

WIRING THE CHAMBER

BY JIM STOKES

**The Latest A/V
Technology
Keeps the
Wheels of
Government
Turning.**

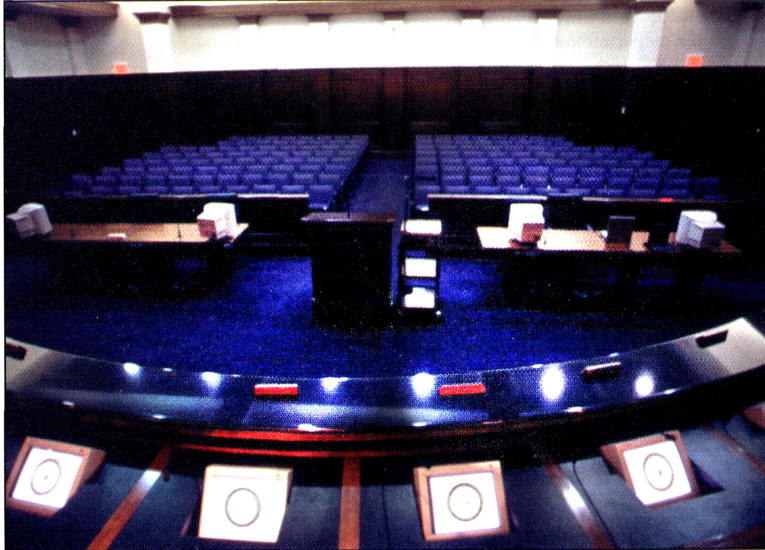


Figure 1 - Chairman's-eye-view of the Council chamber.

Thanks to a systems integrator solving an acoustical challenge, government can accomplish its tasks. Long Communications of Winston-Salem, North Carolina, designed and installed the A/V system in the commissioners' room in the Nash County Administration Building in Nashville, North Carolina. The systems installer worked through the architects, Oakley & Associates, Rocky Mount, North Carolina, on this from-the-ground-up project. Long Communications is a dealer for all the equipment in the install. In general, equipment was selected for its professional quality, advanced design, ease of operation and proven reliability.

According to Holt Stevens, project manager at Long Communications, the goal of the system was "to have clean audio. And they wanted to move ahead and incorporate some high-tech video in the system." Those two goals were met.

The aesthetic design of the room presented an acoustical challenge that was overcome in the A/V company's design and install. "The room was newly built. But we looked at the plan where the microphones were going to be placed and all the speaker locations. Then we realized there was going to be feedback."

The semi-circular space where the 13 county commissioners sit has a rather low ceiling of approximately eight feet. "The ceiling is definitely close to the microphones," says Stevens. "And there's a back wall that curves, giving you a 'nice' echo!"

Looking at the rest of room layout, in front of the council's (commissioners') space is a center lectern with a staff table on each side. The entire room measures 90 feet wide by 60 feet deep. In addition to the aforementioned space, there's a gallery with theater seating for attendees and spectators. The ceiling rises to 20 feet in that space.

Advanced Technology

"I like the Sabine and the Lectrosonics particularly well," says Stevens. "They both made the audio a lot easier on this job. The video is really straightforward; the audio had to be set up. What goes on internally with both the Sabine and Lectrosonics is pretty miraculous! If we used all the gear it would have taken years ago, we would have had to add another rack to do all those things we're doing here."

Further reflecting on past experience with sound systems, Stevens notes, "We've done some mix-minus systems in the past for banks for their boardroom tables. We used to do it with distribution amplifiers, by inverting the phase and doing distribution routing with the microphones."

"With the newer mixers, you can do it all by computer control and it saves a lot in labor - being able to wire it up and test it out, test the phase, and everything."

Audio Routing

Twenty four JBL Control 26 ceiling-mounted loudspeakers are distributed throughout the entire room in twelve zones. "We like those JBLs because they have a nice wide dispersion pattern. Since we had a low ceiling in the council area, the pattern needed to be wide. The JBLs have really good sound, and they're really easy to install."

The JBL speakers are driven by two Crown CP-660 six-channel power amplifiers into 8 ohms impedance. "Those Crowns are nice when you're doing multiple zones. I'm using two CP-660s for the 12 different audio zones."

At the front end of the Crown amplifiers are five Sabine GRQ-3102S digital EQ/delay processors. "It's kind of like a magic box," says Stevens. "It does a lot of things. I'm using the equalizer, the delay for the gallery speakers, and the [feedback] canceller."