

# SCANNER

A JOINT PUBLICATION OF THE NORTHERN VIRGINIA AND WASHINGTON SECTIONS

January–February 2007

Volume 22, No. 1



**Getting the Word Out**—GlobeCom 2007 volunteers staffed a booth at November's GlobeCom 2006 conference in San Francisco to publicize next fall's conference in Washington. Standing (left to right): Ludong Wang, Tim Weil, Wally Lee and Jerry Gibbon. Seated: NC Weil, Monica Mallini and Betsy Gibbon.

## GlobeCom 2007 Volunteers Attend San Francisco Conference

By Tim Weil  
Washington Section Editor

Just after Thanksgiving, members of the planning team for the GlobeCom 2007 conference attended the GlobeCom 2006 conference in San Francisco to meet the Communications Society committees responsible for conference management and technical program planning.

Local volunteers also staffed a GlobeCom 2007 booth at the conference exhibition and talked with attendees interested in next year's event, which will be held in Washington on Nov. 26-30.

GlobeCom's "Innovate Educate Accelerate" theme characterizes the continuing pervasiveness of telecommunications in all aspects of global society, industry, and government. GlobeCom is one of the Communications Society's flagship conferences, with full programs of technical and professional activities spanning the entire range of hot topics in voice, data, image, quality of service, home networking, signal processing, wireless, optical, and multimedia communications.

**GLOBECOM 2007**  
continues on page 7

## Ethical Awareness Conference Hosted by GMU Student Branch

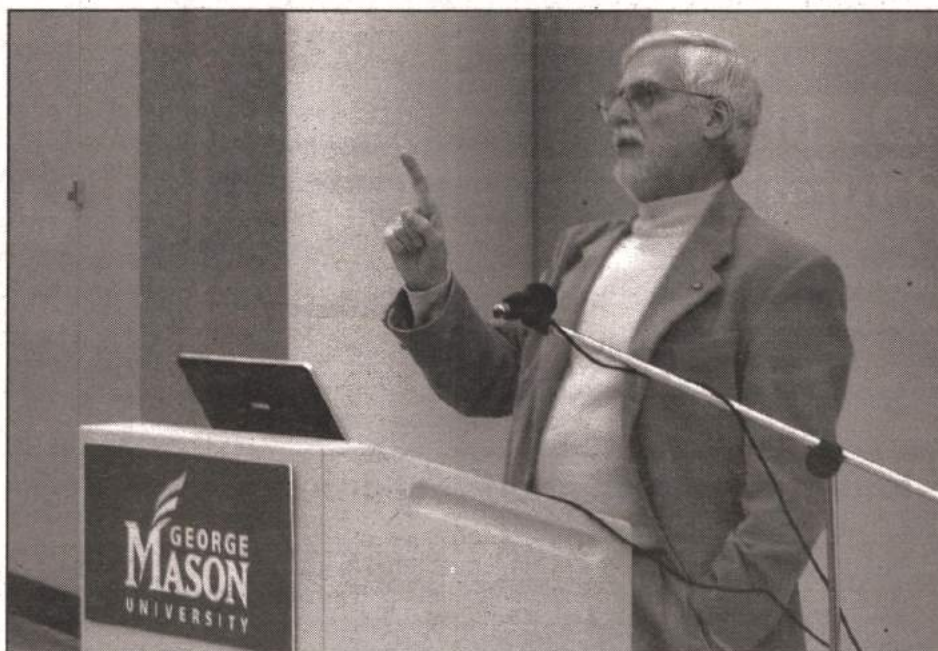
The IEEE Student Branch at George Mason University (GMU) recently hosted a Student Ethical Awareness Conference that featured a keynote address on stem cell research and an ethics competition.

Speaking just a few days before the November elections, Dr. Mark S. Frankel explored the controversy surrounding stem cell research, noting that it is unusual for a scientific topic to play such a prominent role in politics. He discussed various ethical arguments for and against stem cell research, and the impact of recent laws and regulations, especially at the state level.

Dr. Frankel is a Fellow of the American Association for the Advancement of Science, where he

is interim director of the Science and Human Rights Program and director of the Scientific Freedom, Responsibility and Law Program. He is also the editor of the association's Professional Ethics Report.

The conference included an ethics competition in which student teams analyzed three different case studies and presented results to a team of judges. The judges included Dr. William Sutton, Associate Chair of the Electrical and Computer Engineering Department at GMU; Marc Apter, Past IEEE Vice President for Regional Affairs; and Murty Polavarapu, IEEE Region 2 South Area Chair. The first place and second place teams received gift certificates for Best Buy.



**Exploring Ethical Issues**—Dr. Mark S. Frankel explained the arguments behind a current political battle in his lecture, "The Stem Cell Controversy: What's All The Fuss About?"

## DCCEAS Awards Banquet, Family Day Planned for Engineers Week 2007

During Engineers Week, Feb. 18-24, the activities of the District of Columbia Council of Engineering and Architectural Societies (DCCEAS) offer opportunities for us to encourage and mentor young people interested in entering engineering and science fields.

The first DCCEAS event is the Engineers and Architects Day Luncheon, Wednesday, Feb. 21, at the Pier 7 Restaurant off Main Avenue in the waterfront area of Washington. The DCCEAS Awards Banquet, Saturday, Feb. 24, will be held at the Crowne Plaza Hotel in Silver Spring, MD. The

keynote speakers, attendance prices and other details will be listed in the eScanner ([www.ieee.org/escanner](http://www.ieee.org/escanner)) soon after they become available.

