TO: Jay Hand, Administrative Program Manager, Pima County Office of Emergency Management (PCOEM)

FROM: Greg Peters, Operations Chief, PCOEM Communications Group (PCOEM Comm)

CC: PCOEM Comm

SUBJECT: Exercise After Action Report – Transformer Fire, Sierrita Mine, Sahuarita, AZ

1. PURPOSE:

To simulate a PCOEM Comm response to a real emergency, which occurs without advance warning, so as to be able to evaluate the effectiveness of the response with respect to the availability and number of responders, the speed of the response, and the ability of responders to accomplish key tasks.

2. EXECUTIVE SUMMARY:

On Saturday, June 14th, at approximately 0910 hours, with no prior notice Jay Hand of PCOEM initiated an automated callout using Communicator!, the emergency notification system of Arizona Division of Emergency Management (ADEM). Nearly 40 PCOEM Comm personnel were contacted by phone and/or e-mail. All Operations Units (Base Communications, Home Units, Hospitals and Mobile Communications) of PCOEM Comm were activated, and responders were instructed to contact net control on 146.880 MHz. There they received instructions on what needed to be accomplished. Home Unit stations assumed net control responsibilities prior to giving net control functions to PCOEM Base Comm. The Mobile Comm Unit was deployed to Sierrita Mine in Sahuarita in support of a simulated transformer fire and communications outage. Hospital Unit teams were deployed to local hospitals in support of simulated patient arrivals. The exercise ended at approximately 1500 hours.

3. OBJECTIVES:

- Evaluate PCOEM Comm ability to respond to a no-notice callout in a timely manner.
- Evaluate PCOEM Comm ability to create and execute plans as needed, quickly and efficiently.
- Evaluate PCOEM Comm ability to provide communications.
- Deploy communications assets.
- Provide communications for use by mine staff within the mine and by agencies outside the mine.
- Conduct all deployments and demobilizations safely and professionally.
- Fill out all appropriate ICS forms as the exercise progresses.

4. SCENARIO:

During a summer monsoon storm, lightning strikes the 71 transformer at the main substation. Primary side breakers trip. Fire causes the transformer to leak oil, which

also ignites and causes the fire to spread to neighboring transformers. Fire is out of control and the substation is still energized.

5. LESSONS LEARNED/ISSUES:

CALLOUT -

- A. Members were not familiar with the Communicator! system and therefore did not recognize the phone number, leading some to ignore what they believed to be a telemarketing call.
- B. Not everyone received a notification from Communicator!.
- C. The callout message was not sufficiently detailed to make it clear that the exercise was confined to PCOEM. The canned Communicator! lead-in to a message states that it is from the State notification system, thus leading some to believe that this was an anticipated statewide exercise.
- D. Callouts should be disseminated via both ADEM's Communicator! and the primary/alternate PCOEM Comm repeaters.
- E. Net control didn't have updated information concerning the incident and assumed and transmitted information without confirming with PCOEM Comm's COML for the incident.

HOME UNIT-

- F. When stations are checking into the net, they need to announce their availability, location and what unit they are available to work. It is important that we know all stations that respond to the call, not just the available ones.
- G. Net control needs to keep control of the frequency by periodic announcements that the frequency(ies) are in use for an exercise. There were times of many minutes of dead air.
- H. There appeared not to be a protocol for net control change.
- I. Net control needs to maintain radio discipline both during actual and exercises.
- J. When the first net control opened the net and then transferred net control to another operator, there was no net list given to the incoming net control.
- K. Home unit operators need to be aware of the propagation conditions during the time of day of operations.

BASE COMMUNICATIONS -

- L. Unlinking the 147.300 and 146.880 machines was an interesting part of the exercise. However, if the hospital unit is not deployed to the various hospitals, why lose the coverage?
- M. Changing repeaters or configuration of an operating net without a compelling reason causes confusion.
- N. Community Status Report (CSR) was sent to PCOEM, it was indicated that the computer crashed and unable to receive CSR. An operator continually needs to check for WINLINK messages.
- O. Only after an operator deployed to the base arrived there did he learn that the incident occurred in the same general area as his residence. If he had known this, he could have responded directly to the incident site to help with communications instead of reporting to Base Communications.

HOSPITALS -

- P. Radio at St Joseph's Hospital was not programmed properly.
- Q. There was a long period when there were no messages or traffic for the hospitals.
- R. Disappointing that only three hospital teams reported in to use and only two of those hospitals had operators in the radio rooms.
- S. Packet systems in the hospital(s) were not working. They didn't know what frequency to use to send the packet message.

MOBILE UNIT / TOAD -

- T. Meals in the Toad are out of date.
- U. Did not report their location when transitioning from PCOEM to the incident site.
- V. Need to have a procedure for checking out cached radios prior to deployment.
- W. No programming cables or instructions were in the cached radio box for deployment.
- X. Mobile team member lacked key card access to PCOEM.
- Y. Except for the Mobile Comm Unit, there was insufficient staffing for more than one shift.

