



EDITOR: *H. J. Kuno*

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PRESIDENTS MESSAGE

by Stephen F. Adam

During any year of our Society's life the annual International Microwave Symposium is the biggest event. During the last week of May, we held yet the largest, and so far the most memorable Symposium in our history. The Washington Chapter of MTT-S, with the able leadership of Larry Whicker, out performed all previous Symposia both in attendance and style. This was the third time that the Microwave Symposium was held in our nation's capitol. The highlights of the Symposium will be covered elsewhere in this newsletter. I just want to congratulate the entire Steering Committee for a job very well done.

Being President of our Society is a demanding job, but it has its rewards. One of the most satisfying is the granting of our yearly awards. Hal Sobol, as chairman of the Awards Committee with the Administrative Committee, came up with this year's slate of Awards. It was a distinct pleasure to present these Awards to the winners.

Since 1973, MTT-S has established the Microwave Carrier Award "For a carrier of meritorious achievement and outstanding technical contribution in the field of Microwave Theory and Techniques." This year we've selected one U.S. and one European Award winner.

Dr. Seymour Cohn received the Carrier Award for "He has made very significant contributions to the art and science of Microwaves in Field Theory, Waveguide Structures, Stripline, and Filters."

Dr. Werner Kleen was cited for "He made many contributions on Classical and Microwave Electron Tubes. All who have worked on Microwave Tubes have used his books; furthermore, introducing advanced Microwave Technology into the European Space effort."

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REFLECTIONS ON THE 1980 SYMPOSIUM

by Larry Whicker

The 1980 International Microwave Symposium, related Workshops, and Exhibitions were held during the week of May 26 – May 30, 1980. As has been the case in the past few years, the Symposium is continuing to grow. Approximately 1,000 people attended the Symposium and Workshops, while an additional 450 people registered for the Exhibition.

This year five Workshops were scheduled on May 26 and May 27. All were well attended with particularly large attendance at the "Gigabit Logic for Microwave Systems" Workshop and the Workshop on "Monolithic Microwave Analog IC's." The combined attendance at Workshops on May 26 was about 200, with approximately 300 people attending Workshops on May 27.

One of the highlights of the Symposium was the opening session in which the Symposium attendees were addressed by Dr. Steve Adam, MTT ADCOM President, Dr. Leo Young, IEEE President, and Keynote Speaker, Dr. Arden L. Bement, Deputy Under Secretary of Defense (Research and Technology). In his address, Dr. Bement outlined the Department of Defense research thrusts for the 80's and indicated that there is a strong future for research and technology in the microwave area. This opening session was followed by well attended technical sessions. I was somewhat surprised to find that the sessions on millimeter waves had even larger attendance than those on microwave solid state. The three invited sessions dealing with the U.S. export market, Europeans satellite systems, and Japanese satellite systems all created good interest.

The highlight of the week's activities by all standards was the outstanding social program planned by my wife,

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CHAPTER ACTIVITIES

by R.A. Sparks

The Annual Chapter Chairmen's meeting was held in Washington, D.C. on Tuesday evening May 27 preceding the International Microwave Symposium. Nineteen chapters were represented and reports on the prior year's activities were presented. Several chapters have begun the practice of submitting a short written report following their last meeting in the spring or early summer. These reports include the list of speakers and topics presented during the year and a page indicating the new chapter officers with names, addresses and telephone numbers. This latter information is particularly helpful in order to maintain continuity of contact. Sample summaries of the Phoenix and Atlanta Chapters Activities report are shown below. Perhaps you can get some ideas from this list of speakers or topics to include in your planning for technical programs this fall.

PHOENIX WAVES AND DEVICES

(AP-S, ED-S, MTT-S)

1979-1980 MEETINGS

DATE: November 27, 1979
TITLE: "Next Generation Micro Controllers"
SPEAKER: Shep Hume, Intel Corporation
ATTENDANCE: 23

DATE: January 22, 1980
TITLE: "Inverse Synthetic Aperture Radar"
SPEAKER: Professor Thomas Tice, Arizona State University
ATTENDANCE: 27

DATE: February 21, 1980
TITLE: "Technology and Physics of Magnetic Fusion"
SPEAKER: Dr. Frederick Coensgen, Lawrence Livermore Labs.
ATTENDANCE: 82

DATE: March 18, 1980
TITLE: "Millimeter Waves for the 80's"
SPEAKER: Dr. James C. Wiltse, Georgia Tech (MTT National Lecture)
ATTENDANCE: 28

DATE: April 22, 1980
TITLE: "Fiber Optics Devices for Communication Applications"
SPEAKER: Mr. James Herman, Motorola
ATTENDANCE: 18

Each talk lasted from 1-1/2 to 2 hours.