The week includes other events, such as the Discover Engineering Family Day at the National Building Museum (see Calendar listing).

The Engineers Week website at [www.eweek.org](http://www.eweek.org) lists several interesting events, including some activities oriented toward recruiting young women into engineering.

**ENGINEERS WEEK**  
continues on page 6



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## Editorial Policies and Procedures

### Calendar Items and Announcements

Please submit calendar items in the format used in the Calendar of Events. You can send email to [ncac-scanner@ieee.org](mailto:ncac-scanner@ieee.org). If possible, include a synopsis of the event and a biographical sketch of the presenter including academic background, current position, notable achievements, and IEEE and other professional affiliations.

Other contributions, such as reports on chapter events and other member activities, reviews of books by or of interest to members, are most welcome. Please submit them to the managing editor, electronically if possible, at [ncac-scanner@ieee.org](mailto:ncac-scanner@ieee.org).

### On the Web

#### eSCANNER Calendar of Events

The calendar is available at [www.ieee.org/escanner](http://www.ieee.org/escanner). Check here for events submitted too late for print publication.

#### IEEE National Capital Area Virtual Community

Exchange ideas and participate in discussions with local IEEE members at [www.ieee-communities.org/ncac](http://www.ieee-communities.org/ncac).

### Advertising

Contact the advertising manager about ad rates and to place advertising orders. Ads must be submitted by the deadline below.

### Deadlines

The editor reserves the right to set policies and procedures necessary to provide members with a newsletter that is informative and timely. Deadlines must be strictly adhered to to keep the publication on schedule. If you are planning an event and have insufficient information by the deadline, please contact the managing editor.

The deadline for the upcoming issue will always be published on this page.

**The deadline for the March-April issue is February 1, 2007**

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# CALENDAR OF *events*

## Tuesday, January 9, 2007 Washington Section Administrative Committee Meeting

**Time:** Dinner at 6:00 pm; meeting at 6:30 pm  
**Place:** Bethesda Marriott, 6711 Democracy Blvd., Bethesda, MD  
**Directions:** From Silver Spring, take I-495 West to Exit 36 North (Rt. 187, Old Georgetown Rd.), turn right onto Old Georgetown Rd., then left onto Democracy Blvd. and look for the Marriott on the right. From Rockville, take I-270, follow the signs for Northern Virginia at the divide, then take Exit 1 (Democracy Blvd.), turn left onto Democracy Blvd. and look for the Marriott on the left (make a U-turn at Fernwood Rd.). From Northern Virginia, take I-495 to I-270, then take Exit 1 (Democracy Blvd. East), and proceed as above.  
**More Info:** All interested IEEE members are welcome.  
**Contact:** Debra Meale at 703-492-0047 or nca-admin@ieee.org. Please include the term IEEE in the subject line of your email.

## Wednesday, January 10, 2007 Northern Virginia Section Administrative Committee Meeting

**Time:** 6:30 pm  
**Place:** Tuscan Grill, Tysons Corner Holiday Inn, 1960 Chain Bridge Road, McLean, VA  
**Directions:** From I-495 or I-66, take Route 267 West. Exit at Route 123 West (Chain Bridge Road). Turn right on International Drive, then left on Greensboro Drive. Look for the Holiday Inn entrance on the left. Free parking.  
**More Info:** All interested IEEE members are invited to attend.  
**Contact:** Debra Meale at 703-492-0047 or nca-admin@ieee.org. Please include the term IEEE in the subject line of your email.

## Tuesday, January 30, 2007 ◆ Ad Hoc Networks

**Sponsor:** Communication Society, Northern Virginia Chapter  
**Speaker:** Mr Gandhi, Booz, Allen, Hamilton  
**Time:** Dinner at 6:00 pm; speaker at 6:45 pm  
**Place:** Mitre Corporation, Building 2, 7515 Colshire Drive, McLean, VA  
**Directions:** See [www.mitre.org/about/locations/mitre1\\_map.html](http://www.mitre.org/about/locations/mitre1_map.html).  
**More Info:** See Diamond story, p. 4.  
**Cost:** Free for IEEE members.  
**Contact:** Please RSVP to Fred Seelig at [fred.seelig@ieee.org](mailto:fred.seelig@ieee.org).

## Tuesday, February 6, 2007 Washington Section Administrative Committee Meeting

**Time:** Dinner at 6:00 pm; meeting at 6:30 pm  
**Place:** Bethesda Marriott, 6711 Democracy Blvd., Bethesda, MD  
**Directions:** From Silver Spring, take I-495 West to Exit 36 North (Rt. 187, Old Georgetown Rd.), turn right onto Old Georgetown Rd., then left onto Democracy Blvd. and look for the Marriott on the right. From Rockville, take I-270, follow the signs for Northern Virginia at the divide, then take Exit 1 (Democracy Blvd.), turn left onto Democracy Blvd. and look for the Marriott on the left (make a U-turn at Fernwood Rd.). From Northern Virginia, take I-495 to I-270, then take Exit 1 (Democracy Blvd. East), and proceed as above.  
**More Info:** All interested IEEE members are welcome.  
**Contact:** Debra Meale at 703-492-0047 or nca-admin@ieee.org. Please include the term IEEE in the subject line of your email.

