

Volume 2, Issue 4

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## INSIDE THIS ISSUE:

<i>August Launch Report</i>	1
<i>Be sure to sign in</i>	1
<i>September Launch</i>	3
<i>Altimeter Update</i>	3
<i>Recovery of the Nike Smoke</i>	5

## 2008 Launch Dates

- April 12 (Gumbert's)
- May 3 (MIS)
- June 21 (MIS)
- July 26 (MIS)
- August 23 (MIS)
- September 6 (MIS)
- October 11 (TBD)
- November 8 (Gumbert's)
- December 6 (Gumbert's)
- December 7 (Christmas party—Annual meeting)

NOTE: Launch dates are subject to change without notice. Be sure to call the "launch hotline" at 517.262.0510 for the latest weather and field information.

## AUGUST LAUNCH REPORT

JMRC's August launch was held Saturday, August 23rd, at Michigan International Speedway, south of Jackson. The weather started fair but breezy, but by mid afternoon the temperature went up towards 90, and it got pretty hot on the field when the breeze died down. The ground was pretty hard, with dried out grass, and not much "give" for those harder-than-anticipated landings!

25 people flew rockets in August, putting up 92 rockets on 113 motors, which ranged from A to J. Eldred Pickett took the top spot in all 3 categories this month, with 13 motors used in 12 launches and burning 2,198 NS of thrust. Eldred's largest rockets to fly were (of course) crayons. Both his Pink Crayon and Tube Fin Crayon flew on J280 Smoky Sam CTI motors. Both rockets flew dual deploy, with mains deploying at 300'. At least one of these flights went "other than nominally", but were great launches to watch.

On top of all that flying, Eldred still had time to take many good pictures of the launch for the members to enjoy. Way to stay busy Eldred!

Paul Hilse flew 2 high power rockets on Saturday. Both his Firestorm (H144) and Sky

Deamon (I405) flew drogueless, with their mains set at 300 and 500 feet respectively.



## BE SURE TO SIGN-IN

Please remember that there are metal clipboards for all members and guests to sign-in when they arrive at our launch. The club needs to keep an accurate record of who is at our launches, in the event our NAR or Tripoli insurance is ever needed.

The member clipboard has all our members listed, as well as launch fees and membership information. Please be sure to sign in EVEN IF YOU ARE NOT FLYING THAT DAY!

You can also pre-pay your launch fees, and the amount remaining on your account will be displayed on the list.

The non-member clipboard gathers information from guests, and gives us a chance to follow-up and invite them to join the club.

Let's all try to remind each other over the coming months to sign-in. That way, everyone is sure to keep their flight fees and dues current, and the Club has the revenue it needs to continue and grow!

Also, remember that if you see someone looking around, welcome them to the launch, and ask if you can help them get the lay of the land.

# AUGUST LAUNCH REPORT (CONT.)



Mickael Lysic flew 6 rockets for 7 flights, including his G-powered scratch built, and his well-named rocket, "Spaceman Spiff's Flaming Meteor of Doom"!

Gabe Osborne had 3 dual deployment flights. Big Red Crayon flew on a G80 motor, and deployed it's main at 300 ft, as did Raptor. Gabe's Nike Smoke, however, flew on an I566 motor, and while his main deployed properly at 500', his rocket ended up in a rather notorious patch of

Stealth did not fair so well. The rocket boosted perfectly on a J525, but never deployed and came in ballistic for a bucket recovery.

rocket-eating trees to the east of the launch area. See Gabe's article in this issue about his adventures in retrieving his rocket.



As always, it's the hard work of the volunteers that make these launches a success. Thanks to everyone who came early to help setup, or stayed late to help tear down, or both! Thanks to our vendors, Miller Motor Works, Red Arrow Hobbies, Impulse Buys, and Fade to Black Rocket Works for supporting our hobby. Also, thanks to Roger Sadowsky for bringing out the launch trailer, and acting as LCO for most of the day.

Photo courtesy of Eldred Pickett and Buzz Nau

Carl Wagner flew his "Darth Vader Unleashed" rocket on a V-Maxx I motor. The all black rocket, which is made from a water jug, Tore off the pad for a very exciting flight.

Tom Kurecka put up 5 rockets, including his Plum Crazy, which flew on a CTI J285, deploying drogueless at apogee, with the main deploying at 700'. Tom's all black



## SEPTEMBER LAUNCH REPORT

JMRC's September launch was held Saturday, September 6th, at Michigan International Speedway, south of Jackson. The weather was quite nice, with temperatures in the 70's, clear skies, and variable winds. The ground was pretty hard, with dried out grass, and not much "give" for those harder-than-anticipated landings!

