

NO. 1, OCTOBER 1964

ELECTRICAL ENGINEERING

WHY THIS NEW PUBLICATION?

One of the needs of any large organization is communications among key people about important problems that need solving and important decisions that have been made. To meet this need, ELECTRICAL ENGINEERING is being published.

This new publication is intended to provide a direct channel of communication vertically and horizontally within the IEEE organizational structure. It is being distributed to the principal officers of all major IEEE units such as Committees, Groups, and Sections. We hope that the core of members who have the job of running the nearly 1200 organizational units of IEEE will thereby be better informed of what is going on in IEEE.

Another function of ELECTRICAL ENGINEERING will be to publish supplements containing listings of active officers and members of the various IEEE Committees, Groups, Sections, and the like.

ELECTRICAL ENGINEERING will not be published at regular intervals but will appear as often as necessary to keep you abreast of the changing IEEE scene. It is your publication and we hope you will read each issue carefully. Comments and suggestions will be most welcome and should be addressed to R. K. Jurgen at Headquarters.

Donald G. Fink, General Manager

79TH STREET PROPERTY SOLD

Donald G. Fink, General Manager of IEEE, has announced the sale of the IEEE's 79th Street property consisting of the buildings located at 1 East 79 Street, 5 East 79 Street, and 984 Fifth Avenue. The sale has been approved by the New York State Supreme Court as required under The Membership Corporations law. The buyers are Anthony and John Campagna.

The three buildings involved in the sale were the former headquarters of the IRE. Since the merger on January 1, 1963, they have been used for those members of the IEEE staff concerned with membership administration, accounting, addressing, and mailing.

The buildings were originally the property of the Isaac V. Brokaw family and heirs. In December 1945, the IRE purchased the 1 East 79 Street building and then acquired the other two buildings in later years.

Transfer of the title to the property is scheduled to take place during the first half of 1965. The members of the IEEE staff now located at 79th Street will be relocated on the 15th and 16th floors of the United Engineering Center at 345 East 47

Street. IEEE will then occupy 4-1/2 floors of the Center.

In preparation for the move, an IEEE computer facility is currently in the process of construction at the Center for handling membership records, and accounting and addressing operations.

With the move, all of the IEEE headquarters staff will be consolidated in one location for the first time. It is expected that the new computer facility and the centralizing of staff operations will lead to much more efficiency in the everyday handling of IEEE business.

TECHNICAL ACTIVITIES BOARD

At its meeting in August, the IEEE Board of Directors approved in concept the establishment of a Technical Activities Board (TAB) to replace the present Groups Committee and the Technical Operations Committee.

The reason for the establishment of the new Board is to make possible the unified administration of all technical activities of the IEEE. Such unification now appears practical since with the beginning of the 1965 IEEE administrative year, it

appears that all Divisions presently associated with TOC will have been included within the Group System.

The Technical Activities Board would be comparable to other Boards that have been established such as the Awards Board and Editorial Board. Under the direction of the IEEE Executive Committee, TAB would administer the technical activities of IEEE. Its membership would consist chiefly of the chairmen of the Groups and federations of Groups, chairmen of General Committees, such as Standards and Safety, Members-at-Large, and Liaison Members chosen for special contributions. The Chairman of TAB is to be the IEEE Vice President elected by the annual Assembly. A Vice Chairman is to be appointed by the Executive Committee, possibly upon nomination by TAB. The Secretary of TAB would be a member of the Headquarters staff.

A small Operating Committee has been recommended to manage technical activities and make the many decisions required to ensure efficient operation. Its relation to TAB would be similar to that of the Executive Committee to the Board of Directors.

AFFILIATION BY SECTIONS, GROUPS, ETC., WITH OTHER ORGANIZATIONS - POLICY NO. 1

Minding one's own business, diligently pursuing one's objectives, and avoiding questionable associates are generally regarded as old-fashioned personal virtues. The IEEE Board of Directors believes that these are sound principles for the conduct of an engineering society and its Sections in today's complex world.

An organization that asserts its purposes to be "scientific, literary and educational, directed toward the advancement of the theory and practice" of its professional field has, within the scope of its declared objectives enough opportunities and re-

sponsibilities to engage its energies and resources to their limits. This is especially true now when the engineering societies are being looked to for an important contribution to the continuing education of their members who must keep abreast of rapidly advancing science and technology. Diligent and single-minded pursuit of these objectives is in the public interest, and is rewarded by valuable privileges and exemptions.

Such privileges and exemptions are provided by law for churches, hospitals, colleges, and scientific and educational institutions that are not only non-profit in the usual sense, but that also avoid political and economic activities in the interests of their members, and are judged to operate in the public interest. Activities appropriate to such institutions are defined in Section 501(c)(3) of the Internal Revenue Code of 1954. IEEE, as did its predecessor organizations, qualifies under this classification. It is most desirable that it continue to do so. More than Federal Income Tax exemption is involved here. Business leagues, trade associations and other non-profit organizations have this exemption. Among the special privileges valued by IEEE, and the other Founder Societies, is that which makes donations tax-deductible to the donor. This privilege helped greatly to make possible the United Engineering Center the occupancy of which is limited to 501(c)(3) -type organizations.

Your Board of Directors has ruled that IEEE Sections shall confine their own activities to those bearing directly on the constitutional objectives of IEEE and avoid, or strictly limit, associations with other organizations engaging in activities not so directed.

