal your pit crew to start the engine.



Dick Houser waiting for the "fire her up!" signal - note that we are flight training over concrete!

The Flight:

Immediately after launch, the pit crew needs to pick up the battery, chicken stick, etc. and move it out of the landing area.

So, how can you tell when they are ready to solo? Diagnostics: Steady hand with no jinky motion? Are they fighting your input? If they are not ready, don't let go!

When you are confident they are ready to solo, gradually let go of their hand to see if they'll do okay. When transitioning to solo, begin to release but do small corrections to their hand. I often use my first or little finger respectively to touch (hook) the respective up or down line to adjust flight. This is an important time to pay attention, as you may have to take control again very quickly. Re-stabilize the plane and then decide whether this person may not be ready to solo, or is; and if so, begin the transition again. It's okay to not let them try to solo again (and crash!): it's your plane, not theirs, and you are under absolutely no obligation to let them fly solo when they are not ready. When they are flying stably, raise your flying hand straight up in the air to indicate they are soloing ("look

ma - no hands!") - people will catch on and often begin clapping.

When the engine stops, take control again and "help" them land the airplane. Most students will not understand how to let the plane glide in without stalling it.

If They Crash:

Remain calm, do not be negative. Make sure they know that it's okay - the airplane will be repaired. Give them a little pep talk:

- Learning to fly can be tricky
- Sometimes you can be a good flyer, but a sudden wind gust can make you lose control and crash.

- We understand that learning also involves crashing sometimes.

- so don't feel bad, sometimes it happens.

Even a crash can be "memorable". In one case, a Cub Scout took the hub of a broken prop to make into a necktie holder. Later in the day, he mislaid it and was quite upset. We did a major search to find it. He was ecstatic when it was found again.

After Landing:

Even if they don't solo, be enthusiastic and congratulate them "Wow! That was quite a flight! What do you think - did you have fun? Okay, let's take the tether off your arm and then you can go over to get your certificate."

When you are at your field and not doing a public demo they can then be asked to pick up the airplane and take it back to the take off spot. Advise them - "be careful to not touch the engine, it's hot! Keep the lines tight so they don't drag". The kids get a real sense of responsibility from this.

At the end of the flight (particularly the first few) the spectators may be very excited and want to rush onto the flying field. It is critical that once the engine stops and the plane lands, or in the case of a crash make sure that people stay off the field. For safety sake: think crowd control first, last, and always.

- Scott Richlen





Always have your crowd control planned!

CLASSIC PLANS



Tom McClain
6801 N. 28th Street
Arlington, VA 22213
(703) 241-8642

george.mcclain@verizon.net

Al Rabe's Home Movies

972-257-0193 • alscritmas@evl.net



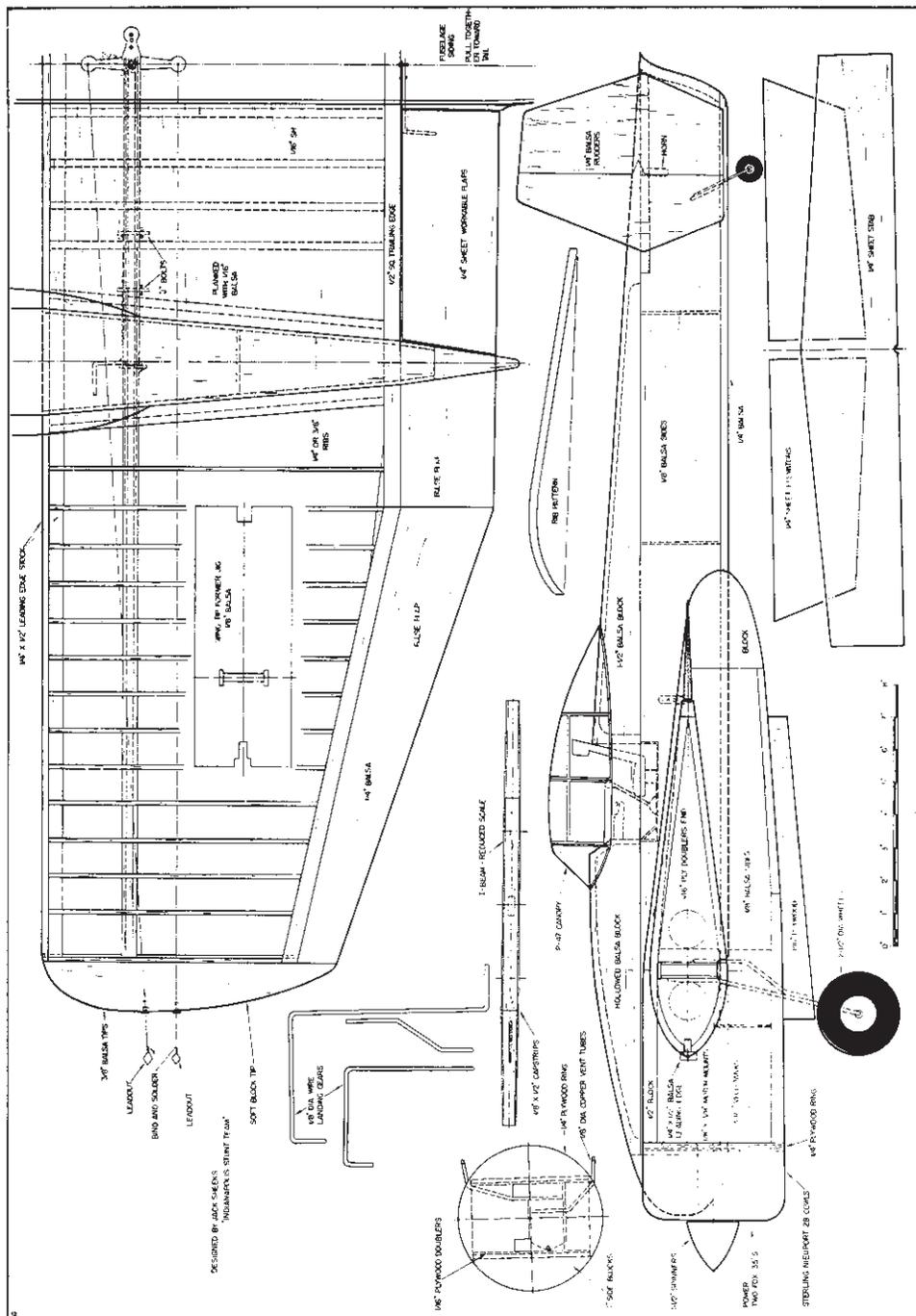
"Millennium Finishing" and "BBQB Finishing" are for decorating or detailing stuntships. They deal with masking, shadowing, ink lines, exhaust stains, lettering and similar topics. They do not cover finishing prep. \$18 ea. shipped to lower 48

Snaggletooth Video Set includes 17 VHS videos and Full size assembly drawings (templates not on plans) \$230 shipped to lower 48

BBQB Bearcat Video Set includes 15 VHS videos and Full size assembly drawings (templates not on plans) \$230 shipped to lower 48

Plans available only with videos!
Laser cut parts for both models available at www.tanks-hangar.com
ktank@tanks-hangar.com

Advanced builders kits, not intended for novice builders.



F5F by Jack Sheeks Flying Models August 1964

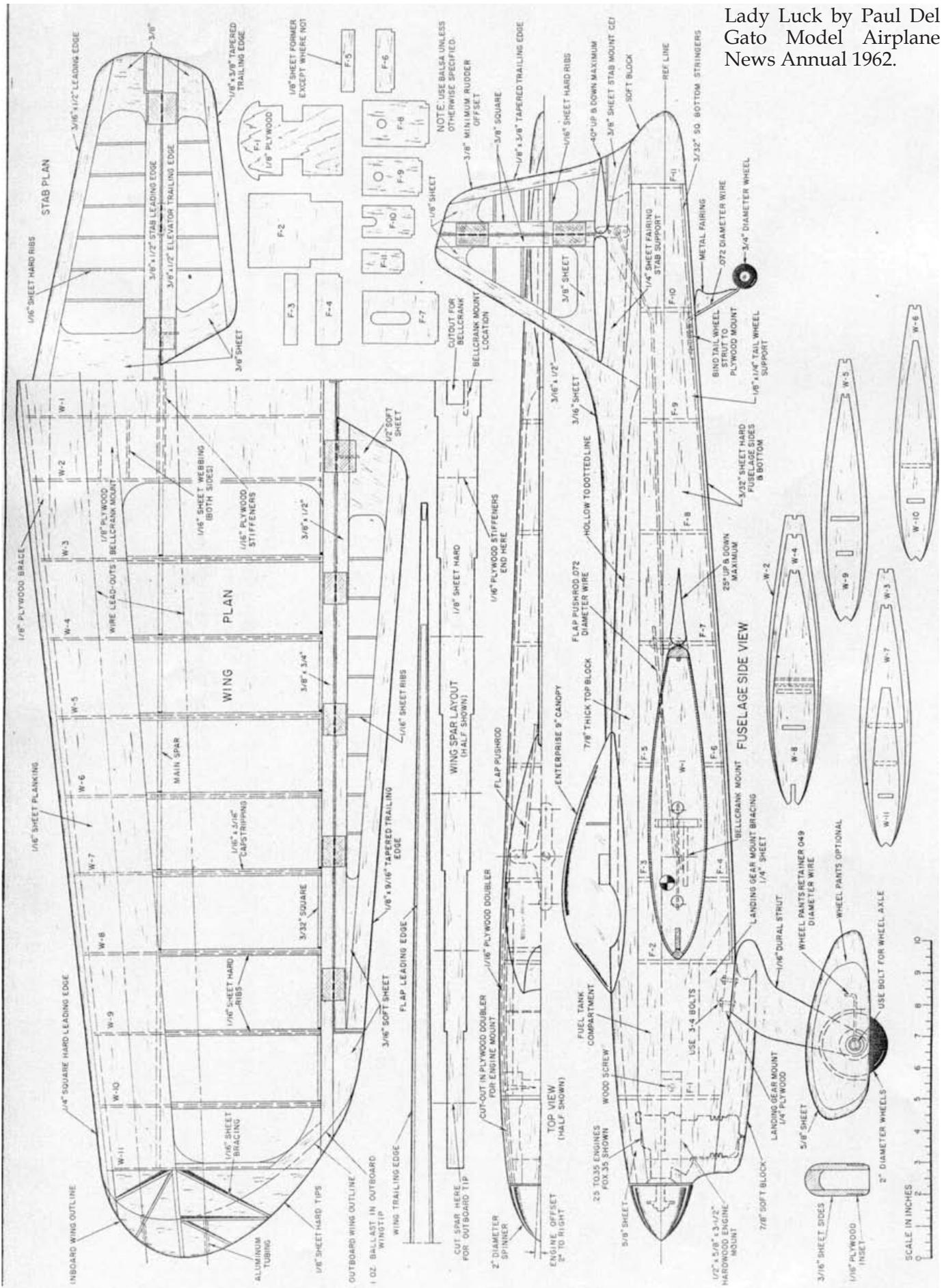
VIRGINIA HOBBYSport

5528 Port Royal Road
Springfield, VA 22151

703-503-5205
703-503-5204 FAX
866-FLY-UCON (866-359-8266) Toll Free

Control Line Spoken Here

WWW.VIRGINIAHOBBYSport.COM



CONTROL LINE SAFETY



Ron King
4220 Lawnvale Dr.
Gainsville, VA 20155
(703) 754-1608
rak@mitre.org

The Safety Column for this issue features some work done by two others safety conscious members: Ken Gulliford will share some thoughts about control lines and Don Ogren will revisit the Stooze issue.

Control Line Safety - Ken Gulliford

Our use of lines provides us with a direct connection to our flying models and is what sets our hobby apart from the other model aviation disciplines. These lines are our lifeline to our models. Good safe flying lines and a proven method for using and storing these lines is the reason many of our models last for years.

There are two major types of flying lines in common use today: Straight Steel (single wire) and cable or wire rope (braided multi-strand). Both have advantages and disadvantages. Let's look at the overall obvious properties.

Straight Steel Positives:

1. Stronger and offers less of a possibility of in-flight failure because of fewer parts to fail, and any damage is easier to spot on one wire.

2. More aerodynamic, offering less drag (arguably).

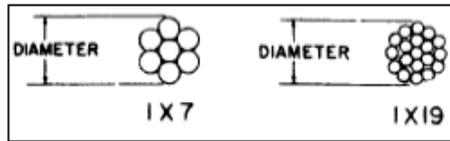
3. Easier to clean and maintain.

Straight Steel Negatives:

1. Any failure is a catastrophic failure, there is only one strand to break and sometimes no indication that it is ready to fail.

2. After several twists, it gets grabby and sticky, making the plane more difficult to control.

3. It requires more attention because it is single strand, and there is little margin for error.



Common Braided Line (Wire Rope)

Braided Line Positives:

1. Because it is constructed of multiple wires, you possibly have more opportunities to catch a broken wire on preflight and prevent a catastrophic failure.

2. Because it is braided, it is more flexible and therefore more bend or kink resistant.

3. Braided lines offer less resistance to each other, so when the lines are twisted there is less grabbing and stickiness than straight steel.

Braided Line Negatives:

1. Because of the "spaces" in the braiding in-between individual wires, dirt, debris, damage, and corrosion can hide in those spaces until it is too late.

2. Braided lines have a certain amount of "give" and can be stretched unequally, which can put a model "Out of Trim" on any given flight.

3. Because damage can happen on a smaller scale to any one of the lines, inspections may not reveal collateral or internal damage soon enough to correct.

Here are some of the accepted Do's and Don'ts of flying wires:

Loop multi-strand wire to inspect.

To inspect a cable, bend it in a loop and visually check for frayed



or broken wires. You can use a clean, dry, soft cloth to help you find any breaks, the cloth will snag on imperfections.

Never use heat to cut, bend, maintain, repair, or apply terminal ends to wire or cables. The heat will change the properties of the wire, and cause stress areas that will fail eventually. That means, aside from the acids or bases present in different type of flux, which will eventually cause corrosion, do not solder the terminal ends on your lines or leadouts. Yes - we all did this for many years and never had a problem, but the people who know about these things say don't do it.

Cables are lubricated and impregnated with preservatives at the factory during manufacture. Under normal use, cables should not require more than a daily wipe down with a clean dry cloth, or paper towel. This wipe down is designed to remove the dirt and debris that the cables pick up in normal use. For most of us, a wipe before flight is just fine, and a wipe before storage is recommended.

Every one of us has a method or procedure that is "THE" way to build, clean, secure, roll, or inspect their flying lines. There have never been more living authorities on the care and feeding of flying lines in the control line world than exist right now.

Some swear that their bare skin (hands and fingers) should never touch the lines because of the corrosive effects of the acids present on the skin. This completely disregards any benefit the oils in your skin might have, or the fact that these oils might offset the effect of the acids.

Some defend the policy of



cleaning their lines with alcohol, spouting the positive cleaning effects of the alcohol and completely ignoring the fact that the best stuff we can buy over the counter has 10 percent water.

Some clean their lines with detergent. While detergent does clean the lines, it is the acids or bases present in the detergent that actually do the cleaning, especially those "Citrus" based cleaners. While they smell and work great, the citric acid is doing the job.

Ok, No one is wrong or right here. All of the widely varied methods have some merit, proven over time by the actual in-service testing of everyday flying stresses also known as Empirical Testing.

So, what can you use to clean, dress, or lubricate your flying lines?

Try clean water and a laboratory grade detergent like Liquinox or Ivory Soap (PH neutral). Alcohol is OK for cleaning IF a dressing is applied after cleaning. Note: WD-40 will hurt your lines more than help them. It is a Water Displacement kind of penetrating oil with better than 60% Solvent (Naphtha). Remember, the standard practice for steel cable is no solvents. Marvel Mystery Oil has 30% Solvent, and Silicon Spray has no solvents. However, it does contain a lot of trichloroethane, which is nasty stuff.

Petroleum Distillates that meet Military Specification MIL-C-16173 like LPS-1 are good. But remember, there are safety and handling issues with Petroleum Distillates, so you should check the label and read the Material Safety and Data Sheets (MSDS) before use.

One product that looks promising is: Triple S Stainless Steel Cleaner Wipes. I haven't tried these yet, but they are listed as a petroleum distillate with mineral oil. The wipes are distributed by Parrish Supply (http://www.parrish-supply.com/stainless_steel_wipes.htm) and they provide a link to the proper MSDS.

Of course, there are those of you who will light some candles, burn

incense, and recite incantations over your lines before each flight. If that is what has worked for you, then have fun, but please check those lines before you fly.

Flying Alone - More on Stooges from Don Ogren



The picture above is a very nice stooge designed by Don Ogren. This stooge does not require a wire loop on the tail wheel of the plane. The tail wheel simply is "captured" within the stooge by the two wires, one behind the wheel, and the trip/release wire in front of the wheel. Hooking up to the stooge is as simple as backing the tail wheel wire against the trip wire, and then locking it in place.

If you like this design but don't feel like building your own, Don makes these for sale. The cost is very reasonable, \$25.00, which includes shipping. Don can be reached via email at dogren96@earthlink.net, or via snail mail: Don Ogren, 6172 Prestwick Ct., Spring Hill, FL 34606 (Please enclose a check or Money Order).

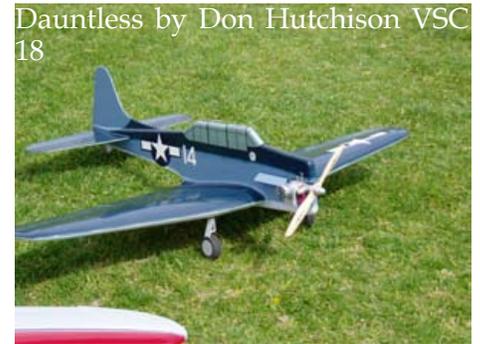
Don also announced that he will be moving up to Advanced for this year's Nats. Way to go, Don and best of luck in Muncie. I wish I could join you for the week, but work keeps getting in the way of my fun.

Thanks to Ken

for his help with the column and thanks to Don for providing a great product to the stunt community. If you have any ideas, please feel free to share them with all of us.

Safe flying is no accident.

- Ron King






Glow, diesels and 4 strokes engines for control line

www.clubtamaran.com
e-mail: albparra@terra.es

ALBERTO PARRA
Av. Pintor Felo Monzon 38-P4-5A
35019 Las Palmas G.C.
CANARY ISLANDS - SPAIN



CRASH REPAIRS



Windy Urtnowski
93 Elliot Place
Rutherford, NJ 07070
(201) 896-8740
windyu@aol.com

Sometimes crash damage can include a tear in an open bay wing. If it's your lucky day, you can use some Ambroid-type cement (not C.A.) and do a respectable mend...but if it's not your lucky day, you'll wind up with a wrinkle or other cosmetic scar. Usually I prefer just to razor out the tissue in the affected bay, radius the edges, and re-silkspan the bay or bays requiring repair. Thanks to Brodak dope's quick drying characteristics, you can usually get the new tissue ready for color paint in one or two days—even quicker in warm weather. Always radius the edges on new wing open bays in addition to any repairs. I've had some repairs that years later I forgot what bay I replaced and had to go back and look at the video to see where the repair was.

Some tips: If you spot a small puncture at the flying field, put some clear tape over it immediately to prevent worsening or allowing oil to get into the repaired area. Lay out any repair paintwork to end at trim edges or inklines to make the end of the repair less noticeable. If using custom colors, always save some paint to do touch-ups or repairs. I've had "wing mittens" for some of my open bay tissue-covered ships. Bubble wrap is fine,

too, and can be great for a long road trip where several ships travel together.

- Windy Urtnowski

DESIGNING / FINISHING



Brett Buck
972 Henderson Ave Apt 4
Sunnyvale, CA 94086
buckbw@pacbell.net
(408)246-8173



Randy Powell
1755 SW Cozy Ln
Port Orchard, WA 98367
(360) 876-3113
stunter2001@wavecable.com

This is going to be something of a woolgathering column. I've spent the last 6 months in almost constant building and finishing and have accumulated some thoughts about several issues that I'll comment on briefly. In the future, I may go into some on these with a bit more depth. If you're interested, let me know. As I'm sure you've noted, Brett's the numbers guy, so I'm going to stay away from that stuff. Besides, he's a lot better than

me at it.

Designing for convenience:

It seems a lot of time that we get so carried away with making it look cool, or solving a structural or aerodynamic issue, that we forget to make things easy to assemble, use or service. Recently, I had a plane that was powered by a pipe engine. I realized about a minute before I started to put on a finish that the thing was really going to be a pain if I had to change pipe length. I had to insert the pipe from the exhaust opening and the engine from the front then connect the pipe to the header after the parts were in the plane. This made tightening the tie wraps very difficult (as they were hard to reach) and made adjusting pipe lengths very tough. But it looked good.

How many times have you built a plane then only to discover when you went to fly it the first time that you couldn't actually get your finger over the venturi to choke it? Or that the hatch you put in to adjust the controls really wasn't quite big enough or not in quite the correct position. Or the landing gear that wasn't quite long enough so you are restricted in the length of prop that can be used? Or my personal favorite, that the fit that seemed fine between the flaps/elevators and fairings is now way too tight when you go to assemble the completed plane.

I'm sure we've all run into this. Planning ahead, actually trying out the fit of components and leaving enough room for paint and making sure you really can reach this or that is a critical element in usability later. The current plane I've been working on and the bones of which have appeared in recent Stunt News issues is a good case in point. For once, I thought about this stuff in some detail. The engine, prop, spinner and pipe can be removed in one piece so working on it should be pretty easy without screwing up settings. Not having to detach the pipe first or take out the needle or remove the spinner. I did some tests once the plane was together and ready to finish to insure I could



reach everything easily. Turned out I had to do a bit of grinding to make sure I could get a tie wrap on the pipe mount and then be able to tighten it. That could have been a real pain if uncorrected. Choking, adjusting controls, usability of such controls were all considered (for once). I don't know how well the plane will fly ultimately, but it should be easy to service.

Finishing Notes:

I suspect somewhere along the line, I'll need to do a complete finishing article outlining a step wise finish for newcomers or those that need a refresher. It seems that it's a good idea to do this periodically. But for now, I wanted to comment about "standard" finishes vs. experimental attempts. I have learned a new iron clad rule. Never, ever use an experimental finishing system on an airplane with a completion deadline. Recently, I built a Walter Umland Cobra specifically to attend VSC. It was the first kit I'd built in a long time (Walter does great kits, by the way). I had decided to try out a water based automotive finishing system I'd been looking at for awhile. While I still think that such finishes are viable (as has been proven by others), in this instance, it was a bad idea. I ran into fairly serious adhesion problems that I tried to correct, only to make the problem worse. I ended up messing with this for more than 2 weeks. Ultimately I had to strip the finish back down to the silkspan and start over. Three days of using steel wool and PrepSol did the job, but it wasn't pretty (and pretty smelly, too). Later discussions with my auto paint guy uncovered the problem and I'll certainly try this system again. But the debacle left me with about 6 days to complete the plane from silkspan to clearcoat before we needed to leave for the long trek to VSC. It didn't come out too bad; a decent 5 foot finish (I think I got 15 or 16 appearance points at VSC). Not bad for a 6 day finish, but it taught me a lesson. I think we would all like to plan out the finishing process and treat it like a step-wise project,

but sometimes, stuff happens. The Cobra was completed using primarily Certified non-taunting butyrate mixed with auto toners and a catalyzed polyurethane topcoat. I had really, really wanted to use a clear dope topcoat (it is a Classic plane after all), but simply didn't have the time. Hey, if nothing else, catalyzed polyurethane is fast and can be fairly light if care is taken.



Retrofitting:

Lastly, I wanted to say something about retrofitting. The above noted Cobra was built in an awful hurry. While I did install a fully adjustable control system (Tom Morris horns and pushrods with right and left handed threads to easily adjust pushrod length), I didn't install a hatch to get to it. Just didn't have the time. I suppose I hoped that it would "be OK". How many times have you used that term? Well, it wasn't and was in sore need of adjustment. You can only do some much biasing the handle to correct flight issues. So, after returning from VSC, I decided to install the hatch I neglected in the original build. Really wasn't too tough to install the hatch, though I probably wouldn't have done it this way if I'd done it during the original build. A hole was cut with X-Acto and a piece of sharpened brass

tubing and the eventual hatch piece removed. A mount was installed and the hatched lined with 1/64" plywood. It was test fit and then the edges of the hatch and plane were coated with a catalyzed glazing compound, in this case, some auto glazing called Dolphin Glaze. Some plastic wrap was placed on the seating surface and the hatch was bolted back in place. Picture below is of the hatch after removal and fit up for contouring.



The area was sanded down and fitted. Remember, this plane had dope from bare wood up to the catalyzed polyurethane topcoat. It makes it tough to repair and the polyurethane is a bit sensitive to having dope shot over it. The clear was taken down to an area about an inch wide around the new hatch along with the hatch itself.



Finally, the hatch was removed and new silkspan and filler coat were applied. It was again fit and sanded until it matched the surrounding area. Then the hatch and surround area were repainted taking care to shoot as little paint over the polyurethane as possible. Finally, new clear was applied using a technique I learned from Brad Walker via Bill Wilson. The area was shot with new catalyzed



polyurethane clear coat, feathering the edges as well as possible without getting too near the tape edge masking the rest of the plane. Then the gun was emptied and refilled with urethane thinner creating a sort of 95% thinner and 5% paint solution and the area was shot liberally with this mixture. It allows the clear to feather out nicely and after a bit on sanding and polishing, the repair is virtually undetectable. Here's the completed repair.

I have to say for a retrofit, I'm pretty happy with it. And at least I can adjust the controls now.

Everyone should be well into the contest/flying season by the time this sees print. Remember, the main thing is to have some fun with this. And as always, if you have questions, feel free to write or call.

