



# Oceanic Engineering Society

## Newsletter

EDITOR: FREDERICK H. MALTZ

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**Oceans 2003 Jointly With Scripps Institution of Oceanography Centennial Celebration**

# IEEE OCEANIC ENGINEERING SOCIETY

## President

THOMAS F. WIENER  
2403 Lisbon Lane  
Alexandria, VA 22306-2516  
+1 703 768 9522  
t.wiener@ieee.org

## Newsletter Editor

FREDERICK H. MALTZ  
821 Runningwood Circle  
Mountain View, CA 94040  
+1 650 967 5092  
+1 650 969 9390 (FAX)  
f.maltz@ieee.org

## Vice President

### Technical Activities

STANLEY G. CHAMBERLAIN  
Raytheon Electronic Systems  
MS T3TN46, 50 Apple Hill Dr.  
Tewksbury, MA 01876  
(508) 858-5012  
(508) 585-1955 (FAX)  
s.chamberlain@ieee.org

### IEEE Newsletters

PAUL DOTO  
445 Hoes Lane  
Piscataway, NJ 08855-1331  
+1 732 562 3945  
+1 732 981 1855 (FAX)  
p.doto@ieee.org

## Vice President

### International Activities

JOSEPH R. VADUS  
Global Ocean Inc.  
8500 Timber Hill  
Potomac, Maryland 20854  
+1 301 299 5477  
+1 301 983 4825 (FAX)  
jvadus@erols.com

### Journal of Oceanic Engineering Editor

JAMES F. LYNCH  
Oceans Physics and Engineering  
203 Bigelow Building  
Woods Hole Oceanographic Institution  
Woods Hole, MA 02543  
+1 508 457 2000 x2230  
jlynch@whoi.edu

## Vice President,

### Professional Activities

NORMAN D. MILLER, P.E.  
2644 NW Esplanade Drive  
Seattle, WA 98117-2527  
+1 206 784 7154  
+1 206 784 0478 (FAX)  
colmiller@home.com

## Treasurer

JAMES T. BARBERA  
13513 Crispin Way  
Rockville, MD 20853  
+1 301 360-4347  
+1 301 871 3907 (FAX)  
j.barbera@ieee.org

## Web Coordinator & Publicity

Archie Todd Morrison III

## EX-OFFICIO

### Jr. Past President

GLEN N. WILLIAMS  
Engineering Program Office  
Texas A&M University  
College Station, TX 77843-3112  
979 845 5485  
g.williams@ieee.org

### Sr. Past President

CLAUDE P. BRANCART  
18 Juniper Road  
Brunswick, ME 04011-3414  
207 729 7873  
monkfish@blazenetme.net  
c.brancart@ieee.org

### Membership Development

JAMES S. COLLINS  
Dept. of Elec. & Comp. Engineering  
University of Victoria  
P.O. Box 3055  
Victoria, B.C. CANADA V8W 3P6  
+1 250 595 6928;  
+1 250 595 6908 (Fax)  
j.s.collins@ieee.org

### Nominations

CLAUDE P. BRANCART

### Chapters

NORMAN MILLER

### Journal Editor

JAMES F. LYNCH

### Awards and Fellows

DAVID WEISSMAN  
Dept. of Engineering  
104 Weed Hall  
Hofstra University  
Hempstead, N.Y. 11549  
516 463 5546  
516 463 4939 (Fax)  
eggdew@hofstra.edu

### Publications Review Board

GLEN N. WILLIAMS

### Newsletter Editor

FREDERICK H. MALTZ

### Pace

NORMAN D. MILLER

### TAB Engineering Research and Development Policy Committee

JOSEPH R. VADUS

## ELECTED ADMINISTRATIVE COMMITTEE

DANIEL L. ALSPACH  
ORINCON Corp.  
9363 Towne Center Drive  
San Diego, CA 92121  
+1 858 455 5530  
+1 858 452 4258 (Fax)  
alspach@snap.org

NORMAN D. MILLER  
(see Vice President)

JOSEPH R. VADUS  
(see Vice President, Technical Activities)

MICHAEL INGRAM  
14 Monument Street, #3  
Charlestown, MA 02129  
617 258 3279  
617 258 3858 (Fax)  
ingram@ieee.org

ARCHIE TODD MORRISON III  
McLane Research Laboratories, Inc.  
Falmouth Technology Park  
121 Bernard E. St. Jean Drive  
East Falmouth, MA 02536  
508 495 4000  
508 495 3333 (Fax)  
atmorrison@mclanelabs.com

ROBERT T. BANNON, President  
Bannon International Consulting  
301 Willow Run  
East Stroudsburg, PA 18301-8591  
rtbannon@ieee.org  
570 619 5430  
570 619 5107 (Fax)

CLAUDE P. BRANCART  
(see Ex-Officio)

JOHN W. IRZA  
(see Chapter Chair)

JOSEPH CZIKA, JR.  
T.A.S.C., Inc.  
13605 Dulles Technology Drive  
Herndon, VA 20171-4603  
j.czika@ieee.org  
703 793 3708  
703 561 0800 (Fax)

STEPHEN M. HOLT  
(see Secretary)

PAMELA J. HURST  
General Dynamics Advanced  
Technology Systems  
67 Whippany Road, Rm. 15G-417  
Whippany, NJ 07981  
973 463 4475 (Phone)  
973 463 4988 (Fax)  
pjh47@excite.com

WILLIAM M. CAREY  
(see Journal Associate Editor)

CHRISTIAN DE MOUSTIER  
(see Journal Associate Editor)

PROF. DIANE E. DIMASSA  
U Mass Dartmouth  
Mechanical Engineering II-116  
285 Old Westport Rd.  
North Dartmouth MA, 02747  
508-910-6606  
ddimassa@umassd.edu

FERIAL EL-HAWARY  
(see Chapter Chairmen)

THOMAS WIENER  
(see President)

FREDERICK H. MALTZ  
(see Newsletter Editor)

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## President's Message

### June IEEE Board Series

As I write this, I am just back from the June IEEE Board Series. This is a group of meetings held three times a year where the major Boards governing the Institute meet. As your President, I sit on the Technical Activities Board (TAB) along with the Presidents of the other Societies and Councils, the Vice President of Technical Activities, the Technical Division Directors, and various Committee Chairs. Also meeting during the Board Series are the IEEE Board of Directors, the Regional Activities Board, the Educational Activities Board, the Publications Services and Products Board, the IEEE-USA Board, and many committees. It is a very busy time, and one's commitments frequently begin before breakfast and continue past midnight. It is early to say what has come out of these deliberations, but this is where the destiny of IEEE is controlled. You owe it to yourself and the profession to be well informed, and to let your representatives know what you want.

As you might infer from the preceding paragraph, the governance of the IEEE is rather ponderous. Last year, at the insistence of TAB impelled by the financial problems, the IEEE hired a consulting firm, BDO Seidman, to identify problems and opportunities for improvement. You can read the report at [http://ewh.ieee.org/soc/aes/BDO\\_Siedman\\_Report.pdf](http://ewh.ieee.org/soc/aes/BDO_Siedman_Report.pdf).

The two most important problems raised by their report were Complex Governance and lack of mutual trust between the members and the governing bodies. These are difficult problems,



Thomas F. Wiener

filled with all sorts of emotional hooks, but everyone is working hard to find a way to improve our situation. Some improvements are already in place, some are coming along, and several remain without an agreed solution.

### OTC Administrative Committee Meeting

Your Administrative Committee met in Houston May 3<sup>rd</sup> and 4<sup>th</sup> in conjunction with the Offshore Technology Conference. Reports from the officers included positive reports on conferences being planned, as well as a report on the magnificent success of OCEANS '02, about which a little more later. The minutes of that meeting are elsewhere in this Newsletter.

Conferences of note in which we are participating in the coming year in addition to the OCEANS conferences, soon to be two each year, are the Baltic Conference on Environmental Research in Lithuania, the International Geoscience and Remote Sensing Symposium in Anchorage, Alaska in September. We are also trying to mount an OCEANS '04 America to support the wish of our partner, the Marine Technology Society, and maintain the continuity of the OCEANS America series. Details at this writing are spotty, and of course starting a conference only a year before the presentation date is risky, but we will see what we can do.

Having said that, we are also preparing a Homeland Security Workshop to be presented in December. If you'd like to be involved, please call or write AdCom member Pam Hurst.

We have our second Administrative Committee meeting in San Diego in conjunction with OCEANS '03 on Monday, September 22. Please come and help your Society fulfill its purpose and promise.

In any case, you should be at OCEANS '03, an extravaganza not to be missed.

## IEEE OES As The Primary Source Of Oceanographic Information

I think that our work as individuals and as a Society is a valuable asset for the profession, for our governments, and for the world. The problem is that we are not nearly as well known as we should be, given the resource that we represent. One of the important directions we are taking is to make the IEEE OES better known. We should be the source of choice whenever someone needs information about marine electro-technology.

To achieve this goal, we need to publicize our activities and achievements. For example, at the OCEANS conferences, we sponsor the Student Poster Contest. We should have our logo prominent during the awards ceremony. We should have our logo and a Statement of Objectives prominently displayed in the poster area. This is one example of missing the opportunity to have our good works known as well as they should be, I'm sure there are many others. Please think about how to be sure that you and your colleagues receive appropriate recognition. Identify yourself as a member on the OES and IEEE.

One example of such identification is putting IEEE/OES on your business cards. For those of you who are Fellows or Senior Members, I encourage signing yourself in accordance with the following example.

**Thomas Freud Wiener, Sc.D., SMIEEE/OES  
President, IEEE Oceanic Engineering Society**

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## Vice President's, Norman Miller, Message

While Conferences are the largest activity that the Oceanic Engineering Society engages in, we still have Chapters, Students, and Membership that are concerns of the Society too. Let us begin with Membership. For many years the Oceanic Engineering Society was the smallest society in IEEE. I am pleased to say that we have grown enough to become the third smallest of the IEEE Societies! We are steadily gaining members in Region 10 and are working on building new Chapters there also. We continue our Membership booth at our OCEANS Conferences and at the Offshore Technology Conference. Our publications are a big draw at these conferences and many conference attendees stop at our booth and review what we have to offer. As a result, we gain new members at each conference. We continue to stress the importance of membership up-grades and encourage eligible member grade people to upgrade to Senior Member. Our Senior Membership category is growing.

Our Chapters are active and provide meetings for the members with speakers and good fellowship. As a part of growth in Region, we are in the process of forming a Chapter in Singapore. They are interested in hosting an OCEANS Conference there and are busy recruiting IEEE members and others into becoming members of OES and forming a Chapter. We have also had contacts with people in Cochin India regarding forming a Chapter in this area. It would be great to include these areas as active chapters in Region 10. We expect to have a new Chapter in Italy soon. One of our former Student Poster participants is now a professor at the University of Genoa and is actively organizing a chapter in Genoa. This is also a possible site for a future OCEANS Conference. The Boston Chapter continues to work with the 13 SEA's Student Club at MIT and having been assisting them in their human powered submarine project. Our chapters in Halifax and



**Norman D. Miller**

Victoria, Canada are both active in Region 7 and regularly have good meetings with interesting speakers. The San Diego Chapter supported the Human Powered Submarine race in 2002 and will be supporting OCEANS 2003. We have challenged the Chapters to reach out to local high schools in their areas and promote projects in the schools that will show students the potential of Oceanic Careers!

