

# Radio World

The Newspaper for Radio Managers and Engineers

REPRINTED FROM NOVEMBER 5, 2008

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TOP STUDIO BUILDOUTS

## INSIDE Journal Broadcast Group

*Scott Pfeifer, Kent Aschenbrenner and Team Install New Studios in Milwaukee*

by Tom Vernon

Building a new facility is a daunting experience. But it is doubly so when your new facility occupies the same space as your old facility.

This was the challenge facing Journal Broadcast Group's Milwaukee operation. The site is home to WTMJ(AM), WKTJ(FM) and the Journal Radio Networks, which covers the Green Bay Packers, Milwaukee Brewers, Milwaukee Bucks and Wisconsin Badgers.

There were a number of reasons for the renovation, as broadcast engineer Scott Pfeifer explains:

"The existing infrastructure built around PR&E analog consoles was challenged by the increasing demands of complex mix-minuses and IFBs that our talk and sports-intensive formats require. The Pacifics had served us well, but they were also starting to wear out, and needed more maintenance." He adds the spaces looked old and were in need of a cosmetic makeover.

Pfeifer, along with DOE for Milwaukee Radio & TV Operations Kent Aschenbrenner, began to map out system requirements. They talked to three vendors and developed a comparison spreadsheet describing how each might best meet the requirements of Journal Broadcast's Milwaukee operations. Axia was chosen to provide the console/router infrastructure.

At the same time, design of the physical space was underway. The renovations involved four AM and four FM studios,

as well as a radio news production area.

Pfeifer had an innovative solution. "I designed a full-size mock-up of the studios. Tape outlines of the studio space were laid out on the cafeteria floor, representative furniture was placed in it and propagated with fully functional Axia Element consoles and all necessary flat-panel monitors. The talent looked it over, and worked through placement, sightlines and dimensions." Studio furniture



Axia Element Control Surface with M-Audio speakers



WTMJ(AM) studios following renovations.

was custom built by Ron Mitchell of RAM Systems.

Pfeifer did most of the construction work himself, while maintaining the existing facilities. During overnights as the studios were switched over one by one, he had assistance from Aschenbrenner, Glenn Bowman and Ryan Elliott.

Several design challenges had to be overcome. "One of the requirements was that no computers or fan-cooled devices were allowed in the studios. This meant all PCs required remote control through KVMs, which resulted in some interesting splits, extensions and switching." A compromise was made where a few computers were left close to studio spaces to allow for more convenient CD ripping.

The Axia installation consists of an Element control surface in each studio, along with GPIO, mic, analog and digital nodes. All audio sources and destinations were inventoried, and 13 nodes were installed in the TOC, allowing for more than 100 audio sources. At the core are three Cisco Ethernet switches.

The Axia installation was integrated with an existing Dalet automation system, which handles the stations' on-air audio recording, play-out and storage requirements.

Some of Journal Broadcast's GPIO and



Journal Broadcast engineering rack following installation of Axia nodes.

IFB switching requirements were outside the standard Axia protocol. Axia sent technician Milos Nemcik to Milwaukee to do custom programming with Axia's Pathfinder software to meet the requirements.

An added bonus to the Axia installation that Pfeifer liked was the DSP built into the consoles. "It's a simple system that works very well, so no external mic pro-

cessors are required."

From discussions until site completion took Journal Broadcast three years.

The installation was a lot of work for Pfeifer, but there were no insurmountable surprises. Now that it's all over, he's glad to get back to the routine of equipment maintenance and engineering all of the Green Bay Packers radio broadcasts. 🌐