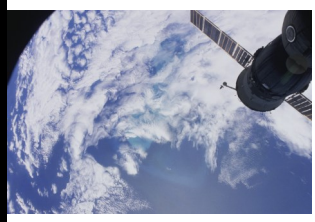
MASA PLANET

OFFICIAL NEWSLETTER OF THE MINNESOTA AMATEUR SPACEMODELER ASSOCIATION



Inside this issue:

Upcoming Events:

- **Launch:** Saturday September 28, 9-4 Nowthen Sod Fields
- **Meeting:** Thursday, October 3 7:00—8:45 PM (TBD)
- **Launch:** Saturday October 26, 9-4 Nowthen Sod Fields
- **Meeting:** Thursday November 7 7:00-8:45 (TBD)
- See page 7 for more events and details

September/Rocketober 2013 Volume 16, Issue 05

NAR Section #576 Established 1998

MASA Continues Its Tradition of Outreach

Launch report for the outreach launch at Crosslake, MN by Art Gibbens

This outreach started when Ginny (Virginia Hersey) the librarian at the Crosslake, MN public library contacted Neal Higgins, our president, via information posted on the MASA website. He in turn forwarded it to the MASA list asking if anyone could help her out. I made a couple of contacts with some folks up North and after confirming I would have a room to stay in the night before the outreach demonstration and launch I then contact Ginny. To say she was enthusiastic about the possibility would be an understatement.

So I confirmed my rack space at Trout Lake Camp for the night and then contacted Neal again to let him know we were on. She had shared with me that she could have up to 80 students showing up for the morning activities. I proposed to her that we limit the Fly It Take It (FITI) rockets to a dozen, six in each half of the morning. She thought that was a very generous offer for the children to get a gift like that. So over lunch, the week before I was to head up, Neal brought over to my work site the FITI box of rockets and I selected 12 rockets. He also had some Estes A8-3 and Quest A6-4 engines to donate that he thought Buzz had passed along. I added some Estes A8-3s to the mix so we had enough engines for all the kids. (Continued on p. 2)

Jessica

Braden

Lily

Gus

I want to say right here a huge THANK YOU to all you guys and gals that have built these rockets to share with the next generation of rocketeers! Without you doing this I would not have had such a successful demonstration and launch. Every child that got a rocket was very excited to have his or her prize to take home to show their parents.

The first group of children were in the age bracket of 5 to 7 years old. We started out inside the community center with the kids all sitting on the floor and me going over the safety rules we needed to follow to have a safe launch. We also practiced counting down from 5 to blastoff. I knew that this group would be a bit young to have the motor skills necessary for building a rocket of their own, but they sure got excited once the launching got started.

Ambrosia

The second group was older, as the children ranged in age from 8 to 11 years in age. This group had more questions and in general was more interested in the pre-flight discussion, which one would expect. Being I had planned on flying my pyramid at the end of their flights I made sure they understood the importance of safety on the launch range.

Then we went out to the ball fields behind the library and flew the rockets. In the following launch report are the rockets and who received them in the drawings in each of their respective sessions. Also in the flight report are brief descriptions of how the flights went. We had 100% safe flights with one rocket nestled in the limbs of a Poplar tree and only half of one rocket being recovered. (It was designed to tumble down in two pieces).

Lastly, it was a hoot to fly the pyramid because everyone was told it would be louder, have lots of smoke and that they would be able to see the flame shooting out from the bottom – and it sure did! There still were some squeals of surprise when it lit and then a spontaneous applause when it landed safely on the field at the end of its flight. And then calls for doing that again! I told them that I had only the one engine ready to use so that would be it for the day, much to the chagrin of the crowd. (Continued on p. 4)

