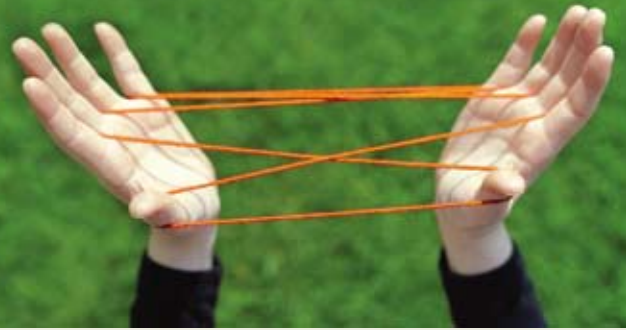
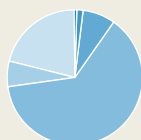


interconnected

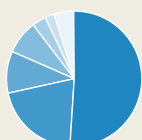


who we are



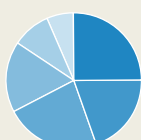
Membership Status

28	Honorary Members
5,888	Fellows
29,140	Senior Members
235,729	Members
23,491	Associates
80,491	Students
374,767	Total



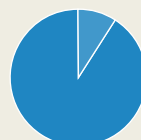
Members in Global Workforce*

51.3%	Industry
20.6%	Academia
9.9%	Government
8.1%	Self-employed
3.3%	Retired
2.3%	Unemployed
4.5%	Other



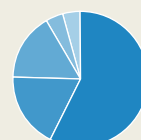
Age of Members

25.2%	Under 30
19.7%	30-39
22.7%	40-49
17.0%	50-59
9.1%	60-69
6.3%	70 and over



Gender of Members

9.2%	Female
90.8%	Male



Geographic Distribution

57.6%	United States
18.0%	India, China, Pacific Rim
16.2%	Europe, Middle East, Africa
4.3%	Canada
3.9%	Latin America

Society Memberships

IEEE Aerospace and Electronic Systems Society	5,046	IEEE Magnetics Society	3,017
IEEE Antennas and Propagation Society	8,020	IEEE Microwave Theory and Techniques Society	11,651
IEEE Broadcast Technology Society	2,064	IEEE Nuclear and Plasma Sciences Society	2,825
IEEE Circuits and Systems Society	11,040	IEEE Oceanic Engineering Society	1,595
IEEE Communications Society	41,016	IEEE Power Electronics Society	5,979
IEEE Components, Packaging, and Manufacturing Technology	2,927	IEEE Power Engineering Society	22,445
IEEE Computational Intelligence Society	5,753	IEEE Product Safety Engineering Society	593
IEEE Computer Society	86,057	IEEE Professional Communication Society	1,143
IEEE Consumer Electronics Society	3,139	IEEE Reliability Society	1,937
IEEE Control Systems Society	8,538	IEEE Robotics and Automation Society	6,356
IEEE Dielectrics and Electrical Insulation Society	1,942	IEEE Signal Processing Society	15,155
IEEE Education Society	3,256	IEEE Society on Social Implications of Technology	2,014
IEEE Electromagnetic Compatibility Society	4,123	IEEE Solid-State Circuits Society	11,724
IEEE Electron Devices Society	10,780	IEEE Systems, Man, and Cybernetics Society	3,838
IEEE Engineering in Medicine and Biology Society	8,441	IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society	2,162
IEEE Engineering Management Society	6,308	IEEE Vehicular Technology Society	4,429
IEEE Geoscience and Remote Sensing Society	2,698	Total	337,755
IEEE Industrial Electronics Society	3,817	*This data was calculated differently in 2006 than in past years to account for differing response rates.	
IEEE Industry Applications Society	9,551	Note: About 53.2 percent of IEEE members belong to at least one Society; while an additional 18 percent belong to two or more.	
IEEE Information Theory Society	3,480	Sources: Members in Global Workforce data from 2006 Member Satisfaction Survey; age and gender data are from IEEE Membership. All other membership data are from the Annual Statistics of the IEEE – 2006.	
IEEE Intelligent Transportation Systems Society	1,060		
IEEE Instrumentation and Measurement Society	4,598		
IEEE Lasers and Electro-Optics Society	7,238		

	(US\$000)	2002	2003	2004	2005	2006
Financial Information	Total Assets	\$ 253,376	\$ 254,871	\$ 281,107	\$ 317,664	\$ 369,758
	Revenue	199,805	250,178	276,993	297,111	330,823
2002–2006	Net Assets	91,011	116,602	138,588	168,724	209,404

2006 highlights

JANUARY

Michael R. Lightner takes office as 2006 IEEE President, and Leah H. Jamieson becomes 2006 IEEE President-elect

IEEE Education Partners Program announces four new institutional partnerships, the first of many in 2006

FEBRUARY

Willard Boyle and George E. Smith receive National Academy of Engineering Charles Stark Draper Prize

IEEE Spectrum launches two-part series on re-engineering of Iraq

MARCH

IEEE Milestone honors first intelligible voice transmission over electric wire in Boston, USA

APRIL

IEEE co-hosts wind power symposium for policy makers in Washington, D.C.

Susan Hassler, *IEEE Spectrum* editor-in-chief, named one of the 40 most influential people in magazine publishing

MAY

IEEE hosts standards seminar in Beijing, China

IEEE Power & Energy Library, an online research service for power utilities and other energy services, announced

New voluntary environmental standard helps large computer buyers make sound purchases

IEEE-USA launches Entrepreneurs Village, an online Web portal

JUNE

James D. Meindl receives 2006 IEEE Medal of Honor

Proceedings of the IEEE introduces updated design and format

TryEngineering.org, a Web site encouraging engineering studies and careers, is introduced

JULY

North Carolina State University team wins IEEE Computer Society International Design Competition

ISI Journal Citation Report again ranks IEEE journals highly, with 18 of the top 20 journals in their fields

AUGUST

IEEE.tv, an Internet-based broadcasting network, is introduced by IEEE

IEEE Mentoring Connection is launched for new professionals and recent graduates

SEPTEMBER

Student leaders gather for the first IEEE Student Leaders Summit

Four IEEE Milestones dedicated in Ireland, U.S., Canada and United Kingdom

OCTOBER

IEEE Computer Society celebrates 60th year coinciding with ENIAC anniversary

Special citation commemorates 150th birthday of Nikola Tesla

Development of VHS recording format recognized as IEEE Milestone at JVC in Japan

NOVEMBER

Lewis M. Terman chosen 2007 IEEE President-elect

IEEE forms Education Working Group in China

Timothy Persons receives U.S. Director of National Intelligence Fellows Award

Work begins on updating IEEE laptop battery standard

DECEMBER

Lima, Peru, workshop advances steps toward university accreditation

Israel's WEIZAC computer celebrated as IEEE Milestone

Michael R. Lightner passes gavel to Leah H. Jamieson, 2007 IEEE President

Top: A new connecting technology known as SiPLIT can replace conventional wire bonding in electronic systems, particularly power electronics applications. Siemens Planar Interconnect Technology enables use of this technology in the same physical space – and because it is planar, or lying in a flat, geometric plane, the electronic switches using these conventions are reportedly smaller, more powerful and can withstand higher temperatures. (Courtesy of Siemens)

message from the president and the executive director



From left: Michael R. Lightner and Jeffrey W. Raynes

In 2006, the IEEE continued to act as a global nexus for technical professionals with new products and initiatives that facilitated the IEEE's growth as a worldwide organization. We also provided powerful new ways for our members and the world's technical and scientific community to obtain and share information. Our achievements spanned many areas, but shared one basic principle: the IEEE's mission to advance the practice of engineering and the application of technology for the benefit of people everywhere.

Since 1884, when our organization's founders recognized the need for a community where technical professionals could connect, share and learn, we have worked with a global focus while respecting local and national concerns. Last year, the IEEE's dedicated volunteers and staff set a new standard for global thinking and accomplishments.

IEEE members are taking the lead in several critical areas of the Global Earth Observation System of Systems (GEOSS), a worldwide effort involving 60 countries and 44 organizations. When fully activated, GEOSS will permit governments, industries and individuals to make informed environmental decisions based on knowledge collected from a broad, linked network of Earth observation sources and datasets.

New or significantly enhanced electronic products were introduced that are now bringing more practical, thought-provoking information about technology to people in more diverse ways. IEEE.tv, an Internet-based broadcasting network, was launched during 2006 and is producing and delivering programming about technology and engineering to both members and general audiences.

Historically, we have provided educational opportunities to help ensure the growth of skills and knowledge among the profession and the public. Last year, with IBM and the New York Hall of Science as our partners, we broadened our outreach programs with TryEngineering.org – an innovative new Web site for pre-university students, their parents, teachers and guidance counselors. For working professionals, we expanded IEEE Expert Now, which complements our other educational opportunities with one-hour, online learning courses from short courses and tutorials presented at IEEE conferences and workshops.

In China, we began efforts to foster global accreditation of engineering curricula, provide opportunities for professional certification, especially for software development professionals, and support the IEEE's global standards development work. At the direction of the IEEE Board of Directors and after extensive study and consultations, we moved forward to establish a formal representative office in Beijing to support these efforts and to provide a local liaison to serve IEEE sections in China, IEEE societies and technical councils, and other organizational units with interests in China. The new Beijing office was approved by China officials in June 2007 and is now operational.

Also in 2006, we expanded our accreditation activities to include not only efforts with ABET (the Accreditation Board for Engineering and Technology) in the U.S. but in other nations as well. Besides forming a working group on education in China, which includes representatives

from leading Chinese educational institutions and industries, we progressed with developing accreditation programs in Peru and the West Indies.

We also worked to more clearly understand the products and services that our members value. The results of our research should enable us to provide enhanced usefulness to technical professionals everywhere.

At the 2006 IEEE Honors Ceremony, we presented the IEEE Medal of Honor to microelectronics engineer James D. Meindl of Georgia Institute of Technology, Atlanta. We also recognized 16 other notable engineers and scientists, one corporation and 271 new IEEE Fellows. Together, they mirror the broad range of technologies and nations within our interconnected, global organization.

Throughout IEEE operations, our dedicated volunteers and staff again teamed to deliver outstanding results. Despite ongoing global tensions and competitive pressures, the IEEE ended 2006 favorable to budget by US\$39.9 million. In addition, net investment gains were US\$21.5 million.

The continued growth of our products was gratifying. The IEEE Enterprise Online Library is increasingly popular among the medium and smaller businesses to which it is geared. The IEEE Member Digital Library, which lets individual members purchase a reasonably priced package of articles each month, also enjoyed growth. These products, along with our standards and education offerings and our pre-eminent IEEE/IET Electronic Library, contributed to the use of IEEE Xplore®, our online delivery platform. In 2006 users downloaded more than 68 million full-text PDF documents, an average of 5.7 million a month.

IEEE conferences set a new record in 2006, with thousands of members and other technical professionals attending and networking at 540 events around the world sponsored either entirely or in part by the IEEE. Participation in online communities also grew, with more than 110 IEEE communities active at year's end.

Technology knows no national boundaries, and we are all globally connected – both as professionals and as a global society. As the world's largest technical professional society, the IEEE remains committed to enabling technical professionals to distinguish themselves in a globally competitive and connected environment.

Michael R. Lightner, 2006 IEEE President and Chief Executive Officer

Jeffrey W. Raynes, IEEE Executive Director and Chief Operating Officer

serving society

TryEngineering.org Offers Children Information, Insights and Fun

Thanks to the IEEE's partnership with IBM and the New York Hall of Science, thousands of pre-university students around the world, as well as their teachers, school counselors and parents, are going online to explore the creativity of engineering.

Launched in mid-2006, the Web portal TryEngineering.org registered almost 246,000 visits during its first year. The average visit lasted at least 25 minutes – many of them, more than 45 minutes. The site offers students from ages 8 to 18 insights into what engineers do, tips on university course selection and financial aid, and help locating universities in 15 nations around the world. The "Find a University" database now includes accredited engineering and technology degree institutions in Australia, Brazil, Canada, France, Germany, India, Japan, Korea, Malaysia, Mexico, New Zealand, Pakistan, South Africa, the United Kingdom and the United States. An expanded search feature allows users to find accredited programs based on locale, tuition and size of the student body.



TryEngineering.org features interviews with real-life engineers whose jobs range from creating special effects for rides at Walt Disney World to working with astronauts in the U.S. National Aeronautics and Space Administration (NASA).

To help students get close to the engineering experience, the Web portal offers games that introduce youngsters to basic engineering concepts. Students can also ask engineering-related questions of both practicing engineers and undergraduate engineering students.

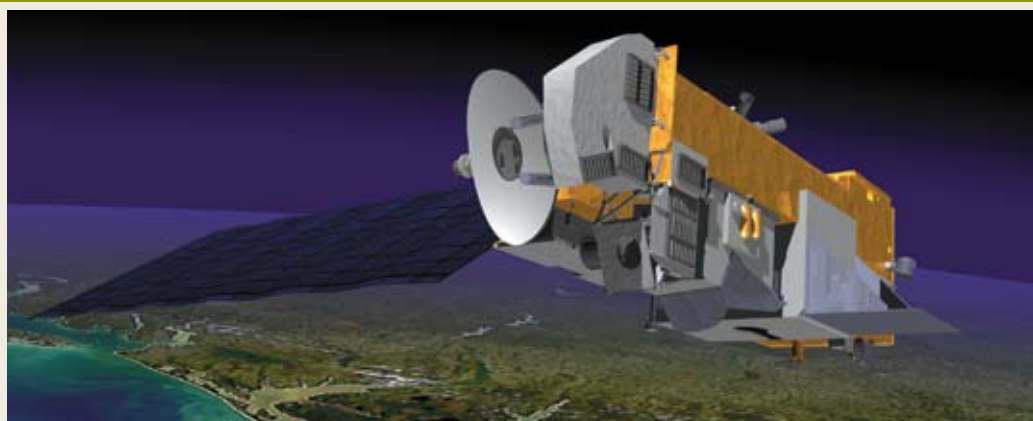
The IEEE is responsible for the Web site's content management and promotion, and IBM is the technology partner. Working with the IEEE, the company provided technology and expertise in Web site design as well as technical support staff at the New York Hall of Science, which is New York City's hands-on science and technology center. TryScience.org at the New York Hall of Science is the Web hosting and consulting partner for TryEngineering.org. Also participating in the portal are The Sloan Career Cornerstone Center, SAE International and Junior Engineering Technical Society, Inc.

IEEE Supports Global "System of Systems"

Growing numbers of IEEE members are contributing their technical and management skills to a worldwide effort to manage Earth's resources from a solid base of knowledge. Started in 2005, the Global Earth Observation System of Systems (GEOSS) involves more than 60 countries and 44 international organizations – including the IEEE – that are developing a coordinated and comprehensive capability to both track and help respond to environmental concerns around the world.

When fully activated over the next eight years, GEOSS will enable the world's governments, industries and individuals to make informed decisions that will, for example, reduce the impact of natural disasters, promote better health, improve weather forecasting and monitor and protect ocean, energy and land resources for sustainability. With the participation of engineers, scientists, government managers and political leaders, this system of systems will – among other aspects – create a broad, linked network of the millions of established national, regional and international Earth observation sources and datasets. The overall effort is addressing how to turn measurements from observations and modeling into usable information and develop support tools for making critical decisions.

The IEEE Committee on Earth Observation (ICEO), which consists of representatives from IEEE Societies, Technical Councils and other organizational units, is actively contributing to GEOSS in several critical areas, including energy, standards, the system-of-systems architecture, infrastructure and interoperability capabilities. The IEEE is also contributing to educating the technical and non-professional audiences about GEOSS. Since 2005 the ICEO has sponsored more than a dozen GEOSS user workshops around the world, including in Korea, South Africa, India and the U.S. Nine more workshops are scheduled in additional locations during 2007. Plans are also underway for



two publications: a peer-reviewed print journal for Earth observation and remote sensing professionals, and an online publication geared to both technical professionals and the general public.

IEEE Standards Association Begins to Build Presence in China

To recognize the growth of China as a global economic power, the Corporate Advisory Group (CAG) of the IEEE Standards Association (IEEE-SA) hosted a day-long seminar in May 2006 in Beijing. Some 230 members of China's standards community attended to learn about the IEEE standards process and IEEE standards for new or prominent technologies such as highly scalable Ethernets, broadband power line communications, and battery standards for laptop computers and mobile telephones.

In addition to conducting the seminar, CAG members met with representatives of the Standardization Administration of the People's Republic of China, as well as companies including Lenovo Group, Hawaii Ltd. and ZTE Corporation. To help build additional information exchange and insights into Chinese standards environment, the CAG welcomed its first member from that nation in January 2007.

In other international standards activities, IEEE-SA launched a new strategy for producing a greater variety of relevant standards that meet the needs of consumers, industry and governments the world over. The effort includes deepening ties with international standards-setting organizations, such as the International Electrotechnical Commission (IEC), the International Telecommunication Union (ITU) and the International Organization for Standardization (ISO). For example, IEEE-SA is working with the IEC to develop procedures for joint standards development. The IEEE and the ITU have planned a joint workshop on Carrier Ethernet, and the ITU made plans to host several IEEE 802 meetings in 2007.

The number of IEEE-SA corporate standards projects continued to grow during 2006 as more organizations discovered the benefits of working in company-based working groups within the IEEE standards process. Five new corporate standards were started and updates began to two existing ones. The projects span a wide range of technologies – from rechargeable batteries for mobile computers and cell phones to long wavelength wireless networking, hardware design and verification, and enterprise decision making.

Above, left: Toshio Koike (left) of the University of Tokyo and Deren Li of the Chinese Society of Geodesy, Photogrammetry and Cartography and China National Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing were among those participating in the 2006 GEOSS user workshop in Beijing. Above, right: When operational, the Global Earth Observation System of Systems will create a broad, linked network of the millions of established Earth observation resources, such as this current NASA satellite. (Courtesy of National Aeronautics and Space Administration)

IEEE Expands Global Accreditation Activities

If universities want to produce qualified technical graduates, then academic leaders must ensure that students, professionals, government bodies and the general public know that a program or institution provides a quality education. The IEEE, which is the lead society for accrediting U.S. institutions in six areas of engineering and engineering technology programs on behalf of ABET (the Accreditation Board for Engineering and Technology) promoted this message globally last year at accreditation workshops and meetings in Lima, Peru, and Beijing, China.

In Lima, 45 people attended a three-day IEEE workshop for future program evaluators of the Instituto de la Calidad en la Acreditacion de Carreras de Ingenieria y Tecnologia (ICACIT), which is Peru's accrediting body. With support from the IEEE and the IEEE Peru Section, ICACIT has been working to develop procedures and a volunteer force to both help that country's higher education system and to be a model for developing accrediting bodies in other countries.

At a November meeting in Beijing, the IEEE formed a Working Group on Education in China that is exploring accreditation opportunities for academic programs in university-level education. Representatives from leading Chinese companies and higher-learning institutions are working with the IEEE to determine where the organization can assist in meeting higher-education needs. ABET materials for program evaluators are being translated into Simplified Chinese, and additional meetings are scheduled during 2007.

Also in 2006, the IEEE met with academic leaders at the University of the West Indies (UWI), in Port of Spain and St. Augustine, Trinidad and Tobago, to assess the current structure of engineering programs in the Caribbean. UWI is seeking to meet ABET accreditation standards. An accreditation workshop is planned during 2007 for the 11 English-speaking Caribbean nations.

Near right: Participants in the Teacher In-Service Program workshops in Cape Town, South Africa (top) and Indianapolis, Indiana, USA (bottom) learned how to incorporate engineering principles into classroom lessons. Right: 2006 IEEE President-elect Leah H. Jamieson presented the IEEE Presidents' Scholarship to Brandon Lee Reavis of Cody, Wyoming, USA. Facing page: Nysted Offshore, located off the coast of Denmark, became the world's largest offshore wind park in 2006. Nysted has 72 windmills and a total capacity of 165.5 megawatts. (Courtesy of Siemens)



Raising Technology Literacy Through Simple Engineering Lessons

Can learning to design and build a candy bag help to advance technology literacy among pre-university students? When it is part of a program that teams IEEE members with local pre-university educators to include engineering principles in classroom lessons, the answer is an emphatic "Yes!".

Since the IEEE Teacher In-Service Program (TISP) began in 2001, hundreds of engineers throughout the U.S. have worked with teachers on the educators' in-service days to offer lessons on a variety of technical subjects.

In 2006, TISP broadened its geographic outreach from the U.S. and Jamaica to include workshops in Putrajaya, Malaysia, and Cape Town, South Africa, as well as in Indianapolis, Boston and Memphis in the United States.

In Cape Town, the 30 educators who participated worked with 60 volunteer engineers for classroom training sessions on the principles of Ohm's Law and balance. The two-day workshop in August was so successful that by late September the volunteer engineers had trained more than 600 teachers, representing some 75,000 students at six technical high schools throughout South Africa. With a TISP workshop planned in 2007 in Kenya, the South Africa project has already proved to be a model for other African nations.

In the U.S., the IEEE Central Indiana Section is partnering with the nearby Challenger Center for Space Science Education, which is part of a global network of math, science and technology learning centers. After a TISP workshop in Indianapolis in mid-2006, IEEE volunteers conducted in-service training sessions for more than 50 teachers. Instead of the candy bag lesson, participants built a "mission bag" to hold Moon rocks on the journey home from space.

Two IEEE Student Competitions Advance Professional Ethics and Innovative Designs

Because they are the next generation of technical professionals, the IEEE encourages the development of student members in many ways.

Student ethics competitions, designed to give IEEE student members experience in applying the IEEE Code of Ethics and other ethical concepts to real-life situations, were held last year in the U.S. and Egypt.

The U.S. winners and their hypothetical challenges were:

- > George Washington University, Washington, D.C., wrestled with the dilemma of an engineering manager faced with cutting six months from a product-development schedule or laying off three engineers because the employer lacked funds to support the longer effort.
- > Valparaiso University, Valparaiso, Indiana, grappled with a technical group's responsibility after knowingly approving a "possible but not probable" solid-fuel rocket design that ultimately killed several soldiers.
- > Virginia Commonwealth University, Richmond, Virginia, analyzed an engineer's quandary after following unethical, illegal advice and specifying the wrong equipment for a new home that caught fire because of an overloaded circuit breaker.

At the University of Alexandria, Egypt, the IEEE Alexandria Student Branch joined with IEEE Egypt Section GOLD (Graduates of the Last Decade) for a three-day ethics workshop. Sixty students – representing both IEEE Student Members and participants in the GOLD group's "Made in Egypt" national competition – took part. Working in teams, the students used the same ethics scenario as the Virginia Commonwealth University group.

The second student competition – the IEEE Computer Society International Design Competition – encourages students to develop computer-based solutions to real-world problems. The 2006 contest, which was sponsored by Microsoft, drew entries from 133 teams representing 28 countries.

The team from North Carolina State University, Raleigh, took first place and US\$20,000 with its SunRay system, which uses ray tracing combined with a numerical model to calculate how much radiation falls on a three-dimensional form that approximates the human body. A team from Beijing University of Posts and Telecommunications won the second place prize of US\$12,000 for an early-warning coal mine system that collects data about contaminants and other health risks. Third place and US\$8,000 went to Politehnica University of Bucharest for Synairgy, a wearable, customizable device to monitor air quality and dangerous pollutant levels, such as auto exhaust gases.

WIND POWER: THE IEEE IS RAISING AWARENESS AND DISCUSSION.



Low-Cost 3-D Laser Scanner Inventor Wins 2006 IEEE Presidents' Scholarship

A three-dimensional laser scanner that offers more detailed scans of an object and at significantly less cost than 3-D scanners presently on the market helped Brandon Lee Reavis of Cody, Wyoming, win the US\$10,000 IEEE Presidents' Scholarship. Reavis, who was a high school sophomore at the time, received the award at the 2006 Intel International Science and Engineering Fair (ISEF) in Indianapolis, Indiana, USA.

Three-dimensional silhouette scanning involves rotating an object in front of a well-lit background while a camera records the object's outermost contours. Reavis developed a dark acrylic enclosure inside of which two lasers scan the object, and the contours of the object are then transmitted to a computer for analysis. The lasers provide detailed scans that, when viewed on a computer, offer additional contours – a feature not possible with ordinary 3-D scanners. Unlike typical 3-D scanners, which currently sell for more than US\$10,000, Reavis' model can be built for about US\$400.

The IEEE Foundation sponsors the annual Presidents' Scholarship, which is the largest scholarship presented in the Special Awards category at ISEF.

No Hot Air Here As IEEE Turns to Wind Power

With wind power now the fastest-growing segment of the power-generation industry, the IEEE launched initiatives during 2006 aimed at raising awareness and discussion of this renewable energy resource.

More than 170 people attended a symposium in April in Washington, D.C. called "Wind Power: Technology, Economics and Politics." Directed primarily at U.S. policy makers, the meeting featured discussions about the opportunities and issues for wind power in developing a sustainable energy policy. Co-sponsored by the Wind Power Coordinating Committee of the IEEE Power Engineering Society, other sponsors were IEEE-USA and three IEEE societies: IEEE Power Electronics Society; IEEE Industry Applications Society; and IEEE Social Implications of Technology Society. Three trade organizations also were sponsors: The American Wind Energy Association, the North American Electric Reliability Council, and the Utility Wind Integration Group.

In addition, the IEEE New Technology Directions Committee, which coordinates the IEEE's efforts on public discussion over the societal context and implications of new technologies, has produced a video for IEEE.tv (see pages 10-11) titled "Wind Power: The Technology." Created especially for non-technical audiences such as policy makers, legislators and the general public, the program covers the history of wind power, describes the technology, and discusses current wind power programs in Europe, China and the United States.

FROM ISRAEL TO JAPAN, 2006 IEEE MILESTONES HONOR MAJOR ACHIEVEMENTS



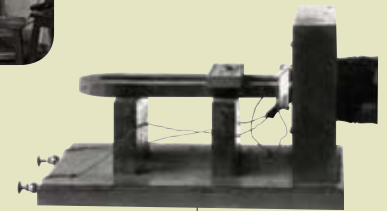
Callan's Pioneering Contributions to Electrical Science and Technology, Maynooth, Ireland. Inspired by Galvani's and Volta's work in electricity while he pursued his divinity studies in the 1820s in Rome, Reverend Nicholas Callan saw the potential for powerful batteries. He began electrical experiments after returning to St. Patrick's College where he headed the natural philosophy department. Callan was influenced by the work of his friend William Sturgeon, inventor of the first electromagnet, and the separate experiments of Michael Faraday and Joseph Henry on the induction coil. In 1836, Callan developed his first induction coil. He also built the first successful mechanical current breaker, established the link between rate-of-change of current and electromagnetic induction, and discovered the principle of the self-exciting dynamo.



Development of VHS for Home Video Recording, Yokohama, Japan. At the Japan Victor Company (JVC), Shizuo Takano and Yuma Shiraishi foresaw the need for a simple, compact and effective way for people to store images on magnetic material, so they designed the first VHS (Video Home System) video tape recorder (VTR). Introduced on 9 Sept 1976, the JVC HR-3300 gained wide customer acceptance. JVC's recorders featured new technologies that permitted a smaller, lighter product as well as higher-density recording and improved color. Although Sony Corporation introduced its Beta format in 1975, JVC convinced consumers to accept VHS as the new standard. Mass production and precision processing technologies enabled VTRs to become a core business – second only to television set production – for consumer electronics manufacturers.



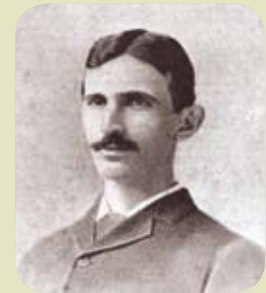
WEIZAC Computer, Rehovot, Israel. Built in 1954-55 at the Weizmann Institute of Science, WEIZAC was one of the world's first electronic computers and the first in the Middle East. The computer was based on one at the Institute for Advanced Study at Princeton University, New Jersey, USA, and reflected the vision of Weizmann's Chaim Pekeris and Princeton's Gerald Estrin. Until 1963, engineers and scientists used WEIZAC for mathematical research that required complex calculations that could not reasonably be performed manually. These calculations enabled scientists to chart maps with a very close approximation of tides around the world, especially in the South Atlantic.



First Intelligible Voice Transmission over Electric Wire, Boston, Massachusetts, USA. On 10 March 1876, Alexander Graham Bell uttered the renowned phrase to his assistant, "Mr. Watson, come here! I want to see you" – and forever changed how humankind communicates. A Scotsman by birth, Bell eventually settled in Boston where he invented the microphone and his "electrical speech machine" that is now called a telephone. In August 1876, Bell made the first long-distance call from Brantford, Ontario, Canada, to his assistant in Paris, Ontario, 10 miles away. Bell started the Bell Telephone Company with others in 1877, and by 1888 had set up the first telephone exchange in New Haven, Connecticut, USA.

How can IEEE members honor the most significant technological achievements that took place in their respective geographic areas? Since 1983, the IEEE Milestones in Electrical Engineering and Computing Program has recognized more than 75 exceptional historical achievements. All of them were proposed to the IEEE History Committee by members, IEEE Sections, Societies and other organizational units. The Committee evaluates the applications and forwards its recommendations to the IEEE Executive Committee for approval.

In 2006, eight new Milestones were dedicated. All IEEE Milestones encourage the preservation of their historic locations and help to strengthen the public's appreciation for engineers' contributions to society.



Liquid-Crystal Displays, Princeton, New Jersey, USA. Between 1964 and 1968, at the RCA David Sarnoff Research Center, a team of engineers and scientists led by George H. Heilmeier with Louis A. Zaroni and Lucian A. Barton, devised a method for the electronic control of light reflected from liquid crystals and demonstrated the first liquid-crystal display (LCD). Their work launched a global industry that now produces millions of LCDs annually for watches, calculators and flat-panel displays. The accompanying 1968 photo is of Robert Lohman, one of two engineers who worked on reducing the number of transistors needed to fit in and operate an LCD wristwatch. *(Courtesy of David Sarnoff Library)*

Thomas Alva Edison Historic Site, Menlo Park, New Jersey, USA. From 1876 to 1882, Thomas Edison operated the world's first industrial research and development laboratory devoted to developing new technology. Located in an area then considered remote from the New York metropolitan area, Menlo Park became an important model for the industrial research facilities of the early 1900s. Edison's years there were his most productive; more than 400 patents were generated and include the phonograph, the first practical use of incandescent lights for street lighting and a prototype electric railway.

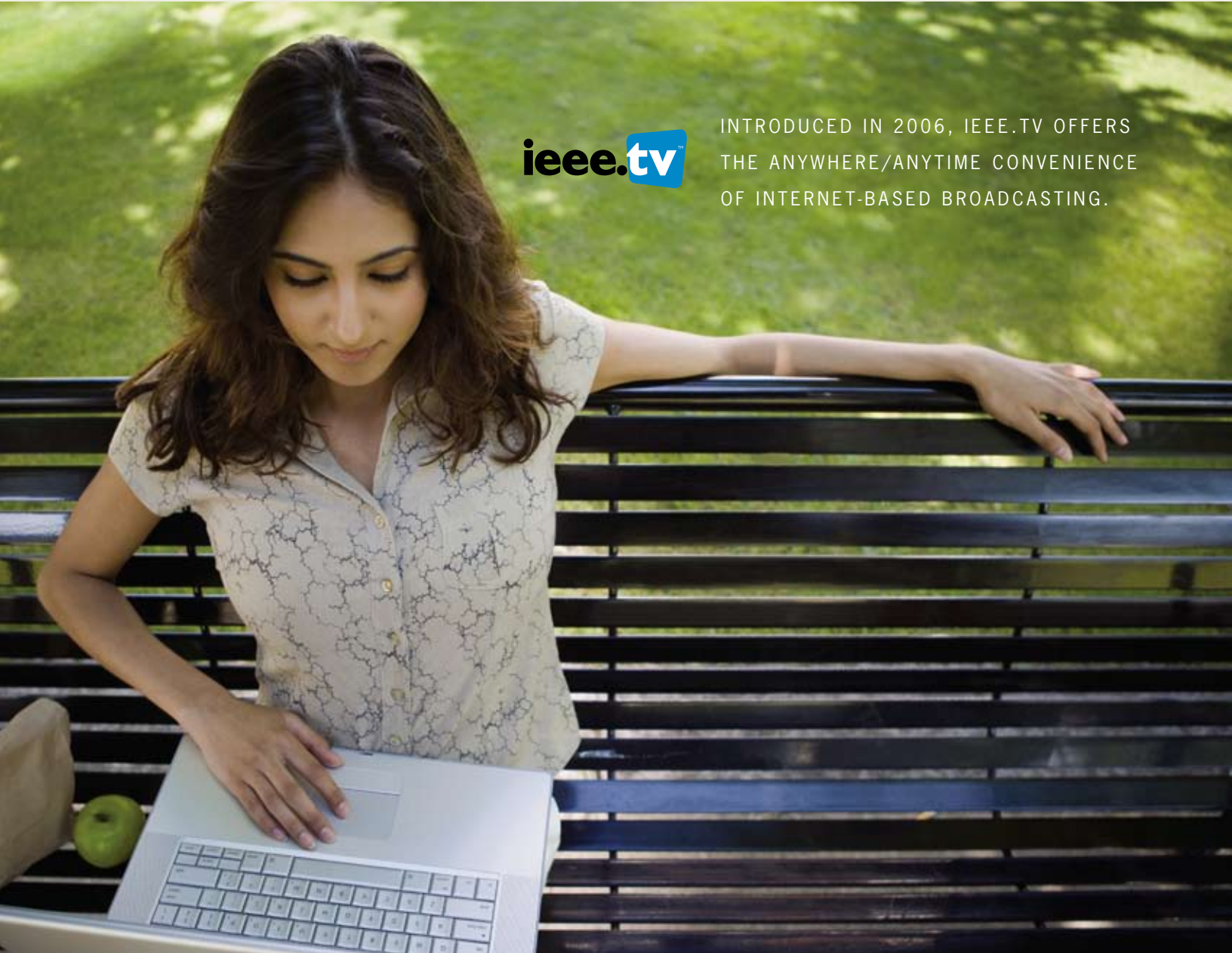
First Submarine Trans-Atlantic Telephone Cable System, Clarenville, Newfoundland, Canada, and Oban, Scotland. Global telephone communications using submarine cables began on 25 September 1956 when the first trans-Atlantic undersea telephone system (TAT-1) went into service. Stretching from Newfoundland to Scotland, the system also included an overland portion and underwater link. TAT-1 was a huge achievement that provided unparalleled reliability with fragile components in hostile environments. In 22 years of service, the vacuum tubes never failed. The system was a joint effort of AT&T Bell Laboratories, the British Post Office Engineering Department and the Canadian Overseas Telecommunication Corporation.

Nikola Tesla (1856-1943), Electrical Pioneer, Beograd, Serbia. In honor of the 150th anniversary of the birth of Nikola Tesla, the IEEE presented a special citation and plaque to the Tesla Museum. The plaque recognizes Tesla's seminal work in electrical engineering, especially his innovative contributions to applications of polyphase current to electric-power systems, his work with electromagnetic waves and his experiments with very high voltages. Special ceremonies were also held in Zagreb, Croatia, where Tesla was born.

serving members



INTRODUCED IN 2006, IEEE.TV OFFERS THE ANYWHERE/ANYTIME CONVENIENCE OF INTERNET-BASED BROADCASTING.





Lights! Camera! Action!

IEEE Now Offers Internet Broadcasting

After more than a century as a leading publisher of technical magazines and books, the IEEE is now an Internet broadcasting network as well.

Introduced in 2006, IEEE.tv contains original content, with broadcasts that provide members with timely technological updates and enlighten non-technical audiences about important technology and engineering topics. As of mid-2007, some 25 programs about technology and engineering were available for viewing on demand from IEEE.tv, with additional titles on the production schedule.

The explosive growth of Internet broadcasting – with its video-streaming, anywhere/anytime convenience – helped to spark this IEEE initiative. The new network reaches a younger audience that is accustomed to multi-media on their terms – while also providing established professionals with valuable information they can use. Although student members comprise about 20 percent of overall IEEE membership, they represent almost half of IEEE.tv viewers.

The programming lineup is divided into five areas, three of which are available exclusively to IEEE members:

- > **Conference Highlights** offers an overview of original, polished productions about selected IEEE conferences and includes interviews with conference presenters. These conferences range from the IEEE Electric Ship Technologies Symposium to a conference on very large systems integration.
- > **Meet the Authors** presents interviews with industry experts who have published books with Wiley-IEEE Press. For example: Carl Selinger gives tips from his “Stuff You Don’t Learn in Engineering School,” which discusses the personal skills engineers need to be successful; Mark Montrose offers highlights from his book on electromagnetic compatibility; and Richard Schreier provides an overview of delta sigma data converter technology.
- > **IEEE.tv Specials** profiles significant people, their achievements and emerging technologies. Recent programs have featured the potential for wind power to help meet the world’s energy needs, and why technology professionals must consider social, economic and environmental effects in making decisions.

Two public-access programming areas are available to IEEE members as well as the general public. **Careers in Technology** explores technology careers like biomedical engineering and information technology in addition to such timely subjects as

Above, left: During a 2006 visit to Beijing, Jeffrey Raynes (left), IEEE executive director and chief operating officer, conferred with, from left, Wu Hequan of the Chinese Academy of Engineering (CAE), and Kang Jincheng and Tian Qi, both of the CAE’s Bureau of International Cooperation. Above, right: The IEEE Mentoring Connection is designed to help newer professionals ease their way into the working world with the expertise of other, well-established members.

recycling electronics hardware. **IEEE Products** offers introductions to various IEEE products including the IEEE Member Digital Library and IEEE Expert Now, among others.

Several IEEE groups are creating IEEE.tv programs of their own, tailored to both their members’ interests and those of people unable to travel to certain meetings. For example, the IEEE Broadcast Technology Society recorded much of its annual Broadcast Symposium and is developing the footage for IEEE.tv. A program produced by IEEE Student Members at Dartmouth College in Hanover, New Hampshire, USA, is also planned. It features classmates who built hybrid-electric race cars from the chassis up.

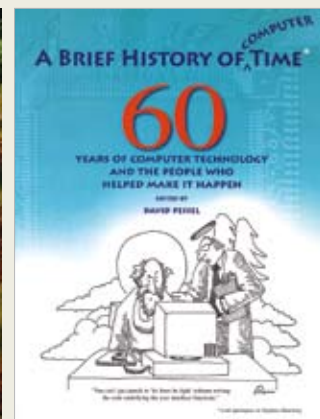
IEEE Mentoring Connection Offers Guidance to New Professionals

As almost any experienced professional will attest, the first year or so after graduation is always the most difficult. Those who are new to the work environment may not know how to best position their strengths in a job interview or respond to a performance appraisal.

To help newer professionals ease their way into the working world, the IEEE Mentoring Connection was launched in late 2006. A Web-based mentoring program, it provides young IEEE members with the expertise of other, well-established members. As of mid-2007, some 850 new professionals and over 370 potential mentors had enrolled, with more than 160 mentoring partnerships established. At present, more than half of the mentors reside in the U.S., with another 19 percent located in Europe/Middle East/Africa and 18 percent in Asia and the Pacific Rim.

Participation in the program is open to all higher-grade (Member and above) IEEE members. In general, individuals seeking mentoring partnerships are new professionals in their first or second job, or are considering making a career move.

The IEEE is partnering with The Training Connection, which has a Web-based program to facilitate the matching process.



Prospective mentors complete a user profile stored in an online database that individuals can search to find a mentor who suits their guidance needs. Online tools include an agreement to help clarify expectations, short-term and final evaluations to summarize accomplishments, and a mentor's guide.

IEEE Computer Society Celebrates 60 Years and Honors Two Pioneers

When the IEEE Computer Society marked its 60th anniversary in 2006, the celebration included awards and recognitions to students as well as two pioneers in the field. The two-day event in San Diego, California, USA, was held 30-31 October and coincided with the 60th anniversary of ENIAC, the first general-purpose electronic digital computer.

A team of students from the Russian State Technological Institute, in Moscow won the society's Computer History Competition, a contest to design a Web site about the history of computing. Northrop Grumman Corp. donated the US\$10,000 cash award.

Computing visionaries Arnold Spielberg and Mamoru Hosaka each received a Computer Pioneer Award for their contributions. Spielberg, an IEEE affiliate member and IEEE Computer Society member as well as the father of film director Steven Spielberg, was honored for his efforts with real-time data acquisition and recording, which became significant factors in defining modern feedback and control processes. Hosaka, who is not an IEEE member, was recognized for his pioneering work in computer technology in Japan. In 1955, he developed the basic concept for a railroad seat-reservation system that evolved into the multi-access reservation system in place today. Toyota Motor Corporation applied Hosaka's ideas in the 1970s when it began designing its automobile bodies using computer-generated models.

In addition, the society presented IEEE Fellow Elisa Bertino with its Tsutomu Kanai Award for her contributions to distributed computing systems. The award, which includes a US\$10,000 honorarium, is funded by Hitachi Ltd.

At year-end 2006, the IEEE Computer Society, the IEEE's largest society, had more than 86,000 members in 140 countries. It traces its roots to a subcommittee on large-scale computers formed in 1946 that was a part of one of the IEEE's predecessor organizations. The IEEE's other predecessor, the Institute of Radio Engineers, had a similar group, and when the AIEE and IRE merged in 1963, the two computer units were combined to form the IEEE Computer Society.

Above, left: IEEE-USA's 2006 Government Fellows contributed technology expertise while also gaining new knowledge. From left, Steven Bank was on U.S. Rep. Dana Rohrabacher's staff working on science and energy issues; Steve Czuchlewski advised the U.S. State Department's Bureau of International Security and Non-Proliferation Center; and Scott Jordan focused on telecommunications and Internet issues on Rep. Ben Nelson's staff. Above, center: Student leaders from U.S. universities participated in the first Student Leaders Summit of the IEEE University Partnership Program. Above, right: As part of its 60th anniversary year, the IEEE Computer Society published a commemorative book that both honored computer pioneers and offered smiles with technology cartoons from The New Yorker, a U.S. magazine. ©2007 J.P. Rini from cartoonbank.com. All Rights Reserved. Facing page: Ken Elkabany of the University of California at Berkeley participated in the IEEE's Student Leaders Summit.

IEEE-USA Introduces Entrepreneurs Village, Forms Innovation Institute

IEEE members who want to start their own businesses have a new place to turn for advice and information. Sponsored by IEEE-USA, the IEEE Entrepreneurs Village is an online site that offers high-tech entrepreneurs with tools and resources to help them launch new businesses and expand existing ones. Village members – there were more than 275 within a few months of the launch – can seek advice and information on topics including funding, marketing, hiring, best practices and legal issues.

Members can post discussion items, link to articles from other sites they find helpful, search for other entrepreneurs and learn about local entrepreneurial groups within the IEEE's U.S. sections. The Entrepreneurs Village also has a mentoring database to help newer business owners locate a more experienced person who can offer advice and information.

In late 2006, IEEE-USA also began organizing the Innovation Institute, a new organization that will offer programs to help managers in business, academic and government organizations who are responsible for the innovation of new products and services. Scheduled to become operational during 2007, the Institute will offer workshops throughout the U.S. led by a faculty of accomplished innovators and entrepreneurs. Workshop topics will include innovative design, research, development, delivery, marketing and sales. Other important areas that help to foster innovative environments – such as human relations, legal and public policy – also will be covered. In addition, a subscriber-based virtual community will offer access to innovation practices, case studies, mentors and other resources.

FIRST IEEE STUDENT LEADERS SUMMIT ENCOURAGES NETWORKING, SHARING.



Student Leaders Gather for Summit Meeting

Student leaders' interests – such as networking with peers, sharing best practices for boosting Branch membership, and encouraging entrepreneurship and community service – were on the agenda when leaders from nine U.S. universities gathered in September of 2006.

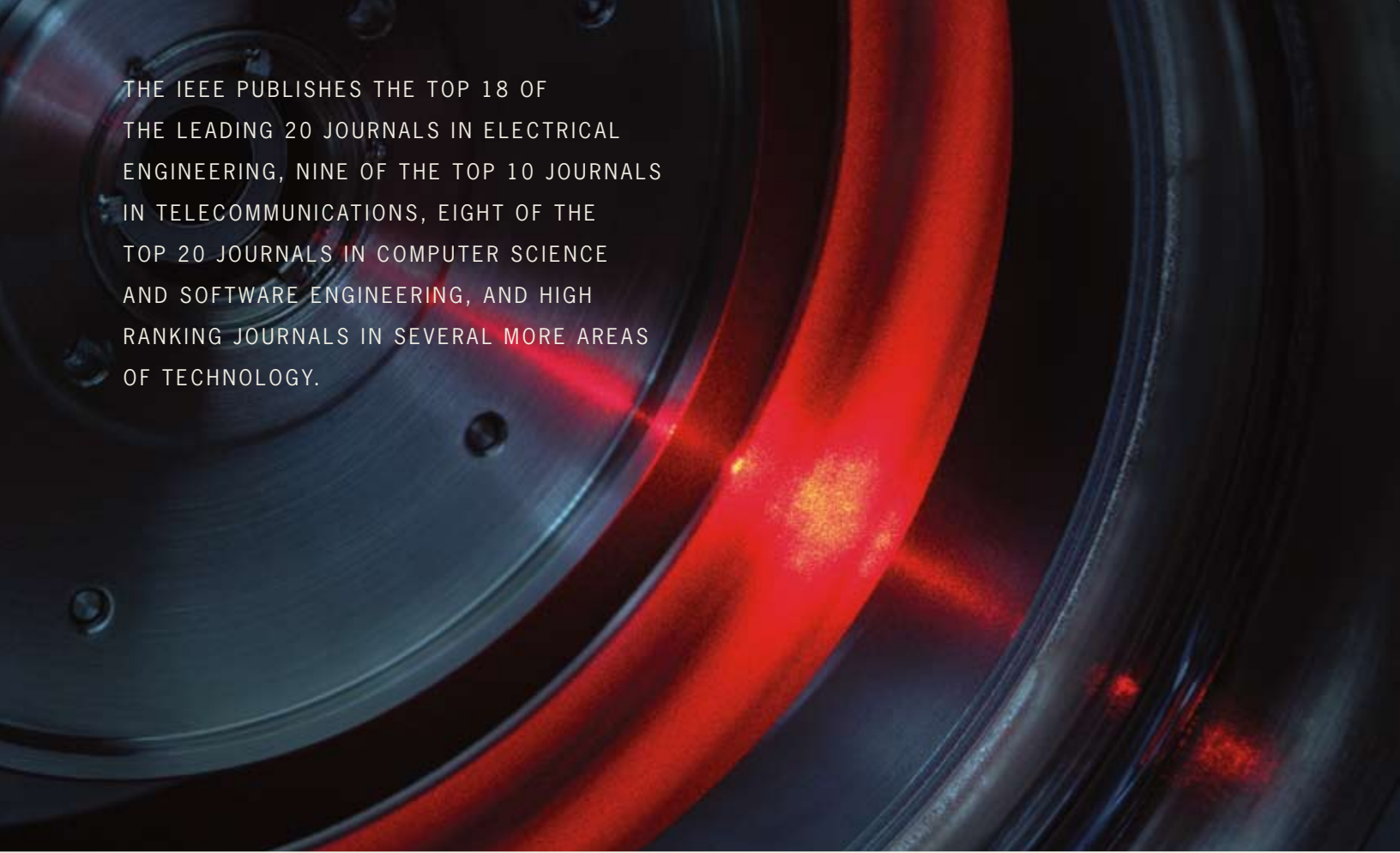
The gathering, which was the first Student Leaders Summit of the IEEE University Partnership Program (UPP), included representatives from Drexel University; Stanford; Texas A&M University; the University of California's Berkeley, Los Angeles and San Diego campuses; the University of Michigan; Virginia Tech; and Worcester Polytechnic Institute. The meeting took place at the IEEE Operations Center in Piscataway, New Jersey, USA.

The IEEE began the UPP in 1999 to establish closer ties with student branches at these and four other institutions that were not represented at the summit. They are: California Institute of Technology, Columbia University, Dartmouth College and Massachusetts Institute of Technology. The goals of the program are to encourage students' learning and their development of professional skills and relationships.

The branch leaders also got career advice from guest speakers, including author Carl Selinger, who discussed the value of non-technical skills. *IEEE Spectrum* Executive Editor Glenn Zorpette also described his experiences while embedded with an engineering team helping to rebuild Iraq's power grid.

In mid-2007, plans were underway to expand the University Partnership Program to several universities located outside the U.S.

products and services



THE IEEE PUBLISHES THE TOP 18 OF THE LEADING 20 JOURNALS IN ELECTRICAL ENGINEERING, NINE OF THE TOP 10 JOURNALS IN TELECOMMUNICATIONS, EIGHT OF THE TOP 20 JOURNALS IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING, AND HIGH RANKING JOURNALS IN SEVERAL MORE AREAS OF TECHNOLOGY.

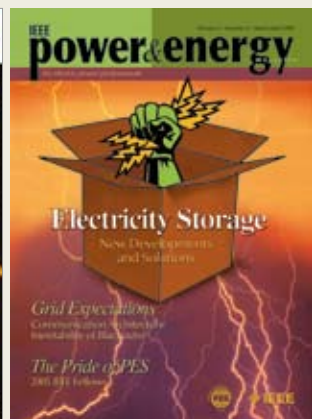
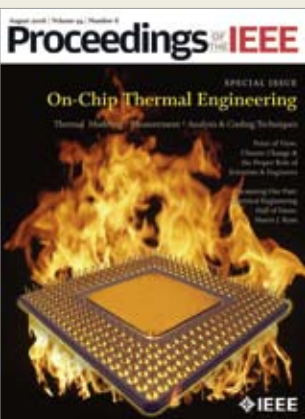
Studies Again Confirm Value of IEEE Publications

In 2006, several studies continued to reaffirm the value of IEEE technical journals to engineers and scientists. Because patent citation has become such a reliable indicator of journal usefulness, the IEEE again commissioned an analysis of how often patents issued by the United States Patent Office (USPO) cite scientific literature – especially IEEE-published content. This was the fifth such study for the IEEE since 2004.

1790 Analytics LLC, a New Jersey, U.S.-based consulting firm that analyzes patent trends for the investment community, conducted two studies in 2006 for the IEEE and found that the top 25 patenting companies referenced more than 250,000 articles over the last 10 years. More than 38 percent of those articles appeared in IEEE journals and IEEE-sponsored conference proceedings.

An analysis of all patents in several technology categories revealed even more powerful findings. For example, some 47 percent of all scientific references to computer hardware patents cited IEEE publications, while the second most referenced publisher had slightly less than 12 percent. The results were similar in such areas as information technology, information storage, telecommunications and power systems.

The second 2006 study conducted by 1790 Analytics assessed the impact of IEEE publications on European patent citations. The 25 most active information technology companies published over 17,000 patents with the European Patent Office (EPO) in 2005 alone. More than half of these cited documents were published by the IEEE. These findings are consistent with the U.S.-based results of earlier studies and are important because, although about half of all U.S. patents were not invented in the U.S., some individuals



Facing page: Laser-controlled X-ray tubes provide new benefits. A filament of tungsten that glows very brightly at about 2500° C. enables it to emit electrons accelerated by high voltage in the vacuum and generate X-ray radiation when they strike the counter electrode. (Courtesy of Siemens) This page, left: Proceedings of the IEEE, which marks its 95th year of continuous publication in 2007, unveiled a new design and new features in 2006. Center: In 2006, the Willamette Valley Chapter of the Society for Technical Communications (STC) honored three 2005 issues of IEEE Power & Energy Magazine for excellence in magazine design. Right: The January 2005 cover of IEEE Signal Processing Magazine was recognized for excellence in 2006 by the STC.

in the global patent community perceive the European patent systems referencing method to be superior to the U.S. system.

The patent-citation metric is a relatively new technique for measuring the value of IEEE scientific and technical journals. Another long-established approach is the Institute of Scientific Information's (ISI) annual Journal Citation Report (JCR), which ranks the impact of journals by how frequently their content is quoted or cited by other scientific publications in their initial year of publication. According to the ISI's 2005 study, that was released in mid-2006, the IEEE publishes the top 18 of the leading 20 journals in electrical engineering, nine of the top 10 journals in telecommunications, eight of the top 20 journals in computer science and software engineering, and high-ranking journals in several more areas of technology. The JCR ranks journals by their impact factor, defined as the average number of times that articles published in a specific journal in the previous two years were cited in a particular year.

Target: Author-to-Reader Digital Publishing

The IEEE is moving closer to a major publishing goal: an all-electronic environment that will help authors and enhance readers' rapid access to cutting-edge information.

In 2006, IEEE publishing advances included both new processes and the refinement of recent innovations. They include:

- > **E-Copyright Form.** Launched in 2004 and now fully implemented, this Web-based system completes the IEEE copyright form for the author and permits the author to sign digitally and file online. The form is available in seven languages: English, French, Spanish, German, Japanese, Simplified Chinese and Russian.
- > **Reference Validation and Link Management.** This tool automates the process of checking author-supplied references against known references to facilitate accurate hyper-linking of documents. Now used internally by IEEE editorial employees, an author module that allows authors to validate citations before submitting their manuscripts to the IEEE is being readied for 2007.
- > **IEEE Manuscript Central.** More than 65 percent of the IEEE's 130+ technical publications now use this online manuscript submission system, which enables authors to submit their manuscripts for peer review. In 2006, about 3,000 manuscripts a month were submitted for review – a 20 percent increase over 2005.

> IEEE Digital Asset Management System (IDAMS).

Launched in 2006, IDAMS stores finished IEEE articles and feeds them to IEEE Xplore®, the organization's digital library. IDAMS supports publishing single articles and multimedia files, offering some articles for online availability as much as two months before they appear in a scheduled printed journal issue.

- > **PDF eXpress.** A service that provides PDF checking and conversion for IEEE conference authors, it enabled processing of almost 172,000 files in 2006, compared to 90,000 files for all of 2005. The service, which is available through IEEE-sponsored conferences that register to participate, checks PDFs before authors submit their manuscripts for publication in the conference proceedings. PDF eXpress ensures that the PDF will meet requirements for optimal display in IEEE Xplore®, thus helping to speed up the online availability of conference proceedings.

- > **IEEE Xplore®.** Users of the IEEE's online delivery platform downloaded 68 million full-text PDF documents during 2006, an average of 5.7 million a month. Also last year, IEEE Xplore® expanded its holdings by another 100,000 articles, including the addition of digitized legacy content dating back to 1913 and a new research tool for power and energy organizations. The legacy content includes the earliest issues of *Proceedings of the IRE*, the predecessor to *Proceedings of the IEEE*, while the new IEEE Power & Energy Library provides focused searching and browsing of power and energy-specific content.

Five New Publications Focus on Breakthrough Technologies

Each of the four new IEEE technical publications introduced in 2006 concentrates on emerging technologies that can have a tremendous impact on industry and people's lives.

IEEE Computational Intelligence Magazine covers all areas of computational intelligence design and applications, especially applications-oriented developments, successful industrial implementations, design tools, computational intelligence education and applied research. It is published by the IEEE Computational Intelligence Society.

IEEE Vehicular Technology Magazine offers automotive transportation engineers current research about motor vehicles and associated land transportation infrastructures, including terrestrial mobile vehicular services, components, systems and auxiliary functions for motor vehicles, automated and

IEEE SPECTRUM HAS RECEIVED SEVERAL HIGH-PROFILE HONORS FOR ITS 2006 SERIES ON RE-ENGINEERING IRAQ.



non-automated ground transport technologies, and land transportation. The IEEE Vehicular Technology Society is the publisher.

IEEE Computer Architecture Letters, a journal devoted specifically to the knowledge and advancement of computer architecture, emphasizes the most up-to-date, innovative and peer-oriented data in such related areas as computer systems, architecture, micro-architecture and workload characterization, among others. It is published by the IEEE Computer Society.

IEEE Transactions on Information Forensics and Security, which is published by the IEEE Signal Processing Society, covers current research on the fundamental contributions and the mathematics behind information forensics, information security, surveillance and systems applications that incorporate these features.

Also in 2006, six new publications were being readied for introduction in 2007. The five print titles are: *IEEE Transactions on Biomedical Circuits and Systems*; *IEEE Nanotechnology Magazine*; *IEEE Systems Journal*; *IEEE Journal of Selected Topics in Signal Processing*; and *IEEE Industrial Electronics Magazine*. The sixth, *IEEE Transactions on Network and Service Management*, will only be available online.

IEEE Spectrum Marks 2006 with Multimedia Successes, Editorial Honors

Can a print magazine create a multimedia experience for its readers? In 2006, important enhancements to *IEEE Spectrum Online* increased its usefulness to members and other technology professionals around the world.

Besides exploring print issues of *IEEE Spectrum*, readers can now access a growing number of audio podcasts produced by the writers and editors of the magazine, as well as obtain articles and features that are available only online. *Spectrum Online*'s new "TechInsider" Webinars – available exclusively to IEEE members – are live one-hour presentations from industry experts exploring technology developments and trends. Topics have included design automation, convergence, and the impact of mobile devices on network security, among others.

The overhaul of *IEEE Spectrum* and the 2004 relaunch of *Spectrum Online* were cited in 2006 when *Folio Magazine* named *IEEE Spectrum* Editor-in-Chief Susan Hassler one of the "40 Most Influential People in the Industry." *Folio* is a U.S.-based trade publication read by magazine publishing executives worldwide.

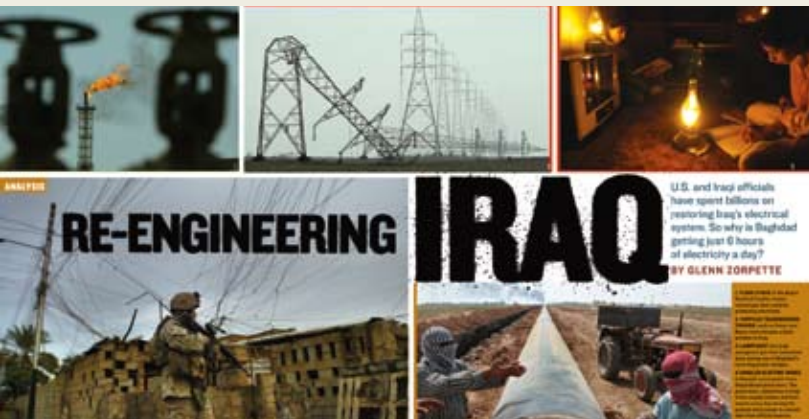
IEEE Spectrum received multiple high-profile honors for its series in the February and March 2006 issues on re-engineering Iraq. American Business Media's Jessie H. Neal National Business Journalism Awards presented three recognitions for editorial excellence for the articles by executive editor Glenn Zorpette. He won a 2007 Neal Award and the 2007 Grand Neal Award from the competition's more than 1,000 entries. Zorpette also received the 2007 McAllister Editorial Fellowship, given annually to an editor to promote the study of business media. In addition, the Society of National Association Publications (SNAP), a U.S. organization of not-for-profit organization publishers, presented 2007 Gold EXCEL awards to Zorpette's Iraq article in the February 2006 issue and to the "Technology and Terrorism" special issue in September 2006. The IEEE sponsored Zorpette's two-week visit to Iraq in late 2005.

The series of articles on re-engineering Iraq also was one of five nominees in the Reporting category of the prestigious U.S. National Magazine Awards. Other nominees were *Esquire*, which won, as well as *Fortune*, *Rolling Stone* and *Time*.

Helping Members and Others to Continue Learning

For engineers and other technical professionals who want to advance their careers, access to continuing education is a top priority. In 2006, the IEEE offered a wide range of learning opportunities, including short courses at conferences and Section meetings, education offerings from IEEE Societies, partnerships with universities and professional training organizations, certificate programs, online learning resources and much more. Many of these IEEE education experiences offer Continuing Education Units (CEU) and Professional Development Hours (PDH).

IEEE Expert Now is a collection of engaging and highly interactive one-hour, online courses gleaned from educational offerings initially presented at IEEE conferences and workshops. In 2006, the program grew to 60 courses, ranging from artificial intelligence to vehicular technology. Another 37 are scheduled to be added by the end of 2007. Formerly accessible only to employees of companies that subscribed to the collection, in 2006 *IEEE Expert Now* became available to individual IEEE members, who can purchase access to single modules at a special rate.



membership development

Above, from left: IEEE Spectrum's "Technology and Terrorism" special issue in September 2006 was recognized with a Gold award by the U.S. Society of National Association Publications. "Re-engineering Iraq," a two-part series in February and March 2006 (March cover shown above center) received multiple high-profile honors. Right: A pilot study conducted with the University of Michigan, USA, shows that a Sandia National Laboratories handheld device determined in minutes – from a tiny saliva sample – whether a patient has gum disease and how advanced it is. Other potential applications range from better diagnosing prostate and breast cancer, to detecting biotoxins and other markers to measure exposure to biological agents. (Courtesy of Sandia National Laboratories)

The IEEE Education Partners Program (EPP), available exclusively to IEEE members, grew significantly in 2006 and now offers more than 7,500 courses, seminars and graduate degree programs either online or on campus at a 10 percent discount. The 26 current EPP providers are a select group of universities and companies that have been reviewed and approved by qualified IEEE experts, ensuring that members have access to high-quality learning resources. Providers include Polytechnic University, Stevens Institute of Technology, Knowledge Master Inc., and Inquestra Learning.

IEEE Standards in Education is a Web portal that provides instructional resources to assist in teaching technical standards in universities. The site includes discussions on the history and uses of standards, tutorial modules and case illustrations, a glossary and a guide to standards development bodies around the world. The Web site was developed by a team of IEEE authorities on education and standards. In addition to the portal, at least one pilot workshop for working professionals on the 802 family of IEEE standards is planned during 2007.

IEEE-USA offers more than 30 online courses in partnership with AchieveGlobal to help members with the "soft skills" needed to succeed in the workplace. Modules include how to manage priorities and how to listen effectively and are available exclusively to IEEE members at a discount.



Local Efforts Help to Boost 2006 IEEE Membership

An increased local emphasis on membership development during 2006 helped IEEE membership to grow to 374,767 by year's end. This was a two percent increase over 2005 and was driven by gains in Region 3 (Southeastern U.S.) as well as all the non-U.S. Regions. These are: Canada (Region 7), Europe/Middle East/Africa (Region 8), Latin America (Region 9), and Asia and the Pacific Rim (Region 10).

At the close of 2006, Region 10 remained the IEEE's largest region, with 67,442 members. Region 8, with 60,856 members, became the IEEE's second largest. Also at year-end, members from outside the U.S. constituted 42.4 percent of the total organization, up from 40.6 percent in 2005.

Reversing a four-year trend, total higher-grade memberships – that is, all those at Member level and higher – exceeded 2005. In addition, the number of IEEE Student Members established a new record high, with 80,491 in this category, an increase of nine percent.

Although society memberships declined an overall 2.5 percent in 2006, an impressive 20 of the IEEE's 39 societies actually increased their memberships. The IEEE Intelligent Transportations Systems Society, which was formed in 2004, continued to grow with an 8.9 percent gain. The IEEE Power Electronics Society grew 6.2 percent.

The percentage of female IEEE members increased slightly. Women now comprise 9.2 percent of the total IEEE membership.

Eight new IEEE sections were formed last year, four of them in China, and one each in Estonia, Japan, Malta and Oman. At year's end, there were 319 sections to facilitate local communications and activities for members.



Thousands Attend Record 540 IEEE Conferences

Thousands of IEEE members and other technical professionals continue to reinforce the value of IEEE conferences. In 2006, these individuals attended a record 540 conferences sponsored entirely or in part by the organization.

The following are just a few of the 2006 conferences:

- > The 2006 IEEE International Symposium on Electronics and the Environment (ISEE) in May in San Francisco drew more than 300 engineers and other technical professionals interested in environmental design, manufacturing, emerging technologies and recycling. Barbara Karn of the U.S. Environmental Protection Administration discussed how the new field of nanotechnology offers opportunities to simultaneously develop sound environmental practices. The annual event is co-sponsored by the IEEE Computer Society's Electronics & the Environment Committee and the International Association of Electronics Recyclers.
 - > Hangzhou, which is one of the ancient capitals of China, was the location of the 2006 Asian Solid-State Circuits Conference. More than 260 attended the November meeting, which was the second such conference held in Asia where they heard presentations ranging from the Korean IT next-generation infrastructure test bed to China's Semiconductor Manufacturing International Corporation. The event is sponsored by the IEEE Solid-State Circuits Society.
 - > After Hurricane Katrina forced the IEEE Power Engineering Society to cancel its annual Power and Distribution Conference & Exposition in October 2005 in New Orleans, more than 11,000 power engineers attended the 2006 meeting in May in Dallas. This was the highest attendance in recent years.
-
- Above, left: The opening plenary session of the 2006 Asian Solid-State Circuits Conference, Hangzhou, China, was attended by (from left) IEEE Senior Member Chong-Kuang Wang of National Taiwan University and chair of the conference steering committee; IEEE Member Ke Gong, president of Tianjin University, China, and conference chair; and IEEE Fellow Richard C. Jaeger of Auburn University, Alabama, USA, and IEEE Solid-State Circuits Society president. Right: New techniques for recycling electronics hardware were high on the agenda at the 2006 International Symposium on Electronics and the Environment in San Francisco.*
- > The first international conference on biomedical robotics and biomechatronics took place in February in Pisa, Italy. Called BioRob 2006, the event included various sessions on biorobotics – an emerging, interdisciplinary field that blends robotics and biomedical engineering. More than 350 engineers, scientists and physicians attended. The event was co-sponsored by the IEEE Robotics and Automation Society and the IEEE Engineering in Medicine and Biology Society.
 - > The 2006 Conference on Computer Communications (INFOCOM), sponsored by the IEEE Communications Society, celebrated its 25th anniversary year in April in Barcelona, Spain. Almost 800 engineers and other professionals heard three keynote speakers: Leonard Kleinrock, who created the basic principles of packet switching, which supports the Internet; Imrich Chlamtac, president of Europe's CREATE-NET network of European universities and research organizations, and Charles E. Perkins of Nokia's Network Technology Laboratory.

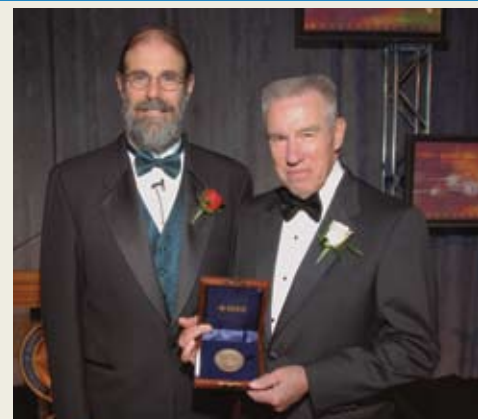
operations

New Business Management System to Launch in Third Quarter

It will revolutionize IEEE operations – but only a part of it will be visible to IEEE members and other technical professionals. "It" is the new Business Management System (BMS), one of the largest and most significant projects in IEEE history. In 2006, more than 200 employees collaborated on creating the new system, which as of mid-2007, was on target for initial implementation during the third quarter of the year.

This new BMS represents a fundamental rethinking and redesign of the IEEE's core business systems, combining information from a variety of databases to provide a comprehensive view of the interconnection of IEEE operations, members and customers. It is expected to significantly enhance IEEE operations and member convenience. Whether people contact the IEEE to join, renew memberships, purchase articles, subscribe to publications, or for many other reasons, the launch of the new system sets the stage to enable even more timely and thorough service to almost anyone who deals with the IEEE.

awards, fellows and honors



James Meindl Receives IEEE's Highest Honor

2006 IEEE President Michael R. Lightner (*above left*) presented the 2006 IEEE Medal of Honor to James D. Meindl during the annual Honors Ceremony in Minneapolis, USA. Soon after receiving the IEEE's highest honor, Dr. Meindl was named founding director of the newly formed Nanotechnology Research Center at Georgia Institute of Technology in Atlanta. At the time of the honors event he was director and Pettit Chair Professor of the Joseph M. Pettit Microelectronic Research Center (MiRC) at Georgia Tech. Also an IEEE Life Fellow, Meindl was honored for his pioneering contributions to microelectronics, including low-power, biomedical, physical limits and on-chip interconnect works. During his 40-year career in the semiconductor field, he has conducted ground-breaking research in gigascale silicon technology integration. The IEEE Medal of Honor is sponsored by the IEEE Foundation. President Lightner also presented 11 other Medals, two Service Awards, one Corporate Innovation Recognition and one Honorary Membership.

IEEE Medal of Honor

James D. Meindl

Georgia Institute of Technology
Atlanta, Georgia, USA

Sponsor: IEEE Foundation

IEEE Richard W. Hamming Medal

Vladimir I. Levenshtein

Keldysh Institute for Applied Mathematics
Moscow, Russia

Sponsor: QUALCOMM, Inc.

IEEE Simon Ramo Medal

Donald C. Wetzel (retired)

Electronic Signature Verification Systems
Dallas, Texas, USA

Sponsor: Northrop Grumman Corporation

Alexander Graham Bell Medal

John M. Wozencraft

Professor Emeritus
Massachusetts Institute of Technology
Cambridge, Massachusetts, USA

Sponsor: Alcatel-Lucent

IEEE Jack S. Kilby Signal Processing Medal

Thomas Kailath

Stanford University
Stanford, California, USA

Sponsor: Texas Instruments, Inc.

IEEE John von Neumann Medal

Edwin Catmull

Pixar Animation Studios and
Disney Animation
Emeryville, California, USA

Sponsor: IBM Corporation

IEEE Edison Medal

Fawwaz T. Ulaby

University of Michigan
Ann Arbor, Michigan, USA

Sponsor: Samsung Electronics, Ltd.

IEEE Jun-ichi Nishizawa Medal

Mitsumasa Koyanagi

Tohoku University
Sendai, Japan

Kiyoo Itoh

Hitachi, Ltd.
Tokyo, Japan

Hideo Sunami

Hiroshima University
Hiroshima, Japan

Sponsor: The Federation of Electric Power Companies, Japan and Semiconductor Research Foundation

IEEE Richard M. Emberson Award

Donald M. Bolle (retired)

Lehigh University
Bethlehem, Pennsylvania, USA
and Polytechnic University
New York, New York, USA

Sponsor: IEEE Technical Activities Board

IEEE James H. Mulligan, Jr. Education Medal

Sanjit K. Mitra

University of California
Santa Barbara, California, USA

Sponsor: The Mathworks, Inc., Pearson Prentice Hall, National Instruments Foundation and Xilinx, Inc.

IEEE Robert N. Noyce Medal

Shoichiro Yoshida

Nikon Corporation
Tokyo, Japan

Sponsor: Intel Foundation

IEEE Haraden Pratt Award

Antonio C. Bastos

Faculdade de Tecnologia e Ciências
Salvador, Bahia, Brazil

Sponsor: IEEE Foundation

IEEE Founders Medal

Toshiharu Aoki

NTT Data Corporation
Tokyo, Japan

Sponsor: IEEE Foundation

IEEE Dennis J. Picard Medal for Radar Technologies and Applications

Eli Brookner

Raytheon Corporation
Sudbury, Massachusetts, USA

Sponsor: Raytheon Company

IEEE Corporate Innovation Recognition

ARM Limited

Cambridge, United Kingdom

Sponsor: IEEE

IEEE Honorary Membership

Vladimir Rokhlin

Yale University
New Haven, Connecticut, USA

Sponsor: IEEE

Other Major 2006 IEEE Awards

At ceremonies around the world during 2006, eminent engineers and other outstanding technical professionals were presented with 30 IEEE Technical Field Awards, two IEEE Teaching Awards, and one Prize Paper Award.

IEEE Cledo Brunetti Award

Susumu Namba

Osaka University, The Nagasaki Institute of Applied Science and RIKEN
Nagasaki, Japan

Sponsor: Brunetti Bequest

IEEE Components, Packaging and Manufacturing Technology Award

C. P. (Ching Ping) Wong

Georgia Institute of Technology
Atlanta, Georgia, USA

Sponsor: IEEE Components, Packaging and Manufacturing Technology Society

IEEE Control Systems Award

Panganamala Ramana Kumar

University of Illinois
Urbana-Champaign, Illinois, USA

Sponsor: IEEE Control Systems Society

IEEE Electromagnetics Award

Raj Mittra

Pennsylvania State University
University Park, Pennsylvania, USA

Sponsor: IEEE Antennas and Propagation Society, IEEE Electromagnetic Compatibility Society, IEEE Microwave Theory and Techniques Society and IEEE Geoscience and Remote Sensing Society

IEEE James L. Flanagan Speech and Audio Processing Award

James D. Johnston

Microsoft Corporation
Redmond, Washington, USA

Sponsor: IEEE Signal Processing Society

IEEE Andrew S. Grove Award

Chang-Gyu Hwang

Samsung Electronics Co., Ltd.
Yougin City, Gyeonggi-Do, South Korea

Sponsor: IEEE Electron Devices Society

IEEE Herman Halperin Electric Transmission and Distribution Award

Anjan Bose

Washington State University
Pullman, Washington, USA

*Sponsor: Robert and Ruth Halperin Foundation
In Memory of Herman and Edna Halperin*

IEEE Masaru Ibuka Consumer Electronics Award

Wayne E. Bretl

Zenith Electronics Corporation
Lincolnshire, Illinois, USA

Richard Citta

Micronas Semiconductor, Inc.
Palatine, Illinois, USA

Wayne C. Luplow

Zenith Electronics Corp.
Lincolnshire, Illinois, USA

Sponsor: Sony Corporation

IEEE Award in International Communication

Yasuo Hirata

The University of Electro-Communications
Saitama, Japan

*Sponsor: IEEE Award in International
Communication Fund*

IEEE Internet Award

Scott Shenker

International Computer Science Institute
University of California
Berkeley, California, USA

Sponsor: Nokia Corporation

IEEE Reynold B. Johnson Data Storage Device Technology Award

Elijahou Harari

Sanjay Mehrotra

Jack H. Yuan

SanDisk
Sunnyvale, California, USA

Sponsor: Hitachi Global Storage Technologies

IEEE Reynold B. Johnson Information Storage Systems Award

Jaishankar M. Menon

IBM Systems and Technology Group
San Jose, California, USA

Sponsor: IBM Almaden Research Center

IEEE Richard H. Kaufmann Award

George W. Younkin

Industrial Controls Consulting
Fond du Lac, Wisconsin, USA

Sponsor: IEEE Industry Applications Society

IEEE Joseph F. Keithley Award in Instrumentation and Measurement

Alessandro M. Ferrero

Departimento di Electrotecnica
Politecnico di Milano
Milan, Italy

Sponsor: Keithley Instruments, Incorporated

IEEE Gustav Robert Kirchhoff Award

Gabor C. Temes

Oregon State University
Corvallis, Oregon, USA

Sponsor: IEEE Circuits and Systems Society

IEEE Koji Kobayashi Computers and Communications Award

Nicholas F. Maxemchuk

Columbia University
New York, New York, USA

Sponsor: NEC Corporation

IEEE William E. Newell Power Electronics Award

Deepakraj M. Divan

Georgia Institute of Technology
Atlanta, Georgia, USA

Sponsor: IEEE Power Electronics Society

IEEE Daniel E. Noble Award

Carlos A. Paz de Araujo

University of Colorado
Colorado Springs, Colorado, USA

Sponsor: Motorola Foundation

IEEE Frederik Philips Award

Louis C. Parrillo

Parrillo Consulting, LLC
Austin, Texas, USA

Sponsor: Philips Electronics N.V.

IEEE Photonics Award

Frederick J. Leonberger

EOvation Technologies, LLC
West Hartford, Connecticut, USA

*Sponsor: IEEE Lasers and
Electro-Optics Society*

IEEE Emanuel R. Piore Award

Robert K. Brayton

University of California
Berkeley, California, USA

Sponsor: IEEE Emanuel R. Piore Award Fund

IEEE Judith A. Resnik Award

Kim M. Ess

NASA Johnson Space Center
Houston, Texas, USA

Sponsor: IEEE Aerospace and Electronic Systems and IEEE Control Systems and IEEE Engineering in Medicine and Biology Societies

IEEE Robotics and Automation Award

George A. Bekey

University of Southern California
Los Angeles, California, USA

Sponsor: IEEE Robotics and Automation Society

IEEE Frank Rosenblatt Award

Lawrence J. Fogel

Natural Selection, Inc.
La Jolla, California, USA

Sponsor: IEEE Computational Intelligence Society

IEEE David Sarnoff Award

Mau-Chung Frank Chang

University of California
Los Angeles, California, USA

Sponsor: Sarnoff Corporation

IEEE Donald O. Pederson Award in Solid-State Circuits

Mark Horowitz

Stanford University
Stanford, California, USA

Sponsor: IEEE Solid-State Circuits Society

IEEE Charles Proteus Steinmetz Award

S. Mark Halpin

Auburn University
Auburn, Alabama, USA

Sponsor: IEEE Standards Association

IEEE Eric E. Sumner Award

Robert Arno Scholtz

University of Southern California
Los Angeles, California, USA

Moe Z. Win

Massachusetts Institute of Technology
Cambridge, Massachusetts, USA

Sponsor: Alcatel-Lucent

IEEE Nikola Tesla Award

Konrad Reichert

ETH Zentrum
Zurich, Switzerland

Sponsor: The Grainger Foundation and IEEE Power Engineering Society

IEEE Kiyo Tomiyasu Award

Muhammad A. Alam

Purdue University
West Lafayette, Indiana, USA

Sponsor: Kiyo Tomiyasu Fund

IEEE Leon K. Kirchmayer Graduate Teaching Award

Toby Berger

Cornell University
Ithaca, New York, USA

Sponsor: Leon K. Kirchmayer Memorial Fund

IEEE Undergraduate Teaching Award

John B. Peatman

Georgia Institute of Technology
Atlanta, Georgia, USA

Sponsor: IEEE Foundation

IEEE Donald G. Fink Prize Paper Award

Suhaz N. Diggavi

Swiss Federal Institute of Technology
Lausanne, Switzerland

Naofal Al-Dhahir

University of Texas at Dallas
Dallas, Texas, USA

Anastasios Stamoulis

QUALCOMM, Inc.
San Diego, California, USA

Dr. Robert Calderbank

Princeton University
Princeton, New Jersey, USA

"Great Expectations: The Value of Spatial Diversity in Wireless Networks." Proceedings of the IEEE, Volume 92, No. 2, February, 2004

Sponsor: IEEE Life Members Committee

2006 Class of IEEE Fellows

In 2006, 271 IEEE Senior Members were elected to IEEE Fellow. This honor is the highest membership grade that any IEEE member can achieve and is awarded annually to no more than 0.1 percent of the voting membership as of 31 December of the preceding year. Being named an IEEE Fellow recognizes outstanding members for their significant accomplishments in advancing engineering, science and technology, and for their contributions to the IEEE's mission.



IEEE Member Willard Boyle and IEEE Life Fellow George E. Smith (*left and right*) shared the 2006 Charles Stark Draper prize, a US\$500,000 award presented annually by the U.S. National Academy of Engineering. The prize, which honors engineers whose accomplishments have benefited society, was awarded to them as co-inventors, in 1969, of the charge-coupled device (CCD). The CCD is a light-sensitive integrated circuit that stores and displays data from an image so that each pixel in the image is converted into an electrical charge. Today, CCDs are widely used in digital cameras, scanners and facsimile machines. Now a consultant, Boyle spent 26 years with Bell Telephone Laboratories where he was executive director of research for communications sciences. Smith, who is retired, was with Bell Telephone Laboratories for 27 years, where he headed groups that worked on next-generation solid-state applications and devices for high-performance digital and analog circuits.



IEEE Member Timothy Persons (*center*) was honored with the 2006 Director of National Intelligence Fellows Award for his research achievements within the U.S. intelligence community. Persons is the technical director and chief scientist for the Disruptive Technology Office (DTO) at the Office of the Director of National Intelligence, in Washington, D.C. The award includes a US\$200,000 grant to be used in research addressing some of the complex science and technology issues facing the intelligence community. "Disruptive technology" describes an innovation or product that eventually overturns and replaces the existing dominant technology. Persons, who was one of 10 to receive the 2006 award, is shown here with (*from left*) John D. Negroponte, director of National Intelligence, and Eric C. Haseltine, associate director of National Intelligence for Science and Technology .

2006 board of directors and management council



IEEE 2006 BOARD OF DIRECTORS

FIRST ROW

Ralph W. Wyndrum, Jr., President, IEEE-USA; **Pedro A. Ray**, Vice President, Regional Activities; **Evangelia Micheli-Tzanakou**, Director & Delegate, Division X; **J. Roberto de Marca**, Secretary; **W. Cleon Anderson**, Past President; **Michael R. Lightner**, President & CEO; **Leah H. Jamieson**, President-Elect; **Saifur Rahman**, Vice President, Publication Products & Services; **Celia L. Desmond**, Vice President, Technical Activities; **Robert L. Baldwin**, Director & Delegate, Region 6; **Donald N. Heirman**, President, Standards Association

SECOND ROW

Jeffry Raynes, Executive Director; **Stuart A. Long**, Director & Delegate, Division IV; **Clinton J. Andrews**, Director & Delegate, Division VI; **Theodore W. Hissey**, Director Emeritus; **Robert A. Hanna**, Director & Delegate, Region 7; **Richard V. Cox**, Director & Delegate, Division IX; **Robert A. Scolli**, Director & Delegate, Region 5; **Seiichi Takeuchi**, Director & Delegate, Region 10; **George F. McClure**, Director & Delegate, Region 3; **Baldomir Zajc**, Director & Delegate, Region 8; **Luiz A. Pilotto**, Director & Delegate, Region 9

THIRD ROW

Oscar N. Garcia, Director & Delegate, Division V; **Mark J. Karol**, Director & Delegate, Division III; **Stephen L. Diamond**, Director & Delegate, Division VIII; **Steven J. Hillenius**, Director & Delegate, Division I; **Thomas A. Tullia**, Director & Delegate, Region 2; **Barry L. Shoop**, Director & Delegate, Region 1; **William O. Kennedy**, Director & Delegate, Division VII; **Robert D. Lorenz**, Director & Delegate, Division II; **Joseph V. Lillie**, Treasurer; **Eric Herz**, Director Emeritus; **Moshe Kam**, Vice President, Educational Activities
Missing from Photo: **Ronald G. Jensen**, Director & Delegate, Region 4

IEEE MANAGEMENT COUNCIL

Jeffry W. Raynes, Executive Director; **Chris J. Brantley**, IEEE-USA; **Donald R. Curtis**, Human Resources; **Anthony Durniak**, Publications Activities; **Judith L. Gorman**, Standards Activities; **Cecelia Jankowski**, Regional Activities; **Matthew S. Loeb**, Corporate Strategy and Communications; **Richard D. Schwartz**, Business Administration; **Barbara Coburn Stoler**, Educational Activities; **Mary C. Ward-Callan**, Technical Activities; **Sally A. Ericksen**, Information Technology

message from the treasurer



I am pleased to present the audited financial reports of the IEEE. These reports indicate that the overall financial health of the organization continues to be strong.

The Institute's Statement of Financial Position showed total assets of US\$369.8 million at 31 December 2006. This is a 16.4% increase from 2005, while the

Institute's total liabilities increased by 7.7% over the same time. Overall, the Institute's Net Assets ("Reserves") grew to US\$209.4 million from the 2005 year-end balance of US\$168.7 million.

In 2006, the Institute had revenues of US\$330.8 million, an increase of US\$33.7 million from 2005 as shown by the Statement of Activities. The increase in revenue was primarily due to the following:

1. Intellectual property revenue increased US\$12.8 million, primarily due to the sale of electronic products, including IEL whose gross revenue grew US\$11.9 million.
2. Conference revenue increased US\$9.7 million.
3. Net investment income also increased US\$9.0 million; total net investment income was US\$21.5 million in 2006 versus US\$12.5 million in 2005.
4. All other revenue increased US\$2.2 million.

The operational surplus in 2006 was US\$21.4 million. The surplus was further enhanced by the net investment gains of US\$21.5 million for 2006. This was offset by New and Continuing Initiative spending of US\$2.2 million. The total net surplus including the surplus from operations, investment gains and spending on initiatives in 2006 was US\$40.7 million

The IEEE received an unqualified or clean opinion from Ernst & Young, L.L.P. in the Report of Independent Auditors. The independent auditors meet with the IEEE Audit Committee to discuss the scope and results of their audit, their review on the adequacy of internal accounting controls, and the quality of financial reporting prior to issuing their opinion.

The IEEE is tax exempt under Section 501(c) (3) of the Internal Revenue Code. The IEEE Foundation is a separately incorporated affiliate of the IEEE; accordingly, its audited financial statements are not included in the accompanying documents.

I submit these reports with the certainty that the IEEE continues to be a financially sound organization.



Joseph V. Lillie
2006 IEEE Treasurer

report of independent auditors

The Board of Directors

The Institute of Electrical and Electronics Engineers, Inc.

We have audited the accompanying statements of financial position of The Institute of Electrical and Electronics Engineers, Inc. (the "Institute") as of December 31, 2006 and 2005, and the related statements of activities and cash flows for the years then ended. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Institute's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for

the purpose of expressing an opinion on the effectiveness of the Institute's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The Institute of Electrical and Electronics Engineers, Inc. at December 31, 2006 and 2005, and the changes in its net assets and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.



May 30, 2007

Statements of Financial Position in US\$

December 31, 2006 and 2005	2006	2005
Assets		
Current assets:		
Cash and cash equivalents	\$ 8,640,000	\$ 8,128,500
Accounts receivable, less allowance for doubtful accounts of US\$1,606,700 in 2006 and US\$1,460,900 in 2005	52,913,400	49,707,300
Inventories, prepaid expenses and other assets	14,745,200	15,204,200
Investments	254,930,200	210,578,800
Total current assets	331,228,800	283,618,800
Prepaid pension	–	2,236,300
Long-term investments	191,400	191,400
Land, buildings and equipment, net of accumulated depreciation	38,337,800	31,617,000
Total assets	\$ 369,758,000	\$ 317,663,500
Liabilities and net assets		
Current liabilities:		
Accounts payable and accrued expenses	\$ 33,836,300	\$ 29,590,800
Accrued pension expense	2,414,300	–
Deposits by IEEE Foundation	1,193,900	995,100
Trading liabilities	586,700	302,500
Debt obligations	8,650,200	9,543,700
Current portion of capital lease obligations	1,158,200	881,200
Deferred income:		
Dues and assessments	33,072,000	33,624,600
Subscriptions and other	77,870,500	72,622,800
Total current liabilities	158,782,100	147,560,700
Long-term debt:		
Obligations under capital leases, less current portion	1,571,900	1,379,000
Total liabilities	160,354,000	148,939,700
Net assets:		
Unrestricted	207,929,100	167,957,000
Temporarily restricted	1,283,500	575,400
Permanently restricted	191,400	191,400
Total net assets	209,404,000	168,723,800
Total liabilities and net assets	\$ 369,758,000	\$ 317,663,500

See accompanying notes.

Statement of Activities in US\$

Year Ended December 31, 2006	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Revenue:				
Membership and public imperatives	\$ 60,851,100	\$ 112,000		\$ 60,963,100
Periodicals	109,589,500			109,589,500
Conferences	116,290,100			116,290,100
Standards	20,548,100	646,000		21,194,100
Investment income, net	21,413,900	43,700		21,457,600
Other income	1,328,100			1,328,100
Net assets released from restrictions	93,600	(93,600)		–
Total revenue	330,114,400	708,100		330,822,500
Expenses:				
Program services:				
Membership and public imperatives	68,084,700			68,084,700
Periodicals	98,645,700			98,645,700
Conferences	99,010,300			99,010,300
Standards	16,213,400			16,213,400
Total program services	281,954,100	–		281,954,100
Supporting services:				
General and administrative	8,188,200			8,188,200
Total expenses	290,142,300	–		290,142,300
Change in net assets	39,972,100	708,100		40,680,200
Net assets, beginning of year	167,957,000	575,400	\$ 191,400	168,723,800
Net assets, end of year	\$ 207,929,100	\$1,283,500	\$ 191,400	\$ 209,404,000

See accompanying notes.

Statement of Activities in US\$

Year Ended December 31, 2005	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Revenue:				
Membership and public imperatives	\$ 58,990,200	\$ 79,500		\$ 59,069,700
Periodicals	101,815,700			101,815,700
Conferences	106,580,100			106,580,100
Standards	16,092,800			16,092,800
Investment income, net	12,460,600	29,900		12,490,500
Other income	1,062,100			1,062,100
Net assets released from restrictions	274,000	(274,000)		-
Total revenue	297,275,500	(164,600)		297,110,900
Expenses:				
Program services:				
Membership and public imperatives	60,250,400			60,250,400
Periodicals	91,906,600			91,906,600
Conferences	92,831,400			92,831,400
Standards	13,185,200			13,185,200
Total program services	258,173,600	-		258,173,600
Supporting services:				
General and administrative	8,801,600			8,801,600
Total expenses	266,975,200	-		266,975,200
Change in net assets	30,300,300	(164,600)		30,135,700
Net assets, beginning of year	137,656,700	740,000	\$ 191,400	138,588,100
Net assets, end of year	\$ 167,957,000	\$ 575,400	\$ 191,400	\$ 168,723,800

See accompanying notes.

Statements of Cash Flows in US\$

Year Ended December 31, 2006 and 2005	2006	2005
Operating activities		
Change in net assets	\$ 40,680,200	\$ 30,135,700
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation and amortization expense	5,446,200	6,021,700
Loss on disposal of fixed assets	-	72,000
Net realized and unrealized gains from investments	(15,094,400)	(8,119,900)
Change in fair value of interest rate swaps	(48,500)	(270,100)
Change in assets and liabilities:		
Increase in accounts receivable	(3,206,100)	(8,419,100)
Decrease in inventories, prepaid expenses and other assets	2,695,300	3,532,100
Increase in accounts payable and accrued expenses and other liabilities	6,691,900	6,093,000
Increase (decrease) in deposits by IEEE Foundation	198,800	(64,800)
Increase in deferred income	4,695,100	3,094,700
Net cash provided by operating activities	42,058,500	32,075,300
Investing activities		
Proceeds from sale of investments	443,224,900	204,644,000
Purchase of land, buildings and equipment	(10,383,800)	(5,945,500)
Purchases of investments	(472,197,700)	(225,205,500)
Net cash used in investing activities	(39,356,600)	(26,507,000)
Financing activities		
Change in cash overdraft	(32,100)	(1,516,400)
Payment of debt obligations	(845,000)	(810,000)
Payment of capital lease obligations	(1,313,300)	(1,153,900)
Net cash used in financing activities	(2,190,400)	(3,480,300)
Net increase in cash and cash equivalents	511,500	2,088,000
Cash and cash equivalents at beginning of year	8,128,500	6,040,500
Cash and cash equivalents at end of year	\$ 8,640,000	\$ 8,128,500
Supplemental data		
Interest paid	\$ 674,400	\$ 696,300
Non-cash items:		
Acquisition of equipment through capital lease obligation	\$ 1,783,200	\$ 866,300

See accompanying notes.

Notes to Financial Statements

1. Organization and Nature of Operations

The objectives of The Institute of Electrical and Electronics Engineers, Inc. (the "Institute" or "IEEE") are (a) scientific and educational, directed toward the advancement of the theory and practice of electrical engineering, electronics engineering, computer engineering, computer sciences, and the allied branches of engineering and related arts and sciences and (b) professional, directed toward the advancement of the standing of the members of the profession it serves.

Implementation of the Institute's objectives is primarily performed through regions, sections, societies and councils and their financial results are incorporated in the accompanying Institute's financial statements. These units were formed to serve the specialized technical interests of members and to coordinate these with the local activities of the sections and the broader activities of the Institute. The societies and councils promote the technical interests of their members through symposia, conferences and various publications.

2. Summary of Significant Accounting Policies

Financial Statements

Resources are reported for accounting purposes into separate classes of net assets based on the existence or absence of donor-imposed restrictions. In the accompanying financial statements, net assets that have similar characteristics have been combined into similar categories as follows:

Permanently Restricted – Net assets subject to donor-imposed stipulations that they be maintained permanently by the Institute. Such assets primarily include the Institute's permanent endowment funds. The principal of these endowments cannot be expended. The income earned can only be used as designated by the donor, and is then recorded as temporarily restricted.

Temporarily Restricted – Net assets whose use by the Institute is subject to donor-imposed stipulations that can be fulfilled by actions of the Institute pursuant to those stipulations or that expire by the passage of time. These temporarily restricted net assets are designated principally for awards, medals and specific projects.

Unrestricted – Net assets that are not subject to donor-imposed stipulations. Unrestricted net assets may be designated for specific purposes by action of the Board of Directors or may otherwise be limited by contractual agreements with outside parties. Unrestricted net assets can be utilized to carry out any of the purposes of the Institute.

Expenses are generally reported as decreases in unrestricted net assets. Expiration of donor-imposed stipulations that simultaneously increase unrestricted net assets and decrease temporarily restricted net assets are reported as reclassifications. Temporarily restricted revenues received and expended during the same fiscal year are recorded as unrestricted revenues and expenses in the statement of activities.

The financial statements of the Institute should be read in conjunction with the financial statements of the IEEE Foundation, a related organization (see Note 14).

Revenue Recognition

Revenue from membership dues and yearly periodical subscriptions is recognized ratably over the period to which it pertains. Amounts received in advance are included in deferred income.

Revenue and expense from conferences are recorded on the accrual basis in the year the conferences are held. Amounts received in advance are included in deferred income.

Revenue from contributions is recorded at its fair value in the period received including unconditional promises to give and is classified based upon the existence or absence of donor-imposed restrictions.

Contributions received by the Institute are primarily private and governmental grants containing donor-imposed restrictions as to their use. These restrictions are usually fulfilled within a two-year period by satisfying the respective restrictions.

Standards revenue primarily includes revenue from periodical subscriptions, publications and standards development groups, which are similar to conferences.

Cash and Cash Equivalents

Cash and cash equivalents include highly liquid short-term investments purchased with maturities of three months or less from the date of acquisition.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount and do not bear interest. Management reviews a customer's credit history before extending credit. The Institute has recorded a provision for estimated losses resulting from the inability of its customers to make required payments based on historical experience and periodically adjusts these provisions to reflect actual experience.

Investments

Investments, except special funds, are carried at fair value which is generally determined on the basis of quoted market prices (see Note 3). Special funds are managed by an international investment adviser and management group of companies (the "Investment Manager") and invested primarily in marketable non-U.S. equity and debt securities. The special funds investments are carried at the unit price computed by the Investment Manager based on the fair value of the respective funds' net assets.

Realized gains and losses on sales of investments are determined on an average cost basis.

Inventories

Inventories consist of periodicals published by the Institute and are stated at the lower of average cost or net realizable value.

Land, Buildings and Equipment

Land, buildings and equipment are stated at cost, including interest expense capitalized during the period of construction of the asset, or period of development up to the time that it is ready for intended use, in the case of internal-use software. Depreciation is provided on a straight-line basis over the estimated useful life of the asset. Buildings, furniture and equipment are depreciated over periods ranging from three to thirty-five years. Assets under capital leases are depreciated over the shorter of the lease terms or the useful lives of the assets. Building improvements are amortized over twenty years.

Upon retirement or other disposition of fixed assets, the cost and related accumulated depreciation are removed from the accounts and the resulting gains or losses, if any, are reflected in operations.

Accounts Payable and Accrued Expenses

Included in accounts payable and accrued expenses are cash overdrafts. At December 31, 2006 and 2005 these cash overdrafts amounted to \$2,693,200 and \$2,725,300, respectively.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Recent Accounting Pronouncements

In July 2006, the Financial Accounting Standards Board (FASB) issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement 109" (FIN 48). FIN 48 clarifies that an entity's tax benefits recognized in tax returns must be more likely than not of being sustained prior to recording the related tax benefit in the financial statements. The provisions of FIN 48 are effective January 1, 2007 for the Institute. The Institute is evaluating the potential effects, if any, that FIN 48 may have on its financial position or changes in its net assets, but does not expect there to be a material impact.

In September 2006, the FASB issued Statement of Financial Accounting Standard ("SFAS") No. 157, "Fair Value Measurements" (SFAS 157). This statement defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. SFAS 157 is to be applied when other standards require or permit the use of fair value measurement of an asset or liability. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The Institute is in the process of evaluating the impact, if any, that the adoption of SFAS 157 will have on the Institute's financial statements.

In September 2006, the FASB issued SFAS No. 158, "Employers' Accounting for Deferred Benefit Pension and Other Postretirement Plans" ("SFAS 158"). SFAS 158 requires employers to (i) recognize the funded status of their defined benefit pension and other postretirement plans on their balance sheet, (ii) recognize as a component of other comprehensive income, net of tax, the gains or losses and prior service costs or credits that arise during the period but are not recognized as components of net periodic benefit cost, (iii) measure defined benefit plan assets and obligations as of the date of the employer's statement of financial position, and (iv) disclose additional information in the notes to the financial statements. The Institute is currently assessing the impact of the recognition and disclosure requirements which are required to be reported in its financial statements for year ending December 31, 2007. The Institute is currently evaluating the impact that the adoption of SFAS 158 will have on its financial statements.

In February 2007, the FASB issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities-including an amendment of FASB Statement No. 115." SFAS 159 permits entities to elect to measure eligible financial instruments at fair value. An entity shall report unrealized gains and losses on items for which the fair value option has been elected in income at each subsequent reporting date, and recognize upfront costs and fees related to those items in income as incurred and not deferred. SFAS 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The Institute is in the process of evaluating what elections it plans to make and the impact, if any, of the provisions of SFAS 159.

Reclassifications

Certain reclassifications have been made to prior year balances in order to conform to the current year presentation.

3. Investments

Investments and trading liabilities at December 31, 2006 and 2005 consist of the following:

	2006		2005	
	Cost	Fair Value	Cost	Fair Value
Investments				
Short-term investments:				
Due from brokers and accrued interest	\$ 119,400	\$ 119,400	\$ 52,900	\$ 52,900
Money market and mutual funds	58,218,500	58,218,500	55,643,500	55,643,500
	58,337,900	58,337,900	55,696,400	55,696,400
Equity investments:				
Equity securities	55,348,100	75,889,900	40,966,800	57,015,700
Investment in commingled trusts	12,717,200	13,856,200	—	—
Money market and mutual funds	38,808,800	40,176,000	1,917,400	1,917,400
Due from brokers and accrued interest and fees	740,400	740,400	142,400	142,400
	107,614,500	130,662,500	43,026,600	59,075,500
Fixed income investments:				
U.S. Government obligations	372,800	372,800	—	—
Money market and mutual funds	65,910,700	65,748,400	70,066,500	69,587,700
	66,283,500	66,121,200	70,066,500	69,587,700
Special funds:				
Capital Guardian International (Non-U.S.)				
Equity Fund for Tax-Exempt Trusts	—	—	15,525,400	19,781,200
Emerging Markets Growth Fund	—	—	4,877,100	6,629,400
	—	—	20,402,500	26,410,600
Total investments	232,235,900	255,121,600	189,192,000	210,770,200
Trading liabilities				
Equity investments:				
Due to brokers and accrued fees	(576,900)	(576,900)	(292,100)	(292,100)
Fixed income investments:				
Due to brokers and accrued fees	(9,800)	(9,800)	(10,400)	(10,400)
Total trading liabilities	(586,700)	(586,700)	(302,500)	(302,500)
Net investments	\$ 231,649,200	\$ 254,534,900	\$ 188,889,500	\$ 210,467,700

4. Investment Income

Net investment income for the years ended December 31, 2006 and 2005 consisted of the following:

	2006	2005
Interest and dividends	\$ 6,363,200	\$ 4,370,600
Realized gains, net	13,786,800	5,800,500
Change in net unrealized gains	1,307,600	2,319,400
	\$ 21,457,600	\$ 12,490,500

Investment expense amounting to \$515,400 and \$439,000 in 2006 and 2005, respectively, is netted against investment income.

5. Land, Buildings and Equipment

Fixed assets, carried at cost, and the related accumulated depreciation at December 31, 2006 and 2005 consist of the following:

	2006		2005	
	Cost	Accumulated Depreciation	Cost	Accumulated Depreciation
Buildings	\$ 18,625,300	\$ 9,511,000	\$ 18,625,300	\$ 8,974,400
Furniture and equipment	41,095,900	28,727,400	36,656,900	25,344,800
Building improvements	8,654,100	3,392,000	8,564,500	3,092,300
	68,375,300	41,630,400	63,846,700	37,411,500
Land	1,973,600	—	1,973,600	—
Information systems upgrade in process	9,619,300	—	3,208,200	—
Total	\$ 79,968,200	\$ 41,630,400	\$ 69,028,500	\$ 37,411,500

Furniture and equipment include assets under capital leases of \$6,061,100 and \$5,920,400 as of December 31, 2006 and 2005, respectively. Accumulated amortization of assets recorded under capital leases amounted to \$3,199,400 and \$3,694,500 at December 31, 2006 and 2005, respectively. The information systems upgrade in process includes capitalized interest of \$284,100 at December 31, 2006.

6. Debt Obligations

Debt Obligations

Debt obligations at December 31, 2006 and 2005 consist of loans from proceeds of bonds issued by the New Jersey Economic Development Authority ("NJEDA"), as follows:

	2006	2005
NJEDA 2001 Series A Bonds, variable rate, annual principal and sinking fund payments through April 1, 2014 (the "Series A Bonds"); collateralized by irrevocable direct-pay letter of credit issued by Wachovia Bank.	\$ 5,765,000	\$ 6,350,000
NJEDA 2001 Series B Bonds, variable rate, annual principal and sinking fund payments through April 1, 2014 (the "Series B Bonds"); collateralized by irrevocable direct-pay letter of credit issued by Wachovia Bank.	2,615,000	2,875,000
	8,380,000	9,225,000
Liability under swap agreements:		
Series A Bonds	197,500	233,900
Series B Bonds	72,700	84,800
Total	\$ 8,650,200	\$ 9,543,700

The Series A Bonds consist of variable rate bonds issued in the aggregate amount of \$7,065,000 on May 10, 2001 for the purpose of advance refunding a portion of the 1994 Bonds to take advantage of lower interest rates. The advance refunding resulted in the defeasance and legal extinguishment of the callable portion of the 1994 Bonds due from 2005 to 2014 totaling \$6,390,000. In conjunction with the issuance of the Series A Bonds, the Institute entered into a swap agreement on April 24, 2001 with Wachovia Bank whereby the Institute's interest rate obligation under the Series A Bonds is fixed at 4.55% per annum (the "Series A Swap"). The underlying notional amount of the Series A Swap amortizes through April 1, 2014 and matches the outstanding balance of the Series A Bonds, which amounted to \$5,765,000 and \$6,350,000 as of December 31, 2006 and 2005, respectively. The estimated fair value of the Series A Swap reflects a liability of approximately \$197,500 and \$233,900 at December 31, 2006 and 2005, respectively. The Series A Bonds are due on April 1, 2014, but are subject to mandatory annual sinking fund redemption on April 1 of each year in amounts ranging from \$605,000 in 2007 to \$840,000 in 2014.

The Series B Bonds consist of variable rate bonds issued in the aggregate amount of \$3,810,000 on September 28, 2001 to permanently finance the renovation of a 15,000 square-foot warehouse facility into a new computer center and related equipment purchases and installations. In conjunction with the issuance of the Series B Bonds, the Institute entered into a swap agreement dated August 22, 2001 with Wachovia Bank whereby the Institute's interest rate obligation under the Series B Bonds is fixed at 4.34% per annum (the "Series B Swap"). The underlying notional amount of the Series B Swap amortizes through April 1, 2014 and matches the outstanding balance of the Series B Bonds, which amounted to \$2,615,000 and \$2,875,000 as of December 31, 2006 and 2005, respectively. The estimated fair value of the Series B Swap reflects a liability of approximately \$72,700 and \$84,800 at December 31, 2006 and 2005, respectively. The Series B Bonds are due on April 1, 2014, but are subject to mandatory annual sinking fund redemption on April 1 of each year in amounts ranging from \$275,000 in 2007 to \$385,000 in 2014.

An irrevocable standby Letter of Credit and Reimbursement Agreement with Wachovia Bank, dated May 1, 2001 and amended on September 1, 2001, collateralizes both Series A Bonds and

Series B Bonds. The letter of credit is available if any of the Series A Bonds or the Series B Bonds are tendered and are unable to be remarketed. If the letter of credit is used, the Institute would be required to reimburse Wachovia Bank on demand, including certain fees and charges. U.S. generally accepted accounting principles require that the current portion of long-term debt for bonds subject to such a demand purchase option be calculated based upon the letter of credit terms. Accordingly, at December 31, 2006 and 2005, the entire amount outstanding on the Series A Bonds and the Series B Bonds are classified as a current liability in the accompanying statements of financial position.

The letter of credit amounted to \$8,506,700 at December 31, 2006.

Future scheduled principal repayments required under the NJEDA Bond Agreements as of December 31, 2006 are as follows:

2007	\$ 880,000
2008	930,000
2009	970,000
2010	1,020,000
2011	1,070,000
Thereafter	3,510,000
	\$ 8,380,000

Interest expense on the debt obligations amounted to approximately \$346,100 for 2006 and \$394,000 for 2005. The interest expense associated with the interest swap exposures resulted in net savings of \$48,600 and \$270,200 in 2006 and 2005, respectively. Total interest expense amounted to \$719,700 for 2006 and \$526,400 for 2005.

The Institute maintains a \$25,000,000 credit facility consisting of \$13,750,000 with Wachovia Bank and \$11,250,000 with JPMorgan Chase Bank, N.A. (previously The Bank of New York) under a revolving credit agreement dated February 28, 2002, as amended. The Institute is charged commitment fees, which amounted to \$31,600 in 2006 and \$31,800 in 2005, on the unused portion of the credit facility. The credit facility was not utilized in 2006 and 2005. The Institute had no outstanding borrowings under the credit facility at December 31, 2006 or 2005. The revolving credit agreement, as amended, expires on August 31, 2007.

The Institute is required to maintain certain financial ratios under the amended and restated Letter of Credit and Reimbursement Agreement with Wachovia Bank and the revolving credit agreement with Wachovia Bank and JPMorgan Chase Bank, N.A. The Institute is in compliance with these ratios as of December 31, 2006.

7. Obligations Under Capital Leases

The approximate annual rental payments for obligations under capital leases follow:

2007	\$ 1,355,600
2008	950,500
2009	612,800
2010	404,800
2011	74,800
Total	3,398,500
Less amount representing interest imputed at an average rate of 5.2%	668,400
Present value of minimum lease payments	\$ 2,730,100

8. Commitments and Contingencies

The Institute is in the process of installing new applications and major upgrades to its information system, on which approximately \$4.8 million is expected to be spent in 2007.

9. Pension and Other Postretirement Benefits

The Institute sponsors two qualified and one non-qualified pension plan and other postretirement benefit plans for its employees. In November 2006, the Institute's Board of Directors approved the freezing of the qualified employee benefit plans as of June 30, 2007 and the implementation of a defined contribution plan effective July 1, 2007.

The following tables provide a reconciliation of the changes in the plans' benefit obligations and fair value of assets over the two-year period ended December 31, 2006, and a statement of the funded status as of December 31 of both years:

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Reconciliation of benefit obligation				
Obligation at January 1	\$ 76,941,200	\$ 63,205,000	\$ 2,915,100	\$ 2,685,200
Service cost	6,552,500	4,523,900	108,200	96,400
Interest cost	4,816,300	3,704,400	157,000	152,600
Actuarial loss (gain)	8,925,400	8,388,600	(118,300)	94,700
Benefit payments	(4,302,000)	(2,880,700)	(125,400)	(113,800)
Curtailments	(24,744,300)	-	-	-
Obligation at December 31	\$ 68,189,100	\$ 76,941,200	\$ 2,936,600	\$ 2,915,100
Reconciliation of fair value of plan assets				
Fair value of plan assets at January 1	\$ 60,830,700	\$ 58,492,300		
Actual return on plan assets	7,457,300	5,201,400		
Employer contributions	1,717,700	17,700	\$ 125,400	\$ 113,800
Benefit payments	(4,302,000)	(2,880,700)	(125,400)	(113,800)
Fair value of plan assets at December 31	\$ 65,703,700	\$ 60,830,700	\$ -	\$ -
Funded status				
Funded status at December 31	\$ (2,485,400)	\$ (16,110,500)	\$ (2,936,600)	\$ (2,915,100)
Unrecognized transition obligation	-	-	366,100	411,900
Unrecognized prior service cost	1,300	1,011,900	189,100	222,300
Unrecognized loss	69,800	17,334,800	515,100	657,300
Net amount recognized - prepaid (accrued) benefit cost	\$ (2,414,300)	\$ 2,236,200	\$ (1,866,300)	\$ (1,623,600)

The accumulated benefit obligation for all defined benefit pension plans was \$64,791,200 at December 31, 2006 and \$59,339,300 at December 31, 2005.

At December 31, 2006, minimum rental commitments under noncancelable operating leases for office space and computer equipment are as follows:

2007	\$ 1,476,700
2008	1,275,500
2009	1,091,800
2010	638,000
2011	638,000
Thereafter	746,500
	\$ 5,866,500

The leases for the office space are subject to escalation. Total rent expense for noncancelable operating leases amounted to \$3,057,800 and \$3,030,700 in 2006 and 2005, respectively.

At December 31, 2006, the Institute had an irrevocable standby letter of credit in the amount of \$583,000 with Wachovia Bank, which serves as a security deposit as required by the terms of its lease agreement with Park Avenue Building Company, LLC.

The Institute is currently involved in certain litigation and claims arising in the ordinary course of business. The Institute's management believes that the amount of any liability arising out of these actions that may be sustained, if any, beyond existing insurance liability coverages would not have a material impact on the accompanying financial statements.

Information for benefit plans with an accumulated benefit obligation in excess of plan assets as of December 31 follows:

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Projected benefit obligation	\$ 56,406,900	\$ 13,230,200	\$ –	\$ –
Accumulated benefit obligation	53,816,600	10,484,500	–	–
Fair value of plan assets	53,233,100	10,249,600	–	–

The following table provides the components of net periodic benefit cost for the plans for 2006 and 2005:

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Service cost	\$ 6,552,600	\$ 4,523,900	\$ 108,100	\$ 96,500
Interest cost	4,816,300	3,704,400	157,000	152,600
Expected return on plan assets	(4,467,500)	(4,253,600)	–	–
Amortization of transition (asset) obligation	–	–	45,800	45,800
Amortization of prior service cost	141,600	141,600	33,200	33,200
Amortization of net loss	1,767,400	560,400	23,900	21,900
	8,810,400	4,676,700	368,000	350,000
Curtailment gain	(2,442,100)	–	–	–
Net periodic benefits cost	\$ 6,368,300	\$ 4,676,700	\$ 368,000	\$ 350,000

The prior service costs are amortized on a straight-line basis over the average remaining service period of active participants. Gains and losses in excess of 10% of the greater of the benefit obligation and the market-related value of assets are amortized over the average remaining service period of active participants.

The Institute has multiple non-contributory non-pension postretirement benefit plans.

The assumptions used in the measurement of the Institute's benefit obligation are shown in the following table:

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Assumptions as of December 31:				
Discount rate	5.75%	5.50%	5.75%	5.50%
Rate of compensation increase	5.75%	3.50%	N/A	N/A

The assumptions used in the measurement of the net periodic benefit cost are shown in the following table:

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Weighted-average assumptions as of December 31:				
Discount rate	5.50%	5.75%	5.50%	5.75%
Expected return on plan assets	7.50%	7.50%	N/A	N/A
Rate of compensation increase	5.75%	3.50%	N/A	N/A

The healthcare plan benefits are a flat dollar reimbursement to the retirees toward healthcare premiums. No increase in the reimbursement amount is assumed.

Plan Assets

IEEE determines its assumptions for the expected rate of return on plan assets for its retirement plans based on ranges of anticipated rates of return for each asset class. A weighted range of nominal rates is then determined based on target allocations for each asset class. IEEE considers the expected rate of return to be a longer-term assessment of return expectations and does not anticipate changing this assumption annually unless there are significant changes in economic conditions. The expected rate of return for each plan is based upon its expected asset allocation. Market performance over a number of earlier years is evaluated covering a wide range of economic conditions to determine whether there are sound reasons for projecting forward any past trends.

IEEE's pension and postretirement plan asset allocation for the U.S. plans at the end of 2006 and 2005, and the target allocation for 2006 by asset category based on asset fair values are as follows:

Asset Category	2006 Target Asset Allocation	Pension Assets at		Postretirement Assets at	
		December 31 2006	December 31 2005	December 31 2006	December 31 2005
Equity securities	65%	69%	69%	N/A	N/A
Debt securities	35%	29%	30%	N/A	N/A
Cash and cash equivalents	–	2%	1%	N/A	N/A
Total	100%	100%	100%	N/A	N/A

Third-party investment managers manage IEEE's pension plan assets. Assets are rebalanced, as the Company deems appropriate. IEEE's investment strategy with respect to its pension asset is to maintain a diversified investment portfolio across several asset classes targeting an annual rate of return of 7.5% in 2006 and 2005, while ensuring that the accumulated benefit obligation is fully funded. To develop the expected long-term rate of return on assets assumption, the Company considered the historical returns and the future expectations for returns for each asset class, as well as the target asset allocation of the pension portfolio.

IEEE's pension and postretirement funds' investment strategies are to invest in a prudent manner for the exclusive purpose of providing benefits to participants. The investment strategies are targeted to produce a total return that, when combined with IEEE's contributions to the funds, will maintain the funds' ability to meet all required benefit obligations. Risk is controlled through diversification of asset types and investments in domestic and international equities, fixed income securities and cash. The target asset allocation is 65% equities and 35% debt securities. The guidelines allow the managers to keep up to 5% in cash and cash equivalents. The contributions made during the year ended December 31, 2006 and 2005 were approximately \$1,717,700 and \$17,700, respectively.

IEEE expects to contribute approximately \$7,521,000 to its qualified pension plans during 2007.

IEEE expects to contribute approximately \$18,000 to its non-qualified pension plan and approximately \$167,000 to its other postretirement benefit plans during 2007.

Expected Benefit Payments

	Pension Benefits	Other Benefits
2007	\$ 3,650,200	\$ 166,900
2008	4,626,700	168,000
2009	4,862,500	171,000
2010	5,488,100	175,100
2011	4,934,000	180,000
2012 to 2016	32,441,200	970,200

10. 401(k) Savings and Investment Plan

The Institute has a defined contribution 401(k) Savings and Investment Plan for eligible employees. Employees are eligible to participate in the Plan after the start of the next pay period following thirty days of employment. Under the Plan, employees may generally contribute from 2% to 16% of their salary, however, not in excess of IRS limitations. The Institute provides a 100% matching contribution up to 4% of each employee's salary. The Institute contributed \$2,192,500 and \$2,197,700 to the Plan in 2006 and 2005, respectively.

11. Tax Status

The Institute is qualified under Section 501(c)(3) of the Internal Revenue Code as an organization exempt from federal income taxes.

12. Financial Instruments and Risk Management

Cash

The Institute maintains cash balances which, at times, are in excess of the Federal Deposit Insurance Corporation insured amounts. The Institute mitigates this risk by placing its cash in high quality financial institutions.

Accounts Receivable

A portion of the Institute's revenues from periodical subscriptions, other publication activities and educational products and services is sold by a company to end users. The amount due from the company for such sales accounts for approximately 58% and 59% of the Institute's accounts receivable at December 31, 2006 and 2005, respectively.

Debt Obligations

The fair value of the Institute's debt obligations (including current installments) is estimated based on quoted market prices for similar debt of the same remaining maturities. At December 31, 2006 and 2005, the estimated fair value of the Institute's debt was \$8,634,300 and \$9,908,000, respectively. The Institute utilizes interest rate swap agreements to manage the risk on interest rates associated with its debt obligations.

13. Net Assets

Temporarily restricted and permanently restricted net assets consist of the following:

	December 31, 2006	December 31, 2005
Temporarily restricted:		
Grant funds held for specific purposes	\$ 900,800	\$ 228,100
Funds held for awards, medals and other specific purposes	382,700	347,300
	\$1,283,500	\$ 575,400
Permanently restricted:		
Endowment principal for awards	\$ 191,400	\$ 191,400

Net assets that were released from donor restrictions by incurring expenses satisfying the restricted purposes during fiscal 2006 and 2005 were as follows:

	2006	2005
Grant funds held for specific purposes	\$ 85,300	\$ 206,500
Funds held for awards, medals and other specific purposes	8,300	67,500
	\$ 93,600	\$ 274,000

14. Related Parties

IEEE Foundation, Incorporated

The Institute has transactions with the IEEE Foundation, Incorporated (the "Foundation"), a related organization. The Foundation performs activities in support of the scientific and educational functions and programs of the Institute. The Institute contributed \$574,000 and \$555,000 in 2006 and 2005, respectively, to the Foundation. The Institute provides certain accounting and administrative services to the Foundation. The Foundation paid \$417,000 in 2006 and \$393,000 in 2005 to the Institute for these support services. The Institute solicits contributions on behalf of the Foundation through its annual member renewal process. Total contributions solicited were \$646,500 and \$555,900 in 2006 and 2005, respectively. The Institute holds on deposit \$1,193,900 and \$995,100 from the Foundation at December 31, 2006 and 2005, respectively. These amounts are invested by the Institute on behalf of the Foundation. Receivables due from the Foundation include grants receivable of \$389,700 and \$356,000 at December 31, 2006 and 2005, respectively, and other receivables of \$54,300 and \$47,300 at December 31, 2006 and 2005, respectively. Amounts due to the Foundation were \$251,000 and \$91,700 at December 31, 2006 and 2005, respectively.

Summarized financial data of the Foundation for 2006 and 2005 are as follows:

	December 31, 2006	December 31, 2005
Total assets	\$ 28,116,400	\$ 26,523,700
Total liabilities	1,161,500	1,121,200
Net assets	\$ 26,954,900	\$ 25,402,500
Revenues	\$ 4,263,900	\$ 3,193,400
Expenses	2,711,500	2,494,500

IEEE – Industry Standards and Technology Organization

The Institute enters into transactions with the IEEE-Industry Standards and Technology Organization ("IEEE-ISTO"), a related organization. The IEEE-ISTO is an organization operating for the development of industry standards. The Institute provides certain professional services and facilities that are reimbursed by the IEEE-ISTO. Total combined revenues from these transactions were \$215,200 and \$206,200 for 2006 and 2005, respectively. Receivables due from the IEEE-ISTO at December 31, 2006 and 2005 are \$481,800 and \$615,700, respectively. The Institute's management believes that ISTO intends to repay these receivables. However, due to ISTO's financial condition and the extended time period it may take to receive such payment, the Institute provided a full allowance for the amount due as of December 31, 2006 and 2005.

Summarized financial data of the IEEE-ISTO for 2006 and 2005 are as follows:

	December 31, 2006	December 31, 2005
Total assets	\$ 4,852,500	\$ 5,198,000
Total liabilities	5,156,800	5,744,200
Net assets	\$ (304,300)	\$ (546,200)
Revenues	\$ 6,882,800	\$ 6,397,400
Expenses	6,640,900	6,235,200

IEEE Web pages

The following IEEE Web sites contain additional information about the IEEE products, services and activities discussed in this annual report:

www.ieee.org
www.tryengineering.org
<http://www.ieee-earth.org/>
www.ieee.org/web/membership/IEEEtv/about.html
<http://www.ieee.org/web/membership/mentoring/index.html>
www.computer.org
<http://www.ieee.org/web/publications/home/index.html>
www.spectrum.ieee.org
www.innovate.ieee.org/products/educational/index.jsp
www.ieee.org/web/education/partners/eduPartners.html
www.ieee.org/portal/cms_docs/education/setf/index.html
www.ieeeusa.org/
ieeexplore.ieee.org
<http://www.ieee.org/web/education/home/index.html>

**The 2006 IEEE Annual Report
is available online at:**

www.ieee.org/web/aboutus/annualreport

IEEE Corporate Headquarters

Three Park Avenue, 17th Floor
New York, New York 10016 USA
+1 212 419 7900

IEEE Operations Center

445 Hoes Lane
Piscataway, New Jersey 08855 USA
+1 732 981 0060

IEEE-United States of America

1828 L Street, NW, Suite 1202
Washington, D.C. 20036 USA
+1 202 785 0017

IEEE Asia Pacific Operations Center

59E Science Park Drive
The Fleming, Singapore Science Park
Singapore 11844, Singapore
65 6778 2873

IEEE China Operations Center

Room 1503, South Tower
Raycom InfoTech Park C
No. 2 Kexueyuan South Road
Haidian District
Beijing 100080, China
86 10 8286 2135

IEEE Communications Society

Three Park Avenue, 17th Floor
New York, New York 10016 USA
+1 212 705 8900

IEEE Computer Society

Headquarters
1730 Massachusetts Avenue, NW
Washington, D.C. 20036 USA
+1 202 371 0101

Publications
10662 Los Vaqueros Circle
P.O. Box 3014
Los Alamitos, California 90720 USA
+1 714 821 8380

Produced by IEEE Corporate Strategy
and Communications

September 2007

Designed by Cisneros Design
Santa Fe, New Mexico, USA



This document is printed on paper that has been certified by the Forest Stewardship Council, which encourages the responsible management of the world's forests.