

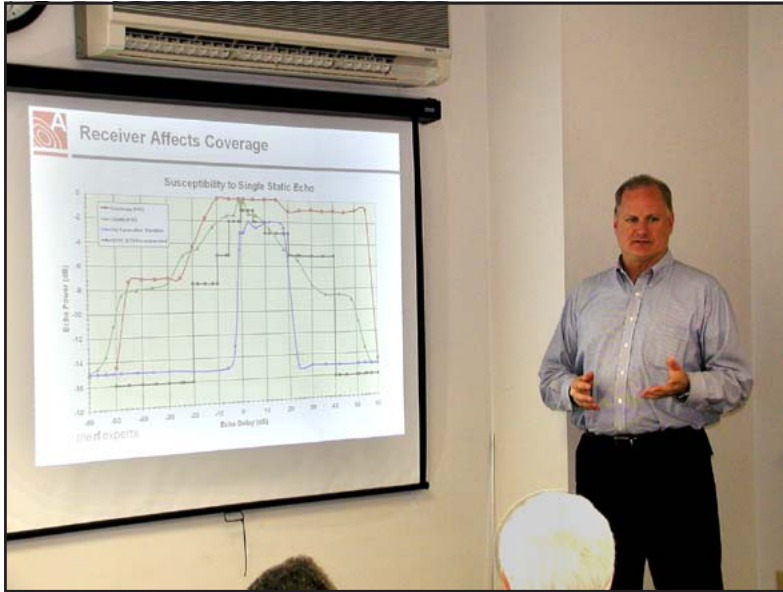


CHAPTER TWENTY NEWS

society of broadcast engineers
pittsburgh chapter

December 2008

Volume 16 Number 10



Rich explains why reception is adversely affected by interference.



Chairman's Corner

Let's Celebrate!

Paul Byers
Executive Director of Engineering,
WQED
pbyers@wqed.org

2008 has flown by and it's certainly been an interesting and tumultuous year for all broadcasters. In this column I have reported on the work we have done to reallocate our Broadcast Auxiliary Services (BAS) from the 2 GHz band and to convert our radio stations to IBOC (HD) radio transmission. I've told you about the proposal to assign VHF channels 5 and 6 to FM broadcasting and to add a new mobile/handheld service to the ATSC standard.

But most of the articles I have written for this newsletter in the past year have focused on something that is yet to come. Of course that is the end of analog television transmission on February 17th, 2009. It is a project that has consumed most of our energies not just this year but for the past several years. We have rebuilt our transmission plants and studios, dealt with the pitfalls of aspect ratio conversion, closed captioning and 5.1 audio. We have tried our best to educate our viewers about how to receive our digital signals with converter boxes and new antennas and by conducting simulated tests of shutting off our analog transmitters. We have seen the results of communities like Wilmington, North Carolina who have made the transition early and heard the projections that tens of millions of households nationwide will wake up to a world without television on February 18th. But I can't help but think that this transition will be more like what we experienced with the Y2K transition and that people will find ways to adapt and continue to receive our digital signals. Stay tuned.

But let's put aside our cares and concerns and celebrate the holiday season at least for one evening. I hope you will be able to join me on



Last Meeting

Transmitter Production

Gary Stewart
CTV
gstewart@ctvn.org

Our November meeting was held on the 20th at Axcera's plant in Lawrenceville, PA, south of Pittsburgh. It was a midday meeting instead of our recent practice of having evening meetings. Nineteen friends and members of Chapter 20 attended, one from as far as Lost Creek, WV. Axcera provided lunch, some very nice premium giveaways, gave a very informative presentation on digital signal coverage enhancement and gave us an extensive tour of the transmitter factory.

The presentation was given by Rich Schwartz and covered two basic ways that dead signal areas can be filled in. Serial methods use either translators or boosters in what we might call a daisy chain feeding out through the main transmitter. Distributed transmission systems (DTS), considered parallel feeding, are fed by other methods than from the main transmitter and involve built-in delays and gps standard locking for Single Frequency Networks (SFN). Both have

Continued on page 2

Continued on page 2

Let's Celebrate! Continued from page 1

Tuesday, December 16th at D'Imperio's Restaurant in Monroeville for a Christmas Party, which will also double as our monthly meeting with election of officers. Cocktails and hors d'oeuvres will be served at 6 PM with dinner at 7 PM. Spouses and significant others are welcome and there will be no charge. Please RSVP by December 15th to http://www.sbe20.org/forms/Form_Party.php.

