Neighborhood HamWatch
Serving the Ham's Friends and Neighbors

Neighborhood HamWatch is not an organization. NHW is a service program any individual amateur radio operator (Ham) can voluntarily perform to relay information between their neighbors and other amateur radio stations during times of extended power outage.

CONCEPT OF OPERATIONS
During periods of extended power outage, people discover that batteries do not last forever and government response to the emergency that causes the power outage takes longer than expected. People may be without power for several days, even weeks. They may also be physically isolated due to downed trees, flooded rivers, or unsafe roadways.

This means commercial radio and television reception is disrupted, telephone and cell phone circuits are overloaded, and the sense of community is shaken. During these periods of communication isolation, fear and rumors fill the gap created by a lack of official information and the inability to contact someone outside of the affected area.

During these times, amateur radio operators may voluntarily use their radios to break through the barrier of silence and establish two-way communications for the purpose of temporarily reconnecting their neighbors to community emergency response headquarters, and possibly to their friends or relatives outside the affected area. Official information about recovery efforts can then be relayed by the amateur radio operator to and from neighbors and emergency management.

NHW SERVICE LEVELS
Amateur radio operators may provide any or all of three levels of service to their neighbors depending upon their equipment capability.

Breaking the Silence Barrier
The first level of service is to **provide simple conversational contact with amateur radio operators in other neighborhoods**. Doing nothing more than sharing information about neighborhood conditions can help people in the overall community recognize the extent of the problem and better appreciate the volume of recovery effort required to bring things back to normal. Sharing this kind of information inevitably leads to general conversation which counters feelings of loneliness and fears of being forgotten that accompany extended periods of power outage. Breaking through the barrier of silence is a first step towards establishing relay capability across the overall community, neighborhood by neighborhood. So when the power goes out, HAMs get on the radio and talk to other HAMs.

Aiding Emergency Response
The second level of service is to **establish two-way communication with an amateur radio station located in the local government Emergency Operations Center (EOC)**. By prior arrangement, a specific frequency should be arranged for NHW contacts so as not to interrupt or interfere with designated repeaters or frequencies utilized for the communication of official emergency management information. Although, amateur radio operators may monitor other communications and thereby obtain information about the progress of general recovery efforts. In this fashion, amateur stations in EOC's can develop a list of amateur operators available in different neighborhoods of the community for the current power outage.

Note that not all amateur radio stations located in EOC's will necessarily be operated by ARES® members. Recent changes in FCC regulations permit governmental agencies to utilize full-time government employees who are licensed amateur radio operators to operate during periods of emergencies. Consequently, local government Emergency Managers must understand and endorse the use of Neighborhood HamWatch for the purposes intended.

When local government emergency managers do not recognize NHW, this level of service may not be able to be provided, except to monitor amateur frequencies being used by official responders for information.

Remote Family Contact
The third level of service is **to provide Internet messaging service for neighbors to distant relatives** utilizing Email supported by WinLink 2000 technology that allows amateur radio operators to connect their computers to the Internet through their HAM radio. WinLink 2000 allows the sending and receiving of short, text only, Emails through the Internet even though local commercial power is unavailable, and/or local internet providers are inoperative.

Emails relayed through WinLink 2000 allow for direct third party communication to any Email address in the country thus keeping the National Traffic System from becoming clogged with non-emergency traffic.

ROOTS IN RELAY
NHW is based on the concept of relay, inherent in amateur radio legacy.   An amateur radio operator does not need equipment or power to reach the other side of the country. Only the ability to maintain two-way communication with another amateur radio operator located between you and the intended destination of your communication is necessary, except in the case of providing the third level of service where you must be able to reach the nearest HF or VHF WinLink 2000 node. Therefore, NHW operates in simplex mode and does not rely on any external source for message relay or power boost.   NHW utilizes repeaters ONLY if they are available and unrestricted for only emergency operation.

As a matter of good practice it is always best to build NHW relays utilizing simplex mode in order to eliminate reliance on equipment that may or may not be operable or available during emergencies. Our roots are in our capacity to relay.