- Randy Powell
- Brent Buck



B-26 by Tom McClain VSC 18

Novi III by Bob Lipscomb VSC 18



ELECTRIC FLIGHT



Will Moore
 36 State Street
 Woonsocket, R.I. 02895
 (508) 272-1060
 wmflyelectric@verizon.net



Watt's Up !

Since we are involved with electric flight, it is cool when new electronic instruments come out that help us enhance our sport and improve our ability to fly and perfect our models. So, this issue I want to talk about the Astro-Flight Watt meter, Eagle Tree's data recorder, and Atomik's microtemp infrared temperature sensor. These products help you to optimize performance. To gather such information, a few years ago, would have seemed inconceivable. But now we have them at our fingertips. Let us discuss them.



Astro-Flight Wattmeter

This meter is very handy in determining what the battery, motor and prop are doing statically, on the bench. It hooks up in series between the battery and the electronic controller. It will give you an approximation of watts, amperage, and voltage coming out of the battery at any given time. One use is to see what different props do under static load, and how they compare to each other - if you chart out the variables in voltage, amperage and wattage for each prop, at different speed settings you get an idea of how they might perform for you. Again, this gives you only information when the everything is on the bench.

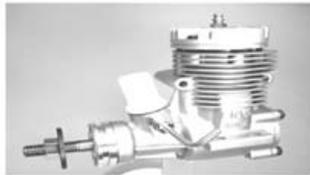
Now we have had this instrument for several years, and we were all excited about it. I've used it to determine whether the battery/motor/prop would be able to deliver the wattage I needed for proper flight and power. We have been using the general rule of 100 watts per lb of aircraft weight. So, for example, let us say your super duper corner cracking mighty machine weighed 60 oz. ready to fly. To have enough power for good pattern performance, we figured, doing the math, we would need about 375 watts to be comfortable (100 watts times 3.75 lb = 375 watts) and maybe more would be better.

Now a lot of guys, at first, felt that you needed to run the motor wide open, and then adjust the prop for proper lap speed. They felt that at that range, the motor is most efficient, and the ESC would run the coolest since it would be under the least load. I have never felt that was necessary, and I'll tell you why. If you run the motor wide open,





MVVS



enya

Glow, diesels and 4 strokes engines for control line

www.clubtamaran.com

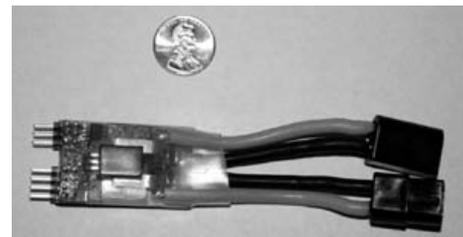
e-mail: albparra@terra.es

ALBERTO PARRA
Av. Pintor Felo Monzon 38-P4-5A
35019 Las Palmas G.C.
CANARY ISLANDS - SPAIN

just continue to tick down throughout the run.

But, if you could develop 375 watts at $\frac{3}{4}$ of top speed, or $\frac{1}{2}$ or whatever, you would have plenty of margin at the top end to play around with. However, that requires a strong enough motor and enough reserve in the

flight speed, so that there could be three all total. That would give you the ability to make two adjustments in flight speed after the 1st one is chosen. By the time you read this, I'll have the prototype to test. The Wattmeter instrument is good for visually seeing how all this works, at the bench, in real time - but remember, only statically.



Eagle Tree Systems Data Recorder

there is no place to go but slower, as the voltage drops throughout the flight, due to amperage load on the battery. And since voltage times amperage equals wattage, if voltage drops and amperage stays constant, wattage will drop. Since the wattage drops, the flight starts to slow down and gradually lap speeds drop about $\frac{1}{2}$ to $\frac{3}{4}$ of a second. That could be detrimental toward the last half of the flight, because you want a little more (not a little less) power to do the verticals and overhead maneuvers. Electric airplanes do not get lighter (and faster) as the flight progresses, as do gas powered airplanes. Gas airplanes get lighter - because they are using up fuel, and the engine run usually gets a little leaner, even under pressure, and so both of those factors helps the airplane pick up a little speed around the more power demanding vertical maneuvers. With electric, the plane maintains the same weight, and wattage drops. Therefore, just when more power would be desirable, the electric system is delivering less. That is why it has been observed that electric powered stunt ships seem to get a little "soft" in performance toward the end of the pattern. And in deed, that is the case as everyone has found out. You can actually see that on the Astro wattmeter even during static observations. The wattage and hence lap times

battery pack to allow for it. So you cannot be lean on battery power to save weight. It will bite you toward the end of the flight. But there is a limit. It becomes a weight / power balancing act. More power in electric requires the ship to carry more weight. More weight requires more power. There is a point of diminishing returns. Some experimentation is necessary to help you make those kind of decisions. That is where this instrument can help. It will tell you whether you are in the ball park or not. Once you are in the ball park, you can fine tune to your liking. To eliminate that sag in power during the flight, you can use a timer that has several flight speeds built into it. The timer tells the ESC what to do. You can adjust out the loss of power by upping the throttle a little at the appropriate time during the total flight, to build the power back up.

There are only two timers for retail sale that I know of here in the States, the Zigras timer and the Selman JMP-2 function timer. Of the two, only the JMP-2 has 2 adjustable flight speeds. The Zigras has only one. That is why I prefer the JMP-2. This timer has 2 flight speeds. With this timer, you have the option of upping the power if you feel you need to during the flight. I have been in touch with Jean-marie Peidnior, the developer, to see if he can build into the chip yet another

The Eagle Tree Systems Data Recorder has been available for just a few months now. This devise is mounted the same way as the Wattmeter is - in series between the battery and the ESC. It is intended to be used during flight to record real time electronic measurements.

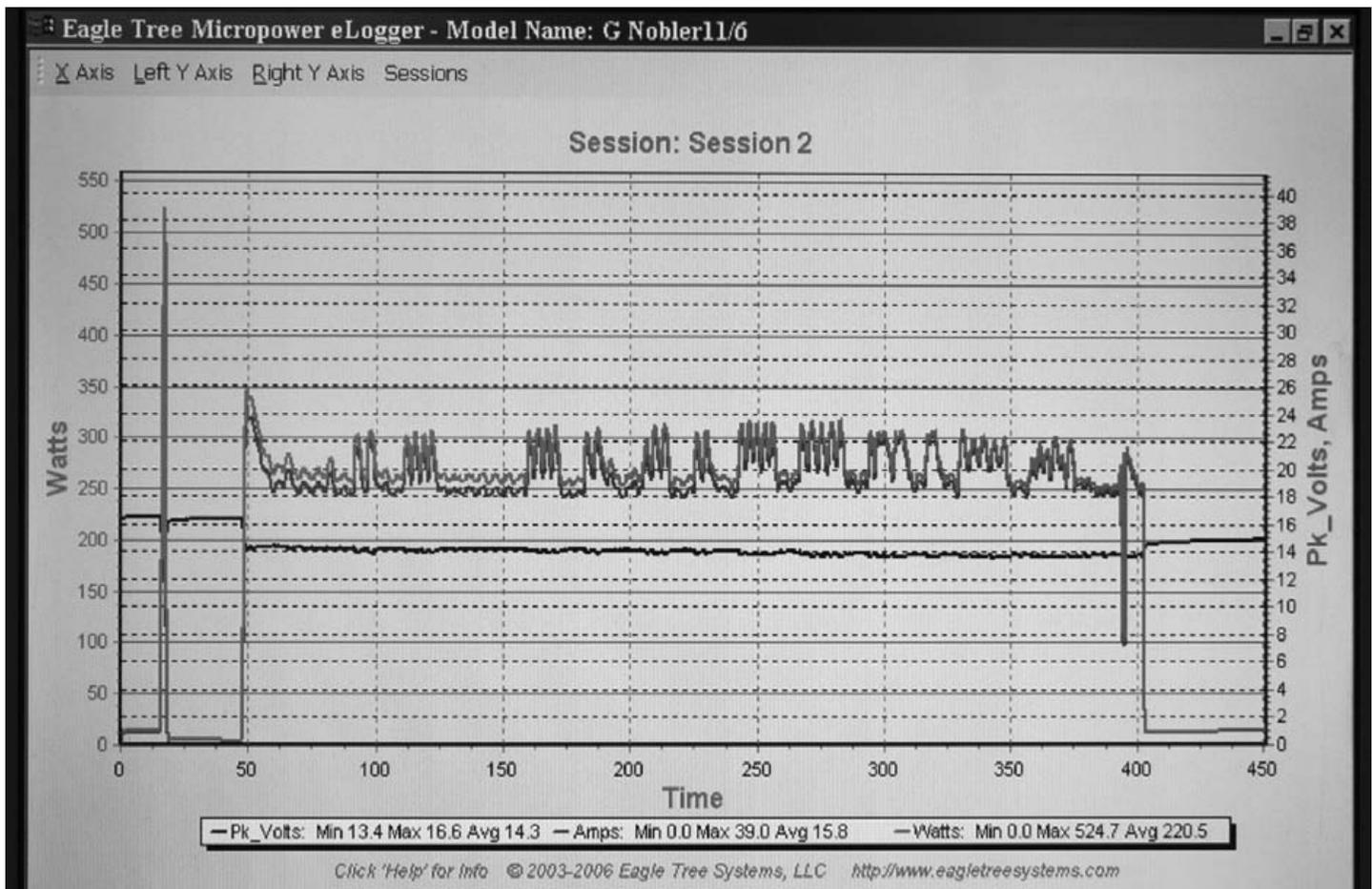
Here is what it can do:

- Logs pack current to 100 amps and 45 volts
- Accepts optional sensors for RPM and temperature
- Software that displays and graphs Amps, Volts, Watts, mAH, Temperature and RPM
- Lets you see what is happening in the model LIVE on the bench, on your PC

The following is a graph of a typical flight I have done on a Gieseke Nobler, which weighs 42 oz before battery installation. With the 4000 4 cell, 14 volt Li Pol battery, the Nobler weighs in at 52 oz. I flew it on 52 foot lines eyelet to eyelet, and lap speeds after takeoff were 5.3 seconds using a Graupner 11/6 carbon prop.

Now, on this graph, you can see what happens from the start of the flight, to the end. The first big pulse on the left of the chart is the initial run up speed. It runs up to full, wide open, electric speed and then quickly ramps down to my idle speed that I use for 30 seconds before it ramps up into my first flight speed





As you study the graph, from left to right, you can see clearly every maneuver of the pattern from takeoff all the way to landing. The top line is the Wattage which is green in color on the computer. The line running just under it is gray and it represents the current. The other line, which is blue, further below that, which is a jagged straight line but goes down somewhat as viewed from left to right is the Voltage.

Unfortunately these will all seem the same color in Stunt News, but I think you will be able to tell them apart.

The flight starts out with a big spike of energy at startup. The motor builds wattage all the way up to about 525 watts and then immediately falls off to the programmed run-up speed. This speed is an idle speed for 30 seconds. This speed saves battery energy while I get to my handle. Then the next spike of wattage is the 1st flight speed - it builds to 350watts and falls off to about 275 watts as the plane moves forward

into flight, decreasing the load on the prop. Level flight on my Gieseke Nobler, weighing 54 ounces, at 5.2 sec. lap speeds on 62 foot lines eyelet to eyelet, requires just under 250 watts of power. I was astonished at this. I thought for sure I would be drawing at least 300 to 350 watts. But not so. I was thinking in terms of my static testing. That implies that the AXI 2826/10 motor I am using has much more potential. As you can see, I am only using half its potential at 14 volts, with the 11/6 Graupner prop I tested this with. If I increased the voltage to five or six cells, and keep the amperage under 30, which is my rule to control heat, I wonder how big an airplane this thing could handle? You might be thinking, "Hey, why not lower the battery size then, and save weight." Remember: you need to have a measure of reserve to maintain such power evenly over the entire pattern. Getting marginal on battery or motor size risks running out of juice or putting undue strain on the entire electric

system. Gas guys put in size 36 -40 engines where a Fox 35 used to be. Why is that? Because power is our friend. It is the same with electric. We just try to be careful about the weight as we discussed earlier.

Back to the chart. If you observe the chart carefully, you will see all the maneuvers and the 2 laps in between, right down to the landing. Most maneuvers drew about 300 to 320 watts of power when the aircraft was climbing and the prop is under maximum load, and around 275 watts during the downside, where the prop's load is minimal. The amperage was moving around just above 18 to about 22 during this process. That was also a surprise. I thought I was driving the batteries to produce close to 30 amps, maybe a little more. The lower line is the Voltage. Notice it drops steadily from just above 14 volts to just under 14 volts. This graphically shows what we are talking about when we say the power gets a little "soft" toward the end of the flight. I purposely chose not to use the 2nd



adjustable flight speed on my JMP Timer so you could more clearly see the drop in voltage. What I would normally do in this flight is program the second flight speed to activate during the level laps preceding the horizontal square eights. That is about 3 minutes and 20 to 30 seconds into the flight from the time I release the button on the timer to begin the flight. When the 2nd flight speed kicks in, it brings the lap speed back to about 5.0 / 5.2 seconds, which carries me through to the end of the flight. That big vertical line toward the end is the timer "burping" two times to tell me it will shut the whole thing down in 15 seconds. It does, as you notice the drop-off at the end.

This is a really nice tool to have! It helps you to understand what is going on up there when you are flying. You could change props, adjust to the same lap speeds, and see graphically which of the two props offered more thrust at speed. It could tell you how much more power you are pulling if you changed lap speeds slightly. Or what effect line length would have on power consumption, or efficiency. By the way, programming the JMP-2 timer in the field is easy. You just have to do it a few times to get the hang of it. You do not have to run the motor to program the timer. Directions show you how to hook up an R/C servo to its output. That allows you to visually see what is going on and what to do. If you need help understanding what I am talking about, just call and I'll guide you through it.



Atomik Microtemp Infrared Temperature sensor

This is a must instrument to have on the flight deck. I use it right after every flight to measure

temperatures coming off the battery pack and the motor. It picks up heat using infrared and gives you readout on a little screen. Easy to use, a no-brainer.

When I get the airplane I just flew back on my stand, the first thing I do is disconnect the batteries. Never leave batteries connected to the motor after flight. You could have an accidental startup. The batteries are also slowly bleeding off amperage through the ESC and you could accidentally bleed them down beyond the acceptable low voltage threshold tolerable. If you go below that threshold, you could permanently damage the pack. Disconnect the battery pack as soon as possible after the flight - no exceptions.

The next thing I do is take a quick temperature reading of the battery pack. I also check the temperature of the motor casing as well as the windings. Manufacturers usually tell you how hot they will allow their products to run. Be mindful of it. On out runners, the magnets are epoxied to the inside of the outer casing that rotates around the armature. The casing temperature has limits. If you go beyond those limits several things happen. One, you can demagnetize or otherwise weaken the magnetism of the magnets. Two, you could cook the epoxy into releasing the magnets. Either case, it could put a crimp in your flying. Ask me how I know!

So far, my Gieseke Nobler runs cool at about 78 degrees F. It will



go up during the summer months but I do not think dangerously so. My Cavalier 650 runs much hotter because of the higher amperage

draw of the Mega Motor I am using on that machine and the way I have chosen to introduce cooling airflow. Last summer it was running about 130-150 degrees F. But everything is holding up as it is not at the upper threshold of 175 F

There are many makers of these sensors; they are all good and cost about \$30.00. If you fly electric, get one.

People have been asking where to find articles on Electric Flight that have been in Stunt News.

Here is the list.

Stunt News

Nov/Dec 2004 How About Electric! A discussion of electrifying an ARF Nobler

May/June 2005

Watt's Up? An explanation of an electric set up on a profile Cavalier

July/Aug 2005

Power Train A comparison between the JMP-2 and Zigras timers

Sept/Oct 2005

Watt's Up? Glen Allison's electric Humongous

Nov/Dec 2005

Watt's Up? Electrifying a Cavalier 650

Jan/Feb 2006

Electric Flight Interview with Bob Hunt and his electric Genesis

Mar/Ap 2006

Power Train Walt Brownell and his electric Arcangle

May/June 2006

Electric Flight David Chang's re-worked ARF Oriental

Some have called and have asked questions about electric flight and have just about apologized for asking what they thought were stupid questions. I'd like to comment for a moment about that. There are no stupid questions. When you do not know much about a subject, then every question is important. The answers lead to other questions that are equally important. So, please, never think they are stupid. I do not have all the answers. I have some of them. Some of them might be less correct than others. And there is usually more than one way to do something, each way being correct on its own merit. If you do not ask the question, well, then, I



cannot answer them. So, please, ask away and I will try to help you. If it is beyond my understanding I'll point you in the direction you need to go to find out more.

You can get in touch with me these ways; E-Mail wmflyelectric@verizon.net

Cell 508-272-1060

Enjoy your Summer. I will see some of you in contests being held in New England. You will be hearing about electric more and more. I have heard that there may be several ships in international competition besides Bob Hunt's that will be electric. We'll soon see. There are new motors being released for retail all the time. There are more battery manufacturers too. All that competition will drive down prices. E-Flite just released their new out-runners. They have named them for the size engines these motors replace - 25, 45, 60. Hacker has released their new out-runners too. They have been noted for very high end in runners with gear drives used by R/C flyers.

There will be new timers and controlling devises out. Maybe someone can think of a way to keep prop RPM absolutely constant during flight, even under load and the voltage drop we experience.. How about an infrared tachometer on the prop that controls the ESC. Maybe there will be a battery introduced that will keep voltage and amperage constant for 7 or so minutes. And maybe they will be lighter yet.

Fly safe, Fly electric !

- Will Moore

FLY ON THE WALL



Hoyt Hawkins

34 Arledge Dr.

Attalla, AL 35954

(256) 538-0110

hoythawkins@bellsouth.net

Picture a model airplane contest on Long Island that begins at 6 a.m. and draws two hundred thousand spectators in a single day -- the largest crowd, according to the cops, to attend any sporting event in New York state that year. Picture an even one thousand contestants flying in sixteen events, competing for ten thousand dollars worth of prizes that include not just the usual hobby supplies, but motorbikes and television sets and (at the very top, fresh off the assembly line) a full-scale, eighty-five-horse "Ercoupe"! The year is 1950, and the site is Grumman Airfield in Bethpage, NY. It's the fifth annual "Mirror Model Flying Fair" -- the biggest, richest, gaudiest, noisiest one-day model meet in the history of the planet. Chief sponsor of this fabulous contest is the New York "Daily Mirror", at the time the country's largest-circulation daily. Mirror publisher Charles McCabe, another of modeling's Friends in High Places, is an old hand at promoting the sport -- he was sponsoring model contests in Denver under the Scripps-Howard banner well before World War II. It was McCabe who called every shot for the Mirror Meets, and he made

some great calls. Entries were limited to the first 1000 who applied. All timers and officials were paid for their services -- and required to attend a dress rehearsal. Only gas-powered events were flown.

Editors Note: The following is not the official position of PAMPA.

The Mirror rules recognized only two age classes, below and above 18 -- a bit of wisdom that even today's AMA hasn't caught up with. (Coddling young competitors has never yet promoted aeromodeling. The bright ones are offended by it, and the dull ones aren't listening, because modeling simply doesn't attract many dull ones). At the Mirror Meet, "professional" modelers, defined as people who made their living in the hobby industry, were welcome to compete for the glory and the plaques, but all the cash and merchandise prizes went straight to the top amateurs.

Substitute NATs...For modelers along the eastern seaboard, "the Mirror" was something to look forward to all winter -- a kind of substitute Nationals. (Some years, in fact, it drew more entries in one day than the NATs did in five.) A majority of the Mirror contestants flew in two or more of the three categories (FF, R/C, U/C.) And not just because of the grand prizes, either. People flew multiple events at the Mirror because they flew multiple events at home every weekend. The meet, which ran annually from 1946 to 1961, managed to span those magical postwar years before modeling had entirely fragmented into specialties. (Example: of the 200 R/C entries in 1955, 180 were registered in one or more of the freeflight and controlline events, as well.)

The first Mirror Meet was held in '46, at Bethpage. When Grumman dropped its sponsorship in 1952, the venue was switched to Floyd Bennett Field in Brooklyn without skipping a beat. The end finally came in 1961, during modeling's post-Sputnik doldrums. By that time, the magazines had quit covering the Mirror. Contests --



even first-rate contests -- were no longer big news. Entries had been dropping off for two or three years; latecomers no longer had to line up at 1 a.m. with 300 other people, hoping to claim a 'no show' place and fly with the elect. Other contests -- other pastimes -- were beginning to divert the Clan's attention. The article above is an excerpt from Dave Thornburg's book, 'Do You Speak Model Airplane?'

“The Mirror Meet returns on July 2, 2006 after an absence of 45 years.

The Mirror Meet Pattern (The Mirror Meet Flying Fair is indebted to George Aldrich, Lloyd Curtis, Hi Johnson, Bob Palmer, Jim Saftig, and Don Still for their valuable suggestions)

Three flights are allowed to complete the pattern. The bottom of each maneuver should be 5 feet or less. Maneuver Max Points Allowed:

1. Level flight - 3 laps - 3
2. Inverted flight - 3 laps - 6
3. Upright inside loop - 3
4. Inverted inside loop - 3
5. Upright outside loop - 6
6. Inverted outside loop - 6
7. Upright square inside loop - 6
8. Inverted square inside loop - 6
9. Upright square outside loop - 8
10. Inverted square outside loop - 8
11. Upright wingover 3 in sequence - 9
12. Inverted wingover - 1 only - 12
13. Upright horizontal eight - 15
14. Inverted horizontal eight - 15
15. Upright vertical eight - 15
16. Inverted vertical eight - 15
17. Upright overhead eight - 15
18. Inverted overhead eight - 15 (Done in same vertical plane)
19. Upright double vertical eight 180 degrees instead of 90 degrees) - 30
20. Inverted double vertical eight - 30
21. Upright 3 leaf clover - 20
22. Inverted 3 leaf clover - 20
23. Upright 4 leaf clover - 20
24. Inverted 4 leaf clover - 20
25. Bolo Wingover - 20
26. Vertical hourglass - 40

27. Corkscrew wingover - 8 loops - 20

28. Horizontal Square 8 - 40

29. Vertical square 8 - 40

30. Spot landing - no whipping after wheels (or airplane) touch ground. ON Spot - 15, 3 ft. away - 12, 5 ft. away - 10, 10 ft. away - 5, Over 10 ft. away - 0, Whipping after landing - 0.

And all on one tank of fuel????

According to instructions at the top of Mirror Meet Flight Plan, you get 3 flights (not attempts) to finish the Mirror Meet Pattern. In 1953, John Abaray used two Jim Walker pressure fuel tanks with the engine fuel lines T'd together, and finished the pattern in one flight. (He also won in the 18 and under division that year.) Jim Walker came up to him after John's winning flight, introduced himself, and gave John several new Walker pressure tanks. Larry Scarinzi, who won 2nd place 3 times, told me that most guys took 2 flights to do the pattern. He said that everybody used a caller out in the circle to call each of the different maneuvers (usually the pit man)."

- De Hill

On July 2, the Tulsa Gluedobbers will run the 1953 stunt portion of the Mirror Meet. Each contestant will receive a framed certificate and picture of himself and his airplane. The winners (1st thru 3rd) will receive a framed picture of themselves and their airplane. All contestants will also receive a set of Mirror Meet decals, and have their choice of 3 colors to choose from. John Abaray, (winner of the 18 and under class at the 1953 Mirror Meet stunt event) will be one of the judges. Entry cost is \$12.00. The decals cost \$5.00 a piece. If you are looking for something new and challenging, come on down!

Several of the Gluedobbers went out to practice the Mirror Meet pattern. Some flew, others judged. Several types of airplanes were used to fly the pattern. Joe Gilbert used his Nobler, and while the wind was low, it was satisfactory. When the wind came up, the Nobler

lacked the power and line tension to properly perform the double vertical eight and the corkscrew wingover. Bob Reeves used his Brodak ARF Super Clown powered by a Brodak .25, and it was a good match for the pattern. The following aircraft will do the mirror meet pattern, using a Fox .35 ,OS .25, Brodak .25, or equivalent engine.

Flitestreak, Super Clown, Ringmaster, Sterling Yak-9, Sterling P-51, almost any Slow Combat ship, ukey 35 or 40, most of the Old Time Stunt aircraft (about 42 inch span), and Super Slow Combat Ships.

Spot Landing: The spot will be a piece of square linoleum tile. The pilot will place the tile in the spot of his choice before he starts the 2nd half of the pattern. Aircraft without landing gear are an advantage, since they fly better than the same airplane with landing gear. Takeoff is not judged, landing is not judged. Only the distance from the stopped aircraft to the spot is judged. Remember, no whipping is allowed after the landing gear or aircraft touches the ground. You can dive your aircraft on to the spot, just like Red Reinhart did. His Stuntwing bounced and landed on top of the spot. Red used an Ernie Babcock wooden line reel for his spot. His landing was worth 15 points. Larry Scarinzi told me that the perfect spot landing won first place for Red.

Bolo Wingover: The Bolo Wingover is a wingover that starts and ends with an inside loop. It is performed crosswind.

With the pilot facing downwind, the inside loop is performed first, on the pilot's right hand side. After the loop is finished, the airplane continues straight up into a wingover, and goes across the top of the circle to the left hand side. As the pilot exits the wingover, he performs an inside loop on his left hand side. To receive maximum points (20) your first and last loops must have bottoms at 5 feet or lower.

This is not a particularly difficult maneuver, but it is the most legendary one of the Mirror Meet pattern.



The Corkscrew Wingover - maximum points - 20: This is one of the most difficult maneuvers in the Mirror Meet pattern. It is flown crosswind; like the Bolo Wingover. Facing downwind, the first four loops are performed on the pilot's right hand side. (that means you are entering the loops downwind) The first loop is not bad, but the airplane starts to lose energy and line tension as you perform loops 2, 3, and 4. After loop 4, you start descending and start entering the loops with the plane flying into the wind. This is easier on the airplane and pilot. To get maximum points, the maneuver must be flown well, and the first and last loops must have a bottom that is 5 feet or less.