ATLANTA CHAPTER OF AP/MTT SOCIETIES ACTIVITIES FOR 1979-80

DATE: September 19, 1979
TITLE: EHF Satcom Systems
SPEAKER: Dr. L. J. Ricardi, MIT Lincoln Laboratory
ATTENDANCE: 49

DATE: October 9, 1979
TITLE: Concerto for Horn (Antenna)
SPEAKER: *Dr. A. W. Love, Space Division, Rockwell International
ATTENDANCE: 23

DATE: November 14, 1979
TITLE: Microwave Activity in the People's Republic of China
SPEAKER: Prof. G. P. Rodrigue, Georgia Institute of Technology
ATTENDANCE: 16

DATE: December 11, 1979
TITLE: Millimeter Waves for the 80's
SPEAKER: *Dr. J. C. Wiltse, Georgia Institute of Technology
ATTENDANCE: 31

DATE: January 15, 1980
TITLE: Journey from the Center of the Earth & the Space Shuttle
SPEAKER: Mr. Henry Marron, Scientific-Atlanta, Inc.
ATTENDANCE: 21

DATE: February 12, 1980
TITLE: Spherical Wave Intermediate-Field to Far-Field Transform on a Mini-computer
SPEAKER: Dr. D. W. Hess, Scientific-Atlanta, Inc.
ATTENDANCE: 32

DATE: March 11, 1980
TITLE: Beam Forming Network for DSCSIII Satellite
SPEAKER: Dr. Tom Sharon, Electromagnetic Sciences, Inc.
ATTENDANCE: 19

DATE: April 22, 1980
TITLE: Microwave Landing System
SPEAKER: Mr. Seymour Everett, Federal Aviation Administration
ATTENDANCE: 22

DATE: May 13, 1980
TITLE: A 94 GHz Variable Beamwidth Zoned Lens Monopulse Antenna
SPEAKER: Mr. D. J. Kozakoff, Georgia Institute of Technology
ATTENDANCE: —

The format of the meetings in each case was a half hour for refreshments, followed by a talk lasting approximately one hour.

*National Lecturer

History of MTT

by Ted Saad

ADCOM X, July 1, 1961 through June 30, 1962

Administrative Committee: T. N. Anderson, Chairman
S. B. Cohn, Vice Chairman
M. Wind, Secretary-Treasurer

B. D. Aaron	T. S. Saad
H. M. Altschuler	R. F. Schwartz
R. W. Beatty	G. Shapiro
A. C. Beck	G. Sinclair
R. C. Hansen	M. C. Thompson
W. W. Mumford	K. Tomiyasu
A. A. Oliner	R. D. Wengenroth
S. W. Rosenthal	

Ex-Officio Members

D. D. King	Honorary Life Members
F. Klawnsnik	G. C. Southworth
W. L. Pritchard	A. G. Clavier

The Chairman of the tenth ADCOM was Tore Anderson, the Vice-Chairman was Seymour Cohn and the Secretary-Treasurer was Hal Altschuler. Don King was still editor of the Transactions and Gus Shapiro continued as Newsletter Editor.

During a financial discussion at the first ADCOM meeting on September 14, 1961, Gus Shapiro stated that he favored the presence of commercial exhibits at MTT Symposia in order to make them profitable rather than break-even or loss operations. The suggestion stemmed from the fact that the 1961 Symposium was at about a break-even, financially. Furthermore, with the elimination of advertising in the Transactions ADCOM, budget deficits were anticipated.

One of the major projects undertaken during the tenth ADCOM was the revision of the PGMTT Constitution under the guidance of Bob Wengenroth. Although changes were made in most sections of the Constitution, most of the changes were of a minor nature. In some cases it was revised to reflect current IRE usage, in other cases it was to eliminate confusion and still in other cases the changes were made to reflect the dynamic growth in the microwave field over the prior ten years.

The new Constitution was reviewed and approved by the IRE Executive Groups and Professional Groups Committees. Finally, in a mail ballot conducted through the Newsletter the new Constitution was approved by a vote of 975 to 5.

The rejection rate of submitted papers to the Transactions was increased in response to the demand that the quality of the publication be improved. However, a number of papers that would normally be rejected were appearing as correspondence. It was also noted that 85% of the authors of papers that appeared in the Transactions held doctors degrees. Don King pointed out that the reviewers were "hard on straight-forward design papers but leaned towards and favored theoretical type papers."

There was also concern expressed that some papers appearing in other Groups Transactions were more appropriate for the PGMTT Transactions. This, however, was a continuing fact of life due to the overlap between groups.

Despite the termination of space advertising, a vigorous campaign to solicit institutional listings under Frank Klawnsnik was so successful that some companies had to be placed on a waiting list.

At the end of the ADCOM year, Don King began looking for his replacement.

The Newsletter continued to provide the membership with the news of the ADCOM and of the Chapters. Gus Shapiro was still having problems trying to get material for publication, despite his constant urging of ADCOM members to send him news items. Since the Newsletter cost approximately 10% of the total publication costs of the PGMTT, Chairman Anderson asked for a budget. After lengthy discussion, a budget of \$2,500 for the calendar year 1962 was established. One additional note, after mild pressure from the various sources, the number of quips in the Newsletter was reduced by one third.

Discussion on financial matters occupied a good deal of ADCOM time during this period. Projections of financial performance were constantly reviewed and great apprehension was expressed. At an ADCOM meeting on November 9, 1961, the group dues were increased \$1 to \$4 per year by a vote of 8 to 1. However, despite the apprehension, the balance in the Treasury at the end of June was about \$34,000.

During the year, membership of the group hovered in the 5,000 range. Bob Rivers as membership chairman raised the question as to whether it was economical to continue an aggressive drive for new members. Despite his concern, Chairman Anderson felt that a vigorous campaign of recruitment should continue. Membership at the end of June 1962, including affiliates and Student members numbered 5,742.

The subject of the role of ex-chairman was discussed and a committee was named to consider their continued service to the ADCOM. In addition, by a vote of 5 to 4, Honorary Life Members were given full voting rights in the committee, but they were placed outside the quorum, however, their dues were to be paid for life by the ADCOM.

A committee made up of Bob Wengenroth, Bill Mumford and Al Beck volunteered for the task of writing the tenth year history.

Work on the Handbook of Procedures continued. Tore Anderson proposed that it be submitted as is for distribution to other PG Chapters as a model to aid in the preparation of similar handbooks.

There were 25 Chapters in the group, 7 of which were joint Chapters. Also a new chapter in Montreal was being formed.

Despite a move to eliminate the Affiliate Membership status, it was defeated by a vote of 5 to 4.

Although the Group continued its involvement with both the IRE Convention and Wescon, it was evident that interest and participation was beginning to wane. However, some discussions did begin on a proposed joint meeting in Japan.

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At the beginning of the ADCOM year, it was reported that discussions were being held with regard to a merger between AIEE and IRE. At the November 9, 1961 ADCOM meeting, a lengthy discussion was held. At the end of the discussion, and in response to the question of whether the group was in favor of a merger in principle, 8 members were in favor, none were opposed and 4 abstained. A letter of support was sent to the Chairman of IRE summarizing the discussions and the vote.

The 1962 Symposium was held in Boulder, Colorado under the Chairmanship of Dr. George E. Schafer of N.B.S. There were 465 registrants and it realized a net profit of \$127.

Two proposals were received for the 1963 Symposium, one from Philadelphia, the other from Los Angeles. After lengthy debate the Los Angeles proposal was accepted. Towards the end of the ADCOM year letters were received requesting that the 1964 or 1965 Symposium be held in New Jersey, Long Island and Florida. Also the Orlando Chapter expressed a desire to sponsor a MM-Wave Symposium in Orlando in January or February of 1963. They were invited to present a detailed proposal.

The winner of the Microwave Prize for 1961 was Dr. George L. Mattahaei for his paper entitled "A Study of the Optimum Design of Wide-Band Parametric Amplifiers and Up-Converters" which appeared in the Transactions of January 1960. The award was presented at the annual banquet at the Symposium in Boulder. It followed a fascinating talk by Dr. Wilmer L. Barrow, Vice-President of Sperry on "Reminiscences of a Microwaver."

The new ADCOM members selected for the next three years were R. C. Hansen, G. L. Mattahaei, D. D. King, A. A. Oliner, S. W. Rosenthal and K. Tomiyasu.

It was another stimulating year for the ADCOM. Changes were on the horizon — the IRE-AIEE merger, no advertising, a suggestion for commercial exhibits at the Symposium, to name a few. And the concerns for the budget and the membership were still dominant considerations.

CANDIDATE STATEMENTS

by G. P. Rodrigue

The primary responsibility of Division Directors is to represent at Board of Directors meetings the interests of the technical Groups and Societies. This structure provides balance with the Regional organization. In order to represent Group/Society interests the Division Directors must be in contact with the members in order to properly fathom their concerns. I'd like to see improved channels of communications among IEEE members, the volunteer officers, and the professional staff. Too many members underestimate the impact that they can have on the direction taken by IEEE. All members should have readily accessible the information necessary to contact their Board representatives as well as IEEE Headquarters.

The Division Directors can also do much to facilitate coordination of activities within the Groups/Societies as well as to exchange information about technical, professional, and educational programs. All Groups and Societies are seeking ways to increase service to their members. Many new programs have been started in Division IV. The Magnetics Society's National Merit Scholarship and the Microwave Theory and Techniques' forthcoming twenty seven year index are two examples. The Electron Devices Congressional Fellow Program and the Distinguished Lecturerships of AP-S and S-MAG could help to improve understanding in somewhat specialized political, technical, and educational areas.

The Groups and Societies in Division IV enjoy a well-deserved reputation for leadership in their respective technical areas. Their strength, which is based on the efforts of volunteers, provides our members with a vital means of maintaining their technical edge through Group/Society publications and participation in conferences and workshops. IEEE's Division organization should facilitate continuing growth of members' technical competence through better coordination of conferences and more attention to subscribers' (and editors') needs in publications.

