

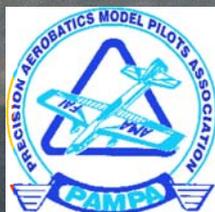
Stunt News

Precision Aerobatics Model
Pilot's Association

July/August 2010 \$5.00



The 2010 VSC
One of the windiest in history



features

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On the cover: Gaylord Elling guides his Gieseke Nobler through the pattern at the 22nd edition of VSC. He received many compliments for the very colorful and original color scheme on his ship. Photo by David Russum.

Above: Lanny Shorts brought Arlie Preszler's Kenhi Panther to VSC and flew it in competition in honor of his very dear friend. Arlie is seriously ill and we all missed seeing him at VSC. Lanny's gesture made us all feel a little closer to Arlie. Photo by David Russum.

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

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President's Column

By Bill Rich

I certainly feels strange to have missed the 2010 Nats. This is the second Nats I've missed since I first started attending in 1980. Hopefully the USA Team will be very competitive and bring home another Team World Championship.

I hope everyone who was fortunate enough to attend enjoyed themselves and their fellowship with other attendees. Congratulations to the winners, although I honestly feel that everyone who attended were winners in their own right, regardless of their competitive standing.

This column will be short and to the point. Only one topic will be addressed. It is time to ask each of you to consider what our Nats means to you, and how the loss of the Nats would affect you. As in all volunteer associations, a few willing persons end up doing the majority of the work.

Individuals who are currently volunteering should not be expected to carry an increasing workload for the organization. You only need to look at the history of PAMPA to identify members who have given continually to PAMPA. I could list some names but prefer not to because I would certainly leave a number of people out.

There are numerous people who have given more than their fair share back to the hobby and PAMPA. There are also many people who have not given as much back and should consider doing so.

PAMPA, as the SIG (Special Interest Group) for Control Line Aerobatics, is charged with providing volunteers to staff the many administrative positions required at the Nats. It all starts with appointing an Event Director who then oversees the entire staffing of the effort, from Judges to score sheet Runners. Without these critical volunteers, the Control Line Aerobatic Nats would not happen.

PAMPA is currently facing a key challenge in staffing the Nats after this year. This will be the last year as Event Director for Paul Walker. It has been very difficult to someone to step forward and agree to become the Event Director for the Nats.

Paul feels, and I agree, that one of the main issues facing potential Event Director candidates is the loss of the ability to compete at the Nats. For as long as I've been competing at the Nats the Event Director served for multiple consecutive years. Paul and I believe if the Event Director position was for a single Nats then more candidates would step forward and serve as Event Director. This will require commitment and a desire to "give something back" to Control Line, but it would not mean a loss of more than one Nats as a competitor.

Paul has been working on developing a "list" of PAMPA members who have said they would serve as the Event Director. The response to his appeal has been less than encouraging.

Our concern about the Event Director position centers on the possible reaction of the AMA. If PAMPA cannot provide an Event Director for 2011 the AMA may appoint an Event Director of its choosing. This person might be completely unacceptable to the competitors. Worse yet, the AMA could decide not to continue on with the Control Line Aerobatic Nats. Neither of these possibilities would be acceptable.

As I mentioned earlier, it falls to PAMPA to

provide an Event Director and administrators for the Nats. I have asked the District Directors for help in compiling a list of PAMPA members who have agreed to become the Event Director for at least one Nats. Only after they have discussed the Event Director position with and gotten a firm commitment to accept the one-year assignment as Event Director will their name be placed on the list.

Hopefully, we can create a list of members who are willing to give one year back to the hobby and PAMPA to ensure the continuation of our Nationals. To date I have three volunteers; unfortunately, none are available for the 2011 Nats. I could very easily come up with a list of at least 25 members who would be excellent Event Director candidates. Some have been competitors for numerous years, some have won the Nats, and most have finished in the Top Twenty for numerous years.

There are also excellent candidates with outstanding administrative skills who have experience as local and regional Event Directors. The key is to challenge each of them to "pay it forward" to ensure the continuation and enjoyment of our Nationals.

This effort to compile a list of members who are willing and able to serve as the Event Director of our Nationals will become my number-one initiative moving forward. I appeal to each of you to strongly consider volunteering to ensure the continuation of this great event. Ask yourself, can I be doing more for the hobby and PAMPA?

Please contact me directly if you would like to discuss this personally. *SN*



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Level Laps

By Bob Hunt



In this issue of *Stunt News* you will find an article announcing the 40th anniversary Garden State Circle Burners Old Tyme Stunt contest. Written by Rich Peabody, this piece also contains a bit of the history behind the event and highlights its founder, John Miske.

Certainly John's inspiration to form this event came from the fact that his involvement in modeling bridged the years from the end of that era to and through a great deal of the "modern" era of CL Stunt. John saw it all and loved it all. I'm sure he still does...

Those of us who have known John for many years also know the love this man has for model aviation in general and specifically CL Stunt. A very good flier in his own right, John has always been one who served willingly and often so that others might have a great time flying at the GSCB events. To me he was a fixture at that Lincoln Park, New Jersey, field from my youth, through my years of rising through the ranks and on into more modern times. John, to me, is GSCB personified.

We all owe John a debt of gratitude for not only coming up with one of the most popular events in CL's history, but also for keeping the flame of participation and interest burning bright in the east. The man is a legend in our sport.

If I may, I'd like to pass along just one short John Miske story. John had a not-so-secret desire to own and operate a hobby shop. In the early 1990s he realized that dream and opened a shop in Passaic, New Jersey. Just before the shop was to be opened officially I received a call from John asking me if I would do him the honor of cutting the ribbon in a ceremony at which many of the town's officials were to be present. I told John that I would certainly do that, but that the honor was all mine.

The day arrived and my entire family

went with me to the ceremony. There were reporters and cameras and food and much fanfare. Of course all the Garden State Circle Burner members and their families were present as well to support John and his wife/best friend, Elaine at the opening. It really was a pretty big deal!

The ribbon had been stretched across the door and the time had arrived for the cutting ceremony. I was handed a large pair of scissors and I proceeded to place the blades above and below the ribbon ... and then I stopped and said, "I'm sorry, I just can't do this."

John had a look of horror on his face. He had no idea what was going on or what I was doing. At that exact moment I'll bet he was having massive second thoughts about having asked me to perform this task. I handed the scissors off to my father and he in turn handed me a small cutting board, a straight edge and a sharp #11 blade knife handle and I proceeded to cut the ribbon as if I were slicing a piece of balsa wood. John breathed a sigh of relief and everyone had a good laugh. Hey, it was the only appropriate way to open a hobby shop!

There is just no way that I can adequately thank John for all his support and guidance over the years. He has been a steadfast and loyal friend to all modelers and I really don't think he knows any strangers; only friends. Let's all pay tribute to John and his vision of aeromodeling by making arrangements if we possibly can to attend and fly in the 40th GSCB OTS contest. I know I'll be there ...

Errata

In the May/June issue of *Stunt News* we presented an "Appearance Point" piece that featured Derek Barry's Evolution Extreme. Derek's plane was also featured on the cover of that issue along with Derek and the Concours trophy that he won with the plane at last year's Nats. The problem is that we credited the text for the "Appearance Point" write-up to Randy Smith. While it is a Randy Smith design, the credit for the write-up should have gone to Derek. Sorry about that Derek!

We had a guest columnist last month for the E-Stunt column and it was Jim

Perlowsky. We misspelled Jim's last name as "Perlowski." Jim is the Editor of the SEFLI (Silent Electric Flyers of Long Island) newsletter and he was very gracious in pointing out that we all make mistakes from time to time.

We thank him again for allowing us to present his column on Lipo care. Hopefully we can continue to share information with our electric RC brethren as time goes on. They have, after all, had a head start on us in that field.

The Sharpy

In light of the fact that this is the 40th anniversary year of Old Tyme Stunt, we thought it appropriate to further commemorate the occasion by publishing an OTS construction feature. The subject of this feature is the very obscure, and rarely seen, F&B Sharpy design.

OTS aficionado, and Contest Director extraordinaire, Tom Hampshire resurrected this one from the past, wrote a really informative step-by-step construction article, and worked with our own Bob



Kruger (PAMPA's resident

CAD plans expert) to come up with a set of beautiful working drawings to allow this neat little model to be produced easily. It should become a favorite in OTS events; it has all the right "numbers."

VSC XXII

To complete the theme of OTS and vintage modeling we are presenting Robin Sizemore's report on the 22nd edition of the Vintage Stunt Championships. This year's VSC was visited by overall good weather, but there were a couple of days in which the desert wind threw down a challenge for OTS and Classic fliers. Last year we were spoiled at VSC by five of the most amazingly perfect flying days you could possibly imagine for the contest. I guess we got spoiled ...

If you've never attended a VSC, please try to make it to Tucson next March. You won't regret it!

Till next time, Fly Stunt! *SN*

—Bob Hunt



PAMPA Membership Application or Renewal Form

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Vintage Stunt Club

By Robin Sizemore

This year's entry level was good with 89 entered in Classic, 67 entered in Old Time Stunt, 9 entered in Old Time Ignition. These are good numbers in any year and were up from 2009. This year the 2009-2010 AMA rules for pull test and line sizes were used at VSC. We started weighing planes on the Saturday before the start of the VSC and continued doing this at the appearance judging and the opening day of OTS and Classic for those contestants not arriving prior to the opening days. The new pull test equipment was in place and worked well.

Monday was, as usual, a practice day with all six circles being used; three asphalt and three grass. The weather reports were not great but it looked like we would have reasonable weather for OTS and much better for Classic. Tuesday, the first day of OTS and OTS IGN, proved to be a very windy day and so much so that flying was impossible. At 10:30AM Tuesday the contest was called off and would resume Wednesday morning at 7:30AM.

Wednesday proved to be a much better day and flying for OTS and OTS IGN started as planned. OTS IGN finished both rounds on Wednesday. All contestants entered in OTS flew the first round as if it was Tuesday. After the first round was completed the top 10 from each group (Circle 1 and Circle 2) flew a second round by switching circles (just like always) and their 2nd round score was added



VSC XXII will go down as one of the windiest in VSC's 22 year history.

Championships XXIII

Photography by Rickii Pyatt and David Russum



Above: Here's our cover subject model, Gaylord Elling's Gieseke Nobler in flight. It is powered by a PA 40 R Ultra Lite.



Above: Warren Tiaht's version of Art Pawloski's Lunar completes a loop in competition at VSC 22.

to their 1st round score to determine the top ten award winners. OTS and OTS IGN were completed on Wednesday and Classic would be next starting Thursday morning and completing Saturday.

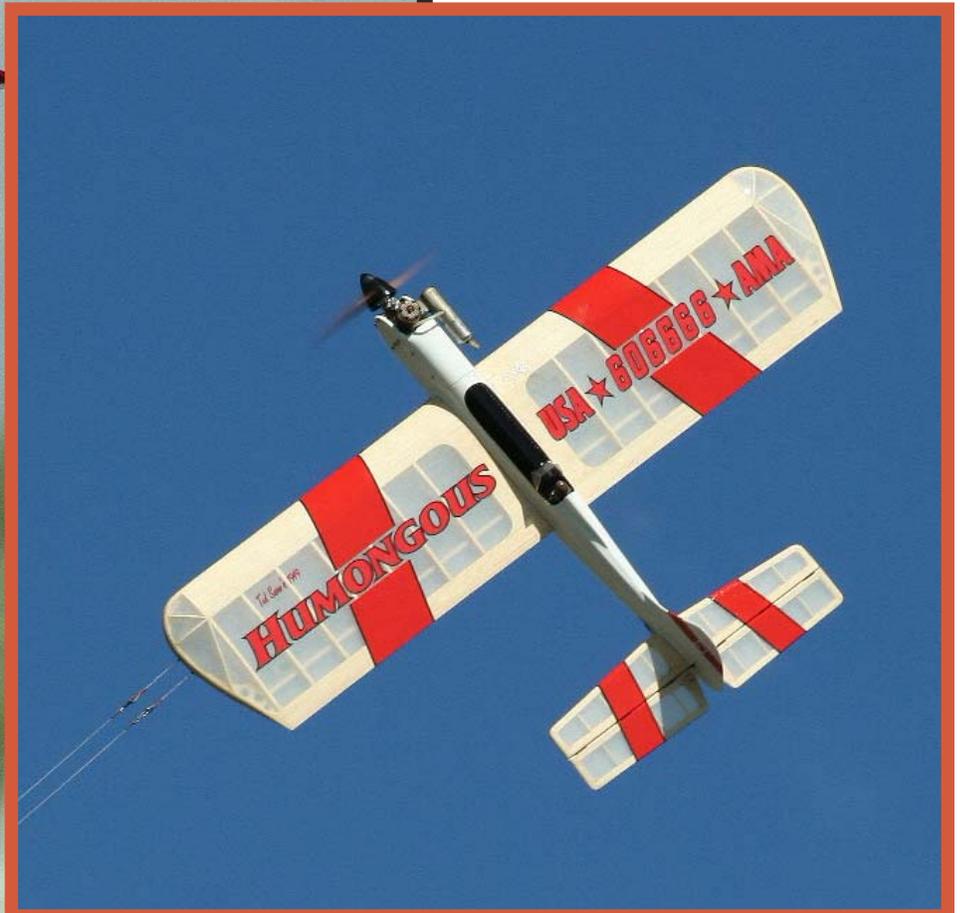
Wednesday evening at the RiverPark Inn the appearance judging took place as usual. The line up of planes is always great to see. Ken Gulliford and Bob Parker did the appearance judging this year and did an excellent job. The top appearance point planes were placed on an elevated grass area in the RiverPark Inn court yard for picture taking. Mark Gerber and Windy Urtnowski both received 20 points for their planes followed by Roy DeCamara, Steve Harris, and Bob Hunt with 19 points. The display of planes at VSC is something to see. The different color, styles, finishes are very good. VSC seems to bring out the best in all who attend, fly, judge, and help.



Bob Hazle built the I-Beam wing version of Bill Werwage's Vulcan. He's flown it at several VSCs.

Top: Here's another example of Gaylord Elling's interesting paint work on his F&B Viking. It's powered by an ST .46.

Bottom: Roy Trantham's striking Humongous performs in OTS competition. A Double Star .54 provides the power.





Left: One look at the outstretched flag will convince you that it was pretty windy while Masaru Hiki was flying the last round of Classic with his Bob Lampione-designed United. Masaru placed second with this flight.

Below: Bob McDonald produced a gorgeous version of Bill Werwage's USA-1 and placed third in Classic with it this year. A PA .40 R Ultra Lite engine is used and the model is covered with Polyspan.

Right: Gary Marchand built one of Jack Sheeks' most unusual models, the "Sheik." Here he poses with his model and its designer during appearance point judging.

The first day of Classic was a little bit windy but not unmanageable. With the exception of the usual dropouts the rest of the entries in Classic flew their 1st round. Bart Klapinski was the leading scorer after the first round.

Friday, the 2nd day of Classic, was the best weather day of the three days of Classic. Again,





VSC-XXII



2010

JACK SHEEKS
INDIANAPOLIS, IN
VSC XXII - 2010

Sheek's
Sheik III

N7379

Jack Sheeks 2010



Above: David Russum gets his photo taken for a change. He's fueling a borrowed Profile Oriental with some help from Dale Gleason. The ship belongs to Joe Gilbert.

Right: The appearance point judging was done in the courtyard of the official VSC motel, the Riverpark Inn. The models entered continue to get more beautiful each year.





Mark Gerber's replica of Bob Palmer's Hurricane fittingly captured the Classic Concours award. Here it glides in for a landing during competition.

all who flew on the day before flew on day two. At this point Bob McDonald was leading all scorers and the competition was looking really good. The weather report for Saturday looked good for the morning and not so good after 1:00PM. It turned out to be the worst of the three days.

Instead of 5 to 8 MPH winds from the Southeast we were greeted with 10 to 15 MPH winds from the Northwest and as the morning continued the winds were approaching 20MPH and gusting to 22MPH. This resulted in a large number of scratches with Circle 1 and 2 finishing early. The

contestants on Circle 2 continued to fly with the fewest scratches. As the last two flights were getting underway, the wind started to slow down just a bit. Bob Hunt's last flight of the day was in better (less windy) air. The final flight in Classic was completed by 11:30AM and the wind slowing down to 5 to 8 MPH pretty much for the rest of the day.

Even though the weather was a problem, the cooperation received from the competitors, officials, and helpers was extraordinary. It is the spirit and high regard of the competitors, officials, and helpers of VSC that makes the event so unique and special.

Thank you!

Helpers are a big deal at VSC. Without them not much happens, so, each year we manage to get great help from lots of people.

OTS Ignition Event Director:	Jim Lee
TS Ignition Judges:	Doug Taffinder, Bill Heyworth
OTS Ignition Tabulation:	Mickey Taffinder, Aubrey Elling
OTS & Classic Tabulation:	Elaine Brookins, Shareen Fancher
OTS Judges:	Ted Fancher, Jim Thomerson, Mark Smith, Bob Emmett
Classic Judges:	Rickii Pyatt, Bill Byles, Linda Brainard, Mike Scott, Pete Peterson, Al Hieger
Pit Bosses:	Linda Gleason, Bill Lee, Steve Holt/Rick Green, Warren Tiaht
Pull Test:	Jack Comer, Rene Berger, Lou Crane, Bill Lee, Steve Holt, Warren Tiaht
Score Sheet Runners:	Jack Comer, Rick Green, Linda Wolgast, Ed Capitanelli, Steve Holt, Lew Corbett, Warren Tiaht
Score Sheets/Flight Order/	
Contest Forms, & Scoreboards:	Nick Lemak, Leroy Black, Robin Sizemore, Linda Brainard
Sale of 'T' Shirts/Pins/Hats/etc.:	Linda Wolgast, Peggy Capitanelli
Official Hugger:	Cassidy Delaney
Field Setup:	Peggy Capitanelli (Orange Cap Installer), Rene Berger, Bart Klapinski, John Callentine, Ed Capitanelli, Rick Green, Jack Comer, Jim Hoffman, Lew Corbett
Airplane Data, Registration Check-In:	Lila Lee
Contest Directors:	Lou Wolgast CD, Robin Sizemore Assistant CD

Special Award Recipients:

<i>Keeper of the Flame:</i>	Allen Brickhaus
<i>Gialdini Sportsmanship:</i>	Rickii Pyatt
<i>Spirit of '46:</i>	Bob Lipscomb: (Bandit)
<i>Spirit of '52:</i>	Allen Brickhaus (Humongous, Aloise 51)
<i>Spirit of '64:</i>	Roy DeCamara (Oriental)
<i>GMA Memorial:</i>	Tom Dixon (52 Nobler)
<i>Most Unusual Entry:</i>	Bob Brookins (La Donna)
<i>Classic Pilots Choice:</i>	Mark Gerber (Hurricane)
<i>Best Appearing Old Time:</i>	Pete Peterson (Jameson)
<i>Best I-Beam (Fred Carnes):</i>	Charlie Reeves (Super Ares)
<i>Jack Sheeks Best Appearing:</i>	Bob Brookins (La Donna)
<i>Jack Sheeks Highest Scoring:</i>	Bob Brookins (La Donna)
<i>Best Appearing Bob Palmer:</i>	Mark Gerber (Hurricane)
<i>VSC Eagle:</i>	Bob Whitely (Best Placing in OTS and Classic)



Windy Urtnowski made it to VSC for the first time and flew his version of the Naccarato Big Job. He obviously knows how to score points at home as well as in competition.

The Saturday night VSC banquet was maybe the best ever. The banquet food was a Mexican buffet and the food and the service were excellent. Jim and Sharon Hoffman once again made all of the arrangements for the banquet.

VSC had some new faces which included Les McDonald and his wife Roberta, and Windy Urtnowski and his wife Karyn. Bob Gialdini made it back to VSC after a long absence. Ted Fancher did his usual great job of MC and opening the awards presentations

with his humor and wit. Ted had Les and Windy (separately) come to the microphone to say a few words as to their thoughts about VSC and their first time experience in Tucson. We heard some great comments from each of these gentlemen. Doug Taffinder celebrated his 80th birthday at VSC this year. Ted led the banquet attendees in singing “Happy Birthday” to Doug. Congratulations Doug.

After Ted was done with the opening MC duties it was time to start presenting the awards. After a few words from me (Robin



Hold onto that hat, Roy! This should give you some clue as to how windy it was on Saturday. Roy flew his Humongous in both OTS and Classic competition, but had his hands full on this flight.



Allen Brickhaus flew his version of the Louis van der Hout-designed Olympus. The transparent finish on the wing worked well against the Tucson sky. Allen really likes the way this plane flies!



VSC 22 OLD TIME IGNITION RESULTS

Last Name	First Name	AMA No.	IGN Plane	IGN Engine	RND 1	RND 2	FINAL PLACE
Gilbert	Joe	771377	Humongous	Anderson Spitfire	311.0	295.86	310.99 1
McMillan	Frank	9080	Madman	TORP 29	296.7	306.73	306.73 2
Elling	Gregg	777306	Zilch	Anderson Spitfire 60	263.2	259.49	263.24 3
Gleason	Dale	12938	Madman	Torpedo 35	256.0	259.11	259.11 4
Lipscomb	Bob	17556	Bandit	SPITADE 65	259.0	254.49	258.98 5
Hutchinson	Don	5402	Dragon	ORWICK 29	253.5	177.68	253.49 6
Brokaw	Burt	L206	Humongous	Super Cyke 65	233.2	0	233.24 7

VSC 22 OLD TIME RESULTS

First Name	Last Name	AMA NO	OTS Plane	OTS Engine	RND 1	RND 2	Final	PI	%
Bob	Whitely	68900	Humongous	DS-60	305.0	312.5	617.5	1	
Keith	Trostle	3533	Big Job	DS-60	292.0	322.5	614.5	2	
Lou	Wolgast	7442	Jamison	Brodak 40	303.5	288.0	591.5	3	
Allen	Brickhaus	801	Humongous	Aloise 51	287.0	297.5	584.5	4	
Leroy	Black	5900	Jamison	DS-54	281.5	299.0	580.5	5	
Mike	Scott	164852	Jamison	Brodak 40	284.5	295.5	580.0	6	
Jim	Hoffman	59362	Up Start	Brodak 40	285.5	294.0	579.5	7	
Kaz	Minato	217221	Humongous	Stalker 40 SE	279.5	297.0	576.5	8	
Dale	Barry	2220	Humongous	PA 51 SE	282.5	289.0	571.5	9	
Mike	Duffy	792544	Upstart	Brodak 40	267.5	294.5	562.0	10	
Jim	Rhoades	31047	Humongous	Magnum 36 XLS	263.5	294.5	558.0	11	
Jim	Aron	N1101A	Ringmaster	OS FP-20	273.5	274.5	548.0	12	
Burt	Brokaw	L206	Jamison	OS 35s	278.0	264.0	542.0	13	
Gaylord	Elling	8164	Viking	GMA Custom ST-46	260.5	279.5	540.0	14	
Lew	Woolard	2765	Humongous	OS LA-46	264.0	275.0	539.0	15	
Roy	DeCamara	26434	Jamison	OS FP-35	284.5	252.5	537.0	16	
Charlie	Reeves	141	Big Job	FOX Long Nose 59	268.5	265.0	533.5	17	
Mike	Donovan	427764	Black Tiger	FOX 35	271.5	258.5	530.0	18	
Roy	Trantham	606666	Humongous	DS-60	284.5	239.0	523.5	19	
Bob	Lipscomb	17556	Bandit	SPITADE 65	277.5	83.5	361.0	20	
Leroy	Polk	14004	Jamison	Brodak 40	260.5	0.0	260.5	21	85.83%
Dale	Gleason	12938	Madman	Torpedo 35	259.0	0.0	259.0	22	84.92%
Chris	Brainard	606049	Jamison	Brodak 40	258.5	0.0	258.5	23	84.75%
Robin	Sizemore	70985	Jamison	Brodak 40	253.5	0.0	253.5	24	83.53%
John	Wright	13567	Flying Clown	OS-15	253.5	0.0	253.5	25	83.11%
Joe	Gilbert	771377	Ringmaster	Brodak 40	247.0	0.0	247.0	26	80.98%
Gregg	Elling	777306	Humongous	ST-60	244.0	0.0	244.0	27	80.00%
Scott	Harness	763415	Jamison	Brodak 40	242.5	0.0	242.5	28	79.90%
Stan	Tyler	3239	Adams' Special	Bordak 40	241.5	0.0	241.5	29	79.18%
Bruce	Perry	MAAC13758	Ringmaster	OS FP-20	237.5	0.0	237.5	30	77.87%
Tom	Dixon	1028	52 Nobler (MAN Version)	DS-54	229.5	0.0	229.5	31	75.62%
Floyd	Layton	32524	Barnstormer	FOX 35	230.0	0.0	230.0	32	75.41%
Jerry	Higgins	413013	Jamison	Brodak 40	216.5	0.0	216.5	33	71.33%
Gene	Martine	2903	All American	FOX 35	215.0	0.0	215.0	34	70.84%
Carl	Shoup	14296	Belfry Bound	OS LA-46	210.5	0.0	210.5	35	69.02%
Steven	Diaz	870894	Ringmaster	OS FP-25	208.5	0.0	208.5	36	68.70%
Roger	Olson	788990	Ringmaster	Brodak 25	209.5	0.0	209.5	37	68.69%
Bob	Whitney	RAD	Jamison	ST-46	208.0	0.0	208.0	38	68.53%
Steve	Holt	753562	Ringmaster	OS FP-20	207.5	0.0	207.5	39	68.03%
Lanny	Shorts	2945	Viking	Thunder Tiger 36	207.5	0.0	207.5	39	68.03%
Andrew	Borgogna	19340	Humongous	ST-51	183.5	0.0	183.5	40	60.16%
Tony	Kubes	774931	Barnstormer	OS LA-46	175.5	0.0	175.5	41	57.54%
Lew	Corbett	759259	Jamison	OS LA-46	175.5	0.0	175.5	41	57.54%
Robert	Brookins	7818	Humongous	Silver Fox Tower 46	155.0	0.0	155.0	42	50.82%
Pete	Peterson	449214	Jamison	DS-40	112.0	0.0	112.0	43	36.72%
John (Doc)	Holliday	23530	Firecat	FOX 35	97.5	0.0	97.5	44	31.97%

Sizemore) Jim Lee presented the awards to the top five scorers in OTS IGN. These were: 1st place to Joe Gilbert, 2nd to Frank McMillan, 3rd to Greg Elling, 4th to Dale Gleason, and 5th to Bob Lipscomb. Thanks to Don Hutchinson, all of the Ignition contestants used Don's ignition system and of the 9 contestants entered 7 flew and completed their flights.

Next came the presentation of the top ten in Old Time Stunt. The top ten were: 1st, Bob Whitely; 2nd, Keith Trostle; 3rd, Lou Wolgast; 4th, Allen Brickhaus; 5th, Leroy Black; 6th, Mike Scott; 7th, Jim Hoffman; 8th, Kaz Minato; 9th, Dale Barry; and 10th, Michael Duffy. Michael Duffy is a junior and made the top ten for the first time. Congratulations Michael.

The Classic top ten award presentations followed and they went to: 1st, Bob Hunt; 2nd, Masaru Hiki; 3rd, Bob McDonald; 4th, Ted Fancher; 5th, Bob Whitely; 6th, Lou Wolgast; 7th, Keith Trostle; 8th, Kaz Minato; 9th, Frank McMillan; and 10th, Windy Urtnowski. This was Windy's first VSC flying a take-apart Big Job in Classic and flying it well enough to finish in 10th place. Not many first time contestants do this well.

As last year's recipient of the Gialdini Sportsmanship award I was asked to present it to the 2010 honoree. As I was getting to the end of my presentation I saw Rickii sitting at her table looking over Mack Davis's shoulder (only her eyes showing) and hoping that I was talking about someone else. It was a great moment and I was very pleased to have been

VSC 22 CLASSIC RESULTS

Last Name	First Name	AMA NO	CLS Plane	CLS Engine	RND 1	RND 2	RND 3	Final	PI
Hunt	Bob	1114	Caprice	Aero Tiger 36	556.0	571.5	602.0	1173.5	1
Hiki	Masaru	420543	United	Stalker 40 RE	516.5	582.5	556.5	1139.0	2
McDonald	Bob	61882	USA 1	PA-40 Lite	559.0	579.5	551.0	1138.5	3
Fancher	Ted	1828	Ruffy	MERCO 40	571.5	559.0	399.5	1130.5	4
Whitely	Bob	68900	Formula S	DS-54	565.0	562.0	563.5	1128.5	5
Wolgast	Lou	7442	Fury	DS-54	536.0	561.0	559.0	1120.0	6
Trostle	Keith	3533	Rabe Bear Cat	Aldrich Jett 50	543.5	575.0	537.0	1118.5	7
Minato	Kaz	217221	Humongous	Stalker 40 SE	546.5	549.5	564.0	1113.5	8
McMillan	Frank	9080	Gypsy 46	PA 65	538.5	558.0	0.0	1096.5	9
Urtnowski	Windy	72618	Big Job	ROJETT 61	512.5	540.0	554.5	1094.5	10
Hoffman	Jim	59362	57 Nobler	Aero Tiger 36	539.5	545.0	309.0	1084.5	11
Klapinski	Bart	7531	Delaney 1967						
Dixon	Tom	1028	Two Much 52 Nobler (MAN Version)	Two L & J FOX 35s DS-54	577.5	494.0	0.0	1071.5	12
Firkins	Ray	557055	Heinz 57	Aero Tiger 36	532.5	528.0	0.0	1060.5	13
Reeves	Charlie	141	Super Aries	Aero Tiger 36	546.5	510.0	0.0	1056.5	14
Brickhaus	Allen	801	Olympus	PA-40 Lite	527.5	524.0	498.5	1051.5	15
Tiaht	Warren	1751	Lunar	PA 61	507.5	540.0	0.0	1047.5	16
Martine	Gene	2903	LARK	Aero Tiger 36	518.5	519.5	0.0	1038.0	17
Gilbert	Joe	771377	Tucker Special	Aero Tiger 36	511.0	527.0	471.0	1038.0	18
Shoup	Carl	14296	Belfry Bound	TH 40	506.5	528.5	482.0	1035.0	19
Duffy	Mike	792544	Belfry Bound	OS LA-46	521.0	510.5	0.0	1031.5	20
Harness	Robert	28127	57 Nobler	Aero Tiger 36	528.0	500.5	481.0	1028.5	21
Kephart	Antone	7504	Gladiator 45	ST-51	522.0	493.0	418.5	1015.0	22
Gleason	Dale	12938	Cavalier	Brodak 40	511.5	500.5	0.0	1012.0	23
Wright	John	13567	Southwick Skylark	ST-51	497.5	514.0	363.0	1011.5	24
Brainard	Chris	606049			515.5	494.5	461.0	1010.0	25
Callentine	John	720292	Caprice	OS LA-46	499.5	509.5	0.0	1009.0	26
Barry	Dale	2220	Caprice	Aero Tiger 36	502.5	504.5	0.0	1007.0	27
Compton	Robert	492221	Thunderbird I	FOX 35	502.0	502.5	358.0	1004.5	28
Harris	Steve	22271	Continental	Aero Tiger 36	472.5	531.0	308.0	1003.5	29
Elling	Gaylord	8164			478.5	514.5	0.0	993.0	30
Dick	Wesley	11334	Gieseke Nobler	PA-40 Lite	478.5	513.5	0.0	992.0	31
			62 Aries	Aero Tiger 36	504.5	476.0	0.0	980.5	32



Yuhi Minato flew his Brodak 40 powered Fancy Pants in Classic competition. His Dad, Kaz, once won the Classic event at VSC.

