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25 YEARS

of International Cooperation between 20,000 Region 8 members in Europe, Middle East & Africa

- Accoustics, Speech & Signal Processing
- Aerospace & Electronic Systems
- Antennas & Propagation
- Broadcast Technology
- Circuits & Systems
- Consumer Electronics
- Communications
- Components, Hybrids, & Manufacturing Technology
- Computers
- Control Systems
- Dielectrics & Electrical Insulation
- Education
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- Engineering Management
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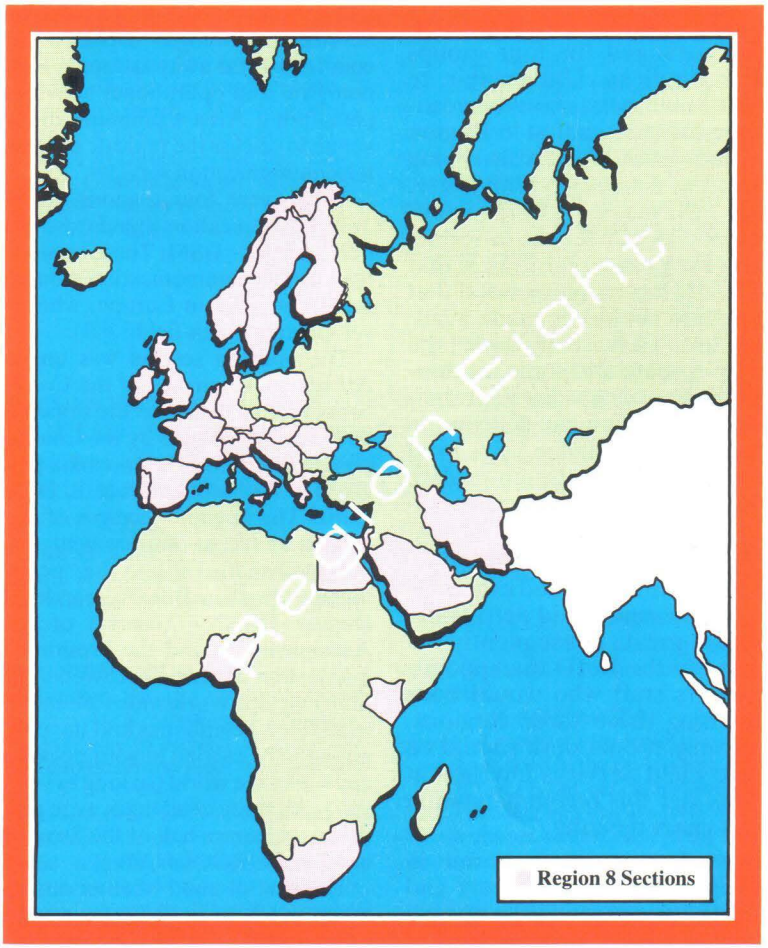


1963-1988

- Industrial Electronics
- Information Theory
- Instrumentation & Measurement
- Lasers and Electro-optics
- Magnetics
- Microwave Theory Techniques
- Nuclear and Plasma Sciences
- Oceanic Engineering
- Power Engineering
- Power Electronics
- Professional Communications
- Reliability
- Robotics and Automation
- Social Implications of Technology
- Systems, Man & Cybemetics
- Solid State Circuits
- Ultrasonics, Ferroelectrics & Frequency Control
- Vehicular Technology

Institute of Electrical & Electronic Engineers Inc
Regional Director: Dr. Hugo Rüchardt

LONG RANGE PLANNING

R.C. Winton (England)

How is Long Range Planning, or Strategic Planning as it is called at IEEE Headquarters, created and implemented? If it concerns matters which are the responsibility of a member of the Region 8 Committee, for instance conferences, membership development or the Region 8 News, I discuss my ideas with whoever is responsible and the decision on implementation rests with that member and with the Region 8 Committee. If Long Range Planning (LRP) concerns matters for which no one on the Region 8 Committee has direct responsibility, for instance a Region 8 office, or electronic communication, then I progress ideas after approval by the Committee. Frequently, plans which the Committee supports involve the approval of Headquarters and if approved then it may be necessary to make some changes in the organisation and/or the procedures at Headquarters. This can result in the plan being abandoned, or taking a long time to put into effect; as I said in my account of the 1987 Section Congress in the last Region 8 News, Headquarters is not in my opinion structured to respond quickly to change.

Now let me consider a few LRP ideas. Possibly the most interesting is the proposed introduction of electronic communication, by which I mean the transfer of information on membership, conferences, chapters, publications and so on from Headquarters to Regions and Sections, and the onward transmission of such information from Regions and Sections to Chapters and even to individual IEEE members; the transfers could be either on floppy disc or by communication links. Later, electronic communication between individuals could be used to supplement communication through the mail and by telex or fax, but costs will have to be investigated.

At the suggestion of the Region 8 Committee, Student Activities Chairman Dick Poortvliet arranged for four groups from the Student Branch at Katholieke Universiteir te Leuven, under the guidance of staff members, should investigate different aspects of electronic communication in Region 8; they expect to report by September 1988. Work is also being undertaken by the Student Branch at Barcelona University. The Section Congress in October 1987 made a strong recommendation to the Board of Directors (BofD) for the introduction of electronic communication; the present position is that the Regional Activities Board (RAB) has recommended that disketts with membership information should be made available by Headquarters for Section use. To be really useful the central data base has to be kept up-to-date and some machinery provided to ensure a regular delivery of new discs; alternatively only the new and deleted data need be distributed regularly, but that would suppose the existence of a local programme to carry out the work of creating the up-to-date disc – cost and compatibility would need careful consideration. The BofD will consider this recommendation at its next meeting, together with a budget for providing such a service.

The Region 8 Committee supported the proposed establishment of an office in the Region, with a small paid permanent staff, but the cost proved to be too great. Subsequently the Directors of regions 8-10 proposed to the BofD the appointment of a member of Headquarters staff who would have responsibility for matters concerning these three Regions. RAB has recommended that a transnational desk should be set up on 1st January 1989 in the Field Services Division at Headquarters. BofD will also consider this recommendation and a budget to implement it, at its next meeting.

Considerable work needs to be done to increase, and in some cases to initiate, co-operation between Chapters and their parent Society. At the moment there is too little mutual communication between Chapters and their parent Societies, yet Societies would like to hear how their Chapters are developing and what their problems are, and Chapters would welcome the support which some Societies can offer. Societies will consider favourably, sponsoring Section conferences in which one of their Chapters is involved and some Societies can assist with speakers and publicity. Societies will also consider a proposal for holding a conference in a Section, and some Societies will assist with Distinguished Speaker visits. I am encouraged that, partly as a result of my drawing attention to the need for closer Chapter/Society co-operation, the Region 8 Committee has approved the Appointment of Professor Andre Vander Vorst to stimulate Chapter Development in Region 8 and to improve Chapter/Society co-operation.

I believe that in the long term Sections have much to gain from greater industry support, both in supporting conferences and in membership development; I have drawn the attention of Section Chairmen to a scheme which has been introduced in the UKRI Section.

What LRP can achieve is limited by the funds which Region 8 can make available, by not attempting more than can be administered and controlled by the Region 8 Director and his Committee, and by what can be implemented by the staff and funds which can be provided from Headquarters. To perceive future needs and to decide what is practicable within these constraints is a challenge which I shall continue to attempt to meet.

EUROCON '88 – Stockholm

J. Bael-Schem (Israel)

The theme of **Area Communications** was well chosen to reflect one of the most interesting developments in modern electrical engineering. As the main topic for Eurocon '88, it attracted to Stockholm more than 400 participants from 25 countries for a three-day Conference with four parallel sessions of invited lectures and papers.

A Technical Programme with more than 120 papers covered a variety of subjects related to the main topic – from speech coding and transmission problems to network structures, simultaneous development of cellular mobile radio and terrestial networks, and Integrated Services technologies captured the imagination of engineers from countries as far away as Japan, Korea and Jordan. The unique technological and operational activities of the Nordic countries in implementing Area Communications made Stockholm an excellent venue to discuss the realistic potential of world-wide mobile personal telecommunication services.

There were four sessions of invited lectures on Pan-European Telecommunication Standards, especially for Mobile Communication Systems – GSM. These sessions included lectures by representatives of Telecommunication Administrations, and by industries from many countries in Europe, who presented a review of current developments in this field.

The opening session was under the chairmanship of Dr. Lars Arosenius, Chairman of the Conference Steering Committee, who conveyed his thanks to the organisers and to the participants. After an Opening Address by the Chancellor of the Swedish Universities, representatives of the two main parties involved in the Conference – Dr. H. Ruechardt and Prof. L. H. Zetterberg – welcomed the participants. The keynote lectures of the Opening Session covered most aspects of recent developments in telecommunication services and provided an insight into the "personal communication" concept for the 90s. Speakers from Research Laboratories in the US and UK, the Deputy Director General of the Swedish Telecommunications Administration and the President of one of the leading Telecommunication industries in Sweden, presented different aspects of our future world: Worldwide Cellular Digital telephone networks, Cordless Office Telephones and the concept of the Future Personal Telephone to be carried in your pocket with the potential to reach you at any site in the world (so long as you wish to carry your telephone with you). All these challenges were presented to the plenary audience in the main lecture hall of the Swedish Royal Institute of Technology, hosts to EUROCON '88.

The best of good weather and a varied social programme contributed much to the enjoyment of the conference: a concert in the Cathedral, a visit to the home of the sculptor Carl Milles, and a Buffet Dinner at the impressive City Hall – well known as the setting for the annual Nobel Prize banquet. The city of Stockholm provided very welcome support for the conference, and their Conference Bureau assisted in the conference organisation. The Conference committees deserve the thanks of all participants for a most interesting and well organised EUROCON '88.

GOOD MORNING Mr. FEERST

Now that Presidential Election time is with us once again, how pleasant it is to find you still in such brilliant form, and to consider anew your views on the conduct of IEEE affairs, and by implication, the manner in which you would direct the policy and conduct the business of the Institute's Boards and Committees. Now, Mr. Feerst, let us begin with one of your earlier differences of opinion with authority, in which, if I remember rightly, you maintained that for you to spend a while in jail would be "no bad thing". On this point there are many who would be in agreement with you, although they may differ as to the duration of the sentence. This of course, Mr. Feerst, is the stuff of martyrdom, which I am sure your advisers will not have failed to notice, but one or two matters of fact. It is common for martyrdom to be achieved posthumously, and while there are those who would support wholeheartedly your plea for immortality, in another world, perhaps your celestial influence would come too late for it to contribute to the success of your proposals for the future wellbeing of the Institute. You may also care to keep in mind that whilst your canonisation may permit you to join a distinguished company of gods, Mesdames Isis, Venus and Minerva are unlikely to be able to afford you such terrestial pleasures as you might wish, or be able, to put into effect.

It is sir, if I understand you correctly, your intention to "spring surprises" on the Board, and presumably also on the members; a ploy which avoids the inconvenience that your adversaries might prepare their case in advance. In the same letter your refer to five senior members of the organisation who should, in your opinion be "fired"; not since Roman times sir has it been felt necessary to call upon the services of the public executioner to perform a summary decimation of the troops in the interests of corporate efficiency – might there not be a more diplomatic approach?

