

# Informant

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Mark Page preps Cameron Page's Terror Ranger, a 2 D12-5 cluster, on the pad. Photo by Greg Smith.

# **GARLO 2006**

By Jonathan Sivier

The weather for GARLO last year was very good overall. Despite being windier than we might have liked the wind ended up being less of a problem than it might have been. We had a large number of former members and friends back to fly with us and ended up having more than 100 rockets flown during the course of the day. The theme for GARLO 2006 was "Cluster's Last Stand" with clustered and multistaged rockets being featured. So there were plenty of exciting flights.

One unplanned event that caused quite a bit of comment was the naked guy sunbathing on the far side of the stream. I suspect he got a bit of a shock when he got himself all settled and then saw rockets floating down above him and people running to recover them.



Alan Carol's Green Rage takes off. Photo by Mark Smith.

I was able to fly the two rockets I had planned on. I flew my newly painted, red, white and blue Comanche-3 on a C11-0/B6-0/A8-5 combination. It flew very well and all the portions were successfully recovered. Then I flew my new FlisKits Tres with a cluster of

three C6-5's. It also flew well and though it landed on the far side of the stream I was able to recover it undamaged.

There were many other fine flights during the course of the day. Here are the ones that were given awards.

# **Best Looking**

- 1. Andy Dooley's Glass Bird
- 2. Cameron Page's Terror Ranger
- 3. Brian Smith's Scissors Wing

# **Best Flight**

- 1 Will Carney's 38 Cinco on an H144
- 2 Ben Evans' Big Kahuna on a G64
- 3 Alan Carrol's 4" AMRAAM on an H180
- 4 Brett Welsh's Big Daddy on an E11

# **Best Cluster Flight**

- 1. Chris Deem's Ivan's Big Brother on 7 D12's of which 6 lit.
- 2. Will Carney's Dee7 on 7 D12's, again only 6 lit.
- 3. Jonathan Sivier's Tres on 3 C6-5's.
- 4. Jeff Deem's Mega Fun Bird on 3 C6-3's.

# **Best Staged Flight**

- 1. Will Carney's Long Long Shot on a D12/D12/D12-7 combination.
- 2. Jonathan Sivier's Comanche III on a C11/B6/A8-5 combination.
- 3. Ben Schaap's Loadstar on a B6/C6-5 combination.
- 4. Chris Deem's CHAD-staged Fun Bird on a D12/D12-5 combination.

# **Closest Landing To Marker**

- 1. Preston Harris's Snitch landed 33' 8" from the marker.
- 2. Adam Joseph's UFFO landed at 38' 8".
- 3. William Tigrak's Birdie landed at 48' 0".
- 4. Robert Miller's Orange Streamer landed at 70' from the marker.

We gave an honorable mention in the Closest To Marker category to Robert Brunner. His Big Bertha landed 1760 feet from the marker. He gets the mention, because of his bothering to measure the distance, rather than his closeness to the marker. He used his GPS to measure, but still this is definitely above-and-beyond.

Another special 1<sup>st</sup> place award was made to Lon Westfall for his staged AND clustered Tall Boy. He flew it on a cluster of two C6's and one D12 staged to a D12-5. It was a fine flight and we felt it belonged in a category of its own.



Mark Joseph's 38 Special takes off. Photo by Jonathan Sivier.

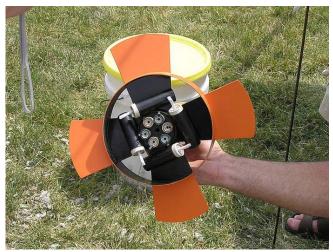
There were also a few unfortunate occurrences that we felt deserved a Prang award. There weren't as many as some years, but Kevin's Tasmanian Devil definitely made up for any lack of sensational disasters that we might have felt.

Two second place Prang awards were given out. One was to Robert Brunner for his Thoy Robin which landed on Bradely Avenue and was then run over by a car. The other was given to Wendy Gregory for her X-Ray 2 which lawn darted.

However the most impressive failure of the day was Kevin Trueblood's Tasmanian Devil. It was a very attractive rocket, which makes its fate all the sadder.



Kevin Trueblood's Tasmanian Devil on the pad. Photo by Greg Smith.



