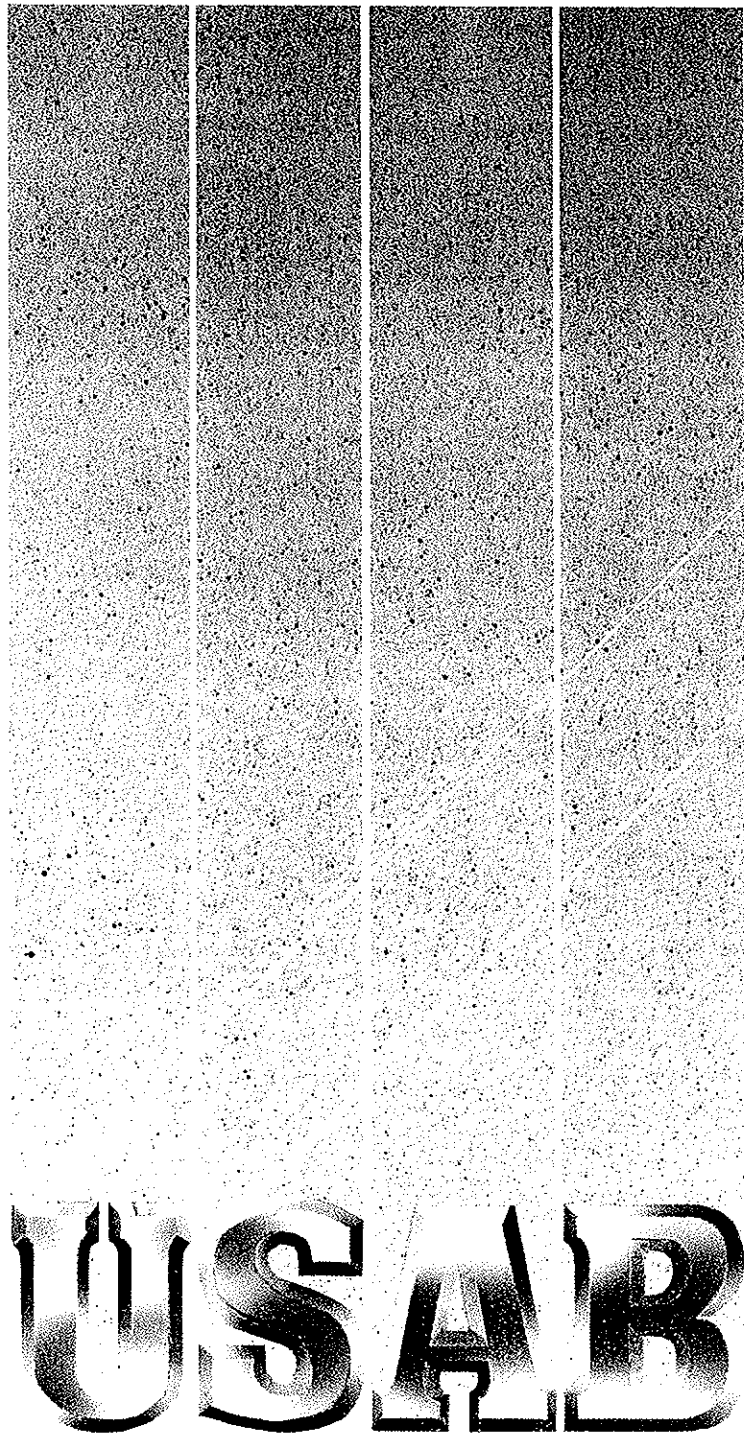


# United States Activities Board 1985 REPORT



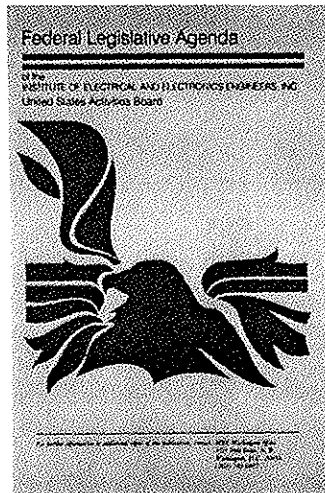
THE INSTITUTE OF ELECTRICAL  
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Among the Administration officials participating at an IEEE R&D Committee Briefing on "Electrotechnology in the Federal FY 1986 Budget" was NASA's Dr. Dudley McConnell, Assistant Associate Administrator, Space Science & Applications.



