

TABLE III
MTT NATIONAL LECTURERS

1967	A. A. Oliner
1968	L. Young
1969	R. W. Damon
1970	H. Sobol
1971	C. Blake
1972	T. Saad
1973	J. L. Allen
1974	S. Okwit
1975	R. W. Beatty
1976	F. Sterzer

TABLE IV
ADCOM PRESIDENTS

1953	B. Warriner	1965	H. M. Altshuler
1954	A. G. Clavier	1966	E. N. Torgow
1955	W. W. Mumford	1967	S. W. Rosenthal
1956	A. C. Beck	1968	R. E. Henning
1957	H. F. Engelmann	1969	L. Young
1958	W. L. Pritchard	1970	J. H. Bryant
1959	T. S. Saad	1971	S. Okwit
1960	A. A. Oliner	1972	A. Clavin
1961	K. Tomiyasu	1973	J. B. Horton
1962	T. N. Anderson	1974	R. A. Rivers
1963	S. B. Cohn	1975	H. W. Cooper
1964	D. D. King	1976	G. P. Rodrigue

contributions must be omitted. Ted Saad, who supplied much of the present information, has compiled a much more complete history. Table IV lists ADCOM presidents by years. Terms of office started as fiscal years but now run as calendar years. The noteworthy tenure of Gus Shapiro as Newsletter Editor bears some mention, as does MTT's agitation for a higher degree of professional action. This professional-activities thrust had its beginnings when Al Clavin was Newsletter Editor and Leo Young was Division IV Director. They continue now with Bob Rivers' activity as Divisional Director.

Overall, the MTT Society has broadened its interests and base of support through the years. The technical program of this Symposium reflects the growth toward higher frequencies, integrated circuits, and commercial applications. MTT is no longer so preoccupied with radar and with Government R & D, and is increasingly concerned with microwave products *for* and microwave impact *on* the public. As a society and as individuals we must increasingly develop our communications with the public as a whole. MTT's principal mission has always been the dissemination of information, both among microwave engineers and the public. Hopefully, this Symposium will further those goals.

The 1976 International Microwave Symposium

BERNARD D. DE MARINIS AND MARTIN CAULTON

THE 1976 MTT International Microwave Symposium was sponsored jointly by the North Jersey, Philadelphia, New York/Long Island, and New Jersey Coast chapters of MTT. The Symposium was held at the Cherry Hill Inn, Cherry Hill, NJ, on June 14-16, 1976. This year's Symposium was held just a few miles from Philadelphia, center of the nation's bicentennial celebration. The Symposium theme was appropriately selected as "The Bicentennial Symposium."

Symposium attendance was 680 registrants from the United States and the International community. In total, 123 papers were presented by authors from eight nations: United States, Japan, England, Germany, France, Canada,

Italy, and The Netherlands, thus reflecting the truly international flavor of the Symposium.

Thirty-eight exhibitors representing forty-one microwave firms supported the conference by purchasing exhibition booths. A special feature of the conference was technical product sessions presented by the exhibitors during the Tuesday and Wednesday luncheon hours. These sessions were well attended on both days.

We are indebted to those local firms that supported the conference in many ways: support of time for the Steering Committee members, secretarial and reproduction services, extensive mailings, and secretarial services during the conference. Our sincere thanks go to the *Microwave*

Journal and Microwave System News for support of the coffee breaks.

