



Oceanic Engineering Society

Newsletter

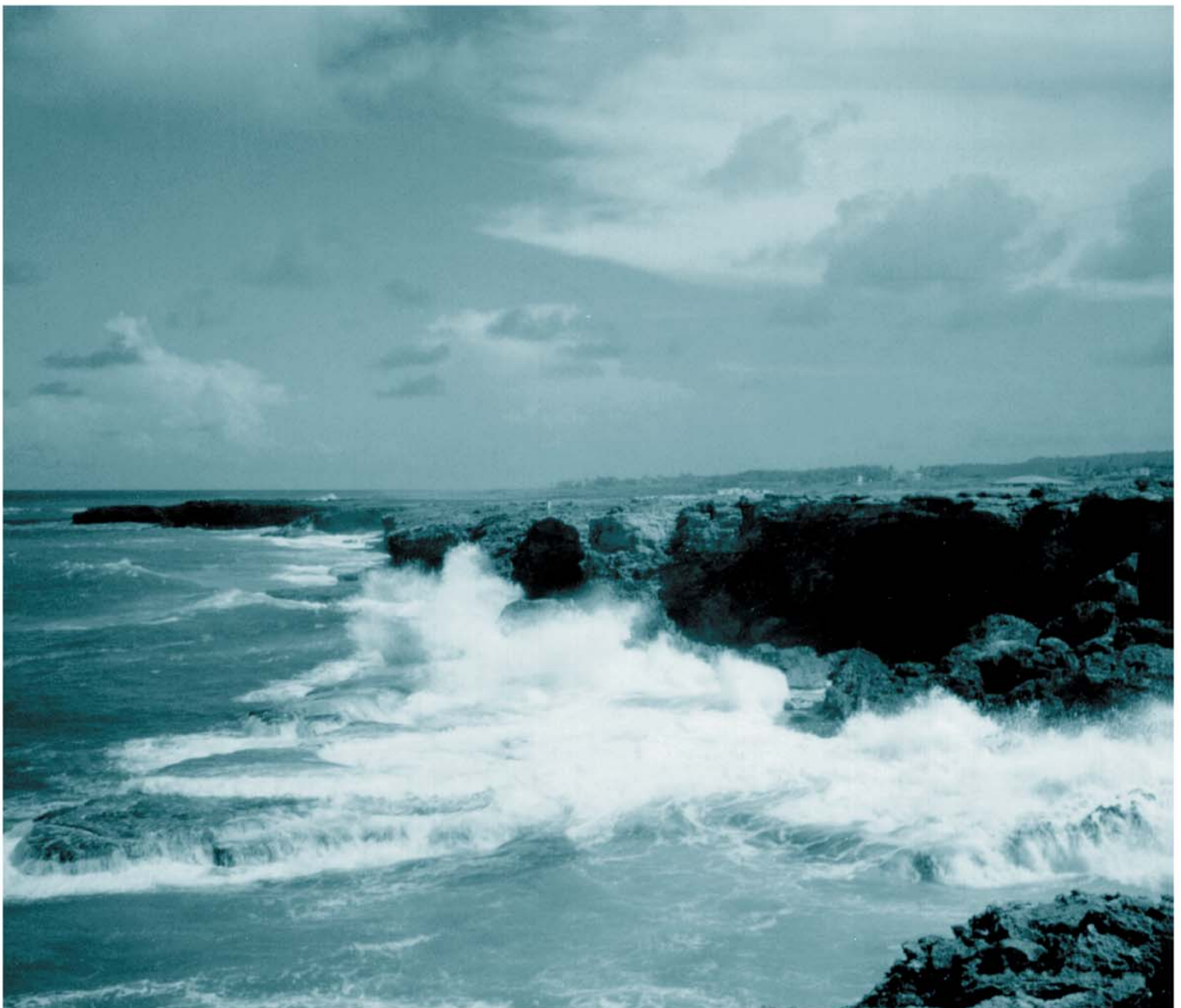
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OES INTERNATIONAL REPORT

Joseph R. Vadus
Vice President, International
IEEE Life Fellow

VP International is responsible for OES activities around the world: initiating future conferences and symposia; promoting chapter formulation; and providing higher visibility abroad. I have relied on Norm Miller, VP Professional and Jim Collins, Membership Director, for chapter “build up” to facilitate new venue selection. Jim has just replaced Norm as VP Professional. Many kudos for Norm, he has served with great distinction. I greatly appreciate Fred Maltz’s efforts in conference reporting and advertising in the OES Newsletter to get the word out. The Newsletter is a very helpful handout when traveling about.

