

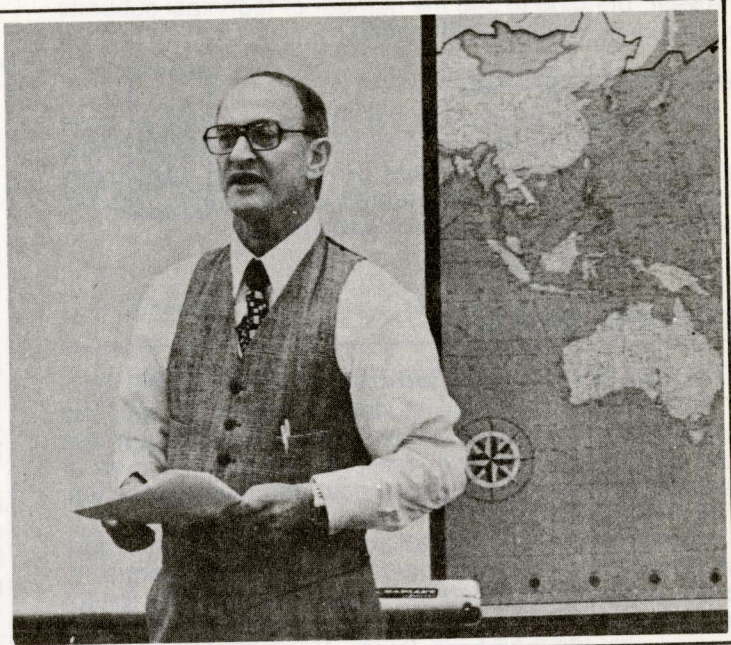
A MESSAGE FROM THE GENERAL MANAGER

Dear IEEE Officer: After 18 years as a volunteer in Section, Region, and Technical Activities of IEEE, it is my pleasure to speak to you now in my new capacity as IEEE's General Manager and Executive Director.

Many of you I have met personally, and many more I will meet or speak to by phone during the months ahead, but I want all of you to know one thing: The staff and I are here to serve your needs.

Over the years I have learned to appreciate the selfless gifts of personal time and effort IEEE's active members offer their Institute. I have also been impressed with the dedication of IEEE's professional staff. One of my jobs will be to blend these—to communicate the members' and volunteers' needs to the staff so that it can respond efficiently and courteously.

At the time of this writing I have been in office for only 30 days. There are no major announcements, but I do want you all to know that if you have a problem, query, or complaint that you feel is not being dealt with by staff, you can call me. Yours truly, Eric Herz



BUDGET SURPLUS FOR 1978

According to the forecast of Controller Tom Bartlett, IEEE's General Funds for 1978 will show a net of \$750 000 over expenses, including investment income, following a year in which many operational areas performed well ahead of budgeted income.

At the same time, IEEE's Societies are reporting a \$600 000 year-end surplus—down from 1977's year-end surplus of \$1.25 million.

The above quoted figures incorporate a later revision of those reported in February THE INSTITUTE. For a detailed interpretation see THE INSTITUTE article.

NEWS SUMMARY

• IEEE's Board of Directors acted on the following major topics during its Dec. 10–11 sessions in San Juan, Puerto Rico:

- Age discrimination
- Certification of engineers
- Campaign funding
- Revision of USAB's structure
- Electrical engineering museum
- Minority opportunities in engineering

For details, see January THE INSTITUTE.

• Institute membership for 1978 reached a record high of 191 374—an increase of 4.6 percent. Student membership climbed to 29 643 (up 17.2 percent) and Society membership stood at 199 623 (up 7.1 percent). See the Membership Development insert, pp. 2E–2L, for details.

• Reminder to Sections: Annual meeting reports and financial statements were due at HQ Feb. 1st.

RAB NEWS

GEOGRAPHIC UNITS: 1978 GROWTH

During 1978 the growth of IEEE's grassroots membership involvement was evidenced not only in record membership growth, but also in the number of new organizational units formed to meet the needs of members at the local level. Five Sections were established during the year, three of which were in Region 10. The Malaysia and Nigeria Sections were newly formed and the Madras Section was upgraded from Subsection status. Similarly upgraded were the two other Sections in Regions 5 and 7 respectively: the Pikes Peak Section and the Newfoundland-Labrador Section. This brought to 240 the number of Sections and to 46 the number of Subsections as of Dec. 31, 1978.

continued, p. 2

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RAB NEWS, continued

The number of Group/Society Chapters formed provides evidence that technical interests of the members at the local level ran high in 1978. Chapters provide the function of carrying out special programs for IEEE members who have common technical interests within one or more Sections. A total of 16 new Chapters were formed during the year, bringing to 546 the number of technical subunits of Sections throughout the world.

AN IDEA EXCHANGE

This issue of *EE* carries the first in a series of case histories exploring ideas and campaigns generated by the geographic units which have proved to be particularly successful. Ideas are still wanted for this series. To contribute contact Bob Asdal at Headquarters.

STUDENT NEWS

STUDENT BRANCH MEMBERSHIP CAMPAIGN

At 1978 year end, the student membership was the largest it has ever been, 29 643, with an increase in the rolls of 17½ percent over the previous year. And as of January 19, the 30k campaign goal had been exceeded, with the rolls standing at 30 113.

Membership doubled at 35 schools. Forty schools added 60 or more new members. At year end, Georgia Institute of Technology had the largest membership roll for any school—440. The University of Illinois at Urbana was second with 408 members. Pennsylvania State University signed up the largest number of new members—226, while the University of Illinois at Urbana was a close second, with 220 new members.

1978 saw evidence of increased activities by IEEE Student members at the local, Regional, and Institute level. Five new Branches were approved during the year, and 11 were disbanded in an attempt to reduce the number of marginally effective units. The total number of Branches therefore decreased to 423. The Student Branch Chapter program grew ten units during the year, with nine new Computer Society Branch Chapters.

IEEE OFFICERS TO ADDRESS STUDENTS

IEEE President Jerome Suran, Executive Vice President Leo Young, and Vice President for Professional Activities Bruno Weinschel will address students at Vanderbilt University as part of a pilot program being conducted by the IEEE Student Activities Committee (SAC) and Region 3. The seminar is one segment of a project, sponsored by SAC and funded by USAB, to develop material that will inform students about the engineering issues that will face them as they enter the profession.

BENDIX AWARD WINNERS

Thirty Student Branches entered this year's Vincent Bendix Award program competition. The winners are: University of Kansas, Iowa State University, Tulane

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*.

University, University of Detroit, University of Arkansas at Little Rock, and Trenton State College.

The program, sponsored by IEEE under a grant from the Bendix Corp., provides Student Branches with up to \$500 each to support the work of Branch members on projects of their own devising. Recipients are chosen as a result of competitive evaluation of proposals.

The Winston-Salem Section Membership Drive Contest—a Case History

To promote its membership drive for 1977, the Winston-Salem Section created a contest and spurred interest by offering a prize calculator, a multimeter, and free dinners to successful promoters of new memberships. Here is how the scheme worked:

All active members of the section were eligible to participate in its contest, save Membership Development Committee members. Names of participants were placed in a pot for the grand prize drawing. At stake was a Hewlett-Packard Model 67 Advanced Programmable Scientific Pocket Calculator, valued at \$450.

Included in the drawing pot were names of all new members; all former members reinstated after a lapse of more than one year; members whose membership had been upgraded during the contest period; and, most importantly, the names of members who had brought in one or more new members. To add spice, a "sum of the digits" calculation was employed to determine how many times the names of members responsible for new members would appear in the pot. For example, names of those who brought in one new member appeared once; names of those who brought in two new members appeared three times; and those who brought in three new members appeared six times. Therefore, the more successful effort a participant put into promoting new memberships, the greater the participant's chances became of winning the grand prize.

