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September 2011 Volume 19 Number 4

9th Annual Ohio Broadcast Engineering Conference

Wednesday, September 28, 2011











Plan to attend the 9th Annual Ohio Broadcast Engineering Conference and SBE National Meeting on Wednesday, September 28, 2011, at the Greater Columbus Convention Center in Columbus, Ohio.

Presented by the Ohio Association of Broadcasters, the Ohio Chapters of the Society of Broadcast Engineers, and the Ohio Chapter of the Society of Motion Picture and Television Engineers, the Engineering Conference is specifically designed for engineers at radio and television stations. The conference features a full day of educational sessions, including:

An opening keynote by Jim Bridgewater, District Director, Federal Communications Commission Detroit office

A panel discussion on the upcoming EAS National Test

A breakout session on IP audio/STL/Remote

A breakout session on hubbing TV operations

And much more. Check www.oab.org/engineering for additional session details as confirmed.

In addition to educational sessions, there is also a dedicated Exhibitors' Showcase during lunch. More than 35 exhibitors are already confirmed to participate. To see the current list of exhibitors, please go to www.oab.org/engineering.

SBE National Meeting

The OAB is pleased to be hosting the SBE National Meeting in conjunction with this year's Engineering Conference, which includes the Annual Membership Meeting, the SBE National Awards Reception and Dinner, and the SBE Fellows Breakfast.

Registration

The registration fee for the Engineering Conference and SBE Awards dinner is \$45. This rate, available to members of OAB, SBE and SMPTE, includes all conference sessions, continental breakfast, lunch and parking. Separate registration for the Engineering Conference only is available for \$35; registration for the SBE Awards Dinner only is \$15.

To register, please go to www.oab.org/engineering. For questions, please contact Patti Geary at 866-OAB-5794.

Chairman's Corner



John Luff SBE Chapter 20 Chairman HD Consulting john.luff@HDConsulting.tv

"The summer is winding down. Time for us to get busy again. I will be sending out a survey request on our Yahoo Group so we can plan a series of meetings over the next year. Our last survey was 18 months ago, so it is time to get a current fix on topics of interest. If you have specific topics you would like to have covered please contact me directly, or through the Yahoo Group. I'll keep the survey open until late September so everyone will have time to respond. As a starting point I have taken the topics we had on the last survey, but did not yet cover, and used them as the starting point. They include some IT topics, compression and workflow, and various other interesting potential meetings.

As you should know by now, the National SBE meeting will be held in Columbus on September 28th, at the Columbus Convention Center. The program is published already at "http://www.oab.org/events/26-9th-annual-ohio-broadcast-engineering-conference". I will be participating in one of the panels, and attending the National SBE meeting as your representative. I hope to see many of you there!

Just a few words about the chapter administration. We need to hold elections this Fall for new officers starting in Q1/2012. Volunteers are hereby solicited...and if we don't see any responses we will be calling!"

Next Meeting

We have selected Fiber Optics for broadcast and IT as the topic for the next meeting. The date has not yet been selected, but we are aiming for sometime in October. Look for an announcement on the Yahoo Group.



Growing Access to News that Matters

By Bill Bennett Engineer, Producer, Videographer and Consultant bill@bennett-ross.com

I have a confession - I'm not a local TV news viewer. Like a growing demographic, I simply can't sit down and take the time to watch. Then I broke my leg and was housebound for about six weeks... that changed things for awhile.

It was fascinating really seeing and hearing what was going on all around Pittsburgh. I do wish the video shot in the field matched the beautiful HD studio imagery and GFX, but that's another story that's evolving over time.

Once I got ambulatory, I left the world of local TV news — only to visit when breaking news occurs, but that's really rare (and then again, appointment viewing is sooooo last century, I can't recall when I sat at my TV at a specific time to watch anything but a game).

So, outside of breaking everybody's legs, how do engineers and content teams keep or grow the audience? Yes there's more video on the Web sites, but it's not a part of every story, and already fewer people are spending much time at a desktop or laptop anyway.