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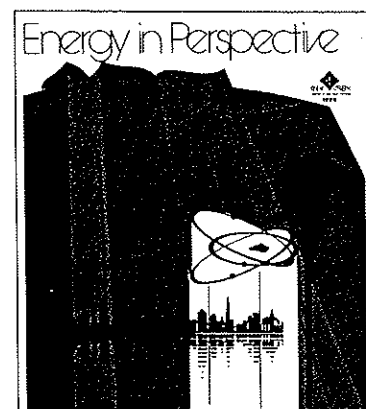
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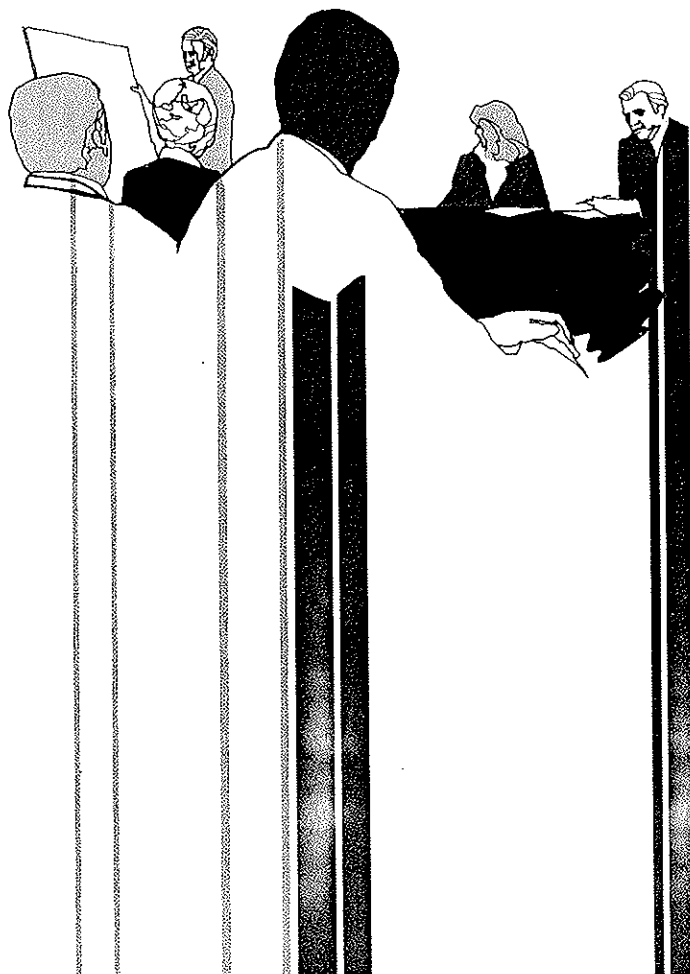


2  
Participating in the Technology Policy Committee (TPC) Seminar on "Protectionism and International Competition" were AT&T International Market Development Vice President John A. Hinds (L) and TPC Chairman Edward J. Doyle.



5  
IEEE 1985 President Charles A. Eldon (L) and Professional Activities Vice President Russell C. Drew (C) present USAB Distinguished Public Service Award to Rep. Doug Walgren (D-PA).

6  
Senator Pete V. Domenici (R-NM) congratulates IEEE Congressional Fellow K. P. Lau (R).



3  
President Reagan joins a White House celebration of the first anniversary of the Young Astronauts' Program, where IEEE slides on Education: Key to America's Future were shown.

