



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

THE UNITED STATES ACTIVITIES BOARD

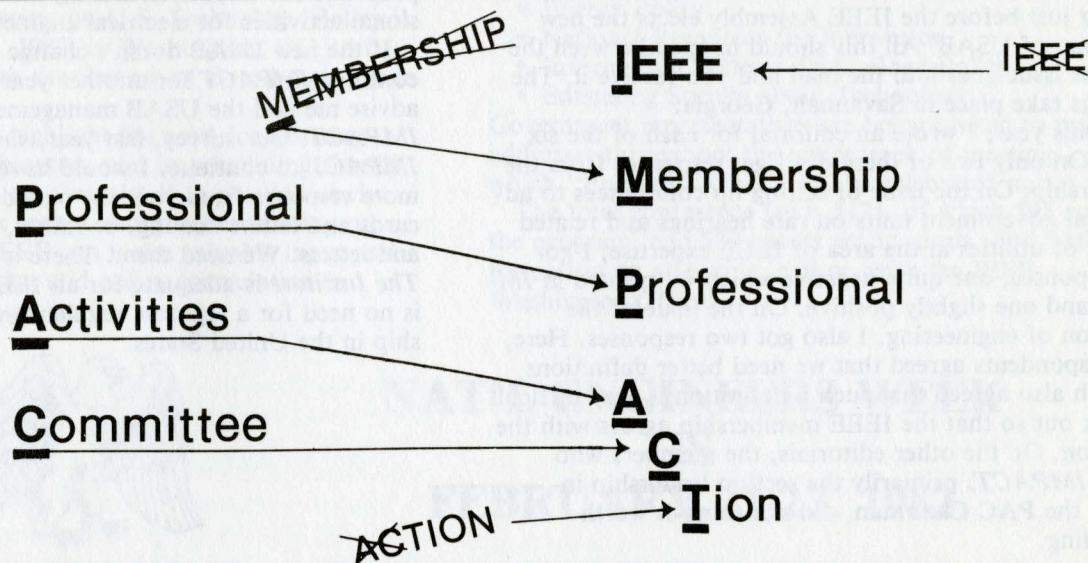
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IEEE

IMPACT

ISSN 0274-8207

THE NEWSLETTER OF IEEE PROFESSIONAL ACTIVITIES COMMITTEES



IS PAC TO BECOME IMPACT? PAGE 4.

Planning Status of IEEE Student Professional Awareness Conferences as Reported at the Fall 1981 IEEE Student Activities Committee Meeting

REGION 1

October 20	Univ. Conn., Storrs
October 27	SUNY, Buffalo; Buffalo State
October 28	Syracuse
October 29	Northeastern
November 2	Univ. of Mass., Amherst
November 4	Rutgers
November 5	CCNY
November 11	Worcester Polytechnic
November 12	Cornell

The 35000 IEEE Student Members WILL BE US within three years. Shouldn't we start *NOW* to make them aware of USAB-related interests.

See related story page 13.

YEAREND REPORT

This is the last 1981 issue of *IMPACT*. It appears that this will not be the last issue of *IMPACT* because we are budgeting for 1982 and *IMPACT* is still included. Of course, by the time most of you receive this issue we will have a new Vice President and a new U.S. Activities Board. A recent Bylaw change formalized the USAB structure with the Vice President for Professional Activities as Chairman of USAB with an operating committee consisting of Chairmen of the various Councils. These Council Chairs will be elected at the December USAB meeting just before the IEEE Assembly elects the new Chairman of USAB. All this should happen between the time this issue goes into the mail and you receive it. The meetings take place in Savannah, Georgia.

For this year, I wrote an editorial for each of the six issues. On only two of them did I get responses from the membership. On the issue of setting up committees to advise local government units on rate hearings and related matters of utilities in the area of IEEE expertise, I got two responses; one quite negative which we printed in *IMPACT* and one slightly positive. On the issue of the definition of engineering, I also got two responses. Here, both respondents agreed that we need better definitions but both also agreed that such a definition is very difficult to work out so that the IEEE membership agrees with the definition. On the other editorials, the members who receive *IMPACT*, primarily the section leadership including the PAC Chairman, did not think it worth responding.

This year, we have tried to structure *IMPACT* along the lines of an agenda. We put action items first, those on which local professional activities committees can and probably should take action. Next, we have information items of interest to people in professional activities. Finally, we have discussion items consisting mainly of letters written to me by various people on various issues. Occasionally, we pick up a discussion item out of another publication and reprint it because we feel it would be appropriate for discussion among those interested in professional activities for electrical engineering.

If the new USAB doesn't change the budget, we will continue *IMPACT* for another year. You could certainly advise me and the USAB management as to the worth of *IMPACT*. Our survey, last year, showed that people want *IMPACT* to continue. I would have a better case, if I had more response from you, the membership. Keep those cards and letters coming, or rather, start sending cards and letters. We need them. There is some sentiment that *The Institute* is adequate for all IEEE members, and there is no need for a separate regular newsletter for the leadership in the United States.

—Ben Leon
Editor-in-Chief

QUESTION DEPT.—CONGRESS DIVISION

How many outdoor U.S. Flags were bought by the U.S. House of Representatives for 1982? Write in your guess _____.

Now compare with the actuals—See page 4.

NEWSLETTER EDITORS: THIS IS FOR YOU

Editors of IEEE publications are invited to reprint any stories appearing in *IMPACT* in their own Section, Society, or other IEEE publication. Simply credit source.

While we no longer print a special editors' clip edition, the regular *IMPACT* printing has changed to black ink, which should prove helpful.

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ACTION ITEMS

U.S. TECH POLICY CONFERENCE SCHEDULED FOR '82: "CHARTING THE NATIONAL COURSE"

A fifth IEEE Conference on U.S. Technology Policy is set for February 24-25, 1982, in Washington, DC, to be held in conjunction with the first set of Board meetings in the new year.

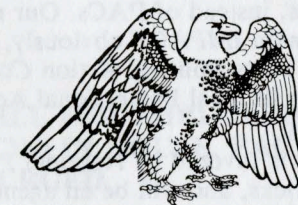
The Conference will highlight the need for a strong IEEE presence in Washington, and its scheduling should enable greater attendance. One aim is to provide newly elected Board members with a better understanding of those issues in which IEEE can make valuable input and influence decision-making and policy formulation in "charting the national course."

The 1982 Conference has been shortened to an evening and a day, in an effort to focus more specifically on a few key issues. Four sessions will be held sequentially and structured to provide maximum audience participation:

- Energy Policy
- National Resources for Innovation
- Information Systems Technology Policy
- Educating Society about Technology

Government representatives are being invited to make key addresses throughout the entire week of meetings, during which "Engineers Week" will be celebrated nationally.

The total conference fee is \$125, of which \$95 covers the program, and \$30 covers group meals. For further information on attending, call or write the IEEE Washington Office.



NAT'L ENGINEERS WEEK IS FEBRUARY 21-27, 1982

Schedule for the February 1982 Board of Directors Series of Meetings

TIME PERIODS	DAY 1 [Tuesday Feb. 23, '82]	DAY 2 [Wednesday Feb. 24, '82]	DAY 3 [Thursday Feb. 25, '82]	DAY 4 [Friday Feb. 26, '82]	DAY 5 [Saturday Feb. 27, '82]	DAY 6 [Sunday Feb. 28, '82]	DAY 7 [Monday Mar. 1, '82]
Breakfast Period			(C) Conference	(F) Speaker	Foundation Board		
Morning Period		USAB TAB Op Com	1 ½ hr Energy Policy 1 ½ hr National Resources for Innovation	TAB RAB EAB PUB		Board of Directors	
Lunch Period	Long Range Planning Committee	(A) Speaker	(D) Conference	(G) Speaker	Executive Committee	(H)	Board Directors
Afternoon Period		USAB Society Presidents Forum	1 ½ hr Information Systems Technology Policy 1 ½ hr Educating Society About Technology	TAB RAB EAB PUB		Board of Directors	
Dinner Period	Audit Comm. USAB	(B) Conference	(E) Conference	Executive Committee		Section and Society Officers	

"WISE" STUDENTS VISIT IEEE, USAB TO PARTICIPATE IN SPONSORSHIP IN 1982

Two students participating in the WISE program—Washington Internships for Students of Engineering—visited with IEEE President Richard W. Damon and IEEE General Manager Eric Herz at the Washington Office. The students, Anna Long and Stephan Bash, were selected for the program along with 13 other students from a competitive nationwide field of nearly 100 applicants.

