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New Section Officers for 2005

The Section Executive Committee approved the new officers for 2005 at its December meeting. They are

- Dan Arnold, chair,
- Bob Sparkes, vice-chair,
- Hamid Sharifnia, secretary.

Dan was vice-chair for the past two years and works at UL in Vancouver. Bob is a long-time member and works for Maxim. Hamid has been active in the PES chapter and also teaches at PSU. Ed Perkins becomes past chair. The Section thanks Pat Barrett for his service as Section secretary in 2004, and Susan Hamill for her contributions as secretary in 2003 and treasurer in 2004.

The Section still needs a treasurer, and is accepting applications from members who wish to volunteer. Some experience in IEEE activities or in being a treasurer or managing finances is preferred.

IEEE Oregon Section January Meetings

For our latest Meetings List see <http://www.ieee-or.org/events/>

Power Engineering Society Chapter Meeting

Life extension of the Pacific HVDC Intertie

Speaker: Wayne Litzenberger, BPA

Date: Tuesday, January 18, 2005

Time: 12:30 to 1:30 PM (Bring your lunch)

Location: Lloyd 700 Building - 700 NE Multnomah Boulevard, Portland OR, Room A&B on Third Floor

Communications & Computer Societies Joint Meeting

Wireless Technology Trends: Promises and Challenges

Speaker: Dr. Paul Kolodzy

Date: Thursday, January 20, 2005

Time: 6:00 PM ~ 8:30 PM

Cost: Free and open to the public (registration required). Register at <http://cpd.ogi.edu/class.asp?n=05-IEEE-0120>

Pizza and refreshments sponsored by AZAD

Location: OHSU - Oregon Graduate Institute of Science and Technology (OGI), Wilson Clark Center

EMC Chapter Meeting

Part 1: Types, Design, and Usage of Inductors

Part 2: Audio Snake Oil: How to spend too much money on audio

Speaker: Patrick G. André

Date: Wednesday January 26, 2005

Time: 6:30pm - 8:30pm

RSVP: for food/drinks req'd by Friday, Jan 21

Location: University of Portland Engineering Hall 301

IAS Chapter Meeting

What's New with the 2005 NEC?

Speaker: Dr. Tom Childers

Date: Wednesday, January 19, 2005

Time: 6:00pm dinner; 7:00pm Presentation

Cost: \$20.00 for dinner. No charge for presentation

The IAS Chapter offers free dinner for all local PSU, OSU and U of P Electrical Engineering Students

Location: Red Lion Hotel Portland

PACE Events

- 1) **"Career Mangement 101" 1/2 day Workshop**
Saturday January 22 at OHSU-OGI. This workshop will help you manage your career by enabling you to be better prepared for career transitions, both planned and unplanned.
Members \$25 by Jan 19, unemployed \$10
Continental breakfast and handout provided.
See www.ieee-or.org/events for details and to register.
- 2) **PACE Meeting.**
How to Succeed at Job Fairs and Interviews
Speaker: Tom Sale
Date: Tuesday, January 25, 2005
Time: 6:30 PM - 8:00 PM, Doors open 6:00PM
Location: OHSU - Oregon Graduate Institute(OGI), Wilson Center Main Dining Room
Cost: FREE, open to the public (registration requested)
Registration: <http://cpd.ogi.edu/class.asp?n=05-ieee-0125>
Learn tips on how to be more successful at job fairs and interviews.
See www.ieee-or.org/events for details
- 3) **PortlandTech Job Fair**
Returns January 27 3-7PM to OHSU - OGI.
Sponsored by IEEE Oregon, the PRC NW, SAO and OHSU-OGI. Pre-registration required for attendance.
See www.portlandtech.org for companies attending, information and registration.

Wireless LAN Administration Course

Presented by the Communications Society Chapter
A 4-day hands-on Workshop
Portland, Oregon, February 1st ~4th, 2005
Venue: Kingstad Place for Meetings, Beaverton, Oregon

This course provides the networking professional a complete foundation of knowledge for entering into or advancing in the wireless networking industry. From basic RF theory to link budget math, including topics from troubleshooting to performing a site survey, this course delivers hands on training that will benefit the novice as well as the experienced network professional.

Audience: This course targets both novice and experienced networking professionals who wish to gain a solid understanding of wireless networking to complement their knowledge of traditional wired networking. It is appropriate for Systems & Network

Administrators, Systems & Network Engineers, Systems & Network Analysts, Technical Support & Implementation Engineers, Technical Consultants and Network Architects. For more information and to enroll go to <http://www.ieee-or.org/events/cwnp>

RFID Training Course

The Section has arranged for a \$50 discount for IEEE Oregon members in a 1-day RFID training course. RFID Made Easy is a one-day course that familiarizes participants with the hardware, middleware, software and everything else necessary for successful RFID deployment. Training is provided in a technology-oriented manner for those individuals who need an in-depth understanding of RFID. A Certificate of completion will be awarded to all participants. See <http://www.ieee-or.org/events/RFID0205/RFID0205> for details.

