

ELECTIONS AND ETHICS ARE TOPICS AT FEBRUARY BOARD OF DIRECTORS MEETING

IEEE's Board has chosen its nominees for 1979 President and Executive Vice President, approved some important new policies regarding electioneering, and revised and expanded By-law 112, now titled "Member Discipline and Support"--all at its February 19-20 meeting in Miami, Fla.

The box below lists all candidates known at time of writing, whose names will appear on the 1978 ballot for 1979 office. Biographies of the Board's candidates for President and Executive Vice President and of the announced petition candidate for President were published in the March issue of THE INSTITUTE and candidate statements and interviews, if granted, will appear in THE INSTITUTE's August issue.

On the matter of electioneering, Policy Statements 12.3--Electioneering, and 12.6--Use of IEEE Funds for Electioneering, have been revised by the Board. As stated by Division IV Director and IEEE Audit Committee Chairman Richard Damon, in a letter circulated to key IEEE officers and publications editors,

"as long as the usual standards of accuracy, space limitation and quality are maintained," the editor of any IEEE publication may publish "statements by those candidates for IEEE offices, whose names will be printed on the Ballots in accordance with the Constitution and Bylaws, giving their programs, views and rebuttals on issues facing the IEEE, provided that all such candidates for a given office are given an equal opportunity to present their views and rebuttals, and that the material submitted is factually correct and does not attack an individual in a libelous manner."

Further, on the matter of funding, the Chairman's letter stated, "It is important that each entity of the Institute, at the very onset, establish its policy for the current cycle on travel support for candidates and proponents of Constitutional amendments who may be invited to speak at their meetings. That policy might be anything in the range from zero to total reimbursement of such expenses. Once decided, that policy must apply to each candidate..."

CANDIDATES FOR IEEE OFFICE WHO WILL APPEAR ON THE SEPTEMBER BALLOT

• Board of Directors' nominees:
for IEEE President, 1978--
Jerome J. Suran
for Executive Vice President--
Leo Young

• Regional Committee nominees
for Regional Director, 1979-1980:

Region 2 Director--
William C. Farrell
H. Mark Grove

Region 4 Director--
Benjamin J. Leon
Marlin P. Ristenblatt
Peter A. Rusche

Region 6 Director--
Charles A. Eldon
Region 8 Director--
Dick C.J. Poortvliet
Robert C. Winton

• Region 6 Committee nominees
for Regional Vice Chairman, 1979-1980:
Frederick G. Suffield
R. J. Yee

• Technical Division nominees
for Divisional Director, 1979-1980:
Division II Director--
F. A. Furfari
Joseph F. Keithley

Division IV Director--
Lawrence K. Anderson
George P. Rodrigue
Division VI Director--
Thelma Estrin
Arthur Goldsmith
Demetrius T. Paris

• Petition candidates
for IEEE President, 1978--
Irwin Feerst

ATTENTION VOLUNTEER OFFICERS

Election dates; p. 2y.
New electioneering rules: write IEEE
General Manager and see boxes, p. 2.

Extracts from Policy Statements 12.3 and 12.6 are boxed below. Further questions may be addressed to Audit Committee Chairman Damon, Sperry Research Center, 100 North Rd., Sudbury, Mass. 01776--or call (617) 369-4000, ext. 285.

The Board's actions on ethics expand the scope of IEEE Bylaw 112 to permit the Institute to support members whose economic and professional interests may be jeopardized by their attempt to adhere to the Code of Ethics in their place of employment. Formerly, the Bylaw was limited to member discipline. This action by the BoD places the IEEE in the forefront as an organization endorsing and encouraging adherence to professional standards of ethical conduct.

The relevant portions of the newly revised Bylaws read as follows:

• **Bylaw 112.1:** "A member of the IEEE may be expelled, suspended or censured for cause. Cause shall mean conduct which is determined to constitute materially unlawful conduct relevant to the IEEE Code of Ethics, a material violation of the Constitution, Bylaws, or Code of Ethics of IEEE, or other materially unprofessional conduct..."

• **Bylaw 112.4:** "The IEEE may offer support to any member involved in a matter of ethical principle which stems in whole or in part from such member's adherence to the Code of Ethics, and which can jeopardize that member's livelihood, compromise the discharge of such member's professional responsibilities, or which can be detrimental to the interests of IEEE or of the engineering profession..."

A detailed explanation of the Board's action can be found on insert pages 2EE-2HH of this issue.

Policy Statement 12.3--Electioneering (excerpt)

"Electioneering activities which provide information to members on issues facing the IEEE are permitted. However, all such electioneering shall be fair to all candidates for IEEE offices and proponents and opponents of initiatives to be voted upon by members. As examples: equal opportunity for talks on Institute elections and referenda at Group/Society/Council/Section or Chapter meetings or conferences shall be given to spokespersons for all candidates or on initiative issues, and equal opportunity for publicity shall be made available on such talks in publications and meeting notices."

Policy Statement 12.6--Use of IEEE funds for Electioneering

"A. IEEE funds may not be used for IEEE electioneering, except those expenses normally incurred in publicity and arrangements of meetings. However, if one of the candidates for an IEEE office is offered by an IEEE entity any portion of the traveling expenses for speaking at a meeting related to IEEE elections, the IEEE entity must invite all other candidates for the same office to speak at the same meeting or other meetings sponsored by the same entity during the same electioneering period, and offer them the same portion of their traveling expenses for speaking at these meetings, if needed. The same policy is also applicable to proponents and opponents of initiative issues.

"B. The use of IEEE funds for electioneering purposes in municipal, county, state or Federal elections is prohibited without the consent of the Board of Directors or the Executive Committee acting in their behalf."

Further details on the results of the Board's February meeting were published in the March edition of THE INSTITUTE. Also, addenda to the January 1, 1978, IEEE Bylaws and Policy Statements manuals, showing revisions in the Bylaws and Policies and Procedures enacted by the Board at its February meeting, are now available from Emily Sirjane at Headquarters.

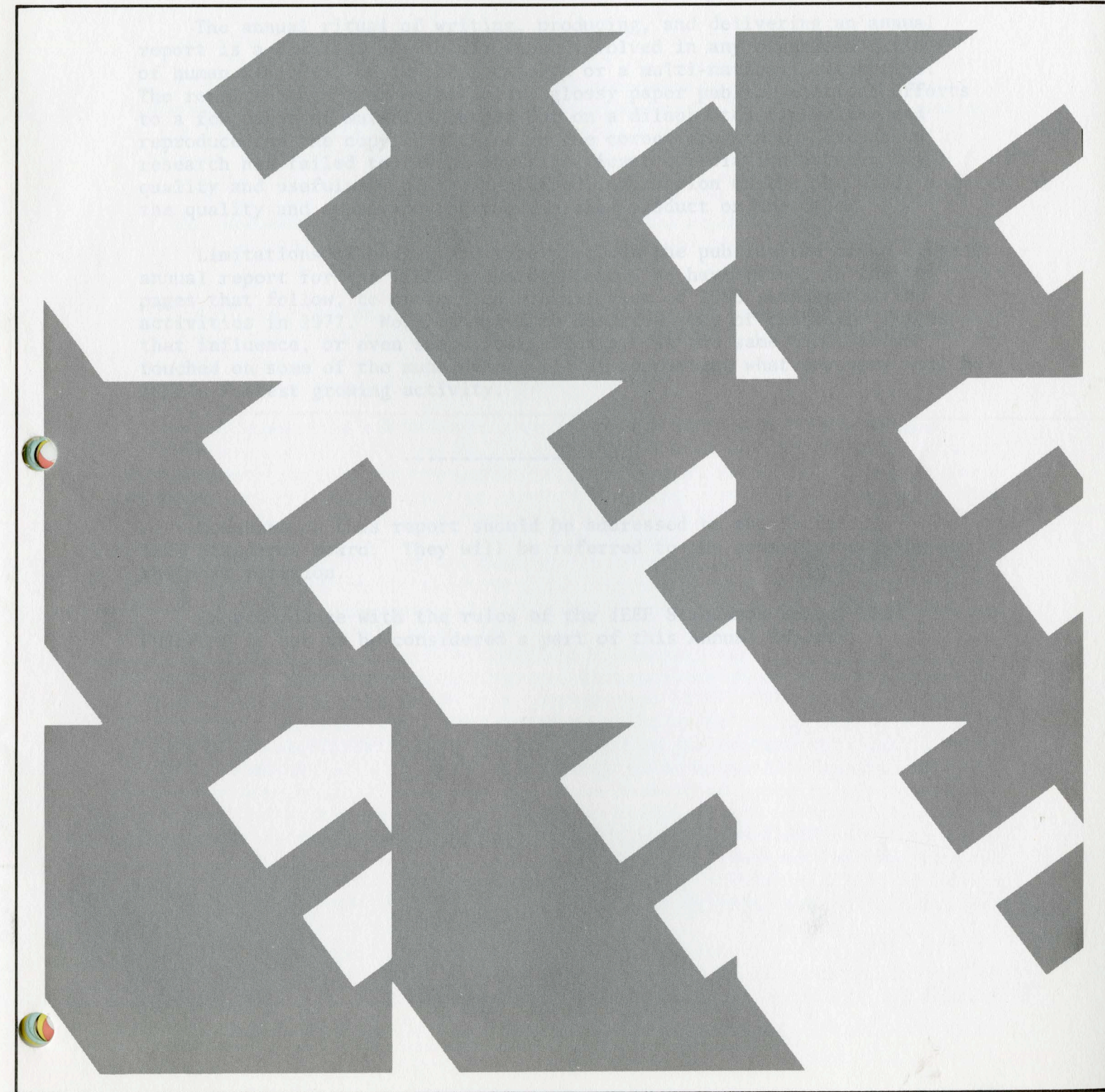
TAB JOINS USAB ON 'PROFESSIONALISM'

"A historic meeting," IEEE's Division II Director Donald Brereton called the professional activities workshop he organized in conjunction with the Board of Directors meeting in Miami, Fla., on February 17. Attending such a meeting for the very first time were six of the seven newly appointed Divisional Professional Activities Committee (PAC) Coordinators along with most of the Division Directors and other IEEE Board members including President Ivan Getting. The purpose behind the meeting, chaired by Mr. Brereton, was to involve IEEE's technical activities arm (via Divisional representatives) in the Institute's professional activities--to heal the breach that has sometimes existed between the two IEEE pursuits.

As defined at the Miami meeting, the role of the Divisional PAC Coordinators will be "to

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IEEE Standards Report for 1977



FOREWORD

The annual ritual of writing, producing, and delivering an annual report is a familiar one to all those involved in any organized field of human activity, be it the local PTA or a multi-national enterprise. The results range from multi-color, glossy paper public relations efforts to a few pages of material banged out on a dilapidated typewriter and reproduced on the copying machine in the corner drugstore. Extensive research has failed to reveal any significant correlation between the quality and usefulness of the contained information on the one hand, and the quality and appearance of the finished product on the other.

Limitations of budget and time preclude the publication of an elegant annual report for the IEEE Standards Board. We have tried, in the few pages that follow, to present an overall view of IEEE standardization activities in 1977. We have tried to describe some of the major forces that influence, or even shape, our efforts. At the same time, we've touched on some of the mundane details of supporting what may very well be IEEE's fastest growing activity.

Comments on this report should be addressed to the Secretary, IEEE Standards Board. They will be referred to the committee working on the next revision.

In accordance with the rules of the IEEE Standards Board, this FOREWORD is not to be considered a part of this Annual Report.

The International Scene

Activity in Electrical and Electronic standards worldwide is at a new high level and growing at a steady rate. New documents processed by the International Electrotechnical Commission are in a volume that threatens to overwhelm the ability of the United States National Committee to participate properly.

During 1977, the USNC of IEC became, after a protracted period of negotiations, a formal part of ANSI. The steady growth in work load, together with inflationary pressures and the deterioration of the dollar against the Swiss Franc has created a serious problem in financing the USNC. IEEE has fortunately been able to contribute \$5,000 to help in a small way to narrow the gap between available income and expenses. There is, however, a fundamental and serious problem regarding the financing of this activity.

IEEE has played a significant role in the IEC since its founding and has, over the years, been involved in the evolution of the USNC/IEC to its present stature. Currently, our participation is probably at as high a level as it ever has been. Members of the Standards Board, as well as the Director of Standards, are on the Executive Committee of USNC, and numerous Technical Advisors for the various Technical Committees (there are over 175!) are provided by IEEE. The strong IEEE support of these activities is made possible by the funding provided by the United States Activities Board.

Organizations other than IEC are also active in the standards international arena. Among the more important are CCIR and CCIT, both so-called treaty organizations with US positions developed by (or through) the Department of State. IEEE participation, as such, in these activities can properly be described as minimal, although the activities addressed by these organizations are squarely in the area of IEEE technical interest (i.e., telecommunications). The relatively low influence of IEEE does not appear to arise from any reluctance on the part of State, but rather from a lack of any cohesive or currently strong organizational support within IEEE.

An activity that has recently and claimed much attention within IEC is the development of an international certification scheme for electronic components, called IECQ. The objective of the system is to have components manufactured and qualified in one country, eligible for sale in other countries without further testing or certification. Under development since 1970, the system will begin to be operational in 1978. The system is naturally strongly oriented to product standards and specifications and the major contributor to the evolution of the US part of the system has been provided by the Electronic Industries Association. Nevertheless, IEEE holds one seat on the Electronic Component Certification Board (of the USNC/IEC) which has been established to manage US participation. Some continued IEEE involvement in this activity seems appropriate.