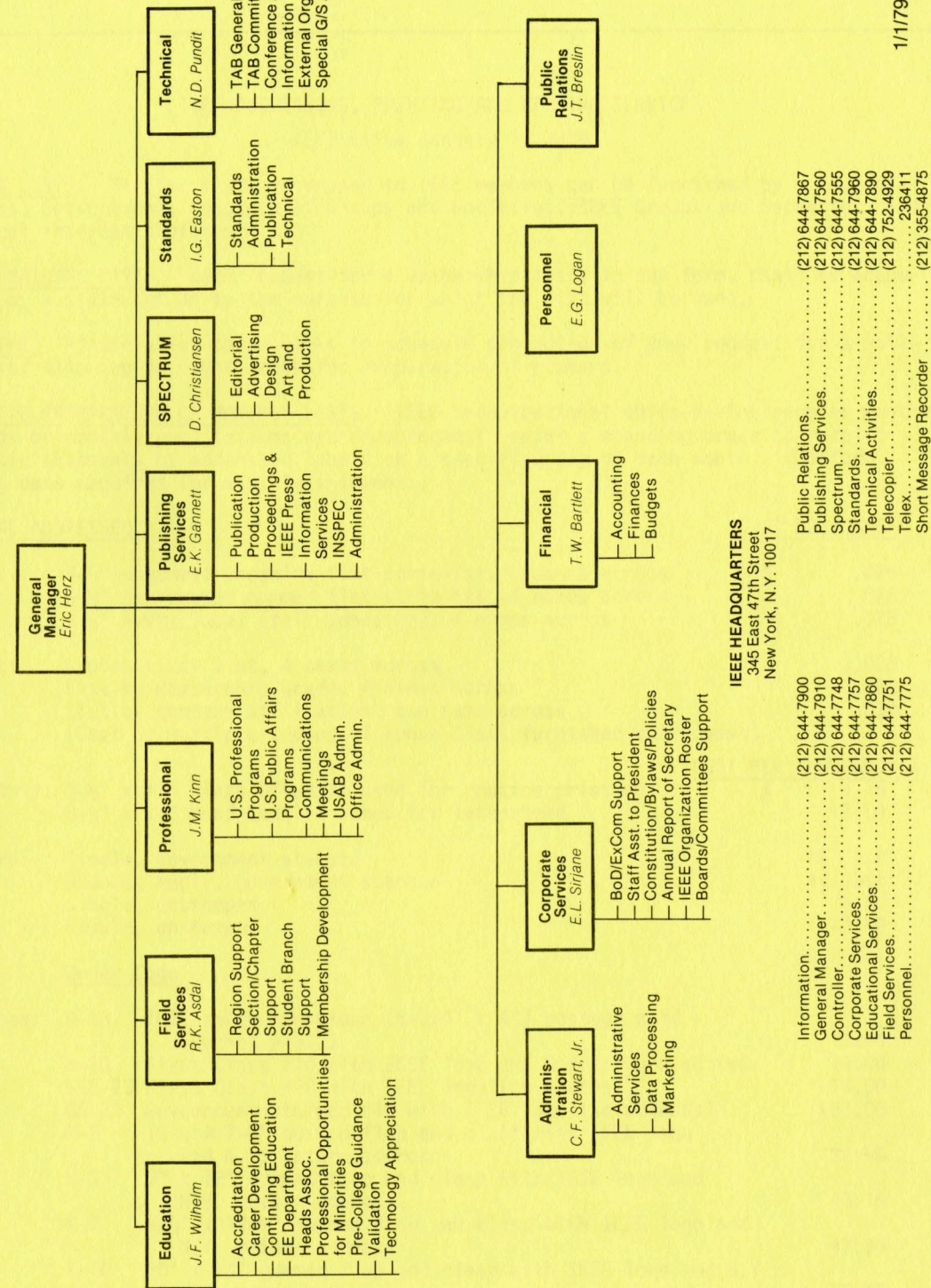
At the June Section meeting the calculator winner was drawn from the pot and the award was celebrated. Also, the Section member responsible for bringing in the most new members automatically won the second grand prize, a Simpson Model 260 Series 6 Multimeter, valued at \$80. Free dinners for the May dinner meeting, as well as grateful recognition, had already been awarded to each participant responsible for two or more new members.

The triumphant result of the contest was a 35 percent section membership increase for the year. Even the Hewlett-Packard salesman who supplied the calculator was signed as a new member. Moreover, according to the contest's creator, Member Drive Committee Chairman Carl D. Shartner, "interest and enthusiasm expressed by the membership in Section programs, meetings, and other activities showed an increase as a by-product of the drive." The contest was accompanied by an extensive back-up effort, including local press coverage of the membership drive.

In recognition of his efforts in mounting the drive, Carl Shartner himself won the Section's Outstanding Engineer of the Year Award. And as final evidence of the Section's success, work is now underway for an expanded and improved contest for the 1979 drive.

This is the first in a series of case histories of successful campaign ideas from the geographic units. For further details contact Bob Asdal at Headquarters.

IEEE Functional Chart





IEEE

Administrative Services Unit

IEEE ADDRESSING, PRINTING AND MAILING SERVICES

(Effective January 1, 1979)

MAILING LISTS. Mailing lists addressed to IEEE members can be furnished by: Regions, Sections, Subsections, Chapters of Groups and Societies, IEEE Groups and Societies, and Technical interest profiles.

USE OF MAILING LISTS. Each request for a membership list, in any form, shall be accompanied by a statement as to the purpose for which the list will be used.

LEAD TIME. Please allow three weeks to schedule production of your request for a mailing list; allow up to eight weeks for preparation of rosters.

AUTOMATIC PREPARATION OF MONTHLY LISTS. IEEE organizational units having regular monthly meetings or monthly publications are encouraged to enter a standing order to receive automatic shipments of addressed labels on a specified day of each month. (Uniform mailing date required for monthly shipment.)

MATERIAL ADDRESSED. COST PER NAME*

Labels:	3-1/2" ungummed Cheshire flat striplist, 4 names across	\$.026
	3-1/2" perforated gummed flat striplist, 4 names across	.026
	3-1/2" Avery label (self-adhesive), 4 names across	.028

Rosters:	Alphabetical list, 4 names across	.028
	List by membership grade, 4 names across	.028
	List by company affiliation, one name across	.038
	(Cost of multiple copies of above lists furnished on request)	

		COST PER THOUSAND*
Paper Only:	8-1/2" x 11" Plaza Offset: used for routine printing	\$ 4.75
	8-1/2" x 11" Mead Cockle: used for letterhead	12.50

Postcard:	Single, government stamped	At Cost
	Double, reply, government stamped	At Cost
	Single, unstamped	6.50
	Double, unstamped	13.00

Order Code

Envelopes:	G-18 IEEE return envelope (8-3/4" x 4") postage paid (Permit #1332)	17.65
	G-20 First Class #10 with IEEE logo and N.Y. return address	14.00
	SEC-23 First Class #10 with IEEE logo (no address)	14.00
	GS-23 Government stamped #10 with IEEE logo (no address)	180.00
	K-2 10-1/2" x 7-1/2" gummed flap and clasp with IEEE logo and N.Y. return address	37.65
	K-3 9" x 12" gummed flap and clasp with IEEE logo and N.Y. return address	43.15
	K-7 9-1/2" x 12-1/2" gummed flap and clasp with IEEE logo and N.Y. return address	47.90
	K-10 10" x 13" gummed flap and clasp with IEEE logo and N.Y. return address	52.15

*Plus postage charges for shipment of addressed material for handling and mailing locally.



Membership Development Committee

The following additional charges apply on requests involving IEEE printing and mailing services:

Printing only:	Labor-including collating, stapling and folding	\$12.60/hour
	Paper-20# bond 8-1/2" x 11"	8.95/thousand
	Paper-Fine finish for letterhead	13.75/thousand

Mailing: The following charges apply for Avery labels (manually affixed) and Cheshire labels (in excess of 1,000 names using automatic equipment):

	Manual	Automatic
Affixing labels	\$9.00/hour	\$9.00/thousand
Inserting and mailing	9.00/hour	9.00/thousand
Sorting, tying, sacking	9.00/hour	

Sorting: To comply with Post Office regulations, all second and third class nonprofit mail must be sorted manually into five zip code groups and is subject to the hourly rate: \$9.00/hour.

Inserting: The inserting machine will accept envelopes ranging in size from 3-1/4 x 6" to 6" x 9". The paper must be 20# stock or better. Maximum inserts are six (6). Each single enclosure is to be at least 3" x 5" but no larger than 6" x 9". Other inserting jobs handled manually at the \$9.00 per hour rate.

HOW TO ORDER

For geographical units, i.e. Councils, Sections, Subsection, Chapters and Branches CONTACT: Field Services Department (212) 644-7856

For technical units, i.e. Groups, Societies, Councils and Committees CONTACT: G/S/C Activities (212) 644-7856

For general orders CONTACT: IEEE Service Center (201) 981-0060 Ext. 184

1978 IEEE MEMBERSHIP, GROWTH SET ALL TIME RECORDS

For a second consecutive year, IEEE membership has reached a record high. A total of 191,374 members were recorded as of 12/31/78, for an increase of 4.6 percent. Student membership at 29,643 was up by 17.2 percent and total Society membership at 199,623 was up 7.1 percent. Graphic and statistical details follow in this insert.

Congratulations and appreciation to all who helped contribute to IEEE's record growth in 1978. Well done!

KEEP GROWING IN 1979 -- REDUCE ARREARS LOSSES

Almost 9% of IEEE's 1977 members have not renewed their dues in 1978. Many more will not have renewed yet for 1979 by February 28. Sections in Regions 1-7 will soon receive PINK CHANGE SHEETS for February. Members coded "K" should be contacted, personally if possible, to attempt resolution of any reasons for not keeping dues current. Many contacts will probably result in a "Slipped my mind, thanks" reaction and renewed dues by the member.

Sections and Societies are encouraged to consider requesting labels for identifying and mailing to members in arrears. Local contact and follow-up is the key to recovery and retention of members.

1979 MEMBERSHIP DEVELOPMENT COMMITTEE FORMING

The enclosed roster lists the Membership Development Committee, with contact information, including members appointed thus far for the 1979 term. MDC Chairman Reed Thompson and all MDC members are eager to provide assistance and receive your input on MD matters. So is Membership Development staff.

MEMBERSHIP BROCHURES DISTRIBUTED - "MINI" & "MICRO" COMING

Among the many projects in development at MD "R&D", redesigned "MINI" and "MICRO" Information Centers will soon be available, for use where the "MAXI" Center is not suitable. Watch this space for more details.

Samples and request postcards for the new 1979 Membership Information and Application brochures (blue, red and green) are on the way to key officers.