Each year 15 selected students are invited to Washington, DC, over the summer to learn first-hand how engineers and the engineering profession contribute to policy decisions on complex technological issues. Study, lectures and fieldwork are part of the students' activities.

The WISE Program

The WISE program is part of a project called *Educating Prospective Engineers for Public Policy*, which is funded by grants from the National Science Foundation, SUN Company, and General Motors Corp., with the support of the American Society of Mechanical Engineers, National Society of Professional Engineers, Society of Automotive Engineers, and the Society of Manufacturing Engineers. The program is coordinated by the American Society for Engineering Education, and the academic sponsor of the project is the University of Washington.

The Students

Stephan Bash is an electrical engineer and pre-med student at Columbia University. Winner of a 1978 Westinghouse Science Award, he heads up his own firm, Systematics Consultants, which designs and implements analytical computer reports for business management. Sponsored in the WISE program by ASEE, he is also a member of IEEE.

Anna Long is an electrical engineering student at the University of Louisville and is active in the campus chapters of NSPE, her sponsor for the WISE program, and SWE and IEEE.

IEEE Participation

Beginning in 1982 IEEE will sponsor two students in the WISE program. USAB has voted funds from its budget toward the support of WISE. Students receive a stipend and a travel allowance, as well as academic credit for their participation. As part of their fieldwork, students are involved with an engineering-public policy issue, and student resources are applied to issues of concern to the sponsoring societies.

Applications: Students and Faculty

Applications for WISE are sought from third-year engineering students who have a proven high performance record in their engineering endeavors, along with the maturity and initiative necessary to take an active role in their own education while in WISE. Forms may be obtained from engineering department chairmen and deans, and from IEEE Student Branch Counselors, or by writing to WISE, American Society for Engineering Education (ASEE), One Dupont Circle, Washington, DC 20036. Students work under the guidance of an engineering professor who serves as WISE Faculty-Member-in-Residence. Faculty members interested in providing such guidance may contact ASEE. Applications must be in hand by the end of 1981 for participation in the 1982 program. ■

IMPACT — A NEW NAME FOR PAC?

IEEE Membership Professional ACTION—or IMPACT—could soon replace PAC to denote our grass roots professional activities organization. We would then have IMPACT chairpeople and committees in each of our sections and societies, instead of PACs. Our newsletter name would still remain IMPACT obviously, but USAB finally would be rid of its Political Action Committee image when it comes to its local Professional Activities Committee programs.

This name change is favored by National PAC Chairman, Dr. Ron Fredricks, and will be an agenda item at the February 1982 USAB meeting. If you disagree with, or have a better alternative to this name change, call Ron at (616) 241-7722 (O), or (616) 791-9134 (H). Other than some new stationery for a few people, the name change should be very easy to effect, and it should clear up a lot of confusion in Congress and in our Government Action programs.

How about it, IMPACT committee leaders? ■

GUIDE TO PUBLIC RELATIONS AVAILABLE

IEEE has published a *Public Relations Guide* for use by Sections, Societies, Councils and other units. The Guide tells how to apply PR techniques to a broad range of situations and what you need to know to be successful as your unit's PR officer. The Guide lists do's and don'ts and explains how the media works. If you are interested in obtaining a copy of this publication, contact the IEEE Washington Office. ■

PAC INSIGHT REGION 3 NEWSLETTER



PAC Insight is a new quarterly newsletter being issued by Region 3 that focuses on the scope of PAC activity within the region. The editors, E. N. Tsengas and A. A. Hamzey, stated in their first message, "Communication plays a very important part in focusing and informing on the activity leading towards the attainment of the goals of USAB and PAC . . . Chairpersons can use this material to take further action or just to make their sections aware of relevant activity and available services."

To help the flow of communication among PACs, IMPACT takes the liberty of reprinting an item from PAC Insight that should be of interest to other PACs.

See page 9.

PATENT BILL FOR EMPLOYED INVENTORS INTRODUCED IN HOUSE, PAC SUPPORT URGED

A bill to set Federal standards for permissible employee pre-invention assignment agreements, H.R. 4732, was introduced by Rep. Robert Kastenmeier (D-WI), Chairman of a subcommittee of the House Judiciary Committee. The IEEE Patent Task Force and its West Coast Subcommittee were instrumental in developing the legislative proposal.

The purpose of the bill is to extend those incentives already provided by the patent laws to employed inventors for inventions that are unrelated to employment. Other provisions, including limitations on employee rights, were outlined in the Oct. '81 issue of IMPACT. The Task Force has also prepared an information package, including the bill and a position statement, which is available from the IEEE Washington Office.

The Task Force is currently strategizing a grass roots effort toward passage of this legislation. A campaign similar to that organized for the pension legislation will most likely be employed. Members will be called on to make constituent visits and conduct other activities in their localities to enlist Congressional support. If you are willing to play an active part in this effort, especially if you are a constituent of a member of the House or Senate Judiciary Committees, contact the IEEE Washington Office. ■

MUCH WORK STILL AHEAD ON PENSION ISSUES, ACCORDING TO TASK FORCE

Having recently accomplished one of its principal goals, the USAB Pension Task Force appears to be losing no time in pursuit of its other important goals toward the achievement of equitable pension rights for engineers. One month after the new tax bill providing a universal IRA was signed into law, the Task Force met on Sept. 13 to redefine and strategize its activities, now that the IRA issue has been resolved.

National PAC leaders were invited to join Task Force members in identifying and prioritizing remaining issues. What emerged was a "wish list" of 30 issues, which the Task Force was able to categorize under three major thrusts for continued development: portable pensions, education, and related issues to be supported in cooperation with other committees and task forces.

Under portable pensions, the Task Force will promote shorter vesting periods, address the problem of voluntary vs. involuntary vesting, encourage "cash outs" as well as company contributions to employee IRAs, study the indexing of pensions, and monitor participation in IRAs.

Educational activities include development of an outline of "good plan" characteristics that would allow individuals to analyze their own plans, continuation of the column on pensions in *The Institute*, and the development of educational materials for use by PACs in promoting a better understanding among members of the complexities of pension and retirement systems.

Related issues, such as the practice of "pension busting," would have to be addressed in cooperation with the Service Contracts Task Force.

PAC leaders usually do not require a special invitation to express their views. Any thoughts or comments may be addressed to the Task Force Leader, Dr. David C. Lewis, in care of the IEEE Washington Office. ■

IEEE IRA-KEOGH PROGRAM DELAYED UNTIL 1982

The IEEE IRA-Keogh Program for members and spouses will not be available until early 1982. Those who wish to establish a KEOGH plan for the 1981 tax year must set up their accounts prior to December 31, and these individuals should therefore not wait for the IEEE program.

