

ELECTRICAL ENGINEERING®

A "SPECIAL" FROM PRESIDENT ROBERT H. TANNER

As IEEE president for 1972, I am delighted to have this opportunity of greeting the 4000 recipients of "Electrical Engineering." You are the backbone of the Institute, who, by your activities in Societies, Groups, Regions, Sections, Chapters, etc., really make the Institute go.

The central leadership owes you all a deep debt of gratitude, and during the coming year, with the help of our headquarters staff, we will do our best to support your efforts in making IEEE valuable to the individual member.

This is by no means an easy task, if only for the fact that each member seems to have a different view of what is valuable. For some it is the wealth of technical information which the Institute makes available, for others the fellowship and personal contact of meetings of various kinds. Then again, member-needs change with the times; just at present we are going through a period when employment problems loom large in an engineer's mind. Yet history suggests that these times will pass, and it is up to us to see that the Institute emerges from them as strong as ever technically, yet stronger still from the capability and flexibility it will have shown in dealing with unusual problems.

How exactly we can accomplish this task is a question which is exercising the minds of the Board of Directors and the Staff Directors. To help us, we have prepared and circulated a detailed questionnaire designed to clarify the ambiguous vote on last year's proposed constitutional amendments. When the returns are all in, we hope to have a much clearer picture of the way our members are thinking.

One questionnaire, however, is quite a limited form of feedback, and the leadership of the Institute can only operate in an efficient feedback system.

This is why we look to you, in whatever capacity you may be serving IEEE, for all the information, help, and guidance you can give us from the grassroots with which you are in closer contact.

- o What are members asking for?
- o How can we improve really worthwhile services to them?
- o What services, if any, can we drop to free needed funds for some other purpose?

These are just three obvious questions among the many to which we would like the answers.

In a contribution to "Inside IEEE" in last July's SPECTRUM, I made the point that our Institute is an upside-down organization: the members are top-bosses; and the volunteer leadership, together with the professional staff, exists only to fulfil their needs to the best of its ability. The fact that there are approximately 170,000 different views as to what these needs really are makes the task difficult, challenging, and fascinating.

I am relying on you and those who may succeed you in mid-year to carry out your functions so well that when it is all over we may look back and say with pride: 1972 was a good year for IEEE.

NEW READERS, GREETING! Every February "Electrical Engineering" (E. E.) acquires new readers by January election or appointment. Welcome aboard!

Skim the whole of each issue. Tick "this-is-for-me" paragraphs in margin for retrieval.

If you lack material mentioned, ask for it. E. E. names names in directing you to staff repositories of information and accumulated wisdom. Follow the footnote on last page to identify and address staff by mail or telephone.

Dig the masthead. "Communication among" means down, up, and sideways. Participate. We dare you.

BULLETIN

SOCIOECONOMICS & PROFESSIONALISM. January Executive Committee (ExecCom) of the IEEE Board of Directors (BoFD) designated Director Guarrera to coordinate the various boards, committees, and geographical units pursuing programs in socio-economic and professionalism in Regions 1-6. . . Copies of Minutes of recent meetings and documented activities bearing on these topics should be sent at once 1) to John J. Guarrera, President, Guide Scientific Industries, Inc., 11855 Wicks St., Sun Valley, Calif. 91352, and 2) Jack Kinn at IEEE. Minutes of future meetings should be sent in the same way.

CHALLENGES AND OPPORTUNITIES

NON-TECHNICAL ACTIVITIES QUESTIONNAIRE. In early January, members (less Students) of Regions 1-6 were mailed questionnaires from Presidents Mulligan and Tanner designed to record U. S. members' wishes and opinions on nontechnical IEEE activities, for guidance of 1972 BoFD. Contents will be presented in Spectrum for March.

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. Second-class postage is paid at New York, N. Y.

1973 COMMITTEE PERSONNEL. IEEE solicits from individual members and all organized units the names of candidates for appointment to 1973 standing committees and boards listed in Bylaw 304.2, with duties defined in Bylaws 304-311. The general qualifications of candidates, and guidelines for nominations, are given on p. 4D. Two copies of the form to be used are furnished as p. 4C. Nominators are not limited as to the number of proposals. Deadline, June 1, '72. (Extra copies, Emily Sirjane)

TOP-SIDE DEVELOPMENTS

MAKE-UP OF 1972 BoFD & EXECOM appears as a centerfold, p. 4A.

BoFD TO MEET 5 TIMES in 1972—one more than heretofore. Schedules: (at New York except as shown): BoFD: Jan. 12-13, Mar. 23, **May** 2-3, (Chicago); Sept. 15-16 (Carmel Valley, Calif.); Dec. 1-2 (place to be announced). ExecCom: Jan. 13-14, Feb. 17, Mar. 22; Apr. 30, (Chicago); July 19 (West Coast); Aug. 16, Sept. 13 (Carmel Valley); Oct. 20, Nov. 29; Dec. 19 (tentative).

BYLAW CHANGES made in January: 105.13 (new Bylaw) - "Admission to membership in IEEE in any grade shall not be affected by the race, religion, nationality or sex of the applicant." 203.1 - As modified, provides for election, by annual Assembly, of "the Vice President - Regional Activities (who shall serve as Chairman of the Regional Activities Board)." (RAB) This post is added to Vice Presidents of Publication Activities (chairman - PUB) and Technical Activities (chairman - TAB). (Note - This post would first be established in 1973; Bylaw 309.1 assigns the chairmanship of RAB to the Vice President elected by the members, in 1972.) 402.10, on Institute funds for the maintenance of Sections, was importantly changed, effective in 1973 (not 1972—E. E. Oct. '71,

p. 6), in order to give greater flexibility in establishing the most appropriate method of allocating funds to the Sections.

The annual basic allowance of \$200 per Section is not changed; but the remaining present paragraphs (on allowances for Section, Group Chapter, and Group Affiliate memberships; and Section, Subsection, and Group Chapter meetings, and Section technical conferences) were deleted and replaced by the following: "Rebate allowance - The rebate schedule for Sections shall be prepared annually by the Regional Activities Board in consultation with the Technical Activities Board Operating Committee, and submitted to the Finance Committee for review and to the Executive Committee for approval and incorporation in the proposed IEEE budget."

401.17 (new Bylaw under "Regions") reads: "Upon approval by the Board of Directors, a voluntary or mandatory fee may be charged to members resident in a Region for specified services for the benefit of members within the Region. The Board of Directors will determine whether the fee is to be voluntary or mandatory in a particular circumstance depending on the nature of the specific services to be provided."

A series of Bylaw changes, on the recommendation of Regional Activities Board (RAB), was made to remove inconsistencies in responsibilities and appointments: 309.4 401.5 401.9 401.11.

Following Bylaws were changed by substituting the title "Group President" for "Group Chairman:" 405.4 406.3 406.4 406.5 406.9. (Note - Similarly we shall expect to see "Group Vice Presidents" in the wording of Manuals, etc., when re-issued.)

BYLAWS AND STATEMENTS OF POLICY including changes and additions made by BoFD in January are being reprinted and distributed. (Copies, Emily Sirjane)

The reprint includes an important new Statement of Policy #33 on the Involvement of IEEE with Legislative Bodies, Government Agencies, and International Organizations.

Statement of Policy #3, para. 2(b), specifying the number of copies of conference publications to be made available for post-conference sale by headquarters, has

been amended by ExecCom: Formerly 100, hereafter 300 copies.

IEEE BUDGET 1972 was approved by January BoFD, showing a deficit of \$245,000.

TAX BITE ON UEC (United Engineering Center). For the first time New York City is in 1972 assessing taxes against real estate held by non-profit educational institutions. The United Engineering Trustees (UET), of which IEEE is a component, will pay taxes for the first half-year under legal protest. The annual impact of the new levy on IEEE would be about \$168,000.

