



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

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Regional Director: Prof. E. Folke Bolinder Chalmers University of Technology, Gothenburg, Sweden

REPORT FROM THE REGIONAL DIRECTOR

On January 13, 1977 I attended the New Directors Orientation Session at the IEEE Headquarters in New York. The President, Professor R M Saunders, called upon the Headquarters Staff to tell about its activities. The required information/time unit was high. General Manager H A Schulke presented an operational overview of the Institute in which he showed big deficits in 1978-80 due to inflation. Medicine: dues increase. The meeting was followed by a tour of the Headquarters facilities in the United En-



gineering Center. In the afternoon we were driven down to the IEEE Service Center at Piscataway, N.J. Also very instructive.

Next day I attended the Executive Committee Meeting. Biggest excitement: General Manager H A Schulke resigned as of July 22, 1977. The Controller T W Bartlett reported that a pre audit closing of the financial operations of the Institute showed a good surplus for 1976.

In connection with a COST meeting in Brussels on February 4, paid by the Swedish Government, I made a four days trip to visit some Region 8 people. At Eindhoven, the Netherlands, I met Prof F L Stumpers and Dr F W de Vrijer; in Brussels, Dr A Rannestad; at Guildford, Surrey, England, Mr C R Russell, Dr R C G Williams, and Mr R C Winton; and in Paris, Prof J-G Remy. The trip was very rewarding and I learnt a lot about Region 8 business.

On February 16 the Directors of Regions 7, 8, 9, and 10 met in Washington DC. An unofficial Foreign Activities Committee was formed, and it was decided that the Committee should meet on the day before a Regional Activities Board (RAB) meeting and that a

"spokesman" would be appointed, who would speak up at the RAB and Board of Directors (BoD) meetings in matters of mutual interest for the regions outside the United States. This time Dr Creed of Region 7 (Canada) was elected. At the RAB Meeting next day I presented my first Motion to try and restore the cut Regions 7 and 8 rebates to the 1975 levels, but it was voted down. On February 18 I attended the Executive Committee Meeting, and the BoD Meeting took place on February 19-20. The BoD adopted the new Policy on Conditions for Joint Relationships with National Societies as recommended by the RAB and the Executive Committee. The BoD nominated Dr Ivan A Getting, President and Member of the Board of Trustees of the Aerospace Corporation in El Segundo, California, for office of President of IEEE, and Mr Carleton A Bayless, Division Manager State of California, of Pacific Telephone and Telegraph in Sacramento, California as Executive Vice President of IEEE. Mr Bayless is the Executive Vice President for 1977 after having been a successful petition candidate.

No doubt, the job as Regional Director is an interesting one. But there are certain difficulties. During the BoD meeting a lawyer gave an outline of legal matters and I must confess that I did not understand much of what he said. For example, what is a "cosmetic revision"? I have to supplement my English vocabulary with words used in American law.

Finally, a plea: My predecessor Professor Stumpers has tried to get new Sections started in Austria, Saudi Arabia, and Turkey by writing letters to prominent persons. However, no answers have arrived. If there is anybody in these countries who feels that he would like to take part in the forming of a new Section, then please contact me. Please remember EUROCON '77 at Venice May 3-6, 1977.

> Gothenburg, Sweden, March 4, 1977 E. Folke Bolinder

INSTITUTE NEWS

Conditions for Joint Relationships with National Societies

IEEE has entered into agreements with other National Societies to increase the exchange of technical information on a worldwide basis. Each such agreement has been tailored to the country where the National Society exists. The Regional Activities Board recommends that with the possible expansion of such relationships, these agreements be formalized through establishment of a policy setting forth the conditions for joint relationships with National Societies, as follows:

1. The National Society must provide some services to the IEEE, preprocessing of member records, and/or resolving local postal problems.

2. There must be not only reasonable, but very strong evidence that the joint membership programme will increase the number of IEEE members in that locale beyond the normal growth pattern.