Last Name	First Name	AMA NO	CLS Plane	CLS Engine	RND 1	RND 2	RND 3	Final	PI
Tyler	Stan	3239	Caprice	Aero Tiger 36	465.5	513.0	454.5	978.5	33
Chuang	Sean	896877	Fury	Saito 40 4-Stroke	477.5	488.5	471.5	966.0	34
Sizemore	Robin	70985	Gladiator 35	ENYA SS 50 S	467.5	492.5	81.0	960.0	35
Trantham	Roy	606666	Humongous	DS-60	486.0	469.0	320.0	955.0	36
Aron	Jim	N1101A	FENO	OS Surpass 30	450.0	494.5	0.0	944.5	37
Rhoades	Jim	31047	Humongous	Magnum 36 XLS	455.0	479.5	0.0	934.5	38
Hutchinson	Don	5402	Thunder Bird	Magnum 36 XL	460.5	474.0	0.0	934.5	39
Higgins	Jerry	413013	Oriental	OS LA-46	468.5	462.5	362.0	931.0	40
DeCamara	Roy	26434	Oriental	Brodak 40	463.5	427.5	463.5	927.0	41
Minato	Yuhi	895965	Fancy Pants	Brodak 40	448.0	476.0	344.0	924.0	42
Olson	Roger	788990	Venus	Aero Tiger 36	461.0	454.0	0.0	915.0	43
Donovan	Mike	427764	Tucker Special	OS LA-46	441.5	469.0	0.0	910.5	44
Corbett	Lew	759259	Blue Angle	OS LA-46	429.5	456.0	0.0	885.5	45
Gerber	Mark	220057	VECO Hurricane	T & L ST-46	455.0	399.5	0.0	854.5	46
Renger	Larry	9246	Neptune II	Brodak 40	428.5	415.5	0.0	844.0	47
Harness	Scott	763415	ARF Nobler	OS FP-35	405.0	429.5	0.0	834.5	48
Elling	Gregg	777306	Gambler	OS FP-40	419.0	407.5	349.5	826.5	49
Gingerich	Gary	870223	Shark 45	DS 60	328.5	492.5	331.5	824.0	50
Whitney	Bob	RAD	Jamison	ST-46	421.5	345.5	0.0	767.0	51
Holliday	John (Doc)	23530	Simons P39	OS LA-46	386.0	349.0	218.0	735.0	52
Hazle	Bob	28801	Vulcan	Aero Tiger 36	306.5	428.5	0.0	735.0	53
Holt	Bill	166	Oriental	OS 35s	315.5	387.5	0.0	703.0	54
Green	Rick	102324	Smoothie	Brodak 40	0.0	433.0	233.5	666.5	55
Brokaw	Burt	L206	Oriental	Brodak 40	135.0	469.5	0.0	604.5	56
Black	Leroy	5900	Pegasus	DS-54	0.0	528.5	0.0	528.5	57
Brookins	Robert	7818	La Donna	Silver Fox LS-46	266.5	233.5	0.0	500.0	58
Haverly	Mike	710882	J.D. Falcon	OS LA-46	463.5	0.0	0.0	463.5	59
Woolard	Lew	2765	Smoothie	Brodak 40	0.0	454.5	0.0	454.5	60
Shorts	Lanny	2945	Panther	DS-40	0.0	452.5	0.0	452.5	61
Wolsey	Richard	25323	J.D. Falcon	DS-40	0.0	398.5	0.0	398.5	62
Russum	David	335952	Profile Oriental	Brodak 40	342.0	0.0	0.0	342.0	63
Borgogna	Andrew	19340	Flite Streak	FOX 35	73.0	146.5	0.0	219.5	64
Gladfelter	John	99999	Smoothie	OS 35s	44.0	0.0	0.0	44.0	65
Crane	Lou	23139	ARF Flite Streak	OS 25	34.5	0.0	0.0	34.5	66

asked to present the Gialdini award to her. Linda Gleason had all of the past recipients of the Gialdini award standing up front with me as the presentation was made. It really was a great moment.

Charlie Reeves made the Keeper of the Flame award presentation to Allen Brickhaus. Allen realized about half way through Charlie's presentation that Charlie was talking

about him. Another great moment was when Allen was named the Keeper of the Flame for 2010 and came forward to receive it.

This was the first year that the new award (The VSC Eagle) for the best placing in OTS and Classic was presented. The recipient of this award is Bob Whitely having placed 1st in OTS and 5th in Classic—a combined score of six (6). *SN*

One of the most spectacular models ever flown at VSC was the Two Much twin that was built by Bart Klapinski. This model was designed by Mark Fechner. Bart's very good friend, Gordan Delaney, helped a great deal in getting this beautiful behemoth ready to fly. Unfortunately it was lost on Saturday of VSC due to a freak wind gust. Bart vows to rebuild it and return next year! Two Fox 35 engines powered the retract-equipped ship.





Above: Bob Brookins built this unusual Jack Sheeks-designed twin-boom LaDonna.

Top left: Bob Whitely beautifully reprised Jim Kostecky's Formula S for 5th in Classic.

Left: Allen Brickhaus gives Charlie Reeves' Big Job a shove.



Left: Stan Tyler's Caprice glides in for a perfect landing.

Right: Bob Hunt's Caprice flies inverted laps on way to a fourth consecutive VSC Classic win.



Bob Whitely's Humongous lands after capturing its second consecutive VSC OTS title.



VSC: We Came, We Flew, We Had a Great Time!



Left: Michael Duffy borrowed Jim Hoffman's Brodak 40-powered Upstart and finished in the Top Ten in OTS. Watch out for this young man... he's talented!

Inset: Carl Shoup just loves the Dale Kirn-designed Belfry Bound and he flies it in OTS with style!



Top left: Bob Harness Sr. and his grandson, Scott Harness, pose here with Scott's Jamison Special. The whole Harness family attended!

Top: Gene Martine brought his OTS deBolt All American and his Classic Mackey Lark all the way from Florida.

Above: Dale Barry flew this colorful Humongous in OTS.

Left: No VSC week would be complete without John, "Doc" Holliday! Here he is with his AJ Firecat.



Left: Contest Director, Lou Wolgast found some time to fly his Jamison Special in OTS competition. He finished a close third!

Right: One of our amazing photographers was Rickii Pyatt (at left in photo to the right). She is shown here with Linda Gleason, who was one of the Pit Bosses.



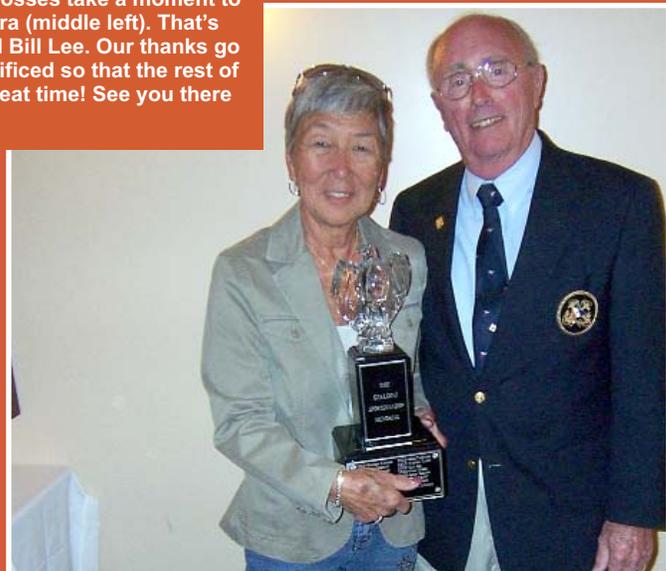
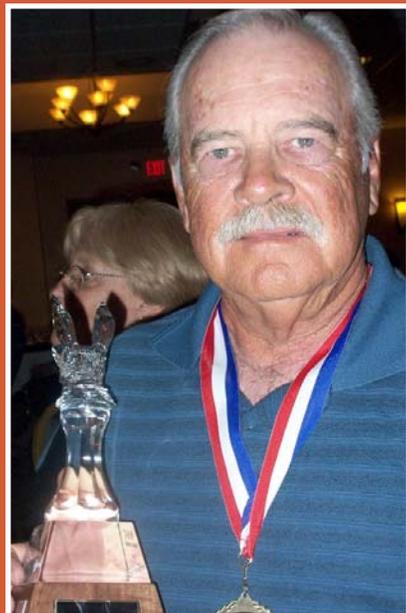
Left: Our other extremely gifted photographer was David Russum. He took most of the beautiful flight shots contained in this article.

Below: Bob Hunt holds for Warren Tiaht as he prepares to start the AeroTiger .36 in his Lunar in preparation for a competition flight.





Clockwise from top left: Our tabulating crew consisted of (L to R) Sharen Fancher, Elaine Brookins, and Lila Lee (top left). Bob Whitely won the inaugural VSC High Point award with a first in OTS and a fifth in Classic (top right) Rickii Pyatt was a very popular choice for the Gialdini Sportsmanship award for all she does behind the scene to make this contest fun (middle right). Here she receives the award from Bob Gialdini. Les McDonald finally made it to VSC and he brought along his darling wife, Roberta (bottom right). Les received many congratulations and thanks for his landmark "Stiletto Chronicles" series that just finished running in *Stunt News*. Just a few of the many people that made VSC a resounding success (photo at bottom left). Back row L to R: Ted Fancher and Mark Smith. Middle row L to R: Bill Heyworth, Doug Taffinder and Jim Thomerson. Front row L to R: Lou Wolgast and Robin Sizemore. There were many more! Here are two of the most famous CL Stunt fliers of all time: Bob Gialdini (L to R) and Bob Whitely (lower left). Two of the hard working Pit Bosses take a moment to smile for the camera (middle left). That's Linda Gleason and Bill Lee. Our thanks go out to all who sacrificed so that the rest of us could have a great time! See you there next year?



The Appearance Point



Paul Walker's

ALL AMERICAN EAGLE 09

Specifications:

Model Name: All American Eagle 09

Designer: Paul Walker.

Construction type: Built up all around, molded shell fuselage construction. Fully take-apart.

Wingspan: 64 inches.

Wing area: 750 square inches.

Length: 45 inches.

Moment arms: 9 inches nose; 18 inches tail.

Weight dry: 74.85 ounces (includes battery).

Power package: Plettenberg 25-14, Schultze 18.46 F2B ESC, Thunder Power 4000 5S2P (cube) 14 ounces.

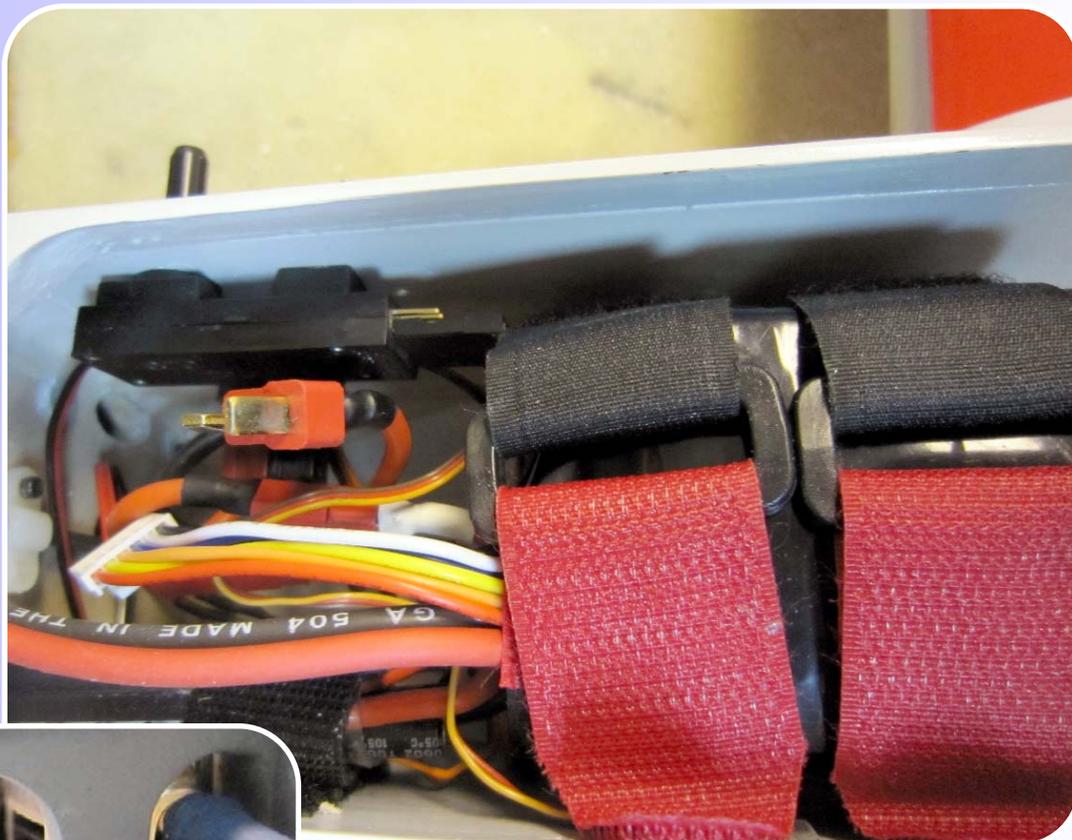
Propeller: 13.5 x 7, 6 (the inner $\frac{2}{3}$ is 7-inch pitch, and it drops to 6-inch pitch at the tip. It is a carbon prop made by Brian Eather. I sent the original, and he made a mold for it and produced the carbon props.

Finish: Dope, Auto clear. Polyspan covering.

Line length: 70 feet, center to center. Handle is balsa/carbon unit that weighs 20 grams.

This project started as another copy of the original electric Impact I created several years ago. However, I wanted something different this time. In the early '70s, I built an All American Eagle, and really enjoyed the outlines. Unfortunately, my first version was portly, and never flew up to the design's potential. For nostalgia reasons I decided to shape this new electric plane after the original.

Like the original, this version was more massive than I wanted. Undaunted, I flew it for the 2009 contest season. In reality, it flew very well despite being just less than 75 ounces. The power system in use provided more than enough thrust to perform all the tough maneuvers. It has



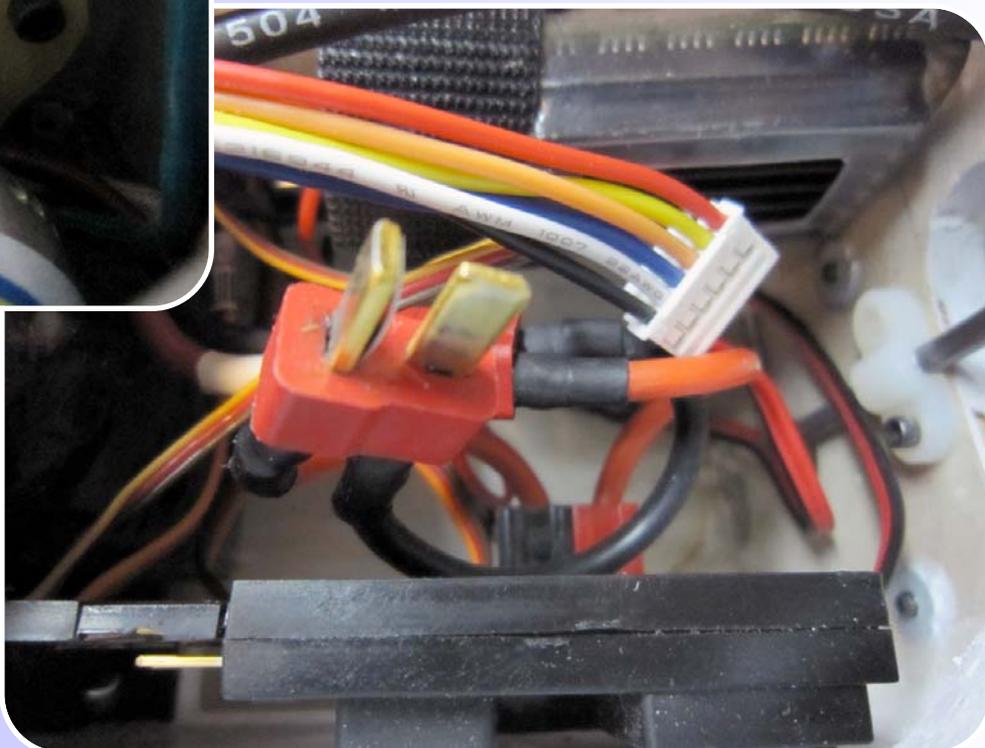
which allow the small dimensions of the transport box. I do remove the outboard wing for transport to the flying field as it will not fit in my car in one piece!

I am very satisfied with this design, however, I am on to new electric designs that have the same power system, yet weigh 62 ounces. I have test-flown one that meets that criterion, and it worked very well. Stay tuned for that design in the future. *SN*



amazing line tension in the overhead considering the mass. I fly it at about 5.3 seconds a lap, and it doesn't feel fast or rushed at any time. Once the landing gear was adjusted correctly, it takes off and lands very well on pavement. The tricycle gear also provides protection for my prop during practice sessions on the "grass" field from which we fly.

The plane features full take-apart construction. It will go in a box that's about 37 x 14 x 11 inches. Both wing panels separate from the fuselage, as do the horizontal tail and vertical tail,





By Matt Colan

Crash Repairs

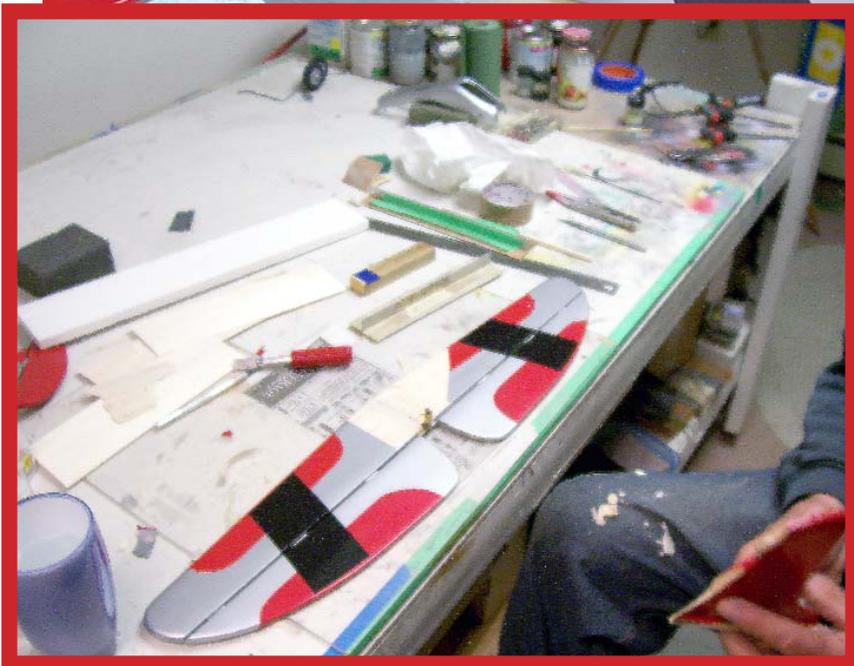
Guest Crash Repair Author Matt Colan

After getting 9 flights on my new Oriental Plus I had the plane flying great! After those few flights I knew it was my best-flying plane to date. Then on flight number 10, a freak wind shift in the middle of my outside loops caused the plane to lose line tension and pancake into the ground inverted. I stood dumbfounded about how I lost the plane like that and couldn't believe that after 6 years of flying, this great flying airplane would also be my first crashed airplane.

When I got up to the wreckage I quickly discovered that the plane was quite fixable. The carbon fiber landing gear mount had

sheared off from the impact, the rudder was in two pieces, the stab and elevator assembly was also in two pieces, and the rear of the fuselage from the leading edge of the stab back had broken clean off.

I told my grandfather, "If it kills me or not, I'm fixing this airplane. It's just too good a flyer to not fix it." We came up with a goal in repairing this airplane; make the tail end lighter. The Oriental Plus weighs 58 ounces, and we had to put two ounces of lead in the nose to get it to balance. By making it lighter, we could take some nose weight out, and make the plane lighter still.





We got all the pieces, and brought it back to the shop. That night, we started to strip the finish off the rear of the fuse. A good way we've found of stripping off the finish of an airplane is by heating the paint with a hair dryer, and getting underneath the finish with a sharp flat blade and peeling it up. If done right, you can get the finish off in a couple large pieces, but we haven't accomplished this. In order to get underneath the finish, we had to scribe a mark into the wood to cut the silkspan in order to get a good bite underneath.

My grandfather and I started with putting the rear of the fuse back together. Since everything had broken off clean, it just plugged right in with no holes to fill in with scrap balsa. We then moved onto the stab and elevator assembly.

After stripping off the finish, we re-sheeted the center section of the stabilizer, right where it broke, and we didn't want to compromise strength so it was just easier to cut it out and re-sheet it. After we re-sheeted the stab, we weighed the whole stab and elevator assembly. The weight came out to a total of 3.7 ounces! We instantly discovered that a bulk of the weight in the tail was the elevators. Rather than putting them back on the plane, my grandfather made new ones while I was at school. We weighed the new assembly and it came out at 2.6 ounces; this was to our liking.

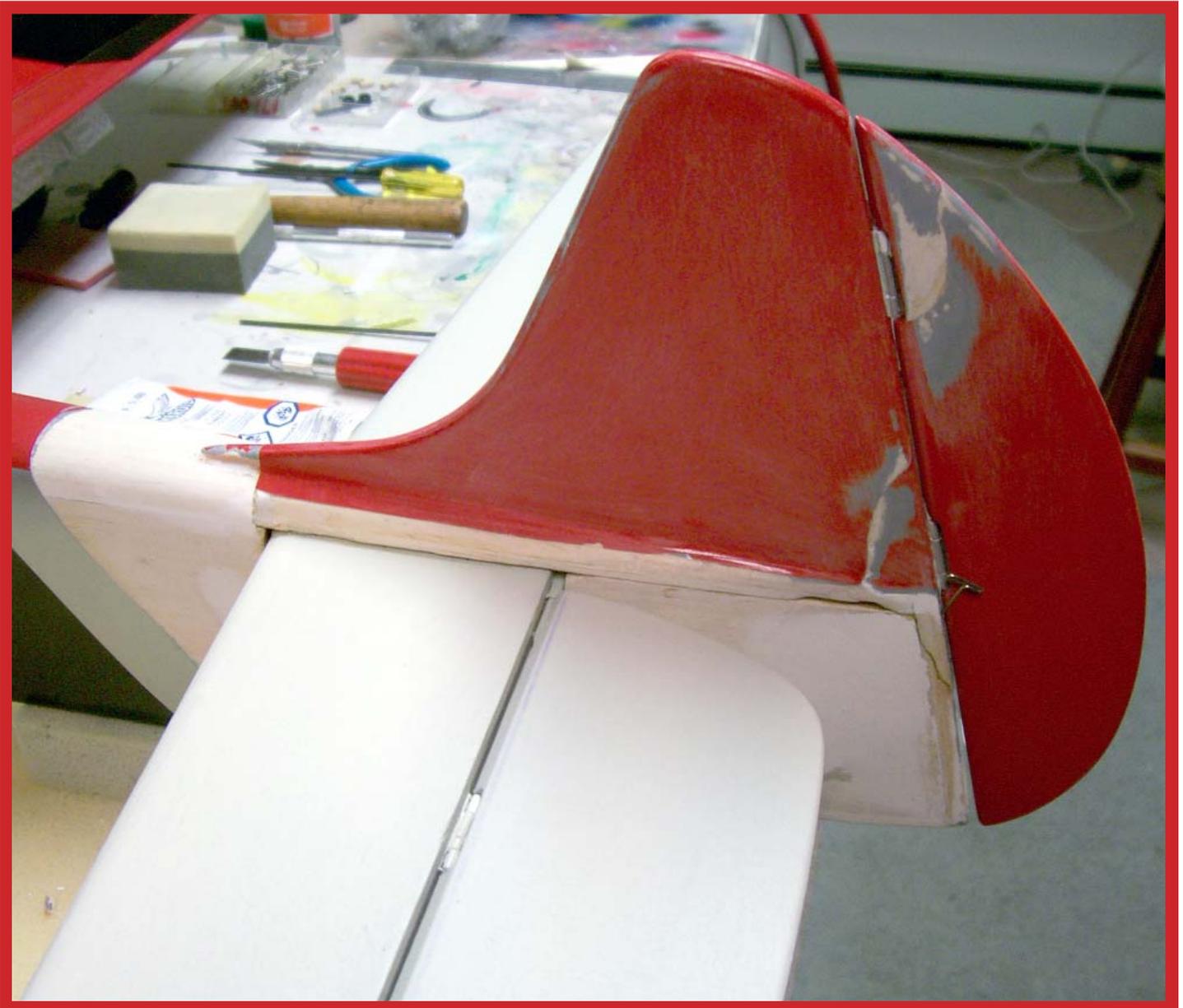
Over the next couple of days I built up the finish on the woodwork with clear dope and covered the stabilizer and elevators with silkspan again.

Due to the fact that I have a busy schedule with baseball at this time of year, I had my grandfather do some of the grunt work in repairing the plane. By the time I got the chance to head over to his house, the plane was back in one piece. By this point, the tail end of the plane was ready for the color coat.

The refinishing of the tail end of the airplane went a lot like the painting process of any airplane, except we had to back mask the rear end of the fuselage. That way no paint would be sprayed where there was already paint.

The whole refinishing process was rushed because I had to get the plane back in the air as soon as possible. My grandparents took a vacation, so it needed to get back in the air before that. Overall it looked good, but the tail end wasn't as nice as it once was. Also I needed to practice with the plane before the Brodak Fly-In.

The Oriental Plus flew for the first time after the repair on Tuesday, May 18th at about 10:30am. I had a day off from school and took advantage of it. The plane now weighs 54.3 ounces. That's 3.7 ounces lighter than it was before the repair!



The repair of the Oriental Plus was well worth it. In fact, I would even argue that the plane flies better now than it did before it crashed. I learned a lot during this process, stripping the finish off an airplane, refinishing parts of it, and making

sure that there was still proper alignment in the plane after a repair.

Thank you, Windy for letting me be the guest Crash Repairs columnist and relate this story for *Stunt News*. **SN**



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Will Hubin—Rocket Scientist

Add Will's name to the long list of CLPA "Rocket Scientists," Brett Buck, Paul Walker, Larry Renger, Howard Rush, Dean Pappas, Frank Williams, etc. ... and now: Will Hubin.

Will's new FM-9 timer and programmer combo is the timer we have all been dreaming about. (That is when we are not dreaming of Nicole Kidman or Angelina Jolie ...)

The FM-9 timer with its programmer will make it easier for anyone converting to E-power, and perfect for those of us already there. I now have 4 of them; they are perfect for our mission. The timer is very small, light, and has a long cable to mount the sturdy red remote on/off button far from the prop for safety. The programmer is a beautiful piece of lab equipment. It is small, about the size of a bar of soap, but has a large, easily read screen. I programmed my first timer in less than a minute. This includes the 30 seconds it took to give the instruction photos a quick look. I promise that you will love this combo!

Timer Info: The following 3 reviews will give you all the details you need to know about this particular timer, and timers in general. This should help the expert ECL flier, as well as give a new ECL flier more insight into how flexible our latest timers are. Rick's review will help you see how useful these timer features are when you are getting started with a new ECL plane. Good info.

Here is a review from my friend Denny Adamisin:

I managed to pick-up one of Will's new FM-9 timer systems at Toledo, have not had a chance to fly it but it is very easy to walk through settings on the ground. The programming box has a large easy to read display. Minimum flight time is now 1 minute so test flights just got even shorter. Key up or down to set flight time, it is reassuring to set the flight time to the second—far closer and easier than what we could do with the pots. Ditto the delay setting.

It will work with several different ESCs and programming modes. It sets the RPM by percentage of PWM. The full range in Phoenix High Governor is 8,040 to 12,880. Thus we are certainly safe. I think the increments are small enough (about 70 RPM) to be useful. The RPM setting scheme is similar for the Hacker, Hacker 1/2A Jeti-Spin, and Schulze, but the increments (and presumably the range) are somewhat different for each brand.

It is clear that this new timer will be a godsend for those using Hi-gov mode. You can throw away your optical tachs and dial in the RPM you want, and adjust it in precise increments. You can also easily bump up or down in small discrete steps if conditions change and know exactly what you get. In my mind this makes it light years easier to use Hi-gov than it was before. In fact I would be willing to try Hi-Gov because I would feel certain about the exact RPM I am setting.

For Castle's Set RPM mode, you can program in RPM 1, 2, or 3 as before, and that calls up whatever RPM you have in the ESC.

The only other difference is that it will be important to mount the timer where it is accessible to get to the two plugs needed to program the timer. However, it is no longer necessary to mount the timer where you can access the pots. In fact I would envision sliding the timer into a pocket, slipping it out to program it then

tucking it away again. Of course you can still use a remote starting switch.

For simple ESCs like the Arrowing (Brodak's Super Clown), E-flite, or Turnigy, the new timer lets you call up the throttle setting in percents, then has 15 different "throttle-up" schedules to maintain flight speeds as the battery drains. The max throttle is limited to 91% of PWM signal with the remainder held in reserve for throttle up. This should let us get all that is available from the simple ESCs. There is also a simple non-compensating throttle mode that will let you access all 100% throttle, but will of course give up RPM as the battery wears down.

