Contributors

Colin S. Aitchison was born in Morecambe, England, in 1933. He received the B.Sc. and A.R.C.S. degree in physics from Imperial College, London, in 1955.

Since then he has worked for the Mullard Research Laboratories, Redhill, Surrey, England, where he was initially concerned with the noise reduction properties of direct injection phase locked klystrons for use with Doppler radar. Since 1962 he has led a section concerned with the measurement and application of varactors and tunnel diodes as low noise amplifier and power sources at UHF and microwave frequencies.

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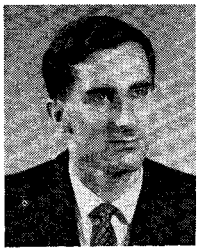

Lawrence K. Anderson (S'55–M'61) was born in Toronto, Canada, on October 2, 1935. He received the B.Eng. degree in engineering physics from McGill University, Montreal, Canada, in 1957 and the Ph.D. degree in electrical engineering from Stanford University, Stanford, Calif. in 1962.

In 1961 he joined Bell Telephone Laboratories, Inc., Murray Hill, N. J., where he worked on magneto-optical interactions, microwave ferrite devices and high-speed semiconductor photodetectors. Presently, he supervises a group concerned with the development of solid-state photodetectors and acousto-optic devices.

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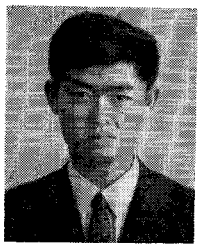

Yoshinao Aoki (M'66) was born in Nagano prefecture, Japan, on September 2, 1941. He received the B.E. and M.E. degrees in electronic engineering from Hokkaido University, Sappro, Japan, in 1964 and 1966, respectively.

In 1966 he became an Instructor in the Department of Electronic Engineering at Hokkaido University. He has worked on electromagnetic theory of waveguides and theory of the laser. Presently, he is engaged in research into optical transmission and coherence properties of optical fields.

Mr. Aoki is a member of the Japan Society of Applied Physics and the Institute of Electrical Communication Engineers of Japan.

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Robert Davies was born in Cardiff, South Wales, on September 15, 1938. He received the B.Sc. degree in electrical engineering from the University College of South Wales and Monmouthshire in 1959 and the Ph.D. degree from Queens University, Belfast, Northern Ireland, in 1964 for work on microwave ferrite devices.

Since 1964 he has been concerned with varactor diode measurements and parametric amplifiers in the Microwave Diode Devices section at the Mullard Research Laboratories, Redhill, Surrey, England.

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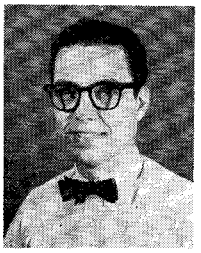

Lawrence E. Dickens (A'56–M'59) was born in North Kingston, R.I., on December 8, 1932. He received the Bachelor's, Master of Science in engineering, and Doctor of Engineering degrees in 1960, 1962, and 1964, respectively, from The Johns Hopkins University, Baltimore, Md.

After his military service he joined the Department of Research and Development (Radar) at Bendix Radio, Baltimore, Md., where he worked on design of missile instrumentation, high precision power supplies, and an airborne system for antenna pattern measurements. Later, his areas were expanded to include the supervision and technical responsibility for a low-noise receiver design group, in which his efforts were directed toward the development of variable reactance parametric amplifiers (for which he has one patent pending) and the development of low-noise receiver components for both the UHF and L-band models of the phased array radar designated ESAR. The work in the low-noise receiver group was expanded to include tunnel diode amplifiers and converters, and solid-state (varactor) harmonic generators. He joined the Carlyle Barton Laboratory (formerly the Radiation Laboratory) of the Institute for Cooperative Research at The Johns Hopkins University, Baltimore, Md., where he engaged in investigations of circuits and materials with the general objective of improving microwave and millimeter-wave receiving systems. He also was an active consultant in the field of low-noise, solid-state receiver techniques to American Electronic Laboratories, Inc., Bendix Radio, Division of Bendix Corporation, Applied Microwave Electronics, Inc., and the Pinkerton Electro-Security Corporation, a subsidiary of Pinkerton's National Detective Agency, Inc. He joined the staff of the Advanced Technology Corporation in November 1965. At ADTEC he has been actively engaged in the development of semiconductor components and the RF and millimeter-wave circuits and systems for their utilization.