Meanwhile active pursuit of the Piscataway building project (E. E. Aug., p. 2) has been held in abeyance pending further study of the UEC situation.

1973 DUES INCREASE. January BoFD approved in principle a dues increase effective Jan. 1, '73, to meet increased costs of IEEE's present services. The dollar amount of increase over the present \$25 has not yet been determined; it will take into account the possibility of Regional assessments (see item below) and of differentials for overseas members. Members should watch Spectrum for developments and announcement.

REMSEF. A Regional Member-Service Experiment Fund has been set up in the 1972 budget. To be administered by Regional Directors, REMSEF is aimed at the solution of problems peculiar to each Region. See Spectrum, Dec. '71, p. 7.

IEEE OFFICE IN WASHINGTON. (See E. E. Dec., p. 4.) Personnel manning this region 1-6 office will soon be named and its street address disclosed. The enthusiastic cooperation of IEEE members in the District and elsewhere is anticipated in carrying out the purposes leading to the establishment of an IEEE Washington office. (Spectrum, Dec., p. 7.)

TECHNOLOGY FORECASTING and Assessment for career planning. An experiment deemed successful, carried out by Washington Section and 8 of its Group/Society Chapters, was referred to in Spectrum, Dec., pp. 8-9. TAB and RAB are

encouraging similar experiments by other Sections and Chapters. ExecCom in January considered possible submittal of a proposal to the National Science Foundation (NSF) for funding of an Institute-wide effort.

INDUSTRY & MANPOWER DATA BASE. The Fleckenstein Report (Spectrum, Dec., p. 63) held the view that "there is a need to reduce the number of individual sources of data on manpower and characteristics of the industry, and to establish a more comprehensive and reliable data base to serve a multiplicity of users."

November BofD voted "that initial steps be taken as quickly as possible to explore the possibility of having a centralized government agency take the lead to establish requirements for a data base that would be useful to professional societies, educational institutions, and industrial associations as well as to the government itself. It is suggested that the President's Office of Science and Technology would be an appropriate focal point to stimulate such a study."

VESTED PENSIONS. Vesting protects the right of an employee to leave his employer's service prior to normal retirement without forfeiting accrued pension. From plan to plan, vesting may be full, partial, or nil. (See Fink, Spectrum, Nov. '70, pp. 34-39.)

At a Sept. '71 seminar of 100 engineering and scientific societies, information on vesting in other countries was presented. It is reproduced on p. 4B as useful in re pension portability in U. S. and elsewhere.

NSPE GAINS RECORDED. Since report in E.E. Aug., p. 3, more IEEE U. S. members have joined National Society of Professional Engineers under the IEEE/NSPE agreement. Up to December, 632 had paid \$15 for national services and 106 had paid \$30 for state and national services. There had been 3,003 inquiries without payment; and the retirement portion of the mailing had drawn 8,000 responses.

NSPE has 67,000 members, of whom 5,000 are affiliated with 54 state societies and 535 local chapters. Many IEEE members are in NSPE apart from the 738 under

the IEEE/NSPE pact: they pay \$25 national dues; \$12-\$50 state dues, \$2-\$10 chapter dues. Grades are: Member (Registered Engineer), Senior Associate (graduate of an ECPD-approved curriculum), Associate (any graduate engineer), and Surveyor.

WORLD FEDERATION OF ENGINEERING ORGANIZATIONS (WFEO). (E.E. Aug. '69, p. 2.) IEEE, as a transnational society, by its membership in the U. S. National Committee of WFEO stands to gain by developing and sharing its world view. Now Don Fink has succeeded the American Society of Civil Engineer's (ASCE) W. J. Wisely as the USA designee to WFEO's executive committee. He will also serve as the head of the U. S. membership consisting of 5 Founder and 3 other engineering societies, looking forward to the next General Assembly, tentatively scheduled for U. S. in 1973.

ASSOCIAZIONE ELETTRONICA ED ELETTRONICA ITALIANA (AEI). A 2-year agreement between IEEE and AEI has been signed, providing reciprocal advantages. More than a year in the making, it differs considerably from those previously negotiated by IEEE with IEE, London; VDE, Stuttgart (E.E. Oct. '70, p. 3); and the more limited one with DTG/IECES Tokyo (E.E. Apr. '70, p. 8). In carrying out its transnational objective for a people-to-people, 2-way exchange of technical information, IEEE adapts itself to situations found in various countries.

IEEE HIGHER-GRADE MEMBERSHIP on December 31, 1971 was 145,495 compared with 144,375 at the end of 1970. Student membership was 20,987 at 1971 year-end—a decrease from previous year's 24,684, reflecting the fall-off in enrollment in the engineering schools. Combined membership this year, 166,482; last year 169,059.

PERSONAL SECRETARIES of 1971 BofD members were among those formally voted thanks for services rendered the Institute during 1971. (BB—Tickler E.E. Dec. '72. There's a lot of thanking to be done around this shop.—Ed.)



COMPOSITION OF THE 1972 IEEE BOARD OF DIRECTORS

(Only Present Terms Shown)

DIRECTORS-AT-LARGE Elected by members

1 Robert H. Tanner	1972-74
President	1972 +
2 Harold Chestnut	1972
Vice President	1972 +
Chm. Regional	
Activities Board	1972
3 John V. N. Granger	1970-72
Senior Past President	1972
4 James H. Mulligan, Jr.	1971-73
Junior Past President	1972
5 Glen A. Richardson	1970-72

DIRECTORS-AT-LARGE Elected by Assembly

1 Joseph K. Dillard	1970-72#
Vice President	
Technical Activities	1972* +
2 Clarence L. Coates, Jr.	1972
Vice President	
Publication Activities	1972* +
3 Edward L. Ginzton	1972
Chairman Awards Board	1972*
4 Glen Wade	1972
Chairman Educational	
Activities Board	1972*
5 Tatsuji Nomura	1971-72
Director, Region 10	1972*
6 Edward A. Wolff	1972
Vice Chairman, Techni-	
cal Activities Board	1972*
7 Raymond W. Sears	1972
Treasurer	1972* +
8 Arthur P. Stern	1972
Secretary	1972* +
9 Donald G. Fink	1972
Executive Director	1972*
10 Seymour Cambias, Jr.	1972 #
Director-at-Large	1972*

DIRECTORS EMERITUS

Alfred N. Goldsmith
also Editor Emeritus
Elgin B. Robertson

*Elected by the Nov. '71 Assembly to these positions
+Corporate Officers
#Seymour Cambias, Jr., elected by Assembly to complete Joseph K. Dillard's member-elected term
*Divisions II IV VI in 1972 elect Directors to serve in 1973-74

REGIONAL DIRECTORS Elected by Regional members

1 Harold S. Goldberg	1972-73
2 George Abraham	1971-72
3 Grover F. Dausman	1972-73
4 Harsford W. Farris	1971-72
5 William E. Cory	1972-73
6 John J. Guarrera	1971-72
7 Douglas M. Hinton	1972-73
8 Paul G. A. Jespers	1971-72
9 Ernesto Obregon	1972-73

DIVISIONAL DIRECTORS Elected by Divisional members

I M. E. Van Valkenburg	1972-73
II	(1973-74)
III William T. Carnes	1971-73
IV Leo Young	1971-72/
V Linder C. Hobbs	1972-73
VI	(1973-74)

EXECUTIVE COMMITTEE

Tanner	(Chairman)
Chestnut	(Vice Chairman)
	Regional Activities
	Membership & Transfers
	Student Activities
	Admission & Advancement
	Public Relations
Dillard	Technical Activities
	Conference Board
Coates	Publication Activities
	History
Mulligan	Nominations &
	Appointments
	Intersociety Relations
	Long Range Planning
Sears	Finance
	Real Estate
	Employees Benefits
	Life Member Fund
Wade	Educational Activities
Stern	Bylaws
	Agenda
	Awards
	Fellow
Guarrera	Government
	Socioeconomics
Fink	(General Manager)

Netherlands: The law requires vesting after five years of service or age 25 (30 for females), if later.

