



## THE FIRST 72 HOURS – WHAT TO EXPECT

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### **Onset: Critical Communication Requirements in a Disaster**

What happens to critical communication assets during the onset of disaster conditions? First, there is a huge increase in the volume of traffic on public-safety radio channels, accompanied by prolonged waiting periods to gain access. As the disaster widens, equipment outages occur at key locations. Messages are not handled in order of priority, and urgent messages are often lost.

As agencies respond, the need arises for agencies to communicate with one another. Meeting that need is an up-hill battle as these agencies have incompatible radio systems, and use unfamiliar or unattainable frequencies, names, terms, and procedures. Exacerbating the situation is the fact that most agencies are reluctant to use another agency's system, or to allow theirs to be used by others.

In a large-scale situation, a need arises to contact locations at distances beyond the range of a given radio or system (50 to 350 miles or more).

Message reply delays are experienced, leading to deferred decisions on crucial matters, message duplication and confusion. A need arises to generate and decipher handwritten messages sent through relaying stations.

Different modes of communication are required in addition to voice:

- Volume data in printed form data modes, high-speed packet, and facsimile.
- Morse code or PSK31 under difficult reception conditions.
- Encoded data for extreme privacy.
- Television--mobile, portable, aeronautical, and marine.
- Telephone interconnections from/to radio systems.

Simultaneously with a high volume of message traffic, stations must cope with messages having widely differing priorities. Also, priority and precedence designations differ among agencies if any are used at all.

Operational problems arise such as:

1. High-volume traffic circuits with no supply of message forms;
2. Using the only printed forms available that were designed for a different, unrelated agency or function;
3. Attempting to decipher scribbling from untrained message writers; using scribes who cannot understand radio parlance or read through QRM; and
4. Becoming inundated with traffic volume so heavy it results in confusion over which messages are to be sent, which were sent, which have been received for delivery, and which have been received to be filed for ready reference.

### **What Happens in the First 72 Hours?**

In the early hours of an emergency turning into a major disaster, it takes precious time to overcome the obstacles to placing fully activated mutual aid resources into operation. Communication is one of those vital resources.

The greatest concentration of relief efforts is generally found in the incorporated cities served by agencies with paid professionals - assuming their equipment, facilities and personnel remain operable. While urban areas experience more concentrated damage, suburbs and isolated areas of a county suffer from remoteness from fire departments, public works, law enforcement and the services of all other agencies. All organizations scramble to respond to an unprecedented demand for service within their authorized jurisdiction.

In these circumstances the public is often isolated, unable to call for help or determine the nature and extent of the disaster so that they can make plans to:

- "Wait it out."
- Prepare to evacuate.
- Actually evacuate with some possessions to a safe place.
- Obtain physical aid for an impending catastrophe.
- Offer aid to a relative, friend or neighbor.

Lack of information results in further attempted use of the telephone when the system is already saturated, if indeed it is still operating at all. Calls can often be received from out-of-town but not made across town.

The opportunity to call for help is often unavailable to most citizens during the first 72 hours. Occasionally, a passing public safety vehicle or one equipped with an operational commercial, utility, Amateur or CB radio can be "flagged down" to make a call assuming it can contact a person who can help.

Too little factual information is gathered about the public's immediate needs, and ways to meet them. Distorted public perceptions develop through misinformation. At the same time, essential damage-assessment report data is needed by county, state and federal agencies to initiate relief aid from outside the disaster area. Broadcast stations (those still on the air) initially disseminate "breaking news" rumors in the absence of factual information. Those few people who possess an operating battery-powered broadcast band radio can tune until they

find a local station that can provide helpful information. Others receive such information second hand, if at all.

Everywhere, people walk aimlessly seeking a route to family and friends. Many, fearful of looting, remain in hazardous buildings, or return, as do shopkeepers, to salvage valuables. As darkness falls, rumors of looting are generated, some true. Word circulates about shelter locations. Some displaced persons stay at homes of friends, relatives, or strangers. Others are housed at public shelters into the fourth day, still searching for family members elsewhere, and without communication. The opportunity to notify concerned distant relatives is not afforded except via Amateur Radio and the Salvation Arm, or American Red Cross.

Later, often too late, information trickles in about problem areas or cases that have been overlooked due to the lack of communication. Some potential evacuees are overlooked. Once the immediate threat to life has passed, survival instincts prevail. Printed "What to Do" instructions are located and followed, and people operate essentially on their own for an indefinite period while public agencies respond to the most urgent problems of which their communications make them aware.

Be prepared for aftershocks, flare-up of fires, weakening or breaking of dams, new flood crests, build-up, and weather changes, etc. This results in some relief work being undone and the posing of new threats.

Inter-agency communication is poor to non-existent. At the end of 72 hours, the disaster area remains in virtual isolation except for helicopter service for known critical cases and official use. Little centralized information is available. Amateur Radio operators from neighboring counties and states offer to help but are often unable to cross the roadblocks established to limit access by sightseers and potential looters. Disorganized local volunteers often lack essential skills and orientation. Costly mistakes are made and systems bog down.

The dead pose a serious health problem. Stress rises among the citizenry. Little overall assessment emerges in the first 72 hours about available emergency resources and relief supplies. Shortages are apparent and growing.

Travel continues to be difficult and slow. Relief supplies trickle in to uncertain storage locations. Some supplies are useless.

Restaurants remaining open are unable to cook without gas or to serve the masses that overwhelm them. Food and water shortages have become critical. Normal water sources may have been cut off or contaminated. Eventually, essential functional communication networks evolve as priorities are asserted and clusters of traffic emerge. Relief efforts are mounted when someone takes charge, makes a decision, and directs the efforts of others. The command and control process of directing others requires communication - the ingredient in short supply in all disasters.

At critiques following a disaster, as always, the cry is heard: "Next time we must be better prepared!"