



Critical Emergency Management Communications Platform Case Study

Background

A Louisiana parish required a rapidly deployable mobile command center to provide on-site command and control at disaster sites and to act as a redundant 911 call center. Disaster preparedness is a high priority in Louisiana. Redundancy and mobility are crucial for governmental organizations to be able to respond quickly and effectively when disasters occur. Rapid deployment of communication systems between all public service organizations is critical to effective disaster response. Traditionally, on-site disaster response has been limited by deployment time, the high levels of technical expertise required, and a high level of complexity due to multiple communications platforms.

The parish's emergency communications requirements presented several specific challenges. The customer needed to be able to rapidly deploy the mobile command center to any site across the 270 square mile parish and initiate communications in under 10 minutes. In addition, the wireless broadband would be deployed by non-technical personnel. Finally, the parish required a minimum of 100Mbps throughput for voice and video communications.

BATS Solution

Integrated with a 4.9GHz (PTP600) wireless broadband radio from Motorola, the Broadband Antenna Tracking System's BTS-3300 was able to locate, lock onto, and track the wireless broadband connection between the mobile command center and one of four towers arranged across the coverage area. The mobile command center and the towers both utilized the BTS-3300 to provide 360° of coverage ability from each tower using directional antennas to provide the range and throughput required to reach all areas of the parish.

True Disaster Preparedness

The BTS-3300 was able to easily and rapidly deploy the connectivity needed. The system integrated with GPS was able to automatically locate and optimize on the nearest available connection point in under 2 minutes using a simple automated aligning process requiring no technical expertise by the operator. The system's 360° scanning capability allowed for connectivity to be achieved in any orientation and at any site across the 270 square mile coverage area. The 200-280 Mbps of bandwidth allowed the mobile command center to use a communication platform that seamlessly integrated voice, video, and data transmissions between all public safety organizations simultaneously. The platform was designed to work with all existing communication platforms, including short wave radio and two-way video communications to other mobile service vehicles. The single integrated platform allowed for reduced personnel training and expertise, as well as faster rapid deployment at disaster sites.

The ease of use, reliability, and bandwidth provided by the BTS-3300 allow the parish to be truly prepared for any situation. Whether it be a hurricane, chemical spill, or plane crash, the parish can now quickly and effectively respond with personnel that have limited technical knowledge as fast as possible while maintaining seamless communication between all resources available in the area or on the scene.

The Technology Behind BATS

The BATS technology is agnostic as to frequency and broadband vendor radio equipment. The technology can automatically align and reposition a directional broadband antenna to maintain a wireless broadband network session. This unique tracking capability is an industry-first feature that allows moving vehicles to obtain real-time access to resources inherent to broadband communications. The BATS system allows for rapid deployment of wireless networks as well as the geographic extension of a current network for customers who have limited broadband access or rely on expensive, low-bandwidth satellite communications.

About Broadband Antenna Tracking Systems

Broadband Antenna Tracking Systems (BATS) provides a proprietary software and hardware platform that locates, locks and tracks wireless broadband communication access points. Our products are designed for quick deploy communications centers and mobile to fixed and mobile to mobile vehicle applications where one or both ends of a network are in constant movement, the BATS system provides seamless network performance.

BATS System Features

- Unique tracking feature allows access to broadband communications from mobile units
- Enables rapid deployment or extension of a wireless network
- Easy deployment and operation
- Gyro-Stabilizer option for mobile applications
- Remote management via IP
- Accuracy within .05* of pinpoint
- Significant cost savings through elimination of manual redirection
- Designed to withstand the harshest environments on land, sea or air
- Automatic failover feature
- Continuous optimizations for maximum throughput
- Technology agnostic, works with any radio and frequency
- Supports broadband communications including data, Voice over Internet Protocol (VoIP) and streaming video

BATS www.batswireless.com innovative technology is ideal for rapid deployment or extension of wireless networks. It is ideal for first responders, public safety, military, border patrol, ship-to-ship, ship-to-shore and other critical communications requirements.