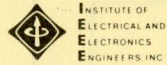
(For MD ACTION, contact Mark M. Lucas, NY Headquarters - (212) 644-8080)

1979 RAB MEMBERSHIP DEVELOPMENT COMMITTEE

<p><u>Chairman*</u></p> <p>K. Reed Thompson 4528 Wyndale Avenue, S.W. Roanoke, Va. 24018 (703) 387-7370 (O) (703) 989-9402 (H) (703) 387-7497 (Telecopier)</p>	<p><u>Vice Chairman*</u></p> <p>Calvin O. Stoutz 21 Stoney Clover Lane Pittsford, N.Y. 14534 (716) 722-2557 (O) (716) 381-2177 (H)</p>	<p><u>Region 1 Representative</u></p> <p>Calvin O. Stoutz 21 Stoney Clover Lane Pittsford, N.Y. 14534 (716) 722-2557 (O) (716) 381-2177 (H)</p>
<p><u>Region 2 Representative</u></p> <p>Bernhard E. Keiser 2046 Carrhill Road Vienna, Va. 22180 (703) 281-9582 (O) (703) 281-9582 (H)</p>	<p><u>Region 3 Representative</u></p> <p>Ensign Johnson Vanderbilt Univ., EE Dept. Box 1687, Station B Nashville, Tn. 37235 (615) 322-2271</p>	<p><u>Region 4 Representative</u></p> <p>Professor Harry G. Hedges Michigan State University East Lansing, Mi. 48824 (517) 353-6484</p>
<p><u>Region 5 Representative</u></p> <p>W. G. Thorman 111 Tyrol Street San Antonio, Tx. 78209 (512) 227-3211, Ext. 384</p>	<p><u>Region 6 Representative</u></p> <p>Roy Yee KEM's, Inc. .239 Puuhale Road Honolulu, Ha. 96819 (808) 847-1395 633164 (Telecopier)</p>	<p><u>Region 7 Representative</u></p> <p>C. E. Spike University of Waterloo Dept. of E.E. Waterloo, Ont., Can. (519) 885-1211, Ext. 3716</p>
<p><u>Region 8 Representative</u></p> <p>C.J.M. van der Wulp St. Ursalaklinik Eikenlaan 3 - 5 Wassenaar, Netherlands</p>	<p><u>Region 9 Representative</u></p> <p>Eduardo Bonzi Correa Casilla 9807 Santiago, Chile</p>	<p><u>Region 10 Representative</u></p> <p>J. A. Okochi 5-51-12 Denenochofu Ohta-ku Tokyo, Japan</p>
<p><u>Division I Representative</u></p> <p>Col. Allen D. Dayton 10221 Raider Lane Fairfax, Va. 22030 (703) 273-0860</p>	<p><u>Division II Representative</u></p> <p>Martin Plotkin Brookhaven National Lab. Upton, N.Y. 11973 (516) 345-4717</p>	<p><u>Division III Representative</u></p> <p>Quayne Gennaro New Jersey Bell - Room 1205A 540 Broad Street Newark, N.J. 07101 (201) 649-3171</p>
<p><u>Division IV Representative</u></p> <p>Richard Sparks Raytheon Company Hartwell Road Bedford, Ma. 01730 (617) 274-7100, Ext. 4523</p>	<p><u>Division V Representative</u></p> <p>Sam Horvitz Box 274 Waterford, Ct. 06385 (203) 442-0771</p>	<p><u>Division VI Representative</u></p> <p>O P E N</p>
<p><u>Division VII Representative</u></p> <p>Howard M. Hess 32355 Susanne Drive Franklin, Mi. 48025 (313) 626-8916</p>	<p><u>Past MDC Chairman</u></p> <p>David C. McLaren Gen. Tel. Co. of Florida P.O. Box 110 Tampa, Fl. 33601 (813) 224-4409 (O) (813) 531-1733 (H) (813) 229-1375 (Telecopier)</p>	<p><u>Chairman, 1979 RAB SAC</u></p> <p>Eric M. Aupperle University of Michigan Merit Computer Network The Cooley Building Ann Arbor, Mi. 48109 (313) 764-9423 (O) (313) 665-8043 (H)</p>
		<p><u>IEEE Staff Secretary*</u></p> <p>Mark M. Lucas IEEE Membership Development 345 East 47th Street New York, N.Y. 10017 (212) 644-8080 (O) (212) 751-6898 (H) (212) 752-4929 (Telecopier) 236-411 (Telex)</p>

*Planning & Evaluation Committee

MML 7/78
Rev. 10/27/78
Rev. 1/79



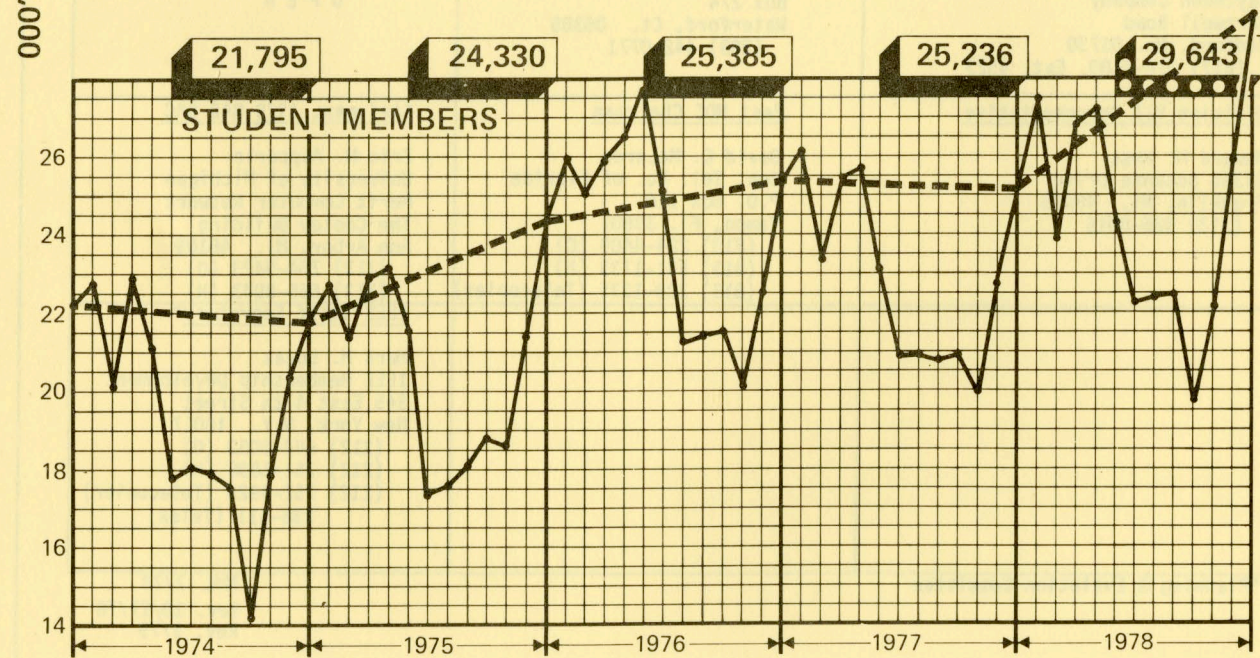
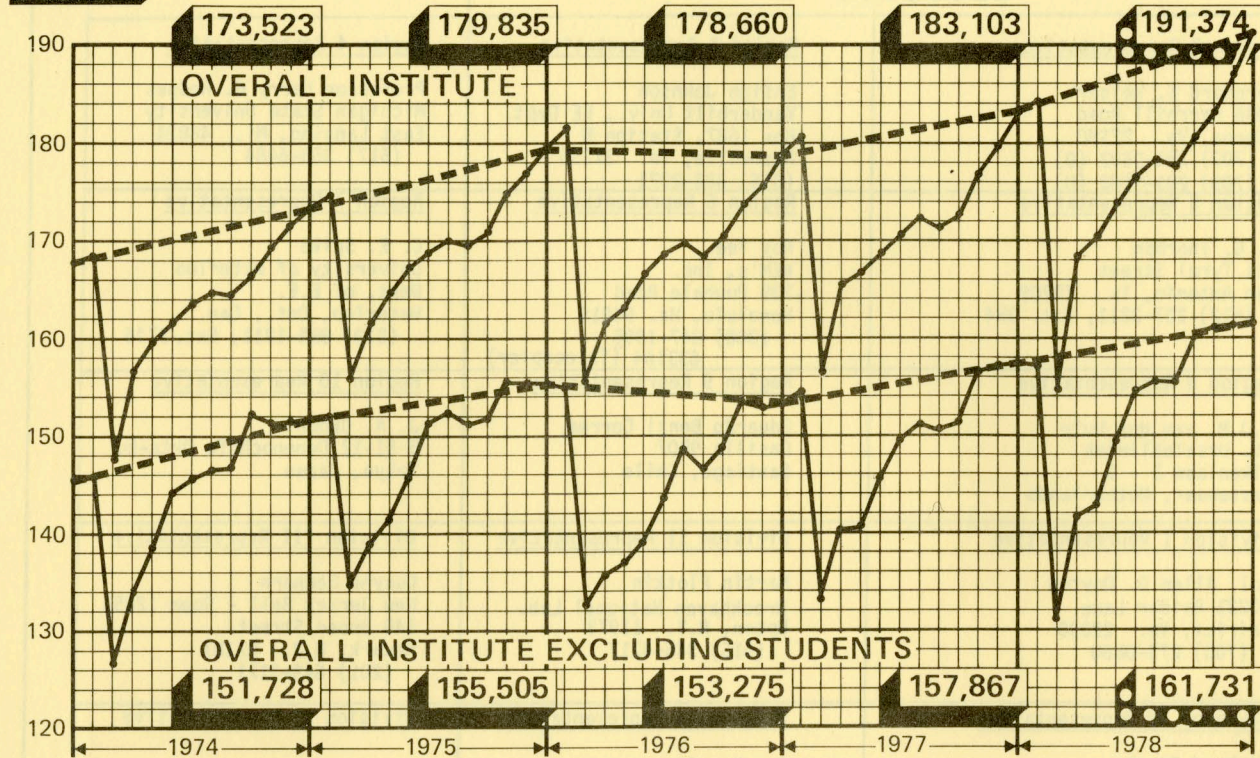
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS INC