Jacquelynne

Heidi

Max

Meghan

Product Review — New Estes Boosters

By Brian Uhlenkamp

NAR 39505 SR

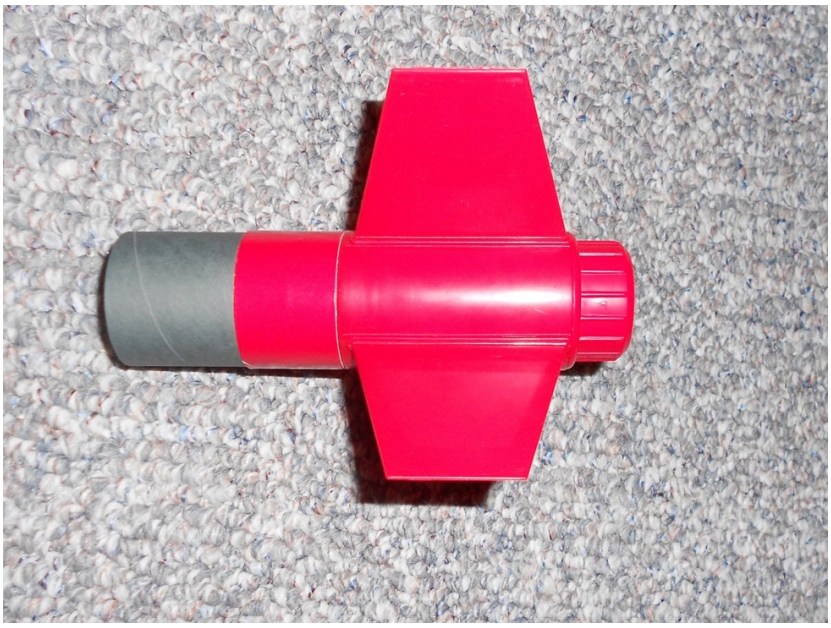
My daughter recently picked out the new Estes 002486 Flying Colors kit as something she wanted to build. It is an ARF/Almost Ready to Fly kit. We hadn't tried an ARF kit yet and I thought that might be a little easier for her than the E2X kits to put together. I also noticed recently that Estes was coming out with some "ARF Boosters" and they appeared worth a look. Since the 002256 Booster-60 was stated as compatible with the 002486 Flying Colors kit, I thought, why not pick one up.

The most interesting feature of the ARF kit was no glue. It has the fin can, launch lug, and shock cord pre-installed and you do the rest, which can be done in about 10 minutes. The fin set would only go in one way and the screw on motor retainer will keep the fins held in place. The Booster fins are also assembled in the same manner. The Booster unit requires no glue as well to complete assembly. The Booster unit is also constructed with a pre-installed 1" section of BT-60 body tube, a screw-on adapter to the model, and its own screw-on motor retainer.

Once assembled, the Booster unit can be easily adapted to the model by simply removing the models screw on motor retainer and replacing with the screw on adapter. The booster is then slid on right over the adapter. The unit has a slight cone at the top to direct the booster engine heat & gases to the upper stage engine, so it is sort of gap staged by about a ½". One thing to note, the adapter is made for a 24mm x 2.75" D12-0 engine only, it is not compatible with a 24mm x 3.75" E12-0 booster.

All in all, the Booster unit is unique and easy to use. It can be used as intended, but based on what I've found; I believe it can be used a few other ways as well.

1. You could remove the short body tube section and build your own single stage 24mm powered model by installing a long 18" BT-60 tube,however, it could only be D powered 2.75" and not E powered 3.75". You could not make it a two stage with another Booster-60 because with the screw-on adapter is 18mm and the output is 24mm.



2. You could add a body tube coupler to adapt it to a BT-60 model, provided there is probably a ½" of body tube exposed (from centering rings) to engage it. You'd need to also verify how the motors mate up.

3. You could do the same thing as #2, but remove the short BT section and install a longer section of BT and a coupler and use as a true gap staged booster for a BT-60 based model.

Photos by Brian Uhlenkamp

Continued on p. 5

Logan

Annika

Reid

So Ginny took the second group inside while I struck the launch site and did a quick look on the field for the missing piece of the rocket that was only half recovered. Unfortunately I did not spy it either. I then met the group inside answering many more questions and receiving an open invitation to come back again to do this kind of thing again there.

So here's the launch report:

1. Jessica - Star Power on an A8-3 – good flight, heaviest rocket in the FITI fleet for the day and landed the closest to the launch pad.
2. Brayden - Equinox on an A6-4 – good flight, landed on the ball field. (Very twisted shroud lines and shock cord.)
3. Lily - First Patriot on an A8-3 – good flight, caught in the top of a Poplar tree.
4. Gus - Alpha 3 on an A6-4 – good flight, landed outside the outfield fence of the ball field.
5. Ambrosia - Second Patriot (Hello Kitty) on an A8-3 – good flight, chute did not open all the way.
6. Jacquelynne - Micron on an A6-4 – good flight, went way up there and landed on the ball field.
7. Heidi - Third Patriot on an A8-3 – good flight, landed outside the outfield fence.
8. Max - Fourth Patriot on an A8-3 – good flight, stuck the landing in the outfield because the parachute did not blossom.
9. Meghan - Zero Gravity on an A6-4 – good flight, landed in a tree, but was recovered using a fallen branch to reach it.
10. Logan - USAF Missile on a A8-3 – good flight, landing on the ball field.
11. Annika - Yankee on an A6-4 – Only misfire of the day, good flight, landing outside the outfield fence.
12. Reid - Twister on an A6-4 – good flight, but only recovered the bottom portion.
13. Art Gibbens - Apophis' Revenge on a G64 reload – good flight, landing on the ball field.

