



Wireless Phones and Network Solutions Help Restore Communications During Crises and Contingencies

Self-Contained Satellite Communications Trailers Incorporate Long-Range EnGenius Wireless Solutions to Provide Telephone Communications and Internet Access to Agencies When Commercial Services are Unavailable.

Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)

GOHSEP, formally the Louisiana Office of Homeland Security and Emergency Preparedness, was created by the Civil Act of 1950. Since 1990, the agency has managed over 16 federal disaster declarations and has coordinated several hundred state disaster declarations authorized under the Governor's signature.

The agency's mission is "to lead and support Louisiana and its Citizens in the preparation for, response to and recovery from all emergencies and disasters.

The Need: A Standalone Communication System for Use During Communication Outages

According to Jay Lockwood, Tactical Systems Branch Manager for GOHSEP, the need for a mobile standalone communications system for use by government authorities and emergency responders arose during Hurricane Katrina.

"When Hurricane Katrina hit us, it wiped out all of the communications in South Louisiana," Lockwood explained. "We received reports from directors, sheriffs and parish presidents in the area that the only way they were able to request help from the state agency was to write a note on paper, give it to a driver and hope that they make it to Baton Rouge. They didn't know whether or not their request made it until help arrived – in some cases a couple of days later."

Lockwood explained that based upon that experience, GOHSEP started to look for an alternative means to provide rapid communications to support the state emergency response effort in the event of future outages.

The Solution: Mobile Communication Systems Equipped with EnGenius Wireless Solutions

Lockwood and his team acquired several trailer-mounted satellite units that can be deployed across the state in the event that parts of the state lose telephone and Internet connectivity. Inside each satellite trailer is an EnGenius DuraFon Industrial Cordless Phone System and ECB-3500 802.11g High-Power 600mW Wireless Access Point/Bridge/Repeater/Router.

"When we deploy these units, it takes about 20 minutes and we can provide Internet and four telephone lines available to whoever we bring the system to," explained Lockwood.





DuraFon PRO Industrial
Cordless Phone System

Lockwood explained that each of parishes in Louisiana has an emergency operations center (EOC) and in the event that a tornado or hurricane incapacitates the infrastructure, one of these satellite trailers can be brought in to provide Internet connectivity and telephone service even if the facility has no electricity.

Each trailer is equipped with eight EnGenius DuraFon handsets that provide access to four outside telephone lines provided through the satellite link. The long-range wireless capability of the phones enables the base station to remain outside on the communications trailer while the handsets are located inside the EOC. For “hardened” EOCs that are shielded against the transmission of wireless signals, Lockwood’s team simply takes a hardwired remote base station into the EOC to provide telephone service.

To provide Internet connectivity, each trailer comes equipped with two ECB-3500 wireless access points. Configured as repeaters, one ECB-3500 is mounted in the satellite trailer and the other is deployed inside the EOC where it is connected to a switch to provide high-speed Internet access to the laptop computers. “The ability of the ECB-3500 to function as a repeater, access point or bridge gave us a lot more flexibility than just a high-powered access point,” Lockwood stated. “We liked the versatility of the product because power is not always the final solution to every scenario. We kind of play like the Marines when we get out in the field. We don’t know what the requirements will be so we need a repertoire of equipment that allows us to support anything they ask for.”



ECB-3500 802.11g High Power 500mW Wireless
Access Point/Repeater/Router with Antenna
Diversity & 802.3af PoE

The Results: Peace of Mind During Times of Crisis

According to Lockwood, the satellite trailers equipped with the EnGenius phones and wireless networking equipment give the EOCs and all the parishes a degree of confidence. In the event that they lose their communications, they know that GOHSEP can provide them with phones and Internet access through their portable satellite units to establish and maintain command and control.

The satellite trailers received their initial call to duty in New Orleans during the first Mardi Gras following the Hurricane Katrina disaster. “At the point where they started bringing Mardi Gras back, they were still rebuilding the infrastructure and the trailers gave us a way to provide communications support to our department of health and hospitals by eliminating the need for them to have to incur the costs of bringing in commercial phones and Internet,” Lockwood said. “The doctors and nurses were on the phones constantly communicating with other units around New Orleans and with the one main hospital that was supporting everyone. The phones are an important asset and we wouldn’t be able to do our jobs without them.”

