

Hurricane Response Planning in Florida

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Abstract

On August 24, 1992, Dade County, Florida experienced a hurricane of catastrophic proportions. Hurricane Andrew was the third most powerful storm to hit the United States and became the most costly natural disaster ever recorded. Andrew caused property damage exceeding \$20 Billion and left nearly 200,000 Floridians homeless. This disaster resulted in a severe and prolonged disruption of normal activities, including government services, in an area of approximately 1,100 square miles.

In addition to describing the impact of Andrew, this report examines the extreme difficulties which were faced by Criminal Justice Administrators in responding to this event. As is always the case, law enforcement was called upon to quickly mobilize, adapt, and restore some degree of normalcy in the stricken area. Andrew was a tremendous learning experience and should result in a better-prepared and more effective response to the next "big one." Specifically, this report explores criminal justice planning. Certainly, a key major success factor in properly responding to a major disaster is the thoroughness of advanced planning by criminal justice administrators. Preparations must be made far in advance of a disaster occurring. Criminal justice administrators must take advantage of the lessons learned from Hurricane Andrew to develop or modify hurricane plans, training, and general preparedness. The experiences of all agencies should be examined. This report outlines major legal authorities and requirements, recommendations, and detailed checklists for comprehensive planning.

Introduction

In addition to an examination of the tremendous impact of Hurricane Andrew and the lessons to be learned from that disaster, there are several natural and historical factors which should be considered by the criminal justice administrator. Florida is, perhaps, the most hurricane vulnerable location in North America. In spite of this, it also appears that most Floridians are not prepared for such potentially catastrophic events.

Florida is the most southern state in North America, a peninsula with 1,350 miles of coastal area. With the Atlantic Ocean on the east and the Gulf of Mexico on the west, Florida is an ideal target from two sides. Tropical depressions or storms generally develop off the west coast of Africa and travel westward towards North and Central America. Depending on the weather conditions and steering currents of the upper winds, Florida is always a prime target.

The state's flat topography makes Florida's coastal area especially vulnerable to the destructive effects of storm surge and high winds. Most of the coast of Florida is only a few feet above sea level. Therefore, strong winds and high tides can have a devastating effect, particularly with the state's rapidly growing population and development in coastal areas.

The majority of individuals who retire or relocate to Florida do so because of the warm year-round climate and the resulting recreational activities provided by the state's

extensive coastline. Consequently, most growth is along or near coastal areas, posing significant public safety concerns in the event of a hurricane.

It is anticipated that the "coastal" population of Florida will reach 10 million by the year 2000, and many current residents have escaped the experience of a major hurricane. (Until Andrew, most south Floridians had not experienced a major hurricane since Donna hit the sparsely populated Florida Keys in 1960.) Complicating the size of the coastal population and the lack of experience with a major hurricane, there now exists the unwillingness of residents to evacuate. Many residents now stay and ride out the storm, not understanding that few buildings are constructed to withstand a major hurricane and its accompanying storm surge and/or excessive wind velocity.

Most residents do not understand the potential of the hurricane's storm surge. A recent report stated, "The most dangerous element of a hurricane is when the ocean water rises as much as 30 feet and floods lands that are normally dry. Roads leading away from developed coastal areas will not carry traffic fast enough for evacuees to beat an approaching hurricane" (U.S. Senate, 1986, p. 2).

In addition to the fact that there are many residents who are reluctant to evacuate, it is also believed that even mandatory evacuation, if it occurs too late, is ineffective. The Senate report indicated that, "several communities in Florida have recently acknowledged that complete evacuation will not be possible given the amount of notice given for a major hurricane. This is particularly true in areas with residents living on barrier islands. Consequently, if a major hurricane were to strike certain areas of Florida's coast, the number of deaths could be in the thousands" (U.S. Senate, 1986).

It is clear that evacuation, even with planning, takes time. The criminal justice administrator can be faced with the probability of a hurricane with little or no warning. There are two primary reasons why:

- A 12-hour notice is the best people can expect, yet studies show some areas of Florida will take 28 hours or longer to evacuate.
- Hurricane tracks of past storms show that some areas of the state experience hurricane force winds on an average of one every 25 years. (U.S. Senate, 1986).

