**Informal Test Report**

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| **Project Name** | Detect-O-Bot 1000 |
| **Team Members** | Alan Cranbury, Mark Mahony, Jack Morgan |
| **Report Date** | November 20, 2013 |

**Hardware**

**Working**

* Marking Ejection system, both mechanical and electrical elements are functional.
* Thermocouple circuit responds appropriately to temperature, approximately 4mV/oC.
* The magnetometer does not function properly as a compass, since the gain is too low. However, placing a magnet near the sensor does give a visible and testable response. It theoretically outputs 128mV/G. It is possible to view the Earth’s magnetic field changing when zoomed in to 20mV scale. The change is about 1mV after the first gain stage.
* The HCS12 is capable of powering and controlling the motors without issue.

**Not Working**

* Metal detection system is not operational.

**Firmware**

**Working**

* Timer channels, RS-232 communication, motor control are all functional.

**Software**

**Working**

* Receiving and interpreting joystick commands.
* Serial communications.
* Camera streaming.
* SSH reception of software output.
* Wifi.

**Not Working**

* Analog have not been tested.