

SOUND & COMMUNICATIONS

THE SYSTEMS MAGAZINE FOR CONTRACTORS AND CONSULTANTS

The Pope takes on New York

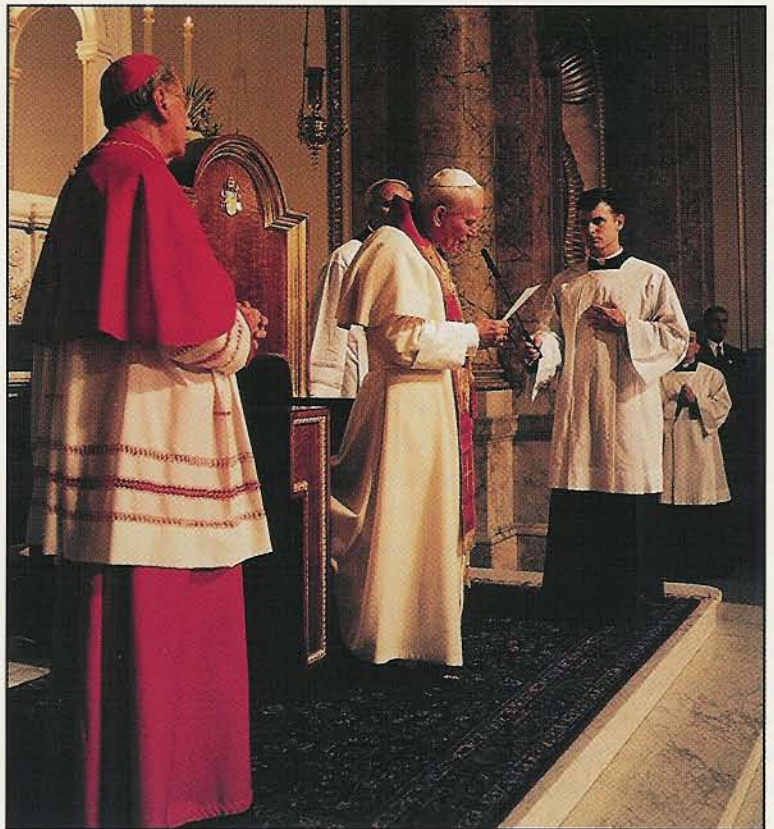
"The Longest Hour" for the Monte Bros.

BY DALE SCOTT

Pope John Paul II's historic visit to the St. Joseph's Seminary last August was described by Stephen Minozzi as "The Longest Hour." He and fellow director Robert Pelepako of Monte Bros. Sound Systems, Inc., surrounded by secret service agents, Vatican staff and the Swiss Guard, were among only a handful of people allowed near His Holiness during the event. So near that their station was directly in his emergency escape route, which caused them anxiety surpassed only by that of the security force, which Minozzi says was the tightest he's ever seen.

The momentous event had to go off flawlessly. An audience worldwide would be hanging on the Pontiff's every word, so audio clarity and reliability were paramount.

Dale Scott, a graduate engineer, was national sales manager for a wireless microphone manufacturer. He has written and edited articles for video, audio, broadcast and recording publications.



The Pope begins the service

THE VENUE

Nestled in the Dunwoodie section of Yonkers, New York, ten miles north of Manhattan, the seminary is known

and revered far above most seminaries, as it is the spiritual heart of the Archdiocese of New York. It will celebrate its centenary in 1996, and the



One of the speaker placements

Pope's decision to appear for Evening Prayer Vespers in its Chapel of Saints Peter and Paul was an incomparable occurrence.

Monte Bros. Sound Systems, Inc., of Dobbs Ferry, New York, is dedicated virtually exclusively to house-of-worship audio design and installation, with hundreds of successful jobs to its credit. A year ago, they were selected to completely overhaul the chapel's sound system, which was only nine years old. Because Roman Catholic clergy, seminarians and dignitaries — sometimes from around the globe — use it liturgically three times daily, seven days weekly, John Cardinal O'Connor, the Cardinal of New York, determined the sound should be uncompromising.

Three wireless microphone systems find regular usage in the chapel. Cardinal O'Connor uses one, with an Audio-Technica AT-830 lavalier mated to a Lectrosonics M-187 VHF high-band pocket transmitter, which sends to two Lectrosonics R-185 receivers. One receiver provides sound to the chapel's sound system, the other is

located in the prayer hall across the courtyard, and feeds its sound system. Thus, Cardinal O'Connor can speak from either location to congregations in both locations.

