



# LDRS23!

Geneseo, NY July 1-6, 2004

An unofficial  
newsletter of the  
biggest launch of  
the year--28 pages  
of story and photos

## Six Days of High-Power Rocketry

Geneseo, NY  
launch July  
1-6 attracts  
hundreds

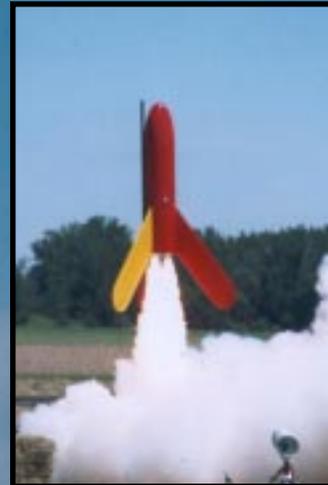
Story and Photographs by  
**Mark Canepa**

It is their annual pilgrimage. And they arrived from everywhere—from Maine to Michigan and beyond to Minnesota, from Maryland through the Carolinas, down to Florida and then across to Texas. They drove in from Canada and as far away as Colorado and California—yes, they even came from Australia.

They carried 14-foot-tall missiles and bowling ball launchers; UFOs, beer bottle rockets and a Flying Pyramid of Fire. They came for the power and the smoke and the noise.

This is LDRS—the largest collection of high-power rocketry disciples in the world, where high-power is a religion and Geneseo is

[See LDRS, page 2](#)



Main cover photo: Rick Boyette's Long March lifts off on a central L and four Pro-38 I motors. Inset, top: Woody Hoburgs Multiple M motor Mosquito. Inset, bottom: Ed Miller's M-powered Flying Saucer.



**On Thursday the field at Geneseo was in perfect condition for six days of high-power. The members of BRS put on a great event with more than 1,200 launches by rocketeers from all over North America--and beyond. Pictured here are just a few of the high-power pads.**

their Mecca, their Jerusalem, their Rome.

LDRS is where level three badges are a dime a dozen and M flights can go unnoticed. It is where science rules.

This year the faithful traveled to a tiny village in upstate New York, where the Woodstock of high-power rocketry went forward July 1-6, 2004 for the twenty-third gathering of the Large and Dangerous Rocket Ships. More than 1,200 rockets took to the sky, and here is a little piece of what happened.

#### **Thursday, July 1, 2004**

Geneseo was a fantastic location for LDRS23 and the Buffalo Rocketry Society was the perfect host. The launch field is a large farm—four square miles and bordered by trees on three sides and the State University of New York to the East. The

farm also serves as the location for the 1941 Historical Aircraft Group. All week, historic airplanes took to the sky from the field's grassy runway.

LCO Wayne Anthony pushed the button for the first rocket of LDRS23, which was launched a

little after 10 am on Thursday. The party never stopped for the next six days. Hundreds of rockets, A through N power, took to the skies as families, friends and old rocketry acquaintances arrived steadily from all over the country.

The mid-and high-power pads



were busy all afternoon long as rockets of all shapes and sizes were launched on rod and rail.

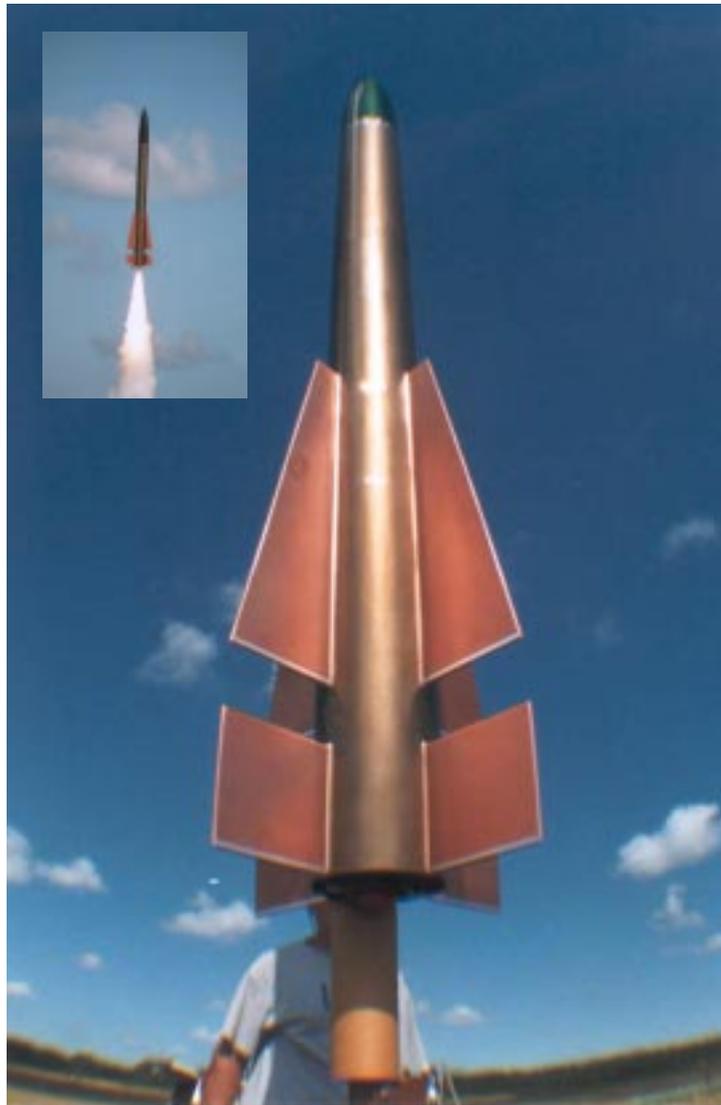
**Dennis Lappert's** upscaled version of the PML Intruder was the first M flight of LDRS23. Lappert, a Tripoli TAP member from New Jersey, loaded his 57-pound rocket on a special mechanized launch pad—supplied for the week by the Maryland Delaware Rocketry Association (MDRA). The six-inch Intruder had a great flight on an Animal Motor Works M1350. The rocket reached nearly 5,000 feet before setting down gently.