PUBLISHED QUARTERLY		JAN.	APRIL	JULY	OCTOBER
DEADLINES	News to Editor	Dec. 7	Mar. 7	June 7	Sept. 7
	Advertisements to County Secretarial Services	Dec. 15	Mar. 15	June 15	Sept. 15
	Delivery inserts to County Secretarial Services	Dec. 22	Mar. 22	June 22	Sept. 22

The dues reduction shall not exceed 20 per cent of the base dues.
All agreements shall be subjected to renewal each five years after two initial 2-year terms.

The Board of Directors adopted the new Policy on Conditions for Joint Relationships with National Societies, as recommended by the Regional Activities Board and the Executive Committee.

Resignation of General Manager

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 appeared in the February Spectrum.

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

Annual Dues Reminder

The dues renewal process continues. Second notices have been sent

out, and hopefully all members with dues outstanding will respond. 3) When and if we attempt to attract advertisers in a European The cut-off date for payment is April 30 for non-US members.

Speakers Wanted

Speakers are wanted for inclusion in a directory RAB will publish during 1977. The idea is to facilitate Section, Chapter, and Student Branch programme planning. Recommended names, appended to annual reports, should be forwarded to Bob Asdal at Headquarters.

Printing and Distribution of Spectrum in Europe

The following memorandum was prepared by Don Christiansen.

It is presently far from feasible to manufacture any technical 1) magazine having the bulk of its circulation in the U.S. elsewhere than at a single U.S. location.

2) It is feasible to bulk air ship European copies and remail from a central location. Commercial technical publications do this. It would cost Spectrum about \$3 or \$4 more per European member per year.

EUROCON 77 **VENICE 3-6 MAY 1977**

Eurocon 77 Venice 3-6 May 1977

PHONE: (301) 948-0028

The number of early registrations indicates that Eurocon 77 will be a most successful conference - 200 had been received by March 14. Also, the sale of advertising space in the Eurocon lounge area is going well with some 20 booths already taken.

There is particular interest in the special section dealing with communications in the developing countries. In February, Dr. Rao, the Co-ordinator of the Indian Space Research Organisation, and Mr. Kirby, the Director of the International Radio Consultative Committee (CCIR) met representatives of the developing countries in Geneva and announced to them the possibility of 25 students receiving a \$100 URSI grant towards local costs in Venice.

The panel for the evening round table discussion will be - Mr. Kirby, Chairman; Mr. Gupta, Indian Telephone Industries, Bangalore; Mr. Hogopiam, Telecommnirt, Iran; Dr. B. Wellenius, University of Chile; and three panellists from U.S.A., Canada and Japan. Student nominations are expected by the end of March.

The special student session will be chaired by Mr. L. Mogridge, the student member on the UKRI Section Committee. The North Italy Section is offering each participating student a subsidy of 25 dollars and it is hoped that other Sections may find it possible to offer some support to students.

'A view of the Grand Canal, Venice'

edition, we will have no choice but to air ship.

We cannot now attract European edition advertisers because our Region 8 circulation is far too low compared with competitive U.S. publications. It must be at least doubled.

5) Spectrum's experiments, including interviews, at the 1976 Paris Components Show reinforced our feeling that Region 8 members want faster delivery of Spectrum, but they do not expect to pay a premium.

Jerry Suran, as a result of his recent trip to Region 8, reported 'Spectrum is thought of very highly in Europe. It is a powerful vehicle for selling Europeans on membership to IEEE. Particularly well received are Spectrum's special issues devoted to single topics"

All of which seems to provide a chicken and egg dilemma. Spectrum needs higher circulation in Europe to attract advertisers, the revenue of which would support air shipping of copies, which would help attract the new members we need!



EMI/EMC SEMINARS

GROUNDING AND SHIELDING STOCKHOLM. SWEDEN - JUNE 15-17, 1977 - FEE: \$475/STUDENT

This is a three-day seminar covering the design of shields for cables, circuits. compartments, boxes, equipment, sub-systems, systems, and complete vehicles. Grounding covers an exciting new systems-aproach, vis.. a methodology with supporting rationale and techniques for controlling EMI. Grounding for safety is also covered.

