HOPKINSVILLE COMMUNITY COLLEGE HIGH ALTITUDE BALLOONING

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NASA Kentucky
Space Grant Consortium and EPSCoR Programs

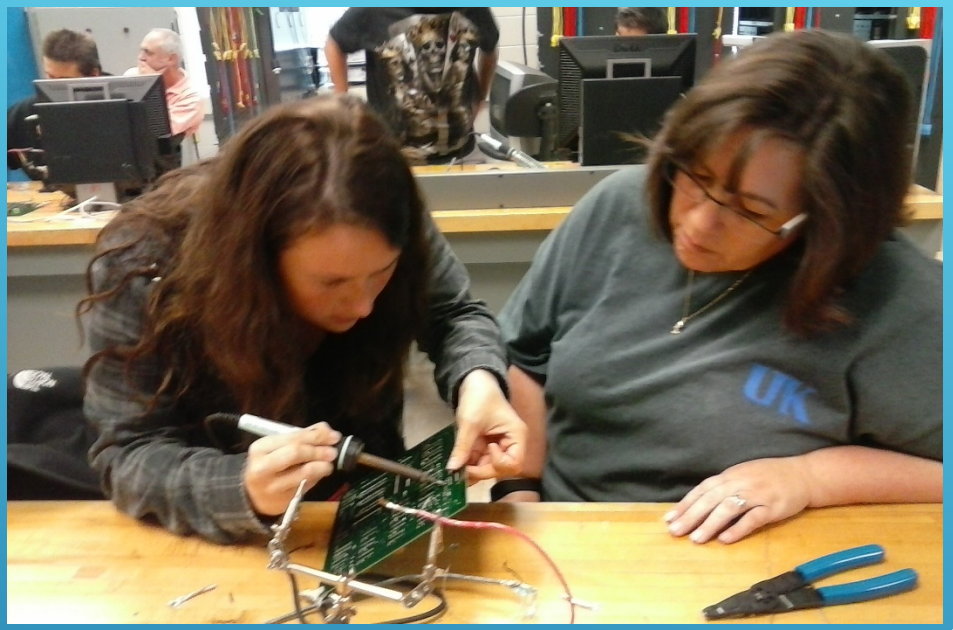
NASA

Hopkinsville
Community College

BalloonSat Workshop at the U.S. Space and Rocket Center

- Soldering and Software
- Programming Micro-Controllers
- Sensor Testing
- Prediction Software
- Launch Operations
- Payload Recovery and Data Analysis