27 people flew rockets on the 6th, putting up 125 rockets on 136 motors, which ranged from A to J. Buzz Nau has a very busy day, with 22 motors being lit on 19 launches. The moderate winds we had were good flying weather for Buzz, as many of his flights were gliders. Buzz's Sky Dart alone flew 5 times. Buzz also found time to take many great photos of his, and other members' rockets.

While Buzz had the greatest number of flights, and motors used, it was Dale Hodgson who burnt the most propellant, with his 1 F- and 3 I- powered flights.

We had 2 members attempt certifications flights on the 6th. Ed Schwerkolt is a high school teacher who has shared his love of rockets with his students, and their TARC team qualified for a trip to Washington DC to compete in the National finals last May.

Ed decided it was time to certify high-power and honored his TARC team's accomplishment by flying his L1 flight with 2 raw eggs in his rocket! (Several members kidded Ed that he had to return the eggs unbroken to get his certification.) Ed scratch built a 1/2 scale Navy ASP as his rocket, including a motorized launcher that lifted the rocket to vertical on its launch rail for flight. Both Ed's launcher and rocket worked perfectly, with his rocket flying on a H153 motor. As Ed's rocket landed with no damage (as well as his eggs!), we welcomed Ed into the ranks of high power flyers! Ed's article on building the launcher and rocket will be in the next issue.



The other member attempting a Cert flight was Steve Kristal. Steve has had a great summer this year with his Apollo Pad Abort model, including photo coverage in Launch magazine, and winning a national video contest on the rocket's construction. Unfortunately, Steve's luck wasn't with him today, with 2 unsuccessful attempts at his Level 2. His Warlock flew first on a CTI J285 motor, but separated the nosecone from the rocket at apogee. All the parts recovered undamaged, so Steve re-assembled the rocket, and put it up again, this time on a Loki J528. The rocket failed to deploy at all this time, and came in ballistic, ending Steve's attempts at his Level 2 for the day. While Steve has had a run of poor luck on getting this level, his excellent rocketry skills are sure to overcome the rocket demons next time!

## ALTIMETER TESTING UPDATE

By Dale Hodgson

I wrote an article about different altimeters that was in a past newsletter but thought I would add the following paragraph. After the paragraph I do have some news about the "fix;" so read on:

A new version of the altimeter (ARTS 2) is now available with even more capabilities such as the option of adding a second 9v battery to ensure proper event operation. In discussions with Jeff Taylor, some of the original ARTS boards suffer a "brownout" due to single battery operation that could be caused by resistance in solder connections, slightly lower battery voltage or type of ematch used. I had

two incidents with one of my ARTS boards, the first at NARAM last summer. Both flight events happened as programmed but the retrieval data was skewed; it looked as if some of the data was "ghosted" onto another flight (I found out later exactly what had happened). Then, at XPRS I flew the same board to 13K in my Vertical Assault. The apogee event separated the rocket but the main didn't deploy; the rocket suffered some damage but is repairable and will set nitrous cover blankets afire again (but that's another story!).

I sent the altimeter to Jeff at Loki, he ran a complete diagnostic and told me there was nothing wrong with the altimeter itself. But, the data showed

that the altimeter suffered a CPU brownout. That is what the "ghosted" profile was; the altimeter detected low voltage and reset itself. Jeff's explained that this started showing up when Oxral and Davey Fire ematches were getting hard to acquire. According to him the M-Teks sometimes take a very slightly higher voltage to fire. Coupled with the other factors that may be involved (connections, solder resistance, lower battery) it could be just enough to cause an ematch not to fire. It is interesting to note that in both cases my altimeter did not identify any low-voltage situations and did not alarm.

I have experimented and successfully flown the Arts boards since that time

## SEPTEMBER LAUNCH REPORT (CONT)



The club's youngest member, Sam Kelly, had 7 flights today, including His D powered Speed Demon, and His Flash Pan Fat Boy. The 4 C engines in this rocket were lit with a generous helping of BP in the flash pan, and his fat boy rose out of the resulting cloud for a nice flight.

James Fustini had 9 launches, 8 of which were D powered. His Upscale Skeeter flew twice on D motors, and Onyx flew on a F26. Jim also had flights of his Big Daddy, Fat Boy, and his beautiful Monster Energy can rocket.

