

INTERNATIONAL SUBMARINE RACES™

NEWS:

For Immediate Release

Contact: John Hussey, ISR:
843-278-1474 (home)
843-209-8140 (cell)
seacure@homesc.com

FLORIDA HIGH SCHOOL TEAM WINS 20TH ANNIVERSARY SUBMARINE RACE TOP PRIZE

... Final Results of Human-Powered Engineering Design Competition...

BETHESDA, MD. July 1, 2009 – “Sublime”, the little mermaid submarine from Hernando County Schools in Florida, won the Overall Performance Award in the 20th anniversary running of the International Submarine Races™.

Innovations in propulsion and creativity were among highlights of the world’s only engineering design competition for human-powered underwater vehicles. ISR 10 was held June 22-26 at the U. S. Naval Surface Warfare Center’s Carderock test tank facility in Bethesda, MD.

Not only did Sublime win the top \$1,000 prize and trophy for Overall Performance, it also inched out a photo-finish victory over rival Florida Atlantic University’s submarine “Talon-1” in an unofficial two-sub, all-Florida challenge match on Friday. Judges said the Overall Performance Award was based on 17 categories, including performance, design, teamwork, attitude, construction, technology, speed, use of materials and innovation. Talon-1 from FAU’s Department of Ocean Engineering finished second in this category winning \$500. The University of Quebec Ecole de Technologie Superieure’s OMER 7 was third, receiving \$250.

At the closing ceremony, FAU’s Talon-1 also won the Absolute Speed Award of \$750 and a trophy by turning in a single run during the week of 6.298 knots over the 100-meter course. Finishing second and third were Sublime (5.975) and Maroon Harpoon (5.44) from Texas A&M. Umptysquatch IV, the submarine from Sussex County Technical High School in Sussex, NJ, won the Spirit of the Races Award and the Compass Publications Best Design Outline Award.

“After 18 years of persistent effort, not just with the current team but with six others, we are honored to have this recognition,” said Steve Barton of Spring Hill, FL, team advisor for Hernando County Schools. “We hope this team and all the others who competed here can be positively influenced by our efforts and this great experience.” One of Sublime’s sponsors is Weeki Wachee State Park, and the white, 11-foot sub was emblazoned with a picture of one of its mermaids. Piloting the Sublime sub was Curtis Weaver, a recent graduate of Central High School, Brooksville, FL.

New international speed records were set in two categories of non-propeller power by the students from Canada’s Ecole de Technologie Superieure, University of Quebec, Montreal. Team OMER designed a radically new system for both of its submarines that delivered thrust from a pair of carbon fiber oars resembling the wings of a penguin. OMER 6, a one-person submarine, achieved a speed of 4.916 knots and OMER 7, a two-person sub, hit a top speed of 5.133 knots. (Team OMER currently holds the world speed record of 8.035 knots (2-person) set in 2007 at ISR-9.) Odin’s Rage from the University of California San Diego finished second in the one-person category at 4.103 knots and Lobstar-1 from the University of Maine was third at 3.963 knots.

In addition to the speed prizes, OMER 7 also won the \$750 award and trophy for Innovation. “Swamp Thing” from the University of Florida finished second, followed by a tie between Washington State’s “Beluga” and “Phantom V” from Virginia Tech. The University of Washington team, “Beluga”, also won the \$750 prize and trophy for Best Use of Composites with a unique blend of fiberglass, carbon fiber and balsa

“Sulis”, from the University of Bath, England, competed as the only dual-powered submarine, utilizing a central drive unit controlling a set of chains and sprockets that moved both a propeller and a sweeping set of mechanical oars called pitching, heaving foils. It won the award for its hybrid category but at a speed of less than one knot over the course.

“Advances in the application of technology and inventiveness were very evident in this race,” said Claude Brancart, Chief Judge. “We never cease to be surprised at what these young people have achieved with their submarines.”

The ISR is an engineering education experience sponsored by the Foundation for Underwater Research and Education (FURE), which also participates in other outreach programs during the two-year design cycle. This was the 10th in a series of biennial races that test the creative skills of young engineering students from colleges, universities and technical and high schools from throughout the world. Teams wear scuba gear to compete in one- and two-person “wet” submarines designed to run along a measured course in Carderock’s 22-foot-deep model basin. U.S. Navy divers provide safety and underwater support.

“The purpose of the sub races is to provide an educational opportunity for aspiring young engineers,” said Nancy Hussey, ISR Executive Director and FURE President. “Their participation in the design, construction, and operation of a human-powered submarine develops real-time application of theoretical knowledge, hands-on experience, problem-solving and teamwork skills.” Eighteen teams participated in the competition, including schools from the U.S., Canada, United Kingdom and Venezuela. The teams were:

University of California San Diego
Sussex County NJ Technical School
Wheaton MD Submarine Works
University of Florida
Virginia Tech
Scuba Sub Team, Frederick MD
University of Maryland
University of Michigan
Texas A&M

University of Maine
Ecole de Technologie Superieure, Quebec, Canada
Hernando County Schools, Spring Hill FL
Ecole Polytechnique de Montreal, Canada
University of Washington
Universidad Simon Bolivar, Venezuela
U.S. Merchant Marine Academy, NY
Florida Atlantic University
University of Bath, England

Keynote speakers at the awards dinner were STS-125 Atlantis astronaut Megan McArthur, Ph.D., who piloted the UCLA submarine in the 1993 ISR-3, and former astronaut Kathy Sullivan, Ph.D., the first American woman to walk in space, now a professor at the Battelle Center for Math & Science Education Policy, Ohio State University. At ISR-3, McArthur met Sullivan, who encouraged her to pursue the dream of becoming an astronaut. "My experience at the sub races truly changed my life. It set me on the course to study ocean engineering and to become an astronaut," Dr. McArthur told sub team members. “This design competition is an investment in the future, not only to help you compete in the global technology economy, but to provide a better trained and experienced resource pool for the future.”

Race participants and volunteers gave an ovation and special award to Daniel Dozier, acting head of Carderock’s Ship Systems Integration and Design Department, who has provided coordination and leadership

on behalf of the NAVY facility since the races transferred to his base in 1995. Mr. Dozier has not only been the Navy's official host but also was an ISR team member in the original open ocean races in 1991.

The Platinum 10th ISR sponsors were the USN Naval Sea Systems Command, NSWC, the Electric Boat Corporation, the Oceanic Engineering Society of the Institute of Electrical and Electronics Engineers (IEEE) and Henry A. "Hap" Perry, ISR founder. Silver sponsors were Lockheed Martin Co., Oceanering International, Inc., and Compass Publications. Many in-kind sponsors also contribute services and facilities.

EDITORS NOTE: Requests for race feature photography can be fulfilled by contacting the ISR or ISR Photographer Mariby Johns at mariby@erols.com . Background information is available at the ISR website, www.isrsubrace.org.