The 1st maneuver in the Flight sequence is level flight. You take off, or hand launch, and fly 2 laps. These don't count. Then you fly 3 level laps at an altitude of 5 feet or lower. The maximum number of points that can be awarded is 3.

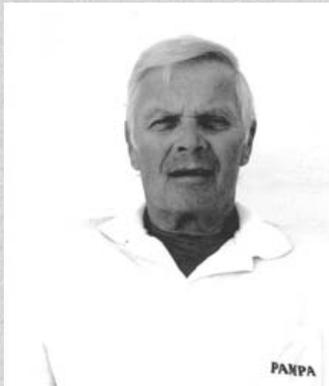
You have 3 flights to finish the complete pattern. If you have engine problems on the first half of the pattern, you can fly level the rest of the flight, get rescheduled for another flight, and then finish the first half of the pattern. The 1st half of the pattern ends on #18, which is the Inverted Overhead Eight. Then you will only have one flight left to finish the second half of the pattern which is #19 Upright Double Vertical Eight thru item #30 Spot Landing.

-De Hill

For information contact De Hill at 918-743-4912. Email: dfhill@juno.com or the Tulsa Gluedobber Website: www.tulsacl.com.

- Hoyt Hawkins

FLYING THE MANEUVERS



Owen Richards
4532 12th St. Ct. E.
Ellenton, FL 34222
941-723-6571
richplane@aol.com

When you have finished up with a nice flying session and you're ready to pack up and go home, you can't just put that greasy thing into your vehicle. Most guys in our club clean them up right there at the field with spray-on stuff and paper towels. I just wipe all the goo off so it won't mess up my truck and give it a good cleaning when I get home in my shop. I just found a good cleaner and I don't know where I heard of it, but it is real easy to make and it does a really good job. You probably have most of the stuff around the house or if not, it is really easy to obtain. I make it in the spray bottle I'm going to use. The formula is: 1/3 water, 1/3 alcohol and 1/3 vinegar. Spray it on and wipe it off with paper towels and it is clean. There is nothing harmful in it and vinegar is actually good for the skin. It will also clean your windshield and do a good job of it.

When building your new plane (You still build them, don't you?) you have to use some kind of glue. I really don't like to use CYA because it messes up my breathing. If I do use CYA, I have the parts ready, drip the CYA on and leave the room for five minutes or so. I'll even hold my breath if I have to. I do use a

lot of 30-minute epoxy for making the tough stuff. Bell crank mounts, engine crutches, wing and stab to fuselage joints etc. I use 5-minute epoxy for some minor repairs or when I'm in a hurry or on 1/2A models. I also use finishing resin to fuel proof the tank and engine compartments.

For building the regular structure of the plane, I use glue called "Weldbond" it comes out of the container looking like milk but it dries crystal clear. It does not get brittle and holds like the dickens. You can handle the parts in two or three hours, it is odorless and non-toxic. If I have to work on foam, I use Elmer's white glue, available anywhere. You can find Weldbond at Ace Hardware, Home Depot or Lowe's stores. It comes in 4, 8, or 21-ounce jugs. I use at least one 21-ounce jug a year. When we moved to Florida, I had a pair of concrete flowerpots and the movers broke off a large corner of the base. I glued it back on with Weldbond and nine years later, it is still together. This is good stuff.

I mentioned some time ago that I made some racks to hold my planes. Each rack holds seven or eight planes; I have built three racks and they are all full. I took some pictures of them and will send them in but I don't know how they will get them in Stunt News. I also have mentioned my portable bench and plane holder, took some pictures of them too. I think it is important to be able to work around three sides of the bench. You should notice the centerline and 90 degree cross lines under the glass top. The glass is 2' by 6' by 1/2" plate glass. When working on the glass top you should have a large assortment of building weights. You can't stick pins into glass. The whole building process works well for me.

Now to get onto flying. It's been pretty windy here lately so I haven't done a lot of flying. I can fly in the wind but it's really not much fun. It also makes a difference which direction the wind is coming from. The east and south sides of our circle have some large trees; so



when the wind comes through the trees, it will shake the plane like it was a dishrag on the end of the lines. I can't get much good practice done under those conditions.

I just finished building my new Impact. I built it from plans and used foam cores from Crist Rigotti in Iowa. You don't need to worry about getting good cores from Crist; this was my third set from Crist and they are perfection. I spent four or five months building this one, which is unusual for me, but I was building three at a time. Powered with a strong ST .60, the Impact came out at 64 oz., which for me is really light.

I flew it for the first time yesterday. The first flight was just to check everything out, climbs, dives, wingovers, inverted flight, wings level, etc. Everything looked and felt okay so I did the whole pattern on the second flight. I was very pleased with the way it was performing so on the third flight, I bore down and really pushed it. Two maneuvers that really stood out were the triangles and hourglass. The corners were crisp and the pullouts flat without a hint of a bobble. Needless to say when I get used to this one, I'll have a lot of fun.

Today is Sunday and the regular day for club members to show up for flying. I put four more flights on the Impact, trying different props. What worked out best was a 13 - 4 which gave lap times of 5.5 seconds with plenty of pull everywhere. Everyone agreed that the Impact presented well and was very smooth. What more could you ask?

When you are flying, practicing the pattern, you are practicing your mistakes. It is always good to have a flying partner to watch your flight and make comments after you land. It is always better if you can have someone who flies in a class above you, but it is not written in stone. The only expert flyer we had in the club was Ed Ruane and he had to up and move to North Carolina. When he was here, he gave me a lot of pointers and told me a lot of ways to improve flying the maneuvers.

Now it is up to about five of us to watch and critique each other.

My flying partners, Paul Sequira and Eric Viglione watch my flights quite often and offer suggestions. Eric is nearing the top of the advanced class. He has a new Avanti with an RO Jett .76 for power and I'm betting this one will put him over the top. Phil Bailey is another member with a vast amount of experience and quite often he has suggestions on trimming the plane or the operation of the engine. That is very helpful.

Where do you position your flying hand/handle during a flight? Is it down around your waist? Off to the right or left side? Or, do you swing your hand around? When doing your loops do you make circles with your hand? I have watched many of the top flyers doing their thing and the hand is centered in front of the body, between the chest and nose. When close to the nose, it is almost like you're sighting down the lines and aiming the plane. When flying loops either inside or outside, you want them to be nice and round with five foot bottoms and 45 degree tops.

You don't just give it up or down and watch the loops form. It takes a lot of little tweaks and nudges to produce loops the way the judges like them. I just used loops as an example; this will hold true for all of the maneuvers. Next time you're flying, try holding the handle in front of your chin and do three inside loops and see if you don't get a new perspective on it. I must say though, when I fly the six inverted laps, I like to extend my arm out full length and just tweak the handle to keep a level flight path. I used to put 1/16 inch positive incidence in the stabilizer but I don't do that anymore. I'd rather adjust the elevator one degree down to do the same thing. It helps to keep the plane from hunting. I always put little doors on each side of the fuselage for access to the elevator clevis. Quite often, you have to make adjustments in this area when trimming the plane.

Well, contest season is about to

get under way very soon. I always have a good time at all the contests in the Midwest plus Brodak's and the Nationals. However, I won't be able to do all that this year, one because of the price of gasoline and another reason is because I'm going to have a new aorta installed about the end of May. So I'll say so long for this time. Work on the vertical eights and four leaf clovers. Practice, practice.

- Owen Richards



Ruffy by Ted Fancher VSC 18



Ruffy by Ted Fancher VSC 18



Caprice by Bill Rutherford VSC 18



PERSONALITIES



Louis Rankin
1262 Mathis Road
Atoka, TN 38004-7902
(901) 837-1511
lwr_@msn.com

Featuring:

John Gunn
Bloomburg, Texas



I just love going to modeling events and meeting all the interesting people. My good friend Zuriel has told me many times that I would thoroughly enjoy the Texarkana stunt contest. Well, he was right. The boys from East Texas know how to put on a contest. And when you mention the Texarkana contest you have to mention the hard work of John Gunn.

John is an accommodating and gracious contest host. Nothing is better than flying stunt in the morning, well, except for John's biscuits and gravy. I flew the best scores I had ever flown and all because of a good hearty breakfast before the competition started. His catered lunch of chicken, sausage, and beef brisket was not too shabby either. Never mind the outstandingly organized contest, the eats were worth the price of registration alone.

John resides in Bloomburg, Texas with his young granddaughter. His current vocation is in education as a substitute teacher. He also is a licensed funeral director and a pharmaceutical salesman.

He has been modeling for over 50 years. His favorite model is the Cardinal, both built up body and profile. He says that even he can do a decent pattern with one. In fact it was the Cardinal's designer (Windy Urtnowski) who has inspired John the most. John had just about given up on modeling when he happened to view one of Windy's videos. That was all it took to get him back into modeling. Thanks Windy, your inspiration has helped retain a true

gentleman in the sport we all love so well.

When it comes to power plants the old ST60 is his favorite with the time proven Fox 35 as a close second. One of his most memorable moments in modeling was in 1952 when he first saw a Smoothie fly with a Fox 35. He has just finished building a Brodak Smoothie and plans to fly it this summer. His modeling goal is to compete at the NATs next year. His least favorite power plant and model is any Cox engine in a Cox plastic plane. I must admit that most are difficult to fly, but they do look pretty neat and command pretty good prices on the "Bay."

To generate interest in aeromodeling, John, with the help of the Balsa Busters, organized a city invitational. He says about 100 kids showed up. They gave away 3 SIG Busters with Fox 19 motors. One of the kids stayed with the club for a few years until girls came into his life. That is ok, just wait until he gets married and has kids. He will come running back to get out of the house and away from all the commotion.

John's other interest are in research. He was just awarded a patent for a new way to kill fire ants. This was his second patent.

As I said before, if you want good hospitality and outstanding eats, go to one of John's contest. You will not go away hungry or disappointed.

- Louis Rankin

Things You Can't Live Without

- Carbon Fiber Wing "Buildathon".** In a group build, parts for several stunters were created using Dave Midgley's aluminum molds. Two-video set, DVD-R or VHS. \$29.90 plus \$5.00 S/H.
- New Engine Tuning.** From Fox .35s to tuned pipes, mysteries made easy to understand, never before published information on how to tune stunt motors. Great info if you're new to tuned pipes. DVD-R or VHS. \$14.95 plus \$5.00 S/H.
- Electric Stunt.** Has all the flights from my library of electric stunters going back many years, Mike Palko's first flight, Walt Brownell's Arc Angel, and Will Moore explaining many of the latest developments in electric stunt. DVD-R or VHS. \$14.95 plus \$5.00 S/H.
- New Flight Trim.** From ARFs to world class ships, useful information everyone can use. DVD-R or VHS. \$14.95 plus \$5.00 S/H.
- Tigercat "Fun Fly".** Taken from Nats footage, many pilots (American and foreign) get to fly the Tigercat. DVD-R or VHS. \$14.95 plus \$5.00 S/H.
- Smoothie ARFs and ARCs.** Bob Palmer's classic and a great performer. \$110.00 plus \$15.00 S/H. (Overseas, call for shipping quote.)
- Electric Timers.** Designed by Sergio Zigras, now legal in AMA and FAI classes, used by Mike Palko and others. \$29.95 plus \$5.00 S/H.

All B&O of our master videos are now available on VHS and DVD-R. Unlike gasoline, they're the same price as when we began in 1987: \$14.95!

Windy Urtnowski

93 ELLIOTT PLACE
RUTHERFORD, NJ 07070
(201) 896-8740 (VOICE OR FAX)
E-MAIL: WINDYU@AOL.COM
There's room in the sport for everyone!

'Same day' shipping!
Current catalog
at Web site:
www.windyrtnowski.com
We're a full-line Saito dealer



SPORT FLYING



John Ashford
830 SE 19th
Paris, TX 75460
(903) 739-2558
jcashford@cox.net

You know, when you build and fly these things you are probably going to crash once in a while. I took the ECLECTIC out for its maiden



voyage and was very impressed with the performance. The weather was a little gusty and when the engine quit and it was time to land, I got caught in a wind burst. The plane stopped dead still about two feet from the ground and bounced. It then was picked up about six feet and slammed back to mother earth. Wing mounted gear went through the top and because of the construction method, broke every rib in the outboard wing and most of the inboard. I haven't made up my mind to either repair or build a new one. It definitely is good enough in performance to warrant a second

model. I was disappointed, but that is part of the game we all live with and I've known that a long time. "Stuff happens".

On a happier note, the SKYLARK and the QUE ES ESO have been flown quite a bit and I am well pleased with both of these planes. The Skylark is a proven design and I've built four of the Sterling versions and three from Ed Southwick's plans. The Sterling Skylark is a very good flying plane and you won't be disappointed if you build this version. Ed's original is (my opinion) a much better plane. It has a larger tail surface, longer moments and the airfoil is thicker. All of these things improve its performance. The ESO is a very good profile and I was a little surprised (actually a lot surprised) at the way it will turn and groove. Landings are nothing short of spectacular. When it hits the deck you would think the wheels are Velcro. Well that's enough bragging. The proof is in the pudding as they say and the contest season will be well underway by the time you read this. I'll let you know how that all works out later.

"Sport Flyer" vs. "Competitor" revisited. I received two very thoughtful responses to my lunacy that I want to share with you. Both seem to confirm what I said on the subject last time about the impossibility of actually defining the difference and are so well written that I feel it worthwhile to include in this venue.

First from Paul Taylor: "I used my Thesaurus to look for other words that describe/define the words Sport and Competitive.

Sport = game, activity, exercise, training, hobby and athletics.

Competitive = spirited, ready for action, aggressive, useful and gung ho, just to name a few.

I work for a Sports minded company and we have a saying. "If you have a body, you are an athlete." I will try to put this in a different light.

Everyone has participated in sports at one time or another and in some form or fashion. Either as

a player or as a fan. The one thing about sports is it will bind a group of people with a very tight bond. As a school, as a State, or even as a Nation. At times sports will take people to an extreme. Look at European Football; Soccer as we call it. People will at times riot after a game just to show support for their team.

Take a group of buddies getting together at a local park just to "play" softball. A guy smacks one over the fence as the streetlights come on and the game is over. It is all for fun and bragging rights. Now it is the bottom of the 9th in the next World Series and someone hits a home run for the win. It is all for the fun and bragging rights, and as a bonus the players get paid a big fat check. In both scenarios these folks are athletes and are competitive. Don't forget the fans. Some fans may not play, but they live and breath the sport with a passion.

With both games, the following words apply: activity, exercise training, hobby, spirited, aggressive and gung-ho. Just to name a few. This is Sport, and Competitive.

Now, with all this said, in Control Line the same applies. When you get right down to it we are all pilots of model planes. Some folks are not pilots but are real fans of airplanes. This is a great hobby that has some very spirited people in it. Some are very aggressive when it comes to contests like the NATs and have a real passion for their activity in the exercise we call Control Line. I can say that I feel like an athlete at times, because we have to train in order to improve our flying skills. After a day at the local flying field, I am tired and ready for the easy chair. I do get exercise and the next day after a flying session, I have aches and pains. Sore knees, arm and back just to name a few. It may be that I just cannot play as hard as I used to and I am out of shape and over weight.

I do think I have a bond with other C/L flyers new and old. Some of the nicest people I have met in my life fly control line. I have found new friends in all parts of the USA



and even other countries and in my own backyard. I would not trade these new friendships for all the balsa trees in the world. I guess the bottom line is: We are all pilots in this sport/hobby we call C/L. So what if some take it to the next level and are more competitive than others. I am very gung-ho about C/L airplanes!"

From Jerry Price: "Now I figure there are as many definitions as there are model flyers. For instance, I am a broken down old retiree, with two back operations and a heart attack and sometimes have trouble just standing up. So even if I go to VSC or Denver, and enter a contest now and then, I would really be stretching things to call myself a "competition flyer." On the other hand, I have a friend, I'll call him Jim, who's every flight is a practice flight for the next contest. He goes to Europe and all over the country to fly in competition but he does it just for the fun or "sport" of it and calls himself a "Sport Flyer." On the other hand, I know people like Bob, Carl and Bill that live to compete. Win, lose or draw these guys are always competing with all and sundry and if they can't find anyone else to compete with, they compete with themselves, to become as perfect as they can be. Like I said, it depends on who you ask. Each person has a different definition of the two terms and who is to say if any one of us it wrong? If competing is our "sport" or if we compete to enjoy the comradeship of sporting competition, we are right! Well that is my opinion...for what it is worth. When it comes to opinions, one can never be wrong, since new facts or information can allow one to change his or her opinion."

Paul and Jerry both hit the nail on the head as far as I'm concerned and confirm the point I made last time out. We all just love this hobby/sport and so around the pool and at the field we are all cut from the same basic cloth. I wanted to include their thoughts because they took the time to reply and said what needed to be said much better

than I have been able to do.

Onward: Flight plan? When you go to the local field do you have a purpose or goal other than to just enjoy the day? When you start up do you have something in mind to accomplish with that flight? Sometimes I fly my old Sterling Mustang with the Johnson .35 and just burn holes in the air. No plan, lazy eights, six loops in a row or whatever I feel like. A Nemesis with a ST G21 .35 on bladder and just show off, now that is a lot of fun! However, there are times when you need to plan a flight and have something specific in mind.

Let's talk about maiden voyages. New plane, first flight. What do you need to learn right up front? This is what I do and I don't make any claim that this is the only way to do things. I short fuel the first flight because what I am most interested in is if the plane flies with wings level both upright and inverted and how the engine/tank is working. If it looks close to me in level upright flight and the engine is happy, I will go on to the next step. Gentle turns up and down to see if it has any bad habits and I increase the sharpness of the turns with each lap. I do the 20' climb thing from the OTS pattern. If it is going well at this point I now need to see if the engine runs right inverted. I do a really big half loop and fly at 45% inverted for a lap or two just to make sure the engine is happy. At this point I have confidence that the engine/tank set up is OK (or not). If that works well then I do the climb and dive (gently). I'm about out of gas now so I level off and wait for the engine to quit. Pay attention to how the plane reacts when the engine dies. If it suddenly pitches up you have a tail heavy plane. If it dives at mother earth it is nose heavy.

On new planes, you need to determine two things. Does the plane fly wings level? Does the engine perform the same upright and inverted? These are the most important issues with a new plane. If the power train isn't right then you are not going to be able to

do anything else with the plane. Trimming starts with getting the plane level both ways. These two issues are at the top of the list. Now, the scenario in the previous paragraph assumes that all is pretty close to right. What if it isn't? If you take off and the plane is flying with the outside wing down six inches, hang on and run the fuel out (why I short fuel first flights). Unless the wing is flying close to level you risk crashing on the first flight if you get bored and try some "tricks."

Brett Buck has shared his trimming tips and procedures with us and I follow them religiously. BUT, you need to think about these things and have definite goals in mind on each flight. The above is the way I approach this goal and as I mentioned, it may or may not be the best way but it works for me. After you achieve wings level and consistent engine performance you can proceed to the finer points of trimming.

Flight plan after the above is accomplished? We can and will talk about that in another column.

Later,
- John Ashford



TF Nobler ARF VSC 18



Nobler VSC 18



THE TRAILING EDGE



Mike Keville
4225 N. First Ave. #1321
Tucson, AZ 85719
(520) 307-1523
vsc-guy@cox.net

“Deadlines and commitments... what to leave in, what to leave out” (thanks, Bob Seger). Let’s start with a couple of photos from the days of tailfins and hula-hoops.



In 1958, 17-year-old Joe Reinhard’s Grumman Cougar won First Place in a Columbus, Ohio Jaycees static show. Trophy presented by USMC Major Phil Pickett, who inscribed the photo, “Congratulations, Joe...the Marine Corps is proud of you.”

By now, those who frequent the Stuka Stunt Forum may have seen my post about two new special awards for VSC-19. If not, here’s the deal. Inspired by several attractive semi-scale entries in recent years, I will sponsor awards for the best Scale or Semi-Scale entries in Old Time and Classic. Admittedly, the word ‘best’ leaves room for interpretation. The awards won’t necessarily go to the slickest



Young airman at Keesler AFB, MS, late 1952. Dyna-Jet model was stolen before he could fly it. Own version Smoothie, built from memory of Palmer’s at a ‘51 Santa Anita meet, seen in foreground. Often flew CL on the beach at Gulfport, MS. Who? Floyd Carter, aka Dr. Spark.

finish (though they could), but rather to those models requiring more than a second glance for whatever reason. There are just two rules: (1) model must make at least one Official Flight, and (2) must be a recognizable replica of a full-scale, heavier-than-air, human-carrying aircraft. One other thing: I will be the sole judge and jury, so if you’d like your entry to be considered, be certain I see it.

The Jan-Feb issue contained an article on covering with Japanese tissue. California Free Flyers Bob Beecroft and Walt Prey are two masters of the art. Walt also flies Stunt and is a PAMPA member who several years ago presented an SN article on applying gold leaf lettering. When we say ‘tissue trimming’ here, we’re talking about more than just doping-on a few stripes and AMA numbers. These guys create aerial art galleries using colors more vibrant than ordinary tissue. Beecroft (Fallbrook, CA) likes Polyspan tinted with floral spray. He wrote:

“I do trim and lettering a combination of ways. The black striping is similar to a felt-tip marker but it’s paint. Craft stores carry these; just don’t buy the ones made by Testors; they’re [‘unsuitable for this purpose’ - mk]. They come in various size tips. The good ones I’ve found are from Zig Memory System, called Opaque Writer, number MS-20, black, 1mm, though many colors and several widths are available. The lettering is hand-cut

tissue. I’ve found the stuff from Hallmark stores to work great, and the black is very fade resistant compared to Japanese tissue ... I’ve been using Design Master brand floral spray. Great stuff. I get mine at an arts-and-crafts store. Comes in lots of colors. I’ve used their number 716 Carnation Red quite a bit. A light coat first; don’t try for 100 percent coverage, just an even ‘dry’ coat first. A second or third can be added rather quickly, as it dries to the touch pretty fast. The second (and third, if you want it darker) can go on as a wet coat – not heavy, but just wet enough to get good coverage. It’s pretty forgiving, and fade-resistant as anything I’ve seen. The entire wing was sprayed with a couple coats of 50-50 Nitrate then the LE was taped-off to shoot the color.

“The best method for taping that I’ve found so far is clear Scotch tape, the old-fashioned shiny kind. I use their ‘Transparent tape’, stock number 557, in the three-quarter inch width. Put down newspaper with a nice clean edge cut on it, then put down the Scotch tape with maybe 3/32 or so exposed to adhere to the covering material. Stick it to the paper using a clean glass sheet or mirror. It’s tacky enough to keep out any seepage if you rub it down a bit. After spraying, let it dry a while – maybe an hour at room temperature, then pull the tape. You probably know the drill, but just in case: pull the tape back over itself. If any of the color leaked through, use a Q-Tip and cheap lacquer thinner to wipe it off. Home Depot sells some pretty cheap lacquer thinner – just what you want here, as it’s not likely to cut into the dope.” Bob said he’d originally tried spraying the Polyspan with thin Nitrate and Rit dye but the Rit faded like it always does. He’d also tried trimming with Airspan and Micafilm colors, which are virtually fade-proof, but (quote) “...neither is as good as Polyspan in my experience.”

Walt Prey (Simi Valley CA) sent more than a dozen handwritten pages, most of which deal with the history of the tissue-trimming



art. While of great personal interest here since I know many of the Free Flighters involved, I've condensed his letters to just those items of possible interest to Old Time CL flyers. A professional sign painter and custom car artist, Walt explained in detail how he and others (most notably, the late Toshi Matsuda) achieved those awesome trim schemes with tissue, including the sign painter's art known as 'drop shading'. He said, "We weren't using the same tissue to decorate with that we used to cover the model; we used art tissue sold in the better art stores. The colors are much stronger and don't fade as fast as the tissue used to cover the model." Some of his multi-color schemes include the use of candy lacquer toners mixed in butyrate dope. He recommends Certified non-tautening butyrate (Aircraft Spruce & Specialty) and candy concentrates from Metalflake, House of Color and SEM, adding, "They work better than ink."

"The big deal about tissue decorating", Walt said, "is putting it on the airplane, which can be real tough. Hold the tissue letter or number with a finger and dip a brush into 75-25 thinned butyrate dope. Touch the brush to the letter and let the dope soak through. Sometimes it will shift and get out of alignment, so take care here. The first thing to go on is the bordering and shading in black tissue." He later decided to pre-join the red letters/numbers with the black shading pieces..." put it all together on the wing, then dip the brush into the dope and have drops of dope from the brush onto the letters, bordering and all, which nailed everything down without having to touch the tissue with the brush. Once the letters are on, put several coats of dope on them to fill them to a gloss matching the rest of the surface."

In the middle of the last century when I was ten years old I stood next to a guy as he fired-up an Atwood in something appearing to be about the size of Alaska. Scared the heck out of me. It was a



Walt Prey's yellow, red and black 'Big Eagle', trimmed with art tissue and candy color concentrate. Tissue stars cut out 25 at a time. Two-tone shaded lettering is time-consuming but worth the extra effort. Much lighter than color dope, too. Picture this on your next Old Timer!

Super Duper Zilch. Fifty-five years later I finally built one and it still scared the heck out of me. Vertical Eights were 'fascinating' thanks to that thin airfoil. Note past tense there. The model no longer exists. Flamed-out in the Overheads, and for some dumb reason I exited inverted. Planned to plop it onto the grass at the circle's edge but several observers standing right there—apparently looking elsewhere, oblivious to three pounds of metal and wood headed their way—nixed that plan. Yanked it back over the asphalt. Ran out of airspeed and ideas at the same time. Pow! The clueless ones avoided taking it in the face but the Zilch was zonked. Here's the point: daydreaming when standing at the circle's edge could be hazardous to your health. (Note: this astounding revelation is not necessarily limited to Old Time and Classic.)

