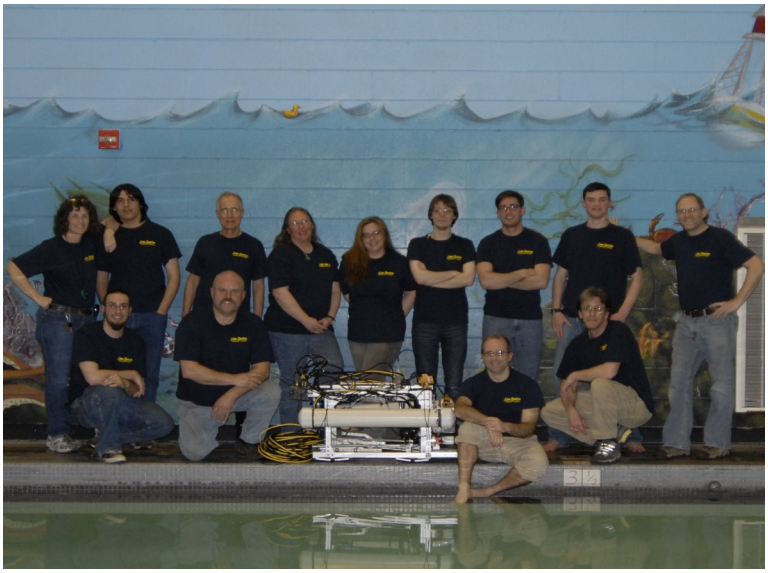
Phoenix Hell-Divers Engineering

Linn-Benton Community College

Albany, Oregon

Distance between NASA Neutral Buoyancy Lab and PHD Engineering Labs in Albany, Oregon: 4007.48 km

2011 PHD Engineering Members:
Freshmen: Kristoffer Hess, Jody Eaton, Dillyn Winn, David Konyndyk, Nathan Fetters, Jessica Eaton, Alex Frisk,
Sophomores: Grant Blake, Nathan Murrow, Rachel Nolan, Symone Stinson, Coquille Rex, Nick Cantrell*, Jeremy Louke, Jonah Brooks, Ivan Merlin, Keith Smee*, Ben Dean*, Ian Fridge, Eric Zounes, Mike Tilse*, Burl Hine, Li Zhang, Savannah Van Beek.
Juniors: Lara Heitmeyer, Justin McCleod*, Kati Davidson, Raven Dorr.
** indicates returning MATE participant.*

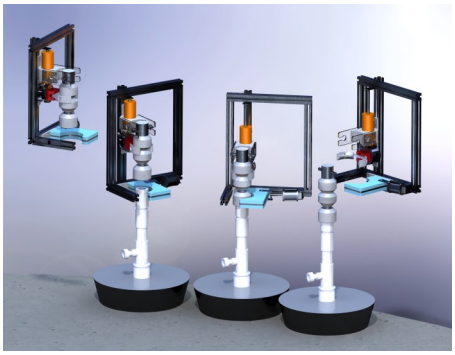


2011 PHD Engineering Company Members

Company Officers:
Ivan Merlin —Chief Executive Officer
Burl Hine—Chief Operating Officer
Ben Dean—System Engineer
Michael Tilse—System Engineer
Jody Eaton –Chief Financial Officer
Pilot – Dillyn Winn

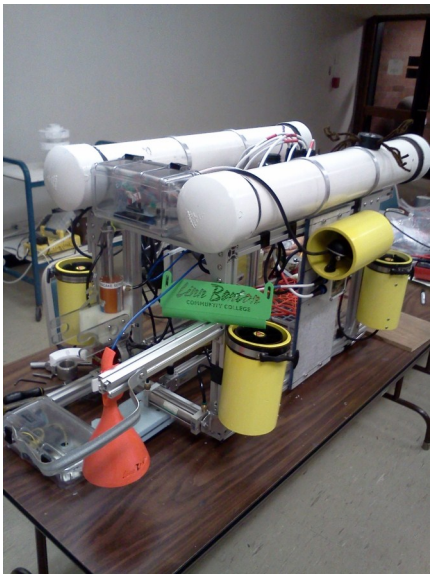
Board of Directors:
Dan Lara Science Engineering & Technology Dean
Greg Mulder Professor Physical Science
Parker Swanson Professor Computer Science
Karelia Stetz-Water Professor English

ROV Name: Phoenix
Total Cost: $4336.00
Primary Materials Used: Aluminum, PVC, and Stainless Steel.
Approximate Dimensions: Length 1.01m by width 0.62m by height 0.54m
Total Mass: approx. 40kg
Special Safety Features: All power distributed on ROV is fused both on the ROV and at surface. A manual kill switch has been installed in the top-side box.
Special Features: The ROV is modular to match customer requirements. The ROV is protected against cascading system failures.



Well-Cap Sequence from Solid Works

Company History:
The Linn-Benton Community College ROV team formed in December 2007 and took part in its first MATE competition in June 2008 in San Diego. During the summer of 2008, in order to maximize the use of the funds we received from the LBCC Foundation to construct the ROV, the team also embarked on a 3-day expedition of an underwater volcanic feature in Newberry Caldera located in Central Oregon. The LBCC ROV team continued to compete in subsequent MATE competitions. Furthermore, the team has continued investigation of Paulina Lake in Newberry Caldera and has lead summer mini-ROV and research workshops for at-risk youth in Oregon.



The Phoenix