One really needs to support and embrace the new media platforms - especially the mobile devices. Over time those will bleed into automotive infotainment, too (let's assume the video part will be obscured from the driver). But it takes time...

The other night while out to dinner, I saw a story covering fire fighters and heat-related hydration from a local broadcaster. Being a volunteer myself, I wanted to see (and hear) this piece, and next morning

found the story via their mobile site — but no link to the video. Just condensed copy of what was clearly a longer piece. That's not television, that's newspaper. As a viewer, I felt underwhelmed - I knew I was missing something. Perhaps some stories on-line never had a video component, but for the ones that do, let's see that video again!

It would be great to have a mobile app that accesses short news summaries — think speed dating for news. A stitched-together series of brief 10 second summaries that when touched, toss to the full-length story from the latest newscast (or save to an album or share). Or, consider working with the various MSOs to tag your news promos for interactive TV DVR recording. To be sure, creating that content is labor intensive — even if there's metadata associated with scripts and an asset management system. But it can be a rich experience for that coveted demographic.

And over time, that busy demographic with the expendable income can come to rely on you as a supplier of news video to learn more about Pittsburgh at any time, on any device, and suitable to their schedule... all without breaking a leg.

Get Certified in 2011

There are only two scheduled opportunities left to take an SBE Certification exam this year.

October 23, 2011 in New York City during the AES Convention

November 4-14, 2011 at your Local SBE Chapter

You must send in your application to the National Office by September 16, 2011 in order to be registered for the exams.

Please fill out the applicable certification application and mail, fax or email it to the SBE National Office, attn: Certification Director.

If you have any questions, please contact the Certification Director, Megan Clappe.

SBE Calendar:

National SBE Events

November 5 :Ennes Workshop, New York (Columbia University)
October 18 - SBE RF Safety Course, with Richard Strickland,
LIVE WEBINAR

August 2012 - SBE Leadership Development Course, location tbd

SMPTE:

- 8 13 September 2011: IBC, Amsterdam, the Netherlands
- 14 18 September 2011: SMPTE Technology Committee Block Meetings, Fraunhofer Institute, Erlangen (nr. Nürnberg), DE
- 24 27 October 2011: SMPTE Annual Technical Conference and Exhibition, Hollywood, CA, USA
- 05 09, December 2011: SMPTE Technology Committee Block Meetings, Disney, Burbank, CA
- 13/15 May (2012) Forum on Emerging Media Technologies: Geneva



Remote Goings On

George Hoover CTO NEP Broadcasting george.hoover@nepinc.com

Remote Truck vendors across the country are wrapping up getting ready for the football season. Additional equipment has been loaded onto the units, gear serviced and any repairs made. In most cases, once the units head out for NFL, they wont be seen back at the Field Shops until next year. In NEP's case, we hold football mini-camps for each of the major production and technical teams here in Pittsburgh or our west coast Field Shop in Van Nuys, CA. All the software across all systems is upgraded to current revisions, cameras are gone though from top to bottom, lenses are

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This "shadow rig" has a separate camera for 2D and a pair of additional cameras for 3D, two separate feeds rather than 5D where the 2D is made from the left side of the 3D.

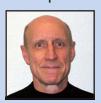
serviced, cleaned and lubricated. Pan heads are cleaned and lubricated. Cables checked, microphones tested, everything organized for football production, inventoried and packed. Some preproduction and graphics prep is also done while in the shop as well. At mini-camp this year we doubled the size of the audio router in one of the prime time trucks, installed a virtual monitor wall in Production Control of another and upgraded to a digital effects console as well. The NFL labor issues actually slowed down the relentless upgrade cycle just a bit.

This season viewers can expect new graphics looks and more high speed super motion cameras. 3D production continues at a steady pace, not as much as some pundits predicted, but still many high profile events. As I'm writing this NEP and CBS are setting up for the US Open Tennis Championships in New York with separate 2D and 3D facilities again this year. We completed two weeks at the Little League World Series in Williamsport, PA in 5D. Essentially 5D is one production facility with one set of resources doing both a simultaneous 2D and 3D production. The same technique has been used by ESPN for the Summer X Games and Boxing, it's one feed, the 2D version is just the left eye signal. Same shots, same audio, same announcers, same director.