KEOGH plans for tax year 1982, as well as IRAs for both 1981 and 1982, will still be available under the IEEE program when materials are distributed early in 1982. The tax deduction, however, for those employees covered by employer-sponsored pension plans will begin with tax years after 12/31/81, under the provisions of the recently passed Economic Recovery Act of 1981. ■

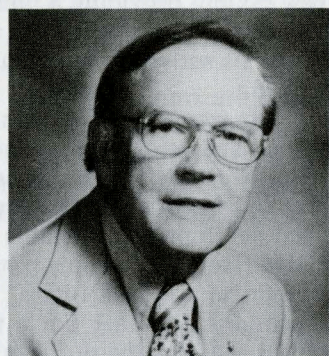
QUESTION DEPT.—ANSWER DIVISION

If you doubt this figure, a copy of the bid package will be forwarded to you upon receipt of a stamped self-addressed envelope.

3 × 5 Cotton	25,000
3 × 5 Nylon	30,000
5 × 8 Cotton	5,000
5 × 8 Nylon	15,000
4 × 6 Nylon	10,000
Total	85,000

(all sizes are in feet)

FORMER DIRECTOR AND PAC LEADER DIES



Richard C. Benoit, Jr., a long-time member of IEEE and its predecessor, IRE, died on September 25 at his home in Utica, NY, following a long illness. Dr. Benoit was chief of communications processing and distribution at Rome Air Development Center, Griffiss Air Force Base, until his retirement earlier this year. An entry in the *Congressional Record* last year by Congressman Donald W. Mitchell marked the 40th anniversary of Dr. Benoit's service as a civilian to the U.S. Air Force. In addition, he served as technical advisor to NATO telecommunications conferences and published more than 30 technical papers.

A Fellow of IEEE, Dr. Benoit served as Director of Region 1, Member of the United States Activities Board, National PAC Chairman, USAB Treasurer, and Chairman of the USAB Awards and Recognition Committee, among many other IEEE positions he held over the years.

He is survived by his wife, Marilyn, and two sons. The family suggests that expressions of sympathy be in the form of contributions to the American Cancer Society.

NEW CONGRESSIONAL FELLOWS CHOOSE HILL ASSIGNMENTS

The two newly selected IEEE Congressional Fellows have accepted positions on Capitol Hill. Dr. Feisal S. Keblawi of Mitre's C³ Division in McLean, VA, became a member of the personal staff of Sen. Strom Thurmond (R-SC) and will work on defense-related issues. Dr. Keblawi began his assignment in September. He is the second IEEE Congressional Fellow to work with Sen. Thurmond.

Dr. Glenn R. Heidbreder of the University of California at Santa Barbara will serve on the personal staff of Rep. Thomas J. Tauke (R-IA), working primarily on telecommunications issues. Dr. Heidbreder begins his assignment in January. Details of the Fellows' backgrounds and their selection for the 1981-82 term were reported in the Oct. '81 issue of *IMPACT*.

IEEE AGE DISCRIMINATION PROGRAM IN SCHENECTADY DRAWS HUGE ATTENDANCE

The IEEE Schenectady Section sponsored a lecture on age discrimination in engineering employment on October 28. Despite competition from the final game of the world series, plus typical Schenectady weather, over 130 members attended. To put this number in perspective, a large IEEE-sponsored technical meeting in Schenectady may be attended by about 40 people, while most events attract between 10 and 20. The attention given to this subject is perhaps indicative of the extent of the age discrimination problem in this region.

The meeting consisted primarily of a 90-minute presentation by James F. Fairman, a practicing attorney and IEEE member from Washington, DC. Mr. Fairman is the author of the *IEEE Age Discrimination Digest*.*

Initially, Mr. Fairman addressed the demographics associated with the technical work force, particularly noting that the fraction of workers in the 40-65 age group is increasing. Following this information, he discussed the grievance procedure in the State of New York for those who wish to exercise their legislated rights. Following this, he described the Federal Age Discrimination in Employment Act (ADEA) of 1967 and how this may be used to protect workers' rights. He also noted a 100% increase in age discrimination complaints in the U.S. from 1979 to 1980.

Another important phase of the talk included a list of five practices by employers which are specifically prohibited by the ADEA in terminating or demoting employees. In describing typical practices used by employers in reducing employment and payroll costs, Mr. Fairman emphasized that the ADEA is not intended to interfere with employer decisions caused by adverse economic circumstances.

In concluding his presentation, Mr. Fairman reemphasized the need for an advocacy organization in government to protect the economic rights of workers between the ages of 40 and 65. He compared this need to the roles filled by NOW and "Ralph Nader" types of organizations.

The Schenectady Section of IEEE and the Schenectady General Electric Engineers and Scientists Association are grateful to Chuck Olsefsky, USAB Age Discrimination Task Force Leader, for supporting this program, as well as to Mr. Fairman for donating his services.

—Michael P. Perry, PAC Chairman
Schenectady Section

*The *IEEE Age Discrimination Digest* is available from the IEEE Service Center in Piscataway, NJ. Request IEEE Catalog No. UH0138-8; price is \$16.50 for members and \$22 for nonmembers. PAC Chairmen have received reference copies for inclusion in the *PAC Source Book* and can make additional information available to IEEE members.

USAB ANNOUNCES WINNERS OF ITS AWARDS FOR PROFESSIONAL ACTIVITIES IN 1981

On behalf of the United States Activities Board, Dr. Howard B. Hamilton, Chairman of USAB's Awards and Recognition Committee, announced the winners of the USAB awards for professional activities in 1981. Candidates recommended by the Committee were selected during the August series of Board meetings. Recipients were notified of their selection and, in turn, notified USAB of their acceptance.

The top award, for engineering professionalism, was awarded to Richard C. Benoit, Jr., for "outstanding contributions toward the advancement of the professional goals of the Institute." Dr. Benoit was informed of his selection prior to his passing on September 25. Presentation of the award will be made to Mrs. Benoit, who will accept the plaque on behalf of her late husband.

The USAB Award for Distinguished Public Service to the Engineering Profession, for persons outside the profession, was awarded to the Honorable Thomas J. Downey, U.S. House of Representatives, for his advocacy of IEEE goals of professionalism in engineering.

A USAB Citation of Honor, for "exemplary effort and dedicated service toward attaining recognition of engineering professionalism," has also been awarded. Fay L. Young, late wife of the 1980 IEEE President, Dr. Leo Young, was named for her successful efforts over the years toward resolution of the pension issue. On behalf of USAB, Dr. Hamilton stated that the passage of the 1981 Federal tax bill, with its universal IRA provision, was viewed as a "definitive accomplishment," and that "Mrs. Young was certainly among the Institute's pioneers" in bringing it about. "Rarely has the Institute benefited so greatly from the dedication of an individual who was not a member of the profession of engineering but nonetheless worked devotedly toward one of its professional goals," he said.

Since more than one Citation of Honor may be presented in a given year, USAB also designated a Citation as the Fay L. Young Memorial Award. "It is our hope," Dr. Hamilton said, "that Mrs. Young's legacy of exemplary service may be an inspiration to others." This award begins concurrently in 1981, and the first recipient is Dr. David C. Lewis. A Congressional Fellow during 1979, Dr. Lewis chaired the Pension Task Force in 1980 and 1981, and worked consistently toward passage of legislation of benefit to the profession.

USAB Awards for Regional Professional Activities will be presented to: Richard F. Tax (Reg. 1); Joseph A. Edminister (Reg. 2); Arthur N. Greene (Reg. 3); Paul V. Schwarz (Reg. 4); and Henry N. Bowes (Reg. 5).

Certificates of Appreciation will go out to Milton Alpern, John Andrews, Nathan Aron, Calvin Dunigan, John F. Foulkes, Roger Madden, Duane Matthiesen, Milton T. Rubin, Robert Sinusas, Karl O. Sommer, and Lewis N. Thomas. Presentation of the major awards will be made at IEEE meetings beginning late in 1981 and continuing through 1982.