The Tasmanian Devil, showing the motor arrangement. The launch lug is up the center. Photo by Mark Smith.

We awarded Kevin a 1<sup>st</sup> place Prang award for this rocket. It was intended to fly on a cluster of 10 motors, 6 18 mm motors lifting it up and 4 24 mm motors canted at an angle to make it spin.

They all lit. In fact they lit too much. The 24 mm motors lit from both ends. This would have been bad enough, but the forced generated by the spinning ripped the rocket apart. It didn't get very high in the air before flew apart and its pieces rained down around the launch pad.



The Tasmanian Devil coming apart in flight. Photo by Robert Brunner.

Despite these few incidents, the day went very smoothly. All the fliers had a good time, and we had a large number of spectators. We're all looking forward to GARLO 2007.

# **GARLO 2007**

# "The Golden Age of Model Rocketry"

The Great Annual Rocket Launch Of 2007 will be held on Saturday, June 30, 2007. It will run from 10 a.m. to 4 p.m. at Dodds Park in Champaign. This is our biggest annual event, a purely-for-fun rocket launch. We will be awarding ribbons and prizes for winners of 7 fun events.

Since this year is the 50<sup>th</sup> anniversary of the founding of the NAR the main theme for the day will be "The Golden Age of Model Rocketry." We will be celebrating the classic kits from the past. For purposes of this event a classic model rocket kit will be defined as one from 1975 or before.

The main events will be Best Classic Model Rocket, Best Classic Model Rocket Clone and Best Classic Model Rocket Upscale. To qualify for the first of these contests your rocket must be a kit (or the majority thereof) that was actually manufactured in 1975 or earlier. More recently manufactured kits will be counted as clones.

Since this is also the 50<sup>th</sup> anniversary of Sputnik we will have a special contest for Sputnik flights. The materials to build one are fairly simple, 4 dowel rods and a Styrofoam ball, but there is plenty of room for imagination and creativity.

Then, of course, there will be the events we hold every year, Best of Show (Static), Best of Show (Flying) and Spot Landing (uncontrolled and controlled). We also have a large number of "Prang" ribbons as consolation prizes. It should be a great day of flying and I hope everyone will plan on being there.

# Illinois Missile Crisis VII Results

By Christopher Brian Deem. Contest director

We held the contest during our June 25, 2005 launch at Pick Dodds Park. It was a typical day in the park for the rocket club, rockets raining down in pieces, rockets lost, a deluge of near Biblical proportions, you know, the usual. We had a total of six competitors, which is towards the high side for us. They were: first time competitor, and our first A Division competitor, Adam Joseph, Lon Westfall, Will Carney, Jonathan Sivier, Greg Smith, and I.

The first event everyone flew was C Streamer Duration, which sounds pretty easy. Take a reasonably small rocket, stick a streamer in the front, a C6-7 in the back and have at it. No problems, right? Wrong! Never underestimate our ability to screw up the easiest of tasks.

Lon Westfall's first flight was with a small rocket, etc. At lift off, it basically vanished, lost by the timers. It was later spotted lying in the street, and there was a brief discussion on whether it lost its fins before or after the car ran over it. His second attempt was with a larger model that had the upper section lightly drift down on its streamer. Unfortunately, this was because the shock cord broke, and the main body plummeted down like a rock.

Greg Smith's first attempt was with a small red rocket that shredded on the way up, raining fins down all over the field. Greg claimed he was just testing the rocket to see if it would hold up to a C engine, but nobody believed him. For his second flight, he went the same route Lon did, bigger rocket, with the same result, a separation.

So, after four flights, we had no successful flights, but a small and growing pile of parts. At this point, I should probably mention the weather. It was cloudy with the ceiling less than 2000 feet, and the wind was what the Weather Channel calls "variable". Most of the time it was from the west-northwest, but it would swing around through the north to the northeast. Not really the best of conditions for flying rockets at Dodds Park.

Our next contestant was twelve-year-old Adam Joseph, who is our first, and so far only, A Division competitor. This meant Adam had to compete against adults who were not only much older, but who have been flying rockets many years before he was even born. Was he worried? Did he feel outclassed? Was he afraid he would embarrass himself trying to compete against the crack CIA competition gang? Don't be silly, Adam's been flying with us for most of his life, he knows what a bunch of flakes we are.

