

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

- Connecting the net to the rest of the circuit, record a zapping moment
- Finishing building of the net (fiber glass rods and adding in all the screws)
- Taking our first flight test

2. My *Accomplishments* this week

a. Project 1: Mosquitos vs. Drones

- deliverable 1. *Connected the net to the converter circuit to electrify the net and recorded the spark*
 - The spark was as bigger than the spark observed with the executioner racket used previously
 - <https://youtu.be/rATIM6YIREU> → link to video of zap testing
- deliverable 2. *Finishing the build of the net*
 - The net has been put together and ready to be to fly, however the weight of the net got surprisingly heavy
 - Total weight of the net: 2.09 lbs, total weight of old net: 4.26 lbs
 - I believe the weight can be reduced by not using Epoxy as a bonding element – using nylon screws to hold the net and frame together might give better results
- deliverable 3. *Taking our first flight*
 - Ran into issues with the net and strike counts. The net can get electrified, but there were issues with the program being able to count the strikes properly
 - After 2-3 zaps, the program is throwing an I/O error
 - Possible problems: Wiring, bad connections, or EMI

3. My *Goals* for next week

- Readjust the corner piece for more optimization
- Build a control box to house all the electrical components
- Have a successful flight test, while successfully logging strikes and GPS
 - a. Meeting with Dr. Becker on Thursday, August 3rd at 3pm

4. What I need Dr. Becker to do:

- a. Help brainstorming solutions for the possible EMI problem.