TRAINING



SOLDERING LAB

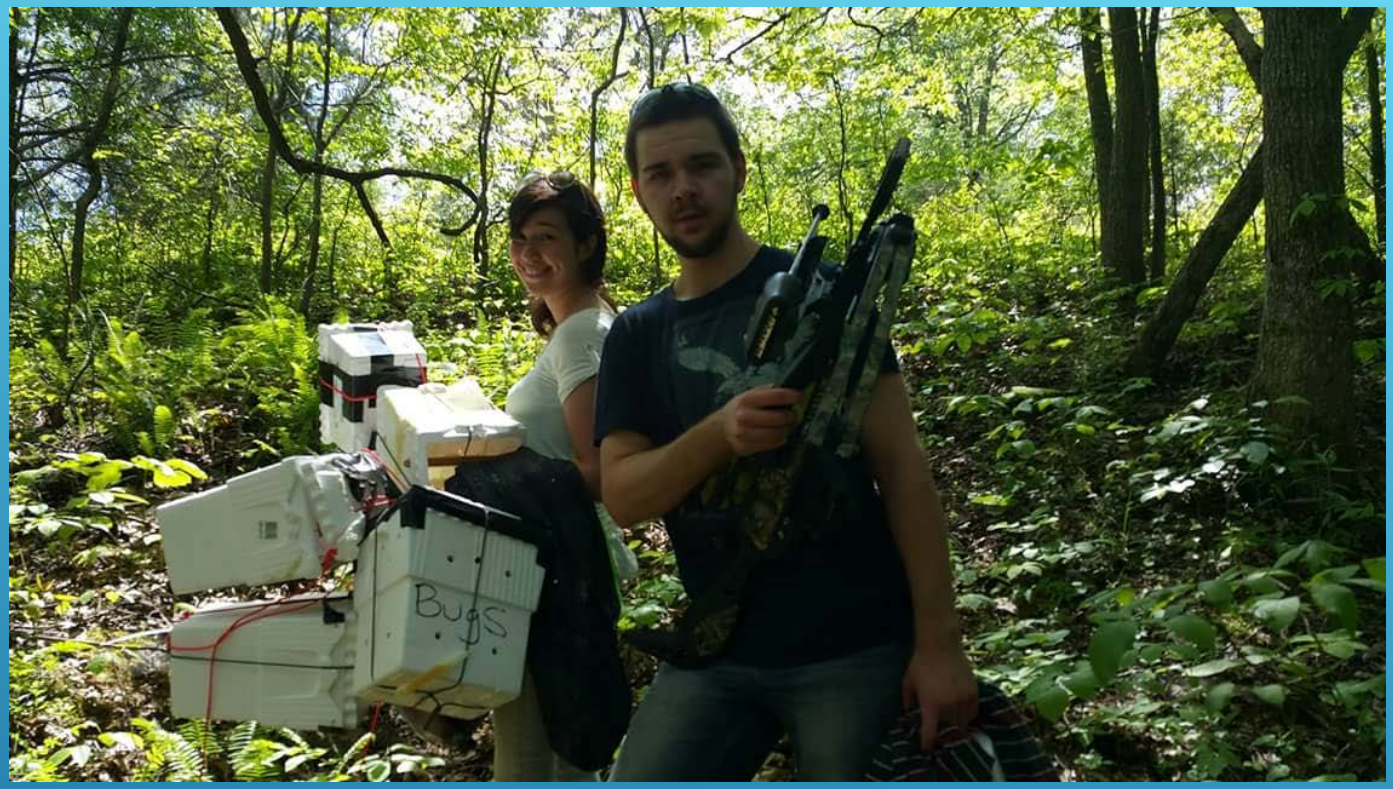
PAYLOAD EXPERIMENTS

- Sensors for Testing Temperature, Pressure, IR
- Mold Growth
- Egg Experiment
- Micrometeorites
- Insect Survivability
- Battery Charging
- Yeast
- Seeds (High School)
- Cellular Phone Reception (High School)