PARTICIPATION

Any legally licensed Amateur Radio Operator can participate in Neighborhood HamWatch. There is no special training required, no special procedures or special rules to follow. If you have your FCC license, you have fully met all of the requirements. Simply follow accepted good practices of amateur radio operations and FCC regulations.

Participation is ideal for those amateur radio operators who are unable to deploy during emergency conditions in ARES® activities, but still want to be able to make a contribution using their skills and capabilities. You can participate fully in Neighborhood HamWatch from your own home or work location with nothing more than a hand-held transceiver and plenty of batteries. For those whose personal health, physical condition, family needs, work requirements, or other factors that limit their ability to deploy during emergencies, Neighborhood HamWatch offers a way to help their neighbor and the emergency recovery effort.

There are no vetting requirements. We do have a design for a basic identification badge for Neighborhood HamWatch volunteers so that they can be recognized by neighbors and others as a participating amateur radio operator.

EQUIPMENT AND READINESS

Level One service, Breaking the Silence Barrier, and Level Two Service, Aiding the Emergency Response, can be provided with minimal equipment. A simple hand-held transceiver (HT), extra batteries, with signal strength great enough to reach another amateur radio operator, will do just fine. You can build capability on this basic equipment by adding an external antenna, a means of charging your batteries using solar energy, or keeping a larger battery charged-up for back-up power.

Remember you don't have to reach out any farther than another ham in order to connect yourself via relay with your local Emergency Operations Center. If you can communicate direct with your EOC, all the better.

Repeaters are great, but Neighborhood HamWatch can't depend on them. First they may be knocked out by the emergency situation. Or they may be temporarily restricted for use only by official emergency operations. Use of 2 meter simplex FM mode is easy, unrestrictive, and efficient. We recommend starting with the simplex frequency of 147.555 (unless it happens to be a repeater frequency in your area) and work from there to find a frequency clear of traffic and useful for Neighborhood HamWatch traffic.

Keep your batteries charged-up, and provide for a means to recharge your batteries without commercial power, such as from a portable generator, solar cells, or other power source. Level Three service, Remote Family Contact, requires the ability to connect your computer to the Internet through your amateur radio. This can be done utilizing WinLink 2000. You will need the additional hardware, software, and Email skills to provide Level Three service. But don't be afraid to get into this. It isn't really that difficult and there are some outstanding sources of help available to get you going.

It is also possible to initiate messages through the National Traffic System (NTS) by connecting to a local traffic net. However, during emergencies, the NTS may be overloaded with priority messages dealing with the emergency itself, and personal or "Health and Welfare" messages may not be accepted. WinLink 2000 is the best bet to provide Level Three service.

PRACTICE

Listen in on ARES® training nets. If the net permits visitors to check in, do so. This will prove you are able to both send and receive to your local Emergency Operations Center using their repeater and via simplex.

Find another amateur radio operator you can talk to who is willing to participate in Neighborhood HamWatch. Become "Relay Buddies," so that you have someone to conduct Level One, Break the Silence, service with. You and your buddy can relay to others as well, and soon you will be able to talk across the county without a repeater.

Listen in on local NTS traffic nets. When you feel comfortable, check in to that net so that others learn who you are and where you are located. This is a great way to find a "Relay Buddy."

Experiment with batteries, solar chargers, and antennas to find the easiest, most efficient means to participate in Neighborhood HamWatch when there is no commercial power.

Then, let your neighbors know what you can and are willing to do during times of extended power outage. Give them a demonstration.

AFFILIATIONS

Since Neighborhood HamWatch is not an organization, it is not affiliated with any organization. It is only a service activity open to voluntary participation by any amateur radio operator. NHW does fully cooperate with ARES® and local government amateur radio station operators to act as a force multiplier to their communication capabilities and community response obligations. Any amateur radio club may support the NHW program by encouraging members to participate, but no club or organization may limit or control NHW activities since these activities are founded on the basic freedoms enjoyed by any FCC licensed amateur radio operator.

For more information visit the Neighborhood HamWatch website at: