**APRIL 1975** 

APR 14 1975NO.57

A management newsletter on IEEE operations . . . to encourage communication among all organizational entities and the staff

STUDENT ACTIVITIES DEPT.

# **ELECTRICAL ENGINEERING®**

TOP-SIDE DEVELOPMENTS

PROFESSIONAL REGISTRATION in Engineering Statement has been issued by IEEE in response to the request of the National Council of Engineering Examiners (NCEE).

The IEEE continues to support the concept of licensure for the practice of engineering. In reviewing the various recommendations currently being put forth on the question of relicensure, it seems clear that much more effort must be expended in developing a meaningful and suitable set of criteria for the measurement of individual competence to practice. By and large such competence is derived primarily as a result of practice, hence the IEEE feels any system developed to certify individuals for relicensure must have built into it a technique for review and evaluation of the immediate past performance of the individual in his working environment.

The IEEE is aware of numerous proposals to use programs oriented toward the accumulation of educational "credits" as a means of assessing competence to practice. The IEEE does not believe such programs can be used as the sole criterion for relicensure of individuals to practice. The IEEE does feel there is a place for educational assessment in the overall relicensing procedure as one of a number of criteria used to requalify the individual.

TRAVEL FUNDS FOR MAJOR BOARDS and Committees described in a revised Policy Statement 10.6. It is recognized that travel by staff of the IEEE and by volunteer members of its Boards and Committees is necessary for many of the essential activities of the Institute. At the same time, it is clear that IEEE resources cannot support all of the travel that is desirable for all Boards and Committees. In order to use the Institute's limited travel

resources effectively, the following guidelines apply: 1) Travel funds are to be budgeted explicitly for each Board or Committee for which such funds are required for effective performance of its functions. In general, such budgets will be approved only for major Boards or Committees (defined as those coordinated by an Executive Committee member). 2) In order to keep such budgets within practical limits. locations and times of meetings should be chosen to minimize travel costs, provided such locations and times do give effective working conditions for the committee. Committee members should not expect travel payment routinely, but should use the budgeted funds only if they do not have other sources of support. 3) It may also be desirable to use travel funds for certain ad hoc studies in which time is of the essence (as in groups set up to formulate action plans during a time of high unemployment). If not budgeted, the Executive Committee may approve such travel from unallocated funds. If the urgency is such that there is not time to wait for the next Executive Committee meeting, the President may approve such travel from an emergency fund, with a report on such authorization at the following Executive Committee meeting. 4) Travel reimbursement will be limited to the following items: Transportation a) Actual bus, coach train or coach day air fare. Reimbursement will not be made unless original receipts are attached. b) Reasonable use of personal auto at 15¢ per mile. c) Tolls and parking. d) Necessary taxi or other ground transportation. Meals and Lodging a) Hotel cost at prevailing local standard rate (single), limited to evening of the meeting and/or the prior night. b) Personal food and beverage at no more than prevailing rate at place of meeting. c) For any expenditures in excess of \$10.00, reimbursement will not be made unless

ELECTRICAL ENGINEERING® is published bi-monthly by IEEE, 345 East 47 Street, New York, N.Y. 10017



original hotel and meal receipts are attached. Entertainment a) Reasonable food and beverage expense will be reimbursed providing names of individuals and purpose of meeting is supplied and approved. All expenditures must be supported by original receipts. Miscellaneous a) Necessary telephone and telegram charges. b) Necessary duplicating service charges. c) Reasonable porter fees and gratuities. 5. It is the responsibility of all Institute Staff members and volunteers who authorize travel reimbursement for hired professionals to make such individuals or organizations aware of the guidelines stipulated in Policy Statement 10.6(4) prior to arrangement of travel plans and to reach a satisfactory understanding with such professionals.

FRANK H. BLECHER was extended gratitude by the IEEE ExecCom along with the IEEE International Convention and Exposition and the IEEE Northeast Electronics Research and Engineering Meeting (INTER-CON/NEREM) Merger Committee. Mr. Blecher with "great tact, persistence and justice led the Merger Committee through lengthy discussions and negotiations to a successful conclusion"--the birth of "Electro."

EXECCOM 1975 MEETINGS CHANGED. The May meeting has been deleted; the June meeting moved to the weekend of June 21-22 in Pittsburgh, and the July/August meetings will be combined into one meeting.

THE BOARD OF DIRECTORS (BofD) passed a motion of appreciation to the Philadelphia Section Executive Committee for the hospitality extended to the BofD as guests at the Philadelphia Section Past Chairmen and Fellows Night.

