

# ELECTRICAL ENGINEERING®

FEBRUARY 1977

NUMBER **68**

H. A. SCHULKE, JR.,  
ANNOUNCES RESIGNATION

IEEE General Manager and Executive Director H. A. Schulke, Jr., has announced his resignation effective July 22, 1977. He has felt for some time, according to a letter to 1977 IEEE President Robert Saunders, that the demands of IEEE's growing professional activities on the office of the General Manager have prevented him from engaging in the kind of technical activities appropriate to his interests and expertise. The full text of Dr. Schulke's letter will appear in the February Spectrum.

President Saunders and the Executive Committee praised Dr. Schulke for his many accomplishments during his short time in office in organizing the Headquarters operations of the Institute, activating the Service Center in New Jersey, and contributing to important changes in the Institute's fiscal policies.

Dr. Schulke intends to seek a position in engineering or engineering management, preferably in his field of expertise, communications. A search committee will be formed

to seek and select his successor. At time of writing, President Saunders told EE that no final decision had been made on the composition of this committee, but that members wishing to submit recommendations for Dr. Schulke's successor could write to: Chairman, Search Committee, Headquarters.

## TIGHT BUDGET CONTROLS PAY OFF

Surpluses have been achieved in four major areas of IEEE's 1976 budget, thanks to efforts of the volunteer officers and staff. Unaudited results indicate budget surpluses have been met--and exceeded--in the areas of Institute operations, Group/Society funding, and the United States Activities Board. IEEE's investment portfolio has also offered a favorable return for the year.

Based on a preliminary analysis of this excellent performance for 1976, IEEE's 1977 Treasurer Robert D. Briskman forecasts no dues increases for 1978, providing that no program changes are implemented which would require additional funding. Details of the 1976 budgetary surpluses will be found in February Spectrum.



New Directors attend orientation session at invitation of 1977 IEEE President Robert M. Saunders. The meeting was held at Headquarters on January 13. The first formal meeting of the Board of Directors this year will occur on February 19-20 in Washington, D.C.



THE INSTITUTE OF  
ELECTRICAL AND  
ELECTRONICS  
ENGINEERS, INC.

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

#### POLITICAL ADS

The Board of Directors, at its December meeting, voted to ban all paid political advertising in IEEE publications. Accordingly, the text of electioneering-related sections of the IEEE Policy and Procedures Manual has been revised and new rules set down for publishing petitions and candidate statements. These changes are detailed in February Spectrum.

#### ANNUAL DUES REMINDER

The dues renewal process continues. Second notices have been sent out, and hopefully all members with dues outstanding will respond. The cut-off date for payment is February 28 for U.S. members; April 30 for non-U.S. members.

#### MIDCON TAKES OFF

MIDCON, the Midwest's first major electronics convention and exposition, will be launched in Chicago, November 8, 1977, and will run through November 10 at O'Hare International Convention Center and Hyatt Regency O'Hare Hotel. Sponsored by IEEE and Electronic Representatives Association, MIDCON's format, program, and events will be modeled on those of WESCON and ELECTRO, but tailored to the Midwest, manufacturing-oriented audience and planned by local committees. Half the size of ELECTRO, MIDCON expects about 300 exhibit units, occupied by 175 exhibitors, and a professional-level attendance of about 20,000 persons. The complete prospectus will be available in mid-March.

#### ELECTRO TICKETS

ELECTRO/77 advance registration tickets are now available. The tickets, called pink cards, allow entry to the exhibits and all professional program sessions for ELECTRO/77, to be held in New York, April 19-21, at the Coliseum and the Americana Hotel.

Exhibiting distributors, manufacturers, manufacturers representatives, and salesmen are providing complimentary pink cards; many IEEE Sections in Regions 1 and 2 are distributing pink cards: some complimentary, some for a nominal fee of \$1. Pink cards can also be obtained by sending \$1 (check or money order) and a self-addressed, stamped envelope to: ELECTRO/77--Pink Cards; 445 Hoes Lane; Piscataway, N.J. 08854.