Nominations are open now through June 1, 1982, for the 1982 awards. "Recognition of outstanding service and contributions is of utmost importance in a volunteer organization such as IEEE," according to Dr. Hamilton. "PAC leaders," he added, "are in a most advantageous position to identify and recommend active members as candidates for these awards." The USAB awards program is the only one in IEEE to consider candidates solely on the basis of accomplishments in professional activities. Information on the program and nomination forms are available from the IEEE Washington Office.

PAC LEADERS BRIEFED ON WASHINGTON ACTIVITIES OF IEEE

During a PAC workshop sponsored by Region 2 for its PAC leadership, the Washington Office staff was asked to brief participants on national activities key to PAC efforts. The Workshop was held in the Washington area on October 16-17.

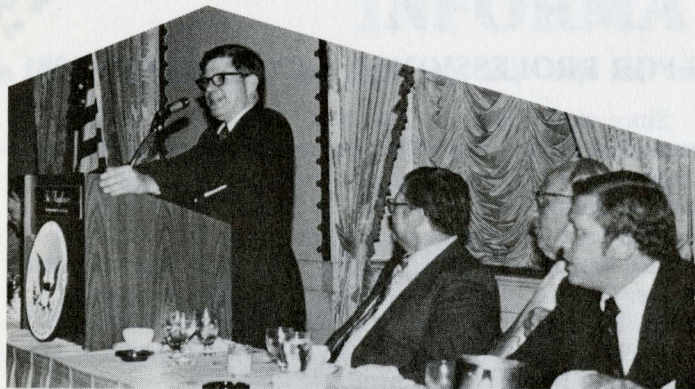
The PAC leaders, along with Region 2 Director Merrill W. Buckley, Jr., visited the IEEE Washington Office for a two-hour session with staff members. PACs were informed on a range of USAB's Washington activities and brought up to date on current legislation, task force developments, publications, and PAC services. Director Buckley noted that it is "unfortunate that we cannot expose all of the PAC community to this type of direct contact with the people and programs of the Washington Office."

The PAC leaders who attended termed it a "beneficial experience," and Region 2 PAC Coordinator, Joseph A. Edminister, thanked the staff for its "key role" in helping to make the workshop a success.

HOUSE STAFF PRAISES WORK OF IEEE CONGRESSIONAL FELLOW

Dr. Eli Fromm recently completed his Fellowship year as a Professional Staff Member of the House Science, Research and Technology Subcommittee. One of three IEEE Congressional Fellows selected for the 1980-81 term, Dr. Fromm was termed "one of the most effective visiting staff we have ever had," by Thomas H. Moss, Staff Director of the House Subcommittee. "Eli quickly won the respect and admiration of the permanent staff," Mr. Moss added.

Dr. Fromm returned to his teaching post at Drexel University in September. Mr. Moss also advised the University of Dr. Fromm's work as a Congressional Fellow. "His technical ability and contacts with the academic and engineering profession brought a great deal of sophistication to our committee work," Mr. Moss commented. "He quickly mastered the quirks of our political business so that he was able to use his technical background quickly and adroitly."



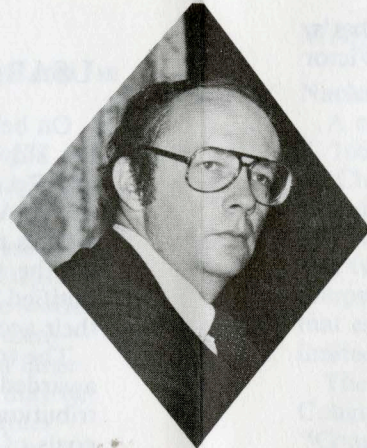
Richard J. Gowen, at lectern, who served as general chairman of the Review Conference and as a co-chairman of the Steering Committee for the IEEE-NRC Conference, welcomes participants, describes the purpose of the Conference, and outlines the work that lies ahead on the PRA Guidebook. Seated alongside (l.-r.) are Saul Levine, Steering Committee Co-Chairman and Vice President and General Manager of the Consulting Div. of NUS Corp.; Clarence Larson, former AEC Commissioner; and his son, Robert E. Larson, who will become President of IEEE in 1982.

IEEE HOSTS CONFERENCE ON RISK ASSESSMENT FOR NUCLEAR REGULATORY COMMISSION

Improving the safety of nuclear power in the U.S. is a national objective to which IEEE recently contributed by hosting the "Review Conference on the Probabilistic Risk Assessment Procedures Guide for Nuclear Power Plants," on October 26-28, in Washington, DC. Nearly 400 people, including those within and those outside the nuclear industry, attended the conference, which was funded under a grant from the U.S. Nuclear Regulatory Commission (NRC).



Saul Levine (c.) conducts meeting of the PRA Steering Committee following the Conference.



Joseph R. Penland, manager of the Applied Engineering Dept. of Science Applications, Inc., chaired the Program Committee for the Review Conference on the PRA Guidebook.



One of seven review panels to critique sections of the PRA Guidebook; above is the external events review group, chaired by Dr. Robert Budnitz (far right) of Teknekron, Inc.



Chairmen of the review panels reported their group's findings and recommendations at the concluding session of the IEEE-NRC Conference. The Review Committee topics were: program organization, accident sequences, component data and accident sequence quantification, human reliability, containment response sequences and quantification, and external events.

Early in 1981 a group of technical experts drafted a guidebook of acceptable probabilistic risk assessment (PRA) methodologies for assessing the safety of nuclear power plants. The purpose of the Review Conference was to subject the guidebook to extensive peer review by both nuclear and non-nuclear practitioners of PRA to assure that its contents reflected the state of the art of such assessments.

A series of seven review panels deliberated on specific sections of the guidebook. Each panel was asked to make specific recommendations for improving the sections of the guidebook under its consideration. After exhaustive examination, the panels concluded generally that the draft guide provided positive assistance. Some sections, however, such as Human Reliability, and Component Data and Accident Sequence Quantification, were noted to need expansion in either the scope or depth of analysis.

IEEE was called on to host the Review Conference because its membership represents both nuclear and non-nuclear experts. The use of Optical Character Reader and

Word Processing technologies expedited production of the minutes and reports of the reviewing panels, and the final report of the Review Conference was completed just over one week after the meeting concluded.

The event marked the second conference held jointly with the NRC for which USAB has had major responsibility. The first conference, held in January 1980, considered advanced electrotechnology applications to nuclear power plants.

USAB SPONSORS SECOND MAJOR CONFERENCE ON CAREERS

USAB's Task Force on Career Maintenance and Development sponsored a "Careers Conference" on October 22-23 in Denver, CO, with the overall aim of improving the careers and working life of engineers. The program focused on the majority of the million-plus engineers in the U.S. who are not in management, but are working as technical contributors, without, however, overlooking the somewhat differing goals of engineers on a management career path.

The Conference was attended by nearly 140 people, comprising a nearly even mix of engineering managers, personnel administrators, and working engineers.

A series of six sessions, which included the presentation of papers, panel discussions, and informal exchanges, outlined a number of problems and approaches to solving them. Management methods, behavioral science research, career models, the role of professional societies, continuing education, and mid-career problems were examined, and a concluding talk was given by IEEE President Richard W. Damon.

"We also took into account all levels of engineering talent," said Conference Chairman Wallace D. Decker of Lawrence Livermore Laboratory. "The solid contributor, the average performer, and the technical star all want their employment to be challenging and rewarding . . . organizations should have a realistic view of this total engineering population and the need for it to be highly productive," he said.

Another goal of the Task Force is to develop guidelines for engineers and guidelines for employers which, if widely accepted, could bring the career goals of engineers more into congruence with the goals of the organizations that employ them. "We believe," Mr. Decker said, "that this will help bring about long, satisfying, and rewarding careers for engineers and that companies will benefit by high productivity, good quality work, and improved morale among engineers."