This is a complex legal matter. Except where the other organization, with which a Section proposes affiliation, has a 501(c)(3) classification, every case calls for special examination by legal counsel. Some local councils are incorporated; some have a tax classification; others don't. Some

are tax-exempt as business leagues. There may be good reasons why an IEEE Section should affiliate, at least on a limited basis, the better to achieve its constitutional objectives. If the desirability and feasibility can be demonstrated, it will be permitted.

How to check up on the propriety of such affiliations is explained on page 16 of the IEEE SECTION MANUAL. It is important that every Section give this IEEE policy full compliance. A number of Sections have submitted the information called for by the Board Resolution of April 19, 1963 establishing Policy No. 1. In most cases, given the required information, legal counsel has recommended either unqualified approval of the proposed affiliation or limitations acceptable locally.

It may be difficult to see how a small deviation from the "straight and narrow" on the part of one Section could affect the "substantial" part of IEEE's activities to which the law refers. For one thing, IEEE has a lot of Sections and other units. All should conform to the same standards. Furthermore, "substantial" is not defined in the law, nor by any trustworthy interpretation of it. This matter is too important to take chances with. All Section officers are therefore requested to review their Section affiliations in the light of Policy No. 1 and take appropriate action immediately. "How-to" is spelled out on page 16 of the SECTION MANUAL.

SPONSORSHIP OF MEETINGS

The Executive Committee arrived at two important decisions this spring affecting IEEE's conduct with respect to meetings. In the first of these decisions, it was ruled that the IEEE should not participate in any meeting or conference sponsored by a commercial profit-motivated organization. This ruling applies, of course, to all Sections, Groups, Committees and other organizational units within IEEE.

The Executive Committee also discussed the matter of Section participation in Group or Committee initiated conferences and decided that Groups or Committees desiring to hold meetings within a geographical area within a Section should seek the concurrence of that Section. It was also decided that the initiating sponsor is not required to seek or accept cosponsorship by other IEEE organizational units. Cosponsorship shall be by mutual agreement. The full statement of present IEEE policy on sponsorship of meetings is as follows:

1. This policy is to apply to all meetings designed and publicized to draw attendance from an area larger than a Section or several contiguous Sections.

2. Any issues that develop under this policy that cannot be resolved by the principal parties concerned shall be referred to the Executive Committee for review and adjudication. The respective staff offices shall be responsible for submittal of relevant information and documents for each such issue.

3. The initiating sponsor of a meeting is the Committee, Group, Section, or Region that creates the original proposal or conceptual plan. In the event a series of meetings has been cosponsored for a number of years and the identity of the initiating sponsor is obscure, after the pertinent historical facts have been assembled, the Executive Committee will adjudicate the matter. If the proposed meeting is to be held within the geographic area of a Section which is not the initiating sponsor, the formal concurrence of the Section Executive Committee should be sought by the initiating sponsor.

4. The initiating sponsor may invite others to join as cosponsors; the initiating sponsor may not force others to join as cosponsors. The invitees' decision in such matters shall be final.

5. Others may request the initiating sponsor to admit them as cosponsors; the requesting entity may not force cosponsorship on the initiating sponsor. The initiating sponsor's decision in such matters shall be final.

6. In the event two or more IEEE entities mutually agree to join as cosponsors, the agreement must clearly state the division of administrative and financial responsibility among the cosponsors. A memorandum of understanding shall be prepared and copies deposited with the Headquarters staff offices directly concerned.

7. The initiating sponsor shall be responsible for the submittal of all items to Headquarters that require action by the Executive Committee or the General Manager. Cosponsors shall be responsible for keeping their respective Headquarters offices informed.

8. If other organizations assist with the preparation of the technical program but are not otherwise involved with management problems and have no financial responsibility, they shall be listed as technical participants, not as cosponsors.

TRAVEL REIMBURSEMENT

For the benefit of those whose special travel duties qualify for partial reimbursement by the IEEE we repeat below, for their future reference, the mileage formula which establishes the maximum allowable amount for such reimbursement, to wit: 17.5 cents per mile, one way, for 600 miles or less, and 13.5 cents per mile for the remaining one-way distance of the trip. The mileage shall be measured on a straight line (not actual route miles) from origin to destination. Note that the computation is based on the one-way distance from origin to destination, not round-trip distance.

Reimbursement will be made only upon presentation to Headquarters of a travel expense report on a form provided by Headquarters.

Speaking of travel, the interim 1963 policy governing partial reimbursement of travel expenses of Regional Committee members and Student Branch personnel has now been adopted as permanent IEEE policy.

In the case of Regional Committees, this policy provides for partial reimbursement of expenses of



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Donald G. Fink, *General Manager*

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authorized committee members to attend one Regional Committee meeting per year. "Authorized Committee members" is defined as those listed in Bylaw 401.4, namely, the Regional Director, Junior Past Regional Director, two representatives of each Section within the Region, and the Chairman of the Regional Student Activities Committee. Expenses of any additional Committee member, specified in Bylaw 401.5, will be paid only upon the endorsement of the Chairman of the Sections Committee, Walter E. Peterson, upon prior request of the Regional Director.

In the case of Student Branch personnel, this policy provides that upon request by a Regional Committee and justification satisfactory to the Executive Committee, partial reimbursement is permitted for actual and necessary expenses of the Student Branch Counselor, the Student Chairman and the Student paper first prize winner, if any, from any Branch to attend one meeting of a District or Region each year. However, local funds should be used for this purpose if available. The above reimbursement will be made only if the Regional Director notifies the General Manager that local funds are not available to defray all or part of the travel expense.

TWO NEW GROUPS ORGANIZED

Effective January 1, 1965, two new IEEE Groups will start operations. One is the Magnetics Group and the other is the Industry and General Applications Group.

