

TECHNICAL SEARCH SPECIALIST

Position Description

The Technical Search Specialist is responsible for performing the search function of the task force incident operation. The Technical Search Specialist reports directly to the Search Manager.

Description of Duties

The Technical Search Specialist is responsible for:

- Searching structures in US&R environments or other locations indicated in the mission assignment using appropriate technical search equipment and techniques.
- Documenting locations of alerts and, if possible, triaging the status of victims for rescue.
- Adhering to all safety procedures
- Cooperating with and assisting other search and rescue resources.
- Accountability, maintenance, and minor repairs for all issued equipment
- Performing additional tasks or duties as assigned during a mission.

Position Requirements and Criteria

Individuals who meet the following requirements and criteria will be eligible to become Technical Search Specialists in the FEMA US&R Response System. The intent of these requirements is to select competent personnel fully capable of providing state-of-the-art search techniques and tactics required in the urban disaster environment. The requirements and criteria for the position are identified in the following categories:

Knowledge

Skills

Abilities

Knowledge

1. Understanding of basic electronic principles and theories
2. Knowledge of the capabilities and operations of the canine search component
3. Knowledge of the proper use and field maintenance of technical search equipment
4. Practical knowledge of search strategy and tactics, including:
 - “Probability of Detection” analysis
 - Victim behavior patterns in various situations.
 - Search pattern selection criteria including terrain, structures, wind, weather, and air circulation characteristics.
 - Search team organization and operational procedures.

- Knowledge of the capabilities and limitations of technical search equipment
- Understanding general rescue tactics and strategy

5. Practical knowledge of the technical aspects of search theory, including:

- Map, compass, and GPS techniques
- Ability to accurately sketch a search area.
- Ability to apply and interpret search area marking techniques for perimeters, alert areas, hazards, etc.
- Understand search area sectoring.
- Recognize and identify victim location clues.
- Practical knowledge of night search techniques, increased hazard awareness, and applicable air circulation characteristics
- Technical search marking system

6. Practical knowledge of the theory and types of building construction, including:

- Recognizing and identifying hazards associated with structural collapse and its environment.
- Structural features and conditions that contribute to a high probability of victim survival in a collapsed structure.
- Understand the need for flexibility and coordination during multiple search operations.
- Understanding of air circulation characteristics in various environments
- Understanding of canine search operations including team size, check and recheck procedures, and observer responsibilities.
- Understanding and identifying the hazards associated with confined space entry.

7. Knowledge of the items included for the search and reconnaissance list.

8. Must have completed the FEMA Structural Collapse Technical Course

Skills

1. Capable of performing basic electronic trouble shooting techniques in the field

2. Practical ability in the operation of selected technical electronic search equipment in the disaster environment. Thorough familiarization with system manufacturers' operation manuals and technical publications as provided.

3. Practical ability to apply search tactics, strategy, and procedures at collapse sites, including:

- Understanding of US&R mission operational procedures
- Understanding of the size-up and reconnaissance considerations of an affected area
- Understanding of specific size-up and reconnaissance considerations of an assigned work site
- Understanding of US&R equipment and tools utilization

- Ability to integrate with local resources and other teams

Abilities ([see general requirements](#))