

RECEIVED

ELECTRICAL ENGINEERING^{®30} 1975

DUES INCREASE AND THE U. S. REGIONAL ASSESSMENT approved by IEEE Board of Directors (BofD). The BofD at its September meeting in San Francisco approved two increases --\$5 a year in dues for all IEEE members who now pay \$30 per year (this excludes Students and others in certain categories) and a \$5 additional Assessment for all U. S. members to provide for continuing and increased emphasis on the Institute's role in promoting professional activities. The increases are effective January 1, 1976.

The increase in dues will aid principally in maintaining the fiscal health of the Institute by offsetting the inroads of inflation of the last three years.

The new professional activities assessment will bring to \$10 the amount contributed by each U. S. member annually to perform the following services:

1. Preparation and establishment of comprehensive pension programs which can be used by engineers and their employers to provide for the financial security of IEEE members in their retirement;
2. Active participation by members in legislative issues that concern the public welfare and the welfare of the EE in the U. S. A.
3. Increased financial support of Section activities in professional areas;
4. An expanded program designed to convey to industry the IEEE members' interests, concerns, and activities;
5. Close analyses and interpretations of manpower trends through updated surveys and reports so that employers, employees, and government agencies will know exactly what the situation is at all times; and
6. Emphasis on IEEE Congressional Fellows, technical liaison, and related activities.

TOP-SIDE STUDENT ACTIVITIES DEPT.

IEEE SPEAKS OUT ON R&D is a featured article in September SPECTRUM. (p. 76) The Bof D took an historic action of adopting an official IEEE position on Federal support of research and development. This position paper, "Science, Technology, and America's Future" was subsequently sent to President Gerald Ford, along with a letter from IEEE President Arthur P. Stern requesting the Administration to respond. This action represents the first time in the Institute's history that the IEEE BofD has presented a sociopolitical position to the President of the United States. The position paper is printed verbatim in SPECTRUM, with the letter from President Stern and a White House response signed by James M. Cannon, Assistant to the President for Domestic Affairs.

TEN ENGINEERING ASSOCIATION Presidents, affiliated with the Association for Cooperation In Engineering (ACE), sent a letter to Congressman Teague of the House Committee on Science and Technology re the proposed National Science and Technology Policy and Organization Act of 1975. The letter, to which IEEE President Arthur Stern also affixed his name, commended Congressman Teague and his Committee's diligent and thorough study of the problems of national science and technology policy and organization over the last several years. The Society presidents urged early approval by Teague's Committee of Science, Engineering and Technology policy and organization legislation along the lines of H. R. 9058 for action by the House. Hopefully there might be completed legislation

ORDER FORM

in effect as desired by the President before the end of this year.

CALL FOR FELLOW GRADE NOMINATIONS! The BofD, at its meeting on December 4-5, will announce the names of those members elevated to the grade of Fellow as of January 1, 1976. A new Fellow nomination kit, which must be used in the submission of future nominations, has been sent to all IEEE organizational units. Included in the kit are detailed guidelines to assist the nominator in the effective preparation of the nomination form. Nominators are urged to read the instructions carefully before completing nominations, and to pay particular attention to the deadline dates for receipt of the material. (Additional kits available, write

Emily Sirjane, HQ.)

RECOMMENDATIONS SOLICITED for elective offices of the IEEE. Nominations and Appointments Committee solicits from individual members and all IEEE organizational units names of candidates for the following elective offices of IEEE: President, 1977 and Vice President, 1977.

Nominees for these offices shall be Senior Members or Fellows. The Committee is interested in securing recommendations of members who have been extensively involved in IEEE activities.

January 1, 1976, is the deadline date for receipt of recommendations. Forms to be used in submitting recommendations may be obtained by writing to the Secretary of the Nominations and Appointments Committee at IEEE, 345 East 47th Street, N. Y., N. Y. 10017.

BofD REVISES CERTAIN BYLAWS
Bylaw 313.8 - Nominations and Elections-- second paragraph, Regional Director/ Delegate ballot shall contain the names of not fewer than two nor more than three candidates -- (thus putting limits on the number of candidates) unless the submission of only one name has been accepted by the BofD (as provided in Bylaw 313.4).

The new revision also states the source of nomination for each candidate shall be identified also. Former Bylaw only required at least one name.

Paragraph three, Divisional Delegate/ Director ballot to contain names of not fewer than two nor more than three candidates -- a new limit-- submitted in accordance with Bylaw 309.2, unless the submission of only one name has been accepted by the BofD. Again, the source of nomination for each candidate shall be identified according to the new Bylaw. Former Bylaw only required not fewer than two candidates.

