

Efforts to prevent unauthorized access to classified information typically focus on securing documents and computers. However, steps also need to be taken to protect verbal communication.

Even if conversations are brought behind closed doors, walls typically aren't enough to ensure speech privacy. Often, the budget isn't available to construct rooms with high sound attenuation and, in any case, even minor gaps or penetrations in their structure can provide clear paths for conversations to travel into adjoining spaces where they can be overheard.

Without the proper treatment, windows, doors, ducts, pipes, floors, ceilings, and walls also present various opportunities for eavesdropping. Speech causes vibrations on these structures, which can be picked up by probes or microphones and translated into intelligible speech. These electronic listening devices are difficult to detect because they can be used at a

considerable distance from the target facility. Traditional methods of acoustical control can't protect against this kind of surveillance.

These issues are particularly significant for military facilities, where conversations take place that must be protected from public disclosure. High acoustical standards are also mandated for the physical construction of particular areas such as Sensitive Compartmented Information Facilities (SCIF).\*

Military buildings may also house office and administrative areas for which noise is another acoustical concern. Numerous studies show that these disruptions not only lower employee productivity, but increase error rates and reduce overall workplace satisfaction.

Personnel using libraries, health clinics and counseling offices also benefit from improved acoustics.



a supportive

environment

for staff.

### The LogiSon® Solution

Closed rooms are built with the intention of providing visual and acoustical privacy. While the first goal can easily be achieved, the second often proves elusive.

That's because walls only address part of the privacy equation. A person's ability to clearly understand a conversation is actually dependent on two factors: the level of the speaker's voice and the level of background sound. The relationship between the two is called the signal-to-noise ratio.

Traditional construction attempts to provide privacy simply by reducing the signal. Deck-to-deck walls increase a room's effectiveness in this regard; however, they also raise costs and reduce flexibility. Furthermore, constant vigilance must be maintained because even minor gaps or penetrations can allow sounds to transmit into adjoining spaces. If the background sound level in those areas is too low, conversations will still be heard—and potentially intelligible.

The LogiSon Acoustic Network establishes an effective background sound level throughout a facility. The

sound is professionally tuned to an independently-proven masking spectrum that's designed to cover speech, increasing privacy. It also masks incidental noises that would otherwise affect concentration.

Installing this technology at a project's outset can reduce sound transmission class (STC) requirements, while providing the same or greater acoustic protection. Using masking also acts as an 'insurance policy.' Should the space underperform—which can occur for any number of reasons—there remains the opportunity to raise the

background sound level to improve the acoustical performance of the space.

For more information about the system's advanced features, see our brochure or contact your local LogiSon Representative.

# **Helps Maintain Speech Security**

By adding a continuous, engineered masking sound to a space, the LogiSon Acoustic Network can dramatically reduce the distance over which verbal communications can be heard. The exact distance will be determined by the masking's level and the other acoustic treatments used within the space, including physical barriers and absorptive materials. The desired level of speech privacy should be achieved by using a well-designed combination of these tactics.

#### Impede Electronic Eavesdropping

The LogiSon Acoustic Network's ability to protect the privacy of verbal communications can be augmented by connecting the hubs to transducers. These components transfer the masking sound to physical structures, impeding the use of audio surveillance equipment. Each transducer's output is precision tuned to ensure it's appropriate for the surface to which it's applied. The LogiSon Acoustic Network is the only sound masking system to provide a truly random (nondeterministic) digital masking generation process, making it exceedingly difficult to filter. Furthermore, the components cannot be modified to act as listening devices.

### **Additional Security Measures**

The LogiSon Acoustic Network is secured using both physical and electronic methods. Its performance is also monitored to help ensure that the system is 100 percent operational 24/7, down to individual loudspeakers. Various notification methods can be employed so that any issues are evident and can be swiftly addressed.

## A Few of Our Military & Related Clients

ARMY RESEARCH LABORATORY, ABERDEEN PROVING GROUNDS • DEFENSE CONTRACT MANAGEMENT AGENCY (DCM) DEPARTMENT OF NATIONAL DEFENCE • DEPARTMENT OF HOMELAND SECURITY (DHS) GOVERNMENT SERVICES ADMINISTRATION (GSA) • L3HARRIS TECHNOLOGIES • LACKLAND AIR FORCE BASE LOCKHEED MARTIN CORPORATION . NASA . NORTHROP GRUMMAN CORPORATION . SPECIAL AIR SERVICE (SAS) U.S. AIR FORCE • U.S. ARMY • U.S. ARMY MEDICAL INFORMATION TECHNOLOGY CENTER (USAMITC) U.S. NAVAL SUPPLY SYSTEMS COMMAND (NAVSUP) • U.S. DEPARTMENT OF STATE (DOS)

### Case Study



### **United States Army Medical Information Technology Center** San Antonio, Texas • USA

The U.S. Army Medical Information Technology Center (USAMITC) is the information technology execution arm of the Army Medical Department (AMEDD). Through its sophisticated IT solutions, USAMITC provides complete lifecycle management support for AMEDD, the Military Health System and other government clients, and enables the U.S. Army Medical Command (MEDCOM) to provide the best healthcare possible for U.S. soldiers.

#### Problem

The USAMITC facility was remodeled, and several different divisions were located within close proximity to one another on the two main floors of the building. Privacy became an issue and security regulations also dictated the need for a paging system to be installed throughout the three-story structure.

#### Solution

The LogiSon Acoustic Network was installed on all three floors of the facility. The technology aided in achieving the privacy required between the divisions. Because it also functions as a paging system, the LogiSon Network provides USAMITC with immediate priority page notification capabilities in all areas of the building. The LogiSon Network operates 24/7 "and has worked as we had hoped," states the USAMITC Facility Manager.

