FEBRUARY, 1976

# ELECTRICAL ENGINEERING®



HEADQUARTERS REORGANIZES:
MOVES TO REDUCE STAFF AND COMPLETES CONSOLIDATION OF FLOOR SPACE

Two major changes -- one, initiated and in process; the other, just completed -- have been effected at Headquarters in a drive to economize and help strengthen IEEE's financial position. Completed is the consolidation of operations in the Institute's New York City offices, where activities formerly carried out on six floors have been relocated onto four floors. This reduction in space was made possible by and followed the transfer of IEEE's "support services"-including its marketing, data processing, and printing and mailing activities -- to the new IEEE building in Piscataway, N.J. Remaining at 345 East 47 Street, New York City, in newly refurbished quarters, are:

IEEE SPECTRUM--now on the 1st floor General Manager (offices and staff)--10th floor

Controller--10th floor Corporate services (Committees)--10th

Student services--10th floor
Publications (IEEE TRANSACTIONS, PROCEEDINGS, IEEE Press, newsletters)--11th floor
Information services--11th floor
Technical Activities--15th floor
Regional Activities--15th floor
Educational Activities--15th floor
Standards--15th floor
(Professional Activities continue to be at
IEEE's Washington, D.C., offices).

As for the change still in process, an 8-percent staff cut--affecting approximately

25 executive and supporting staff members out of a total work force of 288--was announced in a news release sent to our readers under separate cover. As explained to ELECTRICAL ENGINEERING, the impetus for this action was a decision taken by the Executive Committee at its December 1975 meeting. The Committee apparently determined that to produce a 1976 operating surplus, a sizable staff reduction would be necessary.

Inevitably, a personnel cutback of this size will result in a consolidation of staff duties if the level of member services is to be maintained. EE inquired of Dr. Schulke as to any immediate changes in staff assignments. He indicated that a "gradual reconfiguration was in process" but that it would be premature to publish a new "line-up." In subsequent issues, as each piece of the puzzle is set in place, EE will call it to our readers' attentions. In the interim, the March issue of IEEE SPECTRUM will include an in-depth examination of IEEE's present financial difficulties.

With this issue, ELECTRICAL ENGINEERING comes to you under new editorship. The editors intend EE to be responsive as well as informative. To that end, we urge you, our readers, to deluge us with mail--suggestions, criticisms, "hard" news about Institute activities. Please address any such correspondence: Editor, ELECTRICAL ENGINEERING, IEEE, 345 East 47 St., New York, N.Y. 10017.



A management newsletter on IEEE operations...to encourage communication among all organizational entities and the staff...ELECTRICAL ENGINEERING\* is published bimonthly by IEEE, 345 East 47 Street, New York, N.Y. 10017

IEEE's new President, Joseph K. Dillard, has set some important goals for the Institute -and for himself--in the year ahead. In an interview in January SPECTRUM (p. 24) Mr. Dillard conceded the importance of maintaining IEEE's technical excellence, but he also committed himself to leading the Institute along new paths. First and foremost, he will press for "solid progress in the professional arena." Activities in this area might range from a hard look at engineers' working conditions, and at the quality of engineering education in the United States, to 'moving toward universal professional registration." Mr, Dillard also believes that it is time that IEEE emerged as an influential source of technical advice on such national issues as powerplant siting -- and this raises another major goal: to end wasteful duplication in society efforts and unite engineers behind legislation for the public good. And all this, President Dillard promised in the SPECTRUM interview, will be done without significantly increasing Institute expenses. Recognizing that membership dues were raised for 1976, he said that he intends to see to it that 'we end the year with a surplus."

Outgoing members of the Board of Directors:
Harold Chestnut, Senior Past President;
Frank S. Barnes, Vice President--Publications Activities; Harold Goldberg, Vice
President--Professional Activities; Thomas
F. Jones, Jr., Vice President--Educational
Activities; R. C. Hansen, Vice Chairman-Technical Activities Board; John Zaborsky,
Director--Division I; Richard C. Benoit,
Jr., Director--Region 1; W. L. Sullivan,
Director--Region 3; Robert M. Shuffler, Director--Region 5; George Sinclair, Director--Region 7; Jose Roberto C. Lacerda, Director--Region 9. Congratulations on jobs
well done!