Most criminal justice administrators and local governments have hurricane or emergency evacuation plans, but are the plans adequate? According to Jack D. Kartez and Michael K. Lindell, in adaptive planning for community disaster response:

Formal disaster plans have been adopted by over 80% of U.S. localities; recent assessment by the International City Management Association concluded that local governments continue to be surprised when the procedure of local governments often fail to improve their plans even after a major disaster has been experienced. Different critics have attributed these failure to different factors, including:

1. *A lack of relevant experience with disaster response;*
2. *A failure to learn from experience;*
3. *A lack of commitment to carry-out disaster planning programs, and;*
4. *Doing the wrong kind of planning.*

The experiences of the response and recovery efforts employed in the wake of Hurricane Andrew provide an excellent point of review and evaluation to provide criminal justice administrators with methods of better preparing themselves and all Floridians for future major hurricanes.

Impact of Hurricane Andrew

Florida experienced a catastrophic hurricane on August 24, 1992, in Dade County. Hurricane Andrew has been described as the third most powerful to hit the United States in recorded history. Andrew was the first storm of this magnitude to hit Florida in 32 years and caused property damage exceeding \$20 billion.

Hurricane Andrew slammed into South Florida at 5:00 AM, August 24, 1992, damaging 1,100 square miles as it traveled across the peninsula into the Gulf of Mexico. Classified as a Category IV storm, with sustained winds of 145 mph and gusts up to 175 mph, Andrew battered the coast and yet caused its most severe damage inland. The eye of Hurricane Andrew made landfall near the city of Homestead, the area hardest hit by the storm. Andrew's storm surge set a record high for Florida, 16.9 feet in Biscayne Bay at Southwest 160th Street.

... virtually all economic activities in the devastated south Dade area ceased following the storm. The heaviest damage was inflicted on south Dade area, home to 8,000 of the nearly 60,000 businesses in Dade County and 120,000 jobs. As of September 24, 1992, an estimated 86,000 people were out of work and 7,800 businesses were closed, at least temporarily. Tourism, a \$500 million per year industry will likely be severely impacted in the coming years because of damage to motels, restaurants, and parks and travel industry perception. There is uncertainty about the reopening of Homestead Air Force Base, which was severely damaged by the storm. The base accounted for 14,000 military and civilian jobs and annually contributed more than \$400 million to the local economy. Approximately 80,000 military retirees shopped at the base. Damage to agriculture is estimated at \$1 billion, with a permanent income loss of \$250 million and \$580 million dollars in damage to structures.

The law enforcement response to this emergency was massive, involving scores of agencies and hundreds of officers for an extended period of time. In many ways, the devastated community looked to law enforcement for effective and decisive leadership in the face of this catastrophic event to maintain public security and at least some normalcy of life.

While all responding agencies were, and should have been, commended for their recovery efforts following Hurricane Andrew, the magnitude of this storm revealed the need to better plan and prepare for future hurricanes. Certainly, before another disaster of this magnitude occurs in Florida, improvements should be made in this state's level of preparedness.

In effect, Hurricane Andrew served as a wake-up call for local and state criminal justice administrators, for it is certain that there will be another hurricane, possibly as severe, or more severe, than Andrew.

It is incumbent upon every criminal justice administrator in Florida to strongly

examine the devastation caused by Andrew and the response and recovery efforts which followed this storm. Each administrator should ask the question: *If Hurricane Andrew had hit the community I'm responsible for, would my agency's hurricane plan provide an appropriate response?*

Major findings

On the morning of Monday, August 24, 1992, as daylight dawned and Hurricane Andrew continued its move westward out of Dade County and toward the Gulf of Mexico, a criminal justice administrator's worst nightmare became reality. As the hours passed, the massive nature of the many areas of destruction caused by Andrew became apparent and the corresponding and unprecedented volume of requests for assistance began. This response was to continue for many, many weeks and cost the State of Florida millions of dollars. Since Andrew, it has become abundantly clear that most, if not all, current hurricane response plans would have proven to be inadequate in the face of this massive storm. This inadequacy must be carefully and fully addressed to ensure a proper response to the devastation which can and probably will be caused by a future catastrophic storm.

Why are these plans inadequate? According to the Governor's Disaster Planning and Response Review Committee, one major problem is that most current plans generally are written to prepare for a response to a hurricane -- and do not provide for differing contingencies based upon the intensity, or classification, of the storm. The Committee's report stated that "the needs of citizens and communities following emergencies vary given the intensity and scale of disaster incidents. Therefore, planning for response and recovery should vary similarly." The report recommended that state and local governments use the following categories in planning efforts:

Minor disasters that are likely to be within the response capabilities of local governments and to result in only a minimal need for state and federal assistance, such as a tropical storm or limited flooding.

