ELECTRICAL ENGINEERING®

DECEMBER 1980 9 1

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

LATE BREAKING NEWS....... NINE DIRECTORS ELECTED BY THE ASSEMBLY TO COMPLETE 30-MEMBER BOARD OF DIRECTORS FOR 1981

At a meeting in Lake Buena Vista, Florida, the Assembly of the IEEE elected the following officers for 1981 who join the 21 member-elected representatives of the Board of Directors.

The following are newly-elected officers of the 1981 Board of Directors:

Vice President-Educational Activities: Edward W. Ernst, Department of Electrical Engineering, University of Illinois, Urbana, Illinois. Dr. Ernst was 1980 Chairman of the Accreditation Committee of IEEE Educational Activities Board.

Treasurer: Charles A. Eldon, Manufacturing Manager, Integrated Circuits Department, Hewlett-Packard Company, Palo Alto, California. Mr. Eldon served as 1980 Director for Region 6 on the IEEE Board of Directors.

Secretary: Richard C.J. Poortvliet, Chief Engineer, Health Organization T.N.O. Westeinde Hospital, The Netherlands. Mr. Poortvliet served as 1980 Director for Region 8 on the IEEE Board of Directors.

The following officers are elected for a second year term of office:

Vice President-Professional Activities: Dr. Richard J. Gowen, Dean of Engineering, South Dakota School of Mines, Rapid City, South Dakota.

Vice President-Publication Activities: Theodore H. Bonn, Director of the Digital Techniques Laboratory, Sperry Rand Research Center, Sudbury, Massachusetts.

Vice President-Regional Activities: Dr. Larry K. Wilson, Chairman of the Division of Electrical and Computing Sciences and Professor of Electrical Engineering, Vanderbilt University, Nashville, Tennessee.

Vice President-Technical Activities: Dr. Robert E. Larson, Executive Vice President Systems Control, Inc., Palo Alto, California.

Director-Standards Activities: Irwin N. Howell, Jr., Assistant Vice President, Investments and Economics, South Central Bell Telephone, Birmingham, Alabama.

Executive Director: Eric Herz.

DAMON, LUCKY, ELECTED TO TOP 1981 IEEE POSTS

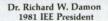
Dr. Richard W. Damon, and Dr. Robert W. Lucky, Director, have been elected 1981 President and Executive Vice President, respectively, of the IEEE.

Dr. Damon is Director of the Applied Physics Laboratory of Sperry Corporation's Research Center in Sudbury, Massachusetts and Dr. Lucky is Director, Electronic and Computer Systems Research Laboratory, of Bell Labs, Holmdel, New Jersey.

During his Presidential campaign Dr. Damon stressed the importance of continued technical excellence as the cornerstone of IEEE activities. He also urged Institute participation in social and political arenas in order to provide an authoritative voice in matters concerning technological issues.

Active in IEEE affairs since 1944 and named a Fellow in 1968, he has served in both technical and professional activities. Included among these have been member of the Board of Directors as a Division director, 1978-79, and chairman of the Ad Hoc Committee on Registration, and of the Audit Committee, 1978-79. Dr. Damon has also served on the Educational Activities and the United States Activities Boards and on a number of technical and publishing committees.

Dr. Damon has been with the Sperry Research Center since 1962 and prior to that was with General Electric Research Laboratories, the Raytheon Company and Microwave Associates. He holds undergraduate, masters and doctoral degrees in





Dr. Robert W. Lucky 1981 IEEE Executive Vice President

physics from Harvard University. Dr. Damon is currently supervising projects in such areas as fiber optics, ring laser gyroscopes, magnetic disk recording materials, and surface acoustic wave devices. In addition to his work with Sperry, Dr. Damon has served on advisory committees with NASA, the National Bureau of Standards and the Department of Defense.

While campaigning for office, Dr. Lucky supported liberalizing IEEE admission criteria to include young software people. In the professional area he has shown a particular concern over the professional needs of the older engineer.

An IEEE member since 1955 and named a Fellow in 1972, Dr. Lucky's principal activities with the Institute have been in technical publishing activities. In 1978-79, he served on the Board of Directors as Vice President of Publications and was also president of the Communications Society of the IEEE. He has served as past editor of the IEEE Proceedings and as assistant editor of the IEEE Transactions on Information Theory and on Communications. He was elected to the National Academy of Engineering in 1978.

