

ANNEX R

SEARCH & RESCUE

CITY OF HOUSTON

APPROVAL & IMPLEMENTATION

Annex R

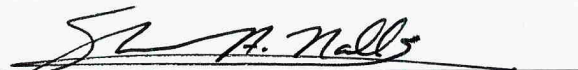
Search & Rescue



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1-11-08

Date



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ANNEX R

SEARCH & RESCUE

I. AUTHORITY

See City of Houston Basic Plan Section 1.2.

II. PURPOSE

The purpose of this annex is to outline operational concepts and organizational arrangements for Search and Rescue (SAR) operations during emergency situations in our community. This annex is applicable to all agencies, organizations and personnel assigned SAR functional responsibilities.

III. EXPLANATION OF TERMS

A. Acronyms

HFD	Houston Fire Department
ME	Medical Examiner
NIMS	National Incident Management System
SAR	Search and Rescue
TEEX	Texas Engineering Extension Service
TRT	Technical Rescue Team
TX-TF1	Texas Task Force 1
US&R	Urban Search and Rescue

Refer to the City's Basic Plan for additional acronyms used in this annex.

B. Definitions

1. Secondary Hazard. A situation that occurs as a result of an initial hazard. For example, a chemical release from a tank car involved in a train derailment or a gas leak within a collapsed building.
2. Terrorist Incident. A violent act, or an act dangerous to human life, in violation of the criminal laws of the United States or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political and social objectives.
3. Texas Task Force 1. Also known as TX-TF1, this task force is the state's urban search and rescue team, headquartered at the Texas Engineering Extension Service's Gateway Facility in College Station, Texas. Its members are from city and county agencies throughout the state. They respond to disasters anywhere in the state. Their assistance is not limited to heavy US&R. They also have a Flood/Swift Water Rescue Strike Team capability to assist during flooding situations.
4. Technical Rescue Command. A Division of the Special Operations Command of HFD. This Division is managed by the TRT Rescue Chief.

IV. SITUATION AND ASSUMPTIONS

A. Situations

1. The citizens of Houston depend on the HFD for SAR.
2. Local buildings are subject to structural damage from both natural, technological and human caused events that could result in injured people trapped in the damaged and collapsed structures.
3. In emergency situations involving structural collapse, large numbers of people may require rescue.
4. The mortality rate among trapped victims rises dramatically after 72 hours; therefore, SAR operations must be initiated without delay.
5. Secondary hazards may compound problems and threaten both disaster victims and rescue personnel.
6. Weather conditions such as rain, temperature extremes, and high winds, may pose additional hazards to disaster victims and SAR personnel.
7. Large-scale emergencies, disasters, and acts of terrorism may adversely impact SAR personnel, equipment, and facilities as well as communications systems.

B. Assumptions

1. A trained, equipped, organized rescue service will provide the capability to conduct methodical SAR operations, shore up and stabilize weakened structures, release trapped persons, and locate the missing and dead.
2. Access to disaster areas may be limited because of damaged infrastructure.
3. If our resources and those obtained pursuant to inter-local agreements are insufficient and additional support is required, we will request assistance from the Region and State.
4. During major emergency situations, our SAR resources may be damaged and specialized supplies depleted.

V. CONCEPT OF OPERATIONS

A. General

1. The HFD has the primary responsibility of providing our community with SAR operations. City of Houston SAR resources include:
 - a. The HFD Technical Rescue Team (TRT)
 - b. The HPD Canine Team provides the following capabilities:
 - 1) Area Search-Air Scent
 - 2) Tracking/Trailing
 - 3) Evidence Search
 - 4) Evidence-Article Search
 - c. HFD Canine Team provides the following capabilities:
 - 1) Fire scene investigation

- 2) Arson-accelerant search
- d. HPD Dive Rescue Unit
- e. State and Federal resources include:
 - i. The TX-TF1 Urban Search and Rescue Team
 - ii. TX-TF1 Canine Team provides the following capabilities:
 - 1) Cadaver search
 - 2) Water search
 - 3) Urban search
 - 4) Disaster/collapse structure
 - iii. US Coast Guard Air Search Team

2. The responsibilities of our SAR team will be extensive during some types of emergency situations. These responsibilities include the search for and extrication of victims during events such as structural collapse, hazardous materials incidents, flooding incidents and major fires or explosions.

B. Implementation of NIMS

Refer to the City's Basic Plan, Section 3.4.3.

C. Terrorist Incident Response

During terrorist incident response it is essential that the incident command team establish operating areas and formulate a plan of action that will allow SAR personnel to conduct operations in such a way as to minimize the impact to the crime scene. Emergency responders should be especially watchful for any signs of secondary devices usually set off for the purpose of injuring responders. Refer to Annex V, Terrorist Incident Response, for more information on the response to terrorist threats and activities.

D. Requesting External Assistance

Refer to the City's Basic Plan, Section 3.8.

E. Phases of Management

1. Prevention

Currently, there are no prevention measures identified for Search and Rescue activities. See the City's Basic Plan, Section 1.8.1.4 for general prevention measures.