Short Lines: In addition to a limited number of Trophy Trainer (Warden) kits, Walter Umland is now cutting the Colossus (Tichy) and Sweet Sweep (Combat design), but only for those who signed-up for a guaranteed purchase . . . Still hoping to get Dennis Alford and Jim Ivey to the VSC. If you know 'em, prod 'em a bit. At the '56 Nats, Alford won Junior with 299.5; Ivey was second with 299.0. Alford also cleaned house in Junior Free Flight events . . . Reminder: Old Time and Classic will be flown at September's SAM (Society of Antique Modeler) Champs in Muncie. Contact E.D.

Allen Goff for details . . . Photos for this column must now be originals. Sorry, but no photocopies or e-mailed pix. We'll safely return them if you ask . . . Here's wishing the best to our F2B Team and Defending Champions in Spain this month!

- Mike Keville



Rabe Bearcat by Keith Trostle VSC 18



Bob Hunt's Caprice VSC 18



WE HAVE THE TECHNOLOGY



Noel Drindak
180 Lake Hill Rd
Burnt Hills, NY 12027
(518) 399-5939

Time for a New Pattern? – We are in a Golden Age of Stunt. There has been an explosion of technology in our event. We have an array of great, strong engines that are specifically designed for Stunt. When you add carbon-fiber pipes and props to those engines, power is easy to come by. And that's not the end of it – electric power is going to raise the bar even further. Thanks to new materials and new hardware, it's easier than ever to build good planes. And if you don't want to build there is a lot of good flying ARF's to choose from. In short, our equipment is better – a lot better. We have planes that are capable of flying more difficult maneuvers. However, we're still flying the same pattern of maneuvers that we did in the days of Fox 35 powered Noblers.

The Current Pattern -- Our current pattern dates back to 1957. Its design is generally attributed to George Aldrich. Actually, the pattern was the product of the AMA Competition Committee. George Aldrich was the driving force, but others were also involved (Lou Andrews and Dave Cook to name a couple). I think that we all love the pattern – if we didn't, we

would be in a different event. It has a nice flow to it that helps make it enjoyable to fly. However, although I love our pattern, I think that there are ways that it could be improved. I'll list a few:

1) There are large parts of the pattern that aren't very challenging (it starts with five laps of level flight, and later on there are six laps of inverted level flight). These maneuvers could be compressed (or eliminated). I know that there are those who will say this is one of the hardest parts of the pattern to fly. Say what you will -- I say level flight isn't really an aerobatic maneuver.

2) We do inside and outside round loops followed by inside and outside square loops. There's a nice symmetry to that. We should complete the symmetry by also doing inside and outside triangular loops.

3) All the maneuvers are done twice (except for the hourglass and four-leaf clover). To be consistent we should also do two hourglasses. (Since the clover already has four loops, one should be enough).

It may not be possible to change the pattern – it's been unchanged for almost fifty years and there's an incredible amount of inertia keeping it in place. I know that there are a lot of arguments against changing the pattern. Some say that no one's ever flown a perfect pattern, and until someone does, we shouldn't change. Others say that it wouldn't be right for someone to win the Walker Cup if he didn't win it flying the same pattern that George Aldrich and all the other winners flew. Another argument is that we should keep our pattern the same as the FAI pattern. I say that if you can make something better you should make it better.

Designing a New Pattern -- An alternative to changing the current pattern is to design a new pattern. It could be flown as a separate event at local contests. In the early days of stunt, there were contests that had their own pattern – most notably the Mirror Meet, so there is precedent for this. However, it will

be hard to make the leap to a new pattern. There are several reasons for this:

1) We've been locked into the current pattern for so long that we don't have much experience flying (and judging) other maneuvers. Our catalog of other maneuvers is virtually empty. It's hard to design a new pattern without this catalog.

2) It's hard to find enough time to practice one pattern, let alone two. Practicing a different pattern could take away from your level of performance on the current pattern.

Showtime Maneuvers – An alternative for local contests (suggested by Dave Cook) might be allowing competitors to add one optional "Showtime" maneuver at the end of their pattern. The maneuver could be selected from a list, or competitors could design their own maneuver. (Of course, they would have to brief the judges before their flight). Flying Showtime maneuvers could serve as an interim step between our old pattern and a new pattern. There are several good features to this idea:

1) We would gain experience with maneuvers not included in the current pattern, building a catalog of maneuvers that could be eventually used in designing a new pattern.

2) We would still be maintaining our proficiency with the current pattern.

3) It sounds like fun!

I've talked with several top fliers who helped me generate a list of potential Showtime maneuvers:

1) Outside triangular loops – Started from 45 degrees with the point down. Some fliers (Dave Fitzgerald comes to mind) already fly this maneuver after their pattern to unwrap their lines.

2) U-Turn – There may be other names for this maneuver. I believe that combat fliers call it a U-turn. It's a wingover with a 180-degree turn at the bottom followed by another wingover back in the other direction. The 180-degree turn can be either an inside or an outside turn. Obviously, this is a maneuver that requires a lot of power, both to



make the turn and to fly the return wingover against the wind.

3) Consecutive hourglasses - This is another maneuver that requires a lot of power. That's because the second hourglass is started after you've scrubbed off a lot of speed with a 60-degree pullout. Dave Cook flies these to test his airplanes.

4) Bowtie - This is essentially an hourglass laid on its side. It's a challenging maneuver, especially if you do two.

5) Diamond - Probably the best way to fly this is to start at 45 degrees and fly a point-up inside triangle followed by a point-down outside triangle. Again, it's more challenging to do two in succession.

6) Cotter pin - This is a tough maneuver. Starting from level flight make a square turn and fly vertical to 45 degrees. Do an outside loop. Make a square inside turn at the bottom of the loop. Come down vertically and make another square inside turn back to level flight.

7) Three-leaf clover - Dave Cook sent me a diagram showing how to do this maneuver. It looks like a round eight with a loop above the eight, tangent to the both loops of the eight. The right-hand loop of the eight is flown first. At the bottom, continue the loop another 135 degrees. Do a partial outside loop (270 degrees). Finish by doing the second loop of the eight (inside). Recover to level flight. I haven't tried flying this, but it looks tough.

8) Square wave - This maneuver consumes an entire lap. Each quadrant of the circle is one complete cycle of a square wave. The bottom of the square wave is at level flight, the top is at 45 degrees. Start downwind at level flight with an inside square corner followed by two outside square corners at 45 degrees and two inside square corners at level flight. This should make one fourth of a lap. Do three more quadrants in the same way, recovering to level flight with an inside square corner to level flight. At this point you will have done eight inside corners and eight

outside corners. The challenge of this maneuver is to do all those corners and end up in the right place. Also, doing square corners upwind will be interesting when it's windy.

9) Square vertical eights - I'm not sure I like this idea, but I'm putting it on the list because it was mentioned repeatedly. The problem I see is flying (and judging) the flat segment at the top of the circle.

10) Square cloverleaf - This is another maneuver I put in because it was mentioned repeatedly. Again, I see difficulty flying and judging the flat segments at the top of the circle.

That's my list. It should be considered as a starting point for choosing Showtime maneuvers. I'm sure there are other good candidates and that others will be designed if this idea is picked up. In designing maneuvers it's important to consider if they can be judged (overheads are famously difficult to judge).

To summarize, our equipment has gotten a lot better over the last fifty years and we should consider changing the maneuvers that we fly. This could be done by changing the current pattern, by developing a new pattern, or by adding Showtime maneuvers to the present pattern. Regardless of what we choose to do, it's time change.

Good luck with your next plane.

- Noel Drindak

INDEX TO ADVERTISERS

Aero Ply Research	81
Alberto Parra	64, 68
Al Rabe's Home Movies	61
AeroProducts	82
Aeropipes	89
BJM Enterprises	5, 11
Blue Sky Models	19, 113
Buran's Antiques & Hobby	25
CLC Central	7
CF Slattery	29
Core House	54, 109
Doctor Diesel	52
Exemplary Stunt Planes	36, 94
Flying Models Magazine	22, 100
Fellowship of Christian Modelers	83
Heart of Illinois CL Champs	43
Lone Star Models	25, 40
Memphis Stunt Classic	44
Michigan CL Champs	42
MNT Int/Stalker	54, 86
Powermaster Fuels	31
RGGraphix	9
RSM Distribution	29
Sam's Stuff & Hobbies	2
T & L Specialties	17
Virginia Hobby Sport	17, 61
Windy Urtnowski	75



SINCE 1980, TRANSISTOR SPARK IGNITION SYSTEMS

At Prices You Can Afford.

Over 500 in use today.

⚡ SASE for catalog. ⚡

AERO PLY RESEARCH

Floyd Carter

87211 Louvring Lane, Eugene OR 97402

(541) 338-4255

AeroPlyCo@aol.com



WHY DO I FLY STUNT?



*Claus Maikis
Nelkenweg 5
D-89129 Langenau-Albeck, Germany
cmaikis@t-online.de*

There were two wonderful stories in the May/June issue of Stunt News. Paul and Ted gave some musing thoughts about their relationship to control line aerobatics (let me call it stunt from now on). While the essential goal and content of Stunt News is to provide and exchange technical information (I cannot get enough of it), there's still room for thoughts which reach beyond everyday talk. After all - when all technical triviality (technical in the widest sense) is asked and answered, the basic and essential topics will be philosophical in nature.

Paul and Ted found suitable words to describe why a person has chosen this activity, where not only young people but also grown personalities find a passion in playing with these toys. We need not define this term; we all know how Ted has meant this word (just have a look on his jewels and you'll easily see that these have nothing to do at all with toys). If others can only see them in such a way it's THEIR loss.

While Ted has already touched some aspects I'd like to put some more emphasis on them. Partly because I think these are important

AEROPRODUCTS

"WORLD CLASS STUNT PRODUCTS"

Randy Smith

Precision Stunt Engines (Stock & Reworked)

980 Winnbrook Dr
Dacula, GA 30019

Stuntcraft Foam Wings, Stabs & Other Components

(678) 407-9376 Voice

Bolly Props & Pipes, Complete Line

(678) 985-5085 Fax &
Order Line

Custom Kits, Old Time, Nostalgia & Modern www.Aeroproduct.net

Plans, Mufflers, Aluminum Gear, Hardware, etc.

SEND \$3.00 FOR CATALOG & PRICE LIST

aspects generally, partly because they are very important to me. Let me first explain why I think stunt is such a great event, and later I'll tell you why "I" fly it.

The greatest aspect is CREATIVITY. The highest level mankind can ever reach in it's doings is to be creative. To develop our own ideas, to bring them to reality, to enjoy the fun, the joy, and the success of the outcome can even be more rewarding than fulfilling a most complicated task - if this was dictated by another individual (don't get me wrong: by success I don't mean trophies here; success is already when your new own design creation can fly a decent pattern). Creativity isn't found very often in this world. In most cases we have to do what our boss or our customers want us to do. At least we'll have to find a compromise. Sure, if you want to become world champion your new airplane has to stay within certain design limits. But how many of us can strive for this goal? And - even then - these limits are more a challenge for our creativity than a restriction. We have full freedom of decision since our lives don't depend on it. We still have the choice between the design parameters of creations from people like Aldrich, Werwage, Rabe, Fancher, XiangDong, Beringer, Yatsenko, and others. What more do we need! Just look around at any big contest and you'll see an array of individual ideas. GREAT! You'll have a hard time finding another (professional or pastime)

activity which can allow us more creativity.

There's another great aspect. At first glance SIMPLICITY doesn't seem to be an exciting subject. Wait a minute. After all Sokrates (some 2000 years ago!) said: "it's the simple things which are the difficult ones." And Antoine de Saint Exupery (French author, philosopher, and pilot) said: "perfection is not where you cannot add something anymore, but where you cannot remove anything anymore." A precise description of our event! Have you ever wondered why stunt is the most popular control line event? It is because it is so simple. Like football: everybody can kick a ball. Even for a person with my limited skills access to stunt is easy. Sure, it takes some more talents to win the Nationals. But everybody can enter the game and have fun flying stunt. Specialized knowledge, extraordinary skills, and a thick wallet are not required.

SUBJECTIVITY seems to be the most criticised aspect of stunt. As long as we don't think about what we have and what we would have without it. Apart from the fear that beautiful airplanes might influence the judges (actually, I do not think that today's judges are still influenced from the looks of an airplane): this subjectivity in the choice of airplane shape and colour is exactly the reason for our colourful event. And of course this choice is subjective. Or would anybody want a scenery like in team race, with all models looking



exactly the same, same design, same wing shape, same fuselage, same high gloss clear wood finish (they don't dare paint their models in fancy colours in order to save weight; They don't even use ink lines !!!), almost same engine etc.? All this is the result of a category where ONLY the stopwatch decides on performance, the stopwatch dictates the model's size, shape, and colour. This is definitely not what we want. What we offer is BEAUTY. And beauty cannot be measured with a measuring tape or a stopwatch. Have you ever watched dancers in a dancing contest? Have you noticed that they don't even use exactly the same steps? They don't follow a ready programmed procedure which could be performed much better by a programmed robot. They produce beauty, and this cannot be judged by a mechanical or electronic gadget. It can only be judged by human beings. And that's why they - and we - have human judges. Don't tell me that only the precise execution of manoeuvres should count. This is a theoretical idea, nicely thought out, but not realistic.

Okay okay, I can already hear the cry "judges can be biased, judging is subjective". If we really think we have such judges, we can find them, we have the methods. But basically I don't think there are judges with intentional bias. The next cry: "judges can make mistakes". That's right; they can and they do. There's only one answer to this: we pilots make mistakes, too, in flying the pattern. So we simply cannot expect judges to work perfectly. Enough said.

So, maybe subjectivity brings the human element back into our event through the back door, allows for a very relaxed atmosphere, and may even further the comradeship and friendship among competitors. Quite a strong argument for subjectivity.

We shouldn't forget an aspect which is fantastic, and unique to stunt. In other sports, where only the stopwatch decides, you are the winner - or you are NOBODY !

These poor guys have a bloody fight everytime they compete, and they have only one chance (fly fast) to excel. And if they don't win, their name will soon be forgotten. It is only in our event that we can definitely gain some respect, esteem, and honour even without ever having won the huge trophy. Yes, we have the great pilots, but we also have the great designers, the aerodynamic experts, the precise builders, the fantastic finishers. The people who are famous for their ingenious ideas, those who develop modern technology, try new building methods , test new power sources; those who build only Stukas, or mainly twins, or sometimes four engine bombers. Any of these individuals has its place in our circle, is fully and equally honoured for its skills and uniqueness - even if there's no Walker Cup resting on their living room sideboard. Where else can you find this situation ?!

Okay, I could go on and on, but you didn't want to read a promotion campaign. The question was: why do "I" fly stunt. Well, part of the answer is what you have already read. As to my personal relationship: I'm a mix of talents; some modest ones and some tiny ones. I'm a creative person who wants to create his own pretty shapes and colour schemes. I have a preference for all things which have to do with aesthetics (my job was

show window decorator, I'm hobby photographer, I do watercolour paintings, graphics, cartoons). I want to control beautiful airplanes through nice manoeuvres. I have some interest in technical things. I like simple things (probably because I don't understand the difficult ones), things which only carry the essential components (see Saint Exupery ; you can't take anything away from a stunt model), and I have a special liking for abstraction - what could be more abstract than control line flying. I don't want to copy full size aviation. I want to create. So it's easy to see that stunt is exactly the right event for me. Sometimes I get the impression that I haven't found stunt - stunt has found ME.

PS. I just couldn't resist to comment on Ted's statement: "most, in fact, wonder why grown men would still be playing with toy airplanes in their 50s, 60s . . .etc." It's well known that primitive species don't play. Amoebas, snails, and rain worms don't play. It's the higher developed species which play: monkeys, cats, and dogs play. And we can see a similar differentiation within our own species. Some stop playing at the end of their childhood, and some still continue to play in their 50s, 60s,

- Claus Maikis



FCM
FELLOWSHIP OF CHRISTIAN MODELERS

Visit Our NEW Web Site At:

www.fcmodelers.com

FCModelers • 1053 Stevenson St., Napoleon, OH 43545 • (419)599-4705



FEATURES

Stunt Judging
Balsa Storage
Classic Nobler
Dangerous
F-105 Thunderchief
The Lancaster
The Mini-Katana
Mustang
Paint PTG
The Stearman Saga
Supermarine Seafire
Tsunami Trilogy
WildBill
B-26 "Sheryl Lynn"

The Realities of Stunt Judging by Dave Cook



Yes, I fly too. My Lightning 2000, ST 60. Published in FM
3 - 2nds & 2 - 3rd places in Expert. 1 Beamer, 59 Oz.

Background:

There have been web postings asking questions about judging and some taking shots at NAT's operation, especially judging. My name was being mentioned and as I was Chief Judge at both the NAT's and Team Trials for a lot of years I felt a background of the NAT's judging might be helpful. I have seen the NAT's from both sides having made the top 20 several times as a flyer. These are my views and not the view of any official group.

When criticizing judging keep in mind that the only people on the field that watch every maneuver of all patterns, from the proper

position, are the judges and their opinion, good or bad, is the only one that counts. Spectators seldom see the entire pattern and often base their opinions on an out of position view of a few maneuvers. The judges are the sole authority in subjective judging and, per the rulebook, their word is final and uncontestable. That is why we have to take great care in selecting and training judges.

Basic Philosophy:

The CLPA pattern is a skilled art presentation, judged by human beings - without the aid of high-speed cameras, computers, video cameras or protractors. The pilot flies "apparent" geometry and the judge's look at "apparent" geometry from their position outside the circle. Judging is not super accurate or repeatable, it involves opinions and individual subjective judgments. These will vary among judges. Even the same judge will vary from first to the last flyer as well as from the first to second round. Judges vary for a lot of reasons - personal preferences, emotion, lack of concentration, poor positioning, fatigue etc.

"Apparent" means how it looks to a human judge without the aid of anything other than training, experience and eyeballs. (Dictionary Def. for "apparent" - "Clearly revealed to the mind or the senses or judgment", or "appearing real or true based on evidence that may not be valid").

In short - the shape has to look good to the judge and if a corner looks square to the judge it is square!

Bottom line - Stunt is an art form, not an exact science. It is a staged presentation by the flier. We need to understand the art aspect and not get carried away with mechanical rules, hi tech gadgets and deduct scoring systems. Think of musicians, they all have the same sheet of music, yet the great ones play it better. Stunt is the same way, a good judge knows a great maneuver when he sees it and scores it accordingly. They recognize it from training and experience and

put a number on it. Many judges cannot tell you how they do it, they just do it.

Interpretation of the rulebook needs to be standardized to improve the quality of the competitions. Flyers and judges have to be on the same page. It is doubtful that we can ever take the need for interpretation out of the rules. In order to spread the standard, judges should be actively recruited for training and participation in the NAT's. The judge training classes at the NAT's should be open to anyone who wants to attend.

Nationals Training of Judges:

National's judges are first trained in a classroom, with the rulebook and training aids. They are then field trained with "round robin" sessions using contestants for practice flights. Height markers and 90 degree judges are used during training to assist in forming their judgment of heights. Each maneuver and each judge's score are discussed immediately after the flight.

Scores are then tabulated, graphed and discussed in detail with the judges in a second classroom session. The judges have 4 or 5 warm up flights each morning with "round robin" sessions on each flight. Judges are tracked and evaluated during the competition mainly to balance the judging teams as to judging range (hi/low), consistency and geography (East, West, etc.).

The Nationals format is designed to present flyers in small groups by the elimination formats within classes to improve comparison for the judges. This keeps the number of flyers in any one session within reason.

The effects of reputation, distortion from the judge's position and the effect of flight order are among the things discussed during the training. As stated above any interpretation has to be as consistent as possible across the judges and conveyed to the contestant so that we have a common standard of performance. Classroom training using an illustrated guide is by far



the best way to discuss, establish and convey this standard.

Summary & Conclusions:

The AMA Nationals CLPA event is one of the best run and fairest competitions in the world. A lot of people were involved in developing the Nationals format and procedures. They should be given credit, not unfairly criticized for their dedication and personal sacrifice.

Analysis of the Team Trials database information showed no discernable bias or dishonesty. Variation among the judges was about what you would expect and some judges were more consistent than others. The variations that we did see could be attributed to early round flights, fatigue and some ballooning in the later rounds. Each contestant and judge received a detailed graph of their performance to be able to evaluate.

Constructive ideas and proposals are always needed and should be reviewed for merit. We also need recruiting programs to insure competent administrators and judges in the future.

A word to the critics - People do not volunteer at the NAT's to intentionally screw things up. In my many years of judging and training judges at both the NAT's and FAI Team Trials, I have seen very little intentional bias. The same goes for dishonesty or point shaving. It is very difficult to do without being very obvious.

"Bad judging" comes from poor contest formats, lack of judge training and inadequate practice on the judge's part. Judges and administrators all put in great effort to insure a fair and unbiased competition.

Some judges judge high and some judge low, both are OK as long as the placement is right. Scores are simply a means of keeping a record of the judge's cumulative opinion of the flight on that day for proper placement. That is why we use multiple judges and average scores.

We have to setup formats that allow the judge the best close

comparison possible. Judges are capable of comparing flyers on the day of competition and putting them in proper order but accuracy starts to go down hill after 10 flyers. The closer together they see flyers of similar skill, the better the placement.

During the 60's I worked for MIT and had the opportunity to talk with a couple of humanity engineering groups that were studying the capabilities of human beings. A couple of their projects involved subjective judgment involving principals that were very close to our situation.

The consensus of the group was that in subjective judging good comparison was most important. The closer together the judge sees the flyers, of approximately same skill, the more accurate their relative placement.

One of the professors offered an example that goes to the crux of the situation. He did this to demonstrate the subjective comparison ability of humans. If I put a glass of warm water in front of you and ask you to tell me the temperature of that water, you can tell me it is warm but that's about it. You cannot give me an exact temperature reading. If the water is close to your skin temperature you cannot even be sure that it is warm or cold.

Now if I give you two glasses, one warmer than the other, you can, by comparison, tell which one is warmer. Comparison is the key word and opportunity for comparison is what is essential in setting up contest formats. This gives the best opportunity for proper placement and that, my friend, is what we are really looking for - not how high or low the score is.

Formats (like FAI with it's one circle and a zillion flyers) negatively affect a judge's opportunity to compare between flyers. Another example of a poor format is mixing classes together so that a judge gets substantial changes in skill levels. This disrupts the judge's concentration and continuity.

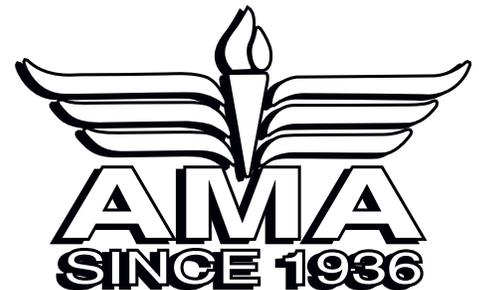
One of the myths in stunt

judging is that a judge can give accurate numerical scores day after day. This is pure fallacy - too many things affect the judgment, among them are the previous flight, flyer reputation, what was for breakfast, etc. The point being that a human judge cannot give consistent numerical scores period. This is why we have to pay attention to giving the judge the best possible environment to render his decision by comparison.

I wrote a computer program for scoring the FAI Team Trials in the early 90s that was later adapted by Shareen Fancher for scoring the NAT's. The Team Trials gave me database info to review for checking some of my assumptions. I have also posted an updated version of the training guide on the PAMPA site. It is in a PDF format and you are welcome to download it and use it.

Running the NAT's is a big chore and a lot of unsung hero's have developed the NAT's to what it is today - I can only name a few of those who have contributed over the years; George Aldrich, Arlie Presler, Keith Trostle, Art & Betty Adamisin, Shareen Fancher, Bob Parker, Bruce Gifford, Warren Tiahart, Gary McClellan, Gene Mills Earl Midgley, Bob Robertshaw - and many others, especially all the judges and tabulators. We owe a debt of thanks to all of them.

- Dave Cook





Balsa Storage by Derek Moran

Everyone who builds stunt planes from scratch has more balsa than he knows what to do with. We must be very selective to ensure the airframe is light, straight and durable. I'll bet less than 20% of the wood bought is actually used. This is easily justified because the cost of wood is negligible compared to the overall investment in time and effort. We promise ourselves the remaining 80% will be used some day for less critical applications- R/C, combat planes, profile trainers for the neighborhood kids and so on. But you can't just turn off the discipline of building these precision aerobats. When the time comes to select wood for a beater, only the good stuff will do.

Thus we wind up with piles of wood whose only fault is a few grams of extra weight or perhaps an imperfect grain. If you are like me, balsa gets stashed in old kit boxes or whatever, and eventually becomes part of the garagesediment. Recently one such pile was preventing access to my workbench and I decided something must be done.

About the same time a shipping supply catalog crossed my desk. I instantly recognized this as a book full of solutions. I've always admired the Sig and Midwest balsa displays. They have a cubby for each stock size, organizing the wood for safety and easy accessibility. Over the years I've tried to get one of those displays but have never been successful. Oh, I could have gone straight to the manufacturer and bought one, but where's the satisfaction in that? With the aid of this catalog I could make one from standard cartons.

But where in the heck would I put it? My shop is a single car garage that has not seen an automobile in more than 18 years. Bicycles, workbenches and machine tools are in a constant floor space rumba. Maybe it's finally time to put my six-foot Mayline table and Vemco track drafter out to pasture. No, not yet- that thing has earned its rent hundreds of times over. Besides, CAD can't do everything. When you need the board, you need it (sentimentality wins again). Progress demanded that I delay this concern.