The Magnetics Group has evolved from the former Nonlinear Magnetics Committee and will continue to sponsor Nonlinear Magnetic Conferences. In 1965, the new Group will begin publication of the IEEE Transactions on Magnetics.

The Industry and General Applications Group is an outgrowth of the Industry and General Applications Division which, in turn, resulted from the merger of the Industry Division with the General Applications Division. The present bimonthly publication IEEE Transactions on Applications and Industry will be continued under the sponsorship of the new Group as the IEEE Transactions on Industry and General Applications.

1965 INTERNATIONAL CONVENTION

The program for the 1965 International Convention has been expanded to five days with 80 sessions to ensure adequate program space for all major subjects. The Exhibit will be open for four days as in the past. It is planned to have the Convention Record available at the meeting.

Important deadline dates are: October 16, 1964 - abstracts and summaries due; December 1, 1964 - authors to be notified of acceptance of their papers; January 15, 1965 - complete text of accepted papers, including illustrations and charts, in a form suitable for reproduction, due at IEEE Headquarters.

THE PROCEEDINGS AND SPECTRUM

It is pleasing to report that the number of subscribers to the PROCEEDINGS of the IEEE has surpassed the 55,000 mark.

In this connection, a noteworthy change has been made in editorial organization with the appointment by the Editorial Board of a Board of Consultants for the PROCEEDINGS and a Board of Consultants for SPECTRUM. These consultant boards, each headed by a member of the Editorial Board, will aid in developing editorial guidance and generating editorial material for the respective publications. The Chairman of the PROCEEDINGS Board of Consultants is F. Karl Willenbrock, Associate Dean of Engineering and Applied Physics, Harvard University. The Chairman of the SPECTRUM Board of Consultants is W. K. MacAdam, Vice President, American Telephone and Telegraph Company.

NAME CHANGES

Do you know the meanings of the IEEE terms "District," "Group," and "IEEE Council of Communication Area Groups?" If not, the following descriptions should help.

The term "District" now applies only to a subdivision of a region. At present, there is only one District in existence and that is the Los Angeles District.

Earlier this year, the term "Group" replaced "Professional Technical Group." For example, we now have the IEEE Group on Electron Devices (abbreviated G-ED).

The IEEE Council of Communication Area Groups is the new name for one of the subcommittees of the Groups Committee. This subcommittee consists of a combination of the communication interests - existing groups and the merging Communications Systems Division and Communications Systems Group. The Council is charged with the responsibility of coordinating those activities predominantly of interest only within the communications area.

WHERE TO SUBMIT MANUSCRIPTS

As a result of the merger, it is probable that not all members are familiar with the established procedures and channels for submitting papers for all publications and all meetings. In cases of doubt, it is recommended that the manuscript be addressed to the Managing Editor at IEEE Headquarters, who will then route the paper to the proper individual.

BUTTON--BUTTON

This reminder is probably unnecessary because surely by this time everyone has purchased his membership pin from IEEE Headquarters for \$4.40 (\$5.50 in the case of Fellows).

NO. 2, JANUARY 1965

ELECTRICAL ENGINEERING

BERNARD M. OLIVER ELECTED PRESIDENT OF IEEE — OTHER OFFICERS AND DIRECTORS ANNOUNCED

Dr. Bernard M. Oliver, Vice President of Research and Development, Hewlett-Packard Co., Palo Alto, Calif., has been elected President of IEEE for 1965 it has been announced by the IEEE Board of Directors. Dr. Oliver succeeds Clarence H. Linder, retired General Electric Vice President, who was IEEE President for 1964.

The IEEE Vice Presidents for 1965 are Dr. W. G. Shepherd, Professor and Head of the Electrical Engineering Department of the University of Minnesota, Minneapolis, Minn. and Mr. Hendley Blackmon, Engineering Manager, Association Activities, Westinghouse Electric Corp., Pittsburgh, Pa.

Mr. Haraden Pratt, Consultant, Pompano Beach, Fla., continues in 1965 to hold the office of Secretary. The Treasurer for 1965 is Mr. Seymour Herwald, Vice President of Westinghouse Electric Corp., Pittsburgh, Pa. The Editor is Dr. F. Karl Willenbrock, Associate Dean of Engineering and Applied Physics, Harvard University, Cambridge, Mass.

The complete roster of 1965 Officers and Directors follows. (Those newly elected for 1965 are indicated by an asterisk.)

1965 IEEE BOARD OF DIRECTORS

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*Editor: Dr. F. K. Willenbrock, Associate Dean of Engineering and Applied Physics, Harvard University, Cambridge, Mass.

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Dr. Ernst Weber, President, Polytechnic Institute of Brooklyn, Brooklyn, N. Y.

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Dr. Thomas F. Jones, Jr., President, University of South Carolina, Columbia, S. C.

*Dr. F. H. Knapp, Chief Engineer, Ohio Bell Telephone Co., Cleveland, Ohio

Mr. W. K. MacAdam, Vice President, American Telephone & Telegraph Co., New York, N. Y.

*Mr. W. E. Peterson, President, Automation Development Co., A Division of Barton Instrument Corp., Monterey Park, Calif.

*Mr. T. F. Rogers, Assistant Director for Communications and Electronics, Office of Director of Defense, Research and Engineering, The Pentagon, Washington, D. C.

*Dr. J. B. Russell, Senior Consulting Engineer, General Electric Co., Electronics Lab., Syracuse, N. Y.

