Meeting Minutes – Robotic Horizons

10/03/2008
11:30 AM
Mind Works Office

Jay McCormack – Advisor
Aaron Goodin – Mentor
John Porter – Mentor
Tim Palmer
KC Akuretiya
David Mehaffey
Nick Yankee
Eli Henson
Matt Cerro

**Assigned Action Items:**
Completed successfully

**Discussion of questions raised on 09/26/08:**
Platform
- 16X16 in maximum
- 1 meter high
Number of data points >1000 (i.e. payload must be retrievable)
Crater Terrain
- ~40K
  - Fine, electrostatic dust
Payload Size
- 6X6X6in max

**Assess possible design ideas:**
Antenna
Pros: retrievable, accuracy, soft landing
Cons: 60m moment arm, size

Sling Shot
Pros: robust
Cons: accuracy, elasticity, complex retrieval

Rail Gun
Pros: accuracy, versatility, good demo at expo
Cons: retrieval, landing force, protection of payload memory (i.e. magnetic field)

Catapult
Pros: robust
Cons: moving parts, retrieval
Remote Control Car
Pros: retrieval
Cons: Deployment functionality

**Create initial function list:**
Launch
Retrieve
Device Setup (deployment)
Loading of payload
Aim-Controls
Communication with payload

**Action Items:**
Type up and distribute template of function list – Matt (10/6)
Fill out function list as completely as possible – All (10/9)
Email NASA to set up meeting for Design Review – Aaron (11/1)

**Next Meeting:**
10/09/2008
3:30 PM
Mind Works Office