

Developing Communications Boxes for KMR

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Christine Ku
Professional Staff I

Overview

- About KMR
- Communications Box Projects
 - MISR
 - Deep Sea Lander IRAD

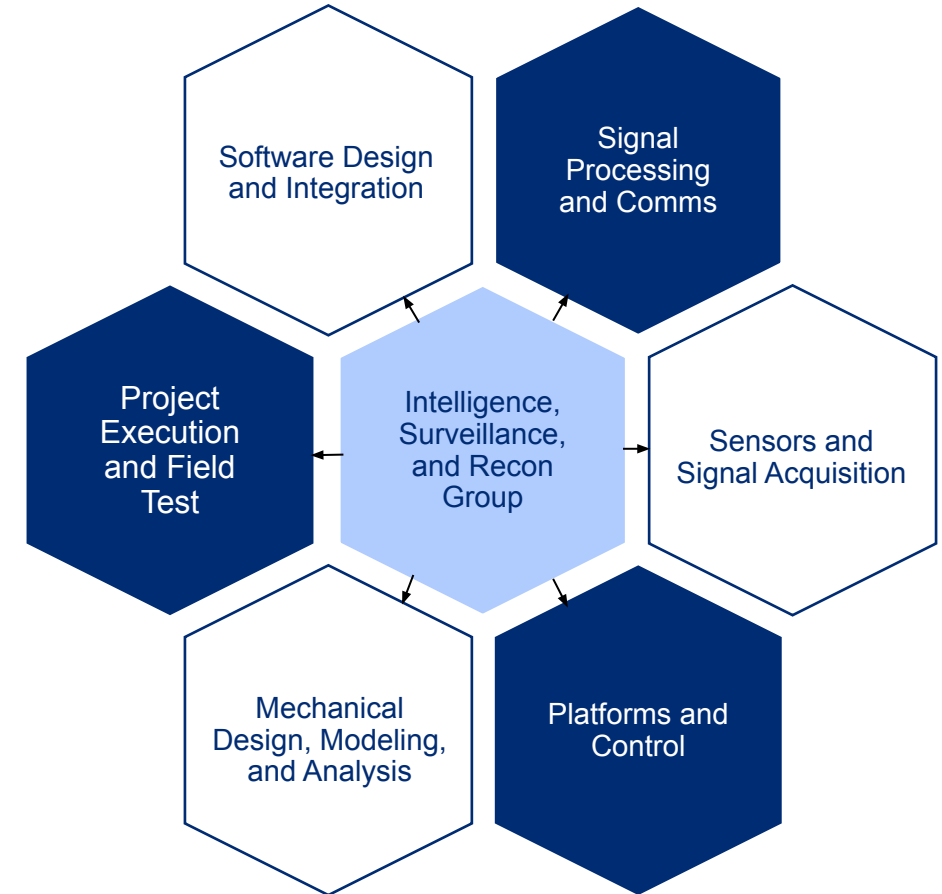
Intelligence, Surveillance, and Reconnaissance Group

- Mission:

- To provide comprehensive engineering expertise to rapidly develop and deploy solutions to mission critical, Intelligence, Surveillance and Reconnaissance (ISR) challenges for U.S. Government organizations.
- To apply Quick Reaction Capability (QRC) to advanced concepts, sensor and system prototypes, field tests and evaluations, demonstrations, deployable systems, and post-deployment data analyses

- Expertise:

- Rapid response, from concept development to deployment
- Optical, acoustic, electro-magnetic, seismic, and other sensors and acquisition design
- Persistent, autonomous, and wireless sensor systems for undersea, in-air, near space, or on-land environments
- Sensor and system test and evaluation, operation analysis and operator training