The two Oceans per year policy has greatly accelerated the total number of conferences handled in the last year. There are more than 20 conferences, symposia and workshops being considered. OES policy invites MTS to join all offshore venues. For those that are joint, OES and MTS approval are required. The Recon Committee (Recon) of very experienced, expert conference assessors: Jim Barbera, Jerry Carroll, Andy Clark, Rene Garello, Hisaaki Maeda, Tamaki Ura, Bob Wernli and Glen Williams providing global recon to find and encourage new conference venues that present good opportunities



Joseph R. Vadus

for OES and MTS. Five of us Reconers are dual OES& MTS members, and I was able to add MTS’ notable Judy Krauthamer at Oceans 2003. San Diego sunshine promotes camaraderie. VP Technical, Stan Chamberlain, with Joint Ocean Advisory Board (JOAB) support, are interacting with MTS/IEEE 2003-04-05 -06, where proposals and budgets are relatively firm and the venue is certain. For continuity from my report last winter, these “front-burner” conferences are reported, followed by the “back-burner” Recon activity ‘06 to ‘11.

Note that offshore (non North America) venues are all scheduled in the Spring, preferably in early June; and the Fall is reserved for the traditional North America Oceans-MTS/IEEE Conferences.

Oceans 2003(San Diego). This has escalated in all dimensions as the “biggest & best” with participation by 14 societies and celebration of Scripps 100th Anniversary. Everything you wanted to know is on their website .Bob Wernli, Kevin Hardy & Co had blocked out the entire Town and Country Hotel and there were over 800 papers organized by the societies and 275 exhibits. Over 1000 attended each of the MTS and OES

Awards Luncheons and the Gala Affair at Sea World. This new MTS/IEEE venture was very successful and should serve as the model for integrating like-minded US marine-oriented societies in future conferences.

Oceans 2004(Kobe, Japan) combines two premiere conferences, Oceans MTS/IEEE and Techno Ocean 2004, referred to as OTO '04 in Kobe Japan, November 9-12. This is another important venture that can firm up MTS/IEEE visibility in Asia–Pacific, where OES hopes to be in even numbered years. Overall, it should not cost too much more than going to e.g. Oceans '01 in Hawaii. The key is getting a low airfare on the internet, well in advance. There's a first class conference committee led by Dr. Hiroshi Ohba, former Chairman of Kawasaki Heavy Industry and JAMSTEC and past chair of several Techno Ocean conferences. The Japanese side committee leadership is provided by Tamaki Ura & Shinichi Takagawa (OES Japan Chapter) and Toshitsugu Sakou & Hiroyuke Nakahara (MTS Japan Section). Watching the OTO partnership develop, I was pleased to have been a founder of Japan's MTS Section and IEEE/OES Chapter. Comparable MTS/IEEE leadership is provided by Tom Wiener, Ted Brockett, Andy Clark, Stan Chamberlain and Jim Barbera. Hisaaki Maeda and I serve on the Advisory Committee.



Kobe, Japan Convention Center for Oceans-Techno Ocean 2004 (OTO '04)

Oceans 2005 (Brest, France) June 20-23. It's on track and under control of Chairman Rene Garrello and a strong core committee that includes OES members. The Le Quartz is a first class conference facility with adequate space for exhibits and breakout sessions. Hotels are conveniently co-located not requiring busing, as was the case for Oceans '94. The Mayor of Brest offered city support. There are many seafaring tourist attractions in and around the port city of Brest, and the restaurants and creperies are quite good. In April, a Recon visit was made by Jim Barbera to check out facilities and review financial arrangements.

Oceans 2005 (Washington D.C.), September 19-23. Leadership will be provided by Honorary Quad-Chairs. VADM Conrad Lautenbacher, USN (Ret.), NOAA Administrator and Department of Commerce Under Secretary for

Oceans and Atmosphere; Mr. John Kreider, Senior Vice President, Oceaneering Technologies, Inc.; VADM Roger Rufe, USCG (Ret.), President, Ocean Conservancy; and Dr. Lydia Thomas, President & CEO Mitretek Systems, Inc. More honorary chairs will be added. Operational leadership is provided by Tri- Executive Chairs: Barry Stamey, Fred Klein and Steve Holt, all of Mitretek Systems Inc. Kudos for Mitretek Systems Inc. They are busy looking at possible program options that will elevate the stature and resulting value-added contributions of Oceans '05. The Marriott Wardman Hotel will handle the entire program: rooms, social functions, technical sessions, exhibits etc. Oceans has finally returned to Washington after 15 years.

Oceans 2006 (Singapore). A proposal for a Singapore venue was presented at the OES AdCom meeting by John Potter, organizer of the Singapore Chapter. A Recon visit was postponed in the Spring because of SARS concerns. It now appears to be under control, but we will keep a watchful eye. Recon's Tamaki Ura visited in July and Hisaaki Maeda in September. It is best to get at least two views on a new venue, and they gave favorable reports to AdCom. The consensus seems to favor the centrally located Raffles Center, with first class hotels, shopping mall and underground station. When John Potter and I Co-Chaired OI '97 in Singapore, I was impressed with Singapore's ambiance and quality; and a great place to confer and socialize. Provisional approval of the venue was given by AdCom, pending approval of the official proposal and budget.

Oceans 2006(Boston). We received a preliminary proposal and budget and a presentation by John Irza to AdCom. Expectations are for over 900 registrants and 175 exhibitors, perhaps a tad better than Oceans '00 in Providence. This should be realized, especially since some of the committee served with Oceans '00. John Irza has the OES lead and MTS leaders include Dick Butler, Bob Lobecker and Don Jagoe. Boston's Hynes Convention Center, with adjoining first class hotels, is being considered. AdCom has given provisional approval for Boston, pending approval of their proposal and budget by MTS & OES. Bean Town is back, after 25 years, and the Big Dig will have been dug.

