R. TABAIC

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ANNUAL ASSEMBLY ELECTS SEVEN 1978 BOARD MEMBERS AT BoD MEETING IN SAN DIEGO, CALIF.; BOARD HALTS ACTION ON REGISTRATION POLICY

Seven key seats on the IEEE Board of Directors for 1978 have been filled by the Annual Assembly. The 19-member body comprised of IEEE membership-elected Directors and officers chose the following slate:

- Eric Herz--Vice President for Technical Activities.
- Bruno O. Weinschel--Vice President for Professional Activities
- Paul F. Carroll--Vice President for Regional Activities
- Jerome J. Suran--Vice President for Educational Activities
- Robert W. Lucky--Vice President of Publications Activities
- Robert D. Briskman--Secretary/Treasurer
- Joseph L. Koepfinger--Director of Standards Activities

Six of the seven new Directors will serve on both the Executive Committee and the Board of Directors. The seventh, the recently created Director of Standards Activities, will serve only on the Board.

After several hours of debate by the Annual Assembly, the slate that they elected was identical to the one submitted to them by IEEE's Nominations and Appointments Committee. (Profiles of the new officers will appear in future EE issues.)

BOARD ACTIONS

At its November 18-19 meeting in San Diego, IEEE's Board of Directors voted to "hold in abeyance" the implementation of its Policy Statement 7.3, Registration of Engineers, pending the report of the Board's own ad hoc committee on registration. Policy 7.3, among

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ELECTION RESULTS

Ivan A. Getting, former president of Aerospace Corporation, won the third contested presidential election held by the IEEE, to become the Institute's 1978 President. Dr. Getting was the Board of Directors' candidate. Elected 1978 Executive Vice President was C. Lester Hogan.

Of the three constitutional ammendments on the ballot, Proposition One, calling for earlier submissions of all Board-nominated election candidates, was passed. Proposition Two, which consolidated all regions outside the U.S. into one region, and Proposition Three, requiring dues or assessment increases to be passed by a majority vote of the membership, were both defeated.

Also elected were five Regional Directors and four Divisional Directors. For election details see December The Institute.

A WORD FROM IEEE'S PRESIDENT ELECT

Now that the election is over, I look forward with anticipation toward contributing to the solutions of problems facing the IEEE. Consistent with the tradition of IEEE, I will stress the importance of scientific and engineering advancement through publications, meetings, seminars, and continuing education. I also plan to address the professional problems of the U.S. engineer. The most important issues are those that affect the employment opportunities for engineers to which an expanding economy coupled with a growth in electronics and use of electric equipment can contribute. In particular, the energy crisis gives us all an opportunity at conservation, more efficient use of electric power, and alternate sources of energy. The IEEE, with its solid base, is in a strong position to help both its membership and the public.

Ivan A. Getting

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BoD (cont'd.)

other things, calls for the elimination of the industrial exemption in state laws as one means of achieving broadened registration of engineers. The recently revised registration policy statement has met with considerable controversy. The Board's action to hold it in abeyance was precipitated by a Computer Society resolution calling for the Board to withdraw the current version of Policy 7.3 altogether and revert to the prior version, which merely recommended the registration of engineers.

In other actions, the Directors voted to restructure USAB to give the Board greater control of USAB's makeup. This involved a revision of Bylaw 310.2 relating to USAB's composition. The responsibility for choosing USAB's six at-large members was transferred from the Vice President for Professional Activities (with the concurrence of the elected members of USAB) to the Board of Directors (aided by recommendations from IEEE's Nominations and Appointments Committee).

The Board also voted to place before the membership on the 1978 ballot a referendum on the concept of a President-Elect. If this concept is approved by the membership, two sentences would be added to Section 1 of Article VIII of IEEE's Constitution, reading: "During the first year immediately following election, he [the elected IEEE President] shall be the President-Elect and Executive Vice President. During the second year following election, he shall serve as President."

Finally, the Board took action in two areas related to professional activities: It voted to withhold approval from a USAB proposal to establish an IEEE political action fund; and it postponed action that would create formal IEEE procedures for handling matters of engineering ethics. Implementation procedures for IEEE's Code of Ethics had been proposed by USAB's Ethics Task Force and by the Board of Directors' newly created Committee on Member Conduct.

The next scheduled meeting of the Board of Directors will be held February 18-20, probably in Miami, Fla.

EE's READERS RESPOND

According to the survey published in the October issue of Electrical Engineering, the general preponderance of survey respondents report that they read the entire issue and they feel that the quality of the news coverage and the inserts is satisfactory. Readers think that IEEE should publish both The Institute and Electrical Engineering, and they feel EE warrants its annual budget allocation.

Of the 3823 reader surveys mailed, 262 had been returned by late November. Answering that "I generally read the entire issue" were 67 percent of the respondents. EE's news coverage was judged satisfactory by 59 percent of the readers, excellent by 27 percent; similarly, the inserts were judged satisfactory by 60 percent of the respondents, and excellent by 23 percent. Only 2 percent of the respondents felt the news coverage or the inserts to be of poor quality.

While 39 percent of the readers said IEEE should publish both EE and The Institute, half that number, or 19 percent, felt it should publish The Institute alone, and half again, or 10 percent, favored publication of EE only. A full 30 percent of the readers had not made up their minds on this issue.

Fifty-six percent of the readers felt that EE is worth its annual publication cost. Only half as many, 28 percent, said it isn't worth the cost.

Most of the readers who took the time to respond to EE's survey had read the publication for four or more years, and most were either Group/Society officers, Section officers, or Committee officers. All of the reader responses and comments received will be useful in charting the course Electrical Engineering will follow in future issues.

USAB NEWS

Employment guidelines for engineers were strengthened in a 1976 action by the IEEE Board of Directors. This initial action, and a continued participation by the USAB on the two intersociety ad hoc committees on review and implementation, have led to a substantive

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E.E. 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.

IEEE

Contact: Emily Sirjane

Fellow Committee

IEEE FELLOWS ELECTED AS OF JANUARY 1, 1978
GEOGRAPHICAL LIST BY SECTION AND SUBSECTION

BOSTON	
Jonathan Allen	For contributions to the design of computer architecture for signal processing and to the synthesis of speech from text.
Jerome Freedman	For contributions to the development of radar systems.
Robert J. Mailloux	For contributions to enhancing the performance of phased array antennas.
Frederic R. Morgenthaler	For contributions to the theory and applications of microwave magnetics.
John M. Osepchuk	For contributions to microwave technology and to microwave safety.
Charles M. Rader	For contributions to digital signal processing.
Ernst F. R. A. Schloemann	For contributions to the theory and development of microwave ferrite materials and devices.
Charles A. Zraket	For technical management and contributions in the application of systems engineering to large military and civilian problems.
MERRIMACK VALLEY SUBSECTION	
Joseph F. White	For contributions to the development of diode phase shifters for microwave array antennas.
CENTRAL ILLINOIS	
Franco P. Preparata	For contributions to coding theory.
CENTRAL INDIANA	
George N. Saridis	For contributions to the theory of self-organizing control systems.
CENTRAL PENNSYLVANIA	
David B. Geselowitz	For contributions to the application of electromagnetic theory in electrocardiography.
CENTRAL VIRGINIA	
Ernst O. Attinger	For pioneering applications of electrical engineering methods to medicine.
CHICAGO	
Wallace B. Behnke, Jr.	For contributions in developing economical nuclear power and the fast breeder reactors.
CLEVELAND	
Wen H. Ko	For leadership and contributions in tne field of microelectronics for biomedical instrumentation.
Yoh-Han Pao	For contributions to laser and electrooptic research and for leadership in engineering education.

