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## INSTITUTE NEWS

### Mr. Robert H. Tanner is New President

Mr. Robert H. Tanner, Director of Information, Bell-Northern Research, Ottawa, Ontario, Canada, has been elected President of the IEEE for 1972.

The IEEE Board of Directors also announced the election of Dr. Harold Chestnut as Vice-President for 1972. Dr. Chestnut is Consultant, Systems Engineering, Information Science and Engineering, General Electric Corporate Research and Development, Schenectady, New York. When the Institute's Annual Assembly meets in January 1972, two additional Vice-Presidents for 1972 will be elected.

Mr. Tanner was born and educated in England, graduating from the University of London (Imperial College of Science and Technology), with the degree of B.Sc. in Engineering with First Class Honours. After a post-graduate year at the University devoted to research in architectural acoustics, leading to an M.Sc. degree, he joined the engineering staff of the British Broadcasting Corporation. During World War II he served in the British Army for seven years and rose to the rank of Major. In 1946 he returned to the BBC Research Department to work on architectural acoustics.

In the following year he took his family to Canada and joined the Northern Electric Company. He spent 13 years in Belleville, Ontario, and was one of the first appointments to the Research and Development Laboratories staff when it was formed in 1958. He has been responsible for developments in several communications fields, and is now Manager of Scientific Information, handling the technical public relations and library services of the Laboratories.

### Galindo Petition Defeated

The petition submitted by Dr. Victor Galindo, which would (1) make secondary the present primary educational objectives of the Institute; (2) make the Institute's primary purpose the economic well-being of its members in the USA; and (3) limit to US members the holding of IEEE office and voting on primary-purpose issues, was defeated.

From the whole IEEE membership, 36.7% voted; of these 23,633 or 50.4% voted against the petition, while 23,266 or 49.6% voted in favour. These percentages must be read in conjunction with the requirement that a two-thirds majority is required to pass any constitutional amendment.

This result, although satisfactory for us, is worth thinking over. It is clear that the Board of Directors will not ignore the large minority which revealed itself. Steps should be taken to preserve the character of transnationality of the IEEE. Discussions were to be held during the meeting of the Board of Directors in mid-November.

The Region 8 Director feels that we should encourage the Board of Directors to take such initiatives so that the minority be satisfied, while our point of view that different Regions deserve different attention should be supported. It is clear that Region 8 does not wish to be involved in lobbying in favour of the electrical engineering profession in the United States.

To be concerned with the welfare of members will cost money. We can assert our solidarity with the IEEE, but we consider that, if such activities involve large expenses, the breakdown of charges should be differentiated within and out the United States.

### First International Symposium on High Power Testing

From the comments heard at the Summer meeting, one cannot escape the conclusion that the First International Symposium on High Power Testing was a success. The programme, which drew 38 papers from 10 countries, presented a wide variety of subject-matter, ranging from plasma physics and transformers,

through fault testing, to the philosophical, financial and insurance aspects of high power testing.

The programme included six technical sessions and one evening panel session. At the technical sessions, 30 papers were presented and 52 discussions heard. The evening panel session on the philosophy of high power testing presented 9 speakers who, after their presentation, were confronted with a barrage of questions on part of an enthusiastic audience which did not leave until the Chairman closed the session at 11 p.m. The large attendance of nearly 200 in each session evidenced the interest.

No doubt the International Symposium had a great appeal abroad. Foreign registration was noticeably higher than at earlier Summer Power Meetings. A total of 24 countries was represented (not counting Canada and the US), with 109 delegates representing over 8% of the total registration. This is an achievement, particularly in view of the general economic strain, which is not limited to the US. The largest contingent came from Japan (20), with Great Britain (14) next, yet eight other countries had more than five delegates each. All continents were represented.

