

ELECTRICAL ENGINEERING®

"WHAT YOU DO SHOUTS SO LOUD THAT I CAN'T HEAR WHAT YOU SAY." (Thanks, Lee Nicol, for the Golden Text.)

What IEEE has done and is doing is pretty much a matter of what, collectively, the 3,500 recipients of Electrical Engineering" (E. E.) do. If what they say occasionally conveys noisy overtones of pride, let that be for the encouragement of one another, busy as each is, building an Institute which will do more things for more members.

"THE STORY OF OUR LIFE." Major technology has three stages: 1) Where you do what you used to do only you do it better; 2) Where you do new things you never did before; 3) Where you change your lives to match the new capability that technology gives you. —Reporter's transcript, Dr. Eugene G. Fubini, panelist, Highlight Session on "Expanding the Citizen's World," March Convention 1969.

AN OUTLOOK FOR OUR LIVES. The future of electronics will hardly be determined by electronics at all. A McLuhan "all-at-once world" has fired the aspirations of less-developed peoples, to whom has been revealed, through technology, the affluence of the West. The future of electronics may be importantly determined by whether the aspirations of the underprivileged will allow us—without basic and fundamental changes in our attitudes toward them—to survive. —Reporter's transcript, Dr. J. H. Hollomon, *ibid*.

(Note: An article is scheduled for July Spectrum covering all Highlight Session panelists' remarks in detail.)

NEEDLES AND PRODS

ONLY A FEW JUNE DAYS remain in which to complete plans for the July 1 changes of command in the Sections, Subsections, and Chapters, and to perfect plans for resumption of activities in the Autumn. On account of vacations, people are hard to reach in July, harder in August!

All but 12 of IEEE's 199 Sections reorganize at this time of year; approximately half, each year, see less-experienced hands taking over from outgoing veterans. It is the month to plan for a smooth transition and for objective reexamination of Section units' goals.

Of particular moment is completion of appointments of all Section and Chapter officers and operating committee chairmen and members; obtaining firm acceptances of appointments; and reporting names to the IEEE staff (per questionnaire mailed in May) for inclusion in the September reissue of the Organization Roster, compilation of which has already begun. (Copy of questionnaire, Emily Sirjane.)

E. E. CIRCULATION LIST, effective with Aug. issue, will take July changes into account only if such changes have been reported by mid-July, when the envelopes are prepared.

Incumbents: Kindly pass August E. E.

to your successor if you are leaving office. He will need it in his business.

Section officers retiring without portfolio: By your simple request, reminding us of your changed status, we'll send E. E. to you for another year as a token of thanks for responsible service and continuing interest. (Cf. E. E. Dec., p. 7.) (Requests, Audrey van Dort)

TOP-SIDE DEVELOPMENTS

HEADLINE STATUS, this issue, belongs to news of the establishment in IEEE's Bylaws of the Regional Activities Board (RAB). It will be recalled (E. E. Aug. '68, p. 3; Feb. '69, p. 3) that Regional Directors for some time have been meeting informally with the elected Vice President (then also chairman of the Sections Committee). RAB is an outgrowth of that collaboration. Its creation is also indicative of a desire on the part of the IEEE Board of Directors (BofD) to decentralize: certain responsibilities formerly discharged by BofD, directly and through its Executive Committee (ExecCom), have been allocated to RAB. See following item, Bylaw Changes, for details.

For long-range significance, the RAB departure shares interest with a movement to tie the technical activities of IEEE, under the Technical Activities Board (TAB), organically into the BofD structure. BofD in March endorsed the principle of increasing the representation of technical activities on BofD through member-election of Technical Directors with responsibility for specified areas of Group activities. TAB and ExecCom are now preparing a definitive proposal, which may reach BofD at Ottawa in August. See green insert, p. 4H of this issue, and subsequently, for developments.

BYLAW CHANGES by January and March BofD actions are contained in a new Mar. 27, '69 revision of the Bylaws being mailed currently to the usual re-

cipients; it supersedes the version of Aug. 19, '68. (Copy, Veronica Lewis)

January changes were referred to topically in E. E. Feb., p. 4. March changes include the following, references being to Bylaws as now renumbered:

Dissolution of the Sections Committee (old 309.12). . . (304.2; 308) Establishment of RAB. . . Under BofD (308.1), RAB takes over ExecCom's former responsibilities for Sections (402.4; 402.5; 402.8; 402.12) for Subsections (404.1.d; 404.2), for joint-Sectional activities (402.13), and for Councils (403.2); but ExecCom from time to time may assign RAB functions and studies (308.2). . . RAB is given BofD's former power to dissolve a Section (402.3). . . RAB consists of all Regional Directors (308.1); with the elected Vice President as chairman (308.1; 302.5), a Corporate Officer (303.3), and ExecCom Coordinator (308.3); through his IEEE office, RAB is aligned with Publications Board and TAB (302.5; 303.3). . . (308.2) RAB's responsibilities are defined; they include the former Sections Committee's purview (308.2.1; 308.2.2), plus allocation of IEEE personnel and finances to support the Regions and their units (308.2.3).

Note: At its first meeting, Mar. 25, RAB took initial steps to absorb the former functions and liaisons of the Sections Committee, and to organize the budgeting and financial aspects of RAB.