It seems Mr. Hubin keeps coming up with very useful innovations. The ability to incrementally change RPM settings (in High Gov mode) without a tach or a PC is a great leap forward. The "no-doubt" setting for flight time and delay are also valuable. For those of us flying fleets of electric airplanes with different ESC's the FM-9 will be a great all-purpose timer.

Here is a review from another friend, Rick Sawicki:

Greetings everyone. I would like to offer some comments on the new Will Hubin Programmer and FM-9 timer units. My history with flying electric control line Stunt goes back more than 6 years. During that time I have used 5 different timer units. For those relatively new into electric control line, believe me you "haven't missed anything!"

For those who have been in it a couple of years you will easily remember like I do the following: "counting seconds and multiplying by 10" to arrive at a flight time; flipping 5 different dip switches to achieve a power level and flight time; adjusting 4 different pots to achieve the same, etc., etc. All procedures we had to go through "in the good old days!" Then continuously recording where the unit was last set!

I am happy to say that all our prayers have been answered in the new Will Hubin Programmer and FM-9 timer units. While others have described specifics earlier in this column, I would like to concentrate on actual flight experiences.

I had received the programmer and several timer units a couple of weeks ago and was extremely impressed with how easy it now was to program a full flight, including start delay, rpm settings and total flight time all in a few seconds. As well as changing any of those parameters just as easily.

My E-control line flying buddy Bob Branch and I spent the afternoon with 7 of our electric Stunters, 5 of which we had put the FM-9 units into for their first actual in-air testing. To make a "long afternoon" short, *all* of the FM-9 units performed flawlessly and were extremely easy to both set up and adjust.

A couple of important details: The programmer cycles thru just 5 screens and allowed our choice of time for total flight time, delayed start time, type of ESC unit (6 different types of settings available). In our case it was set to PX High RPM Govern mode, then for that mode a selection of motor RPM from 8040 to 12880 with changes possible at plus or minus 0.5% (in approx. 50 to 60 rpm steps in the 8-9000 range).

All of the preceding steps were easily adjusted by "Up and Down" buttons on the programmer and then hitting "finish."

Continued on page 36

E-POWER SUCCESS

RUDY TAUBE REPORTS ON E-STUNT CONTESTS

Brodak's:

1st Place Expert PAMPA: Mike Palko, Electric P-51

1st Place Expert Profile: Mike Palko,
Electric Brodak P-40



Mike has used these two planes, unchanged, for the past two years.



Mike's imaginative engineering brain combined with his artistic skills will be giving us some wonderful new E-planes in the near future. The photo of his great

looking new E-Profile Bipe is just a teaser. I will have more info, and photos of the finished Bipe next time.

Following are more results from Brodak's.



These three beautiful planes at the left are in Tim Stagg's electric air force. They are all built and flown by Tim. They are all great, but I love the P-47. Notice how Tim hid

the ESC and timer inside the thin Cheek Cowl. He is both an artist and an excellent engineer, and a very good pilot too! It looks like he made very good use of his long trip from Sheboygan WI.

Electric Plane Specs for Tim Stagg's Trophy Winners:



Magician: Second Place in Advanced Classic, Brodak 2010

Weight: 37.7 ounces with battery (battery weighs 7.7 ounces)

Motor: E-flite 480 1020 KV

Battery: Thunderpower 3S 2700 mAh Pro Power, 30C

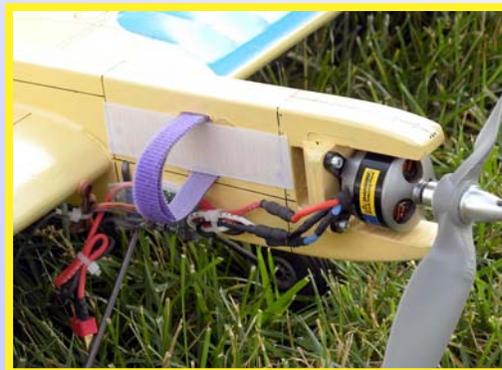
Prop: APC 10-7 Thin Electric (Non Pusher)

Controller: Castle Phoenix 25 (governor Low mode)

Timer: Ztron set at 85% Power

Lap time: 5.2

Amp Draw: 1950 for 6 minute flight



A note from Tim on this setup: "This plane could use a little more power; I have to run the motor a little harder than I want to, an E-flite 10 would be a better choice. The Governor does not have much room to power up at 85% power setting, I just happen to have the 480 sitting around

so I thought I would give it a try."

P-47: (Kit Bashed Brodak P-40), 1st place in advanced Profile, Brodak 2010

Weight: 50 ounces with battery (battery weighs 16 ounces)

Motor: E-flite 15 950 KV

Battery: Turnigy Power Systems 4S 3600 mAh, 30-40C

Prop: APC 12-6 Thin Electric (Pusher)

Controller: Castle Phoenix 45 (governor Low mode)

Timer: Ztron set at 68% Power

Lap time: 5.1

Amp Draw: 2750 for 6 minute flight

1ST HALF OF 2010

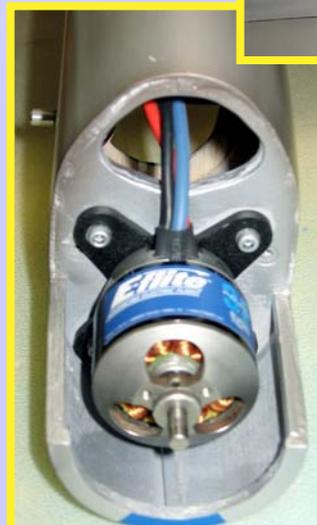


Controller: Castle Phoenix 65 (governor Low mode)
Timer: Ztron set at 75% power
Lap time: 5.3-5.4
Amp Draw: 2450 for 6 minute flight

Tim's note on this setup: "This plane could use a little larger motor as well, the 15 draws a few more amps than I would like, and to get the performance I want, even at 68% of the available power, an E-flite 25 would be perfect. I have plans for the fuse design if anyone is interested."



Tim's note on this setup: "I really like this plane and setup, have a few minor design changes to this



prototype, cosmetic more than anything. I am thinking of producing composite fuselages for this design this winter. The design was drafted in Solidworks CAD and I have an inexpensive connection for CNC mold production. I need to make a few tweaks, but if there is enough interest, I may offer the fuse, plans package for sale. I also have the plans for the balsa fuse if that is preferred, just a lot of tedious $\frac{1}{16}$ sheeting to mold for fuse.



Tsunami: Original design, 3rd place in advanced PAMPA, Brodak 2010

Weight: 62 ounces with battery (battery weighs 16 ounces)
Wing Area: 690 square inches
Motor: E-flite 32 770 KV
Battery: Turnigy Power Systems 4S 3600 mAh, 30-40C
Prop: APC 13-4.5 Thin Electric (Pusher)

Another ECL Brodak success story: Buddy Wieder

4th place in Expert PAMPA Brodak 2010

You know the competition is tough when you score a 542 and place 4th! Bud's beautiful ECL Ryan's Eagle photo gives you a good idea what a skilled craftsman Bud is. Obviously he is an excellent pilot too. Buddy and Ryan's Eagle are pictured at the right. Bud's ship is essentially a Bob Hunt designed Saturn with different fuselage aesthetics, and of course, electric power. Bud's aircraft is finished with DuPont's Chromabase system.

Wing Area: Foam wing 660 square inches

Weight: 63 ounces RTF

Battery: Hyperion 4000 mAh 4S

Motor: AXI 2826-10, front mounted

Controller (ESC): Phoenix-45, high RPM, GOV mode

Timer: Hubin FM-9 and programmer

Lap Time: 5.2 (on 64 foot lines eyelet to eyelet)

Prop: APC 13 x 4.5 pusher at approx. 10,000 RPM

Other high-placing 2010 Electrics

Windy City Classic, Chicago IL:

1st Place in Expert: Crist Rigotti
ECL Plane: "Resolve EP"

Northwest Regionals:

1st Place Expert: Paul Walker
New Electric Impact XS with Plettenberg motor
(Complete details and photos in a future E-Stunt)

1st Place Advanced: Eric Rogers
Electric StarGazer with Plettenberg motor

This was a large contest with tough competition. There were 19 National Championship trophies and 2 World Championship trophies between the competitors, Along with top fliers in Advanced. Well done Paul and Eric.

As you can see, 2010 is already a great year for E-Stunt. This may be a very quiet Bandwagon, but it is sure moving forward at a fast pace. Welcome aboard.

"That's all folks," it was that simple. In addition, by plugging the FM-9 timer back into the box you could easily see "what levels were currently programmed"; no more pads and pads of paper.

I took the approach of dialing in the "last known rpm" that I used on my 4 planes early last winter, setting each of the planes for a 1 minute flight and then Bob and I timed for lap speed (looking for the desired [at least for us] 5.2 sec/lap) and also performed some specific maneuvers during that minute just to get the feel. After 2 to 3 one minute flights per plane we "were there." On the next flights the flight timer was set to 5.5 minutes (took about 20 seconds) and we did full patterns. Bob was also checking out some smaller size, lighter, batteries and was concerned with total flight draw down, so he set his tests to 2:45 seconds, or 1/2 of a normal flight. He could then simply double the draw to get a good total flight estimate.

In total we did well over 25 flights on 6 different aircraft during a 4 hour flight session. The new programmer and timer



allowed a quick "turn-around" between flights, enabling us to accomplish a week's worth of testing in just a few hours. Since all my planes are "dialed in" for our next session it will be full patterns for all the planes all session long!

Needless to say I have nothing but praise for the new units. While they might cost a little more initially due to the cost of the Programmer box, the timer units are much less expensive than any other unit currently out, and most importantly they work flawlessly and parameters can be changed easily. All this is complimented by the fact that Will Hubin is a fantastic person to work with and is always seeking feedback for his projects and makes changes appropriately.

I rate this combination 5 stars out of 5.

Here is more info straight from Will Hubin

This system consists of a very small, light circuit board on the airplane and a remote, powered programmer to precisely

set flight parameters for almost every ESC and every mode. The circuit board has a 6-pin connector to the programmer, three of which are used in the usual way to connect to the ESC after the programming is finished. The only other components on the board are the microcontroller and the start button (or remote leads to a start button).

The programmer is housed in a white, plastic box, about 2½ x 4 x 1¼ inches. It allows the user to program flight times to the nearest second (from 1 minute to 9' 59"), the delay times (after the confirming motor blip) of from 2 to 59 seconds, the ESC mode in use, and the desired RPM or throttle setting.

The programmer embeds a calibration for the governed RPM modes of the Phoenix (High RPM and Set RPM), the Schulze F2B, the Jeti Spin, and two Hacker ESCs, so the user can directly choose the desired flight RPM. (Assuming the motor/battery/ESC combination is capable of it, the user should get an RPM within 50 or 100 of the chosen RPM, but the important thing is that it is highly precise and highly reproducible, so that indicated RPMs that work for different weather environments can be exactly returned to, as needed.) The user can increase or decrease the RPM based on changing the throttle setting by ½ of 1% (200 steps over the 0 to 100% throttle range).

For ESCs without a governed/constant RPM mode, the programmer also lets the user choose a strictly throttle value (15% to 100%) and a compensated throttle mode (allowing the user to choose between 15 different levels of compensation for the normal decline in battery voltage during a flight).

The programmer is priced at \$75.00 but the FM-9 circuit boards for the airplane are only \$8.00 or \$10.00 (extended leads), making it an economical system for those with many e-powered planes, or for clubs.

2010—The End of the Beginning

It is only June and it has already been a great year for E-Stunt. Those that are thinking that E power is still in the beginning stages of replacing wet power systems at the top may be in for a shock. The number of top pilots converting to E-power combined with the contest results this year show that we are well on our way to replacing BP with Mr. Tesla's electrons.

Most of you know that many time National Champion and World Champion Paul Walker has been flying E-powered CLPA for a few years, as well as past National Champion and World Champion Bob Hunt (yes, the same Bob that has made *SN* a fantastic CL magazine). They have both given E-power valuable credibility the past few years.

Now we have the current World Champion, many time National Champion, and fellow airline pilot, Dave Fitzgerald about to go electric. Dave has watched Paul, Eric, Larry and me fly our E-powered CLPA planes at contests in NorCal and in the NW for a few years now. He just told us that his next plane would have E-power! I think this sends a clear signal to anyone who had doubts about the viability of E-power winning at the highest levels of our sport.

Knowing Dave, and the excellent group around him (Larry, Jimbo, Phil, Bret, and Paul), he will come up with an outstanding E-powered plane. Eric Rogers is already flying a beautiful E-powered version of Dave's world champ plane. We are all looking forward to Dave's next wonderful creation. Dave is a great guy and is always fun to be around. Like Paul, Dave's openness and willingness to help others will be an important asset to the E-power community.

The other big name converting to reliable, repeatable, clean,

quiet, powerful, green power is PTG (AKA: Phil Granderson). PTG is an old combat friend of mine who is also a top CLPA pilot. PTG builds the most beautiful pieces of art in the world, some call them airplanes too. He is an artist by trade, and it shows in his fantastic models. Below, in his own words, is the story of his "enlightenment."

PTG's Take on E-Stunt and NW Champs

Electric? Yeah sure, let's wait and see! Six or seven years ago I was talking to Bob Hunt and he said that electric was going to take over the Stunt world. I was ready to file that comment in the "yeah sure, let's wait and see" bin when I recalled a similar conversation in the early '80s with the same Mr. Hunt and he proclaimed tune pipes were going to dominate the world of control line tricks. Well we know how that whole pipe thing turned out. They just never caught on in combat so it didn't really matter much in my world!

At the 2004 Nats I saw Mike Palko flying a little red electric powered airplane. I remember thinking, "That's a cute plane, and that guy can really fly!" I watched Hunt at the '07 Team Trials and thought, "Hmmm, that converted tail-less wonder is going thru the wind pretty well." And I watched Paul fly everything from VF powered Impacts to bombers and finally a group of electrics in a variety of configurations.

For the past five years I have been devouring information about electric on both RC and Control Line forums. Reading RC mags and talking to electric pilots of both fixed wing and rotating wing RC models. The pile of electric stuff in my building studio has reached critical mass. I've bench burned a bunch of motors, controllers and batteries trying to get a solid understanding of how the various components really function as a system and how that system will actually produce good usable power for a competitive PA plane. The Skinny Diva was conceived as a transition from IC to electric. The Zealot was supposed to be a competitive, easily convertible to either IC of electric.

All that with the same, "Yeah sure, let's wait and see" attitude. Last weekend it changed to "yeah I see it now." Dave is the World Champion and a fierce competitor who doesn't compromise in extracting the last bit of performance from himself and his airplane.

As we watched one of Paul's practice flights I was thinking "this plane is different" and Dave turned and said, "That's gonna be hard to beat." Later he asked me how my electric was progressing and volunteered that his next plane would be electric. I have been fortunate to fly both Paul and Eric's airplanes. In my mind there is no question that the advantage has shifted to electric and it's only going to get better. Can't wait to see Hunt's 2-motor thingy.

My sincerest thanks to all the pioneers of competitive electric power for control line Stunt here in the US and Canada; Mike Palko, Walt Brownell, Bob Hunt, Dennis Adamisin, Kim Doherty, Crist Rigotti, Will Hubin, Rudy Taube, Eric Rogers, Paul Walker and everyone who has published or helped with good information and on this and the other forums. Yeah, I see it now!

The biggest thanks goes to the Eugene Prop Spinners, Mike Hazel, John Thompson, Scott Riese, Mike Dennlis and everyone who worked so hard to make the 39th Northwest Regional Control Championships such an incredible experience! Everyone is still wondering how you stopped the rain!

Once again, "The Game's afoot!"

Till next time: "May the power of Tesla be with you." *SN*

Old Time Stunt Turns 40

By Rich Peabody

**WE'RE
HAVING A
PARTY!**

What: OTS Turns 40
Who: Garden State
Circle Burners
When: Sunday, October
3, 2010

The Garden State Circle Burners will celebrate the 40th Anniversary of Old Time Stunt on Sunday, October 3rd, 2010. Mike Cooper will be the CD of this historic event. The Circle Burners have a dinner planned and all of the entrants will receive a photo plaque. Tee shirts celebrating the date are already available. The Fall Meet, Part I will also fly four classes of Classic Stunt. The GSCB has been flying flapped models in a separate class (Phase II) for a couple of decades, as well as OTS Ignition.

John Miske and several other Circle Burner visionaries sought to revive sagging turnout at Stunt contests. John reasoned that the models that the membership had grown up with were outdated by the then-modern flapped larger models of the day. Many of the membership were still enjoying the earlier designs. John researched and figured that the "break" between the older designs and the "newer, more modern" designs was somewhere in the

1952-62 area. The Noblers, Novi, Ares, and Stiletos seemed to outclass by leaps and bounds the non-flapped, short coupled designs of the early 50's.

John researched further and came up with "kitted or published before January 1st, 1953" as the criterion for his new class, and Old Time Stunt was born. John reasoned that it would be a terrific "entry" class to competition and figured that a Builder of the Model rule should not be used. The first OTS contest took place on the first weekend of the Fall Air Shows and the gang dressed in period costumes and found a "Miss Old Time Stunt," and a great time was had by all. Bob Hunt won the inaugural meet flying a Veco Mustang.

I doubt if anyone present that October afternoon knew how much the event would do to give Stunt a much needed "shot in the arm." Some credit John and the GSCB with *saving* Stunt! OTS has certainly changed Stunt: Classic was formed after the success of OTS was proven. These two events draw huge numbers! The entries in OTS at the Brodak Fly In each year are very close to those of the Precision Aerobatics event. The annual Vintage Stunt Championships in Tucson attracts Nats like numbers. At the Nats, OTS is very well attended. Several of our "cottage industry" kit makers have created kits of Old Time eligible models that are *far* superior to the originals ... Die "crunched" pieces have been replaced with laser cut gems, and the wood selection has improved greatly. The designers of the early models are legendary ... Aldrich, Palmer, Netzeband, Kania, Southwick, and others evoke fond memories. Sadly, few of the early designers are around today to celebrate the 40th Anniversary of OTS.

While John Miske and the GSCB made allowance for many "modern" trim features like tip weight boxes and adjustable leadouts, the cut-off date became a sticky issue. Among the first challenges was that over the eligibility of the Elliott "Black Tiger," which appeared in an early 1953 publication. The argument was that in order for it to be in that issue it had to have been designed prior to December 1952. John remained unwavering, and, as other models emerged that were neither kitted nor published, yet were flown successfully in contests prior to 1953, PAMPA convened a committee to address the situation. PAMPA came up with a viable solution requiring documentation that the model was designed or flown prior to the 1953 cut-off. PAMPA also adopted a "K-factor" type scoring system.

Today the GSCB, in an effort to be as inclusive as possible, allow models that are PAMPA eligible to compete. The early scoring system has been retained however. As mentioned, the GSCB flies flapped planes in a different class ... This is OTS Phase II. Phase II will be flown at the 40th Anniversary on October 3rd.

It's great to see that several of those who participated in the inaugural OTS contest in 1970 are still around! We hope that they will come to the celebration! **SN**



The full crew, the planes and Miss Old Time Stunt, Beth England.



All of the contestants plus John Miske, event director and Miss O.T.S.

ROUND & ROUND

Garden State Circle Burners Old Time Stunt Event in full, glorious color — peppermint stripe shirts and parasols were a way of life back then.



Time out for picture taking — all photos on this page by Dan Driscoll.

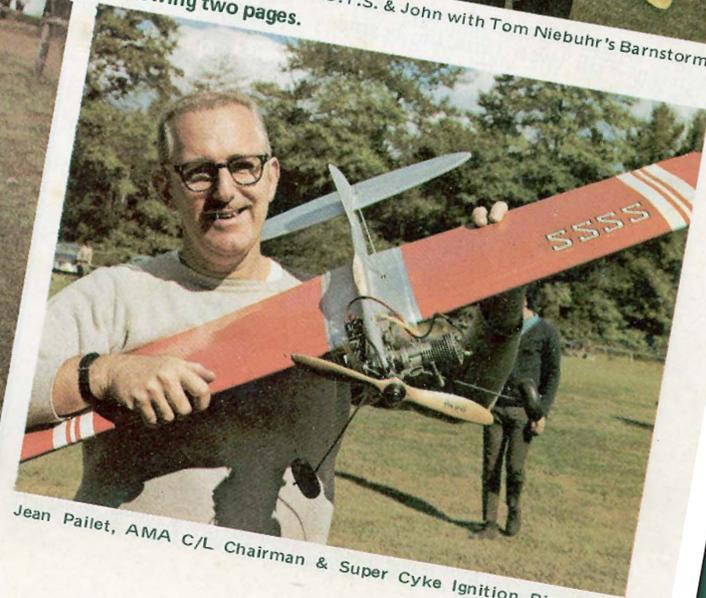


Takes two to tango! Miss O.T.S. & John with Tom Niebuhr's Barnstormer

Round and Round on following two pages.



inda poses with Tom Niebuhr's Fox 35-powered Barnstormer.



Jean Paillet, AMA C/L Chairman & Super Cyke Ignition Ringmaster.

It's In the Details

By Matthew Neumann

Cowl Attachments

Many people, me included, have wondered, on occasion, how other people attach their cowls. When you look at many plans, the method used by the author of how he attached his cowl seems to be missing. Usually it is treated as "left to the builder's discretion." But how did he do it? Wouldn't it be nice to see how others go about attaching their cowls? In this article I would like to touch on a couple of ways that I have attached cowls over the years.

First up is my Mustang. It is probably one of the easiest to do. This style of attachment fits many of the modern Stunters with tuned pipes and classic planes where the builder has put in a rear exhaust engine.

First and foremost, you need to decide where to put the cowl separation line. My recommendation is to put a mark at the front of the plane at the thrust line and then draw a line from it through the spot where the needle valve comes out of the side of the fuselage. The reason for making the separation line like this is

that you can now take the cowl off the plane without having to take the needle out of the needle valve body and messing up your engine setting. Having this capability is really nice when all you want to do is get at the engine to maybe change a head shim, or make sure the mounting bolts are all tight.

The cowl itself is held on with 4 screws, one at each corner. The screws bolt into a set of blind nuts embedded into some $\frac{1}{8}$ -inch Lite-Ply attached to the corners of the cowl. There are holes in the corresponding location in the fuselage to accept the bolts. So overall, take out 4 bolts and the cowl comes off.

The next cowl mounting scheme I would like to show you is a little bit harder to do but I found it to work best for my Stukas. I will call it the "Classic Style" for a lack of a better term because it looks a lot like the cowl on many classic planes. What I mean by "Classic Style" is that the joint between the cowl and the fuselage has a corner to it instead of a straight line from the thrust line to the bottom of the plane; this separation line goes from the thrust line through the needle hole and then typically, just behind the engine, it takes either a sharp turn up or down depending upon if the engine is upright or inverted.

To keep either the cowl or the fuselage sides from bulging and forming a step at the separation line, I install some $\frac{1}{32}$ -inch plywood strips about $\frac{3}{8}$ -inch wide that stick up about $\frac{1}{2}$ -inch from the edge, alternating between the cowl and the fuselage. These tabs then interlock keeping either side from bulging.



Above: Here is a picture of my 2009 Stuka cowl. Notice the tabs along the side of the cowl to keep the sides from spreading apart sideways from each other.

Right: This is a picture of the cowl pulled slightly away from the fuselage to show you how the 4 locators on the cowl line up with the 4 bolts in the side of the fuselage. Also note the separation line between the cowl and the fuselage. Notice that it splits at a point where I do not have to take out the needle to remove the cowl.



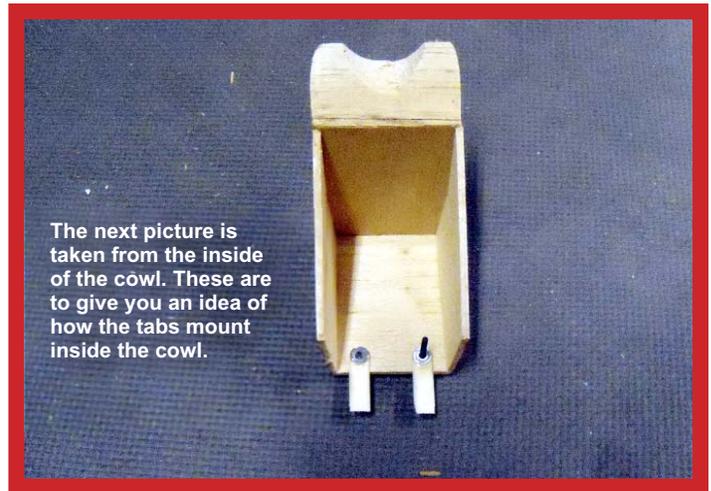
Above: This is a picture of the cowl on the Mustang. Notice the 4 corners of the molded cowl. This is the Lite-Ply that I mentioned earlier that contains the 4-40 blind nuts.

I attach the cowl with only two screws from the bottom. In this case the pieces of plywood that contain the 4-40 bolts are attached to the fuselage with the corresponding locator holes made into the cowl to accept the screw heads. If you prefer you can install these from the side but I like to hide my bolt heads if I can.

To keep the front from separating I install a piece of plywood, cut at a slight angle, to each side of the cowl. These are spaced so they just fit inside the fuselage sides. Two more plywood pieces are then installed on the inside of the very front of the fuselage. These are installed at the same angle as the pieces on the cowl.

The piece from the cowl then slips under the piece of plywood on the fuselage. When this happens the front of the cowl will not be able to separate from the fuselage because the plywood pieces on the fuselage are holding the pieces of plywood on the cowl and keeping it from coming off. A series of pictures that I took when I made the cowl for my latest plane will, hopefully, explain this better. As the saying goes, a picture is worth a thousand words. Of course when you have 13 pictures does that mean that the following how-to is worth 13,000 words? (Let's hope not.)

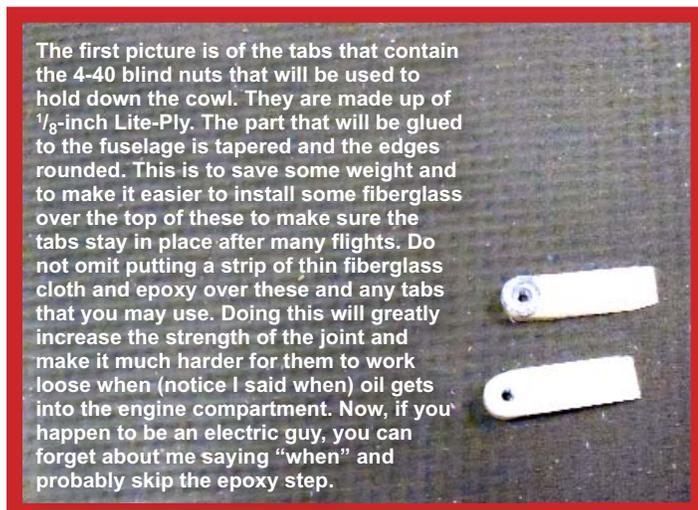
On my latest plane I did things just a little bit different from my 2009 plane. I still used the two screws from the bottom and the plywood pieces that are angled on the front, but instead of alternating pieces of plywood from cowl to fuselage, I used a strip of plywood on the fuselage side and a tab on the cowl side.



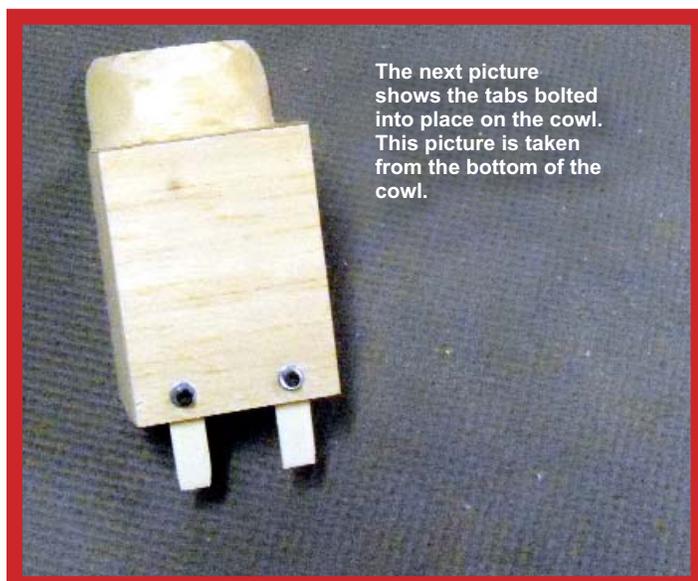
The next picture is taken from the inside of the cowl. These are to give you an idea of how the tabs mount inside the cowl.



Now that the tabs are being held into place with the bolts they can be glued onto the fuselage section. This picture shows how the tabs are slipped under the bottom of the fuselage. I prefer to glue these in place with 5-minute epoxy because epoxy is more fuel proof than CA. With a little epoxy then applied to the gluing surface the tabs are then slipped inside the fuselage still bolted to the cowl. The cowl is then taped in place until the glue had dried. Gluing these tabs in this way insures that the tabs will be in alignment with the mounting holes on the cowl.



The first picture is of the tabs that contain the 4-40 blind nuts that will be used to hold down the cowl. They are made up of 1/8-inch Lite-Ply. The part that will be glued to the fuselage is tapered and the edges rounded. This is to save some weight and to make it easier to install some fiberglass over the top of these to make sure the tabs stay in place after many flights. Do not omit putting a strip of thin fiberglass cloth and epoxy over these and any tabs that you may use. Doing this will greatly increase the strength of the joint and make it much harder for them to work loose when (notice I said when) oil gets into the engine compartment. Now, if you happen to be an electric guy, you can forget about me saying "when" and probably skip the epoxy step.



The next picture shows the tabs bolted into place on the cowl. This picture is taken from the bottom of the cowl.



This shows the tabs glued into place on the fuselage. Now would be a good time to install that strip of fiberglass and epoxy that I mentioned earlier. This ensures that the tabs will stay in place after many oil soaked flights. If the fiberglass and epoxy strips are not added, over time the oil will loosen the joints and the tabs will come loose. You can then bet that the cowl would then come off at the most inopportune time, like during an official flight at a contest.