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

Profile:  
Franklin H. Blecher



IEEE's 1977 Vice President for Technical Activities is Franklin H. Blecher. A Fellow of the Institute, Dr. Blecher has received the Institute's Browder J. Thompson Award for work on feedback amplifiers. He has served on and chaired numerous IEEE committees, boards, Groups, and Councils, and has made extensive contributions in conference organization. Since 1974, Dr. Blecher has been Director of the Mobile Communications Laboratory of Bell Laboratories in Whippany, N.J., and is presently responsible for the development of a new high-capacity mobile communications system. He has done pioneering work in the theory and design of single and multiple loop solid-state feedback amplifiers. He has published extensively on this subject as well as on the design of linear and nonlinear solid-state circuits, active filters, carrier equipment, and microwave circuits.

Dr. Blecher was educated at the Polytechnic Institute of Brooklyn, where he was awarded the B.E.E. degree in 1949, the M.E.E. in 1950, and the D.E.E. in 1955. He served there as a nonresident staff member from 1956 to 1960.

This is the first in a series of profiles on IEEE officers newly elected by the Annual Assembly.

#### EAB NEWS

In 1977 the Educational Activities Board is looking toward even greater interaction in education programs with IEEE Regions, Sections, technical Groups, and Societies. Thus far, over 140 Education Chairpersons have been enlisted in the first phase of a program designed to help plan, promote, and assist in Continuing Education. To strengthen communications, Joseph Biedenbach, Chairperson of the EAB Continuing Education Committee, plans to convene a representative committee of Education Chairpersons. Finally, linking all concerned with education is the new bimonthly Continuing Education Newsletter.



# Membership Development Committee

Contact: Robert Asdal

SUMMING UP '76: In a dues increase year, IEEE membership slipped by a small 0.6 percent (1200 members) to 178,616 members as of December 31, 1976. Losses in higher grade categories were offset by a 1054 member increase in the student grade. Setting a 13 year high, at 25,385, student membership continues to provide the main source of higher grade members to the Institute. Overall Group and Society membership on the other hand moved strongly upward from 175,793 members to 181,909 as of December 31 with the student growth rate at 5.9 percent and higher grade rate at 2.7 percent from the previous year.

1977 GOAL: The Membership Development Goal for 1977 is to increase total Institute membership to 190,000 - an attainable 5.6 percent increase if all Divisions, Groups/Societies, Regions, Sections, Subsections, Chapters, and Student Branches begin work now.

RAISING PERCEPTIONS: Each individual's "Perceived Value of Membership" is fundamental to selling a new member. Every prospective member must feel a motivation to join because his or her personal needs are or can be fulfilled by personalized membership benefits. When talking to prospective members find out their needs then discuss the benefits derived from IEEE services that can satisfy those needs.

PROMOTING BENEFITS: IEEE provides hundreds of services to its membership, all of which are explained in the brochure "1977 Membership Information". A supply of brochures is available upon request to the Field Services Department. By using the brochure to sell IEEE membership, explain the personalized benefits that a prospective member can derive from the services we offer. Valuable business contacts are a benefit of attending local and national IEEE meetings. Recognition and Achievement are the benefits of active participation in Committee work and IEEE's extensive awards program. Present and future occupational security are benefits of IEEE's educational and technical programs. Convenience in saving time and effort in locating information are the benefits derived from utilizing IEEE's extensive publication and indexing program and the facilities of the Engineering Societies Library. And world-wide friendships are the benefits of personal contact that active participants in the profession enjoy. Our 1977 membership effort should be benefit oriented ... let's raise the perceived value of membership among all prospective members by promoting personalized membership benefits.

ONE OF THE PAYOFFS: Sections will receive \$7.50 for each new member elected in 1977. The recently approved Section Rebate Schedule designates \$6.00 for new elections and \$1.50 for each member in the Section - including students - as of December 31, 1977.

Look at every local Section, Chapter, or Branch meeting or activity as an opportunity to extend the benefits of IEEE membership to non-members. The Section Rebate Schedule points out that it pays off in the end!

HEADQUARTERS STAFF CHANGE: Beginning January 1, 1977 staff responsibility for the Membership Development Committee has been transferred to Bob Asdal from Emily Sirjane. Emily, now providing a greater share of her time to Corporate support activities associated with the Board of Directors, deserves a hearty round of thanks for her untiring devotion to membership activities and her success in promoting and extending the scope and preeminence of the Institute's membership world-wide.

GET TO KNOW YOUR MD REPRESENTATIVE: All Divisions, Groups and Societies, Regions, Sections, Subsections, Chapters, and Student Branches should have a group of active members (a Membership Development Committee) working collectively on promoting IEEE membership and transfer in grade. The following members are representatives to the Institute's Membership Development Committee and should be contacted for advice for assistance on membership matters and will work as coordinators in their respective areas on developing successful membership programs:

1977 IEEE MEMBERSHIP DEVELOPMENT COMMITTEE ROSTER

SCOPE OF ACTIVITY: The IEEE Bylaws provide that "The Membership Development Committee shall plan and develop methods of extending the membership of IEEE and promoting transfers in grade to the end that all members shall occupy the highest grade for which they are qualified." (Bylaw 311.8)

<u>Chairman</u> K. W. Atwood Electrical Engineering Department University of Utah Salt Lake City, Utah 84112 (801) 581 6944	<u>Region 9 Representative</u> Guillermo Castillo Las Acacias 393 Lima 18, Peru
<u>Vice Chairman (and Region 3 Representative)</u> D. C. McLaren Post Office Box 110 Tampa, Florida 33601 (813) 244 4710	<u>Region 10 Representative</u> J. A. Okochi 5-51-12 Denenchofu Ohta-ku Tokyo, Japan
<u>Region 1 Representative</u> M. W. Green ITT Defense Communications Division 492 River Road Nutley, New Jersey 07110 (201) 284 2993	<u>Division I Representative</u> F. T. Boesch 49 Briarwood Road Fair Haven, New Jersey 07701
<u>Region 2 Representative</u> L. M. Schwab 8709 Southard Pines Court Vienna, Virginia 22180	<u>Division II Representative</u> H. M. Hess 32355 Susanne Drive Franklin, Michigan 48025 (313) 577-0800
<u>Region 3 Representative (and Vice Chairman)</u> D. C. McLaren (see Vice Chairman)	<u>Division III Representative</u> Edward C. Hall, Jr. RCA Alaska Communications Inc. 629 E. Street Anchorage, Alaska
<u>Region 4 Representative</u> D. S. Lo 2313 Explorer Court Burnsville, Minnesota 55337 (612) 456 4559	<u>Division IV Representative</u> J. E. Shepherd P.O. Box 27 Concord, Massachusetts 07142
<u>Region 5 Representative</u> W. G. Thorman 111 Tyrol Place San Antonio, Texas 78209 (512) 227 3211, Ext. 487	<u>Division V Representative</u> Edward Parrish University of Virginia Department of Electrical Engineering Charlottesville, Virginia 22901 (804) 924 3042
<u>Region 6 Representative</u> R. E. Reiner 1864 Bella Vista Drive E. Sierra Vista, Arizona 85635 (602) 538 2151	<u>Division VI Representative</u> J. M. Biedenbach College of Engineering University of South Carolina Columbia, South Carolina 29208 (803) 777 6693
<u>Region 7 Representative</u> C. E. Spike University of Waterloo Department of Electrical Engineering Waterloo, Ontario, Canada (519) 885-1211, Ext. 3716, 3331	<u>Chairman, 1977 RAB Student Activities Committee</u> J. H. Gordon University of Texas at Austin Department of Electrical Engineering Austin, Texas 78712 (512) 471 7792
<u>Region 8 Representative</u> D. C. Poortvliet St. Ursulakliniek Eikenlaan 3-5 Wassenaar, Netherlands	<u>IEEE Staff Secretary</u> R. K. Asdal, Director Field Services IEEE 345 East 47 Street New York, New York 10017 (212) 644 7759