"This is my first time at an LDRS," said Lappert with a thumbs up after retrieving his rocket—the first of many he would fly over the weekend, adding "This event is fantastic."

**Mike "Dutch" Duchnevich** was next up with his 5.5 inch, 12-foot tall green monster of a rocket nicknamed "Marvin". "My goal at LDRS23 is to become the first person to launch four M motors, four days in a row, all in the same rocket," he said as he prepared Marvin on the away cell. Dutch got off to a good start: The M1315 lifted Marvin nearly 6,000 feet and the rocket returned intact in a beet field a few hundred yards away.

**Keith Gaillard** came to LDRS to launch a lot of rockets. But his main objective was shared by many flyers at Geneseo: Level three certification. Gaillard, a teacher from a Boston-area hospital who was sporting a black ATF t-shirt that looked pretty funny with his long ponytail, dubbed his tall, blue rocket Cavedigger 3.

Gaillard's 55-pound hyperteck rocket left the pad on Thursday afternoon with a loud whine that accompanied the rocket up to 3,800 feet before settling back for a perfect landing. It was the first of many level three certifications that would



**Philip Hathaway's outstanding golden Phoenix missile awaits launch on the away pads. This was a successful Level 3 certification flight on an M1419.**





Thursday, July 1: Mike “Dutch” Duchnevich (lower left) gets a hand from firends as he prepares his 5.5-inch, 12-foot-tall “Marvin” for flight on an Aerotech M1315.

occur over the next few days.

**Friday, July 2, 2004**

As everyone in high-power knows, loss is a big part of this hobby. And on Friday, it was Jerry O’Sullivan’s turn to feel the pain.

The Virginia resident built his 11.75-inch rocket with a completely removable motor housing and today the rocket was loaded with three Loki Research M2000 demonstrator motors. With a weight of 150 pounds, including altimeters and video equipment, the rocket was expected to achieve an altitude in excess of 6,000 feet. But we would never find out.

At ignition, the O’Sullivan Nike screamed off the away cell and rose high into the New York sky. The flames from each of the three Loki motors could be seen as the rocket left the pad. However, at apogee



**Dennis Lappert launched the first M at LDRS23 on July 1.**



**NAR member Keith Gaillard of Salem, Massachusetts with his Level Three Certification rocket, dubbed "Cavedigger 3." Inset photo shows Keith with his altimeter bay. His flight was successful.**

the main parachute unfurled early—causing the rocket to drift for at least 10 minutes on the 24-foot military chute. The Nike appeared to come to rest on a hill in a forest at least two miles away. It looked like recovery would be easy, but after a search that lasted into the evening, the rocket—and its valuable contents—remained missing for the next four days.

There were a lot of Nike Smokes at Geneseo on Friday—The Nike Smoke was on the mid-power pads, the high-power pads, and at the away cells.

**Mark Mazzon** launched his Smoke at the high-power pads on an Aerotech L850. The 8.25-inch, scratch-built rocket looked like a museum piece. With two Adept altimeters the Nike roared skyward for a fine flight that set the stage



**See LDRS23 page 6**



**Jerry O’Sullivan with his mighty 11.75-inch Nike Smoke—one of several Smokes that flew Friday. The rocket had a removable motor housing that contained three Loki Research M2000 demo motors. The 150-pound rocket had a fantastic liftoff and flight, but the main deployed at apogee and the rocket drifted two miles into a forest. Would it ever be found again? By Sunday, it looked pretty dismal.**

for the bigger Smokes to come.

**Dan Lord** of Michigan had an 11.75-inch, three-quarter scale Nike that weighed nearly 180 pounds and boasted some serious firepower: A central N4000, two M1350s and two more L777s. This rocket was dedicated by Lord to the lost crew of the Space Shuttle Columbia and was signed by the first pilot of the Columbia, **Jack Lousma**, who was aboard the Columbia on its maiden voyage in 1981. The handwritten inscription on Lord’s rocket by Lousma read, “To Dan—Wishing you blue skies & happy landings! Jack Lousma, Cmdr Columbia III.”

Setup of Lord’s rocket began Thursday at his campsite and con-

tinued until the rocket was driven out to the away cell on Friday afternoon. All five motors were to fire at ignition.

There was a long ten count, the crowd held its breath, and then—nothing. But wait, one of the L777s came to life and roared away on the pad. There was smoke, there was flame, there was a lot of noise, but the giant Nike did not even budge. Moments later the remaining L777 came alive—again with the same result.

