



IEEE *The Open Channel*

Newsletter for the Hampton Roads Section

http://www.ewh.ieee.org/r3/hampton_roads/

The Institute of Electrical and Electronics Engineers, Inc.

November 2003

Hampton Roads IEEE Meeting

November 20, 2003

6:00 PM Exec Committee

6:30 PM Social

7:00 PM Topic for the night

Sammy & Nicks Family
Restaurant
2718 Mercury Blvd.
Hampton, VA
757.838.9100

Meal Costs:

Members & Guests: \$20.00

Students: \$10.00

Hampton Roads 2003 Officers

Chair: Dr. William Edmonson
wedmonson@ieee.org

Vice Chair: Tim Gavin, P.E.
tim_r_gavin@ieee.org

Secretary: Dr. Robert Dawes
dawes@ieee.org

Treasurer: William Clayton
w.clayton@ieee.org

Newsletter & Membership:
William LaBelle
w.labelle@ieee.org

Committees

Professional Development
Student Activities
Educational Activities
Awards

Region 3 Websites

R3 Web Site:
<http://www.ewh.ieee.org/reg/3/>

ETI Web Site:
<http://www.ieee.org/eti>

Employee Assistance:
<http://www.ewh.ieee.org/reg/3/ea/>

Synthetic Vision Systems for General Aviation Aircraft November 2003

Current research efforts in Synthetic Visions Systems for General Aviation Aircraft and the study of new, innovative, and non-invasive psychophysiological measures to determine workload and situation awareness.

Contact Tim Gavin (757) 827-1786 x313 or email (tim_r_gavin@ieee.org) for information.

Speaker: Michael Uenking

Mr. Uenking, [Michael.D.Uenking@nasa.gov] is a human factors researcher in the Aviation Safety Program at NASA Langley Research Center and a Solar System Ambassador (program sponsored by JPL in California). He has been at NASA Langley since 1988. Mr. Uenking has a Bachelor of Science in Mechanical Engineering and a Master of Engineering in Engineering Mechanics both from Old Dominion University. Presently, he is pursuing a M.B.A. in Technology Management from the University of Phoenix. A long time Hampton Roads native, Mr. Uenking graduated from Princess Anne High School in Virginia Beach in 1984. Currently he lives in Newport News, VA with his wife, Rebecca, and 2 children, Mary Ashleigh (8) and Matthew (6). He is a volunteer at the VA Hospital in Hampton and a member of the Knights of Columbus and a member of the Newport News Public Schools Talented and Gifted (TAG) Program Board. Mr. Uenking is also a member of the NASA Langley Research Center Speaker's Bureau and has served as a mentor to summer high school students in the NASA SHARP program and the New Horizon's Governor School.

From the Chair

Dr. William Edmonson

This represents my last Chair's Letter, for my term ends in January. It has been a good two years as Section Chair of IEEE of Hampton Roads. I would like to thank all of the board members who have served with me and all those who have attended the meetings. Without you, the section and I section could not be successful. Just like the African proverb says, "It takes a village to raise a child", I would like to add to this "It takes a community to sustain a village." Presently, the community of IEEE members in this region is large, but with very few people participating makes sustaining the village tenuous. The attendance at our meetings has been averaging about 15 people out of over a thousand members. Things that we are doing to improve on this are:

1. Holding meetings alternatively on both sides of the water.
2. Choosing locations with good food, e.g. Thai and seafood.
3. Assisting college and secondary students, both financially and technically.
4. May's meeting will be of interest to both the members and their families.

The last one I would like to expound on a little more. Last year we went to Williamsburg Winery for a tour, a taste and dinner. All those that attended with their partners and friends enjoyed it and recommend that we do something like this for next years meeting, May 2004. Some ideas that are being tossed around are Busch Brewery and Busch Gardens. If you have any ideas for the May meeting that will include something fun, technical, and can be enjoyed with our significant other(s), feel free to pass it along to us. Better yet, come to a meeting and express your ideas. We need your help to sustain and grow this organization.

Though this has been a good run for me and I feel good about the things that we have been able to accomplish, I believe that one thing we can do better is to attract and keep a diversity of members. I am speaking of women, people of color and people under 35. We need to be sensitive in what we say and how we say it. We also need to reach out and do a better job in bringing GOLD members into the community. The organization needs your help, especially I would like to see culturally and sexual diverse members begin to attend.

Elections are coming up, so lets get everyone involved so that we can sustain and even grow the section.