These are the plywood pieces that I will glue to the side of the fuselage. Here is where I differed from the previous planes. These are made up of a couple of pieces of plywood. The thin plywood on the back is $\frac{1}{64}$ -inch plywood while the thicker strip is $\frac{3}{32}$ -inch. The wider portion is used to give support to the thicker strip when glued to the fuselage. I would not just edge glue the $\frac{3}{32}$ -inch strip to the fuselage because an edge joint like this is not really that strong, especially after some oil soakage. The reason for the $\frac{3}{32}$ -inch strip of plywood is because the cowl sides are $\frac{3}{32}$ -inch thick and the fuselage is made up of $\frac{3}{32}$ -inch sides with $\frac{3}{32}$ -inch balsa doublers laminated with carbon fiber on both sides for a combined thickness of $\frac{3}{16}$ inch. I needed to fill in the gap between the inside of the fuselage and the inside of the cowl.



The next picture shows the small triangle pieces installed to the front of the fuselage. These hold the front of the cowl down against the front of the fuselage. These are made up of $\frac{1}{8}$ -inch Lite-Ply.

The next step is to make the pieces for the inside of the cowl. These are about $\frac{3}{4}$ -inch wide and are also stepped in thickness. The reason for this is because they will then slip over the pieces that are on the fuselage. This will then lock the sides of the cowl and the fuselage together. Instead of $\frac{1}{64}$ -inch plywood for the thin piece however I used $\frac{1}{32}$ -inch for a little bit more strength. In this case the thinner plywood is actually holding the side of the cowl in place.

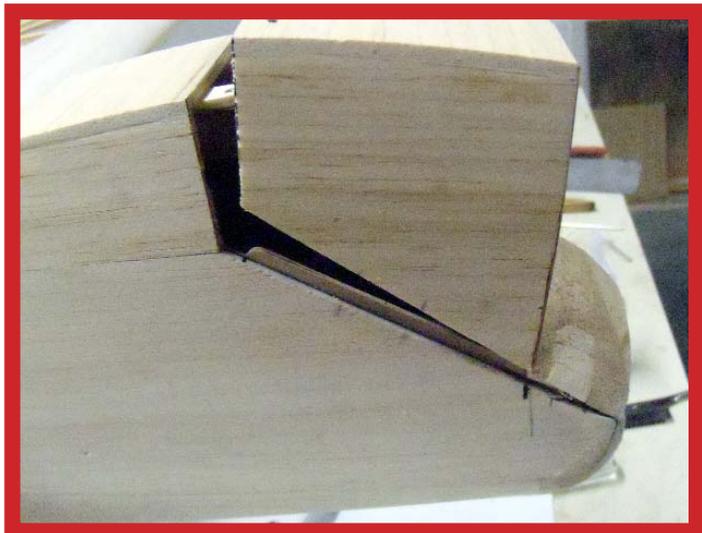


This shows the strips that are going to be glued to the cowl and how they will press against the strips in the front of the fuselage. This should give you an idea as to how the cowl is actually held in place at the front of the plane. Also note in this picture and the previous picture the side plywood pieces that I mentioned earlier and how they are attached to the fuselage.



Now cut a couple of notches in your cowl so you can glue in the front cowl pieces. Some adjustment may be needed so they fit flush against the pieces in the fuselage and the fuselage sides themselves. I like to make a notch in the front of the cowl because of the increased gluing area. If I were to just edge glue these in place it would be a really weak joint and soon break off. Once everything is in position like you saw it in the previous pictures glue the strips to the cowl only.

The next picture shows the tabs installed to the inside of the cowl. Center these if at all possible.



The last picture shows the cowl getting installed. The first thing to do is place the prongs from the cowl under the triangle pieces at the front of the plane and then rotate the cowl so that the joint lines fit flush with each other. As you pivot the cowl you will feel the clips on the inside of the cowl almost snap into place as it grabs the "rails" on the fuselage. Once this is done, insert the bolts and now you have a nice and neat cowl attachment.

Now install your filler balsa blocks and reshape as necessary. The cowl is now mostly complete except for the little details here and there.

You may have to adapt a couple of things here and there to fit your particular design but the basics should always remain the same.

Remember, it is in the details. *SN*



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The Next Generation

By Matt Colan

Another Older Next Generation Flier: In this issue, I asked Derek Barry to write about his life in Stunt. Derek is under 30 years of age so he qualifies as a next generation flier. For those who don't know, Derek is heading to Hungary this year to compete in the World Championships as part of the United States team. Good luck Derek! Here is his story up to the present day.

As far back as I can remember there have always been planes around. My great grandfather (Doc) Howell Brumbeloe and his son Charles flew Control Line in the late 40s and early 50s. They played with CL racing, free flight, and some single channel RC too. They also owned the only hobby shop in Augusta, Georgia, at that time.

Model airplanes have had a long history with my family. My dad learned to fly when he was ten years old. He has flown CL planes throughout his life. Dad never flew in any contest but in early 1987, he told me that he saw a flier for an Atlanta contest in a local hobby shop and he decided we should go check it out. Up until this point, all he ever did was fly for fun.

I remember watching him trying to get as low as he could get to the ground without crashing and doing wingovers with one-foot pullouts. The planes back then were heavy and could withstand a few crashes. I remember how much fun he looked like he was having; as I was growing up there were always the sounds of motors running and the smell of epoxy balsa dust and paint in the house, well that is until he built his shop.

Dad built a big shop in the back yard just for building airplanes. We always called it "The Shop" and he and I spent countless hours in there building. Dad and I have always been very close. Model airplanes have contributed a lot to that ...

Our first contest was in Atlanta. It was Tom Dixon's contest. It was in the summer of 1987 and all we did was go to watch. In 1987 I would have been eight years old and I do not remember a whole lot about this contest. I remember that dad met Tom and he gave us some pointers and got us on our way. We went home only to find that hardly any of dad's planes would do a pattern and he said that it was a lot harder than he thought it was going to be to learn the pattern. I was not really into flying yet but that was soon to change.

My dad went back to Marietta in September of 1987 for his 1st contest as a competitor (Ronnie Farmer was the CD at the fall contest). He did the best he could with a Banshee and an old Fox 35 but crashed and came in last. When we went back home dad was determined to do better, and my cousin Frank decided that he wanted to fly too. They went through a couple of cases of fuel in just a few months and were getting better.

Sometime in March of 1998, I decided I wanted to join them. I went from flying around in circles to the complete beginner pattern by early May. The three of us flew at the May contest back in Marietta. Frank crashed; I left out my squares, and came in last and dad won. Because I was a Junior, Tom gave me a kit to build and I was on my way. Tom Dixon was very helpful to us in the beginning. He helped us with engine runs and taught us how



A very young Derek Barry looks serious about giving his dad Dale's Nobler a proper launch.



Left: Derek won the Junior Stunt crown at the 1990 Nats and here he poses with the Open winner, Paul Walker (center), and the Senior winner, Nat "The Newt" Gifford (far right).

Below: Derek represented the United States as the Junior member of the FAI F2B team that went to the 1996 World Championships in Sweden. He won the Gold Medal at that championships in the Junior division and placed 16th overall! Here he is along with the "Senior" members of the team, David Fitzgerald, Bill Werwege and Paul Walker (L to R).



to trim our planes. Without his help, we would not have progressed nearly as fast as we did.

Over the next few years, we went to as many contests as we could. I remember riding for hours to go to local contests. We were always at the Atlanta contests and Tom Morris had one in Alabama, the Carolina guys had one at Winston Salem and of course King Orange.

These were our main contests but every once in a while we would venture further away from home. Dad and I spent a lot of time practicing at home and at contests. In dad's yard, there was enough room to fly on 52-foot lines and you would only hit a limb occasionally when you wandered out of the circle. The short lines made for good reaction time. I loved those summer days, a cool breeze the smell of fresh cut grass and castor oil in the air, and the sound of planes going round in circles, man those were the days!

We kept flying and moving up the Stunt ladder. Every time I was ready to move up dad would move up too. He did not want to compete against me so he would move up even if he wasn't ready. He told me that he would be one less person I would have to try to beat. I think he just did not like the idea of competing against his son. Even to this day it is rare to see us flying in the same event.

Ready for the Nats

In 1990, we attended our first National Championships. I was a Junior and dad flew Advanced. The previous year a young girl had flown around in circles and won the Junior trophy, I knew the whole pattern so this was going to be a breeze. *Wrong!*

This was also Robby Hunt's first year flying at the Nats. He was very prepared, his dad being a National and World Champion. They knew what they were doing and we were rookies. I managed to squeak by him in the last round and win the Junior National Championship. We were ecstatic to say the least and now I get to fly with the big guys in the Walker Cup Fly Off. What a great year that was. My first time at the Nats and I am standing there with Paul Walker and Nat Gifford. How awesome!

When we went home, we went to see my great grandfather (Doc) in the nursing home. He had been battling Alzheimer's for a couple years and as most people with that disease he had his good days and bad days. We walked in his room with that trophy and he immediately knew what it was and where it was from. In

1952, my grandfather and Charles went to the Nats where Charles placed second in Junior. This was their only trip to the Nats (when Charles turned 18, he put down the handle and never picked it up again).

When we brought that trophy in, he sat up in his bed and smiled. We were able to spend some time with him the way he used to be. He had snapped out of whatever place he was in and came to reality for a few brief minutes. Another good day because of airplanes. He left us on October 12, 1990.

Over the next 5 years, we kept going to local contests and to the Nats. In 1993, I won my second and last Junior, and in 94 I won Advanced, We steadily learned more about building and flying. We started using better motors and planes. Even our painting skills were showing improvement. I guess this is just the way it is done. There is no fast track to success in Precision Aerobatics.

In the summer of 1995, we went to Muncie for me to try out for a Junior spot on the team. I would be the first US Junior to fly out and make the US team. Robby Hunt had been allowed to fly with the team the year before, Bob was on the team and Robby ended up being the first Junior to fly for the US at the World Championships.

In 1996, we went to the Nats and I went to Sweden for the World Championships. I won Senior at the Nats and I was the first Junior World Champion from the USA. I also placed 16th over all with all of the adults, not too bad if I do say so myself. At

this time I was seventeen years old, I had one more year in Senior at the Nats, which I won in 1997.

After such a great few years, I was feeling pretty unstoppable. I felt that I was competing at the top level and I was eager to show those guys in Open what I could do. Well ... maybe I was not as good as I thought I was. I had planned to make the top five my first year in Open; that obviously did not happen. I did not even make the top ten.

I ended up 13th, which at the time bothered me, but looking back now, it seems very respectable. I was the Rookie of the Year that year and probably the youngest person competing in Open. Things were still going great and I was looking forward to the next Nats and another chance at the Walker Cup. That is until life stepped in. Up until this time, I was just a kid hanging out with my dad and flying airplanes. I was going to have a family of my own soon I just did not know it yet.

In 1998, I was dating a girl named Samantha; she would become the mother of my two oldest children and my first wife. I was only nineteen and Gavin my oldest was on the way. On January 21, 1999, Gavin Mitchell Barry was born in Savannah, Georgia, (that is where I was working at the time) and a few short months later, I was married and had Sara my second child on the way.

Right: Here's the plane that Derek flew in 2005 at the Brodak Fly-In. He is becoming noted for his colorful finishes and intricate trim schemes. His models are beautiful!

Below: This is the Randy Smith-designed Dreadnought that Derek flew in the 1996 World Championships.

On December 4, 1999, Sara Nicole Barry was born, this time in Augusta Georgia (we were back home from Savannah) and we now had two beautiful healthy children to take care of.

As you can imagine there was not a whole lot of time left for flying. We did manage to make it to a couple contests and I would fly in Classic or Old Time for fun, nothing serious. Well, as some young couples do, we had problems. My dad had told me all of my life "don't get married until you are 25."

This is one of the many things I wish I would have listened to but chose to ignore. After about 3 years, Samantha and I split up and with most of her family living in Ohio that is where she went. For a year or so, we made back and forth trips to Ohio to get Gavin and Sara. They would stay with me for a couple months



and then they would go back to her for the same. This obviously was not going to work for long. After that year, Samantha and I decided to give it another try. That did not work either but this may have been the thing that got me back into Stunt.

During my time in Ohio, I did not have any family around and only a few friends. I only lived an hour from Cleveland so I decided to go their contests and see if anyone I knew was there, and possibly find someone close to me to fly with. I saw Todd Lee. He was there judging I think, and after catching up for a few minutes talking about the family and stuff I asked him if he knew of anyone who might live close to me. He said, "Go talk to that guy over there his name is Phil Spillman."

I went and introduced myself to Phil and he introduced me to Pat Rowan. I told them where I lived and turns out that I was about 45 minutes from Phil and his flying field and only about 15 minutes from Pat and his back yard flying circle. Awesome! I eventually moved even closer to Pat and only had a 5-minute drive to his house. On dad's next visit, he brought me a few planes that I had left behind in Georgia and now I had planes, a place to fly, and friends to fly with; Ohio did not seem so bad then.

Over the next year, my marriage fell apart but I could always count on Pat. I could call him at almost any time and he would invite me over to have a beer and talk airplanes; if the weather was right, we even did some flying. I have said it before and I will say it again, "You will never find a nicer group of people than Stunt fliers." Pat and Phil really got me back into flying competitively. Both of them were trying to learn more and move up the ranks and this inspired me to complete some of my own goals. I was getting ready to start really flying again.

The economy, weather, and missing being in my home state drove me back to Georgia. I said my goodbyes and thanked Pat for all of his help and went back Home.

I was back in Georgia and burning to get back to the Nats, but I did not have a competitive plane so I needed to get to work. It only took me a few months to build and finish my Staris. This was also my first PA powered plane. As soon as it took off I knew that I had a good place to start my return. The Staris was a good plane for me; it was a .40-size model, which made it a little easier to hold onto on windy days and almost flew like the smaller Classic ships; just with a lot of horsepower. (I flew the Staris for three years, and had a lot of luck with it.)

I went back to Muncie in 2004 for my first Nationals in five years. I had set a goal for myself; I wanted to make the top 20. I achieved my goal but only by a little bit. I ended up 18th at the end of the week, not a great showing in my book, but I was in the top 20.

I was back into flying big time! I could not wait for the next year's Nats. I made the top twenty but that was not going to be enough. I set my goal for the next year a little higher (top ten). I always wanted to win but I was trying to set realistic goals for myself so I would not get discouraged. In 2005 I made the top ten, again not by much; I was 10th. I made my goal but with no room to spare. The next year I was going to have to try harder. I wanted to be in the top five but I knew that was going to be very hard.

The battle to get into the top five at the Nats, to me, is more intense than the fight for the Open win on the next day. You would not believe how hard it is to get two great flights back to back knowing that if you mess up anything you are going home. In 2006, I achieved my goal again. I made the top five, and the next day I ended up 3rd over all. I was very happy and I

knew that there was only one spot left worth getting.

In 2007, I almost got there. I ended up 2nd, my highest placing thus far. Orestes Hernandez beat me by 1.6 points for his first Open win and Walker Cup win. I led the field that day the first and the last round. The second round I went up a little rich and instead of waving the flight off I just went ahead and flew. That second round flight still bothers me today.

Two weeks after we got home (July 29th at 3:05) was "The Fire." Most of you have heard the story so I will keep it brief; an electrical short in "The Shop" caused a fire that completely destroyed our shop and everything in it. There was nothing left to do but start over. There were some really good things to come out of 2007 though. My future wife Melissa and I were expecting a little girl. Layla Danielle Barry was born on December 27, 2007. My dad still says that she is the only good thing to come out of 2007.

In 2008, I had to take a borrowed plane to the Nats. Before "The Fire," I built copy of my world's airplane for a man named Bob Shaw. He is more of a collector than anything and we have built many planes for him. When he found out about the loss of all of our modeling stuff he sent a truckload of planes and tools to help get us back on our feet. So I had a Dreadnought that I had built and with my AMA numbers on it. I took it to the Nats with about 5 flights on it. The plane flew very well; it was not rubbed out as my own plane would be but it would do. I managed a 3rd place at the 2008 Nats.

After we got home, I started on my 3rd Evolution. As the 2009 Nationals grew near, I was way behind on finishing my new plane. There were many long nights at dad's house painting and sanding. All the time Melissa was home with Layla; she was and continues to be supportive. I finished just in time for the Nats.

Most of you know the rest of the story since most if it just happened. I came in 5th at the 2009 Nats, but I did get the Concourse award. Thanks guys and thank you Eric Taylor for making the awesome new trophy. I went back to Muncie and tried out for and made the US team for the 2010 World Championships in Hungary.

I look forward to going and doing my best to represent the US and my fellow modelers. Maybe I can keep Dave from getting that Gold Medal again!

My life would not be the same if it were not for model airplanes. I have been to many places, met hundreds of people, and made some great friends. Not everyone has the opportunity to do the things that I have done. I truly feel fortunate to be a part of this event! I just have one last person to thank. Thank you Dad. Without you, none of this would have been possible!

Thank you, Matt for asking me to write this. I really enjoyed telling my story. Good luck in all of your flying adventures!

—Derek Barry

My luck finally runs out:

After getting 9 flights on my Oriental Plus, I had a great flying airplane. In fact it was the best plane I had been flying up to this point in my Stunt career. On flight number 10, I had something happen that has not happened to me *ever* in my 6 years of flying Stunt.

The Oriental Plus crashes! A freak wind shift in the middle of my outside loops caused me to lose line tension, and she pancaked in inverted. I did repair the plane, and the people that are going to Brodak will be able to see it. I managed to take off some weight during the repair, and it now flies better than it did before. Details of the repair are in this issue's Crash Repairs column, where Windy asked me to do a guest column.

'Till next time, fly Stunt. *SN*

PAINING MY FIRST REPLICA OF BOB PALMER'S '59 T-BIRD

By Mark Gerber



Mark's first T-Bird.

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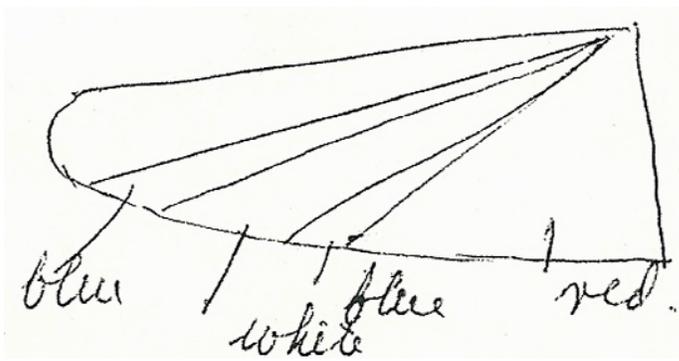
Have you ever wanted to finish an Old Time or Classic airplane in an authentic paint scheme, but were stymied by lack of a color picture?

Here is the account of my experience trying to finish my first T-Bird in original colors.

Ever since I was a kid, I wanted to build a Veco Thunderbird just like the one featured in the early '60s ads. The airplane in the ad photo was built by Control Line legend, Bob Palmer, and flown to win Open Stunt at the 1959 Nats.

Painting nostalgia aircraft to look as they appeared in the manufacturer's ad or when published in a model magazine helps stir memories of the good old days. In the case of the '59 T-Bird, the checkerboard tail and flashy wing blazes are imprinted indelibly in my mind. As a young modeler, month after month I stared at that same image in each black-and-white Veco advertisement, hoping that someday I would have enough money, skill, and time to construct my own T-Bird. Finally, in 1989, using plans from Tom Dixon, I began to scratch build my own. However, as the finishing stage neared, I still didn't know what the true colors were.

To the rescue came a friend in our New England Stunt Team (NEST) club, Geoff Sauter, who was constructing a .60 size T-Bird. He too wanted to replicate Palmer's famous color scheme. From Geoff's archives, he brought out the August-September 1960 issue of *Flying Models*. The cover photo—in color—shows an attractive woman posing with Bob Palmer's Nats winning '59 T-Bird. In this photo, the only color image of this airplane that I've ever seen, Bob's T-Bird appears to be brilliant red orange



Above: The original color photo of Bob Palmer and his 1959 T-Bird.

Left: Bob's sketch of the T-Bird's wing pattern



Mark's T-Bird in flight. Elwyn Aud photo.

white wing blazes and black trim. Now, I had discovered the authentic colors (or so I thought).

Since the red-orange didn't exactly match any Sig color, I mixed various combinations of reds and oranges and came up with a close match to the color on the magazine cover. I painted the trim on the wing blazes and the outline of the lettering black. I did not paint blazes on the bottom of the wing and stab.

Very proud of my work, I took numerous color photographs of my first T-Bird. I sent one along with an order for some plans to Tom Dixon, an acknowledged T-Bird expert. He replied in a note:

"For your info, Bob Palmer tells me his '59 T-Bird was red, white, & blue. Looks like yours has black stripes on (the) wing ...

"To back up his statement, Tom enclosed a copy of a hand-written letter he had received from Bob Palmer that contained a sketch of the distinctive semi-elliptical wing panel."

Well, this was disconcerting. After some thought, I concluded Palmer was unlikely to be wrong, since he painted it. Obviously, the colors on the old *Flying Models* cover had shifted through aging, photographic, and printing processes.

This still left me with some unanswered questions. What color was the dark outline of the white AMA number? Was it blue, or black? Did Palmer paint the wing blazes on the bottom as well as the top?

Taking his address from the copied letter, I wrote to him and asked. In just a few days back came an expansive letter.

"Hello Mark, Received your letter and requests for info on the T-Bird of '59—first I'll answer your questions. Color outline of A.M.A. no. is black. The wing and tail blazes are on the top and bottom and outlined in blue."

Additionally, Bob related the reason he painted the tail in a red-white checkerboard pattern was for better visibility flying low and inverted with a pin in the tip of the rudder to pop a balloon on the ground.

This was a standard part of his popular stunt demonstration. Along with the two page letter he enclosed four original Veco decals—the first I had ever seen!

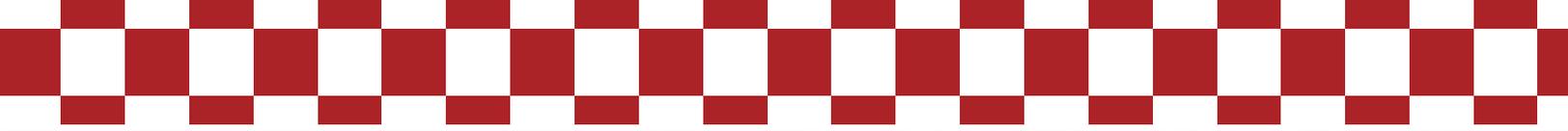
The next winter, due to some battle damage and an engine change, I repainted my TBird in the correct colors. I presumed Bob used Aero Gloss because Pactra featured his picture in many of their ads (rumor has it that he really finished his planes with auto body lacquer), but I used Sig Light Red and Dark Blue dope along with Black and White.

While the shade changes are subtle when going from red-orange and black to red and blue, in my opinion the true colors have much better harmony. Hopefully, any future T-Bird builder who wants to match Palmer's '59 color scheme (and who reads this) will only have to paint their T-Bird once.

For my next airplane, I was thinking about building a '57 Nobler. This was another Classic plane of which I had only seen black-and-white images. So, I wrote to George Aldrich (enclosing a photo of my T-Bird). His reply:

"Hi Mark—Nice to hear from you and that's a dandy T-Bird. The photo (Top Flite Nobler) was Aero Gloss Curtiss Blue—with red and white hand lettering on the wing. The original was Corsair Blue (also Aero Gloss) with white nose and tips. Hope this helps."

So if anyone out there has color photos from the black-and-white golden age of Control Line, please post them on a website or get them published so those who wish can apply authentic colors to Old Time and Classic airplanes. **SN**



Mark with his T-Bird at the VSC. Gayle Jackson photo.

The Euro Scene

By Peter Germann

Indoor electric RC flight, substantially fueled by heavy advertisement campaigns and driven by sound commercial interests, not only shows impressive growth rates, it seems to attract young people otherwise not being interested in aeromodelling, too.

Offering almost immediate access to the adventure of being in control of flight, independent of the weather, nearby, at reasonably low cost and without the need to build an airplane first, we would be well advised to look at indoor electric flight as an entry into the world of Control Line flying.

Electric indoor CL, if properly demonstrated at many of the numerous indoor events, may well attract young enthusiasts looking for challenging action, such as tricky Stunt or perhaps even breathtaking high-speed Combat flying. With enough attention generated, chances are that a manufacturer may respond with a suitable ready-to-fly airplane being sold at the local hobby shop. I doubt if there would be any better way to address what we desperately need most: dedicated young people!

Igor Burger, undoubtedly known as a scientifically working designer and builder of very successful F2B airplanes, an excellent flyer on the highest WC level and a well respected electronics expert, undertakes considerable efforts to promote electric indoor CL in Europe.

Igor has now agreed to share his findings with the Stunt community and I do very much appreciate his move. It is a very valuable contribution to our common cause and deserves attention.

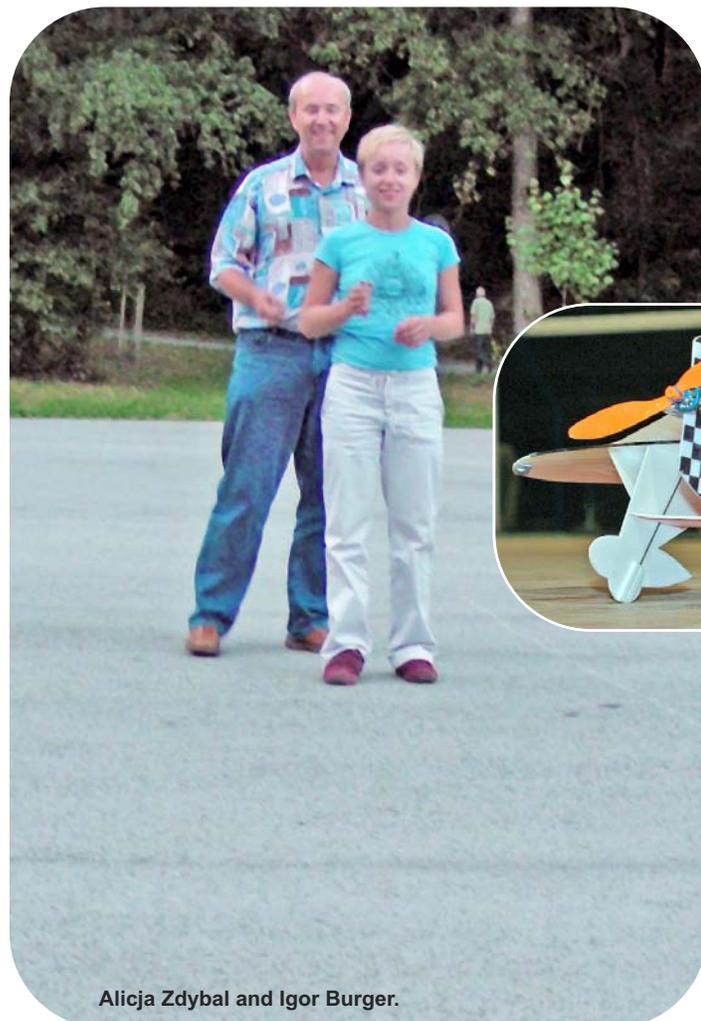
—Peter Germann

Slovak Indoor Fun in Gym

My name is Alicja Zdybal and I am going to write about a meeting of indoor electric powered models in small Slovak town Nitra with known Slovak CL flier Igor Burger. Igor often participates in World and European championships with good results, he designed the “Max” airplane which is used by many European fliers and works hard on electric powered models which are used by more and more European fliers.



Friend Attila Csontos and his airplane.



Alicja Zdybal and Igor Burger.

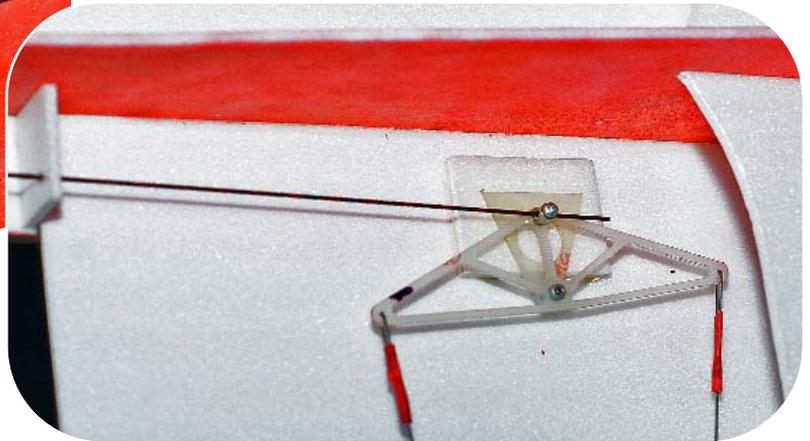


Below: Drive train installation.





Left: Elevator horn.



Below: No flaps control system.

Q: Igor, some readers know you well as a great flier of “big planes.” What do you need small planes for?

A: That’s a really good question. First of all I did not know how to start with electric models. It needs to collect relatively expensive stuff and I had experience with RC indoors, so four years ago I just tried to convert a small and cheap polystyrene RC indoor flyer to fly on lines. It was not what I wanted, but it was eye opening and since then I did several improvements and now we have models which fly quite well.

And since it does not cost too much, I found several guys to fly with me. And then, such a small plane is a very good thing to test some theories and new equipments. For example active control for motor, trimming with extreme yaw, etc. Simply it keeps me in touch during the winter, allows me to do crazy modifications and tests which I can never do with a larger model as it needs several months to create.

Q: OK, so how did it get started? Who said let’s meet together?

A: Several people asked me how to do such a model, so three years ago I invited them to our gym. That time we had only one model that flew really well and few that were “almost” flying, but needed some changes, adjustments, and so forth. It was difficult to explain all how’s and why’s by mail, so I decided to invite them to attend.

It was fun, because several of them had it in hand first time. So since then, we meet every year at least once and every year we have more and more fliers, models, experience, etc.

Q: Why only several times a year? And why in Nitra? Is Nitra a special place for fliers?

A: We fly it only in winter. That’s a time when we have to build new models and prepare for summer time but we are lazy and we want fun, so we do at least that one meeting once per a winter season, but every one of us fly more often, if possible every week.

And why Nitra? It is small town almost in the center of Slovakia, so it was easy to come for everyone. Additionally one of our friends from Nitra has good contacts there and found a good gym. It costs money but he found a tennis hall that we could rent at a reasonable price.

Q: How many people fly indoors?

A: On the last meeting we had seven fliers with models, and several of those “wanted to try.” I know seven is not so many, but we are a small country having only five million inhabitants, so it is a good number anyway. In reality I have never seen seven Slovak fliers on a field outside at once, so I can say it is

more popular than “large” CL models. Several of them fly RC in summer.

Q: So after one meeting those models are destroyed?

A: All depends on pilot’s experience. Those models are capable of flying the same pattern as the “large” models very well, so it is good way to start with CL in general. We have several newcomers and so the life expectancy of such a fragile foam model is short.

But you have your own experience. You also did your first flight with such a model, and you know I was not afraid too much. You also did your first loop in second flight, and it is not so often with models for outside. But for sure—that model does fly well and fly safe in hands of experienced flier, and its life time is minimally one whole season.

Unfortunately (for the model, not for us), development goes quickly forward and we often do modifications—with knife and glue—so sometimes we really need to build new one.

Q: Let’s say I like the idea of spending winter time flying indoor. So what do I need for such a model?

A: The plane itself is done from 3mm thick (or thin) polystyrene plate. It is called Depron. It is not that stuff cut from a block of bubbles, it is homogeneous foam plate with thin skin used for vacuum molding. So for building you need only a knife and some glue.

Alternatively you can use good indoor F3AP flyer from a kit. You can see one in the photos. The only hardware is a bellcrank and carbon pushrod to elevator which is hinged on 3M plastic tape. So it is really easy to do in one evening. Colors are easy to do by color pencils, kids like to do it.

Q: But I see it is relatively small, at least if I compare it to a “large” outdoor model.

A: Yes, the span is only 32 inches and the weight is 6 ounces. So it is relatively small and light, but since we fly limited space of basketball hall, it is good size.

Q: I have noticed that you don’t have flaps on wings as on large model. Is that because it is so small and light?

A: That is right. There are actually four reasons:

1. We use flat wings. It is the only way how to fly at such small speeds. You probably did not hear about Reynolds number, but reality is that only flat wing has good properties at low speeds (low RE number). Thick airfoiled wings like does not perform well. Unfortunately flat wing does not fly well with deflected flaps. They are counter productive, air flow separates at very low angle of attack with deflected flaps and therefore we do not use them.
2. We fly in calm air, so we do not have turbulence and therefore we do not need to go to large wing loads, so we really do not need flaps.
3. Low wing load does not make vortexes at wing tips. It is very dangerous in calm air, and every flier knows that problem. Low wing load limits them (tip vortexes are relative to aspect ratio and lift coefficient) so wing without flaps is an advantage, because its lift coefficient is lower than lift coefficient of smaller flapped wing.
4. We fly at very low lap times. Means we have limited line tension, in reality centrifugal force cannot keep tight lines overhead and it will limit controlling with used flaps, because they make strong feedback.

Q: Tell me something about your motor.

A: For power we similar motors and batteries as do the indoor RC models. The battery is a two-cell 800mAh Lithium Polymer type. The motor is a Python 60 that is made in Czech and it weighs only a little over 1-ounce. It has a KV rating of: $k_v=1400\text{rpm/V}$, $R_i=150\text{mohm}$ and is rated to 60W. It turns a GWS 10x4.7 prop at 4300 rpm with a Jeti Spin 11 ESC in governor mode.

The prop is relatively large for such a small and light model, but is necessary to sustain the speed of such light and slow model almost without mass inertia. The timer, which is set to 3:15s flight time, is of my production. Some of those models have active motor control with current, or gyro or accelerometer sensors. Development of such devices is also part of the fun.

Q: And what about lines? I assume that you don't need steel ones.

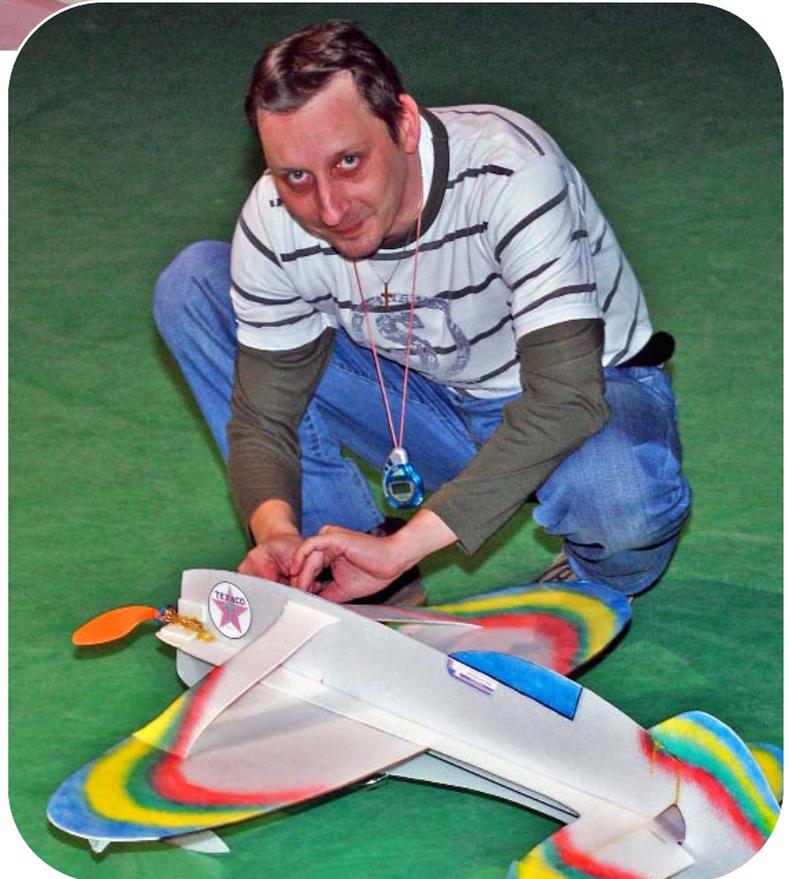
A: I use fishing lines. I use those with Kevlar fibers, for example Spider Wire. They are 5 meter long (~15ft). The lap time is only a little under 5 seconds, so flying is similar to large models outside. As I already wrote, that lap time is long for such short lines. It is not enough for centrifugal force, so that is the reason for those extremely large fuselages.

The model is yawed almost 20 degrees out to replace missing centrifugal force by fuselage side lift. It needs little bit of "another" approach to trimming and an open mind, because not all rules from large models are applicable. For example



Left: Indoor Electric CL Fleet in Slovakia.

Below: Nice colors and no need for fuel proofing!



trimming by rudder, relative large motor offset down, etc., but as a friend of mine told me once that is already "black magic," and we do not have space here for more words about it ...

Q: You said that those small planes are for exercising in winter time but it seems that there are more differences than size.

A: Not so much. They are very similar to beginner's models. They have only a few years of development, while the history of those (as I call them) "long lines" models is very long. But I think all is visible in the photos. Especially in the photos of that beautiful red model done by my friend Attila Csontos, where you can see lightweight linkage and other details. **SN**

—Alicja Zdybal
—Igor Burger (igor-hexoft@netax.sk)

Some useful links:

www.rcmodely.sk/zobrazclanok.php?id=300

www.rcmodely.sk/CLClik/

www.kdesombol.sk/Madar/Igor/1/P1070698.wmv

<http://picasaweb.google.sk/jofrey007/StretnutieHalovychElektrouciekVNitre#>

Robin's View Productions

BOB HUNT'S LOST-FOAM WING BUILDING SYSTEM

In 1968 Bob Hunt began experimenting with foam wing cutting, eventually becoming one of the world's most acknowledged and accomplished experts at the art. He liked the inherent and easy-to-achieve accuracy that a properly cut and covered foam wing virtually assures.

Bob has developed a wing building system that takes advantage of the accuracy of the foam cradle pieces, which are just as accurate negative airfoil shapes as the foam cores are positive airfoil shapes. He has devised a system in which the foam wing blanks are marked for desired rib positions for a built-up wing, prior to being cut into a wing shape.



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Bob first tried this process in 1993, and the very first wing built in the system was absolutely accurate in every respect. That wing was

built for Bob's Tucker Special, which went on to win the Vintage Stunt Championships. Its wing was light, strong and true!

Since that time, Bob has been constantly developing and improving his Lost-Foam Wing Building System, incorporating many unique innovations and ever more accuracy-ensuring techniques. Its success is evident by the large number of top aerobatic champions who have chosen Lost-Foam as their preferred wing building method. Included on that list are Bill Werwage, the 2004 World Champion, and David Fitzgerald, the current World Champion.

The Lost-Foam Wing Building System has many advantages over any other type of built-up wing fixture system. The ribs that are generated from the cut-up foam core templates are accurate to within a few thousandths of an inch, and they fit perfectly into the lower foam fixture to yield a perfectly shaped wing. No other system keys on and trues the outside shape of the wing as it is being built! Foam leading edge molds—which are exact replicas of the front of the wing shape—are used to generate hyper-accurate leading edge shells that have a perfectly shaped leading edge radius. Improperly shaped leading edges are a major cause of poor model performance. The Lost-Foam system solves that problem completely!

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RVP offers a two-DVD set that takes you through every aspect of

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Bob Hunt's Lost-Foam Wing Building System DVD set (two DVDs totaling 207 minutes) is available from Robin's View Productions, PO Box 68, Stockertown PA 18083. Phone: (610) 746-0106 or e-mail Bob at robinhunt@rcn.com. The two-DVD set is list priced at \$39.95, but is available for a limited time to PAMPA members for \$24.95, plus \$5.00 postage and handling (US only).

Start building better, lighter, stronger, and much more accurate wings today! This system and these techniques are, according to Bob, his most significant modeling contribution to date.

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Our motto:

RELENTLESS INNOVATION!





THE

By Tom Hampshire

SHARPPY

It's an Old Time Stunt model, kitted by F&B, a long lost kit manufacturer from Colorado. It's also one of a fairly long list of little known kit OTS ships that were never published, and are accordingly very rare on today's OTS circuit. The only way to build one of these is to do the research, find a kit you can copy, and draw up your own plans. It's more work than just the airplane is worth, but it does help to preserve the history of Stunt's earliest days.

The magazine ad shown at the bottom of this page looks like an introductory ad from the July, 1950 *Air Trails*. Other magazine references for the airplane are the photo ad in the October, 1950 *Air Trails*, and America's Hobby Center ads in *Model Airplane News* for April and March of 1951, and April of 1956. The kit plans show an Atwood Triumph 49/51 engine. This engine first appeared in print in an ad in *Air Trails* in November, 1948, advertising Nats wins from the previous summer. The engine was mentioned consistently in AHC ads in *Air Trails* from December, 1948 forward. This was by no means based on an exhaustive literature search, rather just the box of old magazines I have on hand. I could find no

earlier references to the airplane, although there were ads for a different airplane in 1946, named the Sharpie, class A-B, hence much smaller than our subject.

The ads raise an interesting question. The glow plug was introduced in 1947-48, and promptly made all of the ignition engines obsolete. Yet the original Sharpy, never mentioned in print before 1950, showed a very small tank compartment, which could only have been consistent with gasoline fuel. Very roughly, an OTS pattern of about 3.75 minutes can be flown on a little less than 2 ounces of

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F-B SHARPPY — Trophy-Winning Stunt Plane. 517 sq. inches—47" span, 11" cord. For class C-D engines. .49 cu. ins. up. **\$4.95**

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AIR TRAILS PICTORIAL

gasoline, with ignition, or on about 3.5 ounces of methanol, using glow. So it might be that the prototype had been around for some time prior to production, or who knows? Maybe the builder just liked ignition. Maybe he had an Atwood Triumph on glow.

The small tank compartment did cause some concern over fuel capacity. I chose to resolve this by using an open front end with an RC mount instead of conventional maple mounts. This allowed the use of a profile tank of 1.25-inch depth, with a larger fuel capacity than a standard 1-inch high tin tank. If you prefer the maple mounts, it can all be made to fit, but you'll have to add bracing to the rear of the leading edge because it will need to be cut away to accommodate the longer tank. You might also have to go to a 3-inch bellcrank. Mine has a 4-inch bellcrank. You can also cut the mounts away behind the firewall to allow for the deeper tank. It helps to lay your engine and a couple of tanks out on the plan while you figure out how it can all fit together.

The original kit plans show a fairly accurate set of dimensions

inner nose length (F1 to F2) of $2\frac{3}{8}$ inches, compared to the kit plan which shows the same two formers apart by $1\frac{1}{2}$ inches. The forward nose length (F1 to the thrust washer face) was 3 inches by kit plan and $3\frac{5}{8}$ inches from the parts. So the overall nose length could run from a minimum of $4\frac{1}{2}$ inches to a maximum of 6 inches, depending on how you mix the kit plan and the kit parts. My ship, with a Brodak .40 and no shaft extension, has an overall nose length of $5\frac{3}{4}$ inches, and hit the CG at 25% of MAC, with no ballast whatever. The Brodak .40 weighs about 6.4 ounces. My Atwood Triumph weighs 9 ounces, and it's a glow version, without ignition points, cam, and timer housing.

I don't know how others would view this, but I'm satisfied to have any nose in the range of the kit plans or parts be held eligible for entry in any OTS meet. It seems to me that either is documented within the spirit of OTS. Without an original prototype, we simply don't know for sure what the nose length was. My attempt to scale a dimension from the *Air Trails* July,



Here's a shot of the late, great Rusty Brown and his sidekick "Sugar Babe," with his Sharpy from VSC XV or so. It's the only other Sharpy I've heard of. Thanks to Uber model photographer Elwyn Aud for the photo.

to permit reproducing the parts. But the original kit contained a pre-built fuselage crutch consisting of firewall, sides, and bottom, all of $\frac{1}{8}$ -inch balsa, to which short hardwood mounts were glued, and nose blocks were then glued to the mounts. So there is a huge stress riser right at the firewall. No plywood doublers were used. And the mounts were carved away forward of where the nose blocks were tapered to their front end. The whole layout is a structural headache! The CAD plans included with this article show a conventional plywood doubler and maple mount front end construction. The construction photos show the firewall front end. Either can be made to work well. If you build one with a plywood doubler and hardwood mount front end, consider using hard balsa fill blocks between the hardwood mounts and the plywood to space the bearers at the width of the crankcase of your engine.

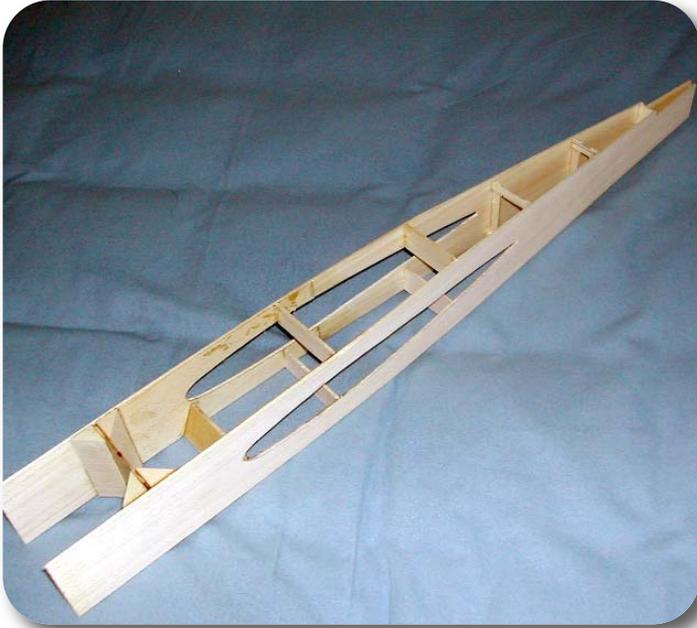
Although the kit plan was neatly drawn, the parts match was, in some cases, way off. The fuse formers in the kit were cut freehand on a bandsaw and were out of square by as much as $\frac{1}{8}$ -inch. The nose blocks were also wildly inaccurate. The parts showed an

1950 ad photo showed a nose length of about $3\frac{3}{4}$ inches. Scaling the nose length from the *Air Trails* October, 1950 ad photo showed a nose length much longer, at about $8\frac{3}{4}$ inches. Both of these were done by assuming the wing chord in the photo at 11 inches, and estimating the nose length along the thrustline axis of the airplane. There may well be more accurate ways to do this, but from what I saw of the inaccuracy of the kit parts, we are all kidding ourselves if we try to come to a precise conclusion about it. Certainly the reproduction can be no more accurate than the admittedly flawed original. I did hear that Marvin Denny had worked up a set of plans for an F&B Viking some years ago. Called him up and talked it over. I found that he experienced much the same problem with inaccurate kit parts in that instance. Thanks, Marvin.

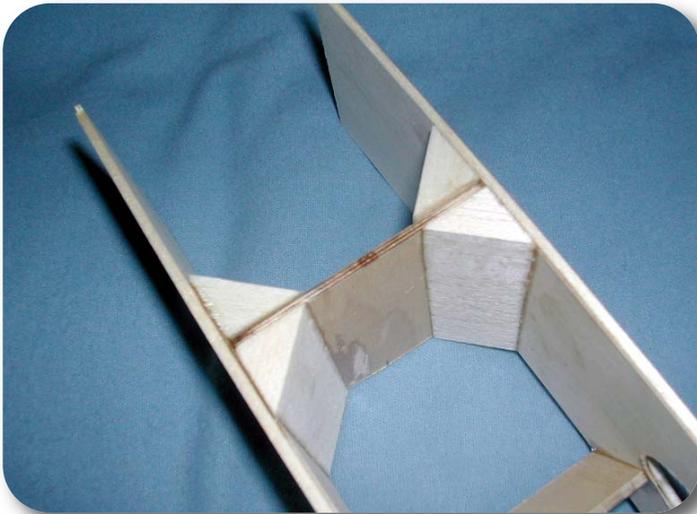
The wing parts were much better from the outset. The rib spacing was taken from the notches in the pre cut leading and trailing edges and fell accurately when compared to the kit plan. The ribs were cut accurately and matched the plan.

Construction

I don't see much point in yet another "Glue spar S into notch N" construction article. So I'll run from here through the construction photos. You can and should use your own style and skills in building. So let's start with the fuse crutch ...



The crutch is built on $\frac{3}{32}$ -inch balsa sides, with $\frac{1}{32}$ -inch birch plywood doublers laminated to the sides with slow cure structural epoxy. Note that the plywood stops at the forward end of the firewall gussets. Adding more plywood forward of that point just makes it difficult to shape the nose ring and fair the forward fuse smoothly into the spinner.



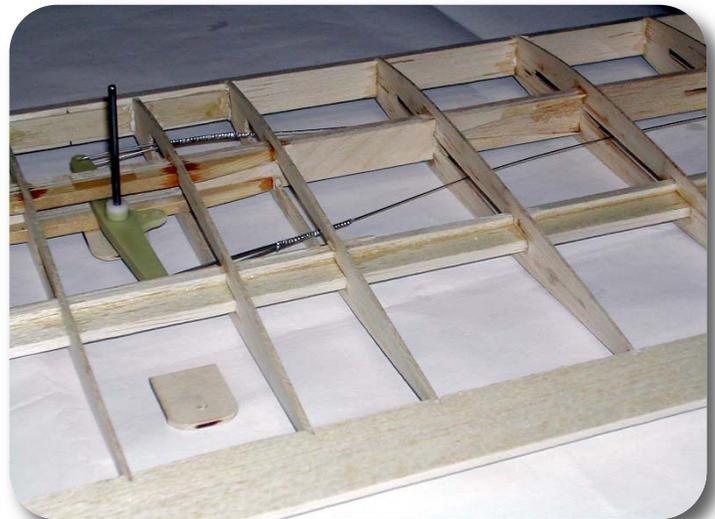
This detail shows the firewall gussets. If you build one with this front end, do not, ever, reduce the size of the gussets. They are cut from firm (8-10#) balsa, cross-grain, meaning the grain runs parallel with the long side of the triangular cross section. This is crucial, as the gusset cannot split along the grain, and all end grain is anchored firmly to the plywood doubler or the firewall by epoxy. Resist the temptation to save a little time by using a gusset where the grain runs vertically, parallel to the firewall joint with the plywood doubler. This will fail very quickly under engine vibration loading.



The spar is shown clamped in place for trimming. Use enough clamps and force to ensure it doesn't slide around under the knife.

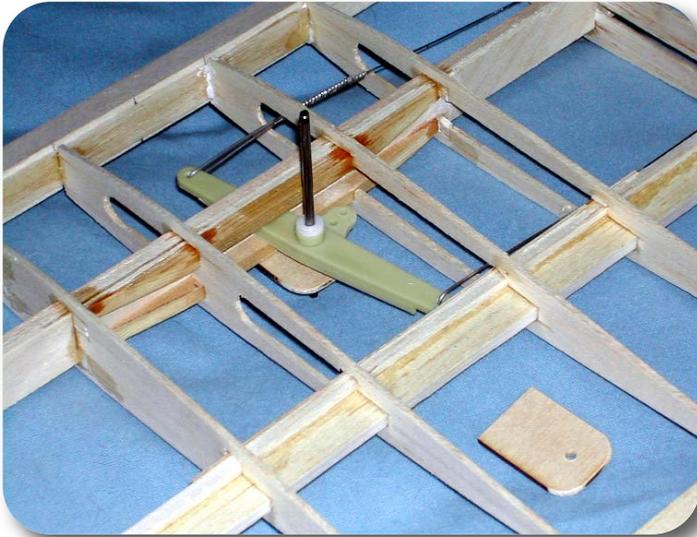
It's on to the wing ... I like to strip spars in stages, to avoid having a spar warp from internal stresses when cut. The key is to cut it oversize by about $\frac{1}{4}$ - $\frac{3}{8}$ -inch, cut it free, and see how it drifts when free of the rest of the sheet. Then clamp it down again, cut $\frac{1}{16}$ -inch off each side, break it free again, and see if it moved. Re-clamp and cut in ever finer increments until you have isolated a straight spar. The plywood spar doubler is glued to the spar with slow cure epoxy, clamped heavily, and left to cure for 24 hours. Bricks, magazines, or lumber will all work as clamps.

I like to cut the doublers a little wider than required to allow for slight shifting when it is glued up, and then plane to finish shape after assembly.



This photo shows the main spar installed in the wing. Note the plywood spar doubler that extends two rib bays beyond the end of the planking, with a "birdmouth" cut in the end of the doubler. I like to build a spar so it flexes progressively from the center to the tips, with no point of rigidity which could cause it to break under heavy air loads. Think of it as the difference between snapping a pencil in your hand, and trying to do the same thing with a fishing rod. The fishing rod bends, but doesn't break. Mother nature does the same thing, much better, by designing trees and grass so they bend in the wind, but don't break, raising their leaves again after the storm passes. The main spar is quarter grain, about 10# stock, with straight, stringy grain. The rear spar is super light 4# A-B grain stock, and adds little strength. Note

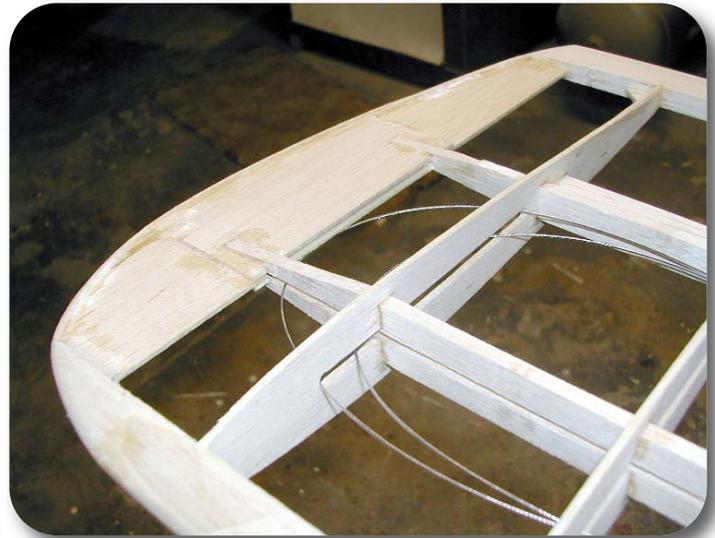
the $\frac{1}{4}$ -inch square spruce center doublers to carry the bending load over the bellcrank cutout in the middle of the spar. Again, these are assembled to the spar with slow cure epoxy, clamped and left to cure for twice the rated cure time.



This photo shows the bellcrank mount, with ply tabs that are used to support the bellcrank stud behind the main spar, with bushings used to center the bellcrank vertically between the tabs, allowing free motion in the center slot. This is merely for assembly purposes; the strength of the stud bellcrank mount is shown in the next photo ...



This view shows the stud trap installed after the wing with ribs, planking, and tips installed in the fuselage crutch. I slid the wing in from one end, but you can also install it in the fuse by cutting diagonals through the fuse sides and doublers and lowering the wing into place. The bellcrank stud as installed stands proud of the wing planking. A 1-inch wide piece of Lite Ply is installed, snug between the fuse sides and drilled to accept the stud. I like to use a second smaller piece of Lite Ply drilled to accept the stud over the ends as well. Then the stud ends are cut off flush, and a $\frac{1}{16}$ -inch plywood cap is installed, trapping the stud in place. The balsa fuse side brace is there to support your fingers against the fuse side for the pull test. Note that this is cut cross-grain, just like the firewall gussets.



The inboard wing tip is made up of two end pieces from the pattern, and $\frac{1}{16}$ -inch balsa plates above and below the ends, leaving a slot for the leadouts to travel through. Note: The slot in the inboard end of the main spar. This allows the forward leadout to sweep aft. The leadouts are located by brass eyelets epoxied in to the slot. Mine has the leadouts centered 1-inch aft of the CG, which is at 25% MAC. This is a good place to start, but I'd not build any airplane without adjustable tip weight and line rake. I didn't want an adjustable line slider because it would be visible through the silk. Note that both tips have a rim of $\frac{3}{32} \times \frac{3}{16}$ -inch balsa cut to fit around the outer edge. This is critical as it supports the silk and allows it to accept the shallow angle of separation due to the odd tip configuration, with the tip rib 4 inches from the edge of the tip. Omitting these pieces will cause the covering to sag when wet, attach to the underlying tip itself, leaving an unsightly pucker at the tips.



This photo shows the tip weight layout. Since I wanted a clear finish silk covered wing, a conventional weight box with a bolt on cover was to be avoided. Instead, a $\frac{3}{8}$ -ounce weight was epoxied into a slot in the spar. It was covered with $\frac{1}{16}$ vertical grain balsa sheet after the photo was taken. The adjustable weight is carried in the aluminum tube and stuffed in through the leading edge. Make sure the plug in the spar end of the tube is securely held in place with slow cure epoxy.



firewall gussets. These will be drilled after installation to accept the hold down screws at the front corners of the tank hatch cover.



The nylon engine mount is seated in a recess cut into the forward firewall gussets, against the firewall, secured by bolts into the blind nuts visible in the photo.

Here's the "office" prior to finish sanding and decorating. I like to sand out little details like this with custom made sticks of scrap with fine sandpaper hot stuffed to them. Takes a little time, but you can get it really slick.

This is the tank compartment. Note the nose blocks have been glued in and carved away to fair into the spinner. Since the strength ends at the front of the forward firewall gusset, the blocks can be shaped to the spinner ring, and then hollowed with a hand grinder tool to a wall thickness of $\frac{1}{8}$ -inch or less. If you build one with a hardwood mount front end, much the same logic applies ...

Cut off the mounts $\frac{1}{4}$ -inch or so forward of the front mounting bolt. The nose out to the spinner ring is like a fender on your car; purely decorative, and it need not be heavy.

The tank floor should be low enough to permit the tank itself to be held in place between two packs of $\frac{1}{16}$ -inch thick sheet foam, wrapped in a plastic bag. This makes tank height adjustment simple ...

Pull the hatch cover, shuffle the shims, and put it back together. The tank compartment floor is fitted closely, and then microballoons are worked into the corners with a fingertip, and the whole business locked up with CA. Since the CA is not particularly fuelproof, paint a couple of coats of slow cure epoxy inside the entire nose and tank compartment, and inside of the hatch cover as well. The hatch cover is made up of block, with a Lite Ply former on the rear end, fitted to a sister former used at the front of the top block. The rear of the hatch cover is held down by $3\frac{1}{8}$ -inch diameter dowel pins glued in to the hatch, and inserted into matching holes in the ply former at the front of the fuse top block.

Drill the holes in both formers at the same time, when they are clamped together, for a perfect fit. Lastly, note the dowels inserted vertically into holes in the forward



Our fearless pilot ... Maybe Spaceman Spiff will appear in the future.



Here's the finished ship; all red, all over, and a dyed clear finish. There are 3 places where I used tiny bits of balsa colored filler under the silk on the body, but their location is classified. If you are new to OTS, I wouldn't try for a clear or dyed finish on the fuse. It can look very good, but it tends to magnify workmanship errors that filler and colored dope can hide. But there's nothing like the old time feel of a full bore clear finish.



This photo shows the pushrod exit and the horn layout. The ship would look better if the pushrod were brought out beneath the trailing edge, and the exit box lowered to suit. I have had success with the DuBro 4-40 thread clevis shown, provided care is taken to get the sliding clip pin retainer accurately seated. Never use any clevis which has a 2-56 thread, any welded joint on the pin, or which can spread the horns of the fork due to load.



Here's the engine room. Note the hatch cover hold down screws which engage the dowels inserted into the forward firewall gussets. They rest on a 1/16-inch plywood plate inlaid

into the front edge of the hatch cover. I used a tongue muffler purely for looks. The barrel muffler looks clunky on an upright engine.

Some general notes on finishing

My Sharpy is silk covered all over. Start with the bare balsa. Apply at least 3 coats, up to 5-6, of clear butyrate on all surfaces the silk will touch. Then sand with #320 or #400 sandpaper until there are no edges which could catch wet silk. You can't fix a run in silk which is under a clear finish.

The wings are covered one panel at a time, soaking the silk with a sprayer of water. Don't answer the phone, don't stop, and continue to work the silk out with your thumbs until the weave lays straight and smooth. Use more water whenever it starts to get a little dry.

When you have it straight, weave square and smooth all around, apply 3 coats of clear dope around the entire edge of the panel, getting plenty on the structure, and none out on the unsupported surface of the silk itself. Now spray it with still more water, and let it dry.

The dope will blush, but the idea is to keep it wet until the dope has a chance to bond the silk to the structure underneath. Letting it dry will put tension on the silk, and tear the dope bond before it reaches full strength. It doesn't hurt to wait an hour and then spray it with water again.