Wi-Fi Course

Portland State University
Electrical & Computer Engineering
In collaboration with IEEE Oregon
Intensive One-Day Course:

Wi-Fi Technology Evolution and Integration
Lectured by Peter Rysavy

Date: Friday, January 28, 2005
Time 8 AM - 5 PM
Place: Portland State University
Cost: \$295.00, IEEE Member \$245.00 by January 21

Objective

In this one day course, Peter Rysavy of Rysavy Research provides a fundamental understanding of how Wi-Fi technology works, why its impact on the networking industry is so significant, how Wi-Fi relates to other wireless technologies such as WiMAX and cellular, and the role the technology will play in the future. This course has been designed for people developing products and services that leverage Wi-Fi, as well as people considering the use or expanded use of Wi-Fi technologies in their own organizations.

More info: call PSU ECE Dept. 503-725-3806 or see <http://www.ece.pdx.edu/~cmliu/shortcourse/WIFI/index.htm> for details and registration form.

Susan Hamill wins IEEE RAB Award

Susan Hamill was a recipient of the IEEE Regional Activities (RAB) Achievement Award for 2004. She was nominated by the Section. The selection was made by the RAB Awards & Recognition Committee and approved by the IEEE Regional Activities Board during its 17 November 2004 meeting.

This is a very prestigious Award, and the IEEE Regional Activities Board was pleased to honor her for the outstanding contributions she has made to numerous IEEE activities and the example Susan set in carrying forward the goals and objectives of the IEEE Regional Activities Board. Susan led the Computer and Communications Chapters program committee. She then served as Section secretary where she was instrumental in helping with developing our strategic plan, and next as Section treasurer where she revamped our financial operations and was instrumental in developing our new web site and working with IEEE to establish the first IEEE on-line credit card capability for a Section.

This Award consists of a cash prize of \$250 (USD) and a plaque which carries the following citation:

2004
Susan Hamill
(IEEE Oregon Section)

"For exemplary service to the IEEE by improving the communication, educational and technical activities within the Oregon Section."

Congratulations to Susan for this well-deserved recognition.

National Engineers Week Banquet

Cassini/Huygens Mission to Saturn **- Recent Results -** **February 23, 2005**

You are invited to attend the 41st Annual Student Invitational Banquet, sponsored by the Engineering Societies of Oregon and Southwest Washington, and including the IEEE Oregon Section, during National Engineers Week on Wednesday, February 23, 2005. This banquet will be held at the Double Tree Hotel, Lloyd Center in Portland, at 6:30 p.m.

EWeek Facts At a Glance:

What: National Engineers Week Banquet with feature speaker on the ***Cassini/Huygens Mission to Saturn***. You are invited to attend, and host a guest student at the 41st Annual Student Invitational Banquet. This event consists of an afternoon tour for the student (hosts are welcome to attend as space permits), exhibit hall and dinner program for the student and host.

Why: National Engineers Week programs are designed to enhance the public understanding of the engineering profession and to promote pre-college interest in the field of engineering.

When: **Wednesday, February 23rd, 2005**, banquet seating begins at 6:15 pm; program ends at 9:30 pm

Where: Double Tree Hotel Lloyd Center, Portland

Cost: \$25 for yourself and \$25 for each student you sponsor

Contact: Carol Friz, 503-306-6163, cafriz@ieee.org

The program this year will feature Dr. Kevin R. Grazier, an Engineer and Scientist with the Jet Propulsion Laboratory (JPL), speaking on the ***Cassini/Huygens Mission to Saturn: Recent Results from the Ringed Planet***. Dr. Grazier currently holds the dual titles of Investigation Scientist and Science Planning Engineer for the Cassini/Huygens Mission to Saturn and Titan, and is involved in computer simulations of Solar System dynamics, evolution, and chaos with collaborators at UCLA, Los Alamos, and the University of Auckland. On a side note, Dr. Grazier also currently serves as the science advisor for the SciFi Channel series *Battlestar Galactica* and for the upcoming PBS animated series *The Zula Patrol*.

You can host one or more Junior or Senior High School students interested in Engineering as a profession, and selected from over 60 local High Schools. As a sponsor, you will be matched up with a student whom you will host at the banquet. Engineer hosts and students will be intermingled at the banquet to provide an opportunity for students to ask questions, and for Engineers to provide them with their own unique insight into the field of Engineering. Prior to the banquet, students may participate in a tour of either the West Side Big Pipe Project or OHSU/OGI. There is also an Exhibit/Display Room prior to the Banquet where over 20 engineering and technology schools and technical societies are represented.

Please mark your calendar for this important date.

Contact Carol Friz at 503-306-6163, email cafriz@ieee.org for tickets, information and questions. Your support is welcome, both as an engineering sponsor to host a student at the Banquet, or, if you cannot attend the banquet yourself, as a student sponsor.

IEEE Foundation Online Grant Applications

Grant seekers now have a new way to apply for a grant from the IEEE Foundation. Effective January 2005, the IEEE Foundation will only be accepting grant applications and project reports through its new, simple-to-use online forms. As in the past, the IEEE Foundation will consider projects that:

- Improve education in mathematics, science and technology from pre-university through continuing education;
- Preserve, study, or promulgate the history of IEEE-associated technologies; Recognize major contributions to these technologies and their applications; or
- Show promise of making a major contribution to the worldwide communities the IEEE serves or significantly advancing the profession.

