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PHASED AND ACTIVE ARRAY TECHNIQUES

Chairman: H. G. Oltman, Jr.—Tecom Ind., Inc.

Session Abstract: The papers in this session address phased array technology which spans the frequency range from C-band to millimeter waves. The development of a GaAs monolithic C-band phased array receive module is presented. A fabrication technique permitting the integration of active IMPATT devices and radiating elements on the same semi-insulating GaAs substrate will be discussed. Encouraging results will be presented on controlling the gain and pulse code modulation of MMIC T/R modules using optical techniques. This session also includes a paper describing microstrip active antennas and arrays designed for operation at X-band using patch antennas and Gunn diodes. The final paper describes a space-fed technique for distributing the local oscillator signal in spaceborne phased arrays which is both lightweight and can partially compensate for the effects of mechanical deformations on array radiation pattern performance.

**10:30 am–12:00 noon, May 27, 1988
Jacob Javits Convention Center, Hall 1E
Room 4**