Bob Dickinson broke out his V2 fleet, with flights of his 3 identically painted rockets ranging from F to J power. All 3 rockets flew fine, as did Bob's other 5 flights from his non-V2 fleet. Bob's next project, a 1/4 scale V2, will take him into L3 territory.

Tom Kurecka's 6 flights ranged from a C6-7 powered Arcas, up to Plum Crazy, a beautiful purple rocket that

flew on a J Smoky Sam motor. The finish on Tom's rockets is the envy of most other members, and Purple Haze is no exception.

Kathy Miller had several model range flights, and 1 high power. Her Warlok was flown on an I800 with a 7 second delay. The Warlok was unusual in that it carried a passenger, Curious George the monkey. George was carefully checked for vertebra before the flight, and the RSO was assured that George's polyester stuffing did render him an invertebrate. Unfortunately, the V-maxx powered boost must have upset Curious George, because he forgot to deploy the chute. Although the Warlok came in ballistic, Kathy assures us that George escaped relatively unharmed, and will certainly fly again.



Eldred Pickett continued to show what can be done in a single day's flying by putting up 14 different rockets with motors ranging from B to I power. Surprisingly, Eldred's big flight of the day wasn't with a crayon. Eldred's Bull Pup went on a nice flight powered by a I285 motor. Between all the flying, Eldred also captured many great pictures of the launch, including several of the photos that accompany this article.

The Palmers were back after an extended absence at JMRC launches. Mark put up 3 rockets, including a MiniMagg on a H144, and his G3, flying dual deploy on a J712 motor.

Emily was also there, flying her usual snitches, this time once on an H motor!

As the day wound down, the Dubauchery brothers were up to their usual hijinks. This month, the dragrace was to be between Dales' 5.5" Fat Boy, and Fred's Quark, both flying on I430 motors. Dales Fat Boy upscale flew dual deploy, with main at 550', and Fred's Quark deployed its main at apogee.

As always, it's the hard work of the volunteers that make these launches a success. Thanks to everyone who came early to help setup, or stayed late to help tear down, or both! Thanks to our vendors, Miller Motor Works, Red Arrow Hobbies, Impulse Buys, and Fade to Black Rocket Works for supporting our hobby. Pinky and crew for their contributions to the nice lunch everyone had. Lastly, thanks to Roger Sadowsky for bringing out the launch trailer.

Photos courtesy of Eldred Pickett and Buzz Nau



## ALTIMETER UPDATE (CONT.)

using two different battery configurations that Jeff suggested. One setup is to use a 9.6v/1600mAh battery pack available at Radio Shack. The battery pack actually tests out closer to 10.5v. It's a heavier type battery pack but serves the purpose well. The other "fix" I have and is successful is to simply use two 9v Duracell batteries wired parallel (positive to positive/ negative to negative). This pack also seems to

supply the extra punch that is needed.

I'm sure others will come up with more options but these two are pretty quick and inexpensive fixes.

Both fixes seem to work well for the original Arts boards. I guess the ultimate fix would be to get an Arts2 board but that can be pricey.

Coincidentally, this phenomenon has not occurred with any of the PerfectFlite models to date.

That's it for now! I'm currently testing an apogee event only altimeter; results will be coming later on.

Fly 'em high, but fly 'em safe!

## RECOVERY OF THE NIKE SMOKE

By Gabe Osborn

On Saturday August 23<sup>rd</sup>. I had 3 flights planned for the day. Little did I know that I would be trudging through swamp muck and riding on the back of the Mule looking for my Nike Smoke.

The rocket was a Polecat Aerospace 5.5" Nike Smoke with the Dual Deploy kit and a 75mm motor tube. I had finished the rocket with an AeroPack motor retainer and the electronics bay carried an ARTSII for deployment. I was also going to be testing a Rocket Rage parachute for that flight.

I had decided after running simulation after simulation on RockSim that I would be using a CTI 5 grain, 38mm I540 for the flight. I am cautious about safe distances and landing anything on the track. The I540 simmed out to roughly 1300ft in altitude, so I decided it was a good match for the field.

Around noon on Saturday I made sure that my ARTSII board was configured properly for the apogee event, as well as the main deployment at 500ft. I then proceeded to build the I540 and get it installed in the rocket with help from Scott Miller. Fitting a 38mm motor in a 75mm tube took some help from Dave at Red Arrow and some improvising on mine and Scotts end of things. After the motor was in, the rocket weighed 15lbs on the pad.