*Mr. Mark Shepherd, Jr., Vice President, Texas Instruments Incorporated, Dallas, Texas

Dr. George Sinclair, Professor of Electrical

Engineering, University of Toronto, Toronto, Ontario, Canada; President, Sinclair Radio Laboratories, Ltd., Toronto, Ontario, Canada

Directors Emeritus:

Dr. A. N. Goldsmith, Consultant, New York, N. Y.

Mr. E. B. Robertson, President, Elgin B. Robertson, Inc., Dallas, Texas

Regional Directors:

(Region 1) - Mr. L. C. Holmes, Executive Assistant, Research and Engineering, General Dynamics/Electronics, Rochester, N. Y.

*(Region 2) - Mr. C. D. Morrill, Manager, Avionics and Electronics, Research and Development Division, Goodyear Aircraft Corp., Akron, Ohio

(Region 3) - Dr. Joseph Weil, Dean, College of Engineering, University of Florida, Gainesville, Fla.

*(Region 4) - Mr. F. W. Bush, Engineering Consultant, Legal Division, Allis-Chalmers Manufacturing Co., West Allis, Wis.

(Region 5) - Dr. C. R. Wischmeyer, Professor of Electrical Engineering, Rice University, Houston, Texas

*(Region 6) - Mr. B. S. Angwin, Manager, Western Region, Receiving Tube Dept., General Electric Co., Los Angeles, Calif.

(Region 7) - Mr. J. C. R. Punchard, Director of Development, Research and Development Labs., Northern Electric Company, Ltd., Ottawa, Ontario, Canada

*(Region 8) - Mr. J. D. Lebel, Director General, C. L. E. S., Paris, France

*(Region 9) - Mr. Hanzo Omi, Vice President, Fujitsu Ltd., Tokyo, Japan

IEEE SUPPORT OF THE NATIONAL TELEMETERING CONFERENCE (NTC)

The attention of IEEE members is invited to the following facts. The Institute of Electrical and Electronics Engineers, Inc. (IEEE) joins with the American Institute of Aeronautics and Astronautics (AIAA) and the Instrument Society of America (ISA) in sponsoring the National Telemetering Conference (NTC). This cooperative arrangement goes back to 1950 and at that time involved the predecessors of IEEE, namely, AIEE and IRE. The detailed organization of the annual NTC is the responsibility of an executive committee on which each society is represented. In 1963 this executive committee made arrangements for sponsoring the International Telemetering Conference (ITC-63) in London, with British societies joining only in the technical program. This venture resulted in a very large deficit, which caused the officers of the sponsoring societies to institute more precise checks and balances, or controls, over the decisions and actions of the NTC Executive Committee.

In May 1964 the presidents of the three societies, Dr. Allen E. Lee for ISA, Dr. Clarence H. Linder for IEEE, and Dr. Courtland D. Perkins for AIAA, jointly signed a statement indicating the decision of the three societies to continue to work together through the NTC mechanism. In 1965 the NTC will be held in Houston, Tex., April 13-15, with ISA as the host society. Dr. Thomas A. Perls, Senior Staff Scientist of Lockheed Missiles and Space Company, Houston, will be NTC-65 General Chairman; Richard W. Towle, Manager of Engineering, Advance Technology Laboratories, Mountainview, Calif., will be Program Chairman. Dr. Robert R.

Gilruth, Director of the NASA Manned Spacecraft Center in Houston, has extended a cordial welcome to NTC-65 on behalf of NASA.

In 1966, the NTC will be held in Boston on May 10-12 with IEEE as the host society. Frank A. Gicca of the Raytheon Company, Sudbury, Mass., is the General Chairman; Dr. A. J. Kelley of NASA Electronics Research Center in Cambridge, Mass., is the Program Chairman. In 1967 AIAA will be the host society; the site and dates have not yet been announced.

As a consequence of the determination of the sponsoring societies to control more closely the actions of the NTC executive committee, some individuals who previously had been active in NTC decided to leave the NTC and to form a private organization for the stated purpose of sponsoring conferences of a similar nature. The first of these conferences has been scheduled for May 18-20, 1965, in Washington, D. C., with the title "1965 International Telemetering Conference." It has been brought to the attention of IEEE Headquarters that many IEEE members, particularly in the Washington, D. C., Section, had assumed from the similarity between the printed insignia for ITC-63 and the insignia used for the 1965 International Telemetering Conference, and from the appearance of names of this latter project that formerly appeared in the ITC-63 project, that the three societies were also supporting the May 1965 affair in Washington, D. C. IEEE and the other sponsoring societies of NTC and ITC-63 are in no way connected with the 1965 International Telemetering Conference.

It is hoped that the above statement will clarify the position of IEEE and the other sponsoring societies with respect to the May 1965 Washington meeting.

Donald G. Fink
General Manager IEEE

INTERNATIONAL CONVENTION REMINDER

The 1965 IEEE International Convention will be held in New York City from March 22 to March 26. A brochure describing the Convention is now being mailed to all IEEE members. It contains preliminary information about the technical program, exhibits, and other functions. Included in the brochure is an order blank for Cocktail Party tickets (March 22) and Banquet tickets (March 24). Since both these functions are always well attended, it would be wise to send the completed form to IEEE Headquarters promptly to avoid being disappointed. Also included in the brochure is a Hotel Reservation form that should also be mailed to Headquarters as soon as possible.

Complete technical program information with abstracts of all papers to be presented will appear in the March issue of IEEE SPECTRUM.

USE YOUR MEMBERSHIP NUMBER

It would greatly assist the staff at IEEE Headquarters if all members would use their membership

numbers when corresponding with IEEE Headquarters. Use of the number speeds acknowledgment and servicing of requests. The membership number appears on all mailing labels used for addressing IEEE publications.