Dr. Lucky joined Bell Laboratories in 1961 as a member of

Index of Inserts

USAB Call for Award Nominations	. 2 <i>P</i>
USAB Call for Congressional Fellow Applications	. 20
Member Development Newsletter	. 20
Whom to Call for Action	. 2
IEEE Services Price List	. 2 K
IEEE Services Price List	. 21

the technical staff and was named to his present directorship in January, 1979. An expert in digital communication techniques, Dr. Lucky holds a number of patents, has published papers and a textbook, and has lectured extensively on the subject. He earned his bachelors, masters and doctoral degrees from Purdue University.

EIGHT NEW DIRECTORS ELECTED FOR 1981-2

The following five Regional directors and three Division directors have been elected to serve a two-year term on the Board of Directors of the IEEE starting on January 1, 1981. Director of Region 2: — U.S. Eastern Region: Merrill W.

Director of Region 2: — U.S. Eastern Region: Merrill W. Buckley, Jr. (Nominated by Petition), Administrator, Planning and Measurement, Government Systems Division — RCA Corporation, Moorestown, New Jersey.

Director of Region 4: — U.S. Central Region: John M. Thorson, Product Line Manager, Utilities — Control Data Corporation, Minneapolis, Minnesota.

Director of Region 6: — U.S. Western Region: Frederick G. Suffield, Manager, Radar Programs; Manager of Marketing — Teledyne Micronetics, San Diego, California.

Director of Region 8: — Europe, Near East, Africa; Dr. Walter E. Proebster, Director R & D Coordination, IBM Deutschland GmbH, Stuttgart, West Germany.

Director of Region 10: Australia, Asia: Dr. V. Prasad Kodali, (Nominated by Petition), Director (Technical) — Department of Electronics, Government of India, New Delhi, India.

Director of Division II: J. Barry Oakes, Project Manager, Applied Physics Laboratory — John Hopkins University, Laurel, Maryland. Division II is composed of the following Societies: Electrical Insulation; Industry Applications, Industrial Electronics & Control Instrumentation; Instrumentation & Measurement; Nuclear & Plasma Sciences; and Vehicular Technology.

Director of Division IV: Dr. Allan C. Schell, Director, Electromagnetic Sciences Division — Rome Air Development Center, Bedford, Massachusetts. Division IV is composed of the following Societies: Antennas & Propagation; Components, Hybrid & Manufacturing Technology; Electron Devices; Magnetics; Microwave Theory & Techniques; Quantum Electronics and Applications; and Sonics and Ultrasonics.

Director of Division VI: Henry L. Bachman, Vice President, Operations; Electronic Systems Division — Hazeltine Corporation, Greenlawn, New York. Division VI is composed of the followng Societies: Education; Engineering Management; Engineering in Medicine & Biology; Professional Communication; Reliability; Systems, Man & Cybernetics.

Also elected as Vice Chairman of Region 6 (U.S. Western Region) was Ralph A. Lamm — Engineering and Management Consultant, Camarillo, California and Vice Chairman of Region 7 (Canada) was Fred J. Heath, Telecommunications Engineer, Power Line Carrier — Ontario Hydro, Toronto, Ontario Canada.

USAB NEWS

USAB ANNOUNCES 1980 AWARD RECIPIENTS

Hilton U. Brown III has received the top award for Engineering Professionalism from USAB for his "outstanding contributions toward the advancement of the professional goals of the Institute." Mr. Brown has been most notably involved as chairman of the IEEE energy committee which has deliberated and promoted several position papers on a broad range of energy issues.

Another Brown, U.S. Representative George E. Brown from California, has received the USAB Award for Distinguished Public Service to the Engineering Profession. As chairman of the House Committee on Science, Research, and Technology, he has been an advocate of many legislative initiatives of concern to the IEEE and the engineering profession.

Four USAB Citations of Honor, for "exemplary effort and dedicated service toward attaining recognition of engineering professionalism," have been awarded to: Robert Bruce, Sajjad H. Durrani, Frank E. Lord, and Ronald J. Wojtasinski.

USAB Awards for Regional Professional Activities will be presented to: Harry M. Cronson (Region 1); Melvin N. Abramovich (Region 2); Valdemar Bodin (Region 3); Mike Cheek (Region 4); and Jack T. Nawrocki (Region 6).