Papers presented at the Conference, as well as other materials, have been collected for the soon-to-be published Conference Record.

In November 1979, USAB sponsored a conference on "Building a Professional Work Climate." The Record of this Conference is available from the IEEE Service Center in Piscataway, NJ.

SECURITY AND PRIVACY, THIRD SYMPOSIUM TO BE SPONSORED BY IEEE COMPUTER SOCIETY

The 1982 Symposium on Security and Privacy, sponsored by the IEEE Computer Society, is set for April 26-28, at the Claremont Hotel in Oakland-Berkeley, California. Papers and panel session proposals related to security and privacy are being solicited. Possible topics include encryption, data base security, operating system and privacy protection. Efforts will be made to provide a common middle group between the encryption and system security communities, according to a release from the IEEE Computer Society. Both theoretical and practical contributions are encouraged.

For further information on the symposium, proposals for papers, registration, and proceedings of past symposia, contact the Computer Society, P.O. Box 639, Silver Spring, MD 20901.

PAC HOTLINE SERVICE HUNTSVILLE, ALABAMA

In 1980 the Huntsville PAC Chapter established a 24 hour telephone service, year around, that receives traceable or anonymous reports from members who are subject to NASA or U.S. Army Service Contract abuses. Also it is being used by anyone to contact the PAC Chairman for any pertinent matters.

This service has been a success for the Huntsville Chapter since it spurred a new method of communication for the membership as well as the general public. It has been used to obtain IEEE Standards as well as responding to questions relating to IEEE services in general.

Billy E. Jones
PAC Chairman

Reprinted from PAC INSIGHT, see also page 5.

PROFESSIONAL ACTIVITIES AND PROMOTIONS GO HAND IN HAND

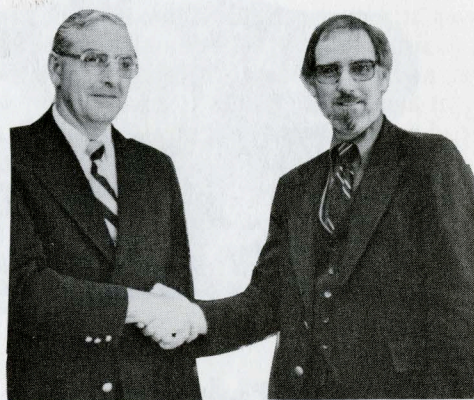
George H. Starr, PE, Portland Section PAC Chairman from 1977 to 1979, was recently promoted by Bonneville Power Administration (BPA). His new title is State and Local Government Coordinator, a position in which he represents the BPA with the legislative and executive bodies within the state of Oregon on issues relating to energy conservation, development and financing of renewable resources, and any other topics of mutual concern. George had to compete under the Federal Merit System for this position against forty other candidates. What were the special qualifications that prompted his selection above the others?

George's story goes like this. Back in October 1976 there was a unionization effort taking place within the engineering ranks at Bonneville Power Administration. In working directly with the leaders of this effort, he was able to swing the movement to a professional approach. The Society of Concerned Engineers was formed as a professional society to communicate with BPA Management and to work directly with the large engineering societies to prepare standards of professional compensation for engineers.

As Professional Activities Chairman, Portland Section, IEEE, and Professional Engineers in Government Oregon delegate to the National Society of Professional Engineers (NSPE), he was one of the major forces behind the adoption by both NSPE in January 1978 and IEEE in August 1978 of criteria for compensation of employed engineers. On March 7, 1978, he testified before the U.S. House of Representatives Subcommittee on Compensation and Employee Benefits during their oversight hearings on pay comparability. The testimony discussed at length engineer compensation criteria, as well as the professional utilization of engineers.

These activities were followed by many more within IEEE and NSPE. The real climax came when George, serving as Chairman of the Professional Engineers of Oregon Legislative Liaison Committee, orchestrated the testimony on behalf of all engineering societies in Oregon during the sunset review of the Oregon State engineering

statutes. After nearly two years of effort the new, strengthened statutes became law on June 1, 1981. That's when the photo of George with Oregon's Governor Victor Atiyeh was taken.



Oregon Governor Victor Atiyeh (l.) and George Starr (r.).

For his efforts George was awarded the 1978 USAB Region 6 Professional Activities Recognition, and in 1981, a special plaque of appreciation from the Professional Engineers of Oregon.

When the Pacific Northwest Electric Power Planning and Conservation Act passed into law in December 1980, the role of BPA was modified, and some of those changes led to the creation of new positions of coordination with state and local governments. George, of course, with all his background, was right there. Without his experiences and the recognition awarded him by the professional societies, "I wouldn't have stood a chance of being selected," he related in a recent phone call. "The legislative and organizational insights gained as a representative of the engineering societies is the best thing that has happened for me in a long time," he said.

George is one engineer who will tell you that speaking up for the profession on professional issues can have financial as well as personal rewards. We wish George lots of luck and continued success in his new position. We hope his story will be remembered by everyone who has ever had that "let George do it" feeling. ■

PAC "SOURCE SHEETS" ON PROFESSIONAL TOPICS AVAILABLE

In its continuing effort to provide authoritative, up-to-date information to PACs, USAB published a number of Source Sheets during 1981 and distributed them to PAC leaders for inclusion in the *PAC Source Book*. A limited supply of additional copies are available on request to the IEEE Washington Office, or you may contact your PAC Chairman for information of interest. Source Sheets published this year include:

- Ethics (Procedures for IEEE Support of Members on Ethical Matters)
- Ethics (Procedures for IEEE Discipline of Members on Ethical Matters)
- Registration (Basic Registration Requirements By State)
- Registration (Directory of State Boards of Registration)

- Congressional Fellows (Program Information)
- Pensions (State Tax Treatment of IRAs)
- Awards (Summary of USAB Awards for Professional Activities)
- Discrimination (The EEOC: The Law Today)
- Legal Services (ABA Info on Locating An Attorney)

The PAC Series of publications includes two booklets, also, published in 1981: *PAC Guide to Service Contracts* ("Your Rights As A Service Contract Employee") and *PAC Guide to Patents* ("Employed Engineers: Who Owns Their Inventions"?). The guide booklets are also distributed to PAC Chairmen for inclusion in the *PAC Source Book*. Additional copies of the booklets are available for sale from the IEEE Service Center in Piscataway, NJ. The Service Contracts Guide is IEEE Catalog No. UH0146-1; price, \$2.25 for members and \$3.00 for nonmembers. The Patents Guide is IEEE Catalog No. UH0147-9; price, \$2.00 for members and \$2.75 for nonmembers. ■

WASHINGTON SCENE

Nuclear Waste Management

A consensus bill on nuclear waste management, S. 1662, was introduced in the Senate by Sen. James McClure, chairman of the Energy and Natural Resources Committee, and Sen. Robert Stafford, chairman of the Environment and Public Works Committee, on Sept. 24. The two leaders, and three co-sponsors, Sens. DeConcini, Simpson and Symms, joined forces on an omnibus bill that establishes policy on nuclear waste and sets up a limited program for Federal storage of spent fuel.

The bill represents the culmination of the work of three Congresses on this issue. According to Sen. McClure, "Congress must deal with this most critical and serious national issue, in the areas of both energy and environmental policy, to assure the predictable and long-term viability of the nuclear power option for this nation, and indeed for the free world."

The IEEE position paper on nuclear waste management is being submitted to the Senate committees. Approved in August, the position states that the Federal government "must reaffirm a positive commitment to nuclear energy . . . by a well-defined waste management program." It recommends that a single Federal agency "assume broad oversight responsibility," and that a national plan must include "effective state and public consultation processes." A copy of the complete position is available from the IEEE Washington Office.