Lord was disappointed, but he and his team were not giving up. Lord approached the rocket cautiously, pulled out the two unburned



**See LDRS23 page 8**



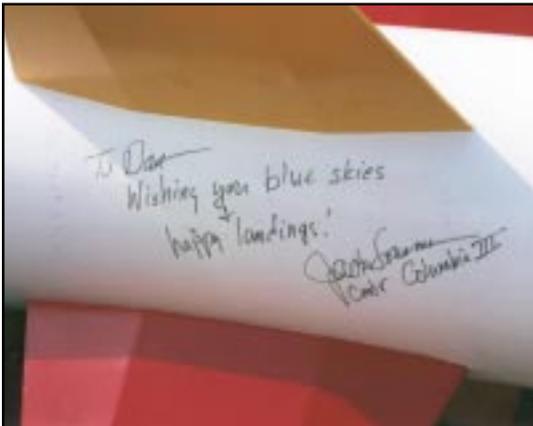
**Left: The 98mm aerotech casing is all that remained of the Tetrahedron after it crash landed, on fire, in a field.**

**On Friday, July 2 John Ritz flew his M1939-equipped tetrahedron. the rocket had a spectacular flight but there was no deployment as it caught fire in the air. The mighty machine settled down in a field and burned to the ground, literally.**





**Dan Lord's three-quarter scale Nike Smoke weighed in at 180 pounds on the pad. The 11.75-inch Nike was packed with five motors: A central N and two Ms and two Ls. The rocket had a special message from Shuttle Columbia pilot Jack Lousma.**



M1350s and made the rocket ready on the single N motor. The third time was the charm. The massive N4000 easily lifted the Nike for a great flight and a good recovery.

There were some other special projects on Friday as well—and lots of M flights. **Phillip Hathaway** obtained his level three certification on a golden Phoenix with an M1419 that cleared 7,500 feet, and

**John Russo** achieved level three on his green and white “StratoCobra” that flew to more than 7,000 feet on an AMW M1850.

A close relative of the infamous Flying Pyramid of Death—this time built by **John Ritz**—was spectacular as it left the pad Friday afternoon on an Aerotech M1939. The black tetrahedron rose on a thick plume of white smoke with a huge

flame gathered along the entire base of the craft. But as it reached apogee and turned over, it was apparent that the Pyramid was on fire! There was no deployment and on impact the entire rocket was aflame, burning everything except the tall, cylindrical motor casing of the M1939.

There were many other noteworthy projects on Friday, including



**Lord's Nike had trouble firing the outboard motors. Here, the rocket lifts off on the central N for a great flight and good recovery.**

Joe Isca's beautiful red Sprite Ring-tail that launched on an Aerotech L850, and Mark Stackpole's 57-pound Sandhawk that flew on an Aerotech M1315.

And then there was the Paralyzer rocket from the Canadian team of Rick Dunseith and friends. This huge, 80-pound, 10-inch rocket was sponsored in part by Cesaroni Aerospace and was boasting a mighty N2500 Cesaroni motor. The rocket was painted dark blue and red and in place of fins it had five ten-inch diameter tubes affixed to the aft end of the rocket.

Dunseith was expecting more

than 7,000 feet on this flight and there was no way the main was going to deploy early and take the rocket to the trees. The rocket rose majestically on the N motor for a fantastic flight and recovery. And the rocket cleared more than 7,300 feet.

#### **Bowling balls**

The bowling ball loft contest at LDRS23 was sponsored by the Arizona High Power Rocketry Association—with the addition of a segment known as "Win Geoff Elder's Money!" Elders, bowling loft ex-

tremist, offered \$1,000 in cash to any contestant who not only won the event, but who also shattered the current record of 1,981 feet on an I motor. There were several takers, including Elders himself.

These bowling ball guys are in a league of their own. They speak casually of things like computational physics, fluid dynamics, stability rings and launch tubes. Each one of these flyers is their own Ahab—and weight reduction is their white whale: Its pursuit results in rockets weighing as little as eight

**See LDRS23 page10**

ounces, but capable of withstanding the thrust of an I motor while lifting an 8-pound bowling ball. "I dumped my altimeter because it weighed three ounces," said one bowling ball flyer sternly as if he were talking about a huge number—"The new one weighs only half an ounce. That will do." But that was not even enough for some: "I took the terminal blocks off my altimeter and soldered the wires directly to the board to save more weight," said another contestant.

This year's contest was dubbed "Bowling Ball Lite" because it involved eight-pound bowling balls, and not the 16-pounders of some contests in the past. The flyers were limited to I motors and a set of rules set by AHPRA. And they were out in force on Friday and Saturday. **Dave Hash** made the trek to Geneseo from Raleigh, North Carolina and **Dave Morey** arrived from nearby Chapel Hill. There was **Richard Hagensick** from Tripoli South Minnesota and **Drake "Doc" Damerau** who hailed from Scranton, Pennsylvania. And of course there was Elders from nearby Vermont, who presumably carried the \$1000 in his pocket—just in case.

One of the first bowling balls to take to the air rose perfectly to more than 2,000 feet. Then—quite unexpectedly—the ball separated from not only its rocket, but also its parachute. All eyes were straining skyward as the tiny ball grew larger and larger—whistling and then screaming—before impacting with a heavy thud in the soft farm soil. Disqualified.

