

March 2006

# IEEE New Hampshire Section Newsletter

[http://ewh.ieee.org/r1/new\\_hampshire/](http://ewh.ieee.org/r1/new_hampshire/)

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## 1. Chairman's Thoughts

As I write this we are entering National Engineers Week (Feb. 19-25). This recognition week was founded in 1951 and is a yearly event planned by a consortium of more than 100 professional and technical societies and major US corporations. IEEE has a significant presence in the nationwide event. Right here in NH a highlight takes place on February 23 with an Awards Banquet in Manchester. The keynote speaker, Wallace Stickney, former director of FEMA, will present a talk titled: "Mother Nature is not a Terrorist."

Something really exciting happened for two NH electronics engineers on Monday, February 13 when President Bush presented Roger L. Easton, of Canaan, and Ralph H. Baer, of Manchester, with National Medals of Science and Technology. Roger helped develop the Global Positioning System at the Naval Research Labs in 1964. Ralph pioneered the video game at Sanders Associates (now BAE Systems) in 1966. I have been privileged on a couple of occasions, one as recently as last September, to spend some time with Ralph. Now in his 80's, he continues to pursue new inventions, mostly for learning and enjoyment by young people. Only three days before the award, Ralph's wife Dena died. Our deepest sympathy goes out to Ralph.

I am hearing from a number of you on various matters and concerns including the usefulness of the Reflector. I can't promise that everyone will be satisfied by the outcome, because opinions vary, but we're taking your comments seriously. Continue to let us know what's on your mind. This is your organization. Also, there are several of you who wish to upgrade to Senior Member or Fellow. We are attempting to make available more assistance to encourage this activity.

Finally, we are planning to have at least two social events again this year, the very popular Mount Washington boat ride in July, and the November Awards Banquet. Our speaker will likely be Col. Barry Shoop from West Point Military Academy. He is the IEEE Region 1 Director for 2006 and 2007.

Please feel free to contact me, Tom Perkins, at [tcomperkins@ieee.org](mailto:tcomperkins@ieee.org) I would enjoy hearing from you.

## 2. Name the Newsletter Contest

The ExCom is sponsoring a contest to name our newsletter. The member sending in the best name will be able to choose a prize from several items from the IEEE catalog. The winner will be chosen at an ExCom meeting. You can submit as many entries as you desire. Please send your entries to the newsletter editor at [james-w-anderson@ieee.org](mailto:james-w-anderson@ieee.org)

In order to get your creative juices flowing we have compiled a list of newsletter names from sections in the US and Canada. Many of the names were preceded by or followed by the section name. Can you think of a name that would tie into something significant about our state, and/or that would tie into an electrical, electronic, or computer term? We are confident that **YOU**, our members, are even more creative than the people that created the names below.

Almanac	Analog	Annual
Annunciator	Beacon	Bay Area Engineer
BEEEP (Bulletin of Electrical & Electronics Engineers of Oregon)	BEEET (Bulletin of Electrical & Electronics Engineers of Tucson)	Bits
Bridge (relates to a local bridge)	Bulletin (2 sections)	Circuit (2 sections)
Common Ground	Communicator	Conductor
Connection (2 sections)	Connector	Contact
Corona	Crosstalk	Current or Currents (2 sections)
Current Source	Data Bus	Direction
Engineer's Information Link	eBulletin (2 sections)	eNewsletter
eNotice	eScanner	Event Sense
Grid	Grit and Grin	Informer
Journal	LiveWire (50 years ago it was livewIRE)	Mighty Mho (relates to the river & reciprocal ohms)
Monitor	Moose Call	News
Newsletter	Open Channel (relates to a port city)	Peak Potential (a mountainous area)
Phase Courante (Montréal Section)	pIEEEdmont Potential (Piedmont Section)	Pocket Scope
Printed Circuit (See below table)	Pulse of	Quantum Wave
Radiator	Random Noise	Reflector
Reporter	SCANFAX	Signal or Signals (3 sections)
Significant Bits	Sparks	Standards
Stray Currents	Technologist	Valley Megaphone
Watt's New	Wave Front	Wavelengths

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### 3. Young Inventors' Competition

A notable PACE activity of your Section is the sponsorship, for some ten years now, of the Electricity and Electronics Awards at the annual New Hampshire Young Inventors' Competition. Prizes of \$100, \$75 and \$50 are awarded to the school children (K - 8) for the top three inventions with the best use of electricity or electronics. The competition is the annual statewide runoff of the winners from the competitions at local schools and typically comprises around 200 hundred inventions.