The Society continues to be active with Students. Once again this year we were a sponsor of the Sixth Annual National Ocean Sciences Bowl. This program, that is organized by the Consortium for Oceanographic Research and

Education (CORE), sponsors regional competition in 12 regions around the USA where high school teams compete and match their wits on their knowledge of ocean sciences. The top twenty four teams compete in the finals. OES provides awards for four high school teams and provides \$500.00 to each school for educational resources. This year OES will be supporting the Human Powered Submarine Race competition at the David Taylor Model Basin in Carderock, MD. We hope that next year the 13-SEAS team from MIT will be a competitor and that we will have helped them achieve this status.

Our largest Student Activity continues to be the Student Poster Program at the OCEANS Conference. This year we will hold the 13th Annual Student Poster Session at OCEANS 2003 in San Diego. We received over 120 abstracts from around the world this year. Twenty five students were invited to present their posters. One of the rewarding aspects of the Student Poster Program is that we are now getting abstracts from students whose faculty sponsors were previous participants in the Student Poster program. All participants in the Student Poster Sessions are offered a Student membership in IEEE and OES at the OCEANS Conference.

## Who's Who in the OES

**Diane E. DiMassa** earned her BS and MS in Mechanical Engineering from the Massachusetts Institute of Technology (MIT) in 1989, her Mechanical Engineer Degree from MIT in 1992, and her Ph.D. in Oceanographic Engineering from the Joint Program between MIT and the Woods Hole Oceanographic Institution (WHOI) in 1997. Her graduate research was in the field of navigation for autonomous underwater vehicles. She developed both a passive hyperbolic navigation system and an active map-matching sonar system for localization and error management. As a graduate student she spent several months at the NATO SAACLANT Undersea Research Center in La Spezia, Italy, investigating the strengths of fibrous ropes and cables for underwater applications such as towing or mooring instrumentation.



Dr. DiMassa is currently a Professor of Mechanical Engineering at the University of Massachusetts Dartmouth and has been teaching engineering design for the past three years. She is the lead instructor for the Mechanical Engineering senior design project capstone course where she has supervised several projects on ocean-related instrumentation, such as the development of a new type of ROV and a new inexpensive shallow-water oceanographic profiler. Prof. DiMassa holds the position of Guest Investigator at WHOI in the Applied Ocean Physics and Engineering Department and is also a member of their scientific scuba diving team. Before joining the faculty of UMass Dartmouth, Dr.

DiMassa was an engineer/scientist at the Woods Hole Group, a marine environmental consulting firm. While on staff there, she worked with acoustic Doppler current profilers (ADCPs) mounted on oil drilling platforms for real-time flow measurements of oceanic currents. She also began research in the field of hydroacoustic measurements of detritus.

Prof. Di Massa's interests are not limited to Engineering. She has participated in geologic field programs in Cyprus and Iceland, and has twice been to Antarctica with the Antarctic Search for Meteorites program. She returned from the most recent Antarctic trip February 2003 having spent 6 weeks in a tent camp approximately 300 miles from the South Pole. In addition to looking for meteorites on the East Antarctic Ice Sheet (her team found over 300), she brought an experimental small vertical axis wind turbine to Antarctica to investigate the feasibility of using wind energy to power small autonomous instrumentation in the harsh conditions of deep field Antarctica.

She is a member of the IEEE, Oceanic Engineering Society (OES), Sigma Xi, and the American Society of Engineering Educators (ASEE). Currently, she holds the positions of President of the UMass Dartmouth chapter of Sigma Xi, and the Mechanical Engineering Department Representative to the ASEE.

Dr. DiMassa also serves on the Administrative Committee of the Oceanic Engineering Society.

She is a member of the Luxuriant Flowing Hair Club for Scientists and an avid ice hockey enthusiast.

# Soundings

by John Irza



Welcome to the latest installment of “*Soundings*”, a column that reports on a broad spectrum of news items from the mainstream media as they relate to Ocean Engineering technologies. The purpose of this column is to inform the ocean engineering community of our industry’s visibility in the media and how the general public perceives our efforts.

## Bear Bites Submarine

If you think “Man Bites Dog” is a strange headline, imagine the surprise of the readers of an Alaskan newspaper that reported the aforementioned animal versus machine confrontation. Shown in the photographs is the clear evidence of one hungry (and large: 700-800 pounds) polar bear, attempting to dine on the rudder of the USS Connecticut (SSN 22). The sub, which had surfaced in an area of polar ice between Alaska and the North Pole, proved to be less-than-appetizing to the bear, and the crew reported only minor damage to the rudder.

The Connecticut is one of the newer Seawolf class boats and was participating in ICEX 2003 when the encounter occurred. While submariners have often seen polar bears when surfaced in this part of the world, this was one of the rare cases when the experience was “up close and personal.” High resolution photos of the pictures shown here can be downloaded from the US Navy’s web site at <http://www.news.navy.mil/search/photolist.asp>



Approaching Rudder

## Never-ending Mine Warfare

The recent Iraqi war brought mine warfare back into the spotlight of mainstream media. The southern Iraqi port of Umm Qasar was a key staging area for sea-borne supplies. The British ship Sir Galahad, laden with 232 tons of supplies, was forced to remain offshore when mines were detected in Umm Qasar’s harbor. A relatively new AUV named “REMUS” was used as part of mine



Getting a Leg Up on the Situation



Sampling the Goods

clearing operations. Prior to the onset of hostilities, National Public Radio (NPR) in the United States featured an overview of mine warfare technology, covering mammal-assisted mine counter-measure techniques through autonomous systems. The web link for NPR’s story is [http://www.npr.org/display\\_pages/features/feature\\_943641.html](http://www.npr.org/display_pages/features/feature_943641.html)

## ONR’s “Afloat Lab”

The US Navy’s Office of Naval Research has a new traveling road show dubbed the “Afloat Lab.” Serving as a public demonstration platform for cutting edge technologies, the Afloat Lab is visiting various ports of call throughout the summer and early fall.

Some of the technologies featured on display include the CETUS Counter-mine UUV and the Surf Zone Crawler (see photo). More information on the Afloat Lab and its port visitation schedule can be found on the web at <http://www.onr.navy.mil/events/afloat/default.asp>

## Undersea Vehicles Assess Coral Reef Health

The Associated Press (AP) recently ran a story on how the Liberty Star, a NASA ship normally used to retrieve solid



ONR "Crawler"

rocket boosters, was used in conjunction with a Phantom SII ROV to put together a complete picture/database describing the Oculina Banks reef system. The reef runs along the edge of the Florida continental shelf, 30 miles offshore from Daytona Beach to Fort Pierce, and has been designated a Marine Protected Area (MPA) by the National Marine Fisheries Council.

The project involved scientists from the University of North Carolina at Wilmington (UNCW), Harbor Branch Oceanographic Institution, NOAA Fisheries, the College of

Charleston and Florida State University. The general public and students were able to follow the expedition through daily logs posted to a Website and a Webcast from the ship.

The results of the project, funded by an \$87,000 NOAA grant, will help determine whether federal protection should be expanded for the Oculina Banks past 2004, when the current protections expire. More information on the Oculina Coral Banks 2003 project can be found online at <http://oceanica.cofc.edu/Oculina2003/ProjectOverview.htm>

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## ALERT!!! Time to Nominate OES Award Candidates and AdCom Candidates...

### OES Awards

The IEEE Oceanic Engineering Society is seeking nominations from the OES membership for the Oceanic Engineering Society Distinguished Service Award and the Distinguished Technical Achievement Award. These awards will be announced and presented at the OCEANS '03 MTS/IEEE Conference in San Diego, California.

The Distinguished Service Award is presented to the OES member who has distinguished her/himself in their service to the OES and the profession. The last five Distinguished Service Awardees are:

- 1998:** Norman D. Miller at OCEANS'98 in Nice, France
- 1999:** Pierre Sabathe at OCEANS'99 MTS/IEEE in Seattle, Washington
- 2000:** Frederick H. Maltz at OCEANS'2000 MTS/IEEE in Providence, Rhode Island
- 2001:** Claude P. Brancart at OCEANS'01 MTS/IEEE in Honolulu, Hawaii
- 2002:** James S. Collins at OCEANS'02 MTS/IEEE in Biloxi, Mississippi

The Distinguished Technical Achievement Award is presented to a member of the profession whose technical achievements in oceanic engineering are recognized by their peers. This award is the OES's way of affording acknowledgement to the technical accomplishments of individuals who have produced and furthered the reputation for technical excellence currently enjoyed by the society. The last five Distinguished Technical Achievement Awardees are:

- 1998:** Burton G. Hurdle at OCEANS'98 in Nice, France
- 1999:** William M. Carey at OCEANS'99 MTS/IEEE in Seattle, Washington
- 2000:** Albert J. Williams 3<sup>rd</sup> at OCEANS'2000 MTS/IEEE in Providence, Rhode Island
- 2001:** Werner R. Alpers at OCEANS'01 MTS/IEEE in Honolulu, Hawaii
- 2002:** James Candy at OCEANS'02 MTS/IEEE in Biloxi, Mississippi

The Nominations Packet for the OES Distinguished Service Award and the Distinguished Technical Achievement Award should include a Letter of Nomination accompanied by a one page vita of the candidate. Nominations will be accepted through 15 August 2003.

### OES Administrative Committee

The OES is also seeking nominations from the OES membership for the CY 2004-2006 OES Administrative Committee. This committee serves the OES as the governing body of the society, administering the professional, technical and financial aspects of the OES. Qualifications for AdCom membership include IEEE and OES membership, and a willingness to serve the oceanic engineering profession. The Nominations Packet should include a Letter of Nomination accompanied by a one page vita of the candidate. Nominations will be open until 1 September 2003, with the election carried out by IEEE Headquarters in November 2003.

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# OFFSHORE TECHNOLOGY CONFERENCE

## HOUSTON, TEXAS

The 35<sup>th</sup> Offshore Technology Conference 2003 was held at the Reliant Center in Houston, Texas, on May 5-8, 2003. There were over 1,700 exhibitors representing 22 countries. The highlight of the conferences were the general sessions. This year's general sessions were "West African Oil & Gas: Defining the Future", which was held on May 6. The moderator for this session was Don Henry (consultant, retired Shell International Petroleum). The second session, "Sustainable Development: Issues and Implications to the Offshore Industry" was held on May 7. The moderator for this session was Joseph A. Stanislaw (president and CEO, Cambridge Energy Research Association).

