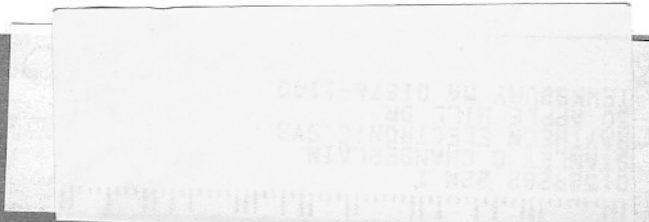


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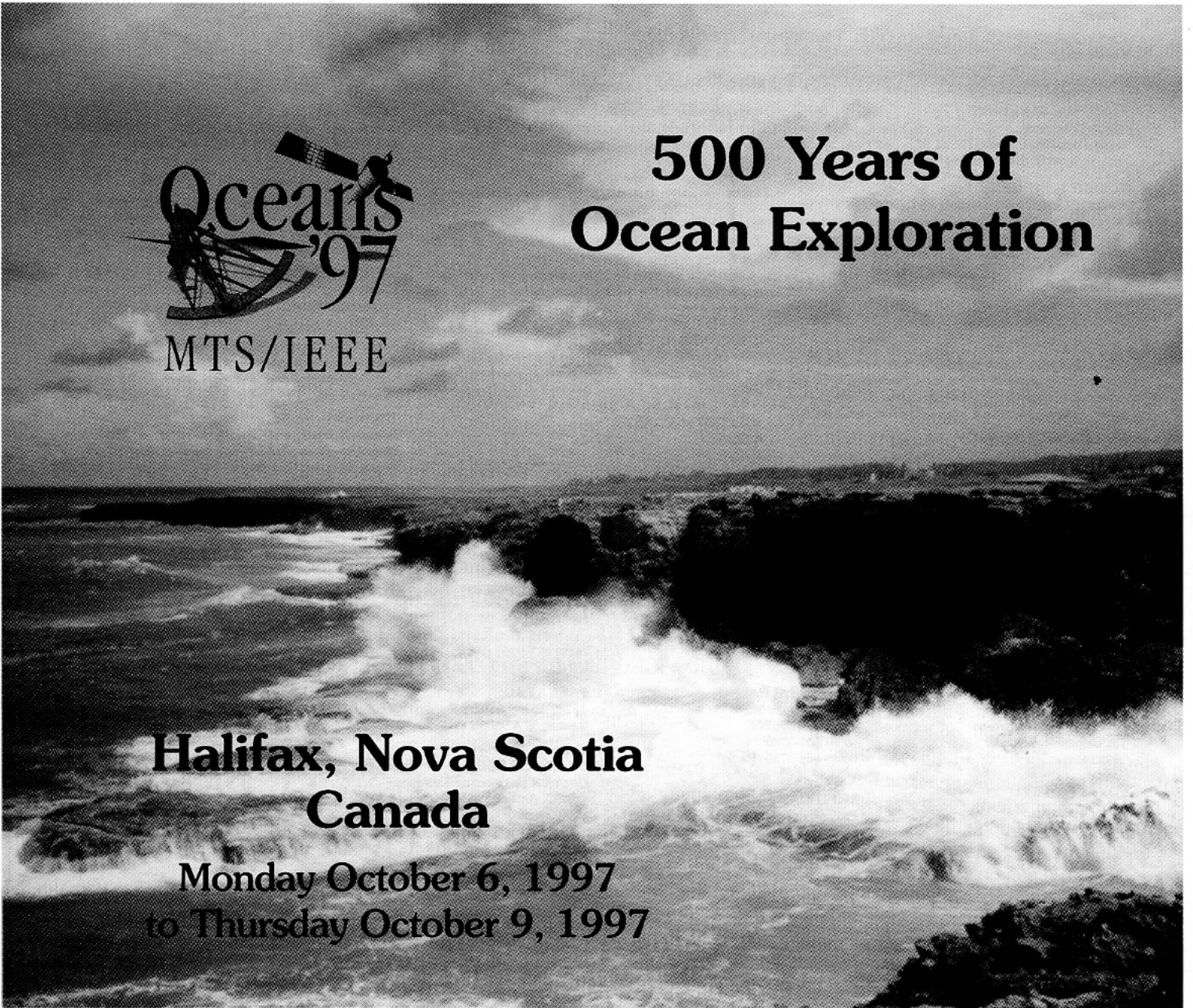
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500 Years of Ocean Exploration

**Halifax, Nova Scotia
Canada**

**Monday October 6, 1997
to Thursday October 9, 1997**





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Sonar Signal Processing: Underwater signals: Detection, Tracking, Classification; Nonlinear Sonar Processing, Sonar Performance and Statistics, Sonar Technology and Oceanic Effects

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MTS/IEEE

Halifax, Nova Scotia Canada

Monday October 6, 1997
to Thursday October 9, 1997

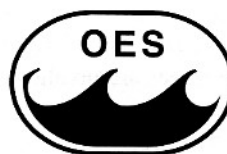
500 Years of Ocean Exploration

In 1497, 500 years ago, John Cabot reached the shores of Atlantic Canada and began an unbroken period of European discovery and exploration of the oceans. Atlantic Canada is now the centre of ocean science and technology in Canada, where university, government and private companies combine to create the third largest concentration of ocean engineering professionals in North America.

Halifax is a vibrant, cosmopolitan capital, filled with history, exciting night life, pristine walkable streets and friendly Maritime smiles. Strong emphasis is placed on heritage and cultural diversity, historic restorations, growth in science, industry and education, and the preservation of a healthy and happy lifestyle.

Oceans '97 is an ocean engineering conference sponsored by MTS/IEEE...
*come and **explore it!***

For information on submitting a paper contact: publications@sirius.ns.ca
For information about the technical program contact: techprogram@sirius.ns.ca
For information on how to become an exhibitor contact: exhibits@sirius.ns.ca



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<http://www.sirius.ns.ca/>



OES TECHNICAL ACTIVITIES

After many years in support of OES objectives, I accepted the nomination and election as Vice-President, Technical Activities. I am pleased to work with President Claude Brancart, OES Officers and membership, and I would like to recognize past VP James Collins for his contributions to OES Technical Activities.

Thank you for your confidence in me. I have interacted with many of you before. I have also served as: VP for Technical Activities for the Marine Technology Society (MTS); Chairman (15 years) for US-Japan and for US-France Cooperation in Marine Technology; and I am a Fellow with U.K. Society for Underwater Technology. It's been a privilege to serve in this broad capacity. Together, with your continued enthusiasm and support, we can achieve our goals and elevate our stature in the world ocean community. Here are some of the topics that I would like to explore with you during my term.

International

IEEE, the world's largest professional society, has a strong commitment for international inclusion. In accordance with OES policy, I will continue to explore with Pierre Sabathe, VP International and others, good opportunities for international involvement. We have ventured to Canada (with MTS) in 1987, 1993 and 1997 and to Brest, France in 1994 and Nice, France in 1998. In 1995, I played a lead role in establishing an OES Japan Chapter and we decided to have a flying start in planning for Underwater Technology (UT) 1998 in Tokyo, April 21-23, 1998. UT 1998 is intended to be the first in a series of International UT Symposia, repeating every two years. We need to establish more foreign chapters to provide a better foundation to strengthen international activities, including opportunities in the Asia-Pacific Region, which is growing rapidly.

Partnerships

There seems to be a growing proliferation of ocean conferences and symposia and occasional conflicts. We will explore the possibilities and any advantages of future partnerships, which may be mutually beneficial. Suggestions from Chapters and Technical Committees are invaluable.

Technical Committees

Technical Committees coordinated by Stanley Chamberlain, have a busy time responding to the various technical activities requiring their input, such as the conferences mentioned be-



low. It is important that they be given opportunities to co-chair sessions and invite papers well before the closing date for call for papers. Some technologies are gaining interest and others are emerging. I would like to explore adding a few more. Some topics that have a strong electro-oceanic component include: environmental technology/environmental monitoring, atmospheric ocean technology (i.e., air-sea interchange, climate research), global ocean observation systems, ocean tomography, underwater imaging, and underwater power sources, to name a few. Some of these may be adequately covered by our

present cadre or may need to emerge for better visibility. Let us know your ideas and offers to Chair.

Publications

Kudos to OES publications. The Journal of Oceanic Engineering is first class under the leadership of Editor Bill Carey, who attracts quality authors and papers. The themes covered many leading edge topics and we look forward to more of the same. I find the OES Newsletter under Editor Fred Maltz to be most comprehensive; a potpourri of newsworthy activity.

Conferences

OCEANS 1997-Halifax is shaping up. Will they outdo Halifax of 1987? OCEANS 1998 in Nice should be a big winner. It's a good venue for high tech activity with support from IFREMER and SEE. OCEANS 1999 celebrates its 10th anniversary in Seattle, and with Conference Chair Ed Early at the helm, it can't miss. I will work with Claude et al and IEEE Conference Services to help firm up OCEANS 2000 and 2001. Of these, we identified a return to Hawaii in 2001 for a 10th anniversary. The AUV Series of Symposia has served us well during its heralded emergence. Now, in its steady state condition it's time to find a broader-based home. In 1998, I'd like to see it in the spotlight at Underwater Technology 1998 in Tokyo.

Education

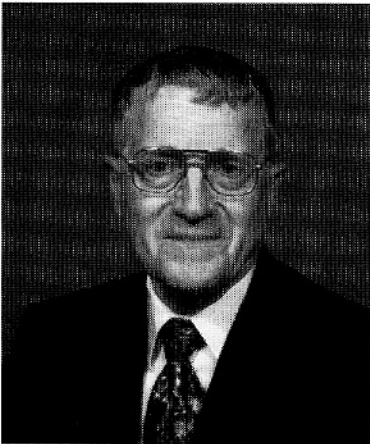
V. P. Norm Miller has pioneered the OES Student program into a respected entity. In view of all the present hoopla about education for young students he was ahead of the power curve. Recently, Past President Joseph Czika and I led an IEEE/OES proposal effort in response to an ONR Broad Agency Announcement (BAA) in support of the National Ocean Partnership Program, spearheaded by The Washington-based Consortium for Oceanographic Research and Education

(CORE). The proposal entitled, Electronic Notebooks for a Web-Based Marine Information System to Support K-12 Education offered the preparation of 12 electronic notebooks over a two year period. I will report to you on the outcome. We declared that our description of the Electronic Notebooks concept and their contents are proprietary. In his inaugural address, President Clinton proposed to provide for internet access to schools in the K-12 levels. The February issue of The

Institute carried the headline K-12 Education an IEEE Priority. Our proposed approach is very timely.