It is, Mr. Feerst, abundantly clear from your past statements of intention in the "Institute" and in these columns, that you keep one set of aims and priorities for the printed word which might reach those of us who do not enjoy the pleasure of living in the United States, and a completely different set of pronouncements intended, one assumes,for domestic consumption within the US. Now since the latter demonstrates clearly your intention to disenfranchise non-US members and effectively to confine the IEEE to US engineers, don't you think Mr. Feerst that that is just ever so slightly dishonest? Again your numerous writings, presumably intended to enrol the Institute's US members in your cause, seem to suggest that you believe even your US colleagues to be gullible beyond belief; it has not been my experience that the citizens of the United States are a collection of cretinous lemmings, waiting to follow the "working engineer's" latter-day Messiah over the precipice into the abyss of ridicule. Furthermore sir, whilst we in this antique Old World may be prepared once to give you the benefit of the doubt, we do try not to make the same mistake twice and you may be ill-advised in your next electoral speech to imagine that you could for a second time, trespass on our Regional tolerance and kindness, and profit therefrom.

There is too Mr. Feerst, that matter of your correspondence to senior members of the Institute, their wives and employers. The members of the Institute's governing bodies are expected and able to deal with eccentricity in all its forms, but that you should attempt to further your interests by vilifying their wives and communicating your verbal inventions to their employers, is rather more than most of us here in Region 8 would wish to see in one who aspires to such high office.

Perhaps sir you would permit me to refer to another of your "public" epistles, in which you pose the question "What parts of Bruno Weinschel's anatomy did Eric Sumner and Carl Bayless kiss to receive their endorsement as candidates for President-elect?" Now Mr. Feerst, I am not unfamiliar with human anatomy, but I was somewhat out of my depth in understanding the implication of your question and so I sought enlightenment from those more familiar with the North American patoir of the English language. I am reliably informed as a result, that you refer to the human male posterior anatomy (the *gluteus maximus,* or perhaps the *spincter ani externus*). Come come Mr. Feerst, such disturbing familiarity with these practices is most unbecoming, even in these permissive times and I do most strongly urge you to forgoe those tendencies should you ever find yourself the occupant of the Presidential throne; the spectre of a Board Meeting conducted along these lines, together with the public execution of dissidents, and multiple sets of conflicting committee papers, fills me with considerable disquiet.

You may rest assured Mr. Feerst that that which you have written and spoken will be taken fully into account when Region 8 members cast their vote, and that those who see in you the saviour of the Institute will not hesitate to place their mark in the appropriate place.

A very good day to you Mr. Feerst

G.H.B. (England)

UNITED KINGDOM & REPUBLIC OF IRELAND

C. W. Turner

Circuits and Systems Chapter will be holding a Workshop and Exhibition on "Digital Signal Processing – Real-time Implementation" on 27th September 1988 at University College, London; the workshop will be preceded by a digital signal processing tutorial on 26 September. For further information contact Dr. C. Phrydas (Thorn EMI Datatech, Spur Road, Feltham, Middx, TW14 0TD) or Dr. A. C. Davies (British Aerospace, PB231, Dynamics Division, Six Hills Way, Stevenage, Herts, SG1 2DA).

As we look forward to the celebration later this year, of the Region 8 25th Anniversary, it is pleasing to report a record level of activity in the UKRI Section. The most important of recent events was the 25th Anniversary Forum on "Safety in Electrical Engineering", which was attended by thirty distinguished engineers, including the Region 8 Director; Dr. Brian Cory's organisation was faultless. To your reporter there were two noteworthy events not mentioned in the official report printed elsewhere in this Region 8 News: first, the numbers were exactly right – discussion was uninhibited, informal and orderly, and second, one of our number was heard to comment ". . . it is essential that there should be an absolute guarantee that there will be no failure . . ."; there could surely not have been a more eloquent plea for "engineering statistics" to be a part of an engineering education.

We aim to increase the technical activities of our seven Chapters, with good prospects of adding an 8th Chapter during the next year or so. Any UKRI member interested in assisting with chapter activities is invited to contact the Chairman of the Section.

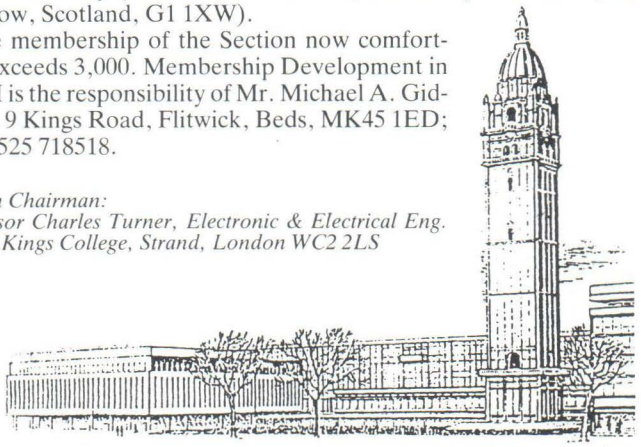
There will be a meeting at Imperial College London on 27th October. Mr. David Wilson, sometime science correspondent for the BBC, will discuss ways of explaining to the public, complex engineering concepts. Tea at 5.30 pm – lecture commences 6.00 pm.

Section meetings have included a lecture on "Benjamin Franklin in London", and another on "Satellite Communications" by Professor Clarricoats, 1987/8 Distinguished Lecturer for the Antennas and Propagation Society.

The formation of a joint Chapter on Acoustics, Speech and Signal Processing, and Communications has been confirmed by IEEE Headquarters; just in time for the new Chapter to participate in the ASSP Society's Annual Conference to be held next year in Glasgow on 23–26th May (Professor T. Durrani, University of Strathclyde, Glasgow, Scotland, G1 1XW).

The membership of the Section now comfortably exceeds 3,000. Membership Development in UKRI is the responsibility of Mr. Michael A. Giddings, 9 Kings Road, Flitwick, Beds, MK45 1ED; Tel: 0525 718518.

Section Chairman:
Professor Charles Turner, Electronic & Electrical Eng. Dept., Kings College, Strand, London WC2 2LS



Imperial College, London

UPDEA – CIRED SYMPOSIUM

The Union of Producers, Conveyors and Distributors of Electric Power in African Countries (UPDEA) and the International Conference on Electricity Distribution (CIRED) are jointly organizing an International Symposium devoted to

ELECTRICITY DISTRIBUTION IN THE DEVELOPING COUNTRIES

This event will be held in the "Maison du Parti", Yamoussoukro, Côte d'Ivoire from 28th November – 2nd December 1988.

Sessions at the Symposium will include the presentation of 76 papers on planning of system development, network construction and operation, customer relations and training of staff. It will provide an opportunity for the distributors of electrical power in the developing countries and elsewhere to discuss the problems and difficulties encountered in installing and operating distribution networks in such countries, to report successes, and solutions advocated or likely to be recommended to cope with the specific features of power distribution in the geographical areas concerned. There will be a technical exhibition associated with the Symposium. Technical visits and tourist tours will be suggested to the participants.

For further information, please contact:
Mrs Ch. LACROSSE
CIRED Secretariat c/o A.I.M.
Rue Saint Gilles, 31,
B-4000 Liège 5 (Belgium)
Tel + 32/41/222946 – Telex 41485 aim b

DENMARK

P. Martin Larsen

The Nordic Seminar on "The Challenge of Electric Power Engineering Education", planned for 1988/89, has been cancelled due to lack of interest on the part of the Nordic professors in Electric Power Engineering – with a few exceptions from Sweden and Denmark. As an alternative the Denmark Section has invited the former president, Charles L. Wagner, the Power Engineering Society Distinguished Lecturer for 1988/89.

In April the Denmark Section arranged a special student-oriented meeting on "Opportunities for students and candidates for supplementary studies in foreign countries". C. G. Rasmussen, head of the Information Secretariat at the Copenhagen Technical University, gave a brief introduction to the EEC programmes ERASMUS and COMET for the exchange of students and staff between universities. M. Klostergaard Jensen spoke about the resources of the "Research Academy" reserved for post-graduate studies. With 150 attendees the importance of special student-oriented meetings is confirmed; the concept and topic is recommended to other Sections.

In September 1988 Preben Jorgensen will give a lecture on "An Alternative to Monte Carlo Simulation", which will be based on his contribution "A New Probabilistic Method for Chronological Production Cost Simulation"; it was one of the entries for the Brussels Student Paper Contest in April.

The revised Denmark Section byelaws were approved by the Technical Activities Board. As part of the Section's membership development programme, all members will receive a letter from the Chairman encouraging the enrollment of new members; with the letter will be a copy of the byelaws and a supply of membership application forms.

The Denmark Section has some 300 members and taken over three years the annual growth has been almost 5%. All members in arrears have received a special letter from the Chairman, printed on red paper.

Section Chairman: Profession P. Martin Larsen, Electric Power Eng Dept., Technical University of Denmark, Building 325, DK-2800 Lynby, Denmark.

CONFERENCES

J. Baal-Schem (Israel)

In accordance with the IEEE Scientific and Educational objectives, conference organization is one of the major activities of the Region; during the last 17 years we have held 16 Regional conferences, with more than 5,000 participants. From all over the world more than 1,500 original papers have been presented at Region 8 conferences by Scientists and Engineers who come to share their experience with other professionals.

Conference activities in the Region started with EUROCON, first held in 1971 jointly with EUREL, the Convention of National Societies of Electrical Engineers in Western Europe; since then there have been eight EUROCON Conferences. From the beginning, Regional Conferences have always been both multidisciplinary and interdisciplinary but the main themes of individual conferences reflect the specific fields of interest of professionals in the country acting as host to the Region.

In 1980 it was felt that the specific interests of professionals from Mediterranean countries, solar energy for example, would justify a series of Mediterranean Conferences, and in 1981 the first MELECON was held in Tel-Aviv, followed in alternate years by a MELECON in Athens, Madrid, Rome and Lisbon. They are characterized by an audience of young engineers, eager to learn from the experience of their peers and to compare their achievements with those of other participants.

When Africa was added to the Region 8 area, the need for a Conference to cater for the special requirements of developing countries became evident and AFRICON was added to our list of Conferences. AFRICON '83 in Nairobi, with more than 200 participants (120 from African countries) convinced even the sceptics of the importance of providing a meeting at which African scientists and Engineers could discuss specific problems related to the technological development of their countries. This was even more strongly emphasized during AFRICON '87, which was held in Abidjan as a Workshop (with 60 participants) where subjects related to the technological infrastructure of Africa were discussed.

