ROSWELL / ALPHARETTA HAMWATCH

First Responders Guide to
Communications Emergencies

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You find yourself the first person on the scene of a communications emergency. Congratulations! You are in charge. Who should you talk to? What kind of amateur radio response is appropriate? How do you set up and staff a HamWatch radio command post in an actual emergency? How many people are needed and where do we put them? As first responder, you are responsible for putting a system in place that provides communications appropriate for the emergency and eventually handing your position to someone else.

As an amateur radio operator responding to an actual emergency, you have no authority and no responsibility. You MAY be permitted to help, if you can locate and convince those in charge that they need your help. Once you have identified the person in charge (incident commander), you need to introduce yourself and briefly explain what you can do for him.

Assuming you are successful in convincing the incident commander that you can help (and won't get in the way), you need to arrange to get a few things from him (or her). By now a perimeter is probably set up around the site, at least one command post is set up inside the perimeter, and one control point is set up for entry to the site.

Since disasters occur at random times and in random locations, parking areas near the disaster site are scarce. During the event you may need additional radio operators, possibly additional equipment, and other supplies. The next step is to establish a dispatch point outside the area for other volunteers to check in, drop off supplies, and get directions, maps, or further instructions.

Since it is difficult for you as the first responder to assess the situation and assign positions while talking on the radio, get other operators to perform these functions. One operator will be needed to perform the duties of Net Control, and another will be required to help manage the other operators and their resources that become part of the HamWatch response. This other station is called HamWatch Dispatch. Once Net Control is on the air, your station becomes just another check-in on the net with the tactical callsign of HamWatch Central.

As other volunteers arrive, assign one operator as HamWatch Shuttle to provide a shuttle service from the HamWatch Dispatch location to the disaster site. This is necessary because you and others responding probably won't be able to park inside the perimeter. Getting one vehicle in and out of the event site multiple times will likely be much easier than getting multiple vehicles in.

At this point, the following four positions should be manned:

HamWatch Central (That's YOU!!!) - located near the command post inside the

perimeter;

Hamwatch Dispatch - located outside the perimeter to provide a staging area for other volunteers, equipment, and supplies;

Hamwatch Net Control - a fixed location away from the incident scene, with radio coverage of the perimeter and additional communication capabilities; and

HamWatch Shuttle - a single, easily identified vehicle for transporting radio operators and supplies from HamWatch Dispatch into the perimeter.

With these basic positions manned, it is time to determine the communications requirements. Several questions need to be answered by you and the incident commander, such as:

How long will communication services be needed?
How many HamWatch volunteers are required?
What are the point-to-point communications requirements?
Do we need to shadow officials?
What kind of traffic will be passed?
What special handling is required for messages that cannot be delivered immediately?
How much additional equipment do we need?

Once the communications needs have been determined, let HamWatch Dispatch know how many people are needed and for how long. If possible, originate formal traffic and list each position and the number of operators needed. Include in the message any requests for additional equipment. Using formal traffic insures both Dispatch and Central have an accurate copy of what is required.

Initially, most of the traffic for the net will be requests for particular individuals or for items needed. Many of thes messages will not be able to be delivered immediately because the person or item cannot be found. A HamWatch message board must be established to insure that these open requests do not get forgotten. Use the message board to keep track of the tactical callsign of the station making the request, the time of the request, and the person or item needed. The station keeping the HamWatch Message Board processes these requests by either (a) sending a message to the command post (through HamWatch Central) requesting further handling instructions, (b) generating formal traffic to be sent outside the local net to accomplish delivery, or (c) holding the request until the person or item is found.

When the time comes to pass the role of HamWatch Central to another operator, tell the incident commander when your relief will be taking over and introduce the new operator to the incident commander personally.

Roles and Responsibilities

HamWatch Central
As HamWatch First Responder and Central, you are responsible for the following tasks:

☐ Identify yourself to the incident commander and be prepared to say one sentence about who you are and what you can get done.

☐ Request a place to establish your HamWatch Central station in or near the command post. Then negotiate a procedure for moving other amateur radio volunteers past the control point. Make it clear that you have your own resources (transportation, power, etc.)

☐ Have the next responding volunteer locate a suitable location for a staging area and HamWatch Dispatch point that is outside the perimeter.

☐ Designate a HamWatch Net Control. This station should be AWAY from the incident site and in a relatively fixed location. Ideally this station will have access to other communication facilities. If more than one net is required, a separate Net Control will be required for each net.

☐ Have Dispatch designate a HamWatch Shuttle operator and direct the vehicle through the perimeter control point to the location of HamWatch Central. If possible, mark the vehicle such that it will be easily recognized as the HamWatch Shuttle. Provide the description of this vehicle to those controlling access to the incident site.