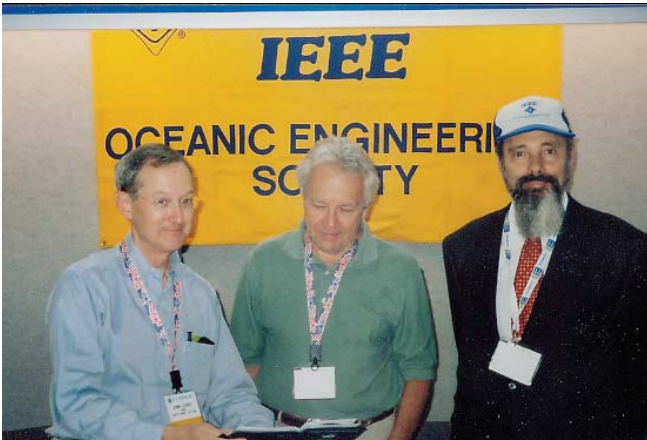
A recent OTC tradition, the industry breakfasts were held the mornings of May 6, 7, and 8. The presentations were "Busi-

ness Opportunities in Venezuela's and Trinidad and Tobago's Oil and Gas Sectors.

OTC Awards - On Tuesday, May 6 OTC had its annual awards luncheon. Each year OTC recognizes outstanding work and service in the industry by honoring an individual and a company, organizations, or institution. This year's annual Distinguished Achievement Award went to Albert W. Bally, Professor Emeritus, Rice University, Houston. OTC Distinguished Achievement Award for Companies

Organizations, Institutions, was presented to TotalFinalElf for its Girassol Project offshore Angola. A special citation was presented to Atlantia Offshore Ltd. for innovative technology in the development of the Morpeth SeaStar platform.

IEEE/OES was present with a booth in the exhibition area.



Ken Ferer with John Lucey and other OES Member in Houston



Joe Vadus second on L and Jim Barbera first on R at OTC

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# NATIONAL OCEAN SCIENCES BOWL FINALS

The National Ocean Sciences Bowl finals were held April 27 and 28, 2003 at the University of California San Diego. This was the sixth annual event and is sponsored by the Consortium for Oceanographic Research and Education (CORE) and is a competition of high school teams from all across the USA. OES again was a sponsor for the event. Twenty Four regional high school winners competed. The two day event selects eight winning teams. Each team is composed of four members. A toss-up question is asked and a team pushes a signal button to be selected to answer the question. If the question is answered correctly, the team is given a bonus question to answer. In addition, written questions are asked and answered by each team. The winning team for 2003 was Cranston High School, Cranston, Rhode Island. They were awarded a trip to Hawaii. They had been the runner up school in the 2002 com-

petition. OES presented awards to four high school teams. During the Awards Ceremony, COL Norman D. Miller was introduced and presented a plaque and a check for \$500.00 each to Lincoln-Sudbury Regional High School, Sudbury, MA, LaJolla High School, La Jolla, CA, Niceville High School, Niceville, FL, and Thomas Jefferson High School for Science and Technology, Alexandria, VA. One of the highlights of the Awards Ceremony is the awarding of the James D. Watkins Sportsmanship Award. This is given to the team that the students select as exemplifying the best sportsmanship throughout the NOSB final championship. This year Juneau-Douglas High School from Juneau, AK received the award. This was their first competition and a well deserved award.



# OCEANS 2003 MTS/IEEE CONFERENCE NEWS & EVENTS

## June, 2003 Update

<http://oceans2003.org>

The Ocean 2003 Advance Program is now on-line at "<http://oceans2003.org/main/AdvanceProgram.asp>". Equivalent to a 150-page publication, the Advance Program provides attendees with conference detail including Plenary and Keynote sessions, scientific and technical program, tutorials, chairs and committees, participating societies, advertising and sponsorship, registration, hotel, and more. Video welcoming remarks by conference Co-chairs Robert Wernli and Charles Kennel, plus a short featurette of the Underwater Film Festival are included. The mini-CD Advance Program will be mailed out to over 12,000 attendees of past Oceans conferences and members in late June.



**Robert Wernli** is a project manager at SPAWAR Systems Center San Diego and is the Co-Chairman of the OCEANS 2003 MTS/IEEE conference to be held in San Diego this September. The following is his response to several questions asked by the newsletter.

## OESN: Why did you agree to chair the OCEANS conference?

RW: I guess the answer is how could I say no. Kevin Hardy, from Scripps Institution of Oceanography (SIO), called me in early 1999 and told me about his spearheading SIO's Centennial Celebration in September 2003 and he felt that the OCEANS conference, then scheduled to return to France, would be a perfect compliment. Kevin asked if I thought we could get the conference and if so, if I'd consider chairing the conference again—I had chaired the OCEANS 1995 conference also in San Diego. I made a couple of phone calls to get the old team together, then asked Joe Vadus to try and change the existing long range schedule. The rest is history; I asked Kevin to be the Executive Vice Chairman, called in most of the 1995 conference team and we were off. Chairing a conference of this magnitude is a lot of work, but the payback from working together with friends, new and old, makes it a tremendous amount of fun. And isn't that what our societies are about—networking with your peers, exchanging ideas and learning something new? How could I say no?

## OESN: What is your position within your organization and how do they support such activities?

RW: I'm on the technical staff of the Ocean Systems Division of the Space and Naval Warfare Systems Center San Diego (SSC SD); AKA NOSC for many of the senior members. SSC SD, which is over 3,000 strong, is the key center for C4ISR (Command, Control, Communications, Computers, Intelli-

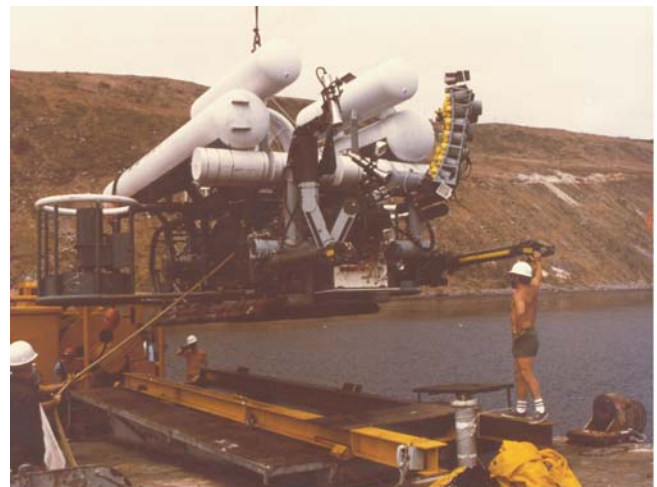
gence, Surveillance and Reconnaissance). I'm now a senior Program Manager, but was fortunate enough to get my feet wet under the mentoring of Howard Talkington, who is in my opinion, the Navy's father of deep ocean robotics; under his guidance we developed over 30 manned and unmanned systems in house. Working for the Navy as a civil servant has provided me with many rewarding opportunities.

My first supervisor, Howard Wheeler, invited me to an MTS meeting, and from that point on I moved up within MTS from one officer position to another. The best part was that everyone above me at work; from Norm Estabrook (my Program Manager) to Howard Talkington (our Department Head) encouraged me to get more involved in MTS. I became the local section Chairman, moved up to VP of the Western Region and then took over the ROV Committee in 1980. In 1983 we started the ROV Conferences, which I chaired for 10 years.

Howard Talkington invited me to participate at a conference in Japan that eventually led to my being invited to become a member of the United States/Japan Committee on Natural Resources, Marine Facilities Panel (UJNR). After a few more years, I'm a member of IEEE/OES, on the ADCOM committee, and I'm chairing the OCEANS '2003 conference in San Diego and the Underwater Technology 2004 conference in Taiwan...and I am still getting encouragement from the center. In fact, I received the Center's prestigious Lauritsen-Bennett Award for Engineering last year, which is highly influenced by one's outside activities such as publications, technology transfer and society involvement.

## OESN: What factors guided your career toward the ocean?

RW: I always wanted to be an Astronomer; in fact, I still have my first telescope with Astronomer Bobby Wernli painted on the top. I pursued that path until I realized that what I wanted to do was be an amateur astronomer. The real astronomers spend a lot of time looking at photographic plates and getting paid very little.



**Bob Wernli launching one of the "small" Scripps ROVs back in 1979 testing at San Clemente Island.**

I ended up in the Army from 1967-1970 and prepared to go back to college while stationed in Monterey, California. I investigated the well-paying jobs and determined that mechanical engineering matched my history of living under the hood of my 55 Chevy, so I entered the engineering school at UC Santa Barbara. About that time the bottom fell out of the space program, so I looked for the next frontier...something with a challenge. I took a course in ocean engineering and was hooked. Dr. Tom Lang, from SSC SD (the Naval Undersea Center back then) interviewed me on campus in 1973. I was invited to visit the center in San Diego, and the rest is history. Guess I got into the space program after all, I just didn't know at the time that it was Inner-Space.

### OESN: What do you feel is critical regarding the future of ocean science and exploration?

RW: That's easy—increased funding! We have the technology to do a lot of research in the ocean. As many have said before, we know more about the back side of the moon than we do of the oceans. President Kennedy challenged the country to explore the oceans, even before his challenge to get to the moon, and we've barely begun.

If we only had NASA's budget! Think of the innerspace satellite networks that could exist. After spending a career developing underwater robots and work systems, I feel that robotics will play a big role in the future. I'm looking toward the day that autonomous vehicles (satellites?) roam the oceans gathering data.

For this year's conference attendees, they will hear the result of the U.S. President's Commission on Ocean Policy. I hope it helps leverage the future so that the funds are there for our Nation to explore the world's oceans to the fullest extent. Should we care? Well, if we don't, there eventually won't be anyone around to answer the question. We're destroying the world's largest body of water, from pollution to over-fishing, and we need to figure out what the real impact is, what we have already done wrong, and change it. Our future depends on it. Washington needs to put some serious funding on the table so that this Nation can do some serious work at sea.

### OESN: What visions do you have for the future for the society and the OCEANS conferences?

RW: For those who get involved, the societies will be a blessing to their career. For the societies, they need to get more students and other young professionals involved. Youth is our future. We're doing a good job increasing the youth in our ranks, but we need to do a great job. This year's conference is doubling the funding available for students. More displays, more papers, more attendees. It's a step in the right direction. The societies don't have deep pockets, so I feel our corporations should step forward and increase the stakes; make some donations to the society that are dedicated to student support.

The future of the OCEANS conferences is strong, and we're going to begin acting like the international society that we are. I'm a member of the IEEE/OES Recon Committee, and we're looking out at least 5 years ahead for both a North American conference and an International (outside North America) conference annually. Proposals are accepted or being considered for Brest, France; Aberdeen, Scotland; Singapore; Germany; Kobe, Japan; and Vancouver and Quebec City in Canada. The combination of a strong technical program with a diverse exposition provides the funding and the attendees needed to supply a fully-rounded conference. And with the touches put on each event by the local committee, enthusiasm and membership grows. We're doing the right thing.