EUROCON	**71**	Lausanne	*Professional Growth*
EUROCON	**74**	Amsterdam	*Engineer in Society*
EUROCON	**77**	Venice	*Communications*
EUROCON	**80**	Stuttgart	*Electronics to Micro-electronics*
MELECON	**81**	Tel-Aviv	*Electrotechnology in the Med. area*
EUROCON	**82**	Copenhagen	*Reliability*
MELECON	**83**	Athens	*Energy and Information Systems*
AFRICON	**83**	Nairobi	*Technology needs in Africa*
EUROCON	**84**	Brighton	*Computers in Communication control*
MELECON	**85**	Madrid	*Developments in Electrotechnology*
EUROCON	**86**	Paris	*Evolution in Communications*
MELECON	**87**	Rome	*Energy Systems Telecom*
CompEuro	**87**	Hamburg	*VLSI and Computers*
AFRICON	**87**	Abidjan	*Technical Infrastructure in Africa*
CompEuro	**88**	Brussels	*System Design*
EUROCON	**88**	Stockholm	*Area Communications*

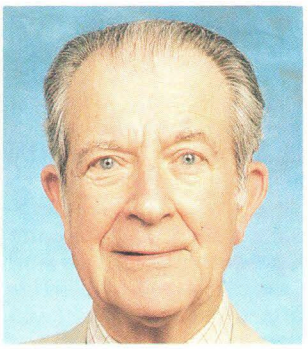
The current trend towards specialisation, and the requirements of Computer Engineers, gave rise to the series of annual CompEuro Conferences, organised jointly with the Computer Society. The first CompEuro was held in Hamburg (1987) and then in Brussels (1988); the theme alternates between VLSI/Hardware and Software/ Systems Engineering. Future CompEuro conferences are planned for Tel Aviv, Hamburg and Bologna.

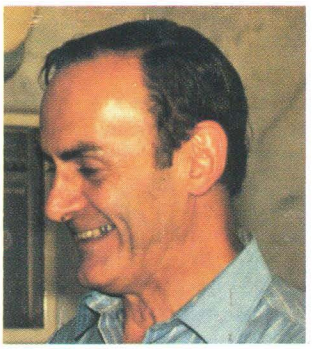
A special emphasis in Regional Conferences is given to student activities. Students are encouraged to attend, special fees are charged and visits to companies and laboratories are arranged; there are also tutorial lectures and paper contests. The Sections and Chapters of the Region organise many other conferences within their own countries and there are numerous events, organised by national societies, where an IEEE Section is a co-sponsor.

It is my firm belief that the organisation of Technical Conferences is one of the most important services provided by Region 8 to the professional community of Electrical and Electronics Engineers. These meetings are the real basis for Technology Transfer as well as being a meeting point for students, engineers and scientists from many countries.

WHAT IS REGION 8?

B. W. Osborne and R. C. G. Williams (England)





Region 8 is a constituent part of the Institute of Electrical and Electronic Engineers Inc., the largest engineering society in the world. The IEEE is responsible for a substantial proportion of the world's engineering publications; its objectives include education, the exchange of information, and the enhancement of the quality of life through the application of technology.

In addition to the service to members provided by the IEEE's 36 specialised Societies, members can petition to form their local Section in their own area. Each Section elects its executive committee: and arranges its technical meetings and student activities. Of the 260 Sections worldwide, 25 lie in Region 8, a geographical area which includes Europe, the Middle East and Africa. The Sections in the Region vary greatly in size, from 100 or so members in the small Sections, to over 3,000 in the largest.

The purpose of the IEEE's organisational structure, both in the Sections and the Societies, is to serve all its individual members, including students. Each Section Chairman is the manager of his Section, obtaining membership growth, and representing his members at the Regional Committee meetings, which are held twice a year at various locations; the 59th such meeting was held in Stockholm in June 1988. The committee Chairman is the Regional Director, who is elected for a 2-year term by postal vote of all the full members of the Region. The Regional Director for 1987/88 is Dr. Hugo Ruechardt from Germany; his successor will be Prof. Sven Olof Öhrivk from Sweden.

The origins of Region 8 lie in a tour of Europe and the Middle East by senior members of the then Institute of Radio Engineers in the early 1960s, which resulted in the formation of additional IRE Sections in the area, and to their grouping in May 1962 as "IRE Region 9". Following the merger of the AIEE and the IRE to form the IEEE, the original IRE Region 9 became the IEEE Region 8 as from January 1963. The first meeting of the Regional Committee was held at Geneva in 1963, with representatives from Switzerland, France, Benelux, England, Italy, Norway, Israel and Egypt. The regional membershiup at that time was 2,300; this has increased nearly tenfold over the last 25 years. Though the latest statistics show a healthy increase of some 20% p.a., the membership in our Region still represents only a small fraction of the electrical and electronic engineers who are qualified to join. A great opportunity exists for future expansion, by making the IEEE better known to engineers and to students, and explaining the benefits of membership to qualified non-members.

This leads however to an important proviso, in that the IEEE does not wish to compete but rather to collaborate with the established engineering Societies and Institutions of the many countries within the Region. The IEEE offers a service to engineers, through its excellent technical publications, technical society activities, section meetings, conferences, lectures and student branches.

The policy of the IEEE in engineering education and the exchange of information transcends national politics. Any differences which may exist between countries play no part in Region 8 affairs, and members from countries with differing views meet amicably at the Region 8 committee table.

THE HEURISTIC LEXICOGRAPHER

You will find amongst the contributions in this Region 8 News, a number of articles by specialists in some of the IEEE fields in which the members of Region 8 might be expected to have an interest. As with most of us, the IEEE started quite naturally in a small way and as with other natural events, it grew; as it did so it acquired a vocabulary related largely to its birthplace, the United States. English, as a language, is well known for its extreme simplicity, its freedom from that polysyllabic profundity and those grammatical, orthographical and syntactic difficulties which depend so much on the etymological proclivities of primitive anglo-saxon tribes helotized by acquisitive eastern potentates. Other languages are not so fortunate.

The Institute's internal language is designed to facilitate the passing of messages between the Committees, Offices and staff of the IEEE central administration in "New York" – this it does admirably. A problem does arise, however, when one of the internal functionaries wishes to communicate with the customers, you; his, or its, vocabulary consists of a number of short pronouncable words, Adcom, Wescon etc., and a number of unpronouncable words to which suitable vowels are added locally as an aid to pronunciation; to these we add a variety of normal English words individually well understood but collectively puzzling. It is my hope that I can develop some kind of translation which will assist your understanding of IEEE terminology in general and the contents of Region 8 News in particular.

Geographical Organisation

BofD B=Board, D=Directors. This is the equivalent of a company Board of Directors in that it is the highest level in the company hierarchy. The Chairman of the Board is the President and the Directors of the Regions and Divisions are its members.

EXCOM EX=Executive, COM=Committee, hence Executive Committee. In the central organisation only the BofD has an EXCOM, the other Boards have an OPCOM – I do not know the difference between an OPCOM and an EXCOM, although the word EXCOM is used frequently in such matters as conference organisation.

OPCOM OP=Operating, hence Operating Committee. Boards do not do any work, they decide what work should be done; the working element is the OPCOM and its members are volunteers.

RAB R=Regional, A=Activities. A Committee (Board) which deals with the policy and organisation of Regions. Dr. Ruechardt is our representative this year, Prof. Örvik will take over in 1989 for two years. Its members are elected volunteers.

TAB T=Technical. A Board which deals with technical matters such as Conferences.

TABOPCOM The interpretation is left as an exercise for the student.

USAB US=United States. Deals with policy and organisational matters which affect members within the United States, i.e. the great majority of IEEE members.

Region The basic Geographical unit, it eases the problem of general organisation and permits a considerable degree of local financial and administrative autonomy.

Section A Geographical division of a Region. In Region 8 it varies in size from 50 to 3,000 members; it is usually based on countries. Every Section has a representative on the Regional Committee.

Technical Organisation

Society A group of IEEE members having similar interests; a Society has no geographical boundaries.

Chapter A subdivision of a Society, its members have the same technical interests as those of the parent Society. For administrative purposes a Chapter operates within a Section.

Division A group of Societies which for organisational and administrative purposes operates under a Divisional Director and an associated Board. Its exact operational role is unclear.

Council A group of Sections organised on a geographical basis. Its geographical area is variously defined; it exists for administrative convenience. It seems that a Council may also be a collection of Societies, but again the distinction between geographical and technical Councils is unclear.

Transnational To non-US IEEE members this would be equivalent to "international". It does not appear in the English Dictionary but it is thought that it is intended to mean "an absence of political boundaries."

Membership Development Recruitment of new members, promotion of existing members.

Some of these names, divisions and subdivisions may be thought of as a text book in which there are Sections and Chapters; the printed characters are presumably you the members – the functions of paragraphs and words has yet to be defined.

This is a simplistic view of a complicated organisation; I have no doubt that I shall have offended unintentionally someone whose function has not been mentioned or has been misinterpreted – for this I apologise in advance. I would however, emphasise that it is only an approximate guide for the elementary class, not an advanced treatise for the postgraduate doctoral student.

G.H.B. (England)

YOU MIGHT WISH TO KNOW

Mr. Mahmood Dorovdchi, if I read his signature correctly, who comes I believe from the Middle East, wishes to meet other electrical engineers in that area. Unfortunately there was no address on his letter – perhaps sir you would be kind enough to write again to the Editor.

"Idea Exchange" is a new scheme introduced by the IEEE Service Centre. If you have a good idea which may be of interest to other Sections then you should write it, double spacing, and post it to Miss Georgina Crane, PO Box 1331, Piscataway, NJ 088533-1331, USA; Tx: 833233; Tel: (201) 981-0060. Your idea may concern any topic but please include your Name, Membership Number, Telephone and Telex Numbers (if you have both). Miss Crane will provide you with any further information you might need.

Supercomputing. An informal Glossary of Terms has been compiled by the Scientific Supercomputer Subcommittee of the IEEE Committee on Communications and Information Policy (CCIP). This "brief lexicon" is intended to help both novices and experts and may serve as a foundation for more definitions. The glossary is available from IEEE Public Information in Washington DC, USA.

Optical Fibres and their Applications – call for papers. A conference to be held in Warsaw, February 1989. Details from Dr. Ryszard S. Romaniuk, IPE, Warsaw University of Technology, Nowowiejska 15/19, PL-00-665 Warsaw, Poland. Tx: 813307 PWPL; Tel: +4822/21007-736.

The Smithsonian Institution, one of the most famous of scientific museums, was founded from money bequeathed by an English scientist, James Smithson. His entire estate was given in order "to establish an Institution in Washington for the increase and diffusion of knowledge among men". *(From: The Rochester Engineer).*

"Region 8 News". Additional copies may be purchased from the Editor; the cost is £20 per 100 + freight. It seems that some Sections have found them useful for publicity purposes at meetings and in connection with the Industry Liaison Officer Scheme.

"International Broadcasting Convention", 23rd–27th September 1988: Mr. Basil Osborne (Region 8 Secretary and Immediate Past Regional President) is the IEEE representative on the Management Committee. He will be pleased to answer your questions on: the programme, attendance, exhibition space, and ideas for the IEEE stand (booth?). His address is 2 Wilmot Cottages, Park Road, Banstead, England, SM7 3DH. Tel: +44 737 356213; Tx: 8956502 CRESNT G (295).

Please Remember. R8N is not a publication representing the official view of the IEEE's governing bodies; the opinions expressed are those of its contributors and the Editor.