4  
Washington Area Young Astronauts, six to 16, are recognized at the White House celebration.

## Introduction

To meet the professional needs of U.S. IEEE members, the United States Activities Board (USAB) and the Washington Office interact with the Federal government, develop programs that enhance members' professional status, and foster public awareness of electrical engineering and electrical engineers. During 1985, USAB concentrated on government activities, career maintenance and development, and public communications. Improved communications was USAB's major goal for 1985, as stated by IEEE Professional Activities Vice President and USAB Chairman Russell C. Drew.

Dr. Drew's specific goals for 1985 were to:

- Improve effectiveness of influencing government and provide more timely identification of issues for response
- Improve communications links to members
- Define international dimensions of IEEE professional activities
- Build a greater awareness of career-oriented benefits derived from USAB programs
- Seek a broader public recognition of engineers and the engineering profession.

To further these goals, USAB and the Washington Office were involved in a number of activities in 1985, including the following:

## Developing a National Retirement Income Policy

During April, June, and September, testimony was presented in the House and Senate promoting the development of a national retirement income policy. Support in this effort was received from several other engineering societies.

USAB has supported legislation that would mandate shorter pension-vesting periods, eliminate the integration of private pension plans with Social Security, ensure portability of pension benefits, and encourage the use of defined-contribution plans in place of defined-benefit plans. Testimony resulted in a call from ABC News, which was preparing a documentary on retirement.

Previously, IEEE was a major contributor in expanding eligibility for individual retirement accounts (IRAs) for all individuals.

## Avoiding Major Fluctuations in Engineering Manpower Demand

As part of its ongoing support of the electrical engineering profession, USAB has endorsed Federal government policies that help eliminate fluctuations in engineering manpower demand. These policies include consistency in scheduling major defense and other government projects, improved utilization of engineering and scientific personnel, support of continuing education programs, as well as improved collection of information on supply and demand.



## Narrowing Interpretations of Immigration Laws

In House testimony presented during October, USAB called for narrowing interpretations of immigration laws to limit the number of foreign nationals who can accept engineering positions in the U.S., with very few exceptions for individuals of outstanding abilities.

In general, with respect to immigration issues, USAB:

- Favors retention of controls on and individual review of the entry of foreign engineers into the U.S. labor force
- Opposes legislation that would authorize the Secretary of Labor to use labor market information without reference to the specific job opportunity and location for which certification is requested
- Supports a "return-home rule" for foreign students, requiring them to leave the U.S. for two years before adjusting their immigration status to seek re-entry, with limited exceptions for students of outstanding abilities.

## Building Support for Pre-employment Disclosures of Pre-invention Assignment Agreements

The USAB Intellectual Property Committee has consistently opposed the practice of requiring assignment of all employee inventions to the employer regardless of their relationship to the scope of the employer's interests. Only limited progress has been made in eliminating or modifying such practices. However, the IEEE filed a "friend-of-the-court" brief in California calling attention to a California labor code provision enacted to protect inventors' rights and provide an "incentive for innovation."

7  
Dr. William Butcher, NSF's Director, Special Programs, addressing R&D Committee

8  
IEEE 1986 President Bruno O. Weinschel (L), Mr. Eldon (C), and Professional Activities Staff Director Leo C. Fanning, at IEEE National Press Club Briefing on "U.S. Civilian Space Policy"

USAB adopted a Position Statement clarifying disclosure standards for all pre-invention assignment agreements. According to the statement, required terms and covenants of such agreements should be disclosed "prior to or simultaneously with a monetary offer of employment." In addition, the statement concludes: "When an employer proposes alterations to previously agreed-upon terms and covenants, the employer has a responsibility to provide a period of acceptance sufficient for securing alternative employment."

### Conducting and Publishing Surveys/Reports on Matters of Professional Concern

Last year, USAB continued meeting its constitutional mandate to conduct and publish surveys and reports on matters of professional concern.