The IECQ system is narrowly focused on electronic components, but if successful, there will be inevitable pressures to extend it or create similar systems for instruments, major hardware, and apparatus.

The National Scene

The increasing importance and scale of standardization activities has focused public and political attention on such activities. Hardly a year has gone by in the past several without some legislation before Congressional Committees bearing on control of, or "support" of, the voluntary standards system. 1977 was no exception. Senate Bill S825 was more restrictive than any of its predecessors and was strongly opposed, almost universally, by the major members of the ANSI federation. The viewpoint of the IEEE Standards Board was presented to the Subcommittee on Anti-Trust (of the Judiciary Committee) in April.

S825 did not get out of Sub-Committee during the 94th Congress, nor was its counterpart in the House ever addressed in Committee. It is not clear at the moment what form of legislation will now be introduced, or when.

There are, in fact, four major initiatives under consideration at this time that bear on the future of standardization activities. These are:

- legislation, already discussed
- a proposed OMB (Office of Management and Budget) Circular
- The GATT Study (General Agreement on Tariff and Trade)
- ANSI's project to develop a National Standards Policy

The OMB Circular was initiated by the government agencies directly involved in standards (over twenty agencies). The Interagency Standards Policy Committee drafted a relatively simple policy statement bearing on the relationship between governmental activities and the private sector. This document was highly satisfactory to the private sector. When published as a proposed OMB Circular, however, it drew critical comments from consumer groups (e.g. Nader) and others who claimed it left too little control by government. As a result, the Circular was not published and after lengthy deliberation, a new draft proposal was issued late in December 1977. Comment is due by February 17, 1978, and a position will be entered by IEEE Standards Board.

A discussion of the details of the OMB proposal is beyond the scope of this report. It can be said, however, that while much of the content forms a satisfactory basis for participation by government agencies, there are sections that specify restrictions which may do more harm than good if cooperative effort is indeed the objective.

The GATT Code has a section relating to standardization and certification on an international basis, which necessarily will impact national positions and procedures. A study by Commerce has been underway to try to develop a position for the US negotiators in GATT. The ultimate GATT agreement will require Executive or Congressional approval (or both). Progress is slow in these negotiations, and the current tendency to revert to protectionism lead many to be pessimistic about the future of GATT and of non-tariff barriers to trade.

Finally, in the private sector, the lack of a coherent and clear-cut national policy on standards has been recognized. A special fund was raised, to which IEEE contributed, to provide professional and staff support to a study aimed to develop such a policy. The draft will shortly be published for public review and comment. Much of the draft policy is consistent with the proposed OMB Circular but there are areas of disagreement.

The hope of the ANSI federation is that the OMB Circular, if issued, and the National Policy will be consistent with each other and that the existence of both will make legislation unnecessary and undesirable.

The IEEE Scene

IEEE and its predecessor societies have traditionally had a significant role in the development of electrical standards. The AIEE Standards Committee was first organized in 1898, and our activities thus predate those of most, if not all, organizations currently involved. Other organizations involved in writing and publishing "electro-standards" are ASTM, UL, and trade associations, particularly NEMA and EIA. Other organizations whose activities relate to ours in varying degrees are ISA, ASME, SAMA, ANS, and SMPTE.

The coordination of all these activities to avoid conflicting or duplicating standards is undertaken by various Standards Management Boards of ANSI, particularly the Electrical and Electronic S-M-B. In addition to the formal efforts of this Board, informal personal contact between staff and volunteers of the various organizations assist in minimizing conflicts.

Most IEEE standards are written by Technical Committees within the Groups and Societies, balloted by those committees, approved by the Standards Board, and published (as IEEE Standards). Most are then submitted to ANSI to obtain "national consensus" and be designated as American National Standard.

Today's emphasis, within ANSI itself, and in all proposed government actions in the standards field, place emphasis on open meetings, public notice, due process, rights of appeal, and no unreasonable restrictions on membership.

With relatively minor changes, IEEE procedure will probably meet those requirements. The requirement that IEEE membership is a pre-requisite to voting participation in a standards-drafting or standards-approving committee is crucial and may have to be changed if IEEE standards are to have, in the future, the recognition they currently have. The first important step in this direction was taken in 1977 with the IEEE by-law change which removed the requirement for IEEE membership on committees active in standards. The implication of and the application of this revised by-law is under study by the Standards Board, as is the general problem of any other necessary revisions in rules and procedures.

Facilities

During the summer of 1977, the entire fifteenth floor, including the Standards Office, underwent extensive renovation. The purpose of the renovation was to provide more orderly layout, improved work flow and (very importantly) reduced noise level. Carpeting was laid on the floor over the reflecting tile, new work-station separators with good sound absorption replaced the highly reflective steel separators previously used and acoustic hoods were placed over the noisy Mag-Card machines. No before-and-after measurements of noise level were made, but none was needed. The noise level in the department has gone from nearly intolerable to highly acceptable. The new work stations and furniture provide a great deal of storage and filing space. Work space was provided for two additional persons and, in addition, one more office was provided for Standards. These new highly satisfactory quarters provide working space for seventeen people and space will be fully occupied early in 1978. It is at this writing not clear how the further expansion, which will almost inevitably be needed, is going to be accommodated, as TAB, RAB, and EAB fully occupy (or will overflow) the remaining fifteenth floor space.

Staff

As of the publication date of this report, the myriad and diverse duties of the Standards Staff are being handled by:

Mamie Bolding
Anna Marie Buffa
Ivan Easton
Joseph Fragola
Mary Beth Furst
Jack Goetz
Mary Goulding
Susan Havranek
Linda Hecht
Cynthia Indriso
Frank Jay
Conrad Muller
Dorothy Ridout
Barbara Schulman
Bertram Stanleigh
Thomas Van Hook

Customer Service

The warehousing, shipping, and financial recording required to handle over 100,000 documents per year is processed by the IEEE Service Center in Piscataway, New Jersey. A measure of the overall effectiveness of this operation is the fact the replacement rate on documents sold is consistently under 1 percent, a figure which includes damage and loss in shipment, as well as errors in fulfillment. After fairly serious problems in 1975 and 1976, performance in terms of fulfillment time has stabilized at a generally satisfactory level. We believe that customer service is comparable to, or better than, that provided by other standards publishing organizations.

To support timely shipment, an inventory of approximately 200,000 documents is maintained. This figure has remained substantially constant for some years, during the course of which the annual shipment rate has more than doubled. In assessing the inventory ratio, one should bear in mind that most standards sell at a relatively low rate and it is therefore not uncommon to print a supply adequate for the life (five years or more) of the standard.

Financial and General

The abbreviated financial report given in the table below for 1974-1977 and in the chart for 1962-1977 on the opposite page indicates a strong growth for IEEE standardization activity.

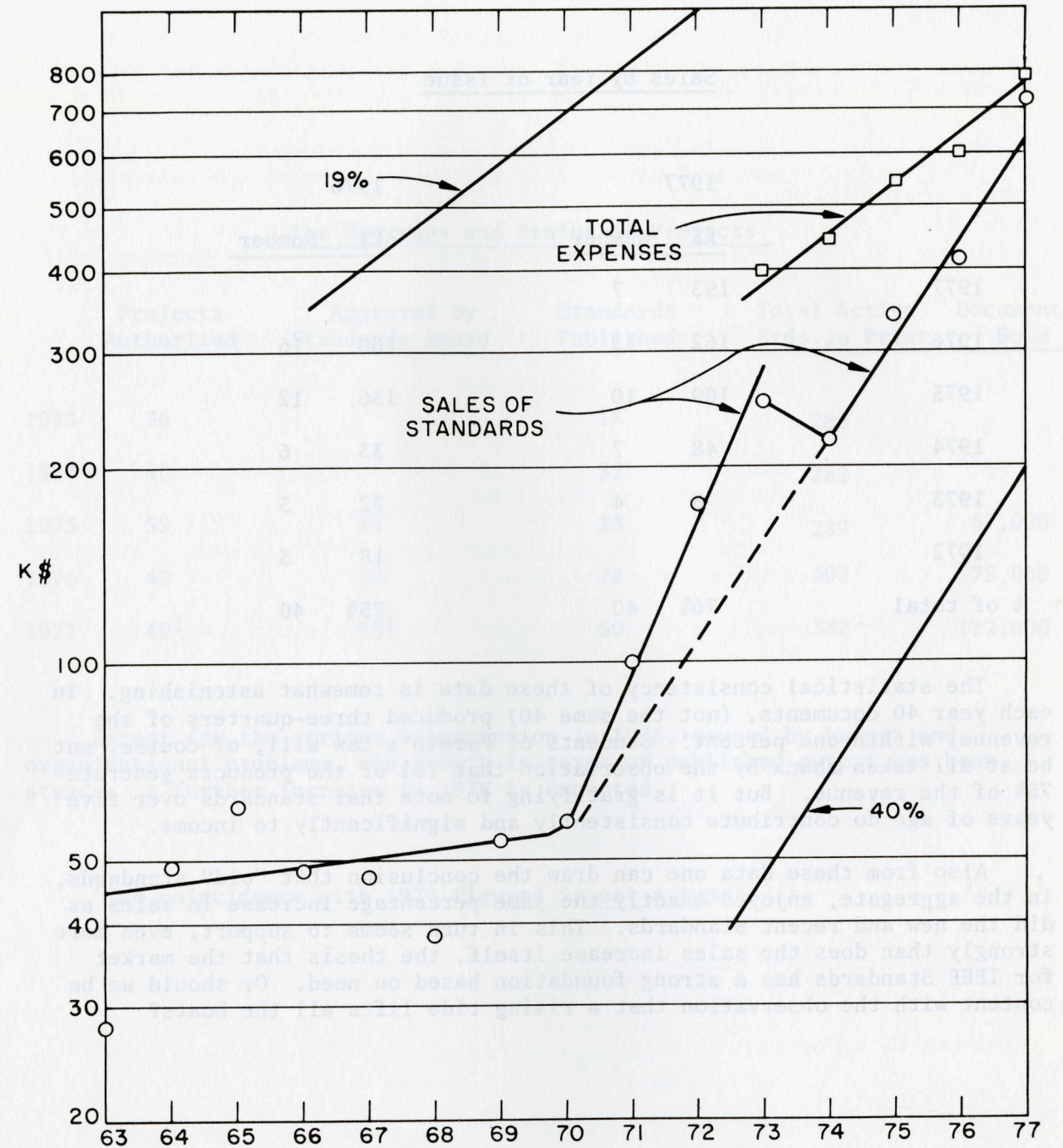
The income figures are adjusted as necessary to reflect only "real" income from outside the IEEE Headquarters operation. The difference between this income and total department expenses is identified as Net IEEE Support. The trend for this item is encouraging, and it is interesting to note that the 1977 figure represents a cost per member (excluding student) of the order of 25¢!

Financial Summary
(thousands of dollars)

| | <u>1977</u> | <u>1976</u> | <u>1975</u> | <u>1974</u> |
|------------------------|-------------|-------------|-------------|-------------|
| Standards Sales | 733 | 413 | 342 | 219 |
| Dictionary Sales | 10# | 15 | 30 | |
| Seminars | 29 | 9 | 31 | |
| Contract | <u>54</u> | <u>60</u> | <u>44</u> | — |
| | 827 | 497 | 447 | 304 |
| Expenses | 859 | 600 | 569* | 447 |
| Net IEEE Support | 32 | 103 | 122 | 143 |

*Adjusted to same basis as 1976

#1972 edition



Sales by Year of Issue

| | 1977 | | 1976 | |
|------------|------|--------|------|--------|
| | K\$ | Number | K\$ | Number |
| 1977 | 193 | 7 | | |
| 1976 | 162 | 12 | 100 | 16 |
| 1975 | 109 | 10 | 136 | 12 |
| 1974 | 48 | 7 | 33 | 6 |
| 1973 | 8 | 4 | 22 | 3 |
| 1972 | | | 18 | 3 |
| % of total | 76% | 40 | 75% | 40 |

The statistical consistency of these data is somewhat astonishing. In each year 40 documents, (not the same 40) produced three-quarters of the revenue, within one percent! Students of Pareto's Law will, of course, not be at all taken aback by the observation that 10% of the products generate 75% of the revenue. But it is gratifying to note that standards over five years of age do contribute consistently and significantly to income.

Also from these data one can draw the conclusion that "old" standards, in the aggregate, enjoyed exactly the same percentage increase in sales as did the new and recent standards. This in turn seems to support, even more strongly than does the sales increase itself, the thesis that the market for IEEE Standards has a strong foundation based on need. Or should we be content with the observation that a rising tide lifts all the boats?

The Progress and Status of Projects

| | Projects Authorized | Approved by Standards Board | Standards Published | Total Active Stds in Print | Documents Sold |
|------|---------------------|-----------------------------|---------------------|----------------------------|----------------|
| 1973 | 36 | | 18 | 280 | |
| 1974 | 40 | | 32 | 282 | |
| 1975 | 59 | 41 | 23 | 289 | 67,000 |
| 1976 | 49 | 53 | 28 | 302 | 75,000 |
| 1977 | 49 ¹ | 53 ¹ | 50 | 332 | 112,000 |

Except for the serious interruption in 1976, caused by budget and organizational problems, the growth in terms of published output has been steady. A further increase in 1978 is expected.

¹The coincidence with 1976 figures is not a typo!

