THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS



Region 8 newsletter

Editor: W. H. Devenish, The Electrical Research Association, Cleeve Road, Leatherhead, Surrey, England.

(Telephone Leatherhead 4151)

Regional Director: Dr. Roger P. Wellinger, Port-Roulant 50, 2003 Neuchatel, Switzerland No. 7 June 1969

INSTITUTE NEWS

Long-Range Planning:

The Long-Range Planning Committee, under the Chairmanship of Past-President Herwald, solicits suggestions for consideration from any source. It is emphasised that long-range as distinct from current planning proposals are required and every committee and board reporting to the Board of Directors or Executive Committee is asked to submit items for study. If you have any ideas, submit them to the Secretary of your Section.

Delay of Spectrum and Transactions:

Headquarters announce that labour difficulties at the printers delayed the February 'Spectrum' by about three weeks. It is expected that after March succeeding issues will revert to normal schedules.

Issues of several Transactions between December and March are also affected.

Introduction of New Computer:

IEEE's new computer reached cut-over in late April. was a hiatus from 28 April to 9 May during which neither new nor old services were available, but, by the time this Newsletter is received, it is hoped that the new facility will be functioning smoothly. Further information, from Bill Keyes at Headquarters. Further information, if required, should be sought

Proposals for Fellow:

Although proposals which were not submitted before 30 April cannot be considered this year, Headquarters suggests that the name of a suitably qualified member should be submitted twice or three times if the first application is rejected because of the Bylaw which limits the number of new fellows in any one year to 125. The note goes on to suggest that Section Chairmen check that a committee is continuously and systematically considering the eligibles.

IEEE Board of Directors :

The new Board, which includes Dr. Roger Wellinger from Region 8, took over on 7 January for 1969. The list shows 12 new Directors in the total of 27, which includes 8 who stood for member election last mid-year and 11 others who had previously been elected by members' ballots. The remaining 8 previously been elected by members' ballots. The remaining 8 were elected by the annual Assembly, all 19 of whom had been member-elected. Thus the entire Board of Directors derives directly from the voting members of IEEE as a corporation; a detail of law that makes sense. Some of our members have wondered whether, in fact, the government of the Institute goes back to the members. By the Assembly mechanism it indeed does. Among the 27 Directors there is wide geographic and occupational dispersion. occupational dispersion.

Regional Activities Board:

A Regional Activities Board is being set up to consist of the Directors representing the ten Regions, with Vice-President Granger as its first Chairman. Miss Emily Sirjane will be the The Regional Directors have been meeting Staff Secretary. informally with the successive elected Vice-Presidents for some It is now felt that desirable restructuring of Regional activities can be accomplished under a suitably organised Board, the scope of which is still to be determined. The step may entail some changes in the Sections Commmittee. Field reaction is welcome. Dr. Granger may be addressed at IEEE. This R.A.B. is not yet shown on the chart giving the IEEE organisation from January 1969, but the chart does show the elevation of the Educational Committee to become the Educational Activities Board (to bring increased emphasis to this field and improve the interface with the academic world) and the detailed structure of the Awards Board and the Publications Board so giving an indication of the activities of these Boards.

Payment of Dues

Members are reminded that in France, Germany, Italy and the U.K. payment may be made in local currency through the Chase Manhattan Bank (in Italy through Banca Nazionale del Lavoro).

Alternatively some Sections find it convenient for all dues to be paid to the Secretary/Treasurer who then makes one consolidated application for U.S. dollars for payment to New York. An extension of this system is being considered by Head-quarters for individual students to pay their \$2 to the Section Secretary/Treasurer in local currency in order to avoid the disproportionate handling change made by some banks for payments of such small sums.

Students Dues during Military Training:



Dr. Andreas Rannestad, Chairman, Norway Secti

The following Bylaw replaced the previous one in August 1968, but has only just been reported: 'A Student notifying IEEE that he is entering military service shall retain his Student status, while in service, for a period not to exceed four years. At his option he may continue to pay annual Student dues during this period and receive publications and other membership services, or he may omit payment of dues and be placed on inactive status. In either case, Student membership shall be recorded as uninterrupted, while the Student is in military service, for the above-stated period.

Conference Records

A majority of the IEEE technical conferences and symposia publish a digest or record of the papers that comprise the technical programme. The conference publication is usually offered at the time of registration and is budgeted for this purpose at the cost of printing. Subsequently, the conference publications are offered for sale at IEEE Headquarters and the normal price is about twice the printing costs.

