



## 'I've heard like I've never heard before ...'

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**By Kevin Cullen**

The Catholic Moment

LAFAYETTE — Karen Hatke has worn hearing aids for more than 50 years. Face-to-face conversations are no problem, but competing background noise and reverberations can make hearing nearly impossible.

Thanks to recently installed “hearing loop” technology, she can now clearly hear everything spoken or sung into the sound system at her parish, the Cathedral of St. Mary of the Immaculate Conception.

“Even when there is competing noise, such as a crying baby, I hear only the priest, reader or singer,” she says. “It is a truly amazing breakthrough for me ... (church) has always been an environment that hearing aids have failed me.”

The cathedral and St. Lawrence Church are the first two Lafayette churches to be “looped” by Assistive Hearing Systems of Palatine, Ill. Steve Thunder, a Purdue University-educated acoustical engineer and division manager for the company, recently spearheaded the installation.

He used crawl spaces and moldings to hide the wires. “The goal is to be heard and not seen,” Thunder said.

“(The wire loop) is similar to an antenna. You have to be inside the loop.”

Churches often pose problems for those with diminished hearing because of the buildings’ high ceilings; marble, plaster, tile and glass surfaces; a lack of sound-dampening carpeting and drapes; plus echoes, reverberation and competing sounds ... such as crying babies.

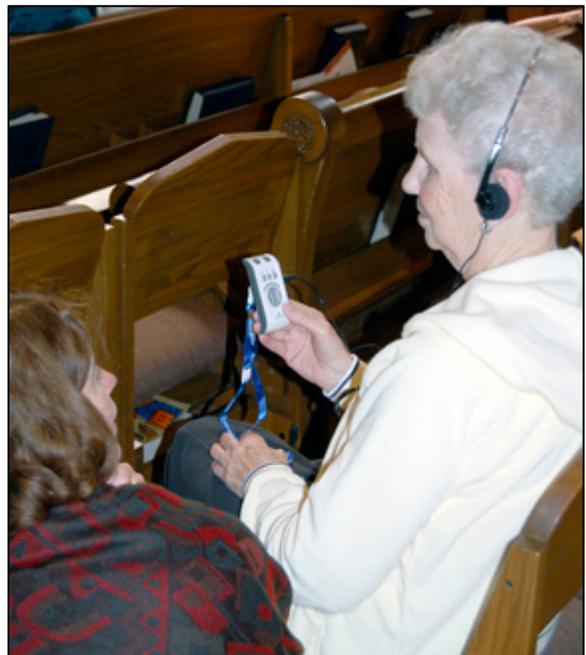
“There is a large volume of hard surfaces, which smears together speech,” Thunder said. Even people wearing hearing aids have difficulty deciphering words in the mishmash of muddy, reverberating sound.

“You can’t just make the sound louder. Loudness doesn’t restore clarity,” he said.

But using loop technology, “you have clean, direct sound.”

According to Dr. Mary Caccavo, an audiologist at Lafayette Hearing Center, the technology has been available in Europe for more than 10 years. More recently, hundreds of churches in the United States have adopted it. It also is used in theaters, tour buses, taxi cabs, airports, subway information booths, ticket booths, and some private homes. London’s Westminster Abbey uses the technology.

In 2010, the Hearing Loss Association of America and the American Academy of Audiology announced a



*Nina Taylor, a parishioner at the Cathedral of St. Mary of the Immaculate Conception in Lafayette, listens using the church's new "hearing loop" technology. (Photo by Kevin Cullen)*

## *'Hearing loop' technology a clear success at two churches*

joint public-awareness campaign called "Get in the Hearing Loop." The goal was to introduce the technology to America.

The need is great. According to the National Institute on Deafness and Other Communication Disorders, approximately 17 percent of all American adults — 36 million adults — report some degree of hearing loss. Nearly 8.5 million wear hearing aids.

Father Dan Gartland, pastor of St. Lawrence, saw a demonstration of a "hearing loop" system earlier this year, and was impressed. He proposed installation of the system at the cathedral and St. Lawrence, and donors quickly responded to a plea for the necessary \$11,000.

A "hearing loop" consists of a thin, concealed wire installed around the perimeter of a room, with a hearing loop driver placed in the vicinity.

A feed from the church public-address system transmits a magnetic signal through the loop. The technology allows a hearing aid to double as a wireless, customized loudspeaker. A loop provides service to any number of listeners, and it requires no receivers.

To take advantage of the system, a parishioner with a telecoil "t-coil" setting on his hearing aid turns it on, just as he would to take a telephone call.

That portable receiver acts as an antenna to pick up the magnetic field signal, which is then amplified into a clear signal. That signal is delivered directly to the ear of the person wearing the hearing aid.

Approximately 60 percent of all new hearing aids have t-coil settings.

People who don't wear hearing aids at all, or who have hearing aids without t-coils, can use one of the portable headsets and receivers available at either

church. Such outfits also are available for private purchase for \$140 to \$240.

Cathedral parishioner Nina Taylor attended a demonstration this fall at the cathedral, and went away impressed. She doesn't use a hearing aid, so she used a headset to listen as Father Brendan Mbagwu, the associate pastor, sat before the altar and read into the microphone.

"I'm hearing it well," Taylor said. "I could understand what he was saying. I might try it. I don't think it will bother me if it helps me understand."

It's more difficult for her to hear in a nearly-empty church than in a full one, she said.

"Usually, the church is pretty full at Mass so it (the poor acoustics) doesn't bother me," Taylor said.

Before the loop installation, Father Gartland said, both churches offered headsets and receivers to improve hearing for individual parishioners, but they sometimes failed when batteries grew weak.

"The new system operates on one loop, and it only amplifies what is spoken over the microphone (in the sanctuary)," he said. "People want to hear, and this amplifies straight into the ear. Purdue University is looking at installing the same equipment."

It cost approximately \$6,000 to install the system in the cathedral and \$4,800 at St. Lawrence, he said.

"Numerous people say, 'I've heard like I've never heard before,'" Father Gartland said. "This is exciting technology. It's nice for the cathedral and St. Lawrence to be the first (in Lafayette) to have it."

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