The second wireless system is a compound arrangement, consisting of two Lectrosonics 187 series transmit-

ters. One is an M-model cigarette-package sized pocket transmitter, which mates with an Audio-Technica AT-830 lavalier mic. The other is an H-model, about 1-1/2" square by about 3" long, which plugs directly onto its Audio-Technica AT-915QMR/MLx via an XLR connector. This wireless system, like the Cardinal's, feeds the sound systems in both the chapel and the prayer hall. A priest uses it in celebrating the mass, and he can either move about with the lavalier/M-187, or he can stand at the presider's chair in the sanctuary and use the H-187 in a mic stand. The H-187/AT-915QMR/MLx combination is a compact, inconspicuous package, which is desirable. Note that the priest makes the decision which mic/transmitter he will use before the service begins; he does not switch back and forth between transmitters during the mass.

A third wireless system consists of another H-187/AT-915QMR/MLx package an assisting deacon uses from his chair alongside the presider's chair. A tee-bar on a mic stand positions the deacon's mic/transmitter in front of his chair, alongside that of the celebrating priest, when he speaks

Equipment List

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|---|--|
| 1 Biamp Advantage one mixer | 1 Symetrix A420 amplifier |
| 1 Biamp Advantage EQ module | 1 Aphex DA-120 distribution amplifier |
| 1 Biamp Advantage AM module | 1 Audio-Technica AT-851AW microphone |
| 1 Biamp Advantage AG-II gate | 4 Audio-Technica AT-915QMR/MLx |
| 1 Biamp Advantage DRC 4+4 remote control module | 1 Audio-Technica AT-859b microphone |
| 1 Biamp Advantage RC II remote control module | 2 Audio-Technica AT-830 lavalier microphones |
| 1 Biamp D-60EQ amplifier | 8 Delta DT-2 low "Q" speakers |
| 1 White 4710BL one-sixth octave digital equalizer | 6 Delta DT-2 low "Q" speakers |
| 1 Crown CT-200 amplifier | |

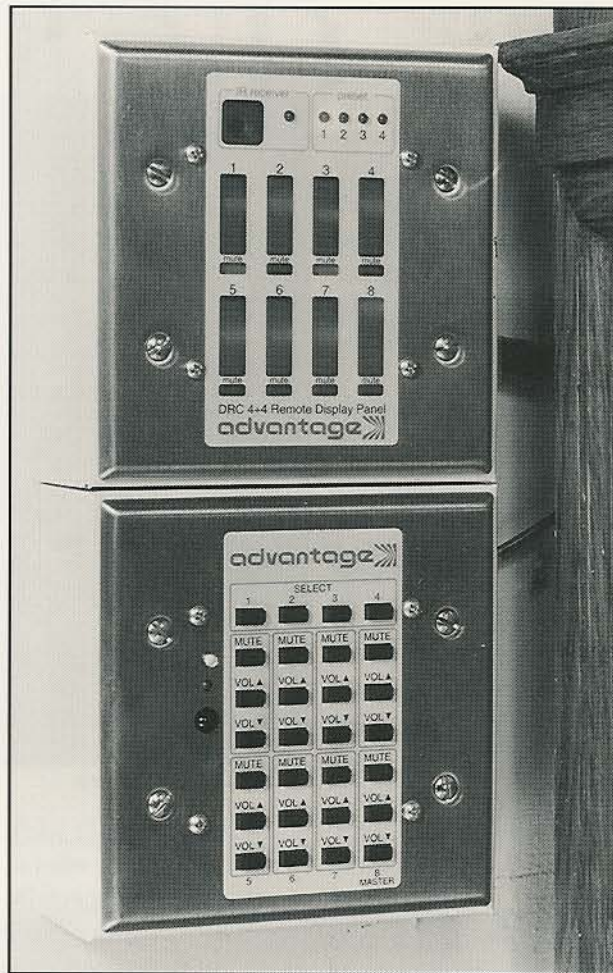
from the presider's chair.

These provide the classic wireless benefits: a lack of clutter on the floor of the sanctuary, mobility for the celebrants, and the flexibility to move microphones about the sanctuary to fit different worship needs. Normally, hard-wired microphones pick up sound at the main altar, a pulpit at the front of the sanctuary, and the choir.

