



CERT DISASTER COMMUNICATIONS

A PRACTICAL EXERCISE FOR SONOMA COUNTY CERTS

OCTOBER 4, 2008

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1. THE EVENT:

Disaster Communications, a training and tabletop drill for Sonoma County CERTS will be held on Saturday, October 4, 2008 at the Sonoma County Sheriff's Department Conference Room, 2796 Ventura Ave. Santa Rosa, first floor, commencing at 9:00 a.m. and ending at 1:00 p.m. (4 hours).

2. INTRODUCTION: (APPROX. TIME: 10 MINUTES)

All disaster experts have stressed that the lack of communications has been the weakest link in responding adequately to bring vital life saving response and meet the critical needs of disaster victims during widespread disaster conditions.

The current Homeland Security CERT Training Manual does not currently include a component for disaster communications in the curricula. In a major disaster, it is unlikely that there will be normal communication systems available between CERT team members, between CERTs and professional emergency response personnel and between CERTs and Emergency Operation Centers.

Because of this, alternatives to normal communication channels are needed during widespread disasters. Fortunately, Amateur Radio (Ham) has been available both as a hobby medium and for many decades has been a dependable communication resource during disasters in the U.S., Canada and many other countries worldwide.

Many CERT Organizations in the U.S. and Canada have introduced and developed Amateur Radio and Family Radio Services (FRS) “walkie-talkie”) protocols into their CERT Programs.

Beginning in 2007, Petaluma CERT, in cooperation with the Southern Sonoma County Auxiliary Communications Service (ACS) agency, a part of the Sonoma County volunteers serving with the Sonoma County Office of Emergency Services, set out to incorporate disaster communications into their CERT Program.

Since then, Petaluma CERT and ACS has developed the Community Emergency Radio Network (CERN) to serve Petaluma and the surrounding communities with a comprehensive amateur radio network that includes CERT operators of both Ham and FRS radios to assure dependable community communications during the time of disaster or extreme emergency with other CERTs, emergency personnel and offices of emergency services established in the communities in and around Petaluma.

3 PURPOSE & GOALS OF THE EXERCISE: (APPROX. TIME: 15 MINUTES)

The purpose of the exercise is to demonstrate, by hands-on application, the techniques and protocol of amateur radio communication and equipment and how communications, during a time of wide spread disaster, can be performed at an acceptable level.

The Goals of this exercise are to:

- To understand the value role of a communications component in the CERT curriculum.
- To observe and learn how an emergency radio network can be planned out on paper, specifically tailored for the CERT Community involved.
- To learn the use of FRS (walkie-talkie) radios, their capabilities and limitations.
- To learn the role of Amateur (Ham) radio in being the backbone of dependable disaster communications.
- To learn the ways that both FRS and HAM radios, when used in a network setting, can achieve valuable results in disaster response efforts and in achieving cooperation with and providing resources to Professional Emergency Operations during a disaster.

4. THE PRESENT SITUATION: (APPROX. TIME: 20 MINUTES)

In order to understand the need for a dependable disaster communications method, as a part of CERT training, it is important to know the present condition of communications in Sonoma County. today.

Thanks to Federal and State mandates and funding to implement inter-operability in the systems and methods of public emergency response communication abilities since the

devastating experiences of 9/11, most public emergency providers have updated their physical communication equipment and have established and tested their ability to communicate with public agencies during a disaster.

However, there does not yet exist a working plan that has been implemented in most communities within Sonoma County for public disaster agencies to communicate with local communities nor the CERTs in local communities to communicate with public agencies.

This shortcoming was the impetus for Petaluma CERT/NERT to establish a working relationship with the volunteer Sonoma County ACS organization, who handle communications for the County during disasters. The goal of this effort was to educate CERTs in the use of amateur radio and the attendant proper protocols for using this equipment during disasters and to establish community radio networks that could interact with ACS during disasters.

As a result of this joint working relationship, Petaluma CERT and South Sonoma County ACS developed a new Unit to the existing CERT training curriculum, "Disaster Communications." This Unit is being taught by ACS personnel, who provide professional expertise in understanding and using FRS and Ham amateur radio operations. In addition, Petaluma CERT/NERT has established a separate subsidiary to the CERT/NERT Programs, titled "Community Emergency Radio Network" (CERN).

CERN is composed of approximately 20 Petaluma and other local CERT graduates who have taken and passed the Ham radio licensing requirements and have been trained by ACS personnel in the use of both Ham and FRS radio handling. Several of these CERT members have also undertaken to take specific and specialized training to become ACS qualified volunteer communications personnel for Sonoma County.

5. THE MODEL FOR THE EXERCISE: (APPROX. TIME: 45 MINUTES)

The model that will be used in the CERT Disaster Communications Exercise is the Petaluma Emergency Radio Network. A schematic flowchart of that network will be provided and explained to each exercise participant and used to illustrate the use of appropriate amateur radio equipment that is a part of the emergency radio network – specifically FRS and Ham radios.

Exercise participants will learn from the model:

- How to set up a community radio network, utilizing CERT operators of both FRS and HAM radio equipment.
- How to set up and use a FRS radio and the use of appropriate communication protocols.
- How to become licensed as a HAM radio operator and the features of HAM radios.
- What operating procedures of both FRS and HAM radios need to be considered and practiced in implementing a meaningful community radio network.

6. THE EXERCISE: (APPROX. TIME: 2 HOURS)

The Exercise of CERT Disaster Communications will be the practicing of what participants have learned from the overview segments of this presentation.

Individuals will learn:

- The setting up of a mock community communication network.
- The use and operation of a FRS (walkie-talkie) radio.
- The use of proper radio protocol in using a FRS radio.
- The observation of Ham radios in the community communication network (and hands-on use of Ham radios for participants who have a Ham radio license).
- Working with Network Control Operators in the protocols of message sending and transcription of messages.
- Communicating messages from the CERT neighborhood level to local Network Control sites
- Receiving messages from local Network Control sites and relaying the information to CERT FRS radio operators in neighborhoods.

7. EXERCISE EVALUATION, Q & A: (APPROX. TIME: 30 MINUTES)

All persons involved in the Exercise will be engaged in an evaluation of:

- overall performance,
- use of equipment and procedures,
- comprehension of required exercise functions,
- problems/mistakes in verbal communication,
- problems/mistakes in equipment use
- value of the exercise in the CERT Curricula
- recognition of additional elements to be incorporated into local community communication models,
- recognitions necessary to consider implementation of a Disaster Communications Class into their local CERT Program.

8. ADDITIONAL REFERENCES AND RESOURCES:

A list of additional references to other CERT Organizations utilizing disaster communications in their Programs will be provided. Also, a list of resources of radio related sites where the incorporation of radio communications has been outlined and discussed as a part of disaster preparedness will also be handed out.