FROM THE REGIONAL DIRECTOR

H. Ruechardt (Germany)

This special edition of Region 8 News will be of particular interest to you. It is double the usual size and is intended to provide an opportunity for all our 20,000 members to participate in "The 25th Anniversary of our Region 8". You will find a series of contributions and reports on our main activities; they have been specially written for this purpose. The official starting date of our Institute's regional organisation in Europe was 8th January 1963 – Africa and the Middle East joined us later, that date is embroidered on an attractive blue banner presented by the IEEE President earlier this year. It was displayed for the first time at our recent Region 8 Committee meeting in Stockholm, which was held on 9–11th June in conjunction with a very interesting and successful Eurocon '88.

A list of decisions taken at that meeting is shown below, from which it is quite clear that our strongest emphasis has to be directed toward continuous improvements in serving our members. Here the poor efficiency and the indifferent quality of available postal services are getting not better but worse all the time. The introduction of computer mail services and much faster access to our technical journals by appropriate electronic means are recognised by the Institute's management as two very high priority items.

The largest project for the remaining months of my term of office as your Regional Director will be our official anniversary event in Munich on 6–7th October, immediately before our second Region 8 Committee meeting in 1988. From many countries we expect a prominent group of representatives from several important institutions in our field, together with three important IEEE Committees (EXCOM, TABOPCOM, REGION 8). The centrepiece of our programme will be four key lectures given by outstanding contributors on different aspects of Engineering in Society; the manuscripts will be available after the event. There will also be an awards ceremony, presenting among others the newly donated Heinrich Hertz award and Medal. An exhibition with IEEE Region 8 with all its Sections, Chapters and Branches will provide our guests with the opportunity to obtain additional information on the Region, its organisation and its development.

I strongly hope that this event will make a contribution to strengthening personal friendships and that it will accentuate the common responsibilities of all engineers in a worldwide society.

Many contributions related to our anniversary year have been donated by a large number of individuals, groups and companies; they certainly deserve our warm thanks and they may be assured that they will have enhanced our commitment to future partnership and services.

Region 8 Committee Resolutions

1. Region 8 Committee requests the Director to oppose any dues increase, unless such an increase is tied to an increase in central administrative efficiency.
2. Approval of the Committee was given to the following appointments: (i) G. J. Arink 1990 Sections Congress; (ii) R.C. Winton RAB suggestions programme; (iii) H. Ruechardt RAB Industrial Leaders Programme; (iv) A. S. Vander Vorst Region 8 Coordinator.
3. Support expansion of Chapter activities at Section level for improved communications between Societies, Sections and Chapters.
4. Approval was given for a new membership drive, in particular to make the IEEE better known in universities.
5. Approval was given for the allocation of $5000 to assist three African IEEE members to attend a course at the Egypt National Telecommunications Institute.
6. Request the President not to sign any extension of the agreement with EUREL involving jont conferences, before the final document for EUROCON conferences is completed.
7. For each Regional conference a go/no-go formal decision has to be made 4-6 months prior to the conference.
8. The Committee approved the membership of the local committee for the Heinrich Hertz Award (E. F. Bolinder, H. J. Schmitt, A. Schwab).

GERMANY

A. Schwab

Dr-Ing Karl-Ulrich Stein has been awarded the 1988 annual prize of the Solid State Circuits Council of the IEEE for his "significant contribution to the development of dynamic random-access memories". The prize was presented on the opening day of the ISSCC Conference in San Francisco.

Section Chairman:
Professor Dr-Ing Adolf Schwab, Kalserstrasser 12, 7500 Karlsruhe 1, Federal Republic of Germany.

ITALY

P. Lampariello

At the last Executive Committee Meeting, on 14th April some important decisions were taken. The Executive Committee proposed two amendments to the bylaws of the Middle & South Italy Section: 1) the name of the Section will be modified from Middle & South Italy to Central and South Italy and 2) the Officers of the Executive Committee shall be elected for three-year terms instead of two-year terms. These petitions have been submitted to the Director of Region 8 in order to obtain approval from the Region so that they could finally be approved by the IEEE Executive Committee in New York.

The Section Executive Committee decided to institute an annual award for the best graduation work in Electronics Engineering, it will be dedicated to Prof. Giorgio Barzilai, founder of the Middle & South Italy Section. This award was announced during the commemoration, on 23rd June 1988, of Prof. Barzilai on the occasion of the first anniversary of his death.

Finally the Executive Committee decided to give an official character to the Section, by attributing to it the legal position of a non-profit cultural incorporated association. The main purpose of this is to enable the Section to handle money without contravening the law.

Several technical meetings have been held during the first months of this year. Among them, a one-day meeting was organised on 24th June on CAD in Electromagnetism; it was attended by 70 people.

The joint MTT-AP Chapter (Dr. B. Palumbo, Chairman, membership about 90) is very active and it plans to arrange meetings with the Distinguished Lecturers of the two Societies.

Two new Chapters of the Computer Society and the Power Engineering Society are planned.

Section Chairman:
Prof. Paolo Lampariello, Dept. of Electronics, University of Rome, "La Sapienza", via Eudossiana 18, 00184 Roma, Italy.

EMERGENCY PROCEDURES

A member from Region 8 had occasion to visit Region 10. Outside a splendid temple was an arrow under which were the words "Foreigners' Toilet". He followed the arrow and was led to a delightful garden in the middle of which was a small pagoda, upon the door was written: "Honoured foreign guest please press button. Bell now ringing in Town Hall. Messenger coming on bicycle with key".

STUDENT ACTIVITIES 1963–1988

R. D. J. Poortvliet (Netherlands)

The Region 8 Committee has always placed great importance on student activities, its main concern being how to encourage student membership without competing with the national societies or local student organisations. The IEEE Student Activities started even before Region 8 existed; the first Student Branch was established in 1961 at the University of Rome with Prof. Barzilai as counselor, this was followed by the University of Padova in 1963, the E.T.S.T.T. Madrid in 1964 and the University of Louvain-la-Neuve in 1965. Until that time Student Branches were not involved in inter-Branch activities.

At the Seventh Region 8 Committee Meeting (1966), Director Lebel suggested the establishment of an inter-Branch competition for the best student papers, for which prizes would be awarded; successful students would be encouraged to enter the IEEE international contest in New York. The Director appointed Prof. P. Jespers, founder of the Louvain Branch, as the first Student Activities Committee (SAC) Chairman – the Committee held its first meeting in April 1966. On 17th September of the same year the Committee approved the rules governing an Undergraduate Student Paper Contest, the first of which took place in Lausanne (1967). Four papers were entered, and the winner, I. Lundstrom from Chalmers University of Technology in Gothenburg, went to New York to participate in the Institute Contest. Unfortunately the contest no longer takes place.

At this point it is interesting to quote from a report written by Prof. Jespers in 1967. "If the IEEE is really to be an organisation having a non-national character, it should remove from its rules the restriction that the contest should be confined to continental United States and Canada. . . . I should like to point out that I consider this a point of considerable importance with respect to the future growth of student activity in Region 8". Although the world-wide Student Paper Contest has ceased to exist, the Region 8 Contest continues to be a success and this year the 20th Contest took place in Brussels.

The 1988 Student Paper Contest.

One of the main aims of succeeding SAC Chairman has been and continues to be, to increase student membership in the Region and to establish more Student Branches. In this they have been very successful (3,000 student members and 43 Branches in 1988), but their success created at the same time a problem; general Student Activity Committee Meetings became increasingly difficult to organise because the SAC budget was limited. Facing the problem of financing Regional activities, the Region 8 Committee approved in 1979 a proposal of Director Poortvliet and Secretary Winton to introduce the Regional assessment. The then SAC Chairman Prof. A. Vander Vorst immediately asked for support to organise a general Counselors' meeting; this was approved. The resultant meeting, the first for six years, was held in Stuttgart during EUROCON '80. At the same time an attractive Students programme was organised in order to bring Student Branches from the whole Region together. This was a great success and the idea was born to stimulate further inter-Branch activities, in addition to the existing Student Paper Contest. In 1982 the Region 8 Committee approved a system of grants to help Branches financilly in organising visits abroad and to encourage inter-Branch and international contacts.

In 1984 direct student representation on the SAC was initiated. The first Student Representatives were the two Centennial students, Philippe Siraut from Louvain-la-Neuve and Lex van Gijsel from Eindhoven. With these two students the further development of inter-Branch activities and student representation in the Region was discussed and a proposal agreed. One of the results was a suggestion that there should be a change in an IEEE Bylaw which would formalise student representation in the Regions and Sections. These proposals were endorsed by the SAC, but are still a matter of discussion by the Board of Directors. Without waiting for the final decision of the BofD all regions have now appointed a Regional Student Representative (RSR), who is encouraged to attend both Regional Committee Meetings and the SAC meetings. The present RSR in our Region is Mikko Katajamaka from Finland.

The first inter-Branch activity, organised by a Student Branch and supported by the SAC Chairman, took place in Eindhoven in 1984, followed by similar events in Finland and Switzerland; all these meetings were very successful. Looking at the Student Membership statistics I believe the Region 8 student activities are going in the right direction.

This year, the 25th Anniversary of Region 8, I asked the Benelux Student Branches to organise a special students programme during CompEuro 88 in Brussels, 12–13th April. On this occassion, not only were students from Region 8 invited, but also the RSRs from the other Regions, an idea well received by the SAC. The organising Branches were very pleased to welcome two students from the USA: Alan Bryant, a student editor of Potentials and Brenda Ziegler the Region 5 RSR. A full report of this activity will be published in the next Region 8 News.

Finally I wish to thank all the IEEE Boards, Committees and many individual members for their support during the last 25 years and I hope that student activities in the next 25 years will be truly international.

SWEDEN

P. Starski

The Sweden Section had the honour of organising the **50th Meeting of the Region 8 Committee,** which was held from 10–12th June in Kista, a suburb of Stockholm. Kista is the very fast growing electronic centre in Sweden. A traditional dinner was arranged at the Solliden restaurant in the open air museum of Skansen. The meeting was sponsored by five companies: ASEA Brown Boveri, Ericsson Radar Electronics, SAAB Combitech, Swedish Board for Technical Development and Televerket Radio-Radiolaboratory; we are most grateful to them all.

Eurocon 88. The 8th European Conference on Electrotechnics was held in Stockholm on 13–17th June. The conference was arranged in co-operation with EUREL, the national societies of electrical engineering in Europe, and Region 8 of the IEEE. With a very interesting technical programme, a large attendance of almost 400 delegates, and beautiful Stockholm weather, the conference was a great success.

The 18th European Microwave Conference will be held in Stockholm on 12–15th September 1988; an additional day, 16th September, will be devoted to a series of workshops. Accommodation will be in the hands of Risbecker International, Kungsgaten 58, S-111 22 Stockholm, Sweden; Tel: +46 8 141355; Tx: 17524 Ristra; Fax: +46 8 240380. The conference programme can be obtained from Microwave Exhibitions & Publishers Ltd., 90 Calverley Road, Tunbridge Wells, Kent, England, TN1 2UN.

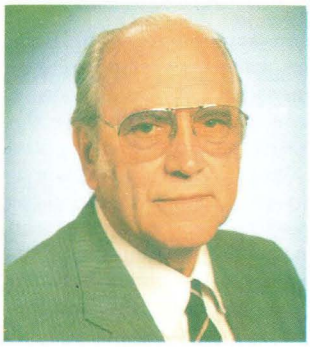
Section Chairman:
Professor P. Starski, Chalmers University of Technology, Division of Network Theory, S-412 96 Gothenburg, Sweden.