STANDARDS PROJECTS APPROVED IN 1977

| <u>Project Number</u> | <u>Title</u> |
|-----------------------|--|
| 16 | Electrical Control Apparatus for Rail Transportation Vehicles |
| 99 | Guide for the Preparation of Test Procedures for the Thermal Evaluation of Insulation Systems for Electric Equipment |
| 143 | Application Guide for Neutral Grounding in Electric Utility Systems |
| 146 | Definitions of Terms: Antennas and Waveguides |
| 147 | Definitions of Terms: Waveguides Components |
| 262C | Audible Sound Level Test Code for Distribution, Power and Regulating Transformers |
| 317 | Electric Penetration Assemblies in Containment Structures for Nuclear Power Generating Stations |
| 334 | Qualification of Continuous Duty Class 1E Motors for Nuclear Power Generating Stations |
| 336 | Installation, Inspection & Testing Requirements for Instrumentation, Control and Electric Equipment at Nuclear Power Generating Stations |
| 344 | Recommended Practice for Seismic Qualification of Class 1 Equipment for Nuclear Power Generating Stations |
| 352 | General Principles for Reliability Analysis of Nuclear Power Generating Station Protection Systems |
| 488 | Digital Interface for Programmable Instrumentation |
| 542 | Standard Requirements for Overhead, Pad Mounted, Dry Vault, and Submersible Automatic Line Sectionalizers for Alternating Current Systems |
| 627 | Design Qualification of Safety Related Equipment Used in Nuclear Power Generating Stations |
| 661 | Method for Determining Objective Loudness Ratings of Telephone Connections |
| 663 | Quality Assurance Program Requirements for the Design and Manufacture of Class 1E Rotating Machinery for Nuclear Power Generating Stations |

| <u>Project Number</u> | <u>Title</u> |
|-----------------------|--|
| 664 | Guide for Measurement of the Performance of Vibration Dampers for Single Conductors |
| 665 | Generating Station Grounding Practices |
| 666 | Electric Power Service Systems for Generating Systems |
| 667 | Incore Nuclear Instrumentation |
| 668 | Recommended Practice for Electrical Heating Applications to Melting Furnaces, Forehearths, and Lehrs in the Glass Industry |
| 669 | Contour Characterization of Electronics Transformers |
| 670 | Requirements for Instrument Current Transformers for Use with AC High-Voltage Breakers |
| 671 | Guide and Test for Non-Gyroscope Inertial Angular Sensors: Acceleration, Velocity, and Displacement |
| 672 | Synergistic Effects on Environmental Qualification of Class 1E Equipment |
| 673A | Audible Sound Level Test Code |
| 673B | Shunt Reactor Vibration Test Code |
| 675 | Distributed Intelligence in CAMAC |
| 676 | Application Guide - Alarm Monitoring and Reporting Systems |
| 677 | Guide on Automatic Reclosing of Transmission Line Circuit |
| 678 | User's Guide for Electric Service to Critical Loads |
| 679 | Proposed Safe Headway Standards |
| 680 | Standard for Germanium Semiconductor Detecto-Efficiency Calibration Using Marinelli (Reentrant) Breaker Geometry |
| 684 | Guide for Application of Valve-Type Lightning Arrestors for Alternating Current Systems |
| 685 | Standard for Underground Mining Power Distribution Centers |
| 687 | Application Guide for Surge Voltage Protective Equipment |
| 689 | Definitions and Rating Structure for AC High Voltage Circuit Breakers Rated on a Total Current Basis |
| 690 | Standard for the Design and Installation of Cable Systems in Nuclear Power Generating Stations |

| <u>Project Number</u> | <u>Title</u> |
|-----------------------|--|
| 691 | Guide for the Design of Foundations for Transmission Structures |
| 692 | Proposed Criteria for Security Systems for Nuclear Power Generating Stations |
| 693 | Recommended Practices for Seismic Design of Substations |
| 694 | Microprocessor Instruction Sets |
| 695 | Microprocessor Relocatable Software |
| 696 | Microprocessor Related Busses |
| 697 | Hobby and Small Business Software |
| 698 | Guide for Interfacing Microprocessors and Peripheral Devices |
| 727 | Supplement to IEEE CAMAC Standards |
| 728 | IEEE Recommended Practice, Code and Format Guidelines |
| 730 | Standards for Software Quality Assurance Plan |

STANDARDS APPROVED IN 1977

| <u>IEEE Std Number</u> | <u>Title</u> |
|------------------------|--|
| 4 | High Voltage Techniques |
| 19 | Methods for Determining the Value of Sinosoidal Current Wave and Normal Frequency Recovery Voltage for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis |
| 22A | Proposed Additions to Standard for Air Switches, Insulator Units, and Bus Supports |
| 26 | Electrical Power System Device Function Numbers |
| 118 | Master Test Code for Resistance Measurement |
| 260 | Letter Symbols for SI Units and for Certain Other Units of Measurement |
| 262B | Trial Use Dielectric Standards for Power Transformers for Operation on Effectively Grounded Systems |
| 271 | Testing Report on Switching Surge Testing of Extra High Voltage Switches |
| 298 | Guide for Calculating Losses in Isolated Phase |
| 313A | Addition to Section 6.4 - Relay and Relay Systems Associated with Electric Power Apparatus |
| 320 | Application Guide for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis |
| 321 | Guide for the Application, Operation and Maintenance of Automatic Circuit Reclosers |
| 324 | Definitions and Requirements for High Voltage Air Switches, Insulators and Bus Supports |
| 325 | Test Procedures for Germanium Gamma Ray Detectors |
| 326 | Test Code for High-Voltage Air Switches |
| 327 | Requirements for Transient Recovery Voltage for AC HVCB's on a Symmetrical Current Basis |
| 328 | Application Guide for Transient Recovery Voltage for AC HVCB's on a Symmetrical Current Basis |

| <u>IEEE Std Number</u> | <u>Title</u> |
|------------------------|--|
| 330 | Guide for Determining Methods of Power Factor Measurement for Low Voltage Inductive Test Circuits |
| 336 | Installation, Inspection, and Testing Requirements for Instrumentation and Electric Equipment During the Construction of Nuclear Power Generating Stations |
| 338 | Criteria for the Periodic Testing of Nuclear Power Generating Stations Safety Systems |
| 339 | Requirements for Switching Impulse Voltage Insulation Strength for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis |
| 340 | Requirements for Pressurized Components of AC High Voltage Circuit Breakers Rated on a Symmetrical Basis |
| 343 | Requirements for External Insulation for Outdoor AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis |
| 368 | Recommended Guide for Measurement of Electrical Noise and Harmonic Filter Performance of High-Voltage Direct Current Systems |
| 384 | Criteria for Independence of Class 1E Equipment and Circuits |
| 398 | Test Procedures for Photomultiplier Tubes for Scintillation Counting |
| 412 | Interrupting Tests on Fuses - Parts A and C |
| 416 | Atlas Test Language - Charter and Supplement 14 |
| 417 | Method for Testing AC High Voltage Circuit Breakers Rated on a Symmetrical Basis When Rated for Out of Phase Switching |
| 421B | High Potential Test Requirements for Excitation Systems for Synchronous Machines |
| 424 | Guide for the Detection and Determination of Generated Gases in Oil-Immersed Transformers and their Relation to the Serviceability of the Equipment |
| 439 | Requirement for the Line Closing Switches Surge Voltage Control for AC High Voltage Circuit Breakers Rated on a Symmetrical Basis |
| 440 | Rating Structure for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis |

| <u>IEEE Std Number</u> | <u>Title</u> |
|------------------------|---|
| 466 | Instrument Systems to Monitor Safety Related Components and Equipment in Nuclear Power Generating Stations |
| 485 | Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations |
| 501 | Standard for Seismic Testing of Relays |
| 503 | Measurement and Characterization of Diode-Type Camera Tubes |
| 514 | Guide for Installation of Oil Immersed EHV Transformers |
| 520 | Guide for Protective Relay Applications to Power System Buses |
| 525 | Guide for Selection and Installation of Control and Low Voltage Cable Systems in Substations |
| 539 | Definitions of Terms Relating to Overhead Power Line Corona and Radio Noise |
| 540A | General Requirements for Dry Type Distribution and Power Transformers |
| 563 | Guide on Conductor Self Damping Measurements |
| 565 | Manual, Automatic and Supervisory Station Control and Data Acquisition |
| 579 | Test Procedure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis |
| 579E | Distribution Lead Circuits |
| 582 | Guide for Terms, Definitions and Measurement Techniques on Charge Coupled Devices |
| 593 | Guide for Application of Transformer Connections in Three-Phase Distribution Systems |
| 598 | Guide for Calculation of Fault Currents for Application of AC High-Voltage Circuit Breakers Rated on a Total Current Basis |
| 603 | Criteria for Safety Systems for Nuclear Power Generating Stations (TU) |
| 634 | Cable Penetration Fire Stop Qualification Test |
| 701 | Consolidation of ANS Application Guide for Transient Recovery Voltage for AC High Voltage Circuit Breakers Rated on a Symmetrical Current Basis |

STANDARDS PUBLISHED IN 1977

| IEEE Std Number | Title |
|------------------|--|
| ANSI C2 (1977) | National Electrical Safety Code |
| ANSI C50.10-1977 | General Requirements for Synchronous Machines |
| ANSI C50.13-1977 | Requirements for Cylindrical-Rotor Synchronous Generators |
| ANSI C50.14-1977 | Requirements for Combustion Gas Turbine Driven Cylindrical Rotor Synchronous Generators |
| ANSI N322-1977 | Inspection and Test Specifications for Direct and Indirect Reading Quartz Fiber Pocket Dosimeters |
| 24 | Standard Electrical, Dimensional, and Related Requirements for Outdoor Apparatus Bushings |
| 45 | Recommended Practice for Electric Installations on Shipboard |
| 56 | Guide for Insulation Maintenance of Large Alternating-Current Rotating Machinery (10 000 kV A and Larger) |
| 64 | Guide for Acceptance and Maintenance of Insulating Oil in Equipment |
| 95 | Recommended Practice for Insulation Testing of Large AC Rotating Machinery with High Direct Voltage |
| 100 | Standard Dictionary of Electrical and Electronics Terms |
| 125 | Recommended Practice for Preparation of Equipment Specifications for Speed-Governing of Hydraulic Turbines Intended to Drive Electric Generators |
| 165 | Standard Definitions of Terms for Analog Computers |
| 166 | Standard Definitions of Terms for Hybrid Computer Linkage Components |
| 181 | Standard on Pulse Measurement and Analysis by Objective Techniques |
| 194 | Standard Pulse Terms and Definitions |
| 211 | Standard Definitions of Terms for Radio Wave Propagation |
| 252 | Test Procedure for Polyphase Induction Motors Having Liquid in the Magnetic Gap |
| 260 | Standard Letter Symbols for SI Units and for Certain Other Units of Measurement |

IEEE Std Number

Title

| | |
|-----------------|---|
| 262B | Trial-Use Standard Dielectric Test Requirements for Power Transformers for Operation on Effectively Grounded Systems 345 kV and Above |
| 264 | Standard for High-Power Wide-Band Transformers (100 Watts and Above) |
| 304 | Test Procedure for Evaluation and Classification of Insulation Systems for Direct-Current Machines |
| 312 | Standard Definitions of Terms for Communication Switching |
| 336 | Standard Installation, Inspection, and Testing Requirements for Instrumentation and Electric Equipment During the Construction of Nuclear Power Generating Stations |
| 338 | Standard Criteria for the Periodic Testing of Nuclear Power Generating Station Safety Systems |
| 368 | Recommended Practice for Measurement of Electrical Noise and Harmonic Filter Performance of High-Voltage Direct-Current Systems |
| 379 | Standard Application of the Single Failure Criterion to Nuclear Power Generating Station Class 1E Systems |
| 381 | Standard Criteria for Type Tests of Class 1E Modules Used in Nuclear Power Generating Stations |
| 384 | Standard Criteria for Independence of Class 1E Equipment and Circuits |
| ANSI/IEEE 386 | Separable Insulated Connectors for Power Distribution Systems Above 600V |
| 387 | Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations |
| 393 | Standard Test Procedures for Magnetic Cores |
| 404 | Standard for Power Cable Joints |
| ARINC/IEEE 416A | Standard ATLAS Syntax |
| 422 | Guide for the Design and Installation of Cable Systems in Power Generating Stations |
| 436 | Guide for Making Corona (Partial Discharge) Measurements on Electronics Transformers |
| 463 | Standard for Electrical Safety Practices in Electrolytic Cell Line Working Zones |

| IEEE Std Number | Title |
|-----------------|--|
| 465.1 | Standard Test Specifications for Gas Tube Surge-Protective Devices |
| 469 | Recommended Practice for Voice-Frequency Electrical-Noise Tests of Distribution Transformers |
| 497 | Trial-Use Standard Criteria for Post Accident Monitoring Instrumentation for Nuclear Power Generating Stations |
| 500 | Guide to the Collection and Presentation of Electrical, Electronic, and Sensing Component Reliability Data for Nuclear-Power Generating Stations |
| 505 | Standard Nomenclature for Generating Station Electric Power Systems |
| 518 | Guide for the Installation of Electrical Equipment to Minimize Electrical Noise Inputs to Controllers from External Sources |
| 522 | Guide for Testing Turn-to-Turn Insulation on Form-Wound Stator Coils for Alternating-Current Rotating Electric Machines -- For Trial Use |
| 566 | Recommended Practice for the Design of Display and Control Facilities for Central Control Rooms of Nuclear Power Generating Stations |
| 590 | Cable Plowing Guide |
| 592 | Standard for Exposed Semiconducting Shields on Premolded High Voltage Cable Joints and Separable Insulated Connectors |
| 603 | Trial-Use Standard Criteria for Safety Systems for Nuclear Power Generating Stations |
| 645 | Test Procedures for High-Purity Germanium Detectors for Ionizing Radiation |
| 686 | Standard Radar Definitions |

