

Monthly Status Report
May 2016
High Altitude Student Platform

Institution: College of the Canyons	Team Manager: Daniel Tikhomirov
Date: May 27, 2016	Advisor: Teresa Ciardi

Progress made this month:

1. Assembly of external structure
 - a. Top and bottom plates connected to side panels by 24 screws
 - b. 90 degree aluminum extrusions machined/threaded/attached for side support
2. Assembly of EPC enclosure mechanism
3. Fabrication of motor assembly
 - a. Improved and secure motor bracket
 - b. Machined aluminum pivot point; less brittle under low temperatures than previous plastic pivot point.
4. High Voltage converter test
5. Flight computer programming
 - a. Data logger functional
 - b. Motor Shield functional
 - c. 4 temperature sensors connected

Problems Encountered:

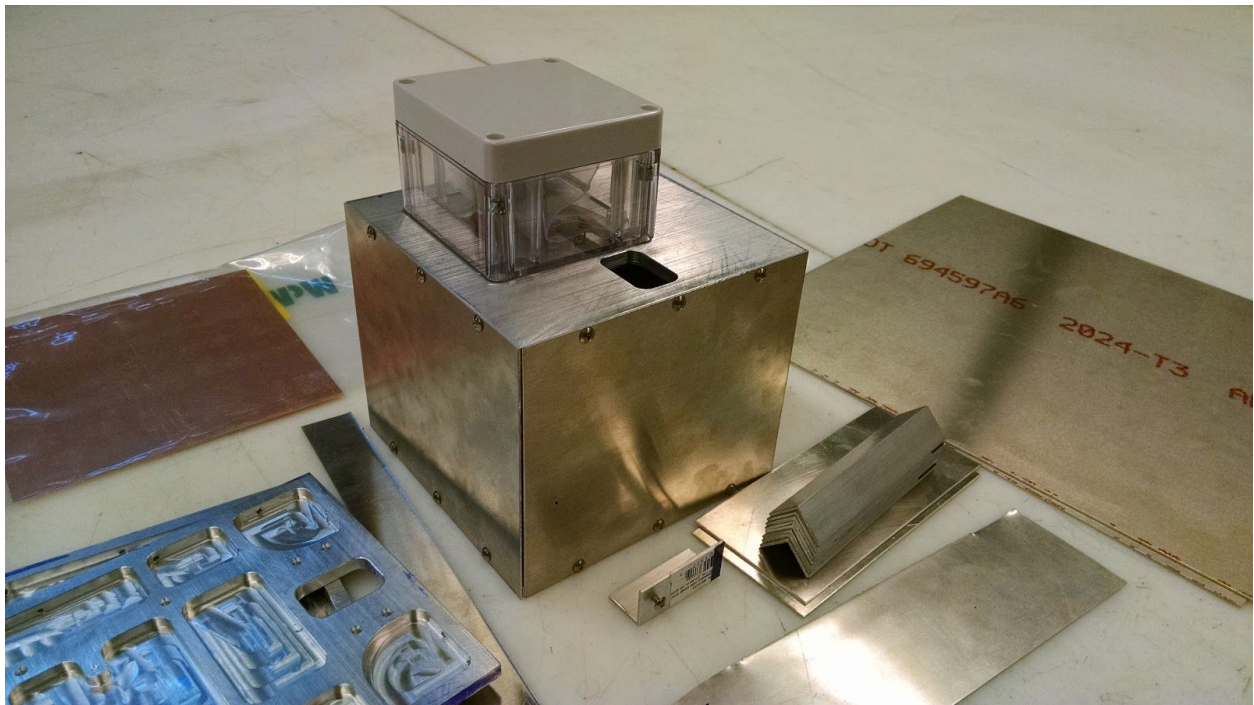
1. Clean room on COC campus compromised due to water leak
 - a. CSUN's (California State University Northridge) cleanroom will be used for completion of the payload and particle analysis

Progress to be made next month:

1. Completion of Payload by June 17th
 - a. EPC assembly/enclosure assembled
 - b. Assembly of High Voltage enclosure and wiring
 - c. Flight computer, power management board, and HV converter secured inside payload
 - d. Assembly of passive(insulation) and active(heaters) thermal systems
2. Electrostatic Particle Collector (EPC) testing
 - a. Smoke collection experiment with copper plate and steel mesh

Current Team Members:

<u>Flight Systems</u> <ul style="list-style-type: none">● Jason Monsalve (lead)● Jayme Gimenez	<u>EPC Systems</u> <ul style="list-style-type: none">● Nicholas Kasdjono (lead)● Savannah Rousselo● David Al-Nemri
<u>Thermal Control</u> <ul style="list-style-type: none">● Ryan J. Arroyo (lead)● Wyatt Kurumiya● Julian Drake	<u>Power Management</u> <ul style="list-style-type: none">● Mindy Saylor (lead)● Irfan Zaman
<u>Mechanical/Structural</u> <ul style="list-style-type: none">● Patrick Gagnon (lead)● Justin Hill● Scott Sebesta	<u>Faculty Advisers</u> <ul style="list-style-type: none">● Teresa Ciardi● Greg Poteat● Michael Bastine● Christine Hirst



Above: partially assembled (lift arm, hinge, and motor assembly not shown) ECDC payload in the COC machine shop as of 5/10/16