The IEEE Foundation will be considering unsolicited applications in three rounds during 2005. The deadline dates are as follows:

Applications due	IEEE Foundation Meeting Date
January 7, 2005	March 11, 2005
April 15, 2005	June 17, 2005
September 16, 2005	November 18, 2005

IEEE Senior Membership Initiative

The distinguished membership grade of Senior Member is approved and assigned by the IEEE Admission and Advancement (A&A) Committee. Advancement requires application or nomination, for members with 10 or more years in the profession and who have demonstrated at least 5 years of significant technical and professional performance.

One must be a Senior Member to be considered for election to Fellow Member grade. Executive IEEE volunteer positions require at least Senior Member status. Senior Members can serve as References for Senior Member applicants and can be invited to serve on an

A&A panel to review Senior Member nominations and applications. Attaining status as a Senior Member is recognition to peers of technical and professional excellence. New Senior Members receive a Senior Member Certificate and an attractive wood and bronze engraved Senior Member plaque to proudly display. A letter of commendation to the employer on the achievement of Senior Member grade will be sent upon the request of the newly elected Senior Member.

The IEEE Oregon Section has appointed James A. "Jim" Rooks, Life Senior Member, as their Senior Member Facilitator. Individual Members can contact Jim for assistance in the Senior Member nomination process. The IEEE Oregon Section Executive Committee supports the program by asking all Chapter officers be Senior Members. Any Chapter officer that is not a Senior Member is asked to work with Jim to be nominated for Senior Member status. The same applies to any member that is qualified. As of now Jim has a 100% success rate. We seek new candidates to be nominated. Our IEEE Oregon Section is proud of the new Senior Members nominated and elected. The IEEE Oregon Section is proud to support the national Senior Member program. We ask all Chapters and IEEE associates to promote the program. Jim has the forms and experience. Contact him at [<jrookspdx@aol.com>](mailto:jrookspdx@aol.com) or give him a call at 503-524-4640.

We are proud to name our 17 associates that were advanced to Senior Member in the year 2004. They are:

James Blakley	Dave Castor
Douglas Hall	Susan Hamill
Harold Harkonen	Gary Hinkle
Alexander Holland	Darryl Ice
Christopher Jacobs	Claude Kansaku
Ed Kopczynski	Luca Lucchese
Jim McNames	William Owsley
Marek Perkowski	John Prohodscky
David Reed	Terry Warner
Raj Yavatkar.	

IEEE Fellow Nominations

Fellow member is the highest member grade of IEEE. The grade of Fellow recognizes unusual distinction in the profession and shall be conferred only by invitation of the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. The accomplishments that are being honored shall have contributed importantly to the advancement or

application of engineering, science and technology, bringing the realization of significant value to society.

Advancing to Fellow requires being nominated, the only grade with that requirement. Self-nomination is not allowed. The maximum candidates that can be elected in any year is 0.1 per cent of the IEEE membership as of December 31 the preceding year. A major requirement of the process is references by at least five (but not more than eight) IEEE Fellow members. Up to three endorsements are allowed, but endorsements are not required.

The IEEE Oregon Section Senior Member Facilitator, James A. "Jim" Rooks, james.rooks@ieee.org, has the forms and some experience in the process.

Section Public Relations Committee

ENGINEERS UNDER APPRECIATED, EVEN BY
OTHER ENGINEERS, AND WE NEED YOUR HELP
TO CHANGE THAT

Dr. Christopher Jacobs Ph.D. EE
Public Relations Chair for Oregon IEEE

Studies have repeatedly shown, while it may not be a "fair" fact of life, but it is a fact of life, that professions with the best image will sooner or later make the most money and have the most prestige and privileges. Employment studies have shown that engineers - based on their required skills, talents, and knowledge - are significantly under paid compared to higher prestige professions, even those which require less training and talent.

The primary reason that we engineers are not paid in accordance with the requirements and significance (very often life and death significance) of our work is that over 70% of the general population, and our area is not appreciably different, DOESN'T EVEN KNOW WE EXIST LET ALONG HOW WE IMPACT THEIR LIVES! For those of us in the IEEE, it is perhaps more discouraging that in the public's recognition of any kind of engineers, electrical engineers are one of the least recognized. Ask yourself a question. "When you got up today and went to the refrigerator, did you say to yourself, 'My god what a wonder? It is still keeping things cool after all these years, and with no service!!'" The EEs who designed the controls are "virtually invisible".

Your Oregon Section of IEEE should and can start on a major campaign to favorably increase public awareness of

our profession. However, all the work can not be done just by the Executive Committee, in general, and the PR committee chair, in particular. We really need your help, and the help of your friends, wives, significant others, etc. The needed skills will be quite wide and varied. There is room for all who will help!

Some of the work will be kind of technical, like putting together look-up tables for politicians and the media. These tables will be used in locating the right person, within our Section, when they have a question (We had a call about the statistical significance of some legislation on cell phones. We missed a good chance to get favorable publicity free because we could not react fast enough to put the media in touch with the right group or person to answer the question. Media people are typically on a tight deadline when they are asking a technical question). Most of the work will only require an open mind and a willing spirit. For example, receiving expert instruction on how to make a good phone presentation, then calling assigned politicians and media to tell them what we will be sending and what to look for.

One new capability, that we now have with the electronic BEEEP, is we will be able to poll our members on questions that are controversial such as your opinion on stem cell funding. (Note the IEEE can not adopt an official position, but the members are allowed to have an opinion.) The media will run nice articles giving up favorable background and presentation when they give the results. For most of us, this could be a terrific learning experience.

Please email our Section Chairperson, Dan Arnold (Daniel.Arnold@us.ul.com) and help us, the IEEE, and especially yourself as an engineer. While not required, indicate if you have a specialty or preference - like, "good on phone", "word processing", "enjoy driving", "office experience", "editing copy", etc.. Given the proper help on your part we can truly raise our recognition. The money and prestige will follow.

Sample Section member poll question:

Would you work on a project that involved embryonic stem cells?

- Absolutely not, it goes against my convictions
 Yes, but it would depend on how the stem cells were acquired
 Yes, under almost any conditions this is valuable research

IEEE-USA Washington Fly-In

IEEE-USA Needs Your Help!

Early this year, Congress will begin debating legislation that could profoundly effect American engineering professionals.

We Need IEEE Members to Come to Washington on March 8th and 9th to Help Us Defend Your Profession!

IEEE engineers face an unprecedented challenge, and an equal opportunity, this year. Done right, pending legislation could strengthen America's long-term competitiveness and prosperity. Done wrong, these proposed reforms could undermine job opportunities and retirement security for many American professionals, including engineers and scientists. It all depends on what Congress decides to do.

Among the many important issues that Congress will debate this year the most important for engineers include proposals to:

- Expand the country's temporary work visa program. Although it will target low-skill workers, this proposal could substantially increase the number of temporary visas available for foreign professionals.
- Partially privatize Social Security and strengthen the nation's defined pension system.
- Change the processing of visas international students need to study in the U.S. Some proposals would make the student admissions process more restrictive. Others will expedite student admissions.
- Make it easier foreign engineers and scientists to permanent residents of the U.S.

IEEE-USA will be working aggressively to protect the interests of IEEE members, but we can't do it alone. We need help from individual IEEE members who are concerned about the future of their profession. On the afternoon of March 8th, 2005 we invite all concerned engineers to meet us on Capitol Hill for an intensive training session on key professional careers issues. Then on March 9th, you will visit with your legislators to discuss the state of engineering in America and practical ways Congress can improve it.

All IEEE members in Regions 1 – 6 are encouraged to participate, including students and retired engineers. No experience is necessary. All you need is a willingness to try to make the country better. IEEE-USA will provide you with background on pending legislation and tips on holding successful meetings with members of Congress.

IEEE-USA held a very successful similar event last year. Only two of the participants had ever met a lawmaker before, yet all were able to successfully communicate personal concerns and practical recommendations to their legislators.

More information on the 2005 IEEE-USA Careers Fly-In, including how to register, can be found here: www.ieeeusa.org/policy/Careerflyin. Limited support for a few IEEE members from key legislative districts will also be available. Questions? Contact Vin O'Neil or Russ Harrison at (202) 785-0017 or e-mail Russ at r.t.harrison@ieee.org.

NETC Call for Presentations

IEEE-NETC (Northwest Electronics Technology Conference) is the new name for Northcon, reflecting its change from being primarily a trade show into becoming a technical conference on electronics engineering subjects, with complementary exhibits. Bill Weber, General Manager, says that the new format will debut May 10-12, 2005 at the Meydenbauer Center in Bellevue, WA, and is a response to the educational needs of today's OEM electronics industry in the Pacific Northwest.

The IEEE-NETC mission is to provide engineers with timely knowledge needed for a successful project. The conference will be focused on the challenging design issues and topics that on which engineers need to stay up to date. The conference presenters will be people, like you, who have successfully solved real problems. Presenting at IEEE-NETC is an opportunity to be recognized by your peers for your accomplishments, make a contribution to the profession, and build invaluable relationships.

As highly qualified technologists, managers or users with specific expertise in the fields they will discuss, we would like you to submit a proposal for a conference presentation, half-day tutorial, or full-day tutorial on the following topics. We will consider other topics that fulfill NETC's mission.

Categories:

- * Design and Analysis
 - o EDA Tools
 - o Design Methodology
 - o Virtual Prototypes
 - o EMI/EMC Design
 - o Design for Manufacturability (DFM)
- * Power Analysis and Design
 - o Chip-Level Power Management

- o System Power Management
- o Battery Technology
- o Power Supply Design
- o Thermal Analysis and Management
- * Test and Measurement
 - o Design for Test (DFT)
 - o Test Standards
 - o System Debug (Hardware and/or Software)
 - o High-Speed Test
 - o Datacom and Telecom Test
 - o Embedded Software Test
- * Wireless Systems
 - o RF
 - o Infrared
- * Advanced Networks (Wireline and Wireless)
- * Optoelectronics and Fiber Optics
- * Emerging Technologies
 - o Bioelectronics/Biosensors
 - o Nanotechnology
 - o MEMS
 - o Biometrics
- * Interconnect and Bus Standards

Tutorials

- * Half- and full-day tutorials will be considered.