Along with the prizes the Section provides the judges for the Electricity and Electronics Awards. If you'd like to see all the wild contraptions school kids can come up with, and have an interesting and entertaining Saturday morning, we could use a couple of volunteers for our team of judges for this year's competition: Saturday, April 8, 8AM to 2 PM at Winnisquam High School, 435 West Main Street, Tilton, NH 03276. Contact Dean Bacon [bacondl@NU.com](mailto:bacondl@NU.com) if you would like to be one of the judges. Free coffee, juices, donuts and other goodies are provided for the judges.

### 4. FIRST Robotics Competition

If you want to see what our high school kids are capable of, then come to the Granite State Regional FIRST (For Interest and Recognition of Science and Technology) Robotics Competition on Friday and Saturday, March 3 & 4 at the Verizon Wireless Arena in Manchester from 9 AM to 4 PM (doors open at 8:30 AM). Admission is free.

About 50 schools from throughout New England, including 36 from New Hampshire and Massachusetts, will match their team built robots in heats of innovation and strategy. Come and cheer on your favorite team, or just enjoy the excitement.

Finals begin on Saturday at 1 PM. Do not miss it!

### 5. Teacher In-Service Program Training for Engineers

If you are interested in helping to inspire our grade school and high school students to develop a love for science, mathematics and engineering, as described in the two articles above;

If you are interested in working with your local pre-university schools, school districts or teachers to help improve the level of technological literacy of students in the community;

Then you are encouraged to attend IEEE's upcoming training session on the Teacher In-Service Program.

Location: Museum of Science Boston, Skyline Room

Dates: Friday 24 March 2006 4:30pm - 8:30pm (dinner will be served from 6:30pm - 8:30pm)

Saturday 25 March 2006 9:00am - 3:00pm

The overall goals of this event are to:

- 1- Empower Section "champions" to develop collaborations with their local pre-university community to promote applied inquiry-based learning.
- 2- Enhance the level of technological literacy of pre-university educators.
- 3- Encourage pre-university students to pursue technical careers, including engineering.
- 4- Increase the general level of technological literacy of pre-university students for many years.

The event will begin at 4:30pm on Friday 24 March with a 2 hour presentation followed immediately by dinner at 6:30pm. On Saturday 25 March the event will run from 9:00am to 3:00pm and will include

hands-on presentations, a question and answer period, and discussion on numerous topics, such as: program background and scope, getting started, potential costs to sections and educators, suggestions on making contact with your local pre-university community, and the alignment of an activity with education standards. Breakfast and Lunch will be provided for attendees.

To register for this event go to: <http://www.ieee.org/web/education/preuniversity/tispboston.xml>

The event is FREE for all IEEE members. There will be a \$75 fee for all non-IEEE members. IEEE will reimburse members for any training-related travel costs incurred. Information on hotel (Hotel Marlowe) and travel accommodations will be made available shortly.

IEEE is pleased to announce that we are partnering with IEEE-USA and PowerUP! for this event. Power UP! is a National Science Foundation funded project associated with the Museum of Science Boston focused on the development of a systemic model for high school, community college, and industry collaboration that will support new technology/engineering programs and pathways for students. For more information visit: <http://www.mos.org/powerup/index.htm>.

Questions? Contact Doug Gorham at [d.g.gorham@ieee.org](mailto:d.g.gorham@ieee.org) or +1 732 562 5483.

## 6. Chapter News

### Computer Society Chapter

The Chapter will hold a meeting on **Tuesday March 14** at 5 to 6 PM. Christopher Crowell, CTO / VP of Aprisma, will give a presentation on Large Scale Software Development.

The chapter will also hold a meeting on **Tuesday April 11** at 5 to 8 PM. Neat Gadgets, Show, Tell and Touch!

The chapter holds its meetings in the Walker Auditorium of Robert Frost Hall at the SNHU. For more information contact Jim Isaak at [snhu2004alt@JimIsaak.com](mailto:snhu2004alt@JimIsaak.com).

### Microwave Theory and Techniques Society Chapter

We anticipate holding two meetings in the Spring. The meetings are usually held in the evening at the BAE Systems headquarters in Nashua. Look for future meeting announcements on the NH IEEE web site, e-mailings, and the IEEE Reflector.

