**Project Status Report**

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| **Project Name** | Detect-O-Robot 1000 |
| **Team Members** | Alan Cranbury, Mark Mahony, Jack Morgan |
| **Report Date** | October 11, 2013 |

**Project Overall Status: Yellow**

We didn’t get as much done this week as we wanted to. One team member was sick, this slowed our progress. The main issue was the many roadblocks we encountered in trying to install the joystick and wifi sticks on the beaglebone, as well as compiling the cross-compiler for the beaglebone. We found a method for streaming video from the camera that is simple and works. We discovered that the encoder on the robot platform we were assigned has an issue. Our goal was to have the robot under closed-loop control by this Friday, now the goal is to have it moving by next Friday.

**Activities – During the Past Week**

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| --- | --- | --- |
| **Activity** | **Planned Completion Date** | **% Complete** |
| Closed-loop control tuning | October 11, 2013 | 0 |
| Determine metal detection methodology | October 11, 2013 | 100 |
| Choose other sensors | October 11, 2013 | 100 |
| Design Op-amp circuits | October 18, 2013 | 10 |
| Install Linux on Beagle Bone | October 11, 2013 | 100 |
| Install wifi | October 11, 2013 | 50 |
| Install joystick | October 11, 2013 | 100 |
| Camera – Decide on Interface | October 11, 2013 | 100 |
| Camera - Receive | October 11, 2013 | 100 |
| Camera – Transmit | October 11, 2013 | 50 |

**Activities Planned – For the Next Week**

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| **Activity** | **Planned Completion Date** |
| Finish control loop tuning. | Wednesday, October, 16, 2013 |
| Finish design of op-amp circuits. | Friday, October, 18, 2013 |
| Get the beaglebone to work with the joystick and wifi. The transmitting of the camera data should follow once the wifi is working. | Tuesday, October, 15, 2013 |
| Finish design of other sensors and coil. | Friday, October, 18, 2013 |
| Order parts and ask Dave to see what’s available. | Tuesday, October, 15, 2013 (Can slide back to Friday, October 18, 2013). |
| Finish incorporating camera streaming service into joystick software. | Friday, October 18, 2013 |
| Begin reading documentation on how to read the analog ports on the beaglebone. | Friday, October 18, 2013 |
| Pick a design for the Marking Ejection System (MES). Finish rough sketch of the proposed system. | Friday, October 18, 2013 |

**Outstanding Issues**

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| --- | --- | --- | --- |
| **Issue** | **Responsibility** | **Date to be Resolved** | **Proposed Resolution** |
| Installation of wifi drivers and on the beaglebone. | Jack Morgan, Alan Cranbury | Tuesday, October 15, 2013 | For the wifi, we might just use a wireless router. Once the cross-compiler works, we might be able to compile a driver for the wifi. |
| Control-law tuning. | Mark Mahony, Jack Morgan | Wednesday, October 15, 2013 |  |

**Changes to Plan**

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| **Change** | **Date of Change** | **Impact to Project** |
| Extended Remote control portion of the project to the second week. | October 11, 2013 | Makes the second week much busier. |
| Monday is not a working day. | October 11, 2013 | Makes the second week much busier. |