Miscellaneous Bylaw Changes: (Old 308.4 (3), (5) deleted) TAB's New Technical & Scientific Activities Committee discontinued. . . (401.5) A Section may no longer furnish voting members to a Regional Committee in addition to the Section Chairman. . . (Old 302.11; new 503) Publication of IEEE Standards hereafter is subject to approval of TAB Operating Committee (TAB OpCom) instead of approval of ExecCom. . . (304.14 - new) Appointment and duties of the Employee Benefits Coordination

E. E. is sent without cost beyond dues to officers of IEEE Groups, Committees, Boards, Councils, Conferences, Regions, Sections, Subsections, Chapters, and Branches of IEEE. Second-Class postage paid at New York, N. Y.

Committee; pertains to the salaried staff and is not to be listed in Bylaw 304 as a Standing Committee.

NOMINATIONS FOR HIGH OFFICE. BofD in March approved officer-nominees for places on the ballot in September: For President, 1970, John V. N. Granger, for the Vice President elected by voting members, James H. Mulligan, Jr.; for two Delegates/Directors-at-Large, these four names: Joseph K. Dillard, Edward W. Herold, Samuel Levine, Glen A. Richardson.

To those candidates have now been added the nominees for Regional Directors of odd-numbered Regions 1 to 9. All names will be published in June Spectrum, together with a required notice as to any nominations-by-petition due noon, Aug. 8. (Constitution, Art. XII, Sec. 4; Bylaw 311.5.)

Ballots this year for first time will be accompanied by photos of candidates and employment information, as well as IEEE record.

"NEW BLOOD IN BofD." Spurred on by the President, BofD is attempting "systematic ways" of finding capable individuals to serve on BofD at an early age, both as a stimulus to IEEE and as an aid to the member's career. Directors David and Whinnery will study "techniques of locating individuals."

In 1965, ExecCom used the New Blood theme in its formulation of "Guidelines for Selection of Nominees to Standing Committees and Boards," which has accompanied the IEEE Secretary's annual (November) request, since that time, for elected officers and Directors, thus: "Electrical and electronics engineering is a fast-moving profession, and the Institute needs a continual infusion of new blood. Much of this must come from younger men." This theme is also basic to Bylaws 304.4, 304.5 provision for annual turnover in committee personnel.

It is suggested that, if any E. E. reader knows of a member "capable of serving on BofD at an early age," he tell Director David or Whinnery, care IEEE,

how he found him—as an aid to the study.

MEMBERSHIP SOLICITATION. April Spectrum, p. 86, bore an article giving results of "Operation G-I-T 1968," briefed in E. E. Feb., pp. 5-6. The article seeks all members' aid in getting new members. Tear-sheet Business Reply (U.S.) mailing cards were inserted (pp. 1A, 153). Mail and phone response to date shows the appeal is being heeded.

Where does membership stand? Last year-end at 162,368, an all-time high. At the end of February '69 it was 163,166. But President Willenbrock reminded ExecCom in March that "IEEE's membership has remained substantially 'flat;' . . . It does not incorporate sufficiently large portions of electrical and electronics engineers on a worldwide basis."

Since IEEE had 153,978 members at the end of 1964, its growth has been less than 5,5% in 4 years. March ExecCom took steps to see what could be done 1) to enhance the public image of a) engineers in general, b) electrical/electronics engineers, and c) IEEE; 2) to influence minorities (women being an example) to enter our field when present involvements are below potentialities; 3) to cope with the fact that after a decade of effort IEEE covers only a small percentage of engineers active in our field overseas (although our growth rate is higher outside U.S. than within).

These studies may eventually result in effective "support measures" behind the man-to-man confrontation of members with non-members in the hustings—in Groups, at conferences, in the Sections, Subsections, Chapters, in offices and laboratories, in college Branches, even in the high schools. Some day it may be possible to beat the bushes by remote control. . . Not yet.

GROUPS, SECTIONS, AND CHAPTERS. How to improve their relationship has engaged the attention of many of IEEE's working members—none more than the successive elected Vice Presidents. Lynn Holmes, who held that office in 1968, was asked by the IEEE Group on Industry &

General Applications (IGA) to prepare an article, recently published. It came under E. E. 's roving eye, and now, with consent of Mr. Holmes and IGA Transactions editor Don Brereton, it is printed as white insert, pp. 4C to 4E. Please observe editor's notation below title.

IEEE ANNUAL REPORTS FOR 1968 are spread on the record in June Spectrum. President Willenbrock has prepared an introduction, including some early 1969 material, to the 1968 Secretary's, Treasurer's, and Auditors' reports. Informative to all members. Of action and reference value to E. E. 's readers.

LIFE MEMBER FUND COMMITTEE. R. W. Sears has additionally been made ExecCom Coordinator of this activity. (Revises tabulation, E. E. Feb., p. 8.)

"EMMY AWARDS", YET! IEEE's Publishing Services, in behalf of the electronics publishing industry, has established an IEEE Annual Award for Excellence in Advertising. From 63 entries "for the most outstanding campaigns that appeared in any electronics publications during 1968," eight judges (of whom the chairman of IEEE's Awards Board was the only IEEE representative) made two awards in each of 4 categories (systems, product, recruitment, and corporate-or-capabilities). Duplicate awards were made to clients and agencies at ceremonies at the March Convention. Initial success establishes the contest as an annual fixture.

Our announcement read: "As the largest technical society in the world, and the publisher of 58 periodicals and other publications, the IEEE wishes to give recognition through these awards to the advertising community, which has contributed so significantly to the dynamics of the electronics industry." The competitive aspects may raise the sights of agencies and publishers alike, so that in time, the award may prove "a real Emmy."