### OESN: Any final comments?

RW: Yes. Get involved. The societies offer their members the key to a successful career: Networking. You are who you know. I certainly wouldn't have achieved what I feel are some great things if I hadn't surrounded myself with bright, talented people (thanks to all of you). Build your networks. To steal a phrase from a TV commercial: Try it, you'll like it. I certainly did (and still do). Thanks for the opportunity to speak candidly to the membership. I'll see you in San Diego.

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## Ocean Engineering Society Newsletter (OESN) Q&A with Charlie Kennel



**Charles F. Kennel** is director of Scripps Institution of Oceanography, which is celebrating its 100th anniversary on September 26, 2003. Kennel is cochair of Oceans 2003, to be hosted by Scripps during its centennial celebration week.

OESN: What factors guided your career toward ocean science?

CK: When I was a young man studying astrophysics, I wanted to discover all the hidden secrets of the universe. Then I met Edward Frieman, my future thesis adviser—who later also preceded me as director of Scripps Institution of Oceanography. Frieman guided me into plasma physics, and in the decades that followed, I studied plasmas, which are found in every environment except on the surface of the earth—on other planets, in the ionosphere, in Van Allen belts, in interplanetary space, on the sun, near neutron stars, in the nuclei of

galaxies with black holes in them. This eclecticism gave me a taste for diverse environments.

In 1993, NASA Director Dan Goldin asked me to go to Washington, DC, to work in NASA's environmental sciences program. He wanted a reputable scientist outside the field to certify that it was science, not politics, leading Mission to Planet Earth.

How could I refuse?

Thus I was blessed in middle age to start at the top and learn about the one environment I hadn't studied, and, of course, the most important one—our own.

I quickly became fascinated with the complexity of earth science and was impressed with the ethical commitment of the earth scientists I was working with, who wanted to apply science to help manage our environment more intelligently. I wanted to share in this conviction and commitment.

During my time in Washington, I discovered how important Scripps had been in developing scientific understanding of the global environment. And so I answered the siren call to come to San Diego and devote the rest of my life to helping solve the scientific problems that people care about.

OESN: Can you describe how you see your role as director of Scripps?

CK: Anyone who thinks he can *direct* Scripps is sadly mistaken. Scripps is an amazing collection of talented scientists and engineers from many disciplines, independent and creative technicians, and a staff dedicated to the institution's mission. This group works on 400 research projects in 65 countries around the world.

My job is to be the bridge between the vision of the past and the vision of the future. To help our scientists shape the institution's programs so that they address the issues people care most about. To sum up the work of these talented people in order to communicate what it means to the world. And to help our scientists and engineers find the funds they need to fulfill their scientific ambitions.

OESN: The theme of Oceans 2003 is "Celebrating the Past... Teaming Toward the Future." This seems to perfectly coincide with the position Scripps is in right now. What is your vision of the future for Scripps science as it begins a new century?

CK: Over the past 40 years, the scientific community, with Scripps playing a prominent role, has documented the increasing impact humans are having on the planet, on our atmosphere and oceans, on living things. As a global society, we have a responsibility to feed, house, clothe, educate, employ, and provide a satisfying existence for a world population half again as large as the one today, while remaining in equilibrium with the environmental and ecological systems that sustain all life.

Scripps scientists in ocean, atmospheric, marine biological, and earth sciences are positioned to contribute to solving the central problems we are facing, including global climate change, the collapse of marine biodiversity, and the health of the coastal environment.

At the same time, Scripps scientists know that most of the vast ocean remains unexplored. It may be that what we do not know will present larger problems than the problems we already know about.

As we forge ahead, it is essential to sustain a productive balance between scientific discovery and scientific applica-

tion, so that we always bring new ideas to our work on society's concerns.

OESN: What are the biggest scientific, technical, administrative, and political challenges oceanography faces in the coming century?

CK: The central challenge today is to build the infrastructure that will support ocean sciences in the twenty-first century.

The next generation of oceanographic ships will benefit from the convergence that is already occurring between earth sciences and information sciences. The experiments on board ships will involve many scientists on shore. Ships will serve as operations centers. Remotely operated aircraft and underwater vehicles will extend ships' reach. Hundreds of underwater floats will wander the oceans at all times. Networks of moorings and underwater observatories will be connected to land by wireless communications and by optical cables. Scientists will have their eyes and ears in the oceans 24/7.

This vision animates every ocean and earth scientist I know.

Building an integrated ocean observing system is somewhat like building a cathedral. Talented artisans from various fields add to the creation of what will become an extraordinary monument to civilization. We don't know the names of the various workers who built the cathedrals, but we see and appreciate the work that has endured for centuries.

So it will be with ocean and earth sciences. Scientists and engineers will labor to create vast observational capabilities. We in the scientific community need to learn to appreciate each of our colleagues who blend their talents into large collective enterprises.

OESN: Scientific research continues to compete for ever shrinking funding dollars. Are Scripps's leaders planning new research funding models for the near and distant future?

CK: I have never before experienced a greater contrast between human and scientific opportunity on the one hand and a lack of financial resources on the other. We are suffering from an unprecedented crisis in the budget of the state of California, resulting in a decline in Scripps's core funding from the University of California.

In addition, partly because of the outstanding students Scripps trained in the past, oceanographic enterprises have grown tremendously. This is as it should be; it has led to more diversity, productivity, and creativity in the oceanographic community. Despite this human and intellectual prosperity, overall federal funds have remained constant—in real terms—for two decades, resulting in a profound tension between what our scientists are capable of doing and what they have the funds to do.

Scripps's approach is to communicate the reasons why an increase in the national investment in ocean science is extremely important over the next two decades. In addition, we are forming long-term partnerships with government agencies, foundations, and industry, which will help sustain various parts of our scientific enterprise.

OESN: What is the role of technology in ocean science?

CK: Oceanography is big science. It requires complex instruments that must go to remote places and function in chal-

lenging environments. The advance of ocean science has always been paced by advances in ocean technology—in the design, propulsion, and equipment of ships and other vehicles; in the construction of resilient instruments; in navigation and communication capabilities. Each technological advance has had profound consequences on what scientists could do.

At the same time, scientists are guided by the problems they hope to solve, and they make demands for the development of new technology, which often finds value later in the more practical world.

Ocean science and technology have always worked in concert and they always will.

OESN: Why is bringing the Oceans 2003 conference to San Diego an important part of the Scripps centennial celebration?

CK: Oceans 2003 speaks to a broad, far-reaching interconnectedness, to the great integration of knowledge that is occurring within science. There is a constructive synergy between science and engineering that will be evident at this conference, providing a dynamic venue to look ahead to the coming century of ocean science and technology.

Two major commissions—the Pew Oceans Commission, of which I am a member, and the U.S. Commission on Ocean Pol-

icy—have taken a close look at all the issues surrounding our oceans. The chairs of these commissions will be attending Oceans 2003. They will report their results and will hear the responses of scientific leaders from around the world. Together we can help chart a new course for the science and stewardship of the oceans.

Perhaps, in the future, this conference will be seen as a turning point. I hope so.

OESN: What message would you like to give the scientists, engineers, and others who will be attending Oceans 2003?

CK: Observing the beginnings of tremendous change and innovation in this new century, I have been pondering several abiding questions:

- Will we emerge at the end of this century at peace with ourselves and with nature?
- Can we reconcile our development goals with the environmental limits of our planet?
- Will we learn how to govern society and nature together?

I firmly believe that Scripps Institution of Oceanography researchers, as well as *all* earth and ocean scientists, can neither deny their ability nor shirk their responsibility to address the most profound issues facing our emerging global civilization.

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## AdCom Meeting Minutes

**13 June 2003**

**IEEE Oceanic Engineering Society (OES) Administrative Committee (AdCom) Meeting Report**

**Houston, Texas**

**3-4 May 2003**

**1.0 Report to the IEEE Oceanic Engineering Society (OES) Administrative Committee (AdCom)**

The report on the IEEE Oceanic Engineering Society (OES) Administrative Committee (AdCom) Meeting held in Houston, Texas from 3-4 May, 2003 is hereby presented.

The purpose of this report is to capture the information discussed at this meeting. Several attachments are included in this report.

The IEEE OES AdCom Meeting commenced on 3 May, 2003 at approximately 2:00 PM at the Guesthouse Inn in Houston, Texas. The meeting began with a call to order and an official welcome from Dr. Thomas Wiener, the OES President.

- The Agenda and OES Strategic Planning Action Plans items are included as Attachment X.
- The role call was undertaken and the attendees were:

Tom Wiener  
Claude Brancart  
Ken Ferer  
Jerry Carroll  
Christian de Moustier  
Diane DiMassa  
Bob Bannon  
Pam Hurst  
Todd Morrison  
Jim Lynch

Rene Garello

Joe Czika

Norm Miller

Jim Barbera

Joe Vadus

Glen Williams

Steve Holt (via teleconference both days)

Dan Alspach (via teleconference, Saturday)

John Irza (by teleconference, Saturday)

Ferial El-Hawary (via teleconference, Saturday)

- The minutes of the last meeting were approved.
- Tom stated that most of the upcoming work in the OES rests with the Strategic Planning tasks. He also stated that the 2003 financial forecast was troublesome according to the IEEE.
- Stan Chamberlain stated that the technical committees were alive and well. The OES Newsletter further details of the committees. Each one is participating heavily in Oceans 2003.
- Joe Czika asked about the committees supporting two conferences per year and were two conferences a year too much for him. Stan answered that time will tell.
- Stan stated that he has started to gather information on past tutorials at the annual Oceans conferences, specifically 1998, 2000, and 2002 (2001 is missing). Neither Spargo, nor anyone else, has any previous data on these tutorials.
- Action: Stan wanted to take the action that the OES put the data on the OES web site, including the title of the tutorial, who taught it, and the attendees.