Recognising that overseas members have difficulty in arranging to attend these conferences, IEEE has adopted the procedure of delivering at one-half the listed member price on all member orders received in response to the conference notice. Note that IEEE is not able to guarantee this discount for all the conferences that are co-sponsored with other societies.

Because many conference papers are not subsequently submitted for publication in the regular periodicals, these conference publications may offer some current technical information in special fields that would otherwise not be readily available.

Oceanographic Co-ordination:

Marine technology, ocean engineering, off-shore technology, oceanography are emerging terms. Geoscience Electronics oceanography are emerging terms. Geoscience Electronics Group (G-GeoS) has offered to co-ordinate IEEE problems in this general field (but not to the exclusion of any other Group), using a separate part of the G-GeoS Newsletter as a communi-G-GeoS has written to all Group Chairmen offering cation tool. to send copies of the expanded Newsletter to any IEEE member upon request, and seeking indications of which Groups have interest, involvement and desire for liaison. (Licontact—Dr. Gilbert Jaffe, Instrumentation Department, Naval Oceanographic Office, Washington, D.C. 20390). quests for Newsletter to Dick Emberson at Headquarters. (Liaison (ReManufacturing Technology:

As manufacturing technology relates to electrical-electronic equipment it is receiving attention of a TAB Ad Hoc committee. TAB is also encouraging presently-involved Groups to identify their programmes as such and to continue them. Nevertheless, co-ordination of attack is needed and is afoot. For instance, the Director of Information Services has tagged the term 'Manufacturing Technology' for identity as a category. Concentration of interest has been demonstrated by a successful session at NEREM '68, Boston, and by the Thick Film Hybrid Integrated Technology Workshop at the March '68 Convention. The Ad Hoc Committee of TAB sponsored another session, on hybrid micro-electronics manufacturing technology, at the March '69 Convention. (Particulars from H. H. Hoar or J. B. Singleton at Headquarters.)

Membership Figures:

The Institute's total membership, including Students, was 162,368 on 31 December 1968, compared with 158,217 on 31 December 1967. The net gain of 4,151 (2.6%) overcame, and passed by that much, normal average attrition of about 6% annually (9,500 on 158,000).

The Growth-Improvement-Transfers Campaign, now entering its second year, aims at a 10% net growth, which means 17% gross to absorb normal average attrition. While neither the Institute as a whole nor any of its largest Sections achieved these targets, smaller ones did—Perman Basin Section produced 76% net. Other U.S. Sections managed gains of 11 to

Headquarters describe as most gratifying the inclusion in the list exceeding 10% growth of six Sections in Region 8, four in Region 9 (Latin America) and Tokyo in Region 10. All are 'non-national' new-growth saplings in which vitality is bursting Special-mention accolades go to five Sections out all over. which better than tripled the GIT goal (more than 30% net in one year): North Italy 55%, Rio de Janeiro 52%, Switzerland, Benelux and San Paulo.

Conferences—Advance Programmes:

Any Section may obtain copies on request. Some Sections in the U.S. are organised to answer telephone enquiries from members about particular conferences to be held. Advance programmes contain the facts. Ask for them.

Feedback:

The indefatigible Herb (H3) Heller writes, 'Due to Emily Sirjane's quick reply before my recent trip I was able to make the Milan Section happy that IEEE-USA cared. In 'Cleveland Section News' for November 1968 he reported on the exposition and trade shows he visited, 'A few Students, identifiable by proudly displaying green IEEE buttons (Editor—no ties?), knew what they were looking for. Professor Emilio Gatti, former Chairman of the Milan Section, stopped by to express appreciation of Headquarters' support.'

Chapter Dinners :

Mr. Robert C. Winton, United Kingdom and Republic of Ireland Section, writes to Headquarters from London, 'Our Circuit Theory Chapter is arranging a dinner next week—ostensibly to get their circuits integrated. Do other Chapters do this, or is it an idea for Electrical Engineering?"

Chapters in the U.S. are as likely to be found eating as meeting. Not many do it to get integrated, but when they do they pick out a place with a tablecloth. I'll pass your idea on, though—it may start something in Paris, Tokyo or Buenos Aires. I. S. Coggeshall, Headquarters.

For Your Information:

Headquarters have issued the following three statements:-The new service-recognition pins for Section Chairmen, Group Chairmen and Life Members are now in stock and may be ordered by the wearer or they may be ordered by a unit to present to the wearer. Detailed descriptions are contained in a report of the Internal Communications Committee 'A Fresh, New Look for IEEE in 1969,' printed in April 'Spectrum' and which contains half-tone illustrations.
Certificates in new format are also to be had for an array of

presentations. They are described a referred to in the preceding item. They are described and pictured in the report the preceding item. The Fellow certificates

sent out in January are in the new styling.

