

Jackson Model Rocketry Club

JMRC NEWS



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July 2008

INSIDE THIS ISSUE:

<i>June Launch Report</i>	1
<i>Be sure to sign in</i>	1
<i>July Launch Report</i>	3
<i>Oh What a Feeling!</i>	3
<i>RIM-24 Tartar</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.

JUNE LAUNCH REPORT

JMRC's June launch was held Saturday, May 21st, at Michigan International Speedway, south of Jackson. The weather started fair but breezy, but by mid afternoon the thunderstorms rolled in and everyone scrambled to get buttoned up for 2 short but intense thunderstorms. While the huge runoff puddles did provide some entertainment for the kids, the wet weather did drive many folks away, and not too many were around to enjoy the beautiful weather that followed. Those that did stay enjoyed a great

group effort dinner. It pays to stick things out!



34 people flew rockets in June, putting up 91 rockets on 97 motors, which ranged from A to K.

Bob Dickinson, JMRC's version of the chili man, went after his L2 certification. His 7.5" V2 flew on a CTI J-285. It was

set to deploy a drogue at apogee and the main at 800'. As Bob is a fan of the "Low and Slow" school, his rocket only reached 800', and both chutes deployed properly at apogee. The rocket landed in fine condition, and a few handshakes and signatures later, JMRC had another L2 flyer!



The other certification flight in June was from new member Alvin Jenks. His rocket, "Missing Bee", flew on a CTI H153 with a 6 second delay. Cesaroni made a good marketing decision when they put out those cert. packages! Missing Bee had a very nice flight, and the crowd cheered Alvin with that popular call, "Welcome to high power, now get out your check book!".

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.

JUNE LAUNCH REPORT (CONT.)



Osborne had 2 dual deployment flights. Little Dog went up on a G80, and deployed its main at 300'. Gabe's I210 powered Nike Smoke went a bit higher, and deployed its main at 800'. Both rockets flew well, and were recovered safely.

Not to be outdone by Gabe, James Howells put his Nike Smoke up on an I 405. Jame's rocket, which was set to deploy the main out the top at 500', took some fin damage, but James is certain she'll fly again.

Eldred took a few breaks from his passion of taking pictures to fly a few rockets of his own. His '38 special' flew on a CTI H400, and his EZI 65 flew on a CTI Smoky Sam motor. Elderd's biggest flight was his red crayon which went up on an I566 drogueless, with the main deploying at 300'.

Tom Kurecka put up 6 rockets in 7 flights, including his H powered Hercules Avenger, and his very fine Stealth and Scorpion II rockets, both on J power. Buzz Nau also had a busy day with 7 flights, including his I powered Flacon, which flew drogueless, and deployed its main cleanly at 800'.

Tony Haga had the big motor of the day, flying his bright green Wocket on a K510. The big saucer rose on a wide column of smoke, and put all 3 parachutes out for a great flight!

through, and tent row had to be taken down to prevent any more tents being bent apart in the wind. Those that weren't deterred had a small flight window before the second storm rolled through. While the author couldn't stay to enjoy the group dinner that was had later, I've been assured I missed out on some fine food and good company!



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 Prefect, Scott Miller, and his wife Jo-Anne for their motor vending, and Pinky, and crew for their contributions to the nice lunch everyone had. Lastly, thanks to Roger Sadowsky for bringing out the launch trailer, and acting as LCO for most of the day.

Gabe

By mid afternoon, the first squall rolled

Photo courtesy of Eldred Pickett and Buzz Nau



JULY LAUNCH REPORT

Sunday July 27 was the date of the most recent JMRC launch, held once again at Michigan International Speedway. It was a fine flying day with mild breezes and highs around 80. The field conditions were dry, and the crowd was on hand!

We had 44 flyers putting up 139 rockets in July, with 163 motors burned ranging



from A to K impulse. Carl Wagner gets honors for the most flights with 16 flights, and Carl's motor count (also 16) was matched by Chris Palmer, who flew only 3 rockets! As usual at any rocket launch, C motors were the most common, with 51 being used.

Tony Haga got things off to a LOUD start with a flight of his green Wocket on a K powered Hybrid motor. When the Skyripper K347 lit off, everyone at the launch knew why the company is named Skyripper! Imagine the world's biggest sheet of paper being ripped in two by a giant, and you're in the ballpark. All 3 parachutes deployed, and Tony recovered the Wocket in excellent shape.

As mentioned in the stats above, Carl Wagner was a very busy flyer on Sunday, with 16 flights ranging from his mysteriously named "toilet paper" on an A10, up to his biggest



jug conversion rocket, Darth Vader Unleashed. Darth flew on an I566 motor, and was recovered successfully. Carl single-handedly flew more rockets than our entire club did at our April launch!

While Carl clearly put up the most rockets, the nod for most efficient flyer has to go to Chris Palmer. Chris burned 16 motors, same as Carl, but did so in only 3 launches! Apart from 1 standard flight (Chris's Trans Fatman flying on an F42), there was the Hydra, going up on 7 C6-5 motors, and the Power of D, that went up on 8 D12-3 motors. The flashpans were out, and the smoke was rolling at this launch!