Major disasters that are likely to exceed local capabilities and require a broad range of state and federal assistance, such as a Category I, II or III hurricane.

Catastrophic disasters that will require massive state and federal assistance, including immediate military involvement, such as a Category IV or V hurricane that hits a densely populated area (Lewis, 1992).

Based upon Lewis' recommendation, §252.36(3)(c), F.S., was amended by the 1992 Legislature to require the Governor, when issuing an Executive Order of Proclamation of a State of Emergency to "identify whether the state of emergency is due to a minor, major, or catastrophic disaster." There are also indications that the federal government is considering those classes of magnitude in its emergency preparedness and response.

Every criminal justice agency needs to re-address, in its hurricane plan, how the agency will respond in reference to the three categories now defined and mandated by statute. Among the many recommendations that came from the review of the impact of

Hurricane Andrew, this is probably the most important because it now requires the criminal justice agency to focus on response for different intensities of hurricanes or storms. The criminal justice agency should also consider that the new categories track §252.34, F.S., on declaration of a state of emergency by a county, the Governor, or the President of the United States. For general planning purposes, a minor disaster would lead to a declaration of emergency called by the county, a major disaster by the Governor, and a catastrophic by the President.

Each criminal justice agency should also be aware of the Emergency Management powers of different political subdivisions as currently defined in §252.38, F.S.:

Each county shall establish and maintain an emergency management agency and shall develop a county emergency management plan and program ...

(1)(b) ... counties shall serve as liaisons for all coordination of municipality's request for state and federal assistance during post-disaster emergency operations.

(2) Legally constituted municipalities are authorized and encouraged to create municipal emergency management agencies. Municipal emergency management agencies shall coordinate their activities with those of the county emergency management agencies. Municipalities without emergency management agencies shall be served by their respective county agencies.

Based on the requirements of Florida Statutes, each county criminal justice agency should, via the authority of the county emergency management agency, have a plan to deal with responses to hurricanes and will be required to serve as liaison for municipalities. Municipal criminal justice agencies are required to coordinate their activities with the county, to include any request for state or federal emergency response.

One of the questions raised in the response to Andrew was the chain of command and relationships between federal, state, county, and municipal governments. In reviewing the current changes in the Florida Statutes, it is clear that the county has the responsibility to plan and coordinate within its jurisdiction. Although municipal agencies are encouraged to plan, they must coordinate activities with the county.

In the case of major or catastrophic disasters, as Hurricane Andrew, the needs of the citizens and communities will likely be greater than local resources. Therefore, the state and federal government polices are to respond to support local emergency efforts. "Current predictions that Florida is at risk to be hit by more frequent and stronger hurricanes in the coming years, add to the urgency to the need to act quickly" (Lewis, 1993). One of the first steps is to improve law enforcement preparedness by rewriting hurricane plans. According to the Committee (1993), there are at least five objectives that should be met:

- Plans should provide for a clear chain of command.
- Plans should clearly delineate the roles and responsibilities of individuals and organizations.
- These should ensure that the designated individuals and organizations are trained to carry out their roles and responsibilities.
- The organization of federal, state, and local post-disaster and recovery teams should

be generally aligned and parallel.

- The plans should prepare for disaster of different magnitudes to ensure that response actions taken are appropriate given the magnitude of the disaster.

Mr. Lewis' committee also recommended four key solutions to the problems revealed during the response and recovery of Andrew:

- Improved communication among all levels of government.
- Strengthened plans for evacuation, shelter, and post-disaster response and recovery.
- Enhanced intergovernmental coordination.
- Improved training.

Planning Checklists

To facilitate proper planning and implementation of response efforts, it is recommended that criminal justice administrators employ a series of planning checklists which "inventory" all necessary preparations and actions and serve as a general guide for use by the criminal justice agency. These checklists could also provide definitions which should be consistently understood in preparing for a response.

The purpose of these checklists is to provide the criminal justice administrator with a list of items he or she may want to ensure occur prior to a hurricane. Although these lists may not be all-inclusive, they will provide a general framework for planning and a knowledge of those items discussed or reviewed by the Governor's Disaster Planning and Response Review Committee and other research documents concerning hurricane preparedness.

