## **New England Combat News**

VOLUME 24 NUMBER 8 JANUARY 2013
THE CONTROL LINE COMBAT NEWSLETTER OF NEW ENGLAND



### Now Celebrating our 24th year of Publication



Neil Simpson and Brian Stas finished "1-2" in this year's Expert Division Season Points



Jeff Vader was a close third in the Expert Division Season Points

### 2012 Regular Season Award Winners

The final results have been tabulated
The following flyers are
The 2012 Division Champions

Neil Simpson-First Place Expert Brian Stas-Second Place Expert Jeff Vader-Third Place Expert

Ken Hargreaves-First Place Advanced Chris Sarnowski-Second Place Advanced Paul Kubek-Third Place Advanced

Jake Vader-First Place Sportsman

A Recap of the 2012 season can be found on page two

Photos of the awards presentation held as part of the Fall Fly Off can be found throughout this issue

### 2012 Formula GX Season Re-Cap 12 Contests ( 5 different winners )

4/29	107th RC Flyers GX Icebreaker-Saugus, MA	Neil Simpson
5/6	Granite State Invitational-Franklin, NH	Jeff Vader
6/24	Len Minick Memorial-East Hampton, CT	<b>Neil Simpson</b>
7/8	Eastern Mass Invitational-Halifax, MA	<b>Brian Stas</b>
7/29	Wingbuster Summer Fly Off-Halifax, MA	Joe Fustolo
8/19	Central Mass Championships-East Brookfield, MA	Neil Simpson
8/26	Salmon River Shootout-East Hampton, CT	Jake Vader
9/8	Horizon Air Meet-Sanford, ME	Neil Simpson
9/16	Wingbuster Invitational-Halifax, MA	<b>Brian Stas</b>
10/14	New England Championships-Halifax, MA	Neil Simpson
11/4	Wingbuster Fall Fly Off-Halifax, MA	Neil Simpson
11/11	Eastern Mass Finale-Halifax, MA	Neil Simpson



The 2012 Advanced Division Season Champs are Ken Hargreaves (1st), Chris Sarnowski (2nd) and Paul Kubek (3rd)

FROM THE EDITOR: New England Combat News exists, not to make a profit, but rather, to promote control line combat in New England. It is distributed without charge to those readers who participate in New England combat contests or who support these contests through donations to the New England contest fund. The subscription rate is \$10.00/year for people who do not meet the above criterion. If you have information you would like to see in this newsletter please call or write:

NEIL SIMPSON 129 PODUNK ROAD EAST BROOKFIELD, MA 01515 PHONE: 508-867-8702 (Home after 6:00pm) E-MAIL: podunk129@charter.net

If you make a donation or if you subscribe to this newsletter make the check payable to NEIL SIMPSON ......Donations go into the New England Contest Fund and are used to cover the cost of running New England control line combat contests. IF YOU WANT TO RUN A CONTROL LINE COMBAT CONTEST IN NEW ENGLAND AND YOU NEED HELP (FINANCIAL OR OTHERWISE) CALL OR WRITE NEW ENGLAND COMBAT NEWS. We want to continue to help make New England a "Hot Spot" for control line combat. New England Combat News is your newsletter-USE IT. Control line combat is your sport-PROMOTE IT.

### New England Combat News Website

www.homestead.com/necn

# Visit Mark Rudner's F2D News

www.homestead.com/F2DNews



### COREHOUSE --- >

34 SWEET ARROW DRIVE HUMMELSTOWN, PA 17036 (717) 566-3810 6-10 pm est PHIL CARTIER

PHIL IS THE COMBAT FLYER"S SOURCE FOR FOAM CORES
A QUALITY PRODUCT AT A FAIR PRICE.

CORES SOLD FOUR BOXES PER SET

ALSO FOAMY COMBAT KITS INCLUDING THE LIL HACKER AND THE NEW COREHOUSE F2D COMBAT LIGHTWEIGHT AND HIGH PERFORMACE AT 265G

ALSO SPECIALITY INCLUDING BLADDER SUPPLIES AND COMPOSITE TUBES

CALL FOR LATEST PRICING AND ADDITIONAL INFO

#### **NOW AVAILABLE**

A new stock of Delrin venturies and metal motor mounts

Venturies are complete with "O" ring and will fit a variety of engines available in .250 (1/4") bore, but I will bore to any size you like - \$10.00 ea

Metal motor mounts-made from 60/61 T6 drilled for 4/40 engine bolts and for 6/32 mounting, step down fits small case engines (OS32-OS25's), step up fits large case (FP40-LA40-Fox36) Besides fitting many engines it's easy to make adjustments (engine offset and engine incidence), they will last just about forever - \$10.00 per pair

Yankee Nipper full size plans

Plans show hopper hard tank but can easily be set up with bladder fuel system - \$12.00 ea

Yankee Nipper pine center ribs - as shown on plans (3/4" white pine) in case of broken wing cores, simply cut old ones off and re-core - \$5.00 ea

From time to time, I have other items in stock – needle valve assemblies, props, bellcranks etc.

Always include \$5.00 for priority mail

Contact: Jim Carpenter 4L Arrow Drive Salem, NH 03079 603-898-3134 OldRustyLines@aol.com

### **GRW Products**

21899 Heliotrope Lane Wildomar, CA 92595 Phone: (951) 678-1406

E-Mail: GRW@RSMDistribution.com

Owner: Eric Rule

Combat or Profile Stunt Hopper Tanks Profile Standard Vent, Profile UNIFLO Vent Built-Up Fuselage Slide in Style Built-Up Fuselage Uniflo Vent

#### **Kitting It Together**

Larry Driskill 6806 Third Lubbock, TX 79416 806-796-3747 **Nats Winning** 1/2A LiteHawk Kits, **Engines and supplies** kit@llano.net

#### AeroPlans C/L MODEL PLANS SERVICE

**BARRY BAXTER** 3292 Greeleaf Drive Brea, CA 92621-6323 (714) 524-3805

Website: www.controllineplans.com

The source for Old Time Combat Plans plus other combat and stunt plans Send SASE for list



#### GRS MODELS

Ready to fly Combat Models (Fast, Slow, F2D, 1/2A, Speed Limit)

FOR A Combat engines: .36, .15, .049, .050, .061

Props, Glass fiber epoxy for Fast, F2D, 1/2A and Speed

Side Kick Shutoffs for Fast, F2D and 1/2A

Accessories: Handles, lines, Bladder material, Perfect Tips Covering, Heavy Duty Nelson rewound Plugs.

Aluminum Engine mounts for Fast, F2D and 1/2A

Contact: George Cleveland at:

GRS Models 36 ANTIGUA DRIVE KENNER, LOUISIANA 70065 USA PH: 1-504-443-4640

EMAIL: gcleveland\_grsmodels@prodigy.net WEB:http://pages.prodigy.net/gcleveland\_grsmodels/

## **TREASURED**

"COLLECTIBLE TOYS PAST, PRESENT, AND FUTURE."

**BILL & SUE HORTON** 

603-898-7224

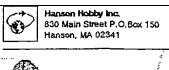
5 North Broadway

Salem, NH 03079

#### Combat DVD's

Mike has just finished making a DVD of the 2004 Word Champs and the 2003 World Cup in the Ukraine **Contact:** 

Mike Willcox 1927 Running Springs Kingwood, TX 77339 EMOWILLCOX@AOL.COM





Tel.(617)293-2804

Fax(617)293-9542

#### HOURS

Mon thru Thur 10 am to 8:30 pm Friday 10 am to 9:00 pm Saturday 10 am to 6:00 ora Noon to 5:00 on Sunday

Flying Model Headquarters Serving Hobbiests on the South Shore since 1975.

A full service hobby shop specializing in RADIO CONTROL PLANES-CARS-BOATS & HELICOPTERS, the largest selection of CONTROL LINE models in New England, Balsa-Spruce-Bass woods, plastic models, rockets, HO-N-O27 scale model railroads-supplies, adventure games, paints, coverings and much more

### BURTON L. IVES & SONS, INC.

22 ROUTE 66 EAST • COLUMBIA, CT 06237 (860) 228-3999

#### HONDA

Generators

Motorcycles ATV's Lawnmowers

SALES - SERVICE - PARTS



### Tack Stop Consignment Shop



New & Used Supplies for Horse & Rider (860) 228-3699



### F2D News - December 2012 Mark Rudner rudner@mit.edu

This month's column is about props. We've all got 'em. Green ones, blue ones, red ones, purple ones, fat ones, skinny ones, scimitar-looking curly ones. But how much thought do you give to that blade you're strapping on to your engine every Sunday? Winter's here, so let's take some time to investigate.