EMMET CAMERON RECEIVES appreciation of IEEE ExecCom for his service with "particular wisdom, tact and persistence in bringing into being Electrical and Electronics Exhibitions, Inc., and in obtaining

the cooperation of the parties to its incorporation...that the affairs of the Western Electronics Show and Convention (WESCON) have been successfully carried forward...."

# SOCIO-ECONOMIC

AS A STEP TOWARD PENSION "PORTA-BILITY" the BofD of IEEE has agreed to join with Pensions for Professionals, Inc. (PFP). This step was taken to aid in the future development of specific pension plans aimed at providing additional coverage to as broad a spectrum of professional society members as is possible under current law.

Six areas of activity in our drive for pensions are most prominent: Establishment of a small but smoothly functioning PFP office; negotiations with additional professional societies; marketing of PFP pension plans to members of participating societies and their employers; development of Individual Retirement Accounts (IRA) authorized by recent pension reform legislation for use by members of participating societies; continued negotiations with institutions for needed investment management; establishment of communications with participating societies to inform society management and membership all about PFP. (Contact Joe Casey at HQ for further information.)

MARKET FEASIBILITY STUDY UNDERWAY for "Engineers and Scientists Only" Pension Plan made possible with passage of the 1974 Pension Reform Act. Results of this study will be published in E. E. and other IEEE publications. The study won't be completed until summer. (Further info, contact Jack Kinn, HQ.)

'IEEE'S PROFESSIONAL PROGRAMS IN the U.S.'' will provide you with a better understanding of IEEE's professional progress and the historical development of the pension plan. (For your copy, contact Emma White, HQ.)

A CONGRESSIONAL RECEPTION will be held in the Hearing Room of the House

**April** 1975

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 New York, N.Y.

Committee on Science and Technology, 5:30 - 8:00 p.m., April 22, in Washington. The Reception will take place on the 2nd day of the Legislative Forum sponsored by the Liaison Engineering Societies (including IEEE) - April 21-23. It will afford the officers of the engineering societies an opportunity to exchange ideas with Congressmen and Senators.

The Legislative Forum will be held at the Shoreham-American Hotel, Washington, D.C. Registration fees: full registration \$75; each discussion session (total of 3) \$15; each evening banquet (Monday and Tuesday) \$15; Tuesday Luncheon \$10. Monday, April 21, is open for Forum attendees to meet with their Congressmen on Capitol Hill. For registration form, contact the National Society of Professional Engineers (NSPE). (Write: NSPE, 2029 K Street, N.W., Washington, D.C. 20006.)

EMPLOYMENT WORKSHOPS SUCCESS-FULLY completed in three different geographical areas. The next step is for IEEE to determine how the individual Sections are implementing the 'How to Job Hunt' program outlined at the Workshops. Section Chairmen who were unable to attend the sessions may request the material available from IEEE Headquarters. (Contact Emma White, HQ.)

EMPLOYMENT MEMBERSHIP SURVEY returns are coming back and will be analyzed by the end of March or early April. IEEE members will see preliminary articles on the Survey in Spectrum and Professional News.

COMMENTS ON CODE OF ETHICS are being invited. The newly-adopted Code of Ethics appears in the February issue of Spectrum. The BofD considers it to be a "living document." (Contact Jack Kinn, HQ.)

# CONVENTION NEWS

DIRECTORS FOR NEW "ELECTRO" SHOW announced. Electro, a new IEEE convention and product exposition, will have its debut in 1976 following the merger this

year of IEEE INTERCON and the Northeast Electronics Research and Engineering Meeting (NEREM). Officers elected include Norman Laschever, Chairman of the Board of Directors; Theodore S. Saad, Chairman of the Executive Committee.

SLATED FOR MAY 11-13, 1976, ELECTRO will be held at the Hynes Memorial Auditorium which is directly connected with the headquarters hotel, the Boston Sheraton. Electro will begin the rotation between Boston and New York. It will capitalize on the Bicentennial, the 50th anniversary of the IEEE Show, and the 100th anniversary of the telephone. The telephone was the most admired exhibit at the Centennial of Independence at Philadelphia's Great World's Fair, 1876. However, it was called by the London Times "the latest American humbug." In March, 1876 Bell talked into his machine and his words, "Mr. Watson, come here; I want you. " were heard around the world. (Further info on Shows, contact Bill Weber, HQ.)

A SELL-OUT FOR WESCON is anticipated for the Western Electronic Show and Convention slated for September 16-19 at Brooks Hall/Civic Auditorium, San Francisco, Calif. The headquarters hotel is the regal St. Francis. Booth sales are running at a rate of twice that of last year at this time. Forecasts state it will be the best WESCON ever. (Further info, contact Bill Weber, HQ.)