2. Mitigation

- a. Maintain up-to-date information on known hazards present in facilities such as refineries, factories, power plants, and other commercial businesses.
- b. Maintain up-to-date information on type and quantities of hazardous materials present in local businesses and industrial facilities.

3. Preparedness
 - a. Maintain a schedule for testing, maintenance, and repair of rescue equipment.
 - b. Maintain a list of all SAR resources and stock specialized supplies.
 - c. Make arrangements for responders to obtain building plans during emergencies.
 - d. Identify sources of canines that can be used for SAR operations.
 - e. Develop communications procedures to ensure adequate communications between SAR units, fire units, law enforcement units and other emergency responders.
 - f. Plan and execute training exercises for all SAR personnel on a regular basis.
 - g. Revise and update response plans at regular intervals.
4. Response
 - a. Initiate rescue missions, as necessary.
 - b. Mobilize support resources.
5. Recovery
 - a. Inventory and replace depleted supplies.

F. National Incident Management System (NIMS)

The National Incident Management System (NIMS) will be used to manage and efficiently mitigate any such incident by integrating a combination of facilities, equipment, personnel, procedures, and communications into a common organizational structure. NIMS is used to organize both near-term and long-term field level operations for a broad spectrum of emergencies, from small to complex incidents, both natural and manmade. Description of the implementation is located within the Basic Emergency Management, Annex I - Public Information, Annex M – Resource Management and Annex N – Directions. Departmental policies and procedures are developed based on these principles.

VI. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. General

1. Our normal emergency organization, described in the Basic Plan, shall carry out the function of providing SAR services in emergency situations. Routine SAR operations can be handled by our SAR team, with limited support from other emergency services, operating under an IC. The EOC will normally be activated for major emergencies and disasters that require extensive SAR operations and a commitment of all emergency services as well as external assistance.
2. HFD's Technical Rescue Command shall serve as the Chief Rescue Officer and coordinate emergency SAR operations.

B. Task Assignments

1. The HFD's SAR Team will:
 - a. Coordinate all SAR operations using City resources or those obtained pursuant to inter-local agreements.
 - b. Provide assistance during evacuations (see Annex E).
 - c. Prepare and execute inter-local agreements for SAR support.
 - d. Provide support for other public safety operations, as necessary.
2. The IC and/or Chief Rescue Officer will:
 - a. Establish an ICP and control and direct emergency response resources.
 - b. Assess the incident, request any additional resources needed, and provide periodic updates to the EOC, if activated.
 - c. Determine and implement initial protective actions for emergency responders and the public in the vicinity of the incident site.
 - d. Establish a specific division of responsibilities between the incident command operation and the EOC, if activated.
3. Law Enforcement will:

Upon request of the IC, control access to and traffic around incident sites.
4. Public Works & Engineering will: Upon request of the IC, provide heavy equipment support for SAR operations.
5. HFD's EMS will:

Provide trained personnel and equipment to administer emergency medical support, if necessary.
6. HPD/HFD/EMS will:

Coordinate body recovery activities with the ME's office, if needed.

VII. DIRECTION AND CONTROL

A. General

1. For most emergency situations, the IC will establish an ICP and direct and control emergency operations at the scene from that ICP. All SAR resources will carry out missions assigned by the IC. The IC will be assisted by a staff with the expertise and of a size required for the tasks to be performed. The individual most qualified to deal with the specific type of emergency situation present should serve as the IC.
2. In some situations, the EOC may be activated without an incident command operation. This type of organizational arrangement is most likely when: (a) a hazard threatens, but has not yet impacted the local area (such as the predicted landfall of a hurricane), or (b) when a generalized threat exists and there is no identifiable incident site (as may be the case

for a terrorist threat). During these situations, a senior SAR officer will normally report to the EOC to coordinate any response by SAR personnel.

3. External response agencies are expected to conform to the general guidance provided by our senior decision-makers and carry out mission assignments directed by the IC or the EOC. However, organized response units will normally work under the immediate control of their own supervisors.

B. Incident Command System – EOC Interface

Refer to the City’s Basic Plan, Section 3.4.7

C. Line of Succession

Line of succession for the Chief Rescue Officer is:

1. TRT Senior Captain Rescue Coordinator

VIII. READINESS LEVELS

- A. Refer to Basic Plan, Section 3.2.2 for Readiness Levels **Green** and **Blue** (Level IV). Part B-D below are specific to this annex and in addition to actions/activities for the identified readiness levels defined in the Basic Plan.

B. **Yellow** (Level III) – Increased Readiness

1. Monitor situation.
2. Alert key personnel.
3. Check readiness of all equipment and supply status and correct deficiencies.
4. Review inter-local agreements for use of SAR resources operated by other agencies.
5. Review plans and procedures and update them, if necessary.

C. **Orange** (Level II) – High Readiness

1. Alert personnel of possible emergency duty.
2. Place selected personnel and equipment on standby.
3. Identify personnel to staff the EOC and ICP if those facilities are activated.
4. Prepare to implement inter-local agreements.

D. **Red** (Level I) – Maximum Readiness

1. Mobilize selected SAR team members.
2. Consider precautionary deployment of personnel and equipment, if appropriate.
3. Dispatch SAR representative(s) to the EOC when activated.