RKA:rt  
1/19/77



Contact: Emily Sirjane

# Board of Directors

COMPOSITION OF THE 1977 IEEE BOARD OF DIRECTORS

<u>DIRECTORS -AT-LARGE</u> <u>Elected by members</u> 1 Robert M. Saunders President 2 Carleton A. Bayless Executive Vice President 3 Arthur P. Stern Senior Past President 4 Joseph K. Dillard Junior Past President	<u>REGIONAL DIRECTORS</u> <u>Elected by Regional members</u> 1 Arthur L. Rossoff 1976-77 2 Howard B. Hamilton 1977-78 3 Larry K. Wilson 1976-77 4 Burkhard H. Schneider 1977-78 5 Ross L. Bell 1976-77 6 John W. Thatcher 1977-78 7 Frank C. Creed 1976-77 8 E. Folke Bolinder 1977-78 9 Luis R. Jimenez 1976-77
<u>DIRECTORS -AT-LARGE</u> <u>Elected by Assembly</u> 1 Irene C. Peden Vice President Educational Activities 2 Douglas M. Hinton Vice President Regional Activities 3 John J. Guarrera Vice President Professional Activities 4 Jerome J. Suran Vice President Publication Activities 5 Franklin H. Blecher Vice President Technical Activities 6 Robert D. Briskman Secretary-Treasurer 7 John E. Barkle Director-at-Large 8 William R. Kruesi Director - Standards Activities 9 James J. Vasseleu Director - Region 10 1977-78 10 Herbert A. Schulke, Jr. Executive Director	<u>DIVISIONAL DIRECTORS</u> <u>Elected by Divisional members</u> I Ernest S. Kuh 1976-77 II Donald S. Brereton 1977-78 III Eric Herz 1976-77 IV Richard W. Damon 1977-78 V Stephen S. Yau 1976-77 VI Richard J. Gowen 1977-78
	<u>EXECUTIVE COMMITTEE</u> Saunders (Chairman) Bayless (Vice Chairman) Conferences Public Relations Surveys Blecher Technical Activities Standards Activities Briskman Audit Life Member Fund Finance Advisory Constitution, Bylaws, and Policies Dillard Intersociety Activities Long Range Planning Nominations and Appointments Tellers Guarrera Professional Activities Hinton Regional Activities Admission and Advancement Membership Development Peden Awards Educational Fellow Suran Publications History Schulke (General Manager)

[All terms are one year  
except when noted.]



# Technical Activities Board

## ENGINEERING FOUNDATION FELLOWSHIPS

The Engineering Foundation has established a new series of Fellowships:

1. Within the technical field of each of the Founder Societies, the Fellowship is to support the preparation of a state-of-the-art review, emphasizing areas that need additional research. Each of the Founder Societies is to supply a list of technical fields that would be suitable for such reviews.
2. Within IEEE, the Technical Activities Board has been assigned responsibility for handling the IEEE portion of the program.

The technical fields referred to above will be on the Agenda of the February 17 meeting of the Technical Activities Board, and will be released soon after.

ENGINEERING FOUNDATION FELLOWSHIPS

Sponsored By  
THE ENGINEERING FOUNDATION  
with the cooperation of its  
FOUNDER SOCIETIES

American Society of Civil Engineers  
American Institute of Mining, Metallurgical and Petroleum Engineers  
The American Society of Mechanical Engineers  
Institute of Electrical and Electronics Engineers  
American Institute of Chemical Engineers

GENERAL

The ENGINEERING FOUNDATION announces the availability of Engineering Foundation Fellowships during 1978-1979 for State-Of-The-Art reviews in fields recommended by its FOUNDER SOCIETIES.

The program is directed toward members of engineering faculties and industrial specialists who have established a professional reputation through publications.

A grant of \$5,000 will be awarded on a competitive basis to a member of each of the FOUNDER SOCIETIES for a proposed research review in a field of direct interest to his FOUNDER SOCIETY.

PROPOSED REVIEWS

Proposed reviews shall provide an analysis in depth of a specific field including recommendations on engineering research needed to advance the state-of-the-art of that field.

A list of recommended fields will be available upon request from the Executive Officer of his professional society.

