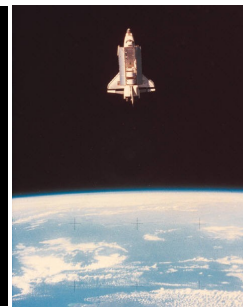


MASA PLANET

OFFICIAL NEWSLETTER OF THE
MINNESOTA AMATEUR SPACEMODELER ASSOCIATION



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Upcoming Events:

- **Launch:**
Saturday, March 23
10:00–3:00
Elk River/Oswego
VFW Soccer Fields
- **Meeting:**
Thursday, April 4
7:00-8:45 (TBD)
- **Launch:**
Saturday, April 25
9:00-4:00
Nowthen Sod Fields
- **Meeting:**
Thursday, May 2
7:00-8:45 (TBD)

See page 9 for more details



March/April 2013

Volume 16, Issue 02

NAR Section #576

Established 1998

February 7 Meeting and NIKE Rockets

Article and photos by Andy Heren

The February MASA meeting was held Thursday, February 7, at the Brookdale Library in Brooklyn Center. There were 23 in attendance. There was a presentation from two Americorps Interns requesting rocketry assistance for an upcoming summer camp for teens. They hope to build and launch. More information is coming.

For the “Show and Tell” portion, Chris Feld brought an antenna he built called a J Pole. It has many uses on the rocket range, such as tracking rockets using a GPS, but is a big large for that. It can also be used to scan the air band (108-137 Mhz) and NOAA weather radio. The materials cost him about \$20. Kevin Anderson brought some old rocket motors he had come across. All agreed that using them was not the wisest action to take, considering their age. Maybe they can be the first exhibit in the new MASA Rocket Museum?

Many had come to hear Alan Estenson’s presentation on the NIKE Missiles. He share the highlights of the program, its purpose, and the many differences between the NIKE Ajax and NIKE Hercules. He had many great pictures, including some of the NIKE missile sites he has visited over the years.

It is always fun to hear a speaker who has a passion for what he or she is presenting, and Alan has that passion. We as rocketeers can understand that. Thanks, Alan!



March Meeting

Article and photos by Jeff Taylor



1 Kit

The March MASA Meeting was held Thursday March 7 at the Brookdale Library in Brooklyn Center. About ten MASA members were in attendance, plus three guests and potential new members. Official club business included President Neal talking about a few recent outreach events along with some upcoming outreach events. VP Jeff reminded the club about building and donating Fly It/Take It rockets and mentioned an upcoming "Science Night Minnesota – Mission to Mars" panel discussion on the Mars Rover at the Fitzgerald on May 21st.



"Damn, I glued my fingers together AGAIN!"



Rick Vatsaas

The remainder of the meeting was a build session lead by Rick Vatsaas where participants created low cost rockets out of drink ware. Rick put together the kits which include an 18mm motor tube, motor retainer hook (optional), eye screw launch lugs, Dunn Bros Coffee cup body tube, plastic wine glass nose cone, cardboard centering ring, paper-laminated balsa fins and mason line shock cord. Also included are the fin patterns and fin marking guide. Kits cost only \$3 or \$4 if you want the optional motor hook. Rick stated that he has flown this particular drink ware rocket on A8-3 motors, but recommends C6-3 motors.



Completed kit

Photo by



Finished Rocket



Busy working!



And working!



Class picture



Photo by Jeff Taylor

Paying Forward – MASA's FI/TI Program

By Jeff Taylor

A few years ago, then MASA Vice President Carol Marple began encouraging MASA members to donate built and un-flown rockets to children or first time rocketeers who come to our launches. The initiative called MASA's FI/TI (Fly It/Take It) program is a great way to get new rocketeers started in the hobby. The rocketeer gets to pick out a new donated rocket, fly it, and take it home to keep. Not only has this paid forward to the next generation of Minnesota rocketeers, but Carol also collected FI/TI donations NAR national events as far back as NARAM 51.

I encourage all MASA members to consider contributing to the MASA FI/TI program. It is pretty simple to participate - build a single stage rocket that flies on standard 18mm motors, and donate it to FI/TI by bringing it to a meeting or launch and give it to a club officer.

To provide a little variety, you are encouraged to give it a different paint job than normal. As you can see in the picture, it is pretty simple to change the look of a common black and orange Estes Alpha III.

SCIENCE NIGHT MINNESOTA - MISSION TO MARS

Tuesday, May 21, 7:00 p.m.



Minnesota Public Radio, the Science Museum of Minnesota, and the Public Insight Network present **SCIENCE NIGHT MINNESOTA - MISSION TO MARS** at The Fitzgerald Theater on Tuesday, May 21st, at 7:00 p.m. Space geeks of Minnesota unite! **John Grotzinger**, the head of NASA's Mars Curiosity mission, is coming to Saint Paul to share the latest research and a behind the scenes look at the red planet's robot rover. The Daily Circuit's Tom Weber will ask Grotzinger about new discoveries, the potential for the building blocks of life on Mars, and how it felt when Curiosity touched down after the so-called seven minutes of terror. They'll be joined by Boing Boing science editor **Maggie Koerth-Baker**, who'll help explore the world of space and scientific discovery.

John Grotzinger is the chief scientist for the Mars Science Laboratory rover mission, which riveted the country with its daredevil landing in August 2012. A geologist, his work focuses on the chemical and physical interactions between life and the environment. With the hypothesis that the early history of the red planet is similar to that of the Earth, Grotzinger hopes to gain more understanding of Earth's evolution through the study of Mars.

Science Night Minnesota is your chance to learn a little something during a night on the town. You'll hear music from Curiosity's playlist, be able to enjoy a beverage, and have the chance to interact with the show and the audience via Twitter. You can also join MPR's Public Insight Network for a chance to meet Grotzinger after the show.

Tickets go on sale Tuesday, March 5th at noon to members of MPR and the Science Museum of Minnesota for \$22.00. Tickets go on sale to the general public on Tuesday, March 12th at noon for \$25.00.

MASA SHOWCASE

This is that new section of our newsletter that showcases recent builds by MASA Members. Thanks so much to the Uhlenkamp family for their contributions of some mighty fine looking rockets!



Lukas Uhlenkamp : New Way "Square in the Air," an odd roc/spool design. "It was an easy one day build."

Brian Uhlenkamp: North Coast Rocketry "SR99 Hyperswift" with added custom red accents and added decals.



Julia Uhlenkamp: Estes "Baby Bertha" with her chosen custom paint and decals.

Space Quote

"Whoopee! Man, that may have been a small one for Neil, but that's a long one for me."

— Apollo 12 Commander Pete Conrad as he stepped onto the surface of the moon



Views from a BAR

By Brian Uhlenkamp

NAR 39505 SR

BAR gets an L1

Back in the late 80s, a 'D' motor was considered big-at least for me. There were no Estes BP 'E' motors (that I recall), but I did launch a handful of Aerotech F & Gs (purchased from North Coast Rocketry). I had only heard of an 'H' or 'I' motor, never seen one launched, and not sure, but I think 'I' was the highest power motor available on the market at that time.



Photo by Brian Uhlenkamp

When I got back into rocketry a few years ago, I soon discovered that there seemed to be a new unwritten classification of LPR, MPR, and HPR. After researching further and visiting the NAR website, it became very apparent the hobby had taken a clear path on HPR safety and certification. Not to mention, it seemed 'H-I' motors were now commonplace and 'J' and higher motors available.

So as I got comfortable building LPR and then MPR models again, I discovered MASA and joined in 2011. It was August and it just so happened I hadn't made it to a MASA launch yet. One Saturday Lukas and I were free and the weather looked nice, there wasn't a MASA launch, but we decided to head to a Tripoli launch. We had never saw or heard an 'H' motor launched before that, but we got to see some HPR rockets launched from 'H', 'I', 'J' and 'K' that day. Two weeks later we made our first MASA launch and saw some more 'H' & 'I' motors. Needless to say, I knew what was soon to be in my build que.

I did my research on building HPR and with the help of several MASA members, I knew what I all had to do to achieve my L1. I chose a Madcow Rocketry Super DX3 to build for my L1 attempt. I purchased the kit, an Aeropack retainer, some U-bolts, quicklinks, Nomex chute protector, and a parachute-oh yeah, and I purchased some Aerotech 29mm HPR reload hardware. I built the kit, painted it, applied the decals and was ready to go by spring 2012.

Well, with some weather and schedule conflicts it was soon June 3rd. Alan assisted with bringing an H180W motor for me and Neal volunteered to be my L1 witness. It was mid-morning, we went thru all the checklists, I assembled the motor and out to the pad we went. As with anyone getting a certification, you have a few nerves, but I was confident that all would go well. Neal was my witness but he was also LCO at that time. A bunch of us were getting our cameras ready, Neal began announcing my L1 attempt and then all of a sudden-whoosh!-there it went-launched and in flight! I believe Alan said "a countdown would have been nice" and my son Lukas said to Neal "You gotta certification on that ...controller?" Shortly after, the chute deployed and started it's decent. I guess it just shows why you need to disconnect power as malfunctions can happen-as always, safety first.