Oceans 2007(Aberdeen). In Biloxi, at Oceans 2002, a preliminary proposal was presented for the Aberdeen venue. In



L to R: Brian Horsburgh, AECC, James Barbera; Lady Provost, Margaret Smith, Joseph Vadus, Rene Garrello and Prof. John Watson, University of Aberdeen.



At the Aberdeen Exhibition & Conference Centre - Planning Session for OCEANS 2007 Europe. L to R: John Watson; Brian Horsburgh; Joseph Vadus; Rene Garelo; James Barbera; and Michael Cowling

April, a Recon visit was made by J.Barbera, R.Garelo and me. Our consensus was that we were impressed with: 1.the Aberdeen Exhibition & Conference Center (AECC) and related facilities. AECC has undergone a major refurbishment; 2.the proposed leadership and conference committee; 3.the proposed program plan and technical coverage; 4.sight seeing and social aspects. The Aberdeen proposal was presented to AdCom by John Watson, University of Aberdeen, and Brian Horsburgh of AECC. Their proposal covers these points, along with a preliminary budget. Provisional approval was given for the Aberdeen venue, based on receiving final approval of the budget. Are you ready for kilts and pipes and a drum roll or two?

Oceans 2007 (Vancouver). A letter of intent and preliminary proposal for a Vancouver venue was presented to the AdCom by Jim McFarlane, President of International Submarine Engineering, who is the proposed Chairman. At Oceans '87, Jim received the OES Distinguished Technical Achievement Award and Canada's highest award in the same week. A strong core of the conference committee includes prominent ocean figures such as Phil Nuytten and Terry Thompson. The



Vancouver, British Columbia with Vancouver Convention & Exhibition Center Proposed for OCEANS 2007.

Vancouver Convention and Exhibition Centre is anchored on the waterfront in the heart of Vancouver downtown within strolling distance of many first class hotels. AdCom gave provisional approval, pending approval of their official proposal and budget by MTS and OES. A Recon visit is planned by Bob Wernli and Glen Williams. Vancouver is a popular venue for conferences and vacation travel.

Oceans 2008 (Asia-Pacific). Hisaaki Maeda and Tamaki Ura are exploring the possibilities in Japan, Korea, and China. Perhaps repeating OTO in 2008 may be desirable, depending on OTO '04 success. Australia has also come up on the radar screen with information from Tom Wiener, Jim Collins, Steve Holt and others. The consensus preference seems to be toward Sidney for general reasons. However, we need more substantive information in a preliminary proposal to determine if there is convincing interest, more than marketing brochures from convention centers. We need a core interest from IEEE sections and members. Jim Collins has also provided information on China and India, and I've had several interactions with India's National Institute of Technology. We will work toward firming up Asia-Pacific in 2008.

Oceans 2008 (North America-East Coast). A preliminary (2-page) proposal was received from Laurie Jugan of Stennis, MS for repeating the venue of Biloxi and involving the core of the Oceans 2002 Conference Committee. Jerry Carroll is tracking this proposal for OES and provided an update to AdCom. The proposers want to remain in Biloxi and will select another hotel near the convention center. Jerry notes that there will be new resort hotel complexes to choose from, but the committee is reluctant to shift from Biloxi to New Orleans. However, they may be amenable to shift their proposal to Oceans 2010, offer a new hotel and promise another Gala Cajun Fest. I considered the Oceans '02 Conference to be a big success and it netted the largest financial surplus on record. However, based on negative comments from several members, AdCom did not support going to Biloxi, as proposed.

Another Oceans 2008 (North America-East Coast). A proposal for Quebec City in 2008, the year of Quebec City's 400 th Anniversary, was presented to AdCom by Philippe Dupont, with assistance from Ferial El-Hawary, who is helping coordinate the effort. This may be a special opportunity for holding an Oceans conference. A preliminary proposal was received from the Quebec IEEE Section (Xavier Maldaque, Pres. and Andre Morin, VP); and a Recon visit was made by Jim Barbera and Jerry Carroll, September 5-7. They found the Conference Center, nearby first class hotels and strolling in old town very favorable. Their comments were supportive of a Quebec City venue. The AdCom gave provisional approval to proceed, pending joint approval of the proposal and budget by MTS and OES. AdCom also expects the formation of a Quebec City-Montreal Chapter.

Oceans 2009 (Europe). A preliminary proposal for Bremen, Germany was presented to AdCom by Christoph Waldmann, IEEE/ OES Member for 15 years. He is affiliated with the University of Bremen's new Research Center on Ocean Margins. He indicated that there is a strong interest in Germany to host technological conferences, and that there is

adequate infrastructure and financial resources to assure success. The economy is strongly related to marine business. The city of Bremen has developed one of the central locations of marine research and technology in Germany. Financial and organizational support is expected from the state of Bremen, German and European Funding Agencies, and major companies. Close ties exist with institutions in France, U.K. and Germany. A Recon visit is planned in mid-2004.