### London 1971 IEEE International Symposium on Electrical Network Theory

By now, all members of the IEEE Circuit Theory Group will know that the 1971 ISCT was held in London, England, but only those who were fortunate enough to be present will know how successful this international gathering turned out to be. The intention of the G-CT Administrative Committee in selecting London as a centre was to stress the international character of the Symposium and to provide an opportunity for delegates living outside the USA, who might otherwise not be able to attend, to do so. It is a pleasure to report that this policy has proved highly successful, since 240 delegates came from 23 different countries, distributed as follows: Austria 1, Belgium 8, Britain 73, Canada 14, Cuba 1, Denmark 3, Finland 1, France 9, Greece 1, Hungary 7, India 1, Israel 1, Italy 13, Japan 2, Netherlands 20, Norway 1, Poland 1, Sweden 10, Switzerland 1, Turkey 3, USA 31, West Germany 32, and Yugoslavia 5.



Prof. B. D. H. Tellegen, Dr. A. C. Davies, Dr. G. S. Brayshaw and Mr. A. P. Stern at the dinner of the London International Symposium on Electrical Network Theory.

In addition to the technical programme containing 73 papers, there were two social functions. The first was the official reception at which Dr. O. F. Thompson, the Chancellor of the City University, welcomed the guests, and the second function was the banquet at which Professor B. D. H. Tellegen of the Philips Research Laboratories, Eindhoven, was the guest of honour and the principal speaker. A second speaker was Mr. A. P. Stern who, as Director of Division I, was present as the official representative of the IEEE.

An interesting demonstration of the availability of international computer facilities was given during an evening programme at which Dr. J. R. Greenbaum used a digital computer in Ohio, USA, which was connected via a communication satellite link to a terminal in the City University, to provide a visual display for the audience.

To give the delegates an opportunity to make contact with the British Institution of Electrical Engineers, an afternoon session was held in the IEE building on the Thames Embankment.

The local arrangements for this Conference were done by the Circuit Theory Chapter of the UK & RI Section of the IEEE, under the Chairmanship of Dr. A. C. Davies, who deserves the gratitude of all the delegates for the excellent way in which these arrangements were organised.

The UK Chapter felt honoured by the IEEE Circuit Theory Administrative Committee's decision to hold the 1971 ISCT in London, and hopes they will make a similar decision in the not too distant future.

Copies of the 1971 G-CT Symposium Digest can be obtained from either the IEEE Order Department, New York, at \$6 for members of the IEEE, IEE or IERE, \$8 for non-members, \$4 for members in Region 8; or alternatively from Net 71, Electrical Engineering Department, The City University, St. John Street, London EC1V 4PB, in which case the prices are £2.50, £3.30 and £1.65 respectively.

#### Field Awards Announced for Presentation in 1972

A broad range of electrical/electronics technology is represented by the eight awards scheduled for presentation by the IEEE in 1972. The IEEE regularly honours, through its programme of awards, outstanding people in a number of technical fields of special interest to its members around the world. Two of the awards come to members in Region 8.

The William M. Habirshaw Award, which marks outstanding contribution in the field of transmission and distribution of electric power, is made to Gunnar Jancke for "leadership in the creation of the world's first 400 kV extra high voltage transmission system, including the application of series capacitors at the voltage". Mr. Jancke is Chief Engineer in charge of development and system engineering and Deputy Manager of the Electrotechnical Department of the Swedish State Power Board. He joined the Swedish State Power Board in 1937 as an engineer of the Operating Department, in charge of relay protection, carrier current and circuit-breaker questions. From 1946 to 1965 he was Chief of System Engineering of the

Electrotechnical Department. In 1950 he was Deputy Manager of the Department, and in 1953 Chief Electrical Engineer, both positions that he now holds. A member of the Royal Swedish Academy of Engineering Sciences, Mr. Jancke has been involved in several national and international conferences and committees. He has been a member of the CIGRE Administrative Council since 1960. He is the former Chairman of the Swedish National Committee of the IEC.

Robin E. Davies receives the Vladimir K. Zworykin Award, presented for outstanding technical contribution in the field of electronic television "for his development of the field-store standards converter which permits US colour television (NTSC) signals and those from the European (PAL) system to be exchanged directly". Mr. Davies spent two years with Decca Radar as an electronic engineer, and then in 1958 joined the BBC Engineering Research Department as a mathematician. From 1963 to 1970 he worked on television standards conversion. Since 1970 he has been engaged on transmission and propagation problems in radio and television.