Views from A BAR, continued



Photo by Brian Uhlenkamp

So, other than that slight surprise w/o a countdown, my L1 cert flight went about as perfect as you could want, including recovery about 200 ft. from the pad. My Altimeter Two recorded 906 ft. and I couldn't see a scratch on the rocket. So, after launching some other rockets with Lukas, I prepped and launched the Super DX3 another time that day, again on a H180W. This time all went good, including a countdown and pictures! I gained my L1 that day, and it will be memorable for me and I think Neal will never forget it-mainly due to Lukas' witty and timely comment. If he forgets, I'm sure Lukas will remind him.

Unfortunately, we only got to attend two more MASA launches in 2012. On one I did have a chance to launch the Super DX3 again, this time I was going with an 'I' motor, however, I had issues assembling the motor due to a defective paper casing, so I guess it wasn't meant to be. I only had those two HPR launches on my cert day for my first year in HPR. I certainly look forward to launching some 'H' & 'I' motor HPR flights in 2013. I want to gain some more flight experience, and then I plan going for my L2. Oh yes, I already have my L2 rocket in my build que!

NAR National Events for 2013

Are you a member of the National Association of Rocketry? If not, we encourage you to become one! As a member of the NAR you will have access to launch sites through local NAR clubs (such as us!), the bi-monthly color magazine *Sport Rocketry*, insurance coverage for your flights, and certification for high power rocket flying. For more information on membership, go to www.nar.org



The NAR also offers three national events per year:

The NAR Convention, or NARCON, was hosted this year by LUNAR, NAR Section #534. It was held on February 22-24 in Santa Clara, California. (MASA has hosted this convention in the past.)



The National Sport Launch, or NSL, will be held in Pueblo, Colorado, May 25-27, 2013. Go to www.nsl2013.org for more information.

NARAM 55 will be hosted by the Mantua Township Missile Agency (MTMA), NAR Section #606, in Aurora, Ohio, on July 20-26, 2013. More information will be coming to www.naram.org.



The NAR is also a sponsor of Team America Rocket Challenge, a contest designed to inspire and attract the next generation of engineers and technicians to join the aerospace industry. MASA has had numerous members serve as mentors. More information can be found at www.rocketcontest.org.

Scratch-Built Crayon Builds – The Rest of the Story

By Brian Uhlenkamp

NAR 39505 SR

EDITOR'S NOTE: Many have gone to the dollar store and bought those plastic crayon banks to convert to flyable rockets. Estes now has a whole box of colors in their fleet. However, last month Brian submitted this great article on his scratch built crayons. When I added the article and picture in the last issue of the *Planet*, I failed to scroll all the way down and missed these great photos he had submitted.

So, Brian, here are the rest of your photos. I hope everyone is as awed as I am at the great finish work he did on these! I especially like the names!

— Andy Heren



Photo by Brian Uhlenkamp



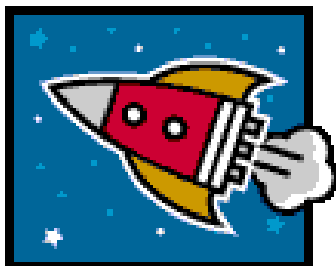
Photo by Brian Uhlenkamp

Renew Your MASA Membership Now

Below is a list of the current MASA members. If you have not done so yet, please renew your MASA membership today !

You can renew your membership by visiting our website at www.masa-rocketry.org. You can print and mail in the form or pay your dues via PayPal.

<i>LastName</i>	<i>FirstName</i>	<i>Cert Level</i>						
Beckius	Becky		Fredrick	Espen		Lenz	Stuart	
Beckius	Brian		Fredrick	Kris		McDermott	Buzz	L2
Beckius	Ellen		Fredrick	Kristina		Miller	David	L2
Beckius	Victor		Fredrick	Nora		Miller	Evie	
Berning	Ethan		Fredrick	Owen		Ross	Chuck	
Bright	David		Gensler	David	L2	Ross	Ian	
Bright	Sara		Gibbens	Art	L1	Schwartz	Cathy	
Carpenter	Allison		Grover	Allan	L2	Schwartz	Joy	
Carpenter	Elliot		Grover	Blake		Schwartz	Larry	L1
Carpenter	Laura		Heren	Andy		Schwartz	Ryan	
Carpenter	Todd	L2	Higgins	Neal	L2	Stoneman	Gene	
Cochran	Ted	L2	Inboden Jr	William		Stroick	Gary	L3
Durkee	Haley		Isom	Davis		Taylor	Alyssa	L1
Durkee	Russ	L1	Isom	Jon		Taylor	Jeff	L1
Estenson	Alan	L2	Juntunen	Abby		Taylor	McKenna	
Everitt	Brenda		Juntunen	Andy	L1	Thell	Mark	L2
Farrell	Michael	L1	Juntunen	Dani		Uhlenkamp	Brian	L1
Feld	Chris	L1	Juntunen	Karen		Uhlenkamp	Julia	
Flynn	Ryan		Karsten	Abby		Uhlenkamp	Lukas	
Flynn	Sean		Karsten	Mike		Uhlenkamp	Natalie	
			Karsten	Patrick		Vyas	Anand	L1
			Klopfenstein	Kirk		Whitaker	Aimee	
			Knox	Kurt		Whitaker	Austin	
			Knox	Lucas		Whitaker	Cynthia	
						Whitaker	David	L2



