

# RASC-AL Robo Ops

9/12/13

## Goals

- ❖ 2013
  - September
  - October
  - November
  - December
- ❖ 2014
  - January
  - February
  - March
  - April

## General

- ❖ Stick with old platform
  - New platform?
    - Two smaller hex bugs
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- ❖ Funding
  - Proposal – create email and letter and presentation to show to potential sponsors
    - Potential Sponsors
      - ◆ Check other Robo Ops teams from prior years
      - ◆ Parents
      - SpaceX
      - Cisco
      - LANL
      - GoPro
    - Last Years –
      - Ciscor
      - Misumi
      - Stride
      - Progressive Automation – Linear Actuator
      - Solid Works – General Competition
- ❖ Competition Day
  - Who goes, who drives
  - Remember:
    -

## Mechanical

### Problems

- Hills, dips
  -
- Turning while moving
  - Programming error?

### Solutions

- Two platforms
  - Need funding
    - ◆ Mass emails asking, if 10 in 100 return \$1K = \$10K
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## Electrical

### Problems

- Networking
  - Problems with communication
    - Antenna? Higher on the robot? Different Network
      - ◆ Higher antenna needed
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### Solutions

- 3G vs Cisco?
  - Router issue
- More compression in data

## Tasks

### MEs

Jason – Project leader, arm mechanism

Chris – Interested in claw mechanism

Justin – Interested in design and build, Promotions

Sponsors, Heat efficiency

### EEs

Linus – Networking

Boris – Programming

## Financials

### Advisor

1<sup>st</sup> meeting 9/12/2013

Sending Jason email about his discussions, advantages since we're mobile, arm has problems, communications killed us last year, recommends Linus and Matt meet, network not strong enough at competition site, not enough cameras or illumination, string on arm!, build simulation environment and practice, get current robot up and running, focus on improvement, salvage sand, overheating motor problems, lag problems, inverted pendulum to rest