

HERZ TO SUCCEED EMBERSON AS GENERAL MANAGER

Eric Herz, currently Vice President for Technical Activities, will succeed Richard M. Emberson as IEEE General Manager on Jan. 1, 1979. Mr. Herz is a senior project engineer at the Convair Division of General Dynamics, San Diego.

Mr. Herz has stated that his primary goal will be to communicate IEEE members' needs to the staff so that it can serve those needs "effectively and courteously.

"I want the members to know that, should they ever have a complaint—especially one that has not been resolved reasonably—I want to hear about it," he says.

Mr. Herz has been an IEEE member for 22 years and a volunteer since the 1950s. He served on IEEE Board of Directors as Division III Director in 1976 and 1977. The many IEEE Committees and Boards on which he has served include those concerned with energy, computing, finance, and nominations and appointments. He was a San Diego Section Chairman, an officer of Region 6, and President of the IEEE Aerospace and Electronic Systems Society.

IEEE ELECTION RESULTS

In the recent IEEE election, Jerome J. Suran won the Presidency over Irwin Feerst. Mr. Suran will take office Jan. 1, 1979.

Mr. Suran has served on the Board of Directors since 1976, first as Vice President for Publication Activities (1976-77), then as Vice President for Educational Activities (1978). In addition, he has been Chairman of the Syracuse Section (1970-71) and has chaired a number of IEEE technical committees. His two decades as an IEEE volunteer have included work with 13 IEEE Boards, Committees, and Subcommittees.

The winners of the nine other races for seats on the Board of Directors are:

- Leo Young—Executive Vice President
- William C. Farrell—Region 2
- Peter A. E. Rusche—Region 4
- Charles A. Eldon—Region 6
- D. C. J. Poortvliet—Region 8
- F. A. Furfari—Division II
- Lawrence K. Anderson—Division IV
- Thelma A. Estrin—Division VI
- John E. Barkle—Division VII

In addition, the proposed Constitutional amendment, which would have required direct election of all IEEE Directors by the membership, failed to garner the necessary two-thirds vote needed for passage.

IEEE CENTENNIAL PLANNING BEGINS

The year 1984 marks the one-hundredth anniversary of the founding of the American Institute of Electrical Engineers (AIEE). The IEEE, formed by a merger of the AIEE and the Institute of Radio Engineers, will celebrate

its centennial during the year beginning Jan. 1, 1984.

Two committees have been appointed to plan for this major event. The first, primarily an honorary group, is the Centennial Committee, to be chaired each year through 1984 by the incumbent IEEE President. Its other members are: John Bardeen, Patrick E. Haggerty, William R. Hewlett, William C. Norris, Robert N. Noyce, Simon Ramo, John W. Simpson, and Charles H. Townes.

The working group for Centennial planning is called the Centennial Task Force. With John D. Ryder as the Chairman, the Task Force has the following membership: Nathan Cohn, Robert F. Cotellessa, Lawrence P. Grayson, Donald T. Michael, William W. Middleton and M. E. Van Valkenburg. The Task Force will soon begin actively considering possible centennial activities. Suggestions should be directed to Reed Crone, Staff Secretary of the Centennial Task Force, IEEE Headquarters, (212) 644-7557.

MEMBERSHIP GOING UP

The October 1978 membership figures, released by the Membership Development Committee, show that the overall IEEE membership of 183 394 has surpassed last year's final total of 183 103. October's membership increase (6828) is 3.9 percent more than the membership increase for the same month last year.

The total membership of all seven Divisions swelled by 6.9 percent (11 923 new members) compared with October 1977 figures. Division V led the way with a 25.3 percent jump (7245 new members). No Division, and only one Region (Region 9), experienced a decrease in membership.

The total increase in membership is only 3 percent short of the suggested 1978 goal of 7000 new members. Regions 3, 5, 6, 8, and 10 have already achieved their suggested 1978 goals. The suggested Divisional goal of 11 000 new members has already been achieved; however, Division V, having exceeded its suggested goal of 2795 new members by 259 percent is the only Division to have reached its goal thus far.

For more information on the October report, see the Membership Development insert on pp. 2E-2H of this newsletter.

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PROFILE—IEEE AWARDS BOARD

One extremely important activity of a professional society is the recognition of distinguished achievement and service of its members. IEEE accomplishes this through an extensive awards program, which is administered by the IEEE Awards Board, chaired in 1977-78 by Nathan Cohn. The 1979 Chairman will be Joseph E. Rowe.

"In a professional society, the recognition by one's fellow engineers constitutes the best award for one's work," Dr. Cohn says.

IEEE Awards serve several purposes: 1) They express recognition for outstanding contributions to electrical and electronics engineering; 2) They are an incentive to youth to emulate excellence; 3) They publicize the achievements of the profession and its members; and 4) They identify IEEE with these achievements.

The IEEE Awards fall into six categories: Medal of Honor, Major Annual Medals, Field Awards, Service Awards, Prize Paper Awards, and Scholarships.

"All members have the opportunity to recognize others, and to be recognized themselves if they have done something outstanding," Dr. Cohn says.

In some cases, nominees for awards must be IEEE members. Other awards are open to all, regardless of membership. All individual members, Groups/Societies and Sections and other organizational entities of IEEE may nominate candidates for awards.

"It is a question of individuals accepting the responsibility as professional people to initiate the nominations for work they know, by people they respect. The hope is that nominators will have a sense of commitment to the task, to make a worthwhile contribution," Mr. Cohn says.

All nominators must support their nominations with relevant information.

"It is a taxing task for the nominator to fill out forms and gather documentation. It takes time and effort. But like anything else, the result is worth the effort," Dr. Cohn says.

The Awards Board, with 17 members appointed by the IEEE Board of Directors, processes the nominations and makes recommendations to the Board of Directors for each Award. The Awards are presented at major IEEE meetings and conferences of wide scope and interest.

The Medal of Honor and the five Major Annual Medals designate achievements having general significance for the profession. The 11 Field Awards recognize unusual accomplishment in a particular field of interest. The two Prize Paper Awards are for publications significant in their excellence. The two Scholarships aim to support superior students. In addition, the IEEE Service Award recognizes outstanding service to the Institute.

For more information on the awards or to request the necessary forms for nomination, contact Una B. Lennon, Secretary to the Awards Board, IEEE Headquarters, 345 E. 47 St., New York, N.Y. 10017; (212) 644-7882.

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 Institute of Electrical and Electronics Engineers, 345 East 47 Street, New York, N.Y. 10017—Telephone (212) 644-7562.

Electrical Engineering is sent without cost beyond dues to officers of IEEE Boards, Committees, Divisions, Societies, Groups, Technical Councils, Conferences, Regions, Regional Councils, Sections, Subsections, Chapters, and Branches. Second-class postage is paid at Piscataway, N.J.

