

### THE STORY

Hurricane Ida made landfall in the United States in August 2021, on the sixteenth anniversary of the infamous Hurricane Katrina, becoming the second-most damaging intense hurricane on record to make landfall in the state of Louisiana.

Natural disasters of such phenomenal size can devastate communities, wiping out the infrastructure and communications networks everyone from emergency management to friends and neighbors rely on. That's why it is so important to re-establish communications, so that every responder can provide the best coordinated and most effective assistance to the communities they come together to serve.

# **INDUSTRY**

State/Local Government Public Safety

### APPLICATION

Communications Interoperability

### THE CHALLENGE

The State of Louisiana requested and received mutual aid from hundreds of agencies from around the country. This brings with it many challenges, as arriving responders often have dissimilar radios and no way to communicate outside of their connected peers. Additionally, Hurricane Ida had done significant damage to critical Land Mobile Radio (LMR) systems. Without a means of putting responders in communication with each other, their efforts would be reduced and even unsafe. For example, over 180 fire stations were affected by the hurricane and were being back-filled by out-of-area responders. Like all responders, they needed to be in communication with each other. If a solution could not be found, there would be no way to dispatch calls to them, and no way for them to communicate while on scene to report emergencies. Fortunately, a solution had been planned for and prepared. The responding agencies were provided communications coordination by Florida and Texas Communication Units who were in contact with officials from Louisiana.



# **EMERGENCY PREPAREDNESS**

# THE SOLUTION

In response to Hurricane Ida, the Florida Department of Emergency Management (FDEM) coordinated a mutual aid response that included a Communication Strike Team from the Nassau County Sheriff's Office, the Region 3 Mutual Aid Radio Communications Team (MARC) from Alachua County Fire-Rescue, a Communication Strike Team comprised of members of Palm Beach Fire and Rescue, and the Lake County Sheriff's Office. Additionally, the State of Texas responded to the call for help by sending a Communication Strike Team. Together, all the Communication Unit members worked together to adapt, patch, and restore communication for the affected Louisiana parishes.

The best solutions can adapt to circumstances. In this case, communications were re-established by attacking the problem from several different angles simultaneously.

Closest to the damage, a JPS ACU interoperability gateway was utilized to create patches for various LMR systems. SkyBase, an authorized JPS dealer, set up a link with their ACU in Tallahassee, Florida, linking it to the radio talkgroup and adding a satellite PTT device and the JPS VIA Push-to-Talk over Cellular (PoC) application. This allowed for emergency communications response team members to communicate amongst themselves for convoy as well as call back to the FDEM operation center in Tallahassee, Florida, by means of their smartphone or their satellite radio, depending on coverage availability. The patch provided constant communications coverage to teams in the field, including the Communication Strike Team from Texas, as they were provided JPS VIA with access to the same talkgroups.

Downrange of the most significant damage, ACU interoperability gateways were used to create patches between disparate radio systems and to patch responding mutual aid units together. In particular, several patches were made to and/or included the Louisiana Wireless Information Network (LWIN), which is a statewide simulcast 700MHz P25 trunking system. Thanks to the capability to patch with the LWIN system using ACUs, communications and coordination between statewide, national, and other mutual aid talkgroups could include any of the thousands of first responders arriving daily.

#### THE RESULT

This success has set new, higher standards for future deployments. The gateway between JPS VIA and the satellite PTT device remain in place now as a permanent patch. The MARC teams are working to develop a plan to move forward with more JPS equipment, seeing the possibility for many additional options. Linking MARC towers together for wide area coverage is also being discussed. In short, communications unit personnel are realizing anything is possible with the right resources.

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There are challenges with every operation and every deployment, but JPS helps communications technicians mitigate problems. You are only limited by your imagination.

Thomas Kelley Florida Communications Unit

# **KEY BENEFITS**



Allows agencies to utilize existing LMR subscriber units and equipment



Seamless communication between LMR and PoC devices



JPS VIA operates over low-bandwith network links, including satellite backhaul