Hearing Loop Technology Is Taking Off at Airports Around the World

BY STEPHEN O. FRAZIER

I got to the gate early, booted my Kindle Reader and settled in with the latest James Patterson mystery. As I read, people were coming and going and garbled announcements were being made. I couldn't understand what they said, but the sign read "Omaha" and had the right flight number. I was in the right place–or so I thought.

was intent on finding out "whodunnit," but when I next looked at it, the sign over the attendant said I was at the gate for Phoenix. Whoa, what happened? I scurried up to the attendant and asked about the Omaha flight and was told the gate had been changed. I rushed to the new gate, getting there just as they were completing boarding. I'd almost missed my flight because I couldn't understand the gate change announcement.

This is just one example of the many problems those of us with hearing loss encounter when traveling. But times are changing, and anyone going to the HLAA2019 Convention in Rochester, New York this June will get a taste of what could be the future of air travel for people with hearing loss upon their arrival. Winner of two important awards for special accommodations for those with disabilities, the Greater Rochester International Airport is becoming the poster child for hearing accessibility in airports with the installation of hearing loops and other assistive technology throughout the terminal.

But what's a hearing loop? In its simplest form, a hearing loop is a wire circling a room, venue, or other assembly area that's connected to an electronic sound source, such as a public address system. The hearing loop broadcasts the sound from the source as a silent electromagnetic signal to the telecoils in hearing aids and cochlear implants (CIs) of anyone inside the loop.

Telecoils, or t-coils, are tiny coils of wire in most hearing aids and all new CIs that receive the signal from the hearing loop as sound. Hearing loops are being installed at more and more places in the U.S., from New York City taxicabs to the Supreme Court Building, and now they're finding their way into airports.

Welcome to Rochester

Besting the proposals of 17 other airports, the Rochester Airport was awarded up to \$40 million from the state of New York to offer travelers state-of-the-art communication access in their terminal. As of this

writing, work that started in fall 2018 is ongoing but should be complete before the Convention in June.

When installation is complete, hearing loop access will begin at check-in, where ticket agents will use counter loops to communicate with passengers, and end when the traveler boards a plane. More than four dozen counter loops will be available for travelers to access after going through security. They'll find the concourses looped and departure gates will feature phased array loops to contain sound to each individual gate area. Attendants at those gates will also have a counter loop to

communicate privately with individual travelers, and counter loops will also be a feature at car rental desks or at most any other point of service in the terminal.

More than 19,000 feet of wire were used to loop all 23 gates and other areas in the terminal, but if a traveler doesn't have telecoils, tablet computers that feature an Interpretype software program will be on hand at those same points of service to converse via voice-to-text or even sign language to voice. Monroe County Executive Cheryl Dinolfo told the local TV station, "Our goal is to create a safer and improved passenger experience with state-of-the-art facilities and amenities."

In addition to the tablet computers there will be color-coded visual communication using large TV monitors strategically placed throughout the terminal and at all the airport's departure gates. Those monitors will visually relay announcements, boarding information and even pages for people in the terminal. Along with text, a flashing green color on the monitor will indicate boarding information and blue will be for paging or



other messages. The airport will also feature telecoilcompatible public phones and public access video phones.

Nearly 2.5 million travelers pass through the Rochester Airport every year and it's estimated that 500,000 of them could have a measurable hearing loss. Because Rochester is home to the National Technical Institute for the Deaf (NTID), the percentage of travelers who are deaf or who have hearing loss will be considerably higher than in other airports. But none of those people will have to wonder what public address announcements are made thanks to the many new means of communication access now available. Some might even turn off the mics in their hearing aids to

> rid themselves of the cacophony of sound in the terminal and simply rely on their telecoils and eyes to get the information they need.

And the List Goes On

Rochester is just one in a growing number of airports to follow the example set when the Gerald Ford International Airport in Grand Rapids, Michigan became the first in the U.S. to install hearing loop technology nearly a decade ago, placing it at all departure gates and the Grand Concourse. Tara Hernandez, airport marketing director, reports, "The response to

the loops by travelers who are hard of hearing has been tremendous because it takes the stress out of travel." Soon after Grand Rapids, the Kalamazoo/Battle Creek, Michigan airport installed a hearing loop, followed by the airport in Muskegon, Michigan.

As the decade progressed, loops found their way into airports in South Bend, Indiana. Some Delta Airlines gates in the Detroit Airport followed and the international arrivals area and an "Art at the Airport" rest and waiting area were looped at the Minneapolis/ Saint Paul International Airport. The airports in Fort Wayne, Indiana and Santa Barbara, California also got in the loop around this time with various applications of the technology in their facilities.

Sky Harbor International Airport in Phoenix has also gotten in the loop. As part of the Terminal 3 modernization project at this major hub airport, Craig Fuller, senior technology systems project manager, reports they have installed inductive hearing loops at 15 gates on the South Concourse, and an additional

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10 gates on the North Concourse are scheduled to be looped in 2020. In Austin, Texas 12 gates will have been looped when this article is published, while in Memphis, Tennessee a major modernization program is underway that includes induction loop systems in the concourse and gate/hold room areas.

The Hartsfield-Jackson International Airport in Atlanta was recently honored by the Federal Aviation Administration (FAA) with a Civil Rights Advocate and Partner Award for the airport's efforts to enhance accessibility for passengers and guests with disabilities. The airport installed hearing loops at information desks and texting telephones for voiceless communication for deaf or hard of hearing travelers to, as Balram Bheodari, interim airport general manager said, "Ensure a bestin-class experience is accessible to all of our guests." Meanwhile, advocates in other cities, including Seattle, Albuquerque and Salt Lake City are active in efforts to get city leaders to join the movement to install hearing loops at their respective airports.