I hope you all have a wonderful Christmas/Hanukkah/Kwanza and a prosperous New Year in 2009!

Last Meeting

Transmitter Production Continued from page 1

their advantages for different situations, which were thoroughly explained.

There was a pleasant surprise for those of us who have heard discouraging words for years in the controversy over whether ATSC or COFDM is better. What we always hear is that ATSC is an inferior system because it is less robust. Rich and Sam Zborowsky, one of the original founders of Axcera's predecessor company, ITS, explained how advances in receiver chip technology have so improved ATSC reception that it isn't true anymore.

The tour was comprehensive, covering everything from the business offices to the loading dock where transmitters are shipped around the world. The offices included the engineering areas where ideas, research and technology get transformed into product plans.

In the plant we first saw where product prototypes are made and tested. The assembly areas start with partially automated parts retrieval, machine shop and state of the art circuit board manufacturing. Actual assembly includes not only new products but also remakes of older products that customers may have need of. Assembly instructions are even available on computer for many of the older products. We saw many of the different model transmitters in various stages of final assembly, although there were no high power tube products being built or tested the day we were there. The tour ended with a look at customer service in full operation.



FCC Report

Paul Byers
pbyers@wqed.org

FCC CLARIFICATION ON CAPTIONING FOR DTV AND FURTHER RULEMAKING

The FCC recently issued a Declaratory Ruling, Order, and Notice of Proposed Rulemaking addressing the obligation to close caption digital programming and seeking comment on whether or how to apply its current revenue-based exemption to multi-stream digital operations. Among other things, the new rules emphasize the availability of station contact information to facilitate viewer access to stations to voice concerns or complaints. In any event, all stations are advised to review carefully both the substantive captioning requirements and the new contact requirements with reference to their current operations.

DECLARATORY RULING

The Commission ruled that all HD programming that does not fall within the established exemptions must be captioned. Even if your HD programming falls within an exemption, you are still required to pass through any captioning you receive, even on re-broadcasts of programs, but you are not obligated to create new digital captions where only analog captions are provided. In any event, when the transition is complete, you must continue to close caption your main digital channel pursuant to the relevant captioning benchmarks, regardless of how much revenue that channel generated during 2008.

Until the transition deadline, if you are simulcasting your analog programming on your main digital channel, you must caption the digital channel as well as the analog channel.

The Commission also stated that in order to count captioned digital programming toward the closed captioning requirements you must transmit captions that can be decoded by the decoders in those analog sets using converter boxes. This means that you must continue to transmit captions

Chapter Twenty News is published monthly
(except July & August) by



Society of Broadcast Engineers
Chapter 20
P.O. Box 16312
Pittsburgh, PA 15242-0312

Web page <http://www.sbe20.org>

Chairman-	Paul Byers	412-622-1530
Vice Chair-	Dave Kasperek	412-244-4615
Secretary-	Henry Lassige, Jr.	724-258-5416
Treasurer-	Henry Lassige, Sr.	412-429-2000
Frequency Coordinator-	Otto Schellin	412-237-1184
Expo Planner-	Joann Garvin	724-843-7501
Certification-	Tom Skubel	412-244-4435
FCC Committee-	Paul Byers	412-622-1530
Newsletter Editor-	Gary Stewart	412-824-3930
Newsletter DTP-	Jean Stewart	412-678-9211

in the CEA-608 (analog) standard after February 17, 2009. The Commission notes that this is not a new requirement, but that it had been adopted in 2000.

NEW RULES ADOPTED

You will be required to make available contact information for those wishing to raise immediate concerns (such as about missing or garbled captions) or make complaints to you. You must designate a telephone number, fax number, and e-mail address for the purposes of “receiving and responding immediately” to any closed captioning concerns. If you have personnel available, either on site or remotely, to address any technical problems that may arise, consumers using this dedicated contact information must be able to reach someone, either directly or indirectly, who can address the viewer’s captioning concerns by taking immediate action or referring the issue to the appropriate person. You are not required to alter your normal hours or staffing, but where staff is available to address technical issues that may arise during the course of transmitting programs, they also must be knowledgeable about and able to address closed captioning concerns.