CONNECTICUT	
Anthony J. DeMaria	For pioneering contribution to acoustic-optics and picosecond pulse laser development.
FAIRFIELD COUNTY SUBSECTION	
Lee L. Davenport	For leadership in industrial research and advanced development.
Steward S. Flaschen	For leadership in consumer, industrial, and component electronics development.
DALLAS	
Carlos O. Love	For contributions to utilizing alternate fuel resources and to creating an effective interconnected system.
DENVER	
James A. Barnes	For contributions to and leadership in measurements of time and frequency and the promulgation of standards.
EASTERN NORTH CAROLINA	
Ralph A. Evans	For contributions to the practice and advancement of reliability theory.
FORT WORTH	
Mo-Shing Chen	For contributions to education and research in power system engineering.
FRANCE	
Michel H. Carpentier	For pioneering work in the fields of radars and information processing.
Michel J. Pouard	For contributions to the development and testing of high-voltage switchgear and to high-voltage and high-current testing.
GAINESVILLE	
Fredrik A. Lindholm	For contributions to transistor and solar cell modeling.
GERMANY (West)	
Adolf Goetzberger	For contributions to the understanding of semiconductor/oxide interfaces.
Dieter H. Kind	For development of high-voltage measurement and test methods.
Hans Marko	For contributions to digital communication transmission systems.
HAMILTON	
John W. Bandler	For contributions to computer-oriented microwave and circuit practices.
ISRAEL	
Uziah Galil	For the pioneering contribution to the establishment of a modern electronic industry in Israel.
ITHACA	
Toby Berger	For contributions to information theory and engineering education.
LEHIGH VALLEY	
Robert W. Werts	For contributions in the planning and developing of large-scale electric power systems.

NEW YORK	
Gregory S. Vassell	For contributions to the planning of reliable and economic electric power systems.
WESTCHESTER SUBSECTION	
Frederick H. Dill, Jr.	For contribution to semiconductor device and process research.
Alan B. Fowler	For contributions to the understanding of charge carriers' behavior in inversion layers.
Merlin G. Smith	For contributions to the development of large-scale integration.
NORTHERN VIRGINIA	
Thomas F. Curry	For the development of remotely controlled electronic reconnaissance systems.
Donald L. Feucht	For contributions to semiconductor heterojunctions research.
Herman Garlan	For the development of regulations to control radio frequency interference.
NORTH ITALY	
Alessandro Alberigi-Quaranta	For contributions and technical leadership in the fields of nuclear electronics and charge transport in semiconductors.
Pietro P. Lombardini	For contributions to radar astronomy, artificial ion cloud communication, and far infrared radiometry.
NORTH JERSEY	
Joseph A. Giordmaine	For pioneering contributions to nonlinear optics.
Robert M. Lauver	For contributions to ocean acoustic surveillance systems.
Gentaro Miyazaki	For contributions to color television receiver development and leadership in international communications.
Neil J. A. Sloane	For contributions to the theory of error correction in communication systems.
OAKLAND-EAST BAY	
R. Carroll Maninger	For contributions to the development of measurement techniques used in the nuclear and environmental sciences.
Chittoor V. Ramamoorthy	For contributions to computer architecture and software engineering.
Shyh Wang	For contributions to the theory and technique of integrated optics devices.
Sander Weinreb	For contributions to instrumentation in radio astronomy.
OTTAWA	
Robert M. Morris	For contributions to the understanding of radio noise and corona on high-voltage transmission lines.
PHILADELPHIA	
Milton Berkowitz	For leadership and contributions to space communication and aerospace electronic systems development.
David Garfinkel	For contributions to computer simulation of biological systems.

LONDON	
Ion I. Inculet	For contributions to the applications of electrostatics in mineral separation and gas cleaning.
LONG ISLAND	
Howard Frank	For contributions to large-scale network design and analysis.
MADISON	
J. Leon Shohet	For leadership in plasma science and engineering.
MAINE	
Clark Nichols	For contributions to and leadership in the design of computer-control systems for electric power applications.
METROPOLITAN LOS ANGELES	
William H. Louisell	For contributions to quantum statistical properties of radiation.
Jerry M. Mendel	For contributions to system identification, state estimation, and their application to aerospace technology.
R. David Middlebrook	For contributions to electronic circuit analysis.
Robert C. Tausworthe	For contributions to communication theory and development of deep space communication and tracking systems.
MICHIANA	
James L. Melsa	For educational leadership in the information and control sciences.
Michael K. Sain	For contributions to the theory of multivariable control systems.
MIDDLE and SOUTH ITALY	
Giorgio Barzilai	For contributions to the field of electromagnetic theory and to engineering education.
MILWAUKEE	
Gustav W. Staats	For contributions to the development, design, and construction of very large conductor-cooled steam turbine generators.
MONTREAL	
H. Brian White	For contributions to the development of extra-high-voltage transmission line structures.
NEW JERSEY COAST	
Ta-Shing Chu	For contributions to dual-polarization radio transmission, and to propagation of radio and light waves in precipitation.
Erich Hafner	For contributions to the improvement of piezoelectric crystals and frequency control devices.
John O. Limb	For contributions to efficient coding of color and monochrome video signals.
Peter W. Smith	For contributions to tunable gas lasers.

PHILADELPHIA (Continued)	
Fred Haber	For contributions to electromagnetic compatibility measurement techniques.
Anthony H. Lind	For technical leadership in the design and product development of video tape recorders and color television cameras.
Walter W. Weinstock	For contributions to radar systems and for leadership in development of modern air defense systems.
PITTSBURGH	
John C. Botts	For contributions to the development, testing, application, and standardization of insulation systems for rotating apparatus.
Stephen W. Director	For pioneering work in computer-aided circuit design and for contributions to engineering education.
Ching-Chung Li	For contribution to biocybernetics.
PORTLAND	
Stig A. Annestrand	For leadership and contributions to the art of high-voltage ac and dc power transmission.
PRINCETON	
Harvey J. Brudner	For leadership in the development and application of computers and electronic, audio-visual systems in education and training.
George Karady	For advancement in the art of high-voltage dc transmission.
PROVIDENCE	
Maurice Glicksman	For contributions to the understanding of transport, optical, and plasma phenomena in semiconductors.
ROCHESTER	
John V. Bouyoucos	For contributions to the field of hydrodynamic energy conversion devices.
SAINT LOUIS	
William S. C. Chang	For contributions to optoelectronics and integrated optics.
Robert W. Harmon	For developments in UHV insulation and suspension systems.
Charles M. Wolfe	For contributions to the development of high-purity gallium-arsenide for microwave and optical device applications.
SAN DIEGO	
Harold W. Sorenson	For contributions to control, estimation, and optimization of stochastic dynamic systems.
SAN GABRIEL VALLEY	
Marvin K. Simon	For analytical contributions to communication system design.
SANTA CLARA VALLEY	
Gilbert F. Amelio	For pioneering technical and managerial contributions in the field of charge-coupled devices.
Gene F. Franklin	For leadership in engineering education and for outstanding contributions in control theory and applications.
James E. Solomon	For contributions in research, design, and application of analog integrated circuits.