IEEE should improve communications between its member engineers and the public. More active public relations programs, supplementing the government oriented activities of USAB, are needed to aid mutual understanding of technology and society. The COMAR project now underway to develop an educational film on microwaves is a step in the right direction.

Division IV with its component orientation draws heavily on contributions of engineers, metallurgists, physicists, and chemists. Thus the professional registration question is of particular interest. The IEEE is a volunteer organization of professionals and not in the certification business. I believe that we should avoid a closed shop approach to membership, while at the same time assuring that higher grade members are competent in their area of specialization.

The current financial strength of Societies makes them an obvious target when problems of erosion in the General Fund emerge. All Directors are challenged to seek answers to questions of true costs and benefits in IEEE's operations. We all benefit from IEEE's strength in numbers. By cooper-

ating with the Regional organization we can develop supplemental income for the General Fund. As examples, some items of non-members sales of publications as well as some of the surplus funds generated by technical/regional meetings could be turned over to the General Fund. Such measures should help to hold down the dues increase to members. At the same time the headquarters staff should be encouraged to continue their program of careful project management.

As a volunteer organization most decisions made within IEEE are reached by compromise consensus. The individual members, the core and strength of the organization, should feel more a part of this consensus formation. As Division IV Director, I would work to improve communications and to represent fully your concerns.

G. P. RODRIGUE

Regents' Professor
School of Electrical Engineering
Georgia Institute of Technology
Atlanta, Georgia

Dr. Rodrigue received the B.S. (1952) and M.S. (1954) degrees in Physics from Louisiana State University and the Ph.D. in Applied Physics from Harvard University in 1958. From 1958 to 1968 he was employed by Sperry Microwave Electronics Division, Sperry Rand, first as Senior Engineer and subsequently as Research Engineer and Research Staff Consultant. His work there included research and development on ferrite materials, microwave ferrite devices, parametric amplifiers, microwave acoustic delay lines and microwave acoustic delay lines and microwave integrated circuits. In 1968 he joined the faculty of the School of Electrical Engineering at Georgia Tech where he teaches graduate and undergraduate courses in the areas of circuits, electromagnetics, and solid state. His research interests have included materials and microwave devices as well as near-field antenna measurements. He organized a workshop on the latter subject in 1975 and teaches a short course on antenna measurements in alternate summers.

IEEE Activities (S'56-M'65-SM'69-F'75) COMMITTEES/BOARDS: Nominations and Appointments, 1979-80; Publications Board, 1977-78; Technical Activities Board, 1976, 1979-80; TAB OpCom, 1979-1980; TAB Technology Committees Administration, Chairman, 1979-80. SECTIONS: Atlanta: Awards Committee Chairman, 1976-77, Antennas and Propagation/Microwave Theory and Techniques Chapter, Chairman, 1970-71. SOCIETIES/GROUPS: Microwave Theory and Techniques: President, 1976, Vice President, 1975; AdCom, 1970-79; Newsletter Editor, 1972-75; Membership Services Chairman, 1973-74; Meetings and Symposium Chairman, 1974-75; Awards Chairman, 1977-78; Long Range Planning Committee, 1975, 1978; Microwave Acoustics Committee, Chairman, 1965-67; Microwave Integrated Circuits Committee, 1968-70; Microwave Ferrites Committee, 1968-75. CONFERENCES: Conference on Magnetism and Magnetic Materials, Advisory Board, 1970-73, Steering Committee, 1971-72, Technical Program Committee, 1966. INTERMAG Conference, Technical Program Committee, 1973. International Microwave Symposium, Chairman, 1974, Technical Program Committee, 1969, 1970, 1973, 1979.

by Alan C. Schell

Within the IEEE Board of Directors there are members from the regional structure and from the technical structure of the Institute. The Division Directors are the representatives of the Groups, Societies, and Councils to the IEEE Board of Directors. Included in Division IV are AP-S, ED-S, MTT-S, G-SU, CHMT-S, MAG-S, and QEA-S. This fall, there will be an election for Division IV Director, and I am a candidate for that office.

I view the Division Director as an advocate of the interests of the Groups and Societies. This entails promoting those programs that will improve the excellent technical activities that now exist in Division IV. At the same time, new projects must be watched carefully to avoid the introduction of unnecessary costs or interference with adequate existing services.

We are in a period of rising costs, and the budgets of the Groups and Societies are sensitive to publication expenses. With the cooperation of Transaction Editors and G/S Publication Committees, effective control of these costs can be maintained. The trend of the General Fund of the Institute is again downward, and this problem must be addressed, but not by raiding the treasuries of the Groups and Societies. An open assessment of benefits and a careful scrutiny of expenses can lead to a fair apportionment of costs and a minimum of dues increases.

There are within the Groups and Societies a number of innovations that can be shared to improve further their operations. I believe that the Division Director, through regular contact with the Adcoms of the Groups and Societies, can help by exchanging ideas and promulgating lessons learned and other useful information. The Division Director also has the responsibility of reporting to the G/S officers and members Institute matters that are going to impact their activities.