TECHNICAL PROGRAM

The technical program was planned and organized by the Technical Program Committee under the chairmanship of M. Caulton. The 1976 program consisted of 26 sessions, including two evening panels and special sessions on microwave marketing, technology forecasting, and microwave activities in government laboratories. An additional special feature of the program was two general sessions on selected topics. The opening general session on Monday morning was on optics. The speaker for this session was S. E. Miller of Bell Laboratories, Holmdel, NJ, who reviewed optical fiber transmission and integrated optics. On Wednesday the second general session featured A. H. Solomon of Arthur D. Little, Inc., who discussed microwave markets in telecommunications and aviation. Except for the general sessions, there were three or more parallel sessions throughout the technical program. In general, all sessions were well attended. Authors and panelists were from a cross section of the microwave community, representing individual firms, R&D laboratories, government agencies, and universities. An outline of the technical program by session title is shown as follows:

Monday, June 14

- Session 1:* Joint General Session—Optics
- Session 2:* Integrated and Fiber Optics
- Session 3:* Solid State Microwave Sources
- Session 4:* Passive Microwave Components
- Session 5:* Microwaves in Communications Systems
- Session 6A:* Low Noise Receivers
- Session 6B:* Solid State Power Amplifiers
- Session 7:* Filters
- Session 8:* Evening Panel—Millimeter Integrated Circuit Technology
- Session 9:* Evening Rump—Solid State Devices/Amplifiers

Tuesday, June 15

- Session 10:* Microwave High Power Techniques
- Session 11:* Gigabit Logic
- Session 12:* Millimeter and Microwave Integrated Circuits
- Session 13A:* Computer Aided Design and Measurement
- Session 13B:* Microwave Measurements and Techniques
- Session 14:* Millimeter and Sub-Millimeter Wave Techniques
- Session 15:* Ferrite Components
- Session 16:* Surface Acoustic Wave Resonators

Wednesday, June 16

- Session 17:* General Joint Invited Session on Microwave Marketing
- Session 18:* Acoustic Wave Devices and Techniques
- Session 19:* Commercial Applications of Microwaves
- Session 20:* Phased-Array Components
- Session 21:* Technology Forecasting
- Session 22:* Microwave Activities In Government Laboratories

Session 23: Review and State of the Art, Biological Effects and Hazards of Microwave Radiation

Session 24: Electromagnetic Theory

LATE PAPERS

Several late papers were presented. Since these papers were not listed in the program and would not be reported in the *Digest*, they are listed here by title and author.

"3 dB Complane Couplers," M. H. Arain, N. W. Spencer, and D. W. Ball, Rockwell International, Anaheim, CA.

"Recent Developments in Octave and Multi Octave Bandwidth MESFET Amplifiers," F. R. Neidert and H. A. Willing, Naval Research Laboratory, Washington, DC.

"An Accurate Design of Resonance Frequencies of Dielectric Resonators," P. Guillon and Y. Garault, Laboratoire d'Electronique des Microondes, Faculté des Sciences, Limoges, France.

"Coupling Coefficients Between a Microstrip Transmission Line and Dielectric Resonator, Two Adjacent Dielectric Resonators, for Applications to Bandpass Filters," P. Guillon and Y. Garault, Laboratoire d'Electronique des Microondes, Faculté des Sciences, Limoges, France.

"Testing of Multichannel Satellite Transponder Using Automatic Testing Equipment (ATE)," N. Epstein, P. Y. Chan, and R. Dikshit, RCA Limited, Ste. Anne DeBellevue, Quebec, Canada.

"Low Noise and Permanent Josephsen Mixers for MM Waves," J. Edrich, Denver University, Denver, CO, and D. B. Sullivan, D. McDonald, National Bureau of Standards, Boulder, CO.

SOCIAL FUNCTIONS

One of the highlights of the Symposium was the Awards Banquet, preceded by the traditional cocktail party.



Seated at Banquet (left to right): Mr. and Mrs. B. D. De Marinis, Astronaut Lenoir, Dr. and Mrs. H. J. Riblet.



H. J. Riblet (right) receives Microwave Career Award from G. P. Rodrigue.



J. F. White accepting Microwave Application Award.



T. E. Rozzi (right) receives Microwave Prize from G. P. Rodrigue.



H. W. Cooper accepting Past President's Pin.



Astronaut W. B. Lenoir, Banquet Speaker.