IX. ADMINISTRATION AND SUPPORT

A. Reporting

In addition to reports that may be required by their parent organization, SAR teams participating in emergency operations should provide appropriate situation reports to the IC, or if an incident command operation has not been established, to the EOC. The IC will forward periodic reports to the EOC. Pertinent information will be incorporated into the Initial Emergency Report and the periodic Situation Reports that are prepared and disseminated to key officials, other affected jurisdictions, and state agencies during major emergency operations.

B. Records

1. **Activity Logs.** The IC and, if activated, the EOC, shall maintain accurate logs recording significant operational activities, the commitment of resources, and other information relating to emergency response and recovery operation.
2. **Documentation of Costs.** Expenses incurred in carrying out emergency response operations for certain hazardous materials incidents may be recoverable from the responsible party. Hence, all SAR service elements will maintain records of personnel and equipment used and supplies consumed during large-scale emergency operations.

C. Preservation of Records

Vital records should be protected from the effects of disaster to the maximum extent feasible. Should records be damaged during an emergency situation, professional assistance in preserving and restoring those records should be obtained as soon as possible.

D. Resources

Refer to section V.A of this document.

E. Communications

General emergency communications capabilities and connectivity are discussed and depicted in Annex B, Communications. The SAR team communications network is shown in Appendix 1.

F. Post Incident Review

Refer to the City's Basic Plan, Section 3.9.1.

X. ANNEX DEVELOPMENT AND MAINTENANCE

- A. The Fire Chief is responsible for developing and maintaining this annex. Recommended changes to this annex should be forwarded as needs become apparent.
- B. This annex will be reviewed annually and updated in accordance with the schedule outlined in the Basic Plan.

XI. REFERENCES

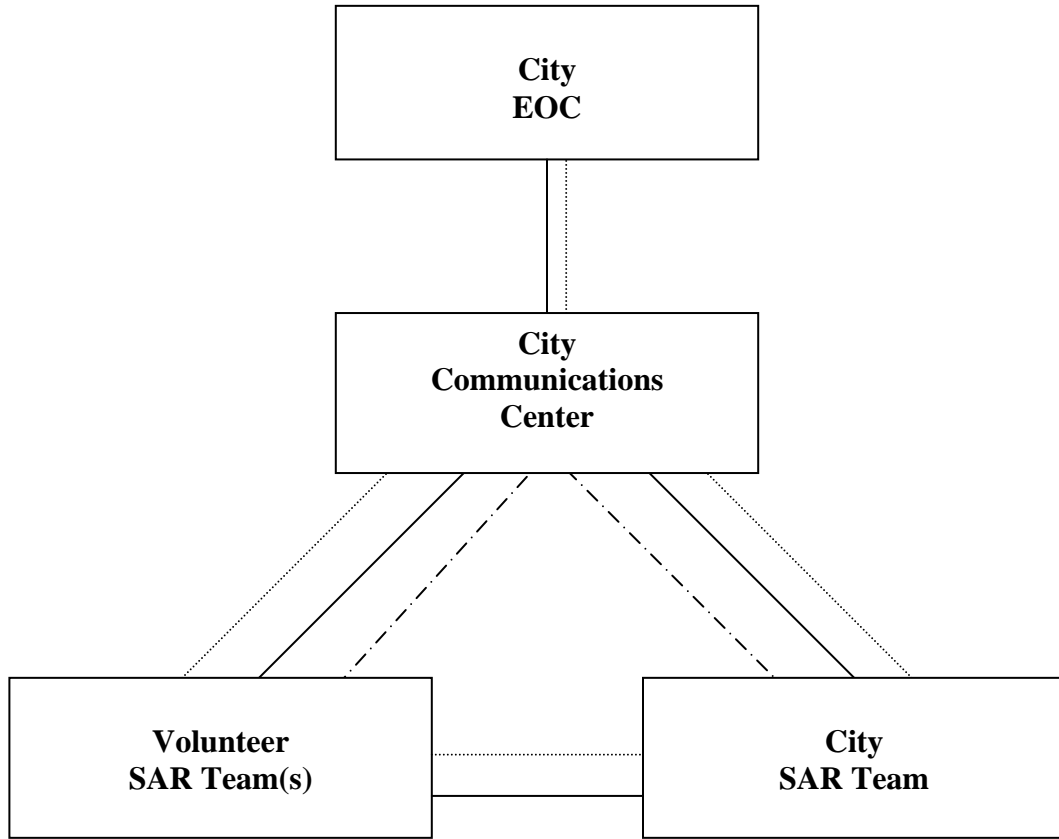
- A. Annex R (Search and Rescue) to the State of Texas Emergency Management Plan.
- B. Annex V (Terrorist Incident Response) to the State of Texas Emergency Management Plan.
- C. Texas Fire and Rescue Mutual Aid Plan, May 1998.

APPENDIX

Appendix 1 Communications Network

Appendix 1 to Annex R

SAR COMMUNICATIONS NETWORK



LEGEND:

- Phone
- VHF Radio
- - - - - Cell Phone