Special Edition

Back To Basics

Search Operations

A Review of the Basics of Fireground Search

This special edition is devoted to specific skills and duties relating to fireground search.

Members should always consult department operational procedures and training materials when using any of the Weekly Fire Drill materials.

Instructors should use these worksheets as guides for company level training sessions using your department SOG’s and your equipment.

Special Edition Subjects

- Search Orientation
- Primary & Secondary
- Search Methods
- Search Priorities
- Search Area Safety
- Rescue vs. Recovery
- Vent-Enter-Search
- Oriented Person Search
- Traditional Search
- Search Progress
Review department SOG’s and operations for conducting search operations.

- What methods are used to stay oriented to your location inside a smoke filed building?
  - How are partners to remain in contact with each other?
  - Discuss communication procedures between members inside this areas, what landmarks should you relay to each other, what information gets passed along to Command?

**Review the pros and cons of wall oriented searches.**

Many firefighters get into trouble inside structures because they lose their orientation to where they are.

- Stay oriented
- Don’t get to far inside
- Stay on the line and with your partner
Review procedures for conducting search and rescue operations.

- What factors are considered when determining the location(s) of a primary search
  - What areas of a building are searched first
  - What incident factors may help you determine a direction or location to begin your search
  - Explain the role of Thermal Imaging in primary and secondary search

**Primary Search: Quick attempt to locate victims who are in danger**

- Time is critical.
- Check all areas where victims might be.
- Rely on sight, sound, and touch.
- Use hand tools to extend your reach.
- Check probable areas that are tenable and safe for you to search quickly

**Secondary Search: Thorough search conducted after the situation is under control.**

- Locates victims not discovered in primary search
- Completed when conditions improve but may still present hazards; IDLH?
- Slow and methodical covering all areas
- Use several teams of firefighters
- Include all areas of the building
Discuss where each of these search methods would be used.

Which are primary search techniques and which are secondary search techniques?
How do you determine where a search will begin?

What areas will be searched first?

How is time of day a factor in your search?

What other factors are included in your decisions on where to search?

Prioritizing Search Areas

1. Most severely threatened
2. The largest numbers (groups)
3. Remainder of the fire area
4. The exposed areas

What does the presence of a car mean?
**Factors in determining the tenability of a search area.**

◊ Evaluate structural stability.
◊ Evaluate for backdraft or flashover conditions.
◊ Continue to reevaluate the operation’s safety.
◊ Determine structure type, possibility of collapse, and life safety risk.
◊ Check integrity of the floor in front of you at all times
◊ Check overhead for high heat or flames
◊ Do not risk firefighter safety for victims who cannot be saved
◊ If visibility is poor, consider ventilation before entry
◊ Always have a search plan prior to entry

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What areas of these structures is safe to search?
What areas are untenable for search?
What search methods would be used in each scenario?

**Safe Search Principles**

Communications * Accountability * Team Work * Air Supply * Orientation
What if each of these incidents had reports of people trapped inside upon your arrival?

Describe your risk management principles you have put to work to make your decisions at these incidents.

As the length of time and temperatures increase, the chance of survival for a victim decreases.
Vent - Enter - Search

Ventilate or open up a small area of a structure such as a bedroom by opening up a window.

Enter through the window and proceed immediately to the door and ensure that the door is closed to protect you from fire.

Search the room quickly and exit the way you came into the room.

V-E-S Safety
- Communicate with IC
- Always work with a partner
- Watch out for fire spread
- Check integrity of room surface before entry
- Have a hoseline available
- Don’t enter too close to fire or in path of fire spread unless you can quickly exit
Oriented Firefighter Search Method

- Emphasizes team search methods
- Must have a predetermined plan and this must be practiced before use
- This method is ideal for use when small rooms are involved
- Search leader remains oriented to one place in the structure.
  - On hose or rope line
  - In entry way to room
  - In hallway
- Oriented persons job is to guide the searching firefighter back to them
- Searching firefighter will use traditional search methods while working inside a room
  - Right hand, left hand, quick primary search sweeps

Oriented Person Tips

- Communicate with searchers
- Pound on floor to make reference point for searcher
- Consider Thermal Imager
- Place light into doorway
- Monitor fire, heat, smoke conditions at all times
Search Basics

• Search in teams of two.

• Remain in visual, voice, or physical contact.

• At least one team member must have a radio and be in contact with the IC.

• Maintain contact with a wall

• Progress through structure on same wall

• Make turns in same direction to return to point that you entered from

• Notify the IC when search of each area is complete.

Left hand on wall, make left turns throughout
There are several methods of marking and communicating progress of a search. On the radio, the simple term “all-clear” is required at the completion of both the primary and secondary searches. To communicate progress on the interior, there are several ways that crews can identify if rooms or areas have been searched. Discuss department procedures for marking areas or rooms that have been searched by crews.

- Chalk
- Markers
- Door straps
- Object in doorway

Give an example of the radio report that would be given after a primary search reveals no victims.

What should doors be marked with to indicate an area has been searched?

What should the marking look like?

In what types of occupancies are door marking especially important?

What actions need to be taken upon locating a victim?