MEMBERSHIP PROGRESS

DEC 1978

This month

Year end



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS INC

THE REGIONS

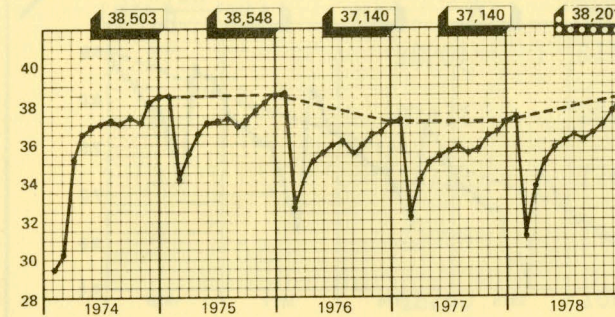
MEMBERSHIP PROGRESS

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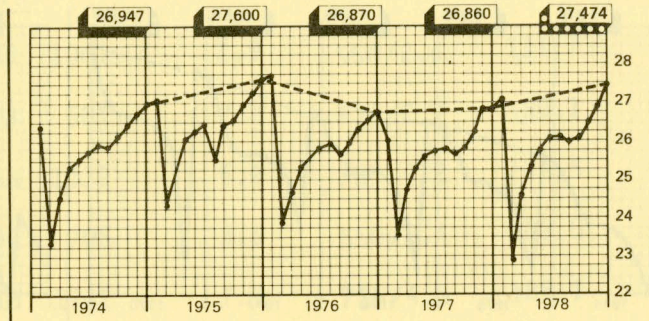
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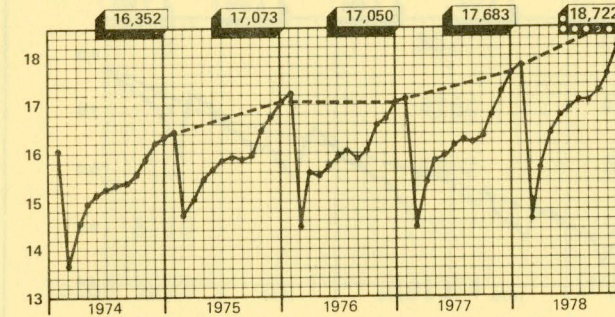
1 Northeastern Region



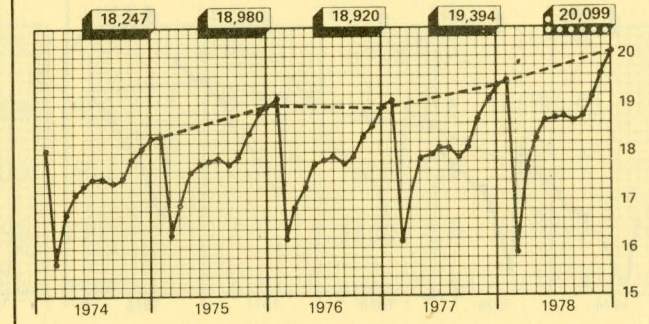
2 Eastern Region



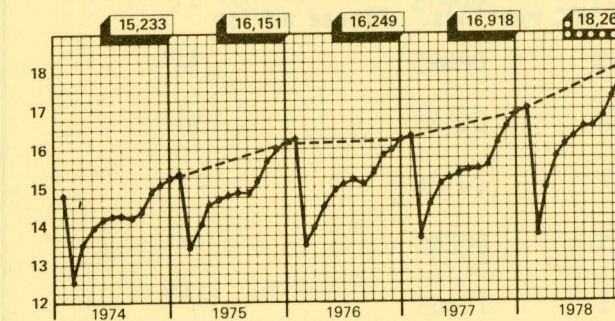
3 Southeastern Region



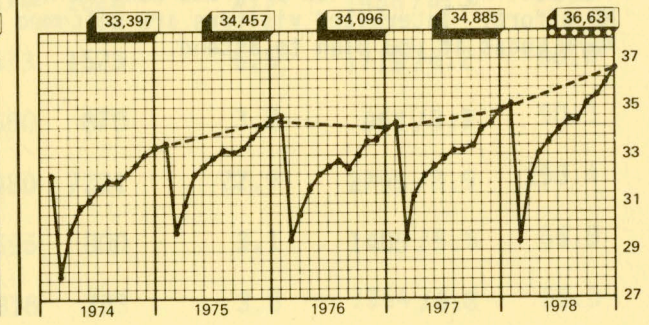
4 Central Region



5 Southwestern Region



6 Western Region





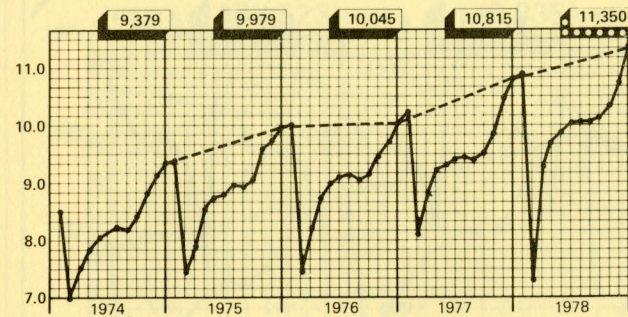
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ENGINEERS INC

THE REGIONS MEMBERSHIP PROGRESS

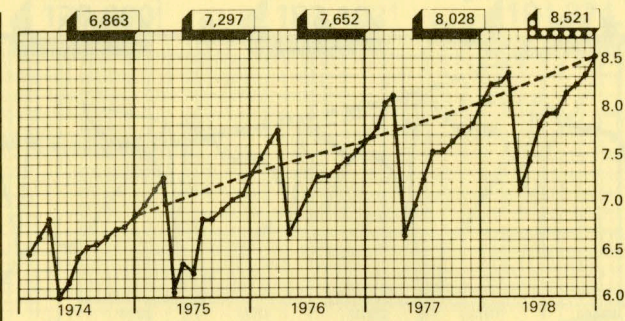
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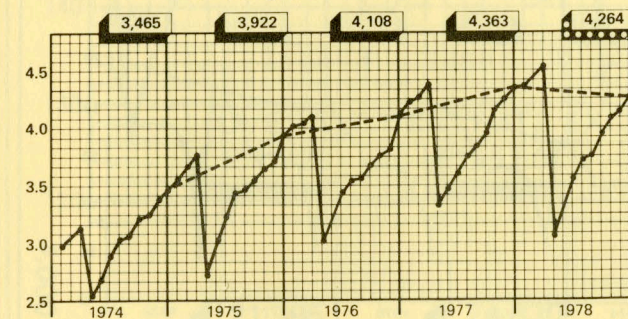
7 Canadian Region



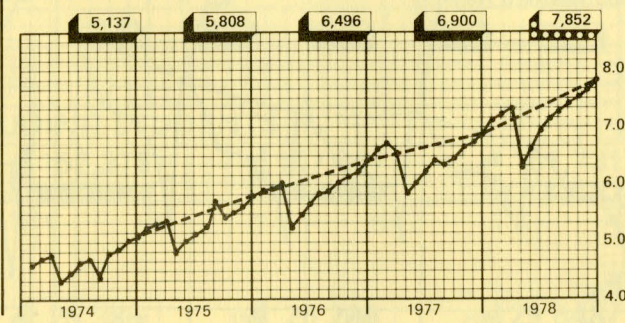
8 Europe, N. Africa, Mid. East Region



9 Latin American Region



10 Rest of the World



MDC TO MEET NEAR WASHINGTON ON MARCH 3 & 4

Incoming MDC Chairman Reed Thompson will convene the first MDC meeting of 1979 on March 3 at Stouffer's National Center, near Washington National Airport. The meeting will review programs continuing from 1978 and plans for the 1979 MD effort. Interested visitors are welcomed at MDC meetings. Please advise Mark Lucas if you plan to attend.

ATTACHMENT A

REGIONAL AND DIVISIONAL SUMMARY

Region	12 /31/78	12 /31/77	△	%△	1978 GOAL	% Goal
	Members	Members			# / %	
1	38201	37140	1061	2.9	950/2.6	111.7
2	27474	26893	581	2.2	725/2.7	80.1
3	18722	17683	1039	5.9	750/4.2	138.5
4	20099	19394	705	3.6	650/3.4	108.5
5	18260	16918	1342	7.9	725/4.3	185.1
6	36631	34885	1746	5.0	800/2.3	218.5
1-6	159387	152913	6474	4.2	4600/3.0	140.7
7	11350	10815	535	4.9	900/8.3	59.4
8	8521	8028	493	6.1	450/5.6	109.6
9	4264	4363	(99)	(2.3)	375/8.6	(26.4)
10	7852	6900	952	13.8	675/9.8	141.0
8-10	20637	19291	1346	7.0	1500/7.8	89.7
Total 1-10	191374	183019	8355	4.6	7000/3.8	119.4

Division SOCIETY/GROUP MEMBERSHIPS BY DIVISION

Division	12 /31/78	12 /31/77	△	%△	1978 GOAL	% Goal
	Members	Members			# / %	
I	29129	28022	1107	3.9	1000/3.6	110.7
II	27400	26374	1026	3.9	1456/5.5	70.5
III	29096	27573	1523	5.5	1719/6.2	88.6
IV	28420	27550	870	3.2	963/3.9	90.3
V	38701	31480	7221	22.9	2795/8.9	258.4
VI	26395	25595	800	3.1	1405/5.5	56.9
VII	20571	19818	753	3.8	1354/6.8	55.6
G/S Total	199623	186412	13211	7.1	11000/6.0	120.1
Students	29643	25283	4360	17.2	4717/18.7	92.4



IEEE

Contact: Dolores Riker

Fellow Committee

IEEE FELLOWS ELECTED AS OF JANUARY 1, 1979 GEOGRAPHICAL LIST BY SECTION AND SUBSECTION

ALBUQUERQUE

Arthur H. Guenther For contributions to high-power laser technology and pulsed-power engineering.

