Memo

**To**: Dr. Luis Rodriguez

**From**: A.R.C. - Logan Beaver, Justin Campbell, Tyler Paddock, and Ron Shipman

**Date**: October 23, 2014

**Re**: A.R.C.’s Update for the Week 7

**Problem Statement:**

Milwaukee School of Engineering’s mechanical engineering students take controls classes in their senior year. Having an automated control system would be a beneficial tool to explore controls theory. An application of Automatic Control Systems is the use and development of robotics. Development of a robot with pneumatic locomotion for the Milwaukee School of Engineering’s controls classes would give students a first-hand experience with complex control systems.

**Last Week’s Accomplishments:**

* Synthesize initial component ideas and discussed
* Simulink -> C code generation research
* Memo created
* Remained in contact with potential sponsors
* Specification added for electrical component protection
* Pneumatic benefits added to the Design Proposal Report
* Specifications and Objectives reviewed
* Microcontroller recommendations given
* Draft Design Report given to Dr. Rodriguez

**Goals for this Week:**

* MATLAB model updated and library created
* Create robot designs in Solidworks
* Work on Design Report
  + Feasibility of Electronic Components
  + Drawings and Models of Robot Components
  + Proposed Gaits
  + Microcontroller Recommendation summarized and added into document
  + Background Section Completed
* Draft of Design Document send to Dr. Rodriguez

**Man Hours:** 14 hours split between team members