Last year, I indicated that OES Senior Member Andrea Trucco, University of Genoa, was planning to submit a proposal for Genoa at Oceans '03 in San Diego. However, no message was received since that time. Rene Garello, Region 8 Chapters Coordinator informed me that Andrea was unable to attend, and that he suggests we consider Genoa for Oceans 2011(Europe).O.K., we will.

Oceans 2009 (North America-West Coast). An expression of interest was received for a Third Anniversary Oceans 2009 in Seattle. Norm Miller is making inquiries and the indomitable Bob Spindel has stepped up to say "great" and to count him on board. After two Chairmanships '89 & '99, I don't dare ask Bob to Chair again, but maybe he could start as Senior Advisor. Judy Krauthamer has received an inquiry from the Seattle Convention Bureau, and some member interest. Actually this is a Fourth Anniversary, since we were there for Oceans '80, but who's counting? Our late colleague, Ed Early is remembered for his great contributions to the past three.

Oceans 2010 (Asia-Pacific). Previously mentioned venues such as Australia, Korea, China and India will be explored with greater gusto.

Oceans 2010 (North America-East Coast). This may be an alternate choice for the Gulf Coast or an opportunity for suggested venues of Charleston, Savannah, return to Washington, or other East Coast venues.

Oceans 2011 (North America-West Coast). Returning to Waikiki Beach, Hawaii for the Third Anniversary is a great possibility. At Oceans 2003, the notable Executive Co-Chairs of Oceans 2001, Liz Corbin and John Wiltshire expressed interest and asked to place a marker in the future scheduling. By that time some ought to improve their hula technique and develop a taste for poi.

Oceans 20xx and Beyond The Reef

We have received expressions of interest for other offshore venues such as Rio de Janeiro, Barcelona, Vienna, Istanbul, and Sidney, but they are solicitations from conference center marketing reps and need leadership from a local IEEE chapter or section.

There is new interest for symposia/workshops from Latin America: Chile, Mexico and Argentina, that include OES members.

Suffice it to say that there is a lot of conference activity on the table, including new symposia and workshops that emerge. Any promising venue suggestions and offers of assistance are appreciated.

Other Non-Oceans, Symposia and Workshops

Homeland Security Workshop, December 10-11, 2003 in Warwick, RI. This workshop topic is very timely and should

draw a lot of interest. Leadership is provided by Bob Bannon and Pam Hurst. Glen Williams is reviewing abstracts.

A prominent list of speakers on this important topic will be there, and a large turnout is expected.

UT '04 International Symposium in Taipei, Taiwan April 20-23 is still on track with a watchful eye on the SARS situation. A call for papers (deadline October 30) and web site are available on <http://ut.na.ntu.edu.tw/ut04>. Yi-Nan Chen (Taiwan), T. URA (Japan) and R. Wernli (USA) are Tri-Chairs leading this event in Taipei, with H. Maeda, Forng-Chen Chiu and J.Vadus as advisors. A first-day technical/site seeing tour is included.

OTC 2004 Houston, May 4-8, 2004. Once again, Claude Brancart is coordinating OES participation. Ask Claude or me, and we'll tell you how important OTC really is. For information, contact Claude at <c.brancart@ieee.org>

AUV '04 Workshop in Maine. In June 2004. As before, this is being orchestrated by Claude Brancart. This time, he will focus on technology related to operating multi AUV's. For information, contact Claude at <c.brancart@ieee.org>

US-Baltic 2004 International Symposium in Klaipeda, Lithuania June 15-17, 2004. In April, a visit was made by J. Barbera and J. Vadus with Algirdas Stankevicius, General Co-Chair, and Lina Siauliene, Program Co-Chair, to evaluate



US-Baltic Symposium for June 2004. L to R: Joseph Vadus, U.S. Chair; Algirdas Stankevicius, Lithuania Chair; Lina Siauliene and James Barbera, Program Co-Chairs in Klaipeda Lithuania.



James Barbera & Lina Siauliene, Program Co-Chairs for the US-Baltic International Symposium

the venue and accelerate the planning. A Call for Papers has been distributed and is included in this Newsletter; and appears on the Lithuania Center for Marine Research web site. J. Barbera, Program Co-Chair is assisted by Victor Klemas, University of Delaware and Horst Oebius, Berlin, Germany. Jim has invited OES Committee Chairs as Session Chairs to organize sessions and recruit papers. Stan Chamberlain has offered much-needed support. This program addresses one of the few IEEE conference themes that focus on the marine environment, and enables several related OES technical committees to have an important role. The IEEE Region 8 Director, Professor A. Davies in U.K., is interested in establishing a Lithuania Section, and we would like to recruit OES members and follow up with an OES Chapter. Region 8 is listed as a sponsor.

IGARSS '04 Anchorage, September 20-24, at the Egan Convention Center. It is being tracked by Rene Garello and Stan Chamberlain. I have been informed that OES has a partial financial sponsorship and agreement with IGARSS, and Stan and Rene promised 50 to 100 papers. This is a substantial offering in the light of OES needing papers for US-Baltic '04 and OTO '04. However, Rene has offered a session on Remote Sensing for the US-Baltic '04.

