

# **Far Horizons**

# **IMSA Intern Program 2014**

Project

# Mission Communication System

- 2-Way Communications
  - Uplink (from ground to platform) mainly for Command & Control (C&C)
  - Downlink (platform to ground) mainly for Telemetry
  - Up/Down also for SMS among vehicles & Adler
- Intra-Platform Communications
  - Payloads Telemetry and C&C to 2-Way via Hub.
  - Wired serial links from payloads to payload box Wireless controller.
  - Wireless links between Hub payload box and other payload boxes
- Platform Hub
  - Collects and distributes data from/to all payload boxes.
  - Wired serial link to 2-Way communications.
- Chase Vehicle Hub
  - Collects data and sends C&C from/to payload via 2-Way link.
  - Displays data and accepts control commands via built-in web site.
  - Users in vehicles & at Adler connect to Hub web site via WiFi router.

# Mission Communication System Concept