# PUB NEWS

TWO NEW BOOKS ARE HOT OFF IEEE Press. The publication of "Nonlinear Networks: Theory and Analysis" is a comprehensive review of research on the theory of nonlinear networks. Directly concerned with circuit-theoretic issues, the book allows the reader to gain a sound understanding of a nonlinear network's behavior resulting from the properties of the circuit's elements and its topological structure. "Computer Communications" treats systems through which the resources of the modern computer are made available to many remote users. The book covers the design of

the total interconnection subsystem. (For further info, contact Reed Crone, HQ.)

MICROFILM AVAILABLE for all INSPEC Science Abstracts, all back copies of Electrical and Electronics Abstracts (EEA), Computer and Control Abstracts (CCA) and Physics Abstracts. This includes the indexes for the yearly volumes. Cumulative Indexes covering 4-year periods are available on separate reels. Discounts are available for purchasers of complete sets of each periodical. (Rates and ordering information available from Don Gieb, 445 Hoes Lane, Piscataway, N. J. 08854.)

ENGINEERING OPPORTUNITIES for women and some of the programs sponsored by engineering schools, industry, and professional societies to acquaint young women with job alternatives are discussed in the February 1975 issue of the IEEE Transactions on Education, a special issue devoted to women in engineering. (Contact Woody Gannett, HQ.)

SINGLE COPY PRICES FOR SPECTRUM, effective immediately, were raised to \$4 for members and \$8 for non-members.

# STUDENT NEWS

OUTSTANDING STUDENT AWARDS for students who have made the greatest contribution to IEEE and the objectives of their own Student Branch should be presented at an appropriate Branch or Section meeting. Each Branch may receive one free certificate for its "Outstanding" member from IEEE Headquarters. Allow 4 weeks for certificate preparation. (Contact Bob Asdal, HQ.)

INDUSTRIAL CONTACTS should be stressed by every IEEE Student Branch for the benefits to be derived. The Institute Student Activities Committee (SAC) has proposed that, in addition to an IEEE faculty Counselor, each Branch also have an Industrial Contact person to help in program planning, setting up "Day with an Engineer" programs, on the needs and requirements of the "working world." How about finding

someone in industry, through your local Section, to serve as your Branch's Industrial Contact? The American Society of Civil Engineers has successfully employed this concept in fostering the activities of their Student Branches. Comments on this idea would be appreciated. (Contact your Regional SAC Chairman, and see February Student Newsletter for names.)

SECTION SAC CHAIRMEN should be selected from industry to serve as Student Activities Committee Chairmen, coordinating and stimulating Section-Branch activities. Committee guidelines are available from Headquarters. (Send names to Bob Asdal or Emily Sirjane.)

COUNSELOR SELECTION spurred on by a revision to Bylaws 407. 2 and 407. 3 is nearing passage by the IEEE BofD, which gives Students a direct role in the selection of their faculty Counselors. The Bylaw, in part, states: "At each Student Branch there shall be a Counselor who shall be an IEEE member and a faculty member...appointed by the Regional Director upon the recommendation of the Student members of the Branch, the Regional SAC Chairman and with the approval of the Department Head at the educational institution involved. The appointment shall be for two years commencing July.1." The new Bylaw will allow Branch members to renominate their current Counselor or nominate a new person for each two-year appointment period.

### PROD

FELLOW GRADE NOMINATIONS must be received by the Fellow Committee on April 30, a very firm date. (For further information, contact Emily Sirjane.)

# HONORS

GRANT HANSEN, IEEE SENIOR MEMBER, named American Institute of Aeronautics and Astronautics (AIAA) 1975 President. Vice President and General Manager, Convair Division, General Dynamics Corporation, Mr. Hansen was installed as the 13th

E.E. No. 57-4

# continuing education services

The Educational Activities Board has developed a meaningful program of short courses for the membership in all IEEE Regions.

Designed for those Education Chairmen who are actively seeking programs that will broaden the base and enlarge the capabilities of the members, the venture offers the following courses:

COMPUTER	& INFORMATION SCIENCES			
/ /	Computer Aided Filter Design			
1/	Minicomputer Realtime Operating Systems			
11	Minicomputers (2 days)			
11	Electronic Information Processing:			
<del>/ /</del>	Technical Drives & Physical Implementation			
	Teelinied Billes & Lilysted Impediation			
ELECTRICA	L & ELECTRONICS ENGINEERING			
/ /	Infrared Testing (2 days)			
BUSINESS &	MANAGEMENT			
/ /	How to Start and Finance A New Business			
11	Professional Growth: Where Do I Go From Here?			
	The Management Imperative: Effective Communication			
1/	How to Convert Your Ideas into Dollars			
1/	Planning: Professional & Personal			
<u>/ /</u>	Tamming. Trotessional & Tersonal			
COMMUNICATION				
/_/	Engineering Consideration For Microwave			
14 House 12 17 Ho	Communications (5 days)			
POWER				
1011211	Introduction to Solid State Power Electronics			
<u>/</u> /	introduction to boild btate I ower Electronics			
Dlease use th	nis sheet in making your selection and mail it to me today.			
I will send you further details and a new sheet to replace the one you				



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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

have used.

