

Digital Simulcast Overview

- **Progress and Plans**

- **Strategy (options for August)**

- **Manpower, schedule, cost**

- **Discussion**
 - **ATRC project organization**
 - **Competition**
 - **ATRC posture at industry meetings**

Progress in Data Compression

- **Developing simulation software in parallel efforts**
- **Ready for November 1 comparison in Briarcliff**
 - **details of picture interchange worked out**
 - **first peek at performance**
- **Next step is to simulate encoding to the channel level, introduce transmission errors, and decode**
 - **crucial step, only indication of robustness**

Progress in RF Transmission

- **LER will bring OFDM modem and 25 Mbps codec (625 line video) to Sarnoff in late November**
- **Twin QAM is a significant new concept**
- **QAM Transmitter PC Board is working**

November 1 Agenda

- **for (i=0; i<4; i++)
{
 describe proposed systems
 view sequences
 discuss planned improvements
};**
- **Side-by-side comparisons of sequences**
- **Discuss compression performance**
- **Discuss acceptability of test sequences**

“T Day” - December XX (12)

- **QAM and OFDM “A,B” evaluated in Sarnoff transmission test bed**
- neither is fully developed
- **Review BER vs. D/U performance curves (how well does digital perform with NTSC interference?)**
- **View NTSC with both QAM and OFDM co-channel interference**
- **Peek at relative hardware complexity**
- **Decide on RF Transmission strategy**

“C Day” - December YY (13)

- **Blind “ABC” viewing of three proposed systems**
 - none is fully developed
- **A/B/C split-screen comparisons**
 - 20 Mbps with different BERs
 - 13.8 Mbps with different BERs
- **A,B,C full-screen simulations with 0 errors**
- **A,B,C estimate of complexity-cost-risk**
- **Decide on Compression approach for FCC hardware**

Labor and Budget Estimates

	Data Compression			RF and FEC			
	H/W	S/W	support	H/W	S/W	support	
PLB	1 0	4	4	2	2	0	2 2
Sarnoff	4	4	2	4	1	2	1 7

- **\$1.5M total hardware costs (build two systems)**
 - equal cost share
- **\$600k for publicity demos (NAB, NCTA, SMPTE)**
 - equal cost share

Items for Discussion

- **We need a project organization**
- **When are we public with Digital Simulcast?**
- **What is our posture at industry meetings?**
 - **ATSC/IEEE workshop (Nov 13-14)**
 - **Digital Video Communications workshop (Nov 26)**
 - **Conference papers for 1991**