#### New Editor of "Spectrum"

Mr. Donald Christiansen, former Editor-in-Chief of "Electronics Magazine", has been appointed to the newly-created staff position of Editor of "IEEE Spectrum". He will have full and continuing editorial responsibility for "Spectrum". In the past this responsibility had been assumed by volunteer members of the IEEE on a part-time basis. Mr. Christiansen will be backed by an editorial staff in depth under the experienced direction of Managing Editor Ron Jurgen.

#### Notice to all IEEE Overseas Members

The longshoremen's strike has placed an embargo on overseas mail such as conference records, transactions and journals. Our publications are classified as "non-preferential" and are, therefore, subject to an embargo so that the US Post Office will not accept from our printers any copies addressed for overseas mail. All military mail, international airmail, air parcel post, and all mail, surface and air, for Canada, Mexico, Hawaii, Alaska, Puerto Rico, Virgin Islands, Canal Zone, Guam, and the Trust Territories will be accepted and delivered.

#### IEEE Fellow Grade Nominations

A new requirement has been adopted this year which calls for the sponsor of a future Fellow grade nomination to solicit from the appropriate IEEE Group or Society a critical evaluation of the technical accomplishments of the candidate. The Fellow nomination kit includes two Evaluation Forms, to be used for this purpose. To be eligible for consideration by the 1972 Fellow Committee, a completed Evaluation Form must be submitted by the Group or Society in time to be received by the Fellow Committee on 15 June 1972. The deadline for submission of the Fellow nomination form and the five completed Fellow references is 30 April 1972.

## REGION 8 NEWS

#### Successful EUROCON 71, Lausanne, 18-22 October 1971

The large Region 8 event, Eurocon 71, which took place in Lausanne, Switzerland, from 18-22 October 1971, has been very successful. With the support of 34 European national societies, Eurocon 71 had an attendance far beyond all expectations—over 1,100 participants from Europe and overseas followed during four days the 250 papers and panel discussions on the main Eurocon subjects—information processing in large systems; long-distance communication; solid state circuits; power distribution; biomedical engineering; electronic time-keeping.

The organisers noticed with great pleasure the participation of 120 students from several European universities, who had come to enrich their human and technical knowledge. A specially-designed students programme had been prepared for them. All the main subjects of Eurocon were followed by a great number of participants. Two smaller conferences should be especially mentioned, because they seemed to have been particularly interesting to the audience—"Standardisation" and "Impact of Electronics in Power Distribution". The wide choice of subjects of Eurocon 71 gave the participants the possibility of getting into touch with specialists from different countries. The reactions on the services given to the participants (microfilms and hard copies of papers, social events, accommodation, etc.) were also very positive. The Convention has been mentioned in Swiss newspapers, as well as announced by the Swiss Broadcasting Corporation.

The Convention was opened on Monday 18 October by an opening session and a banquet. During the banquet the inaugural presentation of the Frederik Philips Award of the IEEE was made to Mr. F. J. Philips, retired President of the Board of Management of Philips. The closure of the Convention was



R. Wellinger, A. Rannestad, F. Eggimann, Pradervand, E. Choisy, R. Richard, J. Mulligan and P. Jespers at the opening of Eurocon 71.

marked by a dinner, offered by the Swiss Section of the IEEE, at which the members of the Eurocon Committees and the Region 8 Committee were present.

The thanks of the Steering Committee go to all who have contributed to the success of the Convention, particularly to the members of the Honorary Committee, representing the Chairmen of several important European national societies, to the



President Mulligan presenting the Frederick Philips Award to Mr. F. J. Philips at Eurocon 71.

Swiss Federal Institute of Technology, Lausanne, to the local authorities, demonstrating in a wonderful way the hospitality of the French part of Switzerland, and to the Swiss industry, which not only supported the Convention financially, but also contributed to its success by arranging visits and tours for the guests. Last but not least we thank the Sections of IEEE for their willingness to support and to delegate members into the various committees.