Norway: Vesting after the employee reaches 10% of the time required under the plan for a full pension (i. e. three years if the plan pays a full benefit after 30 years' service). Forfeitures must be used to provide pensions to keep up with the cost of living.

Finland: Age 23 and six months' service. Plan termination insurance is required, with the cost being 0.4% of the full liability.

Sweden: There is no law on vesting, but labor agreements require full and immediate vesting. The plan termination insurance plan has a premium of 0.3% of the unfunded liability.

Denmark: Vesting after five years' service; immediate under insured plans.

Belgium: After five years under insured plans, with any forfeitures to go to a solidarity fund for widows and orphans. There is no law on non-insured plans, but they generally vest after five years.

France: There is no law, but under the repartition system, vesting is usually full and immediate.

Switzerland: There is no law, but it is called for in labor contracts.

Germany: There is no law, although proposed legislation would require vesting. In the past, the Germans have usually stayed with an employer for life.

United Kingdom: Vesting is not prevalent, although it is required when a plan contracts out of the social security system.

Canada: Mandatory vesting under the federal law is at age 45 after 10 years' service.



In the December 1971 issue of EE, it was announced that Sections are encouraged to request visits from speakers who have been recommended by Group and Society officers as out-

standing lecturers, suitable not only for Chapter meetings but also for general Section meetings. The following speakers have agreed to participate.

<u>SPEAKER</u>	<u>INSTITUTION</u>	<u>TOPIC</u>
Prof. Norman Abramson	University of Hawaii	The ALOHA System - another alternative for computer communications.
Dr. John J. Allan	University of Texas	Digital computer control of machines. Interactive graphics for design and/or control of physical devices. Use of computers in undergraduate education.
Dr. Michael Athans	Massachusetts Institute of Technology	Optimal Control Theory and Applications. Non-linear filtering and Stochastic Control. Large scale systems.
Prof. Robert R. Boorstyn	Polytechnic Institute of Brooklyn	Finite Memory Communications.
Dr. Liborio Castriota	PRD Electronics Incorporated	Networks - current theory.
Dr. Kan Chen	University of Pittsburgh	Systems Sciences, applied to environmental and social systems.
Mr. Warren F. Clement	Systems Technology Inc.	Theory of Manual Vehicular Control. Measuring and Control System Requirements for low visibility landing. Theory for Displays in Manual Control.
Mr. Rudolf S. Engelbrecht	RCA	High frequency solid state devices and circuits. Management of solid state technology center in a decentralized corporation.
Dr. Michael Flynn	Johns Hopkins University	Micro-programming.
Prof. Herbert Freeman	New York University	Computer graphics. Interactive computer graphics. Computer animation.
Mr. James Godfrey	Bell Telephone Laboratories	Semi-Conductors.
Dr. Gunter Geiss	Consultant	Theory optimization - Control Theory - Ecological Systems.
Dr. Paul Green	IBM Research Laboratories	Data Communications and networks.
Dr. Albert S. Hoagland	IBM Corporation	Computers, Memory and Storage. Peripheral Equipment and Magnetic Recording.
Dr. Stephen J. Kahne	University of Minnesota	Trends in Automatic Control Education - Systems Engineering applied to Environmental Design.
Dr. Benjamin J. Leon	Purdue University	Digital Filtering.
Dr. Arnold Lesk	Motorola, Inc.	Semi-conductors, processing technology, reliability, devices.
Dr. Samuel Levine	Consultant	CRT display systems for computers. On-line computing systems, for stock market applications.
<u>VISITING SPEAKERS FROM ABROAD</u>		
Louis C. W. Pols (April-May '72) (Mass., N.Y., Ohio, Indiana Calif.+)	Institute for Perception, TNO Netherlands	Speaker Perception and Recognition
Prof. J. C. Simon (Sept-Oct '72) (Indiana and D. C.+)	University of Paris	Pattern Recognition and Adaptive Communications

SPEAKER	INSTITUTION	TOPIC
Mr. Peter Lloyd	Bell Telephone Laboratories	Piezoelectric devices: Monolithic crystal filters.
Mr. Robert Lucky	Bell Telephone Laboratories	Data Communication.
Dr. Roy H. Mattson	University of Arizona	Solid State Electronics -Biomedical Engineering - Technical Education - Education.
Mr. Lorimer G. Miller	Bell Telephone Laboratories	Application of accelerator technique to B-C device physics: nuclear instrumentation.
Dr. Eugene Mittelmann	Consultant	Transducers - reduction from research to application.
Dr. Hans Oestreicher	Wright Patterson Air Force Base	Cybernetics, adaptive and learning systems.
Mr. James B. Owens	I-T-E Imperial Corporation	Development in high voltage power compact, electric power switching stations.
Mr. John C. Redmond	General Dynamics	Federal Air Pollution - Law and effects on Electronics Industry.
Dr. Joseph E. Rowe	University of Michigan	Microwave solid-state devices - Computer Simulation of beam-plasma systems, Microwave Tubes.
Dr. Raphael J. Salamon	Rutgers University	Health Care Delivery.
Dr. Heinz M. Schlicke	Allen Bradley Company	Filtering for Electromagnetic Compatibility-Mismatching - Realistic Filtering performance for highly mismatched systems - Power line transmission, D. C. to microwave.
Prof. Mischa Schwartz	Polytechnic Institute of Brooklyn	Digital Data Networks - Urban Systems Analysis - Adaptive techniques for Equalization.
Dr. James Snodgrass	Scripps Institute of Oceanography	Oceanographic instrumentation data gathering, satellite navigation frequency allocation for oceanography, engineering aspects- biomedical instrumentation.
W. A. Spencer, M.D.	Texas Institute for Rehabilitation and Research	Information systems in hospitals - Technology and Health Services - Hardware and Software-Electronic Applications for prosthetics.
Prof. George Szentirmai	Cornell University	Computer-aided Design of Circuits and Filters.
Prof. Gabor C. Temes	University of California	Computer-aided Synthesis of Filters- Recent results in the Sensitivity analysis and Optimization of Circuits - New results in the Time-Domain Design of Circuits.
Mr. William von Alven	Consultant	General Systems Technology, General Applications.
Dr. John Zaborszky	Washington University	Control Systems - Controllability and Observability of Bilinear Systems - Inductive Approach to Estimation and Filtering-Singular Arcs in Discrete Systems.

Many Groups and Societies also maintain lists of speakers suitable for the more specialized audiences attending Chapter meetings. These include the IEEE Computer Society, Groups on Engineering in Medicine and Biology, Magnetics, Microwave Theory and Techniques, Reliability, Aerospace and Electronic Systems and Power Engineering Society. Speakers Bureau are under development in the Groups on Engineering Management and Circuit Theory.

Requests for speakers and further information should be made to Dr. Peter D. Edmonds, Administrator, Technical Services, IEEE Headquarters, 345 E. 47th St., New York City, N.Y. 10017. Phone (212) 752-6800 X333, or to coordinators of Group and Society Programs.

Section officers are encouraged to publish this information in Section Bulletins with a request that members make their preferences known to the Section Program Chairman.

February 1972



RECOMMENDED NOMINEE FOR IEEE SERVICE

NOMINEE RECOMMENDED FOR: (indicate office, committee, board)

Before filling in, please read Guidelines on reverse side.

