

# 2013 NATS

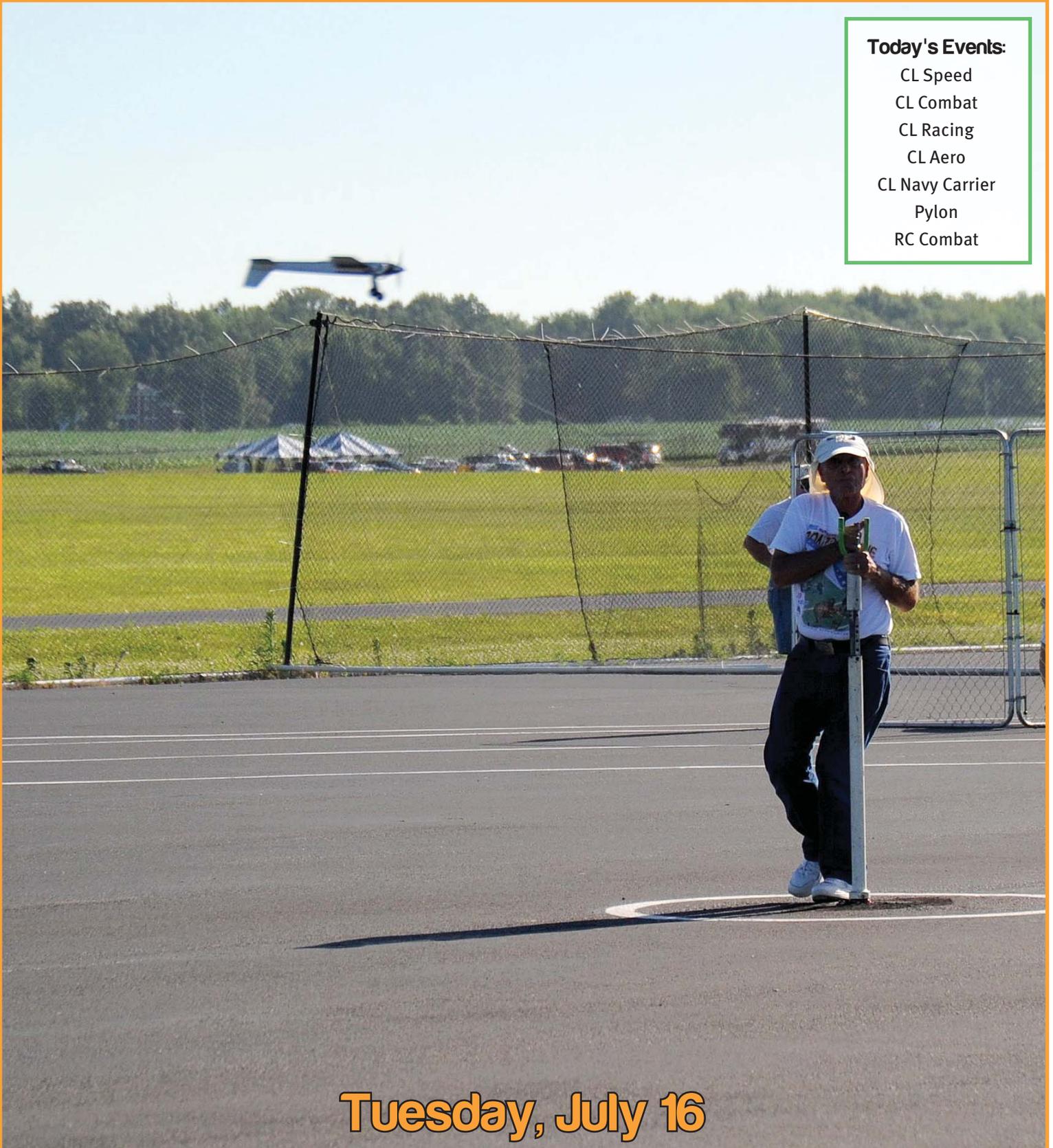
NATIONAL AEROMODELING CHAMPIONSHIPS  
ACADEMY OF MODEL AERONAUTICS · CHAMPAIGN IL · MUNCIE IN

# NatsNews

Academy of Model Aeronautics  
International Aeromodeling Center, Muncie IN  
website: [www.modelaircraft.org](http://www.modelaircraft.org); email: [natsnews@modelaircraft.org](mailto:natsnews@modelaircraft.org)  
Copyright Academy of Model Aeronautics 2013  
Editors: Ashley Rauhen, Rachele Haughn, Liz Helms

## Today's Events:

- CL Speed
- CL Combat
- CL Racing
- CL Aero
- CL Navy Carrier
- Pylon
- RC Combat



Tuesday, July 16

# CL Speed Day 1 Recap

Photos by Warren Gregory.