Your Ideas and suggestions are welcome. Contact me at <jvadus@erols.com> I would like to brainstorm with you, even though it may take me a while to recover.

Joseph R. Vadus,
Vice-President, IEEE/OES Technical Activities
President, Global Ocean Inc. –
International Consultants



AWARDS NOMINATIONS SOUGHT

How often have you attended an awards luncheon and watched someone receive an award and thought to yourself, "I know someone who is equally qualified to receive this award?" To often we fail to recognize our peers for the service they render to the Society or the technical achievements they have made. Now is the time to recognize our peers for the service they have rendered to the Oceanic Engineering Society or for their technical achievements. Each year the OES presents the Distinguished Service Award and the Distinguished Technical Achievement Award to honorees at the OCEANS Conference. This year the awards will be presented on Thursday October 9, 1997 at OCEANS 97 MTS/IEEE in Halifax, Nova Scotia, Canada. We are now seeking nominations for these awards. Nominations for the awards can be made by any Society member. The awards criteria are as follows:

Distinguished Service Award - This award is given to honor an IEEE member who has made outstanding contributions towards furthering the objectives of the Oceanic Engineering Society. The award is based on sustained service to the Society and not for one special event. The award includes a suitably worded certificate and an engraved watch.

Distinguished Technical Achievement Award - This award is given to honor and outstanding technical contribution to oceanic engineering in either the fundamental or applied areas. The recipient of the award is not restricted to an IEEE or Society member. The award may be for a single major invention or scientific contribution or for a series of contributions over a long period of time. The award includes a suitably worded certificate and an engraved watch.

The nomination for either award must be made on the nomination forms enclosed herein. The nominator must be an IEEE member of Member grade or higher. The nomination forms should be sent to:

Norman D. Miller, P.E.
VP Professional Activities
2644 NW Esplanade Dr.
Seattle, WA 98117-2527

The nominations can also be submitted by FAX to 206-784-0478 or via e-mail to n.miller@ieee.org. Nominations must be received no later than August 1, 1997. Don't delay - do it Today! Nominate a friend, co-worker or associate who has made a significant contribution in the Oceanic Engineering field or to the Society!

**THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
OCEANIC ENGINEERING SOCIETY**

**NOMINATIONS FORM FOR
DISTINGUISHED TECHNICAL ACHIEVEMENT AWARD**

For outstanding technical contributions to electrical engineering in the oceans, having a demonstrable influence on the course of oceanic engineering. IEEE membership is not required for this award.

(Type size no smaller than 10 point. Do not exceed space provided. No attached pages permitted.)

1. Name _____ 2. IEEE Member: Yes ___ No ___
IEEE Grade _____

3. Professional Affiliation and Title _____

4. Address (State whether home or business) _____

5. Education Beyond twelfth grade. Honorary degrees denoted (H)

<u>Institution/Location</u>	<u>Degree</u>	<u>Year</u>	<u>Honors</u>
-----------------------------	---------------	-------------	---------------

6. Proposed Citation. *(No more than 25 words.)* _____

7. Principal Employment: Year; Name of Company; Position Title; Concise Description of Responsibility. _____

8. Principal Honors _____

9. Nominator: Name; Business Affiliation and Address (or home address if preferred); Telephone, Fax (reachable during business hours). _____

Date: _____ Signature: _____ Member Number _____

Rev 96/06/17

10. Principal achievements, publications and patents pertinent to the award. (*Prefer items of sole responsibility, otherwise give joint names.*)

11. Principal IEEE and other Professional Activities; Dates, Description.

Submit to: Dr. G. N. Williams, IEEE Oceanic Engineering Society, c/o Dept. of Computer Sciences,
Texas A&M University, College Station, Texas 77843-3112

**THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
OCEANIC ENGINEERING SOCIETY**

**NOMINATION FORM FOR
DISTINGUISHED SERVICE AWARD**

The Distinguished Service Award is given to honor an individual OES member for outstanding contributions furthering the objectives of the Oceanic Engineering Society. The award recognizes contributions made over a sustained period of time and not a singular event. The nominee must be of an Member or higher grade to receive the award.

1. Name _____
2. IEEE Grade _____

3. Professional Affiliation and Title _____

4. Business Address _____

5. Home Address _____

6. State succinctly why the candidate is worthy to receive the Distinguished Service Award.
(Do not exceed space provided. No attached pages permitted.)

7. Proposed Citation. (No more than 25 words.)

8. Nominator: Name; Business Affiliation and Address (or home address, if preferred);
Telephone/FAX/e-mail *(Must be a member of OES and Member grade in IEEE.)*

Member Number: _____

Send to: Dr. Glen N. Williams, Computer Science Department, Texas A&M University, College Station, TX 77843-3112

Oceans '97 MTS/IEEE

*World Trade and Convention Centre
Halifax, Nova Scotia, Canada*

October 6-10, 1997

The Oceans Conferences have been a premier annual showcase of ocean science and technology for over 30 years. They are presented by **IEEE** (Institute of Electrical and Electronic Engineers), **MTS** (Marine Technology Society), and **OES** (Oceanic Engineering Society). The conferences are organized on behalf of the sponsors by a local organizing committee, representing participating industry sectors.

Halifax has previously hosted Oceans Conferences in 1968 and 1987. Participation in 1997 is expected to exceed 1,000 people.

The theme for *Oceans '97 MTS/IEEE* is "500 Years of Ocean Exploration, recognizing the 1497 voyage of John Cabot to Atlantic Canada.

Oceans '97 MTS/IEEE celebrates ocean exploration for the benefit of mankind, and the search for knowledge and

information to improve quality of life; specifically, the science and technology that supports these efforts.

Oceans '97 will present a plenary session, technical programs of current papers, a trade exhibit, tutorials, student posters and/or papers, awards presentations and social events. Topics for papers include:

- Underwater Acoustics/Sonar
- Signal and Information Processing
- Ocean Measurement Systems
- Communication, Navigation and Control
- Marine Resources and Environment
- Vehicles and Platforms
- Ocean Engineering
- Marine Policy and Education

Oceans '97 MTS/IEEE

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For information on Call for Papers, Tutorials, Student Programs or local information:

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FAX: (902) 835-6971

Email: oceans97@sirius.ns.ca

For information on the student program, contact **student@sirius.ns.ca**
For information on becoming an exhibitor, contact **exhibits@sirius.ns.ca**
For information on submitting a paper, contact **publications@sirius.ns.ca**
For information on submitting a tutorial paper, contact **tutorial@sirius.ns.ca**
For information on the technical program, contact **techprogram@sirius.ns.ca**

Oceans '97, the annual international conference and exposition on ocean science and technology, will be held from October 6-9 at the World Trade and Convention Centre in Halifax, Nova Scotia, Canada. The theme of Oceans '97 MTS/IEE is - 500 Years of Ocean Exploration - celebrates the rich history of seagoing activity through the centuries, from the explorations of John Cabot to modern enterprise in aquaculture, space technology, ocean energy and seabed mining.

The publicity committee for Oceans '97 would appreciate if you would place information on this international event in your calendar of events. For more information contact Connie Carruthers, Industry Canada at (902) 426-9905, Fax: (902) 426-2624 or E-mail: carruthers.connie@ic.g.c.ca

Regards,
Heather Campbell
Publicity committee member

The Tutorial's to be offered at OCEANS'97 are as follows:

Monday - October 6, 1997 - 8:30 am. - 12:00 noon

- 1-Active and Passive Sonar Information Processing. by "DAVE KIL"
- 2-Consulting - A Career Path for the 21st. Century by "NORM MILLER"
- 3-Nonlinear Ocean Waves and Hydrodynamic Loading by "MATIUR RAHMAN"
- 4-Fiber Optics Applications in Underwater Communications, Sensing, and Control by "FRANK CAIMI"
- 5-Focus on RADARSAT- A New Source of Data & Information for Marine Applications by "DIRK WERLE"
- 6-Impulsive Acoustic Sources by "RAY SHAEFER"
- 7-Underwater Acoustic Modeling by "PAUL ETTER"

Monday - October 6, 1997 - 1:30 pm. - 5:00 pm.

- 8-Fundamentals and Applications of Offshore Acoustical Geophysics by "RICHARD SYLWESTER"
- 9-Onboard Acoustic Sensors by "FRED MALTZ"
- 10- Internet Workshop by "DAVE JONES"
- 11- Shallow Water Acoustic Propagation, Coherence, and Reverberation by "BILL CAREY"
- 12- Autonomous Underwater Vehicle (AUV) by "DON BRUTZMAN"
- 13- Underwater Optical Imaging by "JULES JAFFE"

For more information and registration, please contact the under signed. I am looking forward to hearing from you and seeing you at OCEANS'97 in Halifax, N.S. CANADA.

Dr. Ferial El-Hawary, P. Eng.,
BH Engineering Systems Limited
P. O. Box 25041, Halifax, NS
B3M 4H4, Canada
Phone (902) 443-2400

The IEEE/Oceanic Engineering Society (Canadian Atlantic Chapter)

IEEE/Oceanic Engineering Society (Canadian Atlantic Chapter) has got lots to offer this year to the local community with the cooperation of the Marine Technology Society (Canadian Atlantic Section) by cosponsoring MTS/IEEE OCEANS'97 to take place in Halifax, W.T.C.C., October'97.

Planning for a large celebration is under way to mark the 10th. anniversary of the last IEEE International Conference OCEANS'87 as well as 500 Years of Ocean Exploration. We will celebrate the rich history of seagoing activity through the centuries from JOHN CABOT to the Modern Technology.