Current Measurement Technology Workshop 2005. This is another in the series orchestrated by Sandy Williams and headed offshore for the first time, located at Southampton Oceanography Center, UK; June 27-29, 2005 and focusing on current measurement technologies, applications, and observations. For more info contact Sandy at awilliams@whoi.edu

Proposed Conference Support Recommendations

1. Reconsider using IEEE Conference Management Services (CMS) as Support Contractor in a Task Ordering-type contract. CMS can repeat managers for conference continuity; handle multiple conferences proceeding at different stages; "ramp up" support as needed; and provide conference data base maintenance. Note that Oceans '05 Washington has started using a CMS manager.
2. Modify Oceans conference guidelines to assign a conference committee member to monitor Support Contractor tasks in regard to scope, schedule and cost to ensure satisfactory completion in an efficient manner. This can help avoid "out of control" tasks or redundant, unnecessary tasks or "never ending" cost plus fixed fee tasks.
3. Strengthen Conference guidelines for the assigned MTS & OES Liaisons to provide support to enable frequently attending committee meetings and reporting back to ExCom on progress, problems, and where JOAB- type assistance may be needed and included in the conference budget. This would ensure equitable charges absorbed by MTS & OES. MTS participation in JOAB has been sparse.

I welcome your suggestions and rationale for new conference venues, or ways to improve planned conferences.

Semper Fi
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AdCom Dinner International Guests - L to R : J. McFarlane (Vancouver), J.Watson (Aberdeen), E.Gough & J.Carroll (CNMOC), J.Vadus (OES), J.Potter(Singapore), Brian Horsburgh (Aberdeen) and C.Waldmann (Bremen)

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:

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Abstract deadline: December 1, 2003

Abstract acceptance: January 1, 2004

Paper deadline: April 1, 2004

Who's Who in the OES

Geoffrey S. Edelson received his A.B. in mathematics from Dartmouth College in 1980, his M.S. in electrical engineering from the University of Pennsylvania in 1984, and his Ph.D. in electrical engineering from the University of Rhode Island (URI) in 1993.

Geoff is currently employed by BAE SYSTEMS Information & Electronic Warfare Systems, headquartered in Nashua, NH, where he is a Sr. Principal Systems Engineer in the Advanced Systems & Technology Division. Since joining BAE SYSTEMS (formerly Sanders), Geoff has been the Principal Investigator on several programs and, over the past ten years, has provided technical leadership in the development, design, and analysis of algorithms for underwater acoustic signal processing applications. He has made novel contributions in the fields of underwater acoustic communications, multistatics, and synthetic aperture sonar. He is also on a high-frequency sonar engineering team for which his specific emphasis has been on sparse array design.

As a graduate student at URI, Geoff participated in the Student Services Program with the Naval Undersea Warfare Center (NUWC) in Newport, RI. Between URI and NUWC, his work involved characterizing the behavior of passive synthetic aperture sonar techniques and analyzing the use of moving arrays for effective localization. Out of these efforts came the concept of the spatially-referenced towed array. During this time, Geoff also analyzed the use of linear signal spaces for simultaneous high-resolution estimation of range and Doppler shift. After graduating, he remained at URI for over six months to participate in post-graduate

research on reverberation component modeling and estimation, and to teach a senior level course in digital computer design.

From 1984 to 1987, Geoff was employed in the Advanced Signal Processing Group at the RCA Missile & Surface Radar Division, Moorestown, NJ. He was the lead engineer for algorithm development and system integration of a ground-based demonstration test bed and a co-lead engineer on the AEGIS radar signal processor upgrade. Prior to joining

RCA, Geoff completed his MS at the University of Pennsylvania where his thesis work concentrated on reducing the sidelobes of random antenna arrays.

Geoff is a member of the IEEE, the IEEE Oceanic Engineering (OES) and Signal Processing Societies, and the Acoustical Society of America (ASA). Since 1996, he has been an *IEEE Journal of Oceanic Engineering* associate editor for signal and array processing. He is also a member of the

IEEE OES Technical Committee on Sonar Signal & Image Processing, the IEEE Sensor Array and Multichannel Signal Processing Technical Committee, and a member of the Signal Processing in Acoustics Technical Committee of the ASA. He has co-authored one book chapter and has published numerous journal and conference papers.

Geoff and his wife Lisa have two wonderful children, Benzi and Mia. The kids occupy almost all of his "spare" time, but he does manage to serve on his Temple's Board of Governors and to volunteer as a soccer coach. His hobbies include wine collecting (and drinking), skiing, and sailing.



