



Maryland Aerospace Career Launch @ Eastern Shore
Experiential Learning Opportunities Project Descriptions



Opportunity WFF ID#8001

Title: New Business Support

Description: The student will support NASA Wallops Flight Facility Suborbital and Special Orbital Projects Directorate and the Front Office Team supporting new business and promoting the aerospace ecosystem on the Eastern Shore of Maryland. The student will work with Wallops Leadership on scheduling/launch forecasting, budgeting, communicating with potential new business partners, and collaborating with regional stakeholders. This position will provide opportunities to gain and improve leadership, communication, and business management skills through meaningful work.

Preferred Majors: Business, Marketing, Communications

Skills: Public speaking, budgeting, communication, time management, critical thinking, project planning

Hands-on/Computer Based/Both: Both

Individual or Team Based/Both: Both

Technician/Research/Both: Research

Opportunity WFF ID#8021

Title: Heliophysics Strategic Technology Office (HESTO) Initiatives

Description: Participate in improving the website, and the project database. Participate in reviews with Principal Investigators. Participate in planning a symposium.

Preferred Majors: Electrical Engineering, Mechanical Engineering, Software Engineering, Space Science

Skills: PowerPoint, Excel, Database, Website

Hands-on/Computer Based/Both: Computer

Individual or Team Based/Both: Both

Technician/Research/Both: Research

Opportunity WFF ID# 8101

Title: Guidance, Navigation and Control Intern

Description: Assist the sounding rocket GNC group with daily work efforts, especially the use of a new 2 axis rate table in the improved calibration of a spin stabilized IMU.

Preferred Majors: Math, Physics, Mech/Elec/Computer Engineering

Skills: data analysis, MATLAB, some hardware familiarity, set up, turn on, tear down

Hands-on/Computer Based/Both: both

Individual or Team Based/Both: individual intern working with a team

Technician/Research/Both: Both

Opportunity WFF ID# 8102**Title: Summer 2026 Mechanical Engineering Workforce Development Student**

Description: Peraton is seeking a Summer 2026 Mechanical Engineering Workforce Development Student at our Wallops Island, VA location to support our NASA Sounding Rocket Operations Contract (NSROC) program. NSROC implements the work of the NASA Sounding Rocket program (NSRP) to fully design, build, integrate, test, and fly sounding rockets via expendable suborbital rockets to study a host of scientific objectives. Workforce Development Students at NSROC are given the opportunity to work on flight hardware and flight designs including design, analysis, and testing, as well as apply theoretical knowledge to solve real world engineering problems.

Responsibilities:

- Apply theoretical knowledge relating to statics, dynamics, strengths of materials, and mechanical design in the design and analysis of flight and GSE structures as assigned by supervisor or mentor.
- Creation of manufacturing documents such as part and assembly drawings and Model Based Definition products utilizing SolidWorks.
- Work with Engineers, Technicians, and machinists in creating and updating technical documents.
- Coordinate with Production and Machine Shop personnel for fabrication of designed products.
- Maintain an engineering daily logbook and organize digital files for each project.
- Practice and learn competent technical professional behavior including memorandum writing, email and calendar usage via Outlook, and report weekly activities to supervisor via status reports.
- Present a capstone presentation at end of term to Senior Management.
- If required, assist with testing in the Environmental Testing Lab.
- Perform related duties as assigned.

Preferred Majors: Mechanical Engineering; Aerospace Engineering; Engineering; Physics

Skills: Solid modeling (especially Solidworks); Statics; Strength of materials; MATLAB; Finite Element Analysis Hands-on/Computer Based/Both: Mostly computer based

Individual or Team Based/Both: Mostly Individual

Technician/Research/Both: Neither

Opportunity ID# WFF 8201

Title: Parachute Sample Testing

Description: As part of the Balloon Research & Development Lab (BRDL), there is a task to do testing on several types of parachute samples from flown parachutes. This task would include first learning how to prepare samples, and how to utilize the Instron machine to produce reliable and repeatable results. Then the samples from the various missions will be tested and statistically examined.

Preferred Majors: STEM Based

Skills: Organized, pays attention to detail, critical thinking, comfortable with testing environment, including cryogenics.

Hands-on and Computer-based task- Both

Opportunity WFF ID#8401

Title: Wallops Range and Mission Management Workforce Development Student

Description: The Range and Mission Management Workforce Development Student will work in the NASA Wallops Flight Facility Range and Mission Management Office. The intern will have the opportunity to work alongside NASA project managers on a variety of launch operations and engineering development projects that span the project life cycle. Typical tasks would include but not be limited to schedule analysis, risk management, developing reports, budget estimation, and launch operations. This position will provide opportunities to gain and improve leadership, project management, planning, coordination, and communication skills through work as part of the Range team.

Preferred Majors: Undergraduate Engineering Degree

Skills: Problem Solving, Critical Thinking, Communication, Risk Management, Time Management, Project Planning & Execution, AI and Automation

Hands-on/Computer Based/Both: Both

Individual or Team Based/Both: Both

Technician/Research/Both: Technical

Opportunity WFF ID# 8402

Title: Airspace Surveillance / Airfield Operations / ATC Shadowing: Surveillance & Airport Operations Technician

Description: This project provides hands-on exposure to range airspace surveillance and airfield operations at NASA Wallops Flight Facility. The research student will work alongside the Wallops Range Surveillance Team, gaining experience with radar and airspace awareness systems used to monitor local and downrange air traffic.

In addition to surveillance duties, the research student will have opportunities to support airfield operations, including aircraft ground handling and refueling activities. The position also includes time spent in the aircraft control tower during live operations, shadowing Air Traffic Control personnel to observe tower procedures and decision-making.

The research student will further participate in airspace surveillance activities supporting UAS missions conducted from Wallops Island, providing insight into integrated crewed and uncrewed airspace operations.

Preferred Majors: Aviation Science or related aviation-focused disciplines

Preferred Skills: Enrollment in a flight school or prior flight training experience, understanding of basic aviation and airspace fundamentals

Work Type: Both hands-on and computer-based, including the use of radar and surveillance systems

Position Structure - individual/team: Primarily an individual assignment with close coordination across multiple operational teams

Position Type: Technical

Opportunity WFF ID #8501

Title: S3PO SMD Database Development

Description: The Small Satellite and Special Projects Office (S3PO) is developing a database to support the NASA Science Mission Directorate's (SMD) H-FORT, Pioneers, and APRA CubeSat portfolios. The office is in the process of developing a new database system to capture critical information for our portfolio of over 30 missions spanning small satellites, ISS payloads, and balloon missions. The student would assist with bulk historical data transfer to the database and developing a solution for automating the ingestion of new incoming information.

Preferred Majors: Computer Science

Skills: Microsoft Office (Word, Excel, PowerPoint), software script coding, database scraping, Ai data processing

Hands-on/Computer Based/Both: Computer Based

Individual or Team Based/Both: Both

Technician/Research/Both: Both

