



Antennas Direct's revolutionary UHF antennas drew much interest at the show



Chairman's Corner

Expo Update & DTV Transition Bootcamp's Coming

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

Thanks to all who attended our 37th annual Expo on October 20th and 21st. The vendors I spoke with seemed pleased with the venue and the attendance and I thought the show seemed much more lively than recent Expos.

I would like to offer special thanks to Joann Garvin and destination PITTSBURGH for another terrific job in planning the Expo. We literally could not have done it without her help.

Gary and Jean Stewart were once again instrumental in designing, printing and mailing the promotional materials for the event.

Thanks also to Dave Kasperek for putting together the best round of technical papers that we have had for many years.

All of you who were lucky enough to win a door prize owe your

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Next Meeting ... Transmitter Factory Tour

Dave Kasperek
Director of Engineering, WTAE
dkasperek@hearst.com

What: Tour a local TV Transmitter Factory
Where: Axcera Headquarters
When: 12:30 PM Thursday November 20

Our host this month is Axcera. Come out and see how television transmitters are designed, manufactured and tested. Learn about a range of low power transmitting devices that may someday be used to overcome gaps in broadcast DTV coverage predicted by Bill Meintell in his presentation at the October Expo.

Take a drive. Have some lunch. Catch up with friends and colleagues to compare notes in our continuing preparations for the end of full power analog television broadcasting in the U.S.

If you are not familiar with them, Axcera is a manufacturer of television and mobile multimedia transmission solutions with a comprehensive line of television transmitter systems, as well as a complete line of MMDS/ broadband wireless solutions.

Axcera products are used worldwide by broadcast television stations, Mobile TV service providers, MMDS operators and educational institutions.



Bill Meintell talked about the difficulties of TV reception for the DTV transition.

DTV Transition Bootcamp's Coming

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thanks to Glenn Romsos for selecting and purchasing the prizes.

And finally, many thanks to Bob Hoffman for videotaping the presentations. Bob has also agreed to edit and encode them so that they may be viewed on our web site. Look for more information on that in the next Newsletter.

Our show this year was also significant because it was the last convention to be held at the Expo Mart. In case you're wondering where next year's show will be held, I'm told that the new convention center in Monroeville will be located just up the street from the Expo Mart on the site of the old Wickes Furniture store. Hopefully it will be ready in time.

I have also recently learned that the SBE would like Pittsburgh to be the site of its national convention again next year so that should bring more excitement and prestige to the event. I hope to see you there.

Don't forget to mark your calendars for Thursday, November 20th as this month's meeting will be held at Axcera's facility in Lawrence, PA. This will be a lunch meeting beginning at 12:30 PM and will include a tour of Axcera's transmitter plant. You might want to bring a friend as this should be a very interesting meeting. Directions to Axcera can be found on page 4 in this Newsletter.

We are in the planning stages for a "DTV Transition Bootcamp," an all day seminar/workshop conducted by SBE Chapter 20. The theme of the presentation will be things engineers need to do between now and February 17, 2009, as well as things to think about as the transition unfolds.

Some of the seminar subjects we have in mind might include:

- DTV Action Items and discussion of educational efforts aimed at broadcasters and the viewing audience.

- The transition of LPTV and Translator Stations and their potential tie-in with mobile TV. Presentations will cover the engineering fundamentals and licensing aspects of lower power television and basic MPEG/ATSC encoding and multiplexing for LPTV.

- Busting Myths about TV audio, DTV, and 5.1 surround sound for the DTV facility.

- Alternate DTV Program Streams and the latest developments with the ATSC M/H System for mobile and handheld TV.

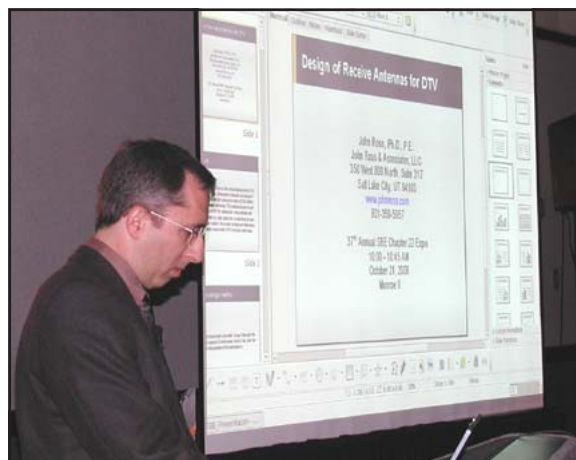
- RF engineering and spectrum allocation issues surrounding the use of "white space" for wireless devices.