## Tuesday, February 13, 2007 Millimeter Wave Imaging

**Sponsor:** Microwave Theory and Techniques Society  
**Speaker:** David Wikner, U.S. Army Research Laboratory, Adelphi, MD  
**Time:** Social period 5:30 pm, dinner 6:00 pm, lecture 7:00 pm  
**Place:** Mitre Corporation, Building 2, 7515 Colshire Drive, McLean, VA  
**Directions:** See [www.mitre.org/about/locations/mitre2\\_map.html](http://www.mitre.org/about/locations/mitre2_map.html).  
**Cost:** \$15 for dinner.  
**More Info:** See [www.ieee.org/mtt-wnva](http://www.ieee.org/mtt-wnva).  
**Contact:** Please RSVP for dinner by COB Thursday, Feb. 8 to Roger Kaul at [r.kaul@ieee.org](mailto:r.kaul@ieee.org) or 301-394-4775.

## Wednesday, February 14, 2007 Northern Virginia Section Administrative Committee Meeting

**Time:** 6:30 pm  
**Place:** Tuscan Grill, Tysons Corner Holiday Inn, 1960 Chain Bridge Road, McLean, VA  
**Directions:** From I-495 or I-66, take Route 267 West. Exit at Route 123 West (Chain Bridge Road). Turn right on International Drive, then left on Greensboro Drive. Look for the Holiday Inn entrance on the left. Free parking.  
**More Info:** All interested IEEE members are invited to attend.  
**Contact:** Debra Meale at 703-492-0047 or nca-admin@ieee.org. Please include the term IEEE in the subject line of your email.

## Saturday, February 17, 2006 Discover Engineering Family Day

**Sponsor:** IEEE-USA  
**Time:** TBA  
**Place:** National Building Museum, 401 F Street NW, Washington, DC  
**Directions:** Use the Judiciary Square Metro station (Red line).  
**More Info:** This one-day festival features dozens of hands-on activities provided by local engineering chapters and national organizations. There will be activities and characters from the popular TV show Cyberchase, and a sneak peak at the new PBS series Design Squad. See [www.eweekdcfamilyday.org](http://www.eweekdcfamilyday.org) for more details.  
**Cost:** Free

## Wednesday, February 21, 2006 Engineers Week Proclamation Day Luncheon

**Sponsor:** District of Columbia Council of Engineering and Architectural Societies  
**Speaker:** TBA  
**Time:** TBA  
**Place:** Pier 7 Restaurant, 650 Water Street SW, Washington, DC  
**More Info:** See [www.ieee.org/escanner](http://www.ieee.org/escanner).

## Saturday, February 24, 2006 DCCEAS Awards Banquet

**Sponsor:** District of Columbia Council of Engineering and Architectural Societies  
**Speaker:** TBA  
**Time:** TBA  
**Place:** Crowne Plaza Hotel, Silver Spring, MD  
**More Info:** See [www.ieee.org/escanner](http://www.ieee.org/escanner).

## Tuesday, February 27, 2007 Economic Valuation of Spectrum

**Sponsor:** Communication Society, Northern Virginia Chapter  
**Time:** Dinner at 6:00 pm; speaker at 6:45 pm  
**Place:** Mitre Corporation, Building 2, 7515 Colshire Drive, McLean, VA  
**Directions:** See [www.mitre.org/about/locations/mitre1\\_map.html](http://www.mitre.org/about/locations/mitre1_map.html).  
**More Info:** Last September's spectrum auctions in the 1710-1755 and 2110-2155 MHz bands raised \$90B. How should spectrum be valued, from an economic supply-demand theory? Are lower bands worth more? Upper bands? An invited speaker will discuss economic theories of spectrum valuation.  
**Cost:** Free for IEEE members.  
**Contact:** Please RSVP to Fred Seelig at [fred.seelig@ieee.org](mailto:fred.seelig@ieee.org).



## Common Vision is Key to Managing a Successful Chapter

By Paul Otto

On October 16, the Washington and Northern Virginia chapter of the Engineering in Medicine and Biology Society invited Doug Holly to give a presentation on the role of the various officer positions in a chapter.

Holly covered the basic ingredients of a successful chapter, citing several local chapters as examples. He showed that these successful chapters combine a common vision with active leadership that puts effort into planning and delivering events. The common vision allows the chapter to focus on what its audience is interested and willing to participate in. He highlighted the importance of the chapter chair being not just a leader, but a cheerleader for the chapter by recognizing active members for their achievements and drumming up excitement about the chapter's events.

After discussing the roles of the various officer positions in a chapter and focusing on IEEE's formal expectations for the officers as well as the informal expectations, he described the National Capital Area's resources available to help chapters operate. One of these resources that would be of interest to every active member is officer training, which is usually offered in February or March (date will be announced at [www.ieee.org/escanner](http://www.ieee.org/escanner)). Although it is primarily used in training new chapter officers, this training is open to anyone interested and is a great way to learn new tools and techniques for succeeding in the business world.

Finally, Holly shared his personal insight in the critical chapter issue of having a successful presentation. From personal accounts, he illustrated how using common organization methods can lead to successful presentations, whether the speaker is a senior government official or a company CEO. The methods for success require knowing your audience's interest, reviewing the presentation beforehand, holding the presentations at the same place and time, and effective advertising.

While focusing on the roles of a IEEE chapter officer, Mr. Holly provided a wealth of information about techniques and resources to improve anyone's skills in the workplace.

## Dr. Anthony Ephremides, Wireless Network Researcher, Speaks to NoVa Communications Society Chapter

By Dennis Moen, Chair  
Communications Society  
Northern Virginia Chapter

Dr. Anthony Ephremides, the Cynthia Kim Eminent Professorship Chair of Information Technology at the University of Maryland, was the guest speaker at the September meeting of the Northern Virginia chapter of the Communications Society.

His presentation provided concepts for extending conventional theories on wireline networks to those on wireless networks based on his many years of pioneering research work in wireless networks. He is recognized as one of the first to propose and study ad hoc multihop wireless networks. In his presentation, he used the example of deploying many sensors on a battlefield by using field artillery. He explained the complexities of these randomly deployed sensors need to be able to self-organize into an efficient network to allow aggregation of reporting information to a central facility.

In his example, he explained the interaction between physical layers and upper layers and the need for efficiency in conserving sensor battery life. Dr. Ephremides summarized and compared different analytical models and supporting simulation data to demonstrate the role of higher layer protocols in conserving energy and the need to exploit the coupling between layers in the design of wireless networks.

Dr. Ephremides is a founding member of the Institute for Systems Research at the University of Maryland, and a member and former co-director of Maryland Hybrid Networks Center (HyNET). He received



**ComSoc Welcome**—Dr. Ray Pickholtz (left), Professor Emeritus, George Washington University; and Dr. Dennis Moen (right), chapter chair, greet guest speaker Dr. Anthony Ephremides.

his Ph.D. from Princeton University in 1971. Dr. Ephremides was president of the IEEE Information Theory Society in 1987 and served on the IEEE Board of Directors in 1989 and 1990. He has served on the editorial board of numerous journals. His visiting professor

positions include those at Massachusetts Institute of Technology, University of California Berkeley and ETH Zurich. Dr. Ephremides has received numerous awards, including the first ACM Achievement Award for Contributions to Wireless Networking in 1996.

## ◆◆◆ DIAMOND STORY ◆◆◆

Tuesday, January 30, 2007

### Ad Hoc Networks

Mr. Gandhi, currently of Booz Allen Hamilton, has six years of experience providing consulting services in the areas of networking and wireless. He is a functional expert in

mobile ad hoc networks (MANET) technologies across Department of Defense (DoD) and commercial standards. Through activities with major defense acquisition programs, he has gained insight into major defense communications technology initiatives, including R&D projects, and commercial and DoD networking standards development.

Gandhi has provided systems engineering support to the acquisition of key defense communications systems at various stages, from requirements development to system design to engineering change proposals and test and evaluation. Through his knowledge of wireless networking and defense acquisition cycles, he has established himself as a technology insertion and evolution strategies specialist. These strategies include identification, evaluation and assessment of emerging commercial and DoD wireless networking technologies and standards.

He earned his B.S. in electrical engineering from the University of Maryland College Park.

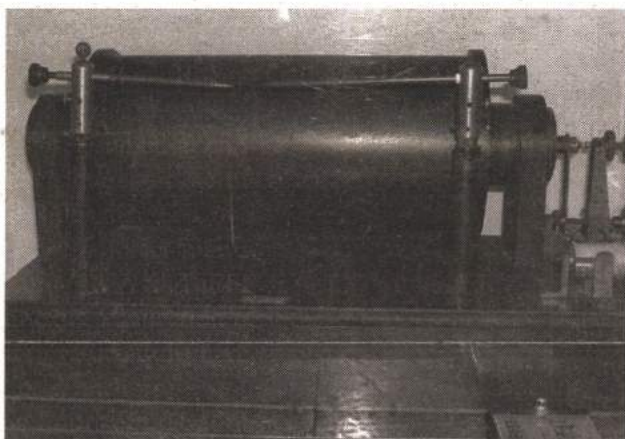


**Warmer Days**—Way back in August, Peter Soltesz (left) and Jim Allen (right foreground), both past chairs of the National Capital Area Consultants' Network, caught up on old times with other members and their families at the group's picnic. The event included a barbeque, music and birthday cake in honor of the members with summertime birthdays.





The upper sash of this window is stained glass depicting Nipper listening to his master's voice. The lower sash is clear glass covered by a RCA curtain.

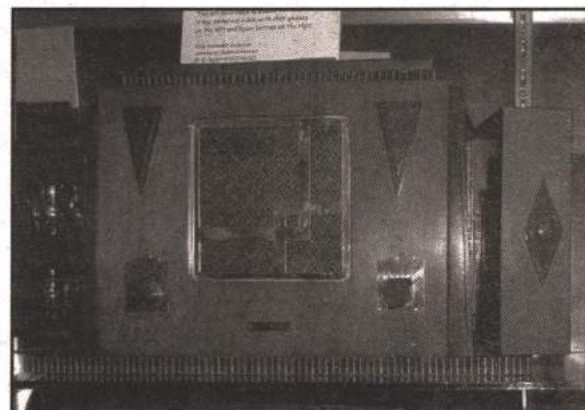


The oldest artifact owned by the museum, a Marconi spark transmitter from circa 1900. The largest component is a Ruhmkorff coil, which acted as a step-up transformer, generating about 25,000 volts.

## Vintage Radio, TV Equipment Displayed at Museum in Bowie



Freed-Eisemann Model NR-5 broadcast receiver (5-tube) flanked by a 1924 RCA horn speaker on the left and a 1924 Magnavox Model R3 horn speaker on the right.



A Pla Pal "penthouse" receiver from the 1930s having a compartment on the right side holding bottles marked Rye, Bourbon and Gin.

By Pete Sypher  
Scanner Editor

A very pleasant weekend afternoon can be had at The Radio & Television Museum at 2608 Mitchellville Road in southern Bowie, Maryland. In what looks like an old farmhouse are packed dozens of vintage television receivers and perhaps a hundred broadcast radio receivers, dating back to the dawn of the television and radio eras.

On the day I visited this museum, there were two docents, Pete Eldridge and Tony Young, who are also on the museum's board of directors and who really know the collection.

Old radio shows are continuously played, as are television shows of the fifties and sixties. There are exhibits of spark transmitters and coherer-type receivers, some being operable. The museum should appeal to visitors of all ages.

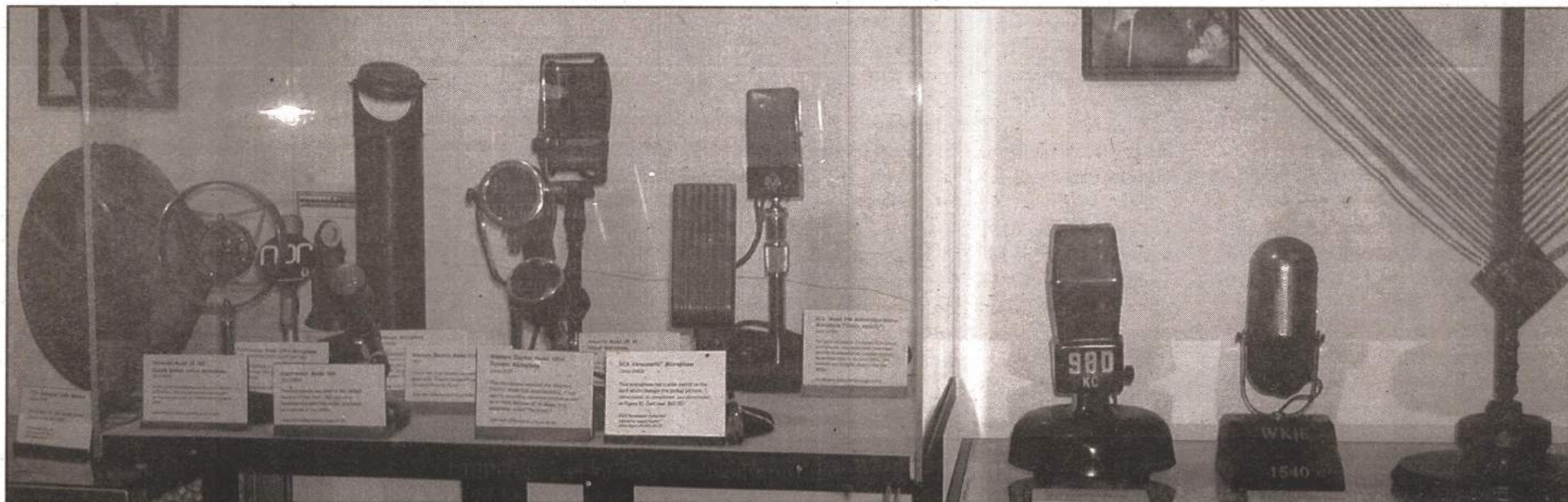
The Radio & Television Museum is one of several museums operated by the City of Bowie Recreation Department. Bowie is near the eastern edge of Prince George's County, not far from the intersection of Routes 50 and 301. For GPS

users, the coordinates of the museum are 38° 55' 34" N, 76° 43' 59" W.

Started by radio collectors in 1999, the museum has a comfortable, well-kept ambience that draws you from room to room. There is an information card describing almost every item, and there are wall displays of items related to radio shows of the past, such as badges and gadgets that kids could get from the Tom Mix, Lone Ranger, Jack Armstrong, Sky King, Buck Rogers and Dick Tracy shows.

Near the museum house is an annex that contains a library of radio and television repair manuals. There is a complete set of Rider manuals, and a nearly complete set of SAMS Photofact manuals. The collection includes some RCA and IEEE literature, too. Also in the annex is a collection of 1940s, 1950s, and 1960s amateur radio equipment, referred to affectionately as "boat anchors."

Admission is free, and the hours of operation are Friday 10:00 a.m. to 5:00 p.m., Saturdays and Sundays 1:00 p.m. to 5:00 p.m. The phone number is 301-390-1020 and the website URL is [www.radiohistory.org](http://www.radiohistory.org).



The museum's collection of 1920s and 1930s microphones.



## Judges Needed for Future City Competition Finals in February

Seventh- and eighth-grade students are front and center in the National Engineers Week Future City Competition, celebrating its 15th anniversary and now operating in 39 regional sites with 30,000 middle school students in more than 1,100 schools.

Through hands-on applications and teamwork, students create computer and large tabletop scale models of cities of tomorrow under the guidance of teachers and volunteer engineer mentors, and present their designs before engineer judges at regional competitions in January.

Along the way, students get a peek into potential careers in engineering, math and science. Future City students also research and write an essay on how engineering can solve a pressing social need. This year, students will detail how an energy strategy using fuel cell systems might power a city of the future.

First place regional teams win a trip to Washington, D.C. for the National Finals, February 19-21, 2007 at the Hyatt Regency-Capitol Hill. The top team will win a trip to U.S. Space Camp.

The competition organizers are seeking engineers and other professionals who could serve as model and presentation judges on Tuesday morning, February 20. The judges will be responsible for judging the model and team verbal presentation.

There are specific score sheets related to these sections of the competition in the Judge's Manual, which will be sent to volunteers upon confirmation of their participation. Judges work in teams, although each judge will need to complete a scoring sheet.

Additionally, essay judges are needed prior to the national competition. Each team essay is 500-700 words on the topic, "Develop an energy strategy to include fuel cell systems to power a city of the future." The essay-judging task does not require you to be on-site for the national competition. As an essay judge, you will be able to judge 10 Future City Competition regional winners essays at your convenience during the time period from February 8 to 14. It should take about three hours.