IMPORTANT NOTES:

- You may submit more than one proposal
- Presentations must be vendor-neutral
- Avoid sales pitches
- Focus on technology, applications, and empirical results

If you would like to be a presenter, please submit the following information:

Presenter's name(s) & title(s): _____
 Company name: _____
 Mailing address: _____
 City, state, zip/postal zone: _____
 Telephone & fax: _____
 Contact E-mail: _____

Category(ies) from above list that your presentation(s) will cover:

Target audience (who should attend this presentation):

Description: Provide a brief list of what an attendee will learn, followed by a brief outline of the presentation.

Provide a biography of the presenter(s) detailing his/her technical qualifications and background.

Submissions are due via e-mail by January 31, 2005.

Please send your proposal and this information to Jim Lipman - ednjim@earthlink.net Questions?? call Jim at 925-606-1370

IEEE Educational Activities News

*NEWS FROM IEEE EDUCATIONAL ACTIVITIES
AND THE HISTORY CENTER
(1st Quarter 2005)*

REGISTER NOW FOR VINNY COMPETITION

Named after Leonardo da Vinci, VINNY is an award given to students in grades K-12 for the best one-minute videos explaining how science, technology, engineering, and mathematics (STEM) can help solve common global problems. VINNY is a worldwide video competition designed to build awareness of STEM. Teams of 3 students and 1 teacher will identify and research a global problem and discover ways that STEM can help solve it. The teams will create a one-minute video explaining the global problem and a possible STEM solution. There are 3 levels of competition: grades K-5, 6-8, and 9-12. The award is given in both English and Spanish, for a total of 6 categories and prizes.

The VINNY website is available at <http://vinny.pcs.cnu.edu>. The deadline for registration is February 15, 2005. VINNY is proudly sponsored by the NASA Center for Distance Learning, Christopher Newport University, and the Institute of Electrical and Electronics Engineers (IEEE). Funding for the project is providing by the IEEE Foundation.

CALL FOR 2005 EAB AWARD NOMINATIONS

The IEEE Educational Activities Board is accepting nominations of IEEE members for its annual awards. The deadline for nominations is 30 April 2005. Awards include:

- IEEE EAB Meritorious Achievement Award in Accreditation Activities. The award is given to IEEE Members, Senior Members and Fellows who have served as program evaluators, made contributions that have enhanced the accreditation process and are currently or have recently been active in accreditation activities. The award consists of a brass and walnut plaque and \$1000.
- IEEE EAB Meritorious Achievement Award in Continuing Education. The award is given to IEEE Members, Senior Members and Fellows who distinguish themselves as unselfish in their support of

continuing education and successful in the delivery of courses as evidenced by their quality, quantity and creativity.

The award consists of a brass and walnut plaque and \$1000.

- IEEE EAB Major Educational Innovation Award. The award is given to IEEE Members, Senior Members and Fellows whose innovation has made a major impact and been emulated outside the individual's immediate environment.

The award consists of a brass and walnut plaque and \$1000.

- IEEE EAB Pre-College Educator Award. The Pre-College Educator Award was established in 2000 by the IEEE Educational Activities Board to recognize current pre-college classroom teachers who have inspired an appreciation and understanding of Mathematics, Science and Technology and the engineering process in students and who have encouraged students to pursue technical careers.

The award consists of a brass and walnut plaque and \$1000.

- IEEE EAB Employer Professional Development Award. The Employer Professional Development Award, established in 1995 by the IEEE Educational Activities Board, recognizes organizations employing IEEE members for contributions to employee continuing education and professional development. This award is given to organizations whose contributions to employee continuing education and professional development are outstanding as evidenced by their quality, comprehensiveness, innovation or impact.

The award consists of a brass and walnut plaque.

For award descriptions, honorarium details, and nominations packets, visit

<http://www.ieee.org/organizations/eab/EABAwards/callnominations-2005.htm>

For more information, contact: Rae Toscano, Manager +1 732 562 5482; Karen Kleinschmidt, Administrator, +1 732 562 5493; Email: eab-awards@ieee.org.

RECORD NUMBER OF IEEE MILESTONES IN 2004

2004 saw seven Milestones dedications, a record! These came from around the globe, and several more exciting ones are in the pipeline for approval in early 2005.

Although not yet nominated a Milestone by the IEEE New York Section, in December 2004 a ceremony was held marking the addition of Philosophy Hall at Columbia University to the U.S. National Historic Landmark Survey, having been nominated by the IEEE History

Center as part of a joint project with the U.S. National Park Service. Sections are urged to get involved in local history, particularly through the Milestones Program.

More information can be found at

http://www.ieee.org/organizations/history_center/milestones_program.html.

ORAL HISTORIES UPDATE

The IEEE History Center continues to collect oral history interviews with important contributors to our fields, from every corner of the world. The Center now manages over 450 interviews, with more than one half available on the Web. They can be viewed at

http://www.ieee.org/organizations/history_center/oral_histories.html. The entire set of History Center pages is

searchable from the center's home page,

http://www.ieee.org/organizations/history_center/index.html, if, say, one wanted to see if a particular country or

region was mentioned. The Center has recently begun

work on a project with the IEEE Electromagnetic Compatibility Society to collect more interviews in their field, in preparation for the EMC's 50th anniversary celebration in 2007.