IEEE STUDENT JOURNAL fits its readership so perfectly at the colleges, and runs so far ahead of the other societies' mag-

azines, that it is hard to restrain enthusiasm. But, if "imitation is the sincerest form of flattery," we may be about to get some. The aeronautical and other out-in-front people are beating at our bastion, asking us to share the secrets of our magic.

NEWS OF BOARDS AND COMMITTEES

MONTHLY TAPE CASSETTES—are they in our future? To find out, Educational Activities Board (EAB) is mailing a survey questionnaire to a statistical sampling of 4,000 members to probe the marketability of an IEEE monthly tape playback cassette service, designed to fill the gap between the amount of technical material being printed and readers' ability to read it.

Use of a similar oral tape service by practicing MDs was noted in E. E. Aug. '68, p. 7. In the IEEE embodiment, proponents visualize references each month to a selection of technological developments, encapsulated; to significant articles currently appearing in the literature; highlights of meetings; interviews with men prominent in the profession. (Inquiries, Jack Kinn)

THE FINANCE COMMITTEE is forming subcommittees expert in 1) budgeting, 2) investments.

A working arrangement is planned between the Finance Committee and finance-and-budget committees of TAB, RAB, EAB, and Publications Board—geared promptly to reflect financial implications of plans and changes instituted by the boards. Culmination would be a special IEEE budgeting committee.

The investment subcommittee would meet with IEEE's Investment Counselor periodically, and review investment results and philosophies to determine that the objectives of the Institute are being met.

AWARDS BOARD is in the middle of its every-tenth-year review. (Bylaw 305.1, para.4) of IEEE's portfolio of honors. Its conclusions are due to come before BofD in August.



THE INTERPRETATIVE ROLE OF SECTION PUBLICATIONS

By Donald S. Brereton, Vice Chairman
IEEE Internal Communications Committee

Excerpts from a Talk to
Section Publication Editors, March 24, 1969

The Institute has never been in a position where it more greatly needs the function and services of the Section publications. There are many new concepts and activities that should be communicated to the membership of your Sections.

A cursory examination of the Section newsletters and magazines indicates that, by neglecting to tell about the always important programs of the Institute, they almost over-emphasize the local news.

It is the distinct, unique, opportunity of Section publications to provide the "special local touch" to Institute news. SPECTRUM, the "core membership publication" reaches all members, worldwide, but it cannot provide Section interpretation, adaptation, or emphasis to Institute information. The management newsletter on IEEE operations, ELECTRICAL ENGINEERING, reaches but few persons in each Section, and even to them it cannot provide local Section implementation of Institute policies and programs. PROCEEDINGS OF THE IEEE and the Groups' TRANSACTIONS and JOURNALS have, collectively, wide distributions, but they can hardly reflect a concentrated effort concerning local technical interests and accomplishments.

Section publications, to the contrary, are in a position to discern and communicate local import of Institute activities, news, conferences, technical programs, educational opportunities, honors, and

happenings in other key areas. Because of all Institute publications, those of the Sections are closest to the membership, it has seemed to me they are the only ones capable of providing, from time to time, increased knowledge of Institute policies, and of specifically relating them to the local environment.

In way of added emphasis, I restate my opinion that the Section publications have the opportunity to do the most effective job in communicating the Institute to the "grass roots" membership. Can you not project the live-wire planning now underway as it unfolds in "E. E."? Can't you convey to your readers an understanding of the Institute's unusual responsiveness to its organizational needs, which will enhance and improve the effectiveness of the Institute to better serve its membership? Are you bringing to bear all communication channels and media to make solid the communications bridge? Assuming that your Section publications are already readable, appropriate, timely, and related to the individual member and reader, can you not additionally employ your columns to reinforce, in the consciousness of readers, the values of membership in the Institute?

We have a great Institute
We need to talk about it By doing so, it can, and will, constantly improve YOU can significantly improve our Institute communications.

OBTAINING ADVERTISING FOR SECTION PUBLICATIONS

Extracts of Talk to Section Publication Editors
by William R. Saunders, IEEE Advertising Director
March 24, 1969

Prospects for placing advertising in your Section publication react to sales efforts the same as ad prospects for SPECTRUM and the PROCEEDINGS. The most friendly of them will try to thwart, foil, baffle, circumvent, and outwit you and me both.

They have to. They are out to get more for their dollars than ever. In the past, many of the companies you have solicited have felt that buying your space was like patronizing a printed program for a social function—a "necessary evil", unconnected with accrued values.

Today that is changed. Companies who place advertising, even in media of restricted geographical circulation like yours, look for a return of their costs and a larger share of the market. They are placing 8 to 12% less volume than a year ago and have become more choosy as to its placement.

Your prospects will consider you and your publication in a more professional light, and increase your opportunities for sales of space if you have ready answers to questions based, not so much on your thoughts, as upon the thinking of your best prospects. Take some time with them, asking what kind of information would be of value to them in making a judgment of your publication. Of course they will want to know what your circulation is and what territory it covers—how it is broken down by industries.

In addition, I am sure, they will want to know a lot about the typical individual in your readership: What is his education level? His income? The size and sales volume of his company? What product

areas he is involved in? What is his title, and his immediate superior's? How much does he travel? Does he see salesmen, and how often? Does he specify or recommend purchases? What is his purchasing power in and beyond his general area of responsibility?

IEEE has data bearing upon such questions and more. I shall be happy to lend you any assistance I can in helping you develop positive selling tools in your respective Sections. You will find that advertisers are placing values on the age-groups of readers; home versus office delivery; time spent with each issue and action taken when the reader has finished with it; pass-along readership. All these things we know about SPECTRUM and its coverage of your Section and all Sections.