February 18, 1975

The theme of National Engineers Week in 1975 "Engineering...Exploring New Energy Frontiers" is keyed to a most pressing problem facing the nation today. The contribution of the overall energy situation to the growing economic malaise of the United States and the rest of the Western world can not be stressed too forcefully.

We, the presidents of several of the country's principal engineering societies having a total U.S. membership of about 335,200, endorse the open letter to the President and the Congress published by the CITIZENS FOR A STRONG ENERGY PROGRAM in the Washington Post on January 10, 1975. We strongly emphasize the absolute essentiality of reducing consumption of energy, particularly petrcleum and natural gas, as the only short term avenue of relief open to us. Every possible means of conserving energy and improving the efficiency of its use should be aggressively and systematically pursued.

However, the problem of energy, though presently most serious, is only one of several involving the interaction between science and technology and the economic, social and political structure of our society. Our letter on the occasion of Engineers Week in 1974 stressed the importance of restoring the capabilities for the development of national policy and plans concerning science and technology which were lost when the Office of Science and Technology and the President's Science Advisory Committee were abolished. Action on this key issue is still long overdue.

The establishment of the Federal Energy Administration and particularly the Energy Research and Development Administration has improved the national capability for dealing with the technology of energy. However, it does not provide for the development of national policies and plans which relate the energy situation to other natural resources, the environment and world food, for example.

The lack of an overall organization and policy for science and technology and the consequent lack of policy for technical manpower, if continued, can be a serious barrier to restoration of economic health. The recent report of the National Planning Association on scientific and engineering manpower needs of energy industries to 1985 said; "events of the last decade forcefully demonstrated the unfortunate results of a lack of manpower planning in the pursuit of national objectives."

National problems in such areas as energy production, pollution abatement, transportation, food production and distribution, industrial productivity, and many others cannot be solved without the help of scientists and engineers. Further, experience has shown that they also create jobs for other occupations, exerting a strong multiplier effect on the national product, and contributing directly to the country's technological leadership in the world.

In establishing the National Commission on Manpower Policy, by PL 93-203, the Congress found; "that the responsibility for the development, adminstration, and coordination of programs of training and manpower development generally

is so diffused and fragmented at all levels of government that it has been impossible to develop rational priorities in these fields, with the result that even good programs have proved to be far less effective than could reasonably be expected." This situation is critically apparent in the government's lack of concern for technological manpower.

The President's State of the Union message on January 15, 1975, called for expansion of goals concerning our technologically based systems and machines which will challenge the utmost capabilities of the nation's scientists and engineers. We urge early consideration of legislation to reestablish organization at the highest levels of government to provide policy advice and coordination of national efforts to mobilize our great scientific and engineering capabilities to deal with the many problems which face our nation today.

Our societies stand ready to assist our government in any way possible.

Sincerely,

Harry J. Leasing

Harry J. Lessig, President American Society for Quality Control

M.M. Sangster

William M. Sangster, President American Society of Civil Engineers

Richard B Hoberten

Richard P. Robertson, President American Society of Mechanical

Engineers

Leslie C. Gates, President National Society of Professional Engineers Carryn Phillips

Carolyn F. Phillips, President Society of Women Engineers

Jesteur P. Rens

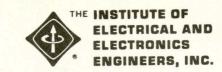
Arthur P. Stern, President Institute of Electrical and Electronics Engineers

K. E. Coulter

Kenneth E. Coulter, President American Institute of Chemical Engineers

Grant Hansen

Grant Hanson, President American Institute of Aeronautics and Astronautics



345 EAST 47TH STREET, NEW YORK, N.Y. 10017 AREA CODE 212 752-6800

February 1975

NEW IEEE MEMBERSHIP DEVELOPMENT POSTER

- AN AID TO PROMOTING IEEE MEMBERSHIP

On the other side of this notice is a copy of the new IEEE Membership Development poster, which will be printed in color and available in two sizes.

This is that time of year when it is particularly advantageous to join the IEEE. Applicants signing up during the period March through August pay only one-half of the annual membership dues and one-half of the Group/Society fees and receive from one to three months additional service at no charge.