EXPIRATION DATES FOR GROUP MEMBERSHIP

When an IEEE member joins his first IEEE Group and pays the necessary Group fee, this fee applies for one full year from the date received. After this first year has expired, the member will then be billed for membership in that Group on a prorated basis to a June expiration date.

NEW IEEE MAILING ADDRESS

As this issue of ELECTRICAL ENGINEERING is being prepared, the IEEE Headquarters' staff at 79th Street is being moved to the 15th and 16th floors of the United Engineering Center at 47th Street. Therefore, all mail to IEEE Headquarters should now be sent to the following address:

345 East 47th Street
New York, N. Y. 10017

DEFICIT FINANCING OF SPECIFIC PROJECTS

If a continuing responsible entity, such as a Group or Section organizes a series of conferences, symposia, or other activities for which individual budgets are required, the total of these activities should be on a self-sustaining basis. The Group, or Section, for sufficient reasons may elect to budget a particular activity on a deficit basis. Such a deficit budget will be approved if properly related to the total fiscal picture.

"INTERNATIONAL" IN CONFERENCE TITLES

Submittals for future conferences should state what name will be used for the conference. In the event the word "international" is part of the conference title, there must be a clear and sufficient justification for the Executive Committee to approve its use.

POLICY ON INDUSTRIAL SEMINARS

No single company concerned with competitive products or services may organize and solely participate in a session at an IEEE sponsored conference. This policy applies to sessions or seminars held in conjunction with IEEE conferences as well as sessions held as an integral part of an IEEE conference.

CONTACTS WITH INTERNAL REVENUE SERVICE

All inquiries or questionnaires from the Internal Revenue Service pertaining to any facet of IEEE business should be referred to the IEEE General Manager. Any inquiries with respect to IEEE's tax status or its pending tax case which are received from other organizations should similarly be directed to the General Manager for reply.



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Donald G. Fink, *General Manager*

ELECTRONIC DATA PROCESSING AT THE IEEE

After several months of work, carpenters, electricians, and other workmen have completed the preparation of a portion of the Exhibition Hall at the United Engineering Center for IEEE's new electronic data-processing facility. An air-conditioned room to house the new computer, a special elevator to the basement for transporting punched cards and such things as mailing lists, raised flooring to accommodate the many computer cables, and other necessary facilities have been installed. And the computer—a General Electric 225—and its associated peripheral equipment have been delivered.

The rental of the new data-processing equipment was considered to be a necessary step toward achieving maximum efficiency in the handling of the many routine jobs vital to the everyday business of IEEE.

In selecting the equipment, IEEE had these prime objectives in mind:

1. To fulfill efficiently the current demands for services to the membership, Groups, Regions, Sections, and other IEEE organizational units.

2. To provide flexibility in expanding these services to keep pace with the steady growth of a society that not only is showing a constant increase in membership but also is extending its operations horizontally through the formation of new Groups and Subgroups.

3. To produce these services at a minimum cost. Preliminary studies indicate that when the new system is in full operation, existing and expanded services can be furnished, and within a few years after installation, a substantial economic savings to IEEE will accrue.

At the present time, a small computer and addressograph equipment are used to maintain current mailing lists and the fiscal records of IEEE members and subscribers. With the merger of AIEE and IRE, it was realized that this equipment was not adequate to fulfill properly the needs of the world's largest technical engineering society.

Following a comprehensive study of the highly diversified and complicated operations of the IEEE, the installation of new data-processing equipment was recommended and its rental authorized.

Over a period of many months a complete review of the entire operation has been undertaken and plans have been developed for the very complex conversion of existing records into the new computer.

Plans are under way to incorporate the following ten major areas into the new computer during the initial phase of conversion:

1. Membership dues billing and accounting
2. Group fee billing and accounting

3. Subscription billing and accounting
4. Membership statistics
5. Membership history records
6. Committee membership biographies
7. Mailing of all IEEE publications
8. Mailings for all organizational units of IEEE
9. Expansion of the system to accommodate additional technical activities
10. Members' area-of-interest data for information retrieval

The new computer facility is a sophisticated system for fast, efficient data handling. Membership information is stored on 2400-foot-long magnetic tapes, which have a storage capacity of 556 bits per inch. With a maximum of 400 characters of information per member (and allowing the usual inter-record gap), this storage capacity means that records for a member will be contained on about one inch of tape. The total number of tapes required to cover the current IEEE membership will be somewhere between eight and ten.

Information can be retrieved from the system with great speed. The high-speed printer will operate at 900 lines per minute and can print three columns of labels concurrently; thus, for example, four-line mailing labels can be run off at a rate of about 700 per minute. The new system is capable of gathering 16 different mailing lists—and has a potential capability of gathering 60 lists—simultaneously. Since IEEE now handles about 66 different mailings per week, improvements in speed and efficiency are desirable.

The IEEE staff is making every effort to insure a smooth conversion of records from the old system to the new while still fulfilling simultaneously the day-by-day demands for services that are necessary to the general conduct of IEEE operations. It has been determined that it will take until March 1965 to complete this major conversion task. The necessity for maintaining two parallel operations, coincident with the annual membership dues billing and the move from 79th Street to 47th Street, makes the job just that much more difficult.

We ask all of the organizational units of the IEEE—Regions, Groups, Sections, Subsections, Chapters, Committees, etc.—to cooperate with the IEEE staff during this difficult period by restricting, wherever possible, all requests for IEEE Headquarters' services to those that are necessary for normal activities. There may be some interruptions in fulfilling these requests for services and there may be some inaccuracies that occur in particular services during this conversion period. But we do not anticipate such problems. Should they occur, we ask for your patience and understanding.