- The "hot wash-up" reports are not available. Claude put one out, however, in 2000.
- Action: Stan wanted us to ask the MTS if they have past hot wash-up reports for past conferences. The JOAB should look into this.
- Jerry Carroll gave a presentation on the results of Oceans 2002, summarizing the finances and attendance. He suggested standardizing the rates for the tutorials/ the rates were \$125 for a half day and \$250 for a full day. The rates for the tutorials were considered to be too low.
- Stan asked if Bob Wernli had submitted a report on Oceans 2003, and nobody had one.
- Stan stated that he wanted more interaction with Japan on this conference. So far there has been little interaction with the technical committee. The first conference committee meeting has been held in Japan, with no minutes sent here as yet.
- Tom stated that OCEANS/Techno-Ocean 2004 is marching ahead without partners (i.e., MTS and OES).
- Stan stated that the next planned interaction between the Japanese and the OES is at Oceans 2003. It was also noted that all Technical Chairmen need to be members of the Technical Program Committee.
- Action: The Steering Committee needs to get involved, not the JOAB. Many issues were not discussed for OCEANS/Techno-Ocean 2004. Tom took this action with Hisaaki Maeda.
- Steve Holt gave a presentation related to the Oceans 2005 conference in Washington, DC. It was noted that equal representation is needed on the conference committee. A question was raised about having a combined conference planner and manager. Steve's presentation is included as Attachment X.
- Ferial El-Hawary proposed having a future Oceans conference in Quebec City, Canada in 2008, to coincide with the city's 400<sup>th</sup> anniversary.
- Steve noted that Mel Heron, at James Cook University, sent him an e-mail hoping that a future conference or workshop could be held in Australia. He noted that it would be very helpful in boosting interest and membership in the OES in that country. Mel's order of preference for a conference was Cairns, Brisbane, and Sydney, in that order.
- Rene Garello gave a presentation on the Oceans 2005 conference in Brest, France. An advisory committee has been assembled, and is entirely French for now. A budget has been received and appears OK. A technical program has been completed and sent to Stan.
- Rene is setting up a technical committee with members on each topic from Europe and the OES. He already has keynote speakers. A web site pending and contractors have been solicited but not selected.
- Rene stated that there are eight tracks: acoustics and processing, underwater systems, air/ocean interactions, naval and offshore technology, information technology and management, marine environment and pollution monitoring, non-acoustic instruments and processing, marine policy and ocean management. All must be in place by Oceans 2004. Papers are due by the end of March 2005. Rene did not want a printed advance program. It would be available on the web and be updated weekly until the formal report is ready for publication. He will send out 15,000 Call for Papers and 15,000 conference flyers.
- There were questions about having a sufficient database for e-mailing information on links to the website and advance planning. The date for the conference is 20-23 June 2005. The projected attendance is about 650 individuals.
- Stan called for John Irza to give his report on Oceans 2006. He was not yet online, but Joe Vadus and Steve Holt received his report. Joe stated that the New Boston Convention Center is too big, and remote. Mid-October seems possible. A formal proposal will be submitted at Oceans 2003. John's report is included as Attachment X.
- Joe Vadus stated that he had the Oceans 2003 report from Bob Wernli. There are over 200 exhibits, and 80-85% of these are committed. The Oceans Presidential Commission will probably get their first major exposure here. There will also be a special Scripps Institution of Oceanography session. A San Diego Underwater Film Festival and event at Sea World are also planned. Watkins, Caldwell, and Lautenbacher have accepted offers to be speakers. This conference is on-track and on-schedule. They are sending out an invitation to attend.
- Joe Barbera asked as to when is the formal date for abstracts. The abstract deadline date has been pushed back three times. Some worried about getting to the final program. A DVD will contain final program, abstracts, papers, and exhibitor advertisements. Wednesday will be a special session. The total allocated budget is \$424K.
- Action: Tom was concerned that the proposed DVD for the Oceans 2003 Conference containing papers and ads for the exhibitors might cause problems. Also, a CD/DVD must include full papers from authors. The AGU et al just published full abstracts.
- Joe Czika asked a question about filling the entire hotel. There was the claim to have an entire management system set up that can be used on future conferences.
- Joe Vadus discussed his investigation of having an off-shore in Singapore in 2006, but it might be too expensive. The idea of an Oceans conference seems to be well accepted there. Stan asked about the involvement of the MTS. Judy said that the MTS may have a booth at Brest.
- Joe stated that he planned to visit Aberdeen in June and Vancouver in the Fall 2003.
- Joe stated that he got a proposal for Oceans 2008 back in Biloxi, MS at the Grand Casino Hotel.
- Joe has also been investigating Genoa in Italy for the off-shore Oceans 2009.
- Jim Barbera stated that there is no domestic US conference in 2004.
- Claude Brancart reported on OTC 2003. He stated that OTC 2002 made \$49,000 and OTC 2003 was projected to make \$50,000.
- Joe Vadus then spoke for Hisaaki Maeda on UT 02-04. Everything looks OK, and Hisaaki's report is included as Attachment X.

- Claude reported on AUV 2002. Southwest Research Institute (SWRI) upped their price to \$7200. He was continuing to investigate this issue.
- AUV 2004 will not be concurrent with the Oceans 2004 conference in Kobe. It will possibly be in Maine, Monterey (California), or Fort Lauderdale (Florida). The mailing list for the conference consists of past authors. Tom asked Claude about what he was doing to see that this event would not look too much like an American workshop. He also noted that there are possible opportunities in working with the ReCon group on this.
- Bob Bannon stated that the Submarine Cable Workshop is not doing well. There are not too many respondents from the USA (out of a projected attendance of 100, a total of 9 have committed). Thirty attendees may be finally possible. Costs, SARS, and communication industry woes may be a problem. 176 attendees have committed but this number has dropped to 21 remaining. Seventy attendees are needed to break even.
- Pam Hurst gave a report on a potential Homeland Security workshop. She proposed putting together a workshop on this topic and stated that a workshop on this issue is needed this year if possible. Stan thought it might not be feasible this year, but could possibly happen next year.
- Todd Morrison gave a report for A. J. Williams on the on the IEEE Seventh Working Conference on Current Measurement Technologies, held at the Bahia Hotel in San Diego, California, from March 13-15, 2003. There were 110 attendees and 55 papers given.
- The AdCom members proceeded to take a break at about 5:00 PM.
- The meeting resumed at 6:30 PM. Rene stated that IGARSS 2004 in Anchorage, Alaska will be held from 20-24 September 2004 at the Egan Convention Center. It was noted that we would like to have possibly 50 papers from the OES, with 100 being ideal. Stan then explained in detail the sessions and the input from our committees. A document pertaining to this issue is included as Attachment X.
- Joe Vadus gave a report on the Baltic conference. It is a collection of 9 countries, with the conference to be held from 15-17 June 2004 in Kleipada, Lithuania. It is proposed that there be no registration fee. Jim Barbera is the Program Chairman. It was noted that there are lots on environmental problems as far back as WWII with the Russian departure. The Baltic Sea requires 30 years to turnover. Three proposals are out for funding. It was noted that rooms and food are expensive at the hotel.
- Tom gave a report on the upcoming IEEE Sensors 2003 Conference, to be held from 22-24 October, 2003 at the Sheraton Centre Hotel in Toronto, Canada. He stated that there were 502 abstracts in as of Friday, 2 May. Also, the IEEE Sensors 2004 Conference is set for October 2004 in Vienna, Austria.
- Todd Morrison gave his report on Publicity. His two very comprehensive presentations are included as Attachments X and Y.
- Glen Williams presented two options for people to receive the past JOE publications. The first proposal was to upgrade the digital archives whereby six CD's would now become one DVD. The cost of upgrading the CD's from 2001 to 2003 is \$3000, as well as \$42,000 from 1972 on. The total cost per person for the upgraded DVD would be \$250. A total of 1000 copies would be made. The second proposal was to have a web based source to download the papers. Set-up costs would be \$45,000, with maintenance costs being \$20,000 per year. Hope is for a three update cycle for the JOE publications.
- Jim Lynch gave a report on the status of Publications. He stated that the JOE was more popular than ever. Chris is to replace him in one year. In 2002, the 800 plus pages cost more than ever. Although the quality of JOE is good, it takes too much time to send out in the mail. For example, the April issue is to go out in June. The July edition, however, should be back on track for mail delivery. There is an upcoming issue on Marine Mammals. There is also a Historical Acoustics issue set to come out, with some articles declassified. There will be over 1000 pages for the JOE in 2003. Jim's report is included as Attachment X.
- IEEE Publications Issue: We cannot send technical papers to China for review due to technical transfer issues. However, they can receive articles.
- Jim led a discussion on the Best Paper Awards.
- The meeting then adjourned for Saturday.
- The meeting resumed on Sunday morning at 8:30 AM.
- Norm Miller gave a report on the Oceans 2002 meeting of the Chapter Chairs. He requested that the Chapter Chairs get active with the local community. He requested more contact with the local schools. The Hawaii Chapter has started a project with local high schools related to UAVs. He also noted that it was difficult getting reports on the previous year's activities outside of Regions 1-7. Victoria and Boston were doing well. He is now working on an Italian Chapter. Jim Collins is stopping by on a trip through India with the purpose of starting a chapter there. India has only 16 OES members.
- Norm also mentioned that Jim Collins is on an ocean cruise and has been doing much on membership activities.
- Norm stated that Oceans 2003 has over 120 abstracts from students (not that many from Europe though). Many were non-OES kinds of papers (biological, etc.). When Claude asked what was the best way to get the students' interest, Norm answered that it was through faculty advisors.
- Finally, Norm said that the Sixth Ocean Science Bowl had lots of support from the local colleges in San Diego. The OES had lots of support as a sponsor.
- Claude mentioned that the upcoming International Submarine Races are coming up this 23-27 June at the U.S Naval Surface Warfare Center's Carderock facility in Bethesda, MD.
- Fred Maltz could not attend this meeting, but he forwarded his Newsletter Editor's Report to Steve, Tom, and Glen and it is included as Attachment X.
- Jim Barbera gave his report on several issues. There are three conferences not completely cleared. Oceans 2002 is in the audit process and needs a final report. AUV 2002 also needs to have a final report. The Oceans 2004 budget

has been submitted. The IEEE is projecting a \$5,000,000 shortfall in TAB accounts. Tom stated that the actual total was \$6,500,000. First quarter conference revenues have dropped. Suggest actions such as reducing travel and dropping the page count in JOE. Jim Lynch stated that the JOE voluntary page charges are “not being fully paid by the authors”. Jim Barbera will check into the mechanics of this.

- Jim Barbera gave his report on financial issues. In addition to financial information, he added the following:
  - For reimbursement purposes, we need to submit the original airline ticket stub.
  - Put in mileage for POV macro makes the calculation. Latest sheet is on the web site.
  - Second sheet is for taxi/meals.
  - No business flight tickets are allowed.
  - Put in IEEE member number
- Jim noted that the IEEE is eventually going all electronic with conference proceedings. For Oceans 2003 and 2004, the IEEE wants PDF versions for papers but will accept paper copies. Some copies of the preprints will be available. For Oceans 2005, no paper copies of papers will be accepted and no paper copies of the proceedings will be available. Jim Lynch stated that the OES folks really want paper.
- Stan gave a report on the History Project. He is looking for information to help, especially the Five Year Society reviews. Glen said that he had some paper versions that he could send to Stan. The last history record covered 20 years and ended in 1983.
- Tom gave a presentation on Strategic Planning. He stated that Jim Barbera has sent out new budget categories to the VPs for review. Also, Jim Barbera and Dan Alspach’s Business Plan will be out by this June.
- Tom stated that he really wants the OES to be relevant, identify important issues, and resolve them!!! He would like people to realize that the OES is an appropriate trustworthy resource for technical information.
- Branding issues were extracted from the Biloxi meetings. Bob Bannon gave a presentation which is included as Attachment X.
- Pam Hurst gave a report on the Undersea Camp.
- Action: Ken Ferer will call Ed relative to the Undersea Camp.
- Norm Miller stated that he would follow up on Bob and Pam’s presentation with a POA&M and budget.
- Action: Steve stated that he would send information on Boy and Girl Scouts Merit Badges to possibly generate a new “Oceans” badge.
- Tom gave a report for John Irza on the Oceans Database Project. It is included as Attachment X.
- Rene gave a presentation on the JOAB. He stated that Dick Butler is the only active MTS member on JOAB. His full report is included as Attachment X.
- Tom stated that he was worried about who was in charge of the JOAB. Ideally, it would be equal between them, however, he had concerns about it not working yet.
- Rene gave a presentation on a Request for Proposal (RFP) which JOAB will use for bidding web companies for an Oceans Conference “perpetual” web site. He felt a confer-

ence web site was needed to take care of abstract and paper submissions, registration, etc. however, he didn’t think that we needed a JOAB web site. His report is included as Attachment X.