Turning to the Big Book of Solutions, I settled on 5x5x50 inch cartons. Cardboard boxes are spec'd by their nominal inside dimensions. Most of my balsa is 3 and 4 inches wide and 36-48 inches long, so I figured the larger, longer, box would give me the most design and storage options. Cost was about \$1.00 each in a bundle of 25 cartons. Yeah, I'd have a few left over, but they'd be perfect for storing rolled plans.

I assembled a 4x4 array of cartons, each trimmed to 37 inches long. I used packing tape to bind modules of 4 cartons, and then taped those modules into the 16-carton array. Once bound, I reinforced everything with 2-inch glass fiber strapping tape.

A few words about tape. I know packing and strapping tape is made with the finest polyester and polypropylene backings and employ only the most tenacious acrylic and synthetic rubber adhesives. I also know most of it is made to a price point in a very large developing nation overseas. The bottom line is five years from now that tape is going to let go like the dethermalizer on an F1C. Again, progress demanded that I delay this concern. The long-term fix is to bind the modules with 1/2-inch polypropylene pallet strapping, and that's what I'll be doing- five years from now.

Dang, this thing was big. Finding floor space is not an option- there isn't any. It had to go up. Up where? I could make room in the

rafters, but that would require a ladder every time I need a piece of wood. As luck would have it, there was space above the drafting table between the roof joists. With just a little persuasion it was fit and secured. I've always believed that balsa should be stored horizontally on a flat surface. In its new home, my storage module will provide just that.

Next came the happy job of stashing the wood that obscured my workbench. With 8.6 cubic feet of space, I thought there would be plenty of space for this and most of the other wood I had squirreled away. Truth is, the modules are not very space-efficient. By the time you sort and organize the balsa, only about 2/3 of the volume is used. Glad I have more boxes.

Binding these long cartons into a module makes a fine storage system for your wood. When calculating your needs, I recommend that you double your immediate requirements. I bought my cartons from ULINE (www.uline.com). Their price was great and they were delivered the next day. Don't rely on the tape you use to assemble the cartons. Plastic pallet strapping is a better long-term solution.

- Derek Moran

NEW STALKER

Pro stunt engines
the big assortment of engines, mufflers, spinner, props, spare parts

76RE/81RE
Weight - 370g
Mount size same as 61



- 61 LT-EX
- 61 LT-LS
- 61 RE
- 51 RE
- 46 RE
- 40 RE

The exclusiv dealer:
Kaz Minato
3-12-6 Higashi
Niiza-shi Saitama
352-0002 Japan

fax: +81-48-474-8079
e-mail: bluemax.minato@nifty.com



Classic Nobler by Michael Duffy

Hi, my name is Michael Duffy. I'm 12 years old and a member of the Cholla Choppers club here in Tucson, Arizona. Early last year I was flying an old Ringmaster and hoping to someday learn how to do the full stunt pattern. Some other club members noticed that I was interested, so they began helping me learn. I started with a second-hand Magician, learning Wingovers and round maneuvers. Then it was a borrowed Ruffy with a McCoy .40 Redhead, where they began teaching me Squares and other more difficult moves. Soon after that I was flying a couple of borrowed Smoothies and starting to put everything together.

Because of all the help received from Robin Sizemore, Keith Trostle, Bill Heyworth, Ed Capitanelli, Bob Whitely and Mike Keville, I was soon entering Beginner, then Intermediate competition. To my surprise and delight I managed to win a couple of those—promptly earning a “boot” to Advanced, since they felt it was time to face some stiffer competition. One of the prizes in Intermediate was an RSM kit of the '57 Nobler. This was where things began to get interesting.



Thanks to the assistance of Bill Heyworth, Bob Whitely and Ed Capitanelli, I built and finished the Nobler—my first full-bodied stunt model—in about five months. I learned many valuable lessons about building light and strong. They took a lot of photos to prove

that I built it. Applying the finish and decorations took the longest, and I was very pleased when it won the “Spirit of 64” award at VSC-18. I'm now practicing the pattern with it every chance I get. So far the model seems to perform well, using an OS Max .35S, and I hope to compete with it in the Junior event at this year's Nationals.

I also get a lot of support from my family. We live quite a distance from the flying field, and my mom, Tricia, gladly drives me there at least once a week to practice, and my dad often takes me too. My younger brother, Ryan, is very supportive. Even though I seem to get most of the attention, he is always there for me and is a really good brother.

Thank you for publishing the photos of my Nobler.



Additional notes from Mike Keville:

Young Mr. Duffy was too modest to mention that in addition to progressing from Beginner to Advanced in a very short period, he is also a middle school Honors Student (straight-A average), active in sports, and plays an excellent trumpet in his school band. In addition to all that, he is an outstanding citizen...always polite, kind and helpful, especially at home whenever his single-parent mom needs assistance with household chores. In short—win, lose or draw, we in the club could not possibly be more proud of him. We feel that if he sticks with it, we may possibly be looking at a future National Champion

- Michael Duffy

It's Dangerous by Randy Powell

Some may have seen this plane staking shape on Stuka Stunt forum and here in Stunt News. Pictures of the wing jiggling, somewhat complicated structure (or at least it looks so - it's actually quite simple to built) and general layout have appeared in various places over the last few months. In some ways, it's a redesign of Bill Werwage's USA-1. Sort of. The basic layout is similar with similar aesthetics, but it has numerous changes. So many that it's not really a USA-1 anymore. Say rather that this design was influenced by Bill's ideas and concepts.



The wing is bigger (774 square inches) with a somewhat thicker airfoil. It is probably closer to the GEO-XL, though not the same. Still has the fairly sharp leading edge. The flaps are increased in size about 30% from the original design and are quite thick. Not so much for aerodynamic reasons, but for structural rigidity. The tail moment is considerably longer and the tailplane increased about 22% with most of the additional area going to a larger stabilizer. The overall appearance was supposed to be a kind of updated USA-1. Don't know if I really captured that, but I like it. Weight may be a problem as it is about 66 oz, but I'm hoping that the additional wing area, increase in flap area, and somewhat thicker airfoil will carry the weight. I loved the USA-1, but it wasn't really designed to carry much payload. Built light, it was a killer. Heavy, and it was at best problematic. To start, it will be powered by an



OS46VF. We'll see how that does. It has a removable engine mount system and a very deep cowl that will allow me to switch engines. May end up trying a .65 or possibly even a new .76 in it at some point, though I'd like to stick with a 40VF or 46VF if possible.

If anyone is interested in this design, feel free to contact me.

- Randy Powell



F-105 Thunderchief by Ed Capitanelli

Several years ago Bob Hunt published a construction article on his F-105 Thunderchief stunter. I always admired its appearance and vowed to someday build one. Thanks to the urging of Bob Whitely and my son Kevin, I finally ordered a set of plans from Carstens Publications and began to make it happen.

Construction began with the "Lost Foam" wing process, another of Bobby's contributions. This is a truly innovative process yielding wings that are light, strong and, best of all, perfectly aligned. The model took six months to build, including the finish of butyrate dope plus a few decals. I hadn't initially planned on including the drop tanks, but was eventually convinced to do so by Bob Whitely, and will have to admit they make a nice touch.

I chose the paint scheme of the USAF "Thunderbirds" since



they once briefly flew the "Thud" in their aerial demonstrations and I've always liked it...especially the stylized eagle on the underside. The model features Tom Morris ball-link controls, including carbon fiber pushrods and four-inch bellcrank. Power is a tried-and-true ST .46 behind a 12-6 Rev-Up prop. Total weight is—I am not making this up—just 48 ounces. At this writing (May 2006) it hadn't yet flown, since I was recuperating from recent knee surgery and was just then starting to get my "circle legs" back. By now it may have had its first flights, which will begin on 63-foot (eyelet-to-eyelet) lines,

and if so I'll send an update of its performance next issue.

As noted above, several others contributed in various ways to my finally seeing this project come alive. None of this would have been possible, however, without the love and support of my beautiful wife, Peggy. Without her encouragement, I'd still be dreaming of this one.

- Ed Capitanelli

THE LANCASTER by P.J. Rowland

"Let's hope you have lady luck on your side"

History:

Where do I start? This question was asked many times before the project got off the ground, and now I find a similar dilemma about writing how it was done, hence the joy of the Lancaster.

The comparisons are obvious when you build a 4 engine Stunt ship to the great Paul Walker, and it would be impossible for me to tell you anything about the Lancaster without dropping the word B-17. Although I have never seen the B-17 Fly, either via video or in person, I could identify, like many others with its awe and technical grace. To fly competitive stunt, top class aerobatics is difficult at the best of times, so why complicate it with more engines, larger wing area, and many other unknown factors? To quote Paul "Because I wanted to!"

To be honest I could not pinpoint the exact time I decided to build the Lancaster, I never really considered a multi-engine aircraft before, as I was consumed by modern stunt ships, with bags to torque, adjustable everything and wild tiger painted aircraft, and I was happy there.

We attended the US Nats back in July 2004 following on from the World Championships; there I saw the Berringer Twin and I had a decent chat with Windy Urtnowski about his amazing A26 invader. I was amazed as to how well it flew



and how well it sounded, he had so much enthusiasm for the bomber and the whole idea of flying a Bomber it got me a little excited about doing something similar. Now at this stage the Lancaster wasn't even a twinkle in my eye, I didn't return and draw up plans as some might think, for the record I did return home and build 2 new full blown Stunt ships and buy a new Saito .72.

Our Australian Nationals were being held in July 2005 so that gave me plenty of time to get both these new aircraft in the air and get in some serious practice and perhaps improve further at the Nationals.

I would have to say after only 2 months into the building of these 2 new aircraft (Mid Oct - Nov) I hit a wall. Not a technical wall, or a problematic wall, but an emotional wall. "Why am I doing this?" I was asking, it felt like there was no joy in the building or in aeromodelling. Sounds strange I know, but thinking back it was the reality of returning from a long overseas trip, meeting so many new people and getting new ideas as well as achieving a life's ambition to compete at a World Champs.

There was not a great deal I could do to overcome this "wall" I felt myself up against. We had built many models, made many successful models and it seemed like the challenge was gone, so to speak!

We started to really seriously consider a new challenge, to do

something that had no known elements, to undertake a project that would take my mind off aerobatics perhaps? Some try Classic stunt, some potter around with vintage, I said 4 words that would haunt me for the next year and a half "Let's build a Bomber."

Almost a tongue in cheek comment at the time, but the seed was planted, I mean how hard could it really have been? Everyone knew about the B-17, but twins were being replicated more often than not. We really decided on a 4-Engined Aircraft because Twins were more common and I prefer to build things that are innovative and not mainstream.

The question was asked, "well if you're going to build a 4 Engine bomber, why not build a B-17?" The main reason I didn't was because of the exact reason I wanted to do something different, because it was just that DIFFERENT.

So what to build? The B-17 was one of the greatest bombers of the War, but was it the greatest? Many programs have been made trying to answer that question, but the 2 Bombers that stand out are the Lancaster and the B-17. So for me the decision was easy, we would undertake a Mighty Lancaster.

I was also attracted by the shape of the Lancaster, it was easily recognizable, it looked good from most angles, it was 4 Engined, and the most popular version didn't have Radial Cowls. So it seemed on the surface to be, dare I say it,

easy?

Early December 2004 I became more intrigued about how to do a 4 Engined Bomber, so I put out some ideas on the now popular "Stuka Stunt" forum asking for general information on the B-17 project.

I must thank those who gave me information, namely Brett Buck, Howard Rush and of course Paul Walker, and thanks Howard for letting me know in advance I was going to have 4 times the cuts! Although at the time it was nothing concrete it was just the start of an amazing journey that would end with the building of what is called "Lady Luck" the idea that I was going to build a Lancaster Stunter.

Christmas came and went and before I knew it July 2005 and the Australian Nats were only a stone's throw away. So the Lancaster was put on the backburner, almost forgotten about, as we concentrated on getting ready for the Nationals.

December I was very keen, but by the time July rolled around, it wasn't even in my head anymore. We were so consumed by flying my new model, I had all but forgotten about building the Lancaster we had a successful Nationals, the new model flew well and we enjoyed the experience.

The drive home was where the story really begins. Australia happens to have in an exceptional war memorial, with lots of interesting things to read about. The History of Australians at the war, one of the new attractions to the war memorial, is a fully restored Lancaster that saw active service. It was only a few hours drive out of our way, and I had never seen a Lancaster in the flesh, so off we drove.

Without getting into too much detail it was an incredible feeling, to see it in the flesh, to get a feel for the size, the scope, the complexity of this mighty Bomber. I can remember standing underneath the huge bombay doors just looking up thinking to myself, war was so destructive but produced such an amazing aircraft, and I just HAVE to build this. I took lots of photos

AEROPIPES

Tuned pipes for all makes from .25 to 1.08 Displacement!

Bill Werwage & Randy Smith

**Used by
Champions
Worldwide**

www.Aeroproduct.net

980 Winnbrook Dr

Dacula, GA 30019

(678) 407-9376 Voice

(678) 985-5085 Fax & Order Line



and all of a sudden that spark I had back in December was alight and we were excited again.

The Drive Back home was a good 8 hours and in that time many ideas were sketched, what engines to run, did we want OS .15's? Did we want 4 OS? 25's? At one stage I was so keen to build something impressive that 4 x Saito .72's was contemplated! Other questions such, as what span to have it, how much it would weigh, would need to work out, but the drive and enthusiasm were there.

Once we were home, serious plans were drawn up and construction started September 4th 2005.

The starting place was a little tricky, we knew that Paul walker flew with OS .15s and it was well documented how the original B-17 ran a central bladder tank. The first real task before any serious work was to be completed was to work out the powertrain. Serious thought was given to running the OS .15, however, finding a good version was a little more difficult than one would think. We knew that if this project was going to work, we would need to obtain NEW engines and run them in all the same to ensure quality control as well as uniform performance. The LA OS.15 was available however I talked to many people who said the new versions were not as powerful as the older style engines and if I could obtain 4 original older OS .15s then that would be beneficial. I suppose the other side of the coin was I wanted 4 chrome engines, just because of the look, I didn't fancy having blue engines sitting in the front of a Lancaster!

Hunting around the Internet for new control line engines yielded many different results. It seems that there isn't a market for a control .15 - .25 sized engine with some people saying " we are out of stock" or "we don't carry that".

I had decided pretty early on that I would like to go for a little more power than the .15. The next obvious choice was either a .19 , a .20 or a .25. The choices came down

to only a couple, but in the end the Enya .19 won out. The choice of engine was based on talking to many people; also I personally had run an older Enya .19 in a vintage model with some fairly reliable engine runs.

We purchased the engines brand new from England and had new lightweight Mufflers Custom made by a local control line engine specialist.

Now that the choice of engines was made and the order was placed, tanks were ordered of a specific size and also custom made. We had bench tested an Enya .19 and worked out the minimum capacity for the tanks and were built to those specifications, uniflow tanks for those interested.

On the tank setup, I had a lengthy e-mail from Paul about how he ran the B-17; my original thought process was to replicate the Central Bladder tank. He mentioned that using 4 separate tanks would be a much simpler answer to how to fuel these engines, taking appropriate fuel out of each tank, would be easy to replicate provided RPM and engines were setup identical.

So now we have the solution to a complex problem, work out how much you need, fuel each one, have each engine running its own little setup, and as a whole, in theory you would get them to work as efficiently as one.

Construction:

There is no real plan available for any modern stunt ship when you design it yourself, there are however many experts who have tested and done the "numbers" so you know you have a reference point to begin with. The Lancaster was no different in approach to any other stunt ship I've designed.

The difference here was going to be weight. I had a very accurate figure as to what the B-17 weighed.

I had worked out how much bigger it needed to be compared to what I was flying currently, the math was fairly simple as far as how much wing area we needed versus how much weigh we could carry.

I had no real intention to build a scale competitive version of the Lancaster, I figure it was no different to the Mustangs of past or the P 47 a "semi-scale" fully aerobatic aircraft.

First real construction began on the wing. I wanted to build it a little bigger than the B-17 because I had a little more power at my disposal and I was not 100% sure what it would end up weighing (who is!?).

Wing area of the B-17 was around the 890 Sq. mark with OS .15. I opted for larger and took the figure of 1150 based loosely on the fact I wanted 30 % larger aircraft.

I don't want to write about the minute details of Glueing A - B. However, I will explain the things we did differently to overcome the strain of the weight

Wing design, for most of our stunters we use the standard traditional sandwich style, this proves light, strong and quick to build. Our technique here is similar to how others do it by simply using 4 laminex templates sandwiched between the ribs which are 3/32. For the Lancaster a new root/tip template needed to be designed, whereby would provide lift, and performance properties we were seeking. Once the templates are finished, I belt sanded the final product and notched out where the carbon fiber needs to go.



Strength is very important in a project of this scope, so here for main spares we went for 3 mains, which are all carbon fiber. The three spares are front/center/rear, with the front being laminated behind a 5/16 x 1-inch balsa block, which helps to form the leading edge. Center / rear spare provide all the



strength of the wing. Longitudinal, they are full span carbon spares of 5/16.

The bellcrank is a 4 " carbon bellcrank being attached to both front and rear of these 2 carbon spares, which allowed in a simulated pull test over three times more than the regulation pull.

Pull force was a big issue for us during the design stage, and as a result it is a little over-engineered but the thought philosophy at the time was that we wanted to be a little stronger than a little weaker. All the control systems were custom made with the horns needing to be a little longer than we would normally use, this allows for greater control authority. All pushrods are carbon fiber and they are fully adjustable with the rear hatch for control ratio adjustment.



Engine fitting was another problem we needed to overcome with vibration being a big factor in testing. Once the wing was framed up and sitting in the jig we proceeded to mount the engines. Engine bearers are 1/2 inch x 3/8 hardwood. Once we worked out the spacing and the length of each nacelle the bearers were notched out to fit the holes of the carbon spare. They were recessed into the main wing spares that were fitted with wrapped .002 carbon veil strands for extra security reinforcement against vibration or fatigue.

The engine bears use no front formers. For many years we have successful braced the engine with carbon fiber formers. Tanks were fitted off next, engine holes drilled with no offset on the engine at all.

The front engine bearers also house the front undercarriage

assembly. If one looks at the Lancaster the main landing struts are very close to the engine and exit out the front two nacelles, This provided a real design challenge with 3 different legs being made and tested, ranging from wire, to carbon, to wire with carbon. In the end we opted for the lightest method, and also tested to be the strongest with a 1/4 inch carbon arrow shaft being used. Simple installation was drilling a hole into the engine bearer and slotting the shaft into this hole. Two legs exit under the nacelle, and 3 inch wheels are fitted off with 2 rear leg supports as per the original Lancaster undercarriage.



Flaps were built using 2 small carbon arrow shafts 1/4 inch diameter that run the full length of the flap, which provides strength against flexing. We used the same technique in the elevator with the spars running full length. The ribs of both flaps/elevators are also of geodetic construction.

Finish:

The finish of the model is nothing different to other models I've finished in the past. Size doesn't change how you finish a model off. My technique is fairly standard and it's very similar to others who finish top class stunters.

I do want to stress the point on finish, that the main difficulty that I found was general sanding. When sanding a model that has such a large surface area, the old arm gets very sore!

Again I don't wish to make a "finishing" article either as that has been done in detail, however some of the points I want to point out I feel were relevant.

One of the main features of the

finishing process always is canopies. Where does one source specific sized canopies for the Lancaster? This was a problem that I was not 100% sure how to overcome. There were several solutions that I tried, one was to try and buy canopies that were close to what I wanted and try to get them to fit. When we build an F2B Model, generally there is only one canopy, however with a Lancaster there are five in total: Pilots main Canopy, Front bomb aimer, Front gunner, Mid-upper gunner, and rear gunner.

I have seen other Semi-Scale jobs overcome this problem with painted canopies and for a long time that was going to be the solution. When I mentioned this to a fellow Aerobatics pilot who is known for expert finishes Doug Grinham, he mentioned that he creates his own canopies by molding them over a wood female mould. All I needed to do was construct each of the canopies out of balsa, sand them to a complete flawless finish and he would "pull" the canopies out of the same plastic material used for all canopies. As the model was not yet finished I worked out what size each of them needed to be, what shape I wanted and proceeded to carve each individual canopy out of balsa. Looking closely at photo references of each canopy it took a solid 4 weeks to carve and shape all five moulds. I was pleased with the outcome and handed them over to Doug to manufacture the plastic canopies, several weeks later I received the canopies with spares of each incase I made an error in cutting or fitting. I must thank Doug for his efforts, even though it was only a small part, it was an essential component all the same and he did a very professional job.

The finish was basic and lightweight, tissue / dope method. I find spending as much time as possible on the sanding ensures the best finish which is nothing new to any reader.

Another challenge we faced in the finishing process was making each nacelle blend perfectly into the wing so all you can see is the wing,



then a smooth transition into the nacelle. I would love to say this was as easy as carving out the moulds for the canopy, but this part took the best part of three weeks just on the smoothing out of the back of the nacelle. We build up as much into the wing with balsa and the rest was filled with sandable filler, the filler needed to be applied several times in several sessions before we were happy with the finished product. Getting each one to be a perfect copy of the last was the tricky part, however it was completed with perseverance and eye for detail, I feel the finished product of this nacelle blend speaks for itself.

It took many weeks of solid sanding and prep work before it was ready for primer, but once it was ready, it was cleaned down with wax and grease remover and white primer was painted on light.

I prefer to spray a soft coat of primer over it, then re-inspect the surface under a suitable light for any imperfections that one missed during the finish process. In this case there was not too many however they were there, easy to correct, I just sand it back with wet and dry 1000 and fill any holes or imperfections, re-prime and do it over again.



I had a very good idea of how I intended to paint it; traditional Lancaster color scheme would do the trick. The main part I felt the need to change was the choice of colors, in my experience a very accurate traditional Wartime color scheme with natural colors looks a little dull. Although the paint selected looks very similar, I wanted to have a little more of a stunt feel, so more vibrant greens and

browns, were selected. I am a firm believer in doing things properly, and efficiently. hence I've had the luxury of a close friend of mine who owns and operates his own Sign writing company. For the Lancaster we looked closely at replicating the roundels, and Squadron Markings as well as designing the nose art, keeping it original where possible but changing what was needed.

As I was able to create any shape nose art possible. This was one of the hardest choices needed to be made from a design point of view. I had several possible choices. Do I copy a previous design? Most of the designs on the Lancaster were war related, like dropping a bomb with words "to Germany with love." I decided I wanted something that reflected stunt, or to give her a name, the name "lady luck" came by almost by accident. I was talking to a fellow local stunt flyer and I mentioned that the project was going ahead and would be ready to fly within 2 months. He said, "lets hope Lady luck is on your side." I thought about it and it stuck, what else is a lucky charm? A 4-leaf clover so it seemed fitting that it was VERY stunt related and she had a name.



One of the other changes that were made was the roundels on the wings. I realise that there are some purists out there who would shake their heads at changing an icon of aircraft. The wing roundels on the Lancaster were red circle / Blue circle. We drew up both sets on the computer and looked closely at each, and took the option of including the white outer circle instead. This served two main points. Number #1, it allows it to

stand out and be a little easier on the judges eyes and Number #2, it aesthetically matches the roundels on the side of the fuselage, which was important to me.

Painting an aircraft of this size one must be VERY aware of how you apply it, as paint alone can add a good percentage of the overall finished weight. Like most do to reduce weight, we chose to apply the lightest color first, being the light brown. One thing that was a little time consuming was to tape up over the primer only the area's that were intended to be brown, then paint. Once good coverage was achieved, the green followed suit, same procedure: Taping up all the brown camouflage and just painting the green leaving no overlap.



Painting the black was again no real hassle, much easier than the top surface, just taping up the top so as to ensure no overspray, the black was applied and the colors were all painted.

Ink lines were added next to a clean surface, for this I used a specialist pen .04mm tip dia, whilst using .05mm dia for the "rivet" lines and to finish I used a 1.0mm for the "walk here and Walk forward of this line" sections. Underneath ink lines were done with a 1.0mm White paint style pen.

Final work was adding 2Pack clear coat, adding all my linkages, taping hingelines, soldering the tailwheel on, buff out and then fly!

Flying:

It took a good 2 weeks before a day came that we felt was calm enough and were able to fly. I was hoping that the day we selected would yield no one down at the



field so we could get this monster in the air in peace, alas this perfect Saturday was not the day! There was 10 or so lucky people who were at the field that day and witnessed its maiden flight. I would be lying if I were to say that I was not feeling nervous, sure we had test flown many full blown stunt ships before but none of this level of complexity or with a crowd so interested in the outcome.

We connected up the starter box, primed each of the engines and proceeded to obtain a setting on the ground before the flight. All 4 Engines started with relative ease and we choose the engine rpm of 10700 constant for each, or as close as possible.

The general feel at the time was that the model would take off and fly fairly easily, but the main question I had that needed to be answered was, how aerobatic would she really be, and how much pull would it exert?

Once the engines cooled down from the ground setting, we fuelled it up, took it over to the circle, cleaned the .021tho lines and got ourselves ready for a historic flight.

By this time the interest in the crowd was growing and as a result my nerves were a little higher, but this was no time to show any trepidation, act as confident as possible without doing anything silly! We did the same procedure as we had practiced so many times, connect up the 4 plug jacks, prime the engines and hit it with the starter. The 4 engines roared into action, I checked the Rpm once more, everything was set - out and as I walked to the handle I had a rye grin as I heard them all sing.



I gave the signal for launch and with a crowd of onlookers slowly rolled the Lancaster for under $\frac{1}{4}$ of a lap then took off, much smoother than I had ever hoped. To my surprise I heard a cheer and applause from the crowd! I was not sure at the time but were they cheering because it didn't crash, or because it flew? Later I was told the cheers were for the impressiveness of the takeoff and the general sound of the engines.