IEEE Neckties for members, which originated and were first worn in the United Kingdom and Republic of Ireland Section, are available for purchase by IEEE members anywhere and of any grade. Prices vary with the currency; for the U.S. it is \$4, payable by ordinary cheque. To order use cut-out from February 'Spectrum,' p. 99, or April 'Spectrum,' p. 126, or write to IEEE, County Secretarial Services, 8 The Flower Walk, Guildford, Surrey, England, for copy of flyer with description, illustration, order form

INTERNATIONAL MEETINGS

IEEE Summer Power Meeting:
Plans for the 1969 Summer Power Meeting, to be held in Dallas, 22-27 June, continue at a rapid pace. All indications point toward widespread participation by electrical engineers and their families.

At the present time, more than 100 technical paper presentations are anticipated. In addition to the technical sessions, ranging in nature from electronics theory to the generation, transmission and distribution of electric energy, to the specifics of the meeting's theme 'Reliability,' a unique one-day tutorial session is being planned. Subject of the session is Modern Techniques of Dispatching in Interconnected Systems.

Another highlight of the meeting will be a panel discussion among educators, industry leaders and engineering students concerning summer employment programmes for students engineers. For further information contact R. S. Miner, Dallas Power and Light Company, 1506 Commerce Street, Dallas, Texas 75201, phone (214) 747-4011.

Tenth Annual Symposium on Switching and

Automata Theory:
The 1969 Symposium is to be held at Waterloo, Ontario,

Canada, from 15 to 17 October 1969. Papers describing original research results in the general areas of switching theory, automata theory, formal languages, theory of computation, theory of programming, and theoretical aspects of logical design are being sought. Typical (but not exclusive) topics of interest include abstract languages, adaptive logic, algebraic formulations for automata, asynchronous circuits, automata theory, cellular theory, computational complexity, iterative circuits, minimisation techniques, reliability and fault diagnosis, sequential machines, theory of parallel computation, theory of programming languages, threshold logic, probablistic sequential machines and automata. Authors are requested to send six copies of detailed abstracts (no word limit) to Professor J. E. Hopcroft, Department of Computer Science, Cornell University, Upson Hall, Ithaca, New York 14850, U.S.A.

International Electronics Conference:

Over 100 papers will be presented at the Conference in Toronto in October. The programme calls for good, novel and well-presented technical papers of 20 minutes' length on electronics and related subjects. Further particulars from Dr. Rudi de Buda, 1819 Yonge Street, Toronto 7, Canada.

NEWS REGION

U.K. Honour for Dr. Williams:



Dr. and Mrs. Williams outside Bucking-ham Palace after the investiture

All members of the Region will be pleased to learn that the Queen's New Year Honours List included the award of the O.B.E. (Order of the British Empire) to Dr. Robert C. G. Williams for services to export. By his international work in industry and through pro-fessional and trade organisations, Dr. Williams has played a leading role developing the technical commercial climate which is essential for the growth of electrical and electronic engineering exports. He is chairman of the IEC Committee for the Electrical Safety of Household Appliances; founder Chairman of the Industrial Council for Educational and Training Technology; founder Governor of the International Institute for Medical Electronics in Paris; and an active member of many other organisations.

Regional Meeting

The Regional Committee was again privileged in having the President, Karl Willenbrock, take part in its discussions. On this occasion Vice-President John Granger was also present and made valuable contributions in his capacity of Chairman of the Regional Activities Board. Also at the meeting was Richard M. Emberson of the H.Q. staff whose advice was particularly welcome when discussion took place on the possibility of organising a Region 8 Conference.

It was finally agreed that a Conference should be held in about two years' time somewhere readily accessible in central Europe. The most favourable suggestion seemed to be Switzerland in the fall of 1970. The Conference would be of a high technical level with individual papers covering fairly narrow subjects but with the range of subjects included being as wide as was found practicable.

Such an approach would enable the Region to mount a Conference which would be quite outside the scope of any but the largest Sections and provide a means for members throughout the Reegion to foregather with professional benefit.

Other items which were considered in Montreux were: the need for activity in connection with awards, up-grading and the election of Fellows; difficulties in payment of dues from countries with blocked currencies; the formation of new Sections; the boundaries of Region 8 and the contents of the Newsletter. After appraisal of the usefulness and cost of the Regional Directory, it was decided that its issue every other year was sufficient

but that, if the computer at H.Q. could provide a list of amendments to bring it up to date, consideration would be given to doing so in the intervening years.