EVALUATION AND SELECTION OF PROPOSALS

Proposals shall be sent to the Executive Officer of his professional society. A panel organized by his professional society will evaluate and select meritorious proposals. They will be submitted (in rank order) to the Projects Committee of the ENGINEERING FOUNDATION who will make the final selection of a proposal for each of the FOUNDER SOCIETIES for submission to the Board of the ENGINEERING FOUNDATION for final approval.

DEADLINE

All proposals being submitted to the FOUNDER SOCIETIES must be postmarked by June 1, 1977.

Selected proposals by the FOUNDER SOCIETIES to the Projects Committee of the ENGINEERING FOUNDATION must be postmarked by August 1, 1977.

ANNOUNCEMENT OF FELLOWSHIPS

Selected fellows will be notified by letter from the secretary of the ENGINEERING FOUNDATION on or about January 1, 1978, with copies to their FOUNDER SOCIETIES. The FELLOWSHIPS will be effective as of February 1, 1978.

FINAL REPORT

A final report shall be submitted to the ENGINEERING FOUNDATION and to the FOUNDER SOCIETY by each fellow for publication. The ENGINEERING FOUNDATION reserves publication rights.

Appropriate recognition of the ENGINEERING FOUNDATION and the cooperating FOUNDER SOCIETY must be prominently displayed on the title page of the publication.

PAYMENTS

The ENGINEERING FOUNDATION will provide 50 per cent of the grant at the start of the fellowship and 50 per cent at the end of the fellowship when the final report is presented.

INSTRUCTIONS FOR PREPARING A PROPOSAL

The formal proposal shall contain the following information. Twelve copies are needed.

The Cover Sheet

The first page of the proposal shall include the title of the review; name of applicant, title, institution and location; name of person financially responsible for administering the fellowship funds.

Description of Proposed Review

The next section (not to exceed four pages) shall contain the proposed review in sufficient detail to allow an evaluation of its merit on the basis of delineated approach and time required for its fulfillment. Maximum time will be one year.

Qualifications of Applicant

The next page shall describe the special qualifications of the applicant for conducting the review followed by a biographical sketch and a listing of publications.

Proposed Budget

The proposed budget shall appear on the last page in specific details describing how the funds will be utilized. The budget cannot exceed \$5,000 and cannot include indirect costs. Such a fellowship award is not renewable.



IEEE

# continuing education services

**A link between now**

**and a better tomorrow**

Speaking for the IEEE Educational Activities Board Committee on Short Courses and Home Study Programs I extend a hearty welcome to the new Section leaders. Each of you is invited to become involved in our continuing education programs.

One of our greatest achievements is the excellence designed into our courses and the timeliness of the material. It is our aim to supply courses that are in tune with your educational requirements.

We have developed many one, two, three and five-day courses for the electrical engineering profession. Our new catalog is being readied for the printer and plans are to circulate it early in 1977. Please consider Vince Giardina, Manager of Continuing Education as your contact. You can call him at (201) 981-0060, Ext. 174, or write him at the address below. He can be most helpful on ways and means to introduce education programs to your Section.

Allow me to list a few guides that will assist you in developing successful educational programs:

1. Appoint an Education Chairperson. Surround yourself with dedicated people who will assist you in getting your programs activated.
2. Communicate with our Headquarters Staff in Continuing Education.
3. Poll your membership via your newsletter. This will assist you in learning your member needs which will eventually help you to program courses. Call us if you need assistance in forming the newsletter item.
4. Determine good timing for your programs. Our education activity continues throughout the year and depends wholly on the local weather. Try to avoid the vacation months of July/August.

A five-month lead period is sufficient to "nail" down all arrangements.

5. Establish a strong communication link. Call us today to learn first hand about how we can extend to you our:
  1. Full support plan that comes with a "no-risk-to-you" clause.
  2. Instructor/notes plan that will help you to generate more money for your treasury while giving your members an excellent education program.
  3. "Brokering" of your own courses transnationally through us.

Achievement of your educational goals is our principal goal. It will be a pleasure to hear from you soon.