The value of these checklists to the experienced, or inexperienced, criminal justice agency in dealing with a hurricane is that this information has been derived from the experiences of those who dealt with the third worst hurricane to hit North America.

If those criminal justice agencies who were unfortunate enough to be forced to deal with the aftermath of Hurricane Andrew had possessed these lists, it is felt they would have been far better prepared to respond in a timely manner to the aftermath of Hurricane Andrew.

Everyone learns from experience; it really is the best teacher. It is incumbent upon every criminal justice agency to learn from the experience of Andrew. All law enforcement must be prepared for the "big one" which may be yet to come.

Pre-disaster Checklist

Planning

1. Maintain a current hurricane plan.
2. Review the plan routinely and at least once each year.
3. Designate a full- or part-time person to coordinate and update the plan and an individual responsible for coordination of all emergency management efforts.
4. Meet with all city/county emergency managers to review their plans at least once each year.
5. Meet with adjacent city/county criminal justice administrators at least annually.
6. Meet with state and federal criminal justice agencies and include them in the local

- planning effort.
7. Establish guidelines for evacuating citizens and police officers.
 8. Identify locations for shelters in consultation with county emergency managers and American Red Cross.
 9. Maintain a plan for post-disaster assistance location for American Red Cross (ARC), Disaster Assistance Centers (DAC), and Food Stamp locations.
 10. Ensure that ARC, DAC, and Food Stamp locations are co-located, if possible.
 11. Pre-establish a fully-equipped command post center for emergency activation.
 12. Ensure the command post center is equipped with adequate phone lines.
 13. Develop plans to secure or relocate the following equipment:
 - Aircraft.
 - Helicopters.
 - Boats.
 - Motorcycles.
 - Vehicles.
 14. Develop plans to ensure that the street or road department has some means of putting up temporary street signs. Consider issuing cans of spray paint to officers for temporary sign preparation.
 15. Develop and communicate a plan with city/county/state work crews to open and clean major arteries as the first priority.
 16. Maintain presigned Mutual Aid Agreements with other state, county and city law enforcement agencies.
 17. Secure all public offices which are not "hurricane proof" and determine if offices are located in a flood plain.
 18. Designate an individual to establish and maintain a log of events and/or actions.
 19. Secure a crane (or aerial ladder) to be used as a radio communication tower, if necessary.
 20. Coordinate with the Florida Department of Community Affairs, Division of Emergency Management (DEM):
 - Time frame for the evacuation order to be issued by the state and the county.
 - Estimation of population at risk.
 - Number of shelters needed.
 - State assistance needs:
 - Law enforcement personnel.
 - Traffic control.
 - Security.
 - Shelter personnel needed.
 - Accessibility of necessary evacuation routes.
 - Need for Governor to issue an executive order to support county operations.
 21. Establish plans to inform the state DEM of the following actions:
 - Evacuation.
 - Public Sheltering.
 - Road/Bridge closures.
 22. Identify resources available through the Florida National Guard via the Florida Mutual Aid Director (Florida Department of Law Enforcement).
 23. Ensure availability of additional radio dispatchers and/or telephone receptionists.

Evacuation

1. Maintain a current evacuation plan within city/county and adjacent jurisdictions.
2. Utilize a barricade deployment plan.
3. Provide a fixed-post assignment for evacuation plan.
4. Maintain a list of locations which may need to be evacuated:
 - Hospitals.
 - Nursing homes.
 - Jails.
 - Correctional facilities.
 - Mobile home parks.
 - etc.
5. Conduct a review of all police stations/office facilities to ensure they do not need to be evacuated due to wind or potential flooding.
6. Consider the temporary lifting of tolls on appropriate evacuation routes. (Coordinate with the Florida Department of Transportation.) Have the individual with this authority on stand-by.
7. Consider early evacuation of barrier islands and low-lying areas and increase security in those areas.
8. Coordinate a marine evacuation of the coastal waters.
9. Coordinate evacuation of any off-shore islands.
10. Evaluate observed traffic situations and correct deficiencies.
11. Activate a traffic control plan:
 - Traffic control points.
 - Traffic control devices.
12. Coordinate emergency transportation requirements.
13. Relocate essential emergency equipment and vehicles to predetermined locations.
14. Notify tow truck businesses of the potential storm emergency and predetermine wrecker locations along critical evacuation routes (clear road or bridge obstructions).
15. Prepare evacuation of:
 - People with special needs.
 - People without transportation.
 - Islands.
 - Low lying areas.
 - Tourists.
 - Mobile Home residents.
 - Recreational vehicles occupants.
16. Coordinate a recommended or ordered evacuation with surrounding counties.