In making your calls you will cross the trails of some worthy competitors for the space you'd like to sell—magazines like "Electronics", admittedly leader in its ad field, and others, all of them aware that media selections today are not being made on individuals' judgments but upon a process which grows more sophisticated and complicated every year. And these periodicals are establishing track records in the face of a hesitant and show-me market.

You may hear such criteria being banded about as demographics, psychographics, data banks, exposure factors, index of social position, the total marketing plan, "cume," and "reach." Don't let it get you down. IEEE, too, speaks that language. We must work within such a framework if we wish to survive. The important thing is to make those calls. And flatter your prospect by listening to him. He'll teach you the trade jargon. Just take along a few salient facts. Lay to rest that "necessary evil" delusion.



GROUPS, SECTIONS, AND GROUP CHAPTERS

By Lynn C. Holmes, IEEE Elected Vice President, 1968

(This article was requested by the staff of the IGA Group's Transactions, and brings to E. E.'s readership the comprehensive knowledge and experience of the author concerning his subject. The manuscript was made available to the current Officers of the Institute in that the relationships discussed in the article are at present under active study by the IEEE Board of Directors.
—Editor, E. E.)

When 160,000 technical people from many countries, backgrounds, languages, and disciplines join as members of the largest single technical society in the world, it stands to reason that that society is serving a purpose which to most of these members is of great importance. If this were not true, our membership would be steadily declining rather than increasing on the average by several thousand members per year.

IEEE is only six years old. I speak from first-hand knowledge and experience when I say that IEEE today represents a vast improvement over either AIEE or IRE, and even over the IEEE of 1963 and 1964. I hope that the present and future IEEE Boards of Directors will give you as much improvement in the society during the next half-dozen years as the Boards from January, 1963 have done.

From time to time we should examine ourselves critically to see if the following question can be answered with a strong affirmative. If not, we should do something about it.

IS IEEE REALLY SERVING THE SCIENTIFIC, LITERARY, AND EDUCATIONAL NEEDS OF ITS MEMBERS IN THE BEST WAY POSSIBLE UNDER PRESENT CIRCUMSTANCES?

More specifically, let us consider the organizational structure for technical activities, especially as related to Sections. The following questions point to some of the areas that should be studied:

- Are Group Chapters as now constituted the most practical organizational units for Groups at the local Section level?
- Should the present Regional organization of IEEE, including Sections, be modified?
- If the present Regional committees are kept, should there be a requirement for technical activities representation on them?
- Assuming the present Section organizational plan, is it possible to develop an improved relationship with the Groups so as to better serve the technical needs of the members at the local level?

- Is it desirable to build more flexibility into the IEEE Bylaws so as to allow widely different organizational structures and relationships to fit local or specific needs of the membership?
- Should the organization and responsibilities of TAB and TAB Op Com be continued at present?
- Should Groups be permitted to have more autonomy?
- Should we reduce the number of Groups by consolidation?
- How should Groups that are not viable be disbanded?
- Should a master plan be developed to allow for the orderly growth of Group activities as new technologies evolve?
- Should technical activities have additional specific representation on the IEEE Board of Directors?

This article will be limited to a discussion of some of the aspects of IEEE that may be affected by changes in the organizational structure of the Groups, Regions, Sections, and Group Chapters. Although educational and publication activities affect all our members as individuals, they do not materially affect the relationships between Sections, Groups, and Group Chapters, and so will not be included in this discussion.

When Past President Herwald was Vice President - Technical Activities, he emphasized the existing matrix of the technical and the geographical segments of IEEE. If we imagine a vertical line for each Section and superimposed on this a horizontal line for each Group, we have a picture of the basic matrix that he described. There are over 6000 intersecting points in this matrix, and this would be the total number of Group Chapters that we would have if every Group had Group Chapters in all Sections.

There are only 7 Sections that have 15 or more Group Chapters (counting the Los Angeles Council as a metropolitan Section). And there are over 90 of the some 200 Sections that have no Group Chapters at all! In general, it requires a Section membership of about 200 or more to support even one viable Group Chapter.

Of course, exceptions can be found. A few Sections have a peculiar situation in which all but a few of the members are employed by a single company and the IEEE interests of these members are so closely associated with their everyday work that there is not much incentive to continue the at-work discussions at Group-Chapter meetings in the evening.

There is no such thing as a "typical" Section. If we divide the total number of IEEE members by the number of Sections, we find that the average Section size is 800 members, but this does not make such a Section a typical one. If it did, we would have only about six typical Sections in IEEE. Another wide variable is the Section membership density in terms of members per unit area. For instance, Boston has nearly 7000 members; Arkansas has about 200; Peru has less than 100. No, a typical Section just does not exist. In some cases, this tends toward a parochial viewpoint on the part of some members, not from a selfish attitude, but because only a very few have a broad knowledge of IEEE in its entirety.

Now let us examine some of the Groups to see if there is a typical pattern. At the end of November, 1968, there were just two Groups with over 12000 members each. There were four with about 9000 and two with about 6000. The rest of the 31 Groups ranged in number of members from about 1000 to 5000. Some are growing rapidly - others decline a bit or remain about constant. The Industry and General Applications Group appears to be experiencing an excellent rate of growth with a total membership rapidly approaching 5000.

These statistics are quoted only to emphasize the fact that IEEE is a dynamic society with no universal pattern either for Sections or for Groups. They also point toward the conclusion that the IEEE Bylaws and Policies must be written in such a way as to provide the maximum flexibility to meet the peculiar situations encountered by IEEE throughout the world.

Now let us consider a few of these peculiar situations.

