

## **Panel Sessions**

### **Panel I: Future of Microwave Engineers Impact of DoD Funding of R/D on Small and Large Companies and Academic Institutions**

**Date:** Tuesday, June 4, 1985, Noon to 1:30 pm  
**Location:** Cervantes Convention Center, Room 261  
**Organizer:** Robert A. Moore  
Westinghouse Electric Corporation  
P. O. Box 746, MS-335  
Baltimore, MD 21203  
**Moderator:** Robert A. Moore  
**Panelists:** Dr. Leo Young, The Pentagon  
Dr. H. C. Nathanson, Westinghouse R/D Center  
Dr. Stephen Honickman, STG Electrosystems  
Dr. George Gamota, University of Michigan  
Dr. Merrill Skolnik, Naval Research Lab  
Dr. David Leeson, California Microwave

**Abstract:**

DoD R/D funding distribution and procurement policies and procedures impact in major ways the careers of microwave engineers. Dr. Young will lead off with an overview of DoD sponsored funding. He will be followed by Drs. Nathanson, Honickman, and Gamota representing, respectively, large company, small company, and academic views. Audience discussion with the panelists will be encouraged.

Box lunches will be available to ticketholders at this informal luncheon session. Tickets for box lunches may be purchased through advanced registration, or at the main registration desk. Please note that lunches will not be sold at the door.

### **Panel II: Advances in Millimeter Wave Subsystems**

**Sponsor:** MTT-16, Technical Committee on Microwave Systems  
**Date:** Tuesday, June 4, 1985, 8:00 pm to 10:00 pm  
**Location:** Cervantes Convention Center, Room 120  
**Organizers:** T. H. Oxley, Marconi Electronics Devices Ltd.  
J. B. Horton, TRW  
**Moderator:** T. H. Oxley

**Abstract:**

Rapid advances in millimeter wave technology in recent years have led to a new generation of device applications and increasingly higher level of integration in millimeter wave subsystems. Members of this panel have been selected to represent a cross section of technologies and applications of these subsystems. Each panel member will review the technical advances and current state-of-the-art in his own area of expertise. Emphasis will be on current construction techniques and how these techniques are used to produce practical multifunction subsystems. Techniques applicable to low volume and high volume production will be discussed. Panel members have been selected from Europe, Japan and the USA.

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### **Panel III: Historical Perspective of Microwaves**

**Date:** Tuesday, June 4, 1985, 8:00 pm to 10:00 pm  
**Location:** Cervantes Convention Center, Room 123  
**Organizer:** Prof. Harold Shipton, Washington University, St. Louis, MO  
**Moderator:** Prof. Harold Shipton

**Abstract:**

Whereas most of the Symposium is involved with the current state-of-the-art in microwave technology, it is interesting and instructive to glance into the past at the origins of our current microwave practice. This panel session will do just that. The discussion will cover the early development of radar, telecommunications, and biomedical applications. Panel members participated in the early development of these fields, and will offer historical perspectives, as well as personal recollections and anecdotes. Dr. Sean Swords (Trinity College, Dublin), author of one of the most complete histories of early radar, will participate. Prof. Harold Shipton, who served in the British Royal Air Force during World War II, will moderate. This panel session will complement the Historical Exhibit located in Room 263 of the Convention Center.

### **Panel IV: Millimeter Wave Integrated Circuits**

**Sponsor:** MTT-6, Microwave and Millimeter Wave Integrated Circuits  
**Date:** Thursday, June 6, 1985, 3:00 pm to 5:00 pm  
**Location:** Cervantes Convention Center, Room 276  
**Organizer:** Dr. James C. Wiltse  
Georgia Tech Research Institute  
Atlanta, GA  
**Moderator:** Dr. James C. Wiltse  
**Panelists:** Dr. Barry Spielman, Naval Research Laboratory  
Dr. Tom Midford, Hughes Aircraft EED  
Dr. Joseph McClintock, Martin Marietta  
Dr. Roger Sudbury, MIT Lincoln Laboratory  
Dr. Kai Chang, TRW, Redondo Beach, CA

**Abstract:**

This session will consider the state-of-the-art progress in the advancement of materials, components, and devices for integrated subsystems at millimeter wavelengths.