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THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

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REPORT OF THE REGIONAL DIRECTOR



D. C. J. Poortvliet Director Region 8 1979-80

During August 1-8 I took part in the meetings with the Long Range Planning Committee (LRPC), the Regional Activities Board (RAB), the Ad Hoc Committee on Transnational Activities and the Board of Directors (two days). One of the items discussed in all the meetings was the visit of President Suran, General Manager Herz and myself to various parts of Region 8. This visit was considered to be a success. Unfortunately, the planned establishment of the Austrian Section could not take place at the predetermined date. This was caused mainly by a bad communication from IEEE Headquarters to Prof. Richter and Dr. Sethy. I hope that the establishment of the Section can take

place in December. In the LRPC the relationships between the IEEE and the non-US National Societies were discussed. The Directors from Region 7-10 were asked to report on the present situation during the December meeting of the LRPC.

One of the main issues during the RAB meeting was the approval of the 1980 Field Services Budget which includes the regional rebates. This rebate forms the operating budget of the Region 8 Committee. To my surprise the rebate for 1980 (\$18.100) was less than in the years before (\$19.200). In spite of my efforts to increase the rebate my motion failed in the RAB. This places the Region 8 Committee in a rather bad financial position. During the Region 8 Committee meeting in London (November 9 and 10) we shall try to find a solution.

RAB approved of the establishment of the Thessaloniki Student Branch in Greece, I also found support in RAB for the idea of the EUROCON 80 Chairman Prof. Proebster to invite student paper contest winners to EUROCON 80. Most of the US Regional Directors were willing to raise travel funds for this purpose.

The payment of the annual dues for non-US members is in many countries difficult and expensive (transfer costs). RAB approved of my suggestion to open the possibility to pay the annual dues by Credit Card. The extra costs involved are absorbed by IEEE.

During the meeting of the Ad Hoc Committee on Transnational Activities the problem of IEEE Headquarters Staff support for the non-US regions was discussed. It was felt that an increase of staff support was desirable. Another solution to improve services to members is to establish a permanent regional office like in Region 7 (Canada). The financial implications of both suggestions have to be studied further before a definite plan can be forwarded to LRPC and RAB. The most exhausting part of the Board of Directors' meeting was the IEEE 1980 Budget. The Treasurer, Mr. D. Brereton, provided the Board members excellent information which was further explained in small working sessions. After each session one could fill in a form to indicate desired changes in the recommended budget.

The most astounding motion was moved by R. E. Larson, Division 1 Director. He moved that the motion relative to the proposed 1980 Budget be amended to increase funds to the Technical Activities Board by \$137.000, with the proviso that if the deficit exceeds \$1.000.000, TAB will return that amount. The amended motion passed!!! You can imagine that your Regional Director was quite upset after this decision, while thinking about the decrease of the Region 8 rebate.

Coming back now to your own Region. I hope that many of the members took the opportunity to vote in the presidential election, so the new President is aware of Region 8.

Finally, my apologies for an error in my report in the August 1979 issue of the newsletter. The second paragraph, third sentence, of the report on the visit to Hungary should read: The next day we had a very open and encouraging discussion with the President of the National Societies (MTESZ), Dr. G. Horgos, and with Dr. J. Hoznek.

DICK C. J. POORTVLIET The Hague October 14, 1979

EUROCON '80, STUTTGART, GERMANY March 24-28, 1980

Over 300 papers have been offered for EUROCON '80, of which 160 will appear in the final programme; this selection will ensure that the papers presented are of high quality. Over 350 reply cards have been received from persons interested in attending, indicating that the eventual attendance will be around 600 to 800. Professor Walter E. Proebster, Chairman of the Steering Committee, is well satisfied with the progress made so far, and reports that major companies are taking space in the technical exhibition.

EUROCON '80 will be held at the Technical University of Stuttgart, Germany, on March 24-28, 1980, with the title "From Electronics to Microelectronics - Trends and Applications". This fourth European Conference on Electronics is jointly sponsored by IEEE Region 8 and the Convention of National Societies of Electrical Engineers of Western Europe (EUREL). These two bodies are determined that EUROCON '80 shall be one of the most highly regarded conferences in Europe, and consider that they are now well on the way to realising this ambition.