Adam's first attempt was with a Fat Boy, which was just plain insulting. He got a duration of 13 seconds, which put him ahead of Lon and Greg. Since Adam and his father Mark had been a little late getting to the launch, this was Adam's only contest flight for reasons that will be explained later.

Next was Will who doesn't build special contest rockets, he uses whichever of his many rockets that he feels like flying at that particular time. This time, he used an Estes Stars and Stripes, and another similar sized rocket. Both worked perfectly, both deployed their streamers with no problems. He got times of 33 and 31 seconds for third place.

I tried the small rocket with big streamer thing for my first flight, and had just as much luck as Lon and Greg did. In my case, the streamer cord broke, and the streamer didn't unroll. We watched the streamer all the way down, but lost sight of the rocket. For my second and final flight, I went the larger size rocket route, that being the only way anybody had gotten a good flight. This time, it also worked to perfection, the only problem being, at this time the wind had shifted from the West, to the East. After a 70 second flight, it landed (hard) in the parking lot. This caused some moderate amount of damage, but I found all the pieces, so it can be fixed.

Last, but definitely not least, Jonathan Sivier had two excellent flights on his bigger than minimum rocket. He got 43 seconds for his first flight, and 51 seconds on his second. This gave him first place, and proved once again that two good flights are better than one.

Our second event was D Egg Loft Duration. The four competitors were Christopher Deem, Jonathan Sivier, Greg Smith, and Lon Westfall. Each of us only made one flight, for reasons I'll explain later.

Lon used his all-purpose, BT-70 sized egg lofter for a nice 53 second flight. Jonathan used his egg capsule on an Estes Eliminator for a 99

second flight that landed a fair way out on the soccer fields. While he was retrieving his rocket, he found the C streamer rocket I lost (thanks Jonathan).

Using the same rocket I used the year before in E egg lofting, I got a good 136 second flight. Like my first steamer flight, the wind decided to reverse direction on me, but this time, I missed the parking lot.

Now, the reason we all just made one flight was because Greg went first. His flight found about the only near perfect conditions we had The wind was from the westnorthwest, and was blowing a little less than it had been most of the day. That plus a huge Mylar parachute, gave him a 328 second flight that landed out of the park by the car wash/detailing place on the other side of the street. After that marvelous flight, the rest of us just settled for not breaking our eggs. As a matter of fact, this was the first time we didn't break any eggs, or lose any rockets. As for Greg's flight, it set a new National Record!! That's right; he beat the old record by eight seconds. Congratulations Greg!

Our third event was supposed to be the everpopular Drag Race, but while most of us were preparing our Drag Race rockets, and Adam was getting his Fat Boy ready for his second Streamer Duration flight, we ran into some less than optimal weather.

It had been cloudy and overcast all day long, and threatened to rain a time or two. This time it did rain. We looked at the clouds, and decided the rain would probably stop in a few minutes. There is a reason none of us works for the Weather Cannel.

We were wrong; it rained, hard, for 30 or 40 minutes. It came down in buckets, tubs, and swimming pools. It rained up, down, and sidewise, we all got soaked trying to get our stuff back in our vehicles, and Jonathan darn near drowned.

Finally, it slowed down to a drizzle (after some old guy with a bunch of animals asked if I would help him build an ark) so we loaded up all the club equipment that had been soaking in the rain.

When we finally got everything put back in Greg's van, it stopped raining. The rocket gods have one heck of a sense of humor. We decided not to unload everything, and called it a day. We then went and dripped all over the pizza place's floor.

So, the final results are: Adam Joseph sixth overall, and first (and only) in A Division with 20 points from his one Fat Boy flight. Lon Westfall came in fifth with 34 points from his egg lofter flight. Will Carney fourth with 40 points from his two streamer flights. I received third place for my two second rate, I mean second place flights with 162 points. Jonathan was second with 168 points. And Greg, who set a national record, after being beat (handily) in Streamer Duration by a twelve year old, was first, and club champion, with 170 points. We gathered a total of 594 points for the club, congratulations to all the competitors. By the way, we need another A Division (7 to 13) or B Division (14 to 18) competitor for Adam to compete against. Having him compete against the adults isn't fair. To 118!