The next ball, painted bright yellow and decorated with cartoon figures, was launched by Elders. The ball was shot out of a 10-foot-tall green PVC tube. At ignition, the ball jumped out of the tube—preceded by a huge flame and burst of smoke out of the forward end of



**The Canadian team of Rick Dunseith and crew prepare his N powered, 80-pound Paralyzer rocket. The rocket was sponsored by Cesaroni Technology and had a great flight to more than 7,300 feet.**



**See LDRS23 page 12**

**LDRS AHPRA Bowling Ball Contest**

# Win Geoff Elder's Money!



The bowling ball contest was again sponsored by the Arizona High Power Rocketry Association. But this year rocketeer Geoff Elders (above, center) sweetened the pot: Elders offered \$1,000 in cash to any contestant who not only shattered the old record of 1,981 feet (on an I motor) but who also won the event at LDRS23. There were plenty of takers, but in the end Elders himself walked away with the record and his money with a bowling ball altitude of 2,755 feet. Drake Damerau (below, right) and Richard Hagensick (below, left) were close behind at 2,713 and 2,487 feet, respectively.

---



**Ed Miller of Pennsylvania with his scratch-built M-power UFO. The rocket had a great flight and was a favorite of the crowd and the crew from Popular Science magazine.**

the tube. “No friction is the key to this event,” said Elders as the ball lifted perfectly before returning on a parachute intact. A possible record?

Another contestant used a shorter, carbon-fiber type tube for a similar launch and effect. Still other flyers relied on rails or, in the case of Richard Hagensick, a custom-made aluminum launch tower. On Saturday Hagensick’s bright blue bowling ball took to the air from his rail for a beautiful flight to 2,487 feet—easily breaking the old record of 1,981. Would it be enough?

“I like this contest because it is weird,” said Hagensick. “I didn’t like it at first, but somehow I became intrigued about how light you could build the rocket and have it survive the flight.”

A unique challenge seemed the key for all the contestants. “Someone told me I couldn’t do it successfully and that’s really all it



**Miller’s UFO on an M2000 redline motor.**

took," said Doc Damerau, adding, "Science rules!"

As it turned out, Elders kept his \$1,000—and walked away the first place winner. Elders, Damerau and Hagensick shattered the old record with altitudes of 2,755, 2,713 and 2,487, respectively.

### **Saturday, July 3, 2004**

**Ed Miller** can make just about any object fly.

Miller, a resident of Jonestown, Pennsylvania is an employee of the Hershey Food Company. Earlier in the launch, Ed flew a large, upscaled Hershey Hug candy treat on a J800! But the real treat for the crowd was his launch Saturday of his bright orange Flying Saucer. This was Ed's 1997 level three certification rocket and he brought it out of retirement for LDRS23. Miller molded the hemispherical nose cone in fiberglass over a light bulb. The whole saucer is four feet in diameter. All this, and M power, too! Ed's UFO shot straight off the pad under the bright flame of an M2000 Redline motor for a spectacular flight and excellent recovery.

Saturday's crowd was big, with lots of spectators. And everything was flying: Bowling balls; small, medium, large and giant rockets; flying saucers, rocket-boosted gliders, beer bottle rockets—you name it. The guys from MDRA were the host

group of the afternoon and they came prepared. Their pad managers did everything—escorting rocketeers to individual pads, lowering the launch rod and even wiping the rods clean! All afternoon the air was filled with sights and sounds,

including multiple rockets on chutes, beepers, and the "bang, boom, bang" of redundant ejection charges.

**Dennis Lappert** (pictured below) returned to the away cell with his pearl green, 82-pound Saab mis-

sile which had a good ride on a Loki Research M3210 demonstrator motor and Dan Michael sent skyward his scale Patriot on an M1315. And the team of **Chris Girard and Blair Dupont** fired off their blue and silver flamed creation on an L1120.

It was also a day of drag races, including two 7.5-inch Fat Boys sent skyward by **Rich Pitzeruse and Mike Scicchitano** to the delight of the onlookers.

But there were mishaps, too.

Young rocket scientist **Woody Hoburg** came to LDRS23 with one of the biggest up-scale Mosquito's ever created. Nicknamed "The Bug" this beautiful

creation was an attention grabber all day as Woody prepped the rocket. It was over 100 pounds and had a diameter of 16.5 inches! The rocket was sporting a flashy red and yellow paint job and was covered in fiberglass. The Bug was carried like a beast by several men to the



**See the full version of this story in the Sept-Oct 2004 issue of Extreme Rocketry magazine**

**See LDRS23 page 15**



**Woody Hoburg's fantastic 100-pound upscaled Estes Mosquito. The rocket launched Saturday on two M1315s and airtstarted two more K570s. The Mosquito boosted perfectly and rose to at least 2,000 feet. But when the rocket turned over, the parachute failed to fully deploy. The Mosquito struck the ground hard but was remarkably intact--a testament to Hoburg's strong construction skills.**



away cell and carefully loaded in position. The rocket was powered by a cluster of two M1315s which would light on the pad and two more K570s which would airstart.