DEADLINES	PUBLISHED QUARTERLY	FEB	MAY	AUG	NOV
	News to Editor	Jan 7	April 7	July 7	Oct 7
	Advertisements to County Secretarial Services	Jan 15	April 15	July 15	Oct 15
	Delivery inserts to County Secretarial Services	Jan 22	April 22	July 22	Oct 22

Technical Exhibition

An important feature of the Conference will be a Technical Exhibition, which is being organised by a committee consisting of representatives of AEG-Telefunken, Bosch, IBM, Siemens and the Standard Electric Corporation. The Exhibition will be opened by the Minister for Economy of the State of Baden-Wuerttemberg. Among the stands already reserved, Philips will show in particular the application of microelectronics in medical equipment; Bosch will concentrate on the applications of microelectronics in automobiles; and the main theme of the Standard Electric Corporation will be microelectronics in communication. Many other companies have shown interest in exhibiting, but some space is still available.

Student Programme

Plans to make EUROCON '80 especially attractive for students are being realised. The Student Programme has two-and-a-half days of tutorial sessions covering: LSI technology; hardware aspects of software applications of microprocessors: aspects; telecommunications; applications in radio and television; applications in other consumer products. One hundred hotel rooms have been reserved in Stuttgart at the special low rate for students of 20 DMs per night, and it is anticipated that these will be fully occupied. Students planning to attend should therefore make their reservations soon.

Keynote Speakers

Five of the six opening keynote speakers are already confirmed, as follows: Dr. Güntscher, who is responsible for the area of data processing at the Ministry of Research and Technology of the German Government, on "Electronics, and its impact on the economy and the growth of the labour force"; Dr. U. Haier, Director responsible for technical development at Siemens, Munich, on "The applications of microelectronics in telecommunications and power engineering"; Mr. B. O. Evans, Vice-President for Engineering Programming and Technology, IBM, New York, on "Microelectronics in data processing and communication"; Dr. K. Lorenz, member of the Board of Philips, Hamburg, on "Microelectronics in consumer products and medicine"; and Dr. P. Aigrain, Ministry of Technology in the French Government, on "The impact of microelectronics on society".

Panel Discussions

A recent addition to the EUROCON '80 programme is Panel Discussions, which have been planned to permit an exchange of ideas on three topics of major importance. A discussion on technological forecasting will review recent steps to improve cost/performance; in the session on social impact, key government, industry, university, and labour leaders will present their views; a discussion on technology transfer will highlight the problems of transferring know-how between universities and industry, and between large and small companies.

Technical Visits

Twelve local companies have agreed to arrange Technical Visits for participants: AEG-Telefunken, Audi-NSU, Bosch, Daimler-Benz, Duetsche Bundesbahn, Hewlett-Packard, IBM, Kodak, Porsche, Standard-Elektrik-Lorenz, Trafo-Union and Zeiss.

Outline of Technical Programme

The Technical Programme is planned to highlight major advances in microelectronics which will influence future developments. Review papers will be included in general sessions in the mornings, and in the afternoons detailed technical papers will be included in four parallel sessions; thus the programme will be of interest to both specialists and non-specialists. As already announced, papers will be grouped under four themes: Technology of microelectronics; Microelectronics in telecommunications and data processing; Electronics in electrical power systems and control; Other applications of electronics and microelectronics.

Social Programme

Arrangements for a social programme are almost complete, and include a Concert, a Wine Tasting session, and a performance by the world-famous Stuttgart Ballet Ensemble. In addition a special programme is being arranged for ladies accompanying Conference participants, to include tours in and around Stuttgart and visits to museums and to other places of interest.

Further Information

Registration Forms and further information on all aspects of EUROCON '80 – the Technical Exhibition, the Technical Programme, the Student Programme, Panel Discussions, and the Social and Ladies' Programmes – are available from Professor Walter E. Proebster, IBM Deutschland GmbH, Postfach 80 08 80, D-7000 Stuttgart 80, West Germany.

