



THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 56, Number 7

March 2006

SCOPE NOTES

March

Houston Section

News

Where:
HESS (Houston Engineering and Scientific Society)
5430 Westheimer@Yorktown

When:
Thursday, April 27, 2006
6:00 - 6:30 p.m. Social
6:30 - 7:30 p.m. Dinner
7:30 - 8:30 p.m.

Cost:
\$10.00 - IEEE Members with 48-hour advance reservations.
\$20.00 - non-members
\$5.00 - students
Call (713) 207-IEEE to make your reservations.

See Page 3
for the Continuing
Education
Schedule!

IEEE WEB
ADDRESS
[http://
\(www.ieee-
houston.org\)](http://www.ieee-houston.org)

IEEE Houston Section
P.O. Box
460443
Houston, Texas
77056-8014



The Chairman's Message

Donald G. Dunn

The Chairman's Message

The February section meeting had good attendance with Don Bammes of Stronwell-Quazite gave an excellent presentation on "Understanding Underground Enclosures". Mr. Bammes presentation covered the most recent changes in the NEC code as they apply to underground enclosures

Our future section meetings will be on April 27, September 28 and December 7. We look forward to your attendance, as the meeting is an opportunity to

promote networking and information sharing. Please take a moment of your time to look at the Houston Section website and join our e-mail majordomo-mailing list, instructions are on the website. Any suggestions about improvements would be greatly appreciated. The address of the website is <http://www.ieee-houston.org/>. We have a local employment assistance section on the website and seek employment opportunities that you may come to your attention. We post ads from individual members seeking employment opportunities, employers seeking engineers and employment agencies.

In addition, April also brings the Region 5 Technical and Leadership Conference which will be in San Antonio April 7-9. I have always found this conference to be a very enjoyable experience and I expect this year to be no different. This meeting is a great opportunity to learn and to network with other colleagues. I am looking forward to meeting as many colleagues from other Sections as possible as well as Region 5 Committee leaders.

Looking to May we have the Offshore Technology Conference (OTC) on May 1-4 at the Reliant Center where we will again set up a booth to promote IEEE. We have already had several members volunteer to help us man these booths but we still have open slots and we can always use more volunteers. Please take this opportunity to volunteer, as these conferences are great ways to meet other engineers and network. If you are interested in volunteering, please give Paul J Donner 713-945-7771 a call or send an e-mail to pj.donner@CenterPointEnergy.com

Our Fourth Annual IEEE Houston Section Scholarship Golf Tournament held at Kingwood Country Club on October 27, 2005 was a complete success. Based on the success of this tournament, we will award four to five (4-5) \$1000 scholarships this year. The deadline for submitting an application form and all supporting data is July 14, 2006. Scholarships will be announced by August 4, 2006, and winner(s) will be honored at the September 28, 2006 Houston Section meeting. All application material will be posted on the website by the first of May.

As always, the Executive Committee and I look forward to your feedback and

Chair Message-Cont.

comments. If you have suggestions and/or are interested in becoming active within the section or a local society chapter, contact one of us. The IEEE is a volunteer organization and without the active participation and feedback from you the members, the programs and content of the IEEE would be reduced.

Donald G. Dunn
Houston Section Chair

Houston Section Meeting

Thursday, April 27, 2006

**Topic: Technology for TransStar
The Port Authority and Houston's new automated traffic signals**

Speaker: Pat Bellamy is the Founding Partner of Houston InfoComm Technology Initiative (HiT). Previously, Mr. Bellamy was Executive Director and Founding Partner of the Houston Area Technology Advancement Center (HATAC). He remains involved with HATAC as the Founding Partner. Similarly, prior to his retirement, Mr. Bellamy was a Regional Vice President and Executive Director with SBC and Southwestern Bell Telephone Company (SWBT). He was responsible for Technical Sales, Support and Planning within Southwestern Bell's traditional five states (Missouri, Oklahoma, Kansas, Arkansas and Texas). In addition, Mr. Bellamy was responsible for technical certification and technology assurance within SWBT.

Mr. Bellamy has been involved with information technology infrastructure deployment for over thirty years. In his various roles, Mr. Bellamy has deployed a variety of "first" technologies in planning the St. Louis, Tulsa, Houston, Paris, Chilean and other networks. Similarly, Mr. Bellamy was involved in the technology coordination efforts for the Rendezvous Houston, Economic Summit and Republican National Convention efforts in the Houston region. He also coordinated and created the Technology Theme document for the Houston 2012 Olympics Project.

