

Purpose of Today's Meeting:

Keep Everyone Informed

- **ADTV Overview** **Glenn**
- **Comments** **Curt**
- **Integration Plan** **Norm**
- **Making It Happen** **Glenn**
- **Concluding Remarks** **Jim**

The Great Race

- **There are four digital HDTV systems under consideration:**
 - DigiCipher (GI/MIT)
 - Digital Spectrum Compatible-HDTV (Zenith/AT&T)
 - ADTV (ATRC = DSRC, TCE, NAP, NBC, CLI)
 - ATA-Progressive (MIT/GI)

- **We now have much more detail on DigiCipher and DSC-HDTV**
 - ATA-Progressive will use DigiCipher transmission

- **ADTV can win!!**
 - picture quality
 - coverage area
 - interoperability and extensability

ADTV Overview

- **Meeting the FCC schedule with ADTV hardware requires parallel (and cooperative) effort in many ATRC labs:**
 - System design at Sarnoff and TCE-LA
 - Video pre- and post-processing hardware at Sarnoff
 - Motion Estimation hardware at Philips-Paris
 - Compression hardware at Philips-Briarcliff
 - Transport hardware at Sarnoff
 - Tuner and VLD hardware at TCE-Indianapolis
- **Final system integration will be a very difficult and tricky task. We have January and February to make it all work!**
- **The schedule is very aggressive -- there are many elements of risk.**

ADTV Overview

- **We also have many parallel efforts within Sarnoff:**
 - Video pre-processor
 - Video post-processor
 - Priority Processor
 - Transport Processor
 - Rate Buffer
 - FEC Encoder
 - Twin-QAM modulation
 - Twin-QAM demodulation and equalizer
 - IF/RF modulation
 - Tuner/IF demodulation
 - Twin-QAM demodulation and equalizer
 - FEC Decoder
 - Inverse Transport Decoder
- **Designing, building, and testing each of these pieces alone is complex...**
- **Pulling it all together requires careful planning**

Integration Overview

- **FEC-Modem-RF-Tuner-Modem-FEC (bits to bits)**
- **Priority Processor-Transport-Rate Buffer**
- **Rate Buffer-Inverse Transport-VLD**
- **Entire Transport Subsystem pull-together**
- **Pre-Processor - Post-Processor**

What's the Message?

- **Every task is critical**
- **Everyone's contribution is important**
- **Every day counts**
- **We need to carefully monitor our progress**
- **Silently falling behind schedule is not acceptable**
- **Anything we can do to pull up our schedule increases our probability of success!!**

This Week's Thank You's

- **Al Acampora - Transport Processor in debug**
- Rick Bunting, Dave Harris, Rich McCormack
- **Liston Abbott - FEC in debug**
- Bob Petri, Joe Long
- **Ron Kolczynski - Priority Handler design**
- **Ron Kolczynski - Breakpoint Calculator design**
- **Joe Passe - CodeWord Translator design**
- **Bruce Anderson - ITP design review**
- **Charlie Brooks - Rate Buffer design review (soon)**

More Thank You's

- **Ted Wagner - AGC loop**
- **Kevin Kelly - Tuner testing and characterization**
- **Bob Evans - RF frequency translators**
- **Jonathan Schepps - TMS32050 code for equaliser**
- **Jim Palopoli - canceled his vacation**
- **Rich McCormack & Desi McBride - nights & weekends**