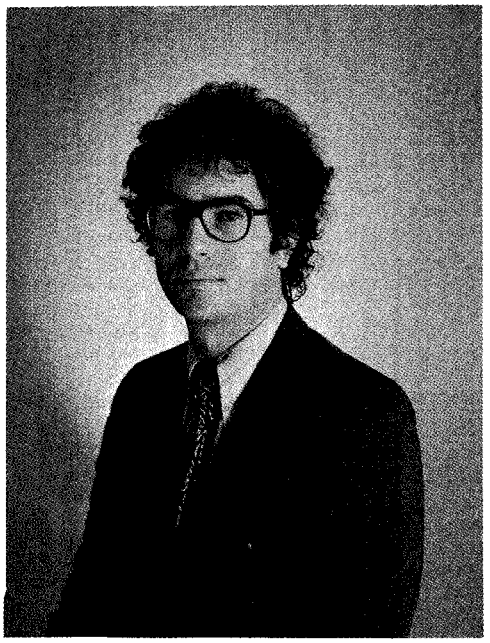
1977 MICROWAVE APPLICATIONS AWARD
to
Martin G. Walker



M. G. Walker, member of the Technical Staff, Solid State Division,
Watkins-Johnson Company. Born 1952, Berkeley, California.
S.B.E.E., Massachusetts Institute of Technology, 1973.
S.M.E.E., Stanford University, 1976.

Martin Walker is currently a member of the Solid State R&D Department of the Watkins-Johnson Company, his principal responsibility being the development of GaAs FET amplifier circuits for operation at 10 GHz and above. His current technical activities include the design and development of 12-18 GHz broadband amplifiers as TWT replacements and 10 GHz narrowband low noise FET amplifiers for radar applications. He previously developed 12-15 GHz and 12-18 GHz amplifier prototypes for the U.S. Army (ECOM), and a 9.6 GHz radar front end for the U.S. Air Force (AFAL). The 12-15 and 12-18 GHz FET amplifiers were the first reported for those frequency bands. The radar front end included full integration of an RF preamp, RF gain control, mixer, FET voltage controlled oscillator, and IF amplifier - all in a highly miniaturized configuration.

Mr. Walker was previously responsible for the successful development of 4-8 and 8-12.4 GHz FET amplifiers at the Watkins-Johnson Company. A key contribution to the success of this amplifier effort was Mr. Walker's synthesis of a very complete RF circuit design computer program which included a sophisticated circuit optimization capability. Mr. Walker's computer program has constituted an essential contribution to the success of several GaAs FET RF amplifier program at Watkins-Johnson; he has acted as a computer analysis consultant on numerous projects.

While at MIT, Mr. Walker developed fabrication techniques for a BARRITT diodes. He fabricated and characterized the various devices to optimize performance.

Mr. Walker is a member of Tau Beta Pi, Eta Kappa Nu and the IEEE.

PUBLICATIONS:

"Microwave Amplifiers", Wescon Technical Paper, Sept. 1974.
"Cover X-Band with an FET Amplifier", Microwaves, Oct. 1975, with F. T. Mauch and T. A. Williams.
"MESFET Amplifiers Go to 18 GHz", Microwave Systems News, April/May 1976, with F. A. Marki and H. M. Abramowitz.
"A 12-18 GHz High Gain Amplifier Design using Submicron Gate GaAs Field Effect Transistors", 1976 IEEE-MTT-S International Microwave Symposium Digest, June 1976 pp. 101-103.