

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

- 3D Print all Corner Pieces and make sure they can be attached to the frame properly
- Connect wires to the mesh, so it can be connected to the rest of the circuit
- Put the frame together and have it ready for the flight test

2. My *Accomplishments* this week

a. Project 1: Mosquitos vs. Drones

- deliverable 1. *Created a new grid frame with smaller opening to prevent the aluminum meshes from touching each other*
 - The frame shown in figure 1 was cut from 1/4th ABS, instead of 1/8th this time, making it thicker so it will make it harder for the meshes to touch each other
 - Total Area of Mesh: 300 in², total area taken up by grid: 50.52 in², therefore effective Area of Mesh: 300 in² – 50.52 in² = 249.48 in²
 - Old Net total Area: 24 in x 24 in = 576 in², total area taken up by the separator: 24 in², therefore effective Area of Old Mesh: 576 in² – 24 in² = 552 in²

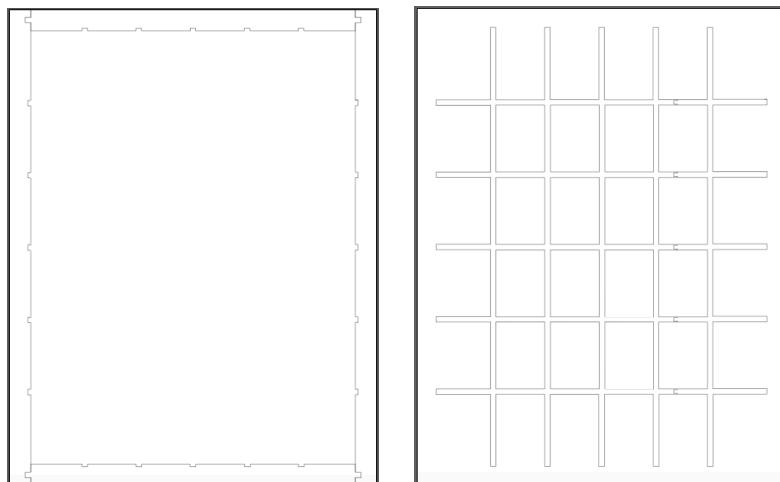


Figure 1: New Spacer Frame

- deliverable 2. *Adjusted the corner piece design one more time before printing all of them.*
 - Added an additional hole in the corner, for attaching the net to the drone
 - Changed the where the two fiber glass rods will be going for all sides

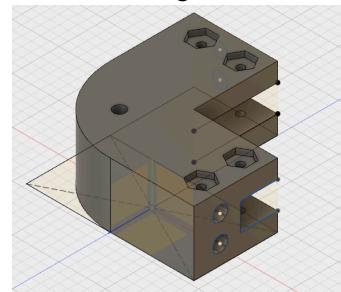


Figure 2: Changed Corner Piece

- deliverable 3. *Printed all the pieces, cut all the ABS and put it all together with Epoxy*

- Wires are attached and pulled through the rectangular opening, so that the net is able to connect to the rest of the circuit
- More fiber glass rods are needed to attach to the bottom and top part of the net



Figure 3: Almost Finished Net

3. My Goals for next week

- Connect the net to the circuit to make sure that it is able to get electrified and zaps can be counted
- Add the missing fiber glass rods and screw everything in place before the flight test
- First flight test with the net and the circuit tentatively scheduled for *Thursday, July 27th*
 - a. Meeting with Dr. Becker on Thursday, July 27th, at 3pm (if available)

4. What I need Dr. Becker to do:

- a. Meeting for recommendation letter