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USER REPORT

WPR Monitors Network With Goldeneagle HD

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MADISON, Wis. HD Radio technology provides Wisconsin Public Radio additional opportunities to reach listeners with multiple program services, and in areas of the state where a second frequency cannot be obtained, adding a program service through an HD2 channel is an attractive alternative.

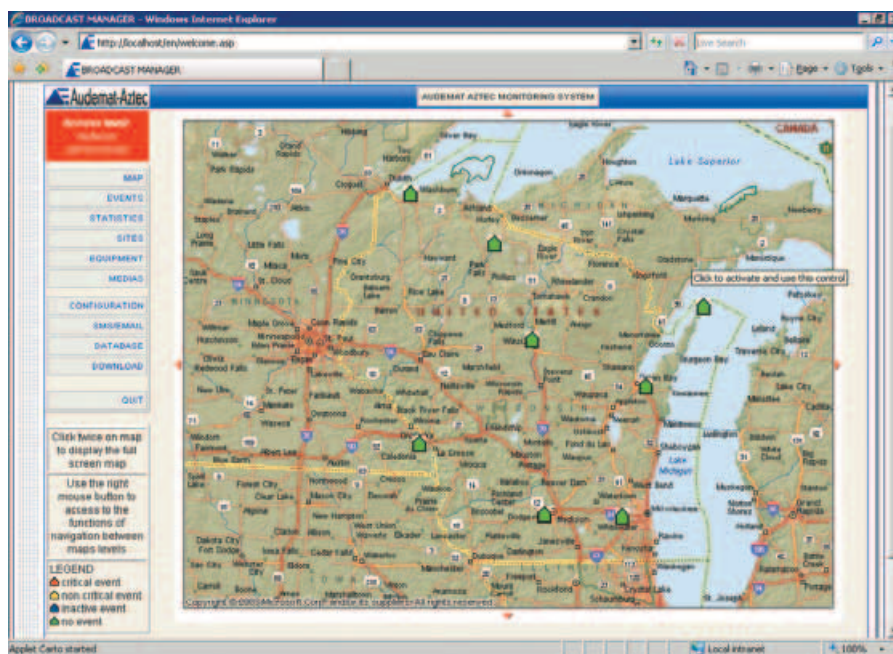
WPR currently offers Ideas Network and NPR News and Classical Network statewide, as well as a third all-classical music format in areas of HD service where this specialty format is requested.

Monitoring a state network of 23 FM and two AM stations is challenging enough, and the most recent phase of our HD Radio build-outs added seven HD Radio installations, four of which now carry an HD2 channel. Add to that six more HD Radio upgrades by early 2008, and one can appreciate the difficulty of the monitoring situation presented to the staff at the Wisconsin Educational Communications Board's new Operations Center in Madison.

Many of these services cannot be heard from Madison, and we often had to rely on listeners to inform us of outages, which could not be monitored at our Operations Center. On a particular weekend when HD2 had shut down in the Milwaukee market, only the repeated calls from classical music listeners made us aware of the outage.

Obviously there had to be a more professional way to monitor these signals.

Coincidentally, the Educational Com-



Kingslien likes Goldeneagle HD's Broadcast Manager, which lets WPR remotely monitor all of its Goldeneagle units from Madison.

munications Board was in the process of upgrading our FM monitoring across the network when we happened across the Audemat-Aztec Goldeneagle HD at NAB2007.

A convincing hands-on demonstration of this device led us to purchase and take delivery of eight Goldeneagle HDs, supplied by Broadcasters General Store. But in our mind the killer app for these units is Audemat's Broadcast Manager package, consisting of a PC server and software that enables us to remotely monitor all of the Goldeneagle units from Madison.

Good visuals

We already had the connectivity available, as our programming is delivered by

common carrier DS3 and T1 circuits, which also gives us limited bandwidth to provide Internet and e-mail to out-of-state staff and several private Ethernet links for control and monitoring of our remote sites.

We now have the ability to display a Wisconsin map at our operations center showing the status of our radio station's Goldeneagles. A green icon indicates that all transmitters and programs are functioning normally, while any loss of an analog signal, HD1 or HD2 shows up on the map as a red blinking alarm.

In addition to this visual display, we installed a relay output card in the Goldeneagles to give us contact closures to our remote monitoring system. This will audibly and visually alert our

operators of problems and tell us which service is impaired.

These alarms can be programmed easily through the Goldeneagle HD software and also can alert field technicians by e-mail, pager or SMS messages. A unique and intuitive graphic scripting program makes complex signaling configurations easy to accomplish.

Look and listen

As a stand-alone product, the Goldeneagle HD is a complete FM monitor capable of monitoring all analog, HD Radio and RDS parameters.

Alarm limits can be placed on these parameters, and by installing a relay card these alarms show up locally and also are reported to any remote control system.

With the centralized network management package everything can be seen at one staffed location.

The Goldeneagles also monitor all parameters in real time, such as total modulation, L+R, L-R, left channel, right channel, pilot, RDS and SCA subcarriers, and can maintain a database of these parameters over time for analysis of problems and overall quality monitoring. They also can record audio streams for playback later and send streaming audio to connected PCs.

The market scan function lets users listen to and look at other stations in your market, while the spectrum analyzer option makes it easy to check for mask compliance and also allows for time alignment of your analog and HD1

streams. The Goldeneagle HD is a one-box solution for monitoring compliance on analog and HD radio stations.

Part of our purchasing package included training on the Goldeneagle HD and on the network management system.

Tony Peterle of Audemat-Aztec's Miami office enjoyed the beautiful Wisconsin fall weather while acclimating our technicians to the systems many features. We learned how to monitor HD Radio quality, HD Radio digital acquisition and digital SNR using the Goldeneagle HD, and how to bring all this data to our central monitoring location using the network management package.

For more information, including pricing, contact Audemat-Aztec at (305) 249-3110 or visit www.audemat-aztec.com. 