



# HASP Monthly Status Report

**Report Month:** June, 2023  
**Submitted by:** Derek Peraza  
**Submit Date:** 6 / 30 / 2023  
**Institution:** College of the canyons  
**Payload Number:** 2023 -09  
**Payload Name:** Sol Seeker

## I) Activities During Previous Month:

- vertical movement of stand with cameras attached and tested
- Nema 24 stepper motor tested
- thermistor tested
- parts machined for stand
- created a better PCB
- perfecting all flight code
- telescopes tested on sun

## II) Issues Encountered:

- Missing a Nema 24 stepper motor

## III) Milestones Achieved:

- We figured out how to fix the Nema 24 stepper motors so that they operate as expected
- Vertical movement of stand with cameras was tested and operated as expected
- Thermistors are tested and working with a very small margin of systemic error that will be used as a calibration for flight data
- Mount for cameras machined
- Created a better PCB to correct for minor issues on testing board (we could fly the original board if needed and will have it with us as a backup)
- obtained visible images of sunspots from our scopes

## IV) Plans for Coming Month:

- Machining for uprights of stand is in progress and will be completed first week of July
- testing of horizontal movement of stand with motor
- Test peltier plates
- Testing both horizontal and vertical movements of stand
- Test code
- Obtain ground observations of sun to compare to flight data

## V) Other Comments or Questions for HASP Management:

Is there a maximum number of people allowed at CSBF in Palestine?  
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## VI) Team Composition and Organization:

Name	Start Date	End Date	Role/Academic Year	Race	Ethnicity	Gender	Disabled
<b>Project Management</b>							
Teresa Ciardi	Fall 2015	Present	Logistics & Science Faculty Advisor	White	N/A	Female	No
Greg Poteat	Winter 2016	Present	Machining Faculty Advisor	White	N/A	Male	No
Amy Foote	Fall 2015	Present	Recruitment MESA Director	White	N/A	Female	No
William Harwood	Spring 2023	Present	Industry Professional-Aerospace Engineer	White	N/A	Male	No
Derek Peraza	Summer 2022	Present	Project Manager Undergrad	N/A	Hispanic	Male	No
Maranda Laws	Fall 2021	Present	Assistant Project Manager Undergrad	White	N/A	Female	No
<b>Engineering Team</b>							
Clarissa Zuo	Summer 2022	Present	Mechanical Lead High School/ Undergrad	Asian	N/A	Female	No
Derek Peraza	Summer 2022	Present	Electrical Lead Undergrad	N/A	Hispanic	Male	No
Drake Lovelady	Summer 2022	Present	Coding/Software Lead Undergrad	White	Hispanic	Male	No
Terry Guerrero	Fall 2021	Summer 2022	Mechanical Team Member Undergrad	White	Hispanic	Female	No

Miguel Paz	Fall 2022	Winter 2023	Mechanical Team Member Undergrad	N/A	Hispanic	Male	No
Isaiah Romero	Fall 2021	Present	Software Undergrad	N/A	Hispanic	Male	No
<b>Marketing / Media</b>							
Marni Kallestad	Winter 2022	Present	Marketing Lead Undergrad	White	Hispanic	Female	No
Gabriel Jimenez	Spring 2022	Fall 2023	Marketing Co-Lead Undergrad	N/A	Hispanic	Male	No
Tawshia Chowdury	Winter 2023	Winter 2023	Marketing Co-Lead Undergrad	Asian	N/A	Female	
Arely Castillo	Spring 2021	Present	Marketing/Media Team Member Undergrad	N/A	Hispanic	Female	No
<b>Mentor Team</b>							
Sarah Boyer	Fall 2021	Present	Mechanical/ Electrical Mentor Undergrad	White	N/A	Female	Yes
Shawn Ford	Winter 2019	Present	Mechanical/ Electrical/ Software Mentor Undergrad	White	N/A	Male	No
Patrick Gagnon	Summer 2021	Present	Mechanical/ Project Management Mentor Undergrad	White/ African-American/ Asian	N/A	Male	Yes
Brandon Gelfand	Fall 2016	Present	Electrical / Software Mentor Undergrad	White	N/A	Male	No
Daniel Larimer	Spring 2019	Present	Mechanical/ Electrical Mentor Undergrad	White	N/A	Male	No
Andrew Nowakowski	Spring 2022	Present	Electrical/ Software Mentor Bachelor's Business Management & Computer Science	White	N/A	Male	No

Svarun Soda	Fall 2021	Present	Software/ Electrical Mentor Undergrad	White	N/A	Male	No
<b>Consulting Team</b> The Local Group Astronomy Club of Santa Clarita Valley, California							
Dave Flynn	Fall 2022	Present	Lead Engineering Consultant	White	N/A	Male	No
Glenn Basore	Fall 2022	Present	CAD design Consultant	White	N/A	Male	No
Abhishek Khanna	Fall 2022	Present	Astrophotography Consultant	Asian	N/A	Male	No
Robi Mukherjee	Fall 2022	Present	Mechanical Consultant	Asian	N/A	Male	Yes
Vahid Talaie	Fall 2022	Present	Software Consultant			Male	No