Vince Giardina  
445 Hoes Lane  
Piscataway, N. J. 08854

Dr. Joseph Biedenbach  
EAB Committee Chairperson  
Short Courses, Self Study Programs

JANUARY

Introduction to Solid State Power Electronics  
January 28 and 29, 1977  
IEEE Pittsburgh Section

FEBRUARY

No courses scheduled

MARCH

Introduction to Microprocessors  
March 19, 1977  
IEEE Columbus Section

APRIL

Introduction to Solid State Power Electronics  
April 7 and 8, 1977  
IEEE Hampton Roads Section - Southeast Con

Introduction to Solid State Power Electronics  
April 15 and 16 or April 22 and 23, 1977  
Iowa/Illinois Section

Introduction to Microprocessors  
April 30, 1977  
IEEE Computer Society - Huntsville Chapter

Protection and Grounding of Distribution Systems  
April 29 and 30, 1977  
IEEE Johnstown Section

MAY

Introduction to Microprocessors  
May 21, 1977  
IEEE Washington Section/Northern Virginia Section

Microcomputer Design and Applications  
May 2-6 or May 9-13, 1977  
IEEE Region 1 and Mohawk Valley Section

Basic Project Management, Planning, Scheduling & Control  
May 7 or May 14, 1977  
IEEE Milwaukee Section

JUNE

Microprocessor Seminar  
June 10 and 11, 1977  
IEEE Washington Section and the Northern Virginia Section

CAMAC  
June 11, 1977  
IEEE Columbus Section

If your section is not listed and you wish to schedule a short course for the Spring season, 1977 please call Vincent J. Giardina at (201) 981-0060 ext 175 before February 15, 1977.

Spectrum: A steady diet

As the first professional Editor of Spectrum, Donald Christiansen reflects: "I joined IEEE with the objective of turning a well-respected magazine into the world's foremost electrical/electronics journal. The challenge has been our readership--the largest and most expert conglomeration of engineers in the world. To serve their needs, we've had to keep our ears to the ground and our pens in our fingers." By background, Don is ideally suited to the task. Before joining Spectrum as Editor and Publisher in 1971, he divided his career between electrical and electronics engineering (for 12 years with CBS) and publishing (the latter culminating in his becoming editor-in-chief of Electronics magazine). A Senior Member of IEEE, he holds memberships in several Groups and Societies. His current interests include technology planning and forecasting, the study of innovation, and the history of technology and science.

Spectrum presents over 900 editorial pages per year, written by its eight full-time editors and several contributing editors. Among the key staff members assisting Editor Christiansen on Spectrum are: Ronald Jurgen and Howard Falk, Managing Editors; Art Director Herbert Taylor; and Advertising Director William Saunders. Says Don, "We think we've been making progress at Spectrum. Our principal commitment is to provide the members with a steady diet of timely, accurate, and, above all, useful information."

The fifth in a series on key Headquarters staff functions.

RAB NEWS

A free resource directory, "The Directory of Speakers and Tours," is being compiled from annual meeting reports of Sections, Chapters, and Branches. Recommendations for listings are sought at once, to meet the August publication date. Please contact Barbara Chapman, Field Services Department, (212) 644-7752.

Three "sunshine" meetings held by the Regional Activities Board in 1976 served as

useful models. A change in Policy 9.7D may open the BoD meetings to members and Executive Committee meetings to Board of Directors' members. Spectrum's Regional News page announces RAB and BoD meetings.

Section officers and committees, please report year-end changes in the names of Section/Chapter/Committee officers promptly to the Field Services Department.

Annual Reports and Financial Statements were due February 1, 1977. If you haven't yet done so, please submit your reports now.

TAB NEWS

Group/Society/Council conference coordination has changed hands within the New York staff. E. D. MacDonald, Supervisor of Conference Services, retired in December after a decade of service in that position. Coordination of Group/Society/Council-sponsored conference services and publication products is now the responsibility of Joseph Casey at (212) 644-7861.

Do you have your copy of the TAB Meetings Committee manual, "How To Organize an IEEE Conference?" Although originally written for the IEEE Group/Society/Council conference activities, the manual also applies to IEEE Region- and Section-sponsored conferences.

Assistance is needed by the IEEE Conference Coordination Group in the listing and coordination of IEEE Group/Society/Council/Region-sponsored conferences. As early as possible, the group should be given the following information: conference name, location, date, and information contact; copy of conference budget as approved by the IEEE Group/Society/Council/Region sponsor; plans for any IEEE Conference Publication. Questions should be addressed to Joe Casey.