Training

1. Provide practical training to all assigned personnel in all appropriate aspects of the plan on an annual basis.
2. Training should include:
 - Mutual Aid.
 - Availability of equipment.

- Manpower resources deployment.
 - Evacuation routes.
 - Evacuation fixed posts.
3. Provide officer stress training related to the response.

Resources

1. Maintain a plan for manpower resource deployment.
2. Engage a plan to stage all officers during the storm for deployment.
3. Ensure plans are designed to ensure the safety of each family member.
4. Maintain the capability of locating all off-duty personnel, by address and phone number.
5. Prepare to have ancillary law enforcement stage in an unaffected area. Maintain readiness to move in immediately after storm has passed.
6. Assign an individual knowledgeable of a detailed plan for feeding and housing outside resources.
7. In the event of a minor disaster, ensure deployment of resources (declared local emergency):
 - Place all local officers on alert.
 - Establish Alpha/Bravo 12-hour shifts.
 - Provide for standby relief from other appropriate local, state, and federal agencies.
8. In the event of a major disaster, ensure deployment of resources (declared state emergency):
 - Place all local officers on Alpha/Bravo (12 hour) shifts.
 - Deploy state law enforcement resources via Florida Mutual Aid Program (FDLE).
 - Deploy Florida National Guard resources via Florida Mutual Aid Program.
 - Ensure that federal authorities are placed on standby.
9. In the event of a catastrophic disaster (declared federal emergency), ensure deployment of all of the above, plus:
 - Activation of FEMA.
 - Activation of U.S. Army (traffic control by Military Police and major food and shelter provisions).
 - Deployment of other appropriate federal agencies.

Equipment/Supplies

1. Ensure that maps are available of evacuation areas, including maps for "out of area" officers who have been brought into damaged area.
2. Provide for maps of flood areas.
3. Ensure backup communications, if current system becomes inoperable.
4. Provide for backup emergency power to operate (in event of a power failure):
 - Phone system.
 - Radio system.
5. Maintain known availability of cellular phones, if necessary.
6. Ensure availability of gasoline for official vehicles when gas cannot be electrically pumped.

7. Provide the following equipment to deployed officers:
 - Uniforms (and means for cleaning).
 - Boots.
 - Reflective gear and wassails.
 - 4-wheel drive vehicles.
 - Cellular telephones for team leaders/supervisors.
 - Hand-held radios with extra batteries and chargers.
 - Flashlight and batteries (including many spare flashlight batteries).
 - Raincoats.
 - Blankets/first-aid kits and supplies.
 - Canteens for water.
 - A supply of tires and patch kits.
 - Generators for command posts and other service areas.
 - Bug spray.
 - Flares (by the cases).
 - Chain saws.
8. Ensure established emergency command posts are fully-equipped.
 - Require extra telephones and facsimile machines.
 - Test all telephone equipment.
 - Test all backup equipment.
9. Ensure the advanced fueling of all vehicles and essential equipment to capacity.
10. Provide laptop computers (portable) to record requests and responses.

Information

1. In conjunction with county emergency managers, provide for an ongoing public information campaign, and intensify communication during the hurricane season.
2. Develop and deliver an emergency preparedness campaign during the year., and intensify during hurricane season.
3. Include a public information campaign designed to reach the sight and hearing impaired.
4. Establish contact with local mass media to relay emergency warning as needed.
5. Designate a formal spokesperson for the new media.
6. Issue public information statements, as applicable.
7. Advise boat owners to secure their property for severe weather conditions.
8. Advise construction companies to secure their property for severe weather.
9. Request construction companies to remove portable toilets from job sites or deliver to specific location to assist shelter operations.
10. Advise businesses to secure their property against displacement by wind forces.
11. Advise beach motel/hotel business of the potential storm emergency.
12. Advise and coordinate operations of draw bridges through the county in conjunction with evacuation plans.
13. Recommend or advise closing of schools.
14. Advise against visiting of any islands and restrict access.

