

DiagnostX Deemed Essential Radio Maintenance Solution for Cobb County's Two-Way Radios



Photo Courtesy of Cobb County Police Department's Facebook Page

BACKGROUND

In 1993, Cobb County's Board of Commissioners created the Department of Public Safety (DPS). They currently have over 1,500 employees and provide service to approximately 750,000 citizens in an area covering 306 square miles.

The DPS is responsible for nine (9) divisions that report to the Director of Public Safety. They include the Police Department, Fire and Emergency Services, 911 Emergency Communications, 800 MHz/P25 radio system, Animal Control, the DPS Training Unit, Internal Affairs Unit, Administrative Division, and the Public Safety Village. Cobb County has 5,000 two-ways radios in use on their regional radio system.

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*Tracy Roberts, former radio system manager,
Cobb County Department of Public Safety*

CHALLENGE

Before using LocusUSA's DiagnostX system, the Department used a manual process to check if their two-way radios were working correctly or not. “It would be either by scheduling the radios for routine annual maintenance, poor coverage of the radio system, or waiting for someone to complain of a problem,” said Tracy Roberts, former radio system manager, Cobb County Department of Public Safety. These methods became both very expensive and time-consuming.

The Department of Public Safety needed to find a more proactive approach in determining which subscriber radios were experiencing a frequency error or significantly out of alignment issues and bring only those radios in for immediate service - while the other ones can remain in the field.

SOLUTION

To meet these challenges, the DPS installed a DiagnostX device. “You can see the unit grab the health of the radios, and identify the ones performing poorly on the network,” stated Roberts. In the beginning, the DiagnostX unit was moved around to the busiest sites. A few years later, the Department acquired five (5) more devices creating a multi-unit DiagnostX system and eliminating the need to move the one device around to various sites. The new system-wide coverage allowed all radio transmissions to be collected from the numerous sites and viewed in the consolidated management console.

DiagnostX can detect problem radios by measuring their alignment characteristics and field performance touch-free, over-the-air in real-time without any user intervention. Once DiagnostX evaluates all the active radios on the network, it then indicates the operational characteristics of each as **Failed**, **Passed**, or **Never Received** in a report based on user-defined thresholds. One of Roberts' favorite features of the DiagnostX device is the System Status Chart. “This report is what we hang a lot of our response on because it determines which radios need immediate service, due to alignment issues or broken parts,” she said. “Plus, the reports can be accessed remotely from any computer, which is a real time-saver.”

When LocusUSA released a new generation of the DiagnostX unit, Roberts was eager to know more. The new platform had upgraded hardware and processors, as well as a substantial reduction in size. It also offered remote receivers for the networked system, instead of using full standalone devices. A new graphic user interface provided more information and better reporting in an easy to read format. The County installed the upgraded system in 2017.

RESULTS

“Our department would spend a great deal of time chasing down specific issues with the radio system that were not valid. The DiagnostX device revealed the problem was not with the system but with individual radios,” said Roberts. “Right there, that’s when I saw the most value in this worthy product.”

Cobb County's Department of Public Safety has experienced a higher level of radio system performance and reduced annual maintenance costs by predetermining radio communication problems with the DiagnostX system. The DiagnostX device has proven to be a powerful proactive radio maintenance tool ensuring Cobb County's public safety personnel can feel confident their radios will work at any time.

About LocusUSA

LocusUSA is an engineering and software development company located in West Melbourne on the Space Coast of Florida since 2001. It is a leader in radio frequency capture for radio analysis and location. The ability to capture and analyze the actual waveform of a radio transmission led to the development of DiagnostX, a patented system that can measure the alignment and operating characteristics of a radio touch-free, over-the-air in real-time without user intervention. LocusUSA supports government customers across the United States and Canada on the local, state, and federal levels with this first-of-its-kind, proactive tool, ensuring the optimal performance of a radio system.

For more information on how DiagnostX can help keep your personnel safe while ensuring operational readiness, contact us at (321) 727-3077 or visit www.locususa.com to schedule a DiagnostX demonstration today.