Revised Bylaw 311.9 - Nominations and Appointments Committee, second paragraph now reads, a list of candidates to fill vacancies expected to exist among the chairmen and members of all Standing Committees and Boards, (and the exception list has been expanded to include the Technical Activities Board, the EAB, RAB/USAB, TAB appointees to the Publications Board), shall be submitted for appointment by the BofD of the Executive Committee (ExecCom) at the first meeting held after January 1. The third paragraph is deleted in its entirety.

Bylaw 408 allows Student Branches to form technical subunits -or Student Branch Chapters. Inspired by the IEEE Computer Society, the new organization structure will provide means for greater interaction by the Groups and Societies with IEEE Students having common technical interests.

STATEMENT ON AGE DISCRIMINATION was adopted by the BofD following Executive Committee (ExecCom) action in August. The IEEE is as "opposed to discrimination because of age as it is against other forms of discrimination since biases of any nature, including those of age, are inimical to the society's best interest and those of the engineer. The IEEE calls upon industry, government, and educational institutions to examine their practices to assure the profession that such age biases do not exist in their endeavors. The IEEE, in turn, will make every attempt to prevent age bias from existing..."

E. E. is sent without cost beyond dues to officers of IEEE Boards, Committees; Divisions, Societies, Groups, Conferences; Regions, Councils, Sections, Subsections, Chapters, and Branches. It is published bi-monthly by IEEE, 445 Hoes Lane, Piscataway, N. J. 08854. Second-class postage is paid at Piscataway, N.J.

SOCIO-ECONOMIC

IEEE UNEMPLOYMENT INDEX ROSE 4.1% in August survey. Highest unemployment figure since the index was started in November, 1974, it also marks the first increase in unemployment since the April survey. In addition to those involuntarily unemployed (4.1%), another 4.3% said that while they were employed they were still available for full-time employment in the area of their prime technical competence.

RAB, TAB, USAB Luncheon held at WESCON on the California Initiative, September 17. Mr. Elmer S. Kapriel, from the Power Engineering Society described plans to use the chapter organization to mobilize IEEE members.

PRODS AND OPPORTUNITES

CONVERSION TO CENTREX TELEPHONE system announced by IEEE Headquarters in New York City. Each extension now has its own telephone number. See insert p. 4E for a directory of Centrex numbers. To reach those people located in the IEEE Service Center in Piscataway, New Jersey, still dial: 201-981-0060. To reach Professional Services/Washington Office, still dial: 202-785-0017.

CANDIDATES SOLICITED FOR IEEE Committee Activities from individual members and all IEEE organizational units for the 1977 standing committees and boards.

Composition and responsibilities of the committees and boards are described in the IEEE Bylaws. The general qualifications for committee and board service are the same as those in any other position of leadership responsibility and trust: competence, experience, willingness to take on the task, availability of time to participate, enthusiasm and vigor.

April 1, 1976 is the deadline date for receipt of recommendations. Forms to be used in submitting recommendations may be obtained by writing to the Secretary of the Nominations and Appointments Committee at IEEE, 345 East 47th Street, N. Y., N. Y. 10017.

VOTE REMINDER... Balloting, which

ends on November 3, shall be counted under the supervision of the Tellers Committee not later than the 5th working day following the above stated dates. (Bylaw 313.9)

IEEE ORGANIZATIONAL ROSTER supplements, with updated information on new officers in the geographical units of the IEEE, will be distributed this month.

REGION AND SECTION NEWS

IEEE MEMBERSHIP IS UP BY 5,000 for the year ending August 31, 1975. All Sections have now received lists of their members in dues arrears with the suggestion that each one be reminded of the advantages of continuing membership in the IEEE. It is just as important to retain a member as it is to recruit a new one!

GOING ABROAD? Reciprocal advantages accrue when competent speakers present papers to IEEE Sections in foreign countries. IEEE members in any country, contemplating a foreign trip and desirous and capable of making engineering contacts of this type are invited to inform Emily Sirjane at HQ in New York, who will furnish the names and addresses of the Section Chairmen with whom the speaker may work out arrangements directly.