That first flight, everything felt really smooth, too good to be a first flight, it was close to in trim, still needed a little flap tweak, some tip weight, but that's to be expected. I did several laps at level flight, adjusted my handle in flight a tad to get a nice feel for level and did a few soft climb and dive maneuvers. This was amazing, really unbelievable as to how maneuverable she really was, I decided to push the limits a bit more and do some wingovers, each one got a little sharper than the previous. I was very surprised that the model hung out on the lines, with little trim, each engine sounded like they did on the ground, in harmony and putting out more than enough power. A few more laps passed and I was starting to feel the strain of flying the bomber, the pull is something that is very difficult to describe. Its similar to flying in very strong wind when the model winds up on the 3rd loop and you have already flown 15 flights in the day, but this is during level flight. The one good thing is you have lots of confidence that its strong, with plenty of line tension but this wasn't a scale job, the time had come to do some aerobatics, no sense in waiting any longer. Even during the 1st flight I decided to see if the last several months were going to be a success or a failure, so I braced myself and did a loop! The crowd cheered again and I had done it, a loop, now the confidence was there, we had done it. Next lap around I did another loop, and this time took in the feel of doing the loop, very controlled quite maneuverable and graceful. I was thinking, well I've

done 2 loops I better unwind these lines, so next lap around half loop, into inverted she went. Tracked really nice even inverted, although it was evident that I really did need to adjust the wing level. Only a few laps inverted were done and then straight into 3 outside loops much to the amazement of those watching. With a few minutes left till the fuel was due to run out, I rounded off the flight with seeing how it would do squares and Figure eight's, and each time I did a maneuver I felt more confident I had done it, built a competitive 4 Engined Stunter.

The big question still to be answered was what she was going to do once the engines cut, was it going to struggle to fly around on one engine? Would it take several laps to quit? The answers soon came as engine #3 shut down 1st. Engines # 1 & 4 shut down pretty quickly within a lap of each other. Now I was flying on # 2 engine alone and it stayed this way for a good 7-8 Laps, even still I was surprised as to how easily it still was airbourne. This shut down sequence was exactly what Paul walker advised me he found in the B-17 project. Numbers #1 & #4 which are the outer 2 engines were very close, the number #2 engine (just inboard of the Fuselage) Shut down quickest, with the Number #3 engine quitting last. Once the engine quit I softly landed it and got a rousing applause from the onlookers. Now that I've have many flights, it's fairly reliable to get all 4 engines to cut within a lap or a lap and half just by taking out various amount of fuel from each nacelle.

That's how the 1st flight of the Lancaster panned out. Someone who was watching when I landed could not believe that this was its first flight ever saying " you've been down here all week haven't you" But that's just it, the success in my mind was not that it worked, but worked VERY well.

Now that the Lancaster is trimmed out and flies exceptionally well I've done close to 100 patterns with her, each very reliable and sharp. I'm pleased we went



through the joy of designing a 4 engine Stunter, going through all the heartaches and problems had there own reward.

Where does this leave our hobby now? Paul walkers B-17 was the 1st of its kind, a highly competitive stunt ship, it only ever takes one person to break the boundaries of what's possible. I suspect 4 Engined aerobatics aircraft will never dominate the stunt scene in the same way pipes, or 4 strokes have in the past, but there was a time when .46 sized engines were the norm but it only took someone to do something different to inspire change.

Paul Walker and his B-17 inspired me, I hope the Lancaster does the same for someone else.

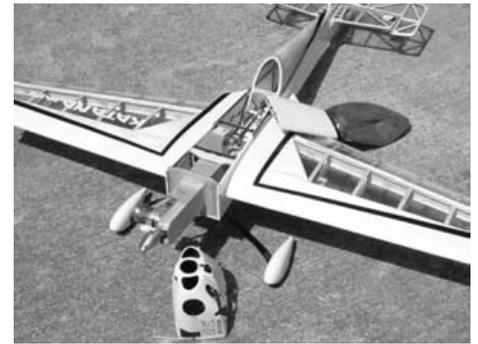
Enjoy stunt.

- P.J Rowland

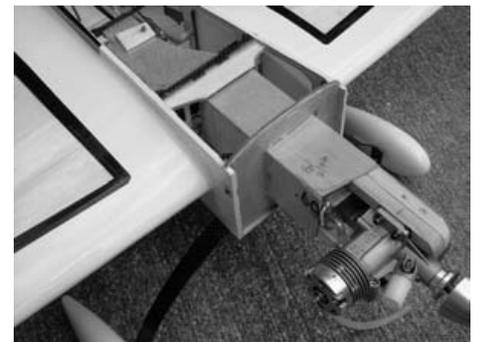


The Mini Katana A Case for "Long Tailed" Stunters by Frank Williams

After mention of this project on the web, a lot of people were very interested in the mods I had made to the R/C Electric 3D Mini Katana. This plane is manufactured by "Precision Aerobatics" and distributed by Atlanta Hobby Products for \$119.00. It's designed for R/C electric 3D flying, but I have converted it to control-line, and it flies a pretty descent pattern for a small plane. My real intent for this project was to investigate a plane with an extended tail moment arm.



the first hard corner. I added some 0.070" carbon rods top and bottom spanning the center section and out about 6 inches into each wing. This was done along the spar line. Additionally the main tube spars were glued together. This effectively made the wing not removable and resulted in a stronger structure I think.



The first fuselage former was doubled with a sheet of 1/16 plywood and the motor / tank box was inserted through it. One could have used a radial mount system with a separate tank box behind the former. Lots of ways to do the job, with just a little extra beef added to the nose. The location of the bellcrank was pretty well set by the tube spar location. It was tempting to mount the bellcrank off the tube, but it just wouldn't have left room for the tanking.



These laser cut Chinese imports are really pretty nice. The engineering is terrific. The electric aspect makes it well suited for the lighter weights needed for C/L, with light weight fiberglass cowl (2.2oz) and nice fiberglass wheel pants. The construction is great and the prices are attractive.

This modification is not necessarily a beginner's project. It is a bit tedious to get the swept trailing edge flaps hooked up, as well as beefing up the nose for a glow conversion. I may have technically overdone things structurally by not wanting to have the plane fold in



EXEMPLARY STUNT PLANES
World Class Designs by World Class Flyers

- **Classic Legal U-2** \$165
Warburton
- **Blue Pearl** \$190
Henk de Jong
- **China Clipper** \$200
Claus Makis
- **Sky Writer** \$215
Xaing Dong Zhang

Kits are laser cut with jigging built in,
CAD plans, molded parts,
Ships USPS Priority Mail for Domestic orders.
Will ship Internationally.
Allow up to three weeks for order delivery

2632 Edgewood Lane • Lake Charles, La 70605
337-477-7948 • steve.stunt@yahoo.com
Call Steve Hand for more information!



The pushrod to the elevator was made with a "Y" at the elevator and the two stock carbon horns were used. This setup will make sure that the control load to the elevator will be balanced. Little snap-on ball links were used at the elevator. The flap hook-up to the bellcrank used a bunch of ball-links. Each flap horn had its own ball-link on the bellcrank and snap-on links were used on the horn connections.

Flying weight of the plane was 34 oz., with an OS 25FP. I've got 1.5 oz of tip weight and ounce of nose weight and a stock muffler on the engine. I've been flying it on 55ft. of 0.012 stranded lines. It probably could use a bit more power, like a .35, but I may first try flying the .25 on higher nitro fuel. The plane flies quite well. Its very stable which is what I was after and also it has a very good tight well damped turn.



Almost any plane of acceptable weight will turn "tight" enough for our standards. What separates a good plane from a dog, I believe, is the plane's ability to stop turning. In other words, when the controls are neutralized, does the plane overshoot its heading or does it produce a nice smooth exit to the square corner.

My main area of focus in stunt ship design has been to concentrate on pitch damping. These ideas come from an area of airplane design called "dynamic stability". We normally think about "static stability", i.e. if a disturbance occurs to the attitude of the aircraft, is the reaction produced directed to reduce the error?. Dynamic stability is concerned with the "quality" of this correcting response.

Picture a lead weight on the end

of a spring. If you pull it down and let it go, it will bob up and down till it finally comes to rest again. This system is statically stable in that the spring produces a force to try to return the mass to its neutral point, but dynamically it's a different story. Dynamic stability doesn't come just in just black and white like static stability. It has many shades of gray. The spring mass system is stable, but without some kind of damping the long term bouncing of the mass isn't what we would want for an airplane to do if disturbed from equilibrium. Damping to a mechanical system is accomplished by a mechanism that produces a reactive force opposite to the current direction of motion.

Longitudinal dynamic response of an airplane can be controlled by numerous geometric properties of the airframe design. The cg location, the aspect ratio of the wing, the inertia of the airframe, the size of the tail, and the length of the tail moment arm. The ability of the plane to exit a hard corner without excessive overshoot is primarily measured by a term called Cmq . This term, pitch moment with respect to pitch rate, is expressed as

$Cmq = -1/2 \text{ at } V (l_t / c)$ where l_t is the lift curve slope of the tail section, l_t is the length of the tail moment arm (cg to $1/4$ chord of the stab/elevator), c is the wing's mean aerodynamic chord, and V is the term called tail volume coefficient, where

$V = (St / Sw) (l_t / c)$ with Sw equal the wing area and St equal the tail area.

My main motivation for writing this article concerns V . We hear a lot about tail volume coefficient and have grown to think of it alone as the key term in airplane pitch stability. What we have overlooked is that Cmq (the key dominant term in pitch damping) is really a function of V times l_t/c . Pitch damping really turns out to be a function of l_t squared. So comparing one stunter to another we should use a term like V times (l_t/c) as the judging criteria. This says that a plane with

a longer tail moment arm should be one that has superior square corner damping.

So why don't we see more longer tailed stunters? We have Atkinson's Laser, and the long tail French creations, but few others. The reason is that with exceptionally long tail lengths, there appears to be loss in the tightness of the turn. As it turns out, the very thing that makes the plane well damped is killing the turn. Remember, the beneficial damping moment, is being produced by a force that opposes the current direction of motion. So, as the longer tail is swept through its arc, the tail is seeing an angle of attack that is opposing the elevator's force. We need something that reduces this effect during the turn and restores it as the controls are neutralized.

Back to the Mini Katana. The interesting thing that this plane has is an elevator with big counter balance tabs. These make the tail look almost like an all flying tail (give or take a bit). Generally we have found that a tail like this is too sensitive for normal applications. With the longer tail, a tail like this may be just right. An all flying tail or one with reduced stab/elev ratio might just be the ticket for long tailed stunters.

This area of stunt ship design needs more experimentation. The Mini Katana, for me turned out to be a good test bed as well as quenching my desire to see what the electric 3D ARF's had to offer.

- Frank Williams





Odyssey of the Mustang Big Beautiful Doll by Matt Neumann

What?!?!?!? Mr. Stuka made something other than a Stuka! (I can just hear all the thunks from everyone's jaws dropping. But yes, I can and did build something different.) How did this come about you ask? Well, this is the Mustang's story.

A little over two years ago I decided that it was time to build a classic stunter again. I do have two surviving Don Still's Stukas, but their controls are completely worn out. Hint: do not use the old Top Flite control horns without bushings. I figured it would be too much work to replace the controls in the Stukas so it was time to build another plane. But what plane to build? When I make a plane I always have several criteria that I try to meet.

1: Try to make the next one better than the last.

2: Try to make the next one so it pushes my skills just a little bit more. This can mean a fancier paint job and/or new building techniques that I have not done in the past but would improve upon the planes quality or appearance.

3: Somehow make it unique. I like to have each of my planes have their own personality as it were. For example, I don't like to do the same paint scheme twice.

Ok, so how did the Mustang get chosen? Well, I had already done 3 Don Still's Stukas in the past. And although all flew well, they did not have the challenge that I was looking for. I also wanted something unique, something that you do not see on the flight line that

often. Don't get me wrong, I like the Noblers, the Orientals, the Ares and the like, but those are much more common. I wanted something that would stand out from the crowd.

One of my all time favorite planes happens to be Al Rabe's Snaggletooth Mustang. I have always admired that plane from the pictures I have seen of it and have always wanted to have one of my own. One year at the NATs I discovered that PAMPA is selling the Mustang III and Bearcat III plans, so I quickly snatched a set of each. The Mustang III is not Snaggletooth exactly but close enough, something unique on the flight line and, best yet, it is classic legal.

The biggest hiccup at the time I got the plans was how to make the ribs so they line up right for the dihedral in the wing. I could do it from scratch but it would be a lot of work. So the plans stayed rolled up in storage until a later time. Then one day I came upon Tank's Hangar Service on the internet who just happens to sell laser cut ribs for the Mustang III at a reasonable price. So my biggest obstacle had just been overcome.

So, lets see: There are not too many Mustangs around so it would be unique. It would challenge me in building. I always wanted to build one. I wanted to build a classic plane anyway. The ribs are reasonably priced. It appeared that this thing fit my criteria to a "T". The Mustang it was, and I sent off my check for the set of ribs.

The plans:

I have to mention something about the plans: They are fairly plain. There are a fair number of places that, shall we say, "are at the builder's discretion". This means that you had better have made a few full bodied stunters before you tackle this one. It would be a good idea also to look at a few detailed plans from people like Windy or Randy Smith as these will give you good ideas on how to fill in the blanks.

I would also recommend that you do some of the techniques

that I will describe on "simpler" planes first. Although I have done the techniques that I will describe on my other planes, this one takes those techniques one step higher. On that note, the rest of this article will be on what I did to fill in the blanks.

The wing:

Since the ribs were laser cut, they are designed to be built on the rod system. They have precut holes for 3/8" rod. After looking around, I finally found some aluminum brake lines at the local NAPA store that were long enough. I do not remember the part number but I do know that I had to cut the flared end off with a pipe cutter which is no big deal. I wanted to use aluminum tubes because they are much lighter than the steel rods that I kept finding elsewhere.



I made one slight variation to the way the landing gear is mounted in the wing. I got this idea off of one of Windy's plans. I made a mount out of 3 pieces of 1/8" birch plywood. One piece serves as the base while the others were glued to the base with a 1/8" gap in between forming a slot for the landing gear wire. There is a hole drilled in one end of the slot for the landing gear wire to go up into the wing.

Here is where the modification comes into play. The rib set comes with two pieces of 1/32" plywood doublers for the ribs to which the landing gear block attaches. I made a second set so I can attach the doublers to both sides of the mounting rib. I then made a set of balsa doublers to thicken the normal 1/16" balsa rib to the point of being the same thickness as a piece of brass tubing 1/8" ID. I then



inserted a piece of brass tubing in the bottom and top portions of the rib making sure to keep them in line with each other so the leg of the landing gear will go all the way to the top of the wing. If this portion of the landing gear leg is too short, it will oval out the mount causing the landing gear to wobble in the mounts. The method I described ensures that there is a long portion of the leg in the wing to help minimize the ovaling effect.

Other than the modification to the landing gear mounts, the wing builds up like a normal wing would in the rod type of jig. Just one word of caution: The plans show that the inboard wing is $\frac{3}{4}$ " of an inch longer than the outboard. No problem I thought. I will just make each of the spaces between the ribs just a little bit longer on the inboard than the outboard. If you do this, you will wind up with your landing gear on the inboard about $\frac{3}{8}$ " farther out than the outboard. This will not be noticeable until you paint your wheel wells later on. If that happens, you get to do some very creative thinking on how to mask off the wheel wells so this flaw does not show. If you want to keep the wheel spacing equal, add $\frac{3}{4}$ " to the portion outside the cuff on the wing keeping the cuff the same distance from the center of the fuselage.

The fuselage:

The only real difference in the fuselage construction that you will notice is that it is wider than normal. That is not a problem since you can easily glue your engine mounts to the plywood bulkheads and then fill in the gaps between the engine bearers and the sides of the fuselage and each other with $\frac{1}{2}$ " cross grained balsa wood. Al does not do this, but I also laminated $\frac{1}{32}$ " plywood doublers to the nose of the plane for strength.

Al's later Mustangs became more and more molded in their fuselage construction. However, I took a look at the way the plans showed this one and decided it can go together very much like a "normal" stunter. The formers in the back were just made up of $\frac{1}{8}$ "

by $\frac{1}{4}$ " balsa strips and the sides are flat. So the center section of the fuselage can go together like any other "normal" stunter. The plans showed blocks on the top and bottom, but I decided it was best to try to mold these pieces.

The top and bottom of the fuselage were molded with 3 pieces of $\frac{1}{32}$ " balsa laminated together. Although I have molded top and bottom pieces before, the compound curves were new to me. I had to take out small triangle pieces lengthwise to get the balsa to lay down right. With the laminations, I took out a small triangle piece at different locations around the mold so the joints do not overlap. The idea was to give a stronger piece by not having the joint in the same spot from one lamination to the next.

In the past, I have made my mold forms out of blue foam and then reinforced the bottom with $\frac{1}{4}$ " plywood. Because of the compound curves on the Mustang, I had to reinforce them with 1" thick pieces of pine to prevent the mold from bowing.

I would also add a word of caution. Put a piece of waxed paper on the mold before you glue the three pieces together. I had a little glue soak through the innermost layer of wood and glue some of the piece to the foam. I was able to get the piece free but it would have been easier if the waxed paper was put on first. The glue I used was some thinned yellow wood workers glue.

Something not to do is what I did on the cowl. I again glued three pieces of $\frac{1}{32}$ " wood together except this time I put some carbon fiber veil in between the layers. I also used some epoxy glue to glue everything together. Although this produced an extremely strong cowl, it was also a bit on the heavy side. Next time I would just glue three pieces together using thinned yellow glue. This should prove to be adequately strong, yet lighter than the original.

Cockpit:

I have never really made a cockpit for a stunter before, so

this was going to be interesting. I decided to make the cockpit seat out of $\frac{1}{16}$ plywood. As it turned out, after I made my cockpit and installed it, Ron Burns posted a piece on the Stuka Stunt Forum on how he makes cockpits that are very light. He of course placed it on the forum AFTER I made mine. As a result, my plywood seat is not exactly the lightest ever made.

Ron makes most of his boxes and seats out of the foam that drafters use to make models of houses for clients. You can get this stuff at office supply stores. It is extremely light and apparently durable enough to hold up to the vibration of stunters. This is the method I will be using the next time out.

I made my instrument panel out of three pieces of plastic, two white and one clear. I drilled holes in one of the white plastic pieces to represent where the instruments go and painted it flat black. The other white plastic piece I painted gloss black and then scratched in the tick marks for the dials through the paint revealing the white plastic beneath. I then glued the three pieces together sandwiching the clear plastic between the two white plastic pieces. The clear piece then gives the instruments their glass lens effect. Unfortunately, this method of making the instrument panel is heavier than I wanted. Next time, I will substitute the two white plastic pieces with the foam. I will also use the foam to make the little boxes and the like that are usually scattered about in the cockpit. Overall, this should lighten the cockpit up a bit over the balsa, plastic and plywood cockpit that I made for my Mustang.

Stabilizer, elevator, rudder and fin:

There really is nothing special about the tail surfaces in terms of construction. They are made up of light balsa just like any other tail surfaces. I will add a little note that I put a strip of hard balsa at the trailing edge of the elevators and rudder to help prevent the normal dings and dents that they can get over the life of the plane.



Fillets:

The Mustang has a fairly large fillet for the wing and fuselage. The best way I know of, and Al made this suggestion, is to make it out of balsa. This was the first time that I had made balsa fillets. To me it really was not too difficult to make. However, make sure that all the surfaces are glued down to both the wing and the fuselage. When I fitted the fillets to the wing, I wound up with some air pockets that were not glued down. These places tended to pop up forming a bulge when I painted them. The only choice I had at that point was to slit the bubble and put some instant glue in the slot and glue down the bubble. Most of the time, this resulted in an added bit of filler to fill in the cavity left behind.

The balsa fillets were the best way to go for large fillets. However for normal size, 1/4" or smaller radius, I think that the normal putty (or Epoxolite or similar) would be the best way to go since I had difficulty carving the balsa to that small of a radius.

Landing gear:



Since this was an Al Rabe design, it would not be right unless it had the shock absorbing gear that he developed 30 plus years ago. This gear is rather neat when you get it working right. I did get mine to work well but it took a lot of time and lots of little tweaks here and there to get everything lined up correctly. Al has since come up with a way to make this type of gear that is much simpler to do. He published it in the November/December 2005 issue of SN. If anyone is interested in making a set of gear like he does, I would suggest you dig up that

article.

One thing about the gear: It is taking me a little time to get used to the clunk that I hear when I pick up the plane. It is caused by the gear extending and hitting the stops. I keep thinking something has either fallen off of the plane or something broke.

Something else I did differently was to face the wheels to the outside instead of the inside like Al does. The real Mustang has the wheel hubs facing out toward the wingtips. I bent the center wire of the strut system to form a wheel yoke similar to the real plane. This was done simply for looks.

This basically covers the actual building of the plane and some of its little quirks.

Now on to the painting:



I used a typical dope finish from the ground up. However the paint scheme I chose was not your typical paint scheme. One thing about doing a Mustang is that there are lots and lots of paint schemes to choose from. With the Mustang you do not have to go military if you do not want too. However, for everyone, there is always some paint scheme that will always stick out in their mind that just defines the plane for them. For me, it was the paint scheme of John

D. Landers "Big Beautiful Doll". For some reason, every time I think of a Mustang, I think of this paint scheme first. So I wanted to paint my plane like his.

However, I had to ask, "Could I figure out a way to do the checkers and keep my sanity?" Well, as I said in the beginning of this article, I wanted a challenge and I got it. Little did I know the biggest challenge to my patience was about to begin with trying to mask off all of those checkers on the nose and wing tips. I obviously did it, and it ONLY took about 45 to 50 hours total to do the nose and wing tips. Someday I will make a 1/24 scale static display model of the Mustang with the same paint scheme. I had thought of doing it right after I finish this one. However, I think I will wait and do it at another time. Something simpler without too much masking seems like a good idea right now. I will go into detail in a future article on how I did the checkers specifically.

A little side note, when I was working on the nose section, I was about 1/2 to 3/4 of the way done when some door to door salesman came knocking. Let me just say I did not have the most pleasant personality at the time.

I cut the mask for the name out of some Frisket material. I then painted the whole thing red. Later on I came back with the ink pens and put the black on over the red freehand. The insignias I had put on a copy machine and enlarged as needed and then cut them out and used the paper cutouts as templates to mask around. The same goes for the unit markings on the side of the fuselage.

The panel lines were your typical ink lines times a bunch. These are not really hard to do. You just need to take your time. I will just say this about panel lines, I like to use a fairly small pen, say a #00 for these. As a personal choice I do not like thick panel lines. However the thick panel lines are easier to put on and I would recommend them to the beginner until he gets a feel for them.



One thing about a semi-scale plane is all you have to do is take a look at the full size plane (or pictures or even plastic models) to figure out where to put the lines. Do not be afraid to make special templates for certain areas. In the Mustang's case it would be around the wing fillet on the fuselage. I made mine out of thin cardboard.

At first I was thinking of doing the lettering with Letra sets. However, in talking with Al, I found out that Tank's Hanger Service sells custom lettering sets. I ordered the ones that Al uses on his Mustang. They are reasonable and very easy to use. Although they are laser cut out of Frisket material, I just put a little removable stick glue on the back and then put some masking tape along the edges to hold them in place. I then sprayed with low air pressure and a fairly thick paint consistency which resulted in a very crisp marking. I highly recommend adding lettering to semi-scale planes as this contributes considerably to the look of the airplane.



The numbers were done entirely in ink. I found some templates at the local office supply store that were of the right size and type. I then just traced around the template and filled in the spaces with ink.

My AMA numbers were a bit of a challenge however. I did not want to put them just any old place because they would look "wrong". In bouncing around some ideas with Al, I decided to take the smallest ink pen I could find, a number 6/0, and put the outline of the numbers on the fuselage under the stabilizer. The numbers are now "there" but not obtrusive and best yet, the plane is now legal for competition.



Flight:

Ready for flight the plane came in a little heavier than I had hoped at 57oz. However the plane with the PA 65 seems to want to fly quite well. As of this writing I have only had it out several times but it has shown me that it can turn a fairly good corner. It's only real major quirk is that it tends to come in at me on take off. This is undoubtedly caused by P factor with the high angle of attack. However, I have figured out how to minimize the effect.

I fly off of grass and use a stooge when no one else is around. On my Stukas I can give them full up right at take off from the stooge. However, you cannot do that with the Mustang. I have found that I need to hold neutral control when launching. This just causes the plane to have a gentle climb out after launch. This is the method that one would use on a hard surface at take-off anyway, so probably it would make no difference to most people. On grass, when I give it full up on launch like I do on the Stukas, the plane will turn in on me and start to free flight across the circle until some fast feet moving backwards catches the plane. Of course when this happens, I get a huge adrenalin rush and my heart stops for a few beats.

The only other real trim change that I noticed from my other planes is that the Mustang needs more control deflection. This is not a big deal since all it basically requires is for one to widen the handle spacing. This is caused from two points, 1: the plane was designed to need more deflection in the first place and 2: it is a little bit on the heavy side.

Conclusion:

I would like to thank Al for all of his help through this project. He and I have had quite a few conversations on what should be done. Although I have always taken his input seriously, I have to admit that sometimes I did things a little bit differently than he does. This was only an attempt to do things better or in most cases just a personal preference. Did they always turn out right? Not all the time but that is part of the fun in building something different. I know I must have had him scratching his head and rolling his eyes on more than one occasion.

Overall this has been a real fun project. I wanted something different and challenging and I got both in one package with a completely different air frame that was a little bit more of a challenge to build and certainly a real challenging paint scheme to boot. I could not have asked for anything better.

However, it does leave me with one problem. Since I like to outdo myself with each succeeding plane, how do I top this? Suggestions can be made. I am sure I will think of something. (A bent wing Stuka? Nah, it has already been done and is being done again.)