Gene H. Haertling For contributions to ferroelectric and electrooptic ceramic materials and devices.

AUSTRALIAN

John B. Moore For contributions to optimal estimation and control and leadership in electrical engineering education.

BALTIMORE

Frank W. Kussy For leadership in the development and application of advanced devices and protection systems for motor control.

ANNAPOLIS SUBSECTION

Merrill N. Lustgarten For contributions to electromagnetic compatibility technology.

BENELUX

Pieter Eykhoff For contributions to identification and parameter estimation in dynamic systems, to control engineering education in the Netherlands, and to international scientific cooperation.

Kurt Katzeff For leadership in the development of telecommunications switching systems.

Leo E. Zegers For contributions to error correction, jitter reduction, and synchronization in data transmission.

BOSTON

Saul Aronow For contributions to nuclear medical instrumentation and for innovative leadership in establishing clinical engineering in hospitals.

Philipp Blacksmith For leadership in developing technology for advanced antennas and electromagnetic sensor systems.

Giorgio V. Borgiotti For the development of Fourier transform modal methods for analysis of phased-array antennas.

Vincent Caleca For contributions to the design, protection, and operation of high-voltage ac and dc power transmission systems.

Paul H. Carr For contributions to microwave acoustics and their use as signal-processing components.

Mildred S. Dresselhaus For contributions to the understanding of electronic properties of semiconductors, semimetals, and metals, to electrical engineering education, and to the enhancement of women's opportunities in engineering education.

Ira Dyer For contributions to the science of acoustics and its applications and for distinguished academic leadership in advancing oceanic engineering and its applications.

Charles Freed For contributions to gas lasers and the pioneering development of ultrastable lasers.

GROUP / SOCIETY AND DIVISIONAL SUMMARY

Division	12/31/78	12/31/77	Δ	% Δ	1978 Goal # / %	% Goal
I ASSP 01	6909	6364	542	8.5		
CAS 04	10076	9924	152	1.5		
IT 12	4807	4625	182	3.9		
CS 23	7337	7109	228	3.2		
I Subtotal	29129	28022	1107	3.9	1000/3.6	110.7
II NPS 05	2983	2822	161	5.7		
VT 06	2572	2472	100	4.0		
IM 09	5081	4998	83	1.7		
IECI 13	5306	5199	107	2.0		
EI 32	1437	1415	22	1.6		
IA 34	10021	9468	553	5.8		
II Subtotal	27400	26374	1026	3.9	1456/5.5	70.5
III BCCE 02	6699	6321	378	6.0		
AES 10	6920	6709	211	3.1		
COM 19	12341	11578	763	6.6		
EMC 27	1731	1633	98	6.0		
GEO 29	1405	1332	73	5.5		
III Subtotal	29096	27573	1523	5.5	1719/6.2	88.6
IV AP 03	4454	4406	48	1.1		
ED 15	8004	7719	285	3.7		
MTT 17	5696	5608	88	1.6		
SU 20	2084	1991	93	4.7		
CHMT 21	2855	2735	120	4.4		
MAG 33	2242	2111	131	6.2		
QE 36	3085	2980	105	3.5		
IV Subtotal	28420	27550	870	3.2	963/3.9	90.3
V COMP 16	38701	31480	7221	22.9	2795/8.9	258.4
VI R 07	2819	2662	157	5.9		
EM 14	7435	7037	398	5.7		
EMB 18	7380	7472	(92)	(1.2)		
E 25	2193	2134	59	2.8		
PC 26	1748	1421	327	23.0		
SMC 28	4820	4869	(49)	(1.0)		
VI Subtotal	26395	25595	800	3.1	1405/5.5	56.9
VII PE 31	20571	19818	753	3.8	1354/6.8	55.6
Total G/S	199623	186412	13211	7.1	11000/6.0	120.1

BOSTON (continued)

Henry P. Hall For contributions to electrical measurement technology, including the development of impedance bridges and standards, and the application of microprocessors to impedance measurements.

Robert W. Mann For leadership in biomedical engineering research and education and in the application of technology to the problems of the handicapped.

Sanjoy K. Mitter For contributions to optimization computation and control theory.

Robert A. Pucel For contributions to the modeling of microwave solid-state devices and leadership in their application.

William W. Shrader For contributions to the theory of radar systems and moving-target indication techniques.

Alan J. Simmons For contributions to the development of microwave and millimeter-wave components and antennas.

David H. Staelin For advances in radio astronomy and the development of microwave radiometric probes.

Laurence R. Young For contributions to biomedical instrumentation and biomedical engineering education.

NORTHSHORE SUBSECTION

Ronald L. Fante For contributions to the understanding of electromagnetic wave propagation in turbulent media.

Edwin L. Key For contributions to the theory of modern radar and leadership in the development of military electronic systems.

Carl F. Kurth For contributions to the practical use of active filters and leadership in the application of digital signal processing to telecommunications systems.

Ming-Lei Liou For contributions to the application of analysis and computer-aided design to communications circuits and systems.

BUFFALO

Loren F. Stringer For contributions to the development and application of solid-state power electronics systems.

CENTRAL INDIANA

Keinosuke Fukunaga For contributions to statistical pattern recognition.

Thomas S. Huang For contributions to the theory and application of image processing and digital filtering.

CHARLOTTE

Eugene S. Zobel For contributions to the research and development of transmission-line engineering.

CHICAGO

Stanley W. Anderson For adapting operations research techniques to electric utility power and operation problems.

FOX VALLEY SUBSECTION

Werner Ulrich For contributions to the development of telephone electronic switching systems.

NORTHWEST SUBSECTION

Sam H. Kaplan For contributions to the theory and development of shadow-mask color TV picture tubes.

CLEVELAND

Stephen J. Kahne For contributions to systems engineering and engineering education.

Henry G. Kosmahl For contributions to the theory of traveling-wave tubes and klystrons leading to increased efficiencies.

CONNECTICUT

Richard C. Barker For contributions to research, teaching, and international cooperation in the field of magnetics.

Kumpati S. Narendra For contributions to stability theory and its application to adaptive control systems.

DENVER

Geoffrey Bate For significant contributions to the understanding of magnetic recording materials and devices.

FRANCE

Gérard L. Leroy For contributions to the scientific knowledge of long air-gap discharges and to the improvement of testing and measuring techniques of transient phenomena.

Georges Mourier For contributions to crossed-field microwave tubes and plasma science.

GAINESVILLE

Mat Darveniza For contributions to the engineering analysis of lightning effects on electric power transmission systems.

GERMANY (West)

Walter Heywang For contributions to the development of semiconductor and piezoelectric materials and devices.

Hans J. Schmitt For contributions to the field of microwave physics and techniques.

HAMILTON

Edward Della-Torre For contributions to the theory of magnetic devices and to the teaching of electromagnetic field theory.

HOUSTON

J. Boyd Pearson, Jr. For contributions to the theory of multivariable control systems.

ITHACA

Ravindra N. Sudan For contributions to plasma theory and to graduate engineering education in plasma science.

LONG ISLAND

Stanley H. Horowitz For contributions to power-system integrity through protective relaying and to education through industry/education research programs.

Martin L. Shooman For contributions to the field of reliability engineering.

METROPOLITAN LOS ANGELES

Leonard M. Silverman For contributions to the theory of linear systems and its applications.

MILWAUKEE

Roald H. Amundson For contributions to high-voltage fuse design and standardization.

MONTREAL

J. Lionel Boulet For leadership in the establishment and management of the Research Institute of Hydro-Quebec.

George Zames For contributions to the stability theory of nonlinear feedback systems.

NASHVILLE

Robert W. House For contributions to the logical design of computers.

NEW JERSEY COAST

Dietrich A. Alsberg For the development of low-loss millimeter waveguides and techniques of their electrical measurement.

Francis T. Boesch For contributions to the application of network theory to invulnerable communication nets.

Donald C. Cox For contributions to the understanding of radio propagation effects in mobile telephone and satellite communications systems.

Irwin Dorros For the management of engineering projects associated with integrated nationwide telecommunications.

Alistair E. Ritchie For contributions to telephone network switching and signaling development.

NEW YORK

WESTCHESTER SUBSECTION

James C. McGroddy For contributions to the understanding of nonequilibrium transport and optical properties of semiconductors.

NORTHERN VIRGINIA

Lamont V. Blake For contributions to the theory and practice of radar range-performance analysis.

E. Oran Brigham For leadership in and contributions to the development of automated electronic reconnaissance systems.

George H. Hagn For contributions to spectrum management and electromagnetic compatibility.

James S. Hill For leadership in the international exchange of electromagnetic compatibility technology and for contributions to the field of measurement of the electromagnetic environment.

Paul Rosen For leadership in and technical contributions to military satellite communications systems.

William G. Schmidt For contributions to the development of time-division multiple-access satellite communications.

NORTH ITALY

Francesco Carassa For development and implementation of wide-band radio links and for contributions to space communication.

NORTH JERSEY

George Bahder For contributions to the understanding of electrical and electrochemical voltage breakdown of extruded and laminar dielectric cables.

Rene Castenschiold For contributions to the development of automatic transfer switches and emergency power generator control.

Eric O. Forster For contributions in the understanding of high-voltage conduction and breakdown phenomena and for leadership in related professional activities.

Akira Hasegawa For contributions to linear and nonlinear wave dynamics in laboratory and space plasmas, to nonlinear optics, and to nonlinear fluid dynamics.

Alfred U. Mac Rae For leadership in the development of ion implantation technology and its application to semiconductor device fabrication.

NORTH JERSEY (continued)

Leo Schenker For contributions to Touch-Tone telephone signaling systems.