IEEE SETF – INCORPORATING STANDARDS INTO UNDERGRADUATE PROGRAMS

Volunteers from the IEEE Educational Activities Board and Standards Association have come together and formed the IEEE Standards in Education Task Force (SETF). The goal of SETF is to help the electrical and computer engineering undergraduate programs with incorporating standards into the learning process. A grant from the IEEE Foundation was sought and supported for a needs survey and the development of proof of concept learning products during 2004 and 2005. Through the survey, roadblocks to the introduction of standards into the undergraduate learning process were identified, namely: (1) the scarcity of learning supplements to classroom instruction that would impart essential knowledge about standards and (2) the cost of access to appropriate standards. The survey respondents encouraged the creation of web-based tutorials on, case illustrations using, and a reference guide to standards, many of which are currently being developed by the SETF. These web-based learning products will be pilot tested at two academic institutions in 2005 and, after any refinements based upon the pilot testing, the web site will be made available on an open-access basis. More information about this project will be announced in the coming months.

For more information on the EAB, visit

<http://www.ieee.org/organizations/eab/> or email education-services@ieee.org.

Those interested in more information on the IEEE History Center are invited to look at the Center's website (http://www.ieee.org/history_center) or to email the Center at history@ieee.org.

IEEE-USA Provides \$50,000 To Support Engineering Public Awareness

WASHINGTON (30 December 2004) -- Three programs designed to promote public awareness of engineers and engineering received \$50,000 from the IEEE-USA Board of Directors at its last meeting of the year in San Antonio. The programs appeal to a variety of audiences using targeted media: special events (for youngsters); movies (for youngsters and young adults); and television news (for adults and the public-at-large). On 17 November, the Board also supported in principle the IEEE emeritbadge program "to provide a global non-discriminatory precollege technology education program for boys and girls."

As part of the \$50,000 allotment, the IEEE-USA Board of Directors allocated \$30,000 to support two Engineers Week 2005 events including continuation of the Family Day activity to be held on Saturday, 19 February, at the National Building Museum in Washington, D.C. The hands-on opportunity helps youngsters appreciate how things work and grasp fundamental engineering principles. In 1993, with the EWeek Committee, the IEEE launched the first EWeek Family Night at Intelsat.

In 2004, IEEE-USA and BE&K provided the bulk of funding to continue Family Day, when the IEEE led EWeek with Fluor Corp. More than 8,500 youngsters and adults broke the previous record for attendance at any event at the Building Museum. Youngsters interacted with Washington-area engineers to build towers, compete in a robot competition, explore a model of the Mars Rover, and meet PBS' "Zoom Into Engineering" cast. The EWeek Committee is working with engineering society volunteers in Washington to assume financial and organizational responsibility for Family Day as soon as 2006.

Also in support of EWeek 2005 (20-26 February), IEEE-USA underwrote the preparation of animated slides to promote "Introduce a Girl to Engineering Day." The slides will be shown in 157 Regal Cinema theatres in eight major cities prior to and including Engineers Week: Los Angeles/Long Beach 26; San Francisco/Hacienda Crossings; New York/Union Square; Atlanta/Hollywood 24; Philadelphia/King of Prussia; Washington/Gallery

Place Stadium 14; Chicago/Lincolnshire; Dallas/Fossil Creek; and Boston/Bellingham.

EWeek 2005 "Introduce a Girl to Engineering Day," now in its fifth year, is scheduled for Thursday, 24 February. The campaign encourage engineers, particularly women, to make the world of engineering "come alive" for girls. Since its inception, an estimated one-million girls have experienced engineering firsthand each year. IEEE-USA is also lending its support to a planned United Nations activity in support of EWeek 2005 Girl Day, having spearheaded the first such activity with EWeek in 2004.

In addition, the Board provided \$20,000 for IEEE-USA-supported engineering features in American Institute of Physics syndicated news feeds for local news programs in the top 108 U.S. television markets. The "Discoveries and Breakthroughs" news service delivers twelve 90-second broadcasts with two audio tracks each month to the subscribing stations. IEEE-USA involvement will ensure that more engineering stories are included. An IEEE-USA staff member is now participating in weekly editorial planning teleconferences to provide leads to IEEE experts on IEEE technologies.

During 2004, "Discoveries" provided a realistic image of how science, technology, engineering and math professionals actively work to contribute to a better quality of life. News stories have covered improved technology that brings health benefits (38%), new technologies that facilitate daily life (19%), better medical procedures (12%), improved forecasting and air quality (12%), and answers to questions that we are curious about (11%).

New IEEE-USA President Takes Office

Princeton Engineer, Inventor Becomes IEEE-USA President, Cites Innovation and Offshoring as Major Concerns

Dr. Gerard A. Alphonse of Princeton, N.J., an IEEE Fellow who holds more than 50 U.S. patents, became IEEE-USA president on New Year's Day.

One of Alphonse's major goals is for IEEE-USA to tackle issues relating to innovation and offshore outsourcing (offshoring). He hopes to bring together technical workers and key stakeholders from government, industry and academia to advance equitable solutions to the transfer of high-value, high-wage jobs overseas.