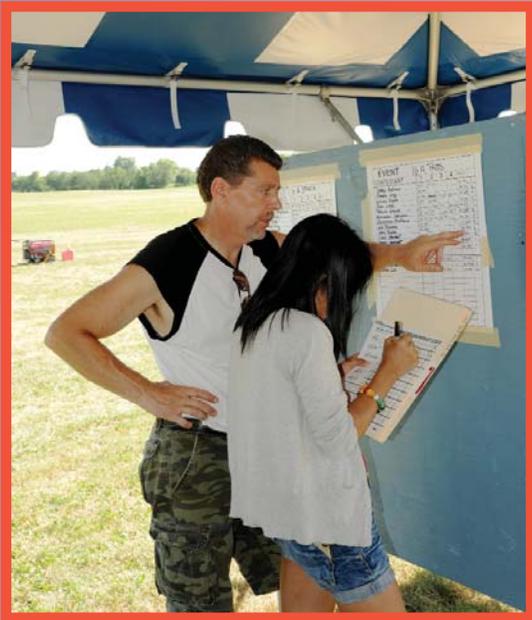




CL Speed

EVENT	1 1/2 A Speed					
CONTESTANT	1	2	3	4	BEST	
William Hughes	110.520	122.504	119.062	-	122.504	5
Christopher Montasino	126.940	122.652	ATT	126.152	126.940	4
Jerry Rocha	135.753				135.753	2
Carl Dodge	ATT	ATT	135.934	137.776	137.776	1
Charles Legg	126.781	131.879	123.546	-	131.879	3
Glen VANSANT	ATT	72.576	94.060	99.295	99.295	6
JAMES VANSANT	ATT					

EVENT	1/2 A Proto					
CONTESTANT	1	2	3	4	BEST	
Garry Andrews	81.121	83.030	-	-	83.030	11
Charles Legg	84.791	-	-	-	84.791	8
William Hughes	87.941	85.884	88.329	85.435	88.329	4
Rosa Legg	ATT	84.235	-	-	84.235	10
Patrick Wemple	80.939	71.798	ATT	84.354	84.354	9
Alexander Valshen	42.778	ATT	51.688	ATT	51.688	15
Christopher Montasino	85.193	84.791	86.795	-	86.795	5
Jim Rhoades	77.689	-	-	-	77.689	13
Jerry Rocha	106.089	-	-	-	106.089	1
Glen VANSANT	85.843	84.039	85.152	-	85.843	6
JAMES VANSANT	88.985	-	-	-	88.985	3
CARL Dodge	85.395	85.072	-	-	85.395	7
NewMATH	87.471	95.655	91.102	-	95.655	2
Charles Williams	81.934	78.299	-	-	81.934	12
Glenn Lee	59.070	58.041	72.434	-	72.434	14



# CL Racing Day 1 Recap

**Let me begin** by apologizing. I had all of the results for Monday's Control Line Racing events on a clipboard, which accidentally got put in the event director's car. I hope to have them along with Tuesday's racing results in my next article.

There are a number of people to thank for helping run the racing events and unfortunately, I do not have everyone's name. John Ballard was Monday's event director while Dave McDonald and Bill Lee comprise the Jury. A number of people also volunteered to time Monday's racing events.

The first event on the schedule for Monday was F2C Team Race. Because most of the teams that will be trying out for the team in October that will represent the United States at the 2014 Control Line World Championships are spread out across the country, they use the Nats as a chance get in some three-up practice before the team trials.

Pitman David Wallick survived a stroke that has left him legally blind, but has not stopped him from his love of modeling or competing. David not only entered, but managed to place third overall in F2C and second in F2CN.

Each team completed three 100-lap heat races to determine which three teams would qualify for a 200-lap final. Dick Lambert and Tommy Fluker finished first while Steve Wilk and David Fisher finished second and Dave Wallick and his pilot finished third. Pilot Tommy Fluker is a past World Champion in F2D Combat.

There were only three entries in F2CN, so the contestants decided to run a 100-lap heat race in order to get a good motor setting before going in to the 200-laps final. The team of Bill Lee and Bill Bischoff finished first, David Wallick and his pilot finished second, and Les Akre and Ron Duly finished third.