As pointed out previously, there are many, many Sections with no Group Chapters and with very little likelihood of establishing any in the near future. This does not mean necessarily that there is little or no interest in Groups or technical activities. Indeed, in the countries outside the U.S.A., we find that the ratio of Group memberships to Section members sometimes runs as high as two or three times that in the U.S.A. And yet in these Sections there may not be any need or desire for Group Chapters, or advantage to the Institute in establishing them.

Another problem that has sometimes occurred in the Regions outside the U.S.A. is that individual Group members traveling abroad do not observe common-sense protocol in their contacts with their counterparts in the country being visited. It has been pointed out by Dr. R. C. G. Williams, Past Region 8 Director, that in his Region the Section Chairman is considered to be the top IEEE representative in each country. Group members traveling abroad should be urged strongly to work with and through the Section Chairman, especially when making even preliminary arrangements for a technical conference. As a courtesy, both the Regional Director and Regional Secretary should be kept well informed.

In the U.S.A., most of the larger technical conferences are held at or near the metropolitan centers of population because of better transportation, conference, and hotel facilities. This means that the metropolitan Sections bear the brunt of whatever local arrangements must be made for such conferences. There have been a few instances where a Group has made all the preliminary arrangements for a technical conference without contacting the local Section Executive Committee as required by IEEE Policy.

Another related situation that sometimes leads to unpleasant relations between Groups and Sections concerns the division of responsibility for a technical conference and the allocation of the surplus or deficit, if any, after the conference has been held. Large conferences such as WESCON, NEREM, NEC, and SWIEEECO are special cases and fairly satisfactory arrangements for these have been worked out over the years. It is most important for Groups and Sections to have a clear understanding in writing as to responsibilities, assignments, and budgets when technical conferences are jointly sponsored by a Group and a local IEEE Section.

The officers and Executive Committees of many Sections plan their activities on the basis that Group Chapters are the life blood of the Section. They do all they can to promote Group Chapter activities. When Sections have only up to four or five Group Chapters, all Group Chapter Chairmen are also automatically members of the Section Executive Committee. Thus there is a close liaison and good communication between the Group Chapters and the Section. When the number of Group Chapters increases much beyond five, it becomes necessary to delegate Chapter representation on the Executive Committee to one person for three or four Chapters. In such cases, the climate is not nearly as favorable for good communication and often both Chapters and the Section suffer as a result. One large Section has attempted to overcome this difficulty by having a dual Section or-

ganization - one for technical activities and a separate one for all other Section activities. This seems to be a good compromise type of organization for large Sections.

Now let us discuss the relation between Groups and their Group Chapters, especially where the Group Chapters are very large. There is considerable concern on the part of some Group officers that they have no direct ties with their Group Chapters. They feel inhibited from communicating directly with these Group Chapters because unfortunately there have been instances where the Section officers have resented any intrusion. As a result, some of the larger Groups are suggesting that they become autonomous and that their Group Chapters sever all ties with the local Sections, reporting only up to and through the Group Administrative Committee. Other large Groups recognize the importance of the local Section organization and wish to continue working through them, even though direct communication with their Group Chapters is somewhat curtailed.

Some Groups feel somewhat frustrated because they think that they are forbidden from going into the territory of a Section to encourage and assist in the formation of one of their Chapters. The procedure for the formation of Chapters does not specify this as the normal method but there is certainly nothing in IEEE Policy to prevent it. Common courtesy dictates that such an action be taken only with the knowledge and consent of the Section Chairman. In most instances, I think that the Section Chairman and his Executive Committee would welcome this assistance that an experienced committee from the Group could give. In case of an impasse, the two Vice Presidents concerned with Groups and with Sections should be able jointly to arrive at a solution that would be fair and equitable to all.

Some Groups want the privilege of giving direct financial assistance to their Chapters. The present Bylaws do not permit separate treasuries for Group Chapters and all finances for Chapters must come through the Section treasury. Thus monies going from the Group to the Group Chapter is supposed to flow through the Section treasury, with possible delays and other problems. I suggest that we should allow large Group Chapters to have virtually independent financing. This would involve both financial responsibility and independent financial reporting.

The subject to which I have addressed myself in this article is how to improve relations between Sections, Groups, and Group Chapters. The follow-

ing recommendations, directly or indirectly related to the subject, are based on my personal observations at all levels in the Institute since its beginning as a merged society in January, 1963:

1. Expand the representation of technical activities on the Board of Directors from one (Vice President - Technical Activities) to five or six.
2. For each Regional Committee, provide for a Vice Chairman-Regional Technical Activities, preferably elected by the members at the same time that the Regional Director is elected. Consider adding two or three additional technical committee members by appointment.
3. Require Section Executive Committees to add a Vice Chairman - Technical Activities as an officer of the Section.
4. Encourage direct communication and permit direct financial assistance from Group Administrative Committees to Group Chapters.
5. Consider a completely different organization for Sections and Group Chapters within the five or six largest metropolitan centers served by the Institute.
6. Encourage the consolidation of small adjacent Sections, thus providing a better base for Group Chapters and technical activities.
7. Maintain a strong Section organization to perform the many functions that only such an organization can at the local level.
8. Provide for maximum flexibility and local option at the Section level to satisfy the diverse geographical and technical interests of IEEE members.

Most of these recommendations cannot be put into effect immediately. Not any should be before they have been studied thoroughly by all parties concerned and most of the details worked out.