The Bug climbed off of the pad and accelerated perfectly, trailing a tremendous column of white smoke. The flight looked perfect, but suddenly, near apogee, the nose seemed to pop off early and the rocket turned over and headed back—with separation but no deployment. The rocket picked up speed and impacted with a thud near the parking area but damaged only the ground and, unfortunately, the rocket.

The members of the host Buffalo Rocketry Society (BRS) got in on the upscale action Saturday, too. Their upscale Estes Mean Machine stood nearly 20 feet tall and was packing a mighty M1419 in its four-inch airframe. It lifted perfectly and had a good flight.

Another upscale Estes: The NAPAS project by Rick Dunseith and the crew from Canada. This was a bright green, shark-looking rocket that had a nice ride on a Pro98 M 2505.

There were more level three certifications, too, including **Blake Prince's** beautiful white Phoenix. Blake, a corporate pilot from Allentown, Pennsylvania, came to LDRS with his son **Wes**, who in September will be joining the Air Force. The two spent hours getting the rocket ready. "I've been nervous about this launch since March," said Prince as he went over the details of his certification. He didn't need to worry. Entirely scratch-built except for the huge 11.25-inch PML nose cone, the Phoenix rose on M power for a great certification ride on Saturday afternoon.

Another father and son team at LDRS23: **Mark and Josh Hanna**. Mark took a shot at level three certification with his silver and red

[See LDRS23 page16](#)



Members of the NAPAS project pose with their cool rocket prior to launch on Saturday afternoon.



The NAPAS rocket lifts on a Pro 98 M2505



**Blake Prince and his son Wes came from Pennsylvania with Blakes 11.25 inch scratch-built Phoenix for a successful Level 3 certification on M-power saturday afternoon.**



Aerobee 150 that left the pad with a huge plume of white smoke. Later, son Josh launched a scale IRIS on a K1275.

One of the last flights of the day was **Robert Dehate's** "Orient Express" on an AMW N3400. This rocket was a beast on the pad and at the last moment it was discovered that the N motor would not quite fit all the way into the motor tube. So the rocket was removed from the rail and the booster was inverted on the ground. Dehate jumped on top of a hay bale, reached as high as he could and then dropped the bottom end of the N3400 perfectly in place. Robert gave the motor a few extra smacks with his hand and that was it. The rocket was reloaded on the rail and then it roared off into the sky.

But Saturday wasn't over yet. It was getting close to 6 and by now Floridian **Rick Boyette** from Tripoli West Palm was setting up one of the coolest looking rockets of the entire week—his scratch built, five-motor scale version of the Chinese Long March rocket.

Boyette, who flew to LDRS from West Palm Beach, had the huge Long March shipped to Geneseo. It took some planning: The more components you can break it down to, the better, explained Boyette. "It's usually cheaper to send two smaller boxes than one huge one because then the oversize charges kick in," he added. "I shipped three boxes," said Boyette, "The key is to pack it yourself and allow 4-5 days so it can go on the ground. The fourth box I took on the plane with me. It was over the size limit by a few inches but they did not charge me the \$25 surcharge. I guess I looked pretty pitiful." The total cost for the shipping? About \$60, with UPS Ground.

On the pad with a central L952 and four I205s, Boyette's rocket was impressive.

At ignition, the 72-pound Long



**Keith Gaillard helps load Robert DeHate's N-powered Orient Express on the MDRA launch pad at the away cell. The rocket had a great flight.**

March came to life, lifting effortlessly and climbing under the combined thrust of five motors—higher and higher and then...boom! The rocket suddenly shredded mid-flight, raining debris down in the vicinity of the away cell while also dropping the nose cone and some of the main body on separate chutes.

What happened? "The #2 booster came apart at the coupler joint between the salvaged motor mount and the new section of tube forward of the fins" explained Boyette later. "Apparently I never properly glued the tube to the coupler. D'oh!" Down, but not out, Boyette never lost his sense of humor.

#### **Sunday, July 4, 2004**

The mid and high-power pads were brisk with activity on Sunday and the away cells had a few more

**See LDRS23 page 18**



**Robert DeHate's huge rocket takes off on an N3400!**



Long time Tripoli member and Level 3 TAP Rick Boyette of Tripoli West Palm (left) and friend Gary Dahlke prepare Boyett's Long March on a central L motor and four outboard I motors. The beautiful rocket had a great liftoff but came apart several hundred feet in the air. For a liftoff photo, see cover.

big launches, most notably a 170-pound rocket by **Steven Boyd** of Massachusetts.

The 16-foot-tall rocket was a monster on the pad with an AMW N4000 motor. This was one big rocket and on ignition it was ear-splitting for those close enough to feel the heat. The rocket rose on a good trajectory to at least 4,000 feet before spitting out its valuable N casing at apogee and mistakenly deploying the main 24-foot chute early.

Bowling ball contestant **Drake Damerau**—who flew all types of rockets at LDRS at all of the pads, launched a good-looking Bullpup Sunday on an L777 from the away cell. Later, one of Drake's rockets caught fire on the high-power pads, leading to a charge of the bucket brigade to douse **the flames**.

Mark Mozzell also sent up his 85-pound rocket, "Ready to Rumble," on an AMW M3000 Super Tiger and the team of **Robert Sieger and Mark Polansky**





**Friends and rocketeers Rich Pitzeruse (left) of New York and Mike Scicchitano of South Carolina built two 7.5-inch Fat Boy's for a fun drag race Saturday afternoon on K-power. Despite several aerial photographs, the winner is still in dispute. Litigation over the matter is pending.**

launched their gigantic, 16-foot-tall "Heavy Metal Thunder" on an L1080.

As Sunday wore on the wind started to pick up—a breeze gave way to fierce and finally a small gale around 3 pm, when launching stopped. Launching resumed briefly again, but the winds returned and the event was stopped around 4—it was time to visit with friends and celebrate the Fourth of July and relax.

The saga of **Jerry O'Sullivan's** missing, multiple-motor Nike continued. Poor Jerry and his friends had now spent hours and hours over three days looking for the rocket—to no avail. "I was out there again last night," said a tired but still optimistic O'Sullivan. "As I got farther



**This unidentified man carries a great-looking star spangled rocket—perfect for the Independence Day weekend**

**See LDRS23 page 20**



Mark Mozell's "Ready to Rumble" screams off the pad on an AMW M3000



Mark Polansky with his cool-looking "Blast Off Brew" which flew on 3 J motors!

The long-distance flyer award had to go to Steve and Joanne Sawyer from San Jose, California who made the drive across the nation for LDRS23. The Sawyers are proud members of Tripoli Central California. The person who travelled the longest distance overall for LDRS23 had to be Tripoli TAP David Wilkins (inset photo) who made the trek from Australia!



and farther away from the road, the forest got real quiet and dark," he said. "Then I stepped in the huge paw print of a bear track and I knew it was time to quit!" Still, the search would continue. At the Tripoli Banquet O'Sullivan offered a \$500 reward for the lucky finder.

**Monday, July 5, 2004: Ex Day One**

The first day of the experimental launches—no commercial motors allowed—was a day of stops and starts and really big stuff at the away cells. But not all of it would be able to get into the air.

First up, **Neil McGilvray** with his father, **John**, with their joint project "Cats in the Cradle" named for the popular song by Harry Chapin. This was another pyramid rocket. It stood several feet tall and weighed in at a whopping 170 pounds loaded on the pad with an

## Experimental Day 1



### “Cats in the Cradle”

MDRA member Neil McGilvray and his father, John, (top, right) built their “Cats in the Cradle” for flight on Monday’s EX day. The 170-pound rocket was powered by an N4500. The nosecone alone weighed nearly 80 pounds. Top left: Dave Weber, John and Neil wrestle the rocket into place. Bottom, left, Deb Koloms, Dave Wilkins and Neil take a final look. Bottom, right: MDRA member Dave Weber with the all important igniter for the N4500.



**Robert Utley, right, and Neil McGilvray with Utley's beautiful "Sky in my Eye" on an EX M1350. Opposite page: The rocket CATOs on the pad. Inset, below: McGilvray picks up some of the pieces.**

Ex N4500 motor. The nose cone alone weighed 76 pounds. The rocket had more than 14 grams of black powder for ejection charges and multiple altimeters and other electronics to ensure separation and deployment of the chute.

As Neil and his efficient team set up at 9 am it was getting warmer and a bit humid and the winds were starting to pick up. This complex rocket was one of the fastest to be assembled on the away cell for the entire week.