B Team Race was the final event of the day. First place went to the team of Bill Lee and Bill Bischoff, second place was Dave Betz and Charley Johnson, while Ron Duly and Les Akre finished third.

Look in tomorrow's *NatsNews* for both Monday and Tuesday's times.

—Melvin Schuette  
reporter/photographer



Pitman Steve Wilk calls pilot Dave Fisher in for a pit.



Three up at 120 mph.

David Wallick is a legally blind pitman.



Event Director John Ballard doing line check before an F2C race.



Timers Sandra Lee and Bob Oge talk between races.



F2CN top three finishers.



F2C top three finishers.



Team Race top three finishers.

# CL Racing

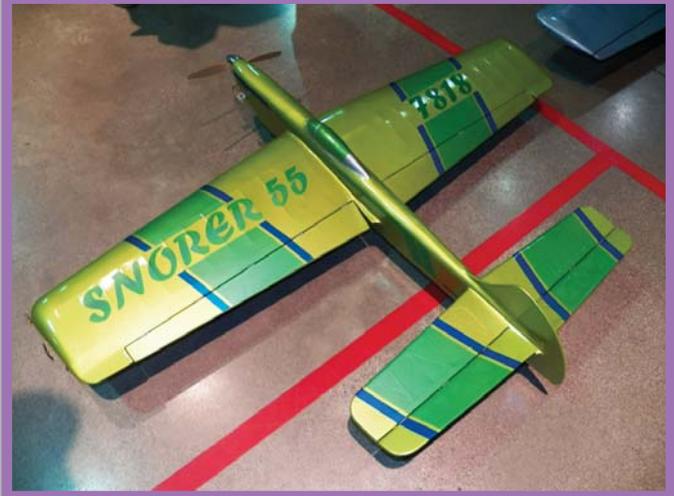
# CL Aerobatics Day 2 Recap

**Words cannot** express the beauty my friends have created. I am letting you look at the pretty airplanes and make your own evaluation.

These shots were taken at Appearance Points at the Oneighty Building, sponsored by Allen Goff and his church. Thank you, Allen.

I am supplying a sample of the multiple great-looking models. Only Kaz Minato's US Navy Hellcat scored 20 points, the rest of the airplanes were close runners-up. I am impressed with the workmanship of my friends.

—Allen Brickhaus  
reporter/photographer



Bob Brookins' beautiful Snorer 55.



Eric Taylor's Katana.



Bob Dixon's patriotic Crystal.



Bob Hunt's Crossfire is a deviation from his signature metallic brown, red, and cream color schemes.



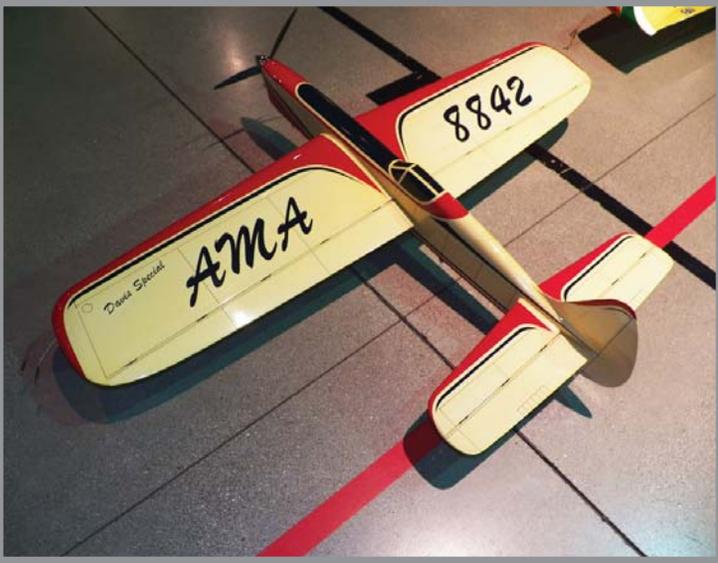
Also a CL Scale competitor, Allen Goff's Petra is judged at the Appearance Point contest.



Matt Neumann's airplane.



Mike McHenry's offering.