Election Data

General Election of 1978 - US House of Representatives

| Date | State | Party | Candidate |
|-------------|---------|------------|-----------|
| February 21 | Alabama | Democrat | ... |
| March 1 | Alabama | Republican | ... |
| March 1 | Alabama | Democrat | ... |
| April 7 | Alabama | Democrat | ... |
| April 7 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
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| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |
| April 26 | Alabama | Democrat | ... |
| April 26 | Alabama | Republican | ... |



IEEE

Contact: Emily Sirjane

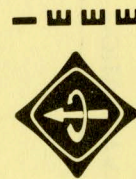
Election Data

Summary of Deadline Dates - 1978 IEEE Annual Election

| | |
|------------------------|--|
| February 27 | Names of petition candidates whose petitions have been validated by this date, and names of other members who have announced intention to seek office by this date, to be listed in April issue of SPECTRUM. |
| March 1 | Regional Committee to submit slates of candidates for the office of Regional Director. |
| March 1 | Divisional Nominating Committees to submit slates of candidates for the office of Divisional Director. |
| April 10 | Deadline to publish in May SPECTRUM notice of intention to circulate petition for Constitutional amendment. |
| May 1 | Board of Directors to announce to the members, via April issue of SPECTRUM, names of candidates to be elected by the members, as nominated by the Board of Directors, the Regional Committees and the Divisional Nominating Committees, and the names of any petition candidates whose names have been announced by February 27. |
| May 26 | Petition nominations due for candidates to be elected by the membership. |
| May 26 | Deadline for receipt of petitions for Constitutional amendments. |
| May 26 | Deadline for receipt of initial statements from all candidates for publication in SPECTRUM. |
| May 26 | Deadline for receipt of initial statements by principal initiators of Constitutional amendments for publication in SPECTRUM. |
| June 2 | SPECTRUM to mail copies of candidates' initial statements, as accepted, to opposing candidates by this date. |
| June 2 | Board of Directors' statement due on Constitutional amendment proposals. |
| June 5 | SPECTRUM to mail Board of Directors' statement on proposed Constitutional amendments to principal initiators, and statements by principal initiators to the Board of Directors by this date. |
| June 16 | Rebuttal statements due from all candidates for publication in SPECTRUM. |
| June 16 | Rebuttal statements due from Board of Directors on Constitutional amendment proposals. |
| June 16 | Rebuttal statements due by principal initiators of Constitutional amendments for publication in SPECTRUM. |
| August SPECTRUM | Election material published in August SPECTRUM. |
| September 1 | Ballots for Institute election mailed to voting members by this date. |
| September 29 | Deadline for receipt of petition nominations for candidates to be elected by the annual Assembly. |
| November 1, 12:00 Noon | Deadline for ballot returns from the voting membership. |
| November 14 | Results of Institute election announced by this date. |
| December 11 | Elections by the annual Assembly announced by this date. |

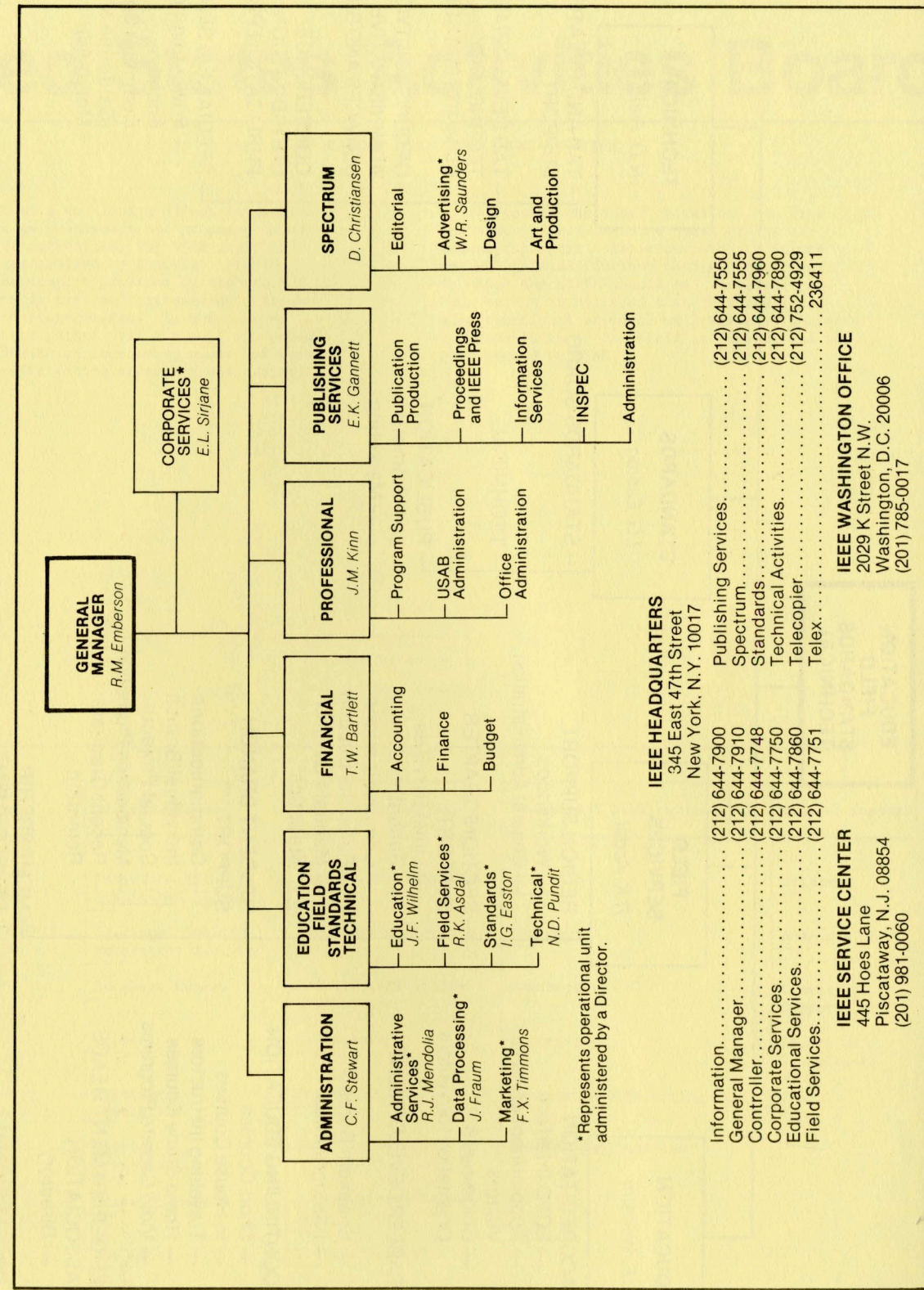
IEEE Board of Directors Election Chart

- | | | | | |
|--|---|--|----------------------------|---|
| 1. IEEE President 2. IEEE Executive Vice President 3. IEEE Junior Past President 4. IEEE Senior Past President | } | Elected by all voting members of the Institute | | |
| 5. Vice President (Educational Activities) 6. Vice President (Professional Activities) 7. Vice President (Publication Activities) 8. Vice President (Regional Activities) 9. Vice President (Technical Activities) | | } | Elected by annual Assembly | |
| 10. Director - Standards Activities 11. Director, Region 10 (all areas outside of Regions 1 - 9) 12. Secretary or Secretary-Treasurer 13. Executive Director | | | } | Elected by voting members in their respective Regions |
| 14. Director, Region 1 (Northeastern Region USA) 15. Director, Region 2 (Eastern Region USA) 16. Director, Region 3 (Southeastern Region USA) 17. Director, Region 4 (Central Region USA) 18. Director, Region 5 (Southwestern Region USA) 19. Director, Region 6 (Western Region USA) 20. Director, Region 7 (Canadian Region) 21. Director, Region 8 (Europe, Greenland, USSR, North Africa, Near East) 22. Director, Region 9 (Latin American Region) | | | | } |
| 23. Director, Division I 24. Director, Division II 25. Director, Division III 26. Director, Division IV 27. Director, Division V 28. Director, Division VI 29. Director, Division VII | | | | |

