



# The Telecoil: Old? Yes. Outdated? No.

By Stephen O. Frazier

**T**elecoils have been in use in hearing aids for more than 80 years, but that doesn't mean they're outdated or have been replaced by newer technologies any more than the radio or internal combustion engine are no longer of value.

New technologies such as Bluetooth, Near-Field Magnetic Induction (NFMI) and proprietary systems such as the 2.4 GHz protocol used by ReSound, or the 900 MHz system used by Starkey to transmit directly to and from the hearing aid, do wonderful things. They allow hearing aids to perform functions that were not possible just a few years ago.

However, as noted, most are proprietary technologies, meaning the Starkey system can't be accessed by a ReSound user and vice versa. Even Bluetooth, the most universally utilized wireless technology for hearing aids beyond the telecoil, cannot serve multiple users. Only telecoils permit one or one hundred hearing aid users in a given area to wirelessly access the room's assistive listening system (ALS) by simply pressing a button on the hearing aid or cochlear implant. And, the telecoil's functionality is not confined to the U.S.—they work anywhere in the world.

## But What is It?

What is a telecoil? That's what many (if not most) newcomers ask at HLAA chapter meetings around the country when told to turn them on to hear the program more clearly via the room's hearing loop.

A telecoil—or t-coil—is a small copper wire located inside the hearing aid or cochlear implant (CI) processor. They are found in more than 70 percent of all hearing aid models currently on the market and in all CI processors. It is activated by pressing a button on the hearing aid or CI called a t-switch. When turned on, the telecoil receives a silent electromagnetic signal sent by a small wire called a loop that encircles the room and is connected to the room's public address system.

The number of people with hearing loss who are not

familiar with telecoils is surpassed only by the number who don't know about hearing loops and who might think telecoils are for use only with the telephone.

## And the Survey Says...

A survey by HLAA a few years ago found that 85 percent of their members have and use telecoils in their hearing aids. A more recent survey by the Committee for Communication Access in New Mexico (CCANM) found that more than 90 percent of respondents had and regularly used them.

The CCANM survey further found that less than 20 percent of respondents “always” use the ALS in performing arts halls and venues when they are required to borrow the equipment and remove their hearing aids to don a headset. (This would be in situations where the venue does not have a hearing loop and the ALS is either an FM or infrared (IR) system, which require a receiver.)

However, more than 50 percent of respondents (two and a half times as many) said they “always” use the ALS when the venue has a hearing loop installed, thus being able to use their telecoils. An additional 25 percent said they “usually” or “sometimes” used it.

With such user acceptance and use of this decades-old technology the question often arises, “Why do those HLAA chapter visitors not know about it?”

Back in 2009, Mark Ross, Ph.D., a nationally-known and respected researcher, partnered with Carren Stika, Ph.D., an audiology professor, to conduct a study on consumer satisfaction with hearing aid services. The study found that less than 50 percent of hearing care professionals, whether audiologists or hearing aid dispensers, made certain their clients were told about telecoils or other hearing assistive technology.

With the growing sophistication people have in these days of the smartphone and smart, digital hearing aids with their many assistive listening applications, one would think more people would be told about the benefits of telecoils than were in 2009. A different CCANM survey found, however, that only 33 percent of first-time hearing aid buyers were even told about the option, leaving 66 percent to learn about it after buying hearing aids and from some other source than their hearing health care provider.

## Why Wasn't I Told?

There are many conscientious, caring hearing health care professionals who counsel their clients in all of the options available to them (including telecoils) before fitting them with hearing aids. This of course allows the patient to make an informed decision before they spend what can be thousands of precious dollars on these devices.