Launch ‘em, Art!

The 002256 Booster-60 is compatible with 002486 Flying Colors, 002487 Helios 002488 Firestorm. Estes claims the Booster will increase altitude approximately 700 ft with a D12-0.

There is also the 002257 Booster-55 that is compatible with the 002484 Red Rider & 002485 L.G.M.

It appears Estes will be coming out with more kits that the boosters will be directly compatible with.

In the "coming soon" section of the Estes website, they have the 009752 Pro Series II E2X Booster, for the new E16-0 and F16-0 29mm black powder engines. I'm assuming this will have a similar design to the Booster-55 and Booster-60. It will be compatible with the new Pro Series II E2X kits, 009706 Ascender, 009707 Majestic, 009709 Trajector, 009710 Prowler. This booster is claimed to increase altitude by approx. 1000 ft. These are 3 fin E2X mid-power kits, certainly an interesting concept for those who want to build a quick mid power rocket-and two stage at that.

So, if you're looking for a quick Booster, you may want to look at these from Estes. Also consider the ARF kits for young children for easy and 10 minute assembly.

Safety Minute: Launch Guide Angles

By NAR President Ted Cochran

(as published in the *NAR Electronic Rocketeer* — Issue #62 — July 2013)

Safety Minute: Launch Guide Angles.

The Board of Trustees has adopted a policy that, on NAR ranges, the default launch guide angle shall be 5 degrees (approximately one inch per foot of launch guide) away from spectators. For local conditions, this angle may be reset at the discretion of the RSO.

Kit review — Estes Black Star Voyager

By Andy Heren, NAR 71711

I am one to like the odd, the fantastic, the eye-catching. This could explain why, when I saw the Estes Black Star Voyager, I knew I had to try it. The open fins concept was something I had never seen before. Could something like this really fly? Exactly how were the fins put together?

I purchased this back in July, started building, and got a bit sidetracked. Part of that being sidetracked was due to the many parts that make up the fins. Finally, right before Labor Day weekend, I got a rocketry second wind and finished it.

It seems like lately I've had a knack for picking kits that require lots of assembling of little parts and then a large amount of filling and sanding.

I didn't take pictures as I went along. Each fin is made of 11 pieces. There was lots of fitting, sanding, tapering, more fitting, gluing, and then more fitting. Let dry. Fill and sand.

Lots of little steps. I got the fins glued on and filled. Then I sanded. And sanded. This was very delicate sanding lest you crack or break a fin. Then the painting began

It is finally finished, and it looks just as cool as I thought it would. I can't wait for the September launch to fly it!

Space Quote "I'm coming back in... and it's the saddest moment of my life."

Ed White expresses his sorrow at the conclusion of the first American spacewalk during the Gemini 4 mission on 3 June 1965.

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-rockeetry.org/planetonline.htm

Club Website

www.masa-rockeetry.org

Webmaster

Alan Estenson — estenson@mn-rocketry.net

Club Yahoo Group

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

MASA Calendar

Launch

Date: Saturday, September 28

Time: 9:00 A.M. — 4:00 P.M.

Place: Nowthen Sod Fields

Special Event: Mega Mosquito Drag Race

Meeting

Date: Thursday, October 3

Time: 7:00—8:45 P.M.

Place: TBD

Topic: TBD

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

www.masa-rocketry.org/events

Launch

Date: Saturday, October 26

Time: 9:00 A.M. — 4:00 P.M.

Place: Nowthen Sod Fields

Theme: "If it's weird, fly it!" — Oddrocks and Halloweeen Rockets

Special Events: OktoberFAST G Motor Drag Race

Meeting

Date: Thursday, November 7

Time: 7:00—8:45 P.M.

Place: TBD

Topic TBD

Launch

Date: Saturday, November 23
Time: 9:00 A.M. — 4:00 P.M.

Place: Nowthen Sod Fields (Field conditions permitting, VFW Soccer Fields are backup site)

Themes: "Winter/Christmas/Holidays"

Special Event: "Snowball Fight" Drag Race

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

Mailing Label Here

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