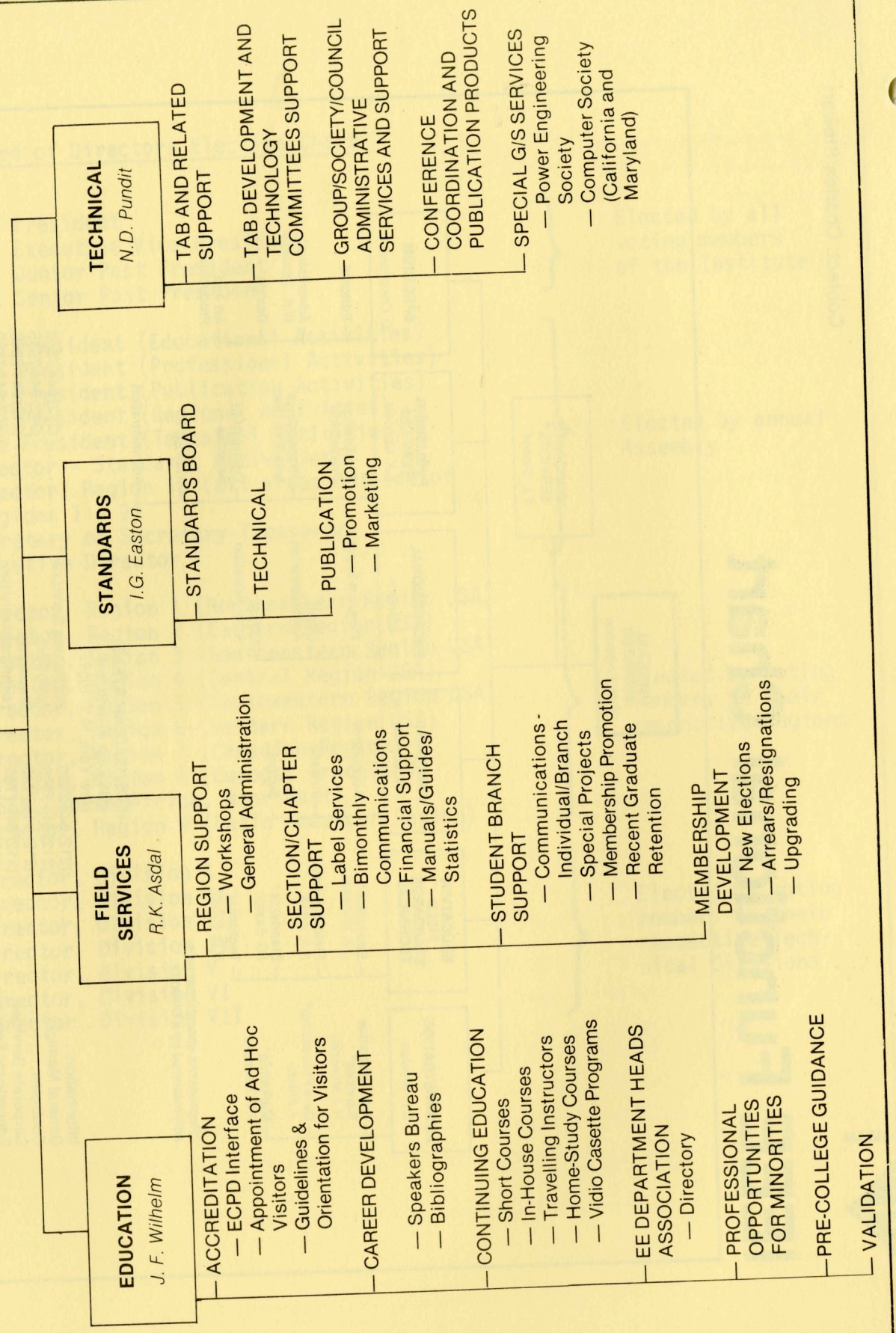


IEEE Functional Chart

Contact: Charles Stewart



**EDUCATION
FIELD
STANDARDS
TECHNICAL**

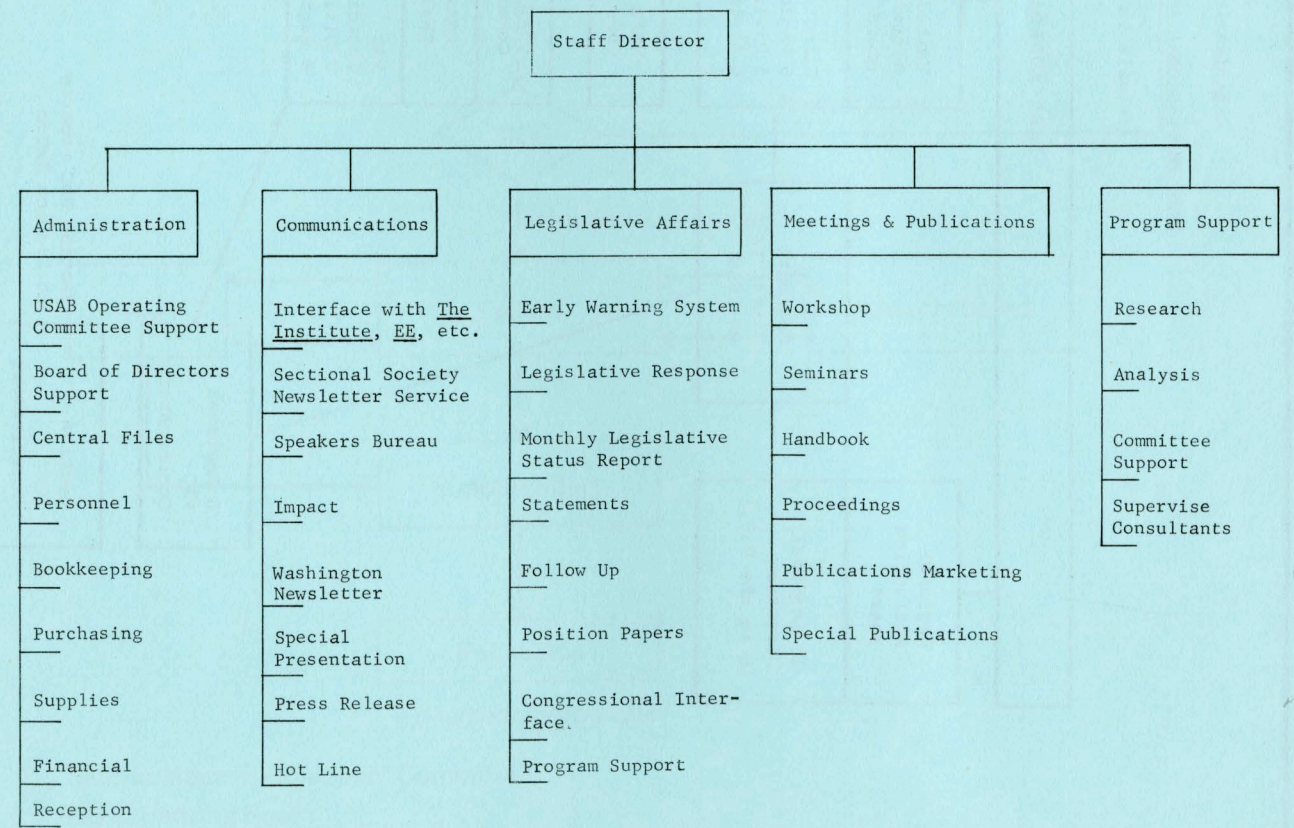


United States Activities Board

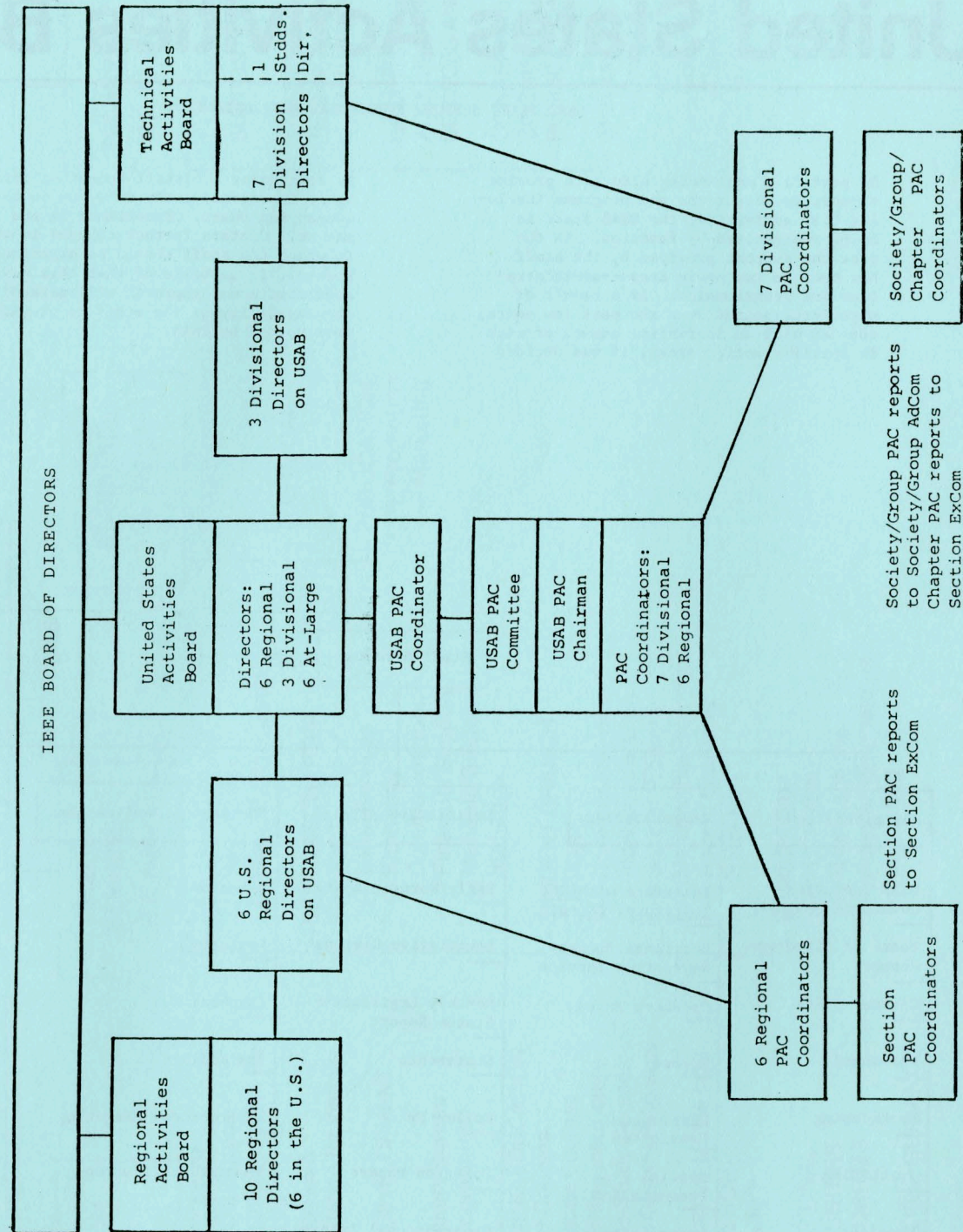
USAB STAFF SUPPORT FUNCTIONAL REORGANIZATION

As part of a continuing effort to provide support to volunteers and programs involving U.S. activities, the USAB staff is being reorganized by function. In the past the support provided by the staff has been in two basic areas--administrative and programmatic. As a result of experience gained over the past few years, coupled with an increasing amount of work in specific acting areas, it was decided

to reorganize the staff operation into five basic functional areas as shown on the accompanying chart. Experience in the future may well dictate further changes in the way in which the staff should be organized. However, it is believed that this newly created functional approach will markedly increase the capability of the staff to provide the support needed by USAB.

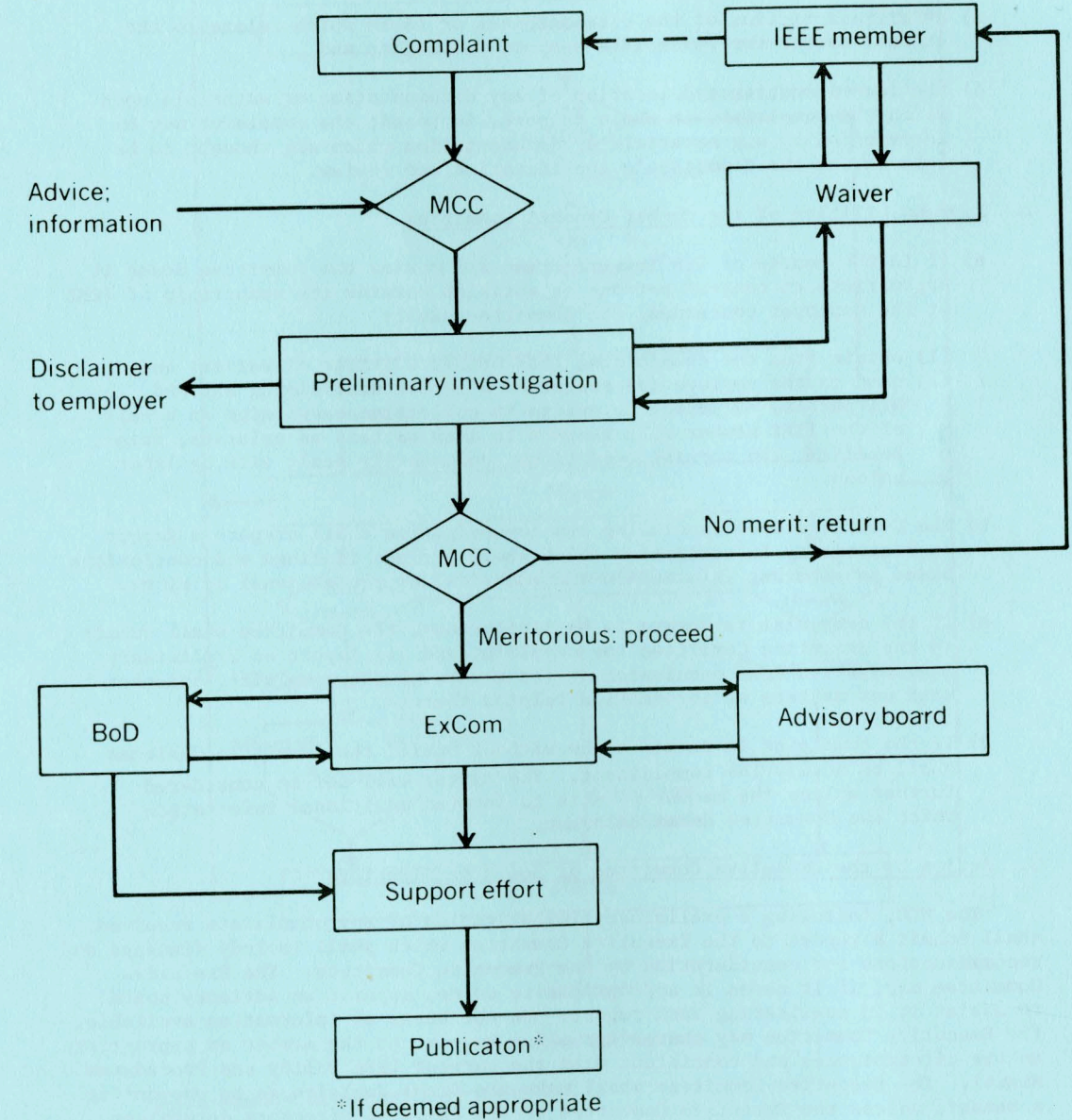


Organization Chart of
IEEE PROFESSIONAL ACTIVITIES COMMITTEES
(details in text, p. 2)



United States Activities Board

Procedures for IEEE support of members on ethical matters



MCC = Member Complaint Committee

HB = Hearing Board

BoD = Board of Directors

*If deemed appropriate

SUPPORT

1. Forward Contents of Complaint

The complaint shall be in the form of an affidavit, typewritten, notarized and signed by a member of IEEE in good standing. The complaint shall include:

- a) the name(s), position(s) or title(s) and address(es) of employer or others who are believed to have knowledge pertaining to the subject of the complaint;
- b) the issue or matter of ethical principle which the IEEE member believes is involved, together with the specific provisions of the IEEE Code of Ethics which are deemed relevant;
- c) a full description of the circumstances or facts which relate to the ethical matter for which IEEE support is sought; and
- d) the identification and location of any documentation or materials upon which the complaint, in whole or part, is based; the complaint may be accompanied by any materials or documentation which are thought to be relevant to the Committee's consideration and review.