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## Join Stephen O. Frazier for *There Ought to Be a Law: A Primer for Getting Hearing Loss Legislation Passed in Your State and Get in the Hearing Loop*

Have you ever wondered what goes into getting a bill passed? Stephen O. Frazier will present, *There Ought to Be a Law: A Primer for Getting Hearing Loss Legislation Passed in Your State*. This workshop will walk participants through the process of successfully getting a bill written, introduced and passed by their state legislature. Steve will be presenting a second workshop called *Get in the Hearing Loop*. This workshop will present an overview of the growing success of the HLAA Get in the Hearing Loop campaign for raising awareness and the availability of telecoil technology, now mandated under the Americans with Disabilities Act (ADA).

Steve will be presenting *There Ought to Be a Law: A Primer for Getting Hearing Loss Legislation Passed in Your State* with Dr. Anne Lobdell on Saturday, June 24 from 8:30 a.m. – 9:30 a.m. and *Get in the Hearing Loop* with Anne Pope and Dr. Juliëtte Sterkens on Friday, June 23 from 1:15 p.m. – 2:15 p.m. Please be sure to check the Convention schedule page on [hearingloss.org](http://hearingloss.org) for presentation locations and any updates or changes to this information.

### TELECOIL *continued from page 33*

There are obviously still many, however—like those found in the Ross/Stika survey—who do not include information about telecoils in that counseling. They either make a conscious decision that their client would neither want nor need the connectivity offered by the telecoil option and thus don't mention it, or they don't offer it because they are simply not familiar with them and all the benefits they can afford that client.

Some professionals will say they don't tell clients about telecoils because they have Bluetooth. While Bluetooth is a remarkable technology that adds considerable flexibility and functionality to hearing aids, it won't help users hear in church, at the movies, or watching TV on the treadmill at the gym. Telecoils will.

#### The Many Uses of the Telecoil

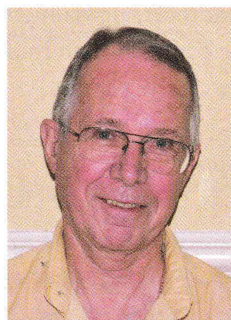
Telecoils were originally used to connect with the magnet in telephone earpieces. But in this day of volume control and text or captioned telephones, the telecoil is most often used to hear not only on the telephone, but in myriad other ways. An untold number of TV rooms in the home have been looped, and there are more and more places outside the home where telecoils are used to improve the ability to hear. Among them are New York City subway stations, departure gates at a growing number of airports, local performing arts venues and movie theaters, and on a fast-growing list of city council chambers. There is even a loop at the U.S. Supreme Court!

Recognizing the user-friendliness of hearing loops and telecoils, the federal government revised the Americans with Disabilities Act (ADA) in 2010 to mandate that all new assistive listening systems be hearing aid compatible, meaning you can connect directly to the ALS without removing your hearing aids. This requirement can be met by either installing a hearing loop or by making 25 percent of the receivers

loaned out to visitors hearing aid compatible by replacing their headsets with neckloops (in new or significantly improved installations). Either scenario requires the hearing aid to be equipped with a telecoil. Currently, there is no other technology that can meet this mandate.

Regarding neckloops, they essentially work like a miniature hearing loop. They can be plugged into any electronic sound-producing device that has a jack for earphones or earbuds—an FM receiver, cell phone, TV, iPad or the sound jack on an airplane TV. The sound is picked up by the neckloop and converted to electromagnetic waves that are sent to a user's hearing aid through the telecoil. Thus, the neckloop essentially becomes the user's headset.

As noted, many conscientious hearing health care providers will discuss telecoils and their uses with clients before fitting them with hearing aids; but some will not. So, unfortunately, the old dictum, "Ask before you buy" still often applies when purchasing hearing aids. If your provider has not already told you the model being recommended has telecoils, ask, and let that provider know you want them. If you're told, "You don't need them, you'll have Bluetooth" (or some other wireless system) ask if it can be used at the movies or at your place of worship. **HLM**



*Stephen O. Frazier is a Hearing Loss Support Specialist, the former New Mexico HLAA state chapter coordinator, and chair of the Loop New Mexico Committee. He serves on the HLAA Hearing Loop Steering Committee and on the New Mexico Speech-Language Pathology, Audiology and Hearing Aid Dispensing Practices Board. His articles on hearing loss and noise control issues have appeared in Church Executive Magazine, Sound & Communications, Advance for Audiologists, Hearing Loss Magazine, the Christian Science Monitor and others.*



**T**he HLAA Get in the Hearing Loop (GITHL) campaign is an educational program designed to increase awareness and availability of assistive listening technologies—especially hearing loops and telecoils—for people with hearing loss.