Electioneering policy and procedures have been revised with the approval of the Board of Directors. In light of the predominance of contested elections for IEEE office, the former ban on certain forms of electioneering has been lifted. Further information can be found in EE insert, pp. 2C-2D.

New officers officially took their posts as of the first of the year. A complete list of the current Board of Directors and Executive Committee appears on insert, p. 2E.

Profile: Robert D. Briskman

Our brand new Vice President of Technical Activities, Robert Briskman--in "real" life--is Assistant Vice President, Fixed Systems, COMSAT General Corporation, Washington, D.C.



At COMSAT since 1964, Bob's present responsibilities include the COMSTAR satellite system. He was previously responsible for satellite command and control activities--particularly in regard to INTELSAT I--and department manager in the corporation's Transmission Systems Division. Prior to COMSAT, VP Briskman, who earned the B.S.E. at Princeton University and the M.S.E. at the University of Maryland, worked at IBM, the Army Security Agency, and NASA. With NASA, he was associated with the planning of the ground instrumentation for the Echo, Mariner, Ranger, Gemini, and Apollo projects.

This is the first in a series of profiles introducing IEEE's nonelected officers to EE's readers.

Members should "upgrade" themselves to the highest Institute level for which they are qualified. Why? Upgrading can gain them: recognition of professional achievement; expanded professional opportunities; added personal prestige and satisfaction; even eligibility to hold IEEE office. Any member or organizational unit of the IEEE can act as sponsor of a change in grade, and Emily Sirjane at Headquarters is the person to contact for further information.

E.E.is sent without cost beyond dues to officers of IEEE Boards, Committees; Divisions, Societies, Groups, Conferences; Regions, Councils, Sections, Subsections, Chapters, and Branches. Second-class postage is paid at Piscataway, N.J.



# NEW INSTITUTE POLICY ON ELECTIONEERING

At the Board of Directors Meeting on December 5, 1975, certain changes regarding electioneering were made in the IEEE's Policy and Procedures Manual.

Because the changes are far reaching, a special effort is being made to call them to your attention. Contested elections have become the rule in IEEE and, in view of the Institute's tradition of providing a forum for free expression of ideas, it was determined that the electioneering ban imposed by the old Policy and Procedures Manual had become an anachronism, at best. Further, while the Constitutionally set candidacy deadlines have not been changed, a new deadline (12 o'clock noon of the Friday preceding June 1) has been set for those petitioners who wish to have their views and rebuttals published in IEEE SPECTRUM. Reproduced below are the amended articles in the 1976 Policy and Procedures Manual.

# 12.3 Electioneering

Electioneering activities which provide information to members on issues facing the IEEE are permitted. For example, the editor of any IEEE publication may publish the following as long as the usual standards of accuracy, space limitation and quality are maintained:

A. Statements by those candidates for IEEE offices, whose names will be printed on the ballots in accordance with the Constitution and Bylaws, giving their programs, views and rebutals on issues facing the IEEE, provided that all such candidates for a given office are given equal opportunity to present their views and rebutals, and that the material submitted is factually correct and does not attack an individual in a libelous manner.

B. Letters to the Editor stating an intention to seek

candidacy for a given position with reasons. The use of IEEE funds for electioneering purposes in municipal, county, state or Federal election is prohibited without the consent of the Board of Directors or the Executive Committee acting in their behalf.