Dr. Dickens is a member of Sigma Xi.

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Robert L. Ernst (S'60–M'62) received the B.E.E. degree with honor from Manhattan College, New York, N. Y., in 1961 and the M.S.E.E. degree from the Polytechnic Institute of Brooklyn, Brooklyn, N. Y. in 1965.

He joined the Radio Systems Division of the Western Union Telegraph Company as a Microwave Engineer in 1961 and was active in design and development of microwave components. He specialized in the design of varactor diode circuits within the VHF and microwave frequency regions. In 1963, he became a member of the technical staff of the Solid-State R.F. Techniques Group of RCA. He has developed interference reduction techniques for microwave receivers using resistive diodes, varactor diodes, and tunnel diodes. In addition, he has designed electronically tunable microwave bandpass filters utilizing YIG crystals and varactor diodes as well as analyzing and specifying ferroelectric capacitors for low distortion microwave receiver applications. He was temporarily assigned to the RCA Research Center in Princeton, N. J., where he reported to the Microwave Research Laboratory. There he evaluated a new mode of transistor operation and then developed a transistor microwave power source in which a single transistor yielded watts of power at L-band frequencies. After returning to the New York Laboratories and working with Hall Effect mixers and internally frequency-modulated transistor oscillators, he has been engaged in design and development of voltage-tunable transistor microwave power sources.

Mr. Ernst is a member of Eta Kappa Nu.

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Peter J. Gibson was born in Gillingham, England, on December 4, 1934. He served a formal apprenticeship in electrical engineering with the Admiralty and studied at the Admiralty college at Chatham, England.

Prior to 1956 he

worked for the Admiralty at Chatham as a Radio Engineer working on communication and radar equipment for the ships of the Royal Navy. He joined Mullard Research Laboratories in the summer of 1956 as a member of a team working on modern radar techniques. Since 1960 he has been working on parametric amplifiers in the fields of television, radio astronomy, radar, and satellite communication.

Mr. Gibson is an associate member of the Institution of Electrical and Radio Engineers (GB).

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Max L. Reuss, Jr., (M'57) was born in New York, N. Y., on August 21, 1930. He received the B.S. degree in physics in 1952 from the University of Maryland, College Park, Md.

Since 1952 he has been a member of the Microwave Antennas and Components Branch, Electronics Division, of the U. S. Naval Research Laboratory, Washington, D. C. He is currently specializing in the design of ferrite components.

Mr. Reuss is a member of Sigma Pi Sigma.

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P. I. Somlo was born in Budapest, Hungary, on May 15, 1933. He was graduated from the University of Technology of Budapest, in 1956.

He joined the Fine Mechanics Company in Budapest where he was engaged in the development and design of high frequency laboratory equipment. In 1957 he joined the Standard Telephones and Cables Company in London where his work was in connection with microwave repeater stations. After arriving in Australia in 1957 he joined the Standard Telephones and Cables Company in Liverpool, N.S.W., where he was engaged in developing pulse-technique circuitry. In late 1957 he joined the National Standards Laboratory of the Commonwealth Scientific and Industrial Research Organization, where his work is in connection with VHF–UHF impedance standards and the development of associated measuring techniques.

Mr. Somlo is an associate member of the Institution of Engineers (Australia).

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Michio Suzuki (SM'57) was born in Sapporo, Japan, on November 14, 1923. He received the B.E. degree in 1946 and the Doctor of Engineering degree in 1960, both from Hokkaido University.

From 1948 to 1962 he was an Assistant Professor and from 1962 Professor of Electronic Engineering at the Hokkaido University, Japan. From 1956 to 1957 he was a Research Associate at the Microwave Research Institute of Polytechnic Institute of Brooklyn.

Dr. Suzuki is a member of the Institute of Electrical Communication Engineers of Japan and the Institute of Electrical Engineers of Japan.