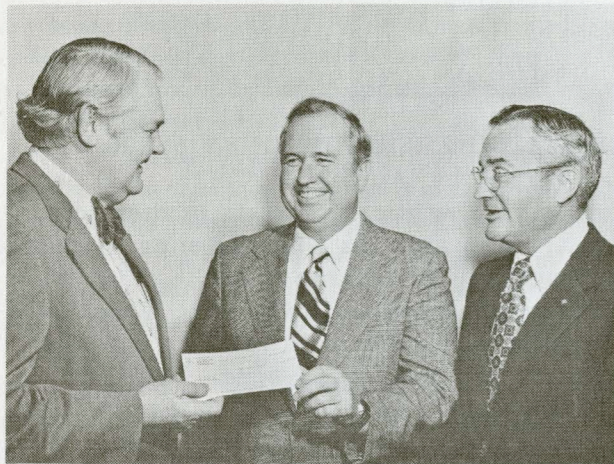
EAB

COURSES AVAILABLE in the expanded educational program include: Computer & Information Sciences; Communications; Power; Business & Management; Electrical & Electronics Engineering; and Microprocessors. If you need to know more about the course program, contact Vince Giardina at (201) 981-0060, ext. 174, or write him at IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854.

\$5000 OUTLAY VOTED FOR EDUCATIONAL purposes by the Los Angeles Council. Contractual dealings have been made between EAB and the Council to supply two courses a month for one year. The first two courses in November will be: Computer Aided Filter Design and Electronic Information Processing. (Further information contact

Vince Giardina, (201) 981-0060, ext. 174)

PAUL CARROLL, IEEE Region 4 Director accepts his share (in the form of a \$3,372.55 check) of the successful 5-city tour of IEEE's one-day Short Course on Microprocessors from Tom Jones, Educational Vice President, as IEEE General Manager H.A. Schulke, Jr. looks on.



STUDENT NEWS

CALL FOR APPLICANTS FOR FORTESCUE Fellowship, 1976-77. This one-year \$5,500 award to be made to a full-time post-graduate student in the field of electrical engineering. Preference given to applicants about to begin their first year of graduate work. File applications on forms provided by IEEE to reach the Fellowship Committee by January 15, 1976. (For further information, contact Una B. Lennon, HQ).

STUDENT MEMBERSHIP CONTEST underway. Five awards to be given for: a) largest absolute membership growth; and b) largest relative membership growth in Branch membership between August 29 and December 31, 1975. First three winning Branches in each category to receive \$200, \$100 and \$50 each plus a complete set of IEEE Press Books. Fourth and fifth place winners to receive complete set of Press Books. (For further information, contact Bob Asdal, HQ).

TEN LARGEST STUDENT BRANCHES, based on December 31, 1974 membership

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are: University of Illinois, Urbana; Polytechnic Institute of New York; Massachusetts Institute of Technology; Stanford University; University of California at Berkeley; University of Colorado at Boulder; University of Missouri at Rolla; City College of the City University of New York; University of Texas at Austin; Purdue University.

CONTRIBUTING WRITERS/PHOTO-graphers, for the Student Newsletter with circulation of nearly 25,000 are wanted. Articles of broad-based interest on or about student branch activities and members are welcome. Black and white glossy photographs are suitable. Send contributions to Bob Asdal, Manager of Member Services, HQ.

CONVENTION NEWS

WESCON DREW 31,333 ATTENDEES in San Francisco. This figure represents a tremendous increase of 4,000 from 1973. Over 320 companies exhibited and there were 520 booths. An historical exhibit of special interest showed very early products in electronics--including the first computer.

PUBLIC SERVICE AWARD presented to California Representative James C. Corman of the 22nd Congressional District at WESCON by IEEE President Arthur P. Stern.



SESSION ATTENDANCE at WESCON was

October 1975



RESOLUTION

of the

IEEE BOARD OF DIRECTORS

at the meeting of September 18-19, 1975

WHEREAS

DON LARSON

has this year completed his career of service to the Institute as General Manager of its two principal expositions, WESCON and INTERCON, and

WHEREAS, from the start of his service 19 years ago, he has devoted particular attention to the changing needs of exhibitors and the technical community, and has introduced effective new techniques of convention planning and management to keep pace with these changes, and his reputation as a manager and innovator has extended beyond the fields of electronics and electrical engineering, and has led to his service as President of the National Association of Exhibition Managers, now

THEREFORE, the Board of Directors of IEEE, hereby expresses to Don Larson its gratitude and appreciation of his long and effective service to the Institute, in WESCON, INTERCON and IEEE, and wishes him the rewarding future he so richly deserves.