FOURTH OCEAN TECHNOLOGY WORKSHOP SCHEDULED

Hingham, Massachusetts, USA — Maggie Merrill reminds us it may seem like a ways off, but planning to attend the 4th Ocean Technology Workshop, "Technologies for Port and Harbor Security," in the fall of 2004 is a smart move. The Hyatt Regency on Goat Island in Newport, Rhode Island, is slated to accommodate several hundred trainers and attendees to what may prove to be the best Ocean Technology Workshop yet, she said. Dates are October 19-21, 2004. After three successful events, the Marine & Oceanographic Technology Network (MOTN) and its partnering organizations have stuck to a simple formula — provide a professional yet casual set-

ting for companies to train existing customers, sales representatives, and serious potential customers on their most recent products.

MOTN moved the event from Plymouth, Massachusetts, to Newport to take advantage of being close to some key customers, great underwater features close to the docks, and access to some fun places to relax and build relationships for the future. Newport is home to the U.S. Naval Underwater Warfare Center, the Naval War College, SAIC's Marine Science & Technology Division, many defense contractors; world class yacht racing; and proximity to the University of Rhode Island and

Woods Hole Oceanographic Institution. There may even be some tours set up for the last day of the event at some of these locations. "We can run more workshops and even more equipment demonstrations this time, since the docks are located steps away from where the workshops will take place", said Bill Charbonneau, event co-chairman. The docks are located close to very deep water in Narragansett Bay where there are many interesting underwater features that will make the equipment demonstrations extremely interesting, he noted.

Merrill also announced that the northeast regional training workshops for Coastal Oceanographics Inc.'s HYPACK mini-camp and the Service Argos Inc. System Users Group

will be repeated in conjunction with the 4th OTW. In addition, the New England Section of the Marine Technology Society will again be sponsoring and coordinating a star-studded Technical Speaker Track to take place each afternoon. Last time these talks were standing room only. For all the details about offering training, registration, or exhibiting, contact Merrill on +1 (781) 740-1456, e-mail: martrep@aol.com, or go directly to <http://www.motn.org/>. All registration materials are available on line. To inquire about sponsorship opportunities, contact MOTN executive director Steve Withrow, P.O. Box 1950, N. Falmouth, MA 02556; +1 (508) 548-3246, e-mail info@motn.org.

The 3rd International Workshop on Scientific Submarine Cables and Related Technologies (SSC'03)

The 3rd International Workshop on Scientific Submarine Cables and Related Technologies was successfully held at the Graduate School of Mathematical Science of the University of Tokyo from June 25 to 27. More than 100 researchers from around the world attended the workshop including USA, Canada, France, Germany, Italy UK, Korea and Japan. It was organized by IEEE OES Japan Chapter, Earthquake Research Institute (ERI) of the University of Tokyo, Institute for Industrial Science of the University of Tokyo, Ocean Research Institute of the University of Tokyo and Japan Marine Science and Technology Center. Prof. Junzo Kasahara, ERI of the University of Tokyo and Dr. Alan Chave co-chaired the workshop.

Underwater observation systems using submarine cables provides long-term continuous data from ocean bottom in real-time that can hardly be obtained otherwise. Many cabled observatories have already been constructed and produced good results. Besides, recent progress in underwater optical telecommunication systems enables the construction of flexible submarine cable networks with huge data transmission capacity. Based on this background, some new projects to develop innovative cabled observatories have been initiated.

On the other hand, the first generation of underwater telecommunication cables begins to retire, that will provide scientists a new opportunity.

SSC'03 aimed at providing a forum for exchanging information between scientists and engineers working in the earth and ocean sciences and underwater technologies. It covered both scientific and engineering topics, including scientific results using scientific submarine cables, previous and future systems, technology on observation, AUV/ROV, Communication, power supply and data/interface standardization. All the sessions were held in series with 67 papers presented. Related meetings on international cooperation and re-use of retired underwater telecommunication cables were also held during the workshop, and made considerable progress.

On the first day, the participants enjoyed a sociable reception at the neighborhood hotel with delicious dishes and drinks, and deepened friendships. On the second and third days, participants had fun of short technical tours to the Underwater Research Center of IIS, the University of Tokyo where Prof. Ura presented the cutting-edge research on AUV.

(K. Asakawa, Secretary of SSC'03)



Call for Papers / Tutorials Posters / Exhibits

OCEANS'04 MTS/IEEE / TECHNO-OCEAN'04



**Bridges Across
the Oceans**

OCEANS'04 MTS/IEEE
TECHNO-OCEAN'04

November 9-12, 2004, Kobe, Japan

Organizers

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MTS Japan Section

Techno-Ocean Network (TON)

Japan Marine Science and Technology Center (JAMSTEC)

Kobe Convention and Visitors Association (KCVA)

Advanced Earth Science & Technology Organization (AESTO)

First Announcement

www.oceans-technoocean2004.com

DON'T MISS!

First Joint Event of OCEANS and TECHNO-OCEAN in Japan.

OCEANS'04 MTS/IEEE / TECHNO-OCEAN'04 (OTO'04) is a joint international convention, combining annual OCEANS conference and exhibition usually held in the USA, with those of TECHNO-OCEAN held biennially in Japan. OTO'04 is the first OCEANS conference in Asia, crossing over the Pacific Ocean.

The theme of this international joint convention is "Bridges across the Oceans", which stands for our hope to provide people living in the continents and islands over the world, with bridges to connect each other, to give them chances of face-to-face talks and to exchange information on oceanic activities. You can't miss the largest and most significant convention of its kind.