Names and assignments of IEEE staff members referred to in *Electrical Engineering* are listed on page 4 of IEEE *Spectrum*.

USAB NEWS

IEEE CONFERENCE ON U.S. TECHNOLOGICAL POLICY

On the heels of a most successful conference held in Washington on September 19-21, planning has begun for a third conference on technological policy to be held in Washington on May 1-3, 1979.

Next year's theme will be "Stimulating U.S. Policy in Innovation." Proposed topics for inclusion are: economic, tax and trade policy; environmental, health, and safety regulations; Federal procurement and direct support for R&D; patents and information policy; regulation of industry structure and competition; and the social environment for innovation.

This year's conference, which focused on "Directions of U.S. R&D Policy," included guest speakers Congressmen Timothy Wirth (D-Colo.), Paul Rogers (D-Fla.), and Don Fuqua (D-Fla.); Senator Harrison Schmitt (R-N.Mex.); Presidential Science Advisor Frank Press; National Science Foundation Director Richard Atkinson; Ky Ewing of the Department of Justice Antitrust Division; Leonard Weisberg, Director of Electronic and Physical Sciences at the Department of Defense; and E. George Riedel, a staff member of the Senate Armed Services Committee.

DECEMBER PAC WORKSHOP SET

A third National PAC Workshop is scheduled for December 12-13 in Dallas, Texas, coinciding with MID-CON 78. Workshop participants will be invited to the MID-CON All-Industry Reception following the Opening General Session of the PAC Workshop.

The Workshop will also feature a number of concurrent Working Group sessions on such topics as the IEEE-Congressional interface, pensions, licensure and registration, age discrimination, patents, promulgating the Intersociety Employment Guidelines, enhancing communications, establishing intersociety legislative advisory committees, and promoting employer-employee cooperation.

The Workshop provides an opportunity to discuss PAC needs and interests and develop plans for implementing projects related to the Working Group topics noted above. At the same time, PAC chairmen are provided with information and tools to enhance their ability to carry out their responsibilities.

USAB volunteers will describe how to organize a PAC, provide examples of ongoing PAC activities, and outline what USAB resources are available and how to obtain them. Workshop participants will be asked to critique such materials generated by USAB as Legislative Alerts, Positions Papers, news items, and surveys.

Consult your Regional or Divisional Director for information on attending any National PAC Workshop sponsored by USAB.

Copies of the Summary Report of the National PAC Workshop held September 10-11 in Los Angeles will be available prior to the Dallas Workshop. Call the Washington Office (202) 785-0017, if you would like to receive a copy of the report.

CONGRESSIONAL FELLOWSHIPS AVAILABLE

IEEE plans to award three Congressional Fellowships for the 1979-1980 term. Applications are being accepted from IEEE members who are U.S. citizens and have been in IEEE at Member grade or higher for at least four years.

Congressional Fellows serve a one-year term on the personal staff of an individual U.S. Representative or



IEEE

Contact: Neil D. Pundit

Technical Activities Board

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ENGINEERING FOUNDATION FELLOWSHIPS

Sponsored By
THE ENGINEERING FOUNDATION
with the cooperation of its
FOUNDER SOCIETIES

American Society of Civil Engineers
American Institute of Mining, Metallurgical and Petroleum Engineers
The American Society of Mechanical Engineers
Institute of Electrical and Electronics Engineers
American Institute of Chemical Engineers

GENERAL

The ENGINEERING FOUNDATION announces the availability of Engineering Foundation Fellowships during 1980 for State-of-The-Art reviews in fields recommended by its FOUNDER SOCIETIES.

The program is directed toward members of engineering faculties and industrial specialists who have established a professional reputation through publications.

A grant of \$5,500 will be awarded on a competitive basis to a member of each of the FOUNDER SOCIETIES for a proposed research review in a field of direct interest to his FOUNDER SOCIETY.

PROPOSED REVIEWS

Proposed reviews shall provide an analysis in depth of a specific field including recommendations on engineering research needed to advance the state-of-the-art of that field.

A list of recommended fields will be available upon request from the Executive Officer of his professional society.

EVALUATION AND SELECTION OF PROPOSALS

Proposals shall be sent to the Executive Officer of his professional society. A panel organized by his professional society will evaluate and select meritorious proposals. They will be submitted (in rank order) to the Projects Committee of the ENGINEERING FOUNDATION who will make the final selection of a proposal for each of the FOUNDER SOCIETIES for submission to the Board of the ENGINEERING FOUNDATION for final approval.

DEADLINE

All proposals being submitted to the FOUNDER SOCIETIES must be postmarked by June 1, 1979.

Proposals selected by the FOUNDER SOCIETIES for submission to the Projects Committee of the ENGINEERING FOUNDATION must be postmarked by August 1, 1979.

ANNOUNCEMENT OF FELLOWSHIPS

Selected fellows will be notified by letter from the secretary of the ENGINEERING FOUNDATION on or about January 1, 1980, with copies to their FOUNDER SOCIETIES. The FELLOWSHIPS will be effective as of February 1, 1980.

FINAL REPORT

A final report shall be submitted to the ENGINEERING FOUNDATION and to the FOUNDER SOCIETY by each fellow for publication. The ENGINEERING FOUNDATION reserves publication rights.

Appropriate recognition of the ENGINEERING FOUNDATION and the cooperating FOUNDER SOCIETY must be prominently displayed on the title page of the publication.

PAYMENTS

The ENGINEERING FOUNDATION will provide fifty per cent of the grant at the start of the fellowship and fifty per cent at the end of the fellowship when the final report is presented.

INSTRUCTIONS FOR PREPARING A PROPOSAL

The formal proposal shall contain the following information. Twelve copies are needed.

The Cover Sheet

The first page of the proposal shall include the title of the review; name of applicant, title, institution and location; name of person financially responsible for administering the fellowship funds.

Description of Proposed Review

The next section (not to exceed four pages) shall contain the proposed review in sufficient detail to allow an evaluation of its merit on the basis of delineated approach and time required for its fulfillment. Maximum time will be one year.

Qualifications of Applicant

The next page shall describe the special qualifications of the applicant for conducting the review followed by a biographical sketch and a listing of publications.

Proposed Budget

The proposed budget shall appear on the last page in specific details describing how the funds will be utilized. The budget cannot exceed \$5,500 and cannot include indirect costs. Such a fellowship award is not renewable.