TELEX: 89-2766 DWCI-GTWN

EMC—DESIGN & MEASUREMENT FOR CONTROL OF EMI ROME, ITALY - JUNE 20-24, 1977 - FEE: \$695/STUDENT

This five-day course covers the EMI/EMC field including system, subsystem, and equipment prediction and analysis, EMC design, control, fix, and retrofit techniques and EMC specifications, control and test plans, instruments, test methods and procedures. EMC design includes wiring, grounding, bonding, shielding, filtering and active circuits.

PHONE: 040.533725

TELEX: 51037

COURSE TITLES	Washington, D. C.	Detroit, Michigan	Toronto, Canada	Rome, Italy	Stockholm, Sweden	Seattle, Washingtor
EMC-DESIGN & MEASUREMENT FOR CONTROL OF EMI	APRIL 11-15		JUNE 6-10	JUNE 20-24		
GROUNDING & SHIELDING					JUNE 15-17	JULY 26-28
MIL-STD-462/462B AND SYTEM-LEVEL EMI TESTING & CLINIC	MAY 2-6					
EMC FOR MOTOR VEHICLES		MAY 24-26				
DIGITAL MODULATION & CODING TECHNIQUES FOR AN INTERFERENCE ENVIRONMENT	MAY 17-19					
EMC-DESIGN FOR INTERSYSTEM EMI	APRIL 26-28					
EMI CONTROL IN POWER TRANSMISSION AND DISTRIBUTION	MAY 31 JUNE 2					
FOR REGISTRATION AND MORE INFORMAT WRS. ANN WALKER Don white consultants, inc. department: 1 4800 springfield road Sermantown, maryland 20767, U.S.A.		OR:		SIN	R. J. ELIENS MAC ELECTRONICS, ENSTRAAT 20 DHOVEN, NETHERI	

John Lane receives IEEE Award

F J Lane, OBE, MSc, FIEE, FIEEE, Chairman of the Council of Members and of the Board of Directors of the Electrical Research Association Ltd, has been selected by IEEE to receive the 1976 William M Habirshaw Award. The citation reads: "For his international leadership in development and application of high voltage ac and dc transmission.'

One of the IEEE Field Awards, the Habirshaw Award is presented annually to an individual or group for an outstanding contribution in the field of transmission and distribution of electrical

power. It carries a bronze medal, a certificate and \$1,000, which was presented to Mr Lane in New York on 1 February 1977 during the IEEE Power Engineering Society's Winter Meeting. The only previous such award to a European engineer was to Gunnar Jancke of Sweden in 1971

During the period when Mr Lane was Chief Transmission Engineer of the UK Central Electricity Generating Board, negotiations with Electricité de France resulted in a decision to construct a high voltage direct current submarine cable interconnection between the two national systems, a 200 kV 160 MW circuit which was a direct successor of the pioneering Gottland 100 kV 20 MW dc connection in Sweden.

Mr Lane participated in and contributed papers to many engineering conferences. In CIGRE, he was Chairman of the HVDC Study Committee for 12 years, member of the Administrative Council and Chairman of the British National Committee. In the distribution field he has been President of the Scientific Directing Committee of CIRED and continues as a member of that Committee for the forthcoming Conference in London in May 1977.

Mr Lane received his OBE in 1951 for services to electricity design.

NEWS OF THE SECTIONS

North Italy Section

The Section encourages student members to participate in EUROCON 77 by offering the \$25 registration fee, plus the travelling expenses; therefore the student members will have to pay only \$40 for the accommodation in Venice, as provided by the Conference Organization.

During EUROCON 77 there will be: the Student Paper Contest (May 2, morning); the North Italy Section General Meeting (May 3, later afternoon) - during the meeting the new officers will be elected; the Region 8 Meeting (May 6 and 7).