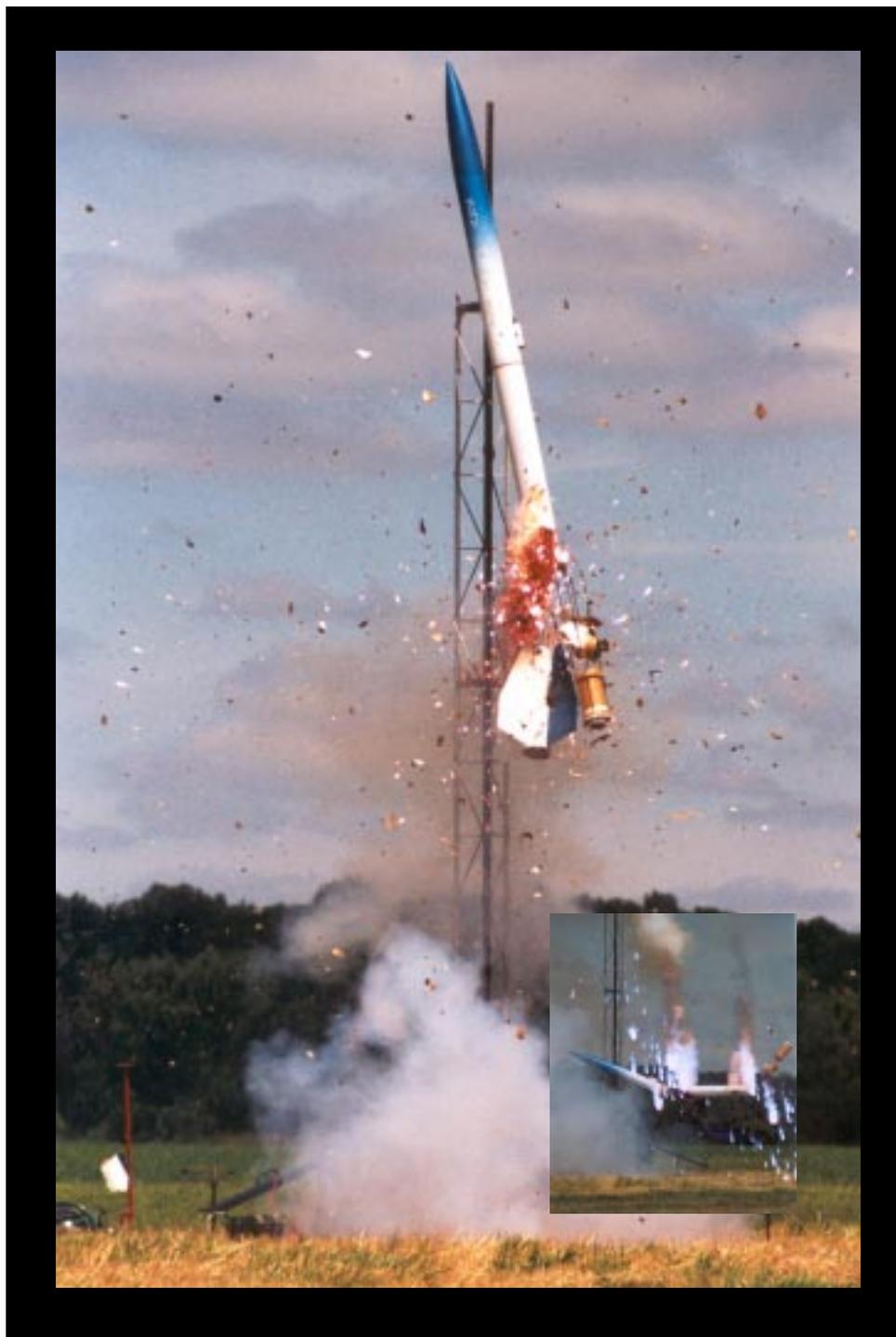
Finally, the go ahead was given for Cats in the Cradle. At ignition, the huge pyramid shot off the pad and rose perfectly on a long red flame. It was quite the sight, and very loud, as the blue pyramid arched skyward and slowly turned over at apogee near 2,000 feet. Multiple chutes deployed and the rocket descending gracefully into the hay field.

Meanwhile, there was Jerry O'Sullivan again. As we all waited for Neil's rocket to be cleared for launch, someone in the crowd drove over to the airfield and asked the pilot of a small civilian plane if

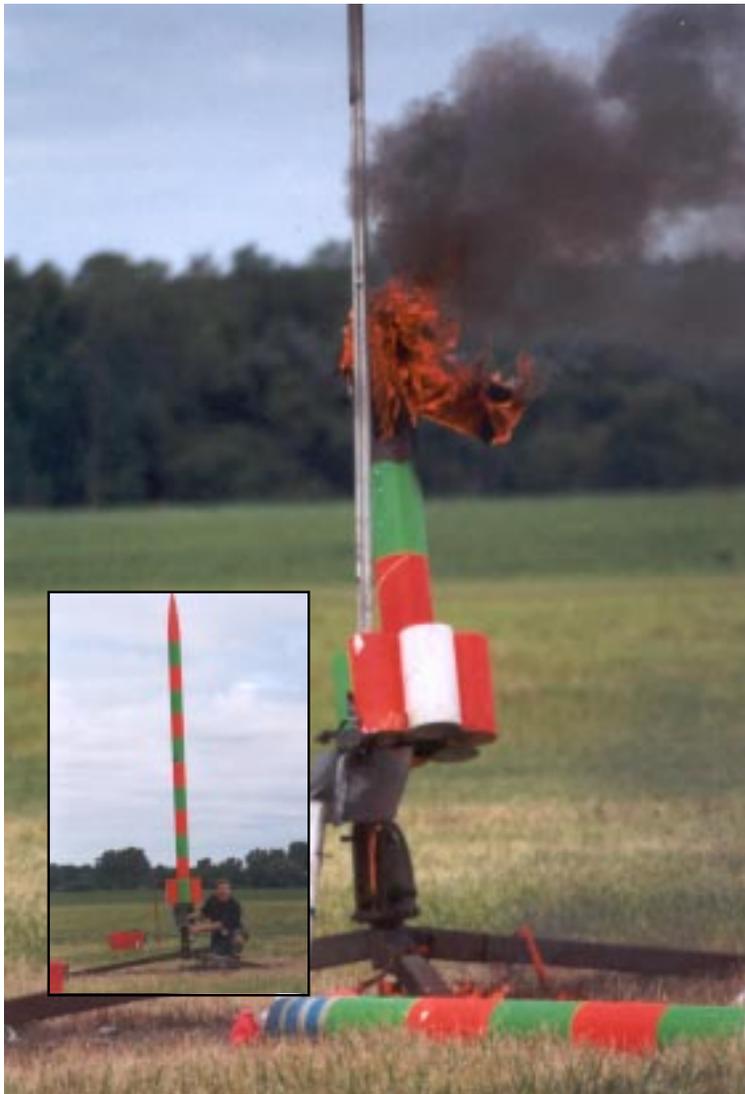
**See LDRS23 page 24**



## They don't call it experimental for nothing!



Robert Utley's 14-foot-tall "Sky in my Eye" camera equipped rocket CATOs on the pad under EX M power on Tuesday afternoon. Photo by Mark Canepa



**MDRA member Dave Weber brought out this fine-looking tube-finned rocket on Tuesday for launch on an EX motor. The rocket had a spectacular CATO on the pad.**

he would take off again and search the far ridge for the still missing Nike Smoke.