NOMINEE _____
 First Name Middle Initial(s) Last Name

MAILING ADDRESS _____

BUSINESS AFFILIATION _____
 Name of Company

Company Address Telephone Number

Title or Position in Company

Indicate present type of work: research, development, sales, teaching, etc.

IEEE RECORD: Present Membership Grade _____

*Offices Held (with dates) _____

*Medals, Prizes, Awards _____

Other _____

* If available to nominator.

OTHER INSTITUTE AND SOCIETY MEMBERSHIPS AND GRADES _____

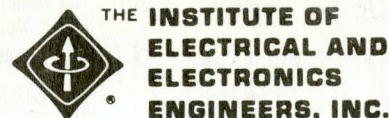
COMMENTS BY NOMINATOR: Give an outline of the nominee's specific qualifications for the nomination or appointment here (use separate sheet if necessary).

Date

Name of Nominator

Telephone Number

Address



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

345 EAST 47TH STREET, NEW YORK, N.Y. 10017 AREA CODE 212 752-6800

GUIDELINES FOR RECOMMENDING NOMINEES FOR SERVICE TO THE IEEE

This form shall be used in submitting the names of nominees to be considered for the elective offices of the IEEE (President and Vice President) and for recommending appointments to the IEEE Committees and Boards. The completed form shall be mailed to the Staff Secretary of the Nominations and Appointments Committee at IEEE, 345 East 47th Street, New York, New York 10017.

The general qualifications for service to IEEE are not different from those in any position of responsibility and trust: competence, experience, willingness to take on the task, availability of time to participate, enthusiasm, and vigor. In the absence of such qualities, it is unwise to recommend a candidate merely as a reward for past service. In fact, if past service indicates that the candidate does not have the competence suitable to the task, he should not be proposed.

Competence implies knowledge and ability to serve creatively and actively, not merely passively. The responsibilities of the IEEE Directors and the tasks of the various Standing Committees and Boards are described in the IEEE Bylaws, and these should be consulted if the nominator is not certain of the tasks to be performed. Two types of competence are involved, technical and administrative. Few candidates possess both in equal measure, but every nominee should be strong in at least one of these, depending on the task he will be called on to perform. The technical tasks require knowledge of one or more engineering or scientific fields and the ability to make sound judgments. Administrative tasks involve the judgment of men and organizational operations, and the ability to develop appropriate Institute policies and objectives.

In judging candidates on the basis of experience, prior work in Institute affairs is, of course, important but should not outweigh ability. Since new vitality must be brought into the IEEE organization, equivalent experience outside the Institute (as in other organizations, or in connection with the candidate's professional employment) should be taken into account. In many cases a candidate, having no experience bearing specifically on the task, may be suitable if he is highly competent, since he will soon "learn the ropes."

Willingness to serve is, of course, essential. There is no rule against a nominee being consulted by the nominator to ascertain this. However, since candidates are proposed from many sources, the Executive Committee and Board may have more candidates than there are open positions. When consulting nominees, therefore, it should be made clear that he cannot be assured of appointment.

Availability of time to participate is, usually, an important consideration in the candidate's willingness to serve. Committee service is so vital to the welfare of the Institute, that most industrial, academic and governmental organizations recognize its importance and the comparatively small time required (compared with the working year) can be justified. A perfect attendance record at Committee meetings is seldom achieved, even by the Chairman. Moreover, specially gifted Committee workers can contribute far more ideas and wisdom in a few meetings than does the less able member who makes attendance a fetish.

Enthusiasm, vigor and creativity are, we believe, among the most important considerations. One of the troubles experienced by all professional societies is the tendency to populate committees with senior statesmen who, however distinguished, are out of touch with present challenges and opportunities. Electrical and electronics engineering is a fast-moving profession, and the Institute needs a continual infusion of new ideas. Much of this must come from younger men, although chronological age is not necessarily an indicator of a youthful attitude of mind, nor of current involvement in the affairs of the profession.



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Other _____

* If available to nominator.

OTHER INSTITUTE AND SOCIETY MEMBERSHIPS AND GRADES _____

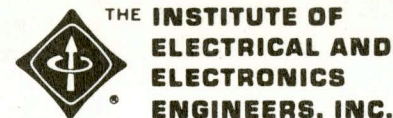
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Date

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Telephone Number

Address



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Willingness to serve is, of course, essential. There is no rule against a nominee being consulted by the nominator to ascertain this. However, since candidates are proposed from many sources, the Executive Committee and Board may have more candidates than there are open positions. When consulting nominees, therefore, it should be made clear that he cannot be assured of appointment.

Availability of time to participate is, usually, an important consideration in the candidate's willingness to serve. Committee service is so vital to the welfare of the Institute, that most industrial, academic and governmental organizations recognize its importance and the comparatively small time required (compared with the working year) can be justified. A perfect attendance record at Committee meetings is seldom achieved, even by the Chairman. Moreover, specially gifted Committee workers can contribute far more ideas and wisdom in a few meetings than does the less able member who makes attendance a fetish.

Enthusiasm, vigor and creativity are, we believe, among the most important considerations. One of the troubles experienced by all professional societies is the tendency to populate committees with senior statesmen who, however distinguished, are out of touch with present challenges and opportunities. Electrical and electronics engineering is a fast-moving profession, and the Institute needs a continual infusion of new ideas. Much of this must come from younger men, although chronological age is not necessarily an indicator of a youthful attitude of mind, nor of current involvement in the affairs of the profession.



OPERATING GUIDELINES FOR THE IEEE PRESS

(Proposed)

General

1. Books must be sponsored by an IEEE Group (or Society), the EAB or the IEEE Press. Individuals cannot be sponsors.
2. The sponsor of books proposed by a Group will be that Group.
3. The sponsor of books proposed by EAB as part of EAB course material will be the EAB.
4. Books proposed by the IEEE Press, or by individuals to the IEEE Press, that fall predominantly in the field of one Group will be referred for further consideration to that Group as the most appropriate sponsor. Said books that overlap the fields of several Groups without falling predominantly into the field of any one Group will be sponsored by the IEEE Press, or at the option of the IEEE Press co-sponsored by several groups. The IEEE Press reserves the right to sponsor books referred to Groups when they fail to act on or decline to sponsor.
5. It is not the policy of the IEEE Press to distribute surplus or make payments to any other entities except sponsors or reprinted journals. If sponsors feel that payments to other entities, such as authors or editors, are required, that is a matter to be financed and arranged by the sponsor, not the IEEE Press.
6. All books issued under the IEEE Press imprint are subject to review and acceptance by the IEEE Press Editorial Board.

Reprint Books

7. Publication of all reprint books will be handled by the IEEE Press itself and the IEEE Press will assume full financial responsibility for reprint books. However, it can decline to publish books it feels are not marketable. In such cases, assuming the books are otherwise acceptable, the IEEE Press will offer the sponsor the option of assuming full financial responsibility.
8. For reprint books, the surplus will be distributed 50% to the sponsor, 30% to the reprinted IEEE publications, and 20% to the IEEE Press.

Original Texts

9. Publication of all original texts will be handled through the IEEE Press and carry its imprint, and the IEEE Press will either publish the texts by itself or arrange to do so through a commercial publisher.
10. The IEEE Press will not normally assume any financial responsibility for original texts. Such responsibility will normally be assumed by the sponsor if the IEEE Press publishes the book itself, or by the publisher if handled through a commercial publisher.
11. The distribution of IEEE surplus from original texts will be distributed as follows: for texts financed by the IEEE Press, 50% to the IEEE Press and 50% to the sponsor; for texts financed by the sponsor or a commercial publisher, 15% to the IEEE Press and 85% to the sponsor.