In preparation for this upcoming big event to take place in Oct.'97 we are looking forward to as much participation as possible from the IEEE Community.

Also we are expecting more IEEE volunteer members to help with OCEANS'97 as well as the IEEE/OCEANIC Engineering Chapter Activities.

Please Note That:

Our OCEANS'97 Web Site is now changed to:

<<http://www.seimac.com/oceans97>>

Ferial El-Hawary, P.Eng., Ph.D.
Chairman IEEE/OES
Canadian Atlantic Chapter.
TEL: (902) 443-2400
FAX: (902) 445-5110
E-mail: ELHAWARY@tuns.ca

Upcoming Conferences

OFFSHORE TECHNOLOGY CONFERENCE

Houston, Texas 5-8 May 1997
Contact: OTC (214) 952-9494 Fax: (214) 952-8435

UDT '97: UNDERSEA DEFENSE TECHNOLOGY

Hamburg, Germany June 24-26, 1997
Contact: Deborah Mitchell UDT, Nexus Information Technology, Nexus house, Swanley, Kent BR8 8HY, U.K.: 44+ (1332) 660070

SIGNAL & IMAGE PROCESSING (SIP '97)

New Orleans, LA 4-6 December 1997
Contact: Nader M. Namazi, Dept. of Electrical Engineering, The Catholic University of America, Washington, D.C. 20064

OCEANS '97 MTS/IEEE

Halifax, Nova Scotia 6-10 October 1997
Contact: Dr. Ferial El-Hawary
(902) 443-2400 Fax: (902) 445-5110

OCEANS '98

Nice, France September 28-October 1, 1998
Contact Pierre Sabathe
Thompson Marconi Sonar, 52, Route des Dolines, BP 157, 06903 Sophia-Antipolis, FRANCE,
Phone:+33 492 96 44 69 Fax: +33 492 96 39 25
bienvenu@tms.thomson.fr, p.sabathe@ieee.org

UNDERWATER TECHNOLOGY '98

Kokyo, Japan 20-22 April 1998
Contact: Prof. Tamaki Ura, ura@iis.u-tokyo.ac.jp,
Fax +81-3-3401-6259 or Bob Wernli, (619) 553-1948,
Fax: (619) 553-1915, wernli@nosc.mil

WHO'S WHO IN OES

Received no request to be included in this column, I have selected two of our Northwest OES members. These happen to be job wanted pieces but remember they can be just information about you and/of your company. Here they are:

Shari L. Rees

Shari is a electrical engineering student and a very active member both at Seattle Pacific University and in Seattle IEEE Section and OES activities. In a short space it is difficult to enumerate all of Shari's experiences but in addition to her studies she has participated in analog/digital design at Fluke and Allied Signal Aerospace and has performed customer service work at Data I/O and Xerox Canada. She lists other skills as technical writing, software design and has romance languages knowledge. On the oceanic area -she participated in the JASON and ABE projects and her objective is "To work for a progressive, safety and quality oriented company within the field of oceanic engineering."

Shari is graduating soon and is looking for a suitable job. You may contact her at:

Shari L. Rees
2803 3rd Ave
Seattle, WA 98119
(206) 286-6006
shadhra@spu.edu

Dr. Ronald P. Stein Senior Physicist, Applied Physics Lab., University of Washington

Ron's expertise is in electronics. for oceanographic instrumentation, underwater acoustics, and underwater

tracking ranges. He has been Involved in the planning and execution of many acoustics experiments and tracking range programs at sea and on the Arctic ice. Recent projects include developing equipment for the ATOC program and supplying equipment for bistatic acoustic measurements in the Coastal Benthic Boundary Layer program. Dr. Stein is a Registered Professional Engineer, State of Washington and has been with APL/UW since 1978.

The Applied Physics Laboratory is mostly a US. Navy Research and Development Laboratory and defense spending is declining. The projects Ron is working on are nearing completion with additional work rather unlikely. Ron is currently looking for other employment in Academia or Industry in the Puget Sound area. He holds three degrees in physics - BS from Penn. State, MS from University of CO, Ph.D. from Penn. State.

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e.earlyelooe.org

YOU ARE RESPONSIBLE FOR YOUR OWN CAREER

Sound familiar? Everywhere you turn today, you hear the same refrain: "No one will look out for your career but you. You cannot expect a lifetime job - only lifetime employment." It is clear that the time is past when the loyal employee works for the same company for 40 years, and in turn is taken care of by that company. That scenario has been replaced by downsizing, outsourcing, and a succession of short-term assignments.

What's an engineer to do under these circumstances? Well, one of the most important things you can do for yourself is to maintain technical currency. Your survival and prosperity depend on the skills you bring to the market. The IEEE recognizes the need for continuing education for engineers, and has taken a number of steps to assist you.

One entire committee of the Educational Activities Board

is devoted to Continuing Education. Here are just some of the current projects of the Continuing Education Committee:

- Help design life-long learning curricula, with technical societies
- Produce educational materials
- Conduct conferences and workshops related to lifelong learning
- Prepare plans for tools for distance learning
- Review and support new product development by EAB Products Committee
- Produce and acquire new video programs
- Assist in development of electronic self study courses
- Set up and maintain web page on Continuing Education services
- Plan and budget for live seminar program

- Help develop career path profile (CD-ROM)

Does all this sound a little abstract? Then, how about some of the specific products of the Educational Activities Board? Just to take a few examples, over the last few years, the Board has produced the following to assist members in life-long learning:

*The IEEE Guides to Business -
invaluable for the budding entrepreneur*

Self-study courses, nearly 20 in all, on subjects such as Power System Fault Calculations, Spread Spectrum Theory and Applications and Mobile Cellular Communications. Video Tutorials on such diverse topics as Intelligent Vehicle Highway Systems, Knowledge-Based Systems, Neural Networks and Virtual Reality are also available.

Another product to help advance your career is the Career Asset Manager (CAM). This unique guide to career management features a step-by-step process for defining your personal career goals, preparing a professional development plan and maintaining records for convenient resume generation. With the mobile nature of today's engineering workforce, CAM promises to be a very handy tool.

In addition to the products like those described above, the IEEE sponsors workshops and seminars on engineering careers. For example, in 1996 alone, the society sponsored "A Best Practices Forum on Skills and Knowledge Assessment" in Minneapolis in April, and "Road Map to Engineering Careers: A Workshop on Personal Strategies for Technical Vitality" in Dallas in June.

And the list goes on. There is something available from your IEEE to help YOUR career. To find out more, just call Gale Latzko, IEEE Continuing Education, at 908-562-5500 or email glatzko@gelatin.ieee.org. You can also get tons of information via the Educational Activities Board home page at <http://engine.ieee.org/eab/>

This brief note summarizes just some of the ways that YOUR society works for YOU. As always, your feedback is solicited.

Jim Hahn,
Outreach Coordinator,
Continuing Education Committee,
IEEE Educational Activities Board.
Email: j.hahn@ieee.org

PRESS RELEASE

1997 International Sonar Products Buyer's Guide

ARLINGTON, MASSACHUSETTS, USA, March 17, 1997— MariNet, the leading marine technology web service, is pleased to announce the production of the **1997 International Sonar Products Buyer's Guide**. Available in print and electronic (computer) form, the buyer's guide will contain detailed technical descriptions of sonar systems used in commercial, military, environmental, and scientific applications. The electronic version of the Sonar Buyer's Guide will feature a searchable database that will allow a user to identify systems that meet specific parameters such as detection range and resolution. Additionally, the database will also provide product support information by allowing users to identify product representatives in specific geographic areas.

Listings in the buyer's guide are free to all companies that provide products related to sidescan, horizontal (forward-looking), and vertical (downward-looking) sonar systems. Companies producing specialized devices such as diver's sonars and harbor surveillance sonars are also invited to submit information. Listings include company background information, product rep/location lists, and detailed descriptions of individual products.

The deadline for listing submissions is May 15, 1997. The print and electronic versions of the Sonar Buyer's Guide will be available in August, 1997. Purchasers of the electronic version will be able to download updates from the MariNet web site at no additional cost. Updates will be made continually as product specifications change and new products are introduced.

Company and product listing forms are available on the web at <http://www.marinet.com/sonar> or by automated-reply

email by sending a message to sonar@marinet.com or contacting the office.

Limited product advertising is being accepted for the buyer's guide. Advertising rates are available by sending email to sonar-rates@marinet.com.

Created in 1993, the MariNet World-Wide Web (WWW) site "www.marinet.com" is an information clearinghouse for marine technology on the Internet, representing companies and publications, and featuring industry news, trade calendar, equipment exchange, job listings, and product directory services. Access to Marinet is free to all users of the WorldWide Web. For client companies, Marinet uses a virtual trade show model to host or "mirror" a company's web pages and provide detailed sales lead tracking.

Marinet's parent company, Sygnus Technology, Inc., provides technology development services in the areas of digital signal processing (DSP), underwater acoustic systems, and oceanographic instrumentation.

Contact: John Irza MariNet / Sygnus Technology, Inc.
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The SCOOP

January, 1997

Published for Section Chairs by Section/Chapter Support

Carol Coffey, Editor

Cecelia Jankowski, Managing Director, Regional Activities

Jill Berman Levy, Director, Regional Activities Operations

We Have A Winner!

The positive comments we heard throughout Sections Congress '96 indicated a successful event. Nevertheless, there is always room for improvement, and Regional Activities asked the experts for their input through the SC'96 Evaluation Form. As an added incentive for completing and returning the form, RAD offered a prize: entry into a drawing for a free one-year IEEE membership. By the deadline of November 30th, 173 evaluations had been received - about 35% of the attendees. All of the evaluation forms were put into a large box, and a single evaluation form was selected - belonging to Marc Apter from the Northern Virginia Section (R2). Congratulations to Marc, and our thanks to all who submitted their evaluations. Your input has been supportive and informative. Look for the results in the SC'96 Final Report, which will be in your hands early next month.