The IEEE staff is looking forward eagerly to the use of the new data-processing equipment in the manner described earlier. We know that it will streamline our daily operations. Moreover, we are convinced that the new system will make it possible in the future to increase our services to the entire IEEE membership.

POLICY STATEMENT ON THE INTERNAL USE & CONTROL OF ALL IEEE LISTS

1. IEEE membership lists may be assembled on a geographical basis, (e.g. Sections or Regions), technical basis, (e.g. Groups), or combinations of these two. A separate policy statement covers requests for lists by outside organizations.

2. The Executive Committee may delegate responsibility to the General Manager for controlling the use of IEEE membership lists. The following delegations of responsibility may be altered only by action of the Executive Committee, except that the General Manager may authorize another to act on his behalf. Blanket approvals may be given for classes of repetitive requests.

3. Lists prepared on cards or in strip list form may be requested by any elected or appointed officer of the IEEE or its subordinate units defined as Section, Chapter, Branch, District, Region, Group, General Committee of TAB, TAB, Editorial Board, Awards Board, Standing Committee of Board or Executive Committee, provided:

3.1 The lists will be used only for specific administrative purposes of the IEEE or its subordinate units (including recruitment of members, chapter organization, etc.);

3.2 The General Manager (or his authorized staff representative) approves.

4. Geographical lists, in label form, including geographical technical lists, may be requested by any elected or appointed officer having cognizance of the geographical area covered by the requested lists. The General Manager (or his authorized staff representative) shall verify the validity of the request before processing it. Example: A Section Secretary may order any list or combination of lists involving only members of the Section. These lists may not subsequently be transferred to any outside organization (unless all provisions of the applicable policy on outside usage have been complied with fully, and only upon written approval of the General Manager).

5. Technical lists in label form may be either the highly specific lists of Group members or the more general lists based on the IEEE survey of interests.

5.1 Each Group list may be used freely by that Group for its own purposes, as the Group Chairman or his designated alternate may request, except that a Group may not procure a list and subsequently transfer it to an outside organization (unless all the provisions of the applicable policy on outside usage have been complied with fully, and the General Manager approves the transfer, in writing).

5.2 A Group list, or any part thereof, may be released to another entity only with the approval of the General Manager and the Group Chairman, or their designated alternates.

5.3 The portion of the IEEE membership interest survey list that is directly related to the technical field of a Group may be utilized by the Group in accordance with Section 5.1.

5.4 Use of the IEEE membership interest survey list, other than as provided in Sections 4 and 5.2 shall be administered solely by the General Manager, or in his absence by his authorized deputy. The control specified by Sections 5.1, 5.2, and 5.3 shall be exercised by the General Manager, or his authorized representative.

6. The internal IEEE use of lists assembled on a basis other than geographical and/or technical shall be under the sole administrative control of the General Manager, or in his absence, his deputy. Example: A list assembled on the basis of grade of membership, or on the basis of service in particular committees, whether to be used for administrative or mailing purposes, shall require the approval of the General Manager for its preparation and distribution.

7. Nothing in this policy shall be construed as limiting the use of IEEE membership lists by the IEEE headquarters staff in the fulfillment of approved staff housekeeping responsibilities for IEEE.

POLICY STATEMENT ON IEEE MEMBERSHIP LISTS REQUESTED BY OUTSIDE ORGANIZATIONS

1. IEEE membership lists may be assembled on a geographical basis (e.g. Sections or Regions), technical basis, (e.g. Groups), or combinations of these two. A separate policy statement covers the internal control of these lists.

2. The entire IEEE membership list in any form may be released to an outside entity only with the specific approval of the Executive Committee on each such request.

3. Requests for labels by institutions and organizations with scientific, technical, and educational goals are defined in Section 501(c)(3) of the 1964 IRS code may be honored provided:

3.1 The total number of names requested by an outside entity shall not exceed 20% of the total IEEE membership except students;

3.2 If feasible, mailings shall be handled through the facilities at IEEE headquarters. If not feasible, the requesting entity shall have pledged the list will be used only for mailing purposes and that procedures, satisfactory to the IEEE General Manager, will safeguard the sanctity of the list;

3.3 Responsible IEEE officers or staff shall have reviewed each case and recommended approval to the General Manager of his deputy;

3.4 Direct IEEE cost plus 25% overhead shall be paid by the requesting entity, unless specific approval has been given by appropriate author-

ity for IEEE to absorb all or a portion of such costs.

4. Requests by institutions and organizations other than those covered by Section 3, above, shall be referred to the General Manager. If the Executive Committee has previously acted on an identical type of request, the General Manager may at his discretion follow this example, acting on behalf of the Executive Committee. For all other requests, the General Manager shall seek guidance from the Executive Committee before acting.

5. If IEEE is a full co-sponsor of an activity with outside organizations, requests for membership lists in support of that activity shall be treated as an internal IEEE request. If IEEE is a technical participant (or cooperating society) in an activity, requests for membership lists shall be treated in accordance with Section 3 or 4 above, whichever is applicable to the sponsor of the activity.

HOW TO NOMINATE CANDIDATES FOR IEEE AWARDS, MEDALS, SCHOLARSHIPS, PRIZES, AND FELLOWS

Who May Nominate? All members of the IEEE are eligible to nominate candidates for Awards, Medals, Scholarships, and Prizes; and to support such nominations by submitting forms and relevant communications to the Secretary of the Awards Board at IEEE Headquarters. (The only exceptions are members of the Board of Directors, the Awards Board and the Headquarters' staff.)