I've had a personal fascination with props for a long time. Let's start with a trip down memory lane. The journey begins back in the days of fast combat, with my time growing up with the Southern California Combat Team. Since those times are long-gone, and they're not coming back, I can share a bit of previously classified information. Surely there are others who will want to disagree, but I think it's safe to say that, especially in the days before the Nelson .36, the Southern California Combat Team had a very strong tradition of maintaining some of the fastest engines in the country. Our Foxes looked like Foxes, but on the inside they weren't really Foxes. Aussie cranks, Wisniewski AAC liners, double bubble heads, the whole shabangabang. That part is well known. Less openly discussed, however, was the issue of props. Various APC props, Top-Flite, Zinger and Rev-Up wood props, and later the beautiful Mejzlik props, were available on the market. We didn't use any of them, at least not in any kind of recognizable form.

The basis for everything that I knew about making props at that time came from two great teachers: my dad and Pete Athans. First, we always used wood. Why? It's much lighter than the other options. Recently I did an interesting comparison (for my experiments with electric F2D), and found that one of my wood props was a full 10 grams lighter than an APC of a similar size (8 grams versus 18 grams). Not only does a heavy prop add weight to the model, but the rotational inertia from spinning a heavier prop at high RPM gives further resistance to turning. If you want to go fast and turn fast, use a light, awesome prop.

What was our starting point? Typically we would start with a Rev-Up 8.5" x 6.5" (pylon or wide blade) or 8.5" x 6" (wide blade, good especially at high altitude in Tucson). Then the cutting and grinding would begin. A typical final size would be something like 7.75" x 6.5". However, there's much more to a prop than just its diameter and pitch. The blades of those props were exceedingly thick, especially out near the tips. On top of this, the blade profile was a bit more circular than ``airfoil"-like. One of the key points that Pete taught me was to get all that meat off of the tips. We would thin them way down, toothpick-thin at the tips. There are a few good reasons for doing this. First, those big clubby tips are a lot of drag on the engine. Reshaping the prop with a thinner, sleeker profile let the RPMs come up. Also, it's much safer: with heavy tips, there's a lot of centrifugal force on the hub, which can result in a thrown blade if one is not careful or if there are defects in the wood. My dad also taught me about smoothing out the flat areas around the hub on the back side of the prop. This part of the prop isn't working too much, but nonetheless it's good to give the prop nice clean lines. Most likely, if it doesn't look fast, it won't go fast (the converse of the Skunk Works motto...).

Back in the height of my fast combat flying days, I would spend between 45 minutes and an hour and a half on every prop. It sounds a little crazy, perhaps, but boy did they run. It also became a point of pride for me . . . . I really enjoyed shaping them to as close to perfection as I could.

With so many choices of great fiberglass props available for F2D these days, it seems like there isn't much incentive to play with props beyond testing various models and finding which work best in various conditions. For those who are curious, however, you might start to wonder \*why\* the green prop runs better than the red one, since at arm's length away they look indistinguishable to an un-sharp eye.

It's a good question, and the best way to take a step toward satisfying this curiosity is to start measuring.

Unlike the old days when props came in sizes, now they come in colors and/or initials (NN, AK, C1, TS, etc.). This is not informative, to say the least. Diameter is an easy parameter to measure with any ruler with sufficiently fine markings. If we may dare to go metric for the course of this article, you'll find that all of the props are in the range of 160 mm, give or take about 5 mm. What about pitch? Pitch is incredibly difficult to ``eyeball," and so requires some specialized equipment to measure accurately. Prather used to sell a pitch gauge (I have one back in the states), but to be honest the scale is rather coarse so I'm not super impressed with it. Anyway, for my experiments with electric F2D, I recently decided to go back to my fast combat roots and carve some totally new wood props. I had some old Rev-Up ``blanks," but they needed to be re-pitched (it turns out they were systematically underpitched compared to the advertised values).