In just three months, the USAB Salary Survey Committee canvassed 30,000 members and produced the *1985 IEEE U.S. Membership Salary and Fringe Benefit Survey*, showing that IEEE members, in general, command higher salaries than non-members. The median salary was placed at \$46,100. The *Salary Survey* is used by the Department of Labor in evaluating electrical engineering salaries. It may be purchased through the IEEE Service Center in Piscataway, NJ.

The USAB Student Professional Awareness Committee surveyed Engineering Deans and Electrical Engineering Department Heads on attitudes toward introducing students to professional subjects such as ethics, patents, and pensions. The survey (which is available from the Washington Office) concluded that seminars and student activities are the most effective means of communicating professional material. USAB's Student Professional Awareness Conferences were praised by educators familiar with them. More than 100 conferences have been held since 1979.

The USAB Opinion Survey Committee canvassed some 6,000 members (chosen at random) to produce the *1985*

*IEEE U.S. Member Opinion Survey*, available from the Washington Office. The survey is used primarily for planning the effective use of assessment funds for career activities and legislative programs. Opinions were tabulated on such career-related issues as engineering utilization, pre-college and continuing education, ethics, and employment practices. NASA programs for space exploration were ranked highest in importance for the future of American science and technology.

### Supporting Career Maintenance and Development

In addition to publication of the biennial salary and opinion surveys, USAB held its Fourth Biennial Careers Conference, attracting some 155 registrants to sessions focusing on "Issues for Engineers and Employers." With this conference, USAB supports work on career maintenance and development with employers and employees alike. USAB-related products benefiting both groups include the "Professional Practices" publication, the *IEEE Employ-*

*ment Guide for Engineers and Scientists: Student Edition*, and the Professional Engineering Employment Registry (PEER). Also, the Registration & Licensure Committee continued to assist the National Council of Engineering Examiners (NCEE) in maintaining relevance and quality of questions for NCEE-sponsored state examinations.

### Outlining U.S. Legislative Goals

For the first time, IEEE outlined its U.S. legislative goals in a single document, the *Federal Legislative Agenda*, distributed widely on Capitol Hill and among the media. The *Agenda* noted support for open international technical exchange, aggressive policies to develop alternative energy technologies, educational tax incentives, permanent R&D tax credits, legislation affecting employment rights of older people, proposals encouraging entrepreneurship, as well as various incentive and protection programs for inventors/scientists.

### Collaborating with Public Bodies, Other Societies for Benefit of Profession

Meeting its constitutional mandate, USAB and the Washington Office were once again involved in collaborating with public bodies and other societies



Former astronauts, Buzz Aldrin (from the first moon landing) and John Creighton (from the Space Shuttle) as well as singer John Denver, in front row, at Young Astronauts' celebration



Intel Corp. Board Chairman Gordon E. Moore, at Technology Policy Committee Seminar

Young Astronauts' Founder Jack Anderson, the syndicated columnist (L), Mr. Fanning (C), and Dr. Weinschel, at White House anniversary celebration





for the benefit of the electrical engineering profession. For example, during 1985, USAB served as an important source of technical expertise to government decision-makers on issues relating to technology policy. On more than 35 occasions, Technology Activities Council committees testified before or submitted their views to the Legislative and Executive Branches. Many of these statements focused on protecting Federal support for research in areas of concern to IEEE such as fusion power, the NASA Space Station, electronic materials, and electric energy systems. Other IEEE positions centered on the possible effects of Federal policies in such areas as communications privacy, telecommunications trade, and computer security. USAB continued to hold joint briefings with government officials on supercomputers, materials research, and an FAA upgrade of the U.S. air traffic control system.

In October, the Technology Policy Committee organized a seminar on "Protectionism and International Competition," attended by some 60 Congressional staff, media, and Congressmen. In March, some 40 IEEE members and media were briefed by Administration officials on "Electrotechnology in the Federal FY 1986 Budget."