My purpose in preparing this article has been to analyze some of the problems that have cropped up since the merger and to suggest ways in which these may be solved. I look forward to an Institute that will continue to serve the scientific, literary, and technical needs of its members, and hope that its leadership will approach the solution of new problems with boldness and imagination.



Technical Activities Board

* Modified Membership Plan for Systems Science and Cybernetics Group

At its November 1967 meeting, the IEEE Board of Directors approved a special membership plan for the Engineering in Medicine and Biology Group. By action of the Executive Committee on March 22, the plan has been extended to the Systems Science and Cybernetics Group. Other Groups may use the new plan with the approval, in each case, of the TAB Chairman and the IEEE Executive Committee. The modified plan includes the traditional arrangement, whereby any IEEE member may voluntarily join the Group upon payment of the prescribed Group fee. The new features of the modified plan provide for full-status Group membership without IEEE membership. Thus, an individual primarily concerned with a discipline outside IEEE's sphere may join a Group that deals with that specialty (e. g. a biologist may join G-EMB) with all Group rights and privileges including voting and elective office.

A Group wishing to make use of the new plan must first obtain approval of its design for implementation, as follows:

Credentials - Establish one or more alternate sets of criteria that must be met to qualify for Group membership, e. g. a degree in the specialized field, or published papers and other evidence of achievement, or letters from individuals familiar with past and current work.

Procedures - Establish a Group Membership Committee to serve in a role comparable to that of the IEEE Admissions and Advancement Committee. The Membership Committee is to review the credentials of each candidate for Group Membership, making a judgement that submittals on behalf of each candidate meet the minimum requirements.

* 1970 International Convention

Mr. W. O. Fleckenstein, Chairman of the 1970 Technical Program Committee, has announced preliminary plans for 1970. As in the last two years, the program will consist of invited speakers either for the formal presentation of papers or for participation in panel discussions. All IEEE Groups have been invited to submit suggestions for these sessions. In addition, an opportunity is again offered for Groups to organize special Symposia for the last two days of Convention week. For details contact the Secretary of the Technical Program Committee, J. Howard Schumacher, Jr., in the TAB Office.

* Oceanography

As this issue goes to press, we are advised that the first intersociety Offshore Technology Conference shows advance registration and exhibit sales have exceeded the capacity of the facilities that have been reserved for 1970. This will require a rescheduling of the 1970 Meeting.

Meanwhile, more than a dozen IEEE Groups have joined forces in the TAB Oceanography Coordinating Committee to bring into focus the many faceted IEEE programs that pertain to this general area. The IEEE Panama City Section has taken the initiative to organize an IEEE Conference on Ocean Engineering, which will be cosponsored by the Section and the TAB Oceanography Coordinating Committee. This meeting is scheduled for September 21-24, 1970. The Chairman of the Coordinating Committee, Mr. Gil Jaffe (Director, National Oceanographic Instrumentation Center, Washington, D. C. 20390), plans to issue an IEEE Newsletter on Oceanography available to any IEEE member upon request. Send items for the Newsletter to Mr. Jaffe at the address shown above. To have your name added to the Newsletter distribution list write to Miss Pat Corcoran in the TAB Office.

* Cable Television

The TAB Technical Planning Committee under the Chairmanship of Dr. E. W. Herold has initiated action for IEEE to participate in the emerging technology of closed circuit or cable television. An Ad Hoc Committee on Cable TV was appointed, chaired by G. Norman Penwell and with representation from G-B and G-ComTech. Among other steps recommended was IEEE cooperation with the technical program, part of the June 22-25 National Cable Television Association Convention to be held at the San Francisco Hilton Hotel, San Francisco, Ca. Explorations are being made for the preparation of a special issue of one of the IEEE publications, for special mailings to attract new members, and for cooperation in measurement standards.

* Reorganization of IEEE Support of Technical Activities

The IEEE Board of Directors at its March meeting encouraged TAB to continue studies to improve the organization support of IEEE's technical activities.

For a number of years, the membership of the IEEE Board has included Directors elected by the 10 Regions. It has been suggested that Directors should also be elected to represent the various technical interests within the IEEE. This concept will be an integral part of the organizational plans now being studied.

* Publication of Standards

The IEEE Executive Committee has delegated to TAB OpCom responsibility and authority to review and approve for publication Standards and other materials forwarded by the IEEE Standards Committee. Meanwhile, the TAB Finance Committee and the TAB Publications Committee are exploring various means for the publication of Standards to insure that this phase of the operation is self-liquidating, and at the same time give the maximum service to our members.

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ENDORSEMENT OF FELLOW NOMINATIONS. (Reference, pink Supplement to E. E. Dec. '68, top, p. 2.) While IEEE organizations are encouraged formally to endorse Fellow nominations in the specified manner, the March BofD agreed with the Regional Directors that Regional Committees should not undertake such endorsements. This decision will be added to Statements of Policy (until superseded by appropriate Bylaws and operating procedures per E. E. Feb., p. 3).

TAB, GROUP, AND CONFERENCE NEWS

GREEN INSERT, pp. 4G-4H, like cafe insert in April E. E., contains material of a kind formerly carried in our regular news columns. Readers not directly concerned with TAB should not neglect the green pages. In compiling them Dick Emberson, Pat Corcoran & Co. have selected material of across-the-board interest in IEEE. This month, for example, there is a front-line report on a possible reconstitution of the IEEE BofD to give elected-Director representation to certain technical units not yet defined.

In June or subsequent E. E. s, RAB may accept an invitation to compile blue pages. E. E. has accepted a calculated risk of fractionating its readership by placing significant items in colored inserts. The reasons are two-fold: More column-space; editorial autonomy. E. E. 's overall objective is to "let the left hand know what the right hand doeth." It's now "know more" and "more precisely."