Harold N. Scherer, Jr. For leadership in the design and operation of ultrahigh-voltage power transmission systems.

OAKLAND-EAST BAY

Elmer F. Kaprielian For leadership and management of power-system operations.

Kenneth K. Mei For contributions to the research and application of computer methods to electromagnetic theory.

Theodosios Pavlidis For contributions to the theory and application of pattern recognition.

PALM BEACH

Thomas J. Harrison For contributions to computer systems for use in process-control applications and to the development of standards for process-control computer systems.

PHILADELPHIA

Kenneth W. Goff For technical contributions to and leadership in the design and development of hardware and software for digital computer-based process-control systems.

Willard T. Patton For contributions to the development of phased-array antenna technology.

PITTSBURGH

David P. Casasent For theoretical and engineering contributions to coherent optical data processing.

Henry E. Lokay, Jr. For contributions to new methods of the simulation of turbine generators, power-system dynamics, and distribution engineering.

John W. Skooglund For contributions to the analysis of power systems stability and the development of generator excitation systems.

PRINCETON

Paul M. Chirlian For contributions to engineering education through the writing of innovative engineering textbooks.

J. James Gibson For contributions to consumer electronic systems and solid-state circuits.

Robert G. Mills For contributions to research on nuclear fusion power reactors.

Neal Zierler For the application of finite mathematics to the design and analysis of communication systems, including error-correcting codes and cryptology.

SAINTE LOUIS

Fred J. Rosenbaum For contributions to the analysis and design of microwave ferrite and semiconductor components.

SANTA CLARA VALLEY

Alan B. Grebene

For contributions to the development of monolithic linear integrated circuits and leadership in engineering administration and management.

Charles A. Liechti

For contributions to the development of gallium-arsenide field-effect transistors, microwave amplifiers, and gallium-arsenide digital integrated circuits.

John C. McDonald

For contributions to and leadership in the design of integrated digital transmission and switching systems.

Edward H. Snow

For contributions to the theoretical understanding and analysis of MOS instabilities.

William Streifer

For contributions to distributed feedback lasers and integrated optics.

SANTA MONICA BAY

Carl A. Wiley

For contributions to the development of high-resolution synthetic-aperture radar.

SCHENECTADY

William E. Engeler

For contributions to the understanding of surface-charge transport and its application to the development of new devices.

Lester A. Gerhardt

For research in digital signal processing, communications and adaptive systems, and pattern recognition, and for leadership in engineering education.

Vernon B. Honsinger

For contributions to the theory and design of electrical machinery, including reluctance machines.

Philip M. Lewis, II

For contributions to switching theory, compiler design, and computer science and for leadership in professional activities.

Delano D. Wilson

For contributions to the development of compact transmission-line technology in the United States.

SOUTH BAY HARBOR

Baruch Berman

For contributions to solid-state power converter technology.

SOUTHEASTERN MICHIGAN

Elmer G. Gilbert

For contributions to multivariable and optimal control systems.

SWEDEN

Karl J. Aström

For comprehensive contributions to stochastic control theory.

Niels H. Knudsen

For contributions to the development of extra-high-voltage transmission systems and equipment and to engineering education.

TOKYO

Toshio Fujisawa

For contributions to the theory of filter design and nonlinear circuit analysis.

Toshihiko Kubo

For leadership in the communications and electronics industries of Japan and contributions to the development of mercury rectifiers.

Yukio Nakagome

For contributions to electronic-communications switching systems and digital signal transmission.

Hideo Okamoto

For research on corona measurements and the effects of corona on the deterioration of electrical insulation.

Morio Onoe

For contributions to the understanding of piezoelectric phenomena and the development of piezoelectric filters.

Shoichi Saba

For contributions to the development of fault locators and gas-insulated switch gears.

TOKYO (continued)

Ikuo Tanaka

For contributions to computer-aided analysis of electric field effects and the development of low skin-effect stranded conductors.

Teruhiro Umezu

For contributions to the development of analytical methods and their application to electric power systems.

TUCSON

Granino A. Korn

For technical contributions to the field of computer simulation and to electrical engineering education.

UTAH

Om P. Gandhi

For contributions to the understanding of nonionizing radiation effects, to the development of electron devices, and to engineering education.

VANCOUVER

Hermann W. Dommel

For contributions to the development and application of digital computer programs for the analysis of complex electric systems network problems.

VICTORIA

Donald H. Jacobs

For contributions to and technical leadership in electronic computers, aircraft navigation systems, guided-missile range instrumentation, aviation fire control, and missile guidance.

VIRGINIA MOUNTAIN

James E. Goell

For technical contributions and leadership in the fields of optical fibers, integrated optical circuits, and millimeter waveguides.

Charles K. Kao

For contributions to the practical use of optical waveguides for communications.

WASHINGTON

Henry C. Bourne, Jr.

For contributions to the theory and application of magnetic thin films and magnetic amplifiers and to electrical engineering education.

James F. Dickson, III

For leadership in the application of engineering science to biomedical research and development and the delivery of health care.

Thomas W. Doepfner

For leadership in advancing electromagnetic compatibility in the design, development, and operation of military telecommunication systems.

Robert O. Harger

For contributions to radar systems, including synthetic aperture and harmonic radar, to optical communication theory, and to graduate and continuing education.

Morton B. Prince

For contributions to semiconductor devices and leadership in the development of the silicon solar cell.

Leonard S. Taylor

For contributions to the theory and application of electromagnetic scattering by turbulent media.

WINNIPEG

Michael A. K. Hamid

For contributions to electromagnetic scattering and diffraction and development of dielectric-loaded waveguides, resonators, and antennas.

NO SECTION ASSIGNMENT

Herbert W. Koenig

For contributions to the understanding of amplification and noise in electron-drift tubes and leadership in engineering education.



Publishing Services

TO: People Who Want to Dispose of IEEE Publications

FROM: Patricia H. Penick, Manager, Publication Administrative Services

Since IEEE Headquarters is so often asked for advice on disposing of old AIEE/IRE/IEEE publications, the following is an attempt to bring together in one place the information and suggestions we think may be helpful.

IN THE PAST, many of our publications had a high market value and could fairly easily be sold to back copy bookstores. Libraries and schools were eager for donations.

NOW, HOWEVER, the situation has changed radically and the demand is very small. The main reason for this change is that, for the last several years, IEEE has made available all of its technical periodicals (including those from AIEE and IRE) on microfilm. Another apparent reason is that so many members with extensive publication collections have already saturated the market by selling or donating them.

ON THE NEGATIVE SIDE, and in answer to the questions most frequently asked: 1) Neither IEEE Headquarters nor the Engineering Societies Library is in a position to accept donations of back publications; 2) It isn't feasible for Headquarters to provide a clearing house service; and 3) Because of the extremely difficult-to-know and shifting nature of the market value of back issues and the number of variables involved (completeness of a collection, physical condition, etc.), IEEE cannot assess or verify the value of a collection.

ON THE POSITIVE SIDE, before committing a good collection to the shredder, we certainly recommend exploring the possibility of selling or donating publications locally. (A brief list of occasionally and/or tentatively interested back copy organizations in the New York City area is available on request from my office.) A few phone calls or letters to back copy book stores in your area should reveal what, if any, interest there is locally and whether there is a willingness to offer a quotation. Similar inquiries to libraries, schools, company libraries, etc. may elicit information on where a collection could be donated.

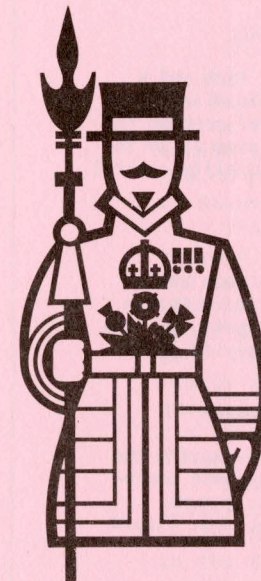
WE STRONGLY URGE that you make such an information-gathering project an IEEE Chapter or Section activity.

IDEALLY, it should be possible to donate publications to a worthy recipient and take a suitable tax deduction. This is certainly possible if a firm quotation has first been obtained from a reputable commercial book dealer or the organization receiving the donation is willing to state formally the value they place on the collection. Unfortunately, several organizations we used to recommend (one, for example, which supplied publications to developing countries) no longer function.

FEEDBACK IS WELCOME from anyone who knows of any organizations which would consistently accept any and all donations or which have at least a reasonable interest in buying back copies. Any such will be added to our list.



Continuing Education Services



HOW TO DEVELOP GROWTH EDUCATION PROGRAMS

Every Section Leader knows an acre of performance is worth the whole world of promise. Technological advances in the past decade, on the other hand, have demonstrated the need for keeping apace and the important role Continuing Education plays in each of our lives.

Although our Section leaders are aware that in life, as in chess, forethought wins, many of them have not had the opportunity nor the time to seriously consider the implementation of ongoing continuing education programs for their membership.

We, in IEEE's Continuing Education Department, are concerned about the Technology Update of our membership. Therefore, topical education programs and the ways to implement these programs are constantly being developed.

NOW we can offer these all new continuing education programs taught by the leaders in the field:

1048-MANAGEMENT AUDITING OF COMPUTER OPERATIONS

COURSE DURATION: Two days

COURSE OBJECTIVE: The seminar will analyze the continuing need for the auditing of computer operations with emphasis on recognizing the symptoms which indicate potentially costly problems. Primary stress will be placed on the real impact of the computer on the entire operation of the organization and the means for organizing and implementing corrective action plans.

