Rocket Write Up

By Tim Matista

Now that we are making our final rocket we had to put more thought into it.  Thus Jorge made sure that we knew what we were doing so we have a write up to do.

From the first and second rockets that I have made I learned that making sure that the rocket fits on the launcher before finishing is important.  I made my first rocket out of paper and it was too tight on the launcher so it couldn’t come off.  The second rocket was a bottle rocket.  It didn’t sit down on the launcher all the way so at about 20 psi it slipped off.  This time I will double check that it fits perfectly.  I think that these failures taught me how to build a better rocket.

Some things about my old rocket worked well though.  The wings, for example, worked perfectly.  Both of my rockets had sturdy wings that kept them flying straight.  I plan to use similar wings for this next rocket.

Based off of previous research I learned that wings are most effective when near the base of the rocket, filling your rocket to about 1/2 or 1/3 with water is the best amount and other such trivia.  I will use my knowledge to help my team save time by not having to research.

I also learned that the fins should be about 6 inches tall and 4 inches wide and that a nose cone should be slightly wider than the top of the rocket and its height depends on your rocket’s height.  Generally nose cones shouldn’t exceed 1/3 the length of the rocket.  As for shape a rounded nose cone makes it easier to stay on course but is significantly harder to make yourself.

As for keeping the egg safe a parachute is by far the most effective way to make sure that there is no mess at the end of the flight.  Other strategies include excessive padding and some excessively intricate suspension methods.  personally I prefer a simple parachute. I think the previous knowledge I have taken from building rockets will help me make this rocket flawless.  In fact it did so well that even though it was weighed down by paint it made it to 53 feet high.

In conclusion I feel that this rocket was a success.  Not only did it meet all requirements, the egg survived, it had a working parachute, and it looked beautiful.