Without a pitch gauge in my office here in Copenhagen, I had to improvise. Out of necessity, the "Poor Man's Pitch Gauge" was thus born (see photos). How much does it cost? The cost is one sheet of paper and a few lines worth of toner (or ink, depending on your printer). I've uploaded the pdf file to the website, available on the Resources page or directly at http://f2dnews.homestead.com/PitchGauge.pdf, so that you can simply print it, follow along, and use it. When you print it, be sure to have the print scale set to 100%, so that the grid lines will have a spacing of 5 mm (check it with a ruler after printing). For those following along on the web, photos are available on the Resources page of the website.

How does it work? After printing, the key step is to carefully make a sharp 90 degree fold along the solid horizontal line that makes the base of the part that looks like a protractor. I used a metal straightedge to assist in this process. The accuracy to which your crease exactly follows along the black line will determine the accuracy of the degree markings. If you mess up, just print another. Next, I set the paper on the lid of my pitbox, with the protractor part hanging down (and flat against the sidewall of the box). A flat table with a wide side could work just as well.

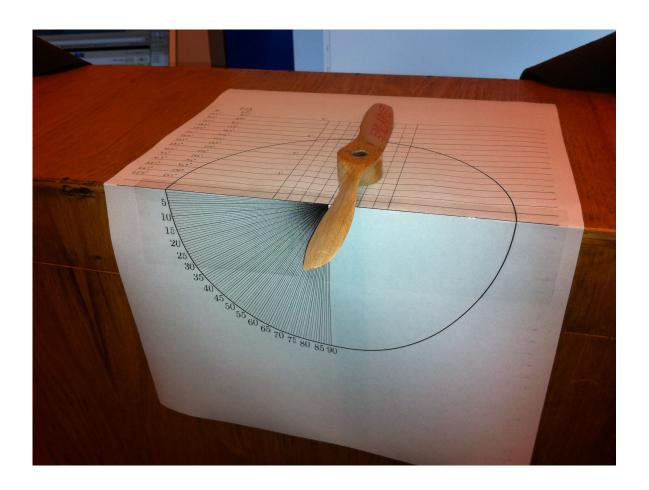
The grid lines help to align the prop: to measure the pitch at a certain radius, set the prop (front side facing up) so that the corresponding horizontal line passes right through the center of its hole. Be sure to orient the blade parallel to the vertical lines, so that it sticks straight out over the end of the box (or table), see Figure 2. To measure the angle of the back surface of the blade, hold a straight edge flat against the side of the box. I used the blade of long utility knife for this. Bring the straight edge up gently to the blade, tilting it as you approach so that it ends up squarely following along the face of the blade as it touches (Figure 3). Now you need to shift the prop and straight edge laterally together until the straight edge passes right through the origin of the protractor. Once you find this placement, the straight edge will follow right along one of the angle marker lines. Record this number and move to the next station (farther out or closer in to the hub). It may sound a bit complicated (it's not easy to explain purely in words), but if you play around with it for a bit I'm sure you can get the hang of it.

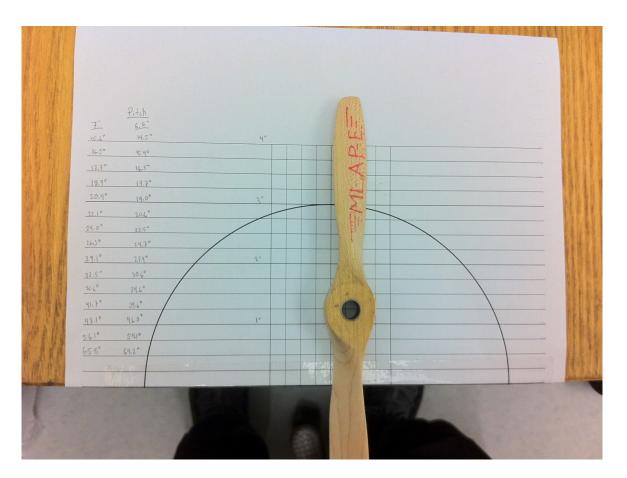
As we all know, the angle of the blade is much higher near the root than at the tip, since the tip covers much more distance over one revolution than the parts near the root. The poor man's pitch gauge will give you an angle at each radius along the blade. To convert this number to a pitch in centimeters or inches, use the formula: Pitch = 2 pi R tan a, where R is the radius (corresponding to the horizontal grid line where the prop is centered) and a is the angle measured. Interestingly, you will find that the pitch is not constant along the blade. Even more interestingly, you might find different results for the

