ODU Enters the ASME Human Powered Vehicle Competition  April 22, 2005
by Kendrick Cary

Like a spaceship from a 1950s movie, the ODU Diatom accelerated along a straight road past hay bales and a parade of other human powered vehicles. The rider was exhausted at 300 meters, in pain and gulping for air at 400 meters, and in 500 meters it was all over.

With blue ceconite skin and an aerodynamic fiberglass nosecone, the Diatom was one of the better looking bikes at the event. Underneath, design features by different team members were apparent. With machine-gun sight handlebars, a 3-bar tube frame, and a pivot-adjustable seat, the bike had some notable differences even from the lowracer recumbents that influenced it, such as Warren Beauchamp’s Barracuda, or George Georgiev’s Varna Diablo.

The competition occurred on April 22, 2005 at the University of Alabama in Tuscaloosa. More than twenty other schools entered in the speed or utility class, or both, with designs ranging from something like a giant horse-drawn buggy to a thin torpedo. The competition was divided into three parts, each lasting a day: design, sprint and endurance.

With a fastest time of 6.35 seconds over the 100 meter time trap, a speed of 35.2mph, Jason Moore placed the team in 4th place for the men’s sprint category. Brianne Williams likewise snagged 9th place for the women’s category, with a top speed of 24.3mph.

“It was a lot of fun, even though I couldn’t see over the nose cone,” Brianne recalls of her sprint trials. The nosecone was later lowered to improve riders’ visibility.

Each team was allowed as many runs as they could muster during the 4 hour sprint competition. Unfortunately, team member Kendrick Cary wrecked the bike an hour before the competition was over, due to a pedal clip failure.
After a visit to the bike shop and some repairs to the bike’s logo, the team was ready for the 40 mile endurance course the next morning. The team’s place during the event shifted between 11th and 3rd, with a final rank of 6th. Many factors determined this, including rider experience, course quirks, and vehicle failures. The ODU team had no mechanical problems during the race, but did manage a couple of wipeouts.

The endurance race ended when the lead team, Missouri Rolla, finished the course’s 52nd lap. ODU racked in 41 laps during this time, with its last rider Andrew Newbold finishing strongly.

Overall, the team placed 6th out of 20 schools in its class. Not bad, for ODU’s first entry in the competition.

Dr. Landman, the team’s advisor, said, “It was a valiant first effort but we can do better. Our bicycle frame and drivetrain were well thought out, but our fairing was last minute and the design was driven by what could be assembled quickly.” The team was grateful for his experience with human powered vehicles and assistance throughout the project.

With some new team members, the experience of remaining members, and a bunch of new sponsors, who knows how fast ODU can go in next year’s race?

The team would like to thank its sponsors Old Dominion University, East Coast Bicycles, and Cycle Classics for helping it get this far!
Team photo, bike with full fairing. Left to right: Kendrick Cary, Jason Moore, Dr. Drew Landman (advisor), Andrew Newbold, Bryan Boyes, Brianne Williams, Scott Headley

If you are interested in joining or sponsoring the team, check out our website at: www.lions.odu.edu/~dlandman/hpv/