Memo

**To**: Dr. Luis Rodriguez

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

**Date**: October 17, 2014

**Re**: A.R.C.’s Update for the Week 6

**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:**

* Meeting with PLEXUS for funding
* Memo written
* Material added into Design Report Deliverable
* Gantt chart updated with a whole year of planning
* Project Plan Deliverable Submitted
* More experimentation and familiarity with MATLAB functions and the leg model
* Microcontroller design matrix drafted
* Microcontroller Recommendation

**Goals for this Week:**

* Synthesize initial design ideas – Different robot designs
* Simulink Coder ™ and Embedded Coder ™ research with Tiva series processors Texas Instruments
* Contact to possible sponsors – keep in touch and on same page
* Design matrix for project design choice
* Feasibility
  + Electrical Components
  + Pneumatic Benefits
  + Proposed Gaits
  + Other Specifications

**Man Hours:** 16 hours split between team members