Certificates of Appreciation will be presented to the Honorable Harrison H. Schmitt, U.S. Senate; Dr. Arthur M. Bueche, General Electric; and the following IEEE members: John Andrews, Benton Bejach, Sandra K. Bidwell, Ralph I. Cole, Michael Davis, Walter Eden, Harb S. Hayre, Charles A. Nicita, Ronald L. Sprague, Ron Waters, and Victor Zourides.

Presentation of the major awards will be made at IEEE conferences through the spring of 1981.

1981 USAB AWARD NOMINATIONS OPEN

Now that the USAB award winners for 1980 are fresh in your mind, it is a good time to think about whom *you* might nominate for next year. An insert in this issue of EE gives you all the details. Deadline is May 15, 1980.

CONGRESSIONAL FELLOWS SELECT ASSIGNMENTS

IEEE Congressional Fellow Dr. Eli Fromm has begun his 1980-1981 term as a Professional Staff Member for the House Subcommittee on Science, Research and Technology, and Theodore R. Simpson will spend his Fellow year, beginning January 1, on the staff of the Senate Subcommittee on Science, Technology and Space. Our third Congressional Fellow, Frederick J. Twogood, will be making his selection shortly.

This is the eighth year of IEEE sponsorship of Congressional Fellows.

Dr. Fromm is on the faculty of Drexel University where he teaches physiology and researches in the application of engineering to physiologic systems. Mr. Simpson is with the Mitre Corporation involved with air traffic control, surveillance, navigation and associated avionics equipment. Mr. Twogood is a senior startup engineer with Westinghouse, with experience in fuel handling equipment, testing reactivity control systems and emergency core cooling systems.

Dr. Fromm is past president of Engineering in Medicine and Biology Society and has been active in the Philadelphia section. Mr. Simpson is PAC Chairman of the Washington section and member of the Aerospace and Electronic Systems Society. Mr. Twogood is a member of the Power Engineering Society.

APPLICATIONS OPEN FOR 1981 CONGRESSIONAL FELLOWS

Are you interested in spending a year in service to the Federal government working on technology policy issues? The IEEE Congressional Fellows program is an excellent way to do it. An insert in this issue of EE gives you all the details. Applications must be in by April 30, 1981.

Electrical Engineering is a management newsletter on IEEE operations intended to encourage communication among all organizational entities and the staff. Electrical Engineering is published bimonthly by The Public Relations Department of The Institute of Electrical and Electronics Engineers, 345 East 47 Street, New York, N.Y. 10017 — Telephone 212-644-7866. Electrical Engineering is sent without cost beyond dues to officers of IEEE boards, committees, divisions, societies, groups, technmical councils, conferences, regions, regional councils, sections, subsections, chapters, and

branches. Second-class postage is paid at Piscataway, N.J.

ON CAPITOL HILL...

Science Policy Act Dr. Russell C. Drew testified at a Senate Committee hearing on Commerce, Science and Transportation on September 19 that was held to examine implementation of the Science Policy Act. While only Government witnesses had been called, USAB's request to provide a witness was approved by the Committee. Terming the Committee's review "most timely and appropriate for the Nation," Dr. Drew offered several specific proposals for Congressional action to foster discussion of scientific and technological issues, and response to national needs.

He also addressed the larger need for the U.S. to adopt a national technology policy. He cited the IEEE position in support of such a policy.

National Technology Foundation Dr. Bruno O. Weinschel testified as chairman of the Engineering Affairs Council of AAES at hearings on H.R. 6910, Congressman George E. Brown's bill to create a National Technology Foundation. The bill would consolidate existing programs of the NSF and the Commerce Dept. Dr. Weinschel said, "We must have an organization that can plan cooperatively, using the best ideas of industry and government." He indicated that planning could be carried out in a Technology or Engineering Foundation or a restructured National Science and Engineering Foundation. "In any case," he concluded, "it requires the serious and long-lasting commitment of engineers, scientists and experienced industrialists."

USAB PENSION TASK FORCE SURVEYS STATE TAX TREATMENT OF IRAs

The USAB task force on pensions has prepared a quick reference summary of taxation of pension plans of all 50 states as one result of its effort to determine the tax impact for individual retirement accounts (IRAs), and, consequently, Limited Employee Retirement Accounts (LERAs). All efforts of the task force to date have been toward equitable treatment at the Federal level. The summary is printed here for your use.