Section/Group Relations:

The Vice-Chairman, G-AP, has suggested that the Chairmen of Sections direct all correspondence for the Antennas and Propagation Group through Dr. James R. Wait, who is Chairman for AP activities outside the United States. His address is Environmental Science Services, Administration Department, Boulder, Colorado 80302, U.S.A.

NEWS OF THE SECTIONS

FRANCE SECTION :

On 25 February 1969 Dr. M. P. Forrer, Director of the Electronic Watch Centre in Neuchatel, Switzerland, gave a lecture on 'Electrical Watches, Recent Technical Developments.' A joint meeting was held on 7 March 1969 with the Société

Française d'Astronautique' and the French Section of the British Institution of Radio and Electronic Engineers. Mr. Maurice Ponte of the Academie des Sciences gave a lecture on 'Electronic Data Processing and Space Research.'

number of students have become Student Members of the IEEE and formed Student Branches in the following schools: Ecole Supérieure d'Electricité (50 members)

Institut Supérieur d'Electronique de Paris (20 members) Ecole Nationale Supérieure d'Ingénieurs Electriciens et Elec-

troniciens (20 members).

Certificates were presented to the following members who were ected to the grade of Fellow of the IEEE, MM. E. Aisberg, oger A. Aubert, Byron L. Havens, P. David, H. Gutton, R. anglois-Berthelot, L. J. Libois, F. Nouvion and J. P. F. Voge.

DENMARK SECTION:

On 5 March Mr. Aage Pederson gave a lecture on 'Development Trends in High-Voltage Technique' before an audience of 30.

On 21 May Mr. P. E. Gudmandsen presented a paper entitled 'Measuring the Ice-Cover of Greenland by means of Radar' at the Technical University, Lyngby.

GERMANY (WEST) SECTION:



Or. Ing Hans H. Burghoff, Secretary, Germany Section

In March 1969 three very successful conferences took place with the sponsorship of the German Section sponsorship of the German Section of IEEE ((1) 'Microwave Technique Conference,' Cologne (F.R. Germany), 12-14 March (350 participants); (2) 'Data Transmission Conference,' Mannheim (F.R. Germany), 19-21 March (650 participants); (3) European Meeting, 'Semi-Conductor Device Research, Munich (F.R. Germany), 24-27 March (750 participants), 150 at dipper). The participants, 150 at dinner). three preparing committees had contrived to find speakers of the best scientific quality. The various topics provoked numerous animated discussions which demonstrated the enjoyment and interest of the partici-

pants. The sponsors of the conferences are sure that the three meetings were a very satisfying success. The participants of the third conference especially came from numerous countries of Europe and abroad so that this meeting got an international character. A similar report can be made on behalf of Confercharacter. Only the second conference did not find such a great interest from the scientists of other countries, probably in view of the fact that a great number of microwave conferences have been and are to be held throughout the world. Particulars conbeen and are to be held throughout the world. Particulars concerning abstracts and proceedings of these conferences may be obtained from the German Section IEEE, D-6 Frankfurt/Main 70, Stresemann Allee 21, VDE-Haus (F.R. Germany). The next international conference with the sponsorship of the German Section is the 'Congress of Cybernetics,' which will be arranged, together with the German Society for Cybernetics, in Berlin from 5-9 April 1970.

ISRAEL SECTION :

The Computation Centre and the Department of Computer Sciences, Technion, Israel Institute of Technology, announce a Summer Seminar that will be held at the Technion City, Haifa, Israel, from 30 June to 8 July 1969 (totalling 40 hours of study). It is intended for engineers (B.Sc., M.Sc.) working in the electronic and computer industry and for teachers of high schools. The Seminar will consist of a series of lectures, under the following headings: Tree Automata and Algebraic Linguistic Theory, Introduction to Complexity of Computation, Synchronical Switching Systems, Introduction to the Theory of Algorithms, Introduction to Automata Theory. Participation fee: \$50. Accommodation in Haifa hotels can be arranged. For

additional information please write as soon as possible to Dr. A. Paz, Faculty of Mathematics, Technion City, Haifa, or J. Evron, Extension Division, P.O.B. 4959, Technion, Haifa.