Innovation and Productivity: Human Factors

The House Science, Research and Technology Subcommittee held hearings in mid-September on human factors in innovation and productivity. Representing an unusual approach for Congress, the hearings focused on human and social elements in the development of technology. Earlier concern with such issues has centered on tax, patent and economic issues.

The hearings came about as a result of suggestions from Rep. Stan Lundine, a member of the House Science and Technology Committee, who has sponsored productivity legislation. "Our society is at a critical point where the growth and sophistication of our technology may surpass our ability to utilize it as effectively as we should," he said.

The Subcommittee Chairman, Rep. Doug Walgren, said that an understanding of the "human and social dimensions of our highly technological society is essential, if we are to know how best to get people to be more productive and innovative."

Patents

Sen. Harrison Schmitt introduced a new uniform patent bill, S. 1657, with five co-sponsors, on Sept. 23. A companion bill, H.R. 4564, was introduced in the House by Rep. Allen Ertel and 10 co-sponsors. Sen. Schmitt said that the value of much Federally sponsored research is lost, "unless the discoveries and inventions which result can be commercialized," and that this is best done if those who have performed the research have "the opportunity and the incentive" to do so. (See separate story in this issue on the introduction of USAB's patent bill.)

R&D Provisos for Small Business

The House held hearings in September on several bills that would require a percentage set-aside of Federal R&D contracts for small business. The Administration, however, has opposed such set-asides based on the President's economic philosophy of opposition to direct Federal subsidies to industry and to any government interference in corporate decision-making. Administration witnesses said that the legislation would put "Federal agencies in the position of using public monies as venture capital to promote commercial development of ideas which the agencies—not the marketplace—decide are innovative and marketable."

What Else?

Details of legislation of interest to IEEE members are reported in USAB's *Legislative Report*. ■

INNOVATIONS TO AID THE HANDICAPPED PROVE REWARDING IN MANY WAYS

A hearing and speech professor at the City University of New York, Dr. Harry Levitt, who programmed an off-the-shelf, low-cost, mass-produced, pocket-sized computer for rapid communication by the deaf over public telephone lines, has been awarded the first prize of \$10,000 in the Johns Hopkins University First National Search for Applications of Personal Computing to Aid the Handicapped.

An IEEE member, Dr. Levitt was presented with the prize at an awards banquet held in Washington, DC. The second prize of \$3,000 went to Dr. Mark Friedman, also an IEEE member, and three colleagues for the development of an eye-tracker for communication by severely disabled persons. Dr. Friedman is a professor and research engineer at Carnegie-Mellon University in Pittsburgh, PA. The third prize of \$1,500 went to Robin L. Hight of St. Louis, MO, for the development of a lip-reader trainer.

The University's search for such applications of personal computing was initiated by Paul L. Hazan, an IEEE member with the Applied Physics Laboratory of Johns Hopkins University. The thrust of the nationwide competition was to encourage and inspire ideas, devices, methods and computer programs to help handicapped persons cope with difficulties in work, home and community settings.

Seven other inventors received honorable mention awards of \$500 each. The search was sponsored by the National Science Foundation and Radio Shack, a division of the Tandy Corp. ■





Meeting with Sen. Pete V. Domenici (seated) prior to briefing on photovoltaics are (standing, l.-r.) William G. Herrold, John A. Casazza, Richard Tabors, David Redfield, Robert Sullivan, and Merwin Brown.

IEEE ENERGY COMMITTEE BRIEFS SENATE STAFF ON PHOTOVOLTAICS

The IEEE Energy Committee, which has been most active in testifying before Congress, the Dept. of Energy and party platform committees, recently took action behind the scenes by sponsoring a briefing on photovoltaics for Senate staff members on Sept. 18. The purpose of the briefing was to prepare staff for upcoming hearings on DOE's photovoltaics program. Thirteen staff members attended, and most said they came away with new perspectives.

The briefing was put together by William G. Herrold, IEEE Energy Committee secretary, under the guidance of the Committee Chairman, John A. Casazza. Four IEEE members briefed the Senate staff on aspects of photovoltaics and the possible use of the technology in electric power supply systems.

David Redfield of RCA's David Sarnoff Laboratory in Princeton, NJ, gave an overview of photovoltaics technology, described a photovoltaic power system, and discussed the tradeoff between the cost and efficiency of solar cells. Merwin Brown, a research engineer with Arizona Public Service Co., discussed utility systems and how photovoltaics could interface with them. Robert Sullivan, associate professor at the University of Florida, reviewed the integration of photovoltaics with the utility system over the next 20 years, from a systems planning viewpoint. Richard Tabors, program manager at MIT's Energy Laboratory, focused on the economics of systems integration of photovoltaics.

Prior to the briefing, the IEEE group met with Sen. Pete V. Domenici, chairman of the Senate Energy and Natural Resources Committee.

Further details were reported in *The Institute*, November 1981.

"IEEE is providing an excellent service as a data base."

—Sen. Pete V. Domenici

"It was very well done. I learned a lot. The technical information helped me understand complex testimony at the hearing."

—Susan Rieff
Office of Sen. Dale Bumpers

"I've had some experience with the issue, but the four presentations gave me a perspective I hadn't seen before. It was very useful, and I would attend another."

—Mitch Tyson
Office of Sen. Paul E. Tsongas

"Congressional staffs don't usually get that kind of detail from other sources. Staff members who attended were interested in depth. They saw how photovoltaics may fit into the utility system, a new perspective, but one that is important as the technology comes into wider use."

—Paul Gillman, Staff Director
Subcommittee on Energy Research and Development

"We were careful not to advocate anything. Our purpose was to acquaint them with the pros and cons of technical and economic issues so that they could probe the key issues during the hearings. Education of key Congressional staff aides can be an outstanding way for us to make constructive contributions to the government decision-making process. It can be much more valuable than giving testimony."

—John A. Casazza
Chairman, IEEE Energy Committee

CONTROVERSY OVER GOVERNMENT'S ROLE IN TECHNOLOGY SPARKED AT IEEE PANEL DISCUSSION

The IEEE-sponsored panel discussion on Federal policies for stimulating technology struck a spark of controversy at the opening of the "Showcase for Technology" held in Albuquerque, New Mexico on October 28-30, 1981. Former Senator Adlai E. Stevenson and a current White House budget official, Glenn R. Schleede provided very different perspectives on the role of government, highlighting a discussion that also featured the President of IEEE, Richard W. Damon, the 1980 IEEE President, Leo Young, and a local New Mexico section representative, Professor Roy Colclasser of the University of New Mexico.

Stevenson was co-author of the Stevenson-Wydler Technology Innovation Act of 1980, which called for a stronger and more coherent Federal role in monitoring and supporting technological innovation, including establishment of generic technology centers, greater budget commitments to technology transfer from Federal laboratories to the private sector, and the formation of a Center for the Utilization of Federal Technology. These measures have not been supported by the Reagan Administration, and no funds have been requested to implement these provisions of the law. Mr. Schleede defended the Administration's position because of the need for fiscal restraint and the poor track record of the Federal government in previous efforts to support technology developments for commercial use. He emphasized the importance of marketplace forces to determine what was needed and when. As an example, Schleede maintained that the current easing of the energy problem, involving conservation measures in the U.S. and adequate supplies, occurred in spite of Federal efforts rather than because of them.

Recognizing the current government reluctance to take a more active role, Dr. Damon suggested a role for technical societies, such as the IEEE, since the members keep closer contact with both industrial needs and government. He pointed out that the large number of society publications and conference activities could serve to aid in the technology transfer process. In addition, Damon cited the industry example and suggested that Federal agencies must make stronger efforts to "sell" their technologies through displays and active participation in trade shows, such as the "Showcase for Technology." He complimented Senator Harrison Schmitt for helping to organize the event, which brought together industry, government and university scientists and engineers under the theme "Moving Technology into the Marketplace." The IEEE panel session which highlighted the opening day was organized as a preparatory activity for the 1982 IEEE Technology Policy Conference, and was moderated by the Conference Chairman, Dr. Russell C. Drew.