2. Responsibilities of the Member Conduct Committee

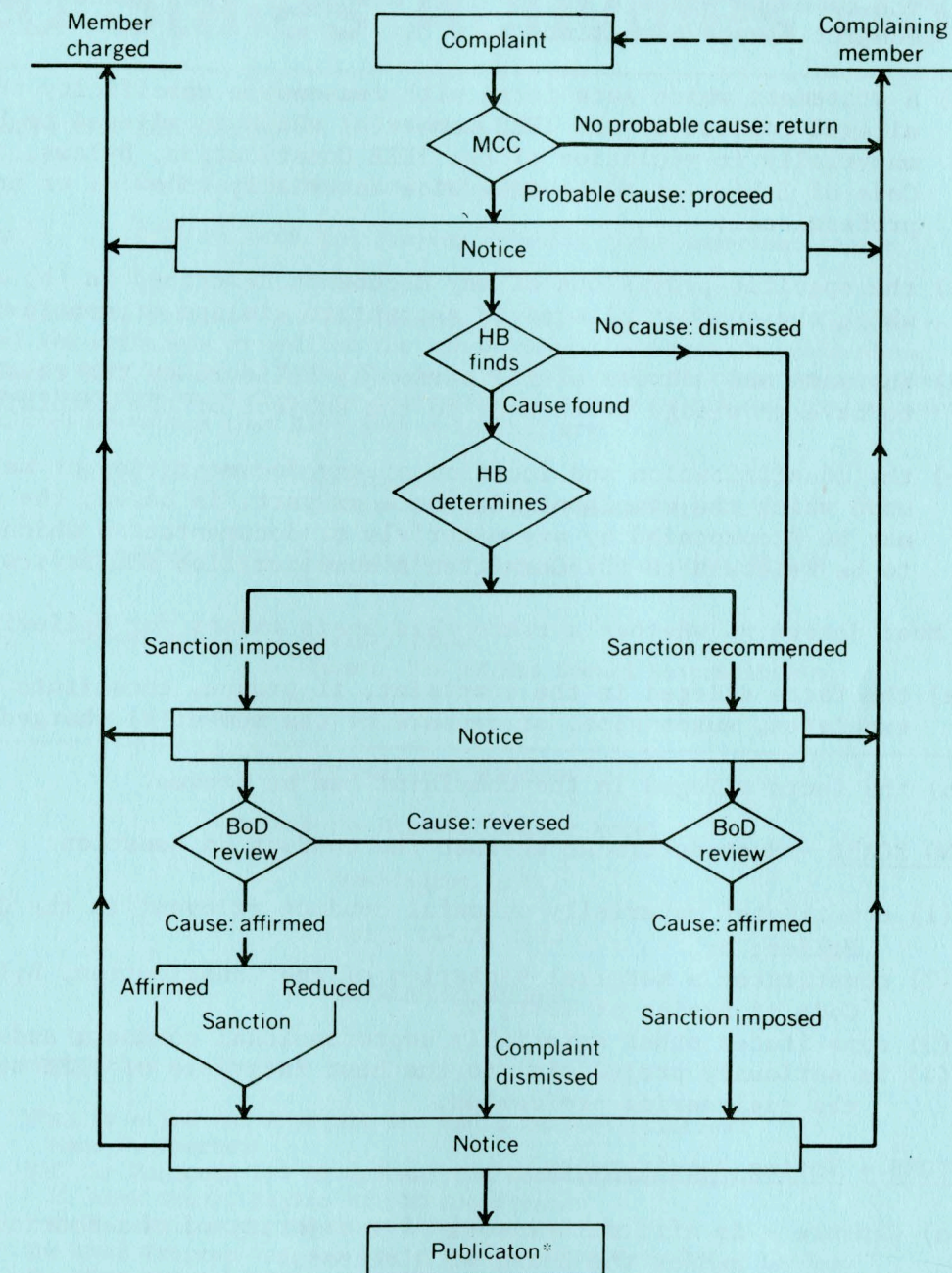
- a) If in the course of its investigation and review the Committee deems it appropriate to contact persons or entities outside the membership of IEEE or the employer concerned, the Committee shall:
 - (1) obtain from the complaining IEEE member a letter of waiver; and
 - (2) send to the employer(s) concerned a letter disclaiming any and all purpose or intent to engage in collective bargaining on behalf of the IEEE member with respect to such matters as salaries, wages, benefits, and working conditions, customarily dealt with by labor unions.
- b) The Committee upon concluding its investigation shall prepare a Report on Preliminary Investigation which shall include findings and conclusions based on relevant information and technical or professional opinions.
- c) If the complaint is deemed to be meritorious, the Committee shall submit to the Executive Committee the complaint and its Report on Preliminary Investigation upon conclusion of its review of the complaint, together with any matters of information related thereto.
- d) If the complaint is deemed to be without merit, the Committee Chairman shall so notify the complainant. The matter will not be considered further unless the member is able to furnish additional information which the Committee deems relevant.

3. Action by the Executive Committee or Board of Directors

The MCC, following a preliminary investigation of any complaints received, shall submit a report to the Executive Committee which shall include findings and recommendations for consideration by the Executive Committee. The Executive Committee may, if it deems it appropriate to do so, appoint an advisory board to assist it in considering such report. On the basis of information available, the Executive Committee may thereafter offer support to the member as appropriate to the circumstances and consistent with the current IEEE Policy and Procedures Manual. The Executive Committee shall make the final decision as to supporting a member, unless the Executive Committee or the Board of Directors determines that the Board of Directors should make such final decision.

The Board of Directors, or the Executive Committee upon approval by the Board of Directors, may publish findings, opinions, or comments in support of the member, and take such further action as may be in the interests of the member, the IEEE, or the engineering profession.

Procedures for IEEE discipline of members on ethical matters



*If deemed appropriate

MCC = Member Complaint Committee
HB = Hearing Board
BoD = Board of Directors

DISCIPLINE

1. COMPLAINT - Shall be in the form of an affidavit, and shall include:
 - a) the name and address of the IEEE member(s) whose conduct is the subject of the complaint;
 - b) a statement which sets forth with reasonable specificity the alleged conduct of the IEEE member(s) which is alleged to be materially in violation of the IEEE Constitution, Bylaws, or Code of Ethics or to be otherwise materially unlawful or unprofessional;
 - c) the specific provisions of any documents described in (b) above which the conduct alleged is thought to violate or contravene;
 - d) the name and address of the person(s) believed by the complainant to have knowledge pertaining to the subject of the complaint;
 - e) the identification and location of any documentation or materials upon which the complaint, in whole or part, is based; the complaint may be accompanied by any materials or documentation which are thought to be relevant to the Committee's consideration and review.
2. MCC - Must determine whether a reasonable basis exists for believing that:
 - a) the facts alleged in the complaint, if proven, constitute cause for expulsion, suspension, or censure of the member(s) charged; and
 - b) the facts alleged in the complaint can be proven.
3. HEARING BOARD - Must determine whether the conduct in question:
 - (1) constitutes materially unlawful conduct relevant to the Code of Ethics; or
 - (2) constitutes a material violation of the Constitution, Bylaws or Code of Ethics of IEEE; or
 - (3) constitutes other materially unprofessional conduct; and
 - (4) is seriously prejudicial to the best interests of IEEE or of the engineering profession.
4. SANCTIONS - Voting Requirements
 - a) Censure - An affirmative vote of a majority of the Hearing Board and/or the Board of Directors.
 - b) Expulsion or Suspension - An affirmative vote of a majority of the Hearing Board and/or the Board of Directors, and, in addition, the affirmative vote of 2/3 of the Hearing Board and/or the Board of Directors that the member's conduct was seriously prejudicial to the best interests of IEEE or of the engineering profession.



IEEE

Contact: Jack Kinn

United States Activities Board

MEMORANDUM TO: IEEE Officers

From: Hans C. Cherney, USAB PAC Coordinator

Subject: 1978 PAC Workshop Program covering three important topics

We have now outlined our PAC Program for the year, which will include three national PAC workshops as well as the scheduling of sessions on professional subjects at as many Regional, Area, Section, Group/Society meetings as possible. These meetings may be in the form of workshops, panels or speaker presentations. The national workshops that have been scheduled are:

| | |
|-----------------|--|
| April 14-15 | Washington Theme: The EE/Government Interface |
| September 10-11 | Los Angeles--in conjunction with WESCON Theme: The EE/Career Potentials |
| December 1-2 | Dallas, Texas Theme: The EE/His Social Responsibility |

NATIONAL PAC WORKSHOP

Stouffer's National Center Hotel

Washington, D.C.

April 14-15, 1978

Abstracted Agenda

A. General Session

Chairman: Hans C. Cherney

- (1) What is a PAC and what are the PAC's responsibilities?
Hans C. Cherney
- (2) PAC's: Regional and Divisional PAC Coordinator's View
H. Mark Grove, Region II PAC Coordinator
Walter Welkowitz, Region VI PAC Coordinator
- (3) The USAB Program and the PAC's Various USAB Task Force Leaders
- (4) The USAB PAC Interface
Herbert H. Heller

B. Work Group Sessions on the Socio-Economic and Technical Grass Roots Activities.

- (1) Group 1 - Establishing Legislative and Government Advisory Committees
- (2) Group 2 - Student Branch Interface
- (3) Group 3 - Technical Issues
- (4) Group 4 - Socio-Economic Issues



Technical Activities Board

STATUS REPORT

INTERNATIONAL TRAFFIC IN ARMS REGULATION (ITAR)

The International Traffic in Arms Regulation (ITAR) may be interpreted broadly to apply to any technical information (classified or unclassified) that bears on U. S. National Security. The Office of Munitions Control, Department of State has responsibility for monitoring all relevant activities.

There have been numerous articles on the subject. Reference 1 covers much of the history. Reference 2 provides a thought-provoking synopsis. Reference 3 which will be published shortly reports on a limited clarification by a State Department staff which may not be the official position. Recently, IEEE legal counsels have submitted a rather lengthy but thorough report which describes their research and lists many alternatives for consideration of the IEEE Executive Committee and Board of Directors.

President Getting, who has taken a keen interest in the subject, encouraged discussions at the February 1978 meeting of the Executive Committee and Board of Directors and this topic will be discussed in subsequent meetings.

1. Information Theory Newsletter, December 1977, No. 73
2. Committee on Social Implications of Technology Newsletter, December 1977, No. 20
3. Aerospace and Electronics Systems Newsletter

TRIP REPORT OF THE IEEE DELEGATION TO THE PEOPLE'S REPUBLIC OF CHINA

Dr. Herbert Sherman, a member of the first IEEE delegation to visit the People's Republic of China in the fall of 1977, has written an informative and enlightening article about the trip in the February 1978 issue of Spectrum, entitled "Electrotechnology in China". The article discusses the technical revelations of the journey and is accompanied by many excellent photographs of factories and equipment seen during the delegation's visit.

INVITEES FROM FOREIGN NATIONS TO IEEE CONFERENCES

IEEE Conferences are open to all. Sometimes special assistance is needed from IEEE in obtaining visas for participants from overseas. If you are inviting participants who may have such problems, please notify Mrs. Audrey R. Bickel, Administrator, Transnational Relations Committee, of all the details so that we may respond to possible inquiries from the U.S. State Department. Mrs. Bickel's telephone number is - (212) 644-2123. Your cooperation in this matter would be extremely appreciated.

TAB DIRECTORY OF KEY PERSONS TO CONTACT

| NAME | FUNCTION | TELEPHONE # (212) 644-_____ |
|----------------------|---|--------------------------------|
| Audrey R. Bickel | Joint Telecommunications Advisory Committee, Transnational Relations and Technical Exchanges Outside Organizations, News Reporting to EE, Institute, Spectrum | 2123 |
| Esmi L. Bidstrup | Policy Matters in G/S/C Administrative Services, Interdepartmental Liaison including Marketing & Personnel (excluding finance), G/S/C Bylaws and Constitution changes | 7868 |
| Mel Bonaviso | Finance (all aspects), TAB Finance Committee | 7890 |
| Joan T. Breslin | TAB Committees: Energy, Environmental Quality, Man and Radiation, Social Implications of Technology, Technology Forecasting & Assessment, Awards and Recognition | 7887 |
| Janet C. Jacobson | TAB and TAB OpCom Recording Secretary, TAB Correspondence | 2122 |
| Richard J. Jerril | Policy Matters in Conference Services, Staff Secretary - Meetings Committee | 7861 |
| Carolyn J. Karpinski | PES Special Activities - overall responsibilities | 7893 |
| Esther E. Kelmenson | TAB Roster, TAB and TAB OpCom Files and Meeting Arrangements, TAB Information | 7890 |
| Barbara A. Owens | Conference Administration, Conference Publications (OOP Single Copy Sales, etc.) | 7895 |
| Neil D. Pundit | Policy Matters in Technical Activities, Technical Interface with External Organizations, Staff Secretary TAB and TAB OpCom, Advance Planning and Projects | 7890 |
| Malvina Torto | Administrative Services to G/S/C, G/S/C Roster, Label Selection | 7856 |

IEEE/TAB is currently compiling a working roster for all officers and members who serve in any capacity within technical activities of the Institute. Kindly complete the following form and return to Dr. Neil D. Pundit, IEEE, 345 East 47 Street, New York, New York 10017.

NAME _____

IEEE MEMBERSHIP # _____

COMMITTEE MAILING ADDRESS _____
(This may be either of two addresses--home or business)

BUSINESS TELEPHONE # _____

MAY WE LIST YOUR HOME TELEPHONE # IN THE ROSTER? YES NO HOME #: _____

LIST ALL BOARDS, COMMITTEES, ETC., ON WHICH YOU HAVE A CURRENT MEMBERSHIP: IF AN OFFICER, PLEASE GIVE YOUR POSITION _____



Contact: Mark M. Lucas

Membership Development Committee

TIMELY TIPS FROM MEMBERSHIP DEVELOPMENT

The "half price enrollment window" has been open for about a month now. Between March 1 and August 31 each year, new members can join IEEE for one half the normal dues, fees and assessment. You can use this fact to encourage enrollment of new members. And although it is practically the end of the Spring "bonus period", it is not too early to begin thinking about a membership drive based on the September 1 Fall "bonus", when 15 months' activities can be enjoyed for only 12 months' dues.

Although many members have remembered to renew their IEEE membership dues since the 2/28/78 deadline, quite a few have not yet removed themselves from ARREARS. The soon-to-arrive PINK CHANGE sheets will provide an early warning to Sections, who should make personal contact with each Arrears member as a friendly reminder, or to react as needed if the member has a specific reason for not renewing. Regions 1 through 6 will find Arrears members as Code "K" in the March PINKS.

MD COMMITTEE HOLDS FIRST 1978 MEETING

At press time, the Membership Development Committee is preparing for its first 1978 meeting, in Philadelphia on March 19 & 20, prior to the IECI conference on microprocessors.

The MD Committee will be examining its own role within the IEEE, identifying opportunities and establishing lines of communication with the Regional and Divisional structure.

To contact your representative on the MD Committee, see the reverse of this insert. Representatives for the three (open) positions are almost finalized and will be announced as soon as possible. All IEEE Officers, particularly MD Chairmen, are encouraged to seek the resources and support of their MD Committee representative. YOUR FEEDBACK IS NEEDED.

INFORMATION CENTER AVAILABLE SOON

The IEEE INFORMATION CENTER is a reusable, mass-fabricated display which ships flat in a storage carton. Following a quick and simple assembly, it can display almost the entire range of IEEE brochures, literature and publication samples, at Section meetings, conferences and where ever members and potential members gather.