I strongly support an open line of communication and action by officers and members to the IEEE Board. The Groups and Societies of Division IV have demonstrated their willingness and ability to participate in changing the direction of the Institute to better serve their members.

The public perception of engineering leaves a great deal to be desired, and we have not done enough in getting across the positive elements of engineers' contributions. One of the significant steps the IEEE has taken is entry into the American Association of Engineering Societies. Participation in AAES and other intersociety cooperation are constructive means to gain broader support and to reach a wider audience on issues affecting the public.

In summary, I believe that the Division Director can serve as an advocate of the interests of the Groups and Societies, and if elected that's what I will try to do.

Allan C. Schell
Director, Electromagnetic Sciences Division
Rome Air Development Center
Bedford, Massachusetts

Dr. Schell received the BS and MS degrees in electrical engineering from the Massachusetts Institute of Technology in 1956. After attending the Technical University of Delft,

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CANDIDATE STATEMENTS (Cont.)

Holland, as a Fulbright Scholar and two years of military service as an officer in the USAF, he returned to MIT, where he received the ScD degree in electrical engineering in 1961. He conducted research studies on antennas, signal processing, and related topics at the Air Force Cambridge Research Laboratories until 1976. He is presently the Director of the Electromagnetic Sciences Division, RADAC, at Bedford, Mass. He has been an invited lecturer at several colleges, and a visiting Associate Professor at MIT. Among other awards, Dr. Schell received the John T. Bolljahn Award for the best paper in the 1966 Transactions on Antennas and Propagation, and the Guenter Loeser Memorial Award. He is the Air Force Liaison representative on the U.S. National Committee of URSI, a member of NSPE, and a Registered Professional Engineer in Massachusetts.

IEEE Activities (S'54, M'57, SM'68, F'73) COMMITTEES/BOARDS: Publications Board, 1974-79; Public Relations Committee 1974-75; U.S. Activities Committee, 1974; Chairman, USAC-USAB Publications Committee 1974-75; Chairman IEEE PRESS Editorial Board 1976-79; Committee on Engineering Registration 1977-79; TAB Publications Committee, 1972-73. SECTIONS: Boston: Executive Committee 1972-79, Secretary/Treasurer, 1974-75, Vice Chairman, 1975-76, Chairman, 1976-77, Editor, The Reflector, 1971-76. SOCIETIES/GROUPS: Antennas and Propagation: President, 1978, Vice President, 1977, Administrative Committee, 1970-73, Editor, AP-S Transactions, 1968-71, Assoc. Editor, 1967-68; Antenna Standards Committee, 1966-78, Chairman, Subcommittee on Definitions of Antenna Terms, 1968-77. CONFERENCES: ELECTRO, Board of Directors, 1978-80, Treasurer, 1980; Technical Program Committee, URSI/AP-S International Symposium, 1975.

PRESIDENTS MESSAGE (Cont.)

It is appropriate here to list the Honor Roll of Microwave Carrier Award recipients:

1973	William W. Mumford
1974	Harold A. Wheeler
1975	Henry J. Riblet
1976	John R. Whinnery
1977	Ernst Weber
1978	A. Gardner Fox
1979	Seymour B. Cohn and Werner J. Kleen

The Microwave Prize is awarded annually for the outstanding paper in the Microwave field published in an IEEE publication. This year's winners are: Eric Carlson, Martin Schneider and Thomas McMaster, all from Bell Telephone Laboratories, Holmdel, N.J. The Honor Roll on the Microwave Prize:

1955	Herman N. Chait and Nicholas G. Sakiotis
1956	Robin I. Primich
1957	Harold Seidel
1958	Ladislav Goldstein
1959	Bert A. Auld
1960	A. F. Harvey

1961	George Matthaui
1962	Leonard Lewin
1963	Leo Young
1964	Seymour B. Cohn
1965	Hendrik Bosma
1966	Arthur Oliner
1967	Robert Wenzel
1968	William Gabriel
1969	John D. Rhodes
1970	William J. Evans
1971	Marion E. Hines
1972	Harrison E. Rowe and Dale T. Young
1973	W. Richard Smith, Henry M. Gerard, and William R. Jones
1974	Charles A. Liechti and Robert L. Tillman
1975	T. E. Rozzi and W. F. Mecklenbrauker
1976	Robert A. Pucel, Daniel Masse, and Richard F. Bera
1977	Marion E. Hines, Ronald S. Posner, and Allen A. Sweet
1978	Anthony R. Kerr and Daniel N. Held
1979	E. R. Carlson, M. V. Schneider, and T. F. McMaster

The Microwave Applications Award was established in 1973 to recognize significant applications of Microwave Theory and Techniques. This year's winner is Erwin Belohoubek of RCA Laboratories, Princeton, N.J. The list of recipients:

1973	Edward G. Cristal
1974	Dean F. Peterson III and Phillip H. Smith
1975	Joseph F. White
1976	Martin G. Walker
1977	Stephen I. Long
1978	Dale H. Claxton
1979	Erwin F. Belohoubek