- Matt Neumann



Painting and Finishing by Phil Granderson



My current finishing method is Certified or Randolph color with automotive toners added to get those colors not available off the shelf, talc filler/sanding sealer and final coat of Automotive Clear coat. The result has been 18/19 points under some very critical judging.

Here's the process:

Sand all bare wood smooth with 320. Apply 2 brushed coats of Clear thinned 30%. Sand lightly with 600. Cover all wood with .02 oz. carbon veil. Apply 2 more brushed coats of the same clear mixture. Again sand lightly with 600.

Pour some full strength clear in a large container with a good sealing lid. Now dump in as much Talc as will stay suspended in the dope (allow about 10 minutes to settle) Next, very important step is to mix

in a small amount of Black dope, just enough to make a very light gray. The very best Talc I have ever used comes from Tap Plastics. It has no odder or oils. Next, thin this mixture only enough to get it through your spray gun. I use a big ugly gun with pressure feed, they're cheap and readily available at Sears. Spray on a medium heavy coat of this stuff. Let it dry a day. Now here's the really cool part. You're gonna sand off 80 to 90% of this and you'll hardly break a sweat! This stuff powders like crazy! It took only 3 hours to sand an entire classic ship leaving only enough to fill. Now since this mixture is gray you will be able to tell the low spots and areas that need more work. No need to get out the spray gun, just spot these areas with a brush and sand. Once everything is uniform thin some clear dope 80% that right 80% and spray on a quick wet coat!

Color: Thin all colors 50 to 60%, and spray on dry. Just enough to cover, don't worry about shine, blushing or even being a little rough. Once all colors are on, spray on 2 coats

of clear thinned 60%. Again don't worry about shine or blush. Lightly sand everything with 800 wet being careful not to sand through the clear coats. Finally once everything is sanded CLEAN EVERYTHING WITH WINDEX. CLEAN IT AT LEAST 2 TIMES USING WINDEX. I usually do this procedure 4 times. Degreasers such as Prepsol or AcryliClean don't get the job done. What you really want to do with cleaning is remove everything that is not fixed permanently to the surface. The reason for all the cleaning is I discovered that just about all of the dust particles that end up in the clear coat are on the plane to begin with. Very little comes from the air. Once you have cleaned and re-cleaned go over everything with a tack cloth several times being careful to apply only light pressure.

Now you're ready for the main event. Lightly apply 1 coat of Automotive Clear. I use PPG Global Performance System Clear D893 and D871 Medium thinner/reducer (this is very different stuff from the DAU 75). This is a 3-part paint, clear, catalyst, and reducer. I use 50% reducer to get a water thin mixture. I also use a gravity fed touch-up gun to put on a very light but even coat. The PPG is dust free in about 10 minutes and the model can be handled in about 2 hours. Your plane will shine like glass at this point and depending on how much dust you have in your spray area you just might be finished! If there is dust fear not. Wet sand with 1200 or 1500 (which ever you have the patience for) and rub out. This whole process added 9 oz. to a fairly large 750 sq. piped ship that has a lot of fuse, rudder and cheek cowls. It only took 6 oz. for my Vulcan classic ship. While I've heard of 4 to 6 oz. finishes by others I have never been able to get it that light no matter how hard I try. The weight of this is quite reasonable and very fast and easy. Hope this helps.

- Phil Granderson

DISCOVER...

We cover everything from Control Line to Giant RC Plans, how-to articles, construction articles, product reviews, and more.

Subscribe today!
800-474-6995
www.flying-models.com
P.O. Box 700, Newton, NJ 07860



On the Stuka Stunt Forum in March, there was a thread regarding "Biplane Wing Incidence". The discussion involved the use of negative incidence in the upper wing. Then a wise and inquisitive poster asked for more information on setting up a biplanes for stunt, thus-

The Stearman Saga by Don Hutchinson

It all started in 1950 when I saw the photos of the Palmer/Yates Orwick 64 powered Stearman "Checkers" which won flying scale at the Nat's that year. Back then, scale models flew the stunt pattern much like our OTS pattern of today so the model had to have some stunt ability plus J C Yates was my hero and that's when the Stearman bug bit me! I had to build one of those beautiful airplanes.

A half inch to the foot rubber powered Stearman model had been published in the September 1949 Model Airplane News and that was the plan source for my first Stearman. I double sized it to a 32 inch span, re-engineered it for C/L and powered it with a front rotor Ohlsson 23. I had my flying buddy test it and it flew quite well, however, before I got a shot at it we lost it flying indoors when he missed the ceiling by a hair going inverted. Go real low to recover and oops, that's too low! This is the only photo of it ever taken.



Ohlsson 23 Stearman, winter 1950

Now it's 1952, my buddy is in Korea so I built another one in the same manner except it had a Cameron 19 up front, airshow paint job with his name upside down on the fuselage and it also flew well, his return home being celebrated by a flying session on a skating

rink in St. Paul, Minnesota. The last thing I recall about this model was a contest flight with an orange smoke bomb on each N strut in 1953. Spectacular!



December, 1952. L-R, Dick Moga, me, Dick Bringgold and Tom Kelleher. Palmer Venus, Stearman, Veco Mustang, Topsy Jr. and SE5

Fast forward to the 60's, I'm now in So. California and flying Nordic gliders pretty seriously but that old C/L urge is still lurking in there. In the October 1961 issue of American Modeler there was an another article which included highly detailed structural drawings of the real Stearman so here we go again. I built another 32 inch Stearman using these drawings and painted it up ala "checkers" using the old Cameron 19 once again. Oddly enough, this one didn't fly like the first two, it would mush if I tried to turn it too hard. I flew it now and then at the Sepulveda Basin and on one occasion, another stunt ship showed up, very modern and unlike any I had ever seen before. The owner thought the Stearman was cute and then allowed me to fly his model. I wasn't impressed with the way it turned but I had never flown a "modern" stunt ship before so what did I know? After showing old photos of it twenty some years later, I found out it was Tom Warden and his Continental! I still don't think it flew very well. In NASCAR terminology, it "pushed".

After a spell of no modeling at all for twenty years, I went to an airshow at Edwards Air Force Base and the So. Cal. guys were flying some very nice stunt ships for demo and I got the bug again. I got a reprint of Ted Fancher's articles on stunt model design (Thanks Ted!)



"Checkers", Cameron 19, Aero Gloss dope

and wondered how a Stearman with flaps would work. I picked up a BB Veco 19 and again went for a 32 inch span Stearman. I rigged flaps on it where the ailerons were on the real ones. I had also figured out why the previous model would mush when the first ones didn't. Those scaled from the rubber model plans had an enlarged stab/elevator area, typical of scale rubber models! With the enlarged tail surface, this one turned out to be a little rocket ship. I met Bart Klapinski at VSC I and had him fly it. He flew square vertical eights with it. Now I decided I should build one that I could fly in competition so I went up to 540 sq. ins and selected an OS 40 FP for power. I was naïve about engines, probably still am but I soldiered on and the first of the "big" ones was built and I did have some success with it. It was painted in U.S. Army Air Corp colors and weighed 48 ounces. I decided this was too heavy so I stripped it clean, cut away a lot of wood, put light wheels on it and painted it in U.S.Navy colors. When done, it still weighed 48 ounces so I kind of gave up on it. Next came a Sammy Mason "Checkers" version with flaps on both wings. I didn't like the way this one flew at all and gave it to Bart. Then came the version we presented to Mike Keville at a later VSC. It weighed 42 ounces and I thought, "this one will fly good"! So, now I had to do one more for myself just to find out, another "Checkers", lower wing flaps only and to hop it up, I moved the inside end of the flaps one rib bay closer to the fuselage. It was also light and flew really good. I had Bart



fly it at a California meet and he scored over 500 with no appearance points. I then promptly flew it into the ground in the outside squares on my first official flight! But it flew so good, I just had to have another so I built ole 402. It came out at a good weight and it still flies pretty good. It's not a pro stunt ship but in capable hands it can turn in a credible performance plus you get ooh-aah points cause the judges think it can't fly that well. When I'm "on", (a rare occasion), it's the classic case of old age and treachery whipping youth and skill!



The Veco 19 rocketship bones



The first OS 40 FP Stearman. Yes it is a model!



"Checkers" A great flyer!

Now we will finally get to the good stuff about how I make the Stearmans fly. It starts with design. A Stearman is obviously not the ideal platform for a biplane stunt ship but I just like the way they look. These are almost dead scale



The last of the breed. Also a good flyer

models so to get reasonably decent performance, this is my approach. I shoot for a wing loading of about 11.5 oz/sq. foot max. I give them ample horizontal tail area, both wings about 16% airfoil, stab at zero incidence and about two to one elevator to flap movement. I set both wings to zero degrees incidence as I can't visualize how anything else would perform equally for inside and outside maneuvers. I use a round bellcrank located about on the thrust line so I only need to put tiny holes in the fuselage for the leadouts to come out. I have been able to get away with running them through short pieces of tubing in the N struts and set these even with where the leadouts exit the fuselage. There is no fore/aft adjustment but they seem OK where they are. One could put a leadout guide out there if desired. The distance from the fuselage to the N struts is not very big so the Stearman tends to rock a bit in the roll axis in winds. Moving the N struts closer to the tips would help but wouldn't be "right".

Once I have a completed model, I set the CG about at the leading edge of the lower wing, this is based on the amount of stagger the Stearman has. It probably coincides with about 15 to 20% of the total wing chords. As for the elevator/flap ratio, the Stearman has big ailerons and not too big elevators. Since I am close to scale, the pitching force of the flaps will about cancel out that of the elevator unless you reduce the flap movement considerably. I have a photo of an earlier ship in flight with the flaps down about the same amount the elevators were up and the model was flying level.

That was my first clue on how to improve the corners. Fortunately, I could get into the cockpit and double the length of the flap horn. I do put weight in the outer wing tip, but only the top wing to keep the weight forward. Bipes do have a lot of drag, especially the Stearman with that big dummy radial engine out front so you need good power and you need to keep the airspeed up after the engine quits but they flare to beautiful wheel landings! The only other bipe I have any experience with is the Moitle, designed in 1944. It had no stagger and was a great flying OTS ship. If you wanted to design a competitive biplane, I'm sure you could, taking into consideration all the caveats above. Were I to do this, I would use little stagger, maybe some sweepback in the upper wing and adequate space between the wings. Flaps on the lower wing only. Otherwise, the same considerations as any other stunt model. There are some nice benefits with a bipe. They attract a lot of attention and they fit in the car better! Remember, real airplanes have two wings and round motors!

- Don Huchinson



The real thing. No, I didn't ride in it, I get airsick real easy!



Supermarine Seafire by Joe Adamusko



As a follow on to my Reno racer styled MK XVI "Yellow Spitfire" that featured a bubble canopy and cut down rear fuselage top deck, I decided to refine the design and go for a slightly different look. The Supermarine FR47 Seafire bubble canopy version was the ultimate in the great range of development of the basic Spitfire aircraft. The distinctive revised elliptical wing section with larger area ailerons, raised leading edge and many of the characteristics of a laminar flow wing really caught my attention. This late 1940's vintage navalized Supermarine variant utilized the mighty Griffon engine and had enormous valve cover protrusions on the nose of the fuselage, a very distinct larger vertical fin and rudder, and of course, a tail hook installation.

I wanted my sleek bubble canopy Supermarine stunt ship to incorporate some new features such as a swept forward flap hinge line, huge area flaps, a smaller span stabilizer, a deeper nose section ojive, huge simulated engine valve covers and exhaust stacks, a detailed canopy section with a pilot figure head, and close spaced wing mounted landing gear with gear door covers. These construction features along with a British Royal Navy paint scheme complete with marking stripes and roundels, would set the bar a notch higher than my previous Spitfire efforts.

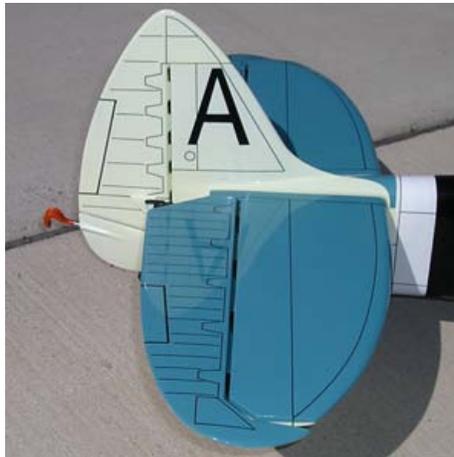
Wing Construction:

The wing was assembled on

rib alignment rods with support blocks. This technique insures a straight warp-free wing, and also provides a means for using the wing framework as a buck for molding the leading edge sheeting. The wing features the traditional use of 1/16 balsa ribs and sheeting, 1/4 inch sq. balsa spars, and maple spar joint gussets for the support of a floating bell crank. Windy Urtnowski's wing mounted landing gear system with upper gear wire torsion blocks was incorporated into the wing construction.

Stabilizer Construction:

The stab was assembled on a flat building surface using a piece of 1/16 sheet c-grain sheet cut to the plan view outline, to act as a base for the structure. Curved pieces of 3/8 thick leading edge sheet and a 1/4 x 3/8 balsa trailing edge spar were installed before placing 1/16 sheet ribs in a geodetic pattern on the stab sheeting. A piece of c-grain sheet was added to cap the stab structure. Tip blocks were installed prior to sanding the leading edge to contour.



Shaping the Curved Flaps and Elevators:

The shaping of the taper required on the curved sheet balsa flaps and elevators was done in sanding jigs constructed from a base of soft pine wood with thin gauge sheet metal strips used as leading and trailing edge thickness guides. This type of sanding jig allows for removal of half the balsa material necessary from each surface of the work piece to achieve the desired

taper thickness on both sides of the control surface. It is also important to use 1/4 C-grain sheeting for the flaps so as to avoid any warping in the large control surfaces.



Fuselage Construction:

The engine crutch was made from saw kerf lightened 1/2 x 5/8 rock hard maple bearers and installed on fuselage sides made from 1/8 C-grain sheet with 1/16 plywood nose doublers. The carved top and bottom fuselage blocks were converted to balsa molding bucks. Ammonia water soaked 3/32 balsa sheet was formed to the molding buck contour using wrapped elastic bandage material. The aft fuselage features access hatches to accommodate elevator control horn and push rod length adjustments. Lightweight fiberglass cloth was used to cover the entire nose area, including the jointed molded balsa shells used in the one piece cowling.



Finishing & Detailing:

The procedure that I use is similar in technique to those executed by most front row builders who finish using butyrate dope. The Seafire finish was done entirely with Brodak dope. The marine blue





Tsunami Trilogy by Paul Winter

Windy, as promised, the Tsunami Trilogy is complete. It has taken nearly 8 years!



1997 one Piece Tsunami too heavy (85oz) Powered by super tigre 60 and the bellcrank was only a 3" and didn't fly too well.

and sea foam underside colors were mixed from the existing Brodak dope color chart. All the painted areas, including the roundels and marking stripes, were back masked prior to applying ink panel lines and clear coat dope. Refer to the SN May/June 1999 "Stuntress" construction article for the detailed step by step dope finishing schedule used on the Seafire.

Powertrain:

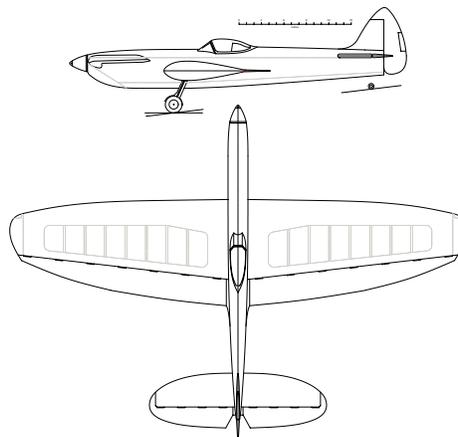
I chose to use a Rojett .65 RE bar stock engine with a custom built (Windy Urtnowski) carbon fiber single baffle expansion muffler. The unit is extremely quiet and tucks in very nicely under the tank compartment and the bottom of the cowling enclosure. The original Seafire is shown with a modified 4-blade Gator 14 x 4 propeller and a 2-1/4 inch Tru-Turn P-51 style aluminum spinner, as this combination worked very well in

my Reno style yellow Spitfire.

Conclusion:

The experience gained in the development of the elliptical wing used in my Stuntress and Spitfire models enabled the refinement of the wing shape used in this stunt model version of the FR 47. The Seafire was designed by my friend Dave Downey to my constantly changing specifications. I'll never forget the time spent looking over Dave's shoulder as he sat at his computer massaging and refining the construction drawings for this airplane. The Seafire shown here represents my attempt at the ultimate integration of an elliptical wing plan layout into the design of a scale like stunter.

- Joe Adamusko



1999 4 Piece Tsunami as you know by being at 1999 NATs got 14 points in appearance and 13th place in advanced. Powered by just ST60 then a Saito 72.



2005 4 piece Tsunami '2' flies great and weighs 96oz. But as it has lots of square inches in wing area. Flies Ok. Still yet to have all its graphics an a combination of two previous.





Paul Winter's twin engine fantasy reno air racer, Paul mixed brodak candy colors with B-25 silver for the beautiful color scheme. Slated for twin Saito 40s.



Larry Fernandez is an awesome builder, just check out the workmanship on his "Checkmate".



Cockpit details on Larry Fernandez's PT-19 are great very scale looking cockpit combing and panels. Ship is built from Dale Hemstroughts plans.



This could be a photo of a full size PT-19. Larry Fernandez shot the photo.



Side view of the PT-19 by Larry Fernandez shows just about how scale looking this ship is.



Cockpit close up of the Fernandez PT-19. Would make a scale builder jealous.



Windy Urtrowski's "Typhoon" during the 2001 Walker Flyoff had many unique features he developed. ZTRON INFRARED throttle control, Saito 91, 4 stroke power, carbon fiber fuselage and fuel tank. First 4 stroke to be in Walker Flyoff.



Ken Clapson's "Vector" a Randy Smith design is a great flyer and one of his favorite ships.



Patti Wagstaff is the pilot figure in Reuben MacBride's "Strega". Scale exhausts from Windy's Moulds.



Ralph Geese did custom graphics for Reuben MacBride's "Strega".



Reuben MacBride's "Strega" is powered by a Double Star R.E. .61 buffed out finish.



Sweden's Raimo Barak's Trivial Pursuit features a Moki 50 for power and a clear see thru finish.



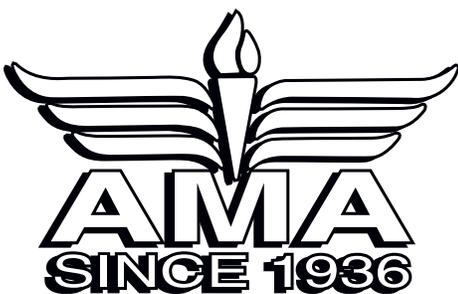


Intrepid XL from Sweden built by Raimo Baraks ready for lettering and final details.



Carlos Serra's latest Cardinal ST 60, carbon fiber gear by Windy, Brodak Dope, 60 ounces.

- Paul Winter



The Humbug Replica is Now Real by Wild Bill Netzeband

There are several ways to report an airplane tuning process. The folks who witnessed the 5th through 8th flights of the new HUMBUG, at the 2006 VSC, will be correct in judging those flights as being too COMBATLIKE for Precision Aerobatics. Alas, this has been the machine's perceived character since its introduction back in the last century. I really need to put those misconceptions to rest, NOW.



The HUMBUG is a viable Classic design, after all.

I set up the line rake, tip weight and CG on the bench during construction. Unfortunately I had WAY TOO MUCH Stabilator motion during the first test flight. After two flights, I drilled two new holes in the handle at a 2" spacing. This helped, but we ran out of time before traveling to Tucson. Two flights on the grass circle led me to think I could get through the officials without being too embarrassed. First official flight, I stumbled on the take-off, chewed the prop, and then wasted the officials time running out the tank. I was just shy having enough thrust to perform a measured pattern. The 9 x 6 APC prop ended up 7.8", and one blade was .25" longer. My 1st official flight was performed at a smoking 60 mph, and earned an average score. To slow down on the next day's flight I bolted on a 9-5 APC, and dropped the nitro content. The new flight velocity was 65 mph! So much for science. At least I didn't bend anything seriously.

At home I got down to careful tuning. The original .012" x 60'

lines were replaced by .015" x 62'. This helped the level flight by reducing the springy response at the 1 G neutral setting with the disadvantageous 2" handle to 3" bellcrank ratio. The tip weight and lines rake were retuned, and they helped. I finally realized that the 25LAS was running HOT, so I chopped out some more cooling exit area. That helped a bunch. I tried a stock OS muffler for nose weight, and it got better. I finally cut into the bottom and reduced the bellcrank output arm. (In keeping the warts of the original design, there was no more room for a longer stabilator control horn). The new setup allowed me to move the handle space back to 2.75", and the flight path was getting quite easy to manage. The wing tip weight and lines rake were finally settled, and I let the CG move aft with the initial tongue muffler.

I wanted to try other props, and bolted on a 9.5 x 6 APC. A bit more nose weight, diameter, and engine load. The flight pattern improved, due to CG and velocity. My final prop was a stretch. I had a couple of 9.625 x 3.75 APC props in the inventory. The prop is probably used as a 40 RC pylon racer, really thin tip chord, and lots of meat at the root. It added another half ounce of nose weight, which really tuned up the controls responses. Note: the total range of CG positions was .25", and the end position is .125" in front of the design position. (Or as some will call it, at 18% of MAC).

The original HUMBUGS had a niggling glitch in yaw and roll in level flight under wind conditions easily tolerated by other airplanes. Bob and I finally decided that the tall fin, and lack of other side area was allowing the fin to load up during the natural yaw changes generated in circular flight during wind, and then stall and release that energy in yaw, followed by the coupled roll twitch. Sure, it's a stretch, not lending itself to calculation, but it SEEMED logical. SO, my final change was to design and build a fin of the same shape, with the 18% airfoil used on the wing. I THINK



it is helping, BUT there were all of those other tuning things. Anyhow, it can't hurt.

So, in final tune, the HUMBUG is not quite docile, but it has predictable response in level, rounds and "squares". These "feel" items back in the 1960's. Response with the stabilator is positive in rounds, and the entry and exit from the "square" cornered maneuvers. Velocity is back in the 55 mph groove, burning fuel with 10% N and 22% oil. The engine and prop, and plane, and pilot are all happy at the same time.

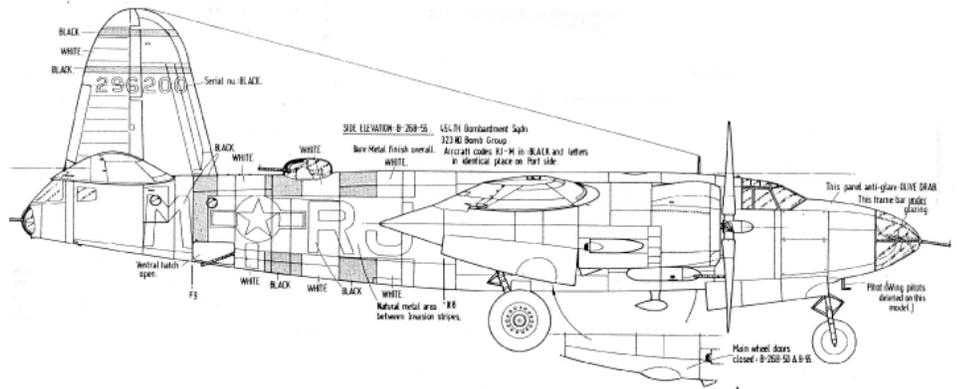
RSM Distribution has the CAD plans and will provide a kit with laser-cut parts. It is a demanding construction, but the results will keep your adrenaline flowing.



- Wild Bill Netzeband

The saga of the B-26 Martin Marauder "Sheryl Lynn and some interesting facts supplied by J. K. Havener in his book "The Martin B-26 Marauder" by Tom McClain

The B-26 Martin Marauder was the cutting edge medium bomber of its time. It incorporated many innovations that were nearly beyond the industrial capabilities of the era. It is arguably one of the more beautiful aircraft to leave the drawing board. It may have had a short operational life of 5 years, but it made its mark and is remembered



fondly by the men who flew it in combat. The following are many of its achievements:

1. It was the first aircraft of WWII vintage to use four-bladed propellers. These were 13-foot 6-inch Curtiss electrics that were driven by Pratt and Whitney R-2800-5 Wasp engines, which developed 1850 hp at takeoff and 1500 hp at 15,000 feet. A two-stage blower was employed for a supercharging effect at higher altitudes.

2. It embodied the first horizontal tailplane with a marked dihedral. (8 degrees.)

3. It was the first aircraft to carry a power-operated gun turret. The original armament called for four flexible .30-caliber guns, but Martin designed the 250CE dorsal-mounted, electrically operated turret with twin .50-caliber guns for increased firepower. These turrets were also later used on B-25, B-17, and B-24 American bombers as well.

4. It was the first medium bomber in which the tail gunner could sit in an upright position. Original armament included a flexible .30-caliber gun in the tail position, but this was later replaced (in the B models) with twin flexible .50s, and later (in March 1943) by an electric-hydraulic Martin-Bell turret still containing twin .50s.

5. It was the first WWII aircraft to use weapons pods. Two fixed .50-caliber machine guns were mounted in package pods on both sides of the forward fuselage belly, beginning with the B models.

6. It incorporated the first all-plexiglass bombardier's nose—a Martin innovation.

7. It was the first combat aircraft in which the designers used butted seams for the skin covering as opposed to the conventional lapped seams. This enhanced the flow of air over the streamlined torpedo-like fuselage, which increased the speed of the aircraft.

8. It was the first combat bomber to employ an all-electrical bomb release mechanism.

9. It was the first combat aircraft to have rubber self-sealing fuel tanks installed as regular equipment. These were another Martin innovation called "Mareng Cells."

