

BOARD ADOPTS BYLAWS, RESCINDS | PETITION PROPOSAL

Adopts new bylaws: Bylaw 109.1, titled "Dues, Fees, and Regional Assessments," provides for a \$7 assessment, effective in 1981, for Region 8 members other than students; Bylaws 201.2, 309.2, 313.4, 313.8, 401.7, 501.2 relative to nomination and election of Divisional/Regional directors, require that Divisional Delegates-Directors maintain membership in a least one of the Societies within the Division electing such Delegate-Director. The Bylaws also provide a mechanism for submission of a single nominee for the office of Divisional/Regional Delegate-Director.

Reverses itself: The Board voted to rescind an action taken at its last meeting to place on the 1980 ballot a proposed Constitutional Amendment on the subject of petition requirements for Constitutional Amendment proposals. The Board also voted to rescind actions taken at its last meeting relative to petition nominations of candidates for the offices of President and Executive Vice President (Bylaw 313.5) and petition nominations for elective offices in units of the Institute (Bylaw 313.11).

Among other actions: The Board urged support of the reorganization of the National Science Foundation, creation of a National Engineering Foundation, or support of a new bill which proposes a National Technology Foundation, which was proposed by RAB, TAB OpCom, USAB, and the ExecCom; the Board supported the reorganization, within the United States Department of Commerce, of the Office of Science and Technology into the Office of Productivity, Technology, and Innovation, provided that its funding be made adequate to improve promptly U.S. industrial productivity; commended the Editor and staff of *Spectrum* for the National Magazine Award won for its Three Mile Island issue. Executive Committee Actions: Discontinued the special 50 percent discount on conference records for members in Regions 8-10, as recommended by TAB, so that now members in Regions 8-10 will have the same 25 percent discount as other IEEE members; approved position papers on cogeneration in the United States and breeder reactors in the United States. Announced by the General Manager: engagement of Robert Friedel as Director of the IEEE Center for the History of Electrical Engineering, a project of the History Committee. Dr. Friedel has a doctorate in history of science and served as archivist and historian for the Smithsonian Institution.

IEEE COMMENTS ON EDUCATION

In response to an inquiry of President Carter to the National Science Foundation, IEEE has submitted a report which describes engineering education in the U.S. as facing a grave crisis. The inability of colleges and universities to cope with the rapid inflation and the boom and bust cycles of engineering employment are but two factors which have contributed to the situation.

IEEE's contribution to the report was written by a committee composed of Benjamin J. Leon, Vice President for Educational Activities, Theodore H. Bonn, Vice President for Publication Activities, Bruno O. Weinschel, Secretary, and Richard J. Gowen, Vice President for Professional Activities. The IEEE report, submitted to the NSF early in May, names the following problems: The cyclic nature of engineering employment; inadequate public funding; the lack of junior faculty (often coming from the ranks of graduate students) with Western cultural orientations; the perceived inadequacy of some current faculty; stagnant curricula at colleges and universities; and inadequate laboratory and computer facilities. The NSF will analyze all the reports before compiling its report to President Carter and expects to meet the July 1 deadline. For further information, see THE INSTITUTE, June 1980.

NOMINATIONS REQUESTED

The Nominations and Appointments Committee of IEEE solicits the nomination of candidates for IEEE offices from individual members and organizational units. The following offices are scheduled for election by the membership in 1982: President, Executive Vice President. Offices to be elected by the Assembly for the 1981 term: Vice President of Educational Activities, Vice President of Professional Activities, Vice President for Regional Activities, Vice President of Technical Activities.

The general qualifications for service to IEEE are: competence, experience, willingness to take on the task, availability of time to participate, enthusiasm, and vigor. Recommendations may be submitted at any time to the Staff Secretary of the Nominations and Appointments Committee, IEEE Headquarters, 345 E. 47th St., New York, N. Y. 10017, but the deadline is Sept. 26, 1980.

DIVISION II CANDIDATE WITHDRAWS

Due to an unexpected increase in work responsibilities, Joseph F. Keithley has withdrawn as a candidate for the office of Division II Director for the 1981-1982 term. Mr. Keithley is chairman of Keithley Instruments Inc., in Cleveland, Ohio.

J. Barry Oakes and J. Leon Shohet remain in the race at this time.

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PRESIDENTIAL TAPE DEBATE CANCELED

Audio tapes of possible debates among candidates for IEEE elective offices this year will not be made available because of limited participation in the program last year. This experimental program was initiated last year, but could boast of only a 0.003 percent of the membership in 28 Sections worldwide actually hearing the presentations. Fewer than 70 of 435 Sections requested the material. In the interest of economy, the program will not be repeated in 1980. However, every effort will be made to maximize coverage of the candidate positions in THE INSTITUTE and other communications channels.

1980 PETITION CANDIDATES

Merrill W. Buckley Jr., and V. Prasad Kodali have qualified as petition candidates for the office of IEEE Regional Director. Merrill Buckley is a candidate for Director of Region 2. Previously nominated by the Region 2 Nominating Committee were H. Mark Grove and Herbert H. Heller.

V. Prasad Kodali is running for Director of Region 10. His opponents are T.V. Balan, David R. Hutt, and Noboru Takagi.

USAB NEWS

RESULTS OF NRC-IEEE CONFERENCE PUBLISHED

An *Executive Summary* and a *Conference Record* have been published of the working conference on "Advanced Electrotechnology Applications to Nuclear Power Plants." The Record includes the technical papers of the working panels, as well as transcripts of major speeches, as shown in the insert on p. 2-C.

Many other publications and reference documents have been published by USAB over the years. The insert on p. 2-D gives a few of these listings; contact Gloria Aukland at the Washington office for further information.

1980 TECHNOLOGICAL POLICY CONFERENCE

"Global Competition in the '80s" was the theme of the 1980 Technological Policy Conference held April 28-30 in Washington, D.C. The conference seemed to show that the outlook for the U.S. is grim. Years of neglecting its technological capability have led to a serious erosion of its strength as a trading nation and as a leader in technological innovation, and threatens to rank the country among the second-rate powers of the world. Solutions to several aspects of the problem were offered, including the proposal that engineers must expand their efforts to provide technical input to the policy-making process. Strong action by Government, cooperation between Government and industry, and education of the public were also recommended. Highlights of the conference were visits to Capitol Hill with the U.S. senators and representatives, and a reception for members of Congress and staff aides. IEEE Position Papers on a number of national policy issues were presented during the conference. See THE INSTITUTE, July p. 1.

1980 TASK FORCE LEADERS NAMED

Leadership of USAB's 1980 task force is identified in the insert on p. 2A. Robert A. Barden, Howard L. Ross, and Richard J. Backe are leaders in acting roles until the time that permanent volunteers are appointed. Where no

leader's name appears, task force activities are largely of an operational nature and are handled by the staff.

USAB's Program Plan has been completely revamped and redesigned, with tasks designated developmental or operational. Special pains were taken this year to present plans more clearly.

CONGRESSIONAL FELLOW PRAISED

Rep. Mike McCormack (D-Wash.) congratulated Congressional Fellow Ian Whyte on his work on the subcommittee on Energy Research and Production in a letter to IEEE President Leo Young. Mr. Whyte's involvement in subcommittee hearings on nuclear power plant safety was a great help, particularly in an examination of important issues in the nation's nuclear power program.

ETHICS HOTLINE

A hotline telephone number, 212-679-0935, has been set up to advise and protect members whose jobs may be in jeopardy because of their adherence to the IEEE Code of Ethics. Volunteers are needed to help the project: technical consultants and ethical consultants. Volunteers and members with questions on the IEEE Code of Ethics may call the hotline number.

IEEE OFFERS PLANKS ON NATIONAL PLATFORMS

During the National Platform Hearings of both the Democratic and the Republican Conventions, IEEE offered testimony on three issues: pensions, energy and innovation. The process began Feb. 29 when Darrell L. Vines and Robert A. Barden spoke before the Republican hearings, and resumed April 30 and May 8 when John J. Guarrera and John A. Casazza addressed the Democratic hearings.

Mr. Vines testified on innovation for which he defined the Federal government's role as one of promotion of personal economic incentives, support of research, provision of tax and other incentives to promote capital formation and industrial innovation, reduction of regulatory burdens; and creation of a common purpose between business and Government.

Mr. Barden addressed the pension issue, calling it IEEE's primary non-technical concern and urging enactment of legislation to provide a Limited Employee Retirement Account (LERA) and commending current LERA bills before Congress. His statement was endorsed by AIAA, ASCE, ASME and NSPE.

