

- What programs are you running? What events are you holding?

Our “vision statement” is to get nano-satellites to orbit. Toward that end we work on a variety of research and development projects, involving collaboration between PSU students and local industry members. So far we have demonstrated our sophisticated but passive electronics and software package in a flight to 18,000 feet. Going forward our research will involve actively guiding the rocket while in the air, which requires that we learn a good deal of math, as well as doing research on propulsion systems. Our propulsion team is currently working on replicating work on paraffin wax motors that so far has only been demonstrated at Stanford.

Most years, we travel to the Black Rock Desert in Nevada, and/or the desert east of Bend. We attend these events to launch our rocket, to meet other aerospace groups from around the world, and to watch those other groups do their own launches. These are our biggest events, but are hardest for students to attend due to costs such as carting enough gallons of water into the middle of the desert. We also give talks in the local community on our work, at venues such as PSU and local high schools.

- How do your programs and events add to student life and student development?

Students who participate in our programs gain an appreciation of science, engineering, and project management not often found in other parts of PSU student life. The collaboration between our members, who have expertise in a variety of different fields, is a greatly enriching experience for everyone involved.

- Events/Programs: What are you spending money on? How will these things add to your programs and events?

Although we have grant funding for purchasing equipment, materials, and electronic components, we would like to start some new programs to enable broader student participation in our projects. These programs are not yet clearly defined and will depend to a great extent on the quantity of funding we receive, but we hope to be able to encourage student participation using small prizes; or if we had more funds, to help students obtain equipment like laptops that we've found critical in successfully developing software in a team setting. As stated previously, we also hope to help students attend launch events.

- Conference/Field Trip/Travel Fees: Where are you going? How are these trips important to your programs? (and)
- What are the important aspects to your programs? How do your events tie-in to your constitution and programs?

As discussed above, we travel to the area of Bend, Oregon and/or to Nevada for annual launches. Building a rocket isn't much fun if you don't fly it from time to time, and the FAA (and common sense) requires us to launch only from sparsely populated areas, so these trips are an essential part of our project.