- Action: Jim Barbera will investigate if the Oceans 2003 software/webpage belongs to OES/MTS or the contractor.
- Glen felt that there should be one website for Oceans conferences sponsored by both the MTS and OES. However, there should be one website for conferences sponsored by only the OES. Both websites could use the same software however.
- Action: Tom will talk to MTS President to come up with plan for JOAB to set up 2003 web site.
- Action: Tom will talk to the MTS to resolve the issue of a conference consultant.
- Tom stated that he would like all joint MTS/OES Oceans conferences listed on the IEEE OES web site. He preferred the use of Veraprise Corporation to do this.
- Tom discussed the issue of two Oceans conferences, as well as management and resources issues. How can we have equal social and technical value at both conferences?
- Tom again raised the issue of paying a consultant to do conferences activities, whether it be full or part-time.
- Questions arose about the Oceanology International Americas 2003 Conference in New Orleans, LA from 4-6 June. What do we do?
- Tom discussed having simplified business practices:
  - Having common practices across societies
  - Now offering electronic paper costs extra
  - Reduced price for publishing for other society
  - Issue of unbundling journal from society dues
- Tom stated that he is rewriting the OES Bylaws. The Bylaws are easy to change, but the Constitution is not.
- Tom discussed “Who should be AdCom Ex Officio and which of the Ex Officio members should have a vote”.
- Tom again discussed the issue of having four Vice-Presidents: Conferences, Publications, Technical Activities, and Professional Activities.
- Motion: Glen made a motion that Pam submit a brief proposal to the OES AdCom (a business plan) to have a Homeland Security workshop with a budget authority of \$10,000 (as seed money) advancement. Norm seconded this motion and it passed unanimously.
- Motion: Jim made a motion to update the OES archives, now on CD. A total of \$42,000 would be allocated to producing 1,000 DVDs through the end of 2003. Christian seconded this motion and it passed unanimously.
- Action: Put together a questionnaire to be distributed at OES luncheon asking how well is the OES serving the needs of individuals.
- The following motions were generated:
  - 1) Motion 1: Glen made a motion that Pam submit a brief proposal to the OES AdCom (a business plan) to have a Homeland Security workshop with a budget authority of \$10,000 (as seed money) advancement. Norm seconded this motion and it passed unanimously.
  - 2) Motion 2: Jim made a motion to update the OES archives, now on CD. A total of \$42,000 would be allocated to

producing 1,000 DVDs through the end of 2003. Christian seconded this motion and it passed unanimously.

The following action items were generated:

- 1) Action Item 1: Stan wanted to take the action that the OES put all tutorial presentations on the OES web site, including the title of the tutorial, who taught it, and the attendees. POC: Chamberlain. Suspense Date: September 5, 2003.
- 2) Action Item 2: Stan wanted us to ask the MTS if they have past "hot wash-up" reports for past conferences. The JOAB should look into this. POC: Chamberlain. Suspense Date: July 18, 2003.
- 3) Action Item 3: The Steering Committee needs to get involved with our Japanese colleagues in regards to the MTS/OES Oceans 2004/Techno-Oceans 2004 conferences. Many issues were not discussed for Oceans 2004. Tom took this action with Hisaaki Maeda. POC: Wiener. Suspense Date: July 18, 2003.
- 4) Action Item 4: Tom was concerned that the proposed DVD for the Oceans 2003 Conference containing papers and ads for the exhibitors might cause problems. Also, a CD/DVD must include full papers from authors. The AGU et al just published full abstracts. POC: Wiener. Suspense Date: June 27, 2003.
- 5) Action Item 5: Steve stated that he would send information on Boy and Girl Scouts Merit Badges to possibly generate a new "Oceans" badge. POC: Holt. Suspense Date: 1 July 2003.

- 6) Action Item 6: Ken Ferer will call Ed relative to the Undersea Camp. POC: Ken Ferer. Suspense Date: TBD.
  - 7) Action Item 7: Action: Barbera will investigate if the Oceans 2003 software/webpage belongs to OES/MTS or the contractor. Jim Barbera. Suspense Date: June 16, 2003.
  - 8) Action Item 8: Tom will talk to MTS President to come up with plan for JOAB to set up 2003 web site. POC: Wiener. Suspense Date: June 27, 2003.
  - 9) Action Item 9: Tom will talk to the MTS to resolve the issue of a Conference Consultant. POC: Wiener. Suspense Date: June 27, 2003.
  - 10) Action Item 10: Put together a questionnaire to be distributed at OES luncheon asking how well is the OES serving the needs of individuals. POC: Czika. Suspense Date: August 15, 2003.
- There was then a motion to adjourn the meeting and Ken Ferer seconded it. The meeting then was formally brought to a close.

## 2.0 IEEE OES Houston 2003 AdCom Meeting Conclusions

- After the meeting ended at approximately 4:00 PM and then was adjourned. Two motions and ten action items were generated.
- This report is hereby respectfully submitted for review by Stephen M. Holt, IEEE OES Secretary, this day of 13 June 2003.

**Stephen M. Holt**

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## Editor's Note

Last Spring, 2002, I mentioned to you the status of IEEE Xplore. This Spring, 2003, I attended the IEEE Panel of Technical Editors Meeting in Washington, D.C. and have an update for you.

### Meeting Highlite

IEEE's publishing business is very profitable and some of the internal IEEE products have been greatly improved. In 2002, IEEE installed a new architecture for Xplore at the data center in New Jersey. In 2003 CrossRef functionality was enhanced, including out links to other publishers.

### January 2003 Xplore Update

- (1) IEEE Xplore 1.4 system release is a major rearchitecture
- (2) Society legacy (pre-1988) content – now goes back to 1950.

Remaining 2003 enhancements includes more links for CrossRef, HTML full-text for Spectrum and Proceedings, new Verity K2 search engine, etc.



### January 2003 CrossRef Update

New system has Metadata links for 7,041 journals and conferences with 6.6 million articles total from it's 179 member publishers. IEEE was a founding member of the umbrella organization, and at present is linking in at a rate of 15,000 hits per month. It has started linking out from journals.

### Newsletter Session

The session focused on workflow options and suggestions for making newsletters more interesting. Discussion centered on the distinction between short or bulletin like newsletters at the one extreme and magazine like newsletters at the other. In all there are 21 titles, 19 of which are produced by IEEE. There was also some discussion on emerging documentation standards and technologies. It was observed that as HTML evolves towards more structured forms, more functionality and possible cost savings would result. At present, we are using both HTML and PDF online in addition to printed copies. Member feedback is important and we would like to hear from you.

**Fred Maltz**



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## NEW MANUSCRIPT SUBMISSION PROCESS FOR J.OE

The IEEE/OES Journal of Oceanic Engineering is pleased to announce the launch of a new electronic manuscript submission process. Initial submissions of manuscripts for the J.OE can now be submitted in PDF format via a web form. Complete information is available through the Journal pages of the Society's web site: [www.oceanicengineering.org](http://www.oceanicengineering.org).

Feedback on this new system is encouraged. Please send comments to: [joe-eic@oceanicengineering.org](mailto:joe-eic@oceanicengineering.org).

This endeavor could not have come to fruition without the efforts of A.Todd Morrison and the staff at Veraprise. Their contributions are gratefully acknowledged.

Contributed by:

Jim Lynch and Anita Norton, IEEE JOE Editorial Office

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## MAY MEMBERSHIP HIGHLIGHTS

In May, IEEE membership totaled 324,825 and is relatively unchanged. Overall, membership has declined 4.1 percent from May 2003. The termination of Life members who did not return their 2003 renewal profiles will probably obscure the statistics for higher-grade U.S. members for the rest of the year. After making the adjustment for Life members, higher

grade membership levels are stronger outside the U.S. (-0.5%) than within the U.S. (-5.8%) and Region 10 and Region 8 are up from their levels of last year.

For more information, read the complete Membership Development Progress report at <http://www.ieee.org/organizations/rab/md/mdprogprpt.html>.

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## PROGRAM EVALUATORS FOR ACCREDITATION ACTIVITIES

The IEEE Educational Activities Board (EAB) seeks professionals in industry, government and academic sectors to serve as program evaluators for the following Accreditation Board for Engineering and Technology Inc. accredited programs at U.S. colleges:

- Biomedical Engineering
- Computer Engineering and Computer Engineering Technology
- Electrical Engineering and Electrical and Electronic Engineering Technology
- Electromechanical Engineering Technology
- Telecommunications Engineering Technology

Applications for the 2004-2005 academic year are due by 15 Nov. They will be reviewed during the January/February IEEE

meetings. Notification will be sent to applicants by 1 March.

Service as a program evaluator gives members of the profession an opportunity to contribute to the achievement of high quality educational standards of engineering and engineering technology programs.

Nomination and application forms for people interested in engineering are available at: <http://www.ieee.org/organizations/eab/apc/ceaa/eacinfo.htm>; forms for those interested in engineering technology are at <http://www.ieee.org/organizations/eab/apc/ctaa/tacinfo.htm>.

For more information, CONTACT Carolyn Solimine - IEEE Educational Activities - telephone +1 732 562-5484; "MailTo:[c.solimine@ieee.org](mailto:c.solimine@ieee.org)" or "Mailto:[eab-accred@ieee.org](mailto:eab-accred@ieee.org)".

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## OCEANS & HUMAN HEALTH ACT INTRODUCED

Washington, D.C., USA — U.S. Senator Ernest F. "Fritz" Hollings (Democrat, South Carolina) recently introduced legislation (S. 1218) "to provide for presidential support and coordination of interagency ocean science programs and development and coordination of a comprehensive and integrated United States research and monitoring program." Co-sponsor is Sen. Ted Stevens (Republican, Alaska). The bill has been referred to the Senate Committee on Commerce, Science & Transportation.

Hollings said the Oceans and Human Health Act "proposes to establish a national interagency program that will

coordinate research efforts and ensure the availability of an adequate federal investment in this critical area. It also would establish a program at the National Oceanic & Atmospheric Administration to strengthen and coordinate its work in this very important arena." A number of federal agencies would share responsibility and expertise, requiring that capabilities be harnessed across such diverse entities as the National Science Foundation and the National Institute for Environmental Health Sciences.