AFRICON '87

FUTURE DEVELOPMENT OF A TECHNOLOGICAL AND EDUCATIONAL INFRASTRUCTURE IN AFRICA

Karsten E. Drangeid (Switzerland)

The Purpose



The first international IEEE conference in Africa (Nairobi, Kenya, 1983) demonstrated the need for an exchange of information and direct contact among African engineers. Spurred on by an awareness of these needs, the IEEE Region 8 Committee decided to organise in Abidjan, Cote d'Ivoire, one of the three workshops which would form a part of the 25th Annivesary Programme for Region 8. The Ministry of Industry of Cote d'Ivoire and the African Development Bank agreed to collaborate in organising this workshop under the patronage of the Ministry of Industry, the aim being to exchange experience and ideas and to generate recommendations. Experts would share their views with experienced engineers from African countries and group discussions would generate both suggestions for improvements in the infrastructure, and proposals for priorities in the application of newly developed technologies. The focus would be on three subjects important for African countries: Energy Systems, Telecommunications and Technical Education.

The Participants

Of the 60 participants, 35 were from African countries, the remainder coming from Europe, Israel, Saudi Arabia and USA. Approximately 50% of the participants were from Universities and the other half from industry, business and government. The participants represented a high level of expertise in either their technical field or their knowledge of the situation in Africa.

The Programme

The opening session was chaired by Dr. Ruechardt, Region 8 Director. The greeting and formal opening of the workshop was made by His Excellency Bernard Ehui Kontoua, Minister of Industry, Cote d'Ivoire, followed by three keynote lectures setting the stage for the group presentations and discussions in the afternoon. The African economic performance was addressed by Mr. S. A. Ogunleye, Vice President, African Development Bank. Mr. A. Terkemani, Senior Expert ITU Morocco, devoted his lecture to the telecommunication service in Africa, with emphasis on maintenance in relation to the environment. Professor O. S. Mazzoni, Harare Polytechnic, Zimbabwe, discussed engineering education, elaborating on the gap between education and industry expectations.

In the afternoon the participants joined one of three parallel sessions to which they had been assigned in advance, for discussions and additional presentations. Each of the parallel sessions concentrated on one of the selected subject: energy systems, telecommunications and technical education.

The next morning's plenary session was chaired by Dr. Baal-Schem, Region 8 Conference Coordinator. Professor Vines, President IEEE Education Society, discussed a comparative study of educational systems. Dr. Boakye, supervisor AT&T, USA, showed the potential for developing countries to leapfrog in the development of their telecommunication infrastructure by exploiting the right mix of emerging and existing technologies. Mr. J. A. Casazza, President Casazza, Schultz & Associates, Inc. described transmission systems, highlighting their evolution in the USA, the savings they are creating and intersystem coordination procedures. Dr. D. M. Kroko, Controleur general Energie Electrique de la Cote d'Ivoire, formulated the needs of the electrical power companies for an infrastructure in education and technological development. Mr. Muyiva Awe, Department of Physics, University of Ibadan, Nigeria, analysed the current predicament of most African countries and the potential of new and emerging technologies to ameliorate the situation. The participants convened in the afternoon for further presentations and discussions in the parallel group sessions, which continued on Wednesday morning.

The Findings and Outcome

The last session was chaired by Dr. Emerson Pugh, IEEE Vice-president Technical Activities and the 1988 President Elect. He opened with a speech on the IEEE's role in a technical Community. The results were then presented by the respective rapporteurs. A small selection from the list of problems is presented here:

A unique situation for many countries in Africa is that 85% of the total energy consumption is in rural areas. This makes the energy supply a real problem as a large number of small stand-alone power stations, mostly diesel generator units, are in operation. Fuel supply and maintenance may in some cases be troublesome and expensive. Here the search for, and development of, alternative energy sources could have a tremendous pay off. Telecommunications, with the introduction of new technologies, needs special solutions in this environment, as the density of population is correlated with the energy consumption. It seems that here it may be possible to leapfrog in the development of telecommunications structure, by the selection of an optimal mix of emerging and existing technologies. The educational system should also be optimised for this environment, education must be adapted to local needs and could be improved by applying distant teaching programs, computer aided learning etc. In education there seem to be many challenging problems to solve; one example is the lack of qualified technical personnel, which makes difficult the installation and maintenance of new equipment. There also seems to be a gap between the needs of a country and what is taught. It is difficult for the technical people to keep up to date with new and emerging technology, and the selection of new products cannot proceed smoothly.

In following up the suggestions, two important points should be emphasised: attitude and awareness. Many of the participants were concerned about this general problem; the opinion was that there is too little awareness of the economic importance of using modern technology. One should be better informed about the social consequences of introducing these technologies. Drive and entrepreneurship is important in all fields. Ways must be found to ensure that governments, industry, universities and private institutions, promote and encourage initiative.

The general feeling at the end of the workshop was that in spite of all the stimulating discussions and recommendations, we only scratched the surface, and the unanimous opinion was that workshops of this kind are needed and should be continued in the future.

Conference Proceedings are available from Dr. Hugo Ruechardt, Director Region 8, Siemens AG, Balanstrasse 71, D-8000 Munchen 80, West Germany; or from IEEE Service Centre, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 0885–1331, USA.

Africon '87 – First Results

1. Free distribution of Africon '87 Proceedings to all participants. Low cost offer of 40 additional copies for the African Development Bank.

2. Professor Akello, University of Nairobi, Kenya, has been invited to the International Conference on Lightning Protection in Graz, Austria, in April 1988. For this purpose Professor Richter from the Technical University, Graz, was successful in raising AS 7,000 from the Austrian Department of Foreign Affairs.

3. One hundred copies of IEEE Proceedings and Spectrum as an annual donation to Subsaharan countries; proposed by Dr. Emerson Pugh and agreed by the IEEE Executive Committee in February 1988.

4. Free of charge electronic components and other educational material to African Universities; by Siemens AG, Components Division, Mr. C. Bohle.

5. Invitation of African students to the Egypt National Communications Institute for technical training in Cairo. The invitation was proposed by Dr. Bilal, Director of this Institute. The Region 8 Confernce Committee is proposing to fund such a training for three students ($5,000).

REGION 8 AND THE NATIONAL SOCIETIES: COLLABORATION AND CO-OPERATION

R. C. Winton (England)

What is the role of the IEE in relation to national electrical, electronic and computer engineering societies, and what needs can the IEEE fulfil which are not met by national societies? The fact that there are some 20,000 IEEE members in Europe, the Middle East and Africa, and that most countries have national societies, indicates that the Institute has a useful role to play – what is it?

Before I answer these questions I must emphasise the basis on which the IEEE attitude to national societies is founded, namely that it is the duty of each Section to ensure that relations with the National Society are, and remain, harmonious. Sections never have, and never should, knowingly place themselves in competition with national societies, even though this may impose restrictions on Section activities and Section membership development. Usually some members of a Section Committee are also members of the National Society and can guide the Committee on the Society's sensitivities, such as loss of members to the IEEE, and IEEE competition with their programme of meetings. If problems are anticipated, the Section Chairman would normally discuss them informally with the President or with the Secretary of a national society, which would certainly not welcome IEEE meetings and conferences that conflict with their own in respect of subject, date or location, whether arranged by the Section or by some other IEEE entity, such as an IEEE technical Society. The National Society may expect Section meetings and IEEE conferences to be organised jointly with them and that is frequently an advantage for the Section; it brings with it improved local publicity and a consequent increase in the number of conference papers received.

The universal manner in which the Institute complements national societies is through its technical publications. There is "Spectrum" to provide a window on every aspect of electrical, electronic and computer engineering, with non-specialist articles to keep readers up-to-date outside their own field. There are the journals of the IEEE Specialist Societies, IEEE Conference Proceedings, and numerous other publications. These are widely acknowledged internationally as the best of their kind in the world. All members will be familiar with some of them, and the majority of individuals in Europe, the Middle East and Africa who join the IEEE do so in order to obtain them.

Other ways of securing co-operation and collaboration between the Institute and national societies depend on local conditions in each country. Of major importance is adding to technical activities in areas where the national society is not very active. This is often done by a Section Committee establishing Chapters of IEEE Specialist Societies, which can organise their own committees, meeting locations and subjects. They usually receive financial support from their Section, and technical support is often available from their Specialist Society.

By sponsoring or supporting national conferences and meetings, the IEEE can provide an international dimension. To obtain speakers, a member can communicate directly with other members in all those countries where worthwhile authors are most likely to be found. To obtain publicity, announcements can be printed in "Spectrum" and "The Institute", in the Newsletters and Journals of relevant Specialists Societies, and in the IEEE Technical activities guide – charges are low or non-existent.

Through Student Branches, Sections can provide students with membership of a worldwide society, with its internationally accepted publications and with the possibility of meeting colleagues from other countries; all this for a very low subscription. There are also reduced charges for registration and accommodation at many IEEE conferences. Often national societies welcome their students being able to widen their experience in this way.

Many Regional Sections have written agreements with IEEE Headquarters and their national societies, covering specific areas of co-operation, such as: administrative assistance to the Section, a discount on the combined dues for those who belong to both the IEEE and the National Society, mutual re-publication of printed material, joint student membership, co-operation on student activities, exchange of publications without charge, reciprocal facilities for members visiting the US and the country of the National society, and co-operation on meetings and conferences. To this long list of co-operative ventures must be added the valuable agreement between EUREL, representing eighteen west European countries, and Region 8 of the IEEE.

There is no doubt that, during its 25 years existence, Region 8 Sections have learnt how to complement the activities of national societies and how to collaborate harmoniously with them; the nature of this relationship frequently changes in individual countries, and is different in each country. Every Institute Section must review the relationship from time to time; if they do, mutual trust will overcome those local problems which inevitably arise.

IEEE Agreements with Region 8 National Societies

AEAI – Association of Engineers and Architects in Israel.
AEI – Associazione Elettrotechnica ed Elettronica Italiana.
EUREL – Convention of National Societies in Western Europe.
OVE – Osterreichischer Vervand Fur Elektrotechnik.
SEE – Societe des Electriciens des Electroniciens et des Radioelectriciens.
SEP – Stowarzuszenie Elektrykow Polskich of Warszawa.
SEV – Schweizerischer Elektrotechnischer Verein.
UMEETY – Mechanical and Electrical Engineers of Yugoslavia.

LETTERS TO THE EDITOR

Regional Representation in IEEE Societies

Sir,

Those of your readers who are members of the IEEE Computer Society will shortly receive two ballot papers, one for the IEEE itself and the other for the Computer Society. I should like to draw their attention to some differences between these two papers regarding Regional representation.

Region 8 is represented on the IEEE Board by its Regional Director, elected by Region 8 members. In the Computer Society there is no such regional representation, all the governors being elected by the whole membership. This might explain why our region has traditionally been absent from, or at least poorly represented, on the Board of Governors of the Computer Society. Several CS presidents have tried to compensate for this by inviting volunteers from our Region to attend board meetings. This was very helpful for the successful launching of the European Office of the Computer Society in Brussels, but it would not be needed if more CS members from our Region did vote.

