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IEEE Region 8 newsletter

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No. 11 July 1970

INSTITUTE NEWS

Headquarters Records of Addresses:

The Region 8 Newsletter is posted using address labels printed in New York from the records held by the computer there. Consequently it is not possible for either the Editor or County Secretarial Services to make any changes in the addresses used.

Any member wishing to alter anything in the address which was used to dispatch this or any subsequent Newsletter should write direct to: Miss Emily Sirjane, Manager, Membership Services, IEEE, 345 East 47th Street, New York, N.Y. 10017, USA.

Loops and Cradles:

In announcing the formation of new Sections, Headquarters describes Greece as 'joining other Sections to close an electronic loop around the Cradle of Civilisation in the Eastern Mediterranean' and Iran as 'from the west pushing this active Institute eastward, deep into the Asian Continent'.

US Members Travelling Abroad:

The following information was circulated to inform members residing in USA. Members in Region 8 may, however, be interested in using the information 'in reverse':—

'US members travelling abroad, if capable and willing, under the auspices of the United States Information Agency's Information Centre Service, to take part in seminars, discussions or lecture programmes involving foreign scholars and professionals, or to address foreign university audiences, may write to Chief, Educational Support Branch, ICS, USIA, 1711 New York Avenue, N.W., Washington DC 20547.'

'The programme is called "Volunteer Speakers Service", seeks to enlist "noted American professionals" and is broader than but includes engineering and scientific disciplines. It presupposes that the traveller is abroad and his expenses have been taken care of. In consideration of his adding a VSS assignment to one or more countries on his itinerary, USIA "posts" abroad undertake (if arrangements are concluded) to assume responsibility for an honorarium or per diem payment to cover the costs of the required regional or in-country travel.' 'Advantages held out include the opportunity to broaden acquaintance with leading foreign personalities in the speaker's field, perhaps to extend his initially-contemplated stay, or to visit localities which did not figure in his original plans.'

'The Washington contact mentioned is principally for putting the IEEE volunteer speaker in touch with the USIA post abroad for the purpose of reaching agreement on consummation, schedule, terms, payments and so on. Presumably USIA-ICS will do some early screening on an applicant's qualifications, so it would be well to let IEEE know that contact is being made.'

Publication News:

Members' copies—for personal use. IEEE's non-IEEE member rates are set considerably higher than member rates. TAB Finance Committee recently reviewed cases in which members have been subscribing more on their employers' behalf than their own.

If employers subscribe and either circulate copies or put them in the library, IEEE has exacted its premium and can hardly object to how employers use their property, but when a member puts his copy to similar disposition, he hits IEEE twice: by depriving it of the premium, and by doing for it a job of recruiting-in-reverse. Members don't beget members that way. Perhaps assuming that the Institute may have been at fault for failure to inform, TAB OpCom urged that all future IEEE offerings pertaining to subscriptions and membership fees carry a clear statement that a member's copies are for his personal use. That would include his use in securing new members—naturally.

Engineering Information Systems:

As surmised they might, all three 'tripartite' parties—United Engineering Trustees (of which IEEE is a member), Engineers Joint Council, and Engineering Index—voted 'no' on the action plan for a United Engineering Information System.

Economics was one big stumbling block. There is widely-recognised need for an active unifying group of appropriate scope. UET has an ad hoc committee, with Harold Chestnut as IEEE's member, trying to chart a sound future course. In a related activity, the informal staff group has been made into a permanent Co-ordinating Committee on Engineering Information. Howard Tompkins is the IEEE staff member on this committee.

IEEE and IEE have broadened their pact as joint publishers of four computer-controlled, photo-typeset periodicals of abstracts and current papers. IEEE will now acquire and integrate into its own data base (transfer being by magnetic tape) the major portion of IEE's computer-produced data base.

The IEEE Annual Index Tapes of its regular publications during 1968-69 combined will become available in 1970, and annually thereafter.

IEEE has also instituted, from its IEE-derived data base, a new service called REFLECS (Retrieval from the Literature on Electronics and Computer Sciences); it consists of machine-readable magnetic tapes of bibliographic entries and abstracts, to be delivered monthly to subscribers by IEEE Information Services, beginning in April. (Particulars from Tom Hogan-HQ.) IEEE co-operating, Engineering Index will use a recent National Science Foundation grant to modernise its indexing vocabulary in electrical and electronics engineering, and bring it closer to the vocabulary used by IEEE and IEE in their joint data base and publishing activities.



The President, Dr. John V. N. Granger, at the reception given in London by the Conference of Engineering Institutions (CEI), talking to (on his left) Sir Eric Mensforth, Chairman of CEI, and (on his right) Mr. R. L. Lickley, of the Institution of Mechanical Engineers.

IEEE Standards :

The IEEE Headquarters staff to support the IEEE Standards Committee is being expanded, in accordance with the recommendations of the Easton Committee that our standards programme be reorganised and strengthened. On 7 April, General Manager Fink announced the appointment of Mr. Sava I. Sherr as Manager of Standards Operation. Mr. Sherr comes to IEEE from the General Instrument Corporation. He holds degrees from Cooper Union and the University of Pennsylvania. In addition to his industry experience, he has been active in EIA, NSIA and AFCEA; he is a member of IEEE and ISA.

As part of the reorganisation of the IEEE Standards Programme, new procedures have been adopted for the publication of new or revised IEEE Standards, including trial-use Standards. When approved by the IEEE Standards Committee, all such documents will be published in the appropriate Group Transactions or Journal. The publication expenses will be part of the Standards Committee budget and will not count against the Group's official page and dollar budget for the year. Reprints will be bound and sold separately, as in the past.

Votes in Election of President, etc. :

An examination of the Tellers Committee Report shows that the percentage of ballots returned by members in Region 8 was only two-thirds of that for the membership as a whole. This is perhaps understandable as we are less likely to have personal knowledge of the men concerned. What is not explainable is that the proportion of ballots from Region 8 which is invalid, as unsigned or for some other such reason, is about ten times greater than in other Regions. This means that even our reduced level of voting is made considerably less effective than it could be with a little more care.

International Notes :

1970 Convention counted about 90 exhibitors from outside the US as follows, in numerically descending order: England, Japan, Canada, Australia, West Germany, Denmark, New South Wales; there were also representatives from France, Holland, Italy, Korea, Scandinavia. Of the 123 elected Fellows honoured at

the Banquet, 17 (14%) were non-US. Representation from outside the US among Convention speakers was lean: of 318 indexed in the Guide, only nine were non-US. Their topics included: integrated circuits for consumers in England and Japan; Japanese and West German video-phones; the Canadian communication satellite and cable-television situations; Japanese waveguide manufacture; and British use of the scanning electromicroscope.

Former Director of Region 8, Prof. R. C. G. Williams, covered trends of technology applied to education in the United Kingdom and withstood the rigours of an American press probe afterwards. J. D. Rhodes of Leeds University returned to England with the Browder J. Thompson Memorial Prize for best paper in any IEEE publication by an author under 30. Co-winner of first prize in the final IEEE Student Prize Papers Award was Michael Lefkowitz (Student 1967—Member 1969) who was born in Poland, received his education there, in Israel, and in Brooklyn and at Cooper Union and New York University—evidently a young man on his way places and a true transnational.

Amendments to IEEE Constitution :

A new statute in New York State makes it necessary to introduce some changes in the IEEE Constitution and, as these will require to be submitted to members for ballot, the Board of Management is taking the opportunity to include a number of other changes which are felt to be beneficial, although not required by the new law.

Full particulars of the changes, with the reasons for the proposed amendments, will be sent to all voting members prior to 1 September 1970 along with the election brochure and ballot.

Information about IEEE :

Every issue of 'Spectrum' has an Index to Advertisers on the final six pages. This lists IEEE advertisements and, to examine each of these, takes only a couple of minutes and Headquarters say that this frequently produces information which is not obtainable in any other way.

REGION 8 NEWS

Appointments to 1971 IEEE Standing Committees and Boards :

The Board of Directors on 26 March 1970 adopted the following new paragraph to IEEE Bylaw 310.10 :

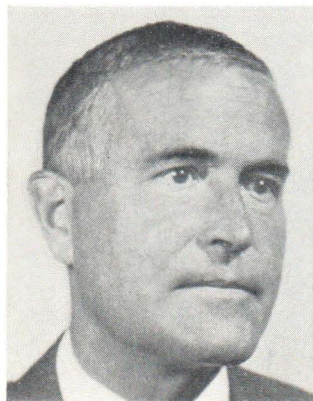
'The Regional Activities Board and the Technical Activities Board shall solicit annually from their respective Sections and Groups, and from their other subordinate organisational units, nominations for elective and appointive office. These Boards shall select from the nominations so obtained the names of nominees who in the opinion of the respective Boards are properly qualified and shall submit such names to the Nominations and Appointments Committee, in accordance with the schedule and procedures outlined in this Bylaw and in Bylaw 312.'

As a result, the Director of Region 8 wrote to all Sections asking for consideration to be given to submitting nominations to him by 4 July (a particularly appropriate date!).

