



HASP 2023 Monthly Status Report

Report Month: April 2023
Submitted by: Dr. Nirmal Patel and Lovely Ramos
Submit Date: 04 /28 /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:

- (i) Design of payload body completed, and fabrication of new body is going on.
- (ii) Preliminary Payload Specification and Integration Plan completed.
- (iii) Design of new electronic circuit as a backup plan is completed and new circuit is under testing.

II) Issues Encountered:

None

III) Milestones Achieved:

- (i) Team made redesign of the payload body.
- (ii) Cory made 3-D printed payload body for simulation and model purpose. He and other two ME students are working on fabrication of the body.
- (iii) Miguel developed the new microcontroller circuit board design. Circuit is under testing by EE students.
- (iv) Testing and checking of program to convert raw files to EXCEL completed and fixed minor bugs.

IV) Plans for Coming Month:

- (i) Fabrication of new circuit board and sensors box.
- (ii) Testing of ozone sensors.

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
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Sam Reams	01/09/2023	Present	Space Studies	Master-Space Studies	Caucasian/White	Non-Hispanic	Male	No