A Change In RAD

Jill Berman Levy has been promoted to Staff Director, Membership, Regional Activities, from her prior position as Director, Regional Activities Operations. As Staff Director of Membership, Jill is responsible for the Membership Development and Admission and Advancement areas of Regional Activities. She joined the IEEE in March 1993 as manager, Section/Chapter Support.

Jill has a bachelor's degree from George Washington University and a master's degree in public administration from The American University. She is a member of Pi Alpha Alpha, the public administration national honor society, the American Society of Association Executives, and the New Jersey Society of Association Executives. We hope you will join us in wishing her success in her new position.

New, From Educational Activities...

The Educational Activities Board has announced the development of the Educational Publications Consignment Program. Now, with no initial investment, Sections can offer members IEEE educational and career development publications while receiving a discount of up to 30% off the regular IEEE member price. Interested? Want to know how it works?

Order one or several of Educational Activities' publications to be sold at your next meeting. Keep the books for up to two months (two meeting cycles). Return any unsold products to Educational Activities, then pay the discounted rate for only the products sold. You can use this program to raise funds for your Section by buying at the discounted rate, and selling

at member price; or you can pass the savings along by charging your members the discounted price - it's up to you.

Choose products from the Educational Product Catalog or the World Wide Web listings.

Products available under this program include:

- Engineers Guides to Business (30% discount off member price)
- Educational Selected Readings (30% discount off member price)
- Self-Study Courses (30% discount off member price)
- Career Asset Manager (CAM) (30% discount off member price)
- Career Xroads (20% discount off list price only)
- Covey's Seven Habits of Highly Effective People (20% discount off list price only)

YEF - II

Last year, the American Society of Mechanical Engineers (ASME) produced a very successful Young Engineers Forum (YEF) satellite broadcast, funded by the Engineering Foundation.

This year, YEF-II is scheduled to be broadcast on 16 April, from 5:30-9:30 PM EST on C-band. Keep watching SCOOP for more detailed information!

Don't forget to send your GOLD ideas to gold.ideas@ieee.org!

Dates For Members

As always, we need the help of our Section/Chapter leadership in keeping the lines of communication to our members open. Please take every opportunity to let your members know that those memberships not renewed by 21 February in Regions 1-7, and 25 April in Regions 8-10, will be placed in Arrears. This will result in a termination of membership benefits, including the delivery of their publications. Please encourage your members to renew now if they haven't done so already!

A Standard Power Tool

IEEE Standards is offering a new CD-ROM-based tutorial to aid in the comprehension and use of IEEE VHDL (Very High Speed Integrated Circuit Hardware Description Language) not available anywhere else. An enhancement to IEEE Std 1076-1993, the interactive tutorial is organized into four modules designed to incrementally add to the users' understanding of VHDL and its application.

This product is licensed for single user purposes. Use for multiple-user environments will be available upon request. For more information, please email stds.vhdinfo@ieee.org or call 908-562-3804.

Catch the Carrier Wave

The SCOOP was contacted in December by Witold Kinsner of the Winnipeg Section to let us know that a new electronic newsletter called Carrier Wave is now available for your communicating pleasure at <http://pc-eee1.ee.umanitoba.ca/~newslet/>.

"The structure has over 250 items, so improvements will be continuing for a while," writes Kinsner. "If you have any announcements regarding IEEE or other events of interest to IEEE and other audiences, send them to me by email as ASCII text and/or Adobe's PDF. The newsletter will be updated by a team, including eight members from the IEEE McNaughton Student Centre and industrial correspondents."

Kinsner welcomes feedback, and may be a valuable resource of information for those of you who have considered an electronic newsletter for your own Section.

For Planners

IEEE Travel Services has negotiated special discount fares with Continental airlines for conferences. Additional savings of 8% on SuperSaver rates and 13% on Y-class fares can be arranged for your meetings. Conference planners who want to take advantage of these special discounts should contact Marianne Farhan in Travel Services.

JAMCON'97

The IEEE Jamaica Section will host JamCon97 in August of this year, and is expected to attract presenters from a number of high-tech centers across the world. SCOOP has been asked to circulate this call for papers, which ends 14 February, 1997.

To obtain a list of topics and/or registration form, please contact Dennis Hartley directly.

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NEW! 1997 IEEE U.S. Membership Salary and Fringe Benefit Survey

The NEW 1997 IEEE U.S. Membership Salary and Fringe Benefit Survey brings you the very latest statistics on U.S. engineering salaries—current information to help you consider prospective jobs, negotiate your salary and benefits, or find out about related positions in your field. Compiled from thousands of responses, this survey provides definitive data based on education, job function, geographic area, industry, retirement plans, insurance, and much more!

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The SCOOP

February, 1997

Published for Section Chairs by Section/Chapter Support

Carol Coffey, Editor

Cecelia Jankowski, Managing Director, Regional Activities

AT&T Labs Student Enterprise Award

The IEEE and AT&T Labs have partnered to sponsor the new AT&T Labs Student Enterprise Award. AT&T Labs has generously provided \$5,000 annually to fund the award program for the next five years. The 1996-97 award has been given to the IEEE Student Branch at the University of Illinois-Urbana for their Engineering Open House Projects proposal. \$1,000 in project funding will be sent to the Student Branch to complete their project.

Here is an excerpt from the proposal abstract "The Engineering Open House (EOH) has traditionally been an excellent means to recruit new members and future officers, provide practical project experience and earn recognition for the Student Branch on campus. The EOH project will highlight two exhibits, a "GPS Surveillance", a system utilizing new GPS technologies to track a roaming target with a camera (team members will be juniors and seniors) and "Simplified Surround Sound" project, utilizing a DSP chip to transform the average stereo system into a surround sound system, involving freshmen and sophomore students."

Project funding is available for proposals developed by teams of IEEE Student members from Student Branches established at over 900 universities and colleges from around the world. The objective of the competition is to provide IEEE Student members with the opportunity to work with others on an engineering project, while simultaneously strengthening Student Branch programs. Topics may be of a technical or non-technical nature ranging from research on state-of-the-art technology to community service programs. Each Student Branch submits a proposal outlining how the project will be completed, its impact on students and increasing professional and technical awareness, a time line and budget with a request for up to \$1,000 in funding. Proposals are due 15 November, 1997 and should be sent to IEEE Student Services. Please contact the IEEE Student Services Department for award guidelines. We look forward to seeing how creative our Student Branch members can be!

Jolly Good, Fellows!

On 1 January, 1997, 244 Senior Members of the IEEE were bestowed with the elevated grade of Fellow. Each Fellow has been nominated, has gone through a rigorous screening process and, finally, been elected by the Board of Directors. It is an extraordinary honor, representing no more than 1% of higher grade members, and deserves widespread recognition.

Each Region Director has received a list by Section and Region of newly-elected Fellows. If you have not yet re-

ceived this information from your Region Director, you might want to make contact to find out if anyone in your Section is on the list (or, you can check your February '97 issue of *The Institute*). If so, a mention in your next newsletter, and a round of applause at your next meeting, would certainly be in order!

GOLD?

You may have noticed an extra sheet of paper in your Officer Reporting packet this year encouraging your entity to select a GOLD representative. If you're still not sure about the Who, What, Where, When, Why, and How of the program, the best way to find out is to appoint a GOLD rep who will find out for you! If you have any questions, please contact Carol Coffey at The SCOOP.

The Right Foot

We certainly appreciate our members' recruiting efforts. In fact, the single most effective Membership Development activity is the networking taking place between our members and their professional associates.

If you are actively recruiting new members, please make sure that you are using a current application form. The forms themselves sometimes change slightly from year to year, as do the prices. If an out-of-date form is used, the applicant may not provide complete information, or may be relying on old data when calculating payment. Either condition will slow the processing of the applications, and generally get them off on the wrong foot. If you need a reproducible copy of the 1997 member or student application, or have any questions (perhaps about the Member-Get-a-Member Program), please contact Bill Hunter in Membership Development.

How Tough Can it Be?

Financial Advantage Program (FAP) staff are often asked why non-US benefits are limited compared to those in the US. We thought you'd like to know the answer. It's tough to do.

To offer quality benefits and services at significant savings, the IEEE enters into agreements under the Financial Advantage Program with vendors offering the desired service/benefit. In an effort to offer a program designed exclusively for IEEE members, the relationship must be formed with a 'critical mass' of members. This is more easily done in the US (Regions 1-6), where a program can be offered to over 200,000 potential participants governed by the same rules and regulations.

It is much more difficult to meet this mass requirement within the geographic borders of IEEE Regions, due in large part to varied laws and regulations between countries/provinces within the Regions. Each usually has its own set of laws

and regulations regarding financial entities and opportunities, often not compatible with another's. In parts of Canada for instance, the government requires that the ownership/business residence of the vendor must be physically established in Canada. The challenge: find a program where the vendor is housed principally in Canada, offers its benefits and services to all distinct provinces, and that have enough potential participants for a negotiated savings.

Once a program is identified, it must be researched by staff and benchmarked against other plans. In FAP's efforts to expand its insurance offerings, a recent target mailing pooled 13 European countries for interest in a particular insurance program - seeking that "critical mass" of members. FAP has also explored possibilities in Mexico and Argentina.

If a program passes the first step, it is presented to the Individual Benefits and Services Committee (IB & SC) for approval. If it meets with IB&SC approval, it must then be approved by the IEEE Executive Committee (ExCom) before it can be rolled-out as a FAP member benefit - like the recently-established term insurance program available in Taiwan.

FAP welcomes the efforts of IEEE members, volunteers, and officers who are able to identify opportunities for development of Financial Advantage Programs, but it is critical for members to know that they are not authorized to sign individual contracts for benefits/services for their own entity. All contract negotiations and authorizations must follow PROPER procedure as described above, to ensure that your entity and the FAP program are protected. If you have suggestions for FAP programs, or questions about how they relate to your entity, please contact Mike Sosa in Financial Advantage.

What's NEW with You?

By the time you read this, you will probably have finished celebrating National Engineers Week (16-22 February, 1997). US President Bill Clinton acknowledged this event by sending to NEW Headquarters an inspiring message citing the contributions of engineers to health care, the environment, and the global economy.