OH, WHAT A FEELING!

by Kathy Miller

It's a clear, sunny, beautiful day with blue sky and you've just watched a large rocket roar off the pad into that sky. Along with the rest of the crowd, you applaud the flight, sort of half engage in the receipt of the applause and congratulations being bestowed on the rocket's owner because you helped prep and rack the bird as part of the "crew". However, the laudations aren't really yours and it was "just another big rocket on an M motor". Yeah, sure it's kewl to help out others with their big projects, but, it's not the same.

Fast-forward six to eight months. You've now spent months tweaking a dream design in a program like RockSim. It looks great - especially those unique-looking fins. Upon design approval, you spend several more months fibreglassing the



airframe and those oh-so-kewl-fins. Careful fitting and painstaking assembly of the booster, glad you decided on the 4" mmt rather than the 3" mmt you'd originally planned.

For a bit, the complexities of a more elaborate electronics bay and wiring wore on your nerves, but, with the help of more electronic-minded rocket buddies, you figured it out.

Finally, the whole big beast is finished - from a collection of tubes, couplers and plywood, it finally looks like a rocket! Even the chosen paint scheme brings it alive! You've practiced prepping the bird following your detailed checklist. You've received the final go-ahead-and-fly-it from your TAP/L3CC/L4CC. Now the countdown begins to flight day. Finally, it's Your turn to experience that "High".

JULY LAUNCH REPORT (CONT)



Another common flyer at the July launch was the Semroc Golden Scout. This kit, put out to commemorate the 50th anniversary of the first rocket kit, was a frequent flyer, with kits being flown by Buzz Nau, John Potts (2), Carl Wagner (2), Rob Dickinson, and Robert Whitesides. I'm not sure if they were all found (it's a pretty small

rocket), but JMRC certainly did its part to help celebrate the golden anniversary of our hobby!

Buzz also flew some gliders for the assembled crowd on Sunday, with his Sky Dart gliders turning nice lazy circles in the air. Buzz's F14 Tomcat had a beautiful flight, even if the parking lot landing did cause a little "road rash". Buzz also brought out his Falcon to fly on an Loki 1430 motor. The rocket was drogueless at its 2500' apogee, and deployed the main successfully at 700'.

Rob Dickinson put up his Performance Rocketry Arrow rocket, names Scout, on a Loki J825. The big red rocket leapt off the pad at launch, and went drogueless at 3100', before falling back to 800' before deploying the main. The rocket was

recovered undamaged.

Bill Poster put up a gorgeous scale Mercury Redstone on a J712 motor. The rocket listed off like it was at the Cape, and recovered drogueless until the main deployed at 400'. Fortunately, Bill's redstone recovered without mishap, so we'll all get the chance to see this fine rocket fly again!

But the flight(s) of the day has to go to the Debauchery brother, Dale Hodgson and Fred Ziegler. Their Performance Rocketry Mad Dogs both went up on J712 motors, and the sound as both rockets lifted in perfect sync was something to hear! As the rockets left the pad at the same instant, they leaned towards each other, and several in the crowd thought they might actually bump! They both flew

perfectly clean, however, and both rockets fell drogueless from apogee, with Dales Main deploying 400', and Fred's at 800'.

Neither Fred nor Dale will say what they have planned for next month, but when the Debauchery Brothers get together, you know it's gonna be good!

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 Prefect, Scott Miller, and his wife Jo-Anne for their motor vending, and Pinky, Emma, and the Dickinsons for their contributions to the nice lunch everyone had. Lastly, thanks to Roger Sadowsky for bringing out the launch trailer, and acting as LCO for most of the day.

Photos courtesy of Buzz Nau.



OH, WHAT A FEELING! (CONT.)

When you prep Your own L3 size bird, build that big motor and are the "supervisor" for the ground crew, anxiously await the countdown and lift-off, watching Your motor come up to pressure, watching Your Big Rocket lift-off on a trail of flame and smoke, watch Your rocket ascend on that trail of smoke, anxiously watch Your rocket reach apogee and breathe a small sigh that the apogee event went, then watch Your rocket free-fall with your heart pounding so loud you think everyone around you can hear it until the electronic

device sends out the main, and the main filling with air, You actually start breathing again, because Your flight just went off as planned. It isn't the same as helping others - it's a Whole Other Feeling!