#### Eurocon 71 Publications

The Convention Digest, containing programme and two-page abstracts of the papers, as well as addresses of the speakers and committee members, can be ordered at SFr 25 (payment in advance with bank cheque). More than two-thirds of the papers are available in full text on microfilm. Please contact the local secretariat of Eurocon 71 for copies of the Digest and

for information on prices and composition of the microfilms—Local Secretariat Eurocon 71, 24 Chemin de Bellerive, 1007 Lausanne, Switzerland.

#### Affinity Group Flight to New York for the International Switching Conference (6-9 June 1972) and International Communication Conference (19-21 June 1972)

There exists a possibility that the IEEE might undertake sponsorship of a group flight from Zurich to New York for these two Conferences. A tentative schedule would be to leave Zurich on 5 June 1972 and to make the return trip leaving New York on 22 June 1972. The tariff situation is unclear at the moment, but it is likely that normal fare (14 to 28 days) would be some SFr 1574. Our group flight tariff (on a regularly scheduled flight would be some SFr 977. Children aged 2 to 12 years would pay half fare. (We would need a group of at least 30 participants with children of the age range mentioned above counting as half participant.) If you are interested, please write to Harry Rudin, IBM Forschungslaboratorium, Saumerstrasse 4, CH-8803 Ruschlikon, Switzerland.



A. Rannestad, Chairman, TPC (sitting), and F. Eggimann, Chairman, CSC, testing performance of a picturephone set at Eurocon 71.

## MEETINGS IN REGION 8

#### Conference on Tubes (Stand und Entwicklung auf dem Gebiet der Elektronenrohren)

A call for papers for this Conference has been issued. The Conference is to be held in Bad Aibling/Oberbayern on 30 and 31 May 1972. It is sponsored by the German Section of the IEEE and the Nachrichtentechnische Gesellschaft im VDE (NTG). Further particulars may be obtained from Herrn Dr. W. Veith, Siemens AG, RB GE, 8 München, St. Martinstrasse Germany.

#### Conference on Advances in Marine Navigational Aids

A Conference on Advances in Marine Navigational Aids is to be held at the Institution of Electrical Engineers, London, England from 25-27 July 1972, and is being held in association with the Institute of Navigation, the Institution of Electronic and Radio Engineers, and the UKRI Section of the IEEE. The scope of the Conference will cover present and future navigational problems and requirements for basic navigational aid techniques, navigational systems for ports and congested waterways, navigation in open waters, and cost-benefit considerations. Papers on inertial, optical or other systems will also be welcome. The organising committee invites offers of contributions covering the above topics, not exceeding 2,500 words, for consideration for inclusion in the Conference programme. A 250-word synopsis should have been submitted to the Conference Department by November 1971. Further details may be obtained from the Manager, Conference Department, IEE, Savoy Place, London WC2R 0BL, England.

#### Two Short Courses in Detection, Estimation and Modulation Theory

The Director of Region 8 draws attention to these Courses, which are to be held in Brussels from 26-30 June and 3-7 July 1972. Each day will consist of five hours of lectures, plus a one-hour problem session. Tuition for either Course is \$300, or \$500 for both. Further particulars may be obtained from Dr. Harry L. Van Trees, 27 Grove Hill Avenue, Newtonville, Massachusetts 02160, USA.

Since 1964, Dr. Van Trees and his colleagues at MIT have been presenting both regular graduate courses and short courses in the area of detection, estimation and modulation theory. Successive versions of notes for these courses evolved into a three-volume set of books—"Detection, Estimation and Modulation Theory", Part I (1968), Part II (1971) and Part III (1971), by H. L. Van Trees. The first volume is used as a graduate-level text in many schools in both the United States and Europe. The second and third volumes are being used for advanced courses in several schools. A final volume, on array processing, is in preparation. Together, these books provide a unified approach to many important areas of current interest. An understanding of this body of material is essential to engineers or mathematicians working in communications, radar, sonar or seismic signal processing. Throughout the course, the application of the theory to actual physical situations will be emphasised.