Many others may have let this opportunity go by - family obligations, work pressures, no idea how on earth to get started on something like this...Others may live outside the boundaries of this national event. However, the spirit of National Engineers Week transcends time and geographic boundaries.

We'd love to hear from those who did celebrate NEW, so that we can share your input with those in need of ideas. It's

never too late to celebrate your profession; every day is an adventure, right? Why not share the pride in your profession with local community groups who might be looking for speakers, or with a school on career day? It's a great opportunity to hone your presentation skills, give engineering an even better image, and even feel appreciated! While it's true that there is no paper contest on "How I Spent National Engineers Week", and no prize for the best idea, sharing your experience will be of value to those who are new at volunteering and could use some insight on how it's done. Let us hear from you at SCOOP, so that we can pass it on!

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GOLD Committee

Mandate

Offer programs and services to and about graduating students, recent graduates and young engineers.

Composition

The Section/Council GOLD Committee will be part of the Section or Council's organization and will report through this IEEE entity. The committee will endeavor to have a balanced representation from all local entities representing IEEE's interests. Such entities include: Student Branches and activities, Membership Development, program and event planning, newsletters, contact with industry representatives, educational institutions, government agencies, and perhaps alumni associations. As with many IEEE entities, the involvement need not be limited to IEEE members, either as organizing resources or the audiences for programs/services.

GOLD Committees should be composed (largely but not exclusively) of and for recent graduates. Where there are sufficient numbers of volunteers, committees can and should be established, i.e. for events, membership, publicity. GOLD reporting will follow the format already used in other Section-based Committees.

The IEEE constantly reviews its membership data for valu-

able information and guidance when examining levels of service. One vital piece of information has surfaced regarding membership retention: a large percentage of recent graduates allow their memberships to lapse. While we find these members returning to the IEEE approximately 5 years later, we must examine the meaning behind the data.

The GOLD program has been established to provide the framework and tools for the Sections' use in retaining this valuable group of members. By identifying those who make up this affinity group, determining their needs and expectations, and acting to meet those needs and expectations, the goal of GOLD is to add such value to the IEEE membership that the recent graduate finds it to be an indispensable professional tool.

It is not the purpose of GOLD to supplant the Section Student Activities Committee (SAC), Student Branch Mentor, or any other Section officer, but, rather, to complement the efforts of Section representatives interested in assisting recent graduates. Some Sections already have strong programs which parallel the concepts on which GOLD activities are based; clearly, the GOLD program is meant to strengthen such programs by consolidating these activities with a common theme and a specific affinity group.

The 1997 IEEE - USA Professional Activities Conference

August 29 - September 1, 1997
St. Petersburg, Florida.

"Tools for Tomorrow's Technology Leaders"

The IEEE GOLD (Graduates of the Last Decade) program is making available a maximum of four grants of up to \$200 each to support paper presentations by GOLD program leaders at the conference.

Grant details:

- the grants are to support travel and accommodation costs.
- the author should be a GOLD program leader involved in initiating or managing a GOLD program at the section level or contributing to the GOLD program at the Institute level. The paper should support the GOLD program mission (see below). The paper should address the techniques of starting a GOLD program, suggestions and experiences, or recommendations to improve the program.
- funding is contingent on paper acceptance by IEEE-USA.
- all proposals received by April 11, 1997 will be consid-

ered for funding, and should be accompanied by: 1) the abstract and IEEE USA acceptance notification 2) dollar value of funding requested

- grants will be administered on an expense reimbursement basis.
- grants requests should be submitted to c.coffey@ieee.org. Questions regarding the conference should be directed to a.hartfiel@ieee.org

NOTE: a GOLD Program resources Guide is available.
Contact:

Carol Coffey
IEEE Regional Activities Dept.
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908.562.5512 (voice)
c.coffey@ieee.org

The Great 1997 GOLD Rush is on!

The IEEE Graduates of the Last Decade program was launched at Sections Congress (SC'96), following the completion of a world-wide pilot program. Supported by staff, volunteers, and a Program Resources Guide (PRG), the GOLD program is now available to your Section.

If you did not attend SC'96, you don't need to get a mule and a pickax to start your mining process. All you need to get started is a copy of the PRG, which contains tips on resources and programs, as well as helpful hints on how to build a successful GOLD program within your Section. Consider it a treasure map! In addition, we will send you a list of the volunteers currently available to answer your GOLD questions.

GOLD mining is critical to membership retention and leadership development. It could tip the scales toward having vital and sustainable Sections and Chapters, and the yield is in an even stronger Institute overall.

One of the most important mining tools is active, strong, dynamic leadership. Where to find this? "X" marks the spot, which may be inhabited by your Student Branch leadership. Reach out now, especially to those graduating this year, and invite them to continue their leadership in IEEE as a GOLD program leader in your Section. If they are moving out of the area, encourage them to get in touch with the Section in their new location. Then, let that Section Chair know to look for them.

In another vein, you might find leadership in paper and contest winners. Or, you may have some young professionals among your membership who would like the chance to become involved in a leadership role that has a high PFQ (potential fun quotient).

Don't forget - among their many contributions, engineers have brought technology to mining! Use your

SAMIEEE diskette program to filter out recent grads - particularly ones new to your area who might be leery of being the "new kids on the block". Newer and better ways to use SAMIEEE for mining are being implemented as we speak. Watch The SCOOP and your mailbox for more information. Your newsletter and your Student Branch's newsletter are also great mining tools - please use them to publicize your GOLD efforts, and even to advertise for GOLD leadership.

Be assured that rewards await those whose effort pays off in a motherlode of success. By year end, we will have awards and recognition programs in place to acknowledge accomplishments at all levels. One rule of mining begs to be broken - share your information! Two email aliases exist to support this program: GOLD@ieee.org is for questions about the program; gold-ideas@ieee.org has been created for the sharing of ideas. Let us know what works, what doesn't, how you broke through walls of stone . . . you get the idea.

GOLD is global. While some of the issues differ between countries, many of the basic challenges remain the same. We need to hear from all of our Sections so that we can help everyone mine for GOLD. Who knows - if you give GOLD a chance, you may find yourself mentoring the next Edison, or introducing the two engineers who can solve the world's problems. You just never know . . .

To receive a PRG contact Carol Coffey
c.coffey@ieee.org

Dave Kemp
Region 7 Director-Elect
MDC GOLD Ad Hoc Subcommittee Chair

HOTLINES

IEEE-USA NEWS SERVICE January 1997

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8. IEEE-USA Works With AAES on New Projects

Notice:

Following this issue, IEEE-USA HOTLINES will be merged with IEEE-USA PERSPECTIVES' WEB EXTRA. IEEE Section and Society editors will be able to access the latest IEEE-USA news and information, updated the first week of each month, directly from the World Wide Web at org/usab/DOCUMENTS/NEWS_PUBS/news_pubs.menu.html#perspectives. Editors are encouraged to copy and publish

any of this material in their own publications. In addition, the monthly WEB EXTRA will be transmitted directly to editors by e-mail, fax, or postal mail, according to how each editor currently receives HOTLINES. Finally, we will continue to provide editors intermittently with glossy reproductions of promotional announcements.071

The editors of HOTLINES hope this change will increase the timeliness and usefulness of our news service to IEEE editors.

1. IEEE-USA Launches New Professional Magazine

IEEE-USA will begin publishing TODAY'S ENGINEER, a new, non-technical IEEE professional magazine for all engineering disciplines. The 48-page quarterly will provide engineers with information that enhances their learning opportunities for career satisfaction and advancement, encourages a business perspective, promotes high standards of professionalism and ethical performance, prepares them for technical and general management, and raises the stature of the engineering profession in society.

Gus Gaynor, president of the IEEE Engineering Management Society, will serve as editor, and Georgia Stelluto, IEEE-USA publications manager, will be deputy managing editor. The first two issues will appear in August and November.

2. New Pensions Coalition Aims For Portability By Year 2000

Vowing that "You CAN take it with you!," participants in the Dec. 12, 1996, IEEE-USA Pension Portability Forum in Washington established an organizational framework for a Pension Portability Coalition that will seek to achieve full portability of pension benefits by the turn of the century. The day-long gathering, organized by our Engineering Employment Benefits Committee, offered a broad spectrum of organizations interested in pensions issues an opportunity to hear current perspectives from pension-policy analysts, including Ellen Seidman, a special assistant to the President for economic policy; to discuss appropriate directions for needed reforms; and to develop a common vision for positive change.

IEEE-USA's Engineering Employment Benefits Committee Chair Mona K. Draper moderated the coalition-building process, which resulted in a common vision statement by forum participants. In addition to setting a four-year goal for the realization of the coalition's objectives, the group defined pension portability as having as its key elements accelerated vesting, centralized vehicles, transferability of benefits, benefit parity for all employees regardless of tenure, preservation, and universal access.

During the first months of 1997, forum participants will be invited to enlist their organizations' support for the new coalition and meet again to develop specific goals and objectives for common action during the 105th Congress.

3. IEEE-USA Supports Pension Assistance Summit

IEEE-USA participated in a Jan. 24-25 Pension Assistance Summit in Washington. The summit, which brought together representatives of 60 public and private organizations that offer pension-assistance services, was organized by the Pension Rights Center and funded by the U.S. Administration on Aging, the Internal Revenue Service, the Pension Benefit Guaranty Corporation and the U.S. Department of Labor.

Summit participants sought to identify gaps and overlaps in current pension-assistance information, counseling, referral, advocacy and legal-assistance programs designed to help employees better understand their pension rights and secure their benefits. They also discussed short- and long-term options for improving the provision of pension-assistance service in the face of declining public financial support for such programs.

A final report of the summit will be presented to the Labor Department at the end of March. According to IEEE-USA Engineering Employment Benefits Committee Chair Mona K. Draper, IEEE-USA will include pertinent information gleaned from the summit in a PACE Guide to Pension Assistance to be published later this year.