The IEEE 5-days Microprocessor Course travels to the North Italy Section! The course will be held in Genova, Istituto Internazionale delle Comunicazioni, Via Pertinace 18, from April 12 to April 16. The course, which is cosponsored by AEI (Associazione Elettrotecnica ed Elettronica Italiana), is presented by the IEEE Education Activities Board in co-operation with the Istituto di Elettrotecnica-Universita di Genova. For further information,

3rd Euromicro Symposium

The 3rd Euromicro Symposium will be held at the Free University, Amsterdam, the Netherlands, on October 3 to 6 1977. It is the leading European Forum on microprocessor systems and microprogramming. The technical programme will cover a variety of subjects such as microprocessors, bit slices, microcomputers, microcomputer software, microprogramming, multi-microprocessor systems, design aids, debugging tools and applications of microprocessors.

The Symposium is organized by the European Association for Microprocessing and Microprogramming (Euromicro), in collaboration with the ECI (AFCET, IACA, BCS, GI, NTG, and NRMG), IEE, UKMAG and IEEE Computer Society, and with the support of the EEC Commissions and the European Research Office.

The Symposium, which will be held in the Auditorium of the Free University-a large modern conference centre-will be accompanied by an industrial exhibition and seminar, where the latest offerings of the microprocessor industry will be presented. Those wishing to participate in the Exhibition should contact the Exhibition Chairman: Reiner Hartenstein, Inst. Informatik IV, University, P.O. Box 6380, D-7500 Karlsruhe 1, Germany. Tel. (721) 6 083641, Telex 782.6521

Further Information on the Symposium from: J D Nicoud, LCD-EPFL, Bellerive 16, CH-1007 Lausanne, Switzerland.

1978 International Zurich Seminar on Digital Communications

The IEEE Switzerland Chapter on Digital Commication Systems is planning its fifth International Zurich Seminar on Digital Communications for March 7-9 1978. The main theme of the 1978 Seminar, which will be held at the Swiss Federal Institute of Technology in

supply. He was recently elected as one of the founder members of the Fellowship of Engineering now in process of establishment by the Royal Society and the Council of Engineering Institutions.

Fellows elected January 1977

The following particulars are now available in addition to the names given by Prof. Stumpers in the last issue:

Egypt

REGION 8 NEWS

Mahmoud A. B. El-Koshairy – For leadership in the development of his nation's power system, and engineering education.

Mohamed A. H. El-Said-For leadership in electronics research and engineering education in his country.

France

Gilbert L. A. Ruelle-For contributions to the development and construction of very large electrical rotating machines.

Germany (West)

Walter E. Proebster-For contributions to and technical leadership in the development of computer components and systems.

Rudolf Saal-For contributions to filter design and to engineering education.

Hans W. Schuessler-For contributions to the theory of analogue and digital filters.

Gerhard M. Sessler - For contributions to the field of electroacoustic transducers, particularly the electret microphone.

Herbert Weiss - For contributions to the development and applications of semi-conducting galvanomagnetic devices.

Sweden

A. Christian Jacobaeus-For pioneering in the theory of switching systems and technical leadership in the development of telecommunication systems.

Lars H. Zetterberg-For contributions to communication theory and medical signal processing and to engineering education.

United Kingdom and Republic of Ireland

Robert Spence - For contributions to the theory of and education in the algorithmic, linguistic, and perceptual aspects of computer-aided circuit

write to the local course co-ordinator: Prof. P. Antognetti, Istituto di Elettrotecnica, Viale Causa 13, 16145 Genova, Italy.

United Kingdom and Republic of Ireland Section

Members are reminded that their subscriptions to IEEE are allowable for income tax purposes. Tax relief is also available in respect of additional subscriptions paid for membership of professional groups and publications. This relief is made in accordance with Section 192 ICTA 1970 (formerly Section 16 Finance Act 1958) and application should be made on form P358.

Members are also reminded that no change in their address can be arranged through the Secretary or any other individual in the UK. All records, and circulations based thereon, are held in New York and consequently any member wishing future communications to him to be sent to a new address MUST inform Headquarters in New York of his wishes DIRECT.

MEETINGS IN REGION 8

Zurich, is: Digital Transmission and Switching in Local Networks.