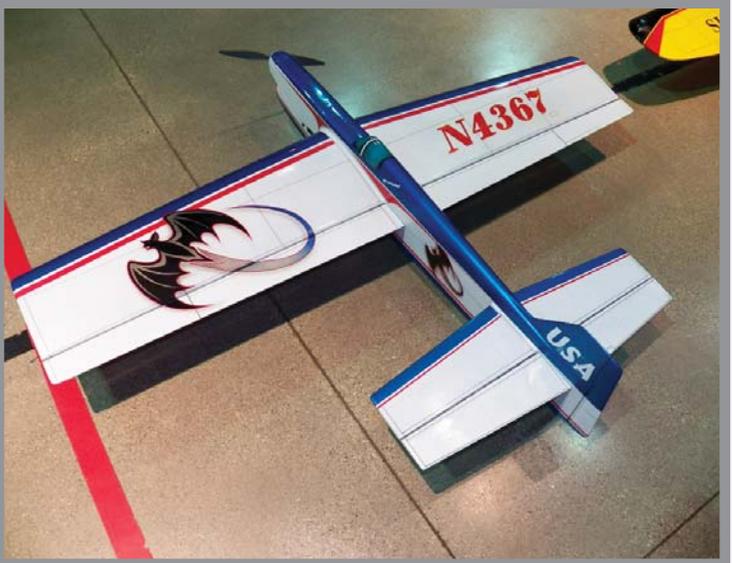
Roger Wildman's Davis Special.



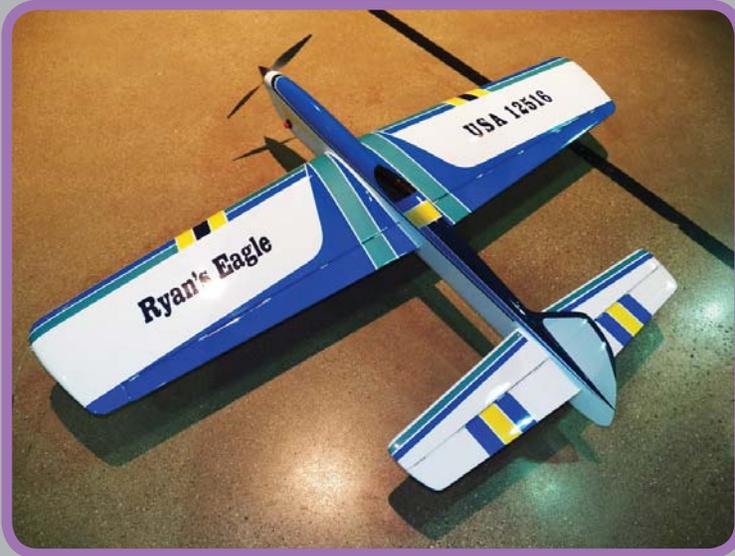
Thomas Case's Shark 45.



Wesley Dick's Velvet.



Bill Rutherford's aircraft has some great graphics.



Buddy Weider is campaigning this Ryan's Eagle.



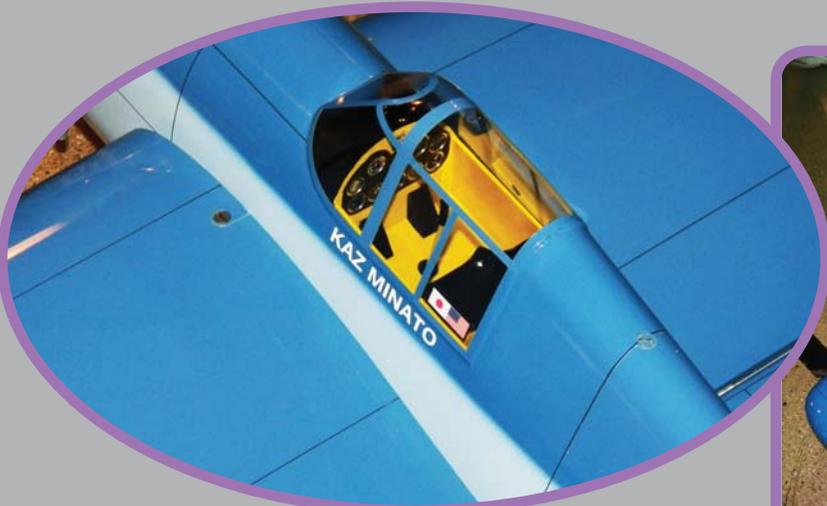
Derek Barry's stunning blue, green, and white aircraft.



Last year's Walker Cup winner Doug Moon's Riff Raff.



Bob McDonald's Apogee V.