Once the bond is established, you are ready to work through the tips. The tip rib is inset, making a very shallow angle between the silk and the underlying tip. Even with the added rim around the edge of the tip, you can ruin the job by getting the whole panel wet with dope, allowing the tip covering to sag and touch the tip itself—instant pucker. So use the tension in the whole panel to support the silk at the tip. Work a few brushfulls of very thin dope around the tip, only about a half inch in from the edge.

Let it dry and firm up, then try a few more thin coats, taking care not to wet the whole tip. After several sessions of this, and when the tips are firm, you are ready to just paint the whole panel with dope. I like a foam brush for this, because if you get a run underneath the silk, you can just hold the airplane above your head, press the brush against the silk, and pull it away slowly. The foam will neatly pull the dope, run and all, through

the silk, leaving an undetectable repair.

There are some very good builders who never mix brands of dope. I do it routinely, in order to control the shrinkage rate. If you use low shrink dope over open bays, it won't shrink enough. So use either Sig or high shrink Randolph or Certified on the open bays to pull the wing covering up nice and tight. Then overlay the whole ship with Brodak, which is the lowest shrink brand of dope in the world. Now your fillet corners won't pull up. If you use high shrink dope everywhere, you run the risk of a blistered fillet.

Silking the body is straightforward. Just cut strips in convenient sizes, spray with water, smooth in place, and dope right on top of the water. I hinged the tail surfaces first, then assembled the airplane, and silked the surfaces over the hinges. Let it dry out, and dope normally, lifting out all the blush.

At this point, the airframe is entirely covered with silk, and in need of careful sanding with #400 paper, and application of more dope to seal it all together. When all is ready, find an old cardboard box, load up your gun, and start adding dye to the dope. Keep adding dye and spraying the box until you have the right shade, then shoot the airplane.

You won't get the right shade at first, it will be too light, but let it dry and shoot some more. If you push it at this stage, you'll only get too much dope on and have to sand out the runs. Take it slow.

After a couple of applications, you will get the right shade to your clear coat. It will fade some in the sun, so I like to go a little heavier on the top surface of the airplane to allow it to fade in to a consistent color. I used aniline dye, but see Pete Peterson's *Stunt News* article about the House of Kolor Kandy Concentrate. He has found a gem for us. As for silk, I use Thai silks 5 mm white silk, about \$2.50 per yard. Google Dharma Trading to order up a batch.

So after all that, how does it work? It came in at 34 ounces all up, for a wing loading (515 sq. inches) of 9.5 oz./sq. ft. So it's light enough. But the wing (11.8 %) is scary thin, with a leading edge which is pretty sharp. It flies far better than that wing has a right to, with a really buoyant, maneuverable feel in the air. It is worlds better than a Super Duper Zilch I built about 18 years ago.

That one was light enough too, but it stalled consistently in every maneuver, just like a Ringmaster with an over-quick elevator. I guess the difference is in a more aft CG location on this airplane. I thought when I started this project that it would turn out to be an interesting curiosity, but not a world beater. Now I'm not sure, so I better get busy and fly it some. It also has the ability to greatly stretch the glide in exchange for only a little gentle whipping. A real help on a grass circle with only one smooth spot for landing.

My heartiest thanks go out to John Miske, who loaned me a kit in 1995. I drew up a set of plans then, but never got around to it until now. Bob Kruger did the CAD work for the new plan, and put up with myriad changes from me. Thanks Bob, for being so patient while I sorted the construction out. Here's hoping we see some more of this one. It flies as well as any. *SN*

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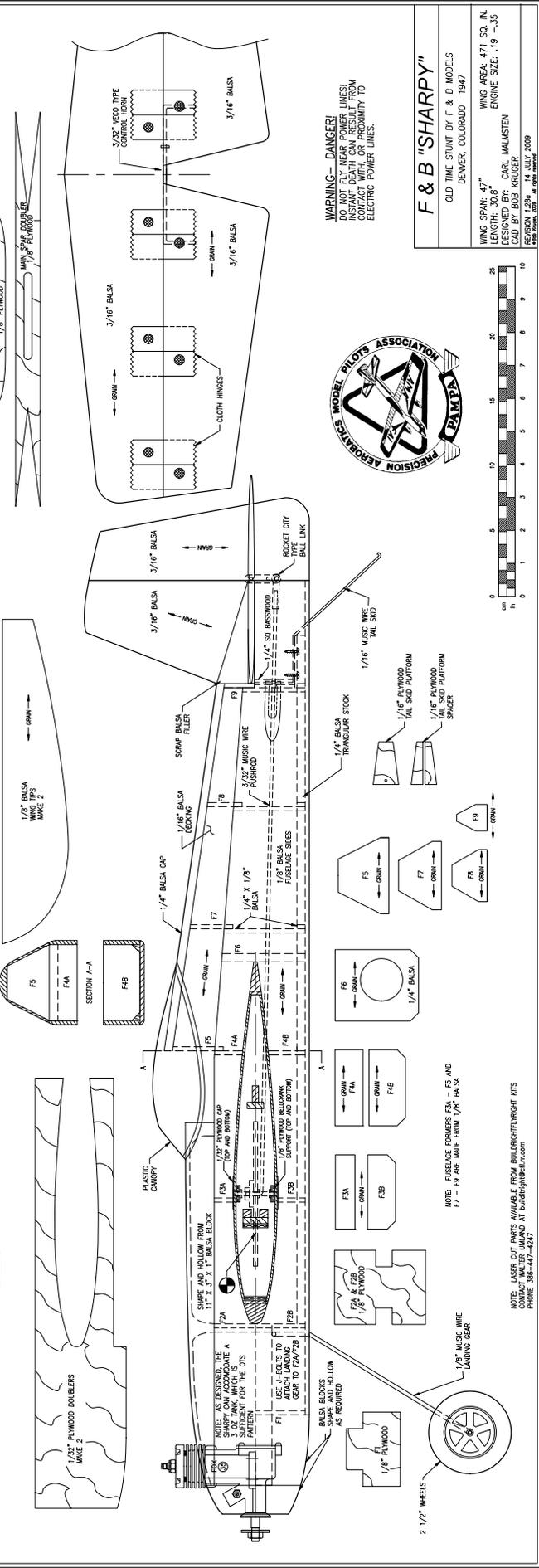
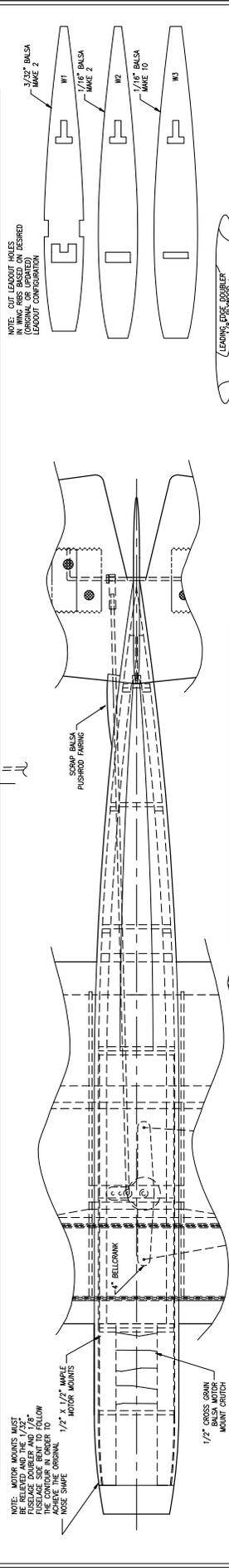
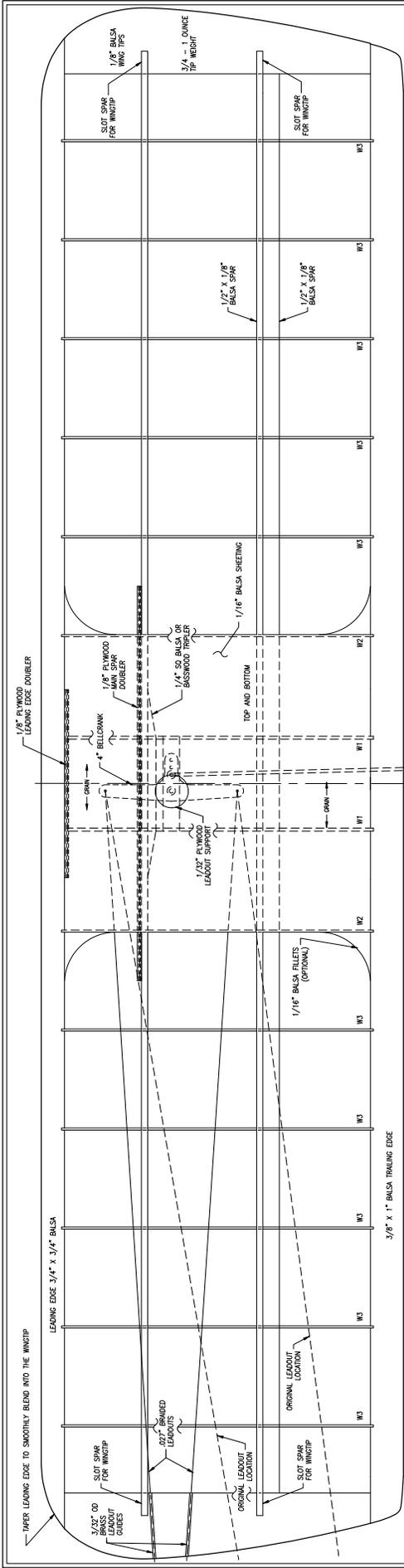
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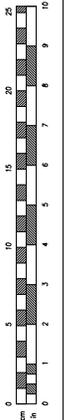
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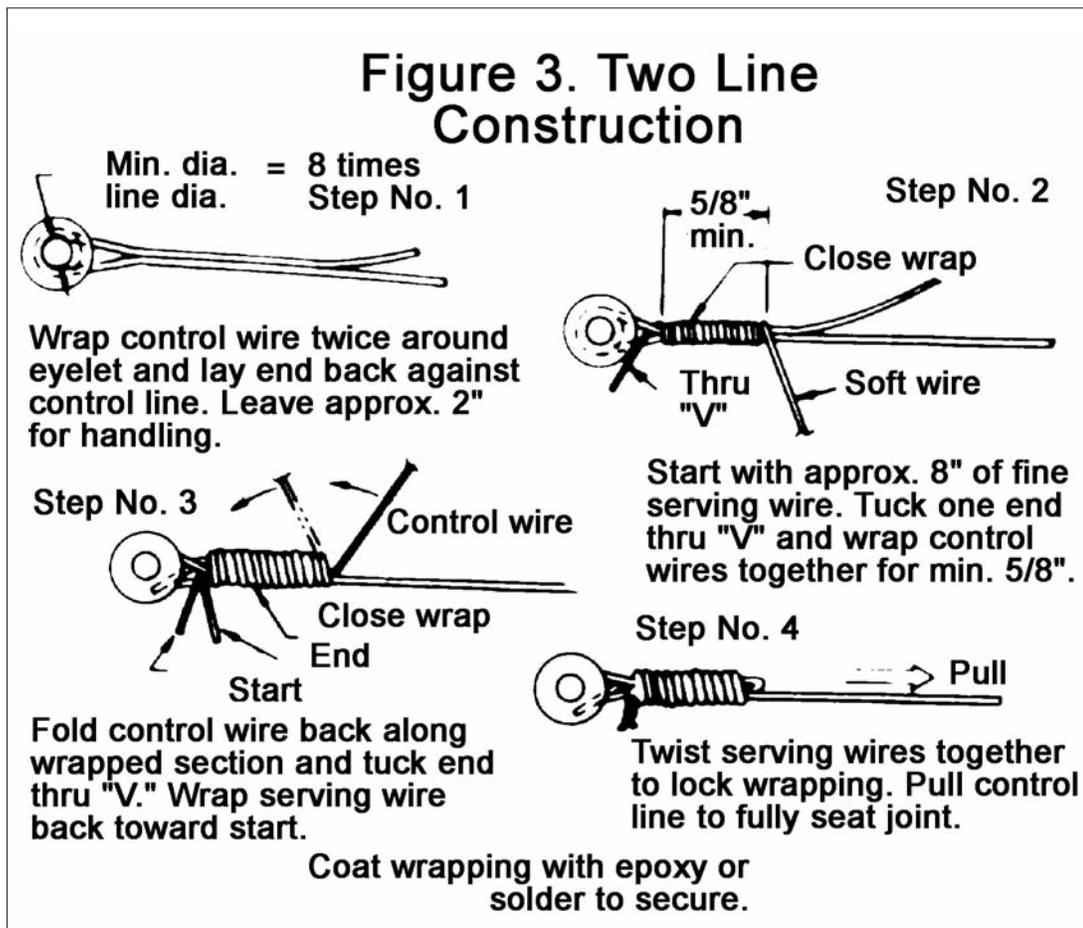
By Noel Drindak

Cable Lines and Leadouts

In the early days of Stunt, lines and leadouts were made of music wire. Music wire is extremely strong (tensile strength greater than 225×10^3 psi), but it's not very flexible. For greater flexibility, fliers turned to cables—first for control lines and later for leadouts. For equivalent strength, cables must have a larger diameter than solid lines, so there was a price to pay for using cable lines—more drag.

For many years fliers interested in extracting maximum performance from their Stunt ships stuck with the solids. However, recent developments in Stunt engines (and an increase in the maximum displacement) have blessed Stunt fliers with an excess of power. For most fliers, saving a little on line drag is no longer worth the inconvenience of solid lines.

In the 2008 Nats Technology Survey, fewer than 5% of the Stunt fliers were using solid lines. Virtually all Stunt fliers are now using cable lines and leadouts.



Cable Basics

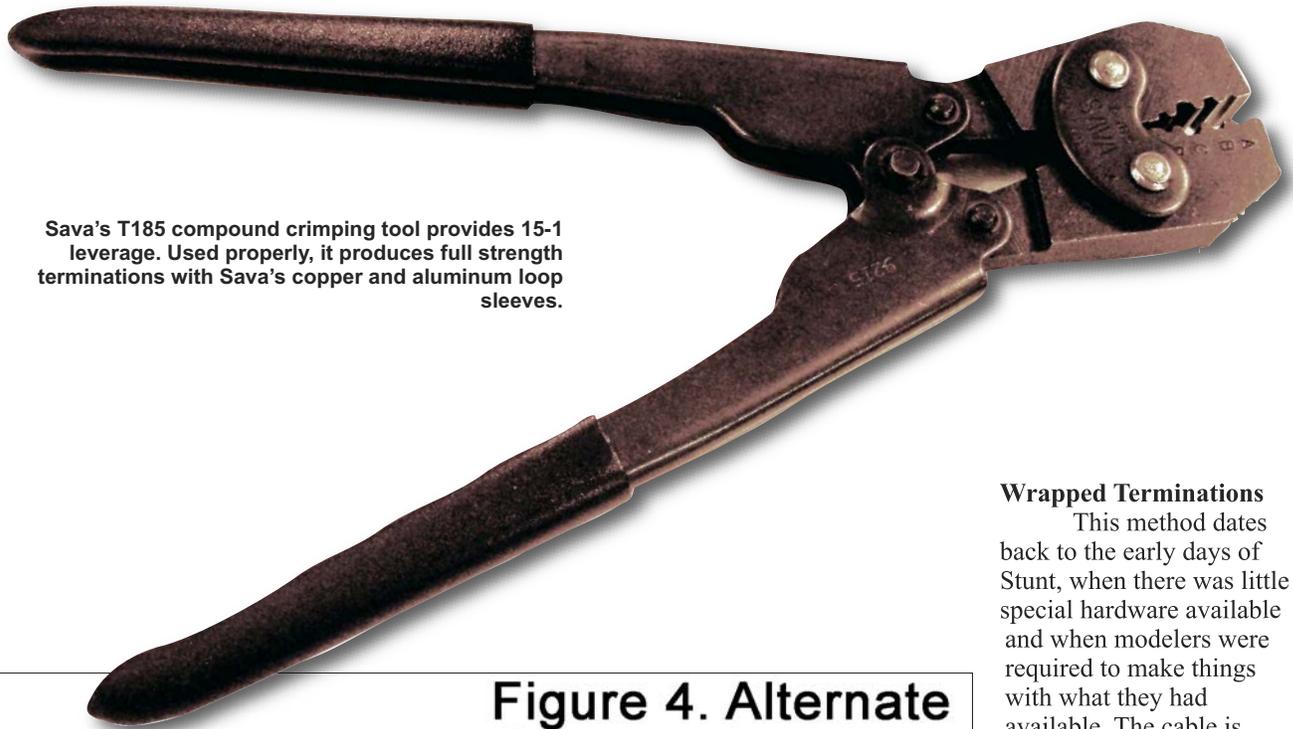
All mechanical cables are fabricated from individual wires that are helically twisted into a strand. Cable is specified as the number of strands in the cable by (x) the number of wires in each strand. We use 1x7 cables for Stunt.

A 1x19 cable offers more flexibility, but most fliers don't find it necessary since small diameter 1x7 cables have adequate flexibility. The cables we use are made from type 302/304 stainless steel (as are the solids being used).

Although considerably less than the music wire we started with, its strength is adequate, and since it doesn't rust or corrode, the friction when lines are twisted is minimized. A major issue with cables is how to terminate them—in our case it's a loop.

There are two methods being used for loop terminations—wrapped terminations and crimped terminations.

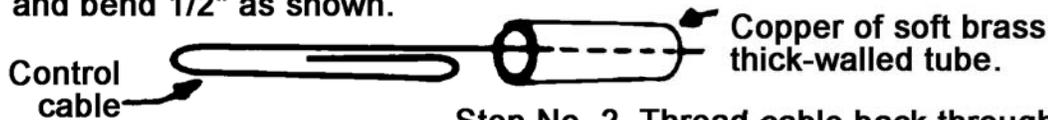
This is the wrapping technique shown in the *AMA Competition Regulations*.



Sava's T185 compound crimping tool provides 15-1 leverage. Used properly, it produces full strength terminations with Sava's copper and aluminum loop sleeves.

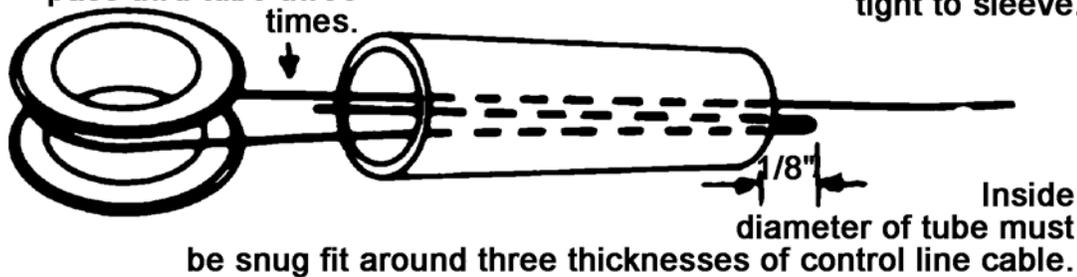
Figure 4. Alternate Construction Multi-Strand Lines Only.

Step No. 1. Thread cable through sleeve and bend 1/2" as shown.



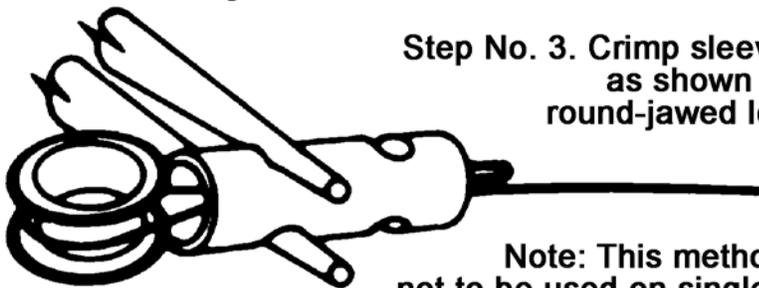
Completed crimped fitting must have control line cable pass thru tube three times.

Step No. 2. Thread cable back through sleeve until 3/8" of cable is completely within sleeve and remaining 1/8" is showing as per drawing. Place brass thimble in loop of cable and pull up tight to sleeve.



Inside diameter of tube must be snug fit around three thicknesses of control line cable.

Step No. 3. Crimp sleeve in two places as shown in drawing. Use round-jawed long nose pliers.



Note: This method of assembly not to be used on single-strand control lines. Use of brass thimbles to reduce line wear is recommended.

Wrapped Terminations

This method dates back to the early days of Stunt, when there was little special hardware available and when modelers were required to make things with what they had available. The cable is looped around an eyelet, wrapped with soft copper serving wire, and then soldered.

A drawing (shown) in the Control Line General section of the AMA Competition Regulations shows the technique. A problem with this method is that the strength and durability of the termination is highly dependent on the skill and experience of the person making it. Also, doing the wrapping is a time-consuming process.

A final issue is soldering the termination. I've consulted with several cable manufacturers who are adamant that cables should never be soldered. They maintain that there is a stress concentration at the end of the solder joint that focuses flexing and can cause the cable to break.

Crimped Terminations

In this method a sleeve (called a loop sleeve) is crimped over a loop in the cable. This is the way that cables are terminated in full size aircraft. Our largest airplane, the C5A

This is the crimping technique shown in the AMA Competition Regulations.

Here's a loop sleeve termination ready for crimping. The cable passes through the sleeve three times to satisfy the AMA requirement.



Here's the termination after crimping. The loop sleeve winds up with a hexagonal cross section.



electrical crimpers and all manner of pliers. To be fair, the drawing (shown) in the *AMA Competition Regulations* leads them in this direction.

My Method

I make control lines and leadouts using a crimp tool and loop sleeves from Sava Industries (www.sava-cable.com). The crimper I use isn't cheap—it goes for \$134. However, considering that I've used mine almost 20 years, making new sets of lines each year, it's not so bad. It's a tool that can be easily shared if you want to split the cost. Sava no longer sells to private individuals, but McMaster-Carr (www.mcmastercarr.com) handles their entire product line. The photos illustrate making up a loop crimp termination for a set of control lines—the techniques are the same for leadout cables.

Maintenance

I give each new line a maximum pull test. I make up new sets of lines each year. During the flying season I give my lines frequent visual inspections for fraying (although I've never seen any). When a set of lines accumulates too many kinks I chuck it and pull out a new set. Following this formula I've never had a failed control line.

I believe that cables made with crimped loop sleeve terminations are simple to make, offer maximum strength, and are more reliable than cables made with wrapped terminations. That's assuming that the appropriate commercial loop sleeves and their designated crimp tool are used. I've had complete success with them and wouldn't consider a different method.

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

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Galaxy, uses control cables terminated with loop sleeves. (Terminations on large aircraft cables are swaged with special machines because thousands of pounds of force are required for large cables—a lot more than hand crimpers can produce).

Terminations made with standard loop sleeves generate the full breaking strength of the cable. They work well and they're easy to make. The key is to use the correct loop sleeve for the cable being terminated, and to crimp it with the correct crimp tool. Crimp terminations have a bad reputation in the Stunt community. This is because almost no one has the correct loop sleeves and the correct tool for the sleeve.

People make sleeves from whatever material they can find or they use something like an electrical splice. Their tools are just as varied including



Here's a finished set of control lines. I add a piece of clear heat-shrink tubing to keep the connector from getting cocked.



PAMPA Products Price List

Prices Effective January 2008

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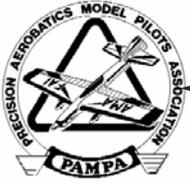
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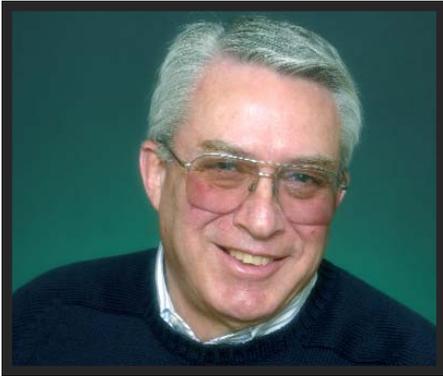
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PAMPA News & Reports

Secretary/Treasurer's Report

By Dave Gardner



How did it get to be Nats time already? As this is written, it's the end of June in the Northwest, and it's a dandy November we're having this summer! Our contest and fun fly days, however, have been amazing!

This is the time of year when we typically have a

composite Treasurer's report. This is going to be an "Executive Summary" of the financial condition of PAMPA. The very short form is that we are in good shape for the shape we're in!

A slightly longer form is that membership is down over previous years, around 750 paid members. We actually have more than that on our mailing lists, due to "complimentary" memberships for various and selected groups, such as AMA officers and our Hall of Fame folks, but these are people who deserve our support.

Nevertheless, we are staying afloat due to some reasonable "due diligence" on the financial front. Like all of us, we have to adjust our budget to the economics we face. At this writing, we have slightly over \$40k in the bank, and everything through the May-June *Stunt News* has been paid for. Even with planned and anticipated expenses—and no more new memberships—we'll end the year in the black! In spite of the increasing costs of postage, we should be able to run another year with no dues changes.

PAMPA Products (Jim Snelson) had been working to identify and clean up the inventory of "stuff." Jim has done a lot of sorting of excess and shopworn inventory. A lot of the forms listed are now available as downloads from the Web site—for free!

The remaining inventory is being sorted and reviewed for appropriate needs, with up-to-date pricing and shipping costs. By the time you read this, *all* the plans will have been scanned to electronic files, probably in PDF format. This will allow PP to send those files to a print shop, have them run and shipped in very short

order. This eliminates having to take paper plans to a copy shop to do the same thing. Each set of plans will be correct, since it will be run from a common electronic master—and the plans won't degrade, either! Extra copies of the plans files will be stored in various formats (hard drive, CD, etc) in at least two locations to provide security for the plans files.

By the time you get this, the new PAMPA Products form will be in the final version. It probably won't be in this issue because of time constraints, but the new one will be dated and noted to supersede all previous product listings and pricing.

One major item on the agenda for this meeting is consideration of directors for some of the districts, as well as the VP position. Brett Buck is *not* running for VP again, so that slot is open. Keep in mind, too, that the other offices, including President and Secretary-Treasurer are going to be open for the election in 2011. That time will be on us before we know it!

In particular, this position takes a bit of a transition time, with moving the money around, possibly a new bank setup, along with a new setup for managing credit cards. It's not insurmountable, but it takes deliberate planning ... a bit like a retirement move!

For any of you fiscally literate folks, this is a great chance to "give back" to PAMPA for all the years of services and benefits it has given out. You don't have to be a "brain" or a financial whiz to manage it, just some attention to detail—and that's just what you do when you build your models, isn't it!?

In any case, think about someone to do this job, or possibly yourself, and let us know!

Tight lines!*SN*



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District I

By Will Moore



We are deep in May as I'm writing this, and finally some of the guys in this district were able to get out to the Wrentham, MA flying field for the first time this year. It seems like weather has stalled us a bit this year. It has either been wind or rain or both. But now it looks like the weather will finally break and warmer weather is on the horizon. But it's 52 degrees out right now ...

I spoke to Steve Yampolsky and he shared with me how he got into this sport of ours. I thought it was interesting and so I wanted to include it in this report. It helps us to appreciate the diversity of those in this activity.

Steve was born and grew up in Minsk, Russia, a country that no longer exists. Interesting how that happens. At age ten he enrolled in an after school activity which included building model airplanes. He explained it as somewhat like a YMCA. He built a solid wing sort of trainer with a .015 engine strapped to it. His goal was to fly Stunt. His parents moved to the Boston area in 1989, when Steve was 17. They were very poor and he found himself shoveling snow and walking dogs to help with the family's expenses. By 1991 Steve was able to get his hands on a Sig Banshee kit and a Fox 35. He flew alone in Boston, not aware of



anyone else in the area who flew Control Line models.

Then in 2003 Steve went on the Web and found the forum, Stuka Stunt, and found that people were flying at Wrentham, MA state park. There he met Rick Clark who introduced Steve to Mitch Lilly. Rick was flying a Chipmunk and for the first time Steve saw the pattern flown, and he was, well, blown away, as he put it, and hooked.

He jumped right in and almost learned the entire pattern that year and entered his first contest as a Beginner. He could do everything but the four leaf clover. He won his class at the contest. Then he met Rick Campbell who let him fly his Prowler. They have become close friends ever since and worked on several designs together. One of them was the Stoli Special which is a modified Dave Cook Lightning. Dave's airfoil is designed to penetrate wind and otherwise remain

stable and the Stoli Special carries that forward in its flight characteristics. It has been a solid performer and, in the hands of Steve, has bounced me out of 1st place on numerous occasions. As a matter of fact, Steve won 1st place last year and the Mass Cup with the Stoli Special; a great accomplishment. Steve gave back to this sport his expression of gratitude by designing and working on the PAMPA website for many years. Thank you Steve!

Steve is defending the Mass Cup this year, but I



think that his involvement in real aircraft (he bought one) might keep him out of the loop long enough for someone else to sneak up on him (not). We will have to see how this year plays out. Stay tuned! Fly safe and enjoy the Summer. *SN*

District II

By Windy Urtnowski

New Jersey, New York

During the last cycle things got pretty hectic here. We did some flying on the frozen lake behind Billy Sargent's house; I finished up the Big Job just in time to go to VSC, and had started training my new protégé Harry Peach in basic modeling skills of building and flying. He's only 12 but simply a natural—I even had him making some basic carbon fiber parts in my shop. I've included some photos of him with the Big Job and working with composites on my shop workbench.

Rich Giacobone and I went to our first VSC and had a simply great time of touring the area sites, attending the USAF Thunderbirds air show and enjoyed wonderful

hospitality from the Tucson fliers and their families one and all. Keith Trostle, Bill Hayworth, and Ricki Pyatt hosted individual parties and the flying site is terrific. Getting to see Bob Palmer's original Hurricane in person was a special treat. It was reported to be his favorite model and it features dihedral and a Veco .35. Watt Moore is doing measurements, and it's slated to be a future Brodak kit.

I was surprised to see how many pilots liked the custom blue Brodak dope color I painted the Big Job with. I custom mixed this color with toners from Bob Brookins and Dave Midgley and was even more surprised to see my model garner 20 appearance points. Other people from

District II have gone to VSC over the years, and Karyn and I are glad to add our names to that growing list.

At VSC it was great



Above: This is Joe Adamusko's newest ship. It's powered by an ST46, is finished with Brodak Dope and weighs 43 ounces. It flies great, and is based on a Steve Buso designed wing.



