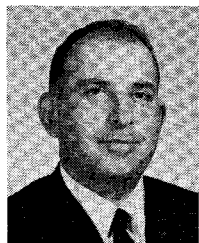


Contributors



Leonard Dubrowsky (M'61) was born in Brooklyn, N. Y., on March 29, 1935. He received the B.E.E. degree from the College of the City of New York, N. Y., in 1957.

From 1957 to 1958, he was employed by the U. S. Naval Ship-

yard Materiel Laboratory, Brooklyn, N. Y., where he worked on precision servomechanisms for navigational instrumentation. From 1958 to 1960, he served in U. S. Army Corps of Engineers as a Company Commander. Since 1960, he has been employed by the Westinghouse Defense and Space Center, Baltimore, Md., where he has been engaged in the development of phased array antennas and microwave components and antenna elements. In 1964, he joined the Microwave Technology Laboratory of the Center where he has been engaged in the development and design of microwave ferrite devices.



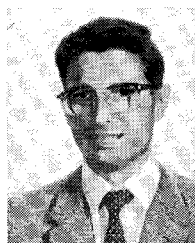
Gerald Klein (M'56-SM'59) was born in Brooklyn, N. Y., on September 22, 1928. He received the B.E.E. degree from Cooper Union, New York, N. Y., and the M.E.E. degree from the Polytechnic Institute of Brooklyn, N. Y., in

1948 and 1953, respectively.

From 1948 to 1955, he was Head of the Magnetron and Gas Switching Tube Group at the U. S. Naval Materiel Laboratory, Brooklyn, N. Y., where he developed new microwave measurement techniques and studied microwave tube behavior in radar systems. From 1955 to 1958, he was employed at the U. S. Army Signal Corps Laboratories as Chief of the Microwave Oscillator and Amplifier Section responsible for new microwave tube

development. In 1958, he joined the Westinghouse Defense and Space Center, Baltimore, Md., to establish the Microwave Technology Laboratory, where he has been engaged in the development of new devices employing high vacuum, gaseous, and solid-state techniques.

Mr. Klein is Chairman of the IEEE Electron Tube Standards Committee and Secretary of the Baltimore Chapter of the IEEE Group on Microwave Theory and Techniques.



D. Marcuse (M'58) was born in Koenigsberg, East Prussia, Germany, on February 27, 1929. He received the degree of Diplom Physiker from the Freie Universitaet, Berlin Germany, and the degree of Dr. Ing. from Technische Hoch-

schule Karlsruhe Germany in 1954 and 1962, respectively.

From 1954 to 1957, he worked at the Central Laboratory, Siemens and Halske, Berlin, Germany, on transmission-line problems and the development of the circular electric waveguide. In 1957, he became a member of the technical staff of the Bell Telephone Laboratories, Inc., Holmdel, N. J., and has worked on the circular electric waveguide and masers. He is presently working on the transmission aspect of a light communications system.



Joseph C. Palais (S'59-A'62-M'65) was born in Portland, Me., on February 2, 1936. He received the B.S. degree in electrical engineering from the University of Arizona, Tucson, in 1959, and the M.S. and Ph.D. degrees in electrical engineering from the University of



Michigan, Ann Arbor, in 1962 and 1964, respectively.

He worked on ferrite devices as a Microwave Engineer at Motorola, Inc., Phoenix, Ariz., from 1959 to 1960. He was an Assistant Research Engineer at the Uni-

versity of Michigan, Ann Arbor, from 1960 to 1964. During the summers of 1965 and 1966, he was associated with the Electromagnetic Techniques Laboratory of Stanford Research Institute, Menlo Park, Calif. Since 1964, he has been an Assistant Professor of Engineering at Arizona State University, Tempe, teaching microwaves, antennas, electromagnetic field theory, and optics.

Dr. Palais is a member of Sigma Xi, Tau Beta Pi, Eta Kappa Nu, Phi Kappa Phi, and the American Association for the Advancement of Science.



Emmanuel N. Protonotarios (S'64-M'66) was born in Naxos, Greece, on February 23, 1940. He received the Electrical Engineer's degree from the National Technical University of Athens, Greece, in 1963. He was then awarded a

Fulbright Travel Grant and attended Columbia University, New York, N. Y., where he received the Eng.Sc.D. degree in electrical engineering, in 1966. He was also awarded the Higgins and Boese Fellowships at Columbia University, in 1963 and 1964, respectively.

From 1965 to 1966, he was a Graduate Research Assistant in the Department of Electrical Engineering, Columbia University. Since May, 1966, he has been with Bell Telephone Laboratories, Inc., Holmdel, N. J., working with an analytical studies group of the digital transmission laboratory.

Dr. Protonotarios is a member of Sigma Xi.



Henry J. Riblet (A'45-M'55-F'58) was born in Calgary, Canada, on July 21, 1913. He received the B.S. and Ph.D. degrees from Yale University, New Haven, Conn., in 1935 and 1939, respectively.

From 1939 to 1941, he taught mathematics at Adelphi College, Garden City, N. Y., and at Hofstra College, Hempstead, N. Y. He joined the staff of the Massachusetts Institute of Technology Radiation Laboratory, Cambridge, in 1942, and at the close of World War II was in charge of one of the three developmental sections of the Antenna Group. From 1946 to 1948, he headed the RF group at the Submarine Signal Company, Boston, Mass. At present, he is affiliated with the Microwave Development Laboratories, Inc., Needham Heights, Mass.

Dr. Riblet is a member of the American

Mathematical Society and the American Physical Society.



Jean-Yves Savard was born in Quebec City, Canada, on January 25, 1935. He received the B.A.Sc. electrical engineering degree from Laval University, Quebec, Canada, in 1957. In 1958, he went to the United Kingdom on an Ath-

lone Scholarship and a National Research Council of Canada Fellowship. He received the Ph.D. degree in electrical engineering from the University of London, England, in 1961.

Since 1961, he has been an Assistant Professor in the Department of Electrical Engineering at Laval University.



Omar Wing (S'50-A'53-M'58) was born in Detroit, Mich., on March 2, 1928. He received the B.S. degree in electrical engineering from the University of Tennessee, Knoxville, the M.S. degree from the Massachusetts Institute of

Technology, Cambridge, and the Eng.Sc.D. degree from Columbia University, New York, N. Y., in 1950, 1952, and 1959, respectively.

He was a Member of the Technical Staff at Bell Telephone Laboratories, Inc., Holmdel, N. J., from 1952 to 1956. Since 1956, he has been a faculty member in the Department of Electrical Engineering at Columbia, as an Instructor from 1956 to 1959, an Assistant Professor from 1959 to 1961, and an Associate Professor since 1961.

Dr. Wing is a member of Sigma Xi, Tau Beta Pi, and Eta Kappa Nu.