If a LERA bill is enacted, how will it be treated by the state?

The Task Force has concluded that states which have no income tax, or use the Federal Adjusted Gross Income as the tax basis, or whose laws are similar to the Federal law, treat contributions to Keogh and IRA plans as well or better than the Federal government.

Where state laws differ from the Federal statues, they could use improvement and where the states treat contributions as taxable income, they need concerted effort to obtain a better tax treatment.

Gloria Aukland 202-785-0017

TAB NEWS

The December meetings of TAB OpCom and TAB will consider a number of issues of concern to society members as well as the Institute:

- TAB OpCom will consider a proposal for a joint conference with USAB to develop an analysis of the Federal R & D budget. This reflects, in part, the need to develop representative positions which can be submitted to Congress on behalf of the Institute
- TAB will discuss the desireability of establishing a society or council on electronics materials. The Electronics Materials Committee, an independent organization and publishers of the **Journal of Electronic Material**, might be interested in affiliating with IEEE
- A Computer Society resolution to change the name of the IEEE to "The Institute of Electrical and Computer Engineers" will be reviewed by both Op Com and TAB.
- TAB will consider the establishment of a Standing Committee on Periodicals whose goals, among others, would be to mediate jurisdictional disputes among Societies related to publications, and to facilitate the exchange of managerial and editorial knowhow among the volunteer editors.
- The Circuits and Systems Society will ask TAB for action on its proposal to publish a new Transactions on Computer-Aided Design of Integrated Circuits and Systems.

Irving Engleson 212-644-7863

SUMMARY OF STATE TAXING OF CONTRIBUTIONS TO KEOUGH & IRA PENSION PLANS

IVIIVIAK I O	FSIA	TE IM	MINC	JOF C	ONTRI	DUTIONS TO KE	OUGI	1 & 11	APEN	NOION	PLA
	No State Income Tax	Basis — Fed. Adj. Gross Income	Same as Federal Law	Variation on Federal Law	Included as Income		No State Income Tax	Basis — Fed. Adj Gross Income	Same as Federal Law	Variation on Federal Law	Included as Income
ALABAMA ALASKA ARIZONA ARKANSAS CALIFORNIA	iday pii k rasob	X	X	X(1)	X	MONTANA NEBRASKA NEVADA NEW HAMPSHIRE NEW JERSEY	X	X	hupis der 2 hapte	ciety l	X
COLORADO CONNECTICUT DELAWARE DISTRICT OF COLUMBIA	X	X X	osperi va Co K Str	visits in	X	NEW MEXICO NEW YORK NORTH CAROLINA NORTH DAKOTA	4	X X X			
FLORIDA GEORGIA HAWAII IDAHO ILLINOIS	X	X	X X X	te AA. c Fellow places		OHIO OKLAHOMA OREGON PENNSYLVANIA RHODE ISLAND		X X X(5)		X(6)
INDIANA IOWA KANSAS KENTUCKY LOUISIANA MAINE	ettw mix an etcom etcom etcom	X X(2) X X	X (3)	reineer Hotels generals w. Con	en bos es bres estierv otierve otierses	SOUTH CAROLINA SOUTH DAKOTA TENNESSEE TEXAS UTAH VERMONT	X X (7) X	X			
MARYLAND MASSACHUSET MICHIGAN MINNESOTA MISSISSIPPI	TS	X X X X(4)	X	\$£00s	X	VIRGINIA WASHINGTON WEST VIRGINIA WISCONSIN WYOMING	X	X			
MISSOURI	1	X				TOTAL	9	30	6	2	4

- (1) Keogh maximum contributions \$2500 (2) No averaging when withdrawing (3) Reviewed bi-annually (4) Some roll-over and distribution variations (5) No averaging when withdrawing (6) Keogh similar to Federal law. IRA contributions treated as income.
- (7) No tax on personal salaries or pensions

EE READER FEEDBACK GRATIFYING

About 250 EE readers have responded to date to our call for feedback on this publication. In a subsequent issue we will provide some detail results, however from a cursory review, it appears that EE is on the right track. Of course, as would be expected, some calls to do away with this publication came across; on the other hand some suggestions to do away with SPECTRUM and the INSTITUTE and use only EE were also

We hope to evolve a number of suggestions into future issues of ÉE.