TYPESETTING & FORMATTING
BY COMPUTER-CONTROLLED AUTOMATED MACHINERY
(From December 1971 IEEE Transactions on Engineering Writing & Speech)

READERS of this issue of the EWS TRANSACTIONS will find a new typeface and perhaps will notice subtle format changes. This is the only visible evidence that the current issue has been typeset and formatted by computer-controlled automated machinery. It is the gratifying culmination of planning that started more than five years ago, when the IEEE first considered the possibility of computer typesetting for its TRANSACTIONS. The August 1968 issue of this TRANSACTIONS was devoted to the theme "Computer-Aided Engineering Documentation" and the status and applications of computer technology at that time were presented.

The idea was brought closer to fruition in the fall of 1969, when the IEEE Board of Directors asked the President to establish a blue ribbon committee on electronic methods of publication. The committee was organized under the Publications Board with Paul Gray (now Chancellor of M.I.T.) serving as Chairman. The IEEE staff recommended that the EWS TRANSACTIONS, which is largely nonmathematical, be selected initially for the new technique.

Computerized typesetting by now is not new. However, its relative cost and its tradeoff of technical advantages made it more practical, in the past, for documents of repetitive issue that changed only partially in contents or for computer-manipulated information in list or matrix form. A symposium on "Where is Technology Leading Communications?", held by the EWS Group in 1969, devoted time to discussing the state of computerized production. In the August 1969 TRANSACTIONS, which carried papers from this symposium, Eleanor McElwee wrote in the Preface:

In view of the subject matter of the Conference, some thought was given to producing this record by means of the computer-based technologies described. However, the editors learned that the advantages of these new systems are not purchased cheaply; both the cost and time estimates obtained from several of the companies represented were in excess of the figures based on more conventional methods. As a result, a compromise was made—the text was produced by an IBM Selectric Composer from magnetic tape, and page make-up was handled by conventional mechanical means.

Now, advances in the technology and its application have reduced production costs—at least for a journal like our TRANSACTIONS—to a figure competitive with those of methods used until now and considerably more of the production of this issue was computerized. The text was still conventionally edited to IEEE style at New York Headquarters and then sent to the George Banta Company in Wisconsin for production. There, it was first routed to a composer-formatter, who marked it for key-

boarding. The markings included regular typesetting considerations, such as typeface, column measure, special character handling, headings, footnotes, etc. He also prepared paging instructions, so that page proofs and, eventually, camera-ready copy would be automatically printed out. The paging instructions included the amount of type to fill a page, the spacing of heads, the placing of footnotes and illustrations, and considerations peculiar to the EWS TRANSACTIONS. (For a detailed description of a similar technique, see the paper by J. L. Pierson, "A Computer Program for Electronic Typesetting," in the June 1971 issue.)

The manuscript then was "typed" on an MT/ST Selectric Typewriter; in addition to appearing as hard copy, the text and all coded commands were recorded on a magnetic tape cartridge. The hard copy was then proofread and corrections were typed to replace incorrect data on the tape.

A cartridge reader then translated the magnetic information into IBM 360/40 language to permit IBM's "Pagination/360" Program to justify lines, place hyphens, and ready the text for output in galley or page form, whichever is requested. This information was retrieved and written on a magnetic tape that serves as a drive for the Harris Fototronic CRT. This device produces continuous typeset galleys or pages on either photosensitized paper, which can be used as camera-ready copy, or film, in either right-reading or wrong-reading images, on rolls up to 475 feet long. The resultant copy is then cut into sections at either galley or page breaks. Galley and page prints are duplicated as necessary on a dry copier when more proofs are required.

Since successively corrected galleys or pages can be automatically typed out of the computer as hard copy for review, all changes can be made and verified in context before any film is exposed and the costs of cutting and stripping of film to make corrections are eliminated.

Our confidence in modern technology leaves us with the conviction that the adaptability and the economics of computerized production will become increasingly more favorable in the near future. This issue could be the bellwether for not only future EWS TRANSACTIONS, but for other IEEE TRANSACTIONS and publications as well.

The editors welcome any comment by readers on the techniques used and the appearance of the issue.

CAROLYNE ELENOWITZ
Senior Editor,
EWS Transactions

H. JAMES CARTER
Managing Editor,
IEEE Transactions



Technical Activities Board

NEW TITLES FOR IEEE GROUP/SOCIETY OFFICERS

The IEEE Board of Directors at its first 1972 meeting approved editorial changes in numerous Bylaws to reflect the change in title to President and Vice President for the principle officers of IEEE Groups and Societies.

We have in stock Society President tie bars in Senior Member and Fellow Grades. We also have some Group Chairmen pins and tie bars. Past Chairmen may wish to order these for nostalgic reasons in basic lapel pin form or as tie clasps or other special arrangements.

PRICES FOR SPECIAL PUBLICATIONS AND OTHER PRODUCTS

In 1971, the TAB Publications Committee developed a schedule of prices for all TAB products. This schedule has now been expanded to cover practically all IEEE products. Please note that this tabulation does not take care of special situations, for example, co-sponsorship of a conference in which special arrangements will be made between the co-sponsors for bulk sales. Any questions of this nature should be referred to the appropriate headquarters staff Director.

IEEE Prices For Single Sale Items

- Note: 1. All prices and discounts are based on non member list prices.
2. Microfiche versions, when available, at same price as hard copy.

Item	Member Discount	Discount on Volume Orders (of any item)	
Standards	25%	10- 49	10%
		50- 99	20%
		100-499	30%
		500-999	40%
		1000+Negotiable	
Conference Publications	25% (Regions 1-7)	20	20%
		50% (Regions 8-10)	
OOPS: Soft Cover	-	10%	
Hard Cover	-	-	
Reprints	25%	20	20%
Preprints	25%	20	20%
Bound Transactions	25%	20	20%
Transactions and Journals	50%	20	20%
Spectrum and Proceedings	50%	20	20%
JTAC Publications	50%	20	20%
Cassette Colloquia	40% (rounded to closest \$)	20	20%

IEEE Press (Cloth bound)	25%	None
IEEE Press (Paper bound)	None	None
Microfilm of IEEE Publications	None	None
Binders	None	None

Note: The 10% dealer and subscription agency discount on single sale items will be discontinued.

TERMINATION OF THE TAB COMMITTEE ON COMPUTER AIDED DESIGN

This activity started as the CAD Committee and in relation to the CADAR, a special list of several thousand interested IEEE members was compiled. At its February 1970 Meeting, TAB voted to discontinue the CADAR Newsletter. The continuing CAD Committee made a special effort to encourage interested Groups to initiate internal programs and other activities to handle their respective Computer Aided Design Applications. At its January 11, 1972 Meeting, TAB OpCom concluded that there was no need to continue the CAD Committee. IEEE Groups/Societies desiring an extension with respect to CAD Applications in the future would contact the Division V Director.

Special thanks are due to Dr. Harlow Freitag, Stephen Young, and Dr. George Zobrist and other members of the TAB Committee for their interest and willingness to help.

MANAGEMENT TRAINING SEMINARS DURING INTERCON '72

Please note that two Management Training Seminars are being planned during INTERCON/'72 by members of the Washington Chapter of the Engineering Management Group. These events will be held at the Abbey Victoria Hotel which is located at 7th Avenue and 51st Street. Tentatively, the Seminars are scheduled as follows:

Chapter Chairmen - Tuesday, March 21

Group/Society AdCom Members: - Wednesday, March 22

The Group/Society AdCom Seminar will be an intensive one-day affair with an informal orientation session the preceding evening, the Chapter Chairmen seminar will be held for one/half day only.