Among his other community involvement efforts, Mr. Bellamy is the Founding Partner of the Houston Area Technology Advancement Center (HATAC). Similarly, Mr. Bellamy has served as the Chairman of the Executive Board for the Gulf Coast Alliance for Minorities in Engineering. This is a volunteer organization that advocates math and science within middle schools. Its membership includes most large businesses in the Gulf Coast area. He also serves on a number of advisory boards (including the University of Houston College of Technology, Prairie View A&M College of Engineering, Houston ISD Career and Technology Department, Alief ISD Career and Technology Department, North Harris Montgomery County College, Houston Community College and others).

Where HESS Building, 5430 Westheimer at Yorktown

Time: 6:00 - 6:30 PM Social - 6:30 - 7:30 PM Dinner - 7:30 - 8:30 PM
Presentations

Cost Dinner \$15.00 for members who register 48 hours prior to the event, \$20.00 for members who do not register 48 hours prior to the event and for non-members; \$5.00 for students.

IEEE CONTINUING EDUCATION ON DEMAND

2005-2006 REGISTRATION FORM

Name: _____
 Company: _____
 Mailing Address: _____
 _____ City/State:
 Zip: _____
 Email: _____
 Telephone: _____

Fax: _____
 IEEE Membership Number: _____
 Mail a copy of your completed registration form along with your check payable to
IEEE CED SEMINARS at the following address:
 IEEE CED SEMINARS
 PAT ROGERS
 SOUTHWEST POWER / HUGHES SUPPLY CO.
 425 BLUEBERRY STREET
 HOUSTON, TX 77018
patricia.rogers@hughessupply.com

Registration receipts will be available upon request **at the seminars.**
 For a cancellation refund, telephone Pat Rogers by the Friday before the seminar
 at:
 Phone: 713.696.9922
 Fax: 713.696.9983
 Email: patricia.rogers@hughessupply.com

IEEE Continuing Education on Demand Completion Certificate with Continuing
 Education Units (CEUs) is provided after receipt of both nightly questionnaires
 and seminar evaluation sheets.

Please direct seminar questions to Paul Barrett at 713.598.0790
 Please check the IEEE Houston Section website for the latest schedule and
 course information.
<http://www.ieee-houston.org>

IEEE CONTINUING EDUCATION ON DEMAND

The purpose of IEEE Houston Section Continuing Education on Demand is to
 provide modern practical industrial power application topics that supplement the
 daily work activities of the practicing graduate electrical engineer.

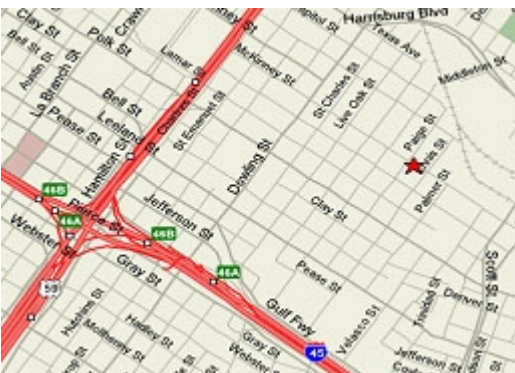
The seminars are intended to stimulate further study and discussion for learning
 continuance throughout the working career. Topics apply to heavy industries: oil
 and gas, petro-chem, cogen, pulp and paper, etc.
 Instructors are application engineers, manufacturing specialists and expert
 consultants who provide a blend of diverse engineering perspectives.

The cost of each seminar is \$70.00 for IEEE members. Non-members \$140.00.
 The **check must be received the Friday before** the seminar start date. "Pay
 at the door" is discouraged due to many "no-shows". If you have a special situation
 contact Paul Barrett (713) 598-0790. Signing up the week of the seminar does not
 guarantee seminar presentation documents or meals.

The following 2005-2006 seminar schedule defines the topics, dates and times.
 A course syllabus is available **ON request**. Minimum class size is
 twenty for each seminar. Seating is limited and filled on
 an as received basis. Presentation documents are provided. A buffet is served from 5:00PM-6:00PM.

Seminar location 2005 - 2006

Summit Electric
2929 McKinney
Houston, TX. 77003



Seminar Title	Code	Date	Amount
Grounding Techniques, Industrial Power Sys	402	Oct. 4 / 5	\$
Electrical Safety in the Workplace	921	Oct. 18/19	\$
API Motor Standards Update	620	Nov. 1/ 2	\$
Protective Relay 5 ABB Relays	315	Nov 15/16	\$
HV Substations For Industrial Applications	125	Feb. 7/ 8	\$
MV Cable Considerations Thru 69kV	130	Feb. 21/22	\$
Protective Relaying for Large Generators	306	Mar. 7/ 8	\$
IEC Standards for Large Power Transformers	950	Mar. 21/22	\$
IEEE 1584 Arc Flash Calculations	340	Apr. 4 / 5	\$
Residual Bus Auto Transfer Schemes	140	Apr. 18/19	\$
Total Paid:			\$

Enter amount for each seminar:

IEEE member early signup: \$ 70.00
 Non-member registration: \$140.00

Fall of 2005 IEEE Seminar Schedule
Grounding Techniques—Industrial Power Sys (402)

Jack Woodham, Jedson Engineering
Tony Locker, Post Glover Resistors
 Oct. 4/5, 2005 6:00-8:50PM
 Reviews and explores the four types of grounding for industrial power systems 480 – 4160 V. **[0.5 CEU]**

Electrical Safety in the Workplace (921)
Danny Ligget, E.I. DuPont Co.
 Oct. 18/19, 2005 6:00-8:50PM
 A detailed focus is on electrical workplace safety coupled with comprehensive safety training. **[0.5 CEU]**

API Motor Standards Update (620)
David Rains, WEG & Doug Gehring, Siemens
 Nov. 1/2, 2005 6:00-8:50PM
 An overview of large motor design considerations for compliance with latest API 541 and API 546. Review and comparison of IEEE 841 and API 541. **[0.5 CEU]**

Protective Relay 5 – ABB Relays (315)
Robert Wilson, ABB
 Nov. 15/16, 2005 6:00-8:50PM
 Review of ABB protective relay design fundamentals and special application considerations. **[0.5 CEU]**

Spring of 2006 IEEE Seminar Schedule
HV Substations for Industrial Applications (125)
Allen Xi & Charles Pulay, Burns & McDonnell Engrs
 Feb. 7/8, 2006 6:00-8:50PM
 An overview of industrial substation design considerations, layout, protection, grounding and controls. Testing and commissioning considerations. **[0.5 CEU]**



IEEE

IEEE Houston Section

2005-2006

Continuing Education On Demand



MV Cable Considerations thru 69 KV (130)
H.R. Stewart HRS Consulting
 Feb. 21/22, 2006 6:00-8:50PM
 Review of design application considerations related to MV power cable projects. **[0.5 CEU]**

Protective Relaying for Large Generators (306)
Wayne Hartman, GE Multilin
 March 7/8, 2006 6:00-8:50PM
 Reviews large generator design characteristics, application problems and reliable protective schemes. **[0.5 CEU]**

IEC Standards for Large Power Transformers (950)
Tom Malone & Martyn Hildreth. Areva T&D
 March 21/22, 2006 6:00-8:50PM
 Detailed review of current IEC standards related to large power transformers. **[0.5 CEU]**

IEEE 1584 Arc Flash Calculations (340)
Jim Bowen, Powell Electrical Manufacturing Co. & Daleep Mohla, DCM Consulting
 April. 4/5, 2005 6:00-8:50PM
 A two part study focuses on NFPA 70E flash hazard analysis requirements and IEEE 1584 formulas to satisfy 70E requirements. **[0.5 CEU]**

Residual Bus Auto Transfer Schemes (140)
Roy Cosse, Powell Electrical Systems Inc. & Robert Spiewak, PolAmex Engineering
 April 18/19, 2005 6:00-8:50PM
A focused review of the residual bus auto transfer schemes, examples, why they work and do not work. Traditional and modern applications. **[0.5 CEU]**

Senior Members

Looking for Senior Member Nominations

READ THIS SECTION TO BECOME A SENIOR MEMBER IN THE IEEE.

A goal of our Region is to sponsor as many Senior Members as possible and I am asking your help. The IEEE criteria for Senior Member status is ten years of professional practice including five years of significant performance, and references. (See the nominator letter and application form for clarification on the IEEE website.) If you know an IEEE member who qualifies for Senior Membership, I would like you to nominate him or her by forwarding their nomination to one of the Houston Section Excom members. If you qualify and are not a senior member please reply to one of the Section Excom members. If your are retired and have met the criteria at one time lets get you nominated. Section meetings are the best networking tool to achieve Senior membership.

As an alternative process, you can direct the prospective Senior Member to one of the Houston Section Excom Members. We have a list of several Fellows and Senior Members which we can use for references. The Section will nominate all those qualified who provide a resume and significant performance vita.

Senior Membership in IEEE promotes the value of membership and enhances the status of the member. The is an achievement award lets honor our deserving members.

IEEE Houston Section Volunteers

The following Houston Section members have are seeking additional volunteers to help serve on various Section Committees.

Past Chairman - Scott Ballew
Chairman - Donald Dunn
Vice-Chairman - Polo Gutierrez
Secretary - Justin McCaskill
Director - Charles Benard
Treasurer - Gil Dolor

In you are interested please contact on of th members for further information. A volunteer leadership position within the IEEE will provide you a great return.

Come on down and join us!

Protective Relay Conference

59TH ANNUAL CONFERENCE FOR PROTECTIVE
RELAY ENGINEERS
Texas A&M University
College Station, Texas
April 4-6, 2006

The Planning Committee of the 59th Annual Conference for Protective Relay Engineers invites you to attend the conference at Texas A&M University on April 4-6, 2006. The Protective Relay Conference provides a forum for engineers to discuss protection technology and related subjects. Both tutorial presentations on fundamental concepts and papers on new technology are included. The program will include the following:

- ◆ New protection equipment descriptions
- ◆ Relay application ideas and new concepts
- ◆ Case studies and “horror stories” – when the relays worked and when they didn’t

Registration Information:

Pre-Registration: \$280 (begins Monday, January 9, 2006)
After Monday, March 6, 2006: \$320

Manufacturers: For hospitality suites, please contact Lydia Godfrey at the College Station Hilton and Conference Center at (979) 694-4903.

Special offerings:

In conjunction with the 59th Annual Conference for Protective Relay Engineers special pre-conference offerings are available Monday, April 3, 2006, including a tutorial, ethics seminar, and manufacturers’ presentations. Please see the website for more details.

This conference offers ***Continuing Education Credits***.

Website: <http://engineering.tamu.edu/prorelay/>

For Registration: Ms. Sharon Loe
Conference Registration
238 WERC, 3128 TAMU
Texas A&M University
College Station, TX 77843-3128
Phone: (979) 845-7912
Fax: (979)458-1139
s-loe@tamu.edu

For Information: Dr. B. Don Russell
Regents Professor
Department of Electrical & Computer Engineering
Texas A&M University
College Station, TX 77843-3128
(979) 845-7912

IEEE USA News

News from IEEE-USA

1828 L Street N.W., Suite 1202, Washington, D.C. 20036-5104

Former NSF Deputy Director to Receive IEEE-USA Distinguished Public Service Award

WASHINGTON (12 January 2006) — IEEE Fellow Dr. Joseph Bordogna, former deputy director of the National Science Foundation (NSF), will be honored with the IEEE-USA Distinguished Public Service Award at the IEEE-USA Leadership Workshop on 4 March in St. Louis. He is one of 15 IEEE-USA award recipients.

Bordogna is being recognized “for visionary leadership in promoting multidisciplinary approaches to national research priorities and for his support of the engineering profession as assistant director for engineering and deputy director of the National Science Foundation.” Bordogna, who resigned from NSF last June and returned to the University of Pennsylvania as the Alfred Filtler Moore Professor of Engineering, was the longest-serving deputy director in NSF history. He joined the agency in 1991 as head of its Directorate for Engineering, and was appointed acting deputy director in 1996. Three years later, he was named deputy director by former President Bill Clinton. Bordogna served as 1998 IEEE president.

Eta Kappa Nu, the honor society for electrical and computer engineers, selected Bordogna to receive its Eminent Member Award in April 2005. The award is the society’s highest honor, given only to those whose achievements and leadership in electrical and computer engineering have resulted in significant benefits to humankind.

IEEE-USA award recipients are recognized for their professionalism and technical achievements, as well as literary contributions to public awareness and understanding of the engineering profession in the United States.

IEEE-USA’s distinguished awards are administered under its Awards and Recognition Committee and approved by the IEEE-USA Board of Directors. For more information, visit <http://www.ieeeusa.org/volunteers/committees/awards/>, or contact Sandra Kim at sandra.kim@ieee.org. Nominations are being accepted for the 2006 awards. The deadline is 31 July 2006.

For more on the 2006 IEEE-USA Leadership Workshop, go to <http://www.ieeeusa.org/calendar/conferences/2006workshop/default.asp>.

Here’s the complete list of 2005 IEEE-USA award recipients:

Professional Awards

DISTINGUISHED PUBLIC SERVICE AWARD

Joseph Bordogna

For visionary leadership in promoting multidisciplinary approaches to national research priorities and for his support of the engineering profession as assistant director for engineering and deputy director of the National Science Foundation

PRECOLLEGE EDUCATION COMMITTEE TEACHER-ENGINEER PARTNERSHIP AWARD

James Jensen and Robert Cornacchioli

For exemplary dedication and outstanding achievement in promoting engineering activities in precollege education

CITATION OF HONOR

Clifford Lau

For educating congressional staff about technology issues in legislation through the Congressional Research and Development Caucus

Thomas F. Rogers

For contributions to the IEEE-USA Committee on Transportation and Aerospace Technology, and for implementing IEEE-USA’s federal advocacy effort in space and aerospace policy

Ralph W. Russell, II

IEEE USA News - Cont

For promotion of engineering to young people through IEEE's emeritbadges.org program at the National Scout Jamboree

Martin M. Sokoloski

For long-term efforts on behalf of IEEE-USA, and for development of the Congressional Research and Development Caucus

DIVISIONAL PROFESSIONAL LEADERSHIP AWARD

Guruprasad Madhavan

For innovative student leadership in the IEEE's Engineering in Medicine and Biology Society and outstanding professional contributions to IEEE periodicals in Division X

REGIONAL PROFESSIONAL LEADERSHIP AWARD

Ronald A. Tabroff

For efforts in promoting PACE activities within Region 1

Ralph D. Painter

For promoting and developing teacher in-service training in support of providing technology experiences to young people in Region 3

Edward G. Perkins

For tireless efforts in developing programs for career management leadership for engineers in Region 6

PROFESSIONAL ACHIEVEMENT AWARD

Linda Bailey Hayden

For outstanding accomplishments in cultivating student interests in engineering and supporting career development

Srinivas Katkoori

For outstanding accomplishments in cultivating student interests in engineering and providing hands-on engineering experiences for students

Technical Award

HARRY DIAMOND MEMORIAL AWARD

G. Clifford Carter

For distinguished technical contributions and exceptional engineering leadership in the field of sonar signal processing Literary Award

AWARD FOR DISTINGUISHED LITERARY CONTRIBUTIONS FURTHERING PUBLIC UNDERSTANDING OF THE PROFESSION

C. Stewart Gillmor

For his biography, Fred Terman at Stanford, illustrating the importance of electrical and electronics engineering, and the contributions of this transformative engineer

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 220,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 360,000 members in 150 countries. For more information, go to <http://www.ieeeusa.org>.

###

Contact: Chris McManes

IEEE-USA Senior Public Relations Coordinator

Phone: +1 202 530-8356

E-Mail: c.mcmanes@ieee.org

IEEE USA in Action Update

NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104

Trends Likely to Affect Us All in 2006: IEEE-USA Today's Engineer Online Article

WASHINGTON (13 January 2006) — Changes and trends in eight major areas likely to affect how we live, work and play are examined in the latest issue of IEEE-USA Today's Engineer Online.

In "What Lies Ahead: Forecast for 2006," Today's Engineer author George McClure examines technology, energy, climate change, work force, employment benefits, immigration, infrastructure and the economy. McClure, a noted expert on technology careers and retirement benefits, looks at where things are today and where they're likely headed. A sampling:

* The United States has the lowest savings rate among developed nations, implying a lack of savings for retirement and children's college costs. McClure points out the trend of greater consumer spending than consumer income "works for only so long, and will cease to be a source of consumption funding as interest rates rise to combat inflation."

* Significant upgrades are needed to repair the United States' crumbling infrastructure, including \$50 billion to improve the national power grid over the next five years. "As power demand increases by 50 percent in 20 years," McClure writes in Today's Engineer, "so will the problem of getting it to the user, as well as the prospect for further blackouts, if reliability is not improved."

* Retirement security is gaining more societal importance as the first baby boomers approach full retirement age in five years. Concerns about fewer workers to replace those retiring, and retirees wondering about having enough money to live comfortably in retirement point toward more older Americans working at least part-time past age 65. The prospect of partial retirement — in which a person works reduced hours while drawing a partial pension — could help alleviate these concerns, "but requires changes in the law," according to McClure.

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 220,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 360,000 members in 150 countries. For more information, go to <http://www.ieeeusa.org>.

IEEE USA News

NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202

Washington, D.C. 20036-5104

IEEE-USA Commends Sens. Ensign, Lieberman for Introducing "National Innovation Act of 2005"

WASHINGTON (15 December 2005) — IEEE-USA commends Sens. John Ensign (R-Nev.) and Joseph Lieberman (D-Conn.) for introducing the "National Innovation Act of 2005" today on Capitol Hill. The legislation includes provisions that will strengthen U.S. competitiveness in the 21st Century.

The "National Innovation Act" responds to recommendations in the National Innovation Initiative Report "Innovate America," published by the Council on Competitiveness in 2004. The Act focuses on three primary areas: increasing investment in basic research; improving science and technology talent; and developing a robust innovation infrastructure.

The legislation would, among other things, establish a President's Council on Innovation; make permanent the Research and Experimentation Tax Credit; nearly double research funding for the National Science Foundation by FY 2011; authorize funding for new and existing Professional Science Master's Degree Programs; and encourage the development of regional clusters of technology innovation.

For a summary of the legislation, go to <http://lieberman.senate.gov/documents/bills/051215niasummary.doc>

IEEE-USA advances the public good and promotes the careers and public policy interests of the more than 220,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 360,000 members in 150 countries. For more information, go to <http://www.ieeeusa.org>.

Contact: Chris McManes

Senior Public Relations Coordinator

Phone: + 1 202 530-8356

E-Mail: c.mcmanes@ieee.org

IEEE USA EYE on Washington

The latest issue of IEEE-USA's Eye on Washington newsletter is now available on-line. For complete text and links, visit <http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp>

The issue includes the following:

1) CAPITOL HILL WATCH

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#capitolhillwatch>

109th Congress, 2nd Session: What's Ahead in 2006? - January will be a month with little congressional activity. The Senate has returned to hold Supreme Court confirmation hearings on the nomination of Samuel Alito. The

House does not return to session until 31 January, the evening of the State of the Union address.

It shouldn't, but the fact that mid-term elections occur this November may dictate congressional behavior this year. One of the casualties? Social security reform. Despite being a cornerstone of the President's 2005 agenda, its unlikely to be tackled due to its "third rail" quality. No reform bills made it out of committee during non-election year 2005, so don't expect anyone to touch the issue during '06 and risk their re-election bids. Instead, the activity we're likely to see will involve clean-up of unfinished business such as: —PATRIOT Act reauthorization (its currently operating on a short 5-week extension); —overhaul of the federal pension system; —opening the Alaskan wildlife areas (ANWR) to drilling, (On an energy-related note, Hurricane Katrina hit one-month after the Energy Act of 2005 was passed last summer. Then came introduction of the "Second Energy Act," designed to spur construction of oil refineries. Currently, US refineries are concentrated in Gulf states making us vulnerable to supply disruptions in the wake of disasters. The second act was focused mainly on oil and gas resources but at one point, did contain a White House-backed provision to allow power plants to more easily upgrade their facilities without installing equipment to reduce pollutants. Judging by the neck-and-neck roll call votes, this second act may not be popular enough to rise again this year.); — and, tax cuts and tax code overhaul.

Later in the year look for a re-write of the 1996 Telecommunications Act, which, House Energy & Commerce-Telecommunications and the Internet Subcommittee Chairman Fred Upton (R-Mich.) says, "will take all of our

attention" this year. Also likely to be on Members' minds, innovation and the U.S.'s ability to compete. Last year saw the release of one report after the other dealing with the subject of our fading world dominance and lagging competitiveness. The first major piece of legislation to deal with the issue was introduced on 15 December - The National Innovation Act of 2005 - by Senators Joseph Lieberman (D-CT) and John Ensign (R-NV). This legislation seeks to implement many of the recommendations of the National Innovation Initiative report, one of many released last year. The bill (S. 2109) includes a number of provisions. Among the highlights are a plan for creating a White House-level President's Council for Innovation as well as a series of new scholarship and fellowship programs to encourage studies in science, mathematics and engineering. The bill encourages federal agencies to spend up to 3% of their research budgets on high-risk frontier research, and it also calls for a doubling of the National Science Foundation's budget over the next five years. A summary of S. 2109, the National Innovation Act of 2005, is available at <http://lieberman.senate.gov/documents/bills/051215niasummary.doc>.

2006 Intellectual Property Activity in a Nutshell - The technology industry will continue to battle the entertainment sector in Congress over legislation designed to impose copy-protection technology. The Motion Picture Association of America and Recording Industry Association of America likely will lobby Congress to pass legislation that would authorize the FCC to mandate anti-piracy technologies in electronics equipment.

2) WHITE HOUSE & EXECUTIVE AGENCY WATCH <http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#whitehouse>

NIST Creates Web Site For Health Standards State Department Preps For More Internet Governance Debate

EYE on Washington-Cont

NSF's 2005: Year in Review IEEE Fellows Win NAE Prize

3) REPORTS, SPEECHES & DOCUMENTS OF NOTE

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#reports>

New Paper From Think Tanks on Fixing the US Patent System

San Francisco Federal Reserve Examines Effective Innovation Policies:

Educated Human Capital is as Important as Existence of Companies

4) U.S. COURTS ACTIVITY

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#courts>

Judge Says Firm Can Compete For RFID Contract

5) US STATES WATCH

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#states>

New Tech Laws In A New Year

New York & California To Be Sites for New Nano Centers

Governors Pledge to Make Their States Technological Leaders

6) AWARDS & GRANTS

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#awards>

7) CONFERENCES, FELLOWSHIPS, PROGRAMS & INTERNSHIPS FOR ENGINEERS, and STUDENTS & SCHOLARS OF ENGINEERING

2007 Congressional & State Department Fellowships

WISE Program Seeks Senior Science & Technology Public Policy Advisor to

Engineering Students (Nine Week Summer Position)

8) LATEST IEEE-USA ACTIVITIES

<http://ieeusa.com/policy/eyeonwashington/2005/06eow01.asp#ieeusaact>

Track IEEE-USA's Progress -A full listing of IEEE-USA lobbying activities can be found on our web site at:

<http://ieeusa.com/policy/policy/index.html>

Mark Your Calendar for Congressional Visits Day - The annual CVD has been set for 28-29 March, and is expected to bring over 250 scientists, engineers, researchers, educators, and technology executives to Washington to raise visibility and support for science, engineering, and technology.

More information, visit <http://www.ieeusa.org/policy/cvd/index.html>.

9) U.S. COMPETITIVENESS & INNOVATION: WHO'S DOING WHAT TO ADDRESS THE ISSUE?

What's New @ IEEE-USA's Eye on Washington highlights important federal legislative and regulatory developments that affect U.S. engineers and their careers. In addition to this biweekly newsletter, subscribers receive legislative bulletins and action alerts on IEEE-USA priority issues, including:

retirement security, employment benefits, research & development funding, computers and information policy, immigration reform, intellectual property protection and privacy of health/medical information.

EDITOR: Erica Wissolik, IEEE-USA, 1828 L Street, N.W., Suite 1202, Washington, DC 20036-5104

You can change your IEEE-USA Eye on Washington subscription status by using the forms at <http://whatsnew.ieee.org/> or at <http://www.ieeusa.org/emailupdates/>.