Send your proposal to: Dr. Neil D. Pundit, Director of Technical Activities, IEEE, 345 East 47 Street, New York, N. Y. 10017

ENGINEERING FOUNDATION FELLOWSHIPS

Illustrative List of Topics in the Electrical Engineering Area
for the State-Of-The-Art Reviews

We wish to emphasize that the topics listed are illustrative of fields in electrotechnology that are of current interest and that are deemed to be appropriate subjects for state-of-the-art reviews. Thus, in response to individual inquiries as to whether or not a particular subject is acceptable, our answer must be that the author's personal knowledge, interest, and enthusiasm should be dominant in selecting a topic. It is our understanding that at no stage in the screening process will a submittal be rejected purely on the basis of the topic, although it was not intended that the state-of-the-art reviews be histories of long-forgotten, dormant topics.

The topics that follow are fairly broad; finer subdivisions would be acceptable:

1. Application of solid state electronics, data processing, simulation techniques, and related developments to the bio-medical field,
2. Application of new engineering approaches to the control of large systems,
3. Development of new components required for optical communications,
4. Advance satellite communication and navigation systems,
5. The design and application of high powered lasers,
6. Non-polluting energy sources, such as solar and geothermal,
7. Ultra high voltage transmission of electrical energy,
8. Computer architecture memories, logic and software,
9. Man-machine interfaces.



Membership Development Committee

MEMBERSHIP PROGRESS - GRAPHICALLY ILLUSTRATED

Reproduced on the following pages is a five year analysis of membership trends for Total Institute, Higher grade and Student breakouts and Regional trends of total membership. The plots show monthly and year-to-year trends. In almost all cases, the trend is increasingly positive. Your MD efforts are paying off!

MORE THAN 15,000 REMAIN IN ARREARS THROUGH 1978

The Fall Arrears mailing to all members whose dues expired in December 1977 is in the mail from Headquarters. Sections may also wish to contact locally those members who never renewed for 1978, not only to encourage their renewed participation, but also to avoid the \$1 penalty deducted from the Section's rebate for 1978. Arrears rosters can be requested through Membership Development.

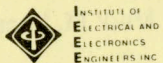
SENIOR MEMBERS WANTED ! ELEVATIONS TO BE PROMOTED BY MDC

The MDC workgroup on Senior Member elevations is finalizing the materials and promotional support for local efforts at encouraging qualified Members to seek Senior Member grade. With guidance from the Admission & Advancement Committee, the forms are being reorganized for easier completion by the applicant and better review by the A & A Committee.

Also being developed are reasons for the individual to elevate in grade, ideas to promote elevation and consideration of additional unique Senior Member programs and activities. Rosters of Members who appear eligible for Senior Member grade can be requested from Membership Development, N.Y.

1979 MEMBERSHIP BROCHURES AVAILABLE

The 1979 versions of the Membership Information brochures (blue - detailed; red - condensed) and the Periodicals & Services (green - Society information) brochures will be available in December. Further announcements and sample copies will soon be distributed.



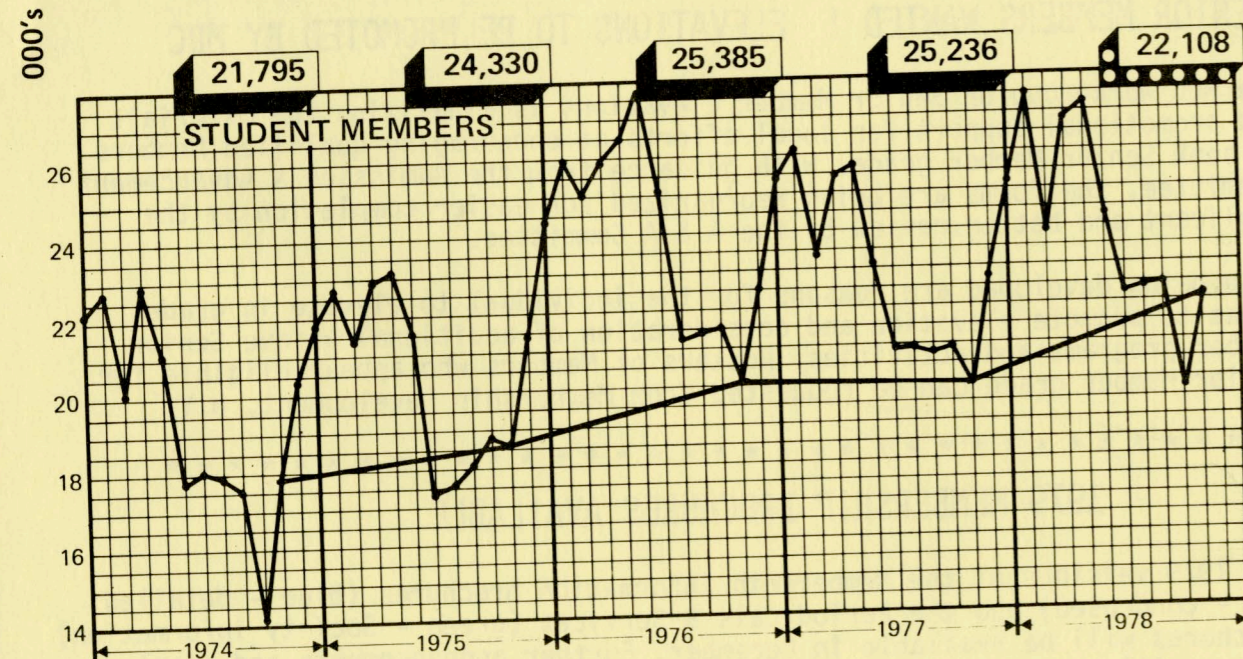
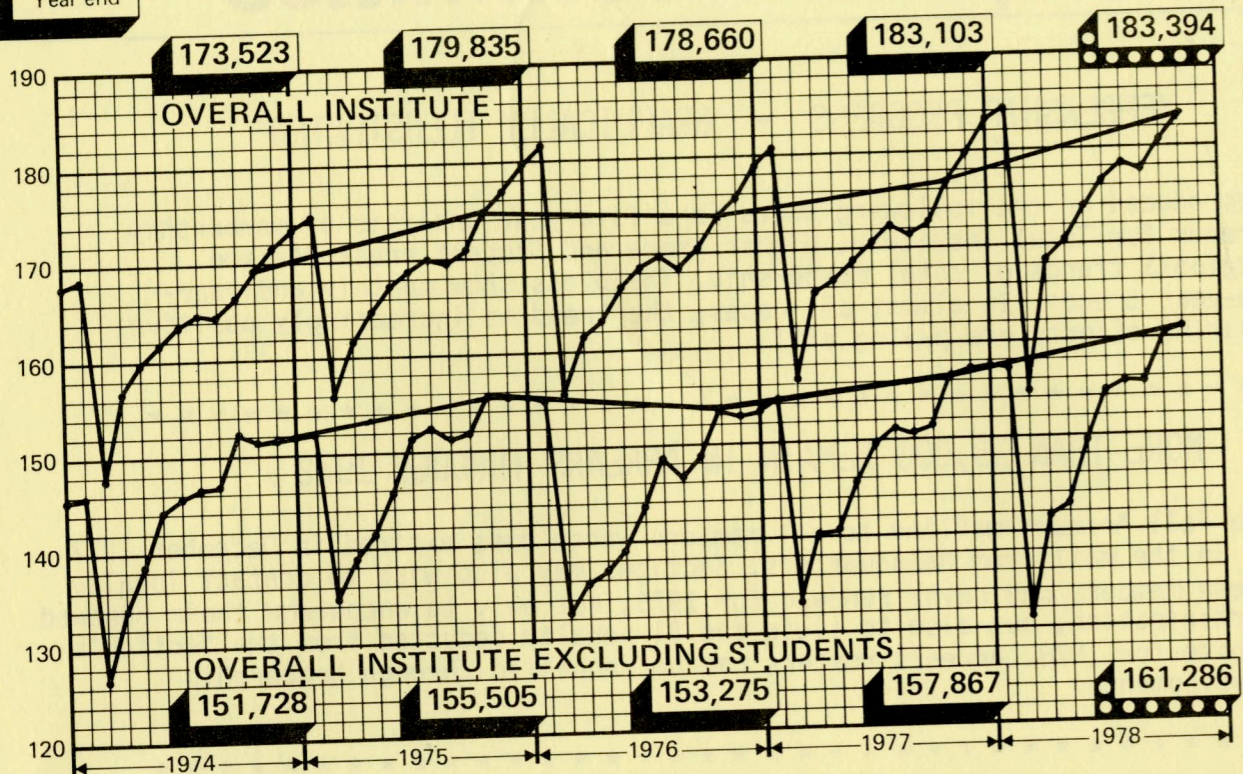
INSTITUTE OF
ELECTRICAL AND
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ENGINEERS, INC.