Coming up in 3D, ESPN starts it's College Football season in 3D, with separate 2D and 3D facilities for those games, followed by college bowl games thenWinter X Games in 5D. CBS has US Open Tennis this fall, followed by the Masters next spring at Augusta. Direct TV continues to produce their series of small venue music concerts in 3D as well.

As the networks execs return from their summer vacations we'll learn whats next in remotes.

FCC Update



MAJOR CHANGES TO PART 101 RULES AFFECT BROADCASTERS

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Recently the FCC changed the rules of the game for microwave band users and asked for public comment on further changes. The FCC made some Broadcast Auxiliary Service (BAS) spectrum available for Fixed Service (FS) use, eliminated the bar to use of desirable Part 101 frequencies as the final broadcast link, provided greater operational flexibility for FS operations, and took steps to facilitate wireless backhaul in rural areas.

From the broadcaster's point of view, perhaps the most striking change is the elimination of their long-time Part 101 nemesis, the "final link" rule. Section 101.603(a)(7) has for many years barred use of the most desirable Part 101 frequencies as the final (RF) link to the transmitter in the chain of distribution of program material. This restriction has been particularly frustrating for broadcasters in metro areas where BAS frequencies are exhausted or increasingly difficult to coordinate. But the previously off-limits Part 101 frequencies are often highly desirable even when BAS frequencies are available. The bandwidth allowed in Part 74 is very limited. Those channels do not provide capacity for all of the broadcast signals (including HD for many stations) and related control, backhaul, and data transmissions.

Alternatives to BAS or Part 101 operations are often not satisfactory for broadcast use. Operation on unlicensed frequencies has almost invariably led to reception of interference that undermines reliability. Landline links often present reliability problems and are almost always priced prohibitively. The result of the final link prohibition has been that broadcasters with extensive Part 101 data systems have not been able to use them for the final link even though such use would not add any congestion to the band. The FCC has granted waivers of the final link rule to broadcasters that made exhaustive showings of need. Those showings have convinced the FCC staff that the restriction is outmoded. The net result of the rule changes is that broadcasters have lost exclusive use of a shrunken and increasingly saturated BAS band that is not configured to suit modern needs and gained the right to accommodate all of their needs in Part 101. However there has been a run on Part 101 frequencies over the past year, and those of you who want to move into

that spectrum will need to evaluate whether frequencies can be coordinated in your area and, if so, move quickly to stake out channels.

Broadcasters have long been permitted to operate certain BAS facilities on a short-term basis without prior authorization for up to 720 hours a year on a secondary basis. In order to preserve that flexibility, the FCC excluded Part 101 FS stations from two 25-megahertz channels each in the 7 GHz band (6975-7025 MHZ) and the 13 GHz band (13150-13200 MHZ). That gives broadcasters an opportunity to use TV pickup stations to cover events that occur outside the licensed areas of their BAS operations. The extensive rule revisions also touch on bandwidth, minimum capacity, loading requirements, and use of adaptive modulation in Part 101.

In a Further Notice of Proposed Rulemaking, the FCC seeks comments on questions including whether it should allow some use of smaller antennas in the 6, 18, and 23 GHz bands, relax efficiency standards, authorize wider channels in some bands for higher capacity links, and update the definition of payload capacity to account for Internet protocol radio systems. The new rules will become effective 30 days after publication in the Federal Register, except for the rule requiring licensees of TV pickup stations in the 6875-7125 MHZ and 12700-13200 MHZ bands to register their stationary receive sites in the FCC's ULS database, which requires OMB approval.

Comments on the new proposals are due by October 4 and reply comments by October 25, 2011. The full text of the action and proposals is available at http://tinyurl.com/3elkna2

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