Dr. Guarrera helped support IEEE's case for LERA, pointing out that engineers employed in industries serving Government are often the most mobile, changing jobs frequently to follow contracts from one Federal contractor to another, and in turn, forfeiting pensions.

Mr. Cazza, a member of the IEEE Energy Committee,

continued page 3

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*.



Contact: Gloria Aukland

United States Activities Board

1980 USAB PROGRAM

<u>PROJECT</u>	TASK FORCE LEADER OR COMMITTEE CHAIRMAN	<u>PROJECT</u>	TASK FORCE LEADER OR COMMITTEE CHAIRMAN
COMPENSATION AND BENEFIT Coordinator: R.A. Barden +		STRATEGIC PROGRAMS Coordinator: D.L. Vines	
Service Contracts	Harb S. Hayre	R&D Innovation in U.S.	Samuel J. Raff
Pension Coverage	Robert A. Barden +	U.S. Energy Program	Hilton U. Brown, III
Patent Rights	Howard L. Ross +	Telecommunications	Richard B. Marsten
		Health Care Policy	Eli Fromm
		Committee on Man and Radiation (COMAR)	Om P. Gandhi
		U.S. Technological Policy Conference	Russell C. Drew
		NRC/IEEE Conference	Richard J. Gowen
		National Platform Effort	Edward A. Wolff
EMPLOYMENT OPPORTUNITIES AND ASSISTANCE Coordinator: R.J. Backe +		COMMUNICATIONS Coordinator: D.B. Dobson	
Manpower Activities	Richard J. Backe +	Internal and External Communications	David B. Dobson
Career Maintenance and Development	Marlin P. Ristenbatt	PUB The Institute	David B. Dobson
Committee on Professional Opportunities for Women (COMPOW)	Mary A. Lillard	Public Relations	Herbert H. Heller
Age Discrimination		Marketing	
Salary Survey	Herbert H. Heller	Opinion Survey	Herbert H. Heller
		Legislative Reports	
		Industry Newsletter	
LOCAL ACTIVITIES Coordinator: R.A. Barden		ADMINISTRATION Coordinator: H.M. Grove	
Professional Activities (PAC)	Robert A. Barden	Washington Office	
Regional/Divisional Project Support	Richard J. Gowen	Administration and Finance (USAB Support)	
Discretionary Funds—USAB Members	Richard J. Gowen	Member Profile	
IMPACT	David B. Dobson	Financial Planning	Richard C. Benoit
PROFESSIONAL Coordinator: J.B. Snyder			
Employment Guidelines	Joel B. Snyder		
Ethical Conduct Activities	Howard B. Hamilton		
Licensure and Registration	Sajjad H. Durrani		
USAB Awards and Recognition			
Congressional Fellows			

(+ = acting)

MEMBERS OF THE 1980
UNITED STATES ACTIVITIES BOARD

* Richard J. Gowen	Chairman
* Richard J. Backe	Vice Chairman
* H. Mark Grove	Vice Chairman
* Richard C. Benoit	Treasurer
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David C. McLaren	Director - Region 3
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Arwin A. Dougal	Director - Region 5
* Charles A. Eldon	Director - Region 6 and RAB Liaison
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* Edward J. Doyle	Director - Division III and TAB Liaison
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Charles A. Zracket	Member-at-Large
* Herbert H. Heller	Member-at-Large and PR Committee Liaison
Howard B. Hamilton	Member-at-Large and Awards Board Liaison
* USAB OpCom Members	



Contact: Gloria Aukland

United States Activities Board

NRC-IEEE CONFERENCE PUBLICATIONS NOW AVAILABLE!

Results of the IEEE Working Conference with the Nuclear Regulatory Commission on "Advanced Electrotechnology Applications to Nuclear Power Plants" have been published in two formats. Both an Executive Summary and a complete Conference Record containing the technical papers on the Working Panels are available for the same low price. Specify which--or both--on the form below.

(tear here)

IEEE Service Center
445 Hoes Lane
Piscataway, NJ 08854

Please send me the publications checked:

- Executive Summary, IEEE-NRC Conference (TH0077-8)
Members, \$24; Nonmembers, \$32
- IEEE-NRC Conference Record (TH0073-7)
Members, \$24; Nonmembers, \$32
- Both of the above (UH0136-2)
Members, \$27; Nonmembers, \$36
- Payment enclosed.
- Bill me. (A \$2 billing charge will be added to all non-prepaid orders.)

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Address _____

City _____ State _____ Zip _____

(New Jersey residents please add 5% state sales tax.)

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FOR THE ENGINEER'S PROFESSIONAL LIBRARY

Summary and Record of the recent Conference on U.S. Technological Policy

- Executive Summary, 1979, "Stimulating Innovation Through U.S. Policy." Contains many photographs and a "Quiz for Engineers." (TH00661) Members, \$7.50; Nonmembers, \$10.
- Conference Records and Slide Presentations, Parts I and II, 1979, "Stimulating Innovation Through U.S. Policy." (CH14720) Members, \$11.25; Nonmembers, \$15.

Newest Salary Survey

- 1979 U.S. Member Salary and Fringe Benefit Survey. How does your salary compare? Many cross tabulations including education, experience, geographic location, and others. (UH01347) Members, \$36.00; Nonmembers, \$54.00.

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Please send me the publications checked.

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City _____ State _____ Zip _____

(New Jersey residents please add 5% state sales tax.)

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Contact: Mark M. Lucas

Membership Development Newsletter

INSTITUTE AND SOCIETY MEMBERSHIP GROWTH CLIMBING

The April 30 statistics show total Institute membership continues strong growth in 1980 at 189,181 active members. This figure is 10,016 above same time last year. The Society membership also continues to grow with 194,404 memberships held, and increase of 14,822 over previous year's April 30 figures.

The Membership Development Committee wishes to thank all members working on MD activities and requests their continued support and contributions toward IEEE growth in 1980.

PROMOTING ELEVATION TO SENIOR MEMBER GRADE

We're halfway through "The Year of the Senior Member" and are experiencing an increasing level of awareness and interest in the program. Sections and Societies are urged to continue to publicize in their newsletters that those members who are "senior" in the profession should also be shown as being "senior" in the IEEE.

Personal contact is one of the most successful methods of encouraging application for elevation to Senior Member grade. All Senior Members should be asked to contact those among their colleagues who reflect that special standard of professional excellence of the Senior Member. Senior Members have an implied responsibility to assure that this standard is easily recognizable by all in the profession.

Sections and Societies are also encouraged to acknowledge newly elected Senior Members at meetings and by printing photographs and biographical material in newsletters. All members who are elected to Senior Member grade during 1980 will receive a membership certificate free of charge.

Any member or organizational unit may propose a qualified member for elevation to Senior Member grade. If you know a well qualified candidate, complete and return the unsigned application (most members already have a resume that can be used for this purpose) and contact three sponsors to support the application. When favorable action has been taken, a form will be forwarded inviting the applicant to accept the proposed elevation in grade.

Contact your MDC Representative (see enclosed roster) for ideas and assistance in your Senior Member growth efforts. Contact Membership Development for Candidate and Reference lists and application packages.

MEMBERSHIP DEVELOPMENT COMMITTEE TO MEET IN CHICAGO

The Membership Development Committee will hold its next meeting in Chicago on August 16 and 17. We wish to take this opportunity to welcome Mr. William Hibbard as a new member of MDC, Division III's Representative. We look forward to his input at this meeting.

Officers in all levels of membership development are encouraged to communicate with their representative on MDC with reports of successful membership programs or requests for MDC consideration of proposals or ideas.