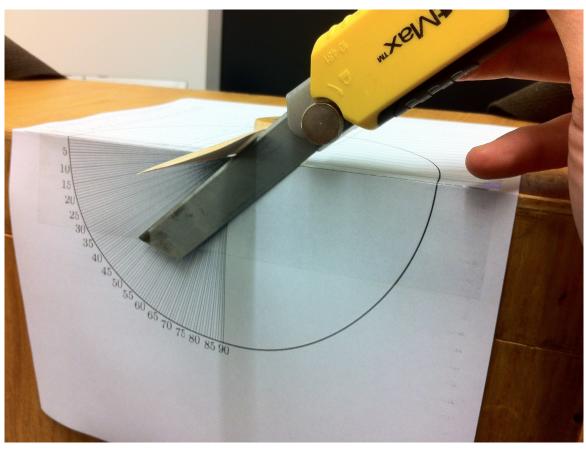
two blades on a single prop. Going even further, you can check many props of a given type, from a given batch. Depending on the source, you may find wide variations from prop to prop, or very tight tolerances. Personally, I'm very impressed when I see prop after prop with the same numbers coming up. At the same time, it's quite frustrating to find that certain batches of props have wide variations. If I test one of them and it runs great, how can I expect the next one to run when I pull it out of the box during a match?

One last point about props that I wanted to mention before signing off is material. You can spend all day measuring blades and even tailoring them to some theoretical ideas about what might be fastest on your model. However, what matters most is the blade shape while the engine is running in the air, not sitting statically on your bench. The aerodynamic forces on a prop are quite high under load, and in fact cause the blades to twist. Depending on the blade shape, the pitch may increase or decrease as it gets loaded up. The amount to which the blade deflects depends on how stiff the material is (e.g. if it's glass or carbon). Is it really happening? Yes. In the 1980s, my dad did a series of experiments with homemade fiberglass props for Nelson 0.15s for F2D. After finding the best performer of the bunch, he made a mold and copied it directly into carbon. Because the carbon props from the same mold were too stiff to twist significantly under load, they ran terribly. After going back to fiber glass, it was fat city all over again.

Anyways, just wanted to throw a little interesting food for thought out there before the holidays. If you get stuck or confused trying to use the pitch gauge, just drop me a line and I'll try to help out. That's all I've got for now. Happy new year. See you in 2013!







### **Top Three in the Advanced Division Season Points**





**Ken Hargreaves** 

Chris Sarnowski



Paul Kubek



Neil Simpson, Brian Stas and Jeff Vader were the top three in the 2012 Expert Division Season Points Championships

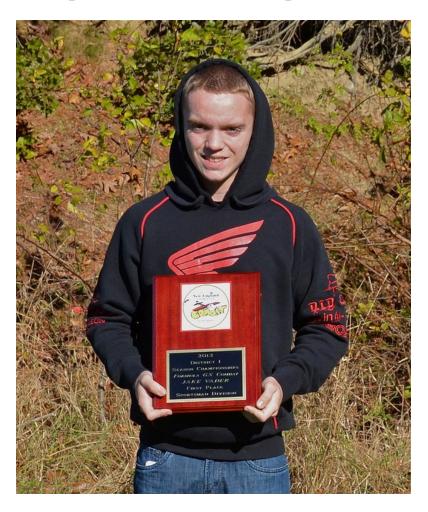


Jeff Vader and Brian Stas finished second and third in the expert division season points. Their head to head matches are legendary.



Jake Vader, this year's "Sportsman" champ, had a very good season. At the Salmon River Shootout he finished first in Sportsman and first overall, as well.

