

## WARP 10



Newsletter #4 September  
2016

### Third Official Club Launch Report

September 10<sup>th</sup> (Middle  
Soccer Field)

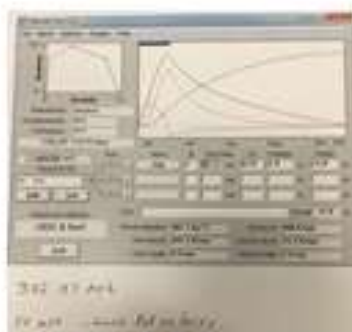
9 am to 12 pm.

WyEast (Permit #1607-0003)

The day to launch rockets was perfect. I should have brought my boost gliders to launch on this day. Daniel Pierce had a lot of successful launches and one bad one with his first launch of the nicely built Scissor Wing Boost glider. He launched it with a B class motor and it was under powered before the rocket had time to deploy its scissor wings for a glide. A C6-3 should be the recommended lowest impulse for that kit. Luckily I had a few 24mm body tubes to give him and he has already rebuilt the rocket and it will be ready for another successful flight for sure:



I had a great launch with an Aerotech IQSY Tomahawk rocket. It was launch with an F44-8W 24mm motor and the rocket achieved an altitude of 1,831.9 feet. Max Speed was 382.97 miles per hour. It was going at a speed of 50 miles per hour by the time it cleared the pad. It achieved its peak altitude in 9.3 seconds and burnout velocity was at 448.0 feet.



Hood River Hobbies Rocket  
Build and Launch Class.

The rocket build class on September 17<sup>th</sup>, 2016 from 10:30am to 12:00pm went well. It was a light turn out (six participants) and it was fun. We all built the classic Estes Alpha kit with the classic 3 fin plastic molded fin set.

Two new people attended and also participated in the launch which took place at 1 pm after the rocket build session. It was a little busy at the park with a few soccer games going on as well as a light drizzle. I was determined to try and get a few launches off. With the help of Daniel, Zed and Andy we were able to get about four to five launches off until it was time to pack up since the glue was getting moist and causing the launch lugs to slip off without the assistance of wrapping masking tape around them.

Everyone was a great help with also breaking down the gear. I quickly dried off all of the electronic launch items and made sure to get some WD-40 from the local store so I could spray it on areas that needed that extra rust prevention after being cleaned off.

I donated a rocket to the Hood River hobby store to display:



Peter Alway's Zvezdotchka-ACM (first Rabbit in space - Anti-Carrot Missile) 🚀🐰

Zvezdotchka was a Soviet rabbit who traveled to space aboard an R-2-A (V-2-A) geophysical rocket circa



1960, and reportedly survived her trip unharmed.

Plans for scratch building your very own Zvezdotchka

bunny will be included with the news letter ☺

The rest of the newsletter will be loaded up with great pictures taken from the September 10<sup>th</sup> Launch.

Make sure to check the GRC 790 web site and subscribe if you would like:

<http://www.gorgerocketclub.com/>



# Zvezdotchka ACM

© 1999 Peter Alway

Glue ears to nose cone



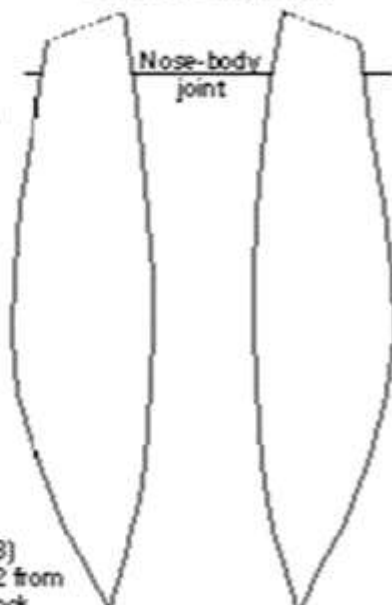
I created the Zvezdotchka Anti-Carrot Missile in response to the threat of a fellow club member's Carrot Missile. It was not an original idea — Estes Industries sold a rabbit rocket, the "Cloud Hopper" in 1973-74. I downloaded the plans from Jim Z's web site, but I felt that I could create a rabbitier rocket on my own. Our pet rabbit, Fida, has helped in the design of some of the lagomorphic features (word of the day: rabbits and hares are lagomorphs, not rodents). Finally, I should explain that Zvezdotchka (Little Star in Russian) was the first rabbit to fly into space, aboard a suborbital V-2-A geophysical rocket. Thanks to her four lucky rabbits feet, she survived and was recovered unharmed.

## Parts:

You will find almost everything in an Estes Big Bertha kit.

- A: Nose Cone from Big Bertha
- B: 2 Ears from cardstock
- C: Shock Cord and Mount
- D: Parachute (12" or 18")
- E: Body Tube, 7" BT-60
- F: 2 Fore Legs from 1/8" balsa or thicker.
- G: 2 Hind Legs from 1/8" or 3/32" balsa (you will need wood bought separately from Big Bertha)
- H: Tail from 1/8" or 3/32" balsa
- I: Standard Engine Mount (Cut Big Bertha mount tube to 2 3/4" long)
- J: Launch lug

Front of eye is about halfway up the nose cone, eye is around 1/4" x 3/8".



Ears (B) Make 2 from cardstock (photocopy plan onto cardstock and cut out).