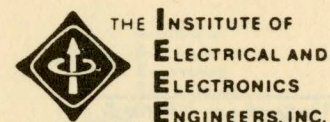
For MD ACTION, call Roseann Schulz, IEEE/NJ (201) 981-0060, (ext. 132)

1980 RAB MEMBERSHIP DEVELOPMENT COMMITTEE

<u>Chairman*</u> Calvin O. Stoutz 21 Stoney Clover Lane Pittsford, N.Y. 14534 (716) 722-2467 (O) (716) 381-2177 (H) (716) 458-1000, Ext. 73679 (for Telecopier)	<u>Vice Chairman*</u> O P E N	<u>Region 1 Representative</u> Bernard De Marinis 87 Monmouth Road Spotswood, N.J. 08884 (201) 747-9303 (O) (201) 251-2069 (H)
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<u>Region 8 Representative</u> C.J.M. van der Wulp TNO Research Unit, EEG Dept. Westeinde Hospital Lijnbaan 32 2512 VA, The Hague, Netherlands	<u>Region 9 Representative</u> Eduardo Bonzi Correa Casilla 9807 Santiago, Chile	<u>Region 10 Representative</u> D. N. Purandare 31 C. Dr. Na Purandare Marg Bombay 40007, India 358867 (H) 272144 & 271898 (O) WIECOL BOMBAY (Tele. address)
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<u>Division IV Representative</u> Richard Sparks Raytheon Company Hartwell Road Bedford, Ma. 01730 (617) 274-7100, Ext. 4708	<u>Division V Representative</u> Ronald G. Hoelzeman Univ. of Pittsburgh 348 Benedum Hall, EE Dept. Pittsburgh, Pa. 15261 (412) 624-5396 (O)	<u>Division VI Representative</u> Thomas H. Grim 3392 Avalon Road Shaker Heights, Oh. 44120 (216) 822-8871 (216) 561-9110
<u>Division VII Representative</u> Robert E. Mendoza Public Service Electric & Gas 80 Park Place, Room 6302A Newark, N.J. 07101 (201) 430-7678 (O)	<u>Past MDC Chairman</u> K. Reed Thompson 4528 Wyndale Avenue, S.W. Roanoke, Va. 24018 (703) 387-7370 (O) (703) 989-9402 (H) (703) 387-7497 (Telecopier)	<u>Chairman, 1980 RAB SAC</u> Eric M. Aupperle University of Michigan Merit Computer Network 5115 IST Building Ann Arbor, Mi. 48109 (313) 764-9423 (O) (313) 665-8043 (H)
	<u>IEEE Staff Secretary*</u> Roseann Schulz IEEE Service Center 445 Hoes Lane Piscataway, N.J. 08854 (201) 981-0060, Ext. 132	

*Planning & Evaluation Committee

MML 5/80



IEEE MEMBERSHIP SUMMARY

APRIL 1980

Region	MEMBERSHIPS		Growth	(see rank) % Growth	YEAR END GOAL # / %	% of # GOAL	RANK
	4/30/80	4/30/79					
1	37567	36409	1158	3.2%			9
2	26813	26257	556	2.1%			10
3	19055	17580	1475	8.4%			4
4	19478	18647	831	4.4%			7
5	18004	17001	1003	5.9%			6
6	37266	35099	2167	6.2%			5
1-6	158183	150993	7190	4.8%			-
7	10537	10140	397	3.9%			8
8	8814	7800	1014	13.0%			2
9	3744	3424	320	9.3%			3
10	7903	6808	1095	16.1%			1
8-10	20461	18032	2429	13.5%			-
Total 1-10	189181	179165	10016	5.6%			-
SOCIETY/GROUP MEMBERSHIPS BY DIVISION							
Division							
I	27217	25247	1970	7.8%			2
II	26310	24765	1545	6.2%			4
III	28912	26145	2767	10.6%			1
IV	27395	25601	1794	7.0%			3
V	41267	35917	5350	1.5%			6
VI	24064	22930	1134	4.9%			5
VII	19239	18977	262	1.4%			7
G/S Total	194404	179582	14822	8.3%			-
Students	32618	29723	2895	9.7%	TBA		-
Senior Members	20912	20843	69	0.3%	TBA		-

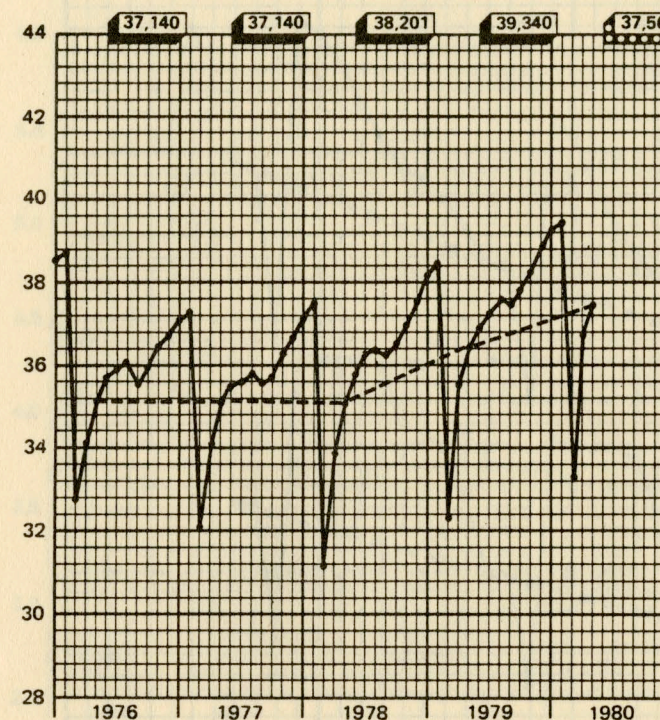
Division	MEMBERSHIPS HELD		GROWTH	% GROWTH	Year End Goal # / %	% of # Goal	Rank % Growth
	4/30/80	4/30/79					
I ASSP 01	6962	6202	760	12.3			3
CAS 04	9142	8531	611	7.2			9
IT 12	4344	4139	205	5.0	T		19
CS 23	6769	6375	394	6.2			13
I Subtotal	27217	25247	1970	7.8	B		-
II NPS 05	2769	2588	181	7.0			11
VT 06	2417	2309	108	4.7	A		20
IM 09	4651	4484	167	3.7			22
IECI 13	4970	4702	268	5.7			15
EI 32	1388	1319	69	5.2			18
IA 34	10115	9363	752	8.0			7
II Subtotal	26310	24765	1545	6.2			-
III BCCE 02	6581	5913	668	11.1	T		5
AES 10	6545	6167	378	6.1			14
COM 19	12732	11174	1558	13.9			2
EMC 27	1749	1633	116	7.1	B		10
GEO 29	1305	1258	47	3.7			22
III Subtotal	28912	26145	2767	10.6			-
IV AP 03	4243	4027	216	5.4			17
ED 15	8102	7268	834	11.5	A		4
MTT 17	5390	5103	287	5.6			16
SU 20	1951	1867	84	4.5			21
CHMT 21	2552	2473	79	3.2	T		23
MAG 33	2278	2114	164	7.8			8
QE 36	2879	2749	130	4.7			20
IV Subtotal	27395	25601	1794	7.0	B		-
V COMP 16	41267	35917	5350	15.0			24
VI R 07	2678	2520	158	6.3			12
EM 14	7290	6682	608	9.1	A		6
EMB 18	6227	6220	7	0.1			27
E 25	2053	1960	93	4.7			20
PC 26	1854	1604	250	15.6			1
SMC 28	3962	3944	18	0.5			26
VI Subtotal	24064	22930	1134	4.9			-
VII PE 31	19239	18977	262	1.4			25
Total G/S	194404	179582	14822	8.3			-