KOBE, JAPAN is waiting for you to come.

The host city, Kobe, is one of the traditional port cities as well as the advanced oceanic cities in Japan. There are ocean-related organizations in research and academia, industry and public sector, including Japan Coast Guard and others, in Kobe. OTO'04 will offer you a valuable interface arena not only on ocean and coastal science, technology and engineering but also for future ocean business.

Kobe is also a very beautiful city with its sea and mountains. You can enjoy a "million dollar night view" and an easy access to Kyoto and Nara, ancient capitals of Japan. Please come and join us!

Call for papers / Tutorials / Posters

Potential authors are encouraged to submit papers and posters, or to register tutorials. You will be able to make contact with the Committee Chairpersons through the website: www.oceans-technoocean2004.com. No abstract submission fees are required.

The OTO'04 Technical Program offers a three-day session configuration, and one-day tutorials before the term on ocean, coast and marine related professional and interdisciplinary topics. Again, OTO'04 offers an important and worldwide arena for everyone in ocean-related fields across the Pacific Ocean. Suggested topics for presentation are listed below.

- Acoustics
- Coastal Engineering
- Coastal / Ocean Environment
- Deep Ocean Water Application
- Fisheries / Aquaculture
- Information Technology
- Integrated Coastal Zone Management
- Marine Bio Technology
- Marine Education / Culture
- Marine Resources
- Marine Sports & Tourism
- Naval Architecture
- Oceanic / Arctic Engineering
- Offshore Technology / Floating Structures
- Policy, Law, Security & Economics
- Port & Harbor / Marine Transportation
- Remote Sensing / Monitoring
- Renewable Energy
- Sensors
- Underwater Vehicles

IMPORTANT DATES

Call for Papers

Abstract Deadline: April 15, 2004
Notification of Acceptance: May 31, 2004
Camera-ready full paper: August 31, 2004

Call for Tutorials

Abstract Deadline: April 15, 2004
Notification of Acceptance: May 31, 2004

Call for Student Posters

Abstract Deadline: April 15, 2004
Notification of Acceptance: May 31, 2004

THE IEEE LAUNCHES IEEE *Xplore*[™] RELEASE 1.5:

The IEEE launched IEEE *Xplore*[™] Release 1.5 during July. The upgrade provides free abstract/citation records for guests and enhanced linking to complete abstract/citation records for IEEE members and subscribers, as well as:

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For more information on this release, visit <<http://ieeexplore.ieee.org/xpl/ReleaseNotes.jsp>>.

EARTH OBSERVATIONS GROUP HOLDS FIRST MEETING

Washington, D.C., USA — At the first-ever Earth Observation Summit, ministers and other high-level representatives from around the world adopted a declaration that put forth the principles for developing a comprehensive, coordinated, and sustained earth observation system to “take the pulse of planet Earth.” (See Oceansp@ce No. 491, June 16.)

Retired U.S. Navy VAdm. Conrad C. Lautenbacher Jr. (under secretary of commerce for oceans and atmosphere) was named by the White House (See Oceansp@ce No. 496, July 21.) as the lead U.S. representative to the ad hoc Group on Earth Observations (GEO). Lautenbacher’s alternate, Dr. Charles “Chip” Groat, is director of the U.S. Geological Survey. In addition during the first meeting of GEO, Lautenbacher was elected co-chair along with Director General Achilleas Mitsos, directorate general for research, European Commission; Mr. Akio Yuki, Japan’s deputy minister of education, culture, sports, science & technology (MEXT); and South Africa was selected as the developing country co-chair.

Lautenbacher said, “We now look forward to developing a plan to make this a reality. The overwhelming re-

sponse to the [Earth Observation Summit] brought an enormously talented group from around the world who have played an important role over the years in getting us to this historic opportunity. The first meeting of the ad hoc Group on Earth Observations made considerable progress in taking the initial steps toward organizing and structuring a working intergovernmental body to meet the goals outlined during the summit. The goodwill and consensus demonstrated at the GEO meeting will bring enormous benefit to nations and regions of the world as we work toward establishing a plan to implement a global earth observation system to enhance economic and environmental security for every nation.”

The next meeting of the GEO is scheduled to take place in Baveno, Italy, on November 28-29. The purpose of the follow-on meetings, Lautenbacher said, will be to develop a framework for a 10-year plan to be presented at the next ministerial meeting to take place in Tokyo in the spring of 2004. Details for now at <http://www.earthobservationsummit.gov/>.

NEW WHOI IMAGING VEHICLE MAPS CORAL REEFS

Woods Hole, Massachusetts, USA — Deep-water coral reefs in the U.S. Virgin Islands may occupy a much larger area and be in better health than previously thought, based on evidence gathered by a new autonomous underwater vehicle that flies through the sea like a helicopter. Woods Hole Oceanographic Institution scientists and engineers used an autonomous underwater vehicle and imaging platform called SeaBED during a first-of-its-kind study to determine the health of deep-water coral reefs and related spawning areas for commercial fisheries.