If you have any suggestions for meeting topics or speakers; or if you would like to become more active in the Chapter please feel free to contact me, Tom Perkins, at [tomperkins@ieee.org](mailto:tomperkins@ieee.org) I would enjoy hearing from you.

### Power Electronics Society Chapter

If you have any suggestions for meeting topics or speakers; or if you would like to become more active in the Chapter please contact Chuck Button at [chuckbutton@ieee.org](mailto:chuckbutton@ieee.org)

### Power Engineering Society Chapter

If you have any suggestions for meeting topics or speakers; or if you would like to become more active in the Chapter please contact Paul Krell at [krell@unitil.com](mailto:krell@unitil.com)

## 7. Meeting with Russell T. Harrison

Russ is IEEE-USA's Legislative Representative for Grassroots Activities in Washington DC and has offered to meet with the members of our Section and discuss politics, IEEE-USA and the engineer's role in public policy debates. His presentation can be focused on specific public policy problems, such as offshoring, H1B visas, portable health care and pension benefits, etc.; or it can be focused more broadly on IEEE-USA's entire legislative program. Either way, the purpose of Russ' visit would be to explain what IEEE-USA is doing in Washington for us, and to discuss ways that we as individual IEEE members can get involved.

We are tentatively planning on holding a Section meeting on an evening in June but we do not want to bring Russ into town unless we are sure there is sufficient interest among YOU, our members. Please contact Duncan Morrill, the Chairman of our PACE Committee, at [d.morrill@ieee.org](mailto:d.morrill@ieee.org) and let him know if you think that this would be a useful meeting and what topics you would like Russ to address.

## 8. Local Member Becomes Published Author

We are very pleased to announce the release of the book "Basic Game Design & Creation for Fun & Learning" by Nanu Swamy and Naveena Swamy. Naveena is the Chair of the Section's Publicity Committee. The book is published by Thomson Delmar Learning, ISBN 1-58450-446-3, and it is available worldwide.

The Barnes and Noble store at 235 Daniel Webster Hwy in Nashua NH will host a meet the authors session on March 26, 2006. Call (603) 888-0533 for details.

## 9. IEEE Milestone Award Ceremony

YOU ARE INVITED TO ATTEND the IEEE Milestone Award ceremony honoring The Invention of the Telephone in Boston, center of pioneering innovations in communications on Friday, March 10th beginning at 8:30AM at the Verizon Building, 185 Franklin Street, Boston. After welcoming remarks, The IEEE Milestone plaque will be presented by Ralph Wyndrum Jr. President IEEE-USA to Peter T Bowman, VP External Affairs, Verizon.

The Milestone Committee and sponsors would like a big turnout at this historically important event. IEEE members, non-members, guests, families and friends are encouraged to attend and enjoy a bit of history. Attendance is FREE and refreshments will be served, but pre-registration is required by contacting IEEE Boston headquarters at 781-245-5405 or by emailing Linda Scott at [l.scott@ieee.org](mailto:l.scott@ieee.org)

For more information, please go to:

[http://www.ieeeboston.org/milestone\\_telephone/telephone\\_milestone.htm](http://www.ieeeboston.org/milestone_telephone/telephone_milestone.htm)

## 10. ExCom Meetings

For 2006 the ExCom will be meeting at 6:00 PM on the second Thursday of the month. The March meeting will continue to be held at the Yard Seafood & Steak House Restaurant in Manchester. In future months we hope to hold the ExCom meetings in other geographical areas of the state if suitable restaurants can be found. If you know of a nice restaurant that has a private meeting room or space, please contact Tom Perkins at [tomperkins@ieee.org](mailto:tomperkins@ieee.org) or [NHIEEE@aol.org](mailto:NHIEEE@aol.org). By moving the meetings around the

state we hope to get input from more of our members. Check next month's Newsletter or contact the above for the location of April's meeting.

Any member of the Section is welcome to attend the ExCom meetings and get involved in the operation of YOUR Section.

For a list of the ExCom members and their contact information please go to:

[http://ewh.ieee.org/r1/new\\_hampshire/Officers.html](http://ewh.ieee.org/r1/new_hampshire/Officers.html).

## **11. Housekeeping**

If you have any suggestions for improving this newsletter please contact the Editor, Jim Anderson, at [james-w-anderson@ieee.org](mailto:james-w-anderson@ieee.org).

If you wish to be removed from the mailing list or change your email address, please send an email to the NH Section Administrator, Donna Davis, at [NHIEEE@aol.com](mailto:NHIEEE@aol.com).