MEMBERSHIP PROGRESS

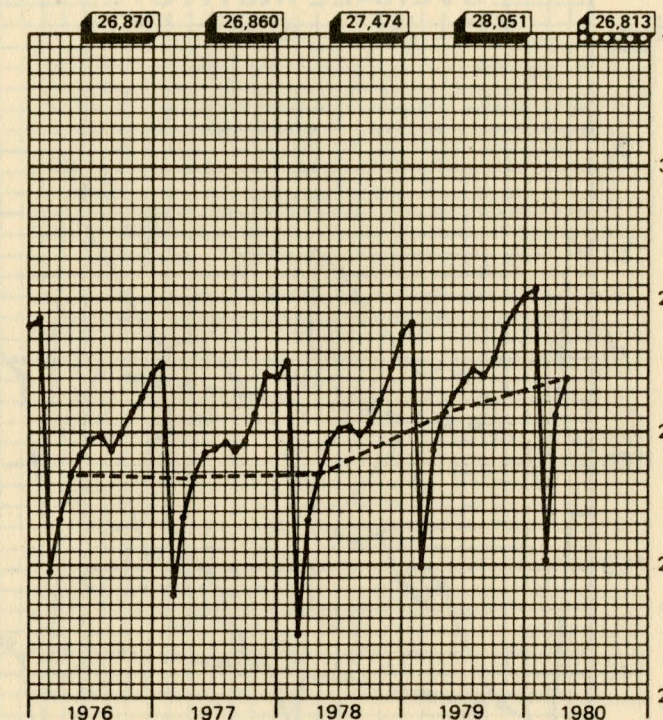
APR 1980

This month
Year end

1 Northeastern Region

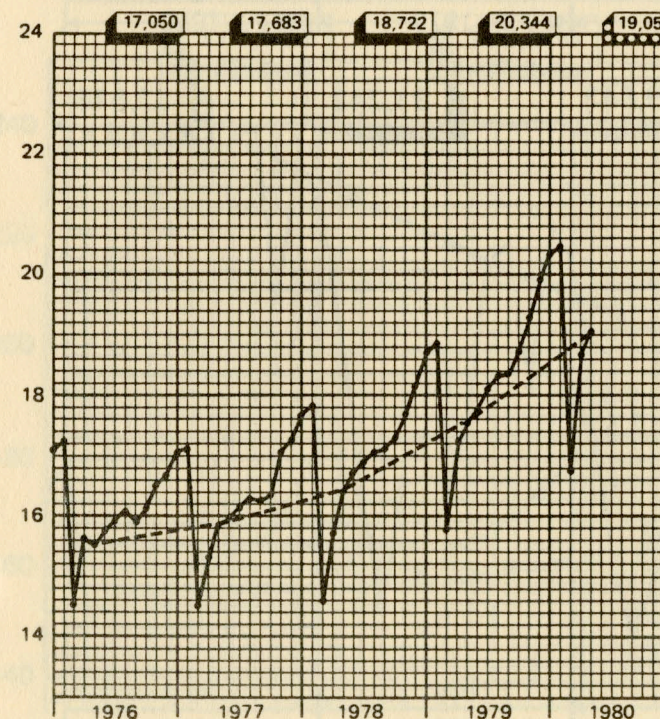


2 Eastern Region

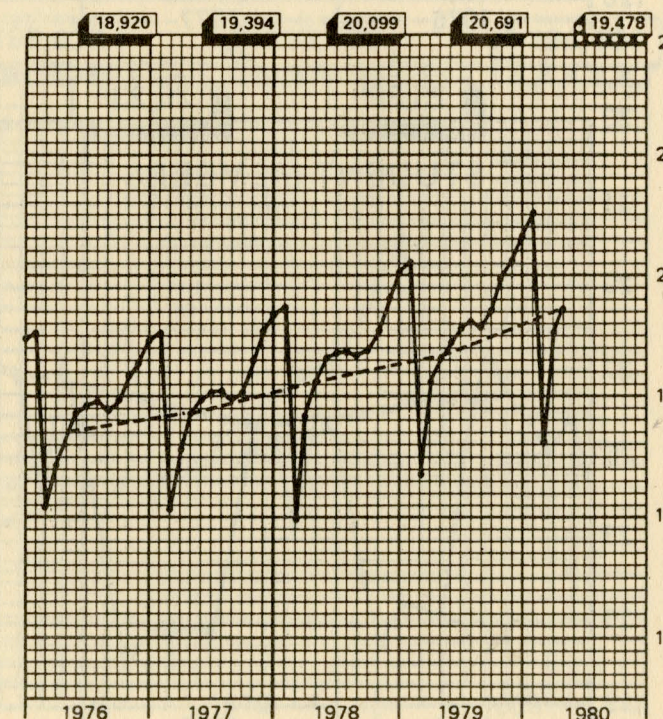


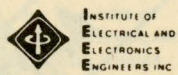
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3 Southeastern Region



4 Central Region





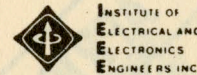
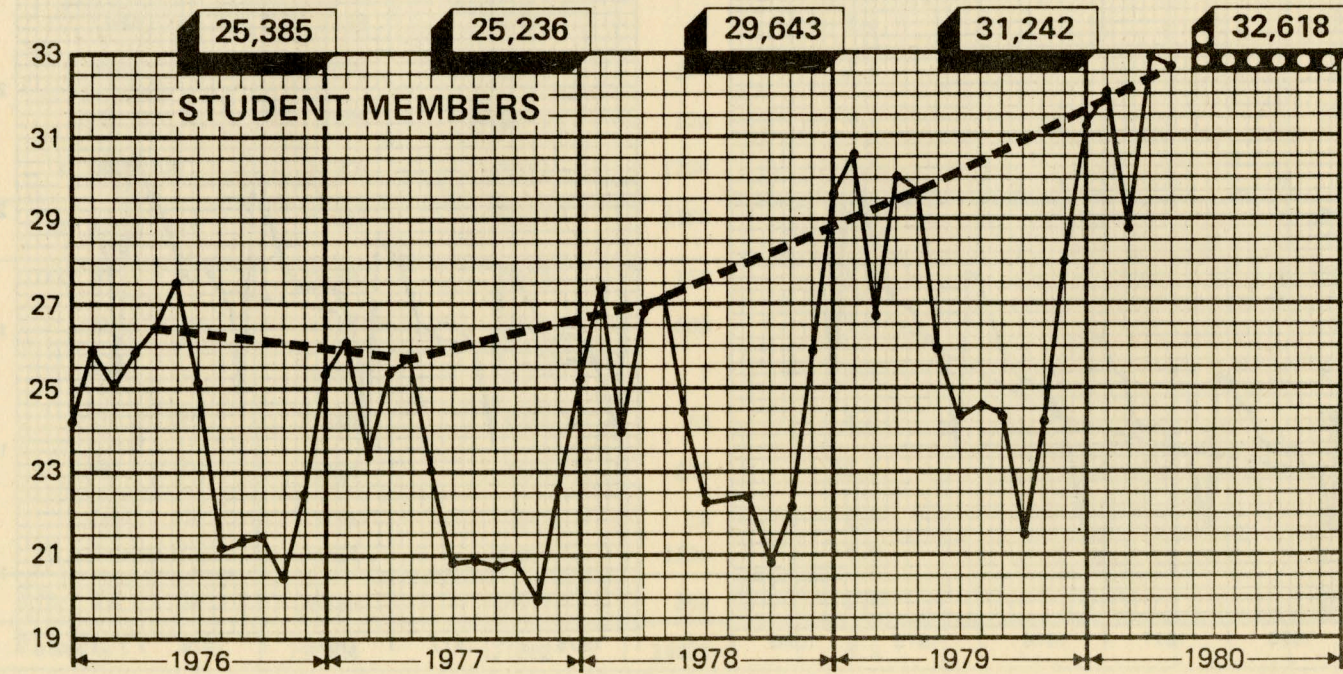
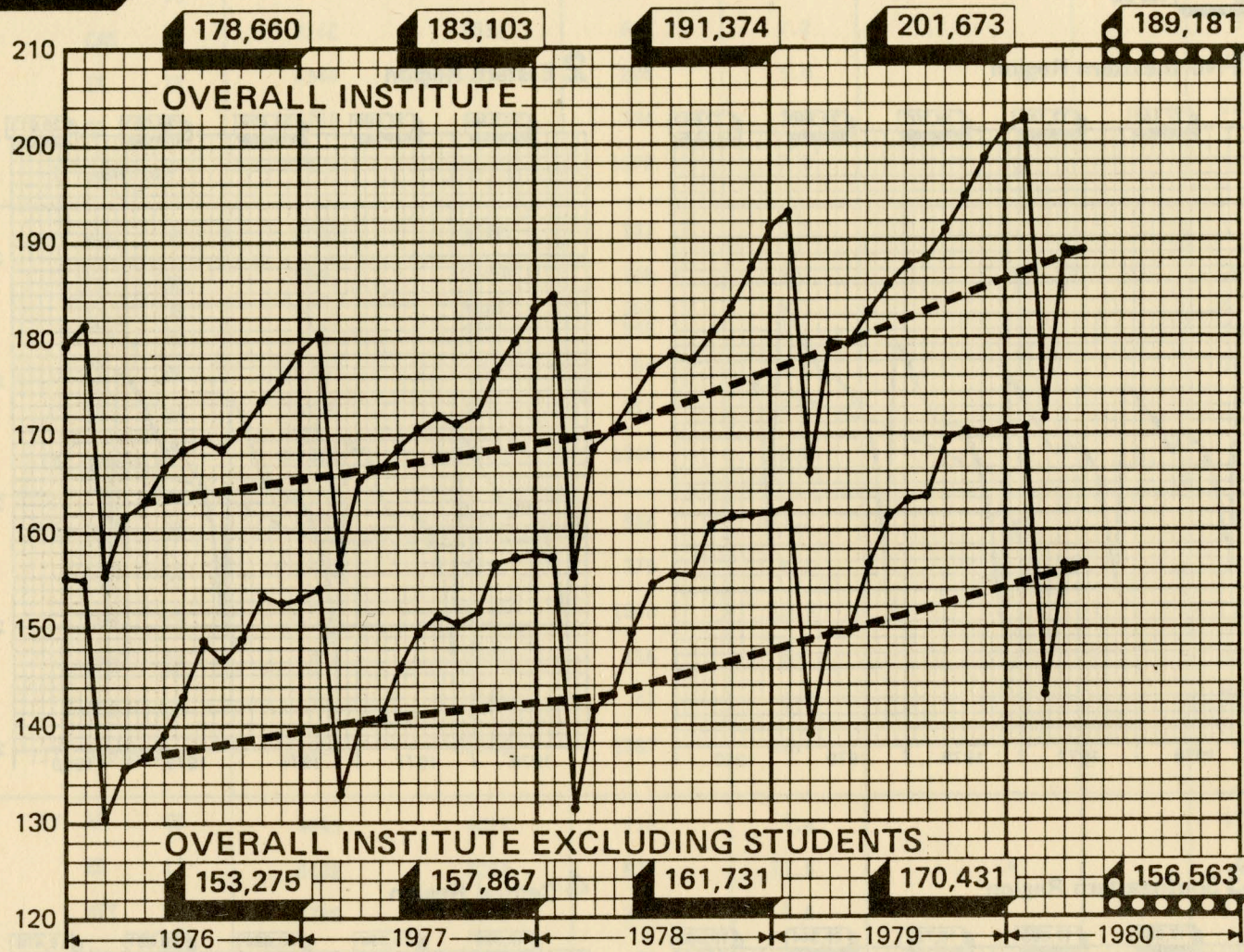
INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS INC