Who Are Eligible for Nomination? In some cases, as indicated in the following descriptions of the awards, nominees must be members of IEEE. Other awards are open to all regardless of membership. (The only exceptions are members of the Board of Directors, the Awards Board and the Headquarters' staff.)

Purpose of Awards. The IEEE Awards serve several purposes:

1. An expression of appreciation for outstanding contributions to the art and science of electrical and electronics engineering.
2. An incentive to youth to emulate excellence.
3. A personalized presentation to the public of the achievements of the profession and its members.
4. The identification of IEEE with these achievements.

The Importance of Member Participation. The values in making these awards, in which all members' share, can be realized only to the extent that the recipients consistently represent the most worthy available candidates.

All IEEE Awards are granted by the Board of Directors on recommendation of the Awards Board. The Awards Board, in turn, is advised by commit-

tees with special competence to evaluate the records, achievements, and contributions of the candidates.

The IEEE Bylaws prohibit the Board of Directors, the members of the Awards Board and the Headquarters' staff from initiating nominations. They are limited to the evaluation and judging of the relative merits of the candidates submitted to them. It is therefore the duty and responsibility of every member of IEEE to give thought to this matter and to bring forward outstanding candidates of whose work and contributions he has personal and intimate knowledge. It is a serious mistake to assume that "they" - meaning the Awards Board, or the IEEE leadership in general - "know all about him." The enormous scope of present technology and the large membership of IEEE precludes such knowledge. Beside, remember, "they" are not, in most cases, permitted to initiate nominations. It is up to "you."

How to Make a Nomination. The procedure in proposing candidates for the various classes of Awards, Medals, Prizes, and Scholarships varies somewhat. This will be apparent from the forms and the descriptions of the award and the qualifications by which candidates will be judged. However, these are general considerations applicable to all. These are as follows:

1. Consider carefully the qualifications for the award as described here.
2. Secure the appropriate form or forms by request to the Secretary, Awards Board, at IEEE Headquarters.
3. On these forms, supply all of the relevant and pertinent information requested.
4. Supplement the nominating form, if necessary, with additional details explaining your evaluation of the nominee's contribution, and giving examples of achievements pertinent to the field of the award.

Where the contribution includes work of others besides the nominee, make clear just what part is ascribed to him. When listing patents and papers published, their significance and value in application should be brought out.

5. Secure at least two supporting letters from members well acquainted with the record and contributions of the candidate. Supporting letters are of greatest value when confined to the personal knowledge of the writer and concentrated upon the qualifications pertinent to the award.
6. The nominating form and supporting letters should make the case for the nominee complete and well documented. The Committees and Boards will judge the candidates on the records submitted to them. They will not be able to do any research to verify unsupported claims.

7. Send the complete form, or forms, with supporting letters to the Secretary of the Awards Board before April 1, except in the case of scholar-

ships and paper prizes for which later deadlines are specified in the descriptive statements.

The following brief summary of awards and prizes may be used as a guide for requesting nominating forms.

Medal of Honor. This medal is awarded only when exceptional requirements are met, usually not each year. It is given for an exceptional contribution to the field of science and technology. Its purposes are scientific, literary, and educational, directed toward the advancement of the theory and practice of electrical engineering, electronics, radio, allied branches of engineering, or the related arts and sciences.

Major Awards. Recipients of the following major awards should be members of IEEE, unless exception is made by the Board of Directors.

1. Edison Medal. This is the principal annual award for a career of meritorious achievement in electrical science, electrical engineering, or the electrical arts. A gold medal and certificate are awarded.

2. Founders Award. This is for outstanding service to the profession and to IEEE. Qualifications now under revision will be announced later in SPECTRUM. A bronze medal and certificate are awarded.

3. Lamme Medal. This is for meritorious achievement in the development of electrical or electronic apparatus or systems. A gold medal and certificate are awarded.

4. IEEE Education Medal. This is awarded for outstanding contributions to teaching and the profession through research, engineering achievements, technical papers, and participation in the education activities of professional societies. A bronze medal, certificate, and \$500 are awarded.

Field Awards. These are given annually in several fields of science and technology and in particular classes of service. Candidates should be members of IEEE.

1. Harry Diamond Memorial Prize Award. This is given for outstanding technical contributions in the government service. A certificate and \$500 are awarded.

2. William M. Habirshaw Award. This is presented for outstanding contributions to the field of transmission and distribution of electric power. A bronze medal, a certificate, and \$500 are awarded.

3. Mervin J. Kelly Award. This is given for outstanding contributions in the field of telecommunication. A bronze medal, certificate, and \$1000 are awarded.

4. Morris E. Leeds Award. This is for outstanding contributions to the field of electrical mea-

surement. An illuminated certificate and \$500 are presented.

5. Morris N. Liebmann Award. This is presented for the most important contribution to the radio art recognized during the preceding three calendar years. A certificate and \$1500 are awarded.

6. David Sarnoff Award. This is given for outstanding contributions in the field of electronics. A gold medal and certificate are awarded.

7. Vladimir K. Zworykin Award. This is presented for the most important technical contribution in the field of electronic television. A certificate and \$500 are awarded.

Prize Paper Awards. These are given annually. The Awards Board recommends that nominations be submitted by the specific Groups or Divisions. Supporting letters are not required.

1. W. R. G. Baker Prize Award. This is given for the best paper originating in any of the IEEE Transactions. A certificate and \$1000 are awarded.