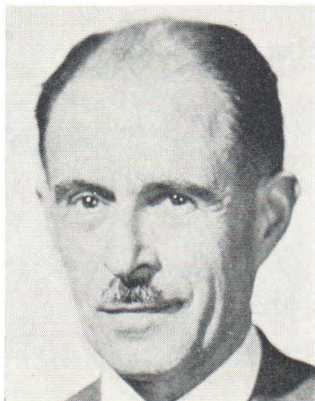
The Boards and Committees concerned are—

Awards Board, Conference Board, Educational Activities Board, Fellow Committee, Inter-Society Relations Committee, Life-Member Fund Committee, Long-Range Planning Committee, Nominations and Appointments Committee, Publications Board, Tellers Committee.

Admission and Advancement, Finance, History, Internal Communications, Membership and Transfers Committees.



Mr. G. Guanella
Past Chairman,
Switzerland Section.



Dr. Pierre David
Past Chairman,
France Section.

Satellite Systems Committee :

A Satellite Systems Committee has recently been created and enthusiastic committee members are required to participate in the work of the Committee and in the formation of various sub-committees.

Plans for the operation of the Committee are currently being formulated and it is expected that a wide range of topics within the satellite systems field will be covered. Those desirous of participating are requested to write to Mr. T. Simms, Northern Electric Co. Ltd., P.O. Box 3511, Station C, Ottawa, Ontario, Canada.

Annual Reception for Overseas Members :

'Dear Dr Wellinger, The Washington DC Section of IEEE invites members of IEEE Sections in Region 8 to attend the Second Annual Reception for Overseas Members in Washington on Friday evening, 26 March 1971. This annual event will be held each year following the IEEE International Convention in New York. Members will find a visit to Washington very rewarding. We will be glad to assist them in every way.'

'It is also suggested that members take advantage of the operations and facilities of the IEEE International Convention Reception Committee for any service or assistance that may be needed. This Committee operates during each day of the Convention in New York. I am a member of the Committee and will be pleased to be of any service I may render personally. Orest A. Meykar, Chairman of Professional Relations Committee, Washington Section of IEEE, 200 East Luray Avenue, Alexandria, Virginia 22301, USA.'

Meetings in the Region :

1971 European Microwave Conference, 23-28 August 1971, Stockholm :

An international Conference, organised by the Royal Swedish Academy of Engineering Sciences, in co-operation with the IEEE, IEEE Region 8 and the Swedish National Committee of URSI.

The main topics of the Conference will be—microwave solid state devices, microwave components and computer analysis, microwave integrated techniques, microwave antennas, microwave applications, microwave acoustics. The call for papers and further Conference details will be published in due course. Advance information is available from Dr H. Steyskal, Secretary-General 1971 European Microwave Conference, Fack 23, 104 50 Stockholm 80, Sweden.

Conference on Dielectric Materials, Measurements and Applications :

This Conference is sponsored by the IEE, in association with the Institute of Physics and the Physical Society and the UKRI Section of IEEE. It will be held at the University of Lancaster, Lancaster, 20-24 July 1970. The Conference is planned to interest those engaged in research on solid and liquid dielectrics and their applications in the power and communications industries, including in its scope all aspects of dielectrics and insulation which are of scientific and general interest. Further particulars may be obtained from the IEE, Savoy Place, London WC2R OBL, England.

Conference on Optimisation Techniques in Circuit and Control Applications :

A Conference on this subject was held at the IEE, Savoy Place, London W.C.2, England, from 29 to 30 June, 1970.

NEWS OF THE SECTIONS

DENMARK SECTION :

The following four speakers have been listed in the Speakers Directory of December 1969 and might be of special interest to Region 8 :

Mr. M. Gronlund, The Scandinavian-Belgian Communication Satellite Experiment.

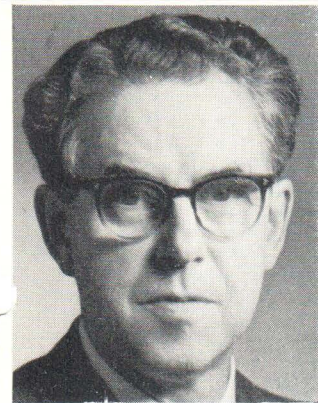
Mr. A. Pedersen, Trends in the High-Voltage Measuring Techniques.

Mr. P. Gudmansen, Radar Sounding of the Intandice in Greenland.