APR 1980

This month

Year end

MEMBERSHIP PROGRESS



INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS INC

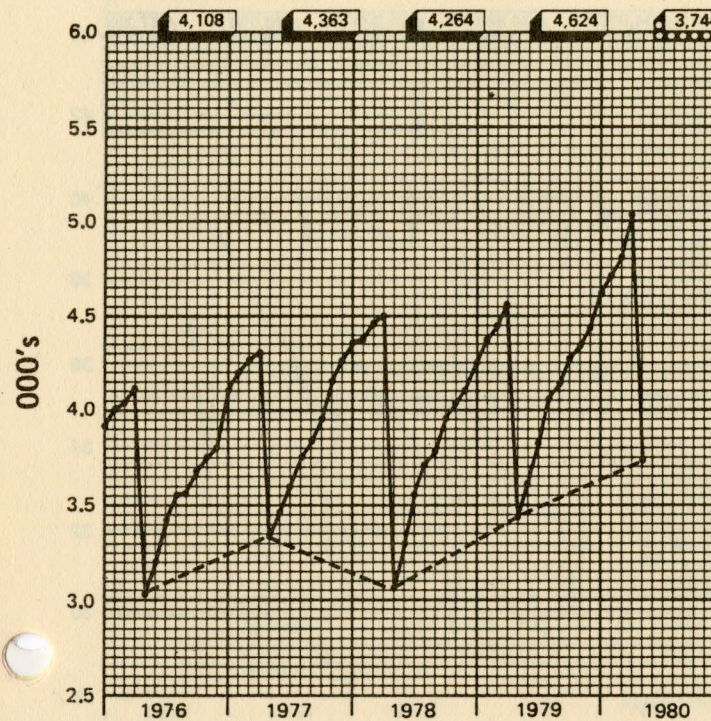
APR 1980

THE REGIONS

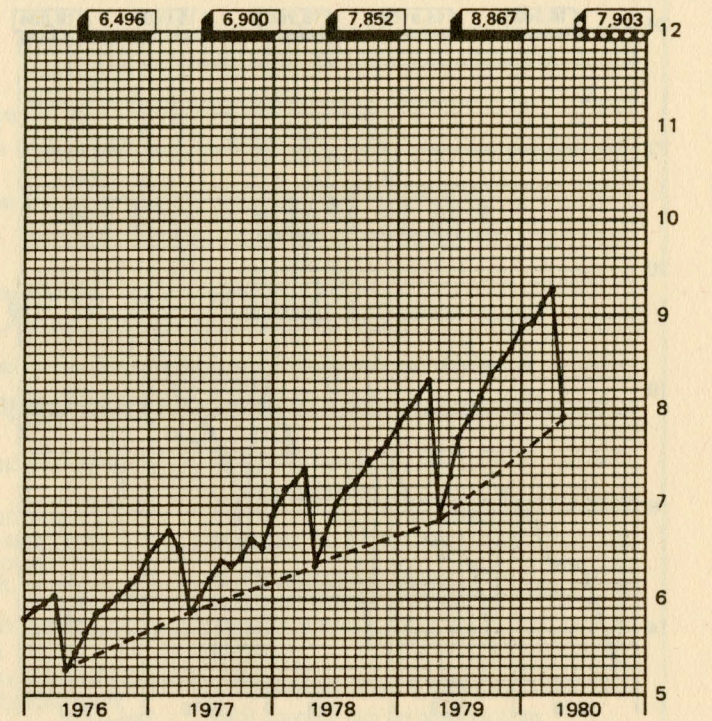
MEMBERSHIP PROGRESS

This month
Year end

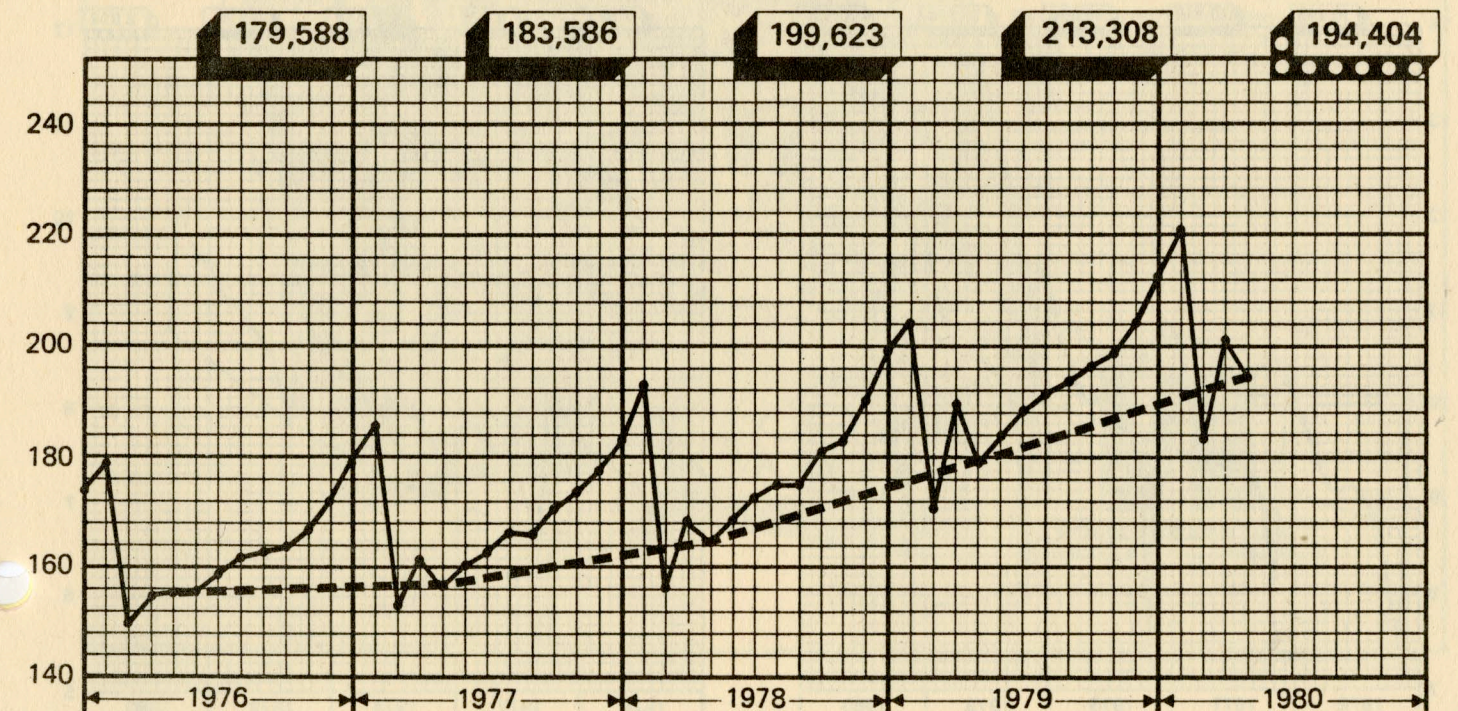
9 Latin American Region



10 Rest of the World





THE SOCIETIES & GROUPS-TOTAL MEMBERSHIPS HELD

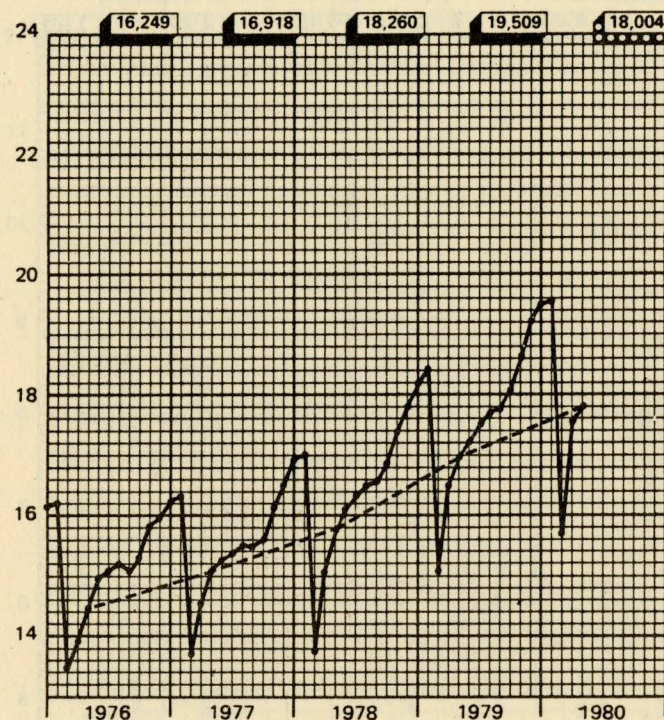


MEMBERSHIP PROGRESS

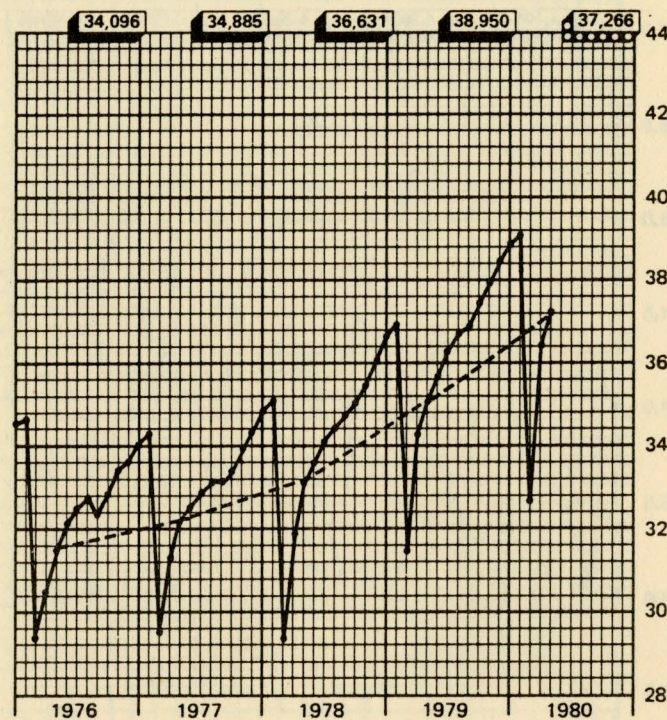
APR 1980

 This month
 Year end

5 Southwestern Region

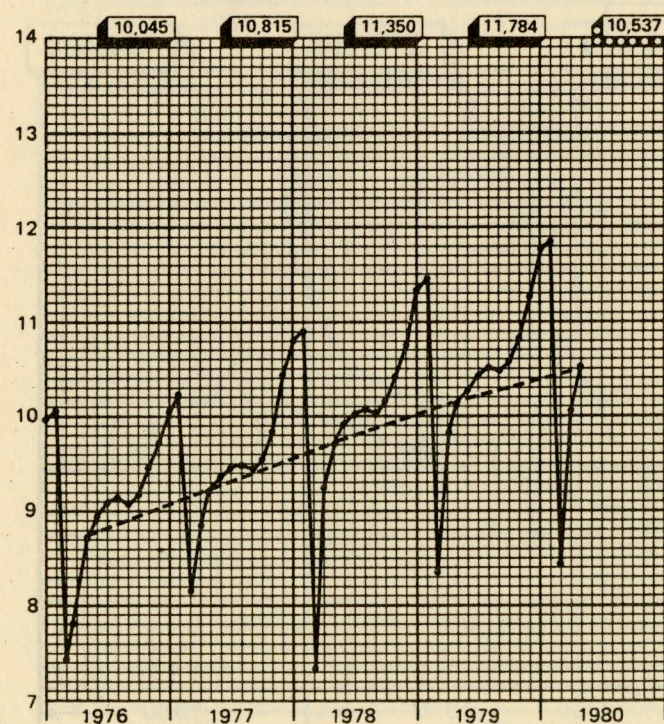


6 Western Region

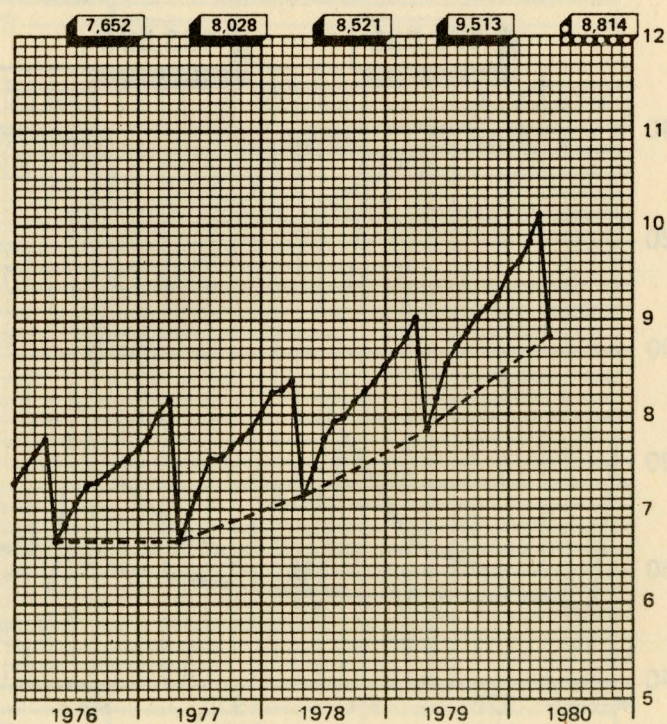


000's

7 Canadian Region



8 Europe, N. Africa, Mid. East Region



Continuing Education Services

IEEE Short Courses provide expert instruction plus member service