If you would like to serve as a National Finals model judge or as an essay judge, please go to [www.futurecity.org/judge](http://www.futurecity.org/judge), no later than January 10. (You must type in the URL; it is not accessible from website menu.) If you have any questions, please contact the national director, Carol Rieg, at 1-877-636-9578 or [crieg@futurecity.org](mailto:crieg@futurecity.org).

The Future City Competition was recently named "Partner of the Year" by Connect America, a program of the Points of Light Foundation, at the National Conference of Volunteering and Service in Seattle.

More information on the Future City Competition is available at [www.futurecity.org](http://www.futurecity.org).

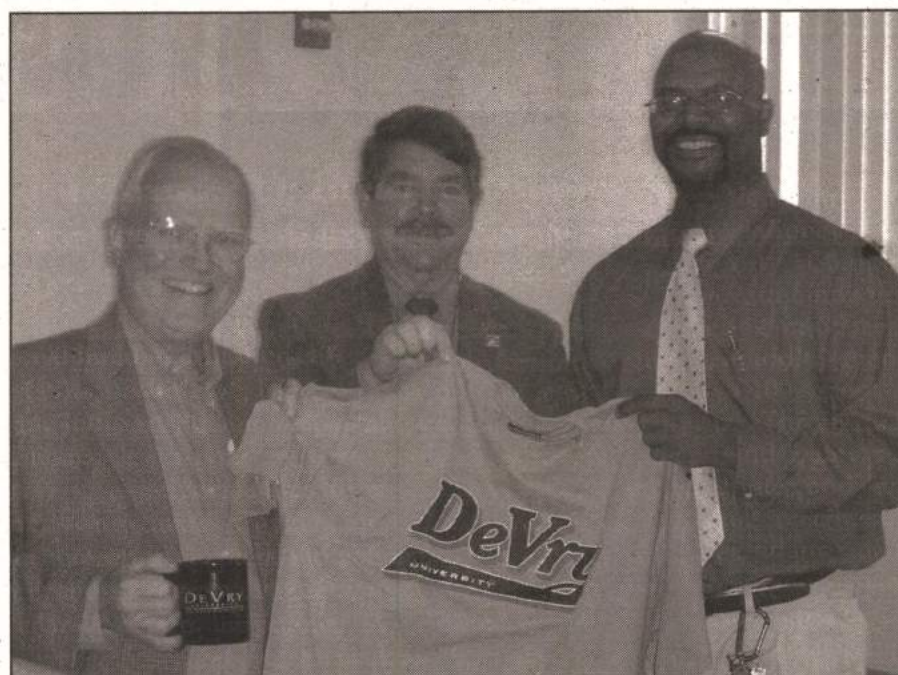
### ENGINEERS WEEK

*continued from page 1*

The seventh annual Introduce a Girl to Engineering Day is Thursday, February 22. "Girl Day" mobilizes thousands of women engineers—with support from their male colleagues—to mentor and share their firsthand experiences of engineering with more than one million girls and young women each year.

The Future City Competition National Finals for junior high school students will be held in Washington on February 19-21. Engineers and other professionals are needed to serve as judges (see story above).

Engineers Week-sponsored websites for young people include the Sightseers Guide to Engineering at [www.engineeringsights.org](http://www.engineeringsights.org), recently updated with new information on engineering marvels in all 50 states, and [www.discoverengineering.org](http://www.discoverengineering.org), an engineering resource for middle school students with links to hundreds



**Thank You—**DeVry University Professor Daniel Cross-Cole (center) and IEEE Student Branch President Aubrey Humphrey (right) present a T-shirt and mug to Tom Wellington, a guest speaker at the first annual DeVry University-IEEE Student Professional Awareness Conference (SPAC) in September. Wellington gave a presentation on *Preparation for Career Changes*. More than 40 students, faculty and visitors attended the event, which was sponsored by the IEEE Student Branch at DeVry University, Arlington and the IEEE Northern Virginia Section. (See Scanner, Nov.-Dec. 2006, p. 5)

## Washington Section Gets New Editor

Wally Lee is the Scanner's new Washington Section Editor, replacing Tim Weil, who was elected Secretary of the Washington Section for 2007.

As a native of Memphis and a University of Tennessee engineering physics graduate, his blood runs orange ("how 'bout them Vols!"). Wally also holds an M.S. degree in physics from the Florida Institute of Technology. He is a system engineer with considerable depth and breadth of experience. He can say "hello world" in several computer languages. His company, The Solution Space, specializes in engineering communications.

Lee is a Senior Member of IEEE and an active member of the National Capital Area Consultants' Network, the Communications Society, and the Professional Communication Society. In his spare time, when he is not attending Vols football games, he has two granddaughters to spoil.



*Wally Lee*

"If all this were not fun, I would not bother with it," Lee said.

He recently relocated from Rockville, Maryland, where he lived for more than 30 years, to the Mount Vernon area of Fairfax County, Virginia.

of educational, professional, and corporate sites.

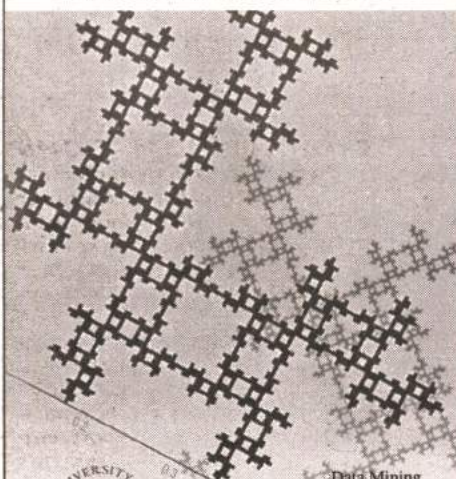
Design Squad, a new reality TV series that debuts nationwide on PBS stations during Engineers Week 2007, will introduce nine- to 13-year-olds and their families to the engineering design process. Each week on the show, two teams of high school students will use their problem-solving skills to design, construct, and test an intriguing, fully operational and, typically, off-beat engineering project.