Left: Rich Giacobone launches Windy Urtnowski's Big Job on a trim flight at a Pal Park Fun-Fly. The ship weighs 47 ounces and is powered by a RoJett 61 that spins a Dorin prop. The model is finished with Brodak custom color dope.

seeing GSCB legend Lou Wolgast flying his beautiful and original classic Fury design. Ed Capitanelli had a Tigercat true in keeping with his Marines background, and his son Kevin looks the same as Ed did when he lived in District II.

I'll be starting to paint the OTS ship being raffled off by the GSCB to celebrate

40 years of OTS—maybe I'll include some photos of progress on that ship in the next issue.

In the next month I hope we start our normal flying routines and get ready for the 2010 Brodak Fly-In and the Nats. It was a record cold winter here—be glad summer is just around the corner. **SN**

District III

By Patrick Rowan

Ohio, Pennsylvania, West Virginia



Dale Barry holds while Derek Barry gets ready to start his Shark take-apart Stunt model. Derek is a former District III resident and is a member of the 2010 USA World Team. Huntersville NC. Davis photo.



Derek's Shark at Huntersville NC. Davis photo.

As I write this it is May 18th. The weather is good in District III. I put some patterns in a couple of days ago. Felt good. A bit rusty however.

The Cleveland, Columbus, Erie, and Akron clubs are active flying. (These are the ones I have heard from.) The newly formed Akron Skymasters are on the look for a permanent flying site and should have one soon.

Till Next Time, Fly Stunt. SN



Chris Keller, Albion PA. Hammet photo.



Right: Alan Buck checking out a pattern. Huntersville NC. Will Davis photo.



George Towns holding his Fancherized Twister. Albion PA. Hammet photo.



Beanhill Club members Albert Bergener, George Towns, Dalton Hammet, Chris Keller. Albion PA. Hammet photo.



Dalton Hammet holding his ARF Nobler. Albion PA (Erie). Dalton Hammet photo.

District IV

By Steve Fitton

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

Hey District IV, I hope you are having a great flying season out there! It's been a busy spring and the big summertime contests are right around the corner, with lots of people out getting ready for Brodak's and the Nats.

The weekend of May 1st saw lots of District IV and V members out at Huntersville for the spring contest. Attendance was good despite some very breezy conditions that persisted all weekend and resulted in the loss of a couple of planes. It was a good outing for the Norfolk Aeromodelers, as they swept the first four positions in Advanced and got two of the three podium positions in Profile, nice work guys! Big thanks goes out to all the Metrolina Club guys and gals who work so hard to put on two of the best contests in the Southeast, and we look forward to coming back in October.



Friday practice at Huntersville finds Charlie Reeves and Tommy Luper helping Watt Moore trim out his OTS model. Davis photo.



Tommy Luper launches Watt's OTS Acrobat so Charlie Reeves can put it through a trim flight. Davis photo.



Eddy Ruane holds his newly refinished Tempest 40.



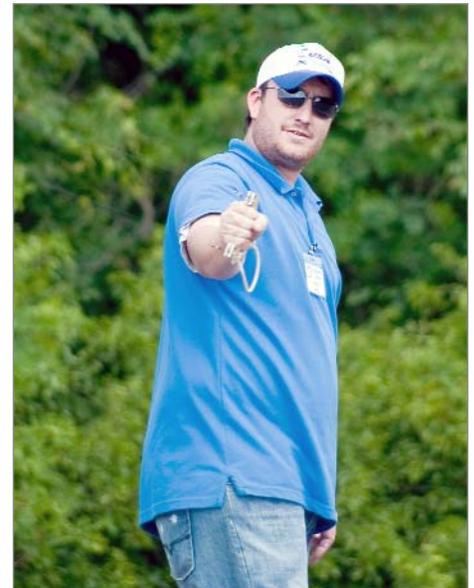
Willis Swindell puts in a flight during Profile at Huntersville.



Bob Zambelli puts in an OTS flight that would be good enough for 2nd behind Charlie Reeves. Bob was flying a Scared Kitten powered with the new and teeny Brodak .15.



Jimmy Welch and Artie Jessup take in a Nostalgia 30 flight.



Derek Barry came up from Georgia to put up some flights on his Yatsenko Shark and to fly Nostalgia 30. Here he puts his Thunderbird through its paces on Saturday.



Jimmy Welch stands poised to start his Saito 62-powered profile ship for an official flight at Huntersville.



Lydia Moore returned to Huntersville in May to pick up wins in both basic flight and Beginner Stunt. Here she pilots an Ares through the Basic flight schedule.



The highly polished spinner of Gene Martine's Lark Classic Stunt model reflects the pit area and circles of the Huntersville field.



Curtis Comer's LA 46 powered Tutor takes off for the winning flight in Profile Stunt.



Scott Bolton and his dad Sam watch the action on the grass circles. Scott would go on to claim second in Intermediate the next day despite a very close shave with the ground in the windy conditions!



Charlie Reeves and Tommy Luper watch some of the action at the Nostalgia 30 circle.



Bill Mandakis and Doug Taffinder judge Nostalgia 30 at Huntersville.



Sonny Williams records a score on the Nostalgia Stunt sheet during Saturday action at Huntersville.



Artie Jessup holds Willis Swindell's Super Clown that a sizeable percentage of the Norfolk club collectively flew during Nostalgia 30.



John Tate's profile P-47 model grows through the pattern in Profile Stunt.



Huntersville contests feature Combat and Navy Carrier as well as Stunt. Here, David Smith brings his MO-1 around on the slow speed portion of a Carrier flight. Davis photo.



John Rakes prepares to launch Kent Tysor's Strega on a practice flight on Saturday afternoon.



Kent and his Strega in action.



After the hotel party the night before, Shelly Gordon is not ready for the Sunday events to begin!



John Rakes gives the start signal to the judges as Ray Copeland holds on Sunday at Huntersville.



Lydia Moore launches her dad Brian Moore's LA-46 powered Tony on a flight in Intermediate.



Alan Buck's Vector 40 arcs over the wingover during a flight in Intermediate.



Alex Givan maneuvers his P-40 ARF through the strong winds during a flight in Intermediate.



Shelly Gordon presents the winning trophy for Basic flight to Lydia Moore as CD Howard Shenton looks on.



Judges for Advanced and Expert were Kent Tysor, William Davis, and Curtis Comer. William missed being in this picture by virtue of the fact he was the one taking it (!).

Just two weeks after Huntersville came the Atlanta Stunt Contest down in Marietta, Georgia. This is mostly a District V deal, but a few people from IV made it down to enjoy what turned out to be almost perfect weather all weekend.

William Davis came down and flew Profile on Saturday with his trusty Teosawki, earning a third place. William had to return home Saturday night, but Larry Fulwider stayed the whole time and was rewarded with a first place in Intermediate on Sunday for some good flights.

The Marietta site may lack some of the amenities that the Huntersville or KOI locations have enjoyed, but it makes up for it with tons of perfectly flat circles and *much* better air which makes it the perfect place for heavy practice, trimming, and testing, and generally getting in some quality flying compared to the wind and turbulence that plague many of the District IV home 'dromes.

Its distance and proximity to the Brodak date make it tough for some in our district to get to, but if you live in the lower half of the district try stopping by in



Left: Larry Fulwider puts in a flight at the Marietta contest.



A view of the flightline at Marietta.

May for the contest and have some fun.

That's it for now gang! A big summer is coming up, and next issue will have district coverage from Brodak's and the Nats! *SN*

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

District V

By Eric Viglione

This issue welcomes the return of the golden orb to our sky. Now we'll hear nothing but complaints about our endless 90+ degree days of summer. Some people would complain if you hung 'em with a new rope! Heh, oh well.

All kidding aside, this year my many giant oak trees gave a bumper crop of pollen snowing down around my home. So much so, that I had to come up with an easy to put up and take down paint booth in my garage, as I would have never gotten my new plane painted if I had to wait for a good day to paint outdoors.



\$40 paint booth.

Paint booth parts list: Two 9 ft. x 12 ft. tarps; One 9 ft. x 16 ft. tarp; Three 5-packs of medium size screw eye hooks.

I put the eye hooks in the rafters around the perimeter of my two car garage door track, meaning the two sides and back wall, so I can still paint with the door open and a fan going. The tarps come with evenly spaced metal eyelets which keep

the screw-eye hook placement easy. It all worked great! And, it folds up and stores easily, while the eye hooks stay put and are ready for the next use. All items were from my local Harbor Freight store.

Don't forget to use an appropriate chemical mask or respirator for the type paint you use along with adequate ventilation! Also make sure your exhaust fan is the sealed, non-sparking type motor. (No reports of "kabooms" please.)

As long as we're covering my new Starfire, here she is all done. Stencils were done by Derek Barry, who is now providing this service for us Stunt guys. Great workmanship, reasonable prices, and he knows what we want!



Eric Viglione's Starfire completed.

And if there's any doubt about Derek's ability to do more than just lettering, check out the bottom of my new Starfire ...

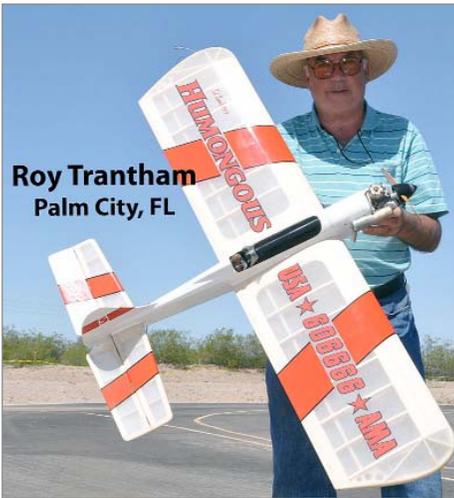


Bottom of Starfire, flames done with stencils from Derek and a little airbrush magic.

I received some pictures from Gene Martine covering a little of District V members' activity at VSC also. Thanks Gene!



Gene Martine with Lark and AA Sr.



Roy Trantham
Palm City, FL

Roy Trantham with his Humongous.



Bob Whitney of Palm Bay posing with his neat Jamison.

Another event, not in our district, but attended by several of our District V people is the Huntersville contest. I have some great photos from William Davis and Steve Fitton of some of our members there. Thanks guys!



Another of Derek's creations, this one has crashed, so to speak. Fitton photo.



Randy Smith sporting his Aeroproducts hat, ever-ready to help out anyone who needed it.



Dale Barry, Randy Smith, and Gene Martine watch the action at Huntersville. Fitton photo.



Dale releasing "The Shark," Davis photo.



Roberta & Les McDonald

Roberta and Les McDonald made the trek to VSC!



Tom Dixon's Nobler ready for battle. Fitton photo.



Tom Dixon snags 2nd in Expert. Davis photo.



9th Place
Old Time Stunt

Cassidy Delaney Dale Barry

Dale Barry receives 9th place OTS award from little charmer, Cassidy Delaney.



Derek Barry's T-Bird in official. Fitton photo.



Dale accepts Derek's 3rd place in classic. Derek was occupied chasing a small child! Fitton photo.

There is a new event in District V: a fun fly put together by Robert Willis in Christmas, Florida. It will be too late for this to be an advertisement, but also too early to report on. Why does it seem all events are timed near *Stunt News* submission deadlines? Murphy's Law I guess ... I hope to get some coverage for the next issue.

The Cobb County Skyrebels Atlanta Stunt Meet was held on May 15 and 16, also within days of our deadline ... but thanks to Dale and Derek Barry, along with Steve Fitton from District IV, I received some last minute emails with photos and info.

According to Dale, "The weather was great, a little hot and muggy on Sat., but overcast with a light breeze on Sun."

Our own Derek Barry took 1st in Expert, Steve Fitton took 2nd, and Bob Dixon placed 3rd.



Tom Weedman (1st in OTS, 1st in Profile, and 2nd in Advanced, it really was Tom's weekend!) and David Shad (3rd in Intermediate). Barry photo.



David Shad's Chizler. Barry photo.



Jim Catevenis's Barnstormer (2nd in OTS). Barry photo.



Bob Dixon cleaning up Crystal. Took 3rd in Expert. Fitton photo.



Judges Richard Schneider, Bill Gruber, and Ron Farmer evaluate the action. Fitton photo.



Tom Dixon keeping a sharp eye on contest proceedings. Fitton photo.



Tom Weedman's nice Profile Vector. Fitton photo.



Ronnie Thompson makes inverted pass. Ronnie was 1st in Advanced with this SV11. Inset: Model upright. Fitton photos.



Dale and Derek on the business end of a treatise on handle and control geometry from Randy. Fitton photo.



Steve Fitton trying to explain away why he brought the broom to Tom Weedman ... which had nothing to do with anyone's flying ability. Derek Barry photo.

As you can see, the spring and summer contest season is in full swing.

I want to thank those that contacted me with district news for this issue, and ask that others also begin to participate so the info doesn't always come from the same sources. We all have different assets, and it is refreshing to get things from a different point of view. Don't underestimate your value to our district.

As I've said before, this is your column, so let's make the most of it. Till next time, See ya on the circle. *SN*

District VI

By Allen Brickhaus

Illinois, Indiana, Kentucky,
Missouri

These shots are submitted with the help of Steve Smith for the Ice O Lated at Buder Park in St. Louis the last weekend of February. They were rained out but a few flew and Steve sent me the shots for the column.

Thanks so much to Steve for being the new CD for the contest and the photo reporter. Steve has taken some of the load off of Bob Arata, who does more than a yeoman's task for the St. Louis based Lafayette Esquadrille Model Airplane Club.



Steve sent a shot of some of the homemade trophies especially created for the Ice O Lated Stunt Champs at Buder Park MO. This park is located at the I-44 and MO 141 junction just west of the former Chrysler plant in southwest St. Louis.



The local Boy Scout Troop provided coffee, donuts, and snacks for the Ice O Lated contest at Buder Park in February of 2010. Hurray for them and their work.



Jason Pearson of Mcleansboro, Illinois, took all Stunt honors with his two flights in the rain on the last Sunday of February. The event was hosted by the Lafayette Esquadrille club of St. Louis MO.



Five local clubs hosted a mall show at the Illinois Centre Mall in Marion, Illinois, during the winter months of 2010. Allen is shown with a multiple number of modelers at this well-attended event.



Jason Pearson's dad built his B-17 Control Line model and has flown it successfully at their local airport in Mcleansboro Illinois. Jason is one of our local Stunt fliers and has flown with the California bunch when he lived out west.

The next set of photos is mine from the Vintage Stunt Championships in Tucson in the middle of March of 2010. I also traveled to the Polk City, Iowa contest and caught many of our District VI fliers taking in the event run by Bob Baldus and his very talented club. My thanks go to the Tucson, Arizona and the Polk City, Iowa clubs for two great events.

Also included is a shot of a multi-club mall show, in which some of my birds were displayed along with five other area clubs. They were clubs from Paducah, KY, Carbondale/Marion, IL, Mt. Vernon, IL, Evansville, IN, and Cape Girardeau, MO. *SN*



Shown in this shot are Charlie Reeves' Super Ares and his Big Job, plus my Olympus and Humongous at the 2010 Vintage Stunt Championships in Tucson of this past March.



The first day of Old Time Stunt was a strong wind day, and we all stood down as the decision was made to wait for better winds the next day.



I caught Charlie Reeves preparing his Big Job for a flight on circle three at Christopher Columbus Park in Tucson of March of 2010.



Floyd Layton of Davenport Iowa and Larry Lindburg of Galva Illinois prep Floyd's Barnstormer at this year's VSC event in Tucson.



Allen's Ted Snow Humongous was powered by an Aloise/Rabe ST .51 for this year's VSC in Tucson.



There is too much knowledge here for me to understand. Les McDonald and Bob Gialdini kibitz on the side-lines at the VSC this March in Tucson.



Eric Rule of RSM has introduced Allen's Buccaneer II Nostalgia 30 legal kit, for sale to the Stunt modelers at the 2010 VSC.



"Doc" Holliday brought his new P-39 by designer, I think, Bill Simons, and got some oooos and ahhhhs for the semi-scale bird.



Bob McDonald readies his Bill Werwage USA-1 while Bob Hunt holds and assists Detroit-Bob with the launch on circle one at the VSC this year.



Bob Brookins won three plaques for his Jack Sheeks LaDonna. Bob is proud of his work and he should well be. I really like his rendition of Jack's design.



The Cadillac-henge located on the west side of Amarillo, Texas, and on the south side of I-40. You should find this only about two miles west of the last Amarillo exit on the west side of town.



Wayne Willey holds his own design Catalina twin Stunter as Keith Sandberg takes it for a spin around the block.



Bart Klapinsky built and flew Gordan Delaney's Too Much twin Stunter at this year's VSC. It is powered by two L&J Fox 35s.



Mal Fawley and Crist Rigotti mull over information at the Polk City, Iowa, contest held on the first weekend of the month of May in 2010.



Wayne launches his own model. The Catalina is very scale looking and capable of doing the entire pattern under Keith Sandberg's skilled hands.



Shown is Mark Gerber's and Bob Palmer's Hurricane design. Mark won the Concours Plaque for his version of Bob's model.



Here is the Catalina in full flight. It also flies inverted and I also have pictures to prove that.



Bob Brookins sets his timer for the first flight on the western circle at the Polk City, Iowa, contest. Seated next to him is Greg Voumard. Unknown friend is seated in the grass next to Greg.



Michael Schmitt contemplates his next flight on the grass circles at the Polk City, Iowa, event during the first weekend of May of 2010.



Dennis Vander Kuur walks the line during the opening hours of the PAMPA day at Polk City, Iowa.



Floyd Layton placed in OTS with his wonderful running Fox .35 and his pretty Barnstormer.



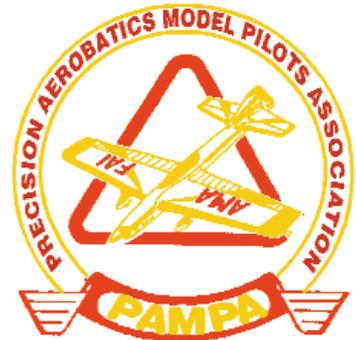
Bud Bodzioch preps his model for a flight at the Beginner/Intermediate/Advanced circle at the Polk City contest.



Larry Lindburg takes it in during a rest time between rounds north at the Des Moines Iowa contest.



Mal Fawley shows off his new Steve Wooley Cobra, which is set up for a Fox .35.



District VII

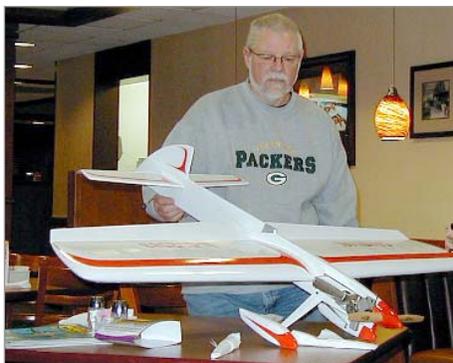
By John Paris

Iowa, Michigan, Minnesota,
Wisconsin

Really, I had good intentions ... As I am sure all of us experience from time to time, I just have not been able to get into the shop to get much serious building done. Michael was able to get some decals on his Tutor II and we took it out for a test flight on a nice day (it did not fly too badly for the first time out), but not much else has progressed on that project. The wing I had hoped to build with Michael on the wing jig is still sitting in the box. Good thing that we do this as a hobby as I think we would go hungry if we did it for a living. There has been word of other people building in our district though.

Last time around Terry Bentley sent some pictures in of a Cardinal that he had recently finished and I forgot to put them in the column. This is his second Cardinal and quite an improvement over the first in

terms of weight. His first sample was in the 60 ounce range and this one came in at 44 ounces. It looks like it has a Brodak 40 for power. I have not heard of a test flight report yet, but I am sure that he will be pleased with this one.



Terry Bentley and his second Cardinal.

This came in from Wayne Willey on his latest project. He certainly has a way of taking a standard kit and making a piece of art of it.

"I'm currently finishing up my Curtiss Helldiver stunt model. It is based on an already built, but uncovered, Fancy Pants wing that was given to me by Kelvin Heath a few years ago. I knocked off the original wingtips on it and made up my own to get a more accurate semi-scale outline. The finished wingspan is now 47 inches. I would have liked to have gone a few more inches or so but the leadouts were already finished and I was too lazy to re-do them. The rest of the model is totally designed and built from scratch. The tail surfaces and flaps have a bit more area than the original Fancy Pants, but I think I left the

moments the same, I'd have to check, it's been a while. Power will be an OS FP .35 and the finish is all Brodak dope. I just started shooting the color last night. The three tone paint scheme is typical of a Pacific Theater Helldiver from about 1943-'44. Markings will be fictitious but accurate for the period. If all goes well, I'll have it finished within the next week."



Ready for paint.



Getting the color started.



A view of the top.



A shot of the bottom.
Stunt News 84

The flying season is certainly upon us. The first contest that I am aware of in District VII is the Polk City, Iowa the first weekend in May. It's a little far for a quick weekend trip for me, but Bob Baldus provided a report for our column:

"Our annual Spring contest took place at Jester Park on a beautiful sunny weekend (May 1st and 2nd). We had a wind issue on Saturday but on Sunday the winds calmed down and provided a perfect day. Our numbers were down a little (20 entrants).

Our goal is to run a fun, fair meet for the modelers so we're not as concerned about numbers as long as we can pay for the awards. We have a nice lunch provided by the club for all of the competitors and their families. Pat Anderson the wife of our CD Mike Anderson does all of the work getting the food ready and served.

"All of the workers stepped up and did a great job. This has become an issue as we're all aging. The stunt judges were: Bob Brookins, Sam Scioratta, Paul McIlrath, Greg Voumard, Jim Funk and Floyd Layton. The tabulations were done by Theresa Voumard and Elaine Brookins and the score runner was my grandson Clark Baldus (He's becoming a pretty good builder and his flying is also improving).

Jim Funk ran the raffle and did a great job as usual. It's the raffle that provides enough money to allow the club to function with a fair cash flow. Randy McMahl did all of the pull testing plus did all of the field markings. He spends nearly 8 hours marking lanes for the pilots in an effort to protect the flying lines.

The raffle would not be successful without the support of our local hobby shop, Hobby Haven. We even have our monthly meetings there. Finally a big thank you goes out to Mal Fawley-Dave Wicker (and, well, myself!) for the field preparation."

Floyd Layton sent along some pictures from this contest. Thank you for recording the event for us.



Wayne Willey's PBY.



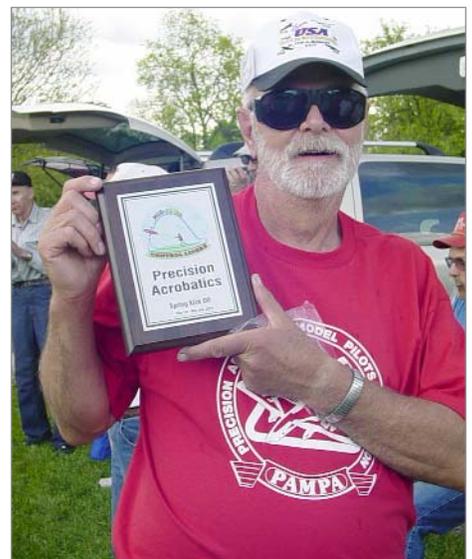
Sam Scioratta's Vendetta.



Former columnist Crist Rigotti arming his system with Larry Lindburg holding.



Tony Kubes being launched by Wayne Willey.



Tony Kubes with his 1st place plaque in Beginner.



Former columnist Bob Brookins with his 3rd place plaque in Advanced.



Keith Sandburg with his plaque for 1st place in Expert.



Crist receiving an award in Old Time from Bob Baldus. These two would make for an interesting combat match or race.

By the time this article makes it to print, we should have the Sig contest in the

books as well as the Nats. I will be wandering around trying to catch some shots of our district members in action at the various contests I am able to make. For those I cannot, I hope that some of you can cover for me so we can have district wide coverage of all of our events.

If there is anything that you would like to see here, please pass it along. *SN*

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

District VIII

By Don Hutchinson

“A in’t it funny, how time slips away.” Nice tune, and, yes, two months have slipped away, the next column is due!

I can start with the same paragraph I used last time! It is raining as I type this and it seems the wind has been blowing forever here in Texas. I think I just saw Dorothy and Toto fly past my window.

How are we supposed to get our stuff dialed in when it’s like this? Contests are coming up and here we sit!

Went out last Saturday and we barely took our models out of the cars, just stood around and pawed the ground!

Bill Wilson had the field manicured beautifully and all for naught! I did get a few shots of his new model; quite an innovative piece of work.

This will be an Appearance Point article in a future issue so no photo here; ya gotta wait!

District VIII did quite well at VSC this year. We took about all the marbles in OTS ignition, had finalists in OTS, and were once again right there duking it out in Classic.

I’m sure there will be full coverage and photos elsewhere in this issue so I will leave the gory details to our professional media staff.

As one can see from the photo above, between District VIII residents and Dallas club members, we had ’em pretty well covered!



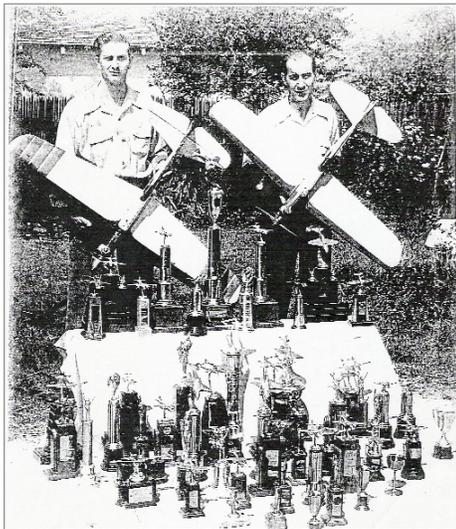
Since our Dallas flying site is on city park property, we maintain a good relationship with the Parks and Recreation. They do a nice job of keeping our section mowed and facilities functioning for our scheduled competitions, so to show our appreciation, we awarded a nice plaque to the parks manager, Mr. Ken Beam. As one can see from the photo above, it was well received. DMAA member George Hamby graciously made the plaque using his laser equipment.



Being an OTS flier, I am always interested in resurrecting interesting airplanes from that era. I got this 8 x 10 photo (next page) from Bill Heyworth. It’s Bob Palmer and JC Yates

posing with two Orwick 64-powered Madman models. I noticed that JC’s Madman appeared larger than Bob’s. After a 1% resize, and laying a 60th engineering scale on it, Bob’s is exactly the same as the Madman kit whereas JC’s measures about 14% larger. If I can get its OTS legal status I will draw up a nice set of plans for it. I am estimating around 515 square

inches of wing area. That's a great size for the LA46. It would be nice to see a beautiful new ship added to the usual gaggle of Jamisons and Humongi. It appears from the photo that the Madman fares well in competition too! If anyone out there can shed any more light on this, I would really appreciate it. Photos or personal knowledge would be a great help getting it legalized.



Yet more contests in District VIII! The Model Aviators of South Arkansas RC club in El Dorado have graciously opened their flying site for Control Line flying and they now have an annual contest there.

This year, the second annual, was met with some iffy weather conditions (see paragraph 1) but all's well that ends well with all events completed. I wasn't there but did get some photos from the event.

The club is also sponsoring a new trophy for profile events flown in District VIII, similar to the PAMPA events trophy we have been running here for a number of years.

Here's the deal. For a Profile event at a sanctioned contest, 5 points will go to first place, 4 to second etc. down to 1 point; however if there are less than 5 entrants, only as many points as the number of fliers will be awarded, i.e. three fliers, 3, 2, and 1 point. A contest CD and judges will be awarded 2 points.

Points will be awarded at all Profile contests in District VIII and the high grand total will be awarded a beautiful perpetual trophy at the fall meet in El Dorado.

I have a photo of it as an attachment to an e-mail but my meager computer skills can't seem to extract it so come to El Dorado in November and either see it or better yet, *win it!* Meanwhile, here are a few shots by Fred Kocher from the spring contest.



Meanwhile, way out at the Western edge of District VIII in Gallup, NM, former Californian, Pete Cunha continues to crank out pretty airplanes.



This one is an Allen Brickhaus-designed Buccaneer 746 built from an old Custom Models kit, modified to take a tuned pipe. Thrust is supplied by a GMA Jett 51.

I don't know if he has a flying site in Gallup, but he has mentioned a site in Farmington, New Mexico. It's lots different from California where most of the flying fields are close to sea level.

Pete now gets the thrill of flying at 5500 feet! That will suck the performance out of the airplane, the engine, and in my case the pilot too. Tell us what it really is like Pete, so we can come to Albuquerque at least half prepared!!

The deadline approaches so I need to send this off in time or face the wrath of Perry White. (*Don't call me "Chief," Jimmy ... —Ed.*) Before signing off, I am still looking for a new District VIII rep. I'm well past retirement age, waiting for the next PAMPA Pulitzer prize winner to make himself known. Since this didn't get tossed together in one evening, I can now report that the flying weather has gotten real good the last few days.

Oh! Here come Dorothy and Toto back. Maybe now I can sort out the goofy engine runs on my new airplane! In parting, another (partial this time) ditty for you to supply the last 3 lines to:

*There once was a lad from Eau Claire
Who was buffing his ship on the stair ...*

When ya'll can't stand it anymore, you will find my replacement!

P.S. Just got an E-mail from Dee Rice containing 224 photos from the Ringmaster Roundup contest just held in Houston. To see and read about all the fun and games, Google Brotherhood of the Ring. Yes, it was 224 *SN*

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Hello, I received this letter and photos from Steven Diaz:

VSC 22

VSC stands for Vintage Stunt Championships. It is held in Tucson Arizona and it is basically the coolest Control Line Stunt competition. How my father and I got started in Control Line Stunt is through a guy named Carl Shoup. We met him at our very first model meeting and he invited us out to fly with him. That day he flew the Stunt pattern and we were instantly captivated. Four years later and lots of training we are still flying and going to competitions.

This year I went to VSC with my good friend Carl Shoup. On this trip we used map quest but it is not as awesome as one might think. In fact it wanted to take us on a road that would have taken quite a while longer. So, we took an alternate route. Being from Colorado we went through Monument Valley also known as the Valley of the Gods. When we got there only a couple of people had set up their tents so we sort of reserved us a spot with some cones that a guy at the field let us use.

When we got to Tucson it was two days before the competition and it was dark so we stayed with one of Carl's friends (Burt Brokaw). Mr. Brokaw gave us the grand tour of his house. Along with having a gigantic house, he had rooms filled with planes and half the kitchen drawers were filled with engines, old and new and of every kind and size.

