Weekly reports are to be emailed to atbecker@uh.edu by 5:00pm on Tuesdays. The purpose of a weekly report is to: (1) give you text and images for your papers, thesis, and dissertation, (2) document progress, (3) identify if you are stuck or need resources.

Weekly report

1. My *Goals* from last week

- Read and understand report: "Mosquitos vs. Drones"
- Understand how the system works
- Go through different Arduino codes, make sure everything needed is there

2. My *Accomplishments* this week

a. Project 1: Mosquitos vs. Drones

- deliverable 1. *Understanding the Report*
  - Mosquito zapping net is an alternative method of killing mosquitos. It is more environmentally friendly and provides more data of the surrounding it flies in.
  - An UAV is mounted with an electrified screen, which is flown through a high-density mosquito population
  - The voltage across the screen is monitored—a drop in voltage is how a strike of a mosquito is counted
  - Other data collected is used to improve the efficiency of this method
- deliverable 2. *Understanding the system*
  - The system is optimized such that the kill rate is maximized as a function of weight, thus an area that is filled with approx. with 1000 mosquitos the system should eliminate 70% of them

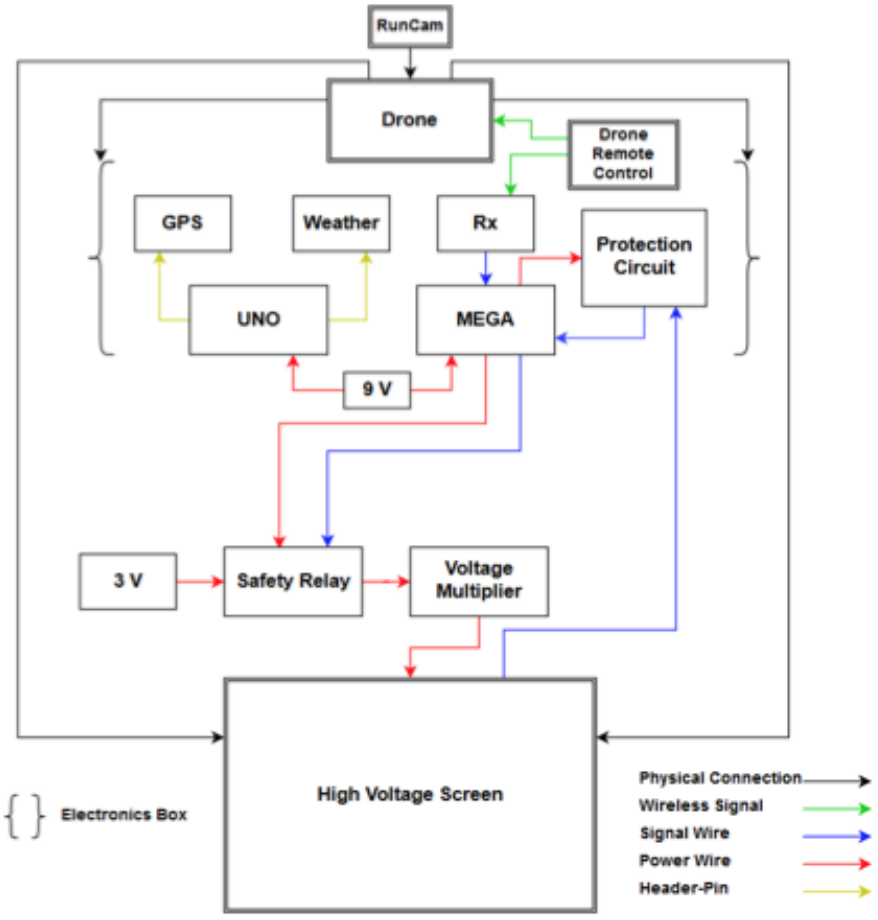

Figure 1 – System Design

- deliverable 3. *Arduino Codes*
  - The code counts the number of strikes that are made on the net, however it has difficulty when 2 strikes are made at the same time
  - The SD card is initialized to store the data log along with a time stamp for each strike (file is saved as a .txt)

3. My *Goals* for next week

- Start running the Arduino codes with the net and related equipment
- Collect some sample logs
- Run them through the interpreter

a. Meeting with Dr. Becker on Thursday, June 1st, 2017 at 11am (if available)

4. What I need Dr. Becker to do:

a. Clarity on how to collect the sample logs, and what interpreter they should be run through
b. Key to the lab
c. Some study material on Drone Flying