MicroAutomation Enhances the McConnell Air Force Base E911 System

The Challenges

McConnell Air Force Base (AFB) is a United States Air Force base located in Wichita, Kansas. It is the home for the Air Mobility Command’s 22nd Air Refueling Wing, the Air Force Reserve Command’s 931st Air Refueling Group and the Kansas Air National Guard’s 184th Intelligence Wing. The base’s primary mission is to provide global reach by conducting air refueling and airlift where and when needed. McConnell AFB is also one of the first Air Force bases to be a “Total Force” base, which includes a formal integration of the Air National Guard and Air Force Reserve with active duty Air Force defense planning to meet national security objectives.

Prior to the implementation of the new MicroAutomation solution, all 911 calls at McConnell AFB were routed off-base to the local county and then transferred back on-site through dedicated circuits. McConnell AFB needed to replace this fragile system to properly support emergency calls on the base.

The Solution

MicroAutomation’s primary goal was to implement a state-of-the-art E9-1-1 system that had the ability to handle emergency calls from the base offices, base housing, commercial businesses located on the base, and the Kansas Air National Guard while utilizing as much of the existing telephone switching infrastructure as possible. The resulting solution utilizes McConnell’s existing Siemens HiPath telephone switch which was originally used to support Command and Control activities on the base.

In partnership with Siemens Communications and Wyle, MicroAutomation implemented four E9-1-1 calltaker positions utilizing Automatic Call Distribution (ACD) technology from the Siemens HiPath switch. The calltaker positions included the Fire Department Dispatcher, Security Forces Dispatcher, and Supervisor in the Security Forces Squadron Center and a backup calltaker position in the McConnell Emergency Communications Center (MECC) at a remote location. MicroAutomation provided the hardware and software to interface with the Siemens HiPath telephone switch and remote Automatic Location Information (ALI) databases to automatically deliver callback and location information to calltakers receiving emergency 911 calls.

The Benefits

The new E9-1-1 solution developed by MicroAutomation for McConnell Air Force Base:

- Integrated disparate technologies into a user-friendly single solution
- Received certification with the Defense Information Systems Agency (DISA) Joint Interoperability Test Command (JITC)
- Achieved full compliance with the National Emergency Number Association (NENA)
- Improved response times, potentially saving more lives
- Used open-standards technology-making the solution more flexible for future enhancements
- Reinforced the Total Force concept with a single E9-1-1 solution
- Was completed on time and within budget

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Technical Implementation

MicroAutomation’s integrated solution consisted of a Computer Telephony Integration (CTI) Server with an ALI Server interface system and ALI Display and Telecommunication Device for the Deaf (TDD) applications for the desktop. The solution was also integrated with McConnell Air Force Base’s existing GeoBase mapping system to display building locations on the base for incoming emergency calls.

Since the goal of the solution was to leverage as much of the existing infrastructure as possible, MicroAutomation worked to design the E9-1-1 solution to use McConnell’s existing Siemens HiPath 4000 telephone switch. Four calltaker positions were defined and touchscreen telephone displays were installed to provide advanced dispatching capabilities for calltakers and dispatchers. MicroAutomation worked with the base telecommunication specialists to configure all on-base telephone switches to route emergency 911 calls directly to the Siemens HiPath telephone switch. Information from the SpeedPay application to provide comprehensive reports for all of Ameriquest’s electronic transactions.

The E9-1-1 solution consists of the following components:

- **CTI Server** – A PC-based server that interfaces with the Siemens HiPath telephone switch and remote ALI databases that retrieve location information for all incoming emergency calls and displays them on the touchscreen telephone displays of all call takers and dispatchers.

- **TDD Modems** – Four Dedicated Zetron 3030 TDD are connected to each workstation and accessible via the keyboard, mouse, and the workstation display. The TDD modems are configured to automatically activate when an incoming TDD call is detected in accordance with the requirements of the American with Disabilities Act (ADA).

- **Call Taker/Dispatcher Applications** – The solution uses Graphical User Interface (GUI) applications that consist of an ALI Display interface and a TDD interface. The ALI Display application receives and displays the location information for emergency calls, extracts the building number nearest to the emergency and displays it on the GeoBase mapping system. The TDD interface application is automatically activated when an incoming TDD call is detected and provides a set of pre-defined responses to allow the call taker to quickly and efficiently support all of the TDD callers’ needs.

MicroAutomation’s technical depth, business process expertise and extensive network of partners expedited the implementation of the new contact center system. MicroAutomation implemented best-of-breed products and provided customization and integration services centered on the healthcare providers’ needs, culminating in a world-class contact center solution.

About MicroAutomation

Commercial, government and 911 customers worldwide have benefited from MicroAutomation’s expert design, development, deployment and support of their contact centers for over 20 years. Outstanding creativity, the ingenuity and forethought of our engineers and partnerships with a wide-range of leaders in our industry allow us to continually provide our clients solutions that surpass expectations. www.microautomation.com