Arthur P. Stern, President
(signed)

E.E. No. 60-4A

October 1975

Continuing education services

A New Approach :

“no risk”

Education

Programs

The constant pressure of "keeping in touch" with numerous new techniques makes it imperative that effective education programs remain our primary goal.

The expansion of our continuing education effort has evolved into a distinctive program where we can now offer educational experience to your unit members at literally no cost to you with a minimum of preparation.

We have developed an impressive curriculum of 30 courses of one,- two,- and five-day duration where the education day consists of five-hours of instruction with one-hour of discussion and interaction with present day problems. We can offer:

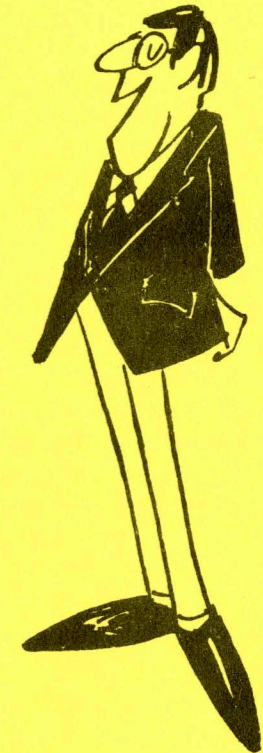
- Computers & Information Sciences (9)
- Communications (2)
- Electrical and Electronics (1)
- Power Systems (9)
- Business & Management (9)

To get the full value you need the complete story. I invite you to call me at (201) 981-0060 Ext. 174 and we'll review how we can develop an educational program for your Unit.



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

FOR ADDITIONAL INFORMATION CONTACT VINCENT J. GIARDINA
445 HOES LANE, PISCATAWAY, NEW JERSEY 08854



very good, with 6764 attending 32 sessions, averaging roughly over 200 per session. IEEE 6-Region Annual Achievement Award in Engineering went to William McSpadden, Battell Northwest, "for countless hours devoted to improving geothermal energy technology and the public's understanding this source of energy." For outstanding company support of IEEE objectives in Region 6, the Small Company award went to KEMS of Honolulu, the large company award to Southern California Edison of Rosemead, Calif.

PUB NEWS

SPECIAL OCTOBER ISSUE OF SPECTRUM

"Tools and Toys" --to feature a series of articles on "tools" of the electrical engineering profession--those general design techniques and methods of information gathering that make all design tasks feasible--and "toys" or avocational activities that give added meaning to an engineer's life.

OPTION NO. PUBLICATIONS

DON CHRISTIANSEN assumes the role of publisher of SPECTRUM, as all editorial, production, advertising and business functions related to SPECTRUM have been consolidated and will report to him. Don will continue to report directly to Dr. Schulke, with the title Staff Director and Editor of SPECTRUM.

THREE NEW IEEE PRESS BOOKS available. "Magnetic Bubble Technology: Intergrated Circuit Magnetics for Digital Storage and Processing", a book of selected reprints edited by Hsu Chang of IBM, is available at a price of \$11.95 for the paper-bound member edition. Clothbound edition: \$23.95 (discounted to \$17.95 for IEEE members). "Career Management: A Guide to Combating Obsolescence", a book of selected reprints, was edited by Harold G. Kaufman of the Polytechnic Institute of New York. This 448-page book, sponsored by the IEEE Engineering Management Society, is priced at \$8.95 for the paper-bound member edition. A clothbound edition is available for \$17.95 (discounted to \$13.45 for IEEE members). The third publication, "Energy and Man: Technical

and Social Aspects of Energy", also a book of selected reprints, was edited by M. Granger Morgan of Carnegie-Mellon University. This 536-page book is priced at \$9.95 for the paperbound member edition. A clothbound edition is available for \$19.95 (discounted to \$14.95 for IEEE members). These books may be ordered postpaid from the IEEE Service Center Order Dept., 445 Hoes Lane, Piscataway, New Jersey 08854. Payment should accompany the order.