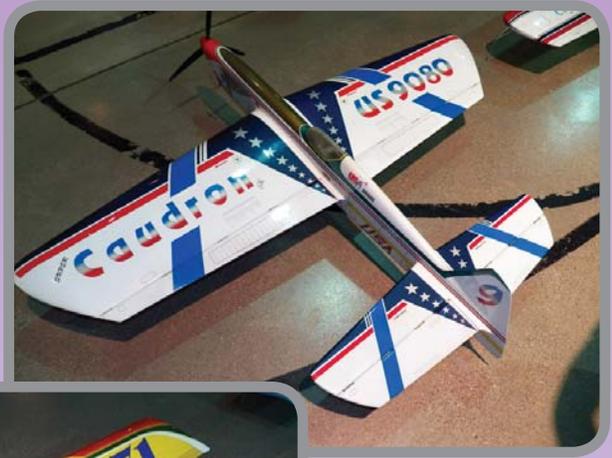


Check out the cockpit of Kaz Minato's beautiful airplane.





Also flying a Katana is Eric Viglione.

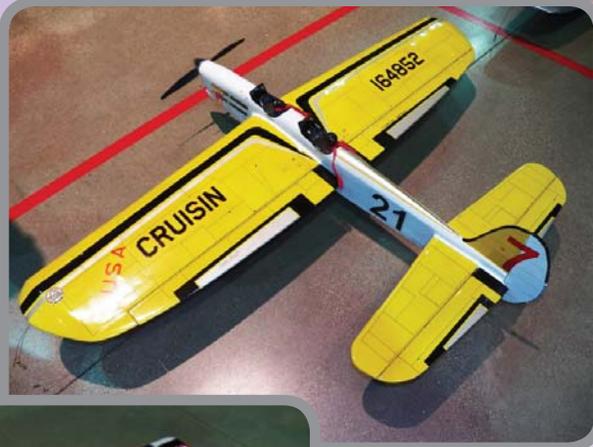


Frank McMillan's Caudron.

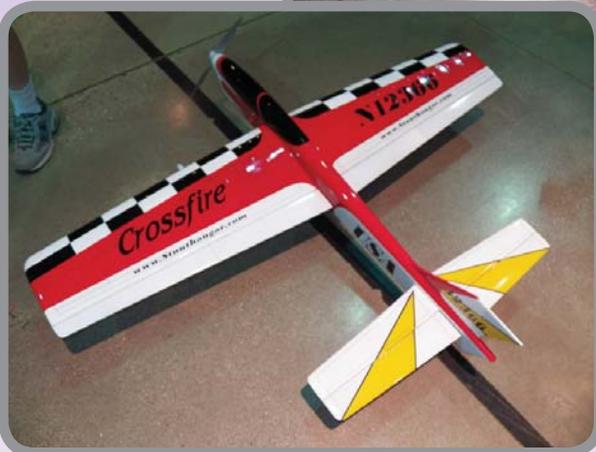


Cruisin belongs to Mike Scott.

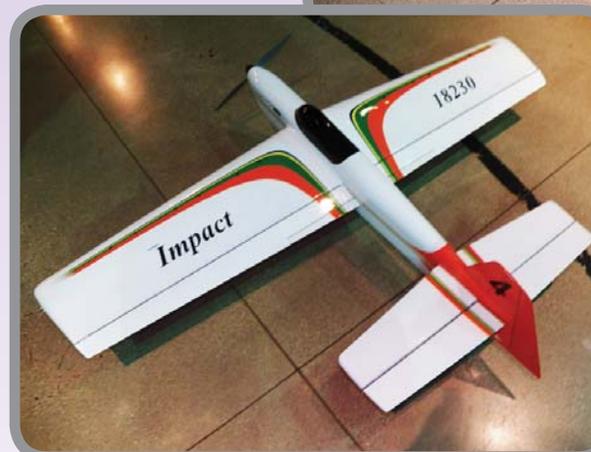
Kenny Stevens is back with his SVE-22.



Paul Walker's gorgeous Predator.



Bob Storick is also campaigning a Crossfire.



Howard Rush's clean-looking Impact.

# CL Combat



Heart of the Team Trials: The backbone of the officiating crew and the team members include (front) Junior entries Rylan Ritch, Alexandra Nadein (Junior team), Austin Minor, Bradon Parker (not present); (back) Tatyana Leontyev, Mark Rudner (team), Josh Ellison (team), Dave Edwards (judge), Richard Stubblefield (team), Lance Matassa (CD), Jeff Hannauer (circle marshall); (middle) Bob Mears (organizer-in-chief), Arlene Pyles (scorekeeper), and Jan Mears (pit boss).

**Nats' official** Control Line Combat kicked off a week of Combat right after the F2D Team Trials ended. Thirty-two fliers started an estimated 100 matches. Most of the Team Trials fliers entered to get some more practice and a shot at a Nats championship trophy.