Each year MTT-S selects an outstanding individual to present a lecture on a new, vital subject to various Chapters. MTT has selected the following National Lecturers since 1967:

1967	Arthur A. Oliner
1968	Leo Young
1969	Richard W. Damon
1970	Hal Sobol
1971	Carl Blake
1972	Ted S. Saad
1973	J. Lamar Allen
1974	Sy Okwit
1975	Robert W. Beatty
1976	Fred Sterzer
1977	John M. Osepchuk
1978	Charles A. Liechti
1979	James Wiltse
1980	Robert A. Pucel

Distinguished Service Awards were given to:

- John B. Horton for his contributions to ADCOM 1967-1979, Vice Chairman 1972, President 1973.
- Ken J. Button for organizing the International Conference on Submillimeter Waves and their Applications.

Certificates of Recognition were awarded to:

- J. Lamar Allen, for Transaction Editorship 1977-1979.
- Ernest L. Komarek, for ADCOM membership 1977-1979, Chairman Standards Coordinating Committee 1978-1979.
- Rudolf E. Henning 1979 International Microwave Symposium Steering Committee Chairman.
- James C. Wiltse and J. Lamar Allen, Co-Chairmen Technical Program Committee, 1979 Symposium.

Don Parker has been awarded with the Past President's Pin for his contribution as 1979 Society President.

REFLECTIONS (Cont.)

Margaret. The social program included:

- *Champagne and Dessert Tour of Washington, D.C.* This evening tour was attended by over 150 conference attendees, spouses and children. It provided an exciting introduction to the Nation's Capital.

- *Three Spouses Tours.* These tours included a Georgetown House Tour, a Capitol Hill Tour, and a tour of Mount Vernon and Alexandria, Virginia. Some of the highlights included a VIP Tour of the White House, a Reception at the Indonesian Embassy, and lunches at the Capitol Hill and Congressional Clubs. These tours provided a unique insight into the Washington scene.

- *The Annual Banquet* was a gala affair with participation by the John Hanson Musical Group, the Combined Services Color Guard, and with entertainment by Mr. Mark Russell. In addition to our many normal awards, Dr. S. B. Cohn and Dr. W. J. Kleen each received the "Microwave Career Award." Dr. Bruno Weinschel received the IEEE/USAP Award for Engineering Professionalism. Some of the many dignitaries in attendance at the banquet included:

- Dr. A. L. Bement, Deputy Under Secretary of Defense
- Dr. J. Feinstein, OUSDRE
- Dr. L. Young, IEEE President
- Dr. R. Damon, Candidate for IEEE President
- Dr. B. Weinschel, IEEE Treasurer

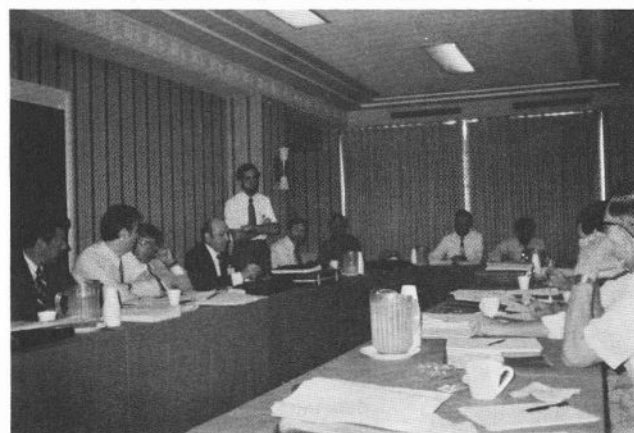
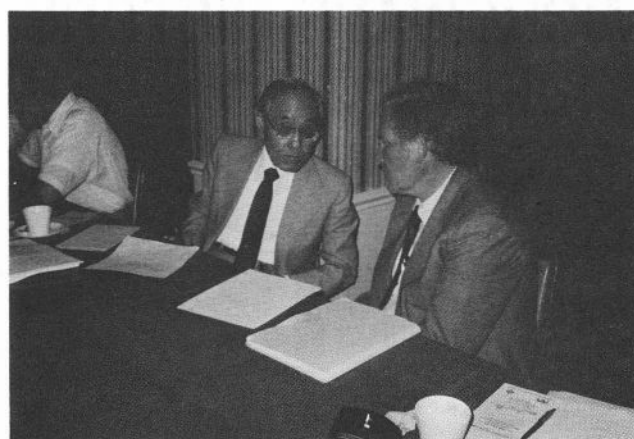
The Symposium Exhibition was bigger and better than ever with 135 booths occupied. Exhibition-only registrations totalled 450 this year as compared to 300 in each of the past two years. The exhibit portion of the Symposium was so successful that a total of 110 booths were committed for Los Angeles by the end of the conference.

An ADCOM Historical Exhibit was organized by Ted Saad. This exhibit was held in a separate room near the registration area. Ted collected a great deal of written material as well as hardware. Some 537 people signed the registration book which Ted maintained. I would like to thank Ted for his major contribution.