Engineers Week is a formal coalition of more than 75 engineering, professional, and technical societies

and more than 50 corporations and government agencies. Founded in 1951 by the National Society of Professional Engineers, the program is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers among young students and by promoting pre-college literacy in math and science. Among the oldest of America's professional outreach efforts, Engineers Week also raises public understanding and appreciation of engineer contributions to society.

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## 2007 Washington Chair's Message

## Washington Section to Focus on Professional Activities, Recruiting, Diversity

By Dr. Kiki Ikossi

It is my honor to serve as the Chair of the IEEE Washington Section for 2007. Our section is the most historic one in the nation, and my membership in IEEE is the most enduring affiliation of my professional life. I joined as a young student simply because I needed a journal for one of my classes and the student price seemed right. However, as the IEEE journals kept coming, they opened my eyes to the new discoveries and wonders of research. Later, as a professional engineer in active research, it was IEEE conferences and technical publications that kept me coming back. Now, my involvement in IEEE is underpinned by my desire to try to make a difference in our profession.

I am pleased to have the enthusiastic support of our Past Chair Haik Biglari, Vice Chair Gerald Christman, Treasurer Richard Benjamin and Secretary Timothy Weil and the leadership and wisdom of our Directors James Christian, Doug Holly, Howard Needham, Harry Sauberman, Debi Siering, Zareh Sghomonian, Mary Tobin and Steve Weiss. Together we will work towards making year 2007 even more successful and exciting.

The Washington and the Northern Virginia sections of IEEE have a long track record of successful collaboration. There are 26 joint, active societ-

ies with monthly meetings that are free and open to the general public. These societies provide a unique opportunity to find out about the latest developments in all areas of electrical engineering and serve as a forum for our members' continuing education.

Our 2007 goals will focus on the areas of professional activities, recruiting and diversity.

Professionally, our section will continue to support the creation of new chapters and to offer new networking opportunities for our members. We plan to enhance the coordination of our activities with local scientific societies and organizations and with national and international conference events in the area. We will work with the Washington Academy of Sciences in planning and organizing the Capital Science 2008 Conference.

The IEEE Washington Section will facilitate the recruitment of the future generation of scientists and engineers through individual mentoring and support of students' early involvement in science. Together with the IEEE-USA PACE program, we will continue supporting science in local high schools. We will collaborate with the Washington Academy of Science's Science and Technology Aptitude Recognition (STAR) program to expand this effort from secondary to middle

schools. We encourage our members to participate as science fair mentors and judges.

The IEEE Washington section will pay particular emphasis in helping the IEEE college students' branches and the Graduates of the Last Decade (GOLD), Life Members, and Women in Engineering (WIE) affinity groups. By engaging more groups, we hope to promote diversity within our profession.

We will continue our efforts to recruit the next generation of scientists and engineers and to support them in developing lifelong careers in electrical and electronics engineering. Our section will work with IEEE-USA to help the young engineers remain professionally active and engaged throughout their lives.

Finally, it is important to provide support to our members in adapting to the rapid changes in both technology and our professional landscape. We plan to work closely with IEEE-USA and the American Association for the Advancement of Science to help ease the transition to the economic realities of the 21st century, while maintaining the professional standards gained through years of hard labor and ensuring that continuing innovation and the free spirit of creativity remain vital components of our profession.

The IEEE Washington Section is

fortunate to serve an area where science and engineering flourish. I urge you to take the time to attend one of our meetings. Listen to top caliber presentations and become active with the technical society of your choice. Remain actively engaged, network with others and stay on top of new developments in your area. I am always open to suggestions and look forward to meeting you at one of our meetings. I can be reached at [ikossi@ieee.org](mailto:ikossi@ieee.org).

### GlobeCom 2007 Seeks Applicants for Sales Rep Position

- The IEEE GlobeCom 2007 committee (GC07) is organizing activities and participation for next year's 50th anniversary Communications Society event here in Washington DC (11/26-30).
- To develop the corporate sponsorship for this milestone program, the GC07 committee is soliciting a Sales Representative to work on a commission basis to develop our program for business participation and patronage.
- Interested parties can apply for this position by contacting Tim Weil at 703-377-0948 or [trweil@ieee.org](mailto:trweil@ieee.org).

### GLOBECOM 2007

continued from page 1

In addition, GlobeCom 2007 will feature keynote presentations by industry leaders, tutorials, workshops and targeted programs.

Registration opened on Nov. 1. Other important dates include the deadline for papers on March 15; forum abstract and proposal acceptance notification on July 1; the paper submission deadline for workshops on July 15; and the deadline for final publishable technical papers on Sept. 1.

Currently, there are 10 subcommittees working in diverse areas, including the technical program, publications, marketing, patronage, and a telecommunications business forum. The leadership team involves Communications Society members and IEEE volunteers from prominent area firms and local universities. Coordinating efforts also involve staff from the Communications Society's headquarters in New York. Organizing efforts for GlobeCom 2007

will continue on a monthly basis throughout the next year.