"It's more than just a jobs issue," Alphonse said. "Even more fundamental is how the United States and other nations will ensure their economic prosperity, national defense and standard of living in an increasingly competitive, technology-based global economy. Success requires that the United States be more productive and innovative than our competitors."

"My goal as IEEE-USA's 2005 president is to make sure key decision makers are aware of the needs of the U.S. technical workers who are responsible for that technological innovation."

To find out more about Dr. Alphonse, see <http://www.ieeeusa.org/volunteers/alphonse.asp>

IEEE-USA January Highlights

1. Latest *IEEE-USA TODAY'S ENGINEER*

Webzine Covers Conquering Change, Managing Conflict, Ethics In Energy Distribution, Opening World Service Markets, The X-Prize, Joining The IEEE Before Joining The Workforce

Also, catch an "Engineering in Pop Culture" feature on "The Far-Reaching Effects of Global Positioning"; a "Capitol Shavings" column on "Being an Informed Citizen;" and a "World Bytes" column on "World Population Projections."

Read the January 2005 edition of IEEE-USA TODAY'S ENGINEER online at: <http://www.todaysengineer.org>.

2. Salary Survey Reveals Decline In Technical Professionals' Incomes

Median income for electrotechnology and information technology professionals declined for the first time in 31 years, according to the latest IEEE-USA Salary & Fringe Benefit Survey. Median incomes from primary sources -- base pay plus any self-employment income, commissions, or bonuses -- for U.S. IEEE members working full-time in their area of professional competence declined 1.49 percent from 2002 to 2003.

For more information, read the news release at: <http://www.ieeeusa.org/communications/releases/2004/122204pr.asp>.

3. IEEE-USA Urges "Safe Servicing" Of Hubble Space Telescope For Humankind

NASA should "strive to develop procedures, technology and equipment that would allow the safe servicing of the Hubble Space Telescope, including the possible use of tele-operated robots," according to an IEEE-USA position adopted by its Board of Directors at its last meeting in 2004.

To read the news release, go to: <http://www.ieeeusa.org/communications/releases/2004/123004pr-hubble.asp>.

To read the position statement, go to: <http://www.ieeeusa.org/policy/positions/hubble.asp>.

4. IEEE-USA President Talks about Challenges Ahead for U.S. IEEE Members

In his first column as 2005 IEEE-USA President, Gerard Alphonse looks ahead at some of the challenges that lie ahead for IEEE-USA and U.S. IEEE members.

Read the President's column at: <http://www.ieeeusa.org/communications/presidentcolumn/Alphonse/alphonsejan05.html>.

5. IEEE-USA Supports Collaborative Engineering Awareness Projects

Three ongoing programs designed to promote public awareness of engineers and engineering received \$50,000 in funding from IEEE-USA at the end of 2004. The programs appeal to a variety of audiences using targeted media: special events (for youngsters); movies (for youngsters and young adults); and television news (for adults and the public-at-large).

For more information, read the news release at: <http://www.ieeeusa.org/communications/releases/2004/123004pr.asp>.

6. EWEEK "Introduce A Girl To Engineering" Goes To The Movies

Showing in January and February at a theater near you: movie teasers featuring a "Girl Day" visual touting Engineers Week's "Introduce a Girl to Engineering Day," slated for 24 February during EWeek.

For more information, go to:

http://www.eweek.org/site/News/Eweek/girlsday_mv.shtml.

IEEE-USA Eye on Washington Highlights

The new issue of Eye on Washington Vol. 2005, No. 1 is now available on the IEEE-USA Web site. Below are some of the highlights. Please view the full newsletter at: <http://www.ieeeusa.org/policy/eyeonwashington/2005/05ew01.html>

- 1) **Capitol Hill Watch**
- 2) **White House & Executive Agency Watch**
Treasury Issues General License For Publishing Activities. See <http://www.treasury.gov/press/releases/js2152.htm>
-New Cross-Reference Digest For Nanotechnology: <http://www.uspto.gov/web/patents/biochempharm/crossref.htm>
- 3) **U.S. Courts Activity, Reports, Speeches & Documents Of Note**
- 4) **Awards & Grants**
- 5) **Programs & Internships For Students And Scholars Of Engineering**
Engineers Without Borders, please see: <http://www.ewb-usa.org/opportunities-intern.html>
- 6) **U.S. States Watch**
- 7) **Other Items Of Possible Interest & For Fun**
Can Nanotechnology Improve Your Tennis Serve? <http://www.npr.org/templates/story/story.php?storyId=4252587>
Top 10 nanotechnology products on 2004: <http://www.npr.org/programs/morning/features/2004/dec/nanotech/nanotop10.pdf>