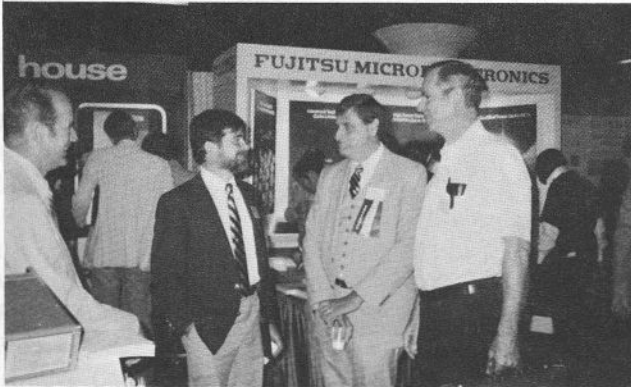
In summary, I feel that we had a memorable symposium in Washington. I deeply appreciate the great deal of work which the Steering Committee members have put forth. Further, on behalf of the 1980 Steering Committee, I want to wish the best of luck to Al Clavin and his Steering Committee as they prepare for the 1981 meeting in Los Angeles.

SCENES FROM 1980 INTERNATIONAL MICROWAVE SYMPOSIUM

ADCOM MEETING



MICROWAVE EXHIBIT



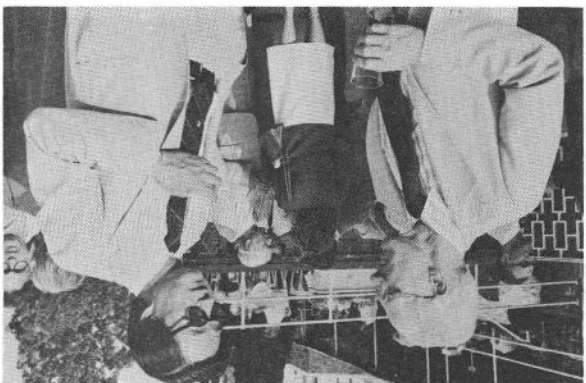
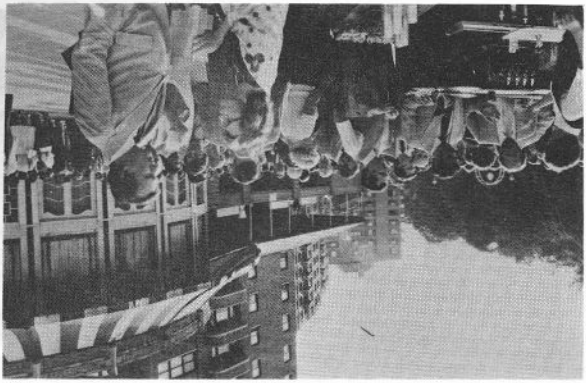
MICROWAVE HISTORY EXHIBIT



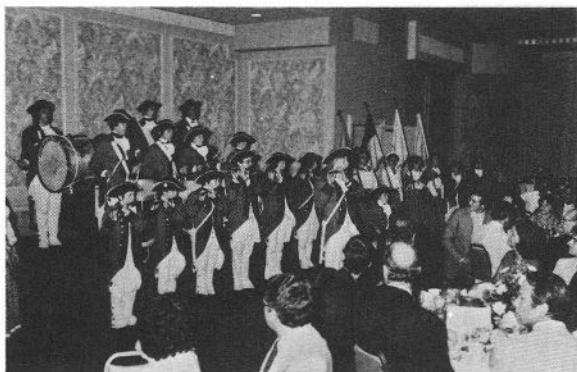
SCENES FROM COCKTAIL PARTY



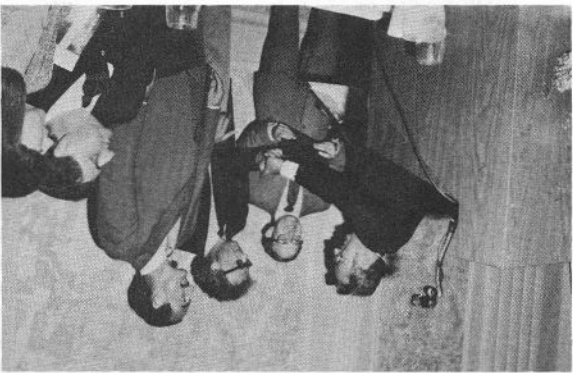
MORE SCENES FROM COCKTAIL PARTY



SCENES FROM SYMPOSIUM BANQUET



MORE BANQUET SCENES



FELLOW AWARDS

MORE BANQUET SCENES



PROPOSED IEEE CONSTITUTIONAL AMENDMENT

The IEEE Board of Directors recommends adoption of the proposed amendment which accomplishes three objectives: (1) introduction of the President-Elect concept; (2) clarification of Delegate and Assembly roles; and (3) procedural simplification.