# Paxton Build & Fly

By Jonathan Sivier

We all felt the build and fly workshop on Saturday, May 18, 2006 for the Big Brothers, Big Sisters of Ford County in Paxton was a big success. We ended up with 7 kids building and flying rockets and used the Estes Generic E2X rockets and provided the kids with markers and stickers to decorate them.

The weather for the launch was exceptional. The wind was from the south-west around 4 knots so we were able to take full advantage of the shape and size of the field. All of the rockets flown remained in the field, except Lon's Tall Boy which landed in the backyard of a house across the road to the south of the park. It was a different backyard than the one his rocket (the same rocket though, I think) landed in last year when we held this same event.



Shanna Ferrel (left) and Alex Anderson prep their rockets for flight. Photo by Jonathan Sivier.

All of the kids flew their rockets all three times. We only had two flights that weren't a total success. We had one separation caused by the shock cord not being securely tied to the nosecone. Both parts of the rocket were recovered undamaged and it was quickly ready to fly again. There was one rocket which failed to deploy its parachute. It was the 3rd flight of the rocket and we don't know why it failed. The rocket came in and lawn-darted in the field and was pretty smashed up. That is the only one of the rockets that couldn't easily be flown again.

Last year we had some of the rockets come apart in flight. We felt this might have been due to not giving the glue enough time to dry. With the rockets we used this year the extra time the kids spent decorating their kits gave the glue more time to dry. This may be one reason we didn't have any rockets disassemble themselves in flight this year.



Alex Anderson's especially well decorated rocket on the pad. Photo by Jonathan Sivier.

I felt these kits worked out very well and while the assembly process is slightly different than with the Alpha III's we should be able to make a few small modifications to these kits the same as we have done with the Alpha's and use them very effectively at future workshops. One of the kits we have left is opened so I think I will build it to work out some possible improvements in the construction methods.

As usual we had pizza at the Monical's in Paxton after the workshop.

# Ask a Librarian Model rocketry resources for kids

By Wendy Gregory

Looking for resources for children who are interested in model rocketry? Here are some books and Web sites that may spark their interest, ignite their imagination, fuel their passion for model rocketry and let their creativity take off!

If the books aren't available at your local library, ask a librarian about an interlibrary loan. Books can often be sent from distant libraries to your local public library at no charge.

# **Non-fiction books**

50 model rocket projects for the evil genius by Gavin D. J. Harper, c2007

"Plans, diagrams, schematics, and lists of parts and tools for model rocket projects."

Lift - off. Part 1, Basic rocketry by Steven A. Bachmeyer, c1995

"Experience the excitement of designing, building, and launching your own model rocket. Also, learn to predict your rocket's performance, measure altitude, and even build your own launching system. [This book] not only is a ... hands-on guide for model rocketry, but it also includes ... information on the rockets used in space exploration and scientific principles behind rocket flight...."

Model rockets
by Ed Radlauer & Ruth Radlauer, c1983

"Includes instructions for building a model V-2 rocket, a satellite, a space shuttle, and a cruise missile."

Model rockets

by Gregory Vogt & Anne Canevari Green, c1982

"Discusses the history, principles, and practical aspects of rocketry; presents experiments that illustrate rocket principles; and explains how to participate in model rocketry."

Out to launch: model rockets by Ross Robert Olney, c1979

"Introduces the growing sport of model rocketry from construction, launching, tracking, and recovery to experimenting with payloads such as insects and cameras."

### **Fiction book**

Martin Bridge ready for takeoff!

By Jessica Scott Kerrin & Joseph Kelly, c2005

"Meet Martin Bridge-a most special and ordinary boy whose well-meant plans sometimes go awry. In three illustrated stories, Martin encounters two bus drivers with very different ways of relating, makes a tough decision about a friend's pet and takes on an extremely competitive model rocket project that almost costs him a friendship. The daily rhythms, struggles and triumphs of childhood-at home, at school and with friends-are evoked with warmth, understanding, honesty and humor."