Sammy & Nicks Family Restaurant

Enjoy mild authentic Thai cuisine served family style. Price includes appetizers, drink and gratuity.

Directions:

- Take I-64 to Mercury Blvd.
- (From the south side, go through the Hampton Roads Bridge Tunnel)
- Exit westbound on to Mercury Blvd.
- Travel approximately 1.5 miles.
- Sammy and Nicks is on the right.

Become a Senior Member

Senior Member drive continues

The senior member drive elevate members from a grade of 'Member' to a grade of 'Senior Member' continues. Of the 500 of the sections active membership hold a grade of 'Member' almost 400 may be eligible for upgrade. Information on requirements for elevation from 'Member' to 'Senior Member' can be found at <http://www.ieee.org/organizations/rab/md/smprogram.html>.

IEEE HR Annual Elections

The Hampton Roads Section is holding its annual election of officers in November. All sections and chapters in IEEE the elected positions are: Chair, Vice Chair, Treasurer, and Secretary. Send in your nominations now to William LaBelle [w.labelle@ieee.org] or William Edmonson [wedmonson@ieee.org]

IEEE-USA TODAY'S ENGINEER topics (October 2003):

Backscatter: Accidents Waiting to Happen

Why do systems fail when they shouldn't? Is it because designers are not aware of preceding failures, or because they are willing to accept the risks based on prior successes
<<http://www.todaysengineer.org/Oct03/backscatter.asp>>

On the Road to a Great Presentation

Regardless of how polished your presentation may be, it will surely fall flat unless you connect with your audience. How do you get there?
<<http://www.todaysengineer.org/Oct03/presentations-p1.asp>>

Who Wants to Be a Millionaire?

As a recent graduate and new hire, what can you do now to know you'll have a million bucks in the bank when you retire?
<<http://www.todaysengineer.org/Oct03/millionaire.asp>>

Voting Technologies — The Issues Go Beyond Punch Card Ballots and Lever Machines

The *Help America Vote Act* has prompted many state governments to consider moving to electronic voting technologies. Some experts believe that, eventually, this trend will involve the Internet. Are we improving the voting system or opening a can of worms?
<<http://www.todaysengineer.org/Oct03/voting.asp>>

Data Mining and Privacy Issues

Gathering information by looking for hidden relationships in data is generating considerable debate both on Capitol Hill and among the public. With so much information gathered and

stored by companies and the government, how can we retain our privacy?

<<http://www.todaysengineer.org/Oct03/data-mining.asp>>

Also in TE

Engineering & Pop Culture: [Movie Technology](#)

World Bytes: [Reflecting on Résumés](#)

Capitol Shavings: [Should Gov't Work Be Contracted Out to the Private Sector?](#)

Read the complete articles and other at the Today's Engineer web site (<http://www.todaysengineer.org/>).

IEEE events

IEEE SoutheastCon 2004

SOUTHEASTCON brings together electrical, electronics, and computer engineering professionals, faculty and students to share the latest information through technical sessions, tutorials and exhibits. It is the most influential conference in the southeast for promoting awareness of the technical contributions made by the electrical and computer engineering profession to the advancement of engineering and science, education, and to the community.

This annual Region 3 conference will be held in Greensboro, North Carolina March 26 - 28, 2004. For more information visit the conference web site at:

<http://www.ewh.ieee.org/cmte/secon04/>

The call for papers has already been announced. Submittal of refereed papers are due December 19, 2003 to the SoutheastCon 2004 Program Committee. More details may be found through conference web site links.

IEEE SouthCon 2004

Southcon attendees represent companies from a major cross-section of the electronics industry including consumer, computer, medical, automotive, and more. As they search for more cost effective ways of developing products, they turn to Southcon's high quality conference sessions, in-depth technical sessions, product demonstrations and vendor exhibits to deliver answers and solutions to their current and near-future problems.

This year's conference will be held at the Orange County Convention Center in Orlando, Florida January 14-15, 2004. For more information visit the conference web site at:

<http://www.southcon.org>

Other conferences in Region 3:

2004 IEEE Nanoscale Devices and System Integration (CDNSI) Feb. 15-19, 2004: <http://www.nanointernational.org/>.

2004 IEEE International Conference on Pervasive Computing and Communications (PERCOM) Mar. 14-17, 2004: <http://www.percom.org/>.

2004 36th IEEE Southeastern Symposium on System Theory (SSST 2004) Mar. 14-16, 2003: <http://www.ssst04.org>.

2004 IEEE Systems and Information Engineering Design Symposium (SIEDS) Apr. 16, 2004: <http://www.sys.virginia.edu/seids04>.

IEEE Student Chapter (ODU) at Camperall

Ms. Genevieve Hankin and Ms. Meena Youssef

What was the event that you attended? On October 11 2003, we participated in the Boy Scout Camperall in Manteo, NC.

Why were you there? We were representatives of Old Dominion University's College of Engineering and Technology and the Student Branch of IEEE.

What was the experience and would you do it again? We found it personally fulfilling to promote engineering and demonstrate Electrical Engineering prototypes. We would like to make IEEE and College of Engineering and Technology a regular participant in Boy Scout educational events.

What were you showcasing at the event? Information about the many engineering programs offered at the College of Engineering and Technology were provided for Scouts and parents.

We brought an IEEE robot from last year's hardware competition and a prototype for the Water Hauling Derby. The Scouts were very impressed with the autonomous vehicles. They were particularly interested in building the car themselves.

What else did you see or participate in? As guests, our



IEEE Student Branch (ODU) Vice-Chair Meena Youssef (left) and Chair Genevieve Hankin

main objective was to run the informational table. However, we had the opportunity to visit other booths including our colleagues at NASA Langley. We were able to share information with Steve Balch who was seated alongside us. He provided the children with interesting facts about Ham Radios and Communication Systems.

The Water Hauling Derby is an electrical and mechanical engineering design competition for middle and high school students. It is part of the Engineering Open House Competitions held on Saturday February 21, 2004. For more information on the Water Derby or other engineering competitions please contact the Electrical and Computer Engineering Department at ODU, 757-683-3741. For information about additional competitions contact the College's Dean's Office at 757-683-3789.

Editor's Note:

Steve [KF4DAX] and fellow amateur radio operator Phil [N4DLD] were present at the Camperall on behalf of the Portsmouth Amateur Radio Club [W4POX].



Meena Youssef and Genevieve Hankin talking to Boy Scouts about Eweek

Local Engineering events

INCOSE: The Hampton Roads Area Chapter of the International Council on Systems Engineering is proud to announce a "free" fall System Engineering Seminar on November 13-14, 2003! The seminar features a discussion on Systems Engineering Certification, the INCOSE Systems Engineering Handbook, and tutorials on Systems Management, Systems Engineering Standards, Models Based Systems Engineering, NAVAIR Systems Engineering Policies & Practice, and Risk Management.

The key note speaker is Dr. Kevin Forsberg. Dr. Forsberg has developed leading industry training programs and has trained over 6,000 high technology project managers. Training courses co-developed by Dr. Forsberg have been taught in 39 countries and a number of universities, including Santa Clara University, University of California, and American University (in Washington D.C.). He co-founded the Center for Systems Management in 1989.

P.S. Visit our HRA INCOSE web page (www.hra-incose.org) for security access requirements, registration, directions, and hints about local accommodations.

While the seminar is free, you must be registered to attend.

ODU: The Old Dominion University Civil and Environmental Engineering Visiting Council (CEEVC) invites you to attend the Fall 2003 Seminar titled *Government Contacts: What does the future hold for design professionals and the contracting community?*. Please see the link below for pertinent information and registration.
<http://members.cox.net/ceevcseminar/Fall%202003%20Seminar%20Site.pdf>

Local Engineering Events inputs

Are you are organizing or sponsoring a local event of interest to the engineering community? Do you know of one? Let us know! Send your event announcement to me, William LaBelle (w.labelle@ieee.org), for publishing in the next edition(s) of *The Open Channel*. Additionally, your event can be announced, or a link established, on the section web site. The section newsletter reaches about 1000 local IEEE members each month. It is a free resource that you can't ignore.

Hampton Roads Engineering Society Calendar

The HRESC is a free website and e-mail calendar of engineering society events for the Hampton Roads area. It is open to the public and all societies are invited to advertise their events. List members receive a weekly text-only e-mail calendar of events.

Currently, HRESC is maintained by Ray Walsh (SNAME), but Mr. Walsh will be unable to maintain it in the future. If you are interested in taking over Mr. Walsh's efforts, please contact the IEEE HR PEC representative William LaBelle (w.labelle@ieee.org).

The manager of the HRESC is SNAME. SNAME, or The Society of Naval Architects and Marine Engineers, an internationally recognized nonprofit, technical, professional society of individual members serving the maritime and offshore industries and their suppliers.