# MASA PLANET



## OFFICIAL NEWSLETTER OF THE

#### MINNESOTA AMATEUR SPACEMODELER ASSOCIATION



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#### **Upcoming Events:**

- Summer Picnic
   Saturday, August 22
   Launch 8:00-4:00
   Picnic 4:00-8:00
   Location: Elk River/
   Otsego VFW Soccer
   Fields
- Meeting
  Thursday, Sept 3
  7:00—9:00 p.m.
  Location: TBA
  Topic: TBD





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#### **MASA Summer Picnic!**

Be sure to join us on Saturday, August 22, for the MASA Picnic at the Elk River/Otsego VFW soccer fields. (Google Maps Link)

The launch portion of the day will be from 8:00 a.m. to 4:00 p.m.

The picnic portion will start at 4:00.

This year we will have a couple special events:

Contests: Open Spot Landing (Launch only)

2 divisions: 14 years of age and under & over 14. Prizes to be

awarded at the picnic. Need not be present to win.

Special Events: Build It Fly It (for Picnic participants only)

Build an Art Apple white Scimitar (provided), fly it (motor

provided), return it intact with the motor present.

The first to complete the task will be awarded a prize.

2 Divisions: 14 years of age and under & over 14.

#### Other information:

For the launch portion we looking for volunteers to help with range setup & tear down, LCO & RSO duties. It will be the responsibility of the LCO on duty to oversee the contest.

For the picnic we need volunteers for

- 1) Grill Master
- 2) Conflagration Corn Cookery Co-hort (Neal would like some assistance this year and will pass on his trade secrets. He has a new cooker this year.)
- 3) Special Event Overseer
- 4) Picnic Shelter cleanup and setup.

MASA will supply burgers, hot dogs, buns, condiments, ice & drinks.

Please email Neal your RSVP with number of people attending and the food item you are bringing. Please respond as soon as possible to nthiggins@gmail.com.

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## **Elmer's Color Change Wood Filler**

**Product Review by Jeff Taylor** 

(Editor's note—With apologies to Jeff, I am running this article again. I inadvertently cut off the last few sentences in the last issue. Sorry, Jeff! Thanks for the review!)

I use Elmer's Wood Filler on nearly every rocket project to fill the seams in body tubes, fill balsa grain and gaps, and to create smooth fin fillets. I don't use this product as-is out of the container, but rather I dilute it slightly with water. I scoop out a small amount (about a spoon full) and place it in a small re sealable container. Then I add a very small amount of water



and stir thoroughly. I like to get it to about the consistency of pancake batter, so I add small amounts of water until I get it how I like it. Diluting it gets the air bubbles out and makes a creamy mixture that is easily applied, and after it is dried it sands smooth.

During a recent stop at the hardware store to pick up some more Elmer's, I came across a new version called Elmer's Color Change Wood Filler. The Color Change Wood Filler starts out purple, and dries white to let you know when it is ready to sand, paint or stain. I only needed a small container of wood filler, and the smallest one on the shelf at that particular store just happened to be an 8 ounce container of the Color Change Wood Filler, so I took it home to give it a try.

I am currently building an Estes Dark Silver kit, and when it came time to sand and prep the fins, I opened up the Color Change Wood Filler container and scooped so out to dilute it. Right out of the container it looks something like purple Play-Doh. Diluting it to a thinner consistency seemed to be no different than the standard Elmer's Wood Filler, and it made a nice smooth mixture. I spread a thin layer over the sanded balsa sheet to fill the grain, and it didn't take long for it to start turning white as advertised. Although I didn't do a side-by-side comparison, I would venture to guess that it dried in about the same amount of time that the standard wood filler does.

When it came time to sand the next day, the Color Change Wood Filler sanded away very easily. If anything I might say that is sanded a little easier than the standard wood filler, but again, without a side-by-side comparison that is a subjective statement at best. It also seemed like the sanding dust was maybe a little bit finer, almost like a fine talcum powder.

I had a few spots that needed a reapplication, so I opened the container that had the diluted mixture in it and was surprised to see that it too had turned white. It still had the smooth creamy pancake batter consistency of the watered-down wood filler, so whatever is in this product to change from purple to white when dry also changed it from purple to white when it was watered down.

The bottom line is that this product works as well or slightly better than the standard wood filler does. To me, the ability to change color when it is dry is not a huge selling feature since I usually wait a day before I sand anyway. And since the watered down product also turned white over time, the color change seems to be more of a gimmick than an important feature. With the overall performance about the same as the standard wood filler, I have no reason to not use it. I have yet to apply primer to this rocket, but I don't anticipate any sort of compatibility issues at all.

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## 2 TH DKR II (Tooth Decayer II)

by Andy Heren, NAR #71711

As many model rocketeers do, I am always on the lookout for things that could be easily made into a rocket. A few years ago the Tootsie Roll banks caught my eye. The wheels started turning and designs for the 2 TH DKR began.