Please use the form below in entering your order for a supply of the new posters and any additional membership brochures required in your membership recruitment activities.

IEEE Member Services Department 345 East 47th Street New York, New York 10017

Please furnish

MEMBERSHIP
POSTERS

Quantity

Size 8-1/2" x 11"
Quantity

Size 11" x 17"

Quantity

MEMBERSHIP
BROCHURES

Quantity

Student brochures
Quantity

Regular memberQuantity

Ship brochures

SHIP TO:
(please print)

First name Middle initial Last name

Street address

City State/Country Zip

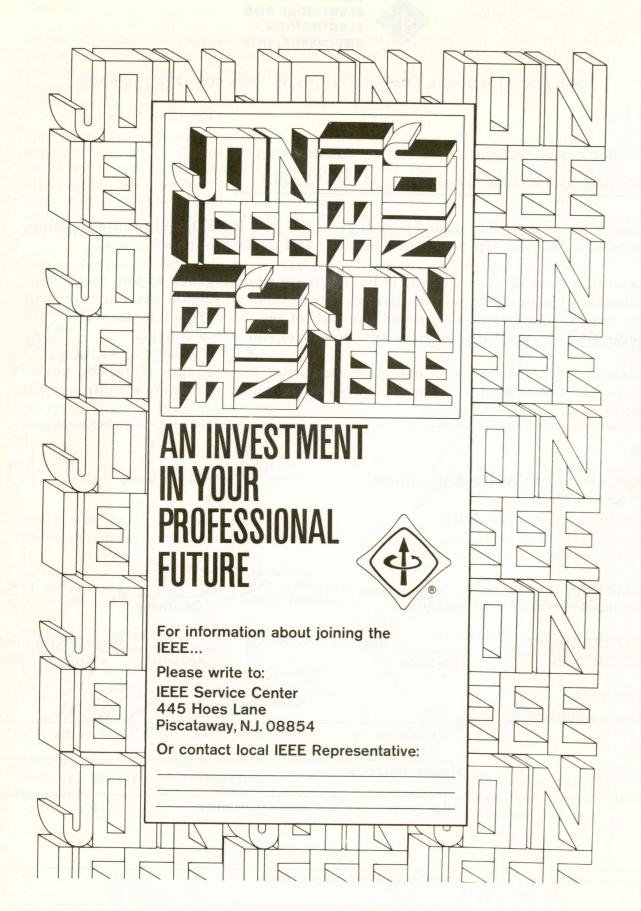
April 1975

Date of order

Your name (please print)

Your office

Identify: Region, Section, Subsection, Chapter, Student Branch E.E. No. 57-4E





# TECHNICAL ACTIVITIES BOARD

NOTICE TO CONFERENCE CHAIRMEN AND SPONSORS CONCERNING THE PROMPT SHIPMENT OF PUBLICATIONS

TECHNICAL CONFERENCES THAT ARE SPONSORED OR COSPONSORED BY IEEE, AND SO LISTED ON THE QUARTERLY MASTER MEETING SCHEDULE, THAT PRODUCE A PUBLICATION ARE AUTOMATICALLY INVOLVED IN THE IEEE OPEN ORDER PLAN (OOP), OPTION NO. 1.

AFTER WE RECEIVE A SHIPMENT OF SUCH A CONFERENCE PUBLICATION, THE OOP COPIES MUST BE HARDBOUND, MAILED, AND INVOICED TO A STANDING LIST OF SUBSCRIBERS. THESE STEPS REQUIRE TIME, AND ALSO ADD TO THE COST OF THE OOP COPIES. THE OOP OPTION NO. 1 SUBSCRIBERS, WITH FEW EXCEPTIONS, ARE LIBRARIES. THE LIBRARIANS, OF COURSE, ARE MOST ANXIOUS TO RECEIVE EACH CONFERENCE PUBLICATION PROMPTLY, AND WE MUST CONSTANTLY STRIVE TO MINIMIZE THE TIME TO DELIVER TO OUR SUBSCRIBERS.

UNFORTUNATELY, THERE HAVE SOMETIMES BEEN LARGE DELAYS IN SHIPPING COPIES TO US BY THE RESPONSIBLE CONFERENCE OFFICERS, WHICH IS THE SUBJECT OF THIS NOTICE.