IEEE News Items

1. **IEEE-USA Urges Changes to Online Piracy Bill**
Downloading a song or a video over the Internet may seem inconsequential to the person doing the copying, but over the years the costs of such copyright infringement have added up to a staggering sum -- US\$19 billion worth of purloined work, according to U.S. entertainment industry groups. That's why the U.S. Senate is trying to punish infringers by defining who might be liable, but IEEE-USA says the bill is far too broad. Find out more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/dec04/12w.online.xml>
2. **Members Help Build Bridges to Policymakers**
Usually IEEE members have little influence or interaction with government officials. But a few are able to bridge that gap by taking on advisory roles to government. Read about how three members have fared in India, Malta, and the United States at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/dec04/12w.help.xml>
3. **Breathing New Life Into Sections and Chapters**
Bringing a dormant IEEE section or chapter back to life is not as difficult as it may seem, say volunteers who have done it. Mostly it requires a few dedicated members willing to brainstorm ways of attracting others back to meetings and enticing new people to join. Find out more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/dec04/12w.bestprac.xml>
4. **Members Rate IEEE's Value**
Results were mixed when the IEEE surveyed its members last year to find out how satisfied they were with the organization's products and services. Members like what they are getting from conferences and local meetings with other professionals, but they are looking for improvement in online access to technical resources and more continuing-education opportunities. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/dec04/12w.rate.xml>
5. **Electronic Communications Resume for Embargoed Countries**
Last month, the IEEE reestablished electronic communications for its members in the U.S. trade-embargoed countries of Cuba, Iran, and Sudan. Members in these countries were given access to communications channels that the IEEE had suspended in January 2002, while the institute investigated the effect of the trade regulations administered by the U.S. Department of the Treasury's Office of Foreign Asset Control. Learn more at http://www.theinstitute.ieee.org/portal/site/tionline/menuitem.130a3558587d56e8fb2275875bac26c8/index.jsp?&pName=institute_level1_article&TheCat=2202&article=tionline/legacy/inst2004/dec04/12w.newsOFAC3.xml
6. **Workshop Features the Latest in Electrical Safety**
Electrical safety is an important issue for workers as well as for product designers. The IEEE Electrical Safety Workshop, to be held 8-11 February in Denver, provides the opportunity for everyone involved - electrical workers, engineers, architects,

product designers, and managers -- to meet and exchange ideas for preventing electrical accidents and injuries in the workplace. Find out more at <http://boldfish.ieee.org/u/workshop3b/05229885>

7. Proceedings Cover First Mobile and Ubiquitous Systems Conference

Earlier this year, the first Annual International Conference on Mobile and Ubiquitous Systems: Networking and Services was a forum for practitioners and researchers to exchange research on service-oriented computing, middleware, networking, knowledge management, and databases. The proceedings of the conference are now available from ShopIEEE:
<<http://shop.ieee.org/store/product.asp?prodno=PR2208>>

8. Member Renews Online, Wins Notebook Computer

IEEE Member Ernest Peterson from Riga, Latvia, in Region 8 (Europe, Africa, and Mid-East) won a Dell Inspiron notebook computer in a random drawing from among the 92 593 members who renewed online before 15 November. A chance for the notebook was offered as an incentive to encourage members to renew their annual memberships online.

IEEE Oregon Section 2005 Contacts

Chair	Dan Arnold	360-817-5699
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Treasurer	OPEN	
Secretary	Hamid Sharifnia	503-813-6935
Past Chair	Ed Perkins	503-612-9397
BEEEP Editor	Allen Taylor	503-656-0831

Editorial submissions are welcome and should be made by the 25th of the month preceding publication. Send all items to the Editor, Allen Taylor, email: allen.taylor@ieee.org

Administrative inquiries should be directed to the Section Chair, Dan Arnold, email: Daniel.Arnold@us.ul.com

OHSU - OGI SEMINARS

Hosted by the Center for Professional Development, OGI School of Science & Engineering

(in evening unless noted otherwise)

See www.cpd.ogi.edu for details

Jan 11 (Tuesday)

[Northwest Six Sigma Users Group: Lean Six Sigma](#)
Center for Professional Development, OGI School of Science & Engineering

Jan 11 (Tuesday)

[XP Users Group: Agile Development in the Portland Area](#)
Darcie Snedeker (no charge)

Jan 13 (Thursday)

[SPIN Seminar: Managing Your Software Engineering Career in the Age of Globalization](#)
Panelists: Brent Capps Zenobia, Mitch Besser, Bhushan Gupta, Katherine Radeka, Vinod Andrew
(no charge)

Jan 18 (Tuesday)

[High Tech and Health Care: Untethering Health Care-- Breaking Traditional Boundaries with Wireless Technology](#)
Jim Welch, VP and CTO Welch Allyn Monitoring
(no charge)

Jan 18 (Tuesday)

[Management in Science & Technology: Information Session for Prospective Students](#)
(no charge)

Jan 20 (Thursday, 12:00pm-1:30pm)

[HR & OD Forum: Controlling Benefit Costs in an "Uncontrollable" Environment](#)
Debbie Burke, Merix Corporation
(\$15 includes lunch buffet and seminar)

Jan 20 (Thursday)

[IEEE Seminar: Wireless Technology Trends--Promises and Challenges](#)
Dr. Paul Kolodzy, Advanced Wireless and Networking Technology (no charge)

Jan 25 (Tuesday)

[IEEE PACE: How to Succeed at Job Fairs and Interviews](#)
Tom Sale, Senior VP, Executive Group (no charge)

Jan 27 (Thursday) 3-7PM

[PortlandTech Career Fair](#)
(no charge)

Feb 1 (Tuesday)

[Developing a Powerful Data Presentation](#)
Nechama Katan, Intel, IllumiNostra.com (no charge)