Further, you are required to take measures to readily accommodate incoming calls placed through a Telecommunications Relay Service (TRS) operator. Staff members reached by using your published contact information are expected to be familiar with TRS. Where someone is not available immediately to handle a complaint, any calls or inquiries received through the dedicated contact information are to be returned or otherwise addressed within 24 hours.

You will also be required to make contact information available for the receipt and handling of written closed captioning complaints that do not raise immediate issues. This contact information must include the name of a person with primary responsibility for captioning issues and who can ensure compliance with the rules, as well as the person’s office, telephone number, fax number, postal mailing address, and e-mail address. The contact information for immediate and other complaints must be posted on your websites and published in telephone directories.

Changes in contact information must be posted within 10 business days for websites and by the next publication of directories. There is no guidance as to how many directories or what types of directories are to be used. Nor is there any explanation of why the Commission has keyed this requirement to the designation of contact information for specific station personnel, requiring updates over the years, instead of permitting stations to establish a title and contact information that would stay the same regardless of personnel changes. It is likely that the requirement for fax access will require new procedures at some stations as well.

Finally on this score, the Commission is going to provide a list of video programming distributors’ contact information on its website, including the name of the appropriate person and/or office to contact, telephone numbers, and e-mail addresses. You therefore must file the required contact information for both immediate concerns and written captioning complaints with the Chief of the Disability Rights Office, Consumer and Governmental Affairs Bureau, or by sending the information to the e-mail address

CLOSEDCAPTIONS_POC@fcc.gov , within 30 days of the

publication in the Federal Register of a notice announcing approval by the Office of Management and Budget of this new information collection requirement. You must then promptly notify the Commission of any change in the information, in any event within 10 business days.

NEW RULES PROPOSED

The Commission is taking comment on the key question of how the exemption for channels with revenues under \$3 million should apply to digital broadcasters that multicast.

The FCC’s rules exempt “each channel” of programming that does not meet the revenue threshold, but they do not define “channel.” The question presented is whether each digital stream constitutes a channel, or whether the station as a whole is one big channel. While not directly acknowledged in the document, the Commission staff has for several years informally told those inquiring that it would be reasonable to consider each digital stream as a separate channel. It is not always clear, however, how to compute the revenue attributable to a digital stream, and that is particularly the case for public broadcasters. The Commission has asked how this determination might affect program diversity, the airing of locally-originated programming, or the airing of other kinds of programming that may afford little or no economic return. It also seeks comment on whether this approach may result in an increase in the number of petitions for exemption from the closed captioning requirements under the “undue burden” standard of the rules.

The Notice also seeks comment on whether the FCC should revise the revenue exemption as it applies to multicast streams to, for example, change the \$3 million threshold for the multicast programming streams other than the “main”stream or adopt a new non-revenue approach. Specifically, it seeks comment on whether the \$3 million revenue amount is a reasonable threshold for determining if secondary multicast streams should be exempt from the closed captioning requirements, or whether, given the general nature of the programming on such channels, a lower figure is appropriate and, if so, what that amount should be.

As an alternative to the fixed revenue approach, the Commission asks whether captioning requirements might be tied to a formula that considers the number of programming streams being offered (or some other variable). Such an approach might be similar to that used for determining a broadcaster’s children’s television programming requirements.

Society of Broadcast Engineers
Pittsburgh Chapter
P.O. Box 16312
Pittsburgh, PA 15242

PRSRT STD
US POSTAGE
PAID
N. VERSAILLES, PA
PERMIT NO. 01



*The crew from WNPB,
Morgantown, came up to
Lawrenceville for our November
meeting. Clockwise from the front
left: Arthur Austin, Wayne
McHenry, Danny Wilson and
Rodney Swisher.*



Next Meeting (RSVP NEEDED!)

Please RSVP by Monday, December 15th to http://www.sbe20.org/forms/Form_Party.php.

Date: Tuesday, December 16

Location: D'Imperio's Restaurant
3412 William Penn Highway
Pittsburgh, PA 15235
(Bus. 22, Wilkins Township, behind Wendy's)

Time: 6:00 - 7:00 Cocktails and Hors D'oeuvres
7:00 - 9:00 Dinner

Program: Annual Christmas Party
Election of Officers

Bring a spouse or significant other ... no charge!