INSTITUTE NEWS

Officers move to strengthen ties with Region 8

As reported by the Regional Director in the last Newsletter, the IEEE Executive Committee held its June meeting in London, giving IEEE officers the chance to meet and discuss major issues with their counterparts in the United Kingdom's Institution of Electrical Engineers and Institution of Electronics and Radio Engineers; the Convention of National Societies of Electrical Engineers of Western Europe (EUREL) representatives; and leaders of the French, West German and Danish national electrical engineering societies. Following these meetings, President Suran, Region 8 Director Poortvliet, and General Manager Herz toured Region 8 encouraging the opening of new sections in Hungary and Czechoslovakia, and arranging acceptable access to monies in a blocked IEEE bank account in Yugoslavia where IEEE has a section. For a description of the Region 8 tour and its achievements see September "The Institute".

IEEE Members car rental discount

The IEEE's Individual Benefits and Service Committee arrangement – described in "The Institute" October 1978 (rear page) and January 1979 (page 11) – with a car rental agreement with AVIS RENT-A-CAR is now in operation in Denmark. The Danish Membership Development Officer advises the Sectional Membership Development Officers to make contact with the Administrative Office of AVIS in their countries to get the details and forms, which interested members must fill in with personal details and IEEE membership number. Based on this information, an account can be opened and an identity card issued.

It is hoped that the IB&S Committee would succeed with similar agreements with hotels and other services related to the travelling engineer, which makes it easier and cheaper for him. It is felt that national engineering societies are learning fromt his agreement and increasingly will utilise these possibilities. Their experience should immediately be communicated to the IB&S Committee to increase their negotiation strength.

FRANK VERNON JØRGENSEN DK Membership Development Officer

ESCOE Progress Report

ESCOE (Engineering Society Commission on Energy) is a not-for-profit organisation established in 1976 by the engineering founder societies, including the IEEE, to provide a source of professional knowledge and skill to support the Department of Energy (DOE) in its work. ESCOE is staffed by mature professional engineers from industry and academia who serve ESCOE for two-year periods.

In March, ESCOE presented a one-day review of its technical programme for an audience of leaders of the engineering community, including representatives from IEEE. ESCOE's work to date has been

primarily in areas of mechanical engineering. Some nineteen tasks have been completed or are under way. Representatives from DOE indicated that they have found ESCOE's work to be of high quality and great value. An annual report summarising the tasks undertaken to date is available from the Technical Activities Department at Headquarters.

Electron Devices Letters

The IEEE Electron Devices Society announces the initiation of a new monthly journal "IEEE Electron Devices Letters" for rapid publication of short communications on new results in the field of electron devices. The time from receipt to publication will average two months for the typical review cycle and the lengths of publications are restricted to two printed pages (three in exceptional cases). Detailed instructions to authors are essentially the same as those for the Briefs Section of the Transactions on Electron Devices.

Criterion for acceptance will be stringent and include novelty, relevance, high technical quality, and the need for rapid dissemination. The number of papers per issue will be kept small to facilitate the fast turn-around time. Distribution will be to all members of the IEEE Electron Devices Society without additional charge and available to non-IEEE members on a subscription basis.

The first issue is scheduled for January 1, 1980, and submissions for this first issue should have been received before November 1, 1979. Subsequent monthly issues will have the same two-month criteria for receipt of manuscripts. All manuscripts should be sent to the editor –George E. Smith, Bell Laboratories, Room 2A-323, 600 Mountain Avenue, Murray Hill, New Jersey 07974, USA. Telephone: (201) 582-3914.

Surface Acoustic Wave Applications

The IEEE Transactions on Microwave Theory and Techniques and Sonics and Ultrasonics are planning to jointly publish in November, 1980, a special issue on Surface Acoustic Wave Device Applications. Papers are solicited that describe new and significant aspects of systems applications of Surface Acoustic Wave devices in the following (but not limited to) areas: Radar, Electronic intelligence; Image processing; Communications equipment; Spread spectrum communications; Jam-resistant communications; Television; Consumer electronics; Frequency and waveform generation; Satellite systems. The deadline for submission of manuscripts is December 4, 1979. The length of each manuscript is limited to 15 double-spaced typewritten $8\frac{1}{2}$ x 11 inch pages plus less than ten figures. Authors were requested to first indicate their intention to submit a paper not later than October 1, 1979. Five copies of each manuscript must be sent to either of the guest co-editors: T. W. Bristol, Hughes Aircraft Company, 600/F259, Box 3310, Fullerton, CA 92634, or R. C. Williamson, MIT Lincoln

Laboratory, Room D-331, Box 73, Lexington, MA 02173.