For further information contact the Chairman of the TAB Management Training Committee:

Mr. Joseph Campagna
Assistant Director, Administration
Harry Diamond Labs
Connecticut & Van Ness Street, N.W.
Washington, D. C. 20438
(202) 896-9031

CHANGES IN NAMES OF IEEE GROUPS AND SOCIETIES

Actions by the IEEE Board at its November 18-19 Meeting and the IEEE Executive Committee at its December 17 Meeting have resulted in the establishment of a total of seven IEEE Societies and name changes involving one Group and two of the new Societies. As quickly as possible IEEE documents will be revised to show that the former IEEE Engineering, Writing, and Speech Group is now the Group on Professional Communication. A re-statement of the Field of Interest accompanied the name change as follows:

"the study, development, improvement, and promotion of effective techniques for preparing, organizing, processing, editing, collecting, conserving, and disseminating any form of information by and to individuals and groups by any method of communication. It also includes technical, scientific, industrial, and other activities that contribute to the techniques and products used in this field."

The following is the list of the seven IEEE Societies; those with name changes are indicated with an *:

Computer

Communications*

Control Systems*

Industry Application* (formerly Industry & General Application)

Magnetic

Power Engineering

Systems, Man & Cybernetics

VOLUNTARY PAGE CHARGES

The IEEE Board of Directors at its November 18-19 Meeting approved a revised and up-dated statement on Voluntary Page Charges as follows:

Page Charges are based on the philosophy that the usual research or development project is complete only when the results have been disseminated to the engineering and scientific community, and that it is thus proper that the financing of the project include funds to support, in part, the cost of publication. IEEE technical journals, being important vehicles for reporting new technical results, are therefore authorized to adopt page charges under the following policies and conditions:

1. The adoption of page charges by a publication is at the option of the publication and requires the advance approval of the Publications Board and the Technical Activities Board.
2. The payment of page charges is entirely voluntary. It is not to be a factor in the consideration or processing of a paper or a prerequisite for publication.
3. Page charges are levied against the author's institution, not the author.
4. The page-charge rate is established by the IEEE Executive Committee and is based on the set-up costs of publication, including editing and composition. There are three

page-charge rates corresponding to the three basic publication processes employed by IEEE publications, namely, (1) justified composition with full editing, (2) unjustified composition with minimal editing, and (3) author-typed manuscripts. All publication within a given category must charge the rate established for that category.

5. Authors whose institutions pay the page charge are provided 100 free reprints per paper at the expense of the journal.

6. Conference Records and Digests do not qualify for page charges. However, conference publications are permitted to establish reasonable maximum length limits for material and to charge authors an appropriate printing fee for each page in excess of that limit.

The page charge rates for 1972 were set at the November 18 meeting of the IEEE Executive Committee Meeting as follows:

1. Justified composition with full editing \$60 per page
2. Unjustified composition with minimal editing \$40 per page
3. Author-typed manuscripts \$15 per page

The expenses related to the administration and collection of page charges and the fulfillment of the 100 reprints furnished are essentially a fixed amount of \$9 per page, regardless of the voluntary page charge rate that applies to a particular page.

At the meeting of the Executive Committee January 13 - 14, 1972, John Guarrera was appointed Government and Economic Coordinator for Regions 1 through 6.

The Executive Committee suggested that all individuals and committees actively engaged in pursuing the development of potential programs in the socio-economic-professionalism areas should all send copies of their minutes and other documented activities to:

Mr. JOHN J. GUARRERA, President
Guide Scientific Industries, Inc.
11855 Wicks Street
Sun Valley, California 91352

and to

Mr. JOHN M. KINN, Director
Educational Services
IEEE - 345 East 47th Street
New York City, New York 10017



LABEL, PRINTING AND MAILING CHARGES

IEEE DEPARTMENTS, SECTIONS, BRANCHES, GROUPS AND CONFERENCES SPONSORED ONLY BY IEEE

1. Member Name and Address Selections

a) Four Across labels	\$10.00 per 1,000
b) One Across labels	\$30.00 per 1,000
c) Four Across Roster	\$13.00 per 1,000
d) One Across Roster	Obtain Price Quote

2. Mail Room Labor

If certain minimum conditions are met we may use automatic equipment for insertion of material, affixing the label, and applying the postage to the envelope. The minimum quantity for use of the automatic equipment is 1,000 pieces.

Affixing: Affixing labels on quantities in excess of 1,000 can be done on automatic equipment providing they are Cheshire and not Avery labels. Avery labels must be applied by hand and this service is therefore subject to the hourly rate of \$5.75.

Sorting: All second and third class Non-Profit mail must be sorted manually into five groups (Post Office regulations - details below), and this service is therefore subject to the hourly rate of \$5.75.

Inserting: The inserting machine will accept envelopes ranging in size from 3 1/4" X 6" to 6" X 12". The paper must be 20 lb. stock or better. The maximum number of inserts is six. Each single enclosure must be at least 3" X 5" in size but smaller than 6" X 12". Any other inserting jobs will be handled manually at the \$5.75 per hour rate.

The following are the rates for automatic equipment:

a) Affixing Cheshire Labels	\$3.00 per 1,000
b) Inserting and Mailing	\$6.00 per 1,000
c) Affixing, Inserting and Mailing	\$8.00 per 1,000

3. **Printing Labor** (including stapling, collating, etc.) \$8.00 per hour
Cost of materials (see reverse side) will be billed in addition to the labor charge.

U. S. POSTAL SERVICE - REQUIRED SORTING AND MAILING REGULATIONS

The following are the U.S. regulations which apply for sacking, labeling and dispatching second and third class matter. When there are six or more (ten for third class) individually addressed pieces to the following described destinations, they must be securely wrapped or tied together as a package by the mailer. Each sack must be labeled as to its designation. Mail must be sorted into the following categories:

1. **Five-Digit Zip Code Packages:** The mailer must package all pieces which are addressed to the same five digit Zip Code delivery unit. The pieces must be faced in the same direction.
2. **Mixed City Packages:** Mail bearing the same first three digits of the Zip Code for a city must be combined into a package and labeled "Mixed City" (same city with different Post Office districts).
3. **Sectional Center Facility (SCF) Packages:** After all warranted five-digit Zip Code and Mixed City Packages have been prepared, the pieces remaining for Post Offices in a sectional center must be combined into a package and labeled "Mixed SCF". These are pieces with the same first three digits of the Zip Code but going to different cities.
4. **State Packages:** The pieces remaining for a State must be combined into a package and labeled with the name of the State.
5. **Mixed State Packages:** Pieces remaining after the above packages have been prepared must be combined into a package and labeled "Mixed States".

- See Reverse Side -

STATIONERY COSTS

	<u>MAT</u>	<u>COST PER MAT</u>
Medium Run - Plain		\$.12
	<u>PLATE</u>	<u>COST PER PLATE</u>
Chief 22 - Aluminum		\$ 2.50
	<u>PAPER</u>	<u>COST PER 1,000</u>
8½ x 11 Plaza Xeralith		\$ 2.50
8½ x 11 Multilith Plaza Xeralith - Emblem		5.00
8½ x 11 Mead Cockle - Letterhead		7.00

	<u>ENVELOPES</u>	
<u>CODE NO.</u>	<u>DESCRIPTION</u>	<u>COST PER 1,000</u>
G-2	Third Class # 10 with printed indicia for Permit # 8021	\$ 5.00
G-9	First Class business reply (blue) for Permit # 1332	14.50
G-12	Colored blue inside for ballot privacy 7½ x 3½	6.00
G-13	Return Envelope for G-12	6.50
G-18	Business reply 8¾ x 4, First Class Permit # 1332	6.00
G-20	First Class # 10, 9½ x 4¼ with IEEE corner card	5.00
G-21	Third Class # 10, 9½ x 4¼ with IEEE corner card	5.00
G-22	Third Class postage saver with spot of gum 9-3/8 x 4-1/8	7.00
G-23	Sections envelope with just IEEE # 10 First Class	5.00
G-27	Printed 8¢ Government # 10 envelope	95.00
G-33	Printed # 10 Air Mail	9.00
K-2	10½ x 7½ corner card, gummed flap and clasp	18.00
K-3	9 x 12 corner card, gummed flap and clasp	19.00
K-7	9½ x 12¼ corner card, gummed flap and clasp	20.00
K-10	10 x 13 corner card, gummed flap and clasp	21.00
K-11	14½ x 11¾ no corner card, gummed flap and clasp	24.00

EXCERPTS FROM IEEE POLICY STATEMENTS

6 - "MAILING LISTS"

IEEE membership mailing lists, whether obtained through IEEE Headquarters or through a local Section, may be used only in connection with normal IEEE-sponsored activities, and may not be used for electioneering in connection with any office within the IEEE, or for any political or commercial promotions. Any requests to Headquarters for a mailing list shall state the purpose for which the listing is to be used. A request for an exception to the above rule may be submitted to the IEEE General Manager.

