APPLICATIONS OF HIGH-SPEED INTEGRATED CIRCUITS TO MICROWAVE SYSTEMS (PANEL)

SPONSORED BY THE MTT-9 COMMITTEE ON DIGITAL MICROWAVE SYSTEMS
(PAUL T. GREILING, CHAIRMAN)

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TUESDAY EVENING 2000 - 2200
JUNE 27, 1978
MacDonald-Cartier Room

This panel will present the current status of both silicon and gallium arsenide high-speed integrated circuits and discuss their impact on future microwave systems. A comparison of the more mature silicon and the emerging gallium arsenide integrated circuit technologies will be presented with emphasis on speed, power and system performance. Topics to be addressed include:

- o Ultimate Speed
- o Power Consumption
- o Speed-Power Product
- o Device Matching
- o On-off Current Ratio
- o Propagation Delay Time
- o Rise Time
- o Noise Performance
- o Gain-Bandwidth Product
- o Reliability
- o Yield

The session will begin with a brief overview of these technological areas given by Gordon Rabanus of the Avionics Laboratory at WPAFB. Each panel member will then make a short statement high-lighting important aspects of their technology from his vantage point. After the presentations by the panel members, the session will consist of a discussion period amongst both the panel members and interested audience participants.

Panel Moderator:
Max Yoder
Office of Naval Research
Arlington, VA

Panel Members:

Gordon Rabanus
Avionics Laboratory
WPAFB, Dayton, OH

Charles Krumm
Hughes Research Laboratories
Malibu, CA

Dale Claxton
TRW
Redondo Beach, CA

Derry Hornbuckle
Hewlett Packard
Santa Rosa, CA

Frank Micheletti
Autonetics
Anaheim, CA