MEETINGS IN REGION 8

7th International Symposium on Computer Architecture

The 1980 International Symposium on Computer Architecture is the seventh in an annual series sponsored by the Association for Computing Machinery (ACM) and the IEEE Computer Society. It is the first one to be held outside the USA. The site of the symposium is La Baule, France, a beautiful beach resort on the southern coast of Brittany, 40 miles west of Nantes and its international airport. The conference will be held May 6-8, 1980. Papers were solicited on any aspect of Computer Architecture including the following areas:

Distributed architectures; Special purpose architectures; Data base architectures; Hardware description languages; Protection and security constructs; Fault-tolerant architectures; Case studies; High speed computers; Control schema; Computer arithmetic; Architecture/operating system trade-offs; Impact of new technologies; Evaluation of architecture performance; Testing and maintenance.

Further information from: Jacques Lenfant, IRISA, Université de Rennes, Campus de Bealieu, 35042 Rennes Cedex, France.

Conference on the Changing Patterns in Education for Electronics, Communications and Computer Science

Organised by the Institution of Electronic and Radio Engineers in association with the Institution of Electrical Engineers, the Institute of Electrical and Electronics Engineers and the British Computer Society, the conference is to be held at the University of Kent from July 1-4, 1980.

The time is particularly opportune for this forum on curriculum development and course organisation for there are presently indications that significant changes are once again required.

The questions which now arise concern the extent to which the engineer in *one* of the areas of electronics, communications and computer science need be familiar with other areas and also how much he needs to know about the fundamental disciplines of Mathematics, Physics, Chemistry, Mechanics and Thermodynamics. In particular, the advent of LSI systems components poses a number of problems in education. With the increased trend towards higher order "building blocks" how much does the system designer need to know about the physics of components and devices? Indeed, does he need to know anything about traditional electronics engineering? Should most courses now be orientated to supply the increasing demand for systems engineers? How may the discipline of design be taught? What is the best form of course for the minority who wish to enter the highly specialised profession of device engineering?

The Organising Committee invited offers of contributions in any area relevant to the foregoing themes and particularly welcomed offers from authors with teaching experience or definitive proposals relating to the following topics: Need for interdisciplinary components in courses; Design as a science rather than an art; The significance of new technological developments; The influence of the computer as a design and teaching aid; Novel systems of teaching, project-work organisation and course assessment.

All communications on this conference should be addressed to: The Conference Secretariat, The Institution of Electronic and Radio Engineers, 99 Gower Street, London, WC1E 6AZ, England. Tel: 01-388 3071.

Sixth International Conference on Gas Discharges and their Applications

The conference is to be held at Heriot-Watt University, Edinburgh, Scotland, September 8-11, 1980, organised by the Institution of Electrical Engineers in association with the IEEE, IMA, IOP, IERE, Soc. Chem. Ind., and the Welding Institute.

The seven sessions have titles: Arc interruption; Corona and breakdown; Plasma technology; Compressed gas insulation; Glows and pre-breakdown phenomena; Test techniques and diagnostics; Gas discharge devices.

The Organising Committee invites offers of contributions on the above topics with 250-350 word synopsis by November 26, 1979. Full contributions of up to 3,000 words of text, or correspondingly less if illustrations are included, will be required by April 7, 1980. Display boards and tables will be provided for the poster session.

Further information from: IEE Conference Department, Savoy Place, London, WC2R OBL, England.

1980 L'Aquila Workshop on Digital Signal Processing

An "Arden House" type workshop on digital signal processing is being organised in Europe. This ASSP workshop will be held at L'Aquila in Italy from September 9-11, 1980. It will be mainly devoted to concepts and techniques in digital signal processing and particular emphasis will be placed on the following topics: Spectral analysis; Adaptive methods in signal processing; Modelling of sources and systems; Digital representation of signals; Architectures for signal processing.

