

Purdue IEEE ROV Newsletter

June 2017

Hello ROV supporters, members, alumni, and interested parties! Sorry this newsletter is late in coming, but we have been busy preparing for the international competition. The competition starts June 23 where we will proudly present ROV *Cephalopod*, the ninth ROV in our history. It is the effort of our 50-member team and over 7,000 person-hours of work.



ROV Cephalopod Picture

In order to get to the competition, we had our first pool at the beginning of April where we finally began to see the fruits of our hard work. While happy to have a successfully moving ROV, it was yet to have fully operational tools and reliable software and electronics. Fortunately, the team continuously worked to refine the mission



The ROV during the first pool test

tools, software, and electronics for all future pool tests. One of the biggest issues we had was with the USB cameras. We learned that the higher speed USB signals (compared to other external signals) were an issue when used with our waterproof connectors. After countless hours debugging, we began to remediate the negative effects of our connectors and were able to obtain better vision, thus enabling us to attempt our qualification video for the international competition.

Tyler Stage became the pilot who qualified us for the international competition with just seconds left to spare in the qualifying mission run! Subsequently we have focused on reducing task times and practicing the other required objectives for the international competition. This has resulted in an increased tool payload and finetuning of other parts of the ROV (such as more reliable tools and better camera angles).

This Thursday twenty-two members of our team will travel to Long Beach, California to compete at the MATE International Competition. While there, we will defend our design to judges in the sales presentation along with piloting our ROV in the mission runs. Furthermore, we will be scored on our poster and technical documentation. It is our hope to win and we believe we are positioned for a solid finish. You can follow us on Facebook and watch the competition live at <https://www.marinetech.org/live-videostream>. We are excited for the competition and look forward to our time there!



The 2017 ROV Team