Therefore Sir, I take the liberty of using this channel in order to urge all Computer Society members in Region 8 to vote at the next election.

Sincerely yours, Jacques Tiberghien
Chairman European Activities Committee

Engineers and the Balance of Risk

Sir,

It is with great interest that I read your thoughts on the Balance of Risk. I concur with your idea that it should be engineers who communicate the problems of new technology to lay people. Unfortunately I think that your article is a bad example.

You write "Someone has to start by explaining the simple fact that the public does not use nuclear power . . ." In fact it is the claim of the "well meaning" and biased protesters that politicians and engineers are not considering the whole complex; i.e. they deliberately leave out both the problem and the cost of getting rid of nuclear waste. In a true system approach nuclear power plants should have been allowed to go into operation only after securing waste sites and designing the processes to handle this waste.

It is not the task of someone who voices concern, that he should be able to assess the risk numerically.

(Unfortunately space does not permit me to print the remainder of Dr. Hackstein's interesting letter – Ed.)

Yours sincerely, Helmut Hackstein
Schwarzwaldstrasse 89,
7260 Calw-Altburg

Letters to the Editor *continued*

Sir,

I agree with all you say in the May editorial. I contacted the Electricity Council (UK) and obtained a copy of their annual report, which contained a great deal of useful information on several polution matters. The general ignorance of this subject is high-lighted by a paragraph which surprised me on a chart published by "New Scientist" (UK) on the subject of radioactivity: "According to the Radioactive Substances Act 1983, any substance containing more than 400 Bq/kg must be kept isolated or disposed of as radioactive waste. These limits do not apply to substances such as tea (830 Bq/kg), coffee (1,640 Bq/kg) and fertilizer (3,100 Bq/kg) although they are way above the limits set by the Act". One wonders what the grocers shop and garden centres are allowed to stock in the so-called nuclear-free zones!

Yours sincerely, J. Chapman
30 Stanley Avenue, Birkdale, Southport, Lancashire, PR8 4RU

One of Mr. Chapman's daughters, a very perceptive young lady, having learned that Manchester (England) has been declared a "nuclear free zone" by its local government, asks why the city has not disappeared in a cloud of electrons?

It was one of the "risks" inherent in writing such an article at the present time that "nuclear" would be perceived as the central part of the text; it was my intention to use that subject as one of several examples to draw attention to the fact that distressingly few engineers are educated so that they may be able to understand the relevance of statistics (risk is but one small branch of statistics) to their work, and that if they were better informed on that subject, they would be so much better able to explain to a lay public that a complete absence of risk exists only as a *theoretical* limit to probability. Statistics may provide an "estimate" of the *practical* limit, it may also assess the reliability of that estimate; the lay (or political) public has to balance the risk assessment and its reliability, against the benefits of that which engineers provide.

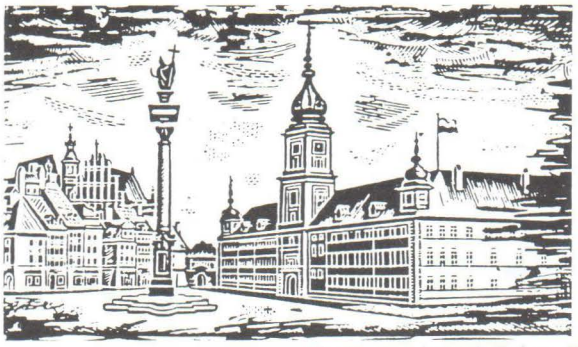
Dr. Hackstein makes the point that those who are "concerned" do not need numbers to express that concern; perfectly true, but they do need numbers, or access to numerical advice, in order to understand the relevance of a numerical reply to their concern. Those who voice their concern have done their public duty, but in the absence of numbers any arguments which follow, tend to be sterile and inconclusive.

Mr. van Rooji, from the Netherlands, (Retired deputy secretary of the International Electrotechnical Commission – IEC), in his letter concerning safety in "consumer goods" makes the valid point that any "reputable manufacturer will instruct his staff to design according to safety standards"; that of course is quite true, and the IEC has done more than most organisations to ensure that those standards are valid. However it does raise the problem of the application of statistics to safety in general. Many millions of consumer products (washing machines, TV's etc) have provided a large body of data and experience upon which to base a statistical analysis, and the educated public can be expected to have a reasonable understanding of the problems and their solutions. However, in the design and construction of large, very complex and almost "one off" engineering projects, statistics is being asked to help in a very different way, by answering the question "can we *predict* the risks involved, and with what certainty". There is little experience, little past data and perhaps not even an adequate statistical theory upon which to base the analysis; it is here that the difficult public explanations begin, before the 'profits of doom' fill the newspapers and TV screens with ill-considered pessimism. There is an IEEE Society with the completely understood title – *Reliability*.

Mr. van Rooij also writes "Please use international units, 'gm' should be 'g' for gram" – page 8 right hand corner. My mistake, I shall try to do better next time.

POLAND

W. Seruga



The Restored King's Palace, Warsaw

★ A Student Branch was founded this year.
★ The International Symposium on Electromagnetic Fields in Electrical Engineering (ISEF '87), jointly sponsored by the North Italy and Poland Sections, was held on 23rd–25th September 1987 in Pavia.
★ There was a total membership of 113 at the end of 1987.
★ During the period September 87 to May 88, thirty two technical meetings were organised.

Section Chairman:
Professor Wieslaw J. Seruga, Senatorska 20 M 23, 00095 Warsaw, Poland.

SPAIN

Aníbal R. Figueiras

Tenglo la ocasión, en el número que celebra el 25 Aniversario, de dirigirme a los miembros de la Sección en nuestro idioma, para tratar asuntos de carácter local.

Como bien saben muchos de los miembros, la actividad técnica local de una Sección se lleva a cabo fundamentalmente a través de los Capítulos. En nuestro país, cuatro son los actualmente en funcionamiento: dos conjuntos, correspondientes a las Sociedades de Acústica, Voz y Tratamiento de Señal más Comunicaciones, por un lado, y a las de Antenas y Propagación y Teoría y Técnicas de Microondas, por otro. Los otros dos son el de Sistemas Aerospaciales y Electrónicos y, el de Computadores.

Adherirse a un Capítulo, que no requiere más que ser miembro (no asociado o estudiante) del Instituto, permite estar informado de las actividades del mismo (conferencias sobre temas de interés específico pronunciadas por expertos, incluso en ocasiones cursillos de formación contínua) y permite al Capítulo mayores recursos y eficiencia. Quienes se interesen por ello, pueden establecer contacto con los responsables de cada uno:

Prof. Manuel Sierra (AP+MTT)
Prof. Félix Pérez (AES)
Prof. Fernando Sáez Vacas (C)
Prof. Aníbal R. Figueiras (ASSP+COM, provisional)

todos ellos en la misma direccion y teléfono:

ETSI Telecomunicación-UPM
Ciudad Universitaria
28040 Madrid
Tfno: (91) 4495700.

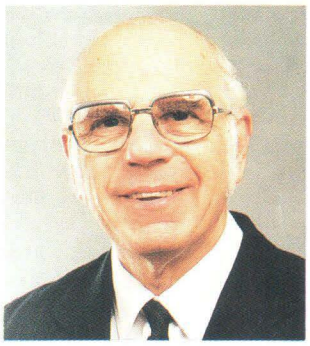
Por otro lado, la posibilidad de crear Ramas de Estudiantes, mediante solicitudes soportadas por 20 firmas de Estudiantes y bajo la consejería de un profesor del centro correspondiente que sea miembro del IEEE, brinda también oportunidad de realizar actividades con apoyo del Instituto. Desde aquí ofrezco información más detallada a los potenciales interesados.

El ritmo de crecimiento de la Sección es de los más bajos de Europa. Ruego un esfuerzo (mínimo, por otra parte) de cada miembro para conseguir nuevos miembros. Los correspondientes formularios de solicitud puedo facilitarlos por correo.

Section Chairman:
Professor A. R. Figueras-Vidal, Cuidad University, Esc. Tecn Sup. Ing. Telecom., 28040 Madrid, Spain.

UKRI SECTION FORUM ON SAFETY IN ELECTRICAL AND ELECTRONIC SYSTEMS

R. C. Winton (England)



The UKRI Section Forum on Safety in Electrical and Electronic Systems, held at the Imperial College of Science and Technology, London, on 19–20th April, considered some aspects of safety which would benefit from a wider discussion. It was not intended that recommendations should be made or that conclusions should be published, but rather that it should stimulate discussion which might lead to further meetings on safety in engineering systems in general and in electrical and electronic systems in particular.

There were many references to the public perception of safety, of risk and of reliability. People do not perceive reliability to be related to probability; they accept statements that a system is completely reliable and fail to understand that no engineer can design a system which will never fail. The public view of risk is governed largely by emotion; it is extremely sensitive about nuclear safety, and yet mostly indifferent to the alarmingly high road casualtues; it fears the electrical field from overhead power cables but sleeps happily on an electric blanket. That illogical public concern distorts facts, but must be noted by engineers because it may well become a factor in engineering design.

Unpredicted human behaviour among managers as well as among operators and supervisors continues to be the principal and sometimes the only cause of accidents; the Chernobyl, Zeebrugge Ferry and Three Mile Island disasters were human failures, failures of management rather than failures of technology. Safety in man/machine interaction depends on the establishment of safe procedures and on the assumption that those responsible for installing, repairing, maintaining and operating a system will interact with it in certain ways; for instance that the cause of a breakdown will be reported and remedial action taken.

Electrical accidents in the home are largely due to failure on the part of the public to realise the dangers inherent in the use of electricity. Fires due to electricity are frequently due to faults in house wiring and to unskilled installation in contravention of accepted good practice.

The ability of high technology to improve railway safety has its limitations. Existing arrangements may be both simple and adequate and the introduction of computers into the system should proceed with caution, particularly since unless they are introduced slowly they have to be operated by staff who have not yet had the opportunity to become familiar with completely new operational concepts. Failure to appreciate the limitations imposed by factors outside purely engineering considerations could lower safety standards rather than improve them.

A major problem in designing reliable software is the production of incorrect specifications, frequently due to an inadequate understanding of what the software must be designed to do. Especially difficult problems arise in safety-critical software requiring ultra-high reliability; for instance the Airbus A320 civil airliner fly-by-wire computer system has a reliability requirement of 10^{-9} failures per flying hour. Is such a figure achievable? And, which is a different issue, if it is achievable is it assurable?

The public need to be educated to understand the concepts of safety and reliability, and to appreciate the numerical basis of risks which might arise – this education should start in the school. Operators must be trained to consider emergency situations not covered by existing rules or procedures, and professional engineers must be made much more aware of their responsibility for ensuring a better public understanding of the factors involved in safety, especially by presenting complex concepts in simple forms which can be understood by the non-technical mind. They must also realise that public emotion is easily aroused by the press and broadcasting and that needless difficulties will arise unless the public is informed about risks and reliability and is assured that this has been taken properly into account in design, production and operation.

GREECE

Basil C. Papadias

During the last six months we have attracted some 60 new members, an increase of 16%.