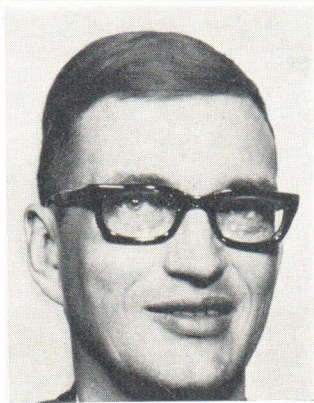
Mr. H. Elberg, Development of Animated Movies by Means of Computer-Controlled Graphical Display.

During 1969 the number of Fellows, Senior Members, Members and Associate members increased from 101 to 106, and the number of Student Members increased from 29 to 67. Actions have been taken especially to increase the number of Student Members at the Technical University and the Technical Colleges by inviting senior students and graduate students to some of the Section meetings.

The Section has co-ordinated activities with Danish Engineering Societies, but no joint meetings have been held. The Section is emphasising more specialised topics which will attract only 20-40 attendance, whereas the Societies are aiming at audiences of 75-150.



Prof. Georg Bruun
Past Chairman,
Denmark Section.



Mr. Per Martin Larsen
Chairman,
Denmark Section.

EGYPT SECTION :

Lectures : The following lectures have been delivered :

1. Engineering Problems in Medical Electricity. 2. Applications of Capacitive Transformers. 3. Development of Micro-Electronics. 4. Applications of Statistical Methods in Electrical Power Systems. 5, 6, and 7. Space Communications; Ground Stations, Satellites and Monolithic Transistors. 8. Transistor Technology. 9. Transistor Circuits. 10. Integrated Circuit Technology and Design. 11. Dry Battery Manufacturing.

Student Activity: In the University of Cairo a special group of students is actively engaged in space communications with Professors and members of the Egypt Section acting as Counsellors. Their work will be reported soon.

Important Projects Activities: 1. Plan of co-ordinating electronic equipment production in Egypt. A meeting was held on 15 April at the Benha Electronics Factory of 20 IEEE members, including Mr S. Amer, Mr A. Abdel Latif and Dr M. A. B. El Koshary with Mr M. E. D. Abdel Latif, Chairman of the Electronics and Electrical Main Organisation, responsible for the administration of all companies in the electronics and electrical manufacturing fields. 2. Plan of establishing special communication facilities to connect the Arab countries in the fields of communications, broadcasting and television.

It was sponsored by the IEE, the UKRI Section of the IEEE, and the Institute of Physics and the Physical Society.

The last five years have witnessed the ever-increasing use of effective optimisation techniques for the solution of problems in circuit and control systems design. These two fields are generally discussed in isolation, but the Conference was arranged with the aim to bring together the experts and users in both fields in order to exchange experience in the use of techniques.

The scope of the Conference included a survey of optimisation techniques used in circuit and control systems design, discussions on non-linear programming and computational techniques, and an examination of applications, e.g., device modelling, network response optimisation, dynamic optimisation of processes and parameter estimation.

Further details may be obtained from the Manager, Conference Department, IEE, Savoy Place, London WC2R OBL, England.

ISRAEL SECTION :

The main activity of the Section is concentrated on the biannual Convention, to take place in October 1970 or February 1971. The effort put into organising this Convention is also being used to promote membership and a good possibility of a 20% increase is seen.

Difficulties are experienced in obtaining guest speakers, and with student activity.

MIDDLE AND SOUTH ITALY SECTION :

The membership of the Section in January 1970 was 55 Students, 33 Associates, 135 other Members and one Fellow, making a total of 224. The ratio of members to Senior Members is affected by the IEEE procedure for elevation to the higher grade being inconsistent with Italian custom. A possible arrangement more in sympathy with tradition is being explored by section officers.

NORTH ITALY SECTION :

In connection with the 1970 Annual Meeting of the North Italy Section, held on 14 May, IEEE members visited the plant of the Centro Elettrotecnico Sperimentale Italiano 'Giacinto Motta', and the Centro Informazioni Studi Esperienze, both in the surroundings of Milan.

The Section co-sponsored a one-day Panel Discussion on 18 June on the subject of 'Insulation in EHV and UHV Electric Systems', including insulation co-ordination; dielectric stresses; external insulation; internal insulation; transformers; internal insulation; cables.

The membership of the Section at 28 February 1970 was 195 Students and 260 other Members, making a total of 455; most of the Section members belong also to AEI. At the end of 1969 a meeting was held (see Newsletter No. 9) to 'start the ball running' for collaboration between AEI and IEEE North Italy Section.

NORWAY SECTION :

Dr J. V. N. Granger, President of IEEE, recently visited Oslo, Norway, giving a talk on 'Engineering Institutions. The Search for Relevance'. An invited editorial by Dr Granger on the subject of the challenge to the societies appeared in 'Teknisk Ukeblad' on 28 May, which is the main organ of the engineering societies in Norway.