## COMMERCE, INTERIOR HOST MARINE PROTECTED AREAS MEETING

Washington, D.C., USA — Last Tuesday, Deputy Secretary of Commerce Sam Bodman and Deputy Secretary of Interior Steve Griles hosted a two-day meeting to introduce the members of the first National Marine Protected Areas Federal Advisory Committee. Established by the U.S. National Oceanic & Atmospheric Administration as part of Presidential Executive Order 13158 dealing with marine protected areas (MPAs), the 30-person committee represents a broad stakeholder community, including scientists, academia, commercial and recreational fishermen, resource users, state and tribal managers, and environmental-

ists. The advisory committee's duties include providing advice and recommendations to the secretaries of Commerce and the Interior on implementation of aspects of the MPA Executive Order. The members may establish working groups, subcommittees, or task forces as needed to fulfill the committee's goals. They also will create a scientific working group of experts in marine and Great Lakes science fields, which will assess the conditions of natural and submerged cultural resources within the nation's MPAs. The members will serve for two terms and will elect a chairperson from the group. More at <http://www.mpa.gov/>.

### Upcoming Conferences

#### **IGARSS '03**

July 21-25, 2003

Toulouse, France

General Chairman ([didier.massonnet@cst.cnes.fr](mailto:didier.massonnet@cst.cnes.fr))

#### **13th International Symposium on Unmanned Unethered Submersible Technology**

August 24-27, 2003

University of New Hampshire

Durham, NH (tel) 603-868-3221

#### **MTS/IEEE Oceans 2003**

September 22-26, 2003

San Diego, CA

[www.oceans2003.org](http://www.oceans2003.org)

#### **2003 IEEE Sensors**

October 21-24, 2003

Toronto, Canada

[www.ewh.ieee.org/tc/sensors/](http://www.ewh.ieee.org/tc/sensors/)

#### **Oceanology International**

March 16-19, 2004

London

[www.oceanologyinternational.com](http://www.oceanologyinternational.com)

#### **UT '04 IEEE International Symposium on Underwater Technology**

April 20-23, 2004

Taipei, Taiwan, R.O.C.

<http://ut.na.nfu.edu.tw/ut04>

#### **Oceans/Techno-Oceans 2004**

November 9-12, 2004

Kobe, Japan

[www.oceans-technoocean2004.com](http://www.oceans-technoocean2004.com)

Visit our OES online, now linked to the IEEE homepage:

<http://www.oceanicengineering.org/>

# CALL FOR PAPERS

# U.S.-BAL TIC

## INTERNATIONAL SYMPOSIUM

On “Advances in Marine Environmental Research,  
Monitoring & Technologies”

**June 15-16-17, 2004. Klaipeda, Lithuania**

**Denmark Estonia Finland Germany Latvia  
Lithuania Poland Russia Sweden & United States**

**Sponsors:** Center for Marine Research, Ministry of Environment, Lithuania; Institute of Electrical and Electronics Engineers (IEEE) Oceanic Engineering Society; Institute of Electrical and Electronics Engineers, Region 8 (Europe); Other Organizations are invited

**Organization:** Chairmen: Dr. Algirdas Stankevicius, Director, Center for Marine Research (CMR). <algsta@delphi.lt> : Joseph R.Vadus, Vice President, IEEE Oceanic Engineering Society (OES). <j.vadus@ieee.org>

**Program Co-Chairs:** Lina Siauliene (CMR); James Barbera, Chairman, Environmental Technology Committee, OES

### **Program Tracks & Suggested Topics:**

**Marine Research:** Topics-Fate of Pollutants; Run-Off Pollution; Sediment Transport & Analyses; Ocean Dumping, Oil spills and Hazardous Material; Benthic Respirometry; Marine Biotechnology ( Biological Indicators); Modeling.

**Environmental Monitoring:** Real Time Measurements; Data Collection & Distribution; Status & Trends; Monitoring Systems; Satellite Measurements; Global and Baltic Monitoring Programs; GOOS & GIS.

**Environmental Technologies:** Oceanographic Measurements (current, wave, CTD, tidal); Sampling Techniques (water, chemistry, sediment); Acoustic Techniques; X-Ray Fluorescence & Neutron Activation; Integrated Systems; Oil Spill Measurements & Modeling; Instrument Platforms, ROV's & Robotics.

## U.S.-BALTIC INTERNATIONAL SYMPOSIUM

### **Symposium Objectives:** To Discuss and Exchange Information on:

- ❖ Problems, Needs, Requirements & Solutions
- ❖ New Technologies and Ideas
- ❖ Advances in Application of New Technologies

**International Advisory Committee:** Members from: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden & USA

### **Background for Prospective Authors**

The Baltic Sea is a valuable natural resource shared by nine countries bordering its waters. It provides marine resources, transportation corridors, marine recreation, tourism and desirable coastal living. Economic benefits are dependent on a clean environment. The Baltic Sea is 422,000 sq.km., with a relatively shallow average depth of 55 meters. The nine countries: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden, Russia, bordering the Baltic Sea are working closely together in continuous monitoring of the Baltic Ecosystem, sharing research and environmental data in order to detect and assess changes that may impact environmental health. The U.S. has similar needs and many research programs addressing coastal and global environmental problems, and can exchange information and experience with the Baltic Nations.

The Baltic nations are rich in sea faring tradition of plying the coastal waters for fisheries and inter nation shipping and trade. Environmental protection policies are moderate and based on a sustainable development approaches. There is a growing awareness of ecological issues. Cleaning the Baltic Sea, preserving biodiversity and monitoring long range transboundary pollution are of great importance. Baltic nations boast many protected coastal areas that also serve as parks and recreational areas. For example, in Lithuania, the Curonian Spit, a 97 km long sliver of land separates the Curonian Lagoon from the Baltic Sea. It is famous for its nature and its landscape. In 2000, UNESCO added it to the World Heritage List.

### **Call for Papers**

You are invited to send a one-page abstract addressing one of the suggested topics. Early submittal is suggested because of program size limitations.

### **Send abstracts and inquiries by E-mail to:**

#### **Europe:**

Center for Marine Research  
Lina Siaulienė, <[lineka@delfi.lt](mailto:lineka@delfi.lt)>  
Taikos Av. 26  
LT-5802, Klaipėda, Lithuania  
<[cmr@klaipeda.omnitel.net](mailto:cmr@klaipeda.omnitel.net)>  
Tel: +370 6 410 450 Fax: +370 6 410 460  
[http://www1.omnitel.net/juriniai\\_tyrimai](http://www1.omnitel.net/juriniai_tyrimai)

#### **U.S.A. & Asia:**

James Barbera  
13513 Crispin Way  
Rockville, Maryland 20853 USA  
<[J.Barbera@ieee.org](mailto:J.Barbera@ieee.org)>  
<<http://www.oceanicengineering.org>>  
Tel: +1 301 460 4347  
Fax: +1 301 871 3907

**Abstract deadline:** December 1, 2003

**Abstract acceptance:** January 1, 2004

**Paper deadline:** April 1, 2004

# OCEANS 2003 MTS/IEEE PREVIEW



**DON'T MISS THE LARGEST OCEANS EVENT EVER!**  
**THE OCEANS 2003 CONFERENCE AND EXHIBITION HAS RESERVED  
THE ENTIRE TOWN & COUNTRY HOTEL AND CONVENTION CENTER.**

## WELCOME TO SAN DIEGO

OCEANS 2003 MTS/IEEE once again returns to San Diego. And with it comes the first ever OCEANS "Umbrella Conference." The active participation by the scientific community from the AGU, ASLO, ASA and the other societies (seen along the top of this Preview flyer) will more than double this year's attendance.

We expect participation from over 20 countries and have established an International Coordination Committee to help increase the international participation.

When you visit San Diego, you gain access to 1% of the population of the U.S. And, when combined with local educational, commercial and government, the attendee demographics will span the entire spectrum of ocean science and technology. Combine this with the Scripps Institution of Oceanography's Centennial celebration, our Thursday VIP Keynote on the results of the President's Commission on Ocean Policy, and OCEANS 2003 will be an event that can't be missed. *See you in San Diego.*

Robert Wernli and Dr. Charlie Kennel  
Conference Co-Chairs

## HIGHLIGHTS INCLUDE:

### Sunday

Golf Tournament  
Underwater Film Festival I

### Monday

Tutorials with UCSD Continuing Education Credit  
20 Scientific and Technical Sessions Through Friday  
Early Bird Reception  
Film Festival II

### Tuesday

Opening Plenary  
MTS Luncheon  
Two Floors of Upgraded Exhibits Through Thursday  
Cyber Café and Poster Sessions  
Exhibitor's Reception

### Wednesday

IEEE/OES Luncheon  
Sea World Extravaganza

### Thursday

Keynote address by Admiral James Watkins, Chair, President's  
Commission on Ocean Policy

### Friday

Celebration of Scripps Institution of Oceanography Centennial

### Saturday / Sunday

Enjoy San Diego.

**EXHIBITS ON SALE NOW!**

**WWW.OCEANS2003.ORG**



## TECHNICAL PROGRAM

The OCEANS '03 Technical Program Committee is accepting abstracts for scientific and technical papers and posters. The Technical Program offers five days of presentations and posters on Ocean Sciences, Oceanic Engineering and Marine Technology topics; 20 meeting rooms have been reserved for five days, allowing more parallel scientific sessions and technical tracks. Poster opportunities are available within an area including scientific and technical exhibits, a general lounge area with tables, an exhibitors lounge area, a cyber café, a snack concession and an in-process central sand sculpture attraction.

## STUDENT POSTER COMPETITION

OCEANS 2003 is sponsoring a Student Poster program to encourage the participation of scientific and engineering students in professional conferences. All Science and Technology related students are invited to submit poster abstracts on topics related to the subjects listed in the Science/Technical tracks on the conference website. Selected students will receive an invitation to present their posters at the conference, and will be provided conference registration and lodging, as well as reimbursement for travel expenses. Monetary awards will be presented to the top students. Visit the website for details.

## REGISTRATION RATES

Register early for the best rates.

<b>Full Package prior to 22 August</b>	<b>Student Full Package</b>
Member - \$415	"Anytime" Rates:
Non-Member - \$490	Member - \$230
<b>Full Package at the conference:</b>	Non-Member - \$250
Member - \$495	<b>Exhibits Only:</b>
Non-Member - \$570	<b>FREE prior to 22 August</b>
<b>Daily Rates prior to 22 August</b>	<b>At the Door - \$20</b>
Member - \$175	<b>Tutorials:</b>
Non-Member - \$225	Half Day - \$150
<b>Daily Rates at the conference:</b>	Full Day - \$300
Member - \$215	
Non-Member - \$265	<b>Visit the website for other rates.</b>

## TUTORIALS

The OCEANS '03 Tutorial Committee is accepting abstracts for scientific and technical Tutorials to be presented on Monday September 22, at OCEANS 2003.

