Championship T-Shirts

Team PrISUm has been a part of the Iowa State University community for 26 years, and in that time they have developed close relationships on campus, one of those now being with the University Bookstore.

At the beginning of the fall semester, Team PrISUm reached out to Matt Laurich, the University Bookstore’s associate director, about selling Phaeton t-shirts to help fundraise for the team’s upcoming projects. Laurich gave them advice about licensing, partnerships and budgeting.

“We’ve worked with student organizations before, but this was a first for Team PrISUm. I knew very little about them beforehand, but they did such a good job of communicating and really getting their goals out there, that it was easy to work with them,” Laurich said.

Team PrISUm also had their Phaeton T-shirts for sale online so alumni who are no longer in the area got a chance to purchase them. “They were really smart in that aspect,” Laurich said.

Laurich felt that by selling their T-shirts at the University Bookstore, they gained a lot of visibility. The shirts were located at the main entrance of the store and were sold for about three weeks.

Team PrISUm and the University Bookstore were able to build a relationship that Laurich feels will continue in a very positive direction.

Championship shirts are still available for sale online at the ISU Bookstore’s website.

Fundraising

Team PrISUm has worked hard to become a part of the World Solar Challenge in October of 2017. With this incredible opportunity comes some incredible costs. This budget is quite a bit larger than past years totaling just above $335,000. This sum underscores the importance of sponsors.

“I think it’s important for our sponsors and alumni to know how much money actually goes into these projects, and what their money is going to,” said Rachel Pick, team treasurer. Pick has been on the team for three years. She has also been the treasurer of Freshman Leaders in Engineering and Engineering Student Council.

The World Solar Challenge itself is estimated to cost $200,000 but the majority of the money is allocated to shipping the car and travel for team members. During the race, the team will sleep in tents along the road; cutting down on lodging expenses. There will be 20 members traveling to Australia, but they will depart from the United States at a later date to save money.

The College of Engineering does engage in a matching program with Team PrISUm in which they match the donations the team has raised. This year the amount was $15,000, making a total of $30,000 to start the year.

Student Government, another source of money, has cut their contribution to $8,000 because they have stopped funding capital expenses.

One of the expenses that doesn’t come around very often is purchasing new motors, which the team plans to do this year. The motors being used now have been in use since the early 2000s. The price of three new motors totals $45,000, but the motors last a long time, so another set will not be needed for many years.

The sponsors are one of reasons Team PrISUm is able to accomplish all that we do. “We are incredibly grateful to our sponsors. Without them it would be impossible for us to compete and succeed,” explained Pick.
In the last 25 years, Team PrISUm has built a total of 12 cars. While each car looks similar, there are many small differences due to the change in competition rules each year. On the left, you will see pictures of five different cars created by Team PrISUm.

The very first car (first picture at the top) was built in 1989. At this time, there were only about 120 team PrISUm members and they were all engineering students. The car was powered by the same amount of energy as a small electric hair dryer, which helped the car travel more than 2,000 miles from Florida to Michigan. This car used an aluminum space frame, the likes of which has been used in almost every car since.

In 1999, Phoenix (second picture) won fourth place in the Formula Sun Grand Prix and fifth place in the Sunrayce that went from Washington D.C. to Orlando. “Phoenix was the first design to use an airfoil shape, marking the beginning of a new generation of solar cars,” says Ryan Perera, a current member of Team PrISUm. Phoenix was designed to have the driver seated in the middle of the car rather than in the front like previous years.

The third car pictured, Fusion, was the eighth car created by the team. Fusion could go as fast as 45 miles per hour on solar power and could go as far as 200 miles on battery alone. This car received first place in stock class at the Formula Sun Grand Prix. Fusion also received third place in stock class and the safety award in the 2005 North American Solar Challenge.

The 10th car (fourth picture) created by Team PrISUm was named Ant helion. This car was the first of the current generation of cars. Anthelion had three wheels, a refined airfoil shape and the driver was seated in the back. Although this car did not perform as well as previous cars, it paved the way for some of the team’s most successful cars; Hyperion and Phaeton.

The last car pictured is Phaeton, Team PrISUm’s current and most successful car. Phaeton is one of the lightest cars the team has ever built. The design of this car won the award for Best Mechanical Design in the 2014 American Solar Challenge. Phaeton also finished third place in the 2014 Formula Sun Grand Prix and first place in the 2015 Formula Sun Grand Prix, which was the team’s first overall win.

Team PrISUm works hard to improve each new car and looks forward to making cruiser class cars in the future.
Thanks to our Sponsors!

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The stories in this month’s Sundial were written by PR 321, taught by Erin Wilgenbusch
Adopt-a-Program

Adopt-a-Cell
By donating $30, you can adopt a solar cell! There will be nearly 400 solar cells on the car, and this is an inexpensive way to become part of our team. When you adopt a cell, we send you a free team shirt and a certificate which includes the identification of your cell or cells.

Adopt-a-Tire
For a $100 donation, you can adopt a tire! Many tires are used over the lifetime of a car. When you adopt a tire, you will receive a certificate and two free team shirts.

Adopt-a-Battery
By contributing $250, you can help us purchase a module in our battery pack. We will have over 200 lithium ion batteries in our car, which are grouped into modules. For adopting a battery, you will receive a certificate and your choice of two free polo shirts or four free team shirts.

Many companies match employee donations to 501(c)(3) nonprofit organizations like Team PrISUm. Please check with your employer. As a team PrISUm supporter, your name will be listed on our website and in our Sundial!

To join our Adopt-a-Program, please email business@prisum.org with your chosen donation amount and shirt size(s).

If you donate online through the ISU Foundation, please email business@prisum.org with your donation amount and selected shirt size(s).