What it might be Like to work in a file based world in which you can no longer "see" the content or touch the media and must depend upon new forms of instruments to tell you if the images, sound and metadata will be what you expected.

What is on the horizon to assist the operator in this new digital media age will be explored.

The event will likely be held in mid December at WQED's studios in Oakland.

Please let me know if you would be interested in attending.



John Ross explained the process of designing new UHF antenna technology



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Chapter 20
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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
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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

FCC Approves Use of Broadband Devices in Broadcast "White Spaces"

Paul Byers
pbyers@wqed.org

On November 4th, The Federal Communications Commission adopted a Second Report & Order that establishes rules to allow unlicensed wireless devices to operate on a secondary basis in the "white spaces" of the broadcast television band.

Broadcasters had been urging the FCC to delay a vote in this proceeding until a recent testing report could be subjected to adequate public review. There are significant concerns that the process leading to this Order was flawed. However, in response to concerns raised by broadcasters, the FCC imposed specific requirements and certification procedures that it asserts will protect the incumbent users of the spectrum.

The Order provides that authorized white spaces devices must include, in addition to spectrum-sensing technology, a geolocation capability and the ability to access over the Internet a database of incumbent services, such as television stations, cable system headends and venues in which wireless microphones are frequently in use. All devices will be subject to equipment testing and certification by the FCC laboratory.

The FCC did not authorize devices that rely on spectrum-sensing alone, but instead established a more rigorous application process that will include public comment and observation of testing as well as certification at the Commission level.

The FCC states that it will closely oversee and monitor the introduction of white space devices, act promptly to remove from the market any equipment found to be causing harmful interference, and require the responsible parties to take appropriate actions to remedy any interference that may occur.

Other action at the FCC's meeting on November 4th:

Closed Captioning. The FCC announced that it has adopted a Declaratory Ruling and Order, reportedly clarifying its closed captioning requirements for digital programming. In addition, the FCC instituted new measures regarding the handling and addressing of consumer concerns and complaints regarding closed captioning.

Distributed Transmission Systems. The FCC approved a Report and Order adopting rules authorizing distributed transmission system (DTS) technologies in the digital television service. DTS technology allows stations to employ multiple synchronized transmitters operating on the same channel to deliver a single television signal to consumers. APTS has emphasized the benefits of DTS, including better and more reliable service to the public. We will provide details when the text of the Order is released.



Musings of a Consultant

Does it Matter?

John Luff
Television Technology Consultant
john.luff@verizon.net

The recent election promises to clean out many of the pro-business vestiges of the last four years. It is way too early to speculate on who will populate the Commission, but not far fetched to assume that cross ownership rules, media ownership limits, net neutrality, the DTV rollout, and other topics will be at the top of the list for review by any new commissioners.

Is it too late to change the Analog Shutoff date? You might think yes, but several prominent Democrats in Congress have been grumbling that people will be disenfranchised for some time. The mood of Congress is hard to predict right now, but it should be clear that Democrats have a promise to voters to protect their interests. The question is, will reining in the media be deemed part of the promise....



Expo Keynote Speaker John Luff talked about the TV station of the future.

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



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Next Meeting

Date: Thursday, Nov. 20

Location: Axcera
103 Freedom Dr.
Lawrence, PA 15055-0525

Time: 12:30 PM

Program: Tour of Plant

Directions to November meeting

From downtown:

- From the Fort Pitt Bridge take I-279 S - go 6.3 mi
- Take exit #1A/ERIE/WASHINGTON onto I-79 S toward WASHINGTON - go 6.1 mi
- Take exit #54/BRIDGEVILLE - go 0.3 mi
- Take Right fork onto MILLERS RUN RD(PA-50 E) - go 0.3 mi

- Turn Right on WASHINGTON PIKE - go 2.1 mi
- Turn Left on BOYCE RD - go 1.4 mi
- Turn Right on MAYVIEW RD - go 0.8 mi
- Turn Left on COMMERCE BLVD - go 0.2 mi
- Turn Left on FREEDOM DR
- Arrive at 103 FREEDOM DR, LAWRENCE, on the Left

If lost, call Axcera at 724-873-8100