Originally created in 2010 as a joint project for one year between HLAA and the American Academy of Audiology, the GITHL campaign was slated to end with the Second International Hearing Loop Conference, held in conjunction with the HLAA Convention 2011 in Washington, D.C. The enthusiasm created by the campaign and the Convention among HLAA members resulted in GITHL becoming an ongoing HLAA initiative.

Thanks to a grant from the David & Carol Myers Foundation, Dr. Juliëtte Sterkens, HLAA hearing loop advocate, travels the country in support of the GITHL campaign. Dr. Sterkens presents workshops to HLAA chapters, hearing care organizations and many others advocating and raising awareness for hearing loops and the need for an increase in their use for improving accessibility for those with hearing loss. In addition, at the local level more than two dozen HLAA chapters or state associations run hearing loop campaigns.

Led by a national Get in the Hearing Loop task force made up of looping advocates from around the country, GITHL campaigners and those inspired by them have played a major role in the looping of city council chambers, state houses, performing arts centers, countless places of worship and even New York City subway booths. They've gotten state laws passed mandating counseling of hearing aid purchasers on telecoil technology and advocated for its installation wherever those with hearing loss congregate with others.

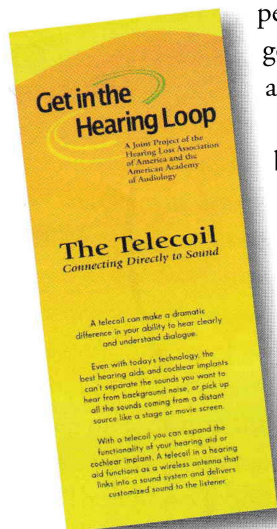
Raised awareness of the technology has also resulted in airport departure gates in several cities being looped, in neckloops being offered as an alternative to earbuds on some international air travel and the investigation by federal authorities of adoption of the technology in future light and long distance rail cars.

The U.S. got off to a late start in recognizing the value of hearing loop technology compared to Great Britain and many other European countries where it has been the primary assistive listening technology for decades, but we are now moving full steam ahead to Get in the Hearing Loop!

More information about hearing loop technology—including *The Telecoil: Connecting Directly to Sound*, an overview brochure about hearing loops and telecoils—is available on the HLAA website at [hearingloss.org/content/loop-technology](http://hearingloss.org/content/loop-technology). You can download the brochure directly from the site or order printed copies from the online store at [hearingloss.org/content/order-materials](http://hearingloss.org/content/order-materials). **HLM**

# Get in the Hearing Loop

A program of the Hearing  
Loss Association of America

The banner for the "Hard-of-Hearing Heroes Project" features a silhouette of a soldier saluting against a background of the American flag. The text "HARD-OF-HEARING HEROES PROJECT" is written in large, bold, red and black letters across the top. Below the image, there is a paragraph of text and a contact information line.

**HARD-OF-HEARING  
HEROES PROJECT**

The National Court Reporters Foundation (NCRF) introduces a new initiative to preserve the experiences of veterans with hearing loss for the Library of Congress Veterans History Project through the use of CART captioning. NCRF is partnering with HLAA to interview veterans with profound hearing loss at HLAA2017 Convention.

If you are, or know, a veteran with hearing loss who would like to be interviewed about your wartime experiences, you can sign up by contacting April Weiner, NCRF manager, at [aweiner@ncra.org](mailto:aweiner@ncra.org).

**For more information visit [hearingloss.org](http://hearingloss.org) or [ncra.org/foundation](http://ncra.org/foundation).**