

# ATRC Executive Review Meeting

## Digital RF Transmission

December 12, 1990

# WELCOME !

- **This is an historic event!**
- **Opportunity to compare and contrast two digital transmission approaches for HDTV Simulcast**
  - share many common benefits of digital
  - each system has many clever aspects
- **Today is the result of much excellent work**

## Key Contributors

- **OFDM Modem**
  - *T. DeCouasnon*
  - *R. Monnier*
  - *J. B. Rault*
  - *M. Cosmao*
  
- **Twin-QAM Modem**
  - *Hugh White*
  - *Steve Evans*
  - *Bhavesh Bhatt*
  
- **Test and Evaluation**
  - *Krish Jonnalagadda*
  - *Jim Gibson*
  - *Lou Stetz*
  - *Dick Klensch*
  - *D. Raychaudhuri*

## Technical Evaluators

### Thomson

Bill Beyers  
L. Christopher  
T. DeCouasnon

### Philips

Carlo Basile  
Dave Bryan  
A. Cavallerano  
Aldo Cugnini  
Frank Kot

### NBC

Stan Baron  
Will Fagot  
Lou Libin  
Burnette Sams  
Merrill Weiss

### Sarnoff

Jim Gibson  
K. Jonnalagadda  
D. Raychauduri  
Glenn Reitmeier  
Hugh White

## **ATRC -- RF Modem Goals**

- **30 Mbps performance with reasonable coverage**
- **Good BER with random noise**
- **Good BER with NTSC interference (NTSC-robust)**
- **NTSC-friendly digital simulcast**
- **Ability to deliver multiple tiers of service**
- **Acceptable cost for consumer electronics**
- **Acceptability to FCC and U.S. industry**

## Today's Goals

- **Learn OFDM and QAM similarities and differences**
- **Learn about NTSC interference problems**
- **Understand technical tradeoffs and issues**
- **Make a decision for FCC effort**

## AGENDA

<b>8:45</b>	<b>Welcome and Introduction</b>	<b>G. Reitmeier</b>
<b>9:00</b>	<b>RF Issues</b>	<b>J. Gibson</b>
<b>9:30</b>	<b>Twin-QAM Review and Results</b>	<b>H. White</b>
<b>11:00</b>	<b>COFDM Review and Results</b>	<b>T. De Couasnon</b>
<b>12:30</b>	<b>Lunch</b>	
<b>1:15</b>	<b>COFDM and QAM comparisons</b>	<b>J. Gibson</b>
<b>3:00</b>	<b>Discussion and Recommendations</b>	<b>K. Jonnalagadda/All</b>
<b>4:30</b>	<b>Concluding Remarks/Depart</b>	<b>G. Reitmeier</b>