Symposium Steering Committee. *Standing, left to right:* N. Eberhardt, W. Glendinning, W. W. Mumford, B. D. Aaron, M. Caulton, J. B. Horton. *Seated, left to right:* L. F. Moose, N. Lipetz, B. De Marinis, R. Snyder.

Attendance this year was 260. B. D. De Marinis served as Master of Ceremonies, with G. P. Rodrigue, '76 ADCOM President, making the awards presentations. Henry J. Riblet received the Microwave Career Award. T. E. Rozzi and W. F. G. Mecklenbräuker received the Microwave Prize and J. F. White received the Microwave Applications Award. H. W. Cooper received the Past President's Pin and R. W. Beatty was presented the National Lecturer's Plaque.

Following the awards, Dr. W. B. Lenoir, NASA Astronaut, spoke on the Shuttle program and many of the scientific aspects of the Shuttle program studies including microwave power transmission. Dr. Lenoir's talk was particularly well received with questions and answers extending into the late hours.

The Ladies Program organized by Lil Caulton and Del Horton, featured the Bicentennial theme with trips to Historic Philadelphia, Peddlers Village, and Valley Forge Park. The Valley Forge trip featured a luncheon which was held at the historic Bull Tavern (circa 1734).

DIGEST

A 376 page *Digest*, ably planned and edited by Dr. N. Eberhardt of Lehigh University, may be obtained by sending \$25.00 for IEEE Catalog No. 76CH1087-6MTT, 1976 IEEE S-MTT International Symposium, Library of Congress No. 72-75863. Send request and check to: IEEE, 445 Hoes Lane, Piscataway, NJ 08854.

ACKNOWLEDGMENT

Your response and attendance at the '76 Bicentennial Symposium have indicated that the Symposium was a success. This success was brought about through the efforts of the people and organizations who contributed generously through their time and support to bring about the Symposium. We extend a special thanks to members of the Steering and Technical Program Committees and their firms. Members of these committees are listed as follows:

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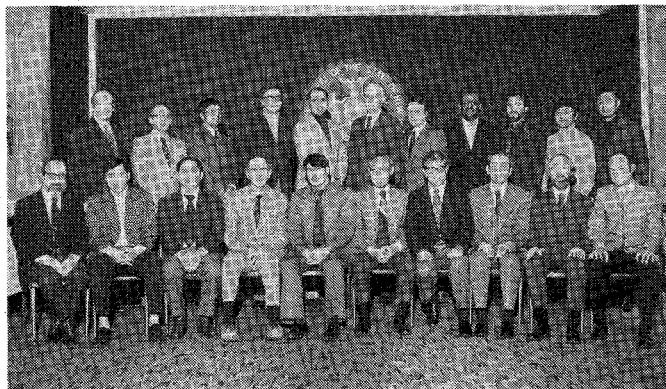
L. F. Moose

R. W. Shillady

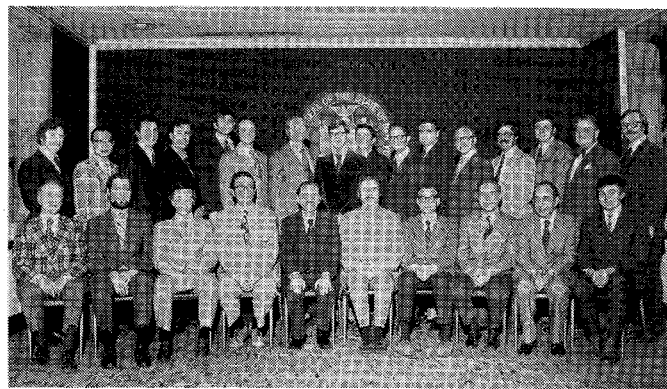
R. Snyder

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M. Balfour	AIL/Cutler Hammer
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J. B. Horton	General Electric, Valley Forge Space Center
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J. J. Taub	AIL/Cutler Hammer
K. Tomiyasu	General Electric, Valley Forge Space Center



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