4. Benefits Issues on Front Burner In 105th Congress

After modest success in 1996 in passing employment benefits-related legislation, such as the Health Insurance Portability and Accountability Act and the Small Business Job Protection Act, Congress is set this year to tackle other pressing benefits concerns. Here's a rundown of the major issues that are likely to see legislative action during the current session:

- **HEALTH INSURANCE REFORM:** Health insurance protections for children, physician reimbursement and patient access to specialty care under managed care programs, and retiree health-care coverage are policy areas high on legislators' to-do lists.
- **INDIVIDUAL RETIREMENT ACCOUNTS:** The 1997 version of the Roth-Breaux Super-IRA bill will phase out income limits on eligibility to make tax-deductible contributions to conventional "front-loaded" IRAs by 2001 and establish new non-deductible "back-ended" IRAs, of which contributions will be taxed as income but the inside buildup of interest earnings will be tax-exempt.
- **PRIVATE PENSIONS:** Lawmakers will explore ways to broaden pension coverage — especially for small-business and low-wage workers, make pensions more portable when workers change jobs, and encourage greater personal savings through tax-favored investment vehicles.
- **EMPLOYER-PROVIDED EDUCATIONAL ASSISTANCE:** Legislation to extend the expired graduate-level exclusion for employer-provided educational assistance and the expiring (on May 31) undergraduate-level are pressing concerns.
- **MEDICARE REFORM:** President Clinton has called for

some short-term changes — including the transfer of some Social Security trust funds to help shore up the system — and the creation of a bipartisan commission to come up with longer-term solutions to the Medicare crisis. Republicans in Congress are expected to agree to some modest compromises in order to keep the volatile issue off the table in the 1998 elections.

- **SOCIAL SECURITY REFORM:** In January 1997, a bipartisan advisory council recommended three approaches to reform, two of which call for individual investment-account privatization. Observers believe there's a good chance this Congress or the next will act to maintain solvency without making major changes in benefits.

5. IEEE-USA Backs IRA Expansion Proposals

IEEE-USA has endorsed new federal legislation that will enable more Americans to contribute to Individual Retirement Accounts (IRAs). A new "Super IRA" bill was introduced Jan. 24 by Sen. William D. Roth, Jr., R-Del., and Sen. John B. Breaux, D-La., and follows identical legislation presented in the House of Representatives by Rep. William M. Thomas, R-Calif., and Rep. Richard E. Neal, D-Mass.

"Expanded IRAs will enable middle-income Americans, including engineers and scientists, to save for their own retirement and help to increase the supply of capital needed for productive investment and jobs creation in the United States," said IEEE-USA Career Policy Chair Paul J. Kostek. "For most Americans, retirement income security depends on access to savings from at least three principal sources: Social Security, employer-sponsored pensions and personal savings. But with Social Security under pressure and downsizing by business and government ever more prevalent, personal savings are becoming increasingly important — especially for mobile professional and technical workers such as the engineers and computer scientists who belong to the IEEE," Kostek added.

Since they were first established in 1974, IRAs have been an effective stimulus to personal savings for retirement. Between 1982 and 1986, when all working Americans were allowed to make tax-deductible IRA contributions, personal savings held in IRAs increased from \$5 billion to more than \$38 billion. When stricter income-eligibility requirements were re-established in 1987, personal savings held in IRAs fell to \$14 billion — a 63 percent drop in a single year.

"IEEE-USA strongly supports the Roth-Breaux Savings and Investment Incentive Act, especially the provisions that will restore universal eligibility to make tax-deductible IRA contributions over a four-year period," said Kostek. "Our members will also welcome the opportunity to choose between contributing to a deductible IRA or to a new non-deductible IRA Plus Account. The bill's provisions to repeal current restrictions on contributions by spouses of active pension-plan participants and index annual IRA contribution limits for inflation are also important steps in the right direction. House and Senate sponsors of this important legislation should

get together with the White House and try to enact this important legislation early this year," he stated.

"Expanded IRAs are a good thing for working Americans and for the American economy," Kostek concluded.

6. President Issues National Engineers Week Proclamation

In honor of the nation's engineering work force, President Clinton offered the following words during National Engineers Week 1997, celebrated Feb. 16-22.

"In our rapidly changing world, we look to America's engineers for the creativity and innovation to meet the increasingly complex technological challenges that lie before us. With outstanding skill and vision, these dedicated professionals strive every day to improve the lives of all of our citizens. Thanks to their determination and ingenuity, they are truly making a world of difference in almost every aspect of human experience. From health care to the environment to the global economy, engineers have made invaluable contributions and promise us a future of even greater health and prosperity.

"During National Engineers Week, engineers across the nation are making a special effort to help millions of students discover practical applications of math, science, and technology through hands-on activities. I encourage all Americans to take advantage of this unique opportunity to learn about the engineering profession and to recognize the countless contributions our nation's engineers make to the quality of our lives."

7. Administration Modifies Stance on Intellectual-Property Treaties

Following strong criticism from IEEE-USA and other groups, the Clinton Administration has backed away from some controversial provisions in two new treaties pending in the World Intellectual Property Organization (WIPO). Proposed language — which would have bound the United States to intellectual-property laws not yet codified by U.S. legislation — was changed in one treaty and postponed for later consideration in another.

In a Nov. 25, 1996, letter to Dr. Henry Kelly, acting associate director for technology in the White House Office of Science and Technology Policy, IEEE-USA asserted that "new intellectual-property domestic and/or international laws may be needed to keep up with the rapid changes in technology — but not at the expense of allowing international treaties to adversely dictate U.S. domestic policy in an industry where the United States is the world leader."

8. IEEE-USA Works With AAES on New Employee-Benefits Projects

As the largest constituent member of the American Association of Engineering Societies (AAES), IEEE-USA is supporting several new initiatives of the AAES designed to advance

engineers' technology- and career-policy goals. Following are highlights of current projects:

- Engineering Summit Conference: AAES will convene a workshop of leaders of the engineering community, industry, government and academia to draft an agenda for a possible Engineering Summit Conference this fall. The summit would help define and communicate an agenda of engineers' policy priorities for Congressional and other policy-makers.
- Engineers and Scientists Joint Committee on Pensions (ESJCP) Policy Statement on Occupational Retirement Plans: In December, the AAES Board of Governors approved a new ESJCP policy statement urging collaboration among member societies to develop occupational retirement plans that meet the changing needs of engineering, scientific and technical professionals. A policy statement on needed reforms in the Social Security system is now in development.
- Engineering Workforce Commission (EWC) Annual Survey of Degree Awards: The EWC's survey of 637 U.S. engineering programs showed that a record number of engineering bachelor's degrees during the 1995-96 school

year went to women (18 percent) and under-represented minorities (10.6 percent). In all, more than 65,000 undergraduate degrees were granted, while more than 31,000 master's degrees and almost 6,800 doctoral degrees were awarded. Results of the survey were published in Jan. 1997 issue of ENGINEERS, EWC's quarterly publication on engineering workforce issues.

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IEEE-USA Perspectives (from the Web)

February 1997

Contents:

1. Outlook on State Tort Reform Efforts Now Available
2. IEEE Members Design Home of the Future in National Engineers Week Survey
3. IEEE-USA News Bytes

Notice:

As announced in last month's edition of IEEE-USA HOTLINES, this issue begins publication of IEEE-USA PERSPECTIVES (from the Web). This publication will be transmitted directly to Section and Society editors the first week of each month by e-mail, fax, or postal mail, according to how each individual formerly received HOTLINES. In addition to the PERSPECTIVES Web edition and PERSPECTIVES WEB EXTRA excerpts included here, IEEE Section and Society editors can access all the latest IEEE-USA news and information directly from the World Wide Web at http://www.ieee.org/usab/DOCUMENTS/NEWS_PUBS/news_pubs.menu.html#perspectives. Editors are encouraged to copy and publish any of this material in their own publications. Finally, we will continue as before to provide editors intermittently with glossy reproductions of promotional announcements.

1. Outlook on State Tort Reform Efforts Now Available

The American Tort Reform Association (ATRA) has published its annual Outlook, highlighting the political climate in each state for tort reform efforts and the latest news on what legislation is likely to be introduced in the states in 1997. The Outlook also lists key contacts of grass roots organizations in each state working in support of tort reform. Copies of the 41-page Outlook report are available free of charge to IEEE members courtesy of IEEE-USA's State Government Activities Committee.

As a member of ATRA, IEEE-USA works through its state government activities coordinators to encourage member participation in efforts to promote common-sense tort reform at the state level. IEEE-USA believes that tort reforms are needed to remove disincentives to innovation and restore much needed balance to professional liability. That includes reasonable caps on punitive damages, use of a comparative negligence damages standard rather than joint and several liability so that defendants are held responsible only for the share of the harm they actually caused, and adoption of the collateral source rule so that juries can consider all compensation received by a plaintiff for an injury when determining its verdict.

for damages. Another legislative interest is passage of "Good Samaritan" laws, which would make it easier for IEEE members to volunteer their services without exposing themselves to excessive risk of liability.

To learn more about ATRA's tort reform efforts, consult the "Stop Lawsuit Abuse" page on the World Wide Web at <http://www.atra.org/atra>. To request copies of the ATRA Outlook report or for more information on IEEE-USA's involvement on this issue, forward your name and mailing address to Chris Brantley, IEEE-USA, 1828 L Street, N.W., Suite 1202, Washington, DC 20036, 202-785-0835 (fax), or c.brantley@ieee.org. You can also visit the State Government Activities Committee's web page at <http://www.ieee.org/usab/DOCUMENTS/FORUM/COMMITTEE/sgac.html> for links to relevant IEEE-USA position statements on tort reform.

2. IEEE Members Design Home of the Future in National Engineers Week Survey

by Christopher Currie,

IEEE-USA External Communications Supervisor

Electronic technology built into the future American home will improve the quality of life while stewarding the environment and conserving natural resources, according to U.S. IEEE members who participated in a National Engineers Week 1997 survey. The IEEE contingent joined professionals from all engineering disciplines in envisioning how current technology will make the home of the future more environmentally friendly.

