After Action Report
County/City Communications Drill
Feb 19, 2022 from 10 am to noon
MTV-22-01T

The scenario was a massive storm with high winds resulting in fallen trees, downed power lines, local flooding, etc. Power was still available at our packet stations. COVID restrictions were in force (masks, six foot distance, etc.) so most participants were alone in their homes. This was a Credentialed Drill, so all participants were required to fill out logs (214, 309) and to hand in all paperwork (213s etc) electronically after the drill.

Field ARES Hams were assigned to a CERT in advance of the drill and were given CERT information and formal messages to be sent during the drill. Some operators were Voice-only and some used packet as well. Packet operators received Bulletins during the drill with requests for information. All operators replied by voice to questions from Net Control about their CERT.

Staff ARES Hams held various positions: County communications by Packet and Voice, Net Control, Scribe, and Messengers. The Messengers received Voice messages from field (CERT) operators and sent the messages by packet to the EOC. One staff member also sent two bulletins for the Packet Operators to respond to.

The goal was to test the communication path from the CERTs through packet to the EOC. Specifically, we were testing to see if four ICS 213s (2 Damage Assessment forms and 2 single-incident forms) could be delivered to the EOC packet system from each CERT, with some operators using intermediate messengers. The intermediate messengers transcribed a message received by voice into packet and transmitted it to the EOC. A sub goal was to see if the packet bulletin system worked to get messages to field packet operators no matter which BBS they connected to.

Results

(See the AA Forms Tally for details)
There were 18 participants total – eight Staff and 10 field (CERTs). A total of 36 formal messages were transmitted successfully from the field to the

packet station at the (simulated) EOC. All participants also responded to informal messages (health and welfare, check-in/out, and informal requests for information). Packet operators all responded to the two city bulletins.

Message traffic was non-stop, and served as a 'stress test' on the communication pathway. Most of the traffic was handled in a timely manner. There were three frequencies devoted to receiving messages by voice and forwarding them by packet to the EOC. One was a repeater frequency that all participants could reach and two were simplex. The Scribe tracked the usage of those frequencies, assigning CERT hams to an appropriate one for their physical location.

Two Hams communicated with the County – one by packet and one by voice. The packet operator also received packet messages that were forwarded from the CERTs and produced a "whiteboard" summary display. Both Hams were able to handle the traffic assigned to them.

Net Control worked from a previously prepared script and schedule. Scribe had a tracking sheet for check-ins, health and welfare, and 3 expected replies to requests. Scribe developed a system "on the fly" for assigning Voice operators to Packet Messenger operators.

All the packet operators retrieved the Bulletins successfully.

Analysis

Ham communications went well on the whole – proper use of operating in directed nets, correct forms, and accurate message passing. Everyone kept logs and turned in paperwork after the drill so that we had a complete record of the activity. We could trace each original CERT message through the communication path to the final destination at the EOC.

We allocated 3 frequencies for transferring Voice messages to Packet, since we had found last year that two weren't enough. Last year there were 11 DA summary messages that needed to go through this path and several of them didn't make it through before the drill ended. This year we had even more messages and had a log jam toward the end of the drill. The last ones did get through in the final minutes of the drill. There were 20 messages routed through this path and 11 of them were 213s with a lot of words to pass (speaking slowly and spelling some things phonetically). The DA Summary

forms go much quicker, since the TO/FROM fields are already filled out and the "message" is a series of numbers. So all-in-all one could say that this system worked, though it was strained to the limit.

For the future, one change needs to be made to this system. The positions "message 1, message 2, message 3" should be renamed to "Relay 1, Relay 2, Relay 3" and the messages should be handled using the Relay methods that are now taught in the county message classes. In particular, the Relay operator should use the CERT's original message number in their packet form instead of the message number that comes up when they first open the form. It should be exactly what it was on the original 213, without adding "P". That way it will appear in the 309s generated by Outpost, so the message can be easily traced from Origin (CERT) to Destination (EOC). The Relay fields in the 213 forms should also be filled out with the tactical call sign of the radio operator.

For the Scribe, the task was difficult and not always manageable. Traffic was non-stop (six pages on the 309!) and the Scribe also had to track the three Message nets to see which one was free for the next caller. It wasn't possible to monitor the message nets and also monitor the main city net, so the scribe developed a T-card-like system with post-it notes. It is suggested that in the future, a third person be assigned the job of tracking the availability of the "message" nets. Further discussion is planned on this topic.

forms Tallly for Mtn View City Comm drill Feb 19, 2022

MTV-22-01T

Tactical Name	radio	Location	214	309	213 P (1)	213 I (3)	DA 1 (2)	DA 2 (4)
Gemello Park	Voice	GPK	X	X	M 3	M 3	M 3	M 3
Monta Loma 2	Voice	MLN	X	on 214	M 1, M 1	na	na	na
North Whisman	Voice	NWA	X	X	M 2	M 2	M 2	M 2
Rex Manor	Voice	REX	X	X	M 1	M 1	none	M 1
Rengstorff	Voice	REN	X	X	none	M 2	M 1	M-2
Cuesta Park	Voice	CPK	X	X	M 1	M 3	M 3	M 3

Tactical Name	radio	Location	214	309	213 P	213 I	DA 1	DA 2
Monta Loma 1	packet	MLN	X	P	X	none	DA 1-6	DA 7
Old Mountain View	packet	OMV	X	P	X	X	X	X
Varsity Park	packet	VAR	X	V P	X	X, called	X	X
South Mountain View	packet	SMV	X	none		none sent		

Tactical Name	radio	Location	214	309			
County Packet	packet	RR	X	X	various county msgs		whiteboard
County Voice	Voice	RR	X	V	213 R	213 R	
City Net Control	Voice	RR	X	6 pages	tracker		
City Scribe	Voice	RR	X	6 pages	tracker		
packet manager	packet	RR	X	X	sent bul 1 & 2		

Tactical Name	radio	Location	214	309	BUL 1	BUL 2
City Message 1 (440)	packet	M1	X	P	B1,CPK 1, REX 1,3,4	REN 2, MLN 15,16, called 2
City Message 2 (tac 1)	packet	M2	X	V P	B 1, 2, NWA 1,2,3,4	REN 3&4
City Message 3 (Tac 2)	packet	M3	X	V P	Bul 1&2, GPK 1-4, CPK 2,3,4	
City Message 3 alt	packet	ALT	X	P	X	X

KEY

214 - personal log, 309 - message log, V is personal (paper), P is packet-generated

213 P is priority, 213 I is Immediate. (#) is sending order, DA 1, DA 2 damage assessment summary 50% and 100%

Bul 1, Bul 2 are city bulletins to MTV packet operators

RR is radio room, M1 -3 are message senders (relay voice into packet)