2016 January Snowstorm – After Action Report

Summary

All dates and times are U.S. Eastern Standard Time.

A "historic" snowstorm was forecasted to affect Calvert, and surrounding, counties in Maryland over the weekend of 22 January. A Blizzard Watch, later upgraded to a Warning, was issued for counties east of Washington, D.C.

Calvert AUXCOMM (ARES®/RACES) was placed into stand-by mode beginning 14:00 Friday, 22 January, and all stations were asked to monitor the 146.985 MHz repeater (CALV01) to the maximum extent possible. The group was held at this level until Sunday, 24 January at 11:00.

Requested services

1. The National Weather Service WFO in Sterling (LWX) requested weather observations (WX OBS) every three hours beginning Friday at 18:00 for Southern Maryland as forecast confidence was low for the area.

Persons responding with hours

1. Bill Hacket N3XMZ (RO) - 32
2. Bob Sheskin N3PPH - 3
3. Brian Kress KB3WFV* - 3
4. Charlie Lumadue AB3LE* - 2
5. Chip Dahle K3AWD – 3
6. Chris Carson KB3SCN*
7. Eric Christensen WG3K (EC) - 36
8. Dave Hardy KB3RAN - 7
9. Dave Weaver W3PQS - 4
10. Jim Tetlow K3UGA - 6
11. John Mumper N3EDD* - 3
12. Peter Holt KB3SXB (AEC) - 8
13. Rich Weaver WW3ZZ* (Charles Co.) - 3
14. Ron Byzet WA4PRR* - 2
15. Shawn Donley N3AE (AEC) - 14
16. Steve Hempling N3IPN - 1

* Not a member of Calvert AUXCOMM

(*Hours calculated based on WX OBS transmitted or submitted hours.*)

Activities

LWX received, by email (lwx-report@noaa.gov), a spreadsheet with WX OBS every three hours as requested. Shawn called a net and compiled the data on a regular basis and Eric covered a couple of shifts.

What went well

- Overall, everything went well. The stand-by net was upheld during the entire event and stations were able to pass informal traffic without problems.
- Members living in the Drum Point Property Owners Association (DPPOA) area (and surrounding) established a subnet on Calvert Tac 5 146.565 MHz (CALV05) which aided their local communications.

- All stations could access the CALV01 repeater although we had significant interference (noise) which made communications difficult at times.
- Fifty-six WX OBS were collected from around the county and transmitted at regular intervals to the National Weather Service WFO in Sterling.
- Echolink (from Bob's (N3PPH) house) worked well throughout the entire event allowing Eric to connect in from a distance.
- Shawn was designated the “duty-EC” before the event and was able to take charge of the event and keep things moving smoothly.
- Communications with ARRL MDC Section Manager occurred at regular intervals.

What could have gone better

- We need better personnel coverage for locations possibly requiring amateur radio support.
- Activation information should have been transmitted to all stations at the onset of the activation.
    - A communications plan (ICS-205), and all other activation forms, should have been crafted and transmitted to all stations, surrounding counties, EOC, and Section leadership, at the onset of the activation. (The default ICS-205 was used in this case and was not transmitted.)
- Pre-assign tac channels to groups of hams (e.g. DPPOA) *before* the event.
- APRS could have been used to help move messages around when the repeater was busy or too noisy to use.
- Eric was using technology (Internet+Echolink) that could have been taken out of service without warning. Because he was actively taking reports at times, and there was no backup, the net would have gone into some sort of purgatory with possible confusion.
- Stations sent all messages informally. We need to train and operate like we would if this had been a large scale event.
- The primary repeater had a significant amount of noise on it making it difficult to understand communications at times.
- SKYWARN® spotter numbers need to be submitted with WX OBS
- Need to confirm coverage and capabilities of all stations to determine access to our secondary repeater, 444.950 MHz (CALV02).
- The Section never stood up any nets to facilitate inter-county/inter-state traffic. While this turned out to not be needed, had it been needed it would have been next to impossible to stand up afterwards.

Corrective actions to be made

- Additional noise study needs to be made on the 146.985 MHz repeater to determine how to bring repeater back to noise-free operation especially in storm conditions. (*Referred to CARA Repeater Committee*)
- Additional training needed on:
    - Record keeping
    - Transmitting messages over the air

- Personnel Qualification Standards (PQS) need to be developed for operating in key positions:
  - Net Control / Alternate Net Control
  - Net liaison positions
  - County Emergency Operations Center
  - Health Department
  - DPPOA Emergency Operations Center
- Investigate backup of Internet-connected resources (e.g. Echolink). If the resource is to be used during an activation there should be a primary and a backup (with as different upstream resources as possible).
- Collect SKYWARN spotter numbers and have them available to the net control station (or whomever is collecting WX OBS for transmission to LWX).

Other items

- Need to follow up with LWX to confirm that the information they received was in a format that could be easily used. What could have been better?
- Need to determine who else needs WX OBS information.
- Need to determine how to interface better with SKYWARN.