# 12.4 Early Receipt of Nomination Petitions

It is the policy of the Institute to afford to the fullest possible extent, equal exposure to the Voting Members of the views and rebuttals of all candidates in the elections of the Institute, including candidates nominated by petition. One means to this end is the publication in SPECTRUM and Group/Society/Council, Regional and Section newsletters of candidate views and rebuttals in an issue which reaches the Voting Members

prior to the receipt of the ballots. To meet the schedule for such publication petitioners, who wish to have their views and rebuttals published in SPECTRUM so as to reach the Voting Members prior to the receipt of ballots, are advised that their petitions must be received at IEEE Headquarters not later than 12 o'clock noon of the Friday preceding June 1st. While valid petitions can be accepted up to 12 o'clock noon of the Friday preceding August 1st. the views and rebuttals of nominees, whose petitions are received subsequent to the June deadline, cannot be scheduled for such publication. Newsletter and other editors may set their own deadlines but are responsible for observing the "fairness-to-all" doctrine and the provisions of Section 12.3A.

12.5 Candidate and Initiative Statements

In any IEEE entity where it is the established policy that candidates or proponents of an initiative are invited to submit a statement in support of their candidacy or initiative. a 'maximum number of words allowed" shall be stipulated by the editor as soon as the available space to be devoted to such matters in the publication has been determined. Each candidate or proponent would be allowed that many words and no more in his statement. Each candidate or proponent would be invited to provide a rebuttal within his individual stipulated space allocation, after he has seen his opponents' statements. Both the statement and rebuttal shall be published together and timed to reach the Voting Members before the ballot is received. The editor of each publication has the responsibility for and the authority in these matters.

# **(**).

# COMPOSITION OF THE 1976 IEEE BOARD OF DIRECTORS

DIRECTORS-AT-LARGE	3 Larry K	. Wilson	1976-77	
Elected by members	And the second second of the second s	4 Paul F. Carroll		
Anticologican to Microsposicoresions	5 Ross L.	Bell	1975-76 1976-77	
1 Joseph K. Dillard	6 Carleton	6 Carleton A. Bayless		
President		7 Frank C. Creed		
2 Robert F. Cotellessa		8 F. Louis Stumpers		
Executive Vice President	9 Luis R.		1975-76 1976-77	
3 John J. Guarrera			1710-11	
Senior Past President	DIVISIONA	LDIRECTORS		
4 Arthur P. Stern		Elected by Divisional members		
Junior Past President	=100104 5)	Diceted by Divisional members		
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DIRECTORS-AT-LARGE		Barkle, Jr.	1975-76	
Elected by Assembly	III Eric Her		1976-77	
22200000 39 223 202110 29	IV Robert A		1975-76	
l Jerome J. Suran	V Stephen S			
Vice President	VI Robert W		1976-77 1975-76	
Publication Activities	VI ROBELL W	• House	1975-70	
2 Robert M. Saunders	FYECHTIVI	EXECUTIVE COMMITTEE		
Vice President	EXECUTIVI	E COMMITTEE		
Regional Activities	Dillard	(Cho;		
3 Robert D. Briskman	Dillard	(Chairman)		
Vice President	Cotellessa	Compensation		
Technical Activities	Cotellessa	(Vice Chairman)		
4 Irene C. Peden		Conferences		
Vice President		Public Relations		
Educational Activities	Stern	Surveys		
5 James H. Mulligan, Jr.	Stern	Intersociety Rela		
Vice President		Long Range Plan		
Professional Activities		Nominations and	Appointments	
	C	Tellers		
6 B. H. Schneider	Suran	Publications		
Secretary-Treasurer 7 Hiroshi Shinkawa 1975-76	C1	History		
	Saunders	Regional Activitie		
Director, Region 10 8 A. S. Hoagland		Admission & Adv		
	D . 1	Membership Deve		
Vice Chairman, Technical Activities Board	Briskman	Technical Activit	ies	
	Peden	Awards		
9 H. A. Schulke, Jr. Executive Director		Educational		
Executive Director	16.111	Fellow		
DIDECTORS EMPRIMIS	Mulligan	Professional Acti	vities	
DIRECTORS EMERITUS	Schneider	Audit		
Eleia D. Dahasta C		Life Member Fun		
Elgin B. Robertson, Sr.		Finance Advisory		
Donald G. Fink		Constitution, Byla		
DECIONAL DEDECTORS	Schulke	(General Manager	•)	
REGIONAL DIRECTORS				
Elected by Regional members				

1 Arthur L. Rossoff 1976-77 2 William W. Middleton 1975-76

(All terms are one year except when noted.)