SANTA MONICA BAY	
Wesley W. Chu	For contributions to multiplexing techniques of and file allocation in computers.
Alan N. Willson, Jr.	For contributions to circuit and system theory in the area of nonlinear circuits.
SASKATCHEWAN	
Roy Billinton	For contributions to development and education in power system reliability evaluation.
SCHENECTADY	
Donald N. Ewart	For pioneering contributions to the analysis of the control and dynamics of large-scale electric power systems.
Fred E. Luborsky	For contributions toward the theoretical understanding of magnetic properties and the practical utilization of this knowledge.
Jennings A. Massingill	For contributions to the design of large steam turbine generators.
John M. Undrill	For development of interactive simulation methods and analysis techniques for electric power systems.
David M. Willyoung	For contributions to the design of large steam turbine-driven generators.
SEATTLE	
John M. Fluke	For contributions to electronic instrumentation.
SOUTH BAY HARBOR	
David W. Borst	For contributions in the application of power semiconductor devices.
SOUTHEASTERN MICHIGAN	
William G. Meese	For research management in the electric power industry.
SOUTHERN ALBERTA	
Thomas H. Barton	For contributions to the field of rotating machine theory and electronic drive dynamics.
SOUTH PLAINS	
Magne Kristiansen	For contributions to plasma technology and pulsed power.
SUSQUEHANNA	
Robert C. Eyloff	For contributions and technical leadership in applied magnetics and in the development of ultra-high-speed rotating machinery.
SWITZERLAND	
George S. Moschytz	For contributions to the theory and the development of hybrid-integrated linear communication networks.
TOKYO	
Morio Akiyama	For contributions to the analysis of variable parametric networks and applications of the method to power engineering and electrodynamics.
Hiroshi Inose	For contributions to the development of digital switching, digital modulation, and road traffic control systems.
Senichi Masuda	For contributions to the understanding and application of electrostatic precipitation technology.

TOKYO (Continued)	
Kunio Nakanishi	For contributions to the understanding of switching phenomena in high-power switchgear.
Kenji Ogata	For contributions to and leadership in telecommunications research and development.
Yukio Saito	For contributions to the understanding of electrical insulating materials.
Isao Someya	For contributions in the use of sampling theory in development of microwave communications systems.
TORONTO	
Edward J. A. Davison	For contributions to control system theory.
Kenneth C. Smith	For contributions to digital circuit design.
TUCSON	
Douglas J. Hamilton	For contributions to education in solid-state electronics.
Lawrence P. Huelsman	For contributions to electrical engineering education and circuit theory.
TWIN CITIES	
Belle A. Shenoi	For contributions to the theory of active filters.
UNITED KINGDOM and REPUBLIC of IRELAND	
Harvey F. Schwarz	For contributions to electronic navigation systems.
VANCOUVER	
Yao-nan Yu	For contribution to the development of analysis and testing techniques applied to stability in large electric power systems.
VERMONT	
W. David Pricer	For contributions to the development of computer memory technology.
WASHINGTON	
David F. Barbe	For contributions to the theory, understanding, and development of charge-coupled devices.
Albert Brodzinsky	For technical contributions and leadership in government electronics research.
Samuel J. Campanella	For contributions to signal processing and satellite communications.
Judson C. French	For contributions to the understanding and measurement of semiconductor devices and materials.
Irwin L. Lebow	For contributions to satellite communications technology.
John B. Slaughter	For contributions to the design of digital, sampled-data control systems.
Archer S. Taylor	For leadership in the development of professional engineering procedures and standards for the cable television industry.
Leonard W. Thomas, Sr.	For leadership in electromagnetic compatibility and development of interference measurement instrumentation and standards.
Leonard R. Weisberg	For contributions in semiconductor compound device research.
Lawrence R. Whicker	For contributions to the development of microwave and millimeter-wave nonreciprocal components.

Contact: Leo C. Fanning

United States Activities Board

THE GUIDING FORCE BEHIND THE GUIDELINES

In the late 1960's scores of engineers were laid off their jobs. Government contracts ended. There was no longer a demand for their services. They were told they weren't needed. No effort was made to relocate them. They lost their pension rights. It seemed grossly unfair.

Out of this experience grew the first set of Guidelines of Professional Employment for Engineers and Scientists. The guidelines were to benefit both the employee and the employer. It wasn't to be a one-sided situation. Each had a set of concerns and a set of responsibilities as well. Most of all, the guidelines created an ambience in which a dialogue could now take place between the two parties.

Someone could easily draw a cartoon depicting management and labor sitting on a see-saw each vying for the upper position. Where there are unions, this see-saw is in almost constant motion. In essentially nonunion situations it is apt to remain more static with management sitting on top -- unless some other means of "bargaining" exists. The guidelines enable the engineer or scientist to relate directly to the employer without the necessity of involving a third person. It retains the one-to-one relationship between employer and employee that the engineer feels is so important.

The original set of guidelines was established in January 1973. At the time it was generally understood that they were not to be considered final and complete in that form. They were to change with the times. In December 1976 IEEE decided that the time had come for some of those changes. At their December Board of Directors meeting they introduced a revised set of guidelines. They then told the Intersociety Guidelines Committee that they would formally adopt this new version unless the latter made some substantive move to update the original guidelines. The Committee met on April 2, 1976 and established an Ad Hoc Review Committee and an Ad Hoc Acceptance (Implementation) Committee.

In the months that followed, Committee members wrote to the original 31 endorsing societies soliciting comments and suggestions that would be helpful in the revision of the guidelines. Twenty-two replies were received, representing 12 (40%) of the societies. The Committee then took the various suggestions and formulated a proposed second edition of the guidelines. This draft was distributed to the endorsing societies in early August 1977 for review. On October 14, 1977, a meeting was held in Washington, D.C. to discuss the new second edition and to begin the endorsement process. Additionally, attention would be focused on guidelines acceptance or implementation.

Fifteen of the 31 endorsing societies were represented at the meeting. Charles H. Samson, Jr., Chairman of the Guidelines Acceptance Committee outlined the day's agenda and John A. Babcock, Chairman of the Review Committee presented some background information. Basically, two questions confronted the group: 1) Should the Committee accept the second set of guidelines and not wait for more changes and 2) What should the voting procedure be? It was generally felt that the societies had had ample time to submit their suggestions. Unless a definite cutoff date was established there would be no end to the revisions. A vote was taken to see whether the societies wanted to freeze the document and let it stand in that form. Seven voted yes. Five voted no and two abstained. Some members felt the outcome would have been different if they themselves had been allowed to make some changes in the guidelines. After some discussion it was decided that Committee members would have a chance to do this -- as long as the changes were of a minor and not a substantive nature. Once these were made, a second vote was taken. This time they voted as members of the Committee (unofficially) on the document with its latest changes. It met with unanimous approval. Finally, a vote was taken to determine the societies' positions on the guidelines. Three voted affirmatively. One voted negatively. The rest abstained because their Boards of Directors had not yet met and indicated the dates of their next Board Meetings. The last one -- that of ASCE (American Society of Civil Engineers) is scheduled for April 26, 1978.

The next step would be to revise the guidelines to include these minor changes and reissue them to the endorsing societies once more for their approval.

With the three affirmative votes, the endorsing process had been set in motion. Hopefully, by the end of May it would be completed and the actual printing of the new version can take place.

Essentially the second set of guidelines is not drastically different from the first. The same topics are covered: Recruitment; Terms of Employment; Professional Development and Termination and Transfer. Yet, the second edition seems stronger and better defined. As stated in the Foreword, the principles outlined in the first edition have been retained; but changes and additions have been made to increase clarity and reflect experience. Again, the guidelines should benefit both the employee and the employer. Specifically, the Foreword states: "It is anticipated that the Guidelines will continue to be used by employers in evaluating their own practices, by professional employees in evaluating their own responsibilities and those of their employers, and by new graduates and other employment seekers in evaluating their prospective employers."