WE TRY TO REIMBURSE EACH CONFERENCE PROMPTLY FOR THE PRORATED COST OF THE OOP COPIES (USUALLY A FRACTION OF THE TOTAL SHIPMENT TO IEEE HEADQUARTERS, THE OTHER COPIES BEING A PHYSICAL ASSET BELONGING TO THE CONFERENCE SPONSOR(S) AND AVAILABLE ON ESSENTIALLY A COMMISSION BASIS FOR SINGLE COPY SALES). THE MOTIVATION TO RECEIVE PROMPT REIMBURSEMENT FOR THE PRORATED PUBLICATION COST OF THE OOP COPIES, TO ASSIST IN PAYING THE CONFERENCE BILLS, APPARENTLY HAS NOT BEEN SUFFICIENT IN SOME CASES.

ON THE ADVICE OF THE TAB FINANCE COMMITTEE AND PUBLICATIONS COMMITTEE, TWO YEARS AGO WE ADOPTED A POLICY TO REDUCE THE PRORATED COST REIMBURSEMENT BY 1% OF THE LIST PRICE FOR EACH WEEK OF DELAY IN SHIPPING THE OOP COPIES TO US. IN COMPUTING THIS PAYMENT DEDUCTION, WE ALLOW A ONE-WEEK GRACE PERIOD AFTER THE CLOSE OF THE CONFERENCE (OR ONE WEEK AFTER THE AVAILABILITY DATE OF POST-CONFERENCE PUBLICATIONS).

PLEASE BRING THIS REIMBURSEMENT POLICY TO THE ATTENTION OF APPROPRIATE CONFERENCE OFFICERS.

E.E. NO. 57 4-G

# DISTRIBUTION OF IEEE SECRETARY'S REPORT FOR 1974

IN PRIOR YEARS, COPIES OF THIS REPORT WERE AUTOMATICALLY DISTRIBUTED TO ALL OFFICERS AND MEMBERS OF THE AD COMS OF GROUPS, SOCIETIES, COUNCILS, AND TAB COMMITTEES. A SPOT CHECK HAS REVEALED THAT MANY AD COM MEMBERS HAD NO NEED FOR THE REPORT, WHICH IS A FAIRLY LARGE DOCUMENT THAT REPRESENTS A CONSIDERABLE COST PER COPY FOR PUBLICATION AND DISTRIBUTION.

ACCORDINGLY, IT IS OUR PLAN THIS YEAR TO ELIMINATE UN-NECESSARY EXPENSES AND TO DISTRIBUTE THE 1974 REPORT AUTOMATICALLY TO OFFICERS ONLY. ANY OTHER MEMBERS OF AN AD COM OR TAB COMMITTEE, WHO NEEDS THE REPORT, MAY HAVE A COPY BY WRITING TO THE TAB OFFICE.

# IEEE MAILING ADDRESSES

IF THE NAME AND ADDRESS OF A SPECIFIC STAFF MEMBER IS KNOWN, BY ALL MEANS ADDRESS MAIL TO THAT INDIVIDUAL. WHEN IN DOUBT, HOWEVER, THE FOLLOWING GUIDELINES MAY BE HELPFUL:

- A. IEEE HEADQUARTERS REMAIN AT 345 E. 47TH STREET, NEW YORK, NEW YORK 10017. ALL MAIL INVOLVING THE GENERAL MANAGER AND ALL STAFF DIRECTORS, EXCEPT THE DIRECTOR OF ADMINISTRATIVE SERVICES, W. J. KEYES, SHOULD BE SENT TO THIS ADDRESS. TELEPHONE NO. (212) 752-6800.
- B. MAIL INTENDED FOR THE DIRECTOR OF ADMINISTRATIVE SERVICES, OR FOR ANY OF THE OFFICES IN THE ADMINISTRATIVE DEPARTMENT, OR FOR SPECIFIC INDIVIDUALS LOCATED AT PISCATAWAY, SHOULD BE SENT TO IEEE SERVICE CENTER, 445 HOES LANE, PISCATAWAY, NEW JERSEY 08854. TELEPHONE NO. (201) 981-0060.



# IEEE REGIONAL OUTSTANDING LECTURE TOURS

Additions to Speakers List

The speakers whose names appear below should be added to the current list (EE, June '74, blue insert, pp. 4E-4I). Section and Chapter officers are encouraged to request speakers or describe a topic of interest so that a matching speaker can be sought. IEEE general funds pay travel expenses in full and other expenses as necessary within constraints of the guidelines (EE, Feb. '73, pp. 4G-4H). It is hoped that Sections & Chapters will pay local accommodations for the speakers; if this is not feasible, the local accommodations can be paid for with IEEE general funds.