OUTREACH

HIGH SCHOOL RESEARCH OPPORTUNITIES

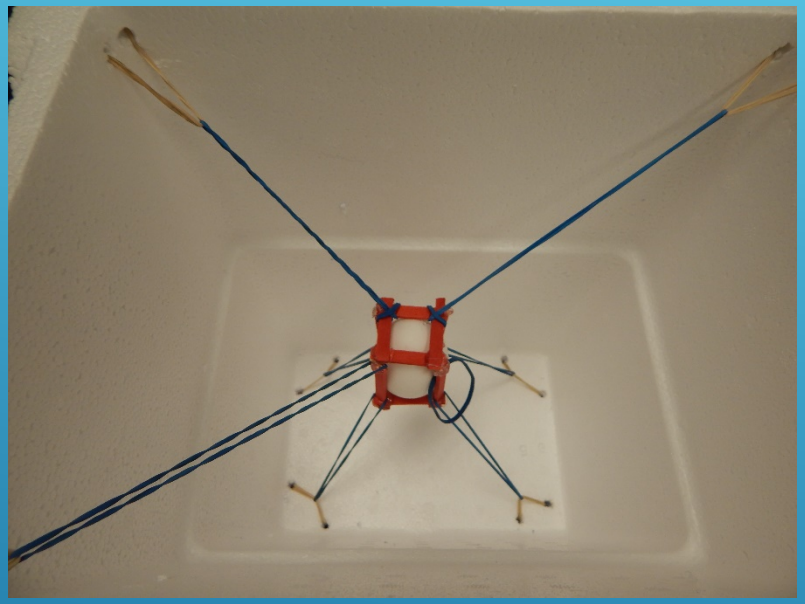
FIRST LAUNCH



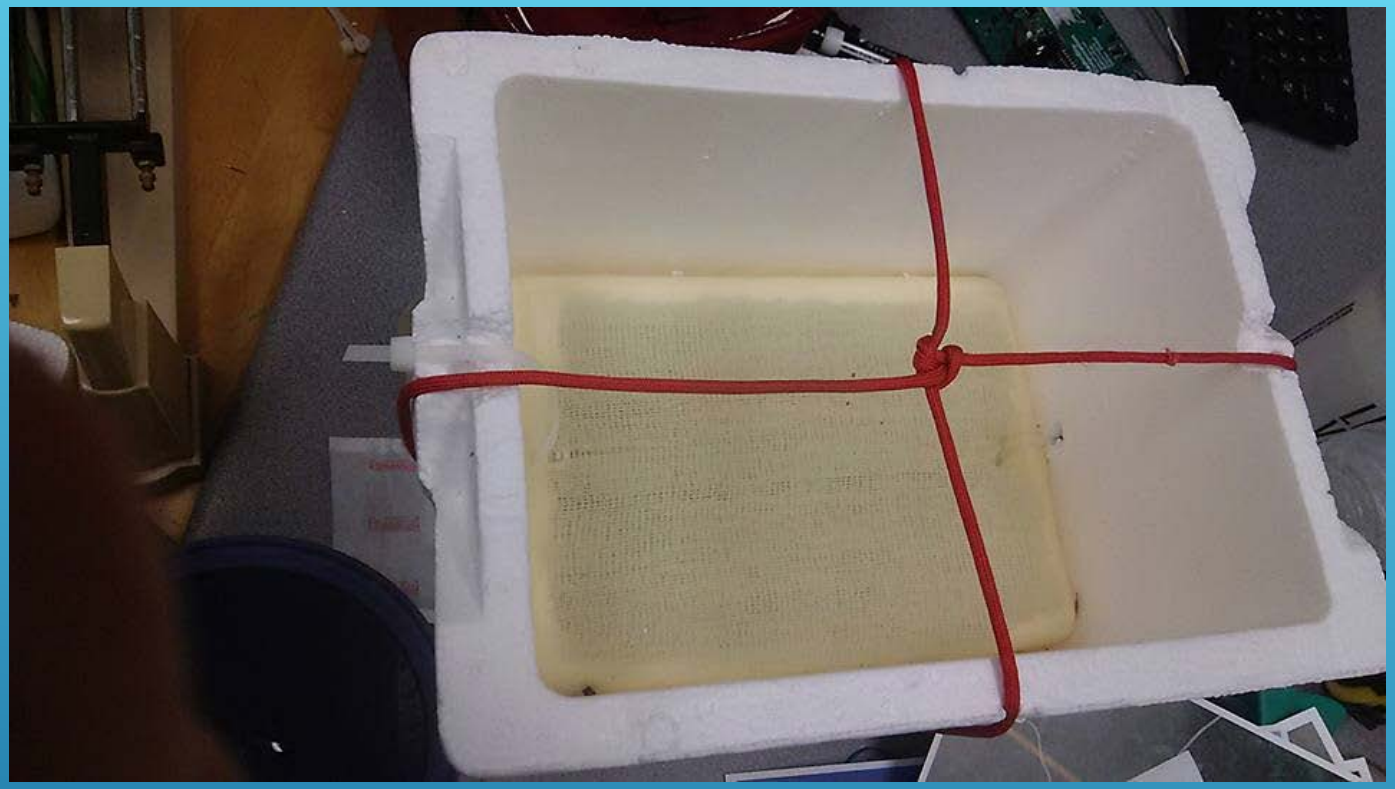
SPRING 2015 RETRIEVAL

SUCCESSES AND CHALLENGES

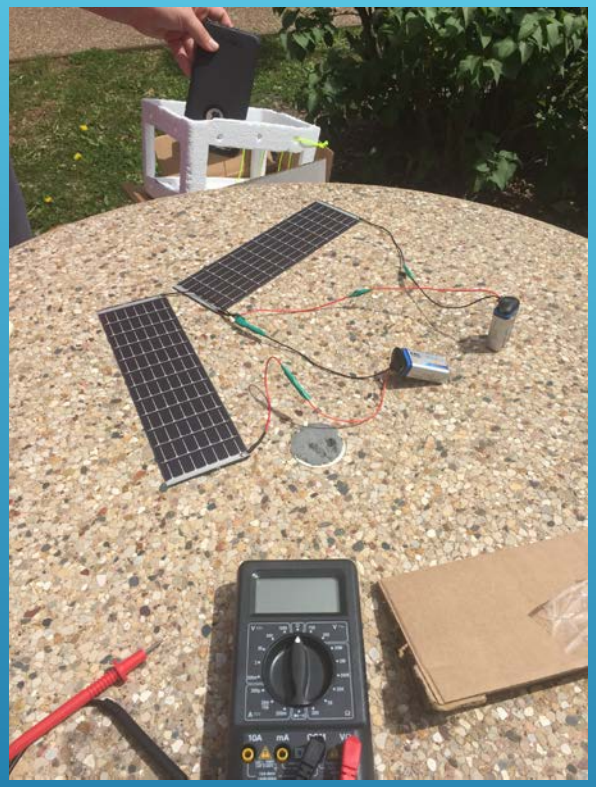
- Retrieval
- Micrometeorite Containment System
- Sensor Coding
- Camera Stabilization