TECHNICAL INNOVATIONS occur constantly and mutely urge assignment to a place in IEEE's technical matrix. If a development crosses the disciplines of several engineering and scientific societies, each of which is equipped to handle only one of its aspects, adherents are quick to form a single new society to embrace all aspects, thus 1) keeping the eye fixed on Interest No. 1; 2) avoiding payment of multiple dues to several societies each with coverage broader than is felt needed. To any of the older

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societies—like IEEE—the phenomenon is that of "splintering."

Frequently in the past half-century, electrotechnical features have appeared early and predominantly in innovative art. IEEE's inability to prevent splintering may be a commentary on the past unyielding forms of our present and predecessor organizations.

By the time of the relatively recent biomedical-electronics development, IEEE had gained experience. E. E. June '68, p. 6, under title: "Affiliates Undergo Evolution," recorded an adaptation of a cross-disciplinary kind of IEEE Group membership to the problem of admitting doctors, surgeons, biologists, and other non-IEEE members, to equal footing in the IEEE Group on Engineering in Medicine & Biology.

This adaptation has been watched with interest by other Groups. ExecCom in March approved a similar modification of the Affiliate Plan for the Systems Science and Cybernetics Group. (See Green insert p. 4G.)

A related problem arises when an innovative development does not immediately find a snug harbor in a particular Group or straddles the scope and interest of two or more Groups. For this, TAB has established a TAB Technical Planning Committee, headed by the TAB Vice Chairman, "to give particular attention to changing and new technologies and the needs of members in these areas." It is already active (Green insert p. 4H).

1969 MARCH CONVENTION registration was 60,544—off 5% from 63,898 of 1968 but up 3% from 58,688 in 1967. Booth rentals were also down 5% from capacity (and 1968) this year.

DUTIES OF ENGINEERS TO SOCIETY loomed large as topic at Convention's two major functions. Panel topic at the Highlight Session was "Electronically Expanding the Citizen's World." Symptomatic of the socio-economic impact of environment upon the profession was the choice of banquet speaker: Dr. Walter R. Heller, lately chairman of the Council of Economic

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Advisors to the President of the United States.

REGION AND SECTION NEWS

FIFTY-FIVE SECTION and two Regional periodicals breezily embrace much of IEEE geographically under a colorful canopy. Names of the magazines, bulletins, newsletters and such are in Secretary's Report for 1968, pp. 49-50; details in Appendix of Section Publications Manual. (Editors' names, addresses, Emily Sirjane)

Editors held a working luncheon at the Convention to mix experience. Lee Nicol, of the staff, X-rayed the anatomy of Communication, bare-bones of Public Relations, for all to see. (Cf. Section Public Relations and Publicity Guide; copy, Lee Nicol.) Dr. Brereton of Schenectady exhorted the editors to bolster up their local notices and chit-chat with news of the mainstream of Institute developments, preferably locally-oriented. (See blue insert, p. 4A.) Bill Saunders was a third speaker (see blue insert p. 4B.)

Summing up, Vice President Granger, presiding, said:

"IEEE is cognizant of the broad problems of advertising and public relations, and recognizes that it is critically dependent upon its communications to the membership. The broad goal is to establish and clarify the image of the Institute—the image of viability and the important significance of its activities. "As the media by which the IEEE reaches its local members, the Section and Regional publications play an important role in the operations of the Institute.

"Advertising is a valid supplement to the editorial content of these publications, and the IEEE advertising program can be geared to assist in this vital service to the membership.

"As Editors, it is important to keep in mind the basic fact that things are happening in the IEEE, they are being done professionally and skillfully, and all these achievements are relevant to the Society. The Section and Regional pub-

lications can convey this message effectively to the local members and also publicize the role of the engineer to young people who are making career decisions."

ADVERTISING. In the highly competitive business of obtaining ads for Spectrum, Advertising Director Bill Saunders has analyzed its readership to a fare-thee-well. He knows, for example, that there are two or more IEEE member-readers for every subscriber to any one of Spectrum's front-running competitors; that a whopping 84% of ours have college degrees—triple the percentage of "Electronics" readers, for example: that 42% of "our boys" earn more than \$15,000 a year (16% \$20,000 or more); and that they not only are in positions to specify, recommend, and purchase technical products but also are mentally equipped to latch on to leads in to-the-point ads placed with us by concerns with most on the ball.

Bill talked to the editors of Section publications at the Convention along these lines, emphasizing that his figures were their figures; that Spectrum's readership in a Section (so help me, Computer!) corresponds 1-to-1 with readership of the Section publication in that Section; hence that advertising placed in Section magazines, bulletins, newsletters, or what have you, flies with Spectrum—non-pareil.

Why is this important to Sections?

1) Because some depend upon ads for financial support. 2) Because local solicitation will be most effective if based on know-how. See extracts from Bill's talk: blue insert, p. 4B.

HOLDING GRADUATING STUDENTS IN IEEE. June marks transitions, Student to Member, Student Associate to Associate, as the boys leave college. Each graduate has been asked for his future mail address.

It is in the immediate and long-term interest of Sections, Subsections, and Chapters, as well as a service to the men entering the profession, for IEEE's units to "comb for neophytes" the local industrial and government entities employing these graduates.

Bear in mind these facts: 1) Students

are automatically upgraded without application, with waiver of references, and without additional charges for 1969; 2) dues during 1970 will be reduced in the "upped" grade (Bylaw 109.1); 3) no billing until November 1969; 4) two-payment installment privilege for 1970 (Bylaw 110.1).