Choose the plan that best fills your capabilities and matches your needs

1. Full-Service Plan

The IEEE Continuing Education Department staff does practically all the arrangements. The sponsoring unit arranges for location, luncheons and refreshments; audio visuals and operator; local promotion of supplied pieces; registration on site. IEEE handles advance registrations.

2. Instructor and Course Notes Plan

Under this plan the sponsoring unit handles most of the arrangements, but has a chance to produce greater funds for the unit.

3. EAB and University/Section Plan

Similar to Full Service Plan but with variations subject to discussion.

4. IEEE Society/Group Plan

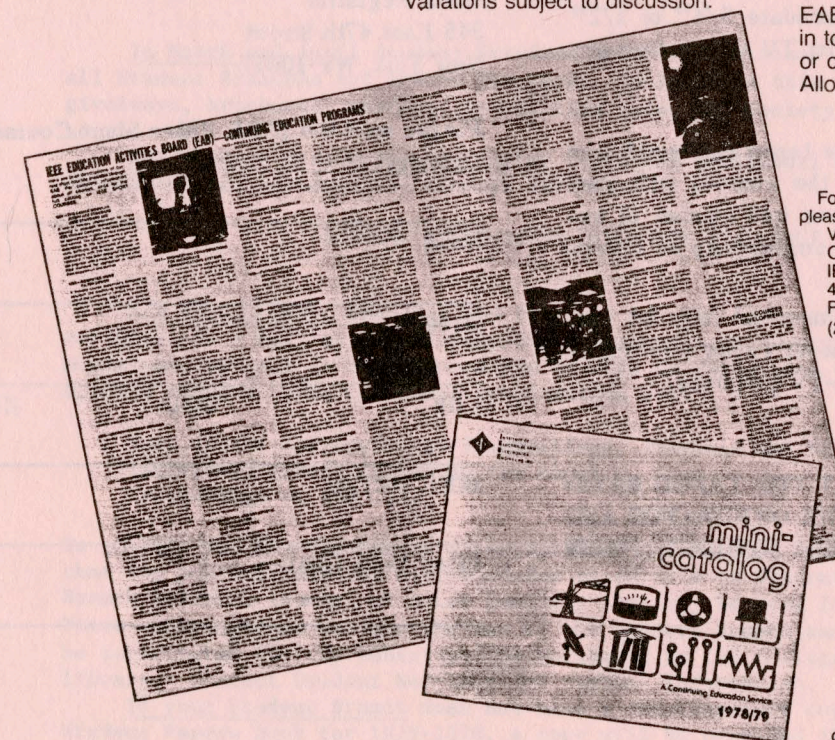
Similar to Section-sponsored plan, but "split" of fees differs.