1061-COMMUNICATION SATELLITE SYSTEMS

COURSE DURATION: Two days

COURSE OBJECTIVE: This course of study will provide a broad overview of space communications to educators, engineers and managers who wish to achieve a working knowledge of the field. It has been designed to cover the state-of-the-art in space communications with a discussion on future trends. Specific emphasis will be placed on communication sub-systems with some discussion of supporting sub-systems.

1052-OPERATIONAL AMPLIFIER THEORY AND APPLICATIONS

COURSE DURATION: One day

COURSE OBJECTIVE: This course has been designed to introduce the basic circuit design using ideal operational amplifier model and introduction to operational amplifier applications in active RC filtering, non-linear signal processing, analog switching and A/D-D/A conversion. It will also cover the methods of estimating effects of manufacturer's specifications on circuit performance. The course will be of principal interest to application and design engineers.

1072-EXPANDING THE PRODUCTIVITY OF THE MANAGERIAL MIND

COURSE DURATION: Two days

COURSE OBJECTIVE: This course has been designed to teach participants how to examine the development and working structure of the human mind; and to learn how to use this structure more effectively to achieve an addition to the information base from which future decisions are made. Participants are taken through the seven basic steps which occur in the thinking mind in dealing with the outside world and to have them learn to ideate and process their thinking in an effective manner.

If you are interested in scheduling or learning more on how to program our education courses, we invite you to complete and mail the coupon on the other side of this sheet.



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HOME STUDY PROGRAMS

To satisfy the need of our members who cannot attend our "live" courses, we offer a series of home study programs in both an "interactive" (with an instructor) or "non-interactive" (where no instructor is assigned) mode.

For ordering information call our Educational Services Department in New York - (212) 644-7860.

HS9001-TECHNICALLY WRITE!

Eleven topics of instruction with instructor assistance designed to help engineers communicate effectively.

HS9002-PROJECT LEARN

A self instructional reading program consisting of 4 cassettes, three workbooks and 5 paperbacks all of which are geared to develop more efficient reading skills and better retention.

ETS-3400 MICROPROCESSORS

Heath Company's individual learning program with miniature digital computer covers microprocessor basics, computer arithmetic, programming, interfacing and much more. Included are texts, cassette tapes and 62 electronic components for a number of interesting experiments.

If the optional examination is taken and a score of 70% or better is assigned, the IEEE will award a Certificate of Achievement and 8 Continuing Education Achievement Units (CEAUs). In addition, the Institute will rebate a portion of the course fee.

UNDERSTANDING MICROPROCESSORS THROUGH SOFTWARE DESIGN

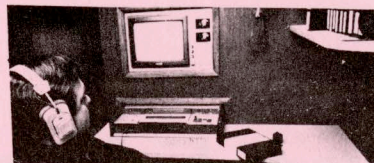
This course has been specifically designed to provide a thorough user level understanding of microprocessors, how to apply them, and how to control their functions through programming.

The program is conducted entirely by correspondence. It will enable the student to --

- Identify opportunities for microprocessor chip applications
- Suggest new products and entire new product areas
- Establish consulting opportunities helping manufacturers adapt and use microprocessors in industrial applications
- Develop his own new microprocessor applications and products
- Gain immediate recognition in his firm for important new knowledge and much more.

#####

We can also offer a series of interactive management games that will help you gain a broader understanding of management principles and practices. Send for the descriptive brochure today.



VIDEO PROGRAMS

Now available on a rental basis a new media form for your group presentations. Courses, most in full color, are on industrial-type 3/4" video cassettes and vary between 6 and 16 hours duration in one-hour cassettes. Rental fee includes a workbook for each participant.

VTC 90178-MANUFACTURING QUALITY CONTROL

Ten video tape lessons of 30 minutes each and a study guide that will assist you in learning the essentials of a modern quality control problem for a manufacturing company. It can be used as an initial introduction to manufacturing quality control or as a review.

VTC 90278-ENGINEERING ECONOMY

Ten video tape lessons of 25 minutes each and a study guide for those who are concerned with the economic analysis of investment alternatives. The course presents the principles of analysis of investment alternatives.

VTC 90378-COOLING OF ELECTRONIC EQUIPMENT

Six, one-hour video tapes designed to provide the methods use with the cooling of electronic equipment including conduction, radiation, natural convection, forced air and liquid cooling, liquid evaporation and heat pipes.

To obtain additional information or arrange for a rental we ask you to complete and return the completed application below.

Please complete this form and return it to IEEE, Mr. V. J. Giardina, 445 Hoes Lane, Piscataway, NJ 08854.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

TELEPHONE NUMBER() _____

I am interested in scheduling an education course for my IEEE unit; my company.

I am interested in purchasing the following Home Study program _____

I am interested in receiving additional information on the Management Games seminars.

I am interested in renting the following Video Tape Program _____



Contact: Richard Aseltine

Student Activities News

STUDENT ACTIVITIES OF TAB INCREASE

One of the big things that happened to the Student Activities Program in 1978 was the blossoming of existing and new involvements of students in the Technical Activities Board and its Groups and Societies. TAB's support of the students is not new though. Branches have always been able to subscribe to all the publications of the Institute at the reduced rate of \$75.00 per year. This is a substantial savings over the reduced rate charged to Student Members.

The Aerospace and Electronics Systems Society and the Industrial Applications Society underwrite the publication of the winning papers from the ten regional Paper Contests. Each one of these is a valuable contribution without which the Student Program of the Institute would be less effective. Other Groups and Societies are becoming actively involved with students, too. The Industrial Applications Society and the Computer Society are currently restructuring their operations to encourage more student input and greater accessibility to their student members. Student Branch Chapters of the Power Society, the Computer Society, and the Engineering in Medicine and Biology Society have been organized.

Last year also saw the Technical Activities Board and the Regional Activities Board take joint action in establishing the Outstanding Branch Counselor Recognition, a strong expression of the commitment of these groups to the Student Program.

IT'S PAPER CONTEST TIME

Do you have an idea you'd like to pursue? If so, consider participation in the IEEE Student Papers Contest. This is one of the oldest "cornerstone programs" of the Student Activities Program, and one of the most strongly supported. Each Region sponsors its own contest, and the cash awards are given by the Life Member Fund.

Rules differ from Region to Region, but the basic judging criteria are fairly consistent. Papers are judged not only on the basis of technical content, but also on clarity of presentation and correct use of the language. A well-written paper can win a regional contest even though it may not be extremely technical in nature. The papers are judged first on written presentation, and the top papers are chosen for oral presentation at an appropriate meeting. The winning papers from the ten Regions are published each year by the Student Activities Committee.

The earliest deadline for submission to the Regional Contest is February 15, 1979, so check with your Branch Counselor or Regional Student Activities Committee Chairman for a complete set of the rules in your Region.

FOUR NEW BRANCHES HAVE SPROUTED

Four new Student Branches have been approved recently by the Regional Activities Board. This brings the count to 435 Branches with a total student membership of 25 933. A Branch may be established with the approval of the Regional Director and the Regional Student Activities Committee Chairman upon the receipt of a petition signed by 20 or more Student Members and a member of the faculty who is an IEEE member. The new Student Branches are at Florida International University, Georgia Southern University, University of Tennessee at Martin, and Seoul National University.

IEEE OFFICERS TO ADDRESS STUDENTS

IEEE President Jerome J. Suran, Executive Vice President Leo Young, and Vice President of Professional Activities Bruno Weinschel will be among those addressing students at Vanderbilt University in Nashville, Tenn., as part of a pilot program being conducted by the IEEE Student Activities Committee and Region 3. The seminar is one segment of a project, sponsored by SAC and funded by the United States Activities Board, to develop material that will inform students about the engineering issues that will face them as they enter the profession.

Topics for discussion in the seminar/workshops include the responsibilities of the practicing engineer, how to maintain professional standing, and IEEE's role in the profession. The workshops will provide an opportunity for interested students to interact with the speakers, allowing students to express their concerns about professionalism and to have their questions answered by IEEE's leaders.

STUDENT ACTIVITIES COMMITTEE CHAIRMAN NAMED

Eric M. Aupperle, Director of the Merit Computer Network at the University of Michigan at Ann Arbor, has been named Chairman of the Student Activities Committee. He has been a member of SAC for the past two years as Region 4 SAC Chairman. In his new position his primary responsibility is to represent the interests of Student members to IEEE Boards and Committees. Questions and comments on any aspect of the IEEE Student Program may be directed to Mr. Aupperle by writing: IEEE Student Services, 345 E. 47 St., New York, N.Y. 10017.

BENDIX AWARD WINNERS

The Vincent Bendix Award program, sponsored by IEEE under a grant from the Bendix Corp., provides Student Branches with up to \$500 each to support the work of Branch members on projects of their own devising. Recipients are chosen as a result of competitive evaluation of proposals.

Thirty Student Branches entered this year's competition. The winners are: University of Kansas, Iowa State University, Tulane University, University of Detroit, University of Arkansas at Little Rock, University of Oklahoma, Swarthmore College, and Trenton State College.

UPDATE ON BRANCH MEMBERSHIP CAMPAIGN

The 30k Calculation Branch Membership Campaign is continuing to draw record members of new Student members. Schools that have recruited over 100 Student members as of December 1 include Georgia Institute of Technology, Purdue, University of Texas at Austin, University of Missouri at Rolla, University of Tennessee at Knoxville, and Texas A&M. These schools will each receive a TI-57 programmable calculator, as will all those either recruiting 60 or more new Student members, or adding at least 20 new members and, thereby, doubling the size of the Branch. The remaining winners had not been announced by the time this page went to press, but some 60 schools are expected to qualify for a prize. Student membership at the end of 1978 stood at 29 643, up 17 percent from the previous year.

AWARDS DEADLINE

Nominations for the IEEE Field Awards must be received by April 1, 1979. See the December 1978 issue of THE INSTITUTE for details, or contact Una Lennon at HQ.