To celebrate the establishment of the Cyprus Sub-section, of which Mr. A. Constantinou is the Acting Chairman, a Technical Conference was held in Nicosia, Cyprus on 13–14th May 1988. The subject was "Modern Topics in Electric Energy Systems" and comprised six lectures. On the first evening there was an introductory speech by the Chairman of the Greek Section on "IEEE and Continuing Education"; it was attended by 150 people – including members of the government and other personalities. The lectures were given by faculty members of the Electric Energy Laboratory of the Athens National Technical University.

Two students from the Athens National Technical University participated in the Region 8 25th Anniversary Student Programme in Brussels on 12–15th April: Chrysanthos Delarocas, Chairman of the Student Branch, and Christodoulos Protopapas, author of the paper selected for the Student Paper Contest.

Section Chairman:
Professor Basil C. Papadias, Department of Electrical Engineering, National Technical University of Athens, 42 Patission str., Athens, 196 62, GREECE.

YUGOSLAVIA

Baldomir Zajc

What a piece of work is a man!
How noble in reason! how infinite in faculties!
– Hamlet

Professor Mirko Vehovec, Chairman of the Yugoslavia Section, died in December 1987; he will be greatly missed by all his friends and colleagues. We extend our sympathies to his wife Harija, and to his sons Borut and Gregor.

Mirko Vehovec was born on 3 November 1936. On his way to a BS degree in Electrical Engineering at the University of Ljubljana in 1960 he attended elementary and high school in the same town. Several years later he went to Great Britain and in 1970 was awarded a Ph.D. degree by the Imperial College of Science and Technology, London, department of Electrical Engineering. He was a professor in the Faculty of Engineering at the University of Ljubjana, where he conducted his research and teaching in linear and nonlinear electronic circuits, and in CAD for electronic circuits. His favourite subjects were: sparse matrix reduction, SC filter systhesis and analysis, and RC oscillator design.

Those who knew him admired his intelligence and his gentle disposition; a memory of his admirable personality will long be cherished in our hearts.

Section Chairman:
Dr. Baldomir Zajc, Fakulteta za Elektrotehniko, Trzaska 25, 61000, Ljubljana, Yugoslavia.

CHAPTER ACTIVITIES

H. Ruechardt (Germany)

IEEE Society Membership has always been one of the major interests in Region 8, an interest which is growing rapidly; the number of Society members has increased from 26,800 in 1986 to 32,200 in 1987. As most of you will know a great deal of technical work related to these Societies is done in many IEEE Chapters spread all over the world; there are many good activities going on in some 40 Chapters alone in Region 8. With many of them related to more than just one IEEE Society, we have in total today some 60 active contact points of our 35 Technical Societies well established within our territory.

Administered by the **Regional Organisation** of the Institute, these Chapters perform a most valuable bridge function to the **Technical Organisation** of the IEEE which at its head is represented by 10 Divisional Directors. Under the leadership of the Vice President Technical Activities these Directors represent the core of the Institute's "Technical Activities Operation Committee (TABOPCOM)".

The involvement of the different IEEE Technical Societies in their related Chapters activities varies a great deal from one to the other. Probably the best service is given by the Computer Society as it has established since several years a special Computer Society chapter coordinating function in Region 8. Most of our Chapters by themselves are well equipped with excellent scientists and scholars, this giving them much independence and autonomy for their activities, which then are not much reported or advertised elsewhere. One of the few places to hear about these Chapters has been our Regional Committee so far. Here our Section Chairmen are reporting quite regularly about their Chapter's technical and educational programs, lectures etc. Still there has been a demand since some time in our Committee for more visibility of the Chapters and for a stronger influence by these active groups on the Institute as a whole.

Benelux	AP	MTT										
Denmark	AP	MTT										
Egypt	AP	MTT	C	COM	PE							
Finland		MTT										
France		MTT	C	COM	PE	ASSP			EMC		GRS	
Germany	AP	MTT	C									
Greece			C		PE							
Israel	AP	MTT	C	COM	PE		AES	CAS	EMC	CS	IE	IA
M & S. Italy	AP	MTT										
S. Africa	AP	MTT	C	COM		ASSP						
Spain	AP	MTT	C	COM		ASSP	AES					
Sweden	AP	MTT		COM							VT	
Switzerland	AP	MTT	C	COM		ASSP		CAS		ED	SIT	
UKRI		MTT	C	COM		ASSP		CAS		ED	CS PC	MAG
Yugoslavia	AP											

ASSP	–Acoustics, Speech, and Signal Processing	GRS	–Geoscience and Remote Sensing
AES	–Aerospace and Electronic Systems	IA	–Industry Applications
AP	–Antennas and Propagation	IE	–Industrial Electronics
CAS	–Circuits and Systems	MAG	–Magnetics
COM	–Communications	MTT	–Microwave Theory and Techniques
C	–Computer	PE	–Power Engineering
CS	–Control Systems	PC	–Professional Communication
EMC	–Electromagnetic Compatibility	SIT	–Social Implications of Technology
ED	–Electron Devices	VT	–Vehicular Technology

Out of this desire we have established recently the new Committee function of a **"Regional Chapter Coordinator"** to which Andre Vander Vorst has been appointed, in addition to his previous assignment for Continuing Education program. With Andre we certainly have chosen an excellent person for this new function, since he has done some very good work for some years as coordinator for our present 12 Chapters or Joint Chapters on Microwave Theory and Technology (MTT). He will certainly need our full support for covering the whole range of Chapters in Region 8. To make this effective should be a main subject for the Region 8 Committee in the coming period.

From the new chapter coordination function I am expecting progress particularly in the following areas

Improved contacts between related Chapters in different Sections, speakers exchange, mutual invitations etc.

Promising actions arising from the Chapters themselves: requests and proposals to our Society and Board Structures.

A growing percentage of transnational participation in Society Management.

Systematic development of a marketing function of Chapters for our Society products – both technical and educational.

It looks like the new project could have a very good start since the 15 members of "TABOPCOM" will visit our Region three months from now. During this visit the committee decided to invite all our Chapter chairmen for a special Chapter workshop in Madrid held on Saturday October 1. This meeting should give an excellent forum for starting some structural improvements and correlated actions which even may give a new momentum to our whole Institute. We should certainly do our best to achieve a good attendance for the event and to help achieve a useful outcome.

NORWAY

By S. Andresen

The Norway Section too is celebrating its 25th Anniversary; it was formed on 23rd March 1963. The ceremony took place at the Norwegian Institute of Technology (NTH), Trondheim on 26th May this year. A silk banner donated by Headquarters was presented, birthday congratulations were read and a half-day seminar, including a panel debate, was held.

From left to right: Michael Brady and Knut Endresen (first secretary/treasurer and chairman); Steinar Andresen and Petter Stoia (present chairman and secretary/treasurer)

The theme of the seminar was "How can we apply energy and information technology to improve the environment and mankind's quality of life." Inge Johansen, Aasmund Gjeitnes and Jens. G. Balchen were the invited panel members.

Some notes from the debate: The news media to-day are too much occupied with "catastrophies". The technical experts should engage themselves a great deal more in the normal discussions of society – a view expressed by many. We ought to take care not to substitute artificial intelligence for our own intelligence and wisdom.

Prof. Balchen commented that until now, technology had been used for our benefit and he warned against the "doomsday prophets" of the media. However, in the future we must be much more clever and deal first with matters which provide the best payoff; it may often be wiser to avoid "very intriguing high technology questions", which in many cases do not count for much, for more basic solutions that count a great deal more.

Prof. Andresen said that although some effects of our technology could be questioned, this should not stop us from seeking new and better ways to deal with old problems. New processes might turn out to have both ecological and economical advantages. Andresen asked in his concluding remarks if now would not be the right time to consider these matters anew.

Section Chairman:
Professor Steinar Andresen, IDT/NTH, N-7034, Trondheim-NTH, Norway.

FRANCE

J. Cladé

Chapter Activities The chapters constitute the principal direction in which the French Section enhances its technical activities, therefore the Section is always happy to create new chapters of the IEEE technical Societies.

The French Section is considering the possibility of creating a chapter "Geoscience and Remote Sensing".

Awards Mr. Pierre Bornard, member of the Power Engineering Society, has been chosen by the PES Selection Committee as the first recipient of the Walter Feer Outstanding Young Engineer Award. We are confident that his selection will bring credit to the IEEE and to the Power Engineering Society in France.

Conferences In association with other Societies the French Section of Region 8 is co-sponsoring the following conferences:

★ Fourth International Workshop on Atmospheric Icing of Structures (Paris 5–7th September 1988). Information from J. L. Lapeyre, EDF-DER, 1 av du Gi de Gaulle, 92141 CLAMART CEDEX, France; Tél: (33) 1 47 65 31 27.
★ 1988 International Commission for Optics Topical Meeting on Optical Computing; Toulon, 30th August–2nd September. Information from Prof. S. Lowenthal, Institut d'Optique, Bât. 503, Université Paris XI, BP 43, 91406 Orsay Cedex, France.
★ Fifth International Days on Antennas (Nice, 8–10th November 1988). Information from Mr. Guiraud, Jina 88, CNET, centre de la Turbie, 06320 Cap D'ail, France; Tél: (33) 93 41 15 30.
★ Colloque "Optique Herzienne et Diéléctriques" Rennes 89. Information from M. G. Dubost, Labo Antennes et Réseaus Larges Bandes, Campus de Beaulieu, av du Gi Leclerc, 35042 Rennes Cedex, France.
★ Eurospeech, organised by the ESCA (European Speech Communication Association) Paris 26–28th September 1989. Information from Mr. J. P. Tubach, Département Signal, Sup Telecom, 46, rue Barrault, 75634 Paris Cedex 13, France. Fax: (33) 45 89 79 06; Tx: Sup telecom 2001160F.

We are also interested in participating in the Organising Committee or Technical Committee of:

★ Workshop on Real-time Area Networks; Paris March 1989. Information from Prof. J. P. Thomesse, club FIP, Ensem BP859, 54011 Nancy Cedex, France; Tél: (33) 83 32 39 01.

★ 1989 International Radar Symposium – Versailles, April 1989. Information from Colloque International suyr le radar, 11 rue Hamelin, 75 783 Paris Cedex, France; Tél: (33) 1 45 05 74 06.

★ European Test Conference; Paris April 1989. Information from C. Maunder, British Telecom Research Labs, Marthesham Heath, Ipswich, Suffolk, England, IP5 7RE; Tél: (44) 473 64 27 06.

Other French News – DEUIL – Nous avons le regret de fous faire part du décés de M. Pierre David survenu le 9 Fébrier 1987. Entre autres très nombreuses distinctions, M. Pierre David était ancien président de la Section française de l'IEEE et Life Fellow Member.

Publications Rappelons que la Section française souhaite être avisée des publicatinsmais ne peut nipublier, ni faire publier des articles qui doivent, pour cela parvenir au Comité de lecture de la revue concernée.

Enfin, il faut signaler que notre ancien président de Section, M. M. H. Carpentier a été nommé membre de "editorial board" de l'IEEE Spectrum. Il souhaite y proposer la publication d'articles sur les domaines où l'Europoe et la France se son mis en évidence.