MASA Directory

Established 1998

Founding President: Russ Durkee

2013 President

Neal Higgins—nthiggins@gmail.com

2013 Vice President

Jeff Taylor— jeff.taylor@mn-rocketry.net

2013 Secretary/Treasurer

Chris Feld — christopher.feld@my.uwrf.edu

MASA Planet Newsletter Editor

Andy Heren—planet.editor576@gmail.com

MASA Planet Online

www.masa-rocketry.org/planetonline.htm

Club Website

www.masa-rocketry.org

Webmaster

Alan Estenson — estenson@mn-rocketry.net

Club Yahoo Group

<http://groups.yahoo.com/group/masarocketry>

MASA Calendar

Launch

Date: Saturday, March 23, 2013

Time: 10:00 A.M. — 3:00 P.M.

Place: Elk River/Otsego VFW Soccer Fields

Theme: “Flyin’ o’ the Green — St. Patricks”

Special Event: Flying of the Vatsaas Odd-Rocs (from the March meeting)

Launch

Date: Saturday, April 25, 2013

Time: 9:00 A.M. — 4:00 P.M.

Place: Nowthen Sod Fields

(Field conditions permitting; VFW Soccer Fields are backup sight)

Theme: “We’ve Got to Have More Power!”

Meeting

Date: Thursday, April 4, 2013

Time: 7:00 — 8:45 P.M.

Place: TBD (To Be Determined)

Topic: TBA (To Be Announced)

Meeting

Date: Thursday, May 2, 2013

Time: 7:00 — 8:45 P.M.

Place: TBD (To Be Determined)

Topic: Field layout, ground, signage, and fire training

For more detailed information, please go to the MASA website at

www.masa-rocketry.org/events

MASA PLANET
C/O ANDY HEREN
3711 BRIAN ST.
EAU CLAIRE, WI 54701

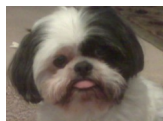


Mailing Label Heren

MASA

Minnesota Amateur Spacemodeler Association, founded in 1998, is an active rocketry club with members from the Twin Cities and surrounding areas of Minnesota and western Wisconsin. MASA is dedicated to the safe and enjoyable pursuit of the rocketry hobby. MASA is a registered section (Section #576) of the National Association of Rocketry (NAR). MASA has been recognized by the NAR as "Medium-Sized Section of the Year" in 2006 and 2007, has received the NAR's North American Rockwell Trophy for best newsletter in 2008, 2009 and 2010, and has hosted NARCON (the NAR's Annual National Convention) in 2007 and 2008. MASA has an official club launch on the 4th Saturday of each month (weather dependent) year round at one of several different flying sites located in Nowthen, White Bear Lake and Otsego. We also hold monthly club meetings on the 1st Thursday of each month, typically held at the Science Museum of Minnesota in St. Paul. We host a Club Picnic in July and a Holiday Party at the end of the year. MASA also participates in numerous rocketry-related outreach activities including Cub Scouts, Girl Scouts, schools, 4H, TARC and USLI to name a few. Visitors, spectators, and prospective members are always welcome to join us at club events! MASA welcomes rocketeers of all ages and experience levels. MASA members share their building and flying experience to help you hone your skills and become a better and safer rocketeer. Flying in a club environment keeps you in touch with the latest rocketry techniques and products, as well as offers encouragement and support through camaraderie of fellow club members. You do not need to belong to the NAR (National Association of Rocketry) in order to join MASA. However, we do encourage you to consider NAR membership. (Find out more about the NAR at www.nar.org) You can find more information on the MASA web site, www.masa-rocketry.org, or email us at masarocketry@rocketmail.com.

For more information, or to join MASA ,go to www.masa-rocketry.org



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