This week we made great progress toward having all of our components ordered. We also made some progress for the testing of each component. The range of the low power transceiver was tested and validated to a 3 room range. A long range transceiver has been ordered and the range will be validated upon receiving the new transceiver.

We also worked on choosing a microcontroller. We choose an Atmel 32-bit microcontroller because it meets all of our I/O and interface requirements. The built in Ethernet controller played a large role in the selection of the microcontroller. We needed to find the proper development board and determine each of the accessories needed for our specific microcontroller.

In the next week we are going to continue component testing. We are also going to begin the process of integration and PCB design.

Need to discuss implication questions at next adviser meeting

Motor and motor driver circuit:

Goals completed:

1) achieved speed, direction, and turning motor control using LMD18200T with Arduino mcu

2) found out that previous torque requirement test method may be inaccurate

Goals for next week:

1) achieve speed, direction, and turning motor control using L298N with Arduino mcu

2) find new motor with more accurate encoder sensors for better testing

3) will need to retest torque requirement with more accurate force scale

Still need to select:

Buttons and physical user input devices

Power supply

buzzer

Schedule: We are currently behind schedule. According to our schedule we should have finished the design process and started the process of documentation on Oct. 22nd. Plans to catch up with the schedule will be implemented and the schedule reconsidered