To request speakers or other information, contact IEEE Headquarters (Mary Jo Vogelsang, 212/752-6800 - Ext. 622). If you write, please include your phone number. Prospective hosts under this program should not contact the chosen speaker directly. Such invitations should be referred to Headquarters, where itineraries can be coordinated to insure best cost/effective use of IEEE funds. As soon as an itinerary has been set, all arrangements are turned over to the host Sections. Sections outside North America receive additional notices advising them when speakers are planning to travel to their Region. After (but only after) receipt of such additional notices, prospective hosts may and should invite speakers directly.

This list may be used freely by Section officers to invite speakers directly if the Section will pay all expenses.

### SPEAKER

TOPIC

William R. Cherry Solar Research Division Energy Research Development Administration Solar Energy Utilization

Charles Gallo Xerox Corporation Work function of metals and insulators
Xerography
Coronas
Electrical discharges in gases
Gas discharge lamps
Light sources
Electrophotography
Electrostatics (triboelectricity, charge exchange)
Sparking and arcing
Thermoelectricity
Transport properties of solids
Optical radiation phenomena
Astrophysics (red shift)

John R. Thomas National Science Foundation The Soviet Union Today
Soviet Detente Policy
U.S.-Soviet Scientific-Technical Relations

William W. Ward Lincoln Laboratory, MIT Optical Space Communication
In Celebration of the Pioneers: To Jupiter & Beyond

Walter L. Elden Consultant

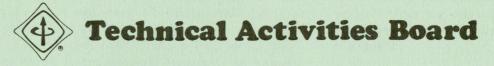
Employment Guidelines & Practices
System Safety Responsibilities
Licensing of Engineers
Elimination of the so-called Industry Exemption
Professionalism Education for Engineers

Older Engineer Obsolescence Syndrome
Defense of the Ethical Engineer's Responsibilities

Charles P. Robart, Jr. Edison Electric Institute

E.E. No. 57-41

Optimum Heating & Air Conditioning System Performance -- New Methodology Equipment for Energy Recovery Current Standards for Energy Conservation in New Buildings -- ASHRAE Standard 90 Environmental Impact -- Fossil Fuel vs. Electric Heating



# SHIPMENT TO THE IEEE WAREHOUSE

UNTIL FURTHER NOTICE, BULK SHIPMENTS SHOULD BE SENT TO THE IEEE WAREHOUSE:

IEEE WAREHOUSE HADLEY INDUSTRIAL PLAZA 3005 HADLEY ROAD SOUTH PLAINFIEDD, NEW JERSEY 07080

EFFECTIVE IMMEDIATELY, THERE WILL BE A FULL-TIME ATTENDANT AT THE WAREHOUSE. IF THERE IS ANY PROBLEM IN MAKING DELIVERY, HOWEVER, THE TELEPHONE CONTACT IS:

SUPPORT SERVICES MANAGER
IEEE SERVICE CENTER
445 HOES LANE
PISCATAWAY, NEW JERSEY 08854
(201) 981-0060

IT WILL BE HELPFUL IF YOU WOULD SEND A LETTER ADVISING OF THE DATE OF SHIPMENT, THE QUANTITY OF SHIPMENT, AND, IF POSSIBLE, THE NAME OF THE CARRIER, WAY BILL NUMBER, AND SIMILAR DETAILS. THIS ADVISORY LETTER SHOULD BE SENT TO THE SUPPORT SERVICES MANAGER AT THE HOES LANE ADDRESS AND YOUR POINT OF CONTACT (E.G., FOR CONFERENCE PUBLICATIONS, E.D. MACDONALD, IEEE 345 E. 47TH STREET, NEW YORK, NEW YORK 10017). IF YOU HAVE NO PRIOR POINT OF CONTACT, PLEASE SEND YOUR ADVISORY LETTER TO SUPPORT SERVICES MANAGER AT THE HOES LANE ADDRESS.

**APRIL 1975** 

President at the Honors Night Banquet. Mr. Hansen, in addition to being an IEEE Senior Member, is also a Fellow and on the Board of Directors of the AIAA, a Fellow of the American Astronautical Society, an honorary life member of the Missile, Space and Range Pioneers, and a member of the Tau Beta Pi and Eta Kappa Nu, honorary engineering societies.

AWARDS NOMINATIONS FOR NEXT year's IEEE Medal of Honor and four Major Annual Medals (Edison, Founder, Lamme and Education) are due by June 1. The Awards program is designed to recognize outstanding achievement in the field of electrical and electronics engineering. If you think someone deserves one of these awards, let us know. (Awards description and nomination form, Una Lennon, HQ.)

IEEE PRIZE PAPER AWARDS, W.R.G. Baker Prize and the Browder J. Thompson Memorial Prize are due September 15. To tell us the deserving and worthy candidates is up to you. (Contact Una Lennon, HQ.)