After some pad management, I was ready to go. It was my first flight using an ARTSII board and I was quite fond of the rocket also, so needless to say, I was nervous. As Dale counted down to zero and pressed the button for ignition, all I could see in my mind was the rocket softly touching down in the grass waiting for me to come pick it up. After an incredible boost on the I540, I watched in anticipation as the Smoke coasted to apogee and waited for the event. The event occurred right on time. Along with it also came the main chute, at what turned out to be roughly 1150ft. As I watched the nice new chute open up I thought to myself "I may never see this rocket again". That is not a good feeling.

When the Smoke finally disappeared behind the tree line to the left of the waste tank, I made my way to Roger to see if he could help me find the rocket. Roger and I spent probably a good hour or more looking through the woods and down the side streets around the track but to no avail. Later in the day Tom Kurecka and Rob Dickinson had also lost rockets to those evil trees near the waste tank. Roger, Tom, Rob and I all went out to try to find any of our lost rockets. Once we go to the tree line, approximately 21ft to the left of the two dead trees north of the waste tank, we entered the woods. Tom K. went in ahead of Roger who even had a machete in his hand, and took off into the woods. I have to say that Tom must have some crazy drive to get rockets back. He was ahead of the machete wielding Roger and got to a point roughly 300ft in the woods and pointed to the Nike Smoke. I couldn't have been more relieved.

The rocket turned out to be draped over two trees roughly 35 feet off the ground. It was clear that I wasn't getting it back that day, but I was determined to get it back. Not only was it a nice looking rocket, I wanted my parts back and the data on the ARTSII.

After the launch on Saturday I started thinking about whether or not I knew anyone who works currently or who had worked in tree service before. Fortunately I remembered a good friend of mine who used to be in the business. I proceeded to give him a call.

After calling Barry Gibson up at MIS, I was given permission to make a recovery attempt. My friend Julius and I made plans to be at the track on Friday morning at 7:30 am. I had to go out of town on Wednesday morning and on my return Thursday morning, just after I had pulled in my driveway the radiator in my car sprung a leak. At that point the recovery was in grave danger in my eyes. I managed to coax Julius into driving after I assured him there would be reimbursement. I had been watching the weather all week long and it had not rained at all. Until Friday morning. On our way there.

By 7:30 we were attempting to run a nylon

rope over the shock cord between the booster and payload bay. After 30 minutes of trying, it was clear that it wasn't going to work due to the foliage in our way. Julius had brought along his chainsaw and he offered to cut the trees down. I knew this was our only shot at getting it back, but I didn't want to upset anyone at MIS and possibly lose our launch field. I made the call to Barry, who was on vacation due to the holiday. I was then transferred to someone else that did the grounds work, who was also on vacation for the holiday. The third time was a charm for me when I spoke with Tim who also worked for the grounds crew. Tim called Barry to make sure felling the trees would be ok and much to my satisfaction, gave us the go ahead.

After getting back into the woods, we made our cuts and in a matter of 10 minutes I was untangling shock cord from the branches. I was extremely happy to have my rocket back.

After inspection of all the parts I was truly amazed. The chute had come out of the trees with absolutely no damage. The electronics were dry as a bone. The only damage was a 4" and a 1" zipper in the booster from being pulled on by the falling trees. I could hardly be happier.

The booster section now has 5" of fiberglass around the top to repair the zippers and will be painted this week sometime.

The altimeter recorded roughly 1150ft in altitude. My main question was why did the main come out at apogee? I forgot 2 of the 4 shear pins.

Jackson Model Rocketry Club

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*Blast off with Rocketry!*

*The Jackson Model Rocketry Club (JMRC) is a prefecture of the Tripoli Rocketry Association (Prefecture 96), and the National Association of Rocketry (Club 620). JMRC is a 501(c)3 tax-exempt organization, and donations to the club are federally tax-deductible.*

*Prefect—Scott Miller*

*Vice Prefect—Roger Sadowsky*

*Secretary—Rob Dickinson*

*Treasurer—Paul Tobias*

*JMRC holds launches monthly (weather permitting) year-round from two primary fields in the Jackson area. The club has launch equipment sufficient to launch any rocket from the smallest Estes model to large high power rockets, including hybrids. Waivers are 5,000 ft. AGL or 9,000 ft. AGL, depending on location. To find our next launch, or for more information on JMRC, see our website, [www.jmrconline.org](http://www.jmrconline.org), or call Roger Sadowsky at 517.764.7514.*

**OUR MEMBERS IN THE FIELD...**