The new guidelines should clarify some of the ambiguities regarding patents, control of proprietary information and the use of engineering titles. A distinction is made between evaluation of the employee for salary purposes and his evaluation in terms of his own standing within the company. Still, the second edition does not or will not anwer all questions. No single document ever seems to accomplish this end. Where it fails, it is hoped that it will at least open up a discussion so that employer and employee can reach a mutually satisfying agreement.

Finally, the Foreword recommends viewing the guidelines as "desirable general goals rather than as a set of minimum standards." Once again the document is subject to periodic review by the endorsing societies so that it remains current with the times.

Committee members present at the October 14th meeting then turned their attention to another important consideration -- namely implementation of the guidelines. There was a realization that even the best guidelines in the world aren't going to do any good unless people know about them.

"Visibility is the key word," explained Chairman Samson. "Unfortunately," he continued "surveys have shown that many companies don't even know that the guidelines exist. Maybe this is due in part to the large volume of mail they receive."

The discussion turned to ways of possibly increasing guideline awareness. Suggestions included a film, a slide show, a logo. Basically, there were two considerations: What the Intersociety group as a whole could do and what the individual endorsing societies could do. It was felt that a film or slide show would reach a large audience and promote general interest in the guidelines. Specific production figures were mentioned. EJC (Engineers Joint Council) tentatively volunteered to fund the initial cost of the film and slide presentation. Hopefully, they would recover their money through sale of copies to the individual endorsing societies.

Several additional approaches were suggested in a report prepared by the Committee on Guidelines Acceptance. At one point, Chairman Samson mentioned some of the things that have already been accomplished. Many societies have published articles on the guidelines for their journals or newspapers. Other societies have focused on students. NSPE (National Society of Professional Engineers) for example includes a copy of guidelines in approximately 30,000 kits distributed to seniors at colleges of engineering. The same NSPE in 1976 directed its attention to the employer in "an Employer Recognition Program." Award certificates are given to employers "who recognize that the guidelines provide desirable criteria for fair and equitable practices for both employees and employers."

In the future the Guidelines Implementation Committee and the individual endorsing societies will focus on the engineering student, the engineering educator, the employer and the employee in an all out effort to cover all fronts. They will encourage meetings on a local and national level to discuss the guidelines and their implications. Taking part in those meetings will be the people directly involved: the engineers and scientists, the employers, the students and the educators.

With these combined efforts, guidelines visibility ought to increase. Surveys have been conducted in the past to evaluate recognition and acceptance of the guidelines by employers and employees. The surveys have been done at random with no overall or constant format. Samson's committee suggests developing a standard survey that can be used by all the endorsing societies. These coordinated surveys, he feels, should be done periodically to measure progress.

At 3:30 p.m., the October 14th meeting adjourned. It had been a long day. Still, many accomplishments had been made. The endorsement process was initiated. Both Ad Hoc Committees had been extended with specific task assignments. A commitment had been made to look into guidelines acceptance and EJC had tentatively made an offer to assist with the funding of the film or slide show. Members of the committee could go home feeling pleased with what had been accomplished. In the months ahead, they can turn their attention to what still needs to be done. It's not the job of any one man or a single committee. It will take the cooperation and the effort of everyone to make the new guidelines a living, viable concept and reality.

Contact: Neil D. Pundit

Technical Activities Board

MAXIMUM RATES OF PER DIEM ALLOWANCES FOR TRAVEL IN FOREIGN AREAS

The maximum allowable per diem rates have recently been revised. This supersedes the insert in Electrical Engineering published in issue No. 69-2C, April 1977.

LOCALITY	MAXIMUM PER DIEM RATES
Afghanistan	
Bamiyan	$ 39
Kabul	46
Other	23
Algeria	
Algiers	84
Other	56
Andorra	30
Angola	
Cabinda	34
Other	30
Argentina	50
Ascension Island	22
Australia	
Canberra	54
Melbourne	48
Sydney	58
Other	44
Austria	51
Azores	27
Bahamas	
Andros Island	
(May 1-Dec.14, incl.)	48
(Dec.15-Apr. 30, incl.)	53
Nassau	
(May 1-Dec.14, incl.)	53
(Dec.15-Apr.30, incl.)	61
San Salvador I.	57
Other	
(May 1-Dec.14, incl.)	48
(Dec.15-Apr.30, incl.)	67
Bahrain	110
Balearic Islands	27
Bangladesh	46
Barbados	
(Apr.16-Dec.14, incl.)	46
(Dec.15-Apr.15, incl.)	70
Belgium	
Antwerp	60
Brussels	60
SHAPE/Chievres	49
Other	36
Belize	30
Benin	50
Bermuda	
(Dec.1-Mar.15, incl.)	60
(Mar.16-Nov.30, incl.)	88
Bolivia	
Cochabamba	30
La Paz	45
Oruru	22
Santa Cruz	30
Other	18
Botswana	31
Brazil	
Belem	51
Belo Horizonte	49
Brasilia	53
Manaus	49
Recife	44
Rio de Janeiro	63
Salvador	49
Sao Paulo	68
Other	40
British West Indies	
(See also Turks & Caico Is.)	
Antigua	
(May 1-Nov.30, incl.)	44
(Dec.1-Apr.30, incl.)	59
Cayman Islands	
(Apr.16-Dec.14, incl.)	42
(Dec.15-Apr.15, incl.)	64
Dominica	
(May 1-Nov.30, incl.)	29
(Dec. 1-Apr.30, incl.)	33
Montserrat	
(May 1-Nov.30, incl.)	21
(Dec.1-Apr.30, incl.)	33
St. Christopher-Nevis-Anguilla	
(May 1-Nov.30, incl.)	25
(Dec.1-Apr.30, incl.)	32
St. Lucia	
(May 1-Nov.30, incl.)	25
(Dec.1-Apr.30, incl.)	47
St. Vincent	
(May 1-Nov.30, incl.)	34
(Dec.1-Apr.30, incl.)	44
Virgin Islands (Br.)	
(May 1-Nov.30, incl.)	25
(Dec.1-Apr.30, incl.)	39
Other	
(May 1-Nov.30, incl.)	25
(Dec.1-Apr.30, incl.)	30
Brunei	48
Bulgaria	58
Burma(e)	19
Burundi	50
*Cameroon	51
*Canada	
Baie Comeau	50
Banff (Alberta)	50
Calgary	55
Chicoutimi (incl. Bagotville)	48
Edmonton	52
Fort Churchill	55
Frobisher Bay, Baffin I.	60
Great Bear Lake (Northwest Terr.)	70
Halifax	56
Inuvik (NWT)	64
Montreal	46
Niagara Falls	50
Ottawa	58
Port Cartier	50
Quebec	52
St. John's, Nfd.	46
Sudbury (incl. Falconbridge)	46
Toronto	52
Trois-Riviers/Nicolet	48
Vancouver	58
Victoria	42
Winnipeg	44
Yellowknife (NWT)	64
Other	36
Canary Islands	27
Cape Verde, Rep. of	26
Central African Empire	44
Chad	44
Chagos Archipelago	12
Chile	50
China	
Kaohsiung	38
Penghu Is.	18
Quemoy-Matsu	18
Taipei	54
Other-Taiwan	30
Peking	22