One reader wanted to know who the other "4,000 IEEE leader/activities" were who receive EE. Hopeful that more of you might be interested, here is the list of the committee files which comprise the EE distribution.

Please don't hesitate to come forward with any other questions that might enhance your understanding of the management of IEEE.

ELECTRICAL ENGINEERING Mailing List

BOARDS Board of Directors Technical Activities Publications Regional Activities Unites States Activities Awards

GEOGRAPHIC ENTITIES Section Chairmen
Section Secretaries
Section Treasurers
Section Secretaries
Section Secretaries/Treasurers
Section Offices
Section Membership Development Chairmen
Section Education Chairmen
Regional Council Chairmen
Regional Council Teasurers
Regional Council Treasurers
Regional Council Treasurers
Section Chairmen
Subsection Chairmen
Subsection Secretaries/Treasurers
Subsection Treasurers
Subsection Treasurers
Subsection Treasurers
Subsection Secretaries/Treasurers
Subsection Treasurers
Subsection Tre Section Chairmen

TECHNICAL ENTITIES Society Administrative Committees
PES Council
IA Council
Society Newsletter Editors
Society Chapter Chairmen
Society Chapter Committee Chairmen
Society Administrative Committees

COMMITTEES COMMITTES
Admission & Advancement Committee
Fellow Committee
History Committee
History Committee
Life Member Fund Committee
Life Member Fund Committee
Membership Development Committee
Nominations & Appointments Committee
Public Relations Committee Fubic Relations Committee Tellers Committee Long Range Planning Committee Student Activities Committee USAB Task Force Members Board of Technical Editors

OTHERS Electrical Engineering Special Recipients Retired Employees

> Joseph Codispoti 212-644-7866

RAB NEWS

Student Branch Chairmen Section PAC Chairmen

WELCOME NEW CHAPTERS

The Computer Society Chapter of the Fort Wayne Section was established on September 26.

The Control Systems Chapter of the Northern Virginia Section was established on September 29.

> Patricia Lech 201-981-0060

CONSOLIDATED INVESTMENT OPTIONS

The recent performance of the cash management investment options available to IEEE's organizational units is reported below. All units are urged to examine their available cash for optimum returns.

Investment Option 1 — Short-Term Bank Deposits*:

8.9% August September 10.00% October 11.10% Nov.-Jan. 11.30%

(estimated)

Investment Option - Long-term Bank Deposits (over 6 months) †:

> August 10.72% September 12.68% October 13.99% Nov.-Jan. 14.10%

(estimated)

Investment 3 — Bond Plant

August 10.55% September 10.94% October 11.15% Nov.-Jan. 11.25%

(estimated)

* Percentages refer to amounts actually earned by all depositors in that month

† Percentages are estimated average return over total period of the investment on funds deposited during the respective months.

> Michael I Sosa 201-981-0060

EE ETC...

• The 1981 membership brochures are available from the IEEE Service Center. You should have liberal quantities at your disposal for meetings and just to have available when the opportunity comes up.

• Speaking of membership, take a close look at the Membership Development insert in this EE...through October overall membership was up 5.8% over 1979 which was a record year, and indications are that the recently announced dues

increase is not adversely affecting renewals.

 IEEE PRESS has just issued a new title, Analog MOS Integrated Circuits, sponsored by the Solid States Circuits Council. The 416-page textbook was edited by Paul Gray, David Hodges and Robert Brodersen of the University of California/ Berkley. Cost: Member paperbound, \$15.45; cloth, \$23.20; non-member, \$30.95. Order through the Service Center.

• If you plan to be in Washington, April 13-15 you might want to take in the annual Engineers Public Affairs Forum which is cosponsored by a dozen engineering societies including the IEEE. This year's theme is "Technical Vitality and America's Prosperity," and the program will include constituent visits to Congress. Write: Engineers Public Affairs Forum, 2029 K Street, NW, Washington, D.C. 20036.

 The AAAS (American Association for the Advancement of Science) is now accepting applications to its Mass Media Science Fellowship program for the summer of 1981. This program places graduate and research scientists, social scientists and engineers in positions with newspapers, news magazines and radio/television stations throughout the country in news writing/production assignments. For information contact: Gail Breslow, Coordinator, AAAS Mass Media Science Fellows Program, AAAS, 1776 Massachusetts Avenue, Washington, D.C. 20036.

> Joseph Codispoti 212-644-7866