GENERAL DYNAMICS RIM-24 TARTAR SURFACE TO AIR MISSILE



By Evan Nau

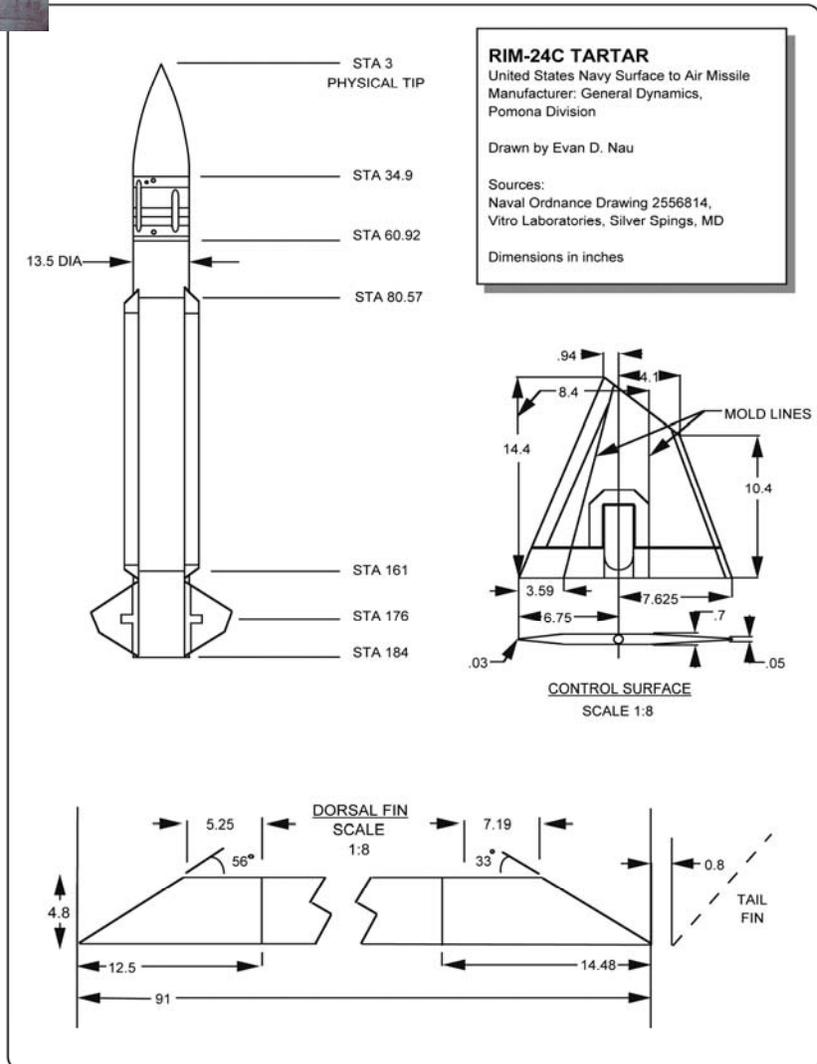
As World War II came to a close the US Navy sought a much needed solution to the Japanese Kamikaze threat. Though working prototypes of guided missiles were developed during the war, they were too late to be used in action. At war's end the Navy opted to stop current "in-house" development of guided missiles and commissioned the Applied Physics Laboratory of the John Hopkins University to research and develop this new and expanding technology. This program was called Bumblebee and was responsible for most of the guided missile technology still in use today. Project Bumblebee found answers for all the basic problems of propulsion and guidance. It also selected all of the contractors to develop hardware. These contractors became known as "Section-T", hence the reason why all early US Navy SAM names began with a "T".

The medium range Terrier and long range Talos were the first two Navy SAMs to see service. These were large missiles requiring massive weapons magazines and shipboard radar guidance systems. During the early 1950's there was growing desire by the US Navy for a surface-to-air missile that could be deployed aboard smaller ships.

Improvements in guidance and propulsion made it feasible to install a single stage SAM on smaller ships. These improvements included the Aerojet Mk 1 Mod 0 dual thrust motor that eliminated the need for a booster. Also new was a SARH (semi-active, radar homing) guidance system. By 1957 demonstrations of Tartar, as the missile was now designated, resulted in

improvements that went into the Terrier HT-3 (Homing Terrier).

The RIM-24 continued to be refined by retrofits. The Tartar Reliability Improvement Program (TRIP) was initiated to improve tactical effectiveness. Improvements included the switch to solid state electronics, quick spin up gyros, multiple target ability, and greater resistance to electronic counter-measures (ECM).



Jackson Model Rocketry Club

JMRC News Editor:
Rob Dickinson
6237 Arroyo Vista
Rockford MI 49341

Phone: 616.874.8926
Fax: 616.874.8963
E-mail: rob@enrollpro.com

We're on the Web!
www.jmrconline.org

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, or call Roger Sadowsky at 517.764.7514.

RIM 24 TARTAR (CONT)

Many previously delivered rounds were reworked with these new capabilities and became known as ITR (Improved Tartar Retrofits) and were designated RIM-24C. Most breakthroughs from the TRIP project went into the totally new missile system, Standard Missile.

The RIM-66 STANDARD MISSILE MR

eventually replaced Tartar after a long service life, however many of those ships continued to be called "Tartar" ships.

References

Bill Gunston, *The Illustrated Encyclopedia of the World's Rockets and Missiles*, (New York:



Leisure Books, 1979)

David Miller and Chris Miller, *Modern Naval Combat*, (New York: Crescent Books, 1986)

Henry Morris, "From Bumblebee to Standard Missile, Nearly Three Decades of Evolution," *Naval Ship Weapon Systems engineering Station*, Port Hueneme, CA

Norman Friedman, *The Naval Institute Guide To World Naval Weapons Systems*, (Annapolis, MD: US Naval Institute, 1989)