☐ Once a response plan has been developed, communicate the plan to the incident commander and to HamWatch Dispatch. Let the incident commander know what you are going to do and give a timetable for the response.

☐ Coordinate with Hamwatch Dispatch on the assignment of operators. Help insure that meaningful tactical callsigns are given for each assignment. As operators come and go at each assignment the tactical callsign remains the same, reducing confusion as the response progresses.

☐ Establish and maintain the HamWatch Message Board for messages that cannot be delivered. Assign this function to another station as soon as another operator is available.

HamWatch Dispatch
HamWatch Dispatch provides a location outside the incident site perimeter where HamWatch operators can meet, receive instructions, directions, and assignments. If the Dispatch location is near other facilities (i.e. fast food, convenience stores, service

stations), the are can be used for rest and relief for operators.

HamWatch Dispatch is responsible for the following:

☐   Maintain a list of positions and equipment that are requested by HamWatch Central.

☐   Get additional operators and supplies as requested by HamWatch Central.

☐   Assign positions to each operator and provide directions or transportation to the site.

☐   Maintain a list of positions, operators, tactical callsigns, arrival time and status.

☐   Insure that all stations are manned and that all volunteers are accounted for. This can be accomplished with the aid of roll calls performed by Net Control.

☐   Insure that the personal needs of volunteers are met. Examples include insuring that operators get meals, that operators get timely relief from assignments if other operators are available, making arrangements for shelter if needed, etc.

☐   Matching assignments with capabilities or limitations of each operator.
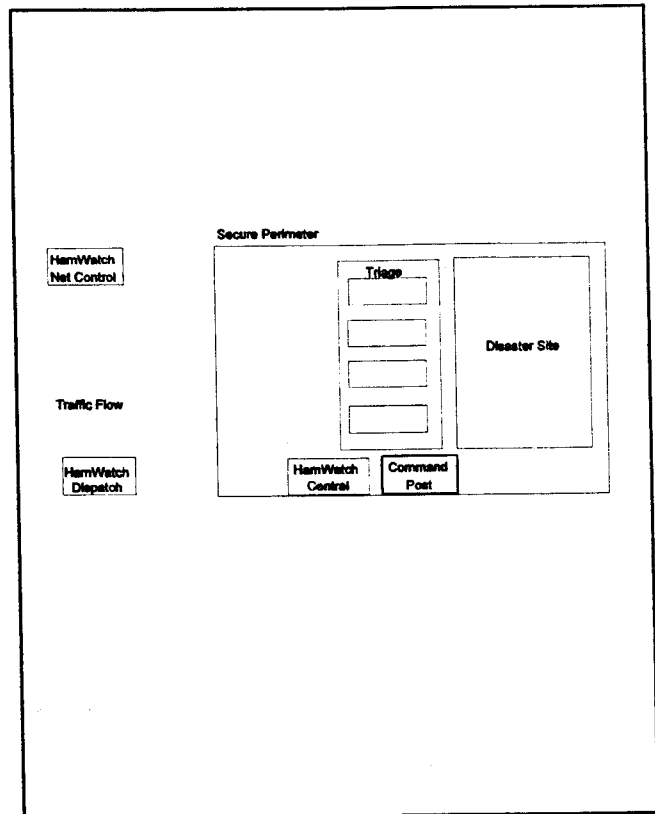
A status board should be maintained to keep track of the positions and the operators assigned.

HamWatch Net Control

During the formative stages of the response the Net Control Station can be instrumental in enlisting (outside) help and coordinate the response. If additional volunteers are needed, the Net Control Station can activate any telephonic recall mechanisms available or use other means for alerting radio operators to the need for volunteers.

Depending on the geographical size of the response, more than one amateur radio

band or mode may be required. Whenever possible, if multiple frequencies or modes are employed, multiple operators should be assigned to the task. A single operator can effectively manage only a single net.

As additional stations are assigned positions and come up on the net, be sure to perform a radio check with each station. Many times operators wander off into "dead" areas and are lost to the net. The radio check alerts the operator to his signal strength and gives warning that he needs to find a "hot spot" to hear and be heard.

Keep in mind that as the situation progresses, operators come and go. Any traffic passed should be addressed to the tactical callsign rather than to the operator. Remind stations to use and respond to their tactical callsigns rather than to their license callsigns, but also to periodically identify by license callsign as required by FCC rules.

Follow normal **DIRECTED** net procedures. Periodic transmissions such as, "This is net control for the Tornado Disaster (drill), KILO DELTA FOUR ALPHA PAPA HOTEL, this is a directed net, please direct all transmissions through net control, out", reinforce net discipline and set a good example for other operators to follow.

Periodic roll calls are necessary to insure everyone is OK and on station. Obviously, roll calls should only be done when other traffic is not pending.

Some stations may have on-going informal traffic for the net. Use the net frequency if it is not busy, otherwise, have the stations change frequencies and report back when they are done. The job of the NCS is to direct the traffic and expedite its flow.