176 PRICES FOR SCIENCE ABSTRACTS set: Physics Abstracts--\$560; Electrical and Electronic Abstracts--\$405; Computers and Controls--\$235. The three INSPEC Data Bases--INSPEC 1, INSPEC 2, and ISMEC remain the same price, and Key Abstracts holds its own as well, at the same price. Housed in England at the Institution of Electrical Engineers (IEE), the INSPEC data base is the largest computerized data base in the English language in physics, electrotechnology, computers and control. (Contact D. Gieb, IEEE, 445 Hoes Lane, Piscataway, N.J. 08854. 201-981-0060)

OPTION NO.	PUBLICATIONS	Approximate Number	Approximate Net Cost	Approximate Saving
	HONORS		\$1400.00	*
1.	IEEE FELLOW--GRAHAM LEE MOSES-- is first recipient of Electrical/Electronics Insulation Conference (EIC) Hall of Fame Award in recognition of his significant contributions to the profession and to EIC. Mr. Moses, founder of the EIC, pioneered development on insulation for high altitude aircraft (1937-1945) and of thermal life and functional evaluation of electrical insulation.	8	98.00	\$11.00
2.	IEEE NOMINEE DR. CHARLES STARK DRAPER receives The Institution of Civil Engineers Kelvin Gold Medal for 1974, for his outstanding contributions to vehicle guidance, control and instrumentation through his pioneering development of inertial navigation systems.	4	49.50	5.50
3.	IEEE NOMINEE DR. CHARLES STARK DRAPER receives The Institution of Civil Engineers Kelvin Gold Medal for 1974, for his outstanding contributions to vehicle guidance, control and instrumentation through his pioneering development of inertial navigation systems.	6	59.40	6.60
4.	IEEE NOMINEE DR. CHARLES STARK DRAPER receives The Institution of Civil Engineers Kelvin Gold Medal for 1974, for his outstanding contributions to vehicle guidance, control and instrumentation through his pioneering development of inertial navigation systems.	2	163.80	18.20
5.	IEEE NOMINEE DR. CHARLES STARK DRAPER receives The Institution of Civil Engineers Kelvin Gold Medal for 1974, for his outstanding contributions to vehicle guidance, control and instrumentation through his pioneering development of inertial navigation systems.	1	7.00	7.00

SEE THE FORM ON REVERSE SIDE...

contract. See insert 4A.

CLEDO BRUNETTI AWARD established as a Field Award "for outstanding contributions in the field of miniaturization in the electronic arts". (For further information, contact Una B. Lennon.)

FOR YOUR INFORMATION

PROGRAM FOR HANDICAPPED in Science launched by American Association for the Advancement of Science (AAAS). Purpose is to identify and explore barriers obstructing entry and full participation of physically disabled persons to education and employment opportunities in science. Contact: Martha Redden, Director, Project on the Handicapped in Science, AAAS, 1776 Massachusetts Ave., N. W., Washington D. C. 20036.

IEEE RADIO SHOWS, a second series, to get underway November 6 and run for 13 weeks. The Shows will be fed on Thursday evening 5:05 Eastern Standard Time (EST). Be sure to check with your Mutual Station to urge that they carry the show, which is free of charge. For a list of Mutual affiliates, see complete set carried in December 1974 EE (40--4T).

1976 USSR POPOV SOCIETY CONGRESS Delegation from IEEE is now being formed as part of the IEEE-Popov Society Annual exchange. Topics for the meeting will be focussed on all facets of medical electronics and all facets of instrumentation. Send your nominations for delegates to your Group/Society presidents as soon as possible. Selections will be finalized in December of this year. (See October SPECTRUM. For further information: J. M. Kinn, Secretary,

or A. L. van Dort, Administrative Assistant of the Subcommittee, HQ.)

REGIONAL LECTURE PROGRAM discontinued with regret. (See August E. E.) All newsletter editors, please note that this program should not appear in future issues.

WELCOME ABOARD!

New Society:

Acoustics, Speech & Signal Processing Society.

New Group/Society Chapters in Sections:

Central Illinois Section: The Joint Nuclear & Plasma Sciences/Electron Devices/Microwave Theory Techniques Chapter. The Joint Instrumentation & Measurement/Communications/Industry Applications Chapter.

Maine Section: The Communications Chapter.

Kitchener-Waterloo Section: Joint Circuits & Systems/Electron Devices Chapter.

Philadelphia Section: The Joint Electron Devices/Parts, Hybrids & Packaging/Manufacturing Technology Chapter.

Alabama Section: The Computer Chapter.

New Section Name:

The Taipei Section becomes the Republic of China Section.

New Subsection:

Victorian Subsection of Australian Section. Territory: State of Victoria, Australia (as defined by statute)

New Student Branches:

Escola de Engenharia de Sao Carlos da Universidade de Sao Paulo Sao Carlos SP 13560, Brazil
University of Oulu
Department of Electrical Engineering SF 90100, Oulu, Finland

Centerfold Inserts

BLUE	-	BofD Resolution	4A, 4B
CANARY	-	EAB	4C, 4D
IVORY	-	Centrex	4E, 4F