10. It employed the first flexible tracks for transferring ammunition from the bomb bay back to the tail gun position. Lionel furnished these tracks.

11. It was the first combat aircraft to use plastic materials as metal substitutes on a grand scale. Martin had been pioneering the use of plastics to replace metal, and the B-26 contained over 400 such parts.

12. It was the first (and last) Army bomber to use torpedoes in WWII. An external rack was installed along the keel to carry a standard 2000-pound naval aerial torpedo.

13. It was the first Allied bomber in the European Theater of Operations to complete 100 operational missions. This was accomplished by Mild and Bitter on an afternoon raid on a Nazi airfield at Evreux/Fauville, southwest of Rouen, France, on 9 May 1944. She was a B-26B-25, Serial Number 41-31819, of the 450th Squadron in the 322nd Bomb Group (M) of the 9th Air Force and had flown her



first mission on 23 July 1943. She did all this on her original engines, amassing a total of 449 hours and 30 minutes on them, 310 hours and 40 minutes of that in combat! During this time she never aborted due to mechanical failure, and not one of her many crewmen was a casualty. She was taken off operations after her 100th mission and flown back to the States to conduct War Bond selling tours.

14. Even more amazing was the fact that a B-26 was the first Allied bomber in the European Theater of War to fly 200 operational missions! In fact, Flak Bait, Serial Number 41-31733, actually flew 202 combat missions over a 21 month period. She was assigned to the 449th Squadron of the same 322nd Bomb Group and flew her first mission on 16 August 1943; when Mild and Bitter had completed her 100th, Flak Bait had 99. She never did get the press coverage that Mild and Bitter received, but she persevered and it paid off in the end. She flew her 202nd and last mission in early May 1945 from Airfield Y-89 at Le Culot, Belgium, from which she had also flown the now-famous 200th. (Sgt. W.J. Johnston, now of Philadelphia, Pennsylvania, was the engineer-gunner on the third crew assigned to Flak Bait, and, although he didn't realize it at the time that it was to be her last mission, he was on it. His crew flew approximately 30 missions in Flak Bait, including numbers 199, 201, and 202. Why not number 200 when it was "their" airplane? The old military truism "Rank has its privileges" reared its ugly head for this historic event, and Sgt. Johnston's crew had to stand down that day so the top brass of the outfit could receive the glory. At least the Sarge flew on that last one and now gloats over the fact that Flak Bait is probably the most famous Marauder of them all. She was appropriately named, having absorbed over 1000 enemy hits during her combat days. Her nose section -well preserved but unrestored and in original condition- now resides in a place of honor at the National Air and

Space Museum of the Smithsonian Institute in Washington D.C. After the war, Devon Francis even wrote a book about her, appropriately titled Flak Bait.

15. Another B-26 may have been the first American bomber to complete 300 combat missions -and probably the only one of any type in the USAAF to do so. A photo of this unnamed ship shows her after 336 missions, during which none of her many crew members were injured. (Unfortunately, the negative for that photo, which is the only print in the Martin Photo Library, has been destroyed by deterioration, and attempts to discover the identity of the ship or to which group she was assigned, proved futile.)

16. The Army was anxious to get into production; and although the first order included a prototype, none was built. The first production model was the first of the line to fly!

17. It had the first aerodynamically perfect fuselage. One of its early nicknames was "The Flying Torpedo".

18. It was the first twin - engine bomber to carry more payload than the B-17.

19. Lastly, the B-26 was the first aircraft to test the bicycle-type landing gear that would later be adopted for use by the Air Force on the B-47 and B-52 jet bombers. The test bed was a G-25 model, Serial Number 44-68221, and was called the XB-26H. It carried the name Middle River Stump Jumper.

It is doubtful that any other World War II aircraft could lay claim to that many firsts.



Building a CLPA version of the B-26 Martin Marauder

I built the Marauder from August 1969 Flying Models magazine plans by Joe D'Amico. I modified the airfoil (borrowed from Windy Urtnowski's F-7F Tigercat) and some of the construction to reduce weight and build in stunt capability. I started in early October 2004 and finished by July 22, 2005.

I am flying the Marauder as a semi-scale stunt ship. It has two Randy Smith Magnum 36s, weighs 112 oz, but does not pull overly hard in flight. The line tension should have been 18 to 20 lbs in level flight, so I lifted a 20lb barbell to get ready for it. The wingspan is 74 inches, area is 860 square inches, it is 58 inches long, 8 inches in diameter at the thickest point of the fuselage, the nacelles are 5 inches in diameter, main wheels are 4 inches, and the nose wheel 2 3/4.

The Marauder is sheeted with 1/16th inch molded contest grade balsa. Load bearing structures were laminated with 1/64 and 1/32 inch plywood. The landing gear mounts are made from 1/8 inch plywood. The wing, empennage, landing gear, gear doors, nose, tail gunner's position and top turret are removable. The removable nose and tail sections allow for proper CG positioning. The wing is one piece and is held to the fuselage saddle by two plug-in wooden dowels on the leading edge where it meets the fuselage and two 8-32 bolts in the trailing edge. The empennage is one piece consisting of the horizontal and vertical fins seated on a saddle and secured with four 4-40 nylon screws.

To get the correct vertical center of gravity, the leadouts exit at the outboard nacelle wing seam and go through an adjustable leadout guide 2 inches below the wingtip. The leadout wires travel through Nyrod guides to the 4 inch bellcrank in the center of the wing. The bellcrank is a trapezoid to provide opposing lobes for actuating separate flap and elevator pushrods. This is needed because the flap bellcrank is on the bottom of the wing as is the adjustable elevator horn on the bottom of the horizontal tail.



The entire control mechanism was fabricated by Tom Morris.



During the early flight tests, I used Rev Up 12x5 props cut down to 11 inches in diameter. But lap times were 5.6 seconds and much too slow. Randy Smith told me I needed more pitch, so I tried APC 10x6 4 blade propellers. The APC 4 blade propellers work great with the Randy Smith Magnum 36s. Static RPM is 9700. The APC propellers decreased the lap time to 5.3 seconds and gave me the vertical performance that the Marauder needed with a crisp respectable corner and beautiful rounds.

I started out with .021 Tom Morris lines, but now have replaced them with .018s and have seen better turn performance and less drag. I originally had the elevator to flap ratio at 3 to 2, which was much too quick, but have reduced it to 1 to 1. With these changes I was able to fly the entire pattern confidently on the seventh flight. Each flight since then has been enjoyable and I have discovered that the Marauder will handle moderate steady state winds of 5 to 10 mph without problem.

Some facts about the Stunt Marauder:

1. The gear struts are modified Robart strut covers over 1/8 inch wire.

2. I used the 2 liter plastic coke bottle method of forming the canopy, nose and tail clear sections. I made punk block balsa and carved male molds to insert in a plastic coke bottle with wedges. I then used a hot air gun to heat shrink the clear plastic to size and shape. The top turret uses .040 SIG heat formable clear plastic mounted in a frame pulled down over a male

mold after heating in an oven at 350 degrees F for 3 minutes.

3. I made the gear doors by wetting 2 layers of 1/16th inch balsa cut to rough shape and taped over the nose and nacelles protected by saran wrap. These were left to dry for 48 hours. I lifted the sheets off and glued them together with thinned TiteBond, put them back on the nose and nacelles with masking tape and let them dry for 48 hours again. After that I cut them to shape.

4. The 50 caliber machine guns were made from brass and aluminum tubing with the cooling holes cut by machinist Carl Foster of Alexandria, VA. The barrels are made from 1/8th inch steel or plastic tubing. The machine gun mechanisms are made from PlastiStruct Styrene square tubing and sheet.

5. The propeller domes and 6 sided lock nuts are from Tru-Turn.

6. The cockpit is made from balsa block and sheet and the instrument panel is a photo reproduction from a book about the Marauder.

7. The mufflers are modified Bisson Pitts style for the LA-40/46. Carl Foster moved the exhaust tubes from the side to the bottom of the chamber and shortened the chamber by 3/4 of inch to fit inside the cowls.

8. The cowls are made from 7 layers of 1/2 oz glass cloth and laminating epoxy. I made two male pink foam molds and laid up the glass cloth on the outside after I covered the molds with low temperature plastic. When the cowls were filled and sanded, I used a Dremel tool with rotary brush to remove the foam.

9. I covered the entire

model with lightweight carbon fiber mat laid down with clear polycrylic. Next time I will use clear dope thinned with thinner 50%. The polycrylic does not work well with thin balsa sheeting and adds weight. I could have saved 8 oz by using clear dope.

10. The paint is Brodak with the overall color of standard silver.

11. The decals were made by Currell Pattie of Shelby Township, MI. They are pressure sensitive stickons and are dope resistant.

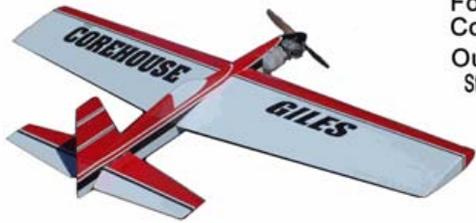


12. My wife's picture and nose art were made from a "Glamour Shot" photograph that she gave me for Christmas in 1993. I scanned it and printed it on clear decal paper with a color laser printer. I put a rectangle of white decal paper behind the decal to make it stand out.

- Tom McClain

GILES SUPER STUNTER

Build It!(tm) Guarantee
If the wing cores are damaged during construction return them to us and we will ship a replacement free of charge.



Foam Fuselage Core <<>>

Outstanding C/L Stunt Trainer

<<>> **Easy to Build and Fly**

<<>> **Computer Cut Foam Wing**

features TrueBeam Self-Jigging Construction

WGT-45oz. typ. AREA- 740 sq. in. SPAN- 60 in.

include \$10 per order for shipping and handling
On the Web at <http://home.earthlink.net/~philcartier>

THE COREHOUSE

1249 JILL DRIVE
HUMMELSTOWN, PA. 17036

\$99.95



INTERNATIONAL NEWS



Paul Lagan
1183 Blythe Rd, RD3
Cheviot, New Zealand 8271
(64-3) 319-8315
plagan@extra.co.nz

2006 Australian Nationals CL Stunt, April 19-25, 2006

South Australia in autumn can be a very nice place to fly model planes. Unfortunately, the first few days of the CL NATs were very windy and, at times, wet which meant that the start of stunt events was delayed. The last three days though were almost stunt heaven – essentially calm and leading to very fair contests.

F2B Expert and Advanced were flown on a “best 3 of 4 flights” basis. Rounds one and two of these events had variable weather – some benefited from excellent air whilst others had to cope with quite a bit of turbulence. In the final reckoning though the results generally indicate the correct “pecking order”.

I used the week as a warm-up for the coming World Champs – testing my packing and preparation as much as my flying. I didn’t manage much practice flying for the first few days but finished off the week well with over a dozen flights on each of the last three days. I was happy with my result and standard and learnt a lot from talking to and watching the top Australian flyers.

Generally speaking, Australian

flyers are very good in calm conditions – they fly accurately and smoothly with nice “rounds”. Only a few hit really “hard” corners and many also fly a little bigger than the rule book defines – I think that this style of flying is pleasant to watch but would be downgraded in Europe where the modern trend is to precision and sharp corners.

In Expert, Brian Eather was really on form – he had the contest virtually won from the first round and his bottoms in particular were very accurate. Paul Turner was his usual unflappable self and Peter White had some excellent individual manoeuvres – he continues to impress, as does his Werwage-designed “Geo-XL” which, with his very good Stalker 61, is an excellent package. Peter’s last round flight in particular was very tidy.

PJ Rowland’s big Lancaster was



Brian Eather’s “Firecracker”, Stalker 61 – top F2B expert



Paul Turner’s “Wind Wiper”, ST46 – 2nd F2B expert

rather too big – it was 10cm over the wingspan limit (of 2 metres) and was disqualified after a protest in round 3. PJ flew it “just for the sake of it” in round 4 and he flew it very well indeed. Unfortunately, it is too big (weighing 3.15kg – nearly 7lb) to fly manoeuvres sharply

and within the FAI size limits, so despite being impressive in the air, it can’t score top points in front of informed judges.

Doug Grinham’s side-mounted Retro ran very well in his own-design “Jazzer” and Mark Ellins also flew a Grinham “Jazzer” – a very attractive model. Dave Simons and Hisato Minoda both flew Yatsenko “Knights”, and both had an unfortunate zero on one of their rounds or they would otherwise have placed much better. Bruce Hoffmann’s Saito 72 Mustang looked very nice in the air and ran sweetly.

In Advanced, Steve Masterton



Yatsenko “Knight” models of Hisato Minoda (Japan) and Paul Lagan (New Zealand)



Doug Grinham and his o/d “Jazzer”, Retro 60.

was in a class of his own flying the Brian Eather designed “Hot Dog” with Stalker 61. Bill Swan, who has recently taken over the BriStunt business, flew his “Mongrel” very well for 2nd and local man, Peter Anglberger, continues to improve at a great rate. Judges for F2B were Joan McIntyre and Russell Bond.

Classic Stunt in Australia is for pre-1965 designs. There are no model or motor bonus points and the pattern comprises mainly the “round” manoeuvres but with triangles thrown in for variety! It is an event that is very keenly contested and I was very impressed



with the overall standard.

The engines in the top six were a



PJ Rowland with Lancaster – 4 x Enya .19s, 2.1m span, 3.15kg.



Lancaster. Model unfortunately disqualified as it was over the FAI 2 metre span limit.



Steve Masterton's pretty "Hot Dog" – a Brian Eather design. Stalker 61 – winner of F2B Advanced.

very interesting mix. PJ Rowland's Stalker 61 was almost idling to fly his original 1951 Nobler. Doug Grinham had one of the very-new BriStunt ABC cylinder assemblies in his OS35S pretty, 41 ounce, Phoenician; I used an Aero Tiger 36 (a gem) in my Egevary Hopp-25; Frank Battam has an ST46 in his "Green Box" Nobler; Steve Masterton's very nice "Chizzler" had a Brodak 40 and it was only Peter White who had a Veco 35 in his '51 Nobler who used a "true" classic engine. PJ flew very well

to win – I suspect he would have done very well in F2B with this model! It was very close for 2nd to 4th place. This event was flown in near-perfect weather and inspired many to go home and start building a "nostalgia" model. Judges were Bob Edgcombe and Paul Turner.

I had to leave before Vintage



PJ Rowland's 1951 Nobler from original Aldrich plans with Stalker 61 up front. 1st place in Classic.



Paul Lagan's "Hopp-25" – 3rd place Classic. A Dr Egevary (Hungary) design from the late 1950's. Aero Tiger 36. Bolly 10½ x 5 Sportsman prop.

but understand it was also flown in excellent conditions. The Australian rules give bonus points for model age, engine age and engine type as well as points for fidelity so it is a challenging compromise between the really old and usually poor flying but high static models and the not-so-old and better flying post-1950 types. Doug Grinham is something of an expert in this event and won with his Jamison this time by virtue of better static points from Peter White's All American.

The next Australian Nationals will be held in the Aubury/Wodonga area this coming Christmas/New Year and it should attract a very large (and talented) entry.



Frank Battam's "Hot Rock" with Fox 35

- Paul Lagan



Floyd Carter's Palmer Venus VSC 18



Don Still's Stuka VSC 18



Billy Werwage's 62 Ares VSC 18

INTERNATIONAL NEWS



*Claus Maikis
Nelkenweg 5
D-89129 Langenau-Albeck, Germany
cmaikis@t-online.de*

Salzburg International 2006

Your editor asked me to tell a few words about what's happening on this side of the pond. I think you'll agree that just giving lists of contest results might not be very exciting to read. After all you are not quite familiar with most of the names. So I'll try to give you a description of the atmosphere over here and mention those things which are a little different from what you are used to.

The Salzburg contest is one of the biggest contests in Europe. I cannot talk about contests in different places of Eastern Europe. Except for a few European and World Championships I have never been in this part of the world, so I don't know about normal contests. Also the language barrier is a big problem. Only in recent years people in these countries have started to speak English. Salzburg attracts flyers from all European countries, from the extreme North to the South and from East to West. Maybe for you Americans the distances are nothing spectacular. For us they still are big; in some cases we still have to cross borders with all the unpleasantness of such

undertaking. Thank goodness many countries have the same currency now (the Euro saves us to exchange several currencies for one trip!). And thank goodness almost all control line flyers from all these countries speak English now.

Salzburg lies in Austria, right at the border to Germany. It's situated in a most wonderful countryside, with soft rolling hills, but right at the beginning of the "Alpen", a high mountain range just like your Rocky Mountains. It's a very popular tourist area with a big choice of very nice and very good country hotels. You can be assured that this is a strong argument for us to visit this contest, and we fully enjoy the gastronomic offer of the whole area.

For those who are not familiar with the term let me explain "International Contest". This is not just the description of a contest with international participation. In order to run such a contest the organizer has to fulfill several requirements which are demanded by the CIAM (International Aeromodelling Committee = the highest aeromodelling governing body in the world). There are strict rules for the layout of the flight circles. The organizer has to invite an "International Jury" (three experienced people from different countries, approved by their respective aeromodelling organization). There have to be experienced judges for each category, again from different nations, a contest director, event directors, and a few other requirements. The contest has to be announced in time to the CIAM to be included in the international contest calendar, and this costs quite a fee.

Now you may think that it's not worth to accept all the trouble, just to get the title "International Contest" (when some of the competitors would come to the contest anyway). But remember, when you have to travel for many hours or even days to get to a contest, you expect it to be organized at a high level, according to the rules, and with competent judges. An "International Contest"

guarantees that the organization is of high quality, and this attracts many flyers to visit this contest - especially the top competitors. This in turn helps the reputation of the contest, and usually increases the number of competitors.

The Salzburg contest is always held at Ascension, a Christian holiday on a Thursday in May. Thursday is arrival day, that leaves Friday, Saturday, and Sunday for a three day contest with one round each day. When we have made our flights early in the day and are not interested in watching team race and speed, we usually do some sightseeing in this wonderful area.

Some information about the results. First place was won by Richard Kornmeier, a very young flyer and one of the best German pilots. He flies a Igor Burger designed and built airplane with a ST 60. Second place went to Lauri Malila, Finland, with a Yatsenko "Shark" airplane. Third place went to Peter Germann, Switzerland, with a new Bob Hunt "Saturn" and RoJett engine. Most interesting feature was Uwe Kehnen's (Germany) retracting undercarriage in an "Impact" with PA 61 engine. The retracts are controlled by sound (microphone). The judges were slightly surprised when after one and a half laps no wheels could be seen any more! When it was my turn to fly, it was raining cats and dogs, so I renounced on two flights - with appropriate results.

This contest is run for the three international control line classes F2A (speed), F2B (Aerobatics), and F2C (Teamrace). Combat is not flown here. Participation is always high, but sometimes depends on weather. This year they had 10 flyers in Speed, 32 in stunt, and 14 teams in Team race, which is lower than usual. Remember there are no skill classes in International events. We have them on a national level in several countries, but here you have to fight it out with the best of the best, and you really find out your place in the stunt world.

Salzburg International is run every other year. This



contest alternates with another famous event, the "Breitenbach International" in Switzerland at exactly the same date of the year. This is another European contest with the image of highest international competition, big participation, high quality organization, and beautiful scenery. And - not to forget those comfortable country hotels with delicious meals and finest wines. We really enjoy these, and if the weather cooperates, nights can be very long in doing so.

I hope I could give you a small picture of the approach as we do it over here in this corner of the world.

Regards,
- Claus Maikis



Aerial photo of the Salzburg flying field



Richard Kornmeier (Germany) winner in Aerobatics



Uwe Kehnen (Germany) checking his retract gear



Lauri Malila (Finland) with his Yatsenko "Shark" model

Blue Sky Models

Laser Cut Kits
Laser Rib Sets
Custom Building
Classic Plans
Custom Drawings
Laser Short Kits
Bluegrass Fuselage Jigs
& More!



J.D. Falcon
John D. Ottavio's
Award Winning Classic
53.5" Span, 590 sq. In.
.35 to .46 Engines



Profile Roadrunner

Classic Stunters designed by Bill Melton & Jim Young
54" Span, 606 sq. In., .35 to .46 Engines



Roadrunner

Coming Soon!
A never before kitted
Old Time Stunter

Made
IN
USA

See our web site: www.blueskymodels.net

Contact: Tom Niebuhr,
Blue Sky Models, 7173 FM 1377, Blue Ridge, TX, 75424
972-736-3780, blueskymodels@earthlink.net



Precision
Aerobatics Model
Pilots' Association

PAMPA, an AMA approved Special Interest Group, founded July 1973. Objectives include a means of communications among control line stunt flyers, voting on issues affecting control line stunt, and administration of the Control Line Precision Aerobatics Event at the Nationals and conduct of the FAI Team Selection Trials.

Officers

President

Paul Walker

25900 127th Ave SE
Kent, WA 98031-7933
(253) 639-0448
pwimpact@earthlink.net

Vice President

Ted Fancher

158 Flying Cloud Isle
Foster City, CA 94404
(650) 345-0130
TED911@aol.com

Secretary/Treasurer

Shareen Fancher

158 Flying Cloud Isle
Foster City, CA 94404
(650) 345-0130 Voice
(650) 578-8454 Fax

Membership Secretary

Jim Renkar

6201 South Nashville Ave
Chicago, IL 60638-4111
(773) 229-9353

Directors

- District 01 - Dave Midgley
- District 02 - Windy Urtnowski
- District 03 - Phil Spillman
- District 04 - Bill Little
- District 05 - Dale Barry
- District 06 - Allen Brickhaus
- District 07 - Crist Rigotti
- District 08 - Steve Moon
- District 09 - Carl Shoup
- District 10 - David Fitzgerald
- District 11 - Bruce Hunt

Stunt News

MANAGING EDITOR

Tom McClain

6801 N. 28th Street
Arlington, VA 22213

Associate Editors

- Text Editor - Bob Storick
- Photo Editor - Ken Budensiek
- Contests - Howard Rush, Jim Snelson
- OTS/Classic Stunt - Mike Keville
- Beginning - Doug Dahlke
- Power Train - Randy Smith
- Planes - Ball Diamond, Jim Harris
- Personalities - Louis Rankin
- Building - Robert Storick
- Crash Repairs - Windy Urtnowski
- Flying - Owen Richards
- Finishing - Bret Buck, Randy Powell
- Products - Curt Nixon
- Historian - Wynn Paul
- Sport Flyin' - John Ashford
- PAMPA Rules - Alice Cotton-Royer
- Competition/Judging - Gary McClellan
- Designing - Bret Buck, Randy Powell
- Safety - Ron King
- "Why We Fly Stunt" - Guest Columnist
- "Fly on the Wall" - Hoyt Hawkins
- Clubs - Scott Richlen
- Technology - Noel Drindak
- Classic Plans - Tom McClain

PAMPA Web Site

www.control-line.org

Disclaimer

Articles printed in *Stunt News* from other sources do not necessarily reflect the opinion of PAMPA nor are these articles intended to be endorsements of particular products by PAMPA. Every effort is made to ensure that the information contained herein is accurate, but PAMPA is not responsible for errors or omissions. No responsibility is assumed, expressed, or implied as to suitability, safety, or approval of ANY material in this newsletter. Any party using ANYTHING expressed herein does so at his or her own risk and discretion without recourse against anyone. Contributions to *Stunt News* are welcome! Credit will be noted and given when due. PAMPA reserves the right to edit or reject any material submitted for publication. Permission is granted for quoting or reprinting items contained herein, provided attributes accompany the item.

DEADLINES

Ad and Editorial copy

#	Issue	Deadline
2-06	Mar/Apr 2006	Jan 20, 2006
3-06	May/June 2006	Mar 20, 2006
4-06	Jul/Aug 2006	May 20, 2006
5-06	Sep/Oct 2006	Jul 20, 2006
6-06	Nov/Dec 2006	Sep 20, 2006
1-07	Jan/Feb 2006	Mar 20, 2006

Deadlines mean in Editor's hands

Advertising Rates

	cost		
page	size	per issue	
(H)	(W)		
1/8	2.25" X 3.50"	\$ 10	
1/4	4.75" X 3.50"	\$ 35	
1/2	4.75" X 7.00"	\$ 70	
Full	9.50" X 7.00"	\$ 140	

Send Camera Ready ads and payment to:

Floyd Layton

1841 E. 32nd St
Davenport, IA 52807-2007
(563) 386-2487
roadwarrior@mchsi.com

POSTMASTER

Send address changes to: **Shareen Fancher**, 158 Flying Cloud Isle, Foster City, CA 94404

Stunt News (ISSN 1076-2604) is the official newsletter of the Precision Aerobatics Model Pilots' Association (PAMPA), a not-for-profit hobby association, and is published bi-monthly at 6801 N. 28th Street, Arlington, VA 22213. Annual membership dues are \$35 which includes a subscription to *Stunt News*. Periodical postage rate paid at Merrifield, Virginia.





57 Nobler by Michael Duffy.
Photo by Rickii Pyatt.



Dangerous by Randy Powell.
Photo by Randy Powell.



Personal Dancer by Igor Panchenko.
Photo by Igor Panchenko



Copperhead by Chris McMillin.
Photo by Chris McMillin.



P.J. Rowland's Lancaster bomber.
Photos by P.J. Rowland.



“The Past, Present, and the Future.”



Michael Duffy, Ed Capitanelli.
Photo by Rickii Pyatt.

“A pair of Stallions.”



Rabe Mustang by Matt Neumann.
Photo by Matt Neumann.



Seafire by Joe Adamusko.
Photo by Joe Adamusko.



Flash by Rene Berger.
Photo by Rene Berger.



Miss Redski by Bruce Hoffman.
Photo by Bruce Hoffman.



Saturn by Peter Germann.
Photo by Peter German.



Sonata by Claus Maikis.
Photo by Claus Maikis.