New fliers included A. Caballero, A. Kobect, A. Prokofiev, D. Lovgren (Canada), A. Magzianov (Canada), and Y. Melnikov (Canada), making it an international affair.

Combat matches are similar, but each is different. Some things to look for: the pit crew has everything in hand and isn't running around at the last second to get something, they get the motor started quickly and easily launch on time, the pilot takes off smoothly without zooming way high or skimming the ground.

Once in the air the better pilots will be looking over their shoulders to keep the other airplane in view. They will be watching the other airplane almost all the time, and only look directly at their airplane when in trouble. They fly by the feel of the model tugging on the control handle. If a gust of wind unexpectedly buffets the airplane it can cause a lot of trouble for the pilot.

A match usually starts out with some

wide loops and Figure 8s as the pilots feel out how their opponent is flying. They both are aiming at the tip of the other streamer, trying for a cut but not getting too close to the airplane.

That can change quickly when one pilot tries to reverse things and gets behind the other airplane. Many times one airplane will follow the other through seemingly impossible switchbacks and square corners.

Many of these pilots have been doing this for years and make 90% of their maneuvers strictly by reflex. After a bout of tight maneuvers they may separate for a bit—anything from half a second to several level laps. The really good pilots seem to end up behind the other airplane, ready to start another attack.

A couple of common defensive maneuvers often turn up. The pilot lets the other flier chase him or her and does a sudden counterclockwise loop (an outside turn) into inverted flight or a very shallow climb followed by a clockwise loop (an inside turn). These Figure 8s will be very close to the ground, sometimes even kicking up bits of grass.

How do they do it? Lots and lots of practice and trimming the airplanes so they fly the same way every time.

With all the matches it is really hard to keep track of who is flying who for the pictures. Apologies to any flier who might get misnamed.

—Phil Cartier  
reporter/photographer



Other F2D action: a classic turning fight. Both airplanes follow each other through many loops and Figure 8s, trying to get an edge.



Dave Lovgren and Andy Minor duke it out in an international match. Having nearly identical models makes it confusing for the judges. The pilots wear jerseys that show which color of streamer they have.



An early match. Pushing hard, the lead airplane took chunks out of the right wing of the trailing one. They continued flying for a long time; the damage hardly affected the airplane.

Rylan Ritch gets set to take off with Alexandra Nadein. Both fliers flew in the Team Trials and really started to get the hang of flying in the same circle with another pilot and maneuvering around each other.



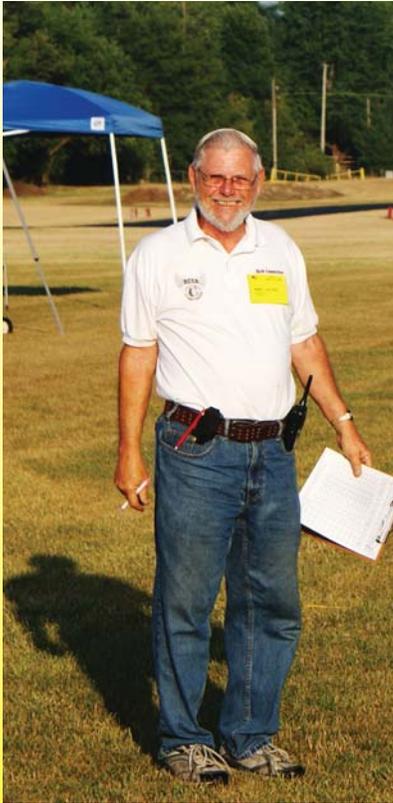
Alexandra comes over the top, trying for a cut. Both she and Rylan mostly tried the safe tactic for new fliers—learn to fly level with another pilot, don't hit him or her, and try to line up for cuts. Getting a cut in level flight can be one of the hardest ways to do it.



Success! The entire black streamer is hanging from Alexandra's airplane. After a pilot gets lined up, there isn't much an opponent can do to avoid the cut.



# RC Combat Begins



Left: Bob Loescher was the CD of the 2012 Nats. Above: Scott Gilkey, AKA Pit Boy, will be back this year to make sure Eric is on top of his game. Right: William Drumm III will once again be showing his colors in the air. You always know which plane to go after. All photos were taken by Don Grissom at the 2012 Nats.

**Once again** it is time for RC Combat at the Nats, or as we call it sometimes, Demolition Derby in the sky. Unlike some other events where people have nice, pretty airplanes to fly, we just take what we can get from the local hardware store and make it fly.