One of the principal goals of the workshop is to actively encourage the sharing of concepts and techniques between different application

Communications



Communications Equipment and Systems National Exhibition Centre Birmingham England 15 April - 18 April 1980

AN INVITATION TO

Communications 80, the fifth in a series of international expositions dealing with the applications of communications equipment and systems, particularly in the major growth areas of data and business communications which are being created by the converging technologies of computing and telecommunications. The other important themes of the exposition are PTT telecommunications, civil fixed and mobile radio and emergency communications.

Communications 80 will attract visitors from all over the world (from 69 countries at the last event in 1978) who will be coming to see the latest developments in communications technology displayed by leading international manufacturers. Many of the visitors will also attend the integral conference, organised by the Institution of Electrical Engineers in association with leading international learned societies, to learn about the latest technical advances in communications equipment and systems.

Communications 80, the world's leading international exposition in the field, is actively supported by the International Telecommunication Union - the world telecommunications authority representing 153 governments; the British government, through the Home Office; the British Post Office; Cable and Wireless Ltd; and the two main UK trade associations - the Electronic Engineering Association and the Telecommunications Engineering and Manufacturing Association.

Please make a note of the dates and venue of **Communications 80** - Tuesday 15 April to Friday 18 April, 1980, at the National Exhibition Centre, Birmingham, England.

You cannot afford not to come if you make, use or specify communications equipment and systems.

Communications

Please send me details of exhibition conference

Name

Position

Company

Address

Complete, detach and mail to

Tony Davies Communications c/o Industrial and Trade Fairs Ltd,Radcliffe House, Blenheim Court,Solihull,West Midlands B91 2BG,England.

Telephone: 021 705 6707 Telex: 337073

areas. Therefore the organisers would like to see and will particularly encourage contributions from several application areas such as digital audio, speech and image processing, underwater acoustics, digital signal processing in medicine, seismology, radar, meteorology and communications.

A second principal goal of this workshop is to gather detailed information about the various ASSP directed research activities in Europe. In order to achieve this goal, special sessions are planned to map out groups and their activities and every effort will be made (by appointing a European activities committee) to obtain a fair representation from all over Europe.

A third goal which is closely related to the former ones is to define the extent to which the community is willing to commit itself to future

ASSP activities in Europe.

Due to previous experience with similar workshops, the number of participants will be limited to 60 to 80, and participation will be both by invitation and application. All papers submitted to the workshop will be presented in "poster" format, a written paper will not be required. Detailed information will be given in a second announcement to be published at the end of the year. The organising committee is composed of José Tribolet (Portugal, Chairman); Peter Noll (Germany, co-Chairman); Ludwig Eggermont (Netherlands, Secretary); Stephan Horvath (Switzerland, Treasurer); Carlo Scagliola (Italy,

For additional information contact: Ludwig D. J. Eggermont, Philips Research Laboratories, 5600 MD Eindhoven, The Netherlands (Tel:

+31 40 742391).

International Conference on Electromagnetic Compatibility

Organised by the Institution of Electronic and Radio Engineers in association with the Institution of Electrical Engineers, the Institute of Electrical and Electronics Engineers, the Institute of Marine Engineers, the Institute of Physics, the Institute of Quality Assurance and the Royal Aeronautical Society, this conference is to be held at the University of Southampton, England, Tuesday to Thursday, September 16-18, 1980.

Systems to be considered include those in civil use in ships, aircraft and other transport vehicles and in control, computing and communication centres. Subjects in the mainly military field will also be considered

provided that security clearance has been obtained.

Methods for preventing the generation of potentially interfering signals and for reducing the susceptibility of equipment to interference, both within systems and between systems, represent the main theme of the conference. All types of man-made interference, including radiated, induced and conducted interference, whether from electronic equipment or from electrical plant, are included in the range of subjects covered. Contributions were also considered regarding protection from natural sources of interference and EMP. It is intended that, in the main, the conference will be concerned with industrial and professional communications, navigation, computing, control and medical subjects. However, the position relating to domestic equipment, both as to its protection from external interference and its own potential for generating it, is a welcome topic.