SWEDEN SECTION

On 10 December 1968 Mr. Osten Pellmer, Chief Engineer, Yngeredsfors Power Co., spoke on 'Electrical Power Distribution.' Attendance was about 40. The meeting was organised jointly by the Engineering Society of Gothenburg and the IEEE Sweden Section.

On 24 February a meeting was held at Chalmers University of Technology. Dr. Uno Lamm (F) from ASEA, San Mateo, California, spoke on 'D.C. Power Transfer.' Attendance was 70. The meeting was organised jointly by the IEEE Sweden Section and the Engineering Society of Gothenburg.

On 25 February a meeting was held at the Engineering Society of Gothenburg.

of Gothenburg. Mr. Lars Rundlof spoke on 'Electronics in the Car.' Mr. Rundlof was from AB Volvo, Gothenburg. Attendance was about 60. The meeting was organised jointly by the Enginering Society of Gothenburg and the IEEE Sweden Section.

SWITZERLAND SECTION:

In order to increase the effectiveness of the Executive Committee—both as regards frequency of, and attendance at, meetings—the officers are recruited in their majority from the meetings—the officers are recruited in their majority from the same geographical area. This year's Committee is predominantly Bernese, viz—H. Diggelmann, Chairman, H. A. Laett, Vice-Chairman, H. Mey, Secretary/Treasurer, K. P. Meyer, Member (Berne Area); F. Borgnis, Member, M. Strutt, Member. Consequently a greater share of 1969's events are likely to take place in the Berne area, ideally situated to bring together and German-speaking members.

The 1969 calendar of events started with a lecture and films on I/C-technology, to be followed by a paper on information compression. The warmer season should see a goodly part of the Section on a highly scientific, yet no less Twainian, escapade on Mount Rigi.

The principle of reciprocity with other engineering organisations, and attendance at related events, is now firmly established and benefits all.

UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION:

Gray, based on work done at Hull University.

Headquarters has been asked to approve a Section Chapter of G-25: Education. It will be concerned exclusively with educational technology. Dr. Robert C. G. Williams has been appointed Chairman, and members interested in joining should in the first instance apply to New York for Group membership. For the first time the Section took part in the Student Paper The paper selected describes a Fourier method of investigating transient acoustical spectra and is by Mr. Kenneth

All members' addresses are being checked and postal codes added. Will members please advise County Secretarial Services, 8 Flower Walk, Guildford, Surrey, England, of any existing errors in their addresses and of their postal codes as and when the system is extended to cover their area.

The Executive Committee was very pleased to welcome Dr. Roger P. Wellinger, Regional Director, to its meeting on 11 February. Subsequent to the Executive Committee meeting a small informal dinner was held at which Dr. Wellinger presented 1968 Fellowship Awards to three members.

Since the last Newsletter was published, invitations to cosponsor have been accepted for conferences on Measurement Education (8-10 July 1969), Industrial Electronics (23-25 September 1969), Management Economics in the Electronics Industry (17-20 March 1970) and International Broadcasting (7-11 September 1970).

The co-sponsored Conference at Southampton University on Lasers and Opto-Electronics was highly successful and was attended by representatives from most European countries and from the U.S.A.

Message from the Editor:

The gallery of portraits which I held has now almost been exhausted; could I please have photographs (preferably at least postcard size) of new Officers, etc. Action photographs would also be very welcome.

STUDENT ACTIVITY NEWS

The formation of three new Student Branches was recently approved in Region 8—Ecole Supérieure d'Electricité (Paris, France), with Professor J. Hebenstreit as Counsellor; Politecnico di Milano (Italy) with Professor D. Ferrari as Counsellor; Ecole Nationale Supérieure d'Ingénieurs Electriciens et Electroniciens (Paris, France), with Professor Roumegoux as Counsellor.

Improved Services

At the recent meeting held in Montreux (Switzerland), the Student Activity Committee of Region 8 passed a motion welcoming the submission of proposals by Student Branches. These

proposals should be precise and clearly explained; a budget estimate attached, and sent to Prof. Paul Jespers, SAC Chairman, 94 Kardinaal Mercierlaan, Heverlee, Belgium. Such a proposal might be to establish the sponsorship of local meetings between Counsellors and Chairmen from different Student Branches (eg, from Scandinavia, North Italy, France etc.). Another possibility could be the editing or translation of slide tape lectures (students could prepare new tapes, the counsellor checking the quality of the work). Other suggestions are welcome. All proposals received will be evaluated by Dr. Wellinger and Prof. Jespers, and a quick reply given subject to budget

SUMMARY OF THE LEEE ORGANISATION FROM JANUARY, 1969

limits.