WHOI scientist Hanumant Singh and colleagues surveyed two reef areas, the Marine Conservation District Hind Bank and South Drop, in June south of St. Thomas and St. John in the U.S. Virgin Islands. Graduate students Chris Roman and Ryan Eustice with postdoctoral investigator Ali Can in collaboration with Roy Armstrong of the University of Puerto Rico

and observer Liane Guild of NASA Ames Research Center were participants.

The team used SeaBED, developed by Singh and his WHOI colleagues, to take a series of 7,000 digital still images of the coral reef habitats. SeaBED conducted nine successful missions at night, when it is easier to image the reefs using strobe lights, on Hind Bank near St. Thomas and the South Drop near St. John. Both reefs are 30 to 80 meters below the surface, deeper than normally reachable by divers. The vehicle “flew” seven transects, each several miles long over the banks, collecting color images every 3 seconds during the week-long project. The banks had never been mapped or imaged before, so the diversity and abundance of coral species and the health of the corals was a major surprise. Scientists from the University of the Virgin Islands (USVI), the Department of Planning and Natural Resources of the USVI, and the

Caribbean Fishery Management Council (CFMC) also assisted with the study.

While recent reports indicate shallow reefs in the Caribbean and around the world are threatened, this new study found well-developed deeper water coral reefs with nearly 100% living coral cover. This is highly unusual in the Caribbean, they said, where disease, pollution, land run-off, and other factors have caused widespread coral mortality in shallower reefs in the past few decades. Until now, little informa-

tion was available on the structure and composition of the deeper coral reefs due to the depths of these insular shelf reefs, which are beyond the safe range of scuba diving at 90 to 200 feet deep and some 10 miles from land.

Singh and the WHOI team plan to return to the reefs with SeaBED in October 2004. New sensors may be added and the survey area expanded. Annual surveys are now planned to determine changes over time in the health of the reef and its inhabitants. Keep track at <http://www.whoi.edu/>.

CANADIANS STILL FASTEST IN HUMAN-POWERED SUBMARINES

West Bethesda, Maryland, USA — High-tech met low-tech and college engineers competed against standout high school students late last month in the seventh running (June 23-27) of the International Submarine Races, the biennial human-powered engineering design competition, in the world's largest indoor tank. Drawing upon both brain and brawn, the scuba-clad future engineers and design entrepreneurs produced a range of submarines from the sublime to the surreal for this year's competition in the U.S. Naval Surface Warfare Center's Carderock Division David Taylor Model Basin here.

As reported by ISR's John Hussey, top honors for overall performance went to OMER from Montreal, Canada's École de Technologie Supérieure (University of Quebec). OMER 5, the team's sleek, 16-foot, two-person submarine, won the "Absolute Speed Award" with the new world record sprint of 6.814 knots and also won the prize for "Best Use of Composites." The "Overall Performance Award," sponsored by the IEEE Oceanic Engineering Society, carries a cash prize of \$1,000 and a trophy. Team Montreal, the team holding the world's record for speed, just over 8 mph, was unable to make its first run until Thursday due to computer problems, but then it achieved a blistering record speed of 6.814 knots. OMER 5 is outfitted with sophisticated, computer-driven speed and directional aids for the propulsor and navigator, both of whom provide the human power.

The "Spirit of the Races Award" went to the team from Florida Institute of Technology (Melbourne, Florida), whose submarine was MISS FIT, a bright red, 16-foot-long six-sided torpedo. This award recognizes overall spirit, gusto, fortitude, and support of other teams and is given to honor the late ISR

contestant Steve Barton of Spring Hill, Florida. Judges awarded the "Best Design Outline and Report" prize to Sussex County Technical School of Sparta, New Jersey, whose first-time entry, UMPYTSQUATCH-1 was completely designed, built, and operated by high school students. A new prize, the "Smooth Operator Award," went to SIRIUS from the University of Washington (Seattle). The award recognizes team efficiency.

The competition featured 19 submarines from teams throughout the United States, Canada, and Mexico, including two high schools and several independents, Hussey said. More than 150 volunteers provided the resources required to conduct the races, including U.S. Navy safety divers and experts from the Carderock Division staff.

Jerry Rovner, race director, said the ISR operations team conducted 189 individual submarine runs during the five-day event. "Our record for 100% safety remains intact," he said. Rovner manages the process of all race operations including diving, safety, emergency procedures, course lighting, underwater video, and timing. "This was the smoothest operation we've ever run. We owe a huge debt of thanks to the U.S. Navy, to our volunteers, and to the submarine teams." Chiming in was chief judge Claude Brancart. "We've seen some excellent designs from the student teams," said Brancart, a retired expert in autonomous underwater vehicles from Draper Laboratories and former IEEE/OES president. "We anticipated lively competition and that's exactly what we got." Brancart and the other judges remarked on the significant progress being made in engineering and design capability by many of the nation's technical high schools.

Upcoming Conferences

2003 IEEE Sensors

October 21-24, 2003

Toronto, Canada

www.ewh.ieee.org/tc/sensors/

Oceanology International

March 16-19, 2004

London

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

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