2. Browder J. Thompson Award. This is presented for the best paper in any IEEE publication by an author or authors under 30 years of age. A certificate and \$1000 are awarded.

3. IEEE National Student Prize Paper Award. This is given for the best paper by an IEEE Student member or members, selected from the winners of Regional Prize Papers Contests. A certificate and \$100 (including transportation to the International Meeting in New York) are awarded.

Final date for the receipt of nominations for Prize Paper Awards at Headquarters is September 15.

Scholarship Awards. These are given annually. Recommendations for the scholarships are made by the Scholarship Awards Committee to the Awards Board.

1. Charles LeGeyt Fortescue Scholarship. This is given to a student of electrical engineering who has received a degree from a recognized college or university. A scholarship in the amount of \$2500 for post-graduate work is awarded.

Final date for the receipt of nominations at Headquarters is January 15.

2. Volta Fellowship. This is given to an Italian citizen with degree in electrical engineering, not over 30 years of age, in the amount of \$2000 for one year of graduate study in the United States.

IEEE Fellows. April 30 has been established as the deadline date for completed nominations of candidates for IEEE Fellow Grade.

The IEEE Bylaws define the qualifications for this grade as follows: "105.2- FELLOW: The grade of Fellow is one of unusual professional distinction and

shall be conferred only by invitation of the Board of Directors upon a person of outstanding and extraordinary qualifications and experience in the fields of electrical engineering, electronics, radio, allied branches of engineering or the related arts and sciences, who meets the requirements for Senior Member as stated in these Bylaws and who has been a member in any grade for a period of seven years preceding the year of nomination, except that the seven-year provision in any individual case may be waived for cause by the Board of Directors."

Candidates previously considered, upon whom no favorable action was taken, will not be reconsidered unless a new completed FC-1 form and five new completed Fellow Grade reference forms are received by the Fellow Committee on or after April 30.

A proposer of a Fellow Grade Nomination must carefully evaluate the qualifications of any proposed candidate, submitting to the Fellow Committee ONLY one who, in his opinion, is unquestionably qualified to be elevated to this grade. In the past, many of those nominated for the Fellow Grade did not meet the necessary qualifications.

Nomination forms are available upon request from the IEEE Staff Secretary, Fellow Committee, IEEE Headquarters, 345 East 47 Street, New York, N. Y. 10017.

APPOINTMENTS TO TECHNICAL COMMITTEES

Responsibility for appointments to technical committees rests with the respective Groups. Various procedures have evolved for securing nominations through Group chapters and the membership at large. In all cases it is important that a nomination be accompanied by a biographical statement supporting the qualifications of the nominee plus a statement that the nominee has informally indicated an interest and willingness to serve and that his home institution will make him available and will support his participation.

Most Groups operate on a July 1 to June 30 administrative year. Hence, nominations generally should be received on or before March 1.

SALE PRICE ANNOUNCED FOR 79th STREET PROPERTY

In the last issue of ELECTRICAL ENGINEERING, it was announced that IEEE's 79th Street property in New York City had been sold. At the time this news item was received for publication, legal counsel had not given clearance for the release of the sale price, which is \$1 650 000. This figure exceeds the appraised values—by \$325 000 in the case of an appraisal by D. S. Macdonald of Douglas Gibbons-Hollyday & Ives, Inc., and by \$50 000 in the case of an appraisal by S. E. Kazdin of Cushman & Wakefield, Inc.

IEEE POLICY ON CONFERENCES

In order to avoid conflict of meetings on overlap-

ping subjects, the Executive Committee has approved the following policy on IEEE conferences.

"All conferences planned with the intent of drawing substantial attendance from outside the geographical area of a single section and all conferences for which exhibits are planned must be approved by the Executive Committee. Sound financial planning, benefit to the membership (and to exhibitors, if any) and absence of conflict with other meetings shall be criteria for approval. Cooperative participation by Sections and Groups is encouraged."

CORRECTION NOTICE

In the last issue of ELECTRICAL ENGINEERING, there was an error in the item, "Travel Reimbursement." In the fourth paragraph of the story as printed it was stated incorrectly that Authorized Committee members included two representatives of each Section within the Region. The statement should have read "one representative of each Section within the Region."

NEW PROVISIONAL PROCEDURES FOR HANDLING SECTION-SPONSORED MEETINGS

New provisional procedures apply to any meeting, lecture series, or similar activity, sponsored or co-sponsored by a Section (or a Chapter or combination of Chapters in the Section) whether of general or specific technical coverage, provided:

1. The meeting is designed to benefit and to attract attendees from residents in the Section and contiguous Sections (in some cases the geographical area concerned may encompass several states).
2. The financial plan for the activity is contained within the approved Section budget.

The new procedures are as follows:

1. The date of the activity may be scheduled by the Section to suit its convenience. Approval by the IEEE Executive Committee is not necessary. Conversely, the activity will not be listed in the official IEEE calendar.

2. The budget for the activity should be approved by the Section Executive Committee. The budget need not be sent to IEEE Headquarters for approval by the General Manager unless exhibits are planned.

3. It is appropriate that announcements and a call for papers be published in the Section Bulletin (and the bulletins of contiguous Sections). Such information is not deemed to be newsworthy for IEEE SPECTRUM (and IEEE PROCEEDINGS) readers and will not be published. On the other hand, if a Chapter is involved, the parent Group may elect to carry an announcement in a Group publication.

4. In accordance with the established policies and procedures concerning mailing lists, the sponsoring Section may utilize lists for all or for any components of the IEEE members residing in the Section and contiguous Sections.