MEMBERSHIP PROGRESS

OCT 1978

This month

Year end



INSTITUTE OF
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ENGINEERS, INC.

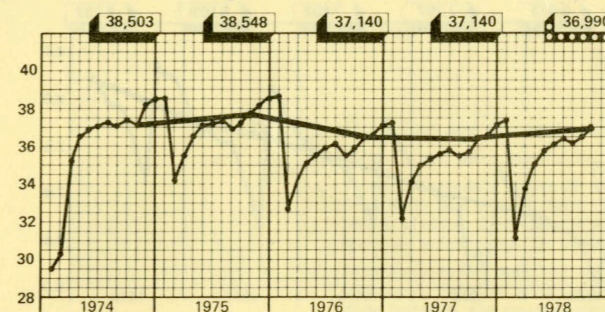
THE REGIONS MEMBERSHIP PROGRESS

OCT 1978

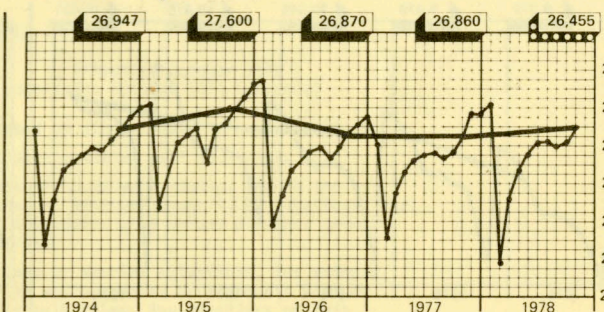
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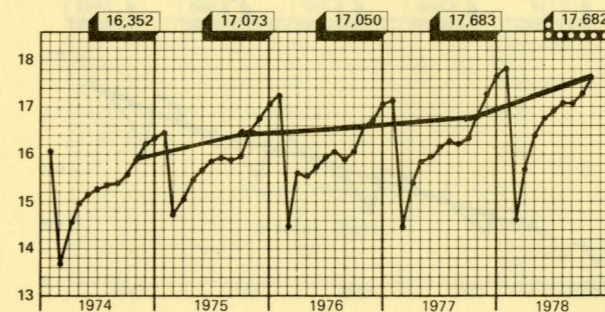
1 Northeastern Region