5. Conference Plan

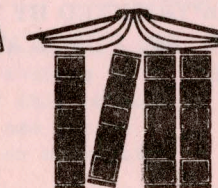
Arrangements for a course or courses during a major conference.

6. On-Premises Courses

EAB courses can be brought right in to your own company, institute, or college, for on-site training. Allow 30-60 days for scheduling.



For complete information, including costs, please contact:
Vincent J. Giardina, Manager
Continuing Education
IEEE
445 Hoes Lane
Piscataway, New Jersey 08854
(201) 981-0060



A Continuing Education Service of the IEEE Educational Activities Board.

A NEW DIMENSION IN IEEE CONTINUING EDUCATION

Videotape Short Courses offered by the IEEE Educational Activities Board are developed by such experts as Colorado State University, MIT, and Texas Instruments covering a broad range of timely engineering subjects. The courses may be offered by IEEE Sections and others over a period of several days/weeks with pre-enrolled students at a reasonable registration fee to the individual participant (thereby recovering the initial rental charge). With minimal equipment and set-up time, the course can multiply instructional resources over a broad spectrum of IEEE members.

Format

Each course consists of five or more color videotape cassettes, averaging 30 to 60 minutes in length on either 3/4" SONY Unimatic, 1/2" VHS or 1/2" BE-TAMAX.

Equipment

The equipment required is any standard video cassette playback unit which will accommodate 3/4" or 1/2" tape selected and a suitable color TV monitor/receiver.

Fees

The cost for rental of the course tapes and workbooks (study guides), if required by the course, will vary according to the number of tapes and number of expected students. Fees for each course may be obtained by contacting IEEE.

Rental Fee covers a one-time use and only for purposes covered in rental agreement. Tapes may not be used for TV broadcast or cable-TV purposes.

Copyright

USERS ARE CAUTIONED THAT THE TAPED MATERIAL IS COPYRIGHTED BY THE ORIGINATOR AND MUST NOT BE DUPLICATED WITHOUT PRIOR PERMISSION.

Subjects Available

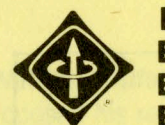
Manufacturing Quality Control
Engineering Economy
Cooling of Electronic Equipment
Operational Amplifiers & Active Filters:
- The Frequency Domain
- Operational Amplifier
- Active Filters
Designing with Microprocessors
Microprocessors
Integrated Optics
Modern Control Theory:
- System Analysis
- Deterministic Optimal Control
- Deterministic Optimal Linear Feedback
- Stochastic Estimation
- Stochastic Control
Management of Technological Innovation
Energy Auditing & Conservation
Systems Engineering & Systems Management

To obtain the Complete IEEE Video Short Course Catalog, fill in the form below and return to:

IEEE Registrar
345 East 47th Street
New York, NY 10017

Please mail the IEEE Video Short Course Catalog.

Name			
Street			
City	State	Zip	
IEEE Section			
Other Organization			



IEEE

Contact: Roni Nichols

Student Activities News

AWARD ANNOUNCEMENTS

A \$1,000 honorarium is available to students from the Radio Technical Commission for Aeronautics. Each year the RTCA confers the William E. Jackson Award on an Outstanding Student. It consists of a personalized plaque and a \$1,000 honorarium. The award is a memorial to William E. Jackson, an outstanding pioneer in the development and implementation of the present Airways, Air Traffic Control, and Aviation Communication Systems.

Eligibility: Any undergraduate or graduate student studying for a degree in the field of aviation electronics or telecommunications systems is eligible. There are no restrictions as to race, creed, color, religious affiliation, national origin or citizenship.

RTCA must receive all entries no later than June 30. Submissions are to be sent to: William E. Jackson Award Committee, c/o RTCA, Suite 655, 1717 H Street, N.W., Washington, D.C. 20006. For more specific details please contact the Committee at the above address or Coordinator of IEEE Student Services.

REMINDER FROM STUDENT SERVICES

Student Services has moved from Headquarters in New York to the New Jersey Service Center. The address and telephone number are: IEEE, Student Services, 445 Hoes Lane, Piscataway, N.J. 08854, 201-981-0060.

PROMOTIONAL MATERIALS AVAILABLE

In March and April Student Services mailed promotional materials to all Student Branches and Branch Chapters. Included in this package were giveaways, brochures, posters, application pads, and Society/Group announcements.

Any Student Branch/Branch Chapter requiring additional materials should contact Coordinator, Student Services.

SPECIAL PUBLICATION DISCOUNTS AVAILABLE

All IEEE Student Branches are eligible to receive an annual subscription to a full set of Society/Group Transactions, Journals and Magazines, as well as the *Proceedings of IEEE* at discounted rates. The special reduced rates for these publications are:

Full Set of Society/Group Transactions, Journals and Magazines	\$86.00
Individual subscriptions to the above	3.00
Proceedings of the IEEE	10.00

To qualify for the discounted subscriptions, the Student Branch must ensure that the publications are displayed and accessible to Student members in a Branch Library, Lounge, or other facility that may be used for this purpose. These subscriptions are for the use of the Student Branch and are not to be substituted for any subscriptions purchased by the college or university library. Contact Student Services for further information.

If your Student Branch does not have a complimentary copy of the Student Papers Book for 1975-1978, a copy will be provided if you contact Student Services.

1980 STUDENT PAPER CONTEST WINNERS

IEEE Student Paper Contest winners have been announced for the competitions in Regions 1, 2, 3, and 8. Students who compete on the Regional level must first compete in a Branch and often Section or Area contest to make the finals in the IEEE Student Paper Contest.

The Student Paper Contest is sponsored by the Life Member Fund. Winners receive cash awards of \$200, \$100, or \$50 for first, second, and third place respectively. In addition, the papers are published in the annual compendium of the top three papers from the IEEE's 10 geographic regions.

For the 1980 Contest, the winners are: Region 1 - Robert F. Popoli and Paul J. Palamara of Cooper Union, first place; Fred Scharf and John A. Langan of Cooper Union, second place; and Denise Camp of Rensselaer Polytechnic Institute, third place.

Region 2 - William Billowitch of Lehigh University, first place; Curt Notestine of Wright State University, second place; and Robert Morford of Swarthmore College, third place.

Region 3 - Michael A. Montgomery of University of Tennessee, first place; Christopher Simpson and Eric H. Weimers of Tulane University, second place; and Ronald C. Atwell of the State Technical Institute at Memphis, third place.

Region 8 - J.A. del Alamo of ETSI Telecomunicacion, Universidad Politecnica, first place; H. Persson of Chalmers Institute of Technology, second place; S. Jespers and Ph. Thibaut of Universite Catholique de Louvain, third place.

PROFESSIONAL COMMUNICATIONS SOCIETY SCHOLARSHIP AWARDED

The Professional Communications Society awarded a \$1000 scholarship to Brian Edward Lundeen of Red River Community College, Winnipeg, Canada.

BRANCH COMPETITION PROVIDES GRANTS OF \$500

The IEEE Vincent Bendix Award Competition provides grants of up to \$500 to Student Branches for the support of projects undertaken by Branch members. Over \$40 000 has been given to 105 projects since the program's inception in 1965. Projects funded have ranged from technical research on the-state-of-the-art technology to community service programs.

Proposals for the 1980-81 competition should be sent to the IEEE Student Services Department so that they are received no later than Nov 15.

Students interested in this award program who would like further information should contact the Coordinator of Student Services, Roni Nichols, 445 Hoes Lane, Piscataway, N.J. 08854, 201-981-0060.

Correction: In the April 1980 Student Newspaper, the PCS award should have been noted as \$1000 rather than \$100.

National platforms, continued

focused his remarks on nuclear fission, fusion, and solar energy, and urged adoption of an energy policy that would encourage increased use of nuclear fission for electrical power generation, along with increased funding to provide development of devices leading to construction of hybridized fusion-fission full-scale power plants. Aggressive R&D programs were recommended for solar energy.