Respondents were unanimous in predicting that computers would become an integral part of many home appliances and systems. "The home computer will be the brain of everything," said John K. Guidry of Lafayette, La. "Processors will be in every item in the house — appliances, books, notepads, clothes, and so on," added Stanford University's Parvati Dev. David J. Hague of Jacksonville, Fla., extended the list to "automatic food preparation, help for the infirmed and sick care, voice response systems, baby sitting, reminder systems, and possibly robotics to handle housekeeping chores."

The proliferation of electronic applications in the home will have several important benefits, according to the IEEE respondents. Among these are improved energy efficiency, said Ted Kochanski, a Massachusetts consulting engineer: "Network operating systems will link together all of the home's appliances and service equipment. These systems, when combined with sophisticated energy management algorithms and the appropriate sensors, will make the home of the future more energy efficient by mixing the correct amount of ventilation with appropriate thermal and humidity management. In addition, all other appliances will do their job more effectively with reductions in energy required and effluent generation."

The home of the future will offer health benefits, as well, according to Dr. J. Michael Fitzmaurice, director of the Agency for Health Care Policy and Research's Center for Information Technology. "The home's info system will moni-

tor the quality of the air and water, looking for bacteria harmful to humans," he said. "This system will also sample human waste products for changes in health artifacts and will monitor vital signs as you relax — without your wearing a device," he added reassuringly.

Expanded communications capabilities will improve home life, according to several respondents. Families will use a "computer-driven monitor/module for TV entertainment and also for communications with family and friends," said George Washington University's Neil R. Helm. "The future will see communications replace transportation; thus, more of us will work from our home office, get more of our education at home, and visit our friends and relatives from home on our two-way video system," he predicted. This in turn will yield environmental savings: "Telecommuting can reduce travel requirements, and along with this reduce the use of fossil fuels," explained Jim Isaak, a New Hampshire computer engineer.

In addition to reduced overall energy consumption, the future home could feature greater reliance on non-polluting fuels such as solar energy. The University of Michigan's Marlin Ristenbatt predicted "more use of active solar panels for energy and possible development of windows whose transmission properties of solar energy would be controlled electrically so as to reduce the heating and cooling required."

Several IEEE respondents emphasized the capabilities of intelligent-control systems in the home. "'Smart' climate-control systems — based on CI technology like neural nets, fuzzy logic and genetic algorithms — will provide much smoother control of heat and humidity and save fuel, as well," said Samuel Biondo, an a Maryland engineer employed at the U.S. Department of Energy. Added Texas engineer Robert Powers: "Fuzzy logic' built into all kinds of devices could make those devices easier to use and more efficient than they are now. Heating and cooling equipment could certainly be trained, via fuzzy logic, to save lots of dollars by working more efficiently, on the basis of detected movements of the residents. Surely, even burglar alarm systems could incorporate fuzzy logic ideas."

During National Engineers Week, celebrated Feb. 16-22, a "home of the future" design was unveiled to the news media, using ideas submitted by engineers who responded to the survey. If the contributions of these IEEE respondents are any indication, the work of electrical, electronics and computer engineers will be more evident than ever in the daily lives of all Americans. The future of engineering, it could be said, begins in the home.

3. IEEE-USA News Bytes

- IEEE-USA has announced the name of its new non-technical, quarterly professional magazine for engineers, which will begin publication this fall. Today's Engineer will help professionals achieve more satisfying, fruitful careers by enhancing their learning opportunities, encouraging a business perspective, promoting high standards of professionalism and ethical performance, preparing for technical and

general management, and raising the stature of the engineering profession in society.

- IEEE-USA 1997 Congressional Fellow Jaelyn A. Spear has accepted an assignment with Rep. Lee Hamilton, D-Ind., working for the minority staff of the U.S. House of Representatives Committee on International Relations. She will have responsibility for international energy and environmental issues. She joins two other IEEE-USA Fellows who have already begun assignments on Capitol Hill. Richard J. Backe is working with Rep. Dana Rohrabacher, R-Calif., and John W. Stafford is on the staff of Sen. Alfonse M. D'Amato.
- On Jan. 13, IEEE-USA Chair Daniel R. Benigni forwarded IEEE-USA recommendations on the U.S. civil space program to selected congressional leaders and administration officials. The position paper, drafted by IEEE-USA's Aerospace R&D Policy Committee, urges that the space program promote economic growth and international competition, open up space to the private sector, and sustain activities of direct societal benefit.
- IEEE-USA presented its Electrotechnology Transfer Award on Feb. 4 to Dr. B. Don Russell, Executive Associate Dean and Director of the Energy Systems Laboratory at Texas A&M University for his achievements in applying microcomputer and signal-processing technology to elec-

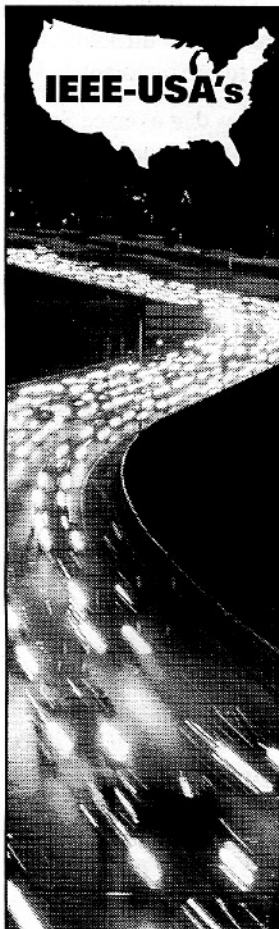
tric-power distribution protection and automation. The award was presented at the Winter Meeting of IEEE's Power Engineering Society.

For more information, contact IEEE-USA PERSPECTIVES News Editor: Chris Currie, c.currie@ieee.org, 202-785-0017, ext. 342

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National Job Listing Service


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IEEE-USA has developed an electronic job-listing service that gives IEEE members free information on job openings in every region of the country.

To obtain current job listings, set your web browser to URL **www.ieee.org/jobs.html** or send a message to any of the following e-mail addresses (no subject line or text message is needed):

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IEEE-USA PERSPECTIVES (from the Web)

March 1997

Jean M. Eason, Editor-in-Chief

Contents:

1. New Pensions Coalition Aims For Portability By Year 2000
2. Budget, Benefits Issues On Front Burner In 105th Congress
3. Ieee-usa News Bytes

The following are excerpts of IEEE-USA PERSPECTIVES Web edition and PERSPECTIVES WEB EXTRA, published the first week of each month. This publication is transmitted directly to subscribers the first week of each month by e-mail, fax, or postal mail, depending on how each recipient formerly received IEEE-USA HOTLINES. To access all the latest IEEE-USA news and information directly from the World Wide Web, set your browser to URL http://www.ieee.org/usab/DOCUMENTS/NEWS_PUBS/news_pubs.menu.html#perspectives.

1. New Pensions Coalition Aims For Portability By Year 2000

Vowing that "You can take it with you!," participants in the Dec. 12, 1996, IEEE-USA Pension Portability Forum in Washington established an organizational framework for a Pension Portability Coalition that will seek to achieve full portability of pension benefits by the turn of the century. The day-long gathering, organized by our Engineering Employment Benefits Committee (EEBC) offered a broad spectrum of organizations interested in pensions issues an opportunity to hear current perspectives from pension-policy analysts, including Ellen Seidman, a special assistant to the President for economic policy; discuss appropriate directions for needed reforms; and develop a common vision for positive change.

The Forum brought together representatives from concerned engineering societies, government agencies, think tanks, pension-rights organizations and benefits-industry groups. EEBC Chair Mona K. Draper moderated the coalition-building process, which resulted in a common vision statement by forum participants. In addition to setting a four-year goal for the realization of the coalition's objectives, the group defined pension portability as having as its key elements accelerated vesting, centralized vehicles, transferability of benefits, benefit parity for all employees regardless of tenure, preservation, and universal access.

During the first months of 1997, forum participants will be invited to enlist their organizations' support for the new coalition and meet again to develop specific goals and objectives for common action during the 105th Congress.

2. Budget, Benefits Issues On Front Burner In 105th Congress

As the 105th Congressional session opened this year, veteran legislators dropped bills in the hopper that they have sponsored before but failed to get passed. Here is a sampling of familiar themes included in bills introduced in January:

- **Balanced Budget Agreement:** Rep. Bill Archer (R-Texas) introduced a measure calling for a constitutional amendment to ensure a balanced budget. Archer, who chairs the Ways and Means Committee, the body with jurisdiction over tax measures, said his measure contains an important distinction — the vote margin needed to waive the balanced budget requirement. Under a similar 1995 measure, the margin needed was three-fifths of the House and Senate. Now Archer is calling for a two-thirds margin. The proposal was referred to the Judicial Committee.
- **Social Security:** Congress is not expected to deal with the Social Security "crisis" in this session, but will, nevertheless, take small bites of the problem. Both the Social Security and the Medicare programs face difficulties in coming up with funds to pay out to future recipients.

In the 105th Congress, the committees that oversee Social Security (the House Ways and Means and Senate Finance) will hold hearings to expand the debate and take formal testimony from authorities and interest groups. Sen. William Roth, R-Del., chair of the Senate panel, plans to introduce legislation that would allow a limited number of young workers to invest a portion of their Social Security holdings in the stock market.

Three alternative "solutions" to the Social Security problem were offered early in January by members of an advisory commission created in 1995 by the Secretary of Health & Human Services, Donna Shalala. The common thread is investment of some Social Security resources in private securities.

- **Health Insurance:** Rep. Pete Stark, D-Calif., has introduced legislation to help retirees, aged 55 and older, obtain or continue health insurance coverage. His bill would make the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) health continuation program available to those between 55 and 65, the time they become eligible for Medicare. It requires employers with a payroll of 20 or more to offer continued access to group health insurance to persons who lose coverage under specified conditions. The Stark bill calls for age 55 or older to pay 110 percent of the group rate policy, compared to 102 percent for most currently eligible individuals.