The two days before the competition were filled with constant flying. As soon as the competition started the wind picked up and was blowing close to 20 MPH so the competition for that day was scrubbed. The next day was just as windy; despite the blustery wind many people still flew. Some planes crashed with epic sadness and others flew their way to glory, but I was not among either of those. I flew, but not to glory. My flight was not as awesome as I had hoped for but that was OK with me because my plane came down in one piece and this year my only goal was to beat last year's score. (And I did!)

Along with all the flying fun there were funtastical parties left and right with good food and even better company. Every year we meet and catch-up on events

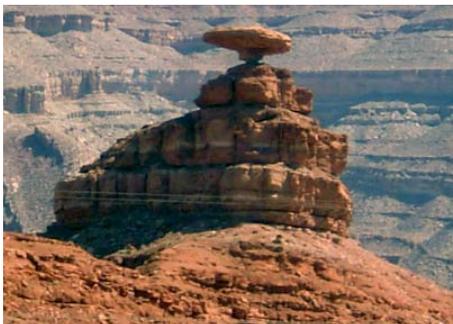
happening in the last year and every year there is the bittersweet emotions of wanting to go home and the sadness of leaving behind flying with the best guys there are to fly with. As we were leaving Mr. Brokaw gave me a plane called a Tutor and told me to take pictures of building it. Even as we were leaving and watching the Tucson sunrise for the last time I still felt like it wasn't over. As I was telling Carl that he reminded me, "There is always next year."



Bill Heyworth, party master.



Mexican Hat Rock.



Closeup of Mexican Hat Rock.



Monument Valley.



Steven's Ringmaster waiting for flight.



Ray Firkin's Heinz 57.



Steven's Ringmaster.



Bart Klapinski and his Too Much.



Jim Lee with his Twixter Twin A-B.



Carl's Belfry Bound and Steven's Ringmaster in the shade.



Steven's Ringmaster.



Jim Lee's Twixter Twin A-B.

Please send anything that you want in *Stunt News*. Thanks! **SN**

District X

By Dave Fitzgerald

Arizona, California, Guam, Hawaii, Nevada, Utah

Once again, we are deep into Little League season. Rachael is doing great at Lacrosse, and the boys ended up on the same team. Hurray! Eric is turning into quite a pitcher, both boys catch, play short stop, third, and first.

I'm a nervous wreck when Eric is pitching. I shouldn't have to worry, but I do. You see, Eric throws very hard. If he hits a batter, it might not be good. Michael has a knack for those ESPN highlight reel catches in the outfield. He never hesitates to completely sell out his body for a diving catch. It's fun for me to

watch; not so much for mom. It's all good, just as long as he gets up. They both hit well and bunt even better. Michael can pretty much get on base whenever he wants by bunting; he's pretty fast running the bases.

Meanwhile, this weekend, Rachael's Lacrosse team is playing in a tournament, and she will be playing all games, every quarter, and as goalie, again should be fun to watch.

WAM Fun day has been rescheduled to June 13th due to the very windy, wet

winter/spring it will be in Napa. **And now for something** completely different: Jim Hoffman has graciously offered to run for District X Director. I think 3 terms for me is enough. So far, I don't know of anyone else that has said they want to run. Maybe Jim will be unopposed; if so, congratulations Jim!

It seems the saga of flying fields continues. Here are a few words from John Wright about Whittier Narrows:

"I just got back from a meeting at



Erik Rogers brought his new E-Gazer to the Plamer contest. More pictures will follow.

Whittier Narrows concerning vehicle entrance fees. It seems that the park has been required to charge vehicle entrance fees since 1990, but had waived them for AMA, soccer, BMX and rifle groups. The Parks and Recreation department are being pressured to collect these fees. It's \$6.00/car or \$65/year, starting in 2011. There will be more meetings to follow.

"Tomorrow night, the Army Corp of Engineers is having a meeting to review input for their new Master Plan. Yes another master plan. The meeting will be at the Pico Rivera Sports Arena, 110003 Rooks Rd. Pico Rivera, CA from 5 to 7:30 PM.

"The L.A. County Parks and Recreation department said that relocating the flying fields, rifles, and BMX is a dead issue but they don't have authority over the Army. So I hope some of you can attend.

"I turned in the last of our insurance papers, endorsement documents, and Club Charter at tonight's meeting. We're good to go for the Bob Palmer this weekend.

"Happy Landings."

Then this from Fred Anderson:

" Ok we had some great results here ... This was the actual Army Corps group ... We read from the 'Whittier Narrows Modelers Statement' document and will send them copies ... it all seems to have been very well received. CL fliers John Wright, Joel Chesler and Fred Anderson and Stuart from tether cars attended.

"It all sounds good right now, but things will still have to be finalized in their final statements somewhere in June. It doesn't sound quite as scary anymore! Thanks a million!"

Meanwhile, back at the bat cave, this from Doug Barton regarding the Woodland site:

"Good morning to all: We are pleased to announce that the WDA board has recommended to the members, and was approved at the meeting on Monday night, a 4 1/2 lease on 47 acres on Rd. 29, about 1.5 Mi. east of Rd. 102 This is about 4 Mi. SE. of our current site.

"This is an interim site and can handle

the R/C side and up to three C/L circles. There is also a 5 year renewal on the master lease that is held by Joe Heidrick Enterprises.

"The land has been used for cattle grazing, and is flat. We will have to take any improvements out when we leave. This should take care of our flying site issues for the short term. We are still actively seeking a permanent site. If you have any question or suggestions please let me know."

This year I've been fiddling with the PA75 engine runs, trying to fine tune the run just a bit. Joe Parisi, from Australia—hmm some good Stunt fliers down there, and I have had quite the discussion about fuel delivery. The verdict is still out, but here is some of our conversation:

Dear Joe:

I'm glad you like the engine run. I have a theory about the 75. It seems to be more sensitive to fuel delivery issues than the other PA engines. Tight bends in fuel lines, fuel line diameter, even the size of inlet of the hole in the spray bar seem to be

critical. I am wondering if the 1/8-inch OD size fuel tubing is approaching the limit of fuel volume and effecting pressure variations.

I have tried going up to the next size fuel line, and drilling out the hole in the end of the spray bar where the fuel line attaches. If you have an extra spray bar you might try this, but for another reason. The 75 uses so much more fuel, the place inside the spray bar where the needle tapers in relation to the injection hole has changed.

The needle, relative to the PA 40 when Randy designed the spray bar, is out quite a bit further to the internal taper spot across the injection hole. By drilling out the inlet hole in the end, one number drill size, which, if you have a number drill set, will only be about .002 to .004 larger. This moves the needle taper back closer to the injection hole with a much easier and more consistent adjustable needle on the ground.

Just my theory but it does seem to be easier to needle. I can't remember if I've talked to you about this particular idea or not, if I have, just disregard.

Hi David:

You hadn't mentioned your ideas on the PA75 fuel delivery issues before to me, but I'm glad you did because this is something that interests me.

I don't disagree at all with your theory. In fact I went through exactly the same issues when I was developing my Saito 72 set-up about 6 years ago. I think I had more success than most people here who were running 4 strokes at the time because I was more focused on improving the fuel delivery system to overcome the relatively poor fuel draw which was inherent with the 4 strokes.

I did a lot of experimenting with large bore 1/8-inch ID fuel tubing and ultimately used it exclusively for all the tank plumbing.

There are 2 components to the fuel draw issue. One is the friction loss in the straight length of pipe and the other is the friction loss due to bends & fittings. Both losses are added together in a pipe system and they are both proportional to the fluid velocity squared. So if you go from 3/32-inch ID pipe to 1/8-inch ID pipe you reduce the friction loss by a factor of $(2.38\text{mm}/3.18\text{mm})^2 = 0.56$. This is significant.

The friction for straight pipe is also a function of the internal surface roughness of the pipe walls. I don't know what the roughness coefficient difference is between silicone tubing and brass/copper

tubing, but I imagine that the metal may be smoother so I try to use as much metal tubing for straight runs as possible.

The friction for bends & fittings is also a function of the shape/cross section change & how much energy is lost going through the bend/fitting. So I try to eliminate any unnecessary bends and sharp changes in direction.

But the biggest culprits in our system are fuel filters. I generally try to use the largest and least restrictive fuel filter than I can accommodate. As filters start to get clogged, their losses increase significantly. I prefer to use the old style 2-piece screw-apart filter with O ring & single screen. That way I can thoroughly inspect & clean the screen and always return the filter to its most efficient state.

Back in my days of running the ST60 (about the late 1980's), as an experiment I made a metal uniflow tank with 1/8-inch ID feed tubing and used 1/8-inch ID silicone tubing from the tank to the engine and also a 1/8-inch ID fuel filter. Normally I would use 3/32-inch ID tubing throughout.

Well in level flight the engine had a very deep 4 cycle and to my surprise it held this deep 4 cycle all the way throughout the pattern until the end. It never broke out of the 4 cycle, whereas normally it would cycle 4/2. Whilst the deep 4 cycle was great, it made the engine somewhat "lazy" and not want to switch at all. I really needed it to break and give me more power going vertical, so I didn't pursue the experiment for long & went back to my normal tank setup.

I guess it demonstrated that if there is little frictional resistance for the engine to feel, it won't break. So I concluded that, at least for the ST60, that some friction resistance was needed in the fuel delivery system.

Back to the PA75, and I have not yet tried any testing on the larger diameter tubing. I'd be very interested to hear what difference the larger tubing made to your engine run?

Did you also try the larger tubing in the tank (for the pickup pipe) or was it just from the tank to the engine? Based on my experience, I would guess that it would only deepen the 4 cycle and reduce any switching tendency. I'm currently just using standard 3/32-inch ID tubing from the carbon tank to the engine. I do measure the actual ID of the silicone tube I use to ensure it is 3/32-inch.

Different brands of silicone tubing have slightly different ID, and many actually measure less than 3/32 inch which is undesirable.

Your comments about the small size of

the inlet hole into the spray bar are interesting. I've often wondered about making it larger as you have done. It is so small in comparison to the size of the engine and also compared to all other engine spray bars.

There must be energy lost there as the fuel speeds up to get in. I guess before I did any modification to the spray bar inlet hole, I wanted to ask Randy what was his reasoning for this.

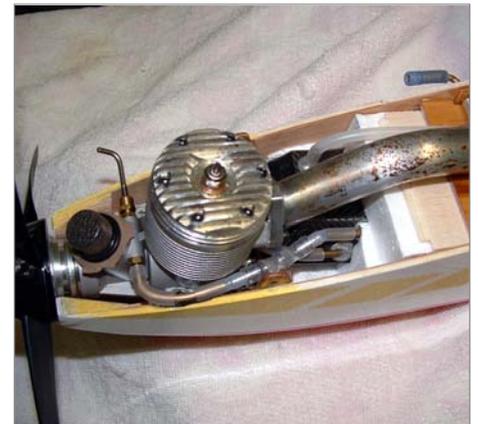
He may have had a reason on the PA40's for doing this and I've just never got around to asking him or taking this any further. But your comments about the location of the needle taper inside the spray bar are most interesting and I'd never thought of it from that perspective. I think I will give it a try in the near future.

I am going to take out the Sullivan crap trap filter out of my model. I have noticed that the engine is more sensitive to the needle than it normally is. I have a feeling this is because this type of filter is more restrictive than the screw-apart filter I normally use.

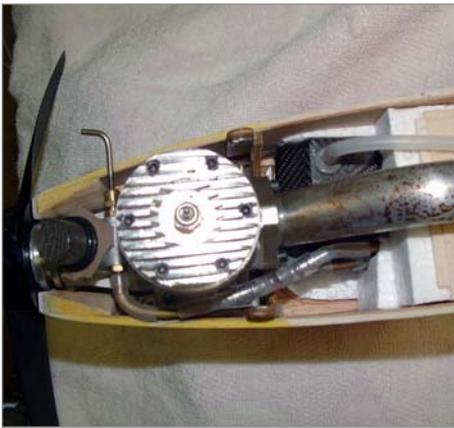
I know the crap trap certainly does an excellent job of filtering with 2 screens, but I find that it is difficult to clean thoroughly by back flushing, even after soaking it in lacquer thinner.

I always check & compare the resistance of different filters by attaching a 1-inch long piece of tubing to one end, blowing air through it and check the airflow pressure coming out in the palm of my hand. Not a very scientific test I know, but it does give you a feel for the friction loss.

Before I go out for a flying session, there are always 2 things I do—clean the fuel filter screen and replace the air filter material (I use 2 layers of ladies stocking). Whilst this may seem a bit onerous, I find that it does give me more consistent needle settings.



Joe Parisi and the carbon tank arrangement.



Notice the tank surrounded by white foam to reduce vibration and foaming.

Hi Dave:

I'm pleased to report that I've improved the problem with the engine run. I canted the tank by $\frac{1}{2}$ -inch at the back and fully shimmed it with styrene foam for vibration damping. See photos attached. My fuse internal width is 2.75 inches, so I had about $\frac{1}{2}$ -inch spare width available for canting.

I cut 4 separate foam pieces with my foam wire cutter:

- $\frac{1}{8}$ -inch thick sheet under the tank
- $\frac{7}{8}$ -inch thick sheet over top of tank
- $\frac{1}{4}$ inch deep tapered shim piece for inboard side
- $\frac{1}{4}$ inch deep tapered shim piece with V notch cut in it for outboard side

Tank is securely held in place by the foam. I had to re-do the connection tubing to the inboard fuse side to suit the new set-up. I ran the overflow outlet towards the back, like you do. There's not much room between the front of the tank and the back of the engine, so I can just get the uniflow pipe squeezed in there.

I use a Sullivan filter, like you do, as there not is much room for any other type of filter. Canting the tank means that you don't get straight feed tubing run to engine, but I don't think it really matters too much.

I take out about $\frac{1}{2}$ ounce of fuel, so if the tank capacity is 8.25 ounces, I'm using 7.75 ounces for a total flight time of around 6 minutes, 20 seconds.

I was really impressed by how well the new tank set was working today. Engine run was completely stable through all the maneuvers with no surging or leaning out. With this much canting, the engine shut down at the end of the flight is so clean.

It is clear to me now that there is a significant difference between how the engine runs on the carbon tank compared

to the previous plastic clunk tank. With the deep "square-ish" clunk tank, the fuel pickup always feels the full head of fuel available during maneuvers and consequently this often tends to give a slightly richer change to the engine run as it goes though square corners.

But with the shallower carbon tank with fixed pick up pipe, the fuel head available during the maneuvers over the pickup is much less which tends to give a slightly leaner change to the engine run.

This very mild leaning tendency in maneuvers (as opposed to richening tendency with the clunk tank) is a good thing of course because it is giving you more power when you really want it and more power is more line tension and hence more positive control response.

I commented last weekend that my corners were cleaner & crisper with the carbon tank, and I now think that part of that is the fact that the engine is not going rich on me in the corners.

I was thinking of reducing the fuse width on my next model, but based on the improved run today with the canted tank, I may stick with the wider fuse in future.

Thanks again for your advice in helping me get the engine run sorted.

Hi Dave:

I've been thinking more about your theory on the PA75 fuel draw and your comment that the $\frac{3}{32}$ -inch ID tubing is approaching the limit of fuel volume.

When we were running the PA40, the fuel consumption was around say 5 ounces. I think mine actually used less—around 4.75 ounces from memory. Now we are using around 8 ounces for the PA75.

That means for the same length engine run, the fuel flow rate to the engine is at least 60% more. Flow rate equals area x velocity. If we are using the same $\frac{3}{32}$ -inch ID tubing for both engines, the cross section area of the tubing is the same and therefore the fuel velocity must be 60% more.

As friction loss is proportional to velocity squared, the increase in friction loss is $1.6^2 = 2.56$ i.e. 256% increase! That sure mounts a strong argument for using the larger $\frac{1}{8}$ -inch ID tubing throughout.

Another thing to think about is that the bigger PA75 must be more efficient at pumping the fuel, compared to say the PA40, but just how much more? A 2 stroke engine's pumping ability is related to its crankcase volume under the piston. I recall many years ago Ted wrote an excellent article about finding the theoretical height of the "centre of pumping" of an engine

for locating the height of the tank pickup relative to the engine mounts. I think he did the calculation of crankcase volume for the ST46. It would be interesting to apply his method to the PA40 & PA75 to get a comparison of volumes. I expect that the increase in crankcase volume/pumping efficiency may not match the increase in the fuel flow rate required, in which case this further adds to your theory.

Joe and I have both been thinking about trying a tank with larger fuel pickup tubes. In this case, $\frac{5}{32}$ -inch OD copper. I've been trying to get some time to build a tank with the larger tubing, but no luck between Little League games. I also have a new carbon tank coming from Kaz Minato with the larger tubes. I'll try to remember and report what happens in my next column.

Jim Hoffman took some pictures of the Palmer contest in April.



Jim Aron. Warren Walker—host extraordinaire—hosted a great party Sat. night, fed us paella and wine. What's not to like? Beautiful house and world-class workshop.





Dave Sabon—new Impact - PA 75.



Erik Rogers with his new E-Gazer prepping for the first flight.

It flies very well. Erik is also trying some new batteries and timer setups. Maybe I can get the details for the next column.

Kirk Mullinix.



AMA has been sending out notices about presidential TFRs. A TFR is an area of airspace that is completely closed when the President or other VIP is in the area. It is an incredible pain to aviation. No planes can fly while it is in effect. They can be very large, and move dynamically with a limo convoy.



In this specific instance the FAA is issuing a TFR that closes almost all the airspace in the entire San Francisco Bay Area, including SFO; an area of 30NM radius from the SFO VOR. Yeah, you think passengers might be inconvenienced? Anyway, the AMA notice of the TFR states: "Model aircraft operations are prohibited in this area during the specific times of the TFR." I asked Greg Hahn at AMA if this included indoor or Control Line flying, he said not it *does not*.

Lou Wolgast—ST60 Pentastar.

So, If anyone gets one of these mass E-mails from the AMA, it does not apply to CL flight. I suggested that they change their generic notice to say: "Outdoor RC Model aircraft operations are prohibited in this area during the specific times of the TFR." **SN**

District XI

By Bruce Hunt

Alaska, Idaho, Montana, Oregon,
Washington

The contest season got off to a great start in Portland with the annual Jim Walker Memorial contest. As is customary, this contest is a coming out party for last winter's newly built models. This year was no exception with new models shown by Mark Scarborough (Avenger), Paul Walker (Impact XL electric), and Randy Powell (Slider orig. design). On Saturday, Bruce Hunt flew his Lark to first place in Classic Stunt. Classic was an airplane showcase event with Pete Peterson's Venus, Pat Johnston's Bearcat, and Scott Riese's Nobler all gorgeous on the ground as well as in the air. Riese won by .75 of a point over Pete Peterson in Old-Time Stunt with his StuntWagon. Pat Johnston took Profile Expert and Mark Scarborough's old GeeBee topped the Profile Sportsman class. Paul Walker showed off the potential of his new Impact XS on Sunday with a win in Expert Precision Aerobatics. Greg Hart took Advanced PA, Richard Entwistle took Intermediate, and Jim Harper topped the Beginner class.

Next up is the Northwest Regionals to be held for the fourth year in Eugene, Oregon. With any luck this year will be sunny with a light breeze to blow the model wake away. At least that was the condition of the field when I was there last weekend.

As always you can get an excellent report on everything going on in the Northwest by checking out the news on the website: <http://flyinglines.org/>. SN



Pat Johnston readies his Profile entry. This event was upgraded in the NW a couple years back from 40 sized engines to allow any size engine. Along with a skill class division between Expert and Sportsman the event has attracted a significant entry of competitors.



Mark Scarborough explains the finer points of using net stockings and candy apple colors to create subtle shading effects.



Mark Scarborough shows off his newest creation.



Gerald Schamp reports that he has finally finished this Chief after several years of good intentions. It looks like the wait has been worth it.



Randy Powell's newest creation. We will soon be anointing Randy the cowl/scoop king or at least the sandpaper champion.



A close up of Mark Scarborough's Avenger. Mark is a professional auto painter with a special touch when it comes to spray gun work.



Paul Walker adjusts the weight of his model: "See, I told you it only weighs 58 oz."



Paul Walker saves a lot of questions by displaying the basic facts of his electric power setup.



Pete Peterson readies his Venus for Classic competition while the pre-contest weigh-in proceeds.



Left: Paul Walker's model in the pit at the Jim Walker Memorial contest in Portland. As expected he was at the top of the Expert category at the end of the day.



Pete Peterson's Venus has a finish that is best described as "wet looking." Additionally, it flies as well as it looks.

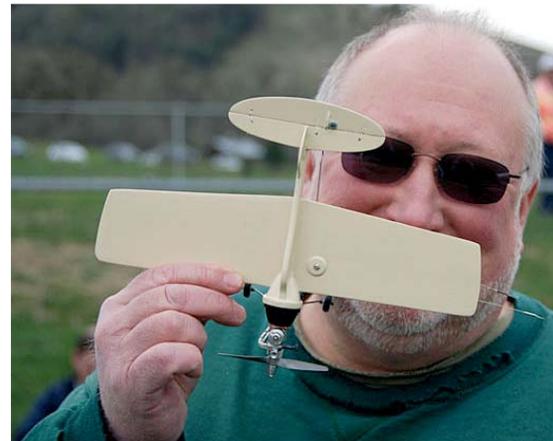


Left: Pat Johnston walks his P-51 semi-scale off the circle at the Jim Walker Memorial contest in Portland. Recently married this last year and out of the contest circuit for a bit, he showed no loss of skill in the circle.



Left: Don McClave models his Mackey Lark. Built in a month following the unfortunate crash of his 2010 Thunderbird.

Below right: Another view of Don McClave's Lark. Don reports that it flies better than the Thunderbird he lost before its first contest. Don found the biggest challenge was trying to match Ultracoat colors to paint color.



Left: Mike Hazel displays what can be built for the Cox .010. It's just the right size to fit in your car's glove box and can be used as a toothpick in a pinch.





Left: Here's a current picture of the Evergreen Aviation flying site converting to another amusement park attraction. Right: This is a photo of the almost completed structure as



Above: The remains of Tom Kopriva's ARF Cardinal. The model still lasted a couple years before the leadout failure.



Inset: Tom Kopriva's ARF Cardinal crashed as a result of the failure of the leadout crimp at the bellcrank.

it sits on top of the Evergreen Aviation control-line circle. The good news is that the museum has plans to construct another larger control-line site soon.



The big assortment of engines, mufflers, spinner, props, spare parts

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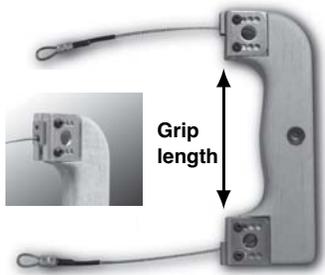


CARBON CL PARTS

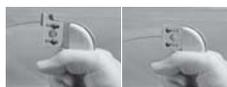


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Grip length



with Extension Normal
Extension bracket for type A (Option)



Long Short



Spare wire (Option)

MNT Handle Type A
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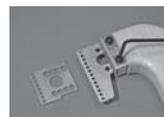


MNT Handle Type B
Grip length 85 mm



MNT Handle Type C
Grip length 85(C-85) or 90(C-90) mm

!NEW!



Contests

Atlanta Stunt Meet 2010 May15-16

Old Time

Tom Weedman	Barnstormer	Fox35	189.5
Jim Catevenis	All American sr.	Fox35	176
John Rewis	Super Clown	Fox35	87
Larry Fulwider	Smoothie	FP35	52.2
Ty Marcucci	Barnstormer	Fox35	39.5
Judges:	Dale Barry	Tom Dixon	

Nostalgia 30

Bob Dixon	Nobler	Fox35	499
Steve Fitton	Nakke	DS50	496.5
John Simpson	Cavalier	AT36	492
Tom Weedman	M.W. Skyraider	K&B40	460.5
Larry Fulwider	Smoothie	FP35	PASS

Profile

Tom Weedman	Profile Vector	LA46	475.5
Curtis Comer	Tutor	LA46	474.5
William Davis	Teosawki	LA46	460
Larry Fulwider	Harmony	FP40	421
Ty Marcucci	Forerunner	LA46	381.5
Judges:	Derek Barry	Bill Gruber	

Beginner – No Entries

Intermediate

Larry Fulwider	Harmony	FP40	387.3
Jim Catevenis	Cardinal	LA46	371
David Shad	Chizler	Brodak 40	339
John Rewis	Banshee	Brodak 40	209.6

Advanced

Ronnie Thompson	SV22	PA65	449.3
Tom Weedman	Vector	LA46	444.3
Curtis Ship	Profile Cavalier	AT36	419

Expert

Derek Barry	Shark	Discovery Retro 60	519
Steve Fitton	Time Machine	DS60 Lite	495.3
Bob Dixon	Crystal	OS52 FS	490.6
Judges:	Bill Gruber	Ron Farmer	Richard Schneider

Tabulation: Jim Pearson, Becky Dixon, Pam Pearson

CD: Tom Dixon

Weather: “Stunt Heaven”– Light wind, Overcast.

A Note from James Mills

My name is James Mills and I am the columnist for Contest Results. Bob has asked me to provide a basic outline of what I need from the contest directors for publishing results from your events.

I need the results e-mailed to me by the 10th of the issue deadline month in order to give me time to collate all results and send them to Bob and Liz. The results need to be prepared and sent in Microsoft Word. Please include the following information with your reports (to the CDs, make it easy on yourselves and have a list for the contestants to fill in this information for you):

Placing in each class including:

- Pilots' first and last names.
- Plane name (designer), engine (I.C. or electric), pipe/muffled, prop, fuel, type of finish, and weight.
- Include any special awards such as Pilots' Choice, Spirit of '68, and so on.
- List of volunteers and workers.

If you would care to prepare a written report on your contest, or have someone cover your meet for the pages of *Stunt News*, it is always best to check with Bob Hunt before doing so. We are trying to print more articles about Stunt contests, but we cannot commit to printing one for every contest. If too many articles are sent in without prior notice, we may not be able to print them all. Again, it's always best to check first.

Good luck at all the contest and have fun.

God Bless, James Mills; jamesmills@centurytel.net;
(417)-581-1271.

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5th Annual NVCL Stunt Fest

Date: September 25, 2010

This AMA sanctioned contest will include Precision Aerodynamics (Stunt Pattern) for classes of Beginner, Intermediate, Advanced, and Expert. It will also include Old Time Stunt for Beginners and for Intermediate, Advanced, and Expert combined.



Directions

In Virginia: From I-95 South, take the Lorton exit (this is also the AMTRAK car-train exit). At the bottom of the ramp, turn left, go under I-95 and follow the road east until it gets to Rt.#1 (Richmond highway). Turn right on Rt.#1 and follow it south until you reach the light at Gunston Road. Turn left onto Gunston and follow it east for about a mile to reach Old Colchester Road. Turn right onto Old Colchester and go south about a mile. You will see a fence and a parking area on the left (you should see our “NVCL – We’re flying today!” banner on the fence.) The gate will be closed, but unlocked. Open the gate, drive through, and remember to close the gate afterwards. Follow the dirt road until it opens into a meadow. Continue to follow the road as it goes downhill and bears right. You’ll soon see the flag-pole, two mowed flying circles, sunshades and parking area.



Who to contact:

CD: Dick Houser Telephone: 703/489-5647

COME FLY WITH US!

The Appearance Point



By Paul Ferrell

With *Rhapsody in Blue*, to paraphrase Winston Churchill, never have I owed so much to so many. *Rhapsody* was conceived following the 2007 World Championships Team Trials in which I was lucky enough to win the Junior slot. To represent the good ole USA at the World Champs in Landres, France, I needed a new, full-size, take-apart Stunt ship.

One of my earliest and most important mentors in Control Line, of which there were to be many, Ted Fancher, recommended that I employ his Imitation wing design coupled with a Trivial Pursuit fuselage for my new ship. The Imitation wing/airfoil is a wonder—very forgiving but fully capable of world-class patterns. Ted further recommended that I get Bob Hunt to custom-craft a sheeted foam wing and stab with molded leading edges. Bob's work is another wonder. On receipt of the wing and stab, I was stunned at their perfection. They were literally ready for construction and covering. The Trivial Pursuit fuse kit came from Eric Rule, another extremely helpful modeler/supplier. Brett Buck most generously gave me one of his super double secret offset "Brettcanks" with titanium post and a custom made double wedge fuel tank.

The take-apart design was copied straight from Paul

as things can get.)

Rhapsody in Blue flies extremely well. It handled the atrociously turbulent conditions at Landres just fine, and while I only scored fifth highest among the Juniors at the World Championships, *Rhapsody* flew me to first place in both the 2008 Golden State and 2009 Nationals Advanced competitions. In closing, I guess I'm saying that if, with a lot of help from many friends and first-class suppliers in the Control Line community, I can be flying a world-class Stunt ship, I'm very sure you can too. **SN**

Specifications:

Model name: Rhapsody in Blue

Designer: Ted Fancher

Construction type: Take apart, Imitation wing and Trivial Pursuit fuse. Sheeted foam wing and stab with molded leading edges.

Wingspan: 60inches

Length: 47 inches from front tip of spinner to back end of fuse

Moment arms: Nose: 10 inches; tail: 18.75 inches

Weight dry: 68 ounces

Power package: RO-Jett .61 w/tuned pipe, 6.8 ounce double-wedge tank

Propeller: Brian Eather 12.5 x 3.8 3-blade carbon fiber

Finish: MonoKote, Pearl White and Royal Blue

Line length: 65 feet x .018 multistrand



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Introducing the PT-19 Profile

The sun warms your face as you head out onto the field. You can already feel the power of the controls in your hands and you remember the days of flying control line in schoolyards. What you're most excited about though, is passing along the excitement to a younger generation. Introducing Hangar 9's PT-19—a control line plane that allows you to be in touch with the airplane through two lines that connect you with the plane, with your hand movements guiding the plane.

The PT-19 Almost-Ready-to-Fly kit is available with or without Evolution's new ready-to-use .36CL engine. The PT-19 also includes a wood control handle, spool of stainless steel cable for control lines, fuel tank and aluminum spinner nut.

So come back to flying control line, it's easier now than ever with this one-box purchase.

The PT-19 Profile CL ARF (HAN0115) comes equipped with Evolution's .36CL engine. This smooth-running 2-stroke control line engine features a purpose-built cylinder and venturi, making it usable right out of the box. The PT-19 is also available as an ARF (HAN0100) with the Evolution .36CL engine sold separately (EVOE0365). This kit comes highly prefabricated and with fewer parts, meaning there is not much work to get flying.



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