Raytheon ACU technology champions rescue and recovery operations for hurricanes Gustav and Ike

When two large hurricanes struck the Atlantic and Gulf Coasts within a mere eleven days of one another, the surrounding regions instantly became devastated by the loss of life, property damage, utility problems and hindered emergency communications.

The government dispatched the maximum number of resources for the effected areas, thus creating a new benchmark in disaster response. An unprecedented number of ground ambulances, air ambulances and

para-transit vehicles were deployed making it one of, if not the largest, mobilization of disaster resources in United States history.

AJT-Critical Infrastructure Support Group (AJT-CISG), which provides critical communications support to ensure communications for first responders, was one of the resource groups contacted to assist in hurricane response efforts by establishing forward command centers in each state.

Previous natural disaster response has taught support groups that when local, national, and private industry first responders arrive to the devastated areas their differing communications devices can not interoperate with one another, causing a delay in relief efforts.

AJT-CISG was all too familiar with responding to hurricanes and other natural disasters. They arrived equipped with their 18-foot communications trailer, outfitted with Raytheon's ACU-1000 interoperability system.

In preparation for the hurricanes, the group established staging areas in Jackson, Mississippi and Alexandria, Louisiana.

On September 1st, when the eye of Hurricane Gustav made landfall in south Louisiana, it drove an estimated two million people to evacuate. The size of the storm prompted FEMA to simultaneously activate national disaster contracts in three separate states including Mississippi, Louisiana, and Texas.

AJT-CISG's communications trailer was set up near the emergency room of the University of Texas' John Sealy hospital in Galveston, Texas which served as a central

location for response efforts and was powered by an emergency generator. UHF and VHF repeaters were also deployed and set up on the roof of the hospital.

As several first responders began to assist in the relief efforts, the ACU-1000 interconnected many of their communications systems including UHF, VHF, 800 Mhz, 900 Mhz, HF, Nextel, low band and SATCOM.

"While en route to assist in the recovery efforts for Hurricane Gustav, FEMA

called us to request a second interoperability system to prepare for Hurricane Ike that was quickly approaching the coast of Texas." said Scott E. Davis of AJT-CISG.

"We immediately contacted Raytheon to request a second ACU-1000."

To ensure the device arrived as quickly as possible, Raytheon set up the system as requested and shipped the additional ACU-1000 overnight.

Shortly thereafter, Hurricane Ike made landfall in Texas on September 12th. At one point, the diameter of Hurricane Ike's forceful winds made it the most massive Atlantic hurricane ever recorded.



Hurricane Gustav

AJT-CISG set up the second ACU-1000 system at the Reliant Center, next to the Astrodome, in Houston, Texas which was a command center for response operations following Hurricane Ike.

Using this ACU-1000, the group maintained communications with law enforcement, fire and emergency medical services as well as other operations.

"This allowed for full island coverage for the response crews plus VoIP back to the command post at Reliant Center in Houston as well as with NATCOM," said Davis. "We also had a repeater set up at the Reliant Center and a patch between Houston's 800 MHz system and the UHF repeater in order for the regional command vehicle for the state of Texas and all other command and response personnel to communicate."

Spanning the two deployments, the interoperability systems were in use for 48 days.

"The ACU technology worked flawlessly for both deployments," said Davis. "Within five minutes of arriving to the sites, the ACU-1000s were up and running and communications were quickly established. Operators thousands of miles away could constantly monitor the radio traffic and operations via satellite thanks to the PCNXU technology provided by Raytheon."

By deploying the ACU-1000s, the group was able to establish interoperability in both areas of operation simultaneously.

"Our group was proud to be able to assist in the recovery and relief efforts following Hurricane Gustav and Hurricane Ike," added Davis. "The ACU-1000 played a central part in our ability to provide the much needed assistance to the federal, state and local agencies arriving on-scene."

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