- **Senate Schedule:** The Senate's new majority leader, Trent Lott, has stated that budget matters will be the first measures for FY '98 in the Senate. Lott wants the Senate to re-examine the balanced budget amendment to the Constitution.

Lott promised early Senate action on confirming the President's nominees for cabinet and sub-cabinet posts and on re-authorization measures, particularly those that involve the economy — with transportation and infrastructure being most prominent, receiving federal funds for highways and mass transit.

One distinguishing characteristic of the 105th Congress is that for the first time in about 40 years, lawyers are no longer the dominating occupation in the House — they are outnumbered by business people and bankers instead.

3. IEEE-USA News Bytes

IEEE-USA Candidates Announced: On Feb. 12, in executive session, the IEEE United States Activities Board approved the candidates to be placed on the ballot for the Institute's general election later this fall. The candidates are as follows:

- For 1998 IEEE-USA President: George F. McClure, John R. Reinert
- For 1998 IEEE-USA President-Elect: Paul J. Kostek, Charles S. Lessard
- For 1998 IEEE-USA Member-at-Large: Jerry C. Aukland, T. J. Tarn
- For 1998-99 IEEE-USA Member-at-Large: Frank E. Lord, Robert P. Noberini

Elected leaders will take office on Jan. 1, 1998.

AAES FactsFax Newsletter Now Available to IEEE Members Via E-mail: IEEE members can now receive the FactsFax newsletter of the American Association of Engineering Societies, which provides the latest engineering-related news from Capitol Hill, directly by e-mail. To subscribe, send an e-mail message to majordomo@majordomo.ieee.org with no subject line and the text message: "subscribe aaes@majordomo.ieee.org". For example, John Doe's text message would read "subscribe aaes@majordomo.ieee.org j.doe@ieee.org". For instructions on how to use IEEE-USA majordomo mailing lists, send an e-mail message to majordomo@majordomo.ieee.org with no subject line and the text message "help". Questions or problems? Contact Chris Brantley at 202-785-0017 or c.brantley@ieee.org.

Young Engineers Invited to Free Videoconference on Career Issues: The American Society of Mechanical Engineers (ASME) is sponsoring a videoconference on April 16 which focuses on career topics of interest to young engineers. The 2nd Young Engineers Forum broadcast will address emerging technologies, opportunities for international employment, staying competitive in the em-

ployment market, managing interpersonal relations for career development, and lifelong learning and problem-solving techniques. IEEE member Robert L. Krause, P.E., will discuss "The MBA Option." For more information or for registration materials, contact ASME's Ellen Lung at lunge@asme.org.

Administration Modifies Stance on Intellectual-Property Treaties: Following strong criticism from IEEE-USA and other groups, the Clinton Administration has backed away from some controversial provisions in two new treaties pending in the World Intellectual Property Organization (WIPO). In a Nov. 25, 1996 letter to the White House, IEEE-USA asserted that "new intellectual-property domestic and/or international laws may be needed to keep up with the rapid changes in technology — but not at the expense of allowing international treaties to adversely dictate U.S. domestic policy."

Aerospace Policy Committee Comments on Proposed National Airspace System: In a Dec. 16, 1996 letter, IEEE-USA's Aerospace Policy Committee commended the Federal Aviation Administration (FAA) for its report, FAA National Airspace System (NAS) Architecture Version 2.0, but expressed "deep concern" that the report's sole basis for navigation is the Global Positioning System (GPS). The committee stressed that at least one other form of navigation system be maintained in the event that a GPS signal is lost or subverted.

Congressional Fellow Accepts Permanent Position on Capitol Hill: IEEE-USA 1996 Congressional Fellow Subrata Ghoshroy has taken a position on the minority staff of the U.S. House National Security Committee, where he will work with Ranking Minority Member Rep. Ronald Dellums, D-Calif., on R&D and arms-control issues.

IEEE-USA Comments on Proposed HDTV Standard: In the wake of a proposed Federal Communications Commission (FCC) standard for high-definition digital television (HDTV), IEEE-USA sent FCC Commissioners a copy of its new HDTV position statement on Dec. 18, 1996, to "help... in formulating further policy." The FCC issued the proposed standard Nov. 27, 1996, after the announcement of a compromise agreement on the standard between broadcast- and computer-industry groups.

IEEE-USA Offers 1997 Salary Survey Prepublication Discount: Members can save \$10 from the regular IEEE member price for the 1997 IEEE U.S. Membership Salary and Fringe Benefit Survey if they place their orders before the publication date of May 15. The Survey will reveal the latest statistics on U.S. engineering salaries, providing valuable information to help members consider prospective jobs, negotiate their salary and benefits, or find out about related positions in their field. It will also contain a special regression-analysis formula, based on more than 50 individual variables, to help users pinpoint their personal salary estimate. To order at the special prepublication member price of \$64.95, call 1-800-678-IEEE by May 15 and ask for product code UH2966-0-0-10.

Engineering Radio Ads Available: A series of radio public-service announcements highlighting the achievements of U.S. engineers is now available from the IEEE-USA Washington Office. The 60-second ads, produced by the American Association of Engineering Societies' Media Relations Advisory Committee and sponsored by Tau Beta Pi, illustrate the theme, "Engineers: Inventing Today, Implementing Tomorrow," and feature such engineering greats as Jack Kilby, John Pierce, Harold Rosen, Marvin Camras, Wilson Greatbatch, Paul Lauterbur, Albert Babb, and Abel Wolman. For a copy of the tapes to air on your local station, contact IEEE-USA's Chris Currie at 202-785-0017, ext. 342, or c.currie@ieee.org.

For more information: Chris Currie, c.currie@ieee.org, 202-785-0017, ext. 342

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IEEE-USA'S LEGISLATIVE AGENDA FOR THE 105TH CONGRESS

IEEE-USA will pursue the following legislative goals in support of the objectives and positions adopted by our members:

- ◆ Passage of **retirement-security legislation to improve portability of pension-plan benefits and expand savings opportunities** available under tax-deferred Individual Retirement Accounts;
- ◆ Support for **tax incentives, regulatory reforms, and public investments** that will help **promote new enterprise** and create well-paid, value-added jobs for Americans, particularly in the high-technology and manufacturing sectors;
- ◆ Passage of budget **authorization and appropriations bills** that **sustain and strengthen federal investment in research and development**, especially in applied research, engineering and precompetitive technology areas;
- ◆ Permanent extension and expansion of the **Research and Experimentation Tax Credit**;
- ◆ Permanent extension of the **Section 127** (Internal Revenue Code) **tax exclusion for Employer-Provided Educational Assistance**, and restoration of eligibility for graduate education expenses for the tax exclusion;
- ◆ Introduction and passage of **legislation to provide protection against unauthorized copying of original useful articles**;
- ◆ Adoption of **legislation, executive orders and/or regulations relaxing U.S. export controls** and other regulations on **encryption technologies** to the maximum extent possible; and
- ◆ **Repeal of Section 1706** of the Internal Revenue Code and **restoration of the Section 530 safe harbor** to ensure the fair and equitable tax treatment of all engineering service providers.



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1997 IEEE-USA PROFESSIONAL ACTIVITIES CONFERENCE

"Tools for Tomorrow's Technology Leaders"

St. Petersburg, Florida

August 29 - September 1, 1997

CALL FOR PAPERS

The 22nd Annual IEEE-USA Professional Activities Conference will be held at the historic Renaissance Vinoy Resort in St. Petersburg, Florida, over Labor Day weekend, August 29 to September 1, 1997. The theme of the conference is "Tools for Tomorrow's Technology Leaders."

You are invited to submit abstracts for review. Abstracts must be received by March 1, 1997, and should not exceed 500 words. Each abstract must be accompanied by a statement regarding the presentation technique that will be used, e.g., tutorial, case study, interactive workshop, or poster session. Hard copy of abstracts should be mailed to:

IEEE-USA
Attention: Ann Hartfiel
1828 L Street N.W., Suite 1202
Washington DC 20036

Writers whose abstracts are selected for presentation will be notified by March 20. Final papers must be received by June 1, 1997, in hard copy and on disk. Papers will be printed in the 1997 Professional Activities, Conference Proceedings.

Topics

The conference offers an opportunity to explore a wide range of professional and career issues of interest to industry and engineering professionals. Presentations will include, but not be limited to, the following general topic areas:

Career Planning

- Developing and maintaining a competitive career
- Career preservation
- 360 performance evaluation and career analysis
- When and how to bail out

Professional Skills Management

- Interpersonal skills
- Time management
- Personal marketing
- Communication skills
- Language skills
- Building personal quality with TQM
- How to conduct performance evaluations
- Building and maintaining influence in a casual world
- Personal etiquette
- Negotiating

Professional Networking

- Personal Microeconomic Management Systems
- Financial planning
- Retirement planning
- Medical planning

Entrepreneurial Skills

- Influencing and Interacting with Customers
- IEEE leadership/constituent relationship
- Increasing the value of IEEE membership
- How to get employers to support IEEE activities

Mentorship

- Finding a mentor
- Being a mentor

Applied Strategic Planning

(for IEEE or the workplace)

- Career forecasting
- Quality positioning (Baldrige/ISO/SEI)

Organizational Ethics and Diversity

- Influencing Public Policy
- Community action
- Government education
- public awareness

Sessions

The conference program will include tutorials, plenary sessions with keynote speakers, concurrent workshops, and posterboard sessions. Some of the workshop and plenary topics will be targeted to engineers with ten years or less of professional experience; papers written specifically for this audience are welcomed. Registrants may earn continuing education units (CEUs) from the International Association for Continuing Education and Training (IACET) for conference participation.

Other Activities

The St. Petersburg climate welcomes a variety of outdoor activities. The Renaissance Vinoy Resort is located in the heart of the city, a short distance from shopping areas and world-class museums, including the famous Salvador Dali museum. In addition to enjoying tennis and golf, you can fish from the municipal pier, charter a sail boat, lounge on a white, sandy beach, or just wander the downtown waterfront.

Additional Information

For additional information on IEEE-USA, consult our Web site: <http://www.ieee.org/usab>

For additional information on the 1997 Professional Activities Conference, contact:

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