*Effective September 1, 1977

LOCALITY	MAXIMUM PER DIEM RATES
Peking	1/ 40
Canton	29
Other	22
Cocos (Keeling) Is.	21
* Colombia	
Bogota	40
Cali	46
Cartagena	36
San Andres I.	36
Other	30
Comoro Islands	36
Congo (Cap: Brazzaville)	30
Costa Rica	42
* Cuba	
Guantanamo Bay	16
Havana	75
Other	12
Cyprus	53
Czechoslovakia	50
Dahomey (See Benin)	
Denmark (see also Faeroe Islands and Greenland)	68
Dominican Republic	
La Romana	
(Apr.16-Dec.14,incl.)	58
(Dec. 15-Apr.15,incl.)	66
Santo Domingo	42
Other	30
Easter Island	46
Ecuador	
Guayaquil	45
Quito	40
Other	33
Egypt(e)	
Alexandria	2/ 29
Aswan	2/ 31
Cairo	2/ 58
Luxor	2/ 31
Other	2/ 19
El Salvador	32
Equatorial Guinea	26
Estonia	25
Ethiopia	32
Faeroe Islands	34
Falkland Islands	21
Fiji	47
Finland	64
France	
Cannes	48
Lyon	57
Nice	58
Paris (City of)	70
Paris (Environs) (Comprised of: Essone, Hauts-de-Seine, Seine St. Denis, Val-de-Marne, Val d'Oise and Yvelines Departments	70
Strasbourg	52
Other	43
French Guiana	37
French Polynesia	59
French Territory of Afars and Issas	90
French West Indies	
(Apr.16-Dec.14, incl.)	60
(Dec.15-Apr.15, incl.)	82
Gabon	70
Gambia, The	46
Germany	
Federal Rep. of Germany	
Augsburg	53
Berlin (Western Sectors)	59
Bonn	59
Bremen	45
Cologne	66
Dusseldorf	59
Frankfurt am Main (incl. Rhein Main AB)	59
Hamburg	66
Hanover	53
Munich	53
Nurnberg	51
Stuttgart	59
Tubingen	45
Wiesbaden	45
Other	37
German Democratic Republic	
Berlin (Eastern Sector)	3/ 37
	4/ 55
Other	3/ 37
	4/ 55
Ghana	65
Gibraltar	33
Gilbert & Ellice Is.	30
Greece	
Athens	
(Dec.1-Mar.31, incl.)	40
(Apr.1-Nov.30, incl.)	44
Thessaloniki	
(Dec.1-Mar.31,incl.)	31
(Apr.1-Nov.30,incl.)	36
Other	28
Greenland	26
Grenada	
(May 1-Nov.30, incl.)	40
(Dec.1-Apr.30, incl.)	55
Guatemala	41
Guinea(e)	49
Guinea-Bissau (formerly Portugese Guinea)	42
Guyana	39
Haiti	
Port-au-prince (incl. Petionville)	42
Other	26
Honduras (see also Swan Is.)	43
Hong Kong	62
* Hungary	
(Mar.15-Jan.1, incl.)	52
(Jan. 2-Mar.14, incl.)	47
Iceland	
(Oct.1-Apr.30, incl.)	42
(May 1-Sep.30, incl.)	57
India(e)	
Bombay	52
Calcutta	42
New Delhi	38
Other	30
Indonesia	
Jakarta	54
Other	50
* Iran	
Tehran	7-
Other	61
Iraq	55
* Ireland	55
Israel	48
* Italy (see also Lampedusa I.)	
Bologna	50
Florence	62
Genoa	48
Leghorn	32
Milan	54
Naples	45
Rome	54
Sicily, Island of	45
Taranto	40
Trieste	41
Turin	54
Venice	52
Verona	44
Other	31
Ivory Coast	
Abidjan	68
Other	40
Jamaica	57
Japan (see also Ryukyus)	
Fukuoka	75
Kyoto	69
Osaka-Kobe	69
Sapporo	69
Tokyo	5/ 73
Other	46
Jerusalem	58
Jordan	
Amman	62
Aqaba	62
Other	22
Kenya	
Mombasa	40
Nairobi	49
Nanyuki	35
Other	20
Khmer Republic	26
Korea	
Pusan	36
Seoul	54
Other	33
* Kuwait	130
Lampedusa Island	31
Laos	33
Latvia	25
Lebanon	46
Lesotho	28
Liberia	
Monrovia	40
Other	27
Libya	
Benghazi	38
Tripoli	38
Other	22
Liechtenstein	54
Lithuania	25
Luxembourg	50
* Macao	47
Madagascar	47
Madeira Islands	37
Malagasy Rep.-see Madagascar	
Malawi	27
Malaysia	40
Maldive Islands	25
Mali	
Bamako	53
Other	31
Malta	31
Mauritania	
Nouadhibou	88
Other	60
Mauritius	39
Mexico	
Acapulco	
(Apr.15-Dec.15, incl.)	34
(Dec.16-Apr.14, incl.)	60
Can Cun/Cozumel	
(Apr.15-Dec.15,incl.)	48
(Dec.16-Apr.14,incl.)	54
Mazatlan	40
Mexico, D.F.	39
Puerto Vallarta	48
Other	33
Monaco	
(Oct. 20-Apr.1,incl.)	55
(Apr. 2 -Oct.19,incl.)	91
Morocco (e)	
Casablanca	38
Rabat	34
Other	26
Mozambique	27
Nauru	34
Nepal	
Kathmandu	32
Pokhara	32
Other	12
Netherlands	
Amsterdam	58
Rotterdam	58
The Hague	58
Valkenburg NAS	58
Other	46

*Effective September 1, 1977

LOCALITY	MAXIMUM PER DIEM RATES
Netherlands Antilles	
Aruba	
(May 1-Dec.14,incl.)	55
(Dec.15-Apr.30,incl.)	81
Bonaire	
(May 1-Dec.14, incl.)	40
(Dec.15-Apr.30, incl.)	54
Other	
(May 1-Dec.14,incl.)	53
(Dec.15-Apr.30,incl.)	64
New Caledonia	50
New Hebrides	52
New Zealand	38
* Nicaragua	52
Niger	
Arlit	30
Ayorou	30
Agadez	30
Dosso	30
Maradi	30
Niamey	43
Tanoua	30
Zinder	30
Other	16
Nigeria	58
Norway	62
Oman	
Muscat	100
Salalah	67
Other	44
Pakistan (e)	
Karachi	72
Islamabad/Rawalpindi	62
Lahore	60
Other	46
Panama	
Colon	42
Contadora	50
Panama City	48
Other	30
Papua New Guinea	60
Paraguay	32
Peru	
Chilca Range	30
Lima	46
Piura	29
Other	25
Philippines	
Manila	44
Other	23
Poland (e)	6/ 40
	7/ 21
Portugal (see also Azores and Madeira Islands)	
Alverca	37
Lisbon	37
Oeiras	37
Other	30
Qatar	107
Reunion	51
Romania	59
Rwanda	48
Ryukyus	51
San Marino	32
Sao Tome & Principe	23
Saudi Arabia	
Dhahran	90
Jidda	
(Jan.16-Sept.30,incl.)	100
(Oct.1-Jan15,incl.)	180
Riyadh	102
Taif	97
Other	64
Senegal	55
Seychelles	40
Sierra Leone	43
Sinai Field Mission	42
Singapore	50
Solomon Islands	34
Somalia	29
South Africa	29
Southern Rhodesia	18
South West Africa	35
Spain (see also Balearic Islands & Canary Islands	
Barcelona	39
Bilbao	39
Madrid (incl. Getafe C.A.S.A. Getafe), Loeches POL Site, Torrejon AB)	41
Other	27
Spanish Sahara	28
Sri Lanka	
Colombo	8/ 40
Kandy	8/ 20
Other	8/ 14
Sudan (e)	
Khartoum	60
Juba	27
Kosti	18
Malakal	18
Port Sudan	27
Wau	18
Other	16
Surinam	44
Swan Islands	12
Swaziland	32
* Sweden	69
* Switzerland	68
Syria (e)	
Damascus	52
Other	25
Tanzania	
Arusha	42
Dar es Salaam	42
Zanzibar	42
Other	22
Thailand	
Bangkok	42
Other	28
Togo	46
Tonga	34
Trinidad & Tobago	
Tobago	
(Apr.16-Dec.15,incl.)	60
(Dec.16-Apr.15,incl.)	98
Other	53
Trust Territory of the Pacific Islands	
Palau	39
Saipan	43
Other	27
Tunisia (e)	
Carthage	54
Gammarth	54
Lamarsa	54
Sidi Bou Said	54
Tunis	54
Other	33
Turkey	
Ankara	46
Istanbul	43
Izmir-Cigli	30
Other	28
Turks & Caicos Islands	
Grand Turk Island	
(May 1-Nov.30,incl.)	32
(Dec.1-Apr.30,incl.)	38
Other	
(Apr.15-Dec.14,incl.)	37
(Dec.15-Apr.14,incl.)	41
Uganda	30
U.S.S.R.	9/ 53
United Arab Emirates	110
* United Kingdom	
Aberdeen	58
Bristol	36
Cambridge	36
Edinburgh	58
Glasgow	58
Inverness	58
Liverpool	45
London	58
Manchester	51
Newcastle Upon Tyne	39
Northern Ireland	42
Nottingham	38
Other	34
Upper Volta	43
Uruguay	37
Venezuela	
Caracas	70
Other	47
Viet-Nam	
Da Nang	18
Saigon-Cholon Areas	24
Other	14
Western Samoa	34
Yemen (Aden)	19
Yemen Arab Republic	
Sana	28
Other	26
Yugoslavia (e)	
Skopje	23
Zagreb	37
Other	35
* Zaire	
Bukavu	34
Kinshasa	60
Kisangani	60
Kolwezi	60
Likasi	60
Lubumbashi	80
Other	52
Zambia	51
Other Foreign Localities	12