By now, Jerry had philosophically let go of his rocket. The Nike belonged to the forest—M motor casings, altimeters and all, said Jerry. But not so fast—the pilot of the small plane agreed to take a look so as Cats in the Cradle sat on the pad all eyes watched the plane circling and circling over the distant ridge...and when the plane landed—it was great news! The student pilot had spotted the chute from the air in a section of dense

forest. Jerry, not too excited yet, crossed his fingers and vowed to take another look.

#### **Tuesday, July 6, 2004**

They don't call it "experimental" for nothing. On Tuesday, we learned why.

But first, there was good news from Jerry O'Sullivan. He had his Nike Smoke back, without a scratch. On Monday it took searchers less than 10 minutes to find the rocket after being spotted by the airplane that morning. Jerry was

all smiles Tuesday—and even treated himself to a ride in a Warbird as rocketeers set up on the away cell. The moral of the lost Nike story, said Jerry: "They always land farther away than you think!"

It was time to launch. **Dave Weber** started things rolling with his orange striped "Super Tuber" on an Ex 6,000 Newton-second "Blue 22" load. This tall, fine looking six-inch rocket had multiple body tubes in lieu of fins and the expected altitude was 3,600 feet.

The "Super Tuber" travelled about a foot. In a spectacular flash, the motor catoed with a boom on the pad, sending debris everywhere and leaving the bottom end of the rocket a flaming, smoking hulk on the pad. "That's why the call it experimental!" yelled the good-natured Weber to his fellow rocketeers as he surveyed the damage.

Next up—**Robert Utley's** video camera equipped "Sky in my Eye" that had been set up on Monday before the big winds forced its early retreat.

This was another Ex load—an M1350. This rocket looked great on the launcher and the countdown began: 5,4,3,2,1—KABOOM! As seen by the photo on page 23, the mighty rocket disintegrated on the pad—the second cato in a row and even more dramatic than the first.

Once again, the man with the body bag was ready. "I didn't realize how heavy this rocket was until I had to drag it in a bag behind me!" said McGilvery as he hauled the rocket away in a plastic bag.

These experimental guys have to have a sense of humor—and they do. Like Dave Weber, Utley was philosophical about the loss of his rocket. Are you having a good time, Robert? "Absolutely!" he replied. "It's just a rocket!"

Next up on the EX away cell: John Ritz. Would this be cato number three? Nope. As John's rocket



**EX drag race! The rockets of Joel Rogers, left, and Robert DeHate, right, are loaded for a drag race on Tuesday afternoon, July 6. Both rockets were powered by 75mm L1200s. Below, the rockets lift on L-power as Joel and Robert look on.**

rose on a perfect trajectory the MDRA crowd chanted: "You broke the curse, you broke the curse!"

And now it was **Jim Livingston's** turn.

His Viper red rocket was ready on the pad as the B17 Flying Fortress suddenly reappeared for the first time in days. As the big plane circled and landed Livingston had the same nervous smile on his face as the day before. He also waited until the B17 was parked a long way off—"just in case" as he put it: The M3300 ignited and roared into the sky for a fine flight, with only minor deployment problems on its return.

One of the last flights on Tuesday was a drag race on experimental L motors between **Robert DeHate and Joel Rogers**. Both good-looking rockets were powered by three grain, 75 mm L1200s. Both missiles screamed off the pad at ignition. Photo analysis revealed that Robert's blue sky-painted



**See LDRS23 page 28**





rocket beat Joel's red monster by a rocket length. Both rockets settled back with textbook landings.

It was the last day of LDRS and people were packing up and hitting the road. Back to Maine, Florida, Wisconsin, California—for **Steve and Joanne Sawyer** of San Jose— and even to far away Australia for Tripoli board member and Australian TAP **David Wilkins**. The event had been fantastic. There had been hundreds of flyers and more than 40 M flights had taken place. More than 1,200 rockets had been flown.

The service provided by the dedicated volunteers at BRS was superb. But you could tell they were getting tired. After all, they have lives, too. And this event had consumed their lives for not just the last six days, but the previous six months, at least.

Theatre costume designer and BRS official **Doug Caskey** compared the event to his regular full time job. "I can relate it to the theatre," Said Doug as he took a rare break Tuesday morning, sitting on a hay bale for only a moment. Caskey and his fellow BRS officers had not slept more than a few hours a night for days. "Hosting LDRS is like doing a live show," said Caskey. "For weeks or even months we work, work, and work and then boom—it's time for the show. It's all so nonstop. And then suddenly, it's all over."

---

**Note: the above story was a condensed version of the story that appears in the September-October issue of Extreme Rocketry magazine. For the complete story, order a copy of Extreme Rocketry at [www.extremerocketry.com](http://www.extremerocketry.com). To contact the author, email Mark at [moparmbc@aol.com](mailto:moparmbc@aol.com)**



**BRS members Doug Caskey, left, and Lloyd Wood take a rare breather during the six days of high-power activity at LDRS23 in Geneseo, NY.**



**Unfortunately, it had to end...until next year in Canada!**