



Emergency Communications Case Study: Hurricane Irene-North Carolina

COMLS KEEP EMERGENCY COMMUNICATIONS OPERATING DURING HURRICANE IRENE

Hurricane Irene was a powerful and expansive storm that brought flooding rains and high winds from the coast of North Carolina to inland areas of Vermont and New Hampshire. Hurricane warnings and states of emergency were declared in 13 states and the District of Columbia, and hundreds of thousands of residents in New York City faced unprecedented evacuation orders.

As Hurricane Irene made its way through the Atlantic Ocean toward the East Coast of the United States, North Carolina began making preparations for the storm. On Wednesday, August 23, 2011, Governor Bev Purdue put residents and emergency responders on alert. She activated the North Carolina Emergency Management Regional Coordination Center-East (RCC-E) in Kinston, and 16 trained Communications Unit Leaders (COML) were advised to be prepared to lead emergency communications during and after the storm.

Irene made landfall before dawn on Saturday, August 27, near Cape Lookout, NC, as a Category 1 storm and affected several counties in the southeastern portion of the State. According to the Governor's office, the storm surge, winds, and heavy rains of Irene left more than half a million residents without power, closed 200 roads and bridges, suspended air and rail service, and destroyed many homes and buildings. In the midst of the storm and its immediate aftermath, COMLs were ensuring emergency communications systems were operating continuously and effectively.

KEEPING COMMUNICATIONS RUNNING

One of the State's COMLs trained through the DHS Office of Emergency Communications' (OEC) Program and called to action was Greg Hauser, the Operations Manager at the Charlotte Fire Department-Communications Division. Another COML was Matt McMahon, a lieutenant with the Greenville Fire and Rescue and a member of the State's Urban Search and Rescue team.



On Friday, August 26, Hauser received a message notifying him of the need for a Communications Coordinator in the emergency management center. According to

Hauser's after action report, when he arrived at the center it "had very limited communications, with no land line phone service, no Internet, spotty cell coverage, and limited radio communications due to the NC VIPER (Voice Interoperability Plan for Emergency Responders) system going in and out of site trunking. The building was also without power and running on generator." VIPER is North Carolina's statewide digital 800 MHz radio system.

Hauser assessed the equipment in the center and set up a workstation. He requested that the amateur radio operator return to the regional coordination center to provide a direct communications link to the State Emergency Operation Center (EOC) via amateur radio. Hauser also worked with team members to request satellite telephones, and to deploy a satellite system brought in to assist the Helicopter and Aquatic Rescue Team.

Within hours, the Regional Coordination Center-East had adequate data and IP telephone capabilities to function normally. When the local amateur radio operator arrived, he initiated three radio nets on three different frequency bands, and was directed to make contact with as many county emergency operation centers as possible. According to Hauser's report, they found that while "a few PSAPs (public safety answering points) had been flooded, were running on generator power, or moved to a backup center, a majority of PSAPs and EOCs were fully functional with no problems."

As Saturday evening came to an end, the storm moved up the coast and the VIPER system stabilized and could be used effectively.

PREPARATION IN GREENVILLE

Meanwhile, in Greenville, COML Matt McMahon and his team used the days before the storm to check their communications gear, and make contact with various regional managers to discuss communications procedures and equipment availability. By 8 p.m. on August 26, as the storm headed for North Carolina, McMahon and his team had established a communications unit in the operations section of the Greenville Fire and Rescue headquarters. According to McMahon's report from the storm, an amateur radio station was established in the EOC, VIPER handhelds were distributed to additional units that had been placed into service, and the remainder of the communications cache was loaded for transport if needed.

ASSISTANCE ON OCRACOKE ISLAND

Late Saturday night, the Operations Section Chief requested a communications assessment team to fly a reconnaissance mission to Ocracoke, an island on the State's Outer Banks, to assess damage to infrastructure. A large portion of Highway 12 on the island had been damaged and, as the team gathered on the morning of Sunday, August 28, reports indicated that Ocracoke had no communication with the mainland. The team, which included a COML, a network specialist, and a VIPER technician, assembled its gear and made plans to reestablish basic communications to the island.

Although the team was not called into action, Hauser says "it was a good exercise for us to see what we could put together." McMahon's after action report notes, "the team had excellent plans to recon, repair, and establish communications if needed. A tremendous amount of gear was on hand with any mode needed."

KEY TO SUCCESS

During the storm, North Carolina was well served by its statewide emergency planning and the VIPER system, which weathered the storm with relatively few issues.



The COML program has also made a significant impact in North Carolina, producing a team of skilled communications professionals, who have extensive experience coordinating regional resources and developing and implementing communications plans.

Hauser says Hurricane Irene produced "a very busy several days, but provided really good exposure to the communication unit." He asserts that without the COMLs in their roles, communications efforts would not have been as effective or as coordinated. "We were able to assemble full communications packages within hours."

He also says that the storm helped show that the communications unit's expertise and specialization can lighten the load for the emergency management coordinators. "If you have a hazardous material, you don't call the SWAT team, you call in HAZMAT. It's the same thing with communications," said Hauser.

In the storm's aftermath, the statewide interoperability coordinator recognized the need for more trained technicians in the State and has requested additional COMT training and COMT train-the-trainer sessions from OEC's Technical Assistance program to enhance this important aspect of emergency response.

FOR ADDITIONAL INFORMATION

Please contact OEC@dhs.gov or visit www.dhs.gov (keyword OEC).