*Effective September 1, 1977

TRAVEL PER DIEM SUPPLEMENT 161

EFFECTIVE OCTOBER 1, 1977

LOCALITY	FROM	TO	
BAHRAIN	DOLS 110	DOLS 125	
BELGIUM	60	63	
Antwerp	60	72	
Brussels	49	51	
Shape/Chievres	36	38	
Other			
CANADA	--	43	New listing
London	--	48	New listing
Sept Iles	--	46	New listing
Sydney	--	54	New listing
Windsor			
(no other changes for Canada)			
CONGO (Cap: Brazzaville)	30	70	
(Effective September 30, 1977 by prior approval)			
CUBA	75	84	
Havana			
(Effective September 9, 1977 through September 30, 1977 by prior approval and continuation of dols 84 rate on 10-1-77. No other changes for Cuba)			
ETHIOPIA	32	DELETE	
Addis Ababa	--	32	New Listing
Other	--	20	New Listing
FRANCE	--	52	New Listing
Marseille			
(no other changes for France)			
GUINEA-BISSAU (formerly Portugese Guinea)	42	45	
ITALY (see also Lampedusa Is.)	54	65	
Milan			
(No other changes for Italy)			
LEBANON	46	57	
LIBERIA	40	45	
Monrovia			
(no other changes for Liberia)			
LUXEMBOURG	50	56	
MALAYSIA	40	42	
MOROCCO (e)	--	32	New Listing
Marrakech			
(No other changes for Morocco)			
NIGERIA	58	DELETE	
Lagos	--	71	New Listing
Other	--	58	New Listing
SOUTHERN RHODESIA	18	52	New Listing
SUDAN (e)	60	73	
Khartoum	27	29	
Juba	27	55	
Port Sudan			
(no other changes for Sudan)			
VENEZUELA	70	72	
Caracas			
(No other changes for Venezuela)			
ZAIRE	60	66	
Kinshasa			
(no other changes for Zaire)			

EXPLANATORY FOOTNOTES

1/ Only if required to use new wing of Peking Hotel.

2/ The Maximum rate when travelers receive per diem in Egyptian pounds is 19.7 for Alexandria; 21.1 for Aswan and Luxor; 39.4 for Cairo and 12.9 for other locations.

3/ Rate for those employees who have been given German Democratic Republic documentation. In addition, the rate for the first day in any hotel in the German Democratic Republic may be increased by the amount of a mandatory room reservation fee, if levied.

4/ Rate for those employees who have not been given German Democratic Republic documentation. In addition, the rate for the first day in any hotel in the German Democratic Republic may be increased by the amount of a mandatory room reservation fee, if levied.

5/ Tokyo, Japan: The term "Tokyo" is limited to that area falling within the following named special wards (KU): Chiyoda, Chuo, Minato, Shinjuku, Bunkyo, Taito, Sumida, Koto, Shinagawa, Merguro, Ota, Setgaya, Shibuya, Nakano, Suginami, Toshima, Kita, Arakawa, Itabashi, Nerima, Adachi, Katsushika, and Edogawa.

6/ Maximum rate for personnel not accredited to Poland. For travelers receiving per diem in zlotys, the maximum rate is 1800 Zlotys.

7/ Maximum rate for personnel accredited to Poland. For travelers receiving per diem in Zlotys, the maximum rate is 945 zlotys.

8/ The maximum rates when travelers receive per diem in Sri Lanka rupees is 478 for Colombo, 239 for Kandy and 167 for Other.

9/ The rate for the first day in any hotel in the U.S.S.R. may be increased by the amount of a mandatory room "reservation" fee, if levied. Also, when there is a required fee for processing requests for travel and hotel reservations in the U.S.S.R., the per diem rate may be increased by the amount levied.

(e) This symbol denotes excess or near-excess currency countries. Travelers should minimize the use of U. S. dollars for travel and per diem expenses, e.g., purchase of foreign currency only from U. S. Government disbursing facilities and the elimination of any use of dollars.

(*) One or more asterisks denote changes in rates effective as of the date or dates shown at the bottom of the page on which the change occurs.

Extracted from: Standardized Regulations
(Government Civilians,
Foreign Areas)
Department of State
Washington, D. C.

Contact: Mark M. Lucas

Membership Development Committee

NEW MD SERVICES, TOOLS AND RESOURCES PLANNED FOR 1978 ADMINISTRATOR NOW ABOARD

"EE" readers can look forward to an increasing level of MD support and activity from IEEE Headquarters in 1978. Initial efforts have already begun in order to provide more resources, tools and services to accomplish MD objectives...gaining new members and retaining and upgrading current members.

Included in the support efforts now being created are...

...A new simplified system for ordering the conference materials you need to operate a Membership Development booth at a local or Regional Convention...

...An attractive and functional literature and information display for use at meetings...

...A program of regular mailings intended to provide MD Chairmen with successful ideas and useful information for local programs...

...Revised and improved Membership Brochures providing more up-to-date information about IEEE and its services to members...

...Improved operational and administrative systems and procedures which will enable MD Staff to increase efficiency and immediacy to contact with field MD volunteers...

...Additional services now under consideration and on the drawing board.

We encourage not only the utilization of these new MD tools, but also your feedback on their effectiveness. It is our best guideline for their improvement and enhancement.