A Biamp Advantage control panel allows the presetting of four different mic scenarios: all mics off; all on; Cardinal O'Connor's on, all others off; and Cardinal O'Connor's off, all others on. Mics can also be selectively turned on or off, and volume levels can be adjusted. Father Anthony Sorgie, director of music and academic dean at St. Joseph's, can also perform any of the above functions with a wireless remote. He can turn off any mic, e.g., when a priest forgets to switch off a mic; bring one up in the reverse case; or adjust the gain on any mic.

The distributed sound system relies on Delta DT-1 and DT-2 speakers for an intimately low-level, but clearly audible, sound. The congregation at the Chapel of Saints Peter and Paul is unlike most, consisting of priests, seminarians, even bishops and cardinals, who sometimes sit in the congregation as well as preside. DT-1 monitors, powered by a Biamp D-60EQ amplifier, hang on the walls above these clergy, who preside or celebrate from the sanctuary at the front of the chapel. Each monitor was mixed individually to assure intelligibility, which allowed them to hear every word by the Pope, who is noted for his soft, intimate delivery.

Sideways-facing priests' and seminarians' choir stalls run the length of the nave from front to rear, and face each other across the center aisle. To accommodate them in this spacious area, Monte Bros. located the larger downward-directed DT-2 speakers at intervals above and behind them on the side walls.



The Biamp control panels

Special treatment was necessary in a gallery up in the choir loft. An organ enclosure, added in 1946, created a dead spot and killed the audibility there. New speakers have solved that problem.

THE PAPAL VISIT

With the news the Pope was coming, the heat was turned up to finish the project, and Monte Bros. did. Meetings commenced months before October 6th, the day of his arrival, and integrated the efforts of Vatican and Archdiocese clergy, security people, media planners, civic authorities, and technical people such as Monte Bros. personnel. Minozzi considered the planning, organization and execution to be impeccable. Because of the extremely tight security, Minozzi and Pelepako would have to handle the TV feed and UHF audio links to the crowds outside. UHF was necessary because security and

logistical realities ruled against cables on the lawn.

The one-hour Vespers became a two day event because of security. Monte Bros. had to have everything set up the first day and the second day they had to show up at 9am for the 5pm service.

Because the permanent in-house system is advanced state-of-the-art and not yet one year old, it usually suffices for all chapel functions, including those requiring media feeds. For this day, however, Monte Bros. opted for zero failure tolerance. They replaced the chapel's permanently-installed Biamp components (first six items in equipment list below) with a Biamp RacMax 16-channel board. The mixer supplied split feeds to the house audio and TV crews; this gave TV people their choice of using their own mix or the main audio mix. The RacMax offered the advantage of having open front and rear faces. Thus,

any glitch could be rectified instantly by patching around the failed component to an identical backup RacMax mixer. Every other piece of equipment was also backed up for this critical worldwide live feed. Four additional wireless mics were used, and two spares were hidden at vantage points in the sanctuary.

Virtually every cardinal and bishop from across the United States was there. A crowd of 30,000 faithful assembled on the seminary lawn, another 5,000 at the entrance, and a blessed few were admitted to the hallways, where Monte Bros. had installed speakers and video monitors. Some sat in chairs in the center aisle between the choir stalls filled with clergy.

His Holiness flew from New York City to Yonkers by helicopter, landing on the Seminary's Great Lawn. He then made the journey from there to the chapel in the celebrated "Popemobile," a custom vehicle with a protective clear plastic enclosure.

Disembarking, Pope John Paul II greeted the followers at the chapel's



St. Joseph's Seminary

front entrance, where he blessed doors that were specially-built to commemorate the occasion. He then walked up the center aisle into the sanctuary, where Cardinal O'Connor officially greeted him, using the AT915QMR/MLx with H-187 mount-

ed on a floor stand. The Pope then turned and, with Cardinal O'Connor at his side and a priest holding an AT915QMR/MLx on an H-187 transmitter, greeted the crowd

He then sat in the presider's chair and listened as a deacon prayed and read scripture at the pulpit, via its hardwired mic. Then the Pope commenced his homily, using a special hardwired microphone. Vatican and seminary officials, as well as Monte Bros., wanted a discreet mic that would be sensitive to his gentle voice, have flexibility of positioning, and not be "in his face." Monte Bros. mounted an Audio-Technica AT-935QMR/MLx on a black, flexible 18" goose-neck, which allowed his secretary to noiselessly adjust its position to accommodate the Pontiff. No wires were visible, being routed down the goose-neck tube and exiting out the base of the mic stand. The hour passed, the Vespers closed, and His Holiness departed. Monte Bros. packed up, warmed by the satisfaction of knowing their mission had gone perfectly, and they had served. ■



The lectern