Also, many meetings were conducted with members of Congress and staff. Two members participated in the IEEE Congressional Fellows program providing technical expertise to Congressmen and their staffs.

In addition, the Washington Office arranged numerous meetings between IEEE volunteers and government officials addressing members' technical and professional concerns. These included sessions with the Science and Technology Adviser to the President, the Director of the National Science Foundation, the Presidents of the National Academy of Sciences and National Academy of Engineering, and the Chairman of the Federal Communications Commission.

The Washington Office also served as a facility for a large percentage of the several hundred professional activities-related meetings convened in 1985.

## Fostering Public Awareness

As part of its public communications program, seeking to foster public awareness of electrical engineering and electrical engineers, in February IEEE held a National Press Club briefing on "U.S. Civilian Space Policy," attracting several dozen media, including AP, *Time*, *U.S. News & World Report*, CBS Radio, the Voice of America, and *Newsday*. Dr. Drew outlined a five-point program for development of a permanently-manned space station.

The IEEE Vice President said it is urgent that the United States:

- Commit now to the development and implementation of the infrastructure needed to continue the country's active involvement in space
- Establish a permanent habitat for space crews and passengers in low-earth orbit that will permit a full range of staging activities for future manned and unmanned missions
- Pursue international cooperation with qualified partners on shared funding, technology, and responsibilities
- Incorporate advanced, remotely-controlled systems as a complement to the on-board crew
- Promote new, innovative opportunities for commercial industrial utilization of the manned habitat and other platforms.

Also, to foster public awareness of technological issues, the Pre-College Education Committee produced 500 sets of *Education: The Key to America's Future*, a slide-tape presentation supporting enhanced pre-college math and science education. The slides were incorporated in a White House celebration of the first anniversary of the Young Astronauts' program.

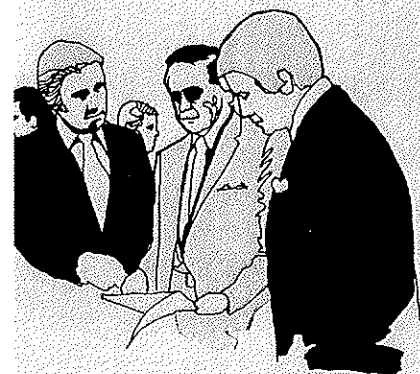
In addition, the Washington Office circulated 300 sets of a revised version of *Energy in Perspective*, a slide-tape show describing the energy crisis from an engineering and scientific viewpoint.

Both shows are designed for community presentation. Information on obtaining them is available from the Washington Office.

## Encouraging Broad Distribution of Technical Information

IEEE also reaffirmed its support for open exchange of technical information to advance national security through accelerated development of U.S. electrotechnology. With the active involvement of IEEE 1985 President Charles A. Eldon, IEEE spearheaded a statement to the Secretary of Defense from 12 professional societies emphasizing that they would not sponsor limited-access conference sessions presenting unclassified, controlled information. This effort, originating with the Technology Transfer Committee, united societies representing more than two million engineers and scientists. It was reported in *The New York Times* and *The Washington Post*. The effort was praised by a widely-read columnist in *Electronic News*:

*From every citizen who values scientific freedom—and fears the creeping surveillance of Big Brother—the united stand of the professional societies deserves rousing support. We must stand behind the societies in their defense against [the Department of Defense's] march to close otherwise unclassified open meetings and bar publication of technical papers and*



research... The 12 professional societies have drawn a courageous line to defend their freedom of research.

The Technology Transfer Committee is also considering recommendations on government rules affecting access to university supercomputers.

