

PSV-110
Amateur Radio - POD Operation Support
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Introduction

This report recounts the experience of amateur radio operator George Fletcher, AD5CQ, who volunteered to provide radio communication support at a POD (Point of Distribution) site immediately following Hurricane Ike in 2008.

Scope

This report will cover radio communication preparation, operation and expectations of a volunteer amateur radio operator when assigned to support a POD.

Predeployment

The HCOEM (Harris County Office of Emergency Management) already knows what sites they plan to use if POD operations are declared. This information will not be released until the last possible moment. HCOEM will work with the ARES District 14 District Emergency Coordinator (DEC) and Emergency Coordinators (ECs) to make the request for amateur radio operators to support POD operations. Amateur Radio Emergency Service members should not self-deploy.

Bare minimum equipment requirements

- Reliable transportation including full tank of gas
- Dual Band “Handy-talkies” (HT) (VHF/UHF) radio, and backup HT
- 18” or longer (bigger) antenna
- Additional power resources (batteries) for HT(s)
- Hat, sunscreen, comfortable shoes, chair
- Reading materials, including HT operation manuals
- Food, snacks unless the POD provides these
- Clip board, writing paper, writing instrument
- Coax and necessary connector adapters to connect between the HT and the antenna
- Head\earphones
- High visibility vest
- Identification badge
- Global Positioning System (GPS) or maps of city

Additional (optional) equipment

- Mobile VHF\UHF amateur radio transceiver
- Mobile antenna
- Antenna mast, guy wires and weights for guy lines
- Additional, more capacity power source(s)
- Solar power system (Cells, regulator, wires, battery)

Chain of Command

Representatives of the Federal Emergency Management Agency (FEMA) will likely be the responsible authority (commander) for the POD. You can expect two or more FEMA representatives at each POD. Possible alternative POD management personnel could be members of the National Guard. Amateur radio operators must comply with the POD authority personnel to the extent that they do not adversely affect amateur radio requirements or place the radio operator at personal risk.

Radio operators should immediately identify themselves to the POD commander and establish a working relationship and location for antenna placement. The radio operator is also responsible for implementing the directions of the EC, DEC or local police. This is nearly identical to the chain of command at a breakpoint during the BP MS-150 event.

General responsibilities of a radio amateur volunteer

Every radio amateur operator must assure that their family and property are well taken care of before volunteering to support a POD operation. Operators must not be distracted by worry about their family or property while on duty. Each radio operator must monitor and augment their activities in order to maintain sufficient stamina and energy to complete the assignment period.

The primary expectation of the radio amateur volunteer is to report status information to the established net control. Beyond that primary responsibility, the activities of the radio operator may vary. Radio operators are generally free to provide additional support at the POD so long as the primary responsibility is not adversely impacted.

The radio amateur will likely be required to report the status of the POD at least once an hour. Each radio operator must listen carefully to the instructions of net control for the format of information to communicate. This is imperative in order to have enough time for the net to cover all of the POD that are in operation. Strict net control procedures are critically important. Radio operators obtain POD status prior to the next report so that there is no delay in making the report. ICS form 214 is useful for recording a summary of the information provided to net control. ICS Form 213 may also be useful for recording formal messages to and from the POD.

Radio operators must monitor the net frequency and be able to respond to any request from net control. It is recommended that the dual band HT with an 18+” antenna be used for monitoring the net. Higher-powered transceivers should be powered off until needed to make contact with net control. A mobile transceiver will draw down a healthy car battery if left powered all day long and used for hourly reports.

It is highly desirable to have at least two amateur radio operators at each POD. This will help to divide the overall workload so that one operator is not physically and emotionally drained by the day’s activities. Another benefit would be to train a less experienced operator for greater service in the future.

Radio Operations

A HT radio antennas of 18” are is the bare minimum. Longer or higher antennas may be required based on the location of the POD. Antenna systems can vary significantly based largely on the radio operator’s personal equipment available for deployment. Radio operators are resourceful. An 18” antenna taped to the end of 10’ PVC pipe with connecting coax would probably suffice to overcome many communication difficulties.

Radio operators need to understand the operation of their equipment sufficient to know what and how much additional power resources they need for the planned radio operations at the POD. PODs may be in operation for many days depending on the impact to the community.

Comfortable head or earphones are highly recommended in order to reliably hear a call from net control. Head or earphones need to be comfortable for wearing all or most of the day. Operators should refrain from taking on additional activities at the POD, which would detract from being able to hear a call from net control.

Any antenna masts must be safety checked for impacts to people and property that may occur due to collapse. Guy mast systems sufficiently to withstand potential winds. Ensure that guy lines are marked with yellow or other colored caution tape to alert other personnel to their location. Coax lines should be similarly marked. Antenna masts should be considered a last resort in order to attain reliable communications.

High visibility vests are encouraged. These vests will provide a measure of safety for the radio operator as well as support points for some or all of the operator’s portable radio system. Display your ARES badge at all times.

A radio operator may be assigned to a different POD on different days. Knowledge of how to use a GPS tool to navigate from one location to another is a significant capability. Alternately, have an updated map of the city to use for navigation.

Conclusion

Each radio operator needs to remain flexible. Assignments may change every day or throughout the same day. Reporting requirements will almost certainly change. Always monitor net control and be prepared to respond. Compose your radio “traffic” in your mind or on paper before speaking to net control. Avoid bringing with you the “kitchen sink” when a “plastic bucket” will do. Do not argue with POD commanders or local police authorities. Withdraw and report conflicts to net control. Keep a small journal to be able to provide a meaningful after action report.