The aim of the Seminar is to present recent advances in theory and practical application within the area of transmission and switching of digitized speech and audio signals, facsimile, data including highspeed data and digitized video signals in local networks. The topics to be covered within the main theme are: Local Switching; Subscriber lines and Terminals; and Local Networks. Each main topic will be introduced by an invited lecturer.

As a complement to the main conference topics, a panel discussion is planned on: Impact of emerging technologies on the evoltion of digital local networks.

Seminar contributions in the field of the above-mentioned conference topics are invited by the Programme Committee. They should comprise novel results, not previously published in any form.

The deadline for submitting a 300- to 500-word summary is August 12 1977

A detailed Call for Papers and further information on the Seminar may be obtained from the Secretariat 1978 International Zurich Seminar, c/o Hasler AG, Dept 60a, Belpstrasse 23, CH-3000 Bern 14, Switzerland.

International Conference on Maritime and Aeronautical Satellite Communication and Navigation.

This conference, in London 7-10 March 1978, is organized by the Institution of Electrical Engineers in association with the Institute of Electrical and Electronics Engineers Communications Society, the Institute of Mathematics and its Applications, the Institution of Electronic and Radio Engineers, the Nautical Institute, the Royal



Aeronautical Society, The Royal Institute of Navigation, and with the support of other overseas bodies.

It provides a forum for reviewing the rapidly evolving state of development of satellite communication and navigation systems for ships and aircraft in the light of: the operational experience gained with the MARISAT system; the advanced stage reached in international studies of mobile satellite organization (INMARSAT); progress in the MAROTS, AEROSAT and NAVSTAR projects.

The scope is: general communications and navigation systems considerations, aeronautical and maritime; the overall system requirements of air traffic control, navigation surveillance, and safety and distress; telephony, telegraphy and data signal transmission; techniques for multiplexing, signalling and multiple access; interconnection between satellite systems and the public telephone and telex networks; design and technology of spacecraft and their sub-systems and the impact of spacecraft design on the system; equipment for aircraft, ships and fixed earth stations; radio propagation and interference in the relevent frequency bands.

Those wishing to offer contributions for the programme are requested to submit a synopsis of between 250-500 words not later than 9 May 1977. The authors of selected synopses will be invited to prepare contributions of not more than 4,000 words for assessment by 5 September 1977.

Further information from: IEE Conference Department, Savoy Place, London WC2R 0BL.

2nd International Conference on Centralized Control Systems

Organized by the Institution of Electrical Engineers in association with the British Computer Society, the Institute of Electrical and Electronics Engineers (United Kingdom and Republic of Ireland Section), the Institute of Mathematics and its Applications, the Institute of Measurement and Control, the Institution of Chemical Engineers, the Institution of Civil Engineers, the Institution of Electronic and Radio Engineers and the Institution of Gas Engineers.

The Conference, in London, 20-23 March 1978, is intended to be of interest to those responsible for centralized control in public utilities and industrial processes. Although the central theme will be the need for and design and operation of alarm systems, remote control, signalling and telemetry including special problems arising from the use of radio and line channels, it is intended that sessions will be devoted to control room organization and philosophy, the relationship between automatic and manual control and the hierarchical structure of the control system, utilization of equipment and similar hazards), the collection and data and developments towards on-line systems of control.

The Organizing Committee invites offers of contributions for consideration for inclusion in the programme. Those intending to make an offer should submit a 250-word synopsis to the IEE Conference Department by 6 June 1977.

The authors selected will be requested to provide a typescript of not more than 4,000 words for assessment by 21 October 1977.

Further details from: IEE Conference Department, Savoy Place, London WC2R 0BL.

Communications 78 - Communications Equipment and Systems

The Institution of Electrical Engineers is organizing a major Conference as an integral part of Communications 78 for the exchange of information and views on the latest trends and developments in Communications technology. The primary aim of Conference, to be held in Birmingham, 4-7 April 1978, will be to highlight the user aspects of communications equipment and systems.

