

After Action Report  
County/City Communications Drill  
Feb 20, 2021 from 10 am to noon  
MTV-21-01T

The scenario was a massive storm with high winds resulting in fallen trees, downed power lines, local flooding, etc. Cell phones were still available. CERTs gathered incident reports and created 213 Damage Assessment (DA) Summary forms. An ARES Ham assigned to the CERT reported the form to the EOC. COVID restrictions were in force (masks, six foot distance, etc.) so most participants were in their homes.

The goal was to test the communication path from the CERTs to the EOC. Specifically, we were testing to see if three Damage Assessment forms could be delivered to the EOC packet system from each CERT.

## Results

There were eight CERT neighborhoods with a total of twenty-three participants. They sent a total of twenty-two DA summary forms. Every CERT sent at least two forms; two CERTS sent three forms, and two CERTS sent four forms. The average was close to our goal of three DA summary forms per CERT. We also had two hams acting as Windshield Survey and they submitted a total of three ICS 213 forms. Incidents to report had all been prepared before the drill, so the exercise could focus on communication.

Some CERTs practiced taking turns being Net Control. That went well and gave all the participants a better understanding of what happens to incidents they report from the field. There were some difficulties with noise on FRS radios but people were able to get through ultimately.

Three CERTs had a Ham with a packet station assigned to them, and all of their forms went into the packet station at the (simulated) Emergency Operation Center (EOC) during the course of the drill. The other five CERTs and the two Windshield Survey Hams delivered their reports to one of two "Message" Hams that were equipped with a packet station. The Message Hams could transfer the form they received into a packet message and send it to the EOC packet station. The Message Hams received all the forms sent from the CERTs and Windshield Surveys, but only a few of them were transferred into the EOC packet station before the drill ended. The

“whiteboard” display shown at the debrief showed all the forms that had been entered during the drill correctly. After the drill the Message Hams entered the remaining forms and the new whiteboard summary showed all the information.

One Ham acted as a simulated EOC Ham and communicated with the County by packet. He also received packet messages that were forwarded from the CERTs and produced a “whiteboard” summary display. Another Ham acted as a simulated EOC ham and used the County Message Net to pass traffic. Both Hams were able to handle the traffic assigned to them.

Another Ham acted as City Net Control at the (simulated) EOC. City Net Control took check in/outs for the ICS 211 form, did Health and Welfare checks, and announced when actions were needed. The city Net Control Ham was assisted by a remote scribe, who maintained the ICS 309 and tracked traffic to the two message hams. All Hams were also responsible for maintaining their ICS 214 personal logs and ICS 309 communication logs and submitting all their forms after the drill.

## Analysis

Communications went very well, considering that everyone was operating remotely and messages had to be relayed through a Message Ham for all but three CERTs. For the CERT reporting process we learned that we need better training on the DA summary form, so that CERTs understand that information on that form is cumulative, beginning with the first incident reported from the field. We also need to train on procedures when a previous incident changes (trapped person is freed, blocked road is cleared, etc.) The DA Summary Form also needs updating, and a team has been assigned to that task.

Ham communications went well on the whole – proper use of operating in directed nets, correct forms, and accurate message passing. Communications from a CERT where the assigned Ham had a packet station went best – messages went quickly to the EOC packet station. When the Ham assigned to the CERT didn't have packet we tried a relay system, which was slower.

The relay system we tried used a new type of radio operator: Message Ham. The Message Ham had a packet station and could operate remotely. Net Control would send callers with long messages to the Message Ham

frequency to transmit their message, keeping the Main Net frequency clear. The Message Ham would enter the message into the packet system and send it to the EOC.

The concept was good, but we found it had limitations. If the available frequency is simplex, the Message Ham needs to be located near the center of town with a strong signal and high antenna so that callers at the edge of town using handheld radios can reach there. In our drill, the Message Ham using simplex was at the edge of town and most callers couldn't reach him. The other Message Ham was nearer the center of town and was also using a repeater frequency, so everyone was able to reach him even though they had low-power handheld radios. But there were so many callers (eleven) that he was receiving messages non-stop and didn't have time to transfer them into packet before the drill ended.

For the Scribe, the task was difficult and not always manageable. The Scribe had to maintain the ICS 309 on the Main Net and also monitor the two Message Ham nets to see which one was free for the next caller. Even with two radios (one dual band) and tracking sheets this wasn't always possible. For a future drill it might work better to pre-assign CERT hams to a Message Ham net that we know they can reach. They would check out of the city net when they had a long message and call their assigned Message Ham net. If that net was busy they might need to stand by before sending their message. When done, they would check back into the Main Net. A Message Ham could probably handle five to six messages during a drill like this one.