### Web sites

JimZ rocket plans http://www.dars.org/jimz/rp00.htm

"JimZ plans is the most complete library of model rocket plans on the Internet. The original step-by-step manufacturer's building instructions have been scanned into this searchable database."

Space exploration merit badge http://www.execpc.com/%7Eculp/space/space.html

"This web site provides all the information you need to complete the Boy Scout space exploration merit badge, including building and launching a model rocket. The best parts of this site are the behind-the-scenes science explanations such as Newton's laws and how orbits work."

Girl Scouts blastoff http://sln.fi.edu/tfi/programs/g-scouts/space1.html

"Written for Girl Scouts, this site adds a women's perspective to the history of rocketry. In addition to the history lesson and rocket science basics, this site describes how to launch a hobby- store model rocket with your troop or family."

*NAR - Model and high powered rocketry* http://www.nar.org/NARmodeltypes.html

"This site offers information on the differences between model and high powered rockets. It also gives important rules that must be followed if you are interested in getting involved with model rockets." *NAR - Model rocket safety code* http://www.nar.org/NARmrsc.html

"No discussion of model rockets would be complete without an understanding of the safety guidelines. Here are fourteen rules for model rocket safety written by the National Association of Rocketry."

The hitchhiker's guide to model rocketry http://library.thinkquest.org/10568/

"Rocketry often viewed as one of the most complex things on Earth, it's not. Model rocketry can introduce you to the joys of this exciting topic from your own home. In this guide, we explain everything from getting your first rocket, to designing your own. We even have a cool simulator written in Java."

Book and Web site abstracts obtained from OCLC WorldCat database, accessed 5/17/07.

# Goddard and Stumpy

By Mark Page

Episode seven introduces the rocket experiment bugs that populate Goddard's world. I would guess that every rocketeer tried launching a bug at least once. This is also the start of the episodic G&S, where the storyline continues across strips. Here the lesson is obscure, "20 ft sissy shock cords," is intended to promote long cords as a means to reduce shock loads. If you look carefully you can also find the episode number hidden somewhere, starting with this panel. (On page 10)

# Other Clubs

# **Tripoli Central Illinois**

The Tripoli Central Illinois folks launch from November to April at the Tuscola Airport on various Sundays. They have a 10,000' waiver. Newcomers are always welcome. They do require that people who fly motors larger than G be NAR or Tripoli members with insurance.

Contact: Don Reasor Phone: 217-253-2586

Email: Don.Reasor@netcare-il.com

 $http://www.tripoli.org/launches/TRA\_Central\_IL.shtml$ 

### **Northern Illinois Rocketry Association**

NIRA holds regular launches in the Chicago area http://www.NIRA-rocketry.org/

# Fermilab Association of Rocketry

FAR holds meetings and launches near Batavia, IL.

http://www.fnal.gov/orgs/far/

# **Peoria Area Rocket Society**

PARS is a model rocket club serving Peoria, IL and surrounding communities.

http://www.piars.us/

# **Tripoli Quad Cities**

Model and High Power rocketry for Eastern Iowa and North Western Illinois.

http://www.tripoliquadcities39.com/

### **Tri-State Rocketry**

Serving Quincy, Illinois and surrounding communities.

http://www.geocities.com/tri\_state\_rocketry

### Indiana

There are various clubs in Indiana who hold regular launches.

http://www.indyrockets.org/

### St. Louis

The St. Louis Rocketry Association holds model and high power launches approximately monthly.

http://www.stlouisrocketry.org/

# **Local Vendors**

Here are some local places to get rocketry supplies.

**Hobby Lobby:** next to County Market near the corner of Mattis and I-72.

**Leisure Time Pet & Hobby:** 807 N. Mattis.

**Rocket R&D:** Call Gary Buck at 217-841-4777 for parts.

**Slot and Wing Hobbies:** Just north of I-74 on the east side of Prospect.

# Call for Submissions

If you have something to share with the other members we would love to hear from you. Possibilities for submissions include: reports on launches or other events, technical articles, rocket plans, contest and flying tips and hints, reviews of models or motors, books, software or other items of interest to rocketeers and photos taken at launches. If you have something in mind to submit for the next issue, hopefully in August of 2007, contact the editor.

# **CIA Officers**

Here is the contact information for the officers of the CIA.

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