AWARDS

REMINDER OF NOMINATIONS NEW DEADLINE

Deadline date for receipt of nominations for the W.R.G. Baker, Donald G. Fink, and Browder J. Thompson prize papers is July 1. For details refer to the January 1980 issue of THE INSTITUTE. For forms and information, contact Una B. Lennon at Headquarters.

TAB NEWS

SOCIAL IMPLICATIONS OF TECHNOLOGY ACTION

At the March 15 Committee on Social Implications of Technology (CSIT) meeting, members voted to collect petition signatures for the purpose of converting the Committee to a Society. The proposed IEEE Society on Social Implications of Technology would, if approved, incorporate all functions of CSIT as well as some expanded functions. The petition will be presented to the Technical Activities Board at its July meeting.

ENGINEERING FOUNDATION GRANT

Engineering Foundation Fellowships during 1981 for state-of-the-art reviews in fields recommended by its founder societies are sponsored by the Engineering Foundation. The program is aimed toward members of engineering faculties and industrial specialists who have established a professional reputation through publications. A grant of \$6,000 may be awarded on a competitive basis to a member of each of the Founder Societies for a proposed research plan in a field of direct interest to the Founder Society. All proposals being submitted to the Founder Society must be postmarked by June 1, 1980. Contact Irving Engelson at Headquarters for further details.

DIVISIONAL STRUCTURE STUDIED

An ad hoc committee has been formed to study the current Society/Group/Council divisional structure and make appropriate recommendations to TAB OpCom, in accordance with the 1980 goals stated by TAB Chairman Larson. The Chairman of the ad hoc committee is Division V Director Dick B. Simmons and members of the committee include Division I Director Jose B. Cruz Jr., Division II Director F.A. Furfari, and Division VI Director Thelma Estrin. The committee will conclude its study in July and form a report at that time.

EAB NEWS

CASSETTES AND 'SPEC' SHEETS ON COURSES

The Continuing Education Department is now in the process of assembling descriptive education cassettes and specification sheets to provide more detailed information

on its continuing education courses. Extensive course material outlines and major concepts of the most popular courses will be supplied. The course-specification sheets are printed as separate sheets punched for three-hole binders for easier collection purposes. The descriptive cassettes are 15 minutes long and will soon be made available to all interested parties. For further information on both of these new concepts, contact Vincent Giardina at the Service Center.

EDUCATION PLANS

Up-to-date high caliber education programs designed to meet local needs are promised by the "packaged course" concept now in development. In response to many requests, six popular two-day courses are being converted into versions that can be taught in a multi-week mode by local instructors. The package is priced at approximately \$25 per participant and will include an instructor's manual, appropriate visuals, examinations, student handbook and all required material necessary for a successful program. Those completing the program will be presented with a CEAU award, Certificate of Achievement and will be included in the IEEE course records and transcript service. Courses being developed include: BASIC for Beginners, Microprocessor Seminar, Fiber Optics, Protection and Grounding of Distribution Systems, Computer Automated Measurement and Control, and Basic Project Management. For further information, contact Vincent Giardina at the Service Center.

SCHEDULE NOW FOR FALL COURSES

A full five-month lead period is recommended by the Continuing Education Department in planning for a continuing education course. All sections are urged to start planning now. Vincent Giardina at the Service Center will help design a rewarding education experience tailored to fit specific needs of today's technology.

RAB NEWS

A REMINDER TO ALL SECTIONS

It had been brought to the attention of the Field Services Department that some student members are not receiving all material generated by their Sections, which is stipulated in the IEEE Bylaws. All Sections are reminded that every Student Member is entitled to receive any and all information sent out by the Sections to the membership.

AUXILIARY SUPPORTS EE EDUCATION

In Jackson, Mich., more than 40 women in the immediate families of IEEE members belong to the Women's Auxiliary to the IEEE, Jackson area of the Southeastern Michigan Section.

One of the primary goals of the group, which was formed in 1960, is to promote the advancement of education of electrical and electronic engineering students. In the past 20 years, the group awarded 10 scholarships ranging from \$250 to \$400 to Jackson Community College students who were going on to study EE at a college of their choice. The auxiliary also has donated about \$300 to the Jackson Community College library.

Programs at meetings of the auxiliary range from silk

continued page 4

Women's auxiliary, continued

flower arranging to nuclear power. The group has assisted IEEE's Southeastern Michigan Section in planning activities for spouses accompanying IEEE members to meetings held in the section area, said Marjorie Lolich, co-vice chairperson.

CHAPTER/SECTION NEWS

The following new chapters were established:

The Magnetics Chapter of the Pittsburgh Section, The Central Georgia Subsection of the Atlanta Section, The Aerospace and Electronic Systems Chapter of the Toronto Section, The Industry Applications Chapter of the North Jersey Section, The Computer Chapter of the Mexico Section, The Power Engineering Chapter of the Sao Paulo Section, The Acoustics, Speech, and Signal Processing Chapter of the Houston Section, The Quantum Electronics and Applications Chapter of the Washington Section, The Broadcast, Cable, and Consumer Electronics Chapter of the New York Section, The Computer Chapter of the Mid-Hudson Section, The Computer Chapter of the Charlotte Section, The Computer Chapter of the Buffalo Section, The Springfield-Joplin Subsection of the Kansas City Section.

PUB NEWS

FELLOWSHIP AWARDED TO U. of Pa. STUDENT

W. Bernard Carlson, a student in the Department of History and Sociology of Science at the University of Pennsylvania, will receive the third IEEE Fellowship in Electrical History. The Fellowship, which carries a basic stipend of \$6500 plus an amount up to \$2000 for tuition and fees, is made possible by a grant from the IEEE-Life Member Fund. It is for full-time graduate study and research during the 1980-1981 academic year.

Mr. Carlson, who received a B.A. degree in history from the College of the Holy Cross in 1977, expects to receive his doctorate in the history of technology from Pennsylvania in 1982. As an IEEE History Fellow, he will undertake research on the professional career of Elihu Thomson, a major engineer, inventor, and scientist. He intends to study two main themes: first, how technological change affects the formation and expansion of high-technology firms; and second, how institutional, scientific, sociological, and psychological factors influence the innovative process.

SPECTRUM WINS NATIONAL MAGAZINE AWARD

SPECTRUM has become the first magazine of a professional society for engineers or scientists to win a National Magazine Award, the industry's most prestigious honor. *SPECTRUM*'s special November 1979 issue, "Three Mile Island and the Future of Nuclear Power," which was one of 648 entries from 219 publications, became one of 40 finalists in eight categories before being chosen for the Award in Specialized Journalism. The announcement of this year's winners came on April 9 during a luncheon at the Plaza Hotel. For further information, see THE INSTITUTE, June 1980.

IEEE PUBLISHES BOOK ON DATA CONVERSION

Data Conversion Integrated Circuits, a book of selected reprints, has been published by the IEEE Press. This collec-

tion, edited by Daniel J. Dooley of Data Conditioning Devices Inc., is sponsored by the IEEE Circuits and Systems Society. The thrust of this volume is to provide a source of design and reference information for both the designer and user. The criteria for selecting the reprinted papers were technical merit, timeliness, and degree of general interest. The 35 papers are divided by subject into the following seven parts: Linear D/A Converters, Linear A/D Converters, Data Conversion Devices for Telecommunications, Interface Data Conversion with Microprocessors, Peripheral Data Conversion Devices, Integrated Circuit Trim Techniques, and General Data Conversion. The paperbound member edition is priced at \$13.45. A clothbound edition is available for \$26.95 (discounted to \$20.20 for IEEE members) from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854.

CONSOLIDATED INVESTMENT OPTIONS

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

Investment Option 1—Short-Term Bank Deposits*:

Feb.	13.13%	
March	15.09%	
April	10.80%	
May/July	10.00%	(estimated)

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

Feb.	15.10%	
March	16.89%	
April	12.71%	
May/July	11.50%	(estimated)

Investment Option 3—Bond Plan†:

Feb.	12.30%	
March	12.55%	
April	11.25%	
May/July	10.50%	(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 201-981-0600, Ext. 123, or Thomas W. Bartlett at 212-644-7748.

Quick-Reference Telephone Roster

(for information referenced in this issue)

Headquarters (212-644-....) Irving Engelson 7863, Una B. Lennon 7882, Mark M. Lucas 8080.

Piscataway Service Center (201-981-0060); Vincent J. Giardina 174, Roni Nichols 165.

Washington Office (202-785-0017) Gloria Aukland.