6 B.3

3. Requests for labels by institutions and organizations with scientific, technical and educational goals, as defined in Section 501 (c)(3) of the 1954 IRS code, may be honored provided:
- The total number of names requested by an outside entity shall not exceed 20% of the total IEEE membership except students.
 - If feasible, mailings shall be handled through the facilities at IEEE Headquarters. If not feasible, the requesting entity shall have pledged the list will be used only for mailing purposes and that procedures, satisfactory to the IEEE General Manager, will safeguard the sanctity of the list.
 - Responsible IEEE officers or staff shall have reviewed each case and recommended approval to the IEEE General Manager or his deputy.

EFFECTIVE DATE: February 1, 1972
(These prices are guaranteed only for three (3) months beyond effective date; subject to change thereafter.)

PUBLICATION NEWS

SPECTRUM FEATURES: President Tanner will contribute importantly to "Inside IEEE" during 1972 beginning in Jan., p. 7, as President Mulligan did in '71. . . February Spectrum, p. 33, will carry the essence of TAB's Cory Report on "Application of Electrotechnology to Social Problems." . . An ad in January Spectrum, p. 110, offers full information about microfilm of backdated and annually updated volumes of AIEE/IRE/IEEE publications. (E.E. Dec., p. 6.) These contain not only editorial but also advertising pages where they appeared and will appear, thus increasing usefulness in tracing state-of-the-art chronologically.

IEEE PRESS. See Spectrum, Jan., pp. 5, 10. Operational guidelines for IEEE Press activity have been tentatively adopted; they are reproduced on p. 4E for information of Groups, Societies, and other units which may consider sponsorship of a book.

COMPUTER TYPESETTING for IEEE publications was moved one step forward by printing of the IEEE Transactions on Engineering Writing & Speech for Dec. '71 by that method. On p. 4F we reproduce the editorial lead for that issue; it explains the process for all interested. The experiment's success has justified continuation through 1972. Experiments will next extend to the more difficult task of producing pages of other journals that contain complex equations.

"IEEE STANDARD DICTIONARY of Electrical and Electronics Terms" (E.E. Dec. '69, p. 4) is in its final stages of typesetting. Publication is expected in March in time for Intercon '72. IEEE members' price will be \$14.95.

PAGE-CHARGE RATES. Reference, Statement of Policy #31, Sec. 4 (E.E. Dec., p. 4D). Page prices corresponding to IEEE's 3 basic publication processes have been set: justified composition with full editing, \$60; unjustified composition with minimal editing, \$40; author-typed manuscript, \$15. (Information, Woody Gannett)

E.E. No. 39-5

EDUCATION NEWS

MANAGER OF CAREER DEVELOPMENT, whose duties under the Director Educational Services were described in E.E. Oct., p. 5 and Spectrum, Oct., p. 10, has been engaged in the person of Joseph E. Casey. See Welcome Aboard, below. (Press release, Jack Kinn)

ONE-DAY SHORT COURSES-FOR-FEE to be offered in Intercon '72 are: Mar. 20, Frequency Synthesis—Applications & Techniques; Mar. 21, Computer-Aided Network Analysis & Design; Mar. 22, Active Inductorless Filters—Theory & Practice; Mar. 23, Introduction to Modern Control Logic; Mar. 24, Integrated Circuits—A Conceptual Approach. (Particulars, Jack Kinn)

MASTER'S ACCREDITATION. BofD in November reaffirmed its 1968 position in favor of evaluation and accreditation, by the Engineers Council for Professional Development (ECPD), of both the basic (baccalaureate) and advanced (Master's) level programs in the electrical-electronics discipline.

CONFERENCE NEWS

INTERCON '72—the big IEEE "March Convention" approaches. January Spectrum carried the general features and full technical program. February and March Spectrums will contain more information and list exhibitors and exhibits. A January Advance Guide mailing has gone out to all members in the New York metropolitan area. Innovations at Intercon '72 were mentioned in E.E. Aug., p. 5; Oct., pp. 5-6; Dec., pp. 6-7.

Of last March's 35,228 registrations, 8,675 were IEEE members. The remaining 26,553 represent IEEE's maximal one-stand annual impact upon non-member fellow workers on the outside of the Institute but very much on the inside of the industry, including 7,816 in the exhibitors' organizations. Taking into account the mix of information picked up by ear and by eye and by a myriad of personal contacts, Intercon is one of IEEE's major operations.

The convergence of working members—E.E.'s readership—on New York make the

February 1972

Convention a focal point for holding meetings of an organizational-unit nature. The solid work of the Institute takes a quantum jump in March due to the interlock between units holding meetings within a few days. (The same phenomenon recurs in Regional meetings and Group/Society conferences. Only in the aspect of size and scope is Intercon unique.)

There will be management training seminars to help newly-elected Group/Society AdCom members and Section/Chapter officers. . . Several Regions will hold meetings. For Section Workshop, see below.

CONFERENCE BOARD. (Bylaw 306; E. E. Feb. '71, p. 3). Normal paired terms are for 3 years ending Mar. 31 following each year's Convention, as follows: 1972 Intercon, Harper Q. North, Theodore A. Smith; 1973, Seymour W. Herwald, Walter E. Peterson; 1974, Franklin H. Blecher, Carroll G. Killen, Jr.; 1975 Clarence J. Baldwin, Frederick T. Van Veen. Assignments are:

	Intercon	
	1972	1973
Chm. Conference Board	North	Peterson
Chm. Executive Com.	Smith	Herwald
Meetings Director	Herwald	Blecher
Exposition Director	Peterson	Killen
Member (TAB liaison)	Blecher	Baldwin
Member (RAB liaison)	Killen	Van Veen
Staff Director of Convention & Exposition Services:	Bill Hilty	

AN INTERCONVENTION BOARD, comprehending INTERCON, NEC Chicago, WESCON West Coast, IEEC (International Electrical & Electronics Conference, Toronto); and NEREM Boston, maybe in the making as a result of a meeting in Chicago of board members and these convention representatives in November. ExecCom-approved purposes are: to optimize financial results for members and exhibitors; to strengthen Regional activity through more positive IEEE identification and support; to make the conferences more meaningful to members. IEEE Statements of Policy and Bylaws are being framed for cooperative measures within these conferences' governing bodies. BofD in March will consider recommendations.

ROTATION OF INTERCON FUNCTIONS. ExecCom and the Conference Board are cooperatively considering a proposal that, instead of a concentration at Intercon, certain functions, like Fellow awards, honors, and Directors' reception, be rotated (on invitation) among Intercon and the major Regional conferences anywhere in the world. Recommendation will go to BofD.

LIFE MEMBERS will enjoy special privileges and program at Intercon '72, as in the past. . . Dr. F. E. Terman, chairman Life Member Fund Committee, has arranged with Wescon to extend similar courtesies to Life Members, beginning this September at Los Angeles.