Net control is responsible for the following:

☐ Accept check-ins and list traffic.

☐ Maintain a list of positions manned, tactical callsigns, operator callsigns and traffic status.

☐ Operate a directed net unless conditions dictate otherwise.

☐ Help recruit additional volunteers and equipment.

☐ Use "radio checks" and "roll calls" to insure everyone is still available.

☐ Establish links to outside resources through HF and telephone, if possible..

☐ Identify an alternate NCS and be prepared to give control of the net to your alternate at any time.

As NCS, your primary responsibility is to coordinate net operations. Other functions such as recruiting, passing traffic via HF and the telephone should be done by someone else whenever possible.

Rules for HamWatch Responders

1. DON'T BECOME A VICTIM.

2. IDENTIFY POTENTIAL DANGER.

3. AVOID DANGEROUS AREAS WHEN POSSIBLE.

4. WARN OTHERS OF POTENTIAL DANGER.

5. COMMUNICATE, DON'T PARTICIPATE.

HamWatch Self-Evaluation Questionnaire

1. If you find yourself in the position of "First Responder"; could you approach the site commander and in one sentence tell him who you are and what you can do for him?

2. Should you, as first responder, get the go-ahead for the site commander, are you capable of organizing a HamWatch response which is appropriate to the situation?

3. If you are a first responder and find that you are overwhelmed by the situation would you be willing to ask for help and/or pass your position to someone else?

4. If you were appointed as the HamWatch Dispatch operator, could you "take charge" and organize the supply and relief effort?

5. If you were acting as the HamWatch Dispatch operator and find that you are overwhelmed by the situation, would you be willing to ask for help and/or pass your position to someone else?

6. If you were appointed as HamWatch NCS, could you organize and operate a directed net as well as enlist additional help through the telephone or other means?

7. If you were acting as HamWatch NCS and find that you are overwhelmed by the situation, would you be willing to ask for help and/or pass you position to someone else?

8. If you are one of the HamWatch volunteer operators and you are asked to relay some important information, could you originate and send a piece of formal (written) traffic?

Authors Note

This paper contains information that was intended to be part of a forum on public service communications presented at the ATLANTA RADIO CLUB Hamfest on July 17, 1993. The first part of the forum may be transcribed at a later date and combined with this paper to create a new document.

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Thank you.

Chuck Daley
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Basic Elements of Public Service Event Communications

With the variety of events possible, it is true that each event will have some unique requirements in terms of personnel, equipment, and the type(s) of traffic to be passed. Even so, there are a number of basic elements that are common (or should be) to all events.

Event Liaison and the Communications Coordinator

Before any event can be effectively handled, someone must act as a liaison with the event sponsors or coordinators. For clarity we will call this person the Communications Coordinator. This interaction should begin well in advance of the event and should continue through the event and even after the event is completed.

In the preparation stages for supporting the event, the Event Coordinator will be the source of information regarding the number of operators expected and the types of traffic to be passed. This is the time to discuss what type service the amateur radio community can and cannot provide. The coordinator is also the person to ask such things as where parking is available, what types of clothing or dress is expected of volunteers at the event (this is usually where the subject of t-shirts comes up), what credentials are required to get into the event area, and what if any personal needs are provided for the volunteers (rest facilities, water, food, transportation, etc.). The preparation stage is the ideal time to anticipate potential operating problems and try to find solutions before the event takes place.

During the event, an operator should shadow the Event Coordinator (if he or she will allow it) since that person will be the one to address questions and problems during the event. This person will also very likely be the destination of a large portion of the event radio traffic. Ideally, the Communications Coordinator should be the shadow since they will already be familiar with each other and will have some amount of common knowledge regarding the event.

Many organizations will critique an event after it is completed in order to examine things that worked and those that didn't in anticipation of the next time the event should take place. The Communications Coordinator will likely be able to provide valuable information to the Event Coordinator that should be covered in such a critique. Some examples would be recommendations for increasing or decreasing the number of operators required, additional communications needs that the amateur community cannot handle, or observations where particular successes or failures were experienced. This is one of the reasons why it is important for there to be interaction from preparation through follow-up.

To summarize, the Communications Coordinator is the amateur community's representative for the entire event and should be considered "IN CHARGE" of the amateur radio volunteers for the duration of the event. Success or failure of communications will largely be determined by the prior planning and communication between the Communications Coordinator and the Event Coordinator.

Resource Management and Dispatch

During an event it will be necessary for someone to manage how operators are deployed and to see that their needs are taken care of. Additionally, there needs to be someone to act as a "SECOND IN COMMAND" in the event the Communications Coordinator should ever be out of radio contact. We will call this position DISPATCH. Unfortunately, this job is frequently doubled with either Net Control or the Communications Coordinator positions, neither of which can really give it as much time and attention as it deserves.