CAMERA STABILIZATION



MICROMETEORITE CONTAINMENT



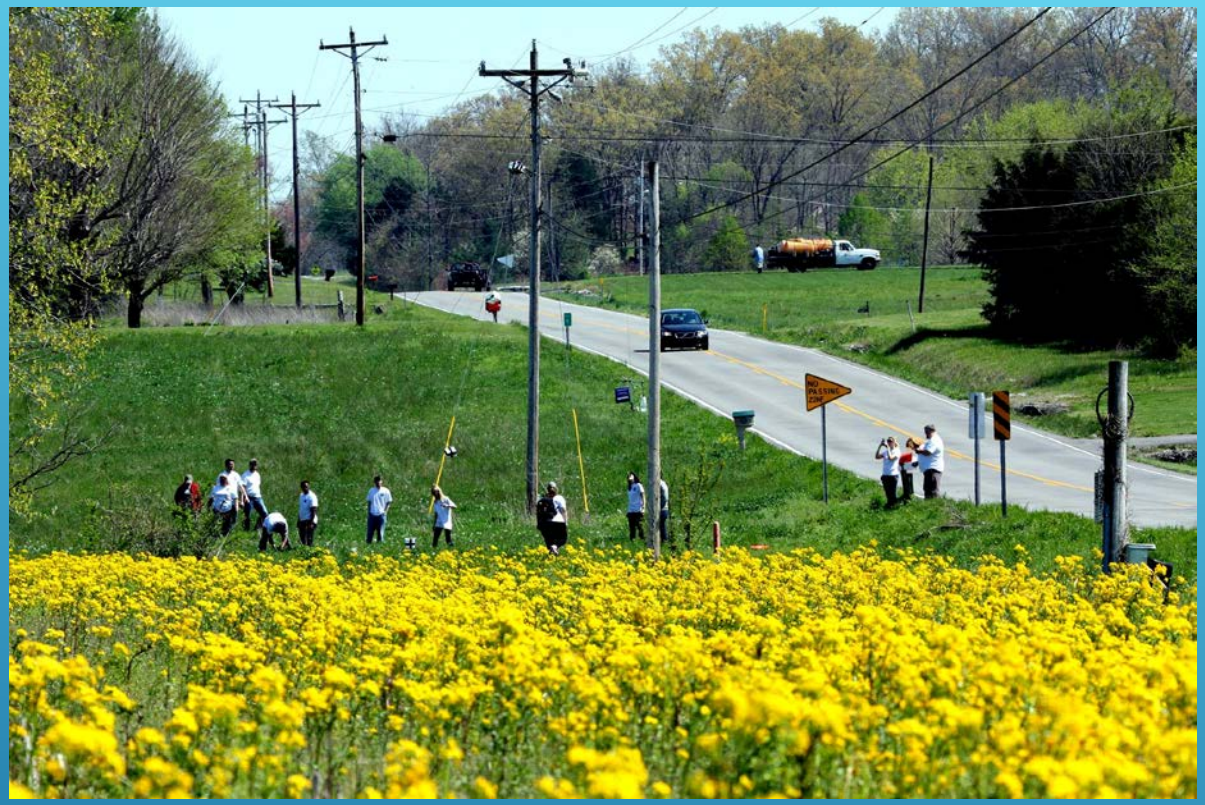
SOLAR PANEL EXPERIMENT

KENTUCKY MATHEMATICAL ASSOCIATION OF THE TWO YEAR COLLEGE PRESENTATION

HOPKINSVILLE COMMUNITY COLLEGE CAMPUS

BALLOON BURST

FALL 2015 RETRIEVAL



SPRING 2016 RETRIEVAL

SPRING 2015 TEAM

SPRING 2016 TEAM

FALL 2016 TEAM

THANK YOU!