

II

COMMUNICATION SYSTEMS

Chairman: P. G. Petrelis—TRW

Session Abstract: The influence of advanced technology in system applications is evident including an identified role for fiberoptic technology. Improved FET devices and circuits are providing the opportunity to improve existing system performance and also making feasible new system applications. A good foundation is being established for transition of high performance circuits to future monolithic FET designs which will lead to the next generation of advanced systems.

This session includes several good examples in the role of new technology in systems. Of particular importance is the paper on demonstrated fiberoptic links for a phased array antenna microwave system. Another good example of new technology is presented in a landmark paper on the performance of very low noise cryogenically cooled HEMT preamplifiers to be used in a new radio astronomy system.

Other samples of the role of FET technology are the two papers on an improved FET upconverter and a high performance 4 to 6 GHz downconverter.

**10:30 am—12:00 noon, May 27, 1988
Jacob Javits Convention Center, Hall 1E
Room 3**