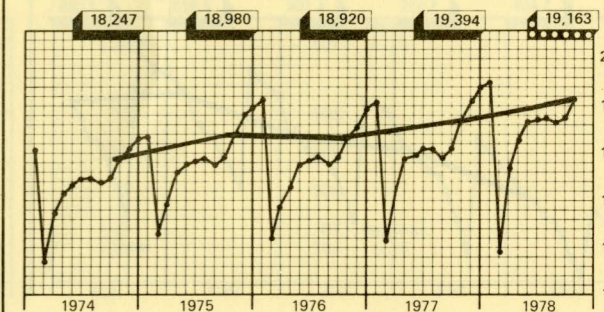
2 Eastern Region



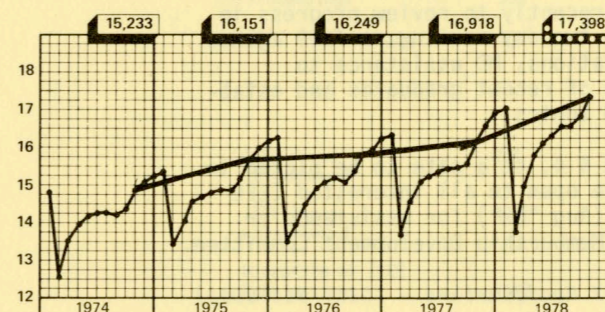
3 Southeastern Region



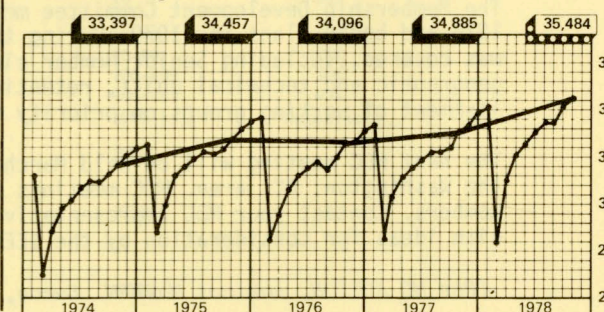
4 Central Region

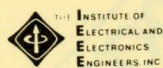


5 Southwestern Region



6 Western Region



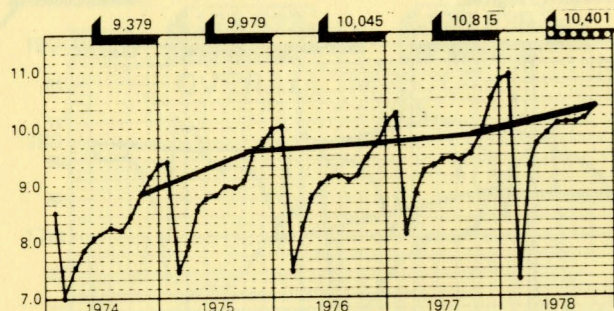


THE REGIONS MEMBERSHIP PROGRESS

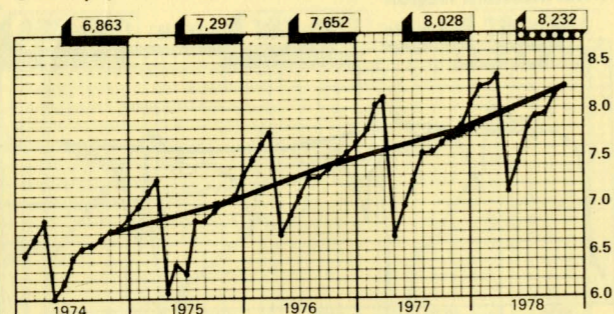
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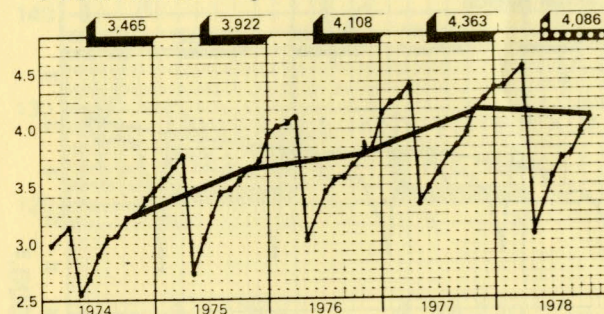
7 Canadian Region



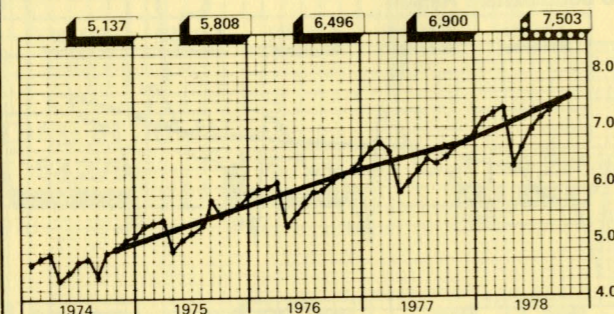
8 Europe, N. Africa, Mid. East Region



9 Latin American Region



10 Rest of the World



TREND LINE

IEEE MEMBERSHIP DEVELOPMENT COMMITTEE MEETINGS

The Membership Development Committee met recently to review progress in 1978 and begin plans for 1979. During the two day meeting, a full agenda was covered, including Senior Member elevations, MD assistance to geographic and technical units, retention of recent graduates and establishment of working groups on priority MD topics.

The next MDC meeting will be held March 3 & 4, at a site to be picked in the Washington, DC, area. MDC meetings are open to all interested IEEE members. Contact your MDC Representative (Aug "EE") for assistance or with ideas for consideration by the IEEE Membership Development Committee.

(For MD ACTION, contact Mark M. Lucas, NY Headquarters - (212) 644-8080)



IEEE

Contact: Jane Post

Administrative Services

IEEE DISCOUNT SCHEDULE FOR SINGLE SALE ITEMS

Effective October 1978
(Supersedes October 1974 Schedule)

- NOTE: 1. All prices and discounts are based on single copy non-member list prices.
2. Microfiche, when available, at same price as full size copy.
3. Volume discounts apply to orders of 10 or more copies, except for STANDARDS and JTAC (Joint Technical Advisory Council) Publications, for which sliding discounts apply; all copies of a volume discount order must be shipped to the same address.
4. 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.

ITEM	MEMBER DISCOUNT	Discount on Volume Orders	
		# OF COPIES	DISCOUNT
STANDARDS	10%	10-49 50-99 100-499 500-999 1000 +	10% 20% 30% 40% Negotiable
Conference Publ.	25% (Regions 1-7) 50% (Regions 8-10)	(10 (100+	30% Regions 50%) 1-10
Reprints	25%	10	30%
Preprints	25%	10	30%
Bound Transactions	25%	10	30%
Tutorial Courses	25% (Regions 1-7) 50% (Regions 8-10)	(10 (100+	30% Regions 50%) 1-10
Tutorial Courses-PES	25% (Regions 1-7) 50% (Regions 8-10)	25	40% Regions 1-10
Transactions & Journals	50%	10	30%
Spectrum & Proceedings	50%	10	30%
JTAC Publications	50%	10-49 50-99 100-499 500-999 1000 +	10% 20% 30% 40% Negotiable
IEEE Press clothbound	25%	NONE	
IEEE Press * paperbound	NONE	NONE	
Microfilm of IEEE Publications	NONE	NONE	
Binders	NONE	NONE	

* For educational use - Orders for 10 or more, paperbound copies of Press Books may be supplied.

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IEEE

Contact: Richard Aseltine

Student Activities News

SECTION MEMBERSHIP

IEEE Student members are automatically members of the IEEE Section in which they maintain their mailing address. The Student Activities Committee encourages you to participate in the Section activities. Through the experience, you will learn more about the "real world" of electrical engineering from the Section technical programs as well as through interaction with professional engineers.

Individuals who maintain mailing addresses outside the Section in which they live may formally change Section affiliation under the "Contiguous Section" clause of the IEEE Bylaws. By doing this, meeting notices and newsletters of the Section in which you attend school can be sent to your mailing address if it is outside of that Section.

For more information concerning Section programs and activities, contact your Branch Counselor or Section Chairman. To change your Section affiliation, or for information as to whom to contact in your Section, write to: IEEE Field Services Dept., 345 E. 47 St., New York, N.Y. 10017.

TIME TO RENEW

You should have received your 1979 dues invoice by the time you read this reminder. Last year, individuals representing more than 95 percent of Students up for renewal chose to continue their association with IEEE as Student members. By renewing now, you will insure that there is no break in your Spectrum subscription or in the many other benefits and services you receive from your Branch and Section, your Group/Society, and from IEEE.

Students who graduate in 1979 receive reduced rates on membership after graduation (i.e., in 1980) only if they are paid-up members in 1979. Recent-graduate dues are \$20 plus Regional assessment for the year following graduation as contrasted with \$45 plus Regional assessment for graduates who were not Student members at the time of graduation.

