

## Members Present

Kurt Stratton  
Joshua Koelle  
Chris Anderson  
Jonathan Gibson

## Group Meeting – October 11, 2011

- Review of Design Review Meeting
  - LK – Bump up documentation importance
  - Wellin – run time specification, pass/fail, run for specific amount of time
  - Nowak – Colors on pareto chart
  - Wellin – Controls are not necessary if just forward and backward
  - Wellin – Don't use Labview
  - Wellin – High Pressure CO2
  - Wellin – Mindstorm Controller
    - Follows trails on floor
    - Relates to kids
  - Wellin – create backup plans
  - Mike – separate cool from what works
  - Bill – risks important
  - Bill – show parallel activity
  - LK – Proof of concepts
- Discussion about control boards
  - Can mindstorms kit provide 24 volts to solenoids
- Turning
  - Will probably need to split muscle groups
- Control with 2-axis joystick
- Fluid Movement
  - Muscles are very quick movement
- Pairs
  - Manual control and turning
  - Autonomous and sensing
- Risk Backups
  - Air and 120 volt hookup available
  - Controls
- Ant Internals
  - Solenoids
  - Relay
  - Power
  - Air Muscles
  - Air

## Meeting Minutes 10.11.2011

10AM-Noon

- Sensors
- Control Board
- Action Items
  - Chris – Bill of materials: weights, prices, etc.
  - Kurt – Sensing vs. Turning to Lamkin Kennard
  - Josh – Info about relay box from measurement computing
  - Gibson – Wellin and Walter about controls