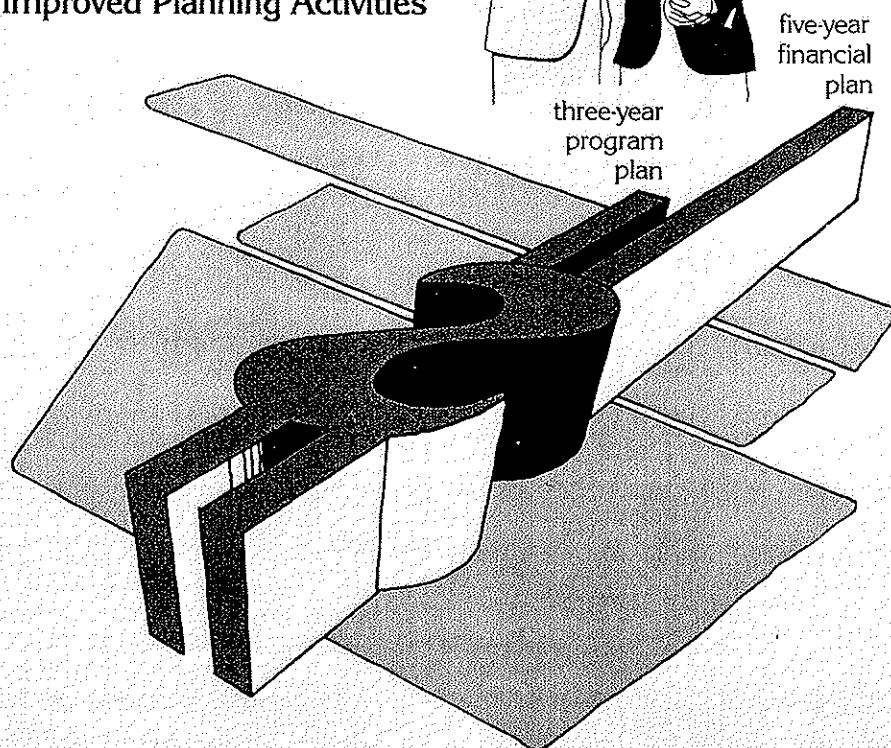
The Committee on Communications and Information Policy (CCIP) expressed concern about certain features of the President's *National Security Decision Directive 145*, especially limits imposed on private sector databases that contain non-government information. The CCIP's opposition, along with that of Congress' General Accounting Office, was noted by *The New York Times*.

## Defining International Dimensions of IEEE Professional Activities

Dr. Drew made presentations in Canada, Mexico, and Japan defining international dimensions of IEEE professional activities. He proposed an exchange of information on interests, assistance in establishing professional activities, and coordination across regions.



## Improved Planning Activities



For the first time, USAB produced a three-year program plan in conjunction with a five-year financial plan. Thus, the organization's program planning helps determine financial planning.

## Conclusion

In summary, Dr. Drew notes: "The effects these professional activities have had on individual careers cannot be easily generalized. However, in just one area—pensions—the work of IEEE (and others) in bringing about the expansion of eligibility for individual retirement accounts is of benefit to every engineer. We continue to press forward with additional proposals for pension reform to widen and enhance coverage for the mobile engineer.

"The list of areas affecting the whole profession (in which we have been active) is broad, and we have experienced varying degrees of success. We have been told, for example, that our support for certain programs sponsored by the Federal government, such as R&D, was instrumental in getting them funded by Congress. In other instances, we have not been so successful. But this is par for the course in Washington.

"A large part of what happens in our profession is in the hands of multiple management teams throughout our industry. To make an impact, we have recognized that one needs to influence the management practices of these individuals and bring them a message about problems within the membership. One initiative IEEE has taken to meet this objective is a series of industry discussions that have continued on a regular basis nationwide.

"Some of the IEEE interactions with industry have been well-reported; others have taken place in a less public way. Our preference has been to work in ways that produce positive results, not necessarily to make a big splash."

Further information about this Report and USAB activities can be obtained from Pender M. McCarter, Manager, Public Information, IEEE Washington Office, Suite 608, 1111-19th Street, NW, Washington, DC 20036-3690, USA, telephone (202) 785-0017. Updated, recorded information about IEEE and USAB is available by calling (202) 785-2180.