I decided that everything in this rocket would be candy related. Only a few things were not: The centering rings and motor tube and hook. I also used a piece of Kevlar and shock cord. The body tubes were the Tootsie Roll banks with rolled up candy boxes as the connecting tubes. The fins were candy boxes folded flat with a piece of thick tagboard in the middle. The nosecone was a plastic M&M character. The parachute was made of Jelly Belly bags taped together with dental floss as the shroud lines.



It didn't fly well since I only allowed for up to an 18mm motor. It just wasn't enough power. After a scary flight I set it aside.

I have judged aerospace in the Eau Claire County Fair for the past 15 years. The state really wants the counties to change judges every couple of years, so we decided it was time for me to step aside for a year or two. That meant that I could now enter in the Open Class! Time to rebuild the 2TH DKR!

I looked at candy banks that I had. I had a couple of Tootsie Rolls and some gum banks. I chose a Tootsie Roll bank and a Double Bubble bank. I used a Kellogg's Sugar Frosted Flakes box to make the centering rings (I glued three layers of the cardboard.) The motor tube is an actual body tube, as well as the hook. I attached a piece of Kevlar to the motor mount tube to run up and out of the body tube. The banks are connected by a ring made of multiple layers of a Trix cereal box.

This time I used different candy boxes for the front and back sides of the fins, with a piece of cardboard between. I glued them, as I did with the centering rings, with a spray adhesive. I attached them with Titebond No-Run, No-Drip wood glue (my new favorite, which has replaced Aleene's Tacky Glue for me). Instead of fillets I used more candy box pieces to strengthen the bond of fin to body tube.

For the two launch lugs I took actual lugs and covered them with Pixie Stick papers. I attached a piece of elastic cord to the Kevlar and attached it to the nose cone, a plastic Hershey's Kiss. This I had attached to the trimmed bank cover with epoxy. I thought the Jelly Belly parachute looked OK to use again.

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## **12015 Estes Catalog**

The PDF of the 2015 Estes catalog is available for download from the Estes web site.

Click on the catalog cover at the right to get linked to Estes.



See your article or pictures here!

Submit an article or picture for the MASA Showcase to

planet.article576@gmail.com

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#### 2 TH DKR II (Tooth Decayer II), continued



To calm my nerves about it flying stable (I need to use Rocksim or Open Rocket), I took it out the night before I had to enter it and test flew it. I used a C11-7. I considered a D, but didn't want it to go too high. It launched just beautifully! Nice and straight flight, but then it was coming down too far before the ejection. The nosecone ejected and it also burned the dental floss. It crashed into the ground!

I was able to take it home and cut off the Double Bubble bank and replace it with a Crybaby gum bank. I also used a real parachute this time. I entered it the next day, where it won a blue.

That Friday was the launch of the fair — Open Spot Landing. (We are still trying to convince some that Open Spot Landing is the goal, not altitude.) I again launched it on a C11-7. It launched beautifully, but the ejection hap-

pened right before it hit the ground again. It was quite the excitement to see the rocket judge's rocket crash. A bit embarrassing for me.

I'm not always the quickest on the draw, but I finally realized my problem was the long delay. I should have used a D12-5. Higher altitude and less delay would have given me a great launch AND recovery.

I have one more Tootsie Roll bank, so I hope to have it fixed again so I can launch it at the MASA picnic and end its career with a great launch.

We live and learn. Even experienced rocketeers whoa re supposed to be "experts" can learn.

#### Quote

"There are people who make things happen, there are people who watch things happen, and there are people who wonder what happened. To be successful, you need to be a person who makes things happen."

— Jim Lovell



### Where in the World is the MASA Planet?

For those wondering, I fell asleep at the computer and there was no issue number 2, which would have been the March/April issue. This July/August issue is also a shortened one. My apologies, and keep the articles and pictures coming! — *Editor* 

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#### **MASA DIRECTORY**

Established 1998

Founding President: Russ Durkee

2014 President

Neal Higgins-nthiggins@gmail.com

2014 Vice President

Jeff Taylor— fatboy55448@gmail.com

2014 Secretary/Treasurer

Carol Marple— MASA576Treasurer@gmail.com

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

#### **Summer Picnic**

Date: Saturday, July 11

Time: Launch 1:00-4:00, Picnic 4:00-8:00 p.m.

Location: Elk River / Otsego VFW soccer

fields, Google Maps Link

#### Meeting

Date: Thursday, September 3

Time: 7:00 p.m.—8:30 p.m.

Location: TBA

Topic: TBD

#### Launch

Date: Saturday, September 26

**Time:** 8:00 a.m.—4:00 p.m.

Location: Elk River / Otsego VFW soccer

fields, Google Maps Link



#### **Activities Disclaimer**

Scheduled dates, times and launch sites are subject to change due to weather and/or field conditions. Check the MASA Web Site (www.masa-rocketry.org) or MASA Yahoo Group (http://groups.yahoo.com/group/ masarocketry) for up-to-date changes.

All MASA Launches are "Misfire Alley" (bring your own launch pad and controller), however, community pads are usually set up for everyone's use.

For more information, please visit the MASA website by clicking

here.

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



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