The proposed amendment shifts the current three-year term of President, Junior Past President and Senior Past President by replacing the latter office by the President-Elect office, thus guaranteeing that a President will have had at least one year of experience on the Board before assuming office. The President-Elect concept is consistent with the practice of many other professional societies.

The proposed amendment clarifies the roles of the membership-elected Delegates, who constitute the Assembly, which has sole authority to elect the additional officers and directors not elected directly by the membership.

The amendment also simplifies the Constitution by transferring appropriate guidelines and practices to the By-laws.

Dated: 5/11/80

OPPOSING STATEMENT TO CONSTITUTIONAL AMENDMENT

The President-Elect amendment should be voted down for two important reasons: (1) It introduces an additional year of delay in the Institute's ability to respond to changes in your concerns, and (2) It replaces the present known and reasonable schedule for balloting (Sept. 1 mailing to members as of Aug. 1.) and petitioning nomination to one to be determined by the Board of Directors in the By-Laws.

By-Laws can be and are changed at almost every meeting of the Board of Directors. You would not know with certainty when the balloting would take place and would effectively be deprived of a right to support the candidate of your choice.

The explicit protection in the present constitution has served the Institute well. The Institute has survived and prospered even through the most trying times of the early seventies with the present procedures. Adequate opportunities exist for future presidential candidates to have served on the Board of Directors and the Executive Committee prior to assuming the presidency. A year of training as President-Elect is unnecessary for those candidates who have rightfully served the Institute in a number of different positions through the years.

Finally; All member responses to a solicitation for inputs have been against this amendment.

Signed: Robert A. Rivers

May 18, 1980

SPECIAL TRANSACTIONS ISSUE ON OPEN GUIDED WAVE STRUCTURES

The IEEE Transactions on Microwave Theory and Techniques is planning to publish a Special Issue on Open Guided Wave Structures in September 1981. Papers are solicited which describe original work concerned with theoretical and experimental investigations in the following (but not limited to) areas:

- Fiber and integrated optics
- Dielectric millimeter waveguide and components
- Quasi-optical techniques
- Radiation and surface wave phenomena in printed transmission lines
- Open waveguides for far infrared lasers

Authors are requested to submit five copies of the manuscript by November 30, 1980 to *Professor T. Itoh*.

Guest Co-editors:

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Military Microwaves

MM(80)

CONFERENCE and EXHIBITION

**The Cunard International Hotel
London**

October 22, 23, 24

"Meeting the Needs of the 80's"

The demand for improved microwave technology by the Defence Industry appears to be insatiable. The scientific advances in materials and devices is well matched by the engineering of advanced products that customers seem rapidly to find indispensable. The Military Microwaves '80 Conference will provide a clear insight into current activity in major areas of interest to the Defence Industry. The theme of this Conference centres around the interface between microwave modules and systems, and the ability of the microwave industry to meet the needs and requirements of weapon system programmes in the 80's.

Particular emphasis in the Program is being given to mm-waves, with papers covering propagation, antennas, receivers, transmitters, circuit technology, radars and radiometers. Similarly, comprehensive coverage is also being given to the other selected topics being covered in the Conference in the fields of Radar, Communications and Electronic Warfare.

The conference papers have all been invited by an experienced international team which has resulted in attracting high quality papers with each Session having a clearly defined subject area. The 3-day Conference will consist of 20 Sessions (100 minutes) with about 4 papers per Session. There are 90 papers scheduled to be presented.

I feel supremely confident that if you work in the field of Defence Electronics and Systems, you will find the Conference together with the associated Exhibition interesting, informative and worthwhile. See you in London!

John Clarke — RSRE
Conference Chairman

1981 NATIONAL RADIO SCIENCE MEETING

The 1981 annual National Radio Science Meeting will be held in Boulder, CO from 12 to 15 January, in cooperation with a number of IEEE Societies including MTT.

January 12-15, 1981

at

University of Colorado, Boulder, Colorado

This open scientific meeting is sponsored by the U.S. National Committee for the International Union of Radio Science. It is being held in cooperation with the IEEE Antennas and Propagation Society, IEEE Circuits and Systems Society, IEEE Electromagnetic Compatibility Society, IEEE Geoscience Electronics Society, IEEE Information Theory Group, IEEE Instrumentation and Measurement Society, IEEE Microwave Theory and Techniques Society, IEEE Nuclear and Plasma Sciences Society, and the IEEE Wave Propagation Standards Committee.

Papers on any topic of interest to a commission are solicited. Deadline for receipt of abstracts is *1 October 1980*.

Steering Committee Chairman—S. W. Maley, Dept. of Electrical Engineering, University of Colorado, Boulder, CO 80309.

Technical Program Committee Chairman—T. B. A. Senior, Dept. of Electrical and Computer Engineering, The University of Michigan, Ann Arbor, MI 48109.

Local Hosts: University of Colorado, National Oceanic and Atmospheric Administration, National Bureau of Standards, Institute for Telecommunication Sciences, National Telecommunication and Information Administration, IEEE AP-S Denver/Boulder Chapter.



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