



HASP 2023 Monthly Status Report

Report Month: June 2023
Submitted by: Dr. Nirmal Patel and Lovely Ramos
Submit Date: 06 /29 /2023
Institution: University of North Florida
University of North Dakota

Payload Number: 2023-07
Payload Name: Measurements of Ozone in the Troposphere and Stratosphere

Payload Short Name: Ozone Sensors Payload – OSPrey

I) Activities during Previous Month:

Team received the comments on PSIP. Team submitted the final Preliminary Payload Specification and Integration Plan (PSIP). Thanks to Dr. Guzik and Dough for making a abstract table of PSIP, which we added on the first page of the final PSIP.

II) Issues Encountered:

None so far.

III) Milestones Achieved:

- 1) Tested and calibrated ozone sensors.
- 2) Integrated sensors boxes with microcontroller circuits.
- 3) Checked and replaced new heaters and checked temperature sensors and controlling of temperature.
- 4) Testing of the payload is going on
- 5) Updated software for the microcontroller circuit.
- 6) Updated software to simultaneously convert all RAW files into one EXCEL file.
- 7) Cory completed two payload body and six sensors' boxes as back up.
- 8) Dustin, Colin, and Aryan kept Arduino circuit card ready. Testing is going on. We are trying to build an additional new payload for back up as well as for next year.

IV) Plans for Coming Month:

- 1) Finalizing the Flight Operation Plan (FLOP) and will be submitted by separate file.
- 2) Visit to NASA-CSBF, Palestine for integration of payload with HASP and thermal vacuum test.

V) Other Comments: None

VI) Team Composition and Organization:

University of North Florida								
Name	Start Date	End Date	Role	Student Status	Race	Ethnicity	Gender	Disabled
Miguel Bolante	01/09/2023	04/30/23	Leader, EE, Communications Sensors	UG-EE	Caucasian/White	Hispanic	Male	No
Diego Fontan-U	01/09/2023	04/30/23	Payload design and body	UG-Civil/ME	Caucasian/White	Hispanic	Male	No
David Medis	01/09/2023	04/30/23	EE Microcontroller Circuits and Data	UG-EE	Caucasian/White	Non-Hispanic	Male	No
Lovely Ramos	01/09/2023	Present	EE Microcontroller Circuits and Data	UG-EE	Asian-Filipino	Non-Hispanic	Female	No
Dustin Leonard	02/01/2023	Present	EE-Circuit board and components	UG-EE	Caucasian/White	Non-Hispanic	Male	Yes
Colin Ott	02/01/2023	Present	EE-Circuits, sensors, and integration	UG-EE	Caucasian/White	Non-Hispanic	Male	No
Cory Pare	03/01/2023	Present	ME, Payload body design, Fabrication	UG-ME	Caucasian/White	Non-Hispanic	Male	No
Haris Smajic	01/09/2023	Present	EE Microcontroller Circuits and	UG-EE	Caucasian/White	Non-Hispanic	Male	No
Aryan Patel	02/01/2023	Present	Software - Programming	UG-Computer	Asian-America	Non-Hispanic	Male	No
Elric Burch	02/01/2023	Present	EE-Sensors and payload thermal budget	UG-EE	White-Cherokee	Non-Hispanic	Male	No
Cathryn Penn	04/15/2023	Present	EE-PCB, Circuit and Testing	UG-EE	African American	Non-Hispanic	Female	No
Julian Rowe	04/25/2023	Present	ME-Payload body Design	UG-ME	Caucasian-White	Non-Hispanic	Male	No
Calla Taylor	04/27/2023	Present	ME-Payload Body Fabrication	UG-ME	Caucasian/White	Non-Hispanic	Female	No
University of North Dakota								
Sam Reams	01/09/2023	Present	Space Studies	Master-Space Studies	Caucasian/White	Non-Hispanic	Male	No