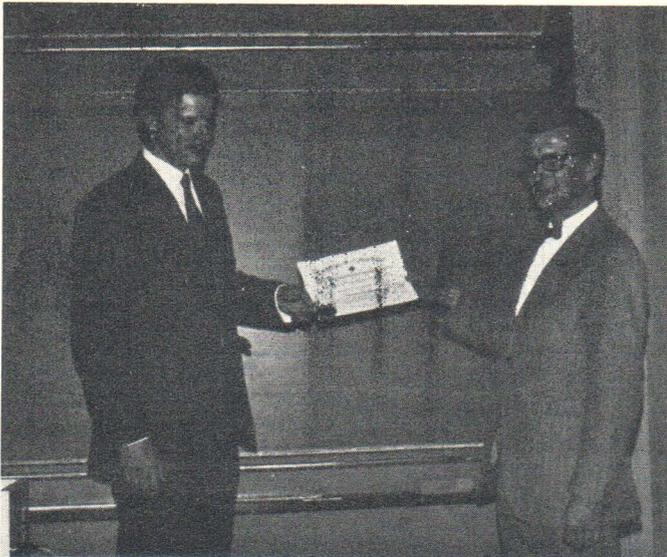
In the past, transportation costs have limited the number of European attendees. This year the course will be given in Europe for the first time. It provides a unique opportunity to obtain a coherent presentation by a group of excellent lecturers who have presented the material previously. In addition to their teaching experience, they are currently doing research in the areas of communications, sonar and radar signal processing.

## NEWS OF THE SECTIONS

#### DENMARK SECTION

A "Computer-Aided PERT Game", used in the education of electric power engineers, was presented on 5 October by Mr. J. A. Richter-Nielsen. After the PERT paper, the GAP

Special Recognition Award for 1971 was given to Dr. Johs. Jacobsen, Terma Electronic Industry, by the Section Chairman, on behalf of the IEEE Antennas and Propagation Group. Dr. Jacobsen was further celebrated at a succeeding cocktail party.



Denmark Section-Chairman, P. M. Larsen, presenting GAP Special Recognition Award for 1971 to Dr. J. Jacobsen.

At Eurocon, two Danish papers were given, one by J. Christoffersen, Electric Power Engineering Department, entitled "A General Purpose Optimiser", and the other by C. Aamand, Systems Analysis Inc., dealing with "Process Identification for On-Line Optimisation". "Signal Analysis by Minicomputers" was the theme for the meeting on 22 November. P. K. Moller and S. Boel Pedersen, from the Acoustics Laboratory, Technical University of Denmark, stated some of the projects within the Laboratory during the last two years using a PDP/8.

#### ISRAEL SECTION:

In June 1971 all the electrical engineering societies in Israel

decided to establish a kind of association for the purpose of conducting professional conferences. The participating organisations are the Israel Section of the IEEE, the Israel Section of the IEE, the Israel Branch of the IERE, and the Section of Electrical Engineers of the National Society of Engineers.

The first Conference took place on 2 November, and the subject was "Microelectronics". The conferences are basically divided into two parts—tutorial, or state of the art lectures, and the purpose of the second part is to acquaint the audience with the work which is being done in Israel in that particular subject. The first Conference was a very big success, with a participation of about 300 engineers. The second Conference is scheduled for the end of January 1972, on the subject of digital communications.

#### Student Activity

The Executive Committee of the Section felt that one of the main reasons for the lack of student activity in Israel was the relatively high fee which is required from the students, who are in a financial squeeze anyhow. Consequently, the Section, together with the academic institutions, decided to subsidise the membership fees by having the students pay only one-third of the required fee, while the other two-thirds are paid by the local Section and by the academic institutions. The first response, resulting with the organisation of a group of 30 students, seems to be very encouraging.

#### UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION

The Annual General Meeting will be held in the IEE Building, London, at 6 p.m., on 17 February 1972.

