



# San Mateo Consolidated Fire Department Community Emergency Response Team Online CERT Course – Study Guide UNIT 7

## Light Search and Rescue Operations - Unit 7.1

- Should I help?
  - Risks involved
  - Will this do greatest good for the greatest number
  - Resources and manpower available
- Size-up
  - Gather Facts: time, weather, construction, terrain, hazards, occupancy
  - Assess and communicate damage: Light, Moderate, Heavy
    - Knowledge check:
      - Light – interior infrastructure damage, cosmetic cracks, structure intact.
      - Moderate – decorative damage, but building still on foundation
      - Heavy – building slid or fell off foundation
    - ABCD sides of the building
    - Knowledge check:
    - Light damage – locate, assess, treat, continue
    - Moderate damage – locate, treat major bleeding and shock, evacuate, warn, continue, minimize number of rescuers and amount of time
    - Heavy damage – secure perimeter, warn, DO NOT ENTER (verbal triage and treat any survivors OUTSIDE of this home/building)
  - Consider Probabilities
    - How stable is the situation?
    - What else could go wrong?
    - What does it mean for the search and rescue?
  - Assess Your Situation
    - Is it safe to continue?
    - What risks will rescuers face?
    - What resources are needed?
    - What resources are available?
      - Personnel – CERT volunteers, firefighters, police, medical personnel, contractors
      - Equipment – what is available, how can it be accessed
      - Tools – crowbars, auto jacks, chainsaws
- Establish Priorities
  - CERT safety

- What should be done
  - In what order
  - Rescue the greatest number in the shortest amount of time, SAFELY
- Make Decisions
  - Safety of CERT
  - Safety of survivors
  - Protection of environment
  - Protection of property
  - CERT mission
- Develop plan of action
  - Focus on priorities and decisions
  - Documentation for responding agencies
  - Keep documentation for CERT records
- Take Action
- Evaluate
- Specific Safety Conditions
- Locating survivors
  - Voids
  - Talk to bystanders
- Test:
  1. Size-up steps – assess your situation, gather facts, take action, consider probabilities
  2. Attempting a rescue consider: risk, resources, greatest good
  3. True - Rescuer safety is #1
  4. False - If you see collapsed floors, do not look around

## **Light Search and Rescue Operations - Unit 7.2**

- Door markings: X: top – time, clock; right: what did you find, environment; left: who went in, team; bottom: victims
  - CERT: (top) clock, (right) environment, (bottom) rescued and remaining, (left) time
- Search methodology
  - Call out to potential survivors (use your “outside voice”)
  - Locate survivors and ask about others who may be trapped
  - Bottom-up or top-down search; right wall or left wall search
  - Stop and listen for tapping, voices, movement
  - Knowledge check: bottom of search marking: survivors
  - Triangulation: - this is not an initial search method
  - Document
- Exterior searches
- Rescue operations
  - Moving objects safely
  - Assess survivors
  - Remove survivors safely
- Create a safe environment
  - Rescuer safety
  - Assess patients in moderately and lightly damaged buildings
  - Evacuate patients quickly but safely

- Precautions to minimize risk
  - Know your limitations
  - Follow safety procedures
  - Remove debris (leveraging and cribbing)
  - Keep your back straight, push with your legs
  - Keep load close to body
- Leveraging and cribbing – “lift an inch; crib an inch”
  - Do not leverage on opposite ends at the same time
  - Fulcrum (pry tool) must be perpendicular to the edge of the object being lifted
  - Box crib
    - Conduct a size-up
    - Have one person in charge, formulate a plan of action
    - Gather necessary materials
    - Use cribbing materials to stabilize
    - Distribute cribbing materials
    - Prepare to lift
    - Assign person to monitor
    - Initