BUILDING careers & SHAPING POLICY

Recognizing **Professionalism and Achievement**

Administered by IEEE-USA's Awards and Recognition Committee, IEEE-USA awards recognize excellence and outstanding service in the engineering profession.

▲ Photo (l-r): 2003 IEEE-USA President Jim Leonard with *IEEE-USA Robert S. Walleigh Award* recipients Mike Andrews (2000), Bob Noberini (2001), Paul Kostek (2002), and George McClure (1999). The award is given to honor members of the engineering profession for long-term dedicated effort and outstanding accomplishments in advancing the aims of IEEE professional activities in the United States.

Planning **Future Cities**

Launched by IEEE-USA in 1993 as its legacy project for National Engineers Week, the **Future City Competition** is designed to prepare future generations of engineers. The hands-on, educational program has seventh- and eighth-grade students create their vision of a city of tomorrow, creating an initial design with a computer and then constructing three-dimensional scale models. Drexel Hill (Pa.) Middle School won the third *IEEE-USA Best Communications System Award* at the national finals of the 2003 competition.

▲ Photo: (l-r, back row) IEEE-USA volunteers Jean Eason of Fort Worth, Texas, and Mike Andrews of Scottsdale, Ariz., presented each team member with a plaque and a $100 U.S. Savings Bond; (l-r, front row) David Granger, a Drexel Hill technology and engineering teacher, and students Marina Kec, Rachel McKlindon, and Philip Crone, with IEEE member William Waldron, manager, performance engineering for Cingular Wireless in King of Prussia, Pa.

Celebrating **100 Years of Flight**

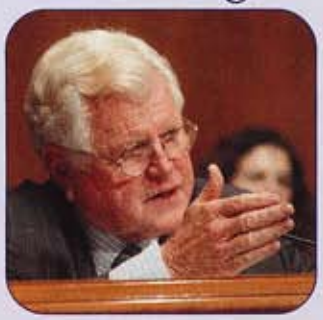
IEEE-USA President Jim Leonard joined IEEE Aerospace & Electronics Systems Society National Awards Chair Erwin Gangl in celebrating the 100th anniversary of powered flight at the International Air & Space Symposium and Exposition, held in the Wright brothers' hometown, Dayton, Ohio, in mid-July. Organized by the American Institute of Aeronautics and Astronautics and International Council of the Aeronautical Sciences, attendees included astronauts Buzz Aldrin, Neil Armstrong and John Glenn.

Support for Combating Unemployment in Visits to Capitol Hill, Media

In 2003, IEEE-USA volunteers participated in Congressional Visits Days and congressional hearings to convey concerns on the plight of unemployed, displaced engineers. IEEE-USA applauded Congress for dropping the H-1B visa cap to 65,000 in October, while urging lawmakers to strengthen U.S. workforce protections.

▲ In photos, clockwise: (l-r) On 16 Sept., IEEE-USA President-Elect John Steadman meets with Senator Saxby Chambliss (R-Ga.), as John Templeton, president of the Silicon Valley Coalition for Fair Employment looks on; IEEE-USA's Ron Hira preparing for CNN appearance on H-1B, 22 May; IEEE-USA volunteers Ralph Sprang and Philip Cox meet with Senator Rick Santorum (R-Pa.) to discuss U.S. IEEE members' concerns about the H-1B visa cap on 10-11 June; and Hira testifying on 20 Oct. before the House Small Business Committee on the Off-Shoring of High-Skilled Jobs.

Stengthening Protections for U.S. High-Tech Workers



Many lawmakers recognize IEEE-USA's policy committees as a valuable resource for information and expertise. Members of Congress frequently ask our volunteers to provide expert testimony before congressional committees on career and technology policy issues, such as immigration policy.

▲ Top left to right: Senator Ted Kennedy (D-Mass.) and IEEE-USA President-Elect John Steadman exchange comments on H-1B during Steadman testimony before the Senate Judiciary Committee on 16 Sept., urging Congress to strengthen protections for U.S. high-tech workers in temporary visa programs. Witness Elizabeth Dixon, a displaced American worker from Ingersoll-Rand, looks on. Above (l-r): House Small Business Committee Chair Donald Manzullo (R-IL), Nydia Velasquez (D-NY), Madeleine Bordallo (D-Del.), and an unidentified staffer hear testimony from IEEE-USA volunteers on the recent trends and possible implications of global outsourcing on engineering jobs.

Advising Congressional Lawmakers

IEEE-USA's Congressional Fellowship program furthers the effective use of scientific and technical knowledge in government, to help educate the scientific and engineering community on the public policy process, and to broaden the perspectives of the science, engineering and governmental communities. Eligible U.S. IEEE members serve a one-year Fellowship, consisting of an appointment to the personal staff of a U.S. Senator or Representative or to the professional staff of a Congressional Committee. The Fellows then help to advise lawmakers about public policy issues affecting U.S. engineers. In 2003, IEEE-USA's priority public policy efforts included electrotechnology, aeronautics, and energy R&D; broadband deployment; remote sensing; cyber security; secure information technology; and electric reliability.

▲ Photo: (r-l) IEEE-USA 2001-2003 Congressional Fellow Peter Winokur, of Los Alamos, N.M., serves in the office of Senator Harry Reid (D-Nev.), Minority Whip, advising the Senator on energy and transportation.

Educating Congressional Staff on Nanotechnology

Dr. Walt Trybula, IEEE Fellow, and Senior Fellow of International Sematech, provided an industry perspective to Congressional staff about the business and economic implications of nanotechnology, at IEEE-USA's Nanotechnology Briefing on 2 June. IEEE-USA supported passage of federal legislation enacted into law that would enhance federal nanotechnology R&D efforts. IEEE-USA believes these R&D investments will help develop an "economic engine of the future" that creates jobs and wealth in the U.S. and world economy.

Strengthening Ties Between Engineers and the Media

2003 IEEE-USA Science & Technology Mass Media Fellow Joy Ku is IEEE-USA's fourth Mass Media Fellow. A former IEEE student member, recently awarded a Ph.D. from Stanford, Joy worked on science, engineering and technology related stories at WNBC-TV in New York City. For each of the past four years, IEEE-USA has sponsored an engineering student in the American Association for the Advancement of Science Mass Media Science and Engineering Fellows Program. The program is designed to strengthen the connections among scientists, engineers and journalists by placing advanced science and engineering students in newsrooms across the country. Now in its 30th year, the program has placed more than 450 Fellows with news magazines, newspapers, TV networks and local organizations.

Preparing WISE Interns for Engineering Future

In collaboration with the IEEE Technical Activities Board, and the IEEE Life Members Committee, each summer IEEE-USA sponsors outstanding IEEE student members in the Washington Internships for Students of Engineering (WISE) program. This year, three student members spent 10 weeks in Washington, D.C., learning how legislators make decisions on complex technological issues, and discovering how engineers can actively participate in the legislative and regulatory process.

▲ Photo (l-r): Writing on U.S. radio spectrum policy, cyber-security, and neural prostheses were, respectively, Kathleen Young, from the University of South Carolina; Jennifer Christensen, of the South Dakota School of Mines & Technology; and Tricia Um, of MIT.