BCARES Simulated Emergency Test
Saturday, 12 October 2013
Preliminary After Action Report
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I. Activation Summary

Every fall, the ARRL recommends all ARES[(R)] groups activate to test their responsiveness to a simulated emergency. The scope and format of the exercise, as well as the exact timing, is left up to each group to decide for themselves. In past years, BCARES has done a number of tabletop exercises, as well as public service events, to evaluate our readiness. In 2013, we decided to take it to the next level and put together a scripted functional on-air exercise.

Member signups for the exercise were requested from July through September, and the script was written specifically for those members who signed up in advance.

II. Summary of Communications Objectives
   1. Receive text message from County EM / IC requesting BCARES assistance. [Missed]
   2. Activate BCARES members without the use of a repeater or email listserver. [Passed]
   3. Deploy an ad-hoc amateur station to the backup EOC on Almshouse Road in Doylestown (at the Bucks County Health Department). [Passed]
   4. Deploy an amateur station to Ivyland firehouse. [Passed]
   5. Handle simulated 9-1-1 traffic from Centennial Station, through the backup EOC, dispatching to fire and ambulance. [TBD]
   6. Handle simulated health & welfare NTS traffic. [Passed]
   7. Test amateur radio stations at all Bucks County hospitals (may be done either during or outside of scheduled SET). [Missed]
   8. Issue press release regarding SET. [Missed]
   9. Handle emergency or priority NTS message. [TBD]
   10. Transmit road closure information over APRS RF. [Missed]
   11. Log all communications thoroughly and accurately. [TBD]

III. Highlights of Success
   1. As a group, we successfully demonstrated that if a disaster left us without the use of repeaters, we could maintain emergency communications within a large part of Bucks County.
   2. Though the activation procedure was a little bumpy, we eventually settled on one of the designated net frequencies and passed messages reliably, with the use of relay stations.
   3. Participation was very strong for a drill of this nature.

IV. Suggestions for Improvement
   1. The biggest complaint presented during the hotwash was that nobody could hear the initial activation on 147.09.
      1. The activation script was presented by KB3GJT at 70W. Only one station responded during the first run. I asked that station to stay on frequency and continue calling while I went through the remainder of the frequency list. Upon returning to 147.09, that station had already vacated and most of the acknowledged stations had already moved to one of the designated net frequencies.
      2. A second round of callups was trasmitted on all frequencies with no additional stations responding.
   2. There was confusion as to who would be running net control for the exercise on which frequency.
      1. The exercise expected the primary net to be on 50.130 and a secondary net on 146.400. The secondary net control was expected to have simultaneous capability on both frequencies. When W3ICC said he could do one or the other but not both, I asked another station to set up for net control.
      2. In the limited chaos, I did not come back to make it clear who would be handling net control duties or designate the net as directed, especially since my own station was not covering as well as I'd hoped and several other stations were not set up for 6m.
   3. My APRS wasn't cooperating to be able to transmit the traffic reports as desired. Besides some connectivity issues between the radio and computer, the software (xastir) version does not support the line and box objects.
   4. K3VJP operated from the Aria Hospital parking lot, reporting a lot of RF noise from that location.
   5. The standard frequency plan does not currently allow for simplex operations on Bucks County repeater frequencies.
   6. WA4YWM was able to hear W1HRO and K3FMQ easily on 146.400, and W3ICC in the noise. W1HRO and W3ICC were unable to hear him calling.
   7. The change in hotwash frequency was not properly relayed to the center and upper parts of the county.

V. Action Points
   1. Develop an SOP for activation in the event one or more repeaters are offline in an emergency.
   2. Update the standard frequency plan to include repeater frequencies on simplex and in reverse.
   3. Change the BCARES organizational structure from three geographic AECs to five non-geographic AECs.
   4. Develop a coverage map of Bucks County simplex capabilities between common deployment locations.
   5. Develop an SOP for net control during emergencies.
   6. Discuss and develop a semi-automated RF system that can handle and queue traffic from multiple sources without immediate operator involvement (BCARES will draft a separate requirements document as the next step).

7. Schedule additional on-air tests of the following:
    1. Simplex activation.
    2. Message relaying between multiple points.
    3. Simplex "buddy system" where an operator would be most likely to find a relay to a station they can't contact directly.
8. Identify contacts with local media outlets for future press releases.
9. Continue to pursue hospital safety contacts to test remaining hospital stations.
10. Coordinate future exercises and trainings with other county agencies.