EXECUTIVE COMMITTEE HOUSTON SECTION IEEE

OFFICERS

Scott Ballew, Lyondell Chemicals, Past-Chairman.....	713-309-7721
Donald G. Dunn, Equistar Chemicals, Chairman.....	281-862-5533
Polo Gutierrez, Tesco Corporation, Vice-Chairman.....	281-721-3911
Justin McCaskill, WH Linder, Secretary.....	832-274-5116
Gil Dolor, Lyondell Chemicals, Treasurer.....	281-862-5906
Charles Benard, Dow Chemicals, Director.....	713-978-3790

IEEE HOME PAGE..... <http://www.ieee-houston.org>

SOCIETY CHAIRS

Lee Gaspard, Shell, Communications.....	713-245-1487
Ernst Leiss, U of Houston, Computer.....	713-743-3359
George Zouridakis, U of Houston, Engr-Medicine & Biology.....	713-743-8656
David Hemmasi, Bechtel, Industry Applications.....	713-235-4059
Jeffrey Williams, U of Houston, Multi-Group Electronics.....	713-743-4455
H. Allen Xi, Burns & McDonnell Engrs, Power.....	713-945-5923
Richard Baraniuk, Rice University, Signal Processing.....	713-285-5132
Dr. Christi K. Madsen, Texas A&M University, A.M.L.G. A&M.....	979-845-9686
Joseph Cavallaro, Rice University, Circuits and Systems.....	713-527-4719
Daniel Mittleman, Rice University, LEOS.....	713-348-5452
Kristin Morrow, Lyondell Chemicals, GOLD.....	281-862-5138

COMMITTEE HEADS

P.J. Donner, Reliant Energy, Arrangements & Awards.....	713-945-7771
OPEN, Conferences.....	
Ransom Siler, Private Consultant, Consultants Network.....	
Paul Barrett, Double E Engineering, Continuing Education-Main Committee.....	713-290-1167
Roy Cosse, Powell Electric, Continuing Education-Consultant.....	713-948-4019
Justin McCaskill, WH Linder, Continuing Education-Administration Co-Chair.....	832-274-5116
P.J. Donner, Reliant Energy, Engr Council of Houston.....	713-790-7907
Open, Membership.....	
John Lucey, Reliant Energy HL&P, Offshore Tech, Conf.....	713-945-5923
Polo Gutierrez, Tesco Corporation, PACE.....	281- 721-3911
Justo Benitez, Foster Wheeler USA, Programs.....	713-587-3108
Dwayne C. Lowry, D.C. Lowry & Associates, Past-Chairman, Webmaster.....	281-565-2316

Donald G. Dunn, Publications and Advertising.....	281-862-5533
Open, Student Activities.....	
Jimmy Salinas, SW Bell Telephone, Science Fair Coordinator.....	713-567-8095
Gilroy Dolor, Lyondell Chemicals, Scholarship.....	281-862-5906

FREEPORT SUBSECTION OFFICERS

Partha Ray, Dow Chemicals, Chairman.....	
Jose Aquas, Dow Chemical, Vice Chair.....	
Open, Secretary/Treasurer.....	

STUDENT BRANCH ADVISOR

Penrose Cofie, Prairie View A&M University.....	409-857-3923
Jim Young, Rice University.....	713-348-4721
Walter Daugherty, Texas A&M University (CS).....	979-845-1308
John Tyler, Jr., Texas A&M University (EE).....	979-845-7508
Rainer Fink, Texas A&M University (ET).....	979-845-5966
Pierre Catala, Texas A&M University (COM).....	979-845-4948
Shahryar Darayan, Texas Southern University.....	713-313-4224
Ovidiu Crisan, University of Houston (EE).....	713-743-4432
Heidar Malki, University of Houston (ET).....	713-743-4075

The **Pocket Scope** is the newsletter of the Houston Section of the Institute of Electrical and Electronics Engineer (IEEE). The Houston Section address is: IEEE Houston Section, P.O. Box 460014, Houston, Texas 77056-8014.

The **Pocket Scope** is published eight times a year (monthly, September to May, except December). It is distributed to over 3000 professionals in the electrical engineering field in the greater Houston area.

Advertising rates are listed on the IEEE Houston Section website and include publishing in The **Pocket Scope**, ad on the website, and within the monthly e-mail update.

IEEE members make change of address notices via the IEEE website: www.ieee.org.

Newsletter Staff

Editors: Lisa Nichols-Dunn, 281-426-4784

E-mail: lnicholsdunn@aol.com

Advertising: 281-426-4784



THE POCKET SCOPE
IEEE Houston Section
P.O. Box 460443
Houston, TX 77056-8014

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
HOUSTON, TEXAS
Permit No. 6513