Full details in the next "EE" and from Headquarters.

| | | |
|--|---|---|
| <p><u>Chairman</u></p> <p>David C. McLaren Gen. Tel. Co. of Florida P.O.B. 110 Tampa, Florida 33601 (813) 224-4409 (Office) (813) 531-1733 (Home) (813) 229-1375 (telecopier)</p> <p><u>Region 2 Representative</u></p> <p>Leonard M. Schwab 8709 Southard Pines Court Vienna, Virginia 22180 (703) 790-1566</p> <p><u>Region 5 Representative</u></p> <p>W. G. Thorman 111 Tyrol Street San Antonio, Texas 78209 (512) 227-3211, Ext. 384</p> <p><u>Region 8 Representative</u></p> <p>Dick C. Poortvliet St. Ursalakliniek Eikenlaan 3 - 5 Wassenaar, Netherlands</p> <p><u>Division I Representative</u></p> <p>(OPEN)</p> <p><u>Division IV Representative</u></p> <p>Dr. Richard Sparks Raytheon Co Hartwell Road Bedford, Ma. 01730 (617) 274-7100 Ext. 4523</p> <p><u>Division VII Representative</u></p> <p>Mr. H. M. Hess 32355 Susanne Drive Franklin, Michigan 48025 (313) 626-8916</p> | <p><u>Vice Chairman</u></p> <p>K. Reed Thompson 4528 Wydale Avenue, S.W. Roanoke, Virginia 24018 (703) 387-7370 (Office) (703) 989-9402 (Home)</p> <p><u>Region 3 Representative</u></p> <p>K. Reed Thompson (See above)</p> <p><u>Region 6 Representative</u></p> <p>R. E. Reiner 1864 Bella Vista Drive East Sierra Vista, Arizona 85635 (602) 538-6016</p> <p><u>Region 9 Representative</u></p> <p>Eduardo Bonzi Correa Casilla 9807 Santiago, Chile</p> <p><u>Division II Representative</u></p> <p>Martin Plotkin Brookhaven National Lab. Upton, New York 11973 (516) 345-4717</p> <p><u>Division V Representative</u></p> <p>(OPEN)</p> <p><u>Past MDC Chairman</u></p> <p>Professor Kenneth W. Atwood Electrical Engineering Dept. University of Utah Salt Lake City, Utah 84112 (801) 581-6944 (Office) (801) 255-8062 (Home)</p> | <p><u>Region 1 Representative</u></p> <p>Calvin O. Stoutz 21 Stoney Clover Lane Pittsford, N.Y. 14534 (716) 724-3936 (Office) (716) 381-1449 (Home)</p> <p><u>Region 4 Representative</u></p> <p>Professor Harry G. Hedges Michigan State University East Lansing, Michigan 48824 (517) 353-6484</p> <p><u>Region 7 Representative</u></p> <p>Professor C. E. Spike University of Waterloo Department of Electrical Engineering Waterloo, Ontario, Canada (519) 885-1211 Ext. 317</p> <p><u>Region 10 Representative</u></p> <p>J. A. Okochi 5-51-12 Denenochofu Ohta-ku Tokyo, Japan</p> <p><u>Division III Representative</u></p> <p>(OPEN)</p> <p><u>Division VI Representative</u></p> <p>Professor J. M. Biedenbach College of Engineering University of South Carolina Columbia, South Carolina 29208 (803) 777-6693</p> <p><u>Chairman, 1978 RAB SAC</u></p> <p>Professor John B. Gordon Department of Electrical Engineering Center for Energy Studies ENS 327 Austin, Texas 78712 (512) 471-7792</p> <p><u>IEEE Staff Secretary</u></p> <p>Mark M. Lucas IEEE Membership Development 345 East 47th Street New York, New York 10017 (212) 644-8080 (Office) (212) 751-6898 (Home)</p> |
|--|---|---|



Continuing education services

WRITE US A LETTER ... YOU'LL FIND MY ADDRESS BELOW.

OR BETTER YET, CALL US TODAY AT (201) 981-0060 EXT 177.
ASK FOR VINCE GIARDINA. LET HIM DESCRIBE HOW WE CAN SCHEDULE A COURSE FOR YOU THIS FALL.

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| <p>March</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td><td></td><td></td><td></td><td></td><td>11</td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td><td>18</td></tr> <tr><td>19</td><td></td><td></td><td></td><td></td><td>24</td><td>25</td></tr> <tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td></td></tr> </table> <p>petition Section Executive Committee to sponsor education course</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | 1 | 2 | 3 | 4 | 5 | 6 | | | | | 11 | 12 | | | | | | 18 | 19 | | | | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | | <p>April</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td>8</td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td>15</td></tr> <tr><td>16</td><td>17</td><td></td><td></td><td>21</td><td></td><td>22</td></tr> <tr><td>23/30</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> </table> <p>discuss program with Giardina at Headquarters-prepare your newsletter item</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | 1 | 2 | | | | | | 8 | 9 | | | | | | 15 | 16 | 17 | | | 21 | | 22 | 23/30 | 24 | 25 | 26 | 27 | 28 | 29 | <p>May</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td></td><td></td><td></td><td>12</td><td>13</td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td><td></td><td>20</td></tr> <tr><td>21</td><td>22</td><td></td><td></td><td></td><td></td><td>27</td></tr> <tr><td>28</td><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td></tr> </table> <p>poll member interest via Section Newsletter</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | 12 | 13 | 14 | | | | | | 20 | 21 | 22 | | | | | 27 | 28 | 29 | 30 | 31 | | | |
| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 23/30 | 24 | 25 | 26 | 27 | 28 | 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 7 | 8 | | | | 12 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 21 | 22 | | | | | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | 29 | 30 | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>June</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td>10</td></tr> <tr><td>17</td><td></td><td></td><td></td><td></td><td></td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td></td></tr> </table> <p>analyze returns (usually represents 1/3 of class size) call Giardina to set course date</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | 1 | 2 | 3 | 4 | | | | | | 10 | 17 | | | | | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | | <p>July</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td>8</td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td>16</td></tr> <tr><td>17</td><td></td><td></td><td></td><td></td><td></td><td>24</td></tr> <tr><td>23/30</td><td>24/31</td><td>25</td><td></td><td></td><td></td><td>27</td></tr> </table> <p>VACATION PERIOD make physical arrangements to relay to headquarters</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | 1 | 2 | 3 | | | | | 8 | 9 | | | | | | 16 | 17 | | | | | | 24 | 23/30 | 24/31 | 25 | | | | 27 | <p>September</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>3</td><td>4</td><td></td><td></td><td></td><td></td><td>9</td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td>16</td></tr> <tr><td>17</td><td>18</td><td></td><td></td><td></td><td></td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> </table> <p>activate local promotion campaign</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | 1 | 3 | 4 | | | | | 9 | 10 | | | | | | 16 | 17 | 18 | | | | | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | | | | | | | |
| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 17 | | | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 26 | 27 | 28 | 29 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 23/30 | 24/31 | 25 | | | | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>October</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> <tr><td>8</td><td>9</td><td></td><td></td><td></td><td></td><td>14</td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td><td></td><td>21</td></tr> <tr><td>22</td><td>23</td><td></td><td></td><td></td><td></td><td>28</td></tr> <tr><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td><td></td></tr> </table> <p>scheduling of course</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | | 14 | 15 | | | | | | 21 | 22 | 23 | | | | | 28 | 29 | 30 | 31 | | | | | <p>November</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td>10</td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td>18</td></tr> <tr><td>19</td><td>20</td><td></td><td></td><td></td><td></td><td>25</td></tr> <tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td></td><td></td></tr> </table> <p>Financial Wrap-Up Determine follow-up program for 1979</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | 1 | 2 | 3 | | | | | 10 | 11 | | | | | | 18 | 19 | 20 | | | | | 25 | 26 | 27 | 28 | 29 | 30 | | | <p>December</p> <table border="1"> <tr><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THUR</td><td>FRI</td><td>SAT</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></tr> <tr><td>3</td><td>4</td><td></td><td></td><td></td><td></td><td>9</td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td>16</td></tr> <tr><td>17</td><td>18</td><td></td><td></td><td></td><td></td><td>23</td></tr> <tr><td>24/31</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> </table> <p>Discuss 1979 plans with Giardina at Headquarters</p> | SUN | MON | TUE | WED | THUR | FRI | SAT | | | | | | | 1 | 3 | 4 | | | | | 9 | 10 | | | | | | 16 | 17 | 18 | | | | | 23 | 24/31 | 25 | 26 | 27 | 28 | 29 | 30 |
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THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

FOR ADDITIONAL INFORMATION CONTACT VINCENT J. GIARDINA
445 HOES LANE, PISCATAWAY, NEW JERSEY 08854



IEEE CANADA PRESENTS AN INTENSIVE TWO-DAY SHORT COURSE ON FIBRE OPTICS



Vancouver
Holiday Inn, Harbour
1133 W. Hastings Street
British Columbia
March 30/31

Edmonton
Holiday Inn,
107th Street & 100th Avenue
Alberta
April 3/4

Winnipeg
Holiday Inn, Downtown,
350 St. Mary Avenue
Manitoba
April 6/7

Halifax
Holiday Inn, Centre
Quinpool Road & Robie Street
Nova Scotia
April 13/14

Montreal
Holiday Inn, Pointe Claire
6700 Trans Canada Highway
Quebec
April 17/18

Ottawa
Holiday Inn, Centre,
100 Kent Street
Ontario
April 20/21

Toronto
Holiday Inn, West,
Hwy 427 - 2 Holiday Drive
Ontario
April 24/25

London
Holiday Inn, South,
1210 Wellington Road, S.
Ontario
April 27/28

This Course, designed for communications engineers, planners and users, will emphasize Glass Fibre Waveguide and terminal devices. The final session will concentrate on system design considerations; options; tradeoffs; and economic aspects of this new technology.

COURSE OUTLINE:

1. Introduction to Optical Waveguide Communications
2. Optical Sources and Detectors
3. Transmission Medium
4. Systems Consideration and Design

INSTRUCTOR:

Dr. Robert Gallawa
U.S. Department of Commerce
Institute for Telecommunication Sciences
BOULDER, Colorado

REGISTRATION FEES:

IEEE Member
Non-Member
Student Member

Advance (14 Days Prior)

\$130.00
\$165.00
\$60.00

Regular

\$150.00
\$188.00
\$70.00

COST OF REGISTRATION INCLUDES:

Complete Course notes with copies of all transparencies used; Buffet lunches on both days of the Course. Coffee breaks morning and afternoon on each day of the Course.

ATTENDANCE IS LIMITED TO A MAXIMUM OF 75 PERSONS

AN IEEE EDUCATIONAL ACTIVITIES BOARD COURSE

Mail completed form to: IEEE CANADA, 7061 Yonge Street, Thornhill, Ontario, L3T 1A6

intensive workshop on

"Microprocessor Programming with a 'Take-Home' Microprocessor ... and power supply"

An intensive 3-day short course designed for the practicing engineer, the engineering manager or programmer who needs to learn microprocessor systems and programming.

Each registrant receives his/her own MOTOROLA MEK6800D2 kit (fully assembled) and power supply unit plus all course notes, programming pads, hexadaisy unit and manuals.

The fee in our IEEE Section programs includes all luncheons, 2 coffee breaks per day, and 2 dinners. A Certificate of Completion will be awarded to all those completing the course.

Designed by Dr. William Eccles of the University of South Carolina, the course will cover:

1st DAY: Why Microprocessors, M6800 overview, Elementary Programming (beginning with Interrupt), Bit Handling, Laboratory Exercises.

2nd DAY: Indexing, Tables, Controllers, Numerical Processing, Decimal, Laboratory Exercises.

3rd DAY: Overview of Higher-Level Languages, System and Product Development, Look-Ahead, Laboratory Exercises.

