



Arapahoe County Amateur Radio Emergency Service After Action Report

Date of activity:	December 28 and 29, 2006
Statement of problem	Severe Weather/Blizzard
Description of Exercise Scenario	
Duration of activity:	Two days and four operational periods
Serving amateur radio groups participating:	Arapahoe County District 22
Served agencies participating:	Arapahoe County OEM and Cunningham Fire Protection District
Describe served agency participation:	During this event D22 provided weather spotting to both served agencies.
Number of Amateurs participating:	22
List of amateurs participating (optional):	I can only provide a partial list; as the weather form did not account for all call signs: KC0VES W0UAW KC0UUO N0MY Y KC0IAD KB9AKD KC0YYF KC0VMP KC0VPR N0ERG K0YMD KC0JHS W0JEN KC0VFN N0ADD KB0QQW KB0LP KB0UBZ KA0ZFI N0PUF N0ADD N0POH
Person-hours of Amateur service:	75
Describe goals of activity, both for served agency and serving group.	The primary goal was to keep members safe and provide useful communications.

The second goal was to provide weather spotting of actual conditions observed around Arapahoe County. This information was used by both the Fire Department and OEM to determine severity of storm.

The third goal was to prepare a RADOP team for deployment to Smoky Hill High School shelter.

The fourth goal was to set up a resource list of available members with 4 x 4 vehicles that could assist in transporting medical personnel for Swedish Medical Center and Hospice of Denver.

Pre-exercise Activities

Did the event fulfill the goals?

Explain:

What went well:

PARITIAALLY

1. With the advanced notice that I was able to provide via email, many members were ready and listening on the net.
2. Dan N0PUF and Emit W0UAW did a fantastic job of setting up the net, developing a spreadsheet tracking form, and very professional communications. I have received many compliments on how our net traffic sounded. One in particular stated, "very professional, they sound like real dispatchers".
3. KB9AKD, Bill and KC0YYF Jim went to the small EOC at the Sheriff's office as Net Controls. Bill and Jim did an excellent job of passing information from EOC to the net.
4. Emit handled net control from 1700 to 1930 and Dan took over from 1930 to 2100 hours.
5. Packet Operations.
6. Frequency selection. During this event we switched to the Aurora Repeater Association 147.12 machine. This machine

generally worked well; however, we noted that due to the severe weather in the foothills there was some audio cut off on the frequency. As we have other callouts or exercises, I will be moving the frequency around. This is a good test of other repeaters and gives members some additional training in changing frequencies. The members of the Aurora Repeater Association were so impressed, we've not only been invited to use the 147.12 machine, but also the 447.500 and 448.500 machines as well!!

7. Grid Calc APRS Weather.

Upon hearing about our weather tracking needs during the first storm, I was contacted by Nick Hanks, N0LP. Nick is the creator and keeper of a program called GridCalc. This is primarily a program used by EOSS for tracking of balloons. However, Nick has altered the program to allow it to also display APRS weather stations. Nick graciously offered the program to me to be able to add APRS weather stations to our weather tracking information. I would like to thank Nick for his program. GridCalc worked great! I was able to see temperature, wind direction, wind speed and gust from several stations. Over a period time as a station beamed; I was able to look up the history of it weather reports and track the changes in weather conditions. This is an excellent tool and I would like to work with Nick and get a few more copies out into the D22 network.

7. We did have 5 4 x 4 vehicles ready for this storm, but did not

Areas needing improvement

provide any transport for medical personnel.

1. Incident Command Structure
I need to continue to assist members in setting up an incident command structure and announcing that information to all on the net. I believe that listeners generally knew that I was the IC and Dan N0PUF was Operations, but no forms were completed or formal announcements made. I will strive to accomplish these activities at the beginning of an incident.
2. Deployment of RADOP for a possible shelter operation.
Both Dan and I went through the roster and the only two members that could respond were KB9AKD and KC0YYF. All others declined to respond. Those that I called I also offered to pick them up and take them home, however, all still declined. Since the EOC was the primary need we staffed it first. Thankfully, the shelter was not activated. I was disappointed that out of a 70 member organization we could not turn out two additional members for standby to man a shelter.
3. Awareness of Frequency
Determining the best frequency for net use is dependent upon many variables such as; the equipment and antenna that that net controllers have to use. Location of repeaters and their general coverage.
4. Use of IC-214 Individual Station Log Form
We got better during the two events at using the IC-214 Individual Station Log form. However, I would to see us strive for all stations that

participate to complete and forward a properly completed IC-214 Individual Station Log Form on every event.

5. Tracking of Call Signs
For after action reports I would like Net Control to also capture the call signs of participating amateur stations.
6. Periodic Role Call during the Net.
I believe it would be beneficial for the net control operator to take a complete roll call of stations at the top of the hour and their status.
7. Better call out procedure?
During this event there was plenty of advanced notice, so it was easy to get members activated. However, callout are not always going occur so conveniently. I believe that some reorganization of the roster and discussion of other technologies is needed. There are various methods of notification such as:
email/SMS/DTMF
paging/CTCSS paging blast or even listing in callout list the user's hangout frequency. Some of these items have been explored in the past, but I think it would be beneficial to have a new discussion.
8. Small EOC room at Sheriff's Office.
The small EOC room only has a telephone. It is a good room for us to use, and I will work with OEM to see what equipment we might be able to acquire or place into the room for our use. I would like to see the minimum of a D700 radio, laptop computer, and cheap bubble jet printer. If we're doing SSTV, appropriate device(s) to receive the pictures.

9. Continue to explore other repeaters and determine their suitability for use by D22.

Lessons learned

Additional training needed

Changes in the Emergency Plan

Other Corrective Actions

General comments

None

None

Both Arapahoe OEM and I were very impressed with both the turnout and professional radio operation of all the members who participated. Arapahoe OEM also was very impressed with the weather spreadsheet information.

Arapahoe OEM and I are exploring more ways that D22 can participate and provide meaningful assistance. A few of the ideas were discussing are:

1. Additional Packet Operations
2. Use of APRS.
3. Adding SSTV to weather spotting.

Ideas for future exercises

Covered above

Report submitted by:

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