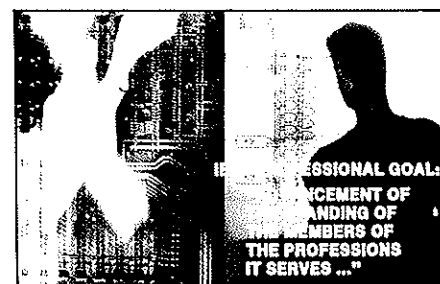
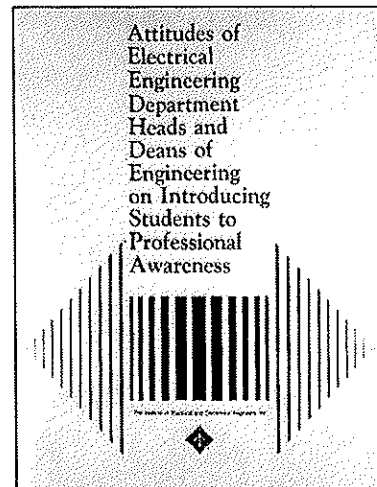
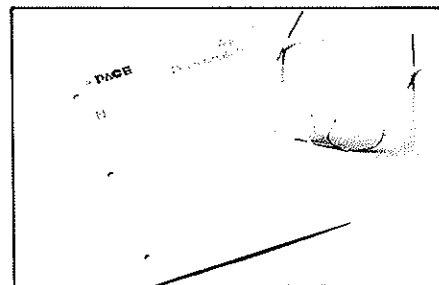
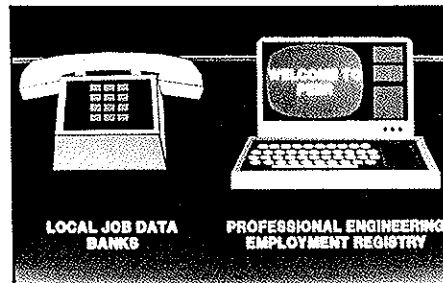
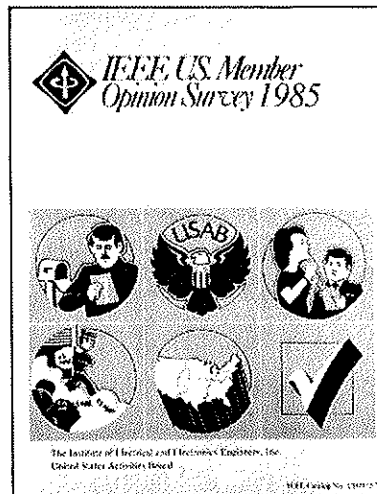
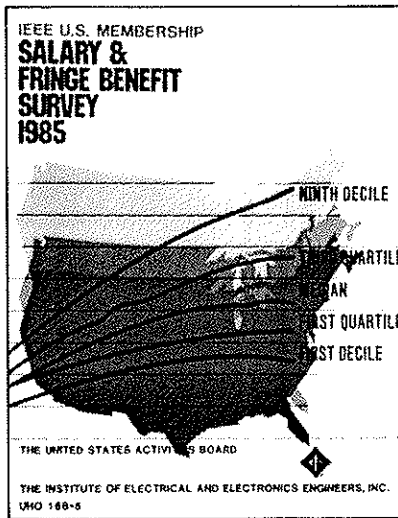


12 Mr. Eldon (L), Dr. Drew, at National Press Club Briefing

13 Swedish television crew interviewing Dr. Drew on technology transfer in Washington Office



14 At IEEE Careers Conference Session: Karen Epstein, MIT Sloan School (L); John M. Harker, IBM General Products Division (C); and Charles R. Kost, Texas Instruments/IEEE Career Maintenance & Development Committee





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## **USAB 1985 Annual Report**

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