Dr. J. Cladé, IEEE Section Francaise, c/o S.E.E., 48 rue de la Procession, 75724 Paris Cedex 12, France.

IEEE HEINRICH HERTZ MEDAL
A New Major Annual Award

Adolf J. Schwab (Germany)

In 1985, at its major annual meeting in Bochum, the German Section Executive Committee decided to propose to the IEEE Headquarters a new major annual medal – the "IEEE Heinrich Hertz Medal". This timely proposal – concomitant with the celebration of the 100th anniversary of Heinrich Hertz's discovery, at the University of Karlsruhe, of electromagnetic waves – was in 1987 approved by the Board of Directors of the IEEE and the IEEE Foundation.

The new IEEE Heinrich Hertz Medal is intended "To recognize an individual for outstanding achievements in Hertzian (radio) waves". Achievements may be theoretical or experimental, and may have been made in any year preceding the year in which the award was conferred. Criteria include: patents, innovative design, and impact on engineering. No restriction as to IEEE membership, organization, nationality etc. is imposed.

The award includes a gold medal, a bronze replica and a $10,000 honorarium for the recipient. It is sponsored by the electrical industry of the Federal Republic of Germany.

The award will be conferred by the Heinrich Hertz Medal Committee of the IEEE Awards Board. Nominations will be solicited in the usual manner employed by that Board. A "Call for Nominations" will be published in IEEE literature; mailings will be made to Societies and other appropriate sources by the Candidate Search Committee. The award will normally be presented at the Institute's Annual Awards Presentation and Reception. However, it is hoped in 1988 it will be awarded during the 25th Anniversary Celebrations of Region 8 in Munich.

INTERNATIONAL CONFERENCE ON VLSI AND COMPUTER PERIPHERALS

R.C. Winton (England)

There is still time to submit a "late paper" for the International Conference on VLSI and Microelectronic Applications in Intelligent Peripherals and their Interconnecting Networks – CompEuro '89 – to be held on 8-12th May 1989 in Hamburg, Federal Republic of Germany. 500-1,000 word abstracts are required as soon as possible and camera-ready copy of accepted papers by 1st February 1989; these should be sent to Professor W.E. Proebster, IBM Laboratory, P.O. Box 1380, D-7030 Boeblingen, Federal Republic of Germany.

1. VLSI, External Memories and Storage
- Storage systems based on semiconductor, magnetic & optical techniques
- Hierarchies & architectures of external memories and storage
- Intelligent interfaces to peripheral memories

2. VLSI and I/O Terminals

I/O Systems and Devices for the Human Interface
- Displays, e.g. CRT, LCD, ELD, PDP
- Printers, e.g. inkjet-, thermal-, laser-printers
- Keyboards, digitizers, scanners, mouse devices
- Speech I/O
- Human factors: noise-, glare-reduction, paper-handling

3. VLSI, Sensors and Controls
- Smart sensors, smart actuators, and data processing systems applied in robotics, process control, medical and others

4. VLSI and Computer Communication
- Advanced bus systems for direct attachment of peripherals
- Advances in Local Area Networks
- Integrated networks, ISDN and integrated networks to support peripherals
- Communication systems, to support a mix of peripherals

5. VLSI Technologies and Trends
- Selection of technology
- Standard vs. custom design
- Advanced design tools
- Advanced testing concepts
- Design for noisy environment
- Low temperature technology
- Packaging

The conference language is English. Apply now for the Preliminary Programme (it will be available in October). CompEuro '89 is sponsored by the IEEE Computer Society, IEEE Region 8, Gesellschaft fuer Informatik (GI).

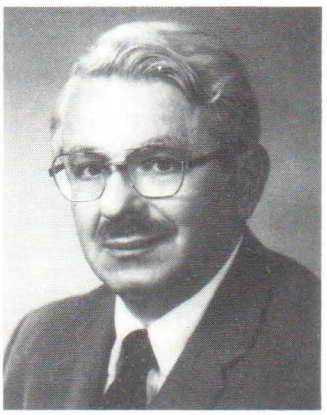
IEEE ELECTIONS – PRESIDENT-ELECT

Mr. CARLETON A. BAYLESS

BS Degree 1949. Bell Systems, AT&T, Western Electric. Data & Voice Transmission Microwave and Mobile Radio, Marketing Manager, Part-time University lecturer.

Served on the Board of Directors, Executive Vice-president, Region 6 Director. Served on 30 Boards & Committees – including Regional Activities. Chairman Region 6. Editor San Francisco Engineer. Communications Society. Has discussed IEEE activities with non-US national societies in numerous countries.

He will promote: The establishment of a Vice-president of International Affairs, a long range operational plan for the IEEE – including finances, organisation and staffing. He is actively interested in: introducing electronic publishing into the IEEE, rapid access to technical literature, and an expansion of applications oriented section/chapter speakers and conferences.



Mr. IRWIN FEERST

Early training in electronics with the US Navy. Masters degree 1955. Assistant Prof. of Physics. Now independent engineer for e.g. IBM, Dow Jones and the King of Thailand. Opposes the current and previous policies of the IEEE Board of Directors and has declared that the IEEE should be a US organisation for US electrical engineers.

USAB Manpower Committee 1985-88. Since 1973 Mr. Feerst has written and edited the newsletter of the Committee of Concerned Engineers in opposition to the "anti-working engineer" policies of the IEEE's Board of Directors.

Has expressed no interest in the IEEE as an international (or transnational) society. Has expressed the view that five members of the Board of Directors, and the Institute's General Manager, should be sacked. Author of many offensive letters to IEEE officers and their wives.

Mr. ERIC E SUMNER

Masters Degree 1955. Austrian born and now Vice-president, Operations Systems and Network Planning at AT&T Bell laboratories. Several original contributions to the development of modern electronic devices and systems – 1988 awarded the Alexander Graham Bell Medal. Communications Society (President). Author of many technical papers.

Served on the Board of Directors and as Director of Division III. Member of 9 IEEE Committees.

He wishes to see: an expansion of IEEE conferences and publications, better links between universities and industry, and an improvement in higher education; he is a solid supporter of transnationalism in the technology sphere of the IEEE. He would seek improvements in the services which IEEE provides for its members; and ensure that this was done at a reasonable cost.

Mr. MERRILL W. BUCKLEY

Masters Degree. 33 years with RCA as: engineering manager, technical director, project manager for large systems. Extensive teaching experience. A retired naval officer (communications).

Served on Board of Directors, Executive Vice-president, Director Region 2, Vice-president Regional Activities, and on 18 IEEE Committees including TAB Transnational Relations, Engineering Management Society. Considerable experience of continuing education.

He wishes to see: a more efficient distribution of publications – especially in remote areas, a greater involvement of Region 8 members on IEEE boards, closer ties between IEEE Technical Societies and Region 8 Sections in the planning of conferences, IEEE policies and procedures that will be sensitive to regional, national, and local interests and traditions.

The notes on this page have been extracted from almost 40 pages of information which I have received on the candidates and on the new method of voting. As far as I am able, I have presented only that information which I believe would interest Region 8 Members in arriving at their decision. I have also taken account of previous election statements from the candidates and that which is generally known about their interests and public pronouncements (Editor)

WHO IS THE PRESIDENT-ELECT

He is the man who, for 1989, will act as deputy to the President; during that year he will familiarise himself with Presidential duties. In 1990 he will automatically become President.

WHAT DOES THE PRESIDENT DO?

You may regard him as the Managing Director of a company of which you, the members, are the shareholders. He is responsible for conducting meetings of the Board, encouraging everyone to produce ideas for improvements in the Institute, and putting into effect the plans which he has announced in his presidential statements.

When considering which way to cast your vote you might care to ask yourself five questions: 1. Does the candidate have the background which would suggest that he has been successful in his engineering endeavours? 2. Does he have the experience of committee work which would enable him to conduct high level meetings that will produce results rather than words? 3. For us in this Region, what will he do to ensure that our voice will be heard at the highest management levels. 4. He will travel extensively and meet many people within and outside the IEEE; as our ambassador, will he deal with them intelligently and diplomatically? 5. His is the ultimate responsibility for the efficiency of IEEE administration, what does he propose to do in order to ensure that that efficiency is improved?

WHAT IS THIS NEW PLURALITY APPROVAL VOTING?

Largely long words to describe a quite simple system. You have as many votes as there are candidates – four this year. You may use 1, 2, 3 or 4 of your votes.

1. If you think that there is only one suitable candidate, you put a cross against his name on your ballot paper and nothing against the remainder, just as you have done in the past – there is nothing more to do.
2. If there is one candidate who in your opinion would be of no value as IEEE President and you are unable to choose between the remaining three, you put crosses against each of the three acceptable candidates and nothing against the unacceptable one.
3. If two candidates are acceptable to you and the other two are not acceptable, you put crosses against the two acceptable and nothing against the two unacceptable.
4. Putting crosses against all four candidates, or against none, merely registers your disapproval but does nothing to elect or reject any of them; it costs you your time and a stamp.

IF YOU VOTE, WE COULD HAVE THE PRESIDENT WE DESERVE
IF YOU DO NOT VOTE, WE SHALL HAVE THE PRESIDENT OTHER PEOPLE DESERVE

HAMBURG
8–12 May 1989

VLSI and COMPUTER PERIPHERALS

Advanced Technologies and Trends

COMP EURO 89

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VLSI and Sensors and Controls
VLSI and Computer Communication
VLSI for Peripherals

Call for Late Papers

Abstracts as soon as possible
Complete papers not later than 1st January 1989
Apply now for **Preliminary Programme**
(Available October)

Further details on page 14 of this Region 8 News

EPE EUROPEAN POWER ELECTRONICS

3rd EUROPEAN CONFERENCE on Power Electronics and Applications
Aachen, F.R. Germany, October 9-11 1989

CALL FOR PAPERS

The aim of the conference is the presentation and discussion of new results in research, development and applications.

Like its predecessors in Brussels (1985) and Grenoble (1987), the 3rd European Power Electronics Conference 1989 is intended to be a forum of internatioanl exchange on the state of the art and future developments in this field.

Prospective contributors are invited to submit papers on the topics listed below before September 15, 1988. Preference will be given to contributions giving details of the latest results concerning power electronic design methods, equipment and components. In particular, papers are requested which describe practical applications of power electronics over a wide range of fields.

Papers submitted must not have been published previously and must contain a substantial amount of new material.

Topics

1. Power Electronics devices and components
2. Electronic power actuators
3. Signal processing
4. Variable-speed drives
5. Multi-motor drives
6. Power Electronics in generation and transmission
7. Electronic power supply systems
8. Systems engineering

Further information may be obtained from:

EPE '89 Secretariat, Mr. M. Schatz, c/o VDI/VDE-Gesellschaft Mess-und Automatisierungstechnik, P.O. Box 1139, D-4000 Dusseldorf 1, Federal Republic of Germany.

REGION 8 NEWS OFFICE

WILL BE CLOSED FROM

20TH SEPTEMBER TO 13TH OCTOBER

Last Date for November Advertisements and Editorial Copy is 20th October

INSERTS should be received by 30th October

A Full Selective Mailing Service will be available from November 1988.

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King's College London,
Strand, London WC2R 2LS
or phone 01-836 5454 ext 2592