Papers were particularly sought under the following general subject headings but this list was not intended to be exclusive and the Organising Committee was anxious to consider papers from other

fields related to the general theme of the conference.

National and international planning; Regulations, standards and specifications; Fundamental studies; Systems and equipment design for compatibility; Procedures and techniques for tests and measurements; Instrumentation; Project management; Operation and installation.

Further information from: Conference Secretariat, Institution of Electronic and Radio Engineers, 99 Gower Street, London, WC1E 6AZ, England. Tel: 01-388 3071, Telegrams: Instrad London WC1.

Eighth International Broadcasting Convention

IBC 80 will be held at the Brighton Metropole Conference and Exhibition Centre, Brighton, England, September 20-23, 1980.

It is sponsored by the Electronic Engineering Association, Institution of Electrical Engineers, Institute of Electrical and Electronics Engineers, Institution of Electronic and Radio Engineers; Royal Television Society anbd the Society of Motion Picture and Television Engineers.

IBC 80 will comprise technical sessions and discussions, a comprehensive display of the latest broadcasting equipment, social

events and a ladies' programme.

The technical programme will cover new techniques, systems and developments, both analogue and digital, of interest to engineers and technicians concerned with all aspects of sound and television broadcasting.

Papers are invited on topics broadly outlined as follows: Microprocessors and minicomputers in broadcasting; Studio lighting technology; Studio design and OB facilities - automatic and digital systems; Transmitters, transposers and antennas; Sound systems; Lightweight programme equipment; Television cameras, electronic graphics, visual effects and other studio equipment; Signal recording and storage; Propagation and service planning, including satellite broadcasting; Cable of optical fibre distribution systems; Future possibilities in receiver design and domestic recording; Audio and video measurement technology; New broadcasting services and systems. Further information from: IBC Secretariat, IEE, Savoy Place, London,

WC2R OBL, United Kingdom.

STUDENT NEWS

As usual there will be an Undergraduate Student Paper Contest in 1980 at Stuttgart.

In addition there will be, for the first time, a Postgraduate Student Paper Contest, open to all students pertaining to an IEEE Student Branch. Through the action of Bob Winton, Secretary of Region 8, and Prof. Walter Proebster, Chairman EUROCON '80, I am pleased to announce that IBM have agreed to fund the contest by offering prizes of \$500, \$200 and \$100. The Region is very grateful to IBM for this

For both contests counsellors are presently receiving adequate information. The deadline for submitting a paper to either of the contests is December 31, 1979. Papers are to be submitted to me. International juries will, of course, be set up.

PROF. A. VANDER VORST Region 8 SAC Chairman Batiment Maxwell B1348 Louvain-la-Neuve Belgium.

POLAND SECTION

We apologise for a mistake in the last Region 8 Newsletter, No. 47. The photo of Prof. Andrzej Sowińsky, a new Poland Section Chairman, mistakenly had the name of Prof. A. K. Smoliński, Poland Section Past Chairman, placed beneath it.

AUGUST NEWSLETTER MAILING

Reports have been received of late arrival in some countries. As all copies were mailed between August 17 and 21 this must be due to postal delay. Investigations are in hand.

ADVERTISING AND INSERT RATES

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

ADVERTISING RATES

Display - \$900 per full page, \$500 per half page, \$300 per quarter page. These rates are for 'camera ready' copy - a charge will be made for any setting required.

INSERT RATES

For full Regional distribution to between 8,000 and 9,000 members in Europe, Middle East and North Africa, size A5 or folded to A5 (148mm x 210mm), weight 10qms \$850, 20qms \$950, 30qms \$1,000. Lower rates for distribution to one country only or to a group of countries. Additional charge if collation or folding required. Recommended method of delivery to County Secretarial Services is by direct air mail parcel post (check local postal regulations for maximum weight per parcel) or by air freight addressed to County Secretarial Services, c/o United Marine (1939) Ltd, Building 521, Room 23/1, London Heathrow Airport. Before shipment of inserts check that the deadline date will be met including allowance for customs clearance and delivery to Guildford.

These rates are net and include no allowance for discount.