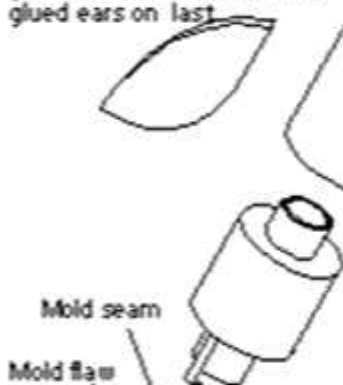
Hind legs and tail are equally spaced around rear of rocket. Fore legs in line with hind legs.

Paint white base coat. Leave white, or mask off tail and spray paint upper side with rabbit appropriate color of your choice. I painted the ears (except where glue goes) separately, scrape paint from glue area on nose cone, and glued ears on last.

Forelegs (F) must be glued on straight a slight misalignment could make your model go unstable.

Fly this model on the same engines you'd use for a Big Bertha.

Hind Leg (G) Make 2 from 1/8" or 3/32" balsa



Mold seam

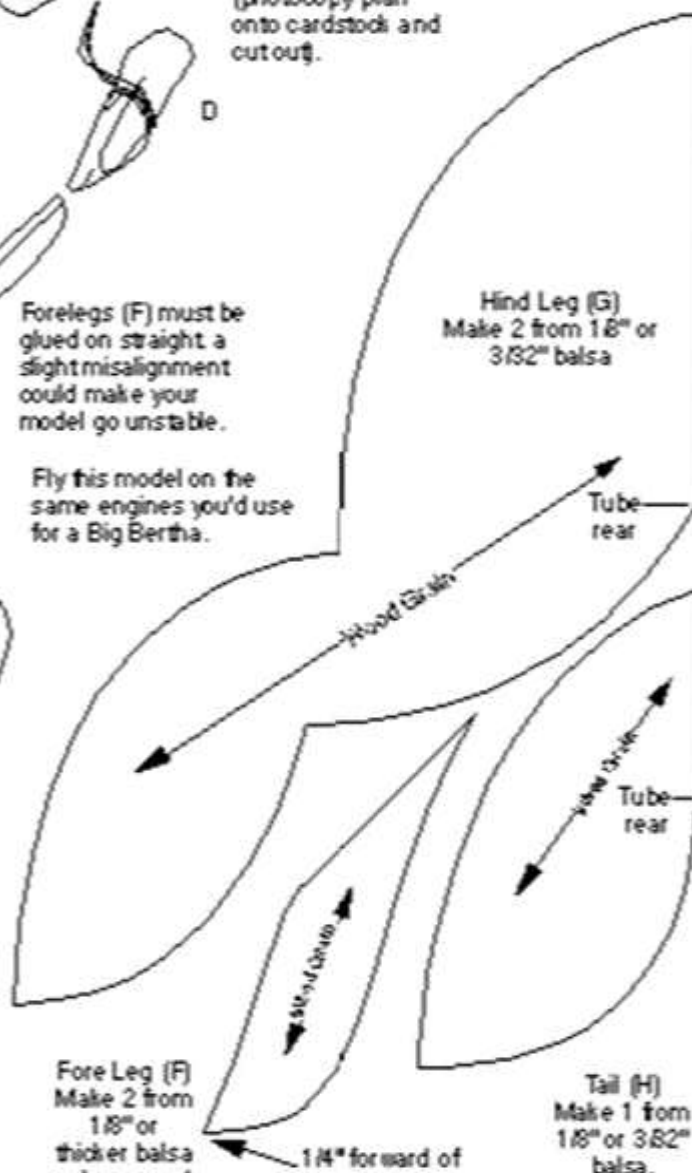
Mold flaw

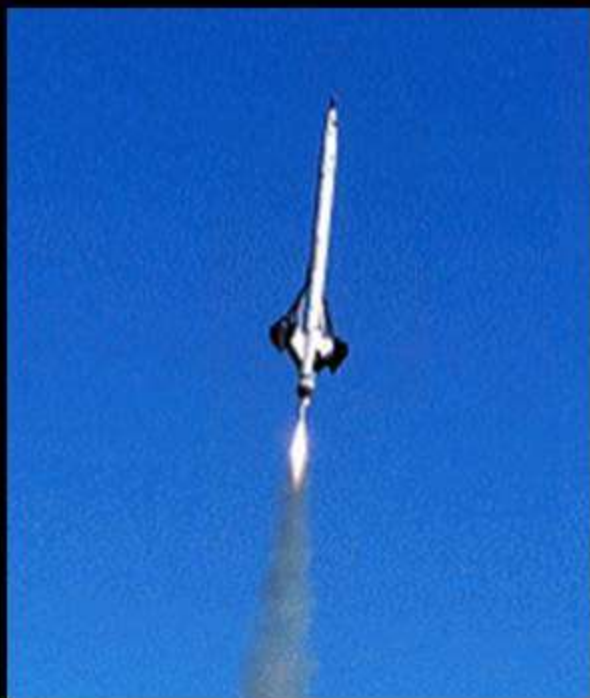
Nostils and philtrum line meet at nose tip.

Fore Leg (F) Make 2 from 1/8" or thicker balsa or basswood.

1/4" forward of front of tube

Tail (H) Make 1 from 1/8" or 3/32" balsa.





**Mid flight Motor  
Failure  
With 24mm  
Aerotech E18-4W  
Reload**













