Grant Walker

Mr. Neill

June 12, 2017

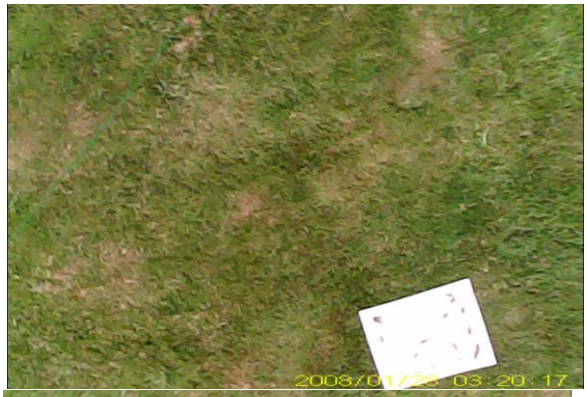
Observations of Test Day

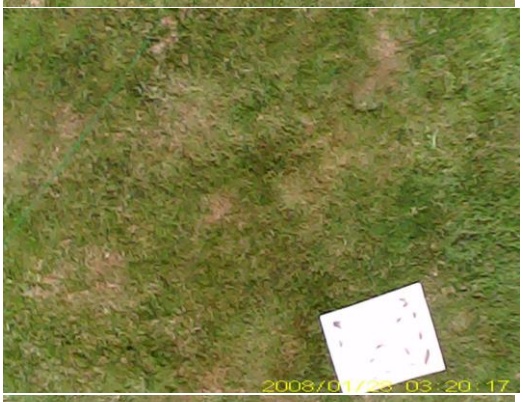
A big part of the entire project was testing. As a team, we had to work together and test every system and every part of the system in order to ensure that it would work on launch day. But as we started and continued the project, we realized that we could never quite get the coding to work exactly how we wanted. We were able to test everything else but the actual circuit. We had to rely on launch day to finalize most of the systems. We had to work extensively on the code on launch day. Launch day was our biggest day of testing.

As launch day as our test day, we were able to learn a lot about how our system worked and were able to fine tune many things. As we started dropping the imaging device, we were able to clearly see what worked and did not work. The parachute was the most reliable part of our system. The chassis worked well but one of the legs broke off and had to be fixed with some hot glue. Most of the structure and circuit worked, but the coding did not. As we tested, we had to practically rewrite the code in order to get some pictures. Our first picture was obtained by turning off the system and just turning on the video mode. Our next two successful pictures were taken with a code that took pictures every two seconds, and sounded an alarm when it landed. This was not what was planned for the final design and was not as successful as we hoped.

We were able to take several photos with the target in it. Some of the photos were taken before it started to descend, but we were ab le to get a few successful photos as well. You can see below on the next page the successful and non-successful pictures. The photos that were successful were pictures that were taken while descending as well as having the entire target in the picture. If the picture did not have those qualifications, it is not considered a successful picture. The team had to work together in order to have a successful descent. One person had to calibrate the system, three people had to hold the tethers to lift it up, and one other person the drop the system. As the team had more practice, the descent improved drastically.

Successful Pictures





Non-Successful Photos