For more information on upcoming planning meetings and volunteer opportunities, contact Jerry Gibbon ([j.t.Gibbon@ieee.org](mailto:j.t.Gibbon@ieee.org)), Dennis Moen ([dennis.moen@ieee.org](mailto:dennis.moen@ieee.org)), Doug Holly ([dougholly@ieee.org](mailto:dougholly@ieee.org)), or Tim Weil ([trweil@ieee.org](mailto:trweil@ieee.org)).

See [www.ieee-globecom.org/2007](http://www.ieee-globecom.org/2007) for more details about the conference.

The technical sessions of  
GlobeCom 2007 include the following:

- General Symposium
- Ad-hoc and Sensor Networking Symposium
- Communications Software and Services Symposium
- Communication Theory Symposium
- Internet Protocol Symposium
- Optical Networks and Systems Symposium
- Performance Modeling, QoS and Reliability Symposium
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- Wireless Networking Symposium

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## Robotics Competition Kicks Off in January at Capitol College

In early January, teams of high school students will meet at Capitol College in Laurel, Maryland to receive parts kits for the 2007 FIRST Robotics Competition and hear announcements about this year's contest. The students will learn the rules for this year's robotic game at the same time as hundreds of other teams gathered at regional sites across the country.

After receiving the kits, the teams will then have six weeks to design, build and practice maneuvering their robots before finally pitting the robots against each other in regional contests. The Chesapeake regional competition will be March 16-18 in the Halsey Field House at the U.S. Naval Academy in Annapolis. The national championship will be in April at the Georgia Dome in Atlanta.

The January 6 kickoff event at Capitol College includes a live telecast from competition headquarters in Manchester, N.H. The broadcast includes a welcome and introduction to the game by Dean Kamen, founder of the competition and inventor of the Segway Human Transporter.

FIRST (For Inspiration and Recognition of Science and Technology) is a worldwide competition that chal-

lenges teams of professionals and students to solve an engineering problem in six weeks using a kit of parts to build a robot. Last year, the student teams designed and built robots that played a modified form of basketball. (See *Scanner*, May-June 2006, p. 5).

The Chesapeake Region consists of more than 50 teams from Maryland, 11 other states and the District of Columbia. About 1,500 students participate in the region, which is supported by NASA Goddard Space Flight Center.

Many IEEE members are among the professional engineers and technicians who work side-by-side with the teams, offering the students a glimpse of what engineering is all about and providing them the opportunity to gain knowledge of and experience in teamwork, time management, task sequencing and computers.

Non-technical mentors help teams with communications, marketing, fundraising, public relations, developing leadership, financial management, administration and transportation.

If you are interested in helping a team or assisting at a FIRST event, contact the Chesapeake Regional Director, Mildred Porter, at [mporter@usfirst.org](mailto:mporter@usfirst.org)



The Radio & Television Museum occupies a 1906 house in Bowie, Maryland. Additional displays and a library are housed in an annex building on the property. (See story, p. 5)

(for Maryland or DC), or the Virginia Regional Director, Pattie Cook, at [robotsfirst@aol.com](mailto:robotsfirst@aol.com).

More information may be found at [www.chesapeakefirst.org](http://www.chesapeakefirst.org) or [www.usfirst.org](http://www.usfirst.org).

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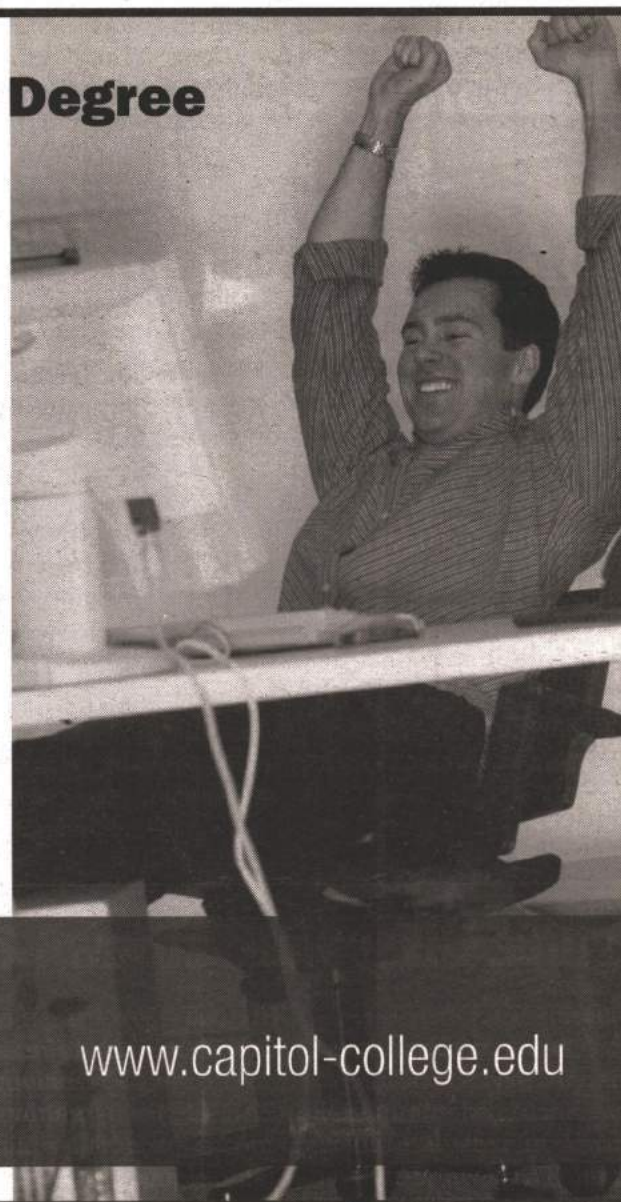
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