An IEEE travelling scholarship of £300 is offered for visit(s) foreign electrical or electronic research or manufacturing establishments by a postgraduate student. The purpose is to promote an exchange of research and technological ideas and to foster a closer relationship between young engineers in different countries. The scholarship is financed by the Section, acting in collaboration with the IEE and the IERE. Entrants must be Student or Graduate Members of one of these three institutions. Further information and entry forms are available from Dr. A. J. Ellison, Queen Mary College, Mile End Road, London E1 4NS, England.

#### ADDITIONAL BENEFITS FOR IEEE MEMBERS IN REGION 8

1. Student members transferring to a higher grade pay dues of \$15 for the first three consecutive years of membership in the higher grade. (In Regions 1-6 students pay \$15 for the first year following graduation and \$25 annually thereafter).
2. Records of all IEEE major Conferences are made available to members in Region 8 at a 50% discount.
3. Section Chairmen in Region 8 receive information collected by IEEE headquarters concerning outstanding speakers who plan to travel to Region 8 and who are

willing to address Section meetings on their technical specialities. The sources of information are the IEEE Groups and Societies and the programmes of IEEE sponsored conferences. Only names of speakers who are recommended from personal knowledge of their technical expertise and communicative skills are transmitted to Section Chairmen through the office of the Region 8 Director. (For further information contact Mrs. C. Stievenart, 206 Avenue A. Huysmans, 1050 Bruxelles, Belgium.)

## STUDENT ACTIVITY NEWS

**Egypt** The SAC Chairman (Professor E. Folke Bolinder) took part in the inauguration of the Ein-Shams Student Branch in Cairo on 12 October 1971.

Dr. Mahmoud A. B. Koshairy, Chairman of the IEEE Egypt Section, reports that further student branches are planned at the Alexandria University, the Al Azhar University (Cairo) and the Assiout University (Upper Egypt).

**Finland** The Regional Director, upon the recommendation of the SAC Chairman, has proposed the nomination of Professor Seppo Halme as Counselor of the Helsinki University of Technology, Otaniemi, Finland. Professor Halme has been suggested by Professor Martti Tiuri, the former Counselor.

**France** The Regional Director, upon the recommendation of the SAC Chairman, has proposed the nomination of Professor J. G. Remy as Counselor of the Ecole Nationale Supérieure des Telecommunications, 46 rue Barrault, 75—Paris 13 eme.

**Israel** The Regional Director, upon recommendation of the SAC Chairman, has proposed the nomination of Professor I. Navot as Counselor at the Technion (Israel Institute of Technology) in Haifa, and Professor S. Karni as Counselor at the Tel Aviv University, as recommended by the Israel Section.

**North Italy** The Regional Director, upon the recommendation of the SAC Chairman, has proposed the nomination of Ing. G. Cottafava as Counsellor at the Università di Pavia, as recommended by the North Italy Section.

On 19 October 1971, the Executive Committee approved of the formation of a Student Branch at the Politecnico di Torino,

with Professor V. Pozzolo as Counselor.

**Norway** The SAC Chairman has received a letter from the Counselor at the Technical University of Trondheim, Professor Nils A. Selseth, in which he reports that he has not succeeded in forming a Student Branch at Trondheim. The SAC Chairman will try to find a new Counselor.

**Switzerland** The Swiss Section Student Branch has been abolished. The old Student Branch at the Eidgenössische Technische Hochschule, Zurich, will remain, and a new Student Branch will be formed at the Ecole Polytechnique Fédérale in Lausanne.

**Turkey** The situation is unclear.

**Yugoslavia** The Region 8 Director, upon recommendation of the SAC Chairman, has proposed the nomination of Professor Albin Wedam as Counselor of the University of Ljubljana, Fakulteta za Elektrotehniko, Trzaska 25, 61000 Ljubljana.

On 19 October 1971, the Executive Committee approved of the formation of a Student Branch at the University of Ljubljana. Professor Wedam will be the Counselor.

In July 1971, Vice-President Robert H. Tanner, Professor Wedam, Dr. Joze Furlan (University of Ljubljana), and the SAC Chairman met at Ljubljana to discuss formalities in forming this new Student Branch.

The SAC Chairman has sent a letter to the Board of Directors asking that the student fee be reduced from \$8 to \$5 for the first year. No reply has yet been received.