REVISIONS TO SECTION MANUAL are due to be mailed the first week in June. (Inquiries, Emily Sirjane)

NO FORUM FOR SECTION CHAIRMEN. Breaking with precedent, none is scheduled for WESCON in August this year.

SPEAKERS DIRECTORY, 80 pages mailed in May, covering meetings of Jan. 10 to Apr. 4, was in content the most comprehensive ever to go out. (Copy, Emily Sirjane)

Meetings and papers committees of Sections, Chapters, Conferences, and other units find the Directory useful in suggesting topics and securing speakers. Bob Loftus says Counselors and Branch chairmen also are putting it to work.

"FOR YOUR INFORMATION"

IEEE'S NEW COMPUTER is "going on line" for shake-down, as this is being written. Unless Spectrum preempts, E. E. plans inserted pages in August to describe the IBM 360/40 Tape Disc 2314 Full Operating System in sufficient detail so that tyros will get an idea of what it can do and experts can tell for sure what it won't do.

For three months our programmers and systems staff worked day and night, seven days a week, with rest only on Easter Sunday, to insure a smooth transition from old to new equipment, precisely on schedule. Lack of space and extreme costs precluded having two systems on location for even a small amount of time. A well-earned "Thank You" to a skillful, talented, dedicated group! "It is a wonderful thing," says Jack Fraum, "to be proud of proud people."

PARLIAMENTARY AID. IEEE units having heavy agenda may be interested to know that ExecCom and RAB have adopted the practice of mailing two-category agenda for their meetings: 1) consent agenda of routine items, as to which there is complete information and no expected dissent; 2) regular agenda. At the opening of the meeting the Chair asks for motions to transfer items from the consent agenda to the regular category. After, or in the absence of, such transfer, the remaining consent agenda items are approved collectively. There is considerable saving in committee time, at the price of advance homework.

As a safeguard for adequate consideration of any motion under New Business, ExecCom's rule is for the Chair to put to a vote, without second or debate, any subsidiary motion to defer action in the absence of advance notice.

FELLOW CERTIFICATES in new style showing grade color were issued to Fellows elected in November '68. (See illustration, Spectrum, April, p. 122; description, p. 123.)

Fellows of prior years who are enamored of the new certificate's size and appearance may obtain an IEEE reissue, bearing correct date of first Fellow election in IEEE, AIEE, or IRE, but signed by the President and Secretary in office at time of reissuance. (Orders, Ronnie Lewis; price, \$3.)

EXTRA-MURAL HONORS. BofD has congratulated past-Director R. C. G. Williams for bestowal upon him of the Order of the British Empire.

EJC DIRECTORY OF HONORS. IEEE is supplying Engineers Joint Council, for inclusion in a new work, the names of IEEE award-winners, officers, and Directors.

FORTY-SIX PAST PRESIDENTS of IEEE are now living. Twenty-eight of them were present at the March Convention Directors' Reception, and sat for a group photograph. All 46 were recipients of

special IEEE pins recognizing their IEEE, AIEE, or IRE service.

HISTORY COMMITTEE'S DREAM and Life Member Fund's money will result in placement, at headquarters office, of a restricted selection of historically-valuable documents and artifacts, pertaining to our Institute, members, and industries, under glass, lock, and loving supervision.

These memorabilia are now stashed away in known but relatively inaccessible boxes and files. Henceforth they'll be on safe display, under custody of a person authorized to take them out for closer examination by interested visitors. (Suggestions, inquiries, Reed Crone)

N. B. —Send no samples. Wait for green light.

"SUCCESS AS AN ENGINEERING EXECUTIVE comes to him who has a good wife to tell him what to do and a good secretary to do it."

Herb Heller, Cleveland Section, in E.E. Feb., p. 6: "Wives, horray!" Now, Bob Winton, United Kingdom & Republic of Ireland Section, London: Secretaries, pip-pip! "Years of effacement," he types, "have made them too modest to produce the music for the trumpets even if someone else blows them—so I'm typ8ng this myself. Without the hidden, forgotten army of secretaries the Institute would soon snarl into a confused halt. But for them we would have done too little too late. Mine, Brenda Butcher, knows more about UKRI Section than I do. Why not an annual award: 'Secretary of the Year'? It would do something to the Convention. It might even make honest men of us when tempted to accept full praise for our work!"

JUST BY HAPPENSTANCE Y^e Ed. got five IEEE News Releases in a single envelope the other day, pushing attendance or papers at IEEE-sponsored conferences—in Devon, Seoul, London, Sendai, and State College, Pa. One big happy family!

WELCOME ABOARD!

Staff: H. James ("Jim") Carter, SM '51, as Managing Editor of Transactions; was publications manager at Entron, RCA, and Litton; member of Engineering Writing and Speech Group AdCom.

Hendrik V ("Henry") Prins as Manager, Marketing Services; was Research Director of "Nation's Business"; New York University School of Commerce, B.S. in Marketing.

(Mrs.) Irene Corder, Assistant Production Manager under Carl Maier; she will also assist Henry Prins.

New Group Chapters in Sections

Section

Canton	Joint:	Circuit Theory Communication Technology Vehicular Technology
Dayton	Joint:	Electron Devices Parts, Materials & Packaging
Long Island	Joint:	Automatic Control Systems Science & Cybernetics
Maine	Joint:	Power Industry & General Applications
Orlando	Joint:	Power Industry & General Applications
Ottawa		Engineering Management
Rochester		Engineering Management

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