### 2012 Sportsman Season Champ-Jake Vader







Jake has earned the respect of the veteran pilots including Paul Kubek (left) and Joe Fustolo (right)

## Wingbuster Fall Fly Off-November 4th Jeff Vader Photos



Rick Clark and Joe Fustolo

Paul Kubek and Ken Hargreaves



Ken Hargreaves and Brian Stas



Paul Kubek and Joe Fustolo

## Wingbuster Fall Fly Off-November 4th Jeff Vader Photos



Brian Stas and Paul Kubek



Ken Hargreaves and Brian Stas



Joe Fustolo and Chris Sarnowski



Jake Vader and Rick Clark



Ara Dedekian and Chris Sarnowski



Chris Sarnowski and Joe Fustolo

### 2013 Schedule

( all events still very tentative-there will be adjustments )

14-Apr	Middlesex, NJ		
	Speed Limit and single elimination 1/2A		
21-Apr	GX Icebreaker	GX	site to be determined
28-Apr			
5-May	GX Shootout	GX	site to be determined
<b>12-May</b>	Mothers Day		
19-May	Gil's Combat Meet		Hershey, PA
	Speed Limit and single elimination 1/2A		
<b>26-May</b>	Wingbuster Spring Championship	GX	Halifax, MA
2-Jun	Eastern Mass Invitational	F2D	Halifax, MA
9-Jun	Brodak Week-June 11th to 15th		
16-Jun	Brodak Week-June 11th to 15th		
23-Jun	Len Minick Memorial	GX	East Hampton, CT
30-Jun	Wingbuster Summer Sizzler	F2D	Halifax, MA
7-Jul	F2D Team Trial Week		
14-Jul	Nats Week-July 15th to 20th		
21-Jul	Nats Week-July 15th to 20th		
28-Jul	Wingbuster Summer Classic	GX	Halifax, MA
4-Aug	East Coast Championships		Hershey, PA
11-Aug	Wingbuster CL Stunt Fun Fly		Halifax, MA
17&18-Aug	Lee Stunt Contest		Lee, MA
18-Aug	Central Mass Championships	GX	E.Brookfield, MA
25-Aug	Salmon River Shootout	GX	East Hampton, CT
1-Sep	New England Championships	GX	Halifax, MA
8-Sep	Sanford Jet Rally/Mass Cup	GX	Sanford, ME
14&15	Mass Cup Stunt Contest		Wrentham, MA
15-Sep	Middlesex, NJ		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
10 жер	Speed Limit and single elimination 1/2A		
22-Sep	New England Championships	GX	Halifax, MA
29-Sep	Wingbuster Fall Championship	GX	Halifax, MA
5-Oct	October Air War-Saturday Contest	GA	Vincentown, NJ
3-00	Speed Limit and single elimination 1/2A		vincentown, 149
6-Oct	Wingbuster Shootout	F2D	Halifax, MA
13-Oct	Fall Finale Combat Tournament	GX	Halifax, MA
20-Oct	Eastern Mass Championship	F2D	Halifax, MA
27-Oct	Fall Fly-Off post season contest	GX	Halifax, MA
27-OCI	ran riy-on post season contest	GΛ	maniax, MA

