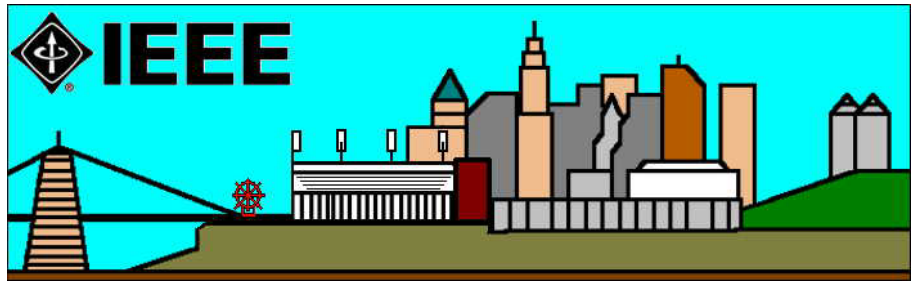


**IEEE CINCINNATI
SECTION
NEWSLETTER
MAY 2004**



MAY MEETING SENIOR PROJECTS

- DATE:** Thursday, May 27, 2004
- PLACE :** Raffel's – 10160 Reading Road (see below for directions)
- TIME :** 5:30 p.m. to 7:00 p.m. - Social Time/Dinner
7:00 p.m. to 8:30 p.m. - Program
- COST FOR DINNER:** \$10.00 for Student Members
\$15.00 for Members
\$20.00 for Non-Members

MENU SELECTIONS: Stuffed Pasta Shells, BBQ'd Ribs, Marinated Char Grilled Chicken Breast, Au Gratin Potatoes, Seasoned Green Beans, Cole Slaw, Tossed Salad, Dinner Rolls & Butter, Assorted Cheese & Fruit Filled Tarts, Coffee, Tea Iced Tea, Soft Drinks. There is also a bar available for the purchase of alcoholic drinks. Raffel's is located at 10160 Reading Road, south of Glendale-Milford Road on the east side of Reading. Take I-75 to the Glendale-Milford Rd. Exit, go east on Glendale-Milford Road approximately 3/4 of a mile to Reading Rd. and turn right on Reading.

Please call the Cincinnati Section Voice Mailbox at **513-629-9380**, by **Noon, Tuesday, May 25, 2004** if you plan to attend. Please leave your Name, IEEE Member Number, and a daytime telephone number. You can also make a reservation by e-mailing our Arrangements Chair, Charlie Nash, at cnash@ieee.org.

ABOUT THE PRESENTATION: This month's meeting will feature presentations by senior students from the Electrical and Computer Engineering Technology Program at the University of Cincinnati College of Applied Science and the Computer and Electronics Engineering Technology Program at Northern Kentucky University that highlight the results of their senior projects. Two students from each university will present their findings in a brief slideshow, demonstrate their projects, and answer questions from the audience.

The CEET-NKU presenters and their topics are:

Greg Reis - "Design of a System Monitoring Control Panel".
Tom Rininger - "Solar-charged Remote Control Vehicle".

The UC-CAS presenters and their topics are:

Pam Maher – "Automatic Material Handling System"
Fred Stevens – "MDI Music Selection"

CHAIR'S MESSAGE

by Fred Nadeau, Section Chair

I would like to thank all our members for supporting our Section's technical meetings and tours this year. I think we did very well with our selection of topics and our members turned out in record number for most of the meetings. I would like to thank all the people at Trentec for an outstanding briefing and tour last month. I'm sure the weather played a large part in the attendance. Our upcoming May meeting will be the University of Cincinnati and University of Northern Kentucky student presentations of the best senior design projects. When we did this last year, we had a very nice turnout and I hope this year we can double our attendance at this meeting. These students work very hard in designing, fabricating their project demonstrations which serve to enhance their skills and knowledge in their selected engineering fields. We need to show our support for these up and coming IEEE members. Each participating student will receive a special award from our Section for their efforts, to be announced at the meeting.

We will take a summer break after this meeting and resume our technical meetings again in September. I would like to wish all our members a safe and relaxing summer and hope to see all of you at our first fall meeting.