RC Combat is a great spectator sport, even though it is a lot more fun to fly. This year we will start with 18 pilots for more than 40 rounds of Combat across four days.

This year we have the return of some of the top pilots in the country. William Drumm III from Wisconsin will once again be taking to the skies. He was last year's top pilot in the country. Longhaul Bob Losecher will be here from Lima, Ohio. He is the Contest Director plus a really good pilot.

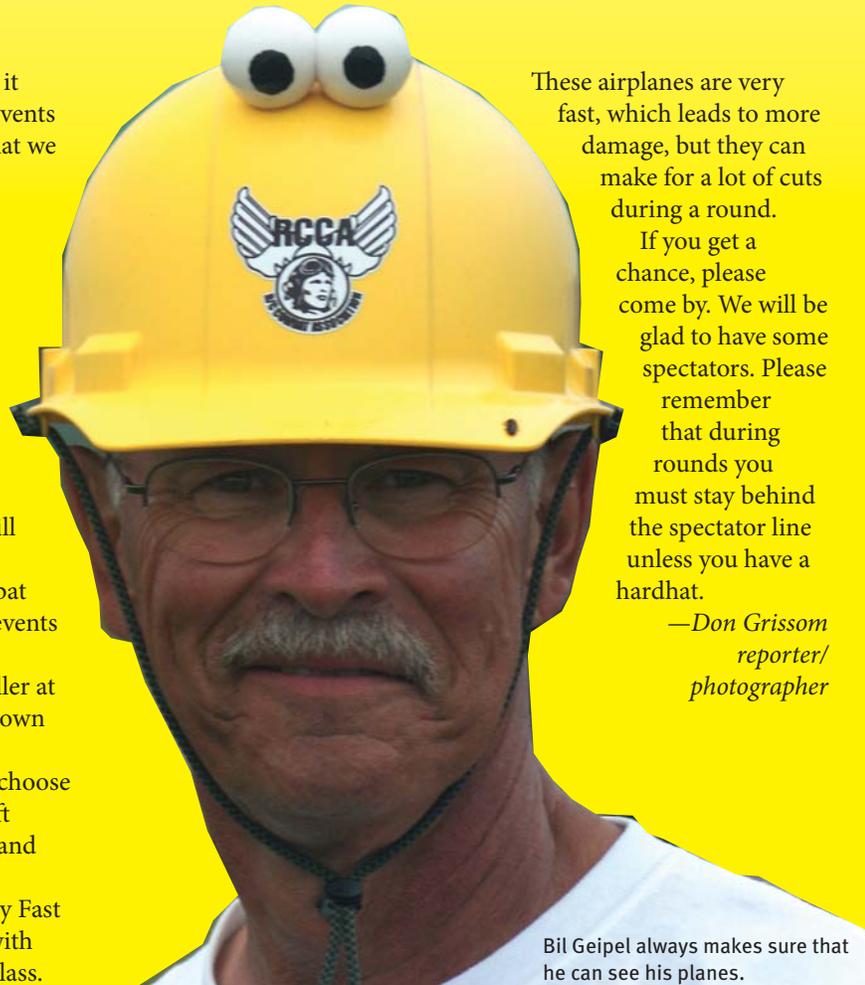
The real long haul will be Gary Funkhouser from Riverside, California. That must have been a drive. We will also have Eric Gilkey back again. After missing last year, he will once again be back to get the rust off his fingers.

We will be starting Tuesday with Slow and Survivable Combat (SSC) around 8 a.m. SSC is one of the most popular Combat events in the country. All 18 pilots are flying in this event.

SSC airplanes use a .15 cu. in. engine running a 8 x 3 propeller at 17,500 rpm. This is a limited class which slows the airplanes down to prevent as much damage, though it still happens at times.

The airplanes will range in design and colors. We normally choose a color which makes it easy to see, plus we can find our aircraft in a group of airplanes. We will be flying five rounds Tuesday and finishing with five rounds of SSC on Wednesday.

After we finish SSC, we then go to Open B, or Fast and really Fast Combat. Open B airplanes are limited to a .29 cu. in. engine with no rpm limit. There is also no propeller requirement for this class.



These airplanes are very fast, which leads to more damage, but they can make for a lot of cuts during a round.

If you get a chance, please come by. We will be glad to have some spectators. Please remember that during rounds you must stay behind the spectator line unless you have a hardhat.

—Don Grissom  
reporter/  
photographer

Bil Geipel always makes sure that he can see his planes.

# CL Navy Carrier Begins

In 1950, the Nats was the guest of the United States Navy at the Dallas Naval Air Station. The Navy Carrier flying events took place there and have been a unique part of American model aviation ever since.