* * * * * * * * * * *

To carry out the staff Administration of the MD function, the position of Membership Development Administrator has been established and staffed within the Field Services Department. The newly selected MD Administrator is Mark M. Lucas. Since earning his BA from Duke University, Mark has worked in promotion and communication management for leading service organizations. Your are encouraged to contact him for any assistance you may require. (At IEEE Headquarters, Telephone (212) 644-8080).

IEEE

continuing education services

GET ON TARGET
WITH
CONTINUING EDUCATION COURSES

INCREASING THE PRODUCTIVITY OF THE HUMAN MIND - 2 Day
Professor Irwin Gray

The development and working structure of the human mind are examined; how to use it more effectively to make future decisions. Participants are taken thru seven basic steps in the thinking mind dealing with the outside world to learn to ideate and process their thinking in an effective manner.

TUTORIAL ON OCEANOGRAPHIC APPLICATION FOR MICROCOMPUTERS, Thomas Williams and Stephen D. Rearwin

An over-view of design concepts and component selection criterial appropriate for development of Micro-Comp Based systems in Oceanographic Applications. Topics cover: Micro. Tech's(ADP roles in micro-comps); chip architectures; rep. processor families; software and development; and interconnection methods.

OSHA ELECTRICAL - 2 Day
Ralph Lee and William S. Watkins

The course deals with the OSHA Section of the US Dept. of Labor and its interpretation of the Nat'l Electric Code. Violations are often treated severly by OSHA and penalties can be harsh. Participants in this course will learn how to maintain safe plant conditions, prevent accidents, and thus avoid penalties by OSHA.

PHASE-LOCKED LOOPS: DESIGN AND APPLICATION - 1 Day
Floyd M. Gardner and Eric Klapper

The course covers a rapid tour of the design principles and shows you the main points that experience has revealed to be important. After a brief fundamental lecture, selected applications show how Phase-Locked Loops can be applied in common esoteric ways.

3-DAY MICROPROCESSOR COURSE
William Eccles and Associates

An intensive hands-on course in programming a Microprocessor in machine language. Each student uses a personal computer which can be taken home at the end of the course. Extensive laboratory programming exercises are available. The Motorola M6800 Microprocessor family is the base unit used.

LINEAR INTEGRATED CIRCUIT APPLICATIONS - 5 Day
Robert R. Atherton

An intensive instruction of the application of Linear Integrated Circuits, particularly Operational Amplifiers. An important discussion features a working model of various circuits demonstrating the theoretical and practical aspects.

PRINCIPLES OF SAFE OPERATION OF MEDICAL ACCELERATORS AND DIAGNOSTIC X-RAY SYSTEMS - 1 Day
Dr. Paul L. Carson, Ph. D.

The course will acquaint engineers and scientists with basic principles and engineering sophistication of modern diagnostic X-ray equipment and radiation therapy accelerators,and cover basic safety considerations.

ENERGY CONSERVATION IN INDUSTRY - 2 Day
Dr. Herbert M. Eckerlin

Participants in this course, upon completion, will be able to establish an effective energy conservation program, following procedures in NBS Handbook 115, and to assess its costs and benefits. They should be able to save their company 10% to 20% of their energy bill.

ENGINEERING ECONOMICS - 2 Day
Dr. William G. Sullivan

Participants in this course will gain a working knowledge of the concepts and techniques of economic evaluation required to compare engineering alternatives in equipment and facilities selection, new manufacturing processes, plant expansion and product redesign.

Please review this list of courses and indicate your choices on the next page, or telephone Vincent J. Giardina - (201) 981-0060 ext. 174 or 177.

Computer and Information Sciences
1. CAMAC - 1 Day
2. Electronic Information Processing - 2 Days
3. Computer Aided Filter Design - 1 Day
4. Computer Networks - 1 Day
5. Intro to Microprocessors - 1 Day
6. Microprocessors Seminar - 2 Days
7. Microprocessors "Hands On" - 5 Day
8. Minicomputers - 2 Days
9. Mini/Microcomputer Applications - 1 Day
10. Microprocessor Workshop with a Take-Home Microproccessor (MEK6800D2) - 3 Days

Electrical and Electronics Engineering
11. Infrared Testing - 2 Days
12. Integrated Circuits - 5 Days
13. Numerical and Asymptotics Techniques for Electromagnetics and Antennas - 5 Days
14. National Electrical Safety Code - 1 Day
15. Osha Electrical - 2 Days
16. Energy Conservation in Industry - 2 Days

Business and Management
17. Communicate for Results - 1 Day
18. Converting Your Ideas Into a Profitable Business - 1 Day
19. How to Analyze and Solve Organizational Problems - 2 Days
20. How to Start a Business and Make it Grow - 1 Day
21. The John C. Crystal Life/Work Planning Process - 1 or 2 Days
22. Managing Your Career Assets - 2 Days
23. Basic Project Management-Planning, Scheduling and Control - 2 Days
24. Engineering Economics - 2 Days

Communications
25. Engineering Considerations for Microwave Communication Systems - 3 or 5 Days
26. Applied Principles of Cost-Effective Control of Interference and Hazards (in the Non-Military Domain) - 2 Days

Power
27. Introduction to Solid State Power Electronics - 2 Days
28. Power Systems Planning - 2 Days
29. Power Systems Relaying - 2 Days
30. Power Systems Interconnections - 2 Days
31. Fundamentals of Applications of Protection Relays - 2 Days
32. Protective and Grounding of Distribution systems - 2 Days
33. Transient Phenomena in Power Systems - 2 Days

USE THIS FORM TO COMMUNICATE WITH US

Please check the subjects of interest to you or your Region, Group/Society, Section or Chapter members. Complete the remainder of this form giving us your name, address and telephone number and return it to us today. The stronger our lines of communication the more viable programming we can do for you.

◯ Yes I am currently receiving CE Newsletter. I would like my colleague _____ to be placed on your mailing list. His address is _____

My Education Coordinator is:

Name _____

Address _____

City _____ State _____ Zip _____

Telephone No. _____

◯ I have reviewed your 1977 Short Course Catalog and feel that we should develop additional courses such as:

_____ Course Title

_____ Course Title

_____ Course Title

Call me at _____

◯ I am interested in an EAB-sponsored course for my unit: or

◯ "in-house" course for my company

◯ I am interested in receiving a copy of your 1977 Course Catalog.

I am interested in programming a short course for

◯ Spring 1978

◯ Fall 1978

◯ Yes, I can participate in your TRAVELLING INSTRUCTOR program. Please consider me for the following locations:

_____ location _____ date

_____ location _____ date

_____ location _____ date

Please print or type

NAME _____

Section Affiliation _____

Company _____

Address _____

City _____ State _____ Zip _____

Company Phone _____

Home Phone _____

◯ I have attended other IEEE Short Course programs.

revision of the first issue of the intersociety employment guidelines. The Intersociety Guidelines Committee met October 14, 1977, to initiate the process of endorsement of the guidelines by the 31 endorsing societies. See the insert on pp. 2I-2J for a background report on the employment guidelines revisions.

Age discrimination was the subject of a three-day conference jointly sponsored by USAB and the National Science Foundation, and held December 7 through 9 in Arlington, Va. The conference, entitled "Discrimination or Utilization: The Engineer at Mid-Career," had a dual purpose: to raise public awareness of the age discrimination problem to which today's engineer is particularly susceptible, and to identify potential courses of action by industry, the Government, and professional societies to reduce the waste of human resources that results from age discrimination.

Up-to-date information on salaries of engineers will be found in "The IEEE 1977 U.S. Membership Salary and Fringe Benefit Survey," a USAB publication available as of mid-December. The two-volume booklet can be ordered from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854.