Thanks for all your help this year

Fred Nadeau, Section Chair
E-mail: f.nadeau@ieee.org
Phone No. 937-289-2800

NEW MEMBERS

The following individuals are IEEE members who are new to our Section:

| | |
|---------------------------|--------------------|
| Dave T. Cavalcanti | Errol D. Shim |
| Christopher M. Church | Robert H. Sterrett |
| Vinesh Dhanaraj | Gabriel M. Vydra |
| Jeff Herbert | Andrae Wills |
| David Pinneo | Victor Zamora |
| Siva Prasad Reddy Samsani | |

We wish to welcome these new members to our Section!!!

LOOKING FOR AN ELECTRICAL PE

PROCESS PLUS, a process and facilities engineering and design firm, is seeking an Electrical PE currently registered in the state of OH and willing to register in other states, including, but not limited to KY, IN, MO, IL. Knowledge of industrial electrical installations and the pharmaceutical industry and/or clean room design and installation preferred. The qualified candidate will be able to do the following: manage multiple clients and projects simultaneously; work with utility companies regarding electrical issues; work all electrical issues from the utility company down through the client facility; act as a construction support resource; conduct load studies and fault current and short circuit analysis; use SKM PowerTools or ETAP software, create reports, and interpret curves; have a working knowledge of ACAD 2000 and Rebis 3D; perform facilities electrical, lighting, receptacles, telephone, CCTV, PA, fire alarm, security, grounding, etc., run conduit or cable tray for both hazardous and non-hazardous locations. Some travel required both locally and regionally. Competitive benefit and compensation plans including profit sharing, 401(k), and employee stock ownership. Please send resume to Process Plus, 1340 Kemper Meadow Drive, Cincinnati, OH 45240 Attn: Mikki LeFevre. A1102 EOE.
www.processplus.com

FIRST Lego League

“NO LIMITS” WITH LEGOS

About FIRST Lego League: Sports for the Mind

FIRST (For Inspiration and Recognition of Science and Technology) Robotics is an organization that designs innovative programs to spark interest among young people in science, technology and engineering. FIRST programs connect professionals with young people to build robots, solve problems and have fun.

FIRST Lego League, FLL, is considered the "little league" of FIRST Robotics and is the result of a partnership between FIRST and the LEGO Company. FLL extends the FIRST concept of inspiring interest in science and technology to children ages 9 through 14. These young students form teams and, using LEGO® MINDSTORMS™ Robotics Invention System™ technology, build robots to compete in friendly, robotics events specially designed for their age group.

With the help of coaches and mentors, these teams gain hands-on experience in engineering, computer programming, research, problem solving and teamwork principles. The students construct and program their unique robot inventions to perform tasks related to a specific “challenge” set out by FLL each year. The 2003 challenge was “Mission to Mars” and students’ robots had to be able to take ice core samples, launch canisters into space, and then brief the Pentagon.

Local qualifying and official state competitions are held annually in over 40 states. Ohio’s official state tournament is held at Wright-Patterson Air Force Base in Dayton, with qualifying tournaments held in Cincinnati and other regions throughout Ohio. Kentucky’s first FLL tournament was held in January 2004, at Northern Kentucky University.

These exciting FLL tournaments are set up much like sports matches. Teams are judged on skills in design, programming, research, and most importantly teamwork and sportsmanship.

2004 FLL Season: No Limits

The challenge for 2004 is “No Limits.” For this year’s challenge, participating teams will be challenged to find ways to help people with different levels of physical ability.

Local qualifying tournaments will be held in the fall in Cincinnati, Northern Kentucky and Lexington, Kentucky. The Ohio and Kentucky Official State Tournaments will be held in January.

Tournament events can happen only with support from volunteers -- coaches, mentors, judges and tournament event support. If you are interested in forming a team or becoming a coach, mentor, judge or volunteer, please contact:

- Linda Neenan, iSPACE, 513-489-3767, lnenan@ispaceohio.org, or
- Mark Rucker, Toyota Motor Manufacturing, North America, Inc., 859-746-4760, mrucker@tmmna.com,

More information about FIRST and FLL can be found at <http://www.firstlegoleague.org/>

Scanning the Past: A History of Electrical Engineering from the Past

Submitted by Dick Reiman, Historian

Copyright 1993 IEEE. Reprinted with permission from the IEEE publication, "Scanning the Past" which covers a reprint of an article appearing in the Proceedings of the IEEE Vol. 81, No. 6, June 1993.

Hidetsugu Yagi

Sixty-five years ago this month, THE PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS (IRE) included a paper on short-wave communication by Hidetsugu Yagi, an Engineering Professor at Tohoku Imperial University in Sendai, Japan. In the paper, he discussed the design and performance of a directive antenna that he called a "wave projector" or "wave canal" and which had been developed recently at Tohoku University. The antenna employed a number of parasitic elements called directors and reflectors and would come to be known as the Yagi antenna or Yagi-Uda antenna. Yagi also provided data on a split-anode magnetron which one of his students, Kinjiro Okabe, had used to generate oscillators down to around 12 cm in wavelength. Yagi stated that he and his colleagues had tested a system using a magnetron at 40 cm along with a wave projector antenna to achieve a range of about 1 km. He commented that the performance of the wave projector had been "demonstrated to be quite remarkable." They had tested antennas with up to 20 directors, and he explained how the beam width was affected by the number and length of the parasitic elements. During the discussion of Yagi's paper, J. Howard Dellinger, of the U.S. Bureau of Standards, predicted that the paper would be regarded as a classic and that the principles disclosed by Yagi would serve as a guide for much future development.

Yagi was born in 1886 in Osaka, Japan, and graduated in engineering from Tokyo Imperial University in 1909. He then went to Germany, where he continued his education under the direction of Heinrich Barkhausen, inventor of the Barkhausen oscillator, which used a positive-grid triode to generate high frequencies. Yagi's research in Germany concerned resonant transformers used in wireless systems. The outbreak of the first World War forced his hurried departure without his experimental data. He later published a paper on the theoretical part of this research in the December 1917 PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS. After leaving Germany, Yagi studied in Great Britain with John A. Fleming until 1916. Before returning to Japan, Yagi visited the United States and spent some time at Harvard University with George W. Pierce. Yagi then began his teaching career at Tohoku University, which awarded him a doctorate in engineering in 1919.

At Tohoku, Yagi initiated a research program in radio-electronics drawing on what he had learned from Barkhausen, Fleming, and Pierce. Other members of the faculty and advanced students, including Okabe and Shintaro Uda, became participants in a collective research effort. A perceived need for better communication between islands and with ships led them to focus on short wave communication with directive antennas. The Yagi group received financial support for the research from a private foundation in Sendai. In February 1926, Yagi and Uda published their first report on the wave projector antenna in a Japanese publication. Yagi applied for patents on the new antenna both in Japan and the United States. His U.S. patent was issued in May 1932 and assigned to the Radio Corporation of America.

In 1928, Yagi made a second visit to the United States and gave talks on the Japanese short wave research at IRE meetings in several cities and for a group of engineers at General Electric. His visit stimulated a renewed interest in magnetrons at GE and they developed a 400-MHz magnetron and tested it with a wave projector during the summer of 1928. Bureau of Standards engineers also used a Yagi-Uda antenna in an experimental aircraft landing system in 1930. In 1933 the short-wave system developed at Tohoku University was used to establish a government radio telephone link between Sakata and Tobishima Island, a distance of about 40 km.

In the early 1930s Yagi moved to Osaka Imperial University as Director of a laboratory where developmental work on radar began by 1936. He served as a Civilian Consultant on radar and communication to the Japanese military during World War II. His home and library along with most of his personal papers were lost during a bombing raid in April 1945. Soon after the end of the war he was interviewed by Roger I. Wilkinson, William R. Hewlett, and others concerning Japanese developments during the war. Yagi expressed considerable frustration over what he perceived as poor communication and cooperation between the military services and civilian experts. Gentai Sato, who studied under Yagi, has written on the surprise to the Japanese when they captured British radars equipped with Yagi antennas and a document on Yagi arrays at Singapore. Sato also noted the irony in the American use of Yagi antennas installed on the atomic bombs dropped on Japan to determine the height of the explosion. Shintaro Uda visited the United States in 1951 and expressed his astonishment at the ubiquity of the Yagi-Uda antennas used as home television antennas.

After the war Yagi served as a consultant on the technological rehabilitation of Japan and assisted in the formulation of television standards. He also served as president of the Yagi Antenna Company and was awarded Japan's Order of Cultural Merit in 1956. He died in 1976.

James E. Brittain
School of History, Technology, and Society
Georgia Institute of Technology

TECH EXPO UNIVERSITY OF CINCINNATI OMI College of Applied Science
 175th 1828 - 2003

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The Tech Expo Tradition: 2004 Edition May 21-22

Each spring, seniors at the University of Cincinnati's [College of Applied Science](#) muster their imaginations and technical know-how to complete their senior projects. The results are a surprising mix of creative design, complex project management, and eye-catching ingenuity.

 Tech Expo 2004 takes this year's senior design projects to the public. We hope you'll come see for yourself.

May 21 & 22 at the [Cincinnati Convention Center](#).
Free and open to the public.
 Friday 4PM - 8PM, Saturday, 10AM - 3PM.

New in 2004: Tech-Services for the Community.
 Bring your "technical difficulties" to our consultants for no-charge solutions.

Senior Projects are the ticket to Bachelor of Science degrees in

- [Architectural Engineering Technology](#)
- [Chemical Technology](#)
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TO SUBSCRIBE TO THE ELECTRONIC NEWSLETTER

This newsletter is only available via e-mail or the Section's web page at <http://iee.cincinnati.fuse.net/> with the exception of new Section members (one issue only) or members who have specifically requested a copy be delivered through the U. S. Mail.

If you are a new Section member and would like to get this newsletter electronically, please contact Bob Morrison (Editor) at **513-287-3697** or by e-mail at j.r.morrison@ieee.org. Provide your name and member number. In case there are questions, please include a daytime telephone number as well.

If you would like the "Snail Mail" version, you must contact Bob Morrison via the above means or call the Section's voice mail at **513-629-9380**.

IEEE NEWS

IEEE's "THE INSTITUTE" NOW UPDATED

The latest version of IEEE's "The Institute" is now available at <http://www.ieee.org/theinstitute>. Included in this issue:

- U.S. Lifts Restrictions on IEEE Publishing

The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) ruled on 2 April that the IEEE's publishing process is exempt from OFAC regulations and licensing requirements for scholarly papers submitted by authors from Cuba, Iran, Libya, and Sudan. For more information about the ruling, visit http://www.ieee.org/portal/index.jsp?pageID=corp_level1&path=newsinfo&file=OFACruling.xml&xsl=generic.xsl

- Membership Drop Not Complete Surprise

At first glance, a 5.6 percent drop in IEEE membership might seem alarming. However, the 21 000 decline to 361 138 members in 2003 was not totally unexpected. Find out why at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2201&article=tionline/legacy/inst2004/apr04/4w.featuremembership.xml

- Marketplace of Ideas: Should Technical Colleges Train New Grads?

Increasingly industry is expecting potential employees to come out of engineering schools fully trained, requiring no additional training on the job. Is job training the responsibility of the university or of industry? Weigh in at <mailto:institute@ieee.org>

- E-mail Service Targets Spam

Members with IEEE e-mail aliases have a new layer of protection against spam: a filter that detects unwanted e-mail by analyzing its words. So far about 6000 people have signed up for the service, which joins a virus-detection service introduced several years ago. Find out more about the new service at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=1010&article=tionline/legacy/inst2004/apr04/4w.productsspam.xml

- IEEE Election Goes Electronic

Members voting in this year's annual IEEE election will have another way to return their ballots: electronically over the Web. Go online to find out more at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2202&article=tionline/legacy/inst2004/apr04/4w.newselection.xml

- Tips for Financing a Mortgage

Most people know the adage that the three most important things to consider when buying a home are location, location, and location. But another saying, "Timing is everything," may be even more crucial when you're planning to finance a home. Learn more at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=1006&article=tionline/legacy/inst2004/apr04/4w.fap.xml

- Network Conference Offers Discount

NetWorld + Interop Las Vegas 2004, a trade show and conference, will address important themes facing today's network professional: security, wireless, collaboration, Voice over IP, performance, data centers, storage, infrastructure, and services. IEEE members receive US\$100 off all educational offerings by using priority code EXESZJ47. IEEE Spectrum is a sponsor of the conference. Register online at <http://ad.doubleclick.net/clk;7657404;8972984;f?http://www.interop.com/lasvegas2004/registration/>

- Latin America Publishes Its Own Transactions

How do you create an online, peer-reviewed, technical publication from scratch in less than a year? For a group of members from Region 9 (Latin America) the answer is simple: work hard, often around the clock. Read more at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2201&article=tionline/legacy/inst2004/apr04/4w.featuretransactions.xml

- Creator of Ctrl+Alt+Delete Reboots His Career

Hardly anyone is aware that the programming behind the PC's clever reboot function, Ctrl+Alt+Delete, is credited to a single person – IEEE Member David J. Bradley. But that's not the only contribution Bradley has made to PC development. Find out more at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=1016&article=tionline/legacy/inst2004/apr04/4w.profile.xml

- Member Survey Response Spurs Societies to Act

When IEEE societies surveyed their members last year to ask if they were satisfied with the services and products they received, they learned that members liked their access to technical information but there was room for improvement. Find out what improvements some societies are making at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2201&article=tionline/legacy/inst2004/apr04/4w.featureresearch.xml

- What is Your Opinion of the Recent OFAC Ruling?

The U.S. Treasury's Office of Foreign Asset Control (OFAC) ruled on April 2 not to place any restrictions on the IEEE's peer review and editing of scholarly articles from members in Cuba, Iran, Libya, and Sudan. Give us your opinion of this ruling at <mailto:institute@ieee.org>. To read the ruling, visit http://www.ieee.org/portal/index.jsp?pageID=corp_level1&path=newsinfo&file=OFACruling.xml&xsl=generic.xsl

- Society Explores the Effect of Technology

More than 30 years ago, a group of members were so worried about the effect that technology was having on society that they convinced the IEEE to form one of the organization's few non-technical councils. Learn more about The Society on Social Implications of Technology at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2201&article=tionline/legacy/inst2004/apr04/4w.featuresociety.xml

- Five Sections Reach Century Mark

In 1904, the same year in which John A. Fleming was inventing the diode, members of the American Institute of Electrical Engineers, one of the IEEE's predecessor societies, formed five sections around the United States. This year the Atlanta, Baltimore, Berkshire (Massachusetts), San Francisco and Seattle Sections celebrate their

centennial anniversaries. http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2202&article=tionline/legacy/inst2004/apr04/4w.newsanniversary.xml

- Microwave Buzz Hits Texas

For six days in June, Fort Worth, Texas, USA, will buzz with the excitement of the latest in microwave developments as researchers and engineers gather for three separate conferences during Microwave Week. Read more at http://www.theinstitute.ieee.org/portal/index.jsp?pageID=institute_level1_article&TheCat=2203&article=tionline/legacy/inst2004/apr04/4w.conference.xml

IEEE-USA's "TODAY'S ENGINEER" NOW UPDATED

The April 2004 issue of IEEE-USA's "Today's Engineer" is now available at <http://www.todaysengineer.org>. Included in this issue is:

- Backscatter: The Collyers and the Web

With the number of pages being added daily to the Internet estimated to be between five and 10 million, are we becoming swamped with information we can't process? How can we find good content without getting "caught in the Web?" <http://www.todaysengineer.org/apr04/backscatter.asp>

- Are Career Events Worth Attending?

While more and more jobseekers use the Internet to submit their résumés to prospective employers, career events such as job fairs still have their place in the job-seeking market. What can you do to make the most of job fairs and get your foot in the door -- in person? <http://www.todaysengineer.org/apr04/career.asp>

- Connecting the Engineering World

National Engineers Week 2004 co-chairs the Fluor Corporation and the IEEE/IEEE-USA launched an international program designed to expand minds through interactive, "live" global teleconferences and web-based forums. What did participants discuss, and how can you get involved? <http://www.todaysengineer.org/apr04/connecting.asp>

- Book Review: Global Leadership: The Next Generation

What will tomorrow's global leaders need to be successful? This book identifies 15 leadership dimensions and elaborates on dozens of skills in a reader-friendly, immediately useful format -- a must read. <http://www.todaysengineer.org/apr04/review.asp>

- Hybrid Vehicles Spell Savings for Those Who Pay the Price

Hybrid vehicles are growing in popularity, but questions remain about their general acceptance and their overall impact on tighter government regulations for fuel economy and low emissions. <http://www.todaysengineer.org/apr04/hybrid.asp>

- U.S. Science and Engineering Careers Outlook

The National Science Board (NSB) considers U.S. strength in science and engineering as being in "potential peril." NSB has endorsed an imperative for the federal government to ensure the adequacy of the U.S. science and engineering workforce, partly by increasing the number of Americans pursuing science and engineering studies and careers. Is this strategy really the way to go? <http://www.todaysengineer.org/apr04/hybrid.asp>

Also in this issue:

- Engineering and Pop Culture: Galvani and the Story of Frankenstein
- Capitol Shavings: Social Security
- World Bytes: Smart in Any Language
- Reader Feedback

- Reader Poll: Can Non-Technical Managers Manage Technical Systems?

AVIONICS PIONEER HONORED BY IEEE-USA

WASHINGTON (April 29, 2004) -- Avionics pioneer Erwin (Erv) Gangl will be honored with an IEEE-USA Special Citation by 2003 IEEE-USA President Jim Leonard today at the IEEE PLANS Conference in Monterey, Calif.

Gangl, considered by many to be the father of the data bus standard (Mil-Std-1553) that led to plug-and-play digital avionics, is being honored "for his collaboration with the IEEE Student Branch at the Air Force Institute of Technology (AFIT) to set up a display with IEEE-USA to commemorate the avionics developed in the first 100 years of flight."

The 100-year timeline features key developments in the electronic equipment that supports aerospace systems (avionics). It begins with the Wright Brothers famous 1903 flight in Kitty Hawk, N.C., and runs through the SENSOR CRAFT, an unmanned U.S. Air Force advanced design concept. From radar to radio communication to global positioning systems, IEEE members like Gangl have contributed greatly to the avionics development.

Leonard, who is also executive vice president of the IEEE's Aerospace and Electronics System Society (AESS), said Gangl deserved the commendation for many reasons.

"First, he worked with the students at AFIT, who put the display together in a highly professional manner," Leonard said. "Then he gained the support of IEEE-USA to set the display up at many prestigious conferences around the country. We're so happy with the combination of the avionics and IEEE-USA displays that we're looking to continue using them together."

The IEEE's avionics exhibit premiered at the 100th Anniversary of Powered Flight Celebration in Dayton, Ohio, last July. It next appeared at October's IEEE/American Institute of Aeronautics and Astronautics' Digital Avionics Systems Conference in Indianapolis. This week it's featured at the IEEE AESS Position Location and Navigation Symposium (PLANS) at the Hyatt Regency Monterey (Calif.).

Unemployment Rate for Electrical Engineers and Computer Scientists Jumps in the First Quarter

WASHINGTON (May 4, 2004) - The number of employed U.S. electrical and electronics engineers (EEs) continues to decline, according to first-quarter data compiled by the Department of Labor's Bureau of Labor Statistics (BLS).

BLS reported 327,000 employed EEs in the first quarter of 2004 vs. 386,000 in the second quarter last year, a decline of 59,000. The figure was 349,000 in the fourth quarter.

The EE unemployment rate increased from 4.5 percent in the final quarter of 2003 to 5.3 percent in the first quarter of 2004, an increase of 17.8 percent. The average for 2003 was a record 6.2 percent, compared to the more typical 1.3 in 2000 and 2.0 in 2001.

The joblessness rate for computer scientists and systems analysts, which averaged a record 5.2 percent last year, went from 5.4 percent in the fourth quarter to an all-time high of 6.7 in the first quarter, a 24.1 percent rise. The number of people employed in the field averaged 722,000 in 2003; the first-quarter figure was down to 672,000.

"The latest statistics indicate that times are still tough for engineers," IEEE-USA President John Steadman said. "The continued shrinkage of the electrical and electronics engineering workforce should send up warning flags that the United States may be losing ground in its technological competitiveness."

The news was mixed in other computer and information technology fields. The quarterly unemployment rate for computer hardware engineers fell from 9.0 percent in the fourth quarter to 4.9 in the first quarter. Computer software engineers experienced a drop from 4.5 percent to 3.3. The unemployment rate for computer programmers, however, nearly doubled from 4.6 percent to 9.0.

IEEE-USA Cites Concern About Rules on Access BPL Systems in FCC Filing

WASHINGTON (May 10, 2004) - In a filing with the Federal Communications Commission (FCC) last week, IEEE-USA raised concerns about proposed FCC rules on Access Broadband over Power Line (BPL) systems.

IEEE-USA expressed concerns about interference to the licensed users of HF spectrum, and concerns about interference to Access BPL systems from those users. The organization noted the potential negative impact of such interference on the ultimate reliability of Access BPL as a means of delivering broadband service to users. It cited possible adverse effects on many uses that are critical to national security, homeland defense, and emergency and disaster communications.

IEEE-USA called for additional studies to evaluate the efficacy of any proposed interference-mitigation techniques. According to the organization, the FCC should not prematurely promulgate rules in the absence of such proof.

Finally, IEEE-USA called on the FCC to extend the deadline for reply comments by at least 30 days - preferably 45 days - beyond the current deadline of June 1 to allow interested parties sufficient time to review and consider the content of a National Telecommunications and Information Administration report and other studies that are expected to be submitted in the initial comment phase. The IEEE-USA filing is accessible at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6516183235

In addition, the IEEE Standards Association and IEEE Power Engineering Society are holding a "Call for Interest in Standards Development for Broadband over Power Lines" meeting in Denver on June 7. For more information, visit http://standards.ieee.org/announcements/pr_bplininvite.html.

IEEE-USA Signs Coalition Statement Urging Solution to Visa-Processing Crisis for International Students, Scholars and Scientists

WASHINGTON (May 13, 2004) - IEEE-USA President John Steadman signed a joint statement Wednesday urging the federal government to solve the current visa-processing crisis by adopting six recommendations to streamline the admittance of international students, scholars and scientists.

IEEE-USA was one of 20 science, higher education and engineering organizations, including the American Association for the Advancement of Science (AAAS) and the Association of American Universities, to endorse the statement sent to U.S. policymakers.

Between 2000 and 2002, the number of non-immigrant visa applications flagged for review under the U.S. Visas Mantis screening program had risen from about 1,000 to 14,000. This has helped create a massive logjam of pending applications, preventing students from attending school and scientists from participating in scholarly research and conferences.

While "the need to ensure national security is indisputable," AAAS CEO Alan I. Leshner said, "legitimate applications from scholars and students seeking to improve human welfare must not become snared in red tape. Scientific advances to combat HIV and AIDS, hunger, terrorism and many other crises will require the insights and contributions of scholars from many regions."

For more on the statement and its specific recommendations, see

<http://www.aaas.org/news/releases/2004/0512visa.shtml>.

The IEEE Cincinnati Section Executive Committee **Member Names and Phone Numbers**

| | |
|--------------------------------------|---|
| Cincinnati Section Voice Mail | 513-629-9380 (call for meeting reservations) |
| Section Web Page | Http://ieee.cincinnati.fuse.net/ |
| Fred Nadeau - Chair | 937-289-2800, f.nadeau@ieee.org (E-mail) |
| Jim Everly - Vice Chair | 513-556-4241, j.everly@ieee.org (E-mail) |
| Laurie Tappel - Treasurer | 513-397-6383, laurie.tappel@cinbell.com (E-mail) |
| Ron Harbaugh - Secretary | 513-769-3781, ron.harbaugh@ieee.org (E-mail) |
| Max Rabiee - PACE Chair | 513-556-4202, max.rabiee@uc.edu (E-Mail) |
| Steve Olenick - Member-At-Large | 513-554-2059 (Office), 513-642-3220 (Fax), steveo@nsseng.com (E-mail) |
| Marie Nemier - Member-At-Large | 513-528-7900, Ext. 137, mnemier@trentec.com (E-mail) |
| Charlie Nash - Arrangements Chairman | 513-723-3849, cnash@ieee.org (E-mail) |
| Randy Holt – Membership | 859-572-5710 (Office), Holthr@nku.edu (E-mail) |
| Bob Morrison - Editor | 513-287-3697 (Office), 513-287-4155 (Fax), j.r.morrison@ieee.org (E-mail) |