PSP Hybrids

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Revitalizing hybrid rocketry at Purdue University

Overview

PSP Hybrids formed in the Fall of 2018 with intentions of revitalizing Hybrid rockets at Purdue and help put Purdue on top of the rocket competition world. Currently, they are working on HAVOC with a mission to launch to 10,000 feet with a 2.2 lb engineering payload for the FAR-1030 competition. PSP Hybrids wants to not only compete at competitions but also wants to offer a platform for members to practice and prepare for a future in industry. They provide training sessions and hope to provide a library of well-documented resources.

Hosted annually in the Mojave Desert near California City, the Friends of Amateur Rocketry (FAR) 1030 competition promotes the development of fully student-researched and built experimental launch vehicles along with complex engineering payloads.

Breakdown

PSP Hybrids has eight subteams that you can be a part of:

- **Aerodynamics**, covering dynamic stability and trajectory.
- **Avionics**, covering vehicle electronics and control systems.
- **Business**, working on sponsorships and public relations.
- **Ground Systems**, working on data acquisition and propellant loading.
- **Manufacturing**, focusing on the machining, assembly, and design workflow.
- **Payload**, developing the payload required for the challenge.
- **Propulsion**, designing the hybrid propellant system.
- **Structures**, encompassing the design and integration of vehicle components.

AT A GLANCE

- Started in 2018
- Competing in the FAR-1030 challenge
- Expected to travel to the Mojave Desert for launch
- Emphasis on professional development and training
- Developing HAVOC to launch to 10,000 feet with a 2.2 lb payload

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