

# WARP-10



## GRC 790 News-letter #3

Contributing writers for this newsletter are

Daniel Pierce and John Thompson

## Second Official Club Launch Report

August 27th (Middle Soccer Field)

9 am to 12 pm.

WyEast (Permit #1607-0003)

## Launch Report

By Daniel Pierce

Well, after nearly three days of absolutely still weather here in the gorge, I woke up Saturday morning to get ready for our club launch day and immediately noticed how windy it was, and it was only 7:30 in the morning!!! I had got ready and packed up most of my bigger rockets for the days launch, including a few that I had finished but had never flown. The new Estes Shuttle and The Launch



Pads Pershing 1A. Fellow member John Thompson and I had gotten together so he could walk me through the process of reloading Aerotech motors and I was super excited to launch my first E powered rocket. These Aerotech E18-4 RMS motors were a suggested first flight motor for my Pershing. I was able to get the kids ready and in the car in time to get to the launch field just before our 9:00 am start time. Surprisingly, the wind was much, much calmer at the field. That gave me renewed confidence for the day's launches. One of the things that I discovered when setting up was that the 3' long 3/16" diameter launch rod I had given John to put on his multi rocket launch pad didn't seem long enough to support the Estes Shuttle or the Pershing. John had also brought his large launch pad that had a 6' long 1/4" diameter rod to launch his Maxi Mosquito that had a new key chain camera and housing, but I only had 3/16" launch lugs on my bigger rockets.



Johns Maxi Mosquito from Estes was a great launched on a CTI E reload motor. I was excited to see the video footage it was going to get for us:

<https://youtu.be/Kn5YspSdGg8>

The rocket drifted a bit farther on recovery than we had expected so we repositioned the launch pads.

Next up was my Estes Shuttle and I loaded it with a D12-5 Estes motor. I believe I tipped it

too far into the breeze as it weather cocked pretty severely and hit the ground before the ejection charge. There was some airframe damage, to the rocket, as well as parachute damage from the ejection charge that was confined to inside the airframe due to the nose cone being stuck in the grass!!!! I think it may have also been under powered, especially with that shorter launch rod.

We then set up the Pershing and diminished the rod angle. The motor was quite a sight when it ignited, with the visible flames and large smoke volume. It weather cocked slightly, but it was a satisfying flight, but it broke a small fin on recovery.

I also got a chance to launch my Cosmic Interceptor. I used an Estes Pro series motor, an E30-4t. It was amazingly fast off the pad and quite an incredible first flight!!! The Parachute shroud got slightly tangled, but it ended up landing close enough to the launch area that I was able to catch it before it made landfall!!

We had a bunch more good flights, including Gorge Hobby Shop owner Zed Ruhlens Crayola rocket that always flew perfectly and gets all awards for landing closest to the launch pad on recovery!

The wind picked up slightly, and some of the recoveries were getting farther away from the pad, and we were about to call it a day when all of the sudden the wind quieted down again. I took the opportunity to set up my Estes QCC Explorer with a Pro series E30-4t, knowing from a



previous launch that it was a good flyer. Well, it was quite a launch! We estimated that it went above 1200 feet, and it caught some pretty serious thermals up there and seemed to hang in the sky forever. We tracked it landing what looked like about a half mile away in an orchard. At first I just figured it was gone forever, and we discussed the need to put contact information on our parachutes for future launches. We packed up and cleaned up our launch area and discussed our next scheduled launch day and said our goodbyes, but as I drove away I noticed that people were actively picking in the orchard where my QCC Explorer had landed so I decided to drive in and at least ask if anyone had seen it come down. Most of the people picking that day were native Spanish speakers, and although I know some rudimentary Spanish, I don't know any rocketry terms in Spanish so I brought along a rocket to help facilitate my explanation of what I was doing there and what I was looking for. Nobody seemed to have seen it, so we took a long walk up and over the rise that I believed it had landed over. We walked some aisles and were just about to give up when I spotted the Parachute on the ground!! The rocket had landed in between the rows of trees on the soft grass and was unharmed. A very lucky recovery as I really had written it off as a lost bird, and was already thinking about how I would need to build it again since it was such a cool looking ship and such a great flyer.

All the repairs were made on the rockets over the next couple days, and new, 1/4" lugs were put on the bigger rockets for the next launch, which I am eagerly anticipating!

! Thanks again to John Thompson for getting this rocket club started and Zed and Miko

Ruhlen for their support at the Gorge Hobby Shop.



*Recovered Estes QCC Explorer after a terrific launch:*

<https://youtu.be/XTiQNWwHcdw>

## Launch Report

By John Thompson

The second official club launch went pretty well. The day before our launch day the weather was very, very calm. The day of our launch the early morning weather along the Columbia Gorge was breezy. However, when we ventured up to the WyEast middle school field it was calm. There were a few little spots of light breezes but nothing like what was occurring near the gorge. The first thing I did was prospect and analyze the best spot to set up. I placed two wind socks up at two different locations so we could keep an eye on the wind directions. We had all three soccer fields to the club that morning which was nice in case we needed to shift the launch pad around due to the changes in possible win directions.

Luckily everyone involved was familiar with how the winds do change in the Gorge area.

See Everyone at the September 10th (Middle Soccer Field) 9 am to 12 pm launch at **WyEast**