SWITZERLAND SECTION :

Switzerland hosted the International Seminar on Digital Processing of Analog Signals held at the Federal Institute of Technology, Zurich, on 11-13 March 1970. This first Swiss Seminar was a resounding success. It received enthusiastic support from some 500 participants from 18 countries, who came to hear tutorial and research reports on the digital processing of analogue signals. The Seminar topic attracted the sponsorship of six international professional societies, two Government bodies and five industrial organisations. Progress in the area of signal processing was discussed in 31 papers from six countries.

The papers presented at the Seminar emphasised the considerable efforts currently devoted to digital signal processing. Several invited papers stressed the importance of the application of both general-purpose computers and dedicated mini-computer systems to contemporary research, particularly in the area of real-time signal processing.

Another set of papers discussed the fundamentals of digital signal processing. It was indicated that one reason for the surge of interest in processing signals digitally is the potentially lower implementation cost, potentially smaller implementation size, greater flexibility and greater performance stability. Specific applications of digital signal processing were the subject of yet another group of papers. These included pattern recognition, speech reception, vocoder systems, radar processing, analysis of electroencephalographic data and noise measurements.

Persuasive and sometimes startling samples of computer generated speech and music were presented during the Banquet. About 120 participants and their wives attended. The official Seminar language was English. Nevertheless, each speaker was given the option to present his material in his native language. In a spontaneous attempt to eliminate potential language barriers, all papers were submitted and presented in English to the advantage of all participants. This will also facilitate publication of many of the Seminar papers in a dedicated forthcoming G-AE Transactions issue.

UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION :

The talk by Dr Granger on 'Engineering Institutions. The Search for Relevance', mentioned in the Norway Section report, was repeated in London at a meeting open to any engineer and to which the press was invited.

Over 200 members who are of more than 10 years standing have been approached and asked to consider transferring to Senior Member.

Although the arrangement with the IEE concerning active recruitment has not been changed, some is being done on a personal basis and by indirect means such as the setting up of a scholarship for post-graduate study.

STUDENT ACTIVITY NEWS

REGION 8 COUNSELORS JUNE 1970

BENELUX :

- (1) *Prof. Dick Poortvliet*
(Twente Student Branch) Techn. Hoogeschool Twente
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Enschede, Netherlands
- (2) *Prof. A. Danthine*
(Liège Student Branch) Université de Liège
49 Avenue des Tilleuls
4000 Liège, Belgium
- (3) *Prof. André Vander Vorst*
(Louvain Student Branch) Catholic University of Louvain
Electronic Research Laboratory
94 Kardinaal Mercierlaan
Heverlee, Belgium
- (4) *Prof. J. Hoffman* Université Libre de Bruxelles
50 Av. F. D. Roosevelt
Bruxelles, Belgium
- (5) *Prof. H. J. Butterweck* Techn. Hoogeschool Eindhoven
Afd. Elektrotechniek
Eindhoven, Netherlands
- (6) *Prof. J. L. J. van der Werff* Hogere Technische School voor
Radiotechniek en Elektronika
Kleine Houtweg 31
Haarlem, Netherlands

DENMARK :

- Mr. E. Nilsson* Technical University of Denmark
Laboratory of Electromagnetic
Theory, Lyngby, Denmark

FINLAND :

- Prof. Martti Tiuri*
(Helsinki Student Branch) Technical University of Helsinki
Otaniemi, Finland

FRANCE

- (1) *M. A. Roumegous*
(ESIEE Student Branch) Ecole Supérieure d'Ingénieurs
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- (2) *Prof. P. Magne*
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55 Rue Greffuhle
92 Levallois-Perret, France
- (3) *Prof. J. Hebenstreit*
(SUPELEC Stud. Branch) Ecole Supérieure d'Electricité
10 Av. Pierre Larousse
92 Malakoff, France

ISRAEL :

- (1) *Prof. Jacob Katzenelson* Technion, Haifa, Israel
- (2) *Prof. S. Karni* Tel Aviv University
Tel Aviv, Israel

MIDDLE AND SOUTH ITALY :

- (1) *Prof. V. Cimagalli*
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- (2) *Prof. F. Cappuccini* Università di Napoli
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- (1) *Prof. Giampio Bracchi*
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- (3) *Prof. G. Zoldan*
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- (5) *Prof. V. A. Monaco* Università di Bologna
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- (6) *Prof. G. Biorci* Istituto di Elettrotecnica
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