The panel generally agreed that the increasing challenge to U.S. technological dominance from Japan and Western Europe would require a much stronger and dedicated U.S. effort and that government policies would have a major effect on the outcome of this global competition. But it was pointed out that the targeted, and frequently highly subsidized efforts by other nations involve a degree of cooperation between their governments and industry that

Extract from report to REGIONAL ACTIVITIES BOARD

One of the important items that was discussed at the (Student Activities Committee, Boston, Oct. 16-17) meeting was Professional Awareness Conferences. Fortunately, Mr. Hans Cherney, IEEE Region 1 Director who has been very active with the student Professional Awareness program, was on hand to interact with the Committee on many points relative to the future direction of the program. The importance of Student Professional Awareness Conferences cannot be overstated. Mr. Cherney gave data that showed that the IEEE Student Professional Awareness Conferences are not only the most effective way of conveying information on professionalism to the students but also is a good source of new student members. The cost of the conferences is significantly offset by the number of new student members, and, when you consider the amount of information presented to the students, the conferences become invaluable. Essentially the conferences inform the students of the nontechnical aspects of their profession and help them identify with electrical engineering as a profession. The whole topic was received very enthusiastically by the Student Activities Committee. The Committee later approved the following goals:

1. To encourage communication of topics related to professional awareness in the new student magazine.
2. Hold a professional awareness conference during each region's major conference.
3. Continue to hold professional awareness conferences on college campuses.
4. Gather information so that a package could be put together that would help schools and regions prepare a successful professional awareness conference and to gather material on these conferences for later inclusion in a slide-tape program.

President Damon (present at the meeting) also endorsed these conferences.

Harry Stearns

is not consistent with U.S. principles, making new approaches required. It was on the degree and type of Federal intervention that participants' views diverged.

Dr. Young maintained that industry pressure to maximize profit inevitably caused a focus on the short-term, which meant that government had to be prepared to support longer-term activities, such as basic research. He emphasized the importance of the human resources, people-to-people relationships for effective technology transfer, and the need for promotion of a better understanding and familiarity with advanced technology by the average citizen. The French program for the introduction of computers was cited as an example of a Government policy that recognized the importance of this objective.

TECHNICAL
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USAB CHAIRMAN'S MESSAGE

A special thanks to Wally Decker and his Program Committee for a very exciting and successful Careers Conference. The Denver conference provided the 130 participants an opportunity to examine the current "career health" of our profession.

Recent trends in electrical engineering and computer sciences employment have indicated the need for a special meeting to review data about the shortage of engineers. While there may be shortages in some local areas, there are signs that the recession in our economy has begun to have an effect on hiring. Additionally, there are growing concerns about the increasing number of "experienced" engineers who are finding themselves nudged aside in favor of newer graduates.

We observe that in a time of "shortage" that average salaries provided to engineers are dropping. Both our salary data and information provided by the Engineering Manpower Commission show that constant-dollar engineering salaries, even for new graduates, have failed to keep up with inflation. My hope is to better understand the data, which, on the one hand supports a shortage of engineers, and on the other hand shows that engineering salaries are decreasing.

At the October USAB OpCom meeting a resolution was passed concerning the certification of positions for which alien engineers could be hired. We noted that some advertisements for engineers show salaries that are far too low to reasonably expect that anyone will apply for the position. Since it is difficult to prove that such advertisements are intended to circumvent our immigration laws, the USAB OpCom chose to recommend to the USAB and the Executive Committee that they endorse a resolution to encourage the Secretary of Labor to deny the certification of any position supported by an advertisement that shows a salary of less than 25% of the average salary for engineers with similar experience in that region as established by our most recent salary survey. The resolution also provides that the Secretary of Labor be advised that advertisements with salaries of over 75% of the average salary could be considered as representing a reasonable effort to find a qualified person to fill the position as required by certification procedures.

The past two years have been busy and rewarding. I have enjoyed the opportunity to meet with members on a number of professional issues. We have seen many of our programs move ahead with great success, including the passage of the long-sought-after improvements in our pension program. The governance of USAB has shifted, with the election of the leaders of USAB to provide greater input from active USAB volunteers in determining the USAB Program. Program funding has been balanced to achieve the greatest effectiveness for each dollar spent. In 1982, with an increase in the USAB assessment, there will be a much needed increase in the level of funding for member programs.

I am pleased to report that the new USAB council system has brought greater effectiveness to the USAB program. Through the councils, task force and committee leaders can more easily obtain both the funding and staff support needed to carry out assigned programs. Under the leadership of Council Chairman Bob Barden, our career

programs are progressing well. Technology Council Chairman Jack Doyle has led our technology policy committees in responding to the massive shifts in federal R&D programs. The Government Activities Council, led by Chairman Russ Drew, has been working closely with our R&D Committee, our Congressional Fellows, and the science and technology committees of the Congress to identify the highest potential technology-related solutions to our nation's critical needs.

Our PAC program is stronger and more effective than ever before. Member Activities Council Chairman Darrell Vines has worked hard to bring together a base of member services. National PAC Chairman Ron Fredricks has led the development of the 1981 PAC Program. His efforts have been well received throughout the IEEE. Recently PAC was asked to comment on a proposed EAB Career Guidance Booklet. The response from our PACs was quick and has led to a joint USAB-EAB Committee to revise the booklet. PAC has grown as an effective means of providing member service, of increasing the awareness of members to problems facing our profession, and of providing effective political action. One example of such political action was the truly impressive response to the Legislative Alert in support of the pension portion of the Tax Bill.

1981 was a time of cooperation. The Energy Committee developed a slide program to be used in the PAC Awareness Program through funding provided jointly by TAB and USAB. EAB has asked USAB to help monitor the new IEEE policy for the control of the use of the word "engineering" in technology programs. TAB and USAB have a number of joint efforts ranging from engineering manpower thru restrictions on the exchange of technical information to a jointly funded 1982 Technology Policy Conference.

The spirit of cooperation with USAB was also shared amongst the leaders of the Board of Directors. For the first time, the IEEE President participated in the National PAC Workshop. President Damon and President-Elect Larson both participated in the Denver Careers Conference. The activity of IEEE leaders with Professional Activities Programs has shown significant increases. The Board of Directors voted to change the first Board meeting in 1982 to be held in Washington DC during Engineers Week. Additionally, the schedule of the February Board meeting was changed to include full participation in the 1982 Technology Policy Conference.

On October 26-28, 1981, I was privileged to serve as the General Chairman for a joint industry-government conference to review the development of a procedures guide for applying probabilistic risk assessment techniques to nuclear power plant safety concerns. The conference program was under the direction of Dr. Joe Penland, and over 400 individuals participated in the conference to direct the development of a new approach to evaluate the safety of nuclear power plants. IEEE Presidents-Elect Bob Larson and Jim Owens, Standards Director Irv Howell, PES Nuclear Committee Chairman John Boettger, and I serve on the Steering Committee to guide the development

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OPINIONS AND ITEMS FOR DISCUSSION

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NATIONAL PAC CHAIRMAN'S CORNER

As 1981 crawls to a close I must express my sincere congratulations and appreciation to all of our hardworking PAC leaders this year for a job well done.