Ideally, Dispatch will establish a marshalling position for all of the operators to meet. At this point they can be given credentials and any other items that they need for participating in the event. If transportation must be provided to the operators, it is Dispatch that sees to this being accomplished (Note: this doesn't necessarily mean that Dispatch must be the actual provider of the transportation). Dispatch should make all operator assignments consistent with the operating and equipment capabilities of each operator. If during the event operators need relief from their assignments, Dispatch must be able to see that relief takes place. At the same time Dispatch insures that stations are manned and service is not degraded.

For some types of events it has been difficult to dedicate one person to performing the Dispatch functions. One way to handle such situations is for Dispatch to also fill an operating position that might allow him or her to perform both jobs simultaneously (possibly that of Shuttle operator). An alternative is to have Dispatch located at or near the Net Control Station in order to insure that Net Control operations requirements are adequately met.

Net Control

Net Control has one job and that is to insure that communications run smoothly. A net control operator should be utilized anytime there are more than three operators operating together for an event. Ideally, the Net Control station should be established AWAY from all of the other activity in order to allow him or her to concentrate on managing the net. The station should have access to as many different means of communications as possible (other radio bands or frequencies, telephone, etc.) Anytime more than one frequency or system needs to be managed or monitored, there should be one operator for each system because one operator cannot effectively manage more than one frequency. One way to lessen some of the burden on Net Control would be to have unassigned relief operators or Dispatch helping with Net Control duties.

Directed nets are essential for public service events. The potential volume of traffic makes "free-for-all" nets very difficult to operate. In the directed net environment any station with traffic must call Net Control for permission to contact the destination station. NET CONTROL CONTROLS THE NET, HE OR SHE DOES NOT HANDLE TRAFFIC. Net Control should not be handling messages EXCEPT when conditions require relay, or when there is traffic that must be sent via a system that only the Net Control station has access to.

These are the three stations that should be common to every public service event. The other stations will vary with the nature and size of the event. Some examples follow.

Shuttle (for operators)
Shadows for Event Officials
Start
Finish
EMS or medical
Rest areas
Volunteer check-in
Escort and chase vehicles

The number of and types of stations will be determined by the needs of the event, the imagination of the coordinators, and the number of operators that volunteer.

Operation Techniques

Operators that are new to Public Service Event communications will find an environment that is a bit different from our daily amateur activities. Principally, we are communicating for others rather than for ourselves. Consequently, we have to operate in such a fashion as to process the greatest number of messages with as few errors as possible.

Even though we are operating in a "tactical" environment where formal message traffic is often less than efficient, every message should still be concise and handled with a similar level of care to insure the integrity of communications between the sender and the recipient.

When in doubt about how to handle messages it is sometimes helpful to think of the amateur radio support staff is a small telegraph network. Virtually all situations that arise in message handling can be resolved by referring to this "model."

Message Addressing

Before a message can be sent it is essential to establish who the intended recipient is and where this person or persons might be located. In most cases it will be a single individual, while in others it may be for everyone associated with the event. In either case it is essential to know where the message is to be delivered.

The sender's identity and/or title must also be included in the message. First, this lends authenticity to the message. Secondly, if the recipient needs to send messages to get more information or wishes to reply to the message, it will be clear to whom the next message should go. For the sake of clarity, the sender is the person who requested the message be sent, not the radio operator who handled the message.

There is one type of message that does not have a clear recipient and these we frequently refer to as "jump ball" messages. Often they appear in the form of a question like "Does anyone know where the lunches for the officials are?" If not followed up, this type of message easily falls through the cracks. The Communications Coordinator should ask the Event Coordinator for any particulars on handling this type of message. Until the message is handled, this request should be logged with Dispatch until such time as the particular query is answered and the sender has been contacted for further action. Jump balls should be reviewed at regular intervals so they are not forgotten.

Message Content

While we are providing communications for event personnel, we are the communications vehicle rather than a communications participant. There is a tendency for operators to have a "desire" to understand the meaning of a message and the actions resulting from this desire often result in unnecessary transmissions and some measure of confusion.

It is may be appropriate to "negotiate" with the sender the contents of the message in order to

should use.

Making the effort to take part in public service communications is far more important than what model is used. It is through public service communications that we can justify the existence of the amateur radio service and repay the public for the PRIVILEGE of being amateur radio operators. It also provides an opportunity to practice the operating techniques that we would use during an actual emergency. During these events we can demonstrate our abilities to various agencies in the public safety community and establish contacts that will be very important if we hope to be of service in actual emergencies.

I hope that the readers of this paper and attendees of the forum have found this information to be interesting and useful. If anyone has any questions or comments they would like to make regarding this paper or the forum, my contact information will appear at the end of this paper.

Thank you.

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