



Light Search and Rescue Operations  
**BERKELEY CERT**





# Search and Rescue Operations

- Sizeup
- Search involves:
  - Locating victims.
  - Documenting location.
- Rescue involves procedures and methods to extricate victims.

# Decision To Attempt Rescue

- Risk involved to the rescuer
- Greatest good for greatest number of people



# Goals of Search and Rescue

- Rescue greatest number in shortest amount of time
- Rescue lightly trapped victims first



# Effective Search and Rescue

- Effective Sizeup
- Rescuer safety
- Victim safety





# Objectives

- Identify sizeup requirements for potential search and rescue situations.
- Describe the most common techniques for searching a structure.
- Use safe techniques for debris removal and victim extrication.
- Describe ways to protect rescuers during search and rescue.

# Search and Rescue Sizeup

1. Gather Facts
2. Assess Damage
3. Consider Probabilities
4. Assess Your Situation
5. Establish Priorities
6. Make Decisions
7. Develop Plans of Action
8. Take Action
9. Evaluate Progress

**Arrangement for Cribbing/ Leveraging Operation**

**CERT Actions in a Disaster**

- Ensure that you and your family are safe.
- Locate your CERT equipment and keep it with you.
- Assist immediate neighbors. Conduct a neighborhood survey.
- Contact your CERT leader. If you cannot reach your CERT leader, report to your pre-designated CERT staging area.
- Do not start out on your own.
- Document all messages and activities. Keep track of personnel at all times.
- Do the greatest good for the greatest number!

Team Organization for Leveraging/Cribbing Operation, showing the victim underneath a collapsed wall and the CERT members at the following locations:

- **Group Leader:** In front of collapse, positioned so that he or she can view the entire operation while remaining out of the rescuers' way.
- **Lever Person:** At the front edge of the collapsed wall and positioned so that he or she can position a fulcrum and lever under the wall.
- **Crib Persons:** On either side of the collapsed wall and positioned to enable the placement of cribbing as the wall is raised with the lever.
- **Medical Care/Victim Removal Person:** Next to the Crib Person who is closest to the victim's head.
- **Safety Person:** One person to focus on everyone's safety.

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## Step 1: Gather Facts

Consider the:

- Time of event and day of week
- Type of structure
- Construction type
- Weather
- Hazards

Gather facts accurately.



## Step 2: Assess and Communicate Damage

CERT mission changes if:

- Damage is light
- Damage is moderate
- Damage is heavy



Consider structure type and age.  
Never enter a structure with heavy damage!

# Search and Rescue Sizeup



Slight Damage

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# Search and Rescue Sizeup



Moderate Damage

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# Search and Rescue Sizeup



Heavy Damage

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# Search and Rescue Sizeup

- Personnel
- Tools
- Equipment



## Safety Considerations

- Make rescuer safety your primary concern.
- Use a buddy system.
- Be alert for hazards.
- Use safety equipment.
- Rotate teams.

Teamwork = Success

# Conducting Search Operations

Inspect area by:

1. Employing search techniques based on sizeup.
2. Locating potential victims.



# Conducting Search Operations



Pancake Void

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# Conducting Search Operations



Lean-to Void

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# Conducting Search Operations



V Void

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# Conducting Search Operations

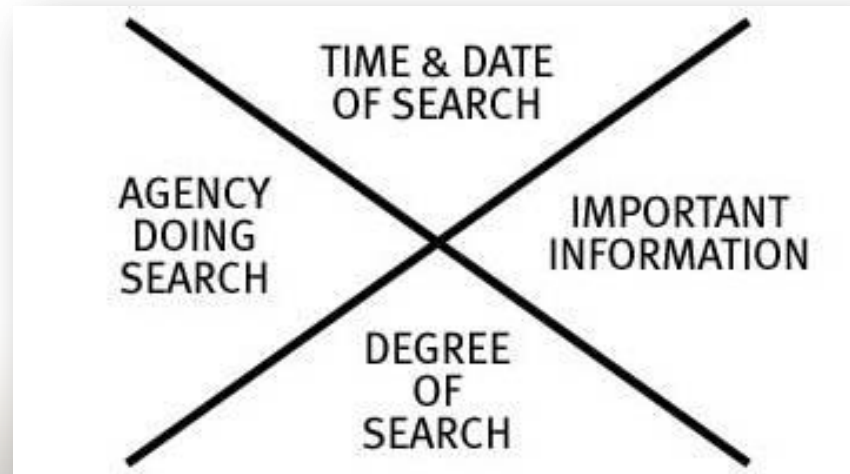


## Individual Voids

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# Effective Search Methodology