GENERAL -

- Z. All operators on the net need to talk slowly, keep transmissions brief, and refrain from using acronyms and three-letter codes.
- AA. Confusion about the extent of activation: it was announced only that PCOEM Comm had been activated, but somehow the Hospitals Unit thought it was on standby.
- AB. It was unclear what, if any, was the PCOEM involvement with the exercise?
- AC. Net control closed the net prior to Toad's return to PCOEM.

6. COMMENTS/OBSERVATIONS:

- A. Mike (K7BUM) did an outstanding job opening the net as soon as he received the callout from Communicator!. Good handoff to Bob Campbell (W6IK).
- B. Bob Campbell (W6IK) handled having net control dropped unexpectedly on him without missing a beat. He takes his responsibility for the Home Unit seriously.
- C. Gary Keck (KE7DX) did a great job taking net control once established at PCOEM Base Communications.
- D. Ron (N7SPW) and Dan (KC7VDA) did a good job maintaining control of the Hospitals Unit. Ron did not hesitate to ensure activation instructions were clear and understood.
- E. Scott Boone (K7ADX) was in his element. What a great asset (and example) he is to the team.
- F. Greg Peters (KC5ZGG) did a great job. Handled the speculation with patience and kept the exercise on track. Comfortable that he is in our group if the balloon should ever go up for real.
- G. Good call by the Toad operators to move to Oro Valley repeater 146.620 when the coverage was lost on PCOEM's primary repeater 146.880 MHz.
- H. Good call by Base Comm net control to announce that there would not be a weekly 1300 hour net since we were in a middle of an exercise.

7. ACTION ITEMS:

- A. Ensure all PCOEM Comm personnel know the Communicator! origination phone number so that they recognize it as same in the future.
- B. In a callout message, clearly state that it's a Pima County exercise/emergency.

- C. Callout recipients: Listen carefully to callout messages to be sure facts have been understood correctly.
- D. Develop a net control procedure/script to follow for an actual/exercise callout to include how to transfer net control to another operator.
- E. PCOEM/Base Comm: Keep net control informed of developments during the actual/exercise incident. Be cognizant of the location of the incident relative to that of the operator(s).
- F. Train personnel to report their status to net control when checking in.
- G. During monthly hospital drills, have operators ensure that radios are programmed properly in accordance with the current PCOEM Comm quick reference radio sheet. Report any discrepancies to Unit Leader for clarification and/or reprogramming.
- H. During monthly hospital drills, continue to train and have each hospital conduct a packet test by sending a message to Base Comm (N7OEM-10).
- I. Develop a procedure for times when there is only one operator at a hospital and he/she needs a break or to be released from duty.
- J. Continue to cross-train PCOEM Comm personnel on all functions of PCOEM Comm.
- K. Check the self-ID timers on the repeaters. It was noted that the 146.880 MHz machine is not meeting specifications.
- L. Develop a list of southern Arizona repeater owners in case it is necessary to move to one of their repeaters while Toad is deployed.
- M. Purchase programming cables for all radios used by PCOEM Comm or issued during an incident.
- N. Develop instructions on how to check out cached radio/equipment from Base Comm prior to deploying.
- O. Develop a coverage map on local repeaters that might be used during deployment.
- P. Develop training on the proper use of Amateur Radio Operator call signs as related to the use of tactical call signs.
- Q. Develop recruitment strategies to attract more members. This exercise demonstrated that PCOEM Comm lacks the depth to staff even one complete Hospitals Unit shift at a moment's notice and can barely staff two no-notice shifts in other Units.

8. FINAL COMMENTS:

Despite the few issues uncovered during this exercise, I believe the PCOEM Comm team did a good job and accomplished the mission with high marks. Participation in events such as this provides great opportunities to hone our skills and discover potential problems as well as develop new skills. The importance of having the opportunity to work closely with the mine and thereby help them understand how we can assist them with their communications needs cannot be underestimated.

I would like to give special thanks to Scott Boone (K7ADX), Gary Keck (KE7DX), George James (KD7XP) and Bob Molczan (KA7VPR) for planning their first exercise. I also would like to thank Sierrita Mine for asking us to participate in their no-notice exercise. I look forward to working with them in the future.

9. OTHER

If you have any questions concerning this After Action Report, please contact me at e-mail address aar9lr@cox.net.

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Attachment: Exercise Participants:

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Greg Peters (KC5ZGG)
Scott Boone (K7ADX)
Gary Keck (KE7DX)
George James (KD7XP)
Bob Molczan (KA7VPR)
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Ronald Kalish (N7SPW)
Daniel Donnelly (KC7VDA)
Lin Donnelly (KF7CNR)
Mike Boger (K7BUM)
Ron McDonald (N9DRG)
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Philip Kortesis (W7PEK) Jim Christian (KE7VJW) Linda Lou Stonehocker (AF7FT) Dennis Stonehocker (AF7GH) Ben Arditi (KF7YDT) Frank Brady (N0WKP) (Not available) Robert Campbell (W6IK)