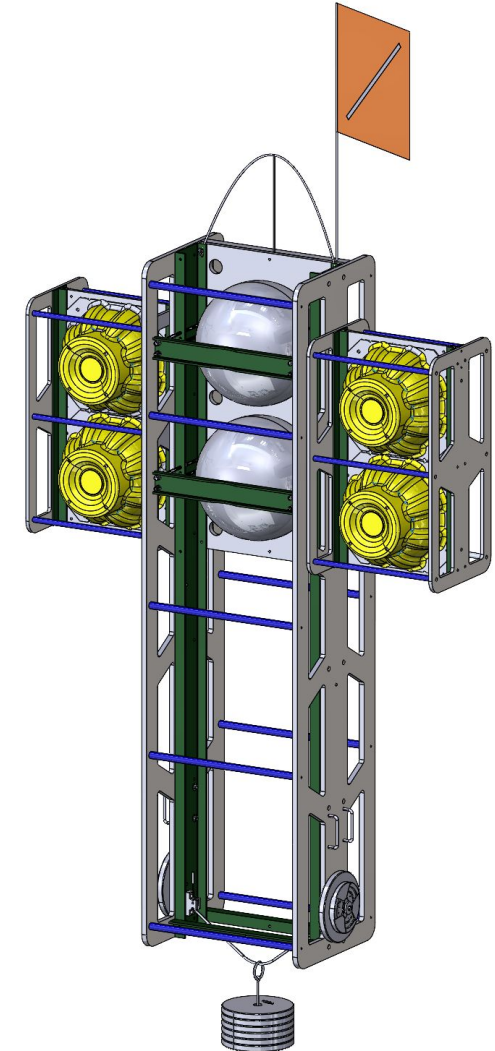
Communications Box for MISR

Stakeholders

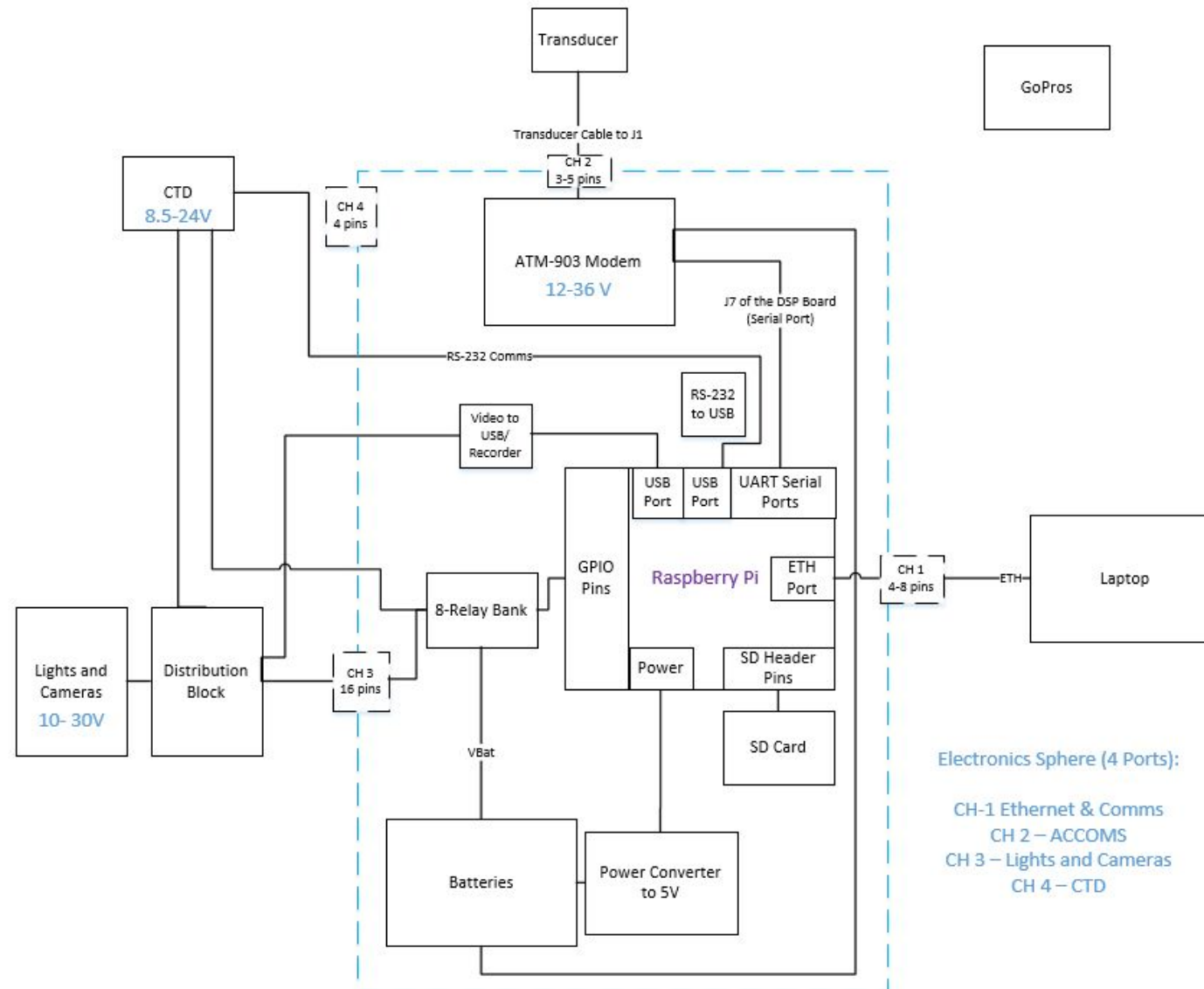
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Objective

- Mission
 - To procure and outfit a deep water lander and progressively deploy it at multiple depths up to 6000 meters (deep water systems environment) to allow further exploration into the techniques, materials and technologies used in deep water design.
- Project Goal
 - To create a box that:
 - Controls peripheral sensors, lights, and cameras on lander
 - Interacts with acoustic modem to transmit and receives data underwater



Component Layout



Command Shell Interface

```
Hi, User!  
Welcome to the Acoustic Comms Box Shell.  
Type help or ? to list commands.  
  
(user): help  
  
Documented commands (type help <topic>):  
=====  
exit  help  rx  status  time  tx  
  
(user): time  
2022-06-15 05:47:17.872339  
(user): |
```

- Currently, the processes of expanding the command shell and sourcing components are still in progress.

Future Development

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