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and the National Marine Sanctuary Program
thank the following organizations
for their support of the 2004 event:

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- ▼ NURC-University of Connecticut
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- ▼ Subsolve
- ▼ UCSB Marine Science Institute
- ▼ UCSD Jacob's School of Engineering
- ▼ Under Water Magazine
- ▼ University of Hawaii Seafloor Mapping Lab
- ▼ University of Rhode Island
- ▼ West Coast & Polar Regions Undersea Research Center
- ▼ Woods Hole Oceanographic Institution
- ▼ VideoRay LLC

Challenging Students to Develop Technology for both Sea and Space:

An ROV Design Competition for Students



Courtesy of Vickie Jensen/Scott Coe

1st place, Ranger class
Cambridge Rindge & Latin School (Massachusetts)

An exciting and educational competition for high school and college students that:

- ▼ helps to facilitate connections among employers, technical professionals, students, and educators
- ▼ promotes the development of technical, problem solving, and teamwork skills
- ▼ increases the visibility of marine-related technical fields, employers, and careers
- ▼ highlights the similarities between technologies used in ocean and space science and exploration

For more information on how you can participate, contact:

Jill Zande
MATE Center Outreach Director and
ROV Competition Coordinator
Monterey Peninsula College
980 Fremont Street
Monterey, CA 93940
Phone: (831) 646-3082
Fax: (831) 646-3080
E-mail: jzande@marinetech.org

Web site: www.marinetech.org/rov_competition/index.php



Monterey Peninsula College



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MATE
MARINE
ADVANCED
TECHNOLOGY
EDUCATION
CENTER



4th Annual ROV Design Competition for High School & College Students

*From the Depths
of the Oceans
to the Far Reaches
of Outer Space*



2nd place, Explorer class
MIT (Massachusetts)

Courtesy of Donnie Reid/Ocean Photography

Underwater Robotics, Anyone?

What?

The Marine Advanced Technology Education (MATE) Center and the Marine Technology Society's (MTS) ROV Committee are partnering with the Neutral Buoyancy Laboratory (NBL) at NASA's Johnson Space Center to organize the 4th annual national student remotely operated vehicle (ROV) design and building competition.

Why?

The contest goals are to increase the awareness of marine technical fields, help students to develop skills necessary for careers in marine technology, and connect students and educators with employers and technical professionals.

This year's competition also gives students an opportunity to learn how similar technologies are used to explore both the depths of our oceans and the far reaches of outer space.

Who?

High school, college, and university students compete. Employers—industry, research institutions, professional societies, and government organizations—and working professionals support the competing student teams and competition events.



1st place, Explorer class
Carl Hayden High School (Arizona)

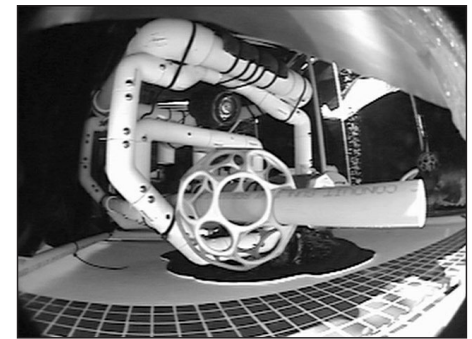
Courtesy of Carl Hayden High School

Employers gain important benefits

- ▼ The opportunity to help develop your future work force
- ▼ Visibility through MATE and MTS web sites, newsletters, and conference presentations
- ▼ Publicity via advertisements and articles published in industry journals, such as *UnderWater Magazine*
- ▼ Your company's logo emblazoned on contest materials and banner at the event venue
- ▼ An invitation to attend the competition and display company materials
- ▼ Your job announcements posted on the MATE Center's online job board
- ▼ Access to skilled interns through MATE's Technical Internship Program
- ▼ Access to graduates from technical programs of MATE partner colleges

Employer sponsorship benefits students

- ▼ **Team Support**
Sponsors have the opportunity to help teams by contributing:
 - Funds – \$5,000 provides travel, and room and board for one team
 - Equipment and building materials
 - Access to workshop facilities
 - Mentors
- ▼ **Competition Events**
High-profile sponsorship opportunities include:
 - Kick-off reception
 - Technical workshops and seminars
 - Event venue
 - Awards ceremony
- ▼ **Awards and Prizes**
Supporting organizations can help recognize teams by providing:
 - Trophies, plaques, and event t-shirts and patches
 - Company products – cameras, thrusters, tethers, tools
 - Trips to subsea facilities or on board vessels
 - Cash awards



Cabrillo High School Aquarium's (California)
Ranger class ROV Vanessa

Courtesy of VideoRay/Steve Van Peltier

About the Organizers

The **MATE Center**, headquartered at **Monterey Peninsula College** in Monterey, California, is a national partnership of community colleges and other educational organizations, research institutions, professional societies, government organizations, marine industries, and working professionals. Established in 1997 with funding from the National Science Foundation, the Center's mission is to improve marine technical education in the U.S. and thereby prepare individuals for ocean occupations.

www.marinetech.org

The **MTS ROV Committee** was created in 1978. The Committee's mission is to promote interchange of technical information among industrial, academic, defense, and other organizations in the areas of ROVs, undersea robotics, and artificial intelligence; provide speakers to academic institutions to increase the participation of students in the society and areas of ROV and undersea technology; and produce technical publications related to ROV technology.

www.mtsociety.org
www.rov.org

The **NBL at NASA's Johnson Space Center Sonny Carter Training Facility** provides controlled neutral buoyancy operations to simulate the "zero-g" or weightless condition that is experienced by crews during space flight, and in particular by crew members performing space walks. The facility is used for hardware development & testing, and provides astronauts with important pre-flight training for extravehicular activities and with the dynamics of body motion under weightless conditions.

www.jsc.nasa.gov/dx/dx12