Post-disaster Checklists

Deployment of resources

1. Ensure availability of a helicopter or slow flying aircraft to be deployed to assess damage for the following agencies:
 - Law enforcement.
 - Emergency management.
 - Emergency rescue.
2. Ensure of readiness of ground assessment teams to deploy in affected areas to review damage and report immediate needs, including specialized equipment.
3. Assessment teams should include, but not be limited to, the following:
 - Local law enforcement.
 - Emergency management.
 - Road department(s).
 - Electrical department.
 - Environmental regulatory agencies.
 - State law enforcement.
 - National Guard.
 - Federal Emergency Management Agency (FEMA).
 - U.S. Army.
 - Health department (County).
 - Water management.
4. Deploy communication personnel to:
 - Assess damage to radio equipment and telephone communication.
 - Identify operational communication facilities to be used for alternatives.
 - Deploy any mobile command post to a forward effective area.
 - Identify communication facilities outside the affected area which could be used.
 - Identify action by commercial telecommunication companies to restore law enforcement equipment.
 - Coordinate the deployment and use of telecommunications equipment.
5. Assign personnel to patrol to protect property.
6. Designate an individual to assist out of area law enforcement to:
 - Secure lodging (block of rooms).
 - Provide food and water.
 - Coordinate assignments.
7. Utilize state, federal and out-of-area law enforcement on fixed posts.
8. Designate personnel to establish liaison with power companies to:
 - Determine number and location of buildings without power.
 - Determine how long it will take to restore power.
 - Use above information to decide on curfews and deployment of resources.
 - If a multi-jurisdiction area affected ensure all curfews are the same.
9. Assign personnel to work with the media to provide information to the general public reference:
 - Requirement to remain in shelters.
 - Estimated time frame for authorization to return to affected areas.
10. Establish a clear chain of command.
11. Coordinate search and rescue by having teams assigned with body detection dogs

- to search for missing persons or casualties.
12. Implement a prearranged staging area to dispatch law enforcement personnel.
 13. Minor disaster deployment of resources (declared local emergency):
 - All local officers on alert.
 - Alpha/Bravo 12-hour shifts.
 - Standby relief from other local, state and relevant agencies.
 14. Major disaster deployment of resources (declared state emergency):
 - All local officers on Alpha/Bravo 12-hour shifts.
 - Deployment of state law enforcement resources via mutual aid.
 - Deployment of Florida National Guard via mutual aid.
 - Federal authorities on standby.
 15. Catastrophic disaster (declared federal emergency), deploy all of above, plus:
 - FEMA.
 - U.S. Army.
 - Other federal agencies.

Security Details

1. Assign security personnel to shelters.
2. Assign security personnel to the pre designated post-disaster centers as they are established.
3. Establish security perimeters and assign personnel to affected areas.
4. Establish security checkpoints leading into affected areas if necessary.
5. Restrict public access to affected areas.
6. Maintain access control for public safety via curfew.
7. Establish security for drop-off points for food and supplies.
8. Use helicopter with floodlights to provide security to unlighted areas.
9. Establish curfew, if necessary.

Traffic Control

1. Ensure that emergency crews are afforded sufficient room to maneuver equipment.
2. Maintain one traffic lane or limit access for emergency responders, if possible.
3. Have officers available for escort of emergency responder vehicles.
4. Have street department clean up the major traffic arteries as soon as possible.
5. Have street department post temporary street signs, as necessary.
6. Implement fixed-post assignments in the affected areas.

Command Centers

1. Establish one emergency operations center, if possible.
2. Staff center with supervisors from each affected agency who possess the authority to make timely and effective decisions.
3. Establish a clear chain of command.

Information

1. Establish one point of contact who will coordinate the release of information and

- instructions to the public.
2. Continuously advise public of traffic conditions, open roads, etc.
 3. Advise public of all closed/restricted areas.
 4. Advise public/homeowners when they will be allowed to return to affected areas.
 5. Advise volunteers where to call to provide services.
 6. Advise public of supplies needed and areas to which deliveries are being made.
 7. Provide call-in for rumor control.

Equipment and Supplies

1. Provide the following inventory of telecommunication equipment:
 - Mobile or transportable telecommunication equipment.
 - Multi-radio system.
 - Base stations and hand-held portable radios.
 - Mobile or transportable microwave systems.
 - Mobile satellite systems.
 - Mobile or transportable switchboard and station equipment.
 - Aircraft/water craft suitable as platforms or radio repeaters.
 - Trained installation and operational personnel available to deploy into the affected areas.
2. Have an area designated for equipment set-up.

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