### For more info contact:

Neil Simpson 129 Podunk Road East Brookfield, MA 01515

Phone: 508-867-8702 E-mail: podunk129@charter.net

## New England Contest Fund 9/1/2012 through 12/20/2012

12/19/2012					Pag
	Date	Description	Category	Amount	

Date	Description	Category	Amount
ALANCE 8/31/20			869.0
9/8/2012	Horizon Air Meet	Trophy Expense	-6.0
9/16/2012	Wingbuster Invitational	Permit-Sanction Expense	-20.0
9/16/2012	Wingbuster Invitational	Trophy Expense	-4.0
9/16/2012	Wingbuster Invitational	Entry Fees	120.0
9/16/2012	Chris Sarnowski	Contribution	5.0
9/16/2012	Rick Clark	Contribution	35.0
9/23/2012	Canceled NH Contest	Permit-Sanction Expense	-25.0
9/30/2012	Wingbuster Model Airplane Club	Donation Expense	-250.0
10/7/2012	Canceled Leominster Contest	Permit-Sanction Expense	-25.0
10/9/2012	Larry Scarinzi	Contribution	20.0
10/14/2012	New England Championships	Entry Fees	240.0
10/14/2012	New England Championships	Trophy Expense	-315.0
10/14/2012	New England Championships	Permit-Sanction Expense	-20.0
10/14/2012	Chris Sarnowski	Contribution	10.0
10/14/2012	Brian Stas	Contribution	10.0
10/14/2012	Joe Fustolo	Contribution	20.0
10/21/2012	Fall Finale	Entry Fees	105.0
10/21/2012	Fall Finale	Permit-Sanction Expense	-20.0
10/21/2012	Fall Finale	Trophy Expense	-6.0
10/28/2012	Wingbuster Shootout	Entry Fees	75.0
10/28/2012	Wingbuster Shootout	Permit-Sanction Expense	-20.0
10/28/2012	Wingbuster Shootout	Trophy Expense	-6.0
11/4/2012	Season Ending Awards	Trophy Expense	-344.0
11/4/2012	2012 Season End Hats	T-Shirt-Hat Expense	-143.0
11/4/2012	Fall Fly-Off	Permit-Sanction Expense	-20.0
11/4/2012	Fall Fly-Off	Trophy Expense	-6.0
11/4/2012	Fall Fly-Off	Entry Fees	165.0
11/4/2012	Rick Clark	Contribution	5.0
11/4/2012	Joe Fustolo	Contribution	5.0
11/11/2012	Eastern Mass Finale	Entry Fees	105.0
11/11/2012	Eastern Mass Finale	Permit-Sanction Expense	-20.0
11/11/2012	Eastern Mass Championships	Trophy Expense	-8.0
11/11/2012	Chris Sarnowski	Contribution	-6.0 15.0
		Streamer Expense	
11/21/2012 11/23/2012	2012 Streamers (366qty) Streamer String (6 Rolls)	Streamer Expense	-69.0
	<u> </u>	Streamer Expense	-16.0
9/1/2012 - 12/20	<i>312</i> 012		-408.0
ALANCE 12/20/2	2012		461.0
	:	TOTAL INFLOWS	935.0
	:	TOTAL OUTFLOWS	-1,343.0
	Ī	NET TOTAL	-408.0

age 1

### The Complete History of the New England Season Point Championships

	First Place	Second Place	Third Place
1990			
Expert Division:	Neil Simpson	Joe Fustolo	Gerry Pompeii
Advanced Division:	Jeremy Simpson	Joe Fustolo Jr. / Glenn Simpson	Jason Greene
Sportsman Division: 1991	John Merritt	Ernie Carosella	
Expert Division:	Lloyd Seymour	Joe Fustolo	Gerry Pompeii
Advanced Division:	Len Minick	Jason Greene	Barry Greenhalgh / Jeremy Simpson
Sportsman Division: 1992	Leon Bowen	Conrad Wondolowski	Ernie Carosella
Expert Division:	Neil Simpson	Lloyd Seymour	Joe Fustolo
Advanced Division:	Len Minick	Conrad Wondolowski	Eddie Blair
Sportsman Division: 1993	Tom Richard		
Expert Division:	Gerry Pompeii	Lloyd Seymour	Neil Simpson
Advanced Division:	Eddie Blair	Conrad Wondolowski	Jim Mynes
Sportsman Division: 1994	Dana Lord	Don Brueck	Tom Richard
Expert Division:	Neil Simpson	Lloyd Seymour	Joe Fustolo
Advanced Division:	Paul Kubek	Conrad Wondolowski	Tom Richard
Sportsman Division: 1995	Don Brueck	Steve Lovely	
Expert Division:	Neil Simpson	Conrad Wondolowski	
Advanced Division:	Tom Richard	Jim Mynes	Dave Parizo
Sportsman Division: 1996	Don Brueck		
Expert Division:	Neil Simpson	Conrad Wondolowski	Dave Parizo
Advanced Division: Sportsman Division:	Tom Richard	Dana Lord / Len Minick	Paul Kubek