FORTESCUE FELLOWSHIP AVAILABLE

Funds have been made available for a Charles LeGeyt Fortescue Fellowship for 1979-80. The one-year \$7000 award will be made to a full-time postgraduate student in electrical engineering. Preference will be given to applicants about to begin their first year of graduate work. The recipient will be chosen on the basis of Graduate Record Examination scores, transcripts covering college courses, and the information in the application and letters of recommendation. The proposed work must be at an engineering school of recognized standing in the U.S. or Canada, and the student must have received his or her bachelor's degree by the time work under the fellowship would begin. Applications should be filed on the proper forms so that they reach the Fellowship Committee by January 15, 1979. Application forms are available at many colleges or may be obtained from Ms. Una B. Lennon, Staff Secretary of the Awards Board, IEEE Headquarters, 345 E. 47 St., New York, N.Y. 10017. The fellowship, administered by IEEE, was established in 1939 as a memorial to Charles Fortescue in recognition of his valuable contributions to the power industry. It is funded by the Westinghouse Electric Corporation, with which Dr. Fortescue was associated throughout his professional career.

COUNSELOR RECOGNITION PROGRAM

An IEEE Student Activities Committee survey shows that the key to a successful IEEE Branch or Branch Chapter is an effective Counselor who is also a faculty member. But the Counselor's effectiveness is limited, the study has found, by the need to satisfy college administrators' emphasis on research and publishing. The study concludes that lack of a formal program in IEEE for recognizing Branch Counselors or Branch Chapter Advisors contributed to the problem. Accordingly, the study recommends a new awards program for Counselors to emphasize the importance of their role to the IEEE and to college administrators.

Each year one to ten Counselors will be recognized for personal efforts in the technical, educational, and professional development of Branch members. The students themselves will initiate the award process by recommending Counselors to their Section Chairmen. The Region Student Activities Chairman will select the nominees from names submitted by the Section Chairmen. Then an Institute-wide evaluating committee will select the winners as representative of the outstanding work of 450 Branch Counselors and Chapter Advisors around the world.

STUDENT ACTIVITIES COMMITTEE MEETS

The autumn meeting of the IEEE Student Activities Committee was held Oct. 20-21 in Montreal. Major policy decisions taken by the committee included: (1) Limiting the formation of Student Branches in the U.S. to schools with an accredited curriculum in engineering, engineering technology, or the related areas and sciences; (2) Establishing guidelines for the Counselor Recognition Program; and (3) Requiring all entrants in a Regional Student Paper Contest to be IEEE members prior to submission of the paper for judging. Other action included developing a Branch Leadership Training package and reviewing the procedures for Branch/Branch Chapter formation and dissolution.

The Student Activities Committee comprises Student Representatives from Regions 1-7, Branch Counselors serving as Regional Student Activities Chairmen, and industrial representatives appointed for their expertise in areas of SAC activities. The Chairman of SAC is appointed by the Vice President of Regional Activities and serves as a member of the IEEE Regional Activities Board.

STUDENT REPRESENTATIVES SOUGHT

Active IEEE Student members in good academic standing are being sought to serve as Student Representatives for the two-year term commencing this spring in Region 2 (Eastern states) and Region 5 (Southwestern states). Regional Student Representatives serve on the Region Committee (comprising Section Chairmen) and the IEEE Student Activities Committee. In addition, they are responsible for organizing the Region's Student Conference and editing the Regional Student Newsletter. Interested students should consult their Branch Counselors or should send a resume and a 200-word statement explaining why they are seeking the position to: (Region 2) Dr. Charles Alexander, Dept. of Electrical Engineering, Youngstown State University, Youngstown, Ohio 44555; (Region 5) Dr. William Kuringer, Dept. of Electrical Engineering, University of Oklahoma, Norman, Okla. 73019.



Continuing Education Services

PLAN NOW FOR YOUR 1979 EDUCATION PROGRAMS

For a successful program a full 5-month LEAD PERIOD should be included in your planning

A suggested approach is to:

- appoint a Continuing Education Chairperson and ask him/her to call Vince J. Giardina for plan or program discussion at (201) 981-0060, extensions 174/175

- select the courses you plan to schedule (either through a newsletter poll or knowledge of your area)

- review Continuing Education plans with your Executive Committee.

For guidance or recording of date and title call V. J. Giardina

We have developed many topical courses for your Section/Chapter use. Select the course of your choice from titles listed below. Then, return the form below completed to indicate your specific interest(s).

- | | |
|--|---|
| 1043 There Is a Microprocessor in Your Future | 1076 Developing Managerial Skills of Engineers & Scientists |
| 1944 Assembly Language Programming for Microprocessors | 1077 Financial Analysis for R & D Managers |
| 1945 Computer Graphics | 1078 Research Management |
| 1046 Introduction to CAD/CAM | 1079 R & D - Engineering and the Law |
| 1047 Johnny Microseed | 1080 Licensing in the U. S. |
| 1048 Management Auditing of Computer Operations | 1081 Technology Transfer Abroad |
| 1049 Computer Security and Integrity - A Tutorial | 1082 New Product Development |
| 1050 Intensive Microprocessor Peripheral Applications | 1083 New Venture Management |
| 1051 Digital Continuous System Simulation | 1084 Corporate Planning in the Technological Industries |
| 1052 Operational Amplifier Theory and Applications | 1085 Technological Forecasting and Assessment |
| 1053 Structured Programming and Software Engineering | 1086 International Corporate Planning |
| 1054 Introduction to Computer Programming - Using FORTRAN (or COBOL or PL/1) | 1087 International Marketing |
| 1055 Introduction to FORTRAN (or COBOL or PL/1) | 1088 Setting Up "Off Shore" Assembly/Manufacturing Operations |
| 1056 Data Processing System | |
| 1057 Statistical Processing Using SPSS | |
| 1058 Introduction to Use of IBM 370 Computer Systems | |
| 1059 Introduction to the Use of IBM Computer Systems via Interactive Terminals and TSO | |
| 1060 Analysis, Design and Operation of EHV Transmission | |
| 1061 Communication Satellite Systems | |
| 1062 Circuit Interruption Theory | |
| 1063 Solar Electric Systems | |
| 1064 Radio Spectrum Management | |
| 1065 Phase-Locked Loops: Design and Applications | |
| 1066 Particulate/Gas Cleaning by Static Precipitation | |
| 1067 Lightning and Grounding | |
| 1068 Lightning Protection of Electronic Systems | |
| 1069 Introduction to Accident, Safety, and Forensic Eng. | |
| 1070 Radar Detection Calculation Procedures | |
| 1071 Management of New Technology Projects | |
| 1072 Expanding the Productivity of the Managerial Mind | |
| 1073 How to Use Your Intuition in Systematic Decisions | |
| 1074 How to Accomplish More in Less Time | |
| 1075 The System Approach to Management | |