REGISTRATION FEES:

IEEE Member \$425.00
Non-Member \$525.00
Student Member \$275.00

Attendance at each location is limited to 50. Please check the course site you prefer and send to V. J. Giardina, IEEE, 445 Hoes Lane, Piscataway, NJ 08854

- Tenn. State Univ. Apr 6-8
Nashville, TN
- Univ. of Alabama Apr 20-22
Birmingham, AL
- Princeton, Section May 18-20
Princeton, NJ
- Vermont Section Jun 1-3
Burlington, VT
- North Jersey Section Jun 8-10
(location to be set)
- Chicago Section Jun 15-17
North Western Univ.
- Washington Section Jun 22-24
Arlington, VA
- W. Virginia Section Jun 28-30
Montgomery, WVA
- West Coast Univ. Nov 1978
Los Angeles, CA

IF YOU ARE PLANNING TO SCHEDULE THIS COURSE WITH YOUR SECTION, WE URGE YOU TO CALL V. J. GIARDINA, (201) 981-0060

ELECTRO/78 PROFESSIONAL PROGRAM

| MAY 23, 1978 TUESDAY | | MAY 24, 1978 WEDNESDAY | | MAY 25, 1978 THURSDAY | |
|--|---|--|--|---|--|
| 10:00 a.m. | 2:00 p.m. | 10:00 a.m. | 2:00 p.m. | 10:00 a.m. | 2:00 p.m. |
| Looking Ahead at High Density Packaging ORG: Stanley Stuhlberg Hughes Aircraft | Engineering Management Tools for Improved Effectiveness ORG: Palo Pierce USAF/Air Force | ABC's of Financing a Growing High Technology Business ORG: Steven Stadler GenRad | Professional Concerns for Today's Engineer ORG: William Wilkes IEEE | Upward Mobility & Career Development for Women Engineers ORG: Thelma Estrin University of CA | Latest Techniques and Design for Solid State Communications ORG: Lewis McCoy ARRL |
| Software: The Key to Using Microprocessors ORG: Max Schlinder Electronic Design | Small Package/Large Performance: 16 Bit Microcomputer ORG: Joseph Austin Digital Equip. Co. | Microprocessor Applications in NASA ORG: Fred Lesh Jet Propulsion | Examining Single Chip up Products ORG: V.K. Huang Bell Labs, Holmdel | Microprocessors as Manufacturing Support Tools ORG: John Trombley Hewlett-Packard | Minis & Micros: Convergence on the Same Market ORG: Bryan Knox Mostek |
| Testing up-Based Products ORG: Jack Holland Inforex | Using ATE More Effectively ORG: Dick Stein Comp. Automation | A Corporate Commitment to Service: Before You Build It, Service It ORG: Maury Floathe Tektronix | Computer Applications in Public Utility Control Centers ORG: Kjell Carlson U.S. Dept. Energy | New Generation Memories: Greater Speed or Higher Density ORG: Sam Young Mostek | Energy Saving Through Infrared Technology ORG: Riccardo Vanzetti Vanzetti Infrared |
| Bridging the Analog-To-Digital Gap ORG: Robert Morrison Burr-Brown Res. | up Interfacing: Today & Tomorrow ORG: Narpat Bhandari Signetics | The Home Computer & Its Peripherals: A Look into the Future ORG: Clark Johnson Micro Communicat. | up Applications in Instrumentation. How Smart Is Smart? ORG: Henry Hall GenRad | Advances in Radar Technology ORG: Herbert Weiss Lincoln Labs MIT | Civilian Applications of Radar ORG: Herbert Weiss Lincoln Labs MIT |
| Recent Advances in Computer Aids to Circuit Design ORG: John Golembeski Bell Labs, Holmdel | Computer Aided Test Design for Analog Circuits ORG: Fred Liquori Naval Air Eng'g. | Automated Microwave Measurements ORG: Richard Laton Lincoln Labs MIT | Computer Graphics: From False Start to Boom ORG: Ed Torerero Spectrum-IEEE | Optically Guided Wave Transmission Systems ORG: R. Lwcrak GPE Labs | Industrial Applications of Optical Communications ORG: David Medved Meret |
| Searching for Future Electronics Applications ORG: Thomas Jones M.I.T. | Memories for a Low Cost Computer System ORG: Dick Morris Digital Equip. Co. | Logic Measurement & Development Products ORG: Bill Furlow Tektronix | Energy: Crises & Challenges ORG: Richard Quinzanni Boston Edison Co. | Technology for Non-Invasive Monitoring of Physiological Phenomena ORG: Ronald Porter Analogic | |

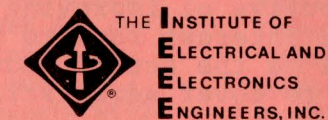
SPECIAL EVENING SESSION 8:00 p.m.
The Human Energy Field: A New Beach-Head for Scientific Discovery
Dr. Richard Dobrin
Scientific Consultant



IEEE

Contact: Thomas Bartlett

Accounting Department



Mr. Robert D. Briskman
Secretary/Treasurer

PLEASE REPLY TO:
Satellite Business Systems (SBS)
8003 Westpark Drive
P.O. Box 908
McLean, Virginia 22101
(703) 827-2244

April 5, 1978

Memo to: IEEE Organizational Units
Subject: Improved Investment Options

The IEEE Executive Committee has authorized establishment of new investment options to improve the rate of return on investment of your excess funds. The three options are designed to meet various cash flow needs while attaining maximum interest. We believe these options offer you an excellent investment opportunity.

The attached outline describes the three options now available to you. Interested parties should contact either:

Mr. Thomas W. Bartlett, Controller (212) 644-7748
Mr. Michael J. Sosa, Finance Manager (201) 981-0060, Ext.123

Either of these individuals can also be reached by writing directly to IEEE Headquarters in New York (345 East 47th St., New York, NY 10017).

I wish to encourage all organizational elements to give serious consideration to these investment options, so they may optimize the return on investment of excess funds.

Robert D. Briskman

RDB/jor
Attch.

IEEE

CONSOLIDATED INVESTMENT OPTIONS

The IEEE has established three (3) investment options to permit its organizational elements the opportunity of placing excess funds under full time management at Headquarters with the objective of improving the return on their investment. The interest rate to be paid under the three (3) options will be the actual amount earned monthly, less $\frac{1}{4}$ of 1% as a fee to cover administrative expenses.

Each issue of Electrical Engineering will report the actual experience for the past three (3) months and the estimated rate for the next three (3) months. Funds maintained at IEEE Headquarters will earn interest at the New York Commercial Savings Bank rate, unless one of the three (3) options is selected by the organizational element controlling the funds. Interest will be calculated upon the average month's balance.

Investment Option 1 - Short Term Bank Deposits

Funds are to be deposited for a minimum of one month and may be subsequently withdrawn with one week's notice.

Required minimum investment - \$500
Estimated net yield for 1978 - 5 $\frac{3}{4}$ %

Investment Option 2 - Long Term Bank Deposits

Funds are to be deposited for a minimum of six (6) months and may be subsequently withdrawn with one month's notice.

Required minimum investment - \$1,000
Estimated net yield for 1978 - 7 $\frac{1}{2}$ %

Investment Option 3 - Bond Plan

Funds are to be deposited for a minimum of one year. Subsequent withdrawal may be at the end of a calendar quarter with two months prior notice. Depositors will share interest and market gains or losses in the same manner as a mutual fund.

Required minimum investment - \$2,000 with additional deposits in increments of \$1,000 at the beginning of any calendar month.
Estimated net yield for 1978 - 8%

Robert D. Briskman
IEEE Treasurer

4/5/78

provide liaison between the professional activities of the Societies and Groups" under the umbrella of the Technical Activities Board, and the professional activities of the U.S. Activities Board and its various task forces. A major effort is also under way to form Group and Society Professional Activities Committees. Some of the important roles such committees are expected to play are: to identify technical issues of national significance to which IEEE expertise might apply; to develop appropriate IEEE position papers; to watch for opportunities for presenting expert testimony to appropriate governing bodies or public forums; and to create rosters of experts willing to participate in the above activities.

An organizational chart showing how the new PAC structure relates to the traditional one appears on p.2DD of this issue. Graphically displayed is the close contact between three of IEEE's major Boards (RAB, USAB, and TAB) on professional matters.

ANNOUNCEMENTS

IEEE's Bylaws and Policy Statements are available in a January 1 publication that covers all actions taken by IEEE's Board of Directors prior to that date. Further, addenda have been published covering actions taken at the February Board meeting. For the January 1, 1978, manuals or the individual addenda, write to Emily Sirjane at Headquarters.

Deadline date for receipt of nominations for the Medal of Honor and major annual medals is June 1. Contact Una B. Lennon at Headquarters for nomination forms.

TAB NEWS

The Open Order Plan (OOP) for automatic distribution of non-periodical publications has been expanded to include a new suboption for the ordering of conference records only. Conference records are now divided into eight categories, broken down primarily by technical divisions. Subscribers may choose to order one or any combination of these categories. OOP was devised as an automatic subscription order system to be used primarily by libraries and institutions.

A substantial increase in the dissemination of technical information presented at conferences is being considered by the Technical Activities Department. The TAB Meetings Committee will be addressing this problem and related financial considerations which the TAB Financial Committee will analyze. The outcome of these considerations will be announced shortly.

The TAB staff has undergone the following personnel changes. J. E. Casey, former Manager of Conference Coordination and Publications Products, has been assigned to the newly created position of Manager for Special Projects, IEEE Service Center, Piscataway. In addition to his TAB functions, Mr. Casey will work on joint EAB/USAB projects, including a joint career development program, special products promotion, surveys, employment assistance and employment guidelines, and promotion and conferences.

Richard J. Jerril was appointed Manager for Conference Activities, and will report to Neil Pundit. Janet Jacobson is the new administrative assistant to Dr. Pundit. Milica Acimovic has joined IEEE as a stenotypist to the TAB Committees.

An Engineering Foundation Fellowship in the amount of \$5000 has been awarded, on TAB's recommendation, to Gerald J. Herskowitz. The award was for a state of the art review of development of new components required for optical communications. Dr. Herskowitz is Professor of Electrical Engineering at the Stevens Institute of Technology, in Hoboken, N.J.

Changing status as of January 1978, each of the following Groups became an IEEE Society: Components, Hybrids and Manufacturing Technology; Electrical Insulation; Electromagnetic Compatibility; Engineering in Medicine and Biology; Geoscience Electronics; Industrial Electronics and Control Instrumentation; Instrumentation; Instrumentation and Measurement; Professional Communication; Quantum Electronics and Applications Vehicular Technology.

CONVENTION NEWS

The Electro '78 program was completed in record time this year. Special congratulations to Professional Program Committee Chairman, Brian Dale. The technical program for ELECTRO '78 is included as an insert on p. 2QQ of this issue.

WESCON '78, to be held September 12-14, in Los Angeles, has issued a call for nominations of technical films to be shown at the conference. Nominations should be submitted no later than May 15, to: Film Theatre Committee Chairman, WESCON '78, 45 Hoes Lane, Piscataway, N.J. 08854.

EB NEWS

Spectrum launched a seven-part series of articles scrutinizing power blackouts, beginning in the February issue with an analysis of New

York's shutdown of last summer. February Spectrum also revisited Loch Ness, examining the sonar equipment being used for underwater observations, and offered the first coverage of electrotechnology in China by any publication in recent times.

In March, Spectrum included a review of microwave landing systems for aircraft; reviewed the videotape options open to consumers; and analyzed new schemes for harnessing the wind. The April issue features a detailed look at charge-coupled-device (CCD) and bubble memories, and an exploration of computer systems employed to slash escalating office costs.

Thomas Edison will be the focus of an upcoming Spectrum retrospective article related to the centennial of the invention of the light bulb. Editor Donald Christiansen is seeking input from people who may have had direct contact with Edison.

Microprocessor Applications is the theme of February's Proceedings of the IEEE. This special issue focuses on the proliferation of microprocessors, and the diverse nature of the systems problems faced by their designers. The issue examines applications having a direct impact on the consumer, then moves on to the areas of instrumentation, communications, and control, and concludes with four papers covering a spectrum of special topics. This 160-page issue, available postpaid to IEEE members for \$5 and to nonmembers for \$10, can be ordered from the IEEE Service Center. Payment should accompany the order.

IEEE Press has announced the publication of "Phase-Locked Loops and Their Application," edited by William C. Lindsey and Marvin K. Simon. This book brings together 37 carefully selected reprints, with a tutorial introduction, to offer an overview of phase-locked loops. The 440-page book, priced at \$12.95 for the paperbound member edition, and \$25.95 for the clothbound edition (\$19.45 for IEEE members), can be ordered postpaid from the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Payment should accompany the order.

RAB NEWS

Membership Development has been given increased emphasis since last October, when Mark M. Lucas was brought on staff as secretary of the Membership Development Committee. An enthusiastic supporter of the geographical and technical units, Mr. Lucas's efforts are focused on promoting new membership, maximizing retention of existing members, and promoting transfers to higher grades.

STANDARDS NEWS

"IEEE Standards Report for 1977" appears as an insert on pp. 2a-x of this issue. If you have any questions, contact Ivan Easton (212-644-7966).

CHAPTER/SECTION NEWS

The Nigeria Section was established.

The Jamaica Section was established.

The Joint Circuits & Systems/Control Systems Chapter of the Delhi Section was established.

The Communications Chapter of the Winnipeg Section was established.

The Circuits & Systems Chapter of the Mid-Hudson Section was established.

The Sonics & Ultrasonics Chapter of the Joint Washington/Baltimore/Northern Virginia Sections was established.

The Electromagnetic Compatibility Chapter of the San Diego Section was established.

The Engineering Management Chapter of the Houston Section was established.

The Sonics & Ultrasonics Chapter of the Pittsburgh Section was established.

The Joint Acoustics, Speech & Signal Processing/Information Theory/Communications Chapter of the Schenectady Section was established.

The Engineering in Medicine & Biology Chapter of the Pittsburgh Section was established.

The Electromagnetic Compatibility Chapter of the Joint Long Island/New York Sections was established.

The Joint Industrial Electronics & Control Instrumentation/Computer/Control Systems Chapter of the Virginia Mountain Section was established.

The Computer Chapter of the Sao Paulo Section was established.

The Electromagnetic Compatibility Chapter of the New Jersey Coast Section was expanded to include Vehicular Technology members for formation of the Joint VT-6/EMC-27 Chapter.

Centerfold inserts

| | |
|---|---------|
| White--Standards report | 2a-2x |
| Canary--Election data | 2y-2z |
| Ivory--IEEE functional chart | 2AA-2BB |
| Blue--USAB: Washington office organization | 2CC-2DD |
| Blue--USAB: Ethics | 2EE-2HH |
| Blue--USAB: PAC chart | 2II-2JJ |
| Green--TAB status report and directory | 2KK-2LL |
| Gray--Membership Development Committee news | 2MM-2NN |
| Pink--Continuing education | 200-2PP |
| Canary--ELECTRO program | 2QQ-2RR |
| Salmon--Investment options | 2SS-2TT |