### INTERESTED IN SPRING COURSES?

#### HERE'S A SAMPLING

<u>Introduction to Microprocessors</u> (Los Angeles Council) — February 28, 1976, Los Angeles, Calif.

Minicomputers (Hampton Roads Section) -- March 5-6, 1976, Norfolk, Va.

Minicomputer Real-Time Operating Systems (Los Angeles Council) -- March 15, 1976, Los Angeles, Calif.

How to Start and Finance a New Business (Los Angeles Council) -- March 17, 1976,
Los Angeles, Calif.

Introduction to Microprocessors (Milwaukee Section) -- March 27, 1976, Milwaukee, Wis.

Introduction to Microprocessors (Central Indiana Section)--April 10, 1976,
Indianiapolis, Ind.

Professional Growth--Where Do I Go from Here? (Los Angeles Council)--April 14, 1976, Los Angeles, Calif.

Microprocessors Seminar (Providence Rhode Island Section) -- April 23-24, 1976, Providence, R.I.

The Management Imperative--Effective Communication (San Francisco Section)-May 1, 1976, San Francisco, Calif.

Introduction to Microprocessors (Virginia Mountain Section)--May 22, 1976,
Blacksburg, Va.

Introduction to Solid-State Power Electronics (Los Angeles Council)--May 26-27,
1976, Los Angeles, Calif.

		Member	Nonmember	Studen
Fees: one-day courses two-day courses	one-day courses:	\$ 65	\$ 75	\$30
	two-day courses:	\$105	\$125	\$50



# FOR ADDITIONAL INFORMATION:

Vincent J. Giardina, 445 Hoes Lane,
Piscataway, New Jersey 08854

A potential tax liability on conference exhibit income has been created by new Internal Revenue Service rulings dated October 31, 1975. The only exceptions relate to binding contracts made with exhibitors prior to December 1, 1975.

At time of writing, The IEEE Board of Directors at its January 29 meeting was slated to consider a policy that would prohibit all sales and order-taking in connection with IEEE Conferences, unless an explicit exemption were arranged and approved in advance by IEEE Controller Tom Bartlett. If in doubt of the outcome of the Board of Directors' policy decision, it is strongly advised that no negotiations be undertaken without Headquarters' approval.

# PUB NEWS

If advertising in SPECTRUM is an indication of the health of those industries that employ IEEE members, economic prospects may be looking up. SPECTRUM's income from advertising pages in January 1976 was more than \$85,000, up from \$28,400 in the same month of 1975. Estimates for the February 1976 issue indicate that ad income will be about the same as it was for February 1975 issue--or just under \$70,000.

Frustration, disgust, and fear are too often the emotions that our cities evokerand engineers have the same feelings about them as other, ordinary citizens. However, engineers may have more-than-ordinary ideas and skills to offer in efforts to revitalize those cities. SPECTRUM's July 1976 issue will explore the problems and possibilities involved in making cities of the future more suitable places in which to live, with special emphasis on the roles that EEs can play in this process. Topics include: communications, transportation, and energy.

A special issue of SPECTRUM also is scheduled for April. This one, on instrumentation, will cover key new developments in instrument design and applications. And in October 1976, SPECTRUM will publish a special issue designed to spell out what engineers can learn from their mistakes. At the moment, that issue is titled, 'What Went Wrong?"

Section 1975 year-end financial statements and meeting reports were due February 1, 1976. No rebates are issued to Sections until these two reports are received.

Nominations for Regional Directors in Regions 2, 4, 6, and 8 are due April 30. These Regions will hold elections in 1976.

Names of new officers for all IEEE units should be submitted within 20 days of election to Robert Asdal at Headquarters (Bylaw 402.5).

Membership record set for the year ending December 31, 1975, of 179,835--the highest total in the Institute's history.

IEEE membership material available from Robert Asdal at Headquarters includes: the 1976 IEEE Membership Brochure, incorporating details on new and expanded member services, and IEEE banners and posters. The banners, made of dark blue wool with a gold IEEE logo, can be ordered for \$75. The posters are free.