HOME STUDY COURSES AVAILABLE FOR YOUR MEMBER USE

- HS9001 Technically Write!
 HS9002 Project Learn
 HS9003 CDC PLATO Systems:
 HS9003.1 Financial Management
 HS9003.2 Problems Analysis and Decision Making
 Effective Technical Project Management
 Understanding Microprocessors through Software Design
 Achieving Results Through Financial Management
 Achieving Results Through Engineering Management
 Modern Control Theory
 Digital Instrumentation
 Pulse-Code Modulation

VIDEO COURSES AVAILABLE ON RENTAL BASIS

- VTC90178 Manufacturing Quality Control
 VTC90278 Engineering Economy
 VTC90378 Cooling of Electronic Equipment

I am Chairperson of the IEEE _____ My Address is _____

City _____ State _____ Zip _____ I am interested in programming the following courses in

1979 (list by number): _____

I am interested in purchasing the following Home Study programs (list by number): _____

I am interested in renting the following Video Courses (list by number): _____

Send me the complete IEEE Course Catalog for 1978-79 (please check box) Name _____

Please return completed page to V. J. Giardina, Manager Continuing Education, IEEE, 445 Hoes Lane, Piscataway, N.J. 08854.



PLEASE TURN PAGE

TECHNICALLY-WRITE!

Is there anything wrong with the following sentence?

"Since all the spare parts needed for the overhaul have been received, work will be able to start immediately; orders for additional spare parts are neither envisaged nor necessary."

If you found little or nothing wrong then may we suggest you enroll in our new self-study course---Technically Write?

Actually the test sentence contains--13 unnecessary words--superfluous words--low-information-content words, and --words that erect hidden barriers between writer and reader.

Technically Write! will do just what its name implies. Upon satisfactory completion you will bring your writing and speaking skills to the new level you must reach in order to achieve your full career potential.

The course is designed to teach proven techniques for producing attention-getting written and verbal communications of every type. Created by Ron Blicq, Chairman of the Education Committee of the IEEE Group on Professional Communications, it has been selected by the IEEE Educational Activities Board as a worthy course for improving the communications skills of our engineers.

It has been designed as a practical "hands on" self-study course for engineers. Students are asked to read specific sections of the text and submit written assignments for correction and evaluation by a personal instructor.

You cannot "read" how to write.

Each student who enrolls is assigned to an instructor who is a specialist in the communications field. Eleven broad topic areas are covered and assignments are based on real-life situations facing you every day. True mastery of the material is achieved by the dialogue that will develop between you and your instructor. Completion of the course takes 3½ months on average and a Certificate of Completion is awarded all students who successfully fulfill all course requirements.

Typical topics covered are:

- Sharpening style and organization.
- Informal reports (field trips, progress inspection, etc.)
- Formal reports, feasibility studies.

We will be glad to put "Technically -- Write" to work for you. Learn first hand how we can improve your written and verbal communications. Fill out the registration coupon and send it to us today.

Note: This is a tax deductible program if taken to maintain or improve your job skills.

TECHNICALLY-WRITE! Enrollment Form

Mail this form with payment to:

**IEEE Service Center
445 Hoes Lane
Piscataway, N.J. 08854**

Yes, I am an IEEE member and would like to enroll immediately in the Technically -- Write! correspondence course. Please send me the textbook and the 11 instruction packages for the course fee of \$80.00 plus \$2.00 for handling and delivery. My check in the amount of \$82.00 is enclosed. I understand that I may return all course materials, in good condition, within two weeks after receipt for a full refund if dissatisfied.

Nonmember fee: \$105.00 plus \$2.00 for handling and delivery.

Name _____ TW

IEEE No. _____

Address _____

City _____

State/Country _____ Zip _____



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

FOR ADDITIONAL INFORMATION CONTACT MRS. EMMA WHITE
345 EAST 47TH STREET NEW YORK, N.Y. 10017



IEEE

Contact: Tom Suttle

United States Activities Board

◆ THE INSTITUTE OF
ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Announces the 7th Annual Competition for

1979-1980

Congressional Fellowships

**A CONGRESSIONAL INTERNSHIP
FOR ELECTRICAL AND ELECTRONICS
ENGINEERS AND ALLIED SCIENTISTS**

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

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

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

AWARDS: IEEE plans to award three Congressional Fellowships for the 1979-1980 term. One Fellowship will be sponsored by the Electron Devices Society, and it is planned that one of these fellowships will be awarded to an applicant whose technical competence is in the field of electron devices.

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

**Secretary, Congressional Fellows Program
The Institute of Electrical and Electronics Engineers
2029 K Street, N.W.
Washington, D.C. 20006**

Applications must be postmarked no later than March 1, 1979, to be eligible for consideration.

Senator, or on the professional staff of a Congressional Committee. See the USAB insert in this issue, (p. 20) for details.

WANT TO BE PART OF THE ACTION?

Requests for action to be taken by IEEE members on legislative issues of concern to the engineering profession are given on USAB's Information Line whenever Congress is in session. Hear other news of USAB's activities before you read about them. Want to know what's happening in Washington? Call (202) 785-2180.

CONSOLIDATED INVESTMENT OPTIONS

The recent performance of the cash management investment options available to IEEE's organizational units is reported below. Continued increases in interest rates are anticipated for the foreseeable future. All units are urged to examine their available cash for optimum returns.

Investment Option 1—Short-Term Bank Deposits*:

June	7.25%
July	7.30%
Aug.	7.60%
Sept./Dec.	8.50% (estimated)

Investment Option 2—Long-term Bank Deposits (over 6 months)†:

June	7.70%
July	7.80%
Aug.	8.23%
Sept./Dec.	8.70% (estimated)

Investment Option 3—Bond Plan†:

June	8.25%
July	8.40%
Aug.	8.65%
Sept./Dec.	8.90% (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.

For additional information, contact Michael J. Sosa at (201) 981-0060, ext. 123, or Thomas W. Bartlett at (212) 644-7748.

TAB NEWS

IEEE CONFERENCE RECORDER

TAB Conference Activities has announced a new publication designed to meet the specific technical interests of members who purchase conference proceedings. The *IEEE Conference Recorder* lists all new conference records from recent IEEE-sponsored or co-sponsored meetings. In preparing the newsletter, Conference Activities relied upon the computer-maintained Technical Interest Profile each member completes when joining IEEE. Concise summaries of topical conference records and price listings are included as well as a convenient order form. The next issue of the *Recorder* will be mailed in late December. For further information or to obtain a copy, contact Conference Activities at (212) 644-7895.

MASTER MEETING SCHEDULE

The January issue of the IEEE Master Meeting Schedule, just published, is available to interested

members. In publishing this schedule, Conference Activities used a computer to ensure that no major meeting conflicts occurred. Also, the listings have been expanded to 1984. All conferences are charted in chronological order and include "limited interest" meetings, such as special Regional and Section events. An alphabetical index of all major IEEE-sponsored conferences is also provided. To receive your copy, contact Conference Activities, IEEE Headquarters, (212) 644-7895.