Navy Carrier flying requires Control Line pilots to manage the energy available to the aircraft in the full-powered takeoff from 24 feet of Scale aircraft carrier deck, and also in the high-speed seven-lap task that follows the launch. More critical management of the power of the aircraft is required to maintain a constant altitude flight path in slow flight.

This seven-lap task presents challenges to the pilot in first decreasing power to enable the aircraft to slow its airspeed to the minimum at which it will continue to fly and then replacing the wing's lift by increasing the angle of attack of the incident air to the wing as the aircraft slows. By increasing the angle of attack of the wind to the wing, the bottom surface of the wing is made to produce enough lift to either maintain steady flight altitude or descend by slight reduction of power, or even climb by applying full power of the engine to produce a slow rate of climb, still at the same low airspeed and high angle of attack.

The rub is that as the angle of attack increases, the induced drag on the wing, which is now flying increasingly broadside to the incident airflow, increases dramatically with every degree of increased angle of attack. The result is that the drag will increase to the point that even the application of full power is not sufficient to keep the aircraft from stalling dropping its nose down to re-establish and obtain a flyable angle of attack.

The pilots must fly just slightly faster than this at slow flight. Slow flight at the level and in descent for landing to the arresting cables requires expert combination of nose-high increased angle of attack and power control. The ability to do this comes with knowledge and experience.

In this manner the flight regimes of full-scale carrier aircraft are required to be done by the model aircraft. The flight scores are a combination of high-speed, slow-speed, and accurate landing technique. Bonus points are awarded to models that excel in presenting scale appearance.

The Profile models compete on Tuesday, and the Scale Carrier aircraft fly on Wednesday. Models of specific aircraft in Naval operations 25 years ago fly on Thursday in Nostalgia Navy Carrier events.

The most suitable weather conditions are in the early mornings. As the day progresses, the heat raises the pressure altitude of the field and this somewhat decreases the power of the engines, the thrust of the propellers, and the lift produced by the wings. Only the pilots will be able to notice the slight changes.

Cover up from the sun, drink plenty of water, eat well, and enjoy watching these unique events.

—Steve Cuthbert  
reporter

All photos are from previous Nats.





CL Navy Carrier

# Pylon Day One

**Monday** was the third annual event of Electric Formula 1 (EF1) with a great turnout and some nice flying weather. Our starter on the line this year is Horizon's Pete Bergstrom. Keeping us all going is a grueling, hot job, so special thanks goes out to him.

Returning from a seven-plus-year hiatus, Event Director Mike Condon is doing an incredible job. What thankless hours are involved in putting everything together over these last several months.

It was a great day racing the electrics but after all the rounds flown, there was a three-way flyoff for first place, and here are the results for the trophy winners:

1<sup>st</sup> place Jim Katz  
2<sup>nd</sup> place Mike Langlois  
1:13.35  
3<sup>rd</sup> place Jerry Small  
1:13.61  
4<sup>th</sup> place Richard Beers  
1:13.54  
5<sup>th</sup> place Roy Andrassy 1:12.86  
Fast time: Jim Katz @ 1:08.46



Today we start our Q500 426 class racing, running six rounds of the A Matrix in the morning and another six rounds for the B Matrix in the afternoon. We'll follow up in the morning with an additional two rounds of each to determine who will fly in the infamous Nats finals.

From each matrix we will take the top 12 pilots and two wildcard pilots (the next fastest times), leaving 28 pilots to battle it out.

Good luck everyone, fly fast and to the left.

—Scott Causey, reporter/photographer





Pylon



Pylon

**This week's events:**

**Wednesday**  
Control Line  
Pylon  
RC Combat

**Thursday**  
Control Line  
Pylon  
RC Combat

**Friday**  
Control Line  
Pylon  
RC Combat

**Saturday**  
Control Line  
Pylon

**Sunday**  
Pattern (Aero)

**Monday**  
Pattern (Aero)

THE CLOUD 9 MUSEUM STORE HAS  
**EXTENDED HOURS**

M-F: 7a.m.-6p.m. | Sat & Sun: 11a.m.-6p.m.

**2013 NATS APPAREL NOW AVAILABLE!**



**PROUD FUEL SPONSOR OF THE 2013 PYLON NATS**

**RITCH'S BREW**  
THE WINNER'S CHOICE™

The 2013 National Aeromodeling Championships are sponsored by:



**Thank you for joining us this year!**

Jenni Orebaugh photo.