PUB NEWS

Two new titles will be available soon through IEEE Press: "Turning Points in American Electrical History," edited by James E. Brittain, and "Charge-Coupled Devices: Technology and Applications," edited by Roger Melen and Dennis Buss. The 416-page volume, "Turning Points in American Electrical History," recounts the key developments of electrical science and technology from colonial days to the present. Each of the book's 64 reprints is accompanied by editorial comments and biographical information. Sponsored by the IEEE History Committee, the paperbound member edition is priced at \$12.95; the clothbound edition at \$25.95 (\$19.45 for members). (cont'd, p.4, col.1)

PUB NEWS (cont'd)

"Charge-Coupled Devices: Technology and Applications" is a 424-page volume pertaining to this entirely new concept in MOS circuitry, including 45 reprinted papers with introductory comments. Sponsored by the IEEE Solid-State Circuits Council, it is priced at \$9.95 for the paperbound member edition; \$19.95 clothbound (\$14.95 for IEEE members). Both of these volumes can be ordered by sending payments to the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854.

Editorship of the Proceedings has changed hands. Glen Wade, professor of EE at the University of California at Santa Barbara, has been appointed Editor of the Proceedings of the IEEE. He succeeds Robert W. Lucky of Bell Labs, who gave three years of dedicated service as Editor.

Spectrum E, a new demographic advertising section focused to reach a select electronics engineering audience, made its first appearance in Spectrum's January issue, and will now appear every month. Spectrum E's circulation is about 85,000, roughly half of the Spectrum readership. A 10 to 15-page supplement, it is proving to be particularly attractive to electronic components manufacturers. Further information can be obtained from Spectrum's Advertising Director, Bill Saunders (644-7767).

Spectrum's April "Instrumentation Issue" looks at present and upcoming instrumentation trends, such as the new world of "smart" instruments and instrument systems linked by data communications. Other articles in the issue will discuss ways in which instrument manufacturers are attempting to meet the myriad challenges of the late seventies.

STUDENT NEWS

Career and life planning for students are the topics of two recent articles by John Picarelli of the Institute's Student Activities Committee. Published in the IEEE Student Newsletter, the articles mark the beginning of an effort to assist students in understanding and articulating their personal needs and abilities.

Centerfold inserts

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Pink--Continuing education	2I-2J

1976 year-end Branch rebates can be obtained by sending in your Annual Report and Financial Statement. The deadline for the \$1.00-per-member rebate was February 1.

Elect new officers early, then remind them that meeting, social, and fund-raising ideas are included in the Student Branch Operations Guide, available from Judy Rundle at Headquarters. Judy would appreciate receiving the names of new officers as soon as possible.

The 1976 Vincent Bendix Awards were made to the following eight IEEE Student Branches: the University of North Dakota, Colorado State University, the University of Detroit, Drexel University (Day Division), the University of South Florida, Youngstown State University, the University of Akron, and the University of Wyoming. Congratulations to all these schools for their creative efforts.

"Beyond the genius of invention" is the theme of the Region 1 Student Conference to be held April 21-23 in New Jersey. Conference activities will include a paper contest, a design contest, leadership training sessions, a short course on microprocessors, a professional concerns seminar, as well as visits to ELECTRO/77. Contact: Paul Bonomo, Stevens Institute of Technology, S'127, Castle Point Station, Hoboken, N.J. 07030.

NOMINATIONS REMINDER

Worthy candidates for IEEE Awards deserve recognition for their accomplishments in electrical and electronics engineering. The awards process is an important activity and your participation in making nominations will be greatly appreciated. Contact: Una B. Lennon at Headquarters for nomination forms.

SECTION/CHAPTER NEWS

Changed--the Northern Virginia Subsection of the Washington Section to a full Section.

Established--the National Capital Area Council, composed of the Northern Virginia and Washington Sections.

Established--the Computer Chapter of the Hampton Roads Section; the Computer Chapter of the New Hampshire Section.