EAB NEWS

BIEDENBACH GIVEN AWARD

Joseph M. Biedenbach was presented a certificate of merit for his outstanding leadership in promoting IEEE continuing education program. The presentation was made by President-elect Jerome J. Suran on Nov. 14 at IEEE Headquarters. Dr. Biedenbach is Chairman of the EAB Continuing Education Committee and has been the major force behind the outstanding growth in the short course and home study course area of IEEE-EAB activities.



President-elect Jerome Suran (right) presents award to Joseph Biedenbach, Chairman of EAB Continuing Education Committee.

VIDEO-TAPE COURSES AVAILABLE

Does your Group/Society or Section/Chapter need refreshing or updating on some topic of electronics? Now available from IEEE are the following short courses on video tape: 1. Designing with Microprocessors; 2. Modern Control Theory; 3. Heating & Cooling of Electrical Equipment; 4. Engineering Economics; 5. Manufacturing Quality Control.

The courses feature outstanding instructors on industrial-type 3/4-in video cassettes supplied by IEEE on a rental basis. Length varies between six and 16 hours, and the fee includes a course workbook for each student. For information, contact Educational Services, IEEE Headquarters, (212) 644-7870.

TRAVELING INSTRUCTORS NEEDED

The "Traveling Instructor Program" welcomes U.S. members planning trips abroad to teach courses to IEEE

members along the route. The program attempts to match the expertise of travelers with the needs of the IEEE Section members in the Region visited. Program Director Vincent J. Giardina emphasizes that a six-month lead time is imperative to make the necessary arrangements. The instructors need not be faculty members nor have prepared courses. In some cases, IEEE will provide TAB-approved courses in the area of the traveler's expertise. For further information, contact Vincent J. Giardina, Manager, Continuing Education Services, 445 Hoes Lane, Piscataway, NJ 08854; (202) 981-0060.

IEEE BOARD SETS CONTINUING EDUCATION POLICY

The IEEE Board of Directors has adopted a policy that educational achievement units may be awarded to attendees of any continuing educational program sponsored by IEEE or its entities provided that prior evaluation and assignment of appropriate achievement for a specific program is obtained from the IEEE Educational Activities Board.

The Continuing Education Achievement Unit (CEAU) has been established by IEEE for this purpose. The CEAU will recognize the evaluation of individual performance while the popular CEU (Continuing Education Unit) does not require such evaluation. Only CEAs, or other education units deemed by EAB to be at least equivalent, will be recorded in IEEE member files.

PUB NEWS

NEW TRANSACTIONS EVALUATION PROCEDURE

A new *Transactions* evaluation procedure has been established by the Publications Board, with the endorsement of The Technical Activities Board. Instead of appointing a dozen panels each year to evaluate one third of the *Transactions*, the Publications Board is establishing a standing committee made up of the TAB Division representatives on the Publications Board to monitor all *Transactions* annually and to arrange for detailed evaluation only when necessary. This procedure is expected to be more efficient and effective than the previous one.

IEEE PRESS

The IEEE press has announced the publication of four books:

- *Digital Image Processing for Remote Sensing*, edited by Ralph Bernstein (484 pages). The 34 papers reprinted in this book provide technical information and mathematical techniques relevant to the entire range of image processing operations. The paper contains numerous examples of applications. Prices: \$17.95 for paperbound member edition, \$35.95 clothbound (\$26.95 for members).

- *Integrated-Circuit Operational Amplifiers*, edited by Robert G. Meyer (320 pages), contains 38 articles covering six different categories of op amps plus design and modeling. Included among the reprinted articles is a series of manufacturers' data sheets for commonly used commercial circuits. Prices: \$11.95 for paperbound member edition, \$23.95 clothbound (\$17.95 for members).

- *Analog Integrated Circuits*, edited by Alan B. Grebene (448 pages). This volume comprises a selection of 57 of the most important and timely articles on these circuits. The articles emphasize circuit design and application rather than process or fabrication technology. Prices:

\$14.45 for the paperbound member edition, \$28.95 clothbound (\$21.70 for members).

- *Modern Spectrum Analysis*, edited by Donald G. Childers (340 pages). The 39 reprinted papers in this volume provide a comprehensive coverage of spectrum analysis with emphasis on the most recent techniques. Tutorial, historical, state-of-the-art, and applications articles are included. Prices: \$14.95 for paperbound member edition, \$29.95 clothbound (\$22.45 for members).

The above books may be ordered postpaid from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854.

RAB NEWS

WINDING UP 1977

All Sections are reminded of the annual meeting reports and financial statements that are compiled on the basis of year-end data. To ensure rebate credit, the reports and statements are due at Headquarters not later than Feb. 1 (Bylaw 402). Also, names of all new officers and committee chairmen taking office on Jan. 1 should be reported to the Field Services Dept. promptly.

INFORMATION CENTERS

Information centers are still available for all organizational units to display membership material and IEEE literature. The free-standing display has helped many units promote IEEE membership. To order one or more Information Centers, send \$9.98 per display to IEEE Cash Processing, 445 Hoes Lane, Piscataway, N.J. 08854.

CHAPTER/SECTION NEWS

The Quantum Electronic and Applications Chapter of the Metropolitan Los Angeles Section was established.

The Industry Applications Chapter of the Dallas Section was established.

A five-section Chapter of the Electrical Insulation Society was established to encompass the Bay of Quinte, Hamilton, Kitchener-Waterloo, London, and Toronto Sections to be administered by the Toronto Section.

The Eastern Zone Subsection of the Delhi Section was elevated to Section status. The new Section, known as the Calcutta Section, will encompass the following territories: The States of Bihar, Orissa, West Bengal, Assam, Meghalaya, Tripura, Mizoram, Manipur, Nagaland, Arunachal Pradesh, and Sikkim in the Republic of India.

STUDENT ACTIVITIES NEWS

STUDENT MEMBERSHIP CONTEST UPDATE

The 30-K Calculation Branch membership campaign has eight Branch winners that recruited 60 or more student members and 13 Branch winners that doubled their total number of members. The 21 winning Branches will each receive a TI 57 programmable calculator in recognition of their outstanding membership recruitment effort.

Texas A&M University has thus far recruited 139 Student Members. In second place is the University of Tennessee with 102. The largest percentage increase was achieved by the Saskatchewan Technical Institute at 240 percent over last year. The University of South Alabama came in second with 166 percent. Statistics reflect the number of applications processed by IEEE as of Nov. 15. The competition closed on Dec. 15, 1978.