#### STUDENT NEWS

An all-time high was reached in the number of new Student members joining IEEE in 1975. A total of 14,534 prospective EEs have swelled the Institute's ranks, surpassing the old record set in 1968. Significantly, the entire Student membership is 24,330, of whom fully 60 percent are new members.

Money is available from Headquarters upon receipt of each Student Branch 1975 yearend report and financial statement, already overdue as of February 1. The rebate is \$1.00 per member as of December 31, 1975. Copies of both reports must be sent to: Headquarters and to your Section and Region Student Activities Committee Chairmen. A fourth copy of the two reports must be maintained in your permanent Branch file.

Elect your new officers—then remind them that you aren't the only source of advice. Copies of the Branch Operation Guide are available from Robert Asdal at Headquarters. He would appreciate receiving the names of

all new officers within 20 days of election on the multipurpose order/report form.

Prizes and recognition can be gained through IEEE's Student Paper Contests held throughout the world. Entries need not be specially designed for such contests but may be papers students are presently writing in connection with school projects. So get out the writers!

Incidentally, examples of prize-winning papers are available to every Branch (and Student) in the form of a hardbound, 352-page volume entitled <a href="IEEE 1975 Student Papers">IEEE 1975 Student Papers</a>. Orders should be sent to IEEE Service Center SPSU, 445 Hoes Lane, Piscataway, N.J. 08854. Price: \$8.00 to members; \$16.00 to nonmembers.

#### HONORS

Fellow nomination kits, to be used in the submission of future nominations, are now available upon request from Emily Sirjane at Headquarters. The kits include detailed guidelines to assist a nominator in the effective preparation of a nomination form. Nominators are further reminded that a substantial number of elections to Fellow grade occur on resubmission—so keep trying.

Three outstanding members of the profession are slated to receive IEEE Field Awards at upcoming meetings. During ELECTRO in Boston, Fairchild's C. Lester Hogan will be given the Frederik Philips Award for R&D management in the semiconductor industry, and George H. Heilmeier of ARPA will be presented with the David Sarnoff Award for his work with liquid crystal displays. And at NAECON, in Dayton, Ohio, Maxime Faget will receive the Harry Diamond Award for his contributions to manned spacecraft. He is with the NASA Lyndon B. Johnson Space Center in Houston, Tex. For complete details, see the February issue of SPECTRUM.

IEEE has a new major annual medal—the Alexander Graham Bell Medal for outstanding contributions to the advancement of telecommunications. Included with the medal is an honorarium of \$10,000. Nominations are due by February 20. Contact Emily Sirjane at Headquarters.

#### HAIL--AND FAREWELL

# Established:

The Mexican Council, to include the Mexico and Monterrey Sections

The Engineering in Medicine and Biology Chapter of the Dayton Section

The Power Engineering Chapter of the Broward Section

The Industry Applications Chapter of the Baton Rouge Section

The Joint Parts, Hybrids, and Packaging/ Manufacturing Technology Chapter of the Los Angeles Council

The Communications Chapter of the Germany (West) Section

The Joint Circuits and Systems/Instrumentation and Measurements/Electron Devices/Microwave Theory and Techniques/Sonics and Ultrasonics/Parts, Hybrids, and Packaging Chapter of the Portland Section (formerly the Joint CAS/IM/ED Chapter)

Student Branch at Indiana State University, Evansville, Ind.

The Engineering in Medicine and Biology Chapter of the Central Indiana Section

#### Dissolved:

The Niagara-International Section in Region 7, with Niagara County, N.Y., transferred to the Buffalo Section in Region 1 and Lincoln and Welland Counties in Ontario, Canada, assigned to the Hamilton Section in Region 7

The Joint Antennas and Propagation/Microwave Theory and Techniques Chapter of the Buffalo Section

# Centerfold inserts

Gray--Electioneering regulations 2C,2D Canary--1976 Board of Directors 2E,2F Pink--Short-courses calendar 2G,2H