Week 12 Report

Work Completed

This week I have continued to work on the wireless portion of the device and troubleshooting portions of the code to allow for communication between the LCD and the CB220. I also created a test setup for demonstration purposes.

Programming

This week I have made significant progress in the wireless coding. The CB220 successfully sends a connect message and the corresponding percentage to the other eb505. It is set up to receive the Relax Variable from the LCD remote and to convert the string into an integer that can be used to trigger the relaxation process. The LCD Remote did break on Thursday, so this has postponed the completion of the LCD Wireless code until the new remote is received. Once the remote is received it should take me a few hours to have everything complete and up and running.

Figure 1 – eb505
Artificial Sphincter

All the necessary parts are now in for the artificial sphincter. All that is left to do is connect the manual pump to the system that is already up and running and then test the function of the device as a complete unit. We are still having some issues with stopping complete flow through the artificial urethra. These issues will have to be dealt with this week, and on Friday.

![Figure 2 – AMS 800](image)

Artificial Urethra

As stated in the previous section, some leakage is still occurring when the sphincter is connected and inflated. Alan did warn us that simulating this portion of the device would be a difficult task. I am considering adding some extra material that will help to compress the tubing once the device is contracted to help prevent flow. I am not sure if this will work, it may just further inhibit the contraction process, but it is going to be worth a shot to see if it improves the system.

Future Work

The final week is approaching, and there is not much left to do. The LCD Remote code has to be reviewed once the remote comes in. The PCB Board needs to be reviewed and ordered by Friday. Also the final preparation for the device housing needs to be completed.

Hours Worked

This week I worked 14 hours. Most time was spent programming and troubleshooting code and creating a test setup for presentation purposes. I also spent time troubleshooting the cause of the LCD failure, but was unsuccessful with my attempt.