NEW FELLOW GRADE ELECTIONS

The Board of Directors has elected 126 new Fellows, whose names and citations appear as an insert on pp. 2M-2T of this issue.

Fellow nomination kits, to be used in the submission of future nominations, are now available upon request to the Staff Secretary of the Fellow Committee at Headquarters. The kit includes detailed guidelines to assist a nominator in the effective preparation of the nomination form. Because a substantial number of elections to Fellow grade occur on resubmission, nominators are encouraged to resubmit nominations.

TAB NEWS

MOSCOW DELEGATES SOUGHT

The U.S.S.R. Popov Society has once again invited an IEEE delegation to participate in the annual Popov Society Congress, to be held in the latter part of May 1979. The IEEE is now seeking applicants for the delegation. Plans include a two-week stay in the Soviet Union, during which delegates will attend the four-day congress and visit several other cities to tour research centers, educational institutions and operating installations. The theme of the 1979 scientific session is "Radio Engineering, Electronics, and Radio Communication Engineering." The following topics will be discussed during the sessions: radio communication engineering; electronic communication engineering; automatic control systems and information storage; development of computer techniques and their utilization in the automatization of research and design processes; utilization of radio engineering, electronics, and communication engineering in industry and agriculture; problems of information theory; electronic instruments; and radio broadcasting, television, and radio measurements.

Potential delegates should submit their applications and biographies to their respective Society Presidents as soon as possible. An additional copy of an applicant's resume should be sent to Audrey Bickel at Headquarters.

Funding is the responsibility of applicants. Nominees will be recommended to the TAB Transnational Relations Committee by their Society Presidents, and final selections will be made by the IEEE Executive Committee.

GRANTS RENEWED

On the basis of merit and exceptional performance, the Engineering Foundation has renewed its support of two IEEE members currently working under the sponsorship of the Foundation's Research Initiation Grants. Barry Keane of Clemson University, S.C. was awarded a \$10 000 Research Continuation Grant in support of his study entitled "Period/amplitude/pattern analysis of the electroencephalogram by microcomputer." Dean Jeutter of Marquette University, Wis., is also the recipient of a \$10 000 continuation grant for his work on "A multiple-channel biomedical telemetry system using CMOS technology."

NEW COMMITTEES MANAGER

Irving Engelson has been appointed Manager of TAB Committees and Special Projects in the IEEE Technical

Activities Department. In this position, Dr. Engelson is responsible for strengthening the technical support, and for overseeing the 14 TAB Committees. He will also work with the Society officers on their financial operations, and undertake special technical projects. Dr. Engelson, who assumed his new post on December 28, 1978, formerly served as Professor and Associate Dean of the College of Engineering and Technology at the University of Nebraska at Omaha and previous to that as Associate Professor of Electrical Engineering and Assistant Dean at the New Jersey Institute of Technology.

EAB NEWS

MICROPROCESSOR HOME-STUDY COURSE

The EAB has introduced a microprocessor home-study course for Heath Company's ETS-3400 with miniature digital computer. The course can now be ordered by IEEE members. To those who complete the course and obtain a 70 percent or better grade on the final examination, the Institute will award 8.0 CEAs (Continuing Education Achievement Units) along with a \$35.00 rebate on the course fee. For details, contact the Educational Services Department at Headquarters.

RENTAL OF VIDEO COURSES

The organizational entities of the Institute are reminded that under the aegis of the EAB, video cassette courses are now available on a rental basis. Titles include: "Cooling of Electronic Equipment," "Manufacturing Quality Control," "Engineering Economy," and soon to be released "Modern Control Theory." Details are available from Educational Services at Headquarters.

GUIDANCE BROCHURE AVAILABLE

With Spring approaching and guidance activities on the upsurge, Section officers and guidance counselors are reminded of the brochure available from EAB introducing students to electrical engineering. For a copy of "Careers in Electrical/Electronics Engineering," write to the Educational Services Department at Headquarters.

PROFESSIONAL ISSUES BROCHURE

The joint EAB/USAB Career Development Committee was active during 1978 on programs to increase the IEEE member's awareness of professional issues. A report of this committee's 1978 activities is available upon request to the Educational Services Department at Headquarters.

PUB NEWS

SPECTRUM

Spectrum is at work on two upcoming special issues. One will offer a comprehensive report on problems, applications, and new technical breakthroughs within the totality of modern communications. The other special issue covers European electrotechnology. Emulating the coverage and style of the September 1978 special issue, "Electrotechnology in Japan," this issue will target recent European technical developments.

IEEE PRESS

The IEEE Press has announced the publication of *Multidimensional Systems: Theory and Applications*. Progress in technology has led to the advent of diverse and complex systems—multidimensional systems—characterized by functions or matrices of several variables. This 304 page book on the subject contains 24 key reprinted papers on multidimensional systems from a

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PUB NEWS, continued

variety of sources and an introductory paper with an extensive bibliography. The volume is priced at \$14.95 for the paperbound member edition, \$29.95 clothbound (\$22.45 for members). It can be ordered postpaid from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Payment should accompany the order.

PUBLISHING SERVICES

As tax time approaches, Publishing Services receives more than the usual trickle of letters and calls asking how to give away or sell old AIEE/IRE/IEEE publications and whether or not tax deductions can be taken for them. There are no magic answers, but the response prepared by Pat Penick (see insert p. 2U) might help.

USAB NEWS

ACKNOWLEDGMENTS AND CITATIONS

Representative Frank Thompson Jr. (D-N.J.) has been selected to receive USAB's Distinguished Public Service Recognition. The recognition is a forerunner of USAB's newly approved Professional Awards Program.

Rep. Thompson was selected for his "singularly distinguished achievements in advocating before the Congress of the United States the IEEE goals of professionalism in engineering." The presentation to Rep. Thompson will be made by Vice President for Professional Activities Bruno O. Weinschel.

At a special reception for IEEE members attending MIDCON 78, six USAB Citations of Honor were presented to Robert A. Rivers, Harold S. Goldberg, Hans C. Cherney, Frank H. Palmer, Leo Young, and Richard J. Backe, for "dedicated service toward attaining recognition of engineering professionalism."

USAB's Regional Professional Activities Recognition was presented to Thomas R. Cuthbert (Region 5). Other Regional Recognitions will be presented at Regional conferences.

Nineteen Certificates of Appreciation have been designated for IEEE members cited by their individual Regions. Also named as Certificate recipients are USAB's 1978 Task Force Leaders and Committee Chairmen, and Regional and Divisional PAC Coordinators.

Among the forerunners of USAB's recently approved Awards program were the USAB Recognitions for Engineering Professionalism presented to Dr. James H. Mulligan and Dr. John J. Guarrera at WESCON 78 (see *EE* October 1978).

LERA BILL REINTRODUCED

A bill to provide for individual establishment of a Limited Employee Retirement Account (LERA) was reintroduced in this session of Congress by Representative James C. Corman (D-Calif.), with the support of 27 cosponsors. The bill, H.R. 628, is gaining additional cosponsors and needs demonstrations of support from IEEE members. USAB requests members to watch for calls for action in support of this bill.

USAB Pension Task Force activity is unrelenting in its effort to obtain pension coverage for engineering professionals. At a recent meeting with Senator Lloyd M. Bentsen (D-Tex.), the Senator discussed his support of such concepts as the LERA and indicated that he would introduce a similar bill in the Senate. He has already introduced a bill to provide pension coverage for homemakers. Next month, the Pension Task Force will meet with Representative Al Ullman (D-Ore.), Chairman of the House Ways and Means Committee, to which the LERA bill has been referred.

NEW USAB ADMINISTRATION

Reelected IEEE Vice President for Professional Activities Bruno O. Weinschel chairs a restructured USAB this year. USAB's "inward-looking" programs, such as pensions, patents, and service contracts, will be guided by a Vice Chairman for Professional Affairs, Robert F. (Bob) Cotellessa, while USAB's "outward-looking" programs, such as government affairs and technological policy issues, will be directed by Vice President for Public Affairs, Richard J. (Dick) Backe.

Three of the six U.S. Regional Directors who are members of USAB are newly elected. They are: William C. (Bill) Farrell (Region 2); Peter A. E. (Pete) Rusche (Region 4); and Charles A. (Bud) Eldon (Region 6). The remaining Directors completing their terms are: James E. (Jim) Shepherd (Region 1); Roy H. Harris (Region 3); and Darrell L. Vines (Region 5).

The three Division Directors serving on USAB in 1979 are Robert E. (Bob) Larson (Division I), Richard E. (Dick) Merwin (Division V), and the newly elected Director of Division IV, F. A. (Tony) Furfari.

Three newly elected Members-at-Large, whose terms run through 1980, are Richard J. (Dick) Gowen, Edward A. (Ed) Wolff, and David B. (Dave) Dobson. The remaining Members-at-Large, completing their terms in 1979, are Alvin A. (Al) Read and Arthur L. (Art) Rossoff. Joel B. Snyder was appointed to complete the 1978-79 Member-at-Large term of office from which Esther O. Mayfield resigned.

CHAPTER/SECTION NEWS

The Computer Chapter of the Winnipeg Section was established.

The Computer Chapter of the Bombay Section was established.

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* :

Oct.	8.88%
Nov.	9.25%
Dec.	9.50%
Jan./Mar.	9.50% (estimated)

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

Oct.	8.50%
Nov.	8.67%
Dec.	10.04%
Jan./Mar.	10.00% (estimated)

Investment Option 3—Bond Plan†

Oct.	8.69%
Nov.	9.42%
Dec.	9.43%
Jan./Mar.	9.60% (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.

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