Across the Pond...And Beyond

America is playing catch-up with airports in Western Europe, Australia and elsewhere around the globe.

The international symbol of access for hearing loss assistance features a "T" if that assistance includes hearing loop technology. In the U.S. it is usually a blue background but abroad it may be maroon,



green, black or some other color, and the symbol is typically white or black. But the color doesn't matter. All you need to remember is that if you see the "T" it's telling you to turn on your telecoils.

Hearing loops have been a staple at major airports in the United Kingdom for years. At London's Gatwick Airport hearing loops are available wherever there are signs showing what they call the "sympathetic ear" symbol, from check-in counters to gates. A new waiting area specifically designed for people with disabilities was opened in June 2018 which also features a hearing loop.

Like Gatwick, there are induction loops available at various points throughout Heathrow Airport in London. In Manchester, England check-in counters are looped and phased array systems have been installed in key areas of the building. Edinburgh's airport in Scotland offers counter loops to provide equal access to information to those with hearing loss.



Concourse at Gerald Ford Airport in Grand Rapids, Michigan. (Photo courtesy of hearing loop advocate.)

You may not understand what's being said over the loop in some airports due to language differences, but you may hear numbers, a city name or some other information that alerts you to something that you might not have heard clearly otherwise.

Across the channel, at the Charles DeGaulle Airport in Paris, travelers will find waiting areas within each of the airport's terminals equipped with induction loops, as is the customer assistance terminal. Loops are featured in all major airports in Sweden, while in Denmark the waiting area in the transit hall has a loop at the Copenhagen Airport.

Fly south to Spain and you'll find that the Adolfo Suarez Madrid-Barajas Airport has installed hearing loops in a variety of locations, and all are identified by the international symbol of access for hearing loss, including at the information desks, car park offices and other locations. You'll even find hearing loops in all three of Moscow's airports where, for example, at Domodedovo Airport induction loops were installed in nine zones of the airport and are connected to the airport's system of automatic announcements.

Down under, travelers will find that Christchurch Airport in New Zealand features hearing loops at departure gates and other waiting areas, while in Australia all gate areas in Pier G of the Melbourne Airport have been fitted with loops. In Brisbane, old, poorly planned and badly installed loop systems have been replaced by new induction loops, and in Canberra, hearing loop technology was deemed essential and has



Information counter at Rochester International Airport. (Photo courtesy of Rochester International Airport.)



Hearing loop sign in Dublin, Ireland. (Photo courtesy of hearing loop advocate.)

been installed at gates, baggage claim belts, check-in counters and elsewhere. In Sydney, the installation of hearing loops is now complete in Terminal 2 and they are also available in select areas throughout Terminal 1.

The foreign airports cited here are simply examples of the availability of hearing loops in airports abroad. They are included to demonstrate that around the world hearing loops seem to the most effective way to serve the communication needs of those with hearing loss. They can also be found in other airports and venues in European countries-even other continents-not mentioned here. Thanks to the universality of hearing loop technology, telecoil-equipped hearing aids or CIs in the U.S. will work with the hearing loops at Iona Abbey in Scotland, Notre Dame in Paris or in a London taxicab. You might not understand what's being said over the loop in some airports due to language differences, but you may hear numbers, a city name or some other information that alerts you to something that you might not have clearly heard otherwise.

Ready for Takeoff

The Rochester Airport was awarded an Airport Innovation Award by the American Association of Airport Executives in 2018. Between public recognition such as that, the recent spurt of airport hearing loop installations, and the efforts of a growing cadre of hearing loop advocates, more airports may choose to "Airport operators and staff are compassionate people, and want to meet the needs of the community, which is why it is so important for people with hearing loss to let their voice be heard to their local airport representatives, as no one wants to implement a program unless it best meets the needs of the community."



Delta Airlines gate at Detroit Metropolitan Wayne County Airport. (Photo courtesy of hearing loop advocate.)

adopt the technology as a way to meet their obligation under the Air Carrier Access Act to ensure that passengers with a disability have prompt access to the same information provided to other passengers at each gate, ticketing area, and customer service desk.

Pam Pflueger, a business development and accessibility consultant in aviation and a major force in the burgeoning adoption of hearing loop technology in airports, said, "Airports are now seeing the benefits of how hearing loops help people with hearing loss for daily announcements, and most importantly, in emergency communications. In addition, hearing loop technology qualifies as an auxiliary aid and service, thereby meeting the Title II Effective Communication provision of the ADA [Americans with Disabilities Act] to which airports must comply. Airport operators and staff are compassionate people, and want to meet the needs of the community, which is why it is so important for people with hearing loss to let their voice be heard to their local airport representatives, as no one wants to implement a program unless it best meets the needs of the community."

Travelers should be on the lookout in airports and other public venues both here in the U.S. and abroad for the international symbol of access for hearing loss via telecoils. It's likely that you'll see it as more airports and other transportation hubs Get in the Hearing Loop. They should probably also wait until they've boarded the plane to find out "whodunnit." **HL**

For more information on how to Get in the Hearing Loop visit hearingloss.org/programs-events/get-hearing-loop.

Steve Frazier, trained by HLAA as a Hearing Loss Support Specialist, chairs the Loop New Mexico initiative of the HLAA Albuquerque Chapter, co-chairs the Committee for Communication Access in New Mexico, and is one of the founding members of the national HLAA Get in the Hearing Loop Task Force. His articles on hearing loops and on noise control issues have run in many publications in addition to Hearing Life, including Advance for Audiologists, the Christian Science Monitor, Church Executive, Hearing Health, Sound & Communications, and Technologies for Worship.

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