In total, Communications 78, the fourth in a series of international expositions, organized by Tony Davies Communications, will provide for a major exhibition, an associated conference, inward missions and a number of social events. Communications 78 is supported by the International Telecommunications Union, the Ministry of Defence, the Home Office, the British Overseas Trade Board, the Post Office, the Electronic Engineering Association, the Telecommunication of Electrical Engineers, the Institution of Electronic and Radio Engineers, the Institute of Electronics Engineers (United Kingdom and Republic of Ireland Section) and the IEEE Communications Society.

The conference programme will be divided into three distinct themes corresponding with those of the exposition as a whole: PTT Tele-Communications: Fixed and mobile radio communications; Defence communications.

User interests are to be covered and technique areas to be covered include such items as: Switching and associated control and signalling systems; Terminal equipment for speech and data; Ancillary components and peripherals.

The Organizing Committee is arranging a programme based on a limited number of invited papers supported by contributions resulting from the 'call for papers'.

Those wishing to offer contributions for the programme are requested to submit a synopsis of about 500 words not later than 20 May 1977. The authors of selected synopses will be invited to prepare full contributions of not more than 3,200 words. The full contributions must be submitted by 24 October 1977, for assessment by the Conference Organizing Committee.

Communications 78 will be held at the National Exhibition Centre in Birmingham, providing integrated facilities for the conference and exhibition.

Details of the Communications 78 Exhibition can be obtained from Tony Davies Communications, c/o BETA, 109 Kingsway, London WC2B 6PU, and information about the Conference from: IEE Conference Department, Savoy Place, London, WC2R 0BL.

Private Electronic Switching Systems

Organized in London 10-12 April 1978, by the Institution of Electrical Engineers in association with the Institute of Administrative Management Telecommunications Managers' Division, the Institute of Electrical and Electronics Engineers Communications Society, the Institute of Mathematics and its Applications and the Institution of Electronic and Radio Engineers.

This International Conference aims to provide a forum for the discussion of the latest techniques in private telecommunications switching systems, taking account of:

- (a) The technology employed in private switching systems has developed so rapidly that it has moved ahead of the public exchange systems for the first time.
- (b) Computer control in the private switching field.
- (c) Operating hardware is now available for voice and data.
- Contributions are invited in the following subject areas:
- (a) System requirements: customer features; signalling; operational and maintenance requirements; data switching features.
- (b) Private networks: interworking; signalling; network features; use of networks; operational and maintenance requirements; combined networks, e.g. voice and data; centrex service.
- (c) General switching techniques: switching reed, spatial, electronic, TDM analogue, TDM digital, broadband; control – centralized, distributed, computer control, software aspects of computer control.
- (d) New systems (covering full range from 2 lines 10,000 + lines): semielectronic (e.g. reed switched); fully-electronic (spatial and TDM); electronic control and computer control; key-systems.
- (e) "Add-on" computer control.
- (f) Data switching.
- (g) Experience with new systems.

Those wishing to offer contributions for the programme are requested to submit a synopsis of about 500 words not later than 6 June 1977. The authors of selected synopses will be invited to prepare full contributions of not more than 3,200 words. The full contributions must be submitted by 1 November 1977, for assessment by the Conference Organizing Committee.

Further information from: IEE Conference Department, Savoy Place, London, WC2R 0BL.

ADVERTISING AND INSERTS

Enquiries to County Secretarial Services, P.O. Box 7, Guildford, Surrey, England GU2 5HH. Telephone 0483 77777. Telex 264045. Cable address Cosec Guildford. Delivery address 8 The Flower Walk, Guildford. Deadline dates in box on front page.

ADVERTISING RATES

Display – \$500 per full page. \$300 per ½ page. \$150 per ¼ page. Special section for Appointments/Professional Services/Publications – \$75 per ½ page to include setting.

INSERT RATES

For full Regional distribution to approximately 8,250 members in Europe, Middle East and North Africa, size A5 or folded to A5 (148mm x 210mm), weight 10gms \$550, weight 30gms \$650. Lower rates for distribution to one country only or to a group of countries. Additional charge if collation required. Recommended method of delivery to County Secretarial Services is by air mail parcel post (check local postal regulations for maximum weight per parcel) or by air freight with notification of airline and airway bill number.

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