# FOR YOUR INFORMATION

NEW IEEE STANDARDS 1975 CATALOG, 32 pages, is now in print. Copies may be obtained without charge. The new catalog lists more than 350 standards publications by subject as well as in numerical sequence. Included in this new set of listings are many American National Standards published by IEEE. (Single copies of the new catalog may be obtained free from the IEEE Standards Department, HQ.)

NEW ORGANIZATION ROSTER is being distributed. It's a handy "who's who" to IEEE leaders and organizations. The new edition contains all of the January personnel changes. (Copies, Emily Sirjane.)

IN MEMORIUM MOTOJI SHIBUZAWA, Professor Emeritus of the University of Tokyo, IEEE Honorary Member. Professor Shibuzawa died on February 22nd, 1975. IEEE President Arthur P. Stern's condolences were read at the funeral of this distinguished Professor, who made so many

outstanding contributions to the electrical and electronics engineering profession. Professor Shibuzawa was 99 at the time of his death.

SERIES ON TECHNOLOGY FORECASTING and Assessment to appear in April issue of Spectrum. Included will be articles on Computers: Looking Ahead; Future Communications; Instruments of the Future; and Components of the Future. Meanwhile, in the present, there will also be a news story on the telephone fire in New York City that knocked so many telephones for a loop. (Don't call to ask me how many phones as mine is also out.)

"THE YOUNG ENGINEER, A PROFESSION-AL Guide" is a totally new booklet just published by the Engineers' Council for Professional Development (ECPD). In six sections, the guide deals individually with: Transition from Student to Graduate; Engineering Graduate; Beginning the Professional Practice; Registration; Professionalism & Unionism; The Engineer's Heritage. Price: 75 cents on an individual basis. 20% discount on bulk order (over 100 copies). (For copies: write ECPD, 345 East 47th St., N. Y., N. Y. 10017.)

A NEW PRE-COLLEGE GUIDANCE Brochure, "What Shall I Be? Your Career in Electrical/Electronics Engineering" is offered by IEEE. It covers an overview of the field, then there is a section of "On the Job, "then "What it Takes to Succeed as an EE, " "What's in It for Me" and finally there's a guide to further sources of information and a list of institutions that offer EE degree programs. Specifically, IEEE wishes to help the reader decide whether electrical/electronics engineering could be a field of interest, and, if so, what to do about it. (Contact Emma White, HQ.) Price: Single copy 50¢, bulk copies (10 or more) 25¢.

CERTIFICATION PROGRAM is being pilot tested for the member who wants to attain expertise in a specialty. Guidelines: that the IEEE certify that a member's performance in an approved continuing education program is adequate; that this certification be in a specific technical area, and that each technical area be related to and under the control of a specific IEEE Group or Society; and that each Group and Society have a Certification Committee to evaluate courses and programs. A cumulative record will be maintained by IEEE. (For further info, contact Joe Casey, HQ.)

A PUBLIC AFFAIRS INVOLVEMENT Workshop, organized by IEEE for the Engineering Liaison Public Relations Committee, was held March 13, at the Engineers Club, Los Angeles, Calif. It was a one-day "teaching session" workshop on public affairs involvement (Community Action Programs) and the development of a local public relations program including the values derived from organizing these types of activities.

NOW AVAILABLE: 1975IEEE MANPOWER Report, "The E/E at Mid-Career--Prospects and Problems." It can be described as the most significant report published to date in its almost total focus on the intimate and far-reaching problems experienced by the individual. With this thorough study of all the factors of engineering employment, the individual engineer can gird him or herself against the common pitfalls of approaching mid-career. Your copy of the 1975 Manpower Report EH 01107 costs \$20 for members, \$30 for non-members.

Order with Report number, EH 01107, from the Order Dept., IEEE, 445 Hoes Lane, Piscataway, N.J. 08854.

MAIL CALL for IEEE announced. If you don't know where to write now that IEEE is in two locations, correspondence concerning membership records, orders, subscriptions and payments should be addressed to the IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854 (Tel. 201-981-0060). All other correspondence should continue to be directed to Headquarters at 345 East 47th Street, New York, N.Y. 10017 (Tel. 212-752-6800).

# WELCOME ABOARD!

New Group/Society Chapters in Sections:

Denver Section: Vehicular Technology
Chapter

Central Indiana Section: Circuits and Systems Chapter

Arkansas Section: Joint Industrial Electronics and Control Instrumentation/Computer Chapter

# New Subsections:

Lower Cape Fear Subsection of the Eastern North Carolina Section Newfoundland-Labrador Subsection of Canadian Atlantic Section

## New Student Branch:

DeVry Institute of Technology, Atlanta, Georgia (Counselor: John Blankenship)

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