- Indicates rescuer location
- Prevents duplication of effort

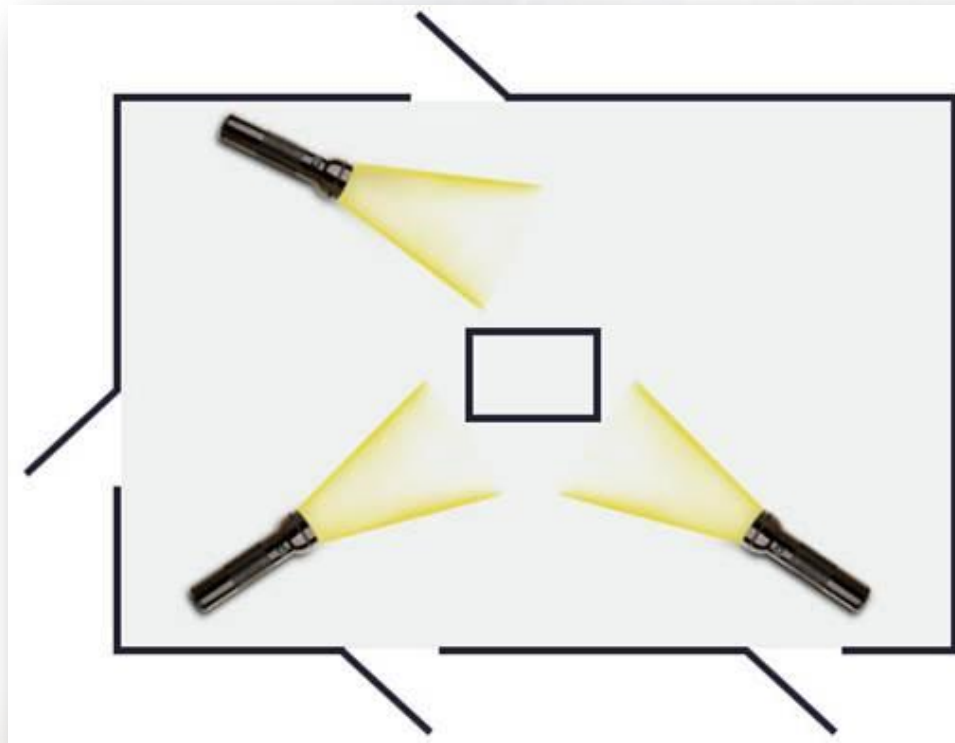




## Search Methods

- Call out to victims.
- Use systematic search pattern.
- Stop frequently to listen.
- Triangulate.
- Mark searched areas to document results.
- Report results.

# Conducting Search Operations



Triangulation

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# Conducting Rescue Operations

Primary functions:

- Creating safe rescue environment
  - Lift objects out of the way.
  - Use tools to move objects.
  - Remove debris.
- Triaging or stabilizing victims
- Removing victims



# Creating a Safe Environment

## Goals:

- Maintain rescuer safety.
- Triage in lightly and moderately damaged buildings.
- Evacuate victims quickly from moderately damaged buildings – minimize injury.

# Precautions to Minimize Risk

## Safe Environment:

- Know your limitations.
- Follow safety procedures.
- Remove debris by:
  - Leveraging
  - Cribbing





# Removing Victims

Types of victim removal include:

- Self-removal or assist
- Lifts and drags
- Allow victims to extricate themselves when possible.



## Extrication Method

Depends upon:

- General stability of immediate environment.
- Number of rescuers available.
- Strength and ability of rescuers.
- Condition of victim.