Provision has been made for **tutorial participants to receive UCSD Continuing Education Credit**. The tutorials will be promoted through the UCSD Extension Catalog. Proposals for a half-day or full-day tutorial can be submitted through the OCEANS 2003 website.

## ACCOMMODATIONS

The OCEANS 2003 conference has reserved the entire Town and Country Resort Hotel complex. This gives us the ability to provide an unlimited technical program, two levels of exhibits and many other special events. ALL attendees will receive the lowest lodging rate of \$99.00 (equivalent to the federal per diem rate). Visit the website to register. Be sure to ask for the **"OCEANS 2003 Block of Rooms"** for the reduced rate.

## EXHIBITORS

The following exhibitors have signed up as of March 12, 2003:

Aanderaa Instruments, Inc.	Materials Systems Inc.
AGU	Metoccean Data Systems
Airmar Technology Corp.	NASA EOS
APM Hexseal	Nautilus Marine Service GmbH
Applied Microsystems Ltd.	Naval Meteorology & Oceanography Command
ASA	Nekton Research, LLC
ASL Environmental Sciences Inc.	NOAA Office Of Ocean Exploration
ASLO	NRL
Association of Diving Contractors	NSWC Carderock
Axys Environmental Systems	NUWC
Benthos, Inc.	Ocean Data Equipment Corp.
C & C Technologies, Inc.	Ocean Design
Chesapeake Technology, Inc.	Ocean Engineering and
CodaOctopus Ltd.	Production/Harbor Branch
CODAR Ocean Sensors	Ocean Innovations
CORE	Ocean Marine Industries
Cortland Fibron BX	Ocean News & Technology
CRP Group	Oceans/Techno Ocean 2004
D & A Instrument Company	Orcina Limited
Deep Sea Systems International	Orincon Defense
DeepSea Power and Light	Paroscientific, Inc.
Desert Star Systems	Prevco Subsea Housings
Dynacon, Inc.	Qeuster Tangent Corporation
EDO Electro-Ceramic Products	RD Instruments
Emerson-Cuming Composite Materials	Richard Brancker Research Ltd.
Event Theater	Science Applications International Corporation
EvoLogics GmbH	Scripps Institution of Oceanography
Falmat Inc.	Sea Con/Brantner & Associates, Inc.
GeoAcoustics	Sea Technology Magazine
Guidline Instruments Inc.	Sea-Bird Electronics, Inc.
Harbor Branch Oceanographic Institution	SEAmagine
Harris Maritime Communications (MCS)	Sensor Technology Ltd.
Hawaii Ocean Science & Technology	Service Argos, Inc.
Hydroid, Inc.	Sidus Solutions, Inc.
IEEE	Sippican Inc.
Impulse Enterprise	Sonatech, Inc.
Insite Pacific	SonTek/YSI, Inc.
Interactive Visualization Systems	Sound Ocean Systems
International Industries, Inc.	South Bay Cable Corp.
International Transducer Corp.	SPAWAR Systems Center
InterOcean Systems, Inc.	SSC San Diego
ITP Ltd. - Feedback Inc.	Subconn Inc.
Knudsen Engineering Limited	Sunwest Technologies
Kokes Marine Technologies, LLC	Tenix LADS, Inc.
Kongsberg Simrad	Thales Geosolutions (Pacific) Inc.
L-3 Communications/Sea Beam Instruments	The OceanScience Group
LinkQuest Inc.	TMT Laboratories
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Of The Coast And Environment	Triton Elics
Marine Advanced Technology	Underwater Intervention
Education (MATE) Center	Veridian
Marine Magnetics	WS Envirotech
Marine Sonic Technology, Ltd.	YSI Environmental, Inc
Marine Technology Society	

**WWW.OCEANS2003.ORG**

## CHAPTER CHAIRMEN

### Boston

John W. Irza  
Sygnus Technology Inc.  
Arlington, MA  
781 648 2144  
781 641 9974 (Fax)  
jirza@sygnus.com

### Canadian Atlantic

FERIAL EL-HAWARY  
61 Bay View Road  
Halifax Nova Scotia  
Canada B3M 1N8  
902 443 2400  
902 445 5110 (Fax)

### France

RENE M. GARELLO  
Telecom Bretagne  
Dept. Image Et Traitement de l'Infromation  
Technopole Brest Cedex  
29285 Brest Cedex, France  
(33) 98 00 13 71  
(33) 98 00 10 98 (Fax)  
r.garello@ieee.org

### Houston/Galveston Bay

AL WILLIAMS  
FSSL Inc.  
525 Julie Drive  
Sugar Land, TX 77478  
713 240 1122 ext 214  
713 240 0951 (Fax)

### Hawaii

BOBBIN TALBALNO  
94-792 Nolupe Street  
Waithu, HI 96797  
808 608 3200  
808 668 3780 (Fax)

### Japan

Junzo Kasahara  
Earthquake Research Institute  
University of Tokyo  
1-1-1, Yayoi, Bunkyo  
Tokyo 113-0032 Japan  
+81 3 5841 5713  
+81 3 5689 7234 (Fax)  
kasa2@eri.u-tokyo.ac.jp

### Norway

DR. THOR I. FOSSEN  
Professor of Guidance and Control  
Dept. of Engineering Cybernetics  
University of Trondheim, N-8034  
Trondheim, Norway  
47 73594361  
47 73594399 (Fax)

### San Diego

DANIEL D. STERNLICHT  
ORINCON Defense  
4770 Eastgate Mall  
San Diego, CA 92121  
858 795 1283  
858 795 8532 (Fax)

### Seattle

SHERI L. REES  
Engenuity Development Networks, Inc.  
116 NW 130th  
Seattle, WA 98177  
206 440 1455  
206 440 1438 (Fax)  
s.l.rees@ieee.org

### Washington D.C./No. Virginia

JAMES BARBERA  
13513 Crispin Way  
Rockville, MD 20853  
301 460 4347  
301 871 3907 (Fax)

### Victoria

JAMES S. COLLINS  
Dept. of Elec. &  
Comp. Engineering  
University of Victoria  
P.O. Box 3055  
Victoria, B.C. CANADA V8W 3P6  
(604) 721-8610; (604) 721-6052 (FAX)  
j.s.collins@ieee.org

## OES Journal Associate Editors

### ARTHUR B. BAGGEROER

Dept. Ocean Eng.-Rm. 5-204  
Mass. Inst. Technol.  
Cambridge, MA 02139  
+1 617 253 4336  
abb@arctic.mit.edu

### D. RICHARD BLIDBERG

Autonomous Undersea  
Systems Institute  
86 Old Concord Turnpike  
Lee, NH 03924  
+1 603 868 3221  
Fax: +1 603 868 3283  
blidberg@ausi.org

### PETER H. DAHL

Applied Physics Lab,  
Univ. of Washington  
1013 N.E. 40th Street  
Seattle, WA 98105  
+1 206 543 2667  
dahlt@apl.washington.edu

### WILLIAM M. CAREY

The Kerry Group LLC  
79 Whipoorwill Rd.,  
Old Lyme, CT 06371  
+1 860 434 6394  
kerrygtp@ctol.net

### CHRISTIAN DE MOUSTIER

Center for Coastal and Ocean Mapping  
Chase Ocean Engineering Lab  
University of New Hampshire  
24 Colovos Road  
Durham, NH 03824-3525  
Phone: 603-862-3434  
FAX: 603-862-0839  
email: cpm@ieee.org

### GEOFFREY S. EDELSON

Advanced Systems & Technology  
BAE Systems  
MER15-2651  
P.O. Box 868  
Nashua, NH 03061-0868  
+1 603 885 5104  
g.s.edelson@ieee.org

### JOHN E. EHRENBURG

Boeing Phantom Works  
P. O. Box 3999  
MC 84-41  
Seattle, WA 98124-2499  
+1 253 773 1332  
john.e.ehrenberg@boeing.com

### DAVID M. FARMER

Institute of Ocean Sciences  
P. O. Box 6000, 9860 West Saanich Rd.  
Sidney, BC V8L 4B2 Canada  
+1 250 363 6591  
Fax: +1 250 363 6798  
dmf@ios.bc.ca

### RENE GARELLO

Telecom Bretagne  
Dpt. ITI BP 832  
29285 Brest Cedex France  
33 2 98 00 13 71  
Fax: 33 2 98 00 10 98  
rcne.garello@enst-bretagne.fr

### MALCOLM L. HERON

Physics Dept.  
James Cook Univ.  
Townsville, Queensland 4811  
Australia  
61 77 81 4127

### DAVID P. KNOBLES

EVG  
Applied Research Labs.  
Univ. of Texas at Austin  
P.O. Box 8029  
Austin, TX 78713-8029  
+1 512 835 3687  
knobles@arlut.utexas.edu

### JOHN J. LEONARD

Ocean Engineering Department  
Room 5-422  
Mass. Inst. Technol.  
77 Massachusetts Ave.  
Cambridge, MA 02139  
+1 617 253 5305  
Fax: +1 617 253 8125  
jleonard@mit.edu

### TAMAKI URA

Underwater Technology Research Center  
Institute of Industrial Science  
University of Tokyo  
4-6-1, Komaba  
Meguro, Tokyo 153-8505 Japan  
+81-3-5452-6487  
ura@iis.u-tokyo.ac.jp

### HISAAKI MAEDA

Institute of Industrial Science  
University of Tokyo  
7-22-1, Roppongi, Minatoku  
Tokyo 106, Japan  
81 3 3402 6231 X2255  
Fax: 81 3 3402 5349  
maedah@iis.u-tokyo.ac.jp

### ARYE NEHORAI

Dept. Elect. Eng. and Computer Sci.  
Univ. of Illinois at Chicago  
851 S. Morgan St.,  
Rm. 1120 SEO  
Chicago, IL 60607-7053  
+1 312 996 2778  
Fax: +1 312 413 0024  
nehorai@eecs.uic.edu

### JOHN D. PENROSE

Centre for Marine Science and  
Technology  
Curtin Univ, Kent SL Bentley,  
Western Australia 6102  
Australia 61 9351 7380  
tpenrosej@cc.curtin.edu.au

### JOHN POTTER

Head, Acoustic Research Laboratory  
TMSI and Elect. Eng. Dept.  
National Univ. of Singapore  
10 Kent Ridge Crescent  
Singapore 117596  
Fax: 65 874 2129  
Fax: 65 874 8325  
johnp@arl.nus.edu.sg

### ROBERT C. SPINDEL

Applied Physics Lab.  
Univ. of Washington  
1013 N.E. 40th St.  
Seattle, WA 98105  
+1 206 543 1310  
spindel@apl.washington.edu

### RICHARD STERN

Applied Research Lab.  
Penn State Univ.  
P. O. Box 30  
State College, PA 16804  
+1 814 865 6344  
rs@arl.vax.arl.psu.edu

### ARTHUR B. BAGGEROER

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of Acoustic and Electromagnetic  
Phenomena

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Unmanned Vehicles, Intelligent Systems,  
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