REGION AND SECTION NEWS

SECTION WORKSHOP will occupy a full day on Wednesday of Convention week. See Middleton (Philadelphia) in action. Hear Tanner; Hogg (Kitchener-Waterloo) on Section publications; Mulligan on planning; Goldberg (Region 1) on Section programs; Chestnut on finances.

Various Regional Committee meetings are scheduled for Tuesday afternoon.

REGIONAL OFFICES have been established at 3600 Wilshire Boulevard, Los Angeles—Gerald M. Goldenstern, Manager; and at 7061 Young Street, Willowdale, Ont.—George G. Armitage, Manager. These are REMSEF experiments for 1972.

U. S. ACTIVITIES COMMITTEE (USAC). This new committee of RAB consists of the Directors of Regions 1-6, and the elected Vice President as chairman. By invitation, Divisional Directors will attend its Feb. 16 meeting.

OUTSTANDING-LECTURER TOURS. (Spectrum, June '71, p. 7; E. E. Dec., p. 7.) A list has been compiled. See pp. 4M-4N, this E. E. Next step is for interested Section chairmen to get in touch with Peter Edmonds at IEEE preferably by telephone, rather than with the speakers.

STUDENT NEWS

STUDENT DUES IN REGIONS 8-10. Sections desiring to do so may subsidize any portion of the \$8 Student dues. The fact that Israel Section had chosen to do so came to the favorable notice of the November BofD.

HIGH SCHOOL ENGINEERS-IN-EMBRYO, calling themselves R. E. S. I. S. T. O. R. S. (E. E. Feb. '70, p. 7) use Princeton University facilities and computers; and hold technical sessions and exhibits at the Spring Joint Computer Conference in Atlantic City. These boys, typical of others elsewhere, are so fired up on computer-implemented gaming algorithms, new interfaces and peripherals, artificial intelligence, and computer graphics, that they can hardly wait.

We can hardly wait. The world can hardly wait.

TOOLS AND AIDS

ORGANIZATION ROSTER, March '72, is expected to be distributed on time—i. e., before Intercon '72. (Copy, Emily Sirjane)

The Roster answers authoritatively more questions about the Institute than you can shake a stick at. The new one will reflect January changes in personnel.

MEMBERSHIP BROCHURE, re-titled "IEEE Membership & Services," has been updated. Available as a general prospectus in February. (Copy, Emily Sirjane)

NCET/IEEE GROUP FLIGHTS. (E. E. Apr. '71, p. 7; June, pp. 4I, 5.) Members may obtain 1972 IEEE Group Flight schedules, fares; U. S. domestic, international; by writing National Center for Educational Travel, Inc., 1601 Connecticut Ave., N. W., Washington, D. C. 20009; phone (202) 232-2077.

"FOR YOUR INFORMATION"

TRAVEL AND U. S. INCOME TAX. See E. E. Dec., p. 8. Don T. Michael, Cincinnati,

a power in Power, says: "I have been deducting such unreimbursed expenses for over 10 years and have survived 2 audits without losing a cent." Deductions for IEEE business (and not for accompanying dependents) included rail, air, bus, and taxi; 6-cents-a-mile plus parking and tolls for personal car; room charges, meals, telephone; registration and papers costs. For protection, keep hotel and other receipts and backsheets of plane tickets; a running record of unreceipted expenses. List location, date, and expenses of each meeting in the same way you would if reporting to an employer for reimbursement, and file with I. T. return, listing total deduction under "Contributions" and referring to attachment for details.

IEEE's counsel recommends that members consult their individual tax advisors for instruction.

PEOPLE WHO WRITE IN get their names in the paper. This is no incentive—it's a fact.

HOSTING VISITORS FROM ABROAD. The Guidelines, as printed in E. E. Dec., pp. 4K-4N, 7-8, have been importantly revised. (Members and units concerned should write Jack Kinn for updated Guidelines.)

HOLIDAYS, 1972. Headquarters will be closed Feb. 21, May 29, July 3-4, Sept. 4, Oct. 9, Nov. 7, 23-24; Dec. 25. Meetings programmers have to watch for other and local holidays; see almanacs. Easter '72 falls on Apr. 2; Yom Kippur, Sept. 10.

STAFF CHANGES IN ACCOUNTING. Tommy Bartlett has been made Assistant to the Treasurer. His place as Accounting Manager has been taken by William I. Zuckerman (see Welcome Aboard).

JOHN L. CALLAHAN RETIRES. On Don Fink's staff professionally as consultant since Merger, John, by recent retirement, has regained his amateur standing.

His career, in electrical communication and with IRE/AIEE/IEEE, man and boy, was so closely intertwined with that of Y^e. Ed that we were sometimes

confused as the left- and right-hand Smith Brothers.

Sit pretty forever, Cal—you be Trade, I'll be Mark.

HERE WE RUN A "TAUT SHIP."

"The sailors cursed the ship, the sea, and God, /And most of all cursed me; shaking their fists /As we surmounted one wave after another. /Yet, when the stormsail went, they had a second /Rigged and in place, bent like a pistol shot, /And every groaning line held to its utmost, /Watched by Druid eyes. At last as night /Swirled down upon us and the storm redoubled /Maniacal, blind force, those seamen knew /Just at what instant by one hair of balance /I was to be relieved. One took the helm /Transferring from my tension to his own /With gradual hold the uninterrupted course, /And as I went below, the little ship /Fought on, her shoulders braced by Breton fury."

Robert Hillyer, "Death of Captain Nemo," Alfred A. Knopf, 1949.

TANNER MEETS HODGSON. President Robert Tanner along with presidents of six other leading engineering societies met Secretary of Labor J. D. Hodgson and other high Manpower Administration officials in January to discuss efforts to find jobs for engineers. Two immediate steps are being taken: launching a general information program to emphasize the role engineers and scientists can fill; and stepping up its campaign to tell employers how the Labor Department's training and placement programs work. (See Inside IEEE, Spectrum, Feb., p. 7.)

WELCOME ABOARD!

Quarter-deck: Flourishes, sideboys, for 7 new Directors: Cory, Dausman, Goldberg, Hinton, Hobbs, Obregon, Stern. Fanfare for 4 coming aboard wearing new braid: Cambias, Dillard, Fink, Van Valkenburg.
New Section: Hong Kong—the entire Crown Colony.
New Subsection: Bangalore Subsection of India Section, comprising the State of Mysore, India.

New Group/Society Chapters in Sections:

Dallas Section: Medicine & Biology Group Chapter.
India Section: Power Engineering Society Chapter.
Phoenix Section: Industry Applications Society Chapter.
Monterrey Subsection of Mexico Section: Power Engineering Society Chapter.
New York, Long Island, North Jersey Sections: Joint Circuit Theory Group Chapter.

Staff:

Joseph E. (Joe) Casey (SM '63) becomes Manager, Career Development, a new position on Jack Kinn's staff. He's a past-chairman of Philadelphia Section; has been vice chairman of EAB, and chairman of Admission & Advancement and Membership & Transfers committees. He will continue volunteer and consulting activities with American Society for Engineering Education, Instrument Society of America, Rutgers University, U. S. Office of Education and various Pennsylvania educational projects. He comes from Bryn Mawr, Pa.; Drexel, Northwestern, U. S. Navy, Leeds & Northrup, Fischer & Porter.
William I. (Bill) Zuckerman, Accounting Manager on Bill Keyes' staff. He graduated in Business Management from Fairleigh Dickinson University where he has also done graduate work. A member of the National Association of Accountants, he was Assistant Controller of the Inmar Corporation. Because of the topnotch job he has done since joining us in October, Bill has become known as the "WIZ KID."

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