As you may know, about 5% of IEEE's membership is very vocal about calling for the dismemberment of USAB and the disengagement of IEEE from all non-technical professional activities. "I made it by myself"—frequently with no degree—and "The good engineer always can advance as far as he or she wishes in the technical arena," is the philosophy they espouse in letters to *The Institute* or other publications. On the other hand another 5% of U.S. members who are equally vocal constantly categorize our professional activities in writing as ineffectual and regard USAB as dominated by corporate and academic interests. Because of their overpowering negative feelings, they refuse to get involved in USAB or PAC activities which are of direct benefit to working EEs. Finally, about 60% or so of our membership seem to limit their activities to the sure bets (like money held in 5.5% savings passbooks). While they have the same career and professional concerns as we do, they limit their IEEE activities to subscribing to journals, taking the life insurance and, starting in 1982, perhaps investing in the IEEE-sponsored IRA funds.

As you can see, with such outright opposition, debilitating negativism and large-scale apathy, it is a constant struggle for each of us to keep our morale up and feel our personal PAC efforts are worth the time expended.

However, looking at this year's accomplishments alone, I cannot help but feel a sense of exuberance and accomplishment! We, USAB, its Task Forces and the national PAC organization, are a success story in 1981!

Consider that we have seen the passage of an IRA largely due to the grass roots efforts of the engineering societies and the IEEE in particular. Consider, too, that this year a PAC-originated resolution on unnecessary employment of alien engineers by industry and suspiciously low salary offers in advertisements appearing in IEEE journals was adapted essentially intact by USAB after passage at the July PAC workshop. Another measure adopted by USAB this fall due to grass roots urging at that workshop was one that viewed the appearance of the word "engineering" in technology *degree* titles as evidence of deception by the technology department involved (although such departments may still keep

the adjective "engineering" in their *department* title to distinguish themselves from medical or industrial technology departments).

Needless to say, USAB has encountered reluctance from PUB to comply with the advertised salary level restrictions and vehement opposition from the Technology Department Heads Association on the "Engineering Technology" policy statement. To its credit, USAB has remained firm in its policy statements out of a sense of conviction that the wishes and feelings of the U.S. members must be paramount in U.S. professional activities, rather than those of other boards or of outside associations or interests. This point will be even more apparent when the revised USAB policy statement on the "Engineer Shortage" is released.

Other major successes, such as the Career Maintenance and Development Conference held in October, or the SILA and related governmental action efforts, energy slide show, employment and age discrimination assistance, social-technical position papers prepared both for national and local or state distribution, student professional awareness seminars, AAES ethics code preparation, uniform patent and invention policy, and new wage-busting legislative initiatives have, or will be, described fully in *IMPACT* and *The Institute*. I need not go into these here, but the point I am trying to make is this: USAB and the national PAC organization have matured and *do* act in the best interests of our members and *are* responsive to their professional concerns! This point will never be accepted by the opponents of professional involvement or by the negativists. However, with your efforts we can make it register in the minds of many among the apathetic 60% I mentioned earlier. Each of that group will then be confronted with the terrible truth that a "let George do it" attitude in an area vitally affecting one's own career and family well-being is logically indefensible.

In the meantime we PAC workers can feel proud of our 1981 accomplishments, even without the approbation of the average member. The attitudes of our U.S. members are changing, however, and their recognition and active support of IEEE's professional activities will occur in the very near future. We will all then have had no small part in bringing this about.

I wish each of you a very happy and blessed holiday season with your loved ones and look for your continued professional involvement in 1982.

—Ron Fredricks

of this new concept for the improvement of nuclear power safety.

I wish to express my deep appreciation for having the opportunity to serve as the Vice President for Professional Activities and Chairman of the United States Activities Board. I am especially appreciative of the tremendous support and cooperation you have given me during the

past two years. I look forward to continuing to support the important efforts to free the giant that is engineering from the bonds which have kept our profession from rising to the fullest measure of its potential.

To all, I say "thank you" for the opportunity to serve. Best wishes for a joyous holiday and a Happy New Year.

—R. J. Gowen

EDITOR:

Ms. Tekla Perry is to be commended for her excellent coverage of the 1981 PAC National Conference July 10-12 in Minneapolis ("PAC Members Seek Salary for President, USAB Head"; *The Institute* Sept. '81, page 1). No article about the PAC National Conference could possibly cover every event at the Conference, but I'd like to tell *IMPACT* readers about one additional, nearly unanimous resolution that was not described in Ms. Perry's fine article.

Conference attendees passed a motion to facilitate PAC review of the USAB budget for the following year. The motion contained the following three parts:

1. Final USAB approval of the USAB budget for the following year shall not occur until after the PAC National Conference.
2. Each attendee at the PAC National Conference shall be mailed before the Conference, a copy of the tentative USAB budget for the following year.
3. The PAC National Conference shall contain an allocated time slot for an agenda item consisting of PAC review and modification of the proposed USAB budget for the following year. The recommendations arising out of this activity shall be forwarded to USAB for its consideration in finalizing the budget.

I feel that the National PAC Structure has now evolved sufficiently to warrant two National PAC Conferences each year. The first could be in the spring (say, May) and serve to give useful PAC feedback to USAB on all the issues including the budget. This conference would be targeted at the more experienced PAC leader. The second conference could be held in the fall (say, October) and would concentrate on how to form and maintain an effective PAC. This latter conference would be especially targeted at the new PAC chairman.

—Ronald J. Fredricks
National PAC Chairman

EDITOR:

A significant event has occurred in the life of industry and government during the week of Oct. 26 when a Review Conference on Probabilistic Risk Assessment (PRA) procedures was conducted in Washington. Specifically, IEEE/USAB functioned as a catalyst to bring the regulators (Nuclear Regulatory Commission) together with representatives of the utility industry and manufacturers of nuclear equipment so that cooperatively, important issues could be presented and evaluated prior to the writing of a procedure or enforcement guide on PRA.

The work is not yet done, but with over 400 attendees at the first meeting we can credit USAB and IEEE leadership with contributing to a historic event. Well done, USAB!

—Darrell L. Vines, Chairman
Member Activities Council

EDITOR:

With regard to your note at the end of my article "Is it Time for SEPAC?" which appeared in the October 1981 issue, I would like to suggest Professional Enhancement Program (PEP) as a new name for the Professional Activities Committees (PAC) to avoid confusion with the more widely known PAC (Political Action Committees).

Sincerely,
Alan C. Nixon

Congressional Fellowships

A Congressional Internship for Members of IEEE

PROGRAM: Electrical and Electronics Engineers and Allied Scientists are competitively selected to serve a one-year term on the personal staff of individual Senators or Representatives or on the professional staff of Congressional Committees. The program includes an orientation session with other Science-Engineering Fellows sponsored by the American Association for the Advancement of Science (AAAS).

PURPOSE: To make practical contributions to more effective use of scientific and technical knowledge in government, to educate the scientific communities regarding the public policy process, and to broaden the perspective of both the scientific and governmental communities regarding the value of such science-government interaction.

tific and governmental communities regarding the value of such science-government interaction.

CRITERIA: Fellows shall be selected based on technical competence, on ability to serve in a public environment and on evidence of service to the Institute and the profession. Specifically *excluded* as selection criteria shall be age, sex, creed, race, ethnic background, and partisan political affiliations. However, the Fellow must be a U.S. citizen at the time of selection and must have been in the IEEE at Member grade or higher for at least four years. Additional criteria may be established by the selection committee.

AWARDS: IEEE plans to award at least two Congressional Fellowships for

the 1982-1983 term. Additional funding sources may permit expansion of awards.

APPLICATION: Further information and application forms can be obtained by calling W. Thomas Suttle (202) 785-0017 at the IEEE Washington, D.C. Office or by writing:

Secretary, Congressional Fellows Program
The Institute of Electrical and Electronics Engineers, Inc.
1111 Nineteenth St., N.W.
Suite 608
Washington, D.C. 20036

Applications must be postmarked no later than April 30, 1982 to be eligible for consideration.