	First Place	Second Place	Third Place
1997			
Expert Division:	Neil Simpson	Conrad Wondolowski	Dave Parizo
Advanced Division:	Tom Richard	Len Minick	Paul Lord
Sportsman Division: 1998	Vinnie Langella	Brian Stas	
Expert Division:	Neil Simpson	Dave Parizo	Gerry Pompeii
Advanced Division:	Brian Stas	Tom Richard	Len Minick
Sportsman Division: 1999	"DJ" Webber		
Expert Division:	Neil Simpson	Dave Parizo	Will Rogers
Advanced Division:	Paul Lord	Paul Kubek	Brian Stas
Sportsman Division:			
2000			
Expert Division:	Neil Simpson	Dave Parizo	Glenn Simpson
Advanced Division:	Len Minick	Brian Stas	Paul Kubek
Sportsman Division: 2001	Dick Sherman	Matt Stas	Ken Hargreaves
Expert Division:	Neil Simpson	Glenn Simpson	Joe Fustolo
Advanced Division:	Brian Stas	Dick Sherman	Len Minick
Sportsman Division:	Ken Hargreaves	Matt Stas	Ernie Carosella
2002	<u> </u>		
Expert Division:	Neil Simpson	Glenn Simpson	
Advanced Division:	Dick Sherman	Ken Hargreaves / Brian Stas	Len Minick
Sportsman Division: 2003	Matt Stas	Rick Clark	
Expert Division:	Neil Simpson	Jim Carpenter	Dick Sherman
Advanced Division:	Brian Stas	Paul Kubek	Matt Stas
Sportsman Division: 2004	Shaylene Vader	Jeff Vader	
Expert Division:	Neil Simpson	Joe Fustolo	Dick Sherman
Advanced Division:	Brian Stas	Paul Kubek	Ken Hargreaves
Sportsman Division:	Shaylene Vader	Richard Sherman	

	First Place	Second Place	Third Place
2005			
Expert Division:	Neil Simpson	Dick Sherman	Joe Fustolo
Advanced Division:	Jeff Vader	Brian Stas	Paul Kubek
Sportsman Division:	Shaylene Vader		
2006	Noil Cimpson	Dick Sherman	Clana Simasan
Expert Division: Advanced Division:	Neil Simpson Jeff Vader	Brian Stas	Glenn Simpson Ken Hargreaves
Sportsman Division:	Shaylene Vader	Richard Sherman	Kell Halgreaves
2007	Shaylene vader	Michard Sherman	
Expert Division:	Neil Simpson	Ken Hargreaves	Glenn Simpson
Advanced Division:	Jeff Vader	Brian Stas	Paul Kubek
Sportsman Division:			
2008			
Expert Division:	Neil Simpson	Glenn Simpson	Joe Fustolo
Advanced Division:	Brian Stas	Jeff Vader	Paul Kubek
Sportsman Division:	Chris Sarnowski	Jake Vader	
2009			
Expert Division:	Neil Simpson	Joe Fustolo	Glenn Simpson
Advanced Division:	Paul Kubek	Chris Sarnowski	
Sportsman Division:	Richard Sherman	Jake Vader	
2010			
Expert Division:	Neil Simpson	Joe Fustolo	Jeff Vader
Advanced Division:	Chris Sarnowski	Paul Kubek	
Sportsman Division: 2011	Richard Sherman	Jake Vader	
Expert Division:	Brian Stas / Neil Simpson	Jeff Vader	
Advanced Division:	Chris Sarnowski	Paul Kubek	
Sportsman Division: 2012	Richard Sherman	Jake Vader	
Expert Division:	Neil Simpson	Brian Stas	Jeff Vader
Advanced Division:	Ken Hargreaves	Chris Sarnowski	Paul Kubek
Sportsman Division:	Jake Vader		



### MACA APPLICATION AND RENEWAL FORM

## mail to: MACA, c/o GENE BERRY, 4610 89th Street, Lubbock, TX 79424 (Please write your AMA Number on your Check.)

Name		Date	
AMA Number	AMA Category JR	[ ]; SR. [ ]; OP. [ ]; CD. [ ]; Other	
Address		Telephone ()_	
City	St	ateZip Plus Four	<del>-</del>
E-Mail Address		Forum login name	
Birth Date	Male [ ] Female [ ]	Competition Flyer [ ] Sport Flyer [	] Non Flyer [
Club/ Clubs Affiliation			
Please rate your preference of fly Combat: 1/2A [ ], Fast [ ], Speed [ ]; Free Flight [ ];	Slow [ ], Super Slow [	], FAI [ ]; Stunt [ ]; Racing	[ ]; Carrier [ ];
\$ 6		S: \$30.00 (U.S. Funds Only) ily member at same address (No News	sletter)