Call USAB's Information line, (202) 785-2180, to keep up with profession-related news.

PUB NEWS

IEEE Press has published two new books. "Digital Signal Computers and Processors," edited by Andres C. Salazar, is an up-to-date compilation of 44 selected papers dealing with the hardware aspects of digital signal processing. The emphasis is on the architecture and applications of high-speed computers and processors that implement digital signal algorithms. The 352-page volume, sponsored by the IEEE Computer Society, and the Acoustics, Speech and Signal Processing Society, is priced at $12.95 for the paperbound member edition; clothbound $25.95 ($19.45 for IEEE members). "Systems Engineering: Methodology and Applications," edited by Andrew P. Sage, provides an overview of systems engineering in 38 reprinted papers. The 408-page volume, sponsored by the Systems, Man and Cybernetics Society, is priced at $14.95 for the paperbound member edition; clothbound $29.95 ($22.45 for IEEE members). Both books can be ordered postpaid from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Payment should accompany the order.

Spectrum January will offer a review of technology in 11 key areas of electrical engineering. This fourth annual technology update explores the major developments during 1977 in hardware and software, looking to identify ongoing trends. Of particular interest are the articles covering the use of electronics to automate in the industrial/manufacturing area; developments in biomedical electronics such as CAT scanners and ultrasonic diagnostic equipment; and the burgeoning area of consumer electronics, from electronic games to microwave ovens and home appliance controls.

Time trials for entrants in Spectrum's Amazing Micro-Mouse Contest" will be held in June 1978, at the National Computer Conference at Disneyland, Calif. The contest challenges Spectrum readers to create self-contained electronic units capable of negotiating a "mystery maze." For further information, contact Roger Allan at Headquarters.

CONVENTION NEWS

At MIDCON's debut appearance this November in Chicago, Ill., several IEEE entities, including Field Services, Membership Development, Publications, Educational Activities, Technical Activities, and Spectrum, joined forces in one enormous exhibition booth. This effective united-front presentation will be repeated at ELECTRO '78 and WESCON '78.

The WESCON '78 Professional Program Committee is looking for high-quality professional proposals. Interested participants should send session proposals to the Wescon Professional Program Committee Chairman, Joe Statsinger, at 445 Hoes Lane, Piscataway, N.J. 08854.

RAB NEWS

Winding up 1977, all Sections are reminded of the Annual Meeting Reports and Financial Statements that are compiled on the basis of year-end data. To insure rebate credit, the reports and statements are due at Headquar-

(continued p. 4, col. 1)

RAB NEWS (cont'd.)
ters not later than February 1, 1978 (Bylaw 402). Also, names of all new officers and committee chairmen taking office on January 1 should be reported to the Field Services Department promptly. At its November 16 meeting, the Regional Activities Board approved its 1978 budget of $1078k, incorporating a Section Rebate Schedule to provide the same parameters of support as in 1977. The rebate schedule, with clarifying amendments, had been approved by the Board of Directors at its November 12 meeting.

Speakers and tours information is wanted by the Field Services Department for its annual Directory of Speakers and Tours. Names and addresses of recommended speakers and tour contacts are sought through the annual meeting report forms provided to all Sections, Chapters, and Branches.

Mail coordination to amend the proliferation of paper that inundates Section Chairmen is under way. The Field Service Department has supplemented its regular monthly mailing and is seeking to consolidate most mail sent independently to Section, Council, and Area Chairmen in its scheduled biweekly mailings.

The Planning and Priorities Committee has been established by RAB to review program and financial planning and priorities of the geographical units in terms of their missions, and the establish mechanisms for long-term planning. The Committee seeks interested Section and Chapter Chairmen to work on developing the role of this committee, and its two-four-year plan of activities, within the geographic framework of the Institute. For further information, contact RAB Finance Chairman Cyril Tunis, Endicott, N.Y., (607) 755-4914.

STUDENT NEWS

IEEE Vincent Bendix Award Proposals were submitted this year in record numbers, due to the support and promotional efforts of the IEEE leadership. The Student Services Department hopes the 1978 Student Papers Competition will receive equal support. The annual contests within the Regions will begin in spring; Branch, Section, and Area contests should be organized soon and held during the upcoming winter months. For further information on the Student Papers Contest, contact Regional Student Activities Committee Chairmen.

NEW FELLOWS

The Board of Directors has honored 129 members by electing them Fellows of the Institute. The names of the new Fellows and their citations appear as an insert on pages 2A-2H. The newly elected Fellows have been requested to advise IEEE by December 30, 1977, whether they would like to have their certificates presented by the local IEEE Section or by an IEEE Group or Society. Soon after that date, the certificates will be furnished to the designated unit of the Institute for presentation at the appropriate ceremonies.

Fellow nomination kits for future nominations or for resubmission of prior nominations are available upon request to the Staff Secretary of the Fellow Committee at Headquarters.

CHAPTER/SECTION NEWS

The Industrial Applications Chapter of the Columbus Section was established.

The Joint Industrial Electronics & Control Instrumentation/Computer Chapter of the Lehigh Valley Section was established.

The Joint Industrial Electronics & Control Instrumentation/Industry Applications Chapter of the Connecticut Section was established by merger by the former single Chapters.

The Kingdom of Thailand Section was established.

Centerfold inserts

Names and assignments of IEEE staff members referred to in ELECTRICAL ENGINEERING are listed on page 4 of IEEE SPECTRUM.

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TO: BOARD OF DIRECTORS
(FEBRUARY 19-20, 1978 MEETING)

FROM: ROBERT K. ASDAL, DIRECTOR - FIELD SERVICES
NEIL D. PUNDIT, SECRETARY - TAB
NDP

SUBJECT: VALUE OF ELECTRICAL ENGINEERING

At the July 19, 1977 meeting of the BOD (Minute Item 34), the RAB and TAB were requested to make a survey of their respective units to determine the value of ELECTRICAL ENGINEERING. This survey was designed and distributed by the SPECTRUM Staff in the October 1977 issue of ELECTRICAL ENGINEERING.

The results indicate an interest in and a continued need for a Management Newsletter. ELECRRICAL ENGINEERING, the survey indicated, has considerable value and should be continued. The analysis of the results published in the December 1977 issue is reproduced below for your information.

EE's READERS RESPOND

According to the survey published in the October issue of Electrical Engineering, the general preponderance of survey respondents report that they read the entire issue and they feel that the quality of the news coverage and the inserts is satisfactory. Readers think that IEEE should publish both The Institute and Electrical Engineering, and they feel EE warrants its annual budget allocation.

Of the 3823 reader surveys mailed, 262 had been returned by late November. Answering that "I generally read the entire issue" were 67 percent of the respondents. EE's news coverage was judged satisfactory by 59 percent of the readers, excellent by 27 percent; similarly, the inserts were judged satisfactory by 60 percent of the respondents, and excellent by 23 percent. Only 2 percent of the respondents felt the news coverage or the inserts to be of poor quality.

While 39 percent of the readers said IEEE should publish both EE and The Institute, half that number, or 19 percent, felt it should publish The Institute alone, and half again, or 10 percent, favored publication of EE only. A full 30 percent of the readers had not made up their minds on this issue.

Fifty-six percent of the readers felt that EE is worth its annual publication cost. Only half as many, 28 percent, said it isn't worth the cost.

Most of the readers who took the time to respond to EE's survey had read the publication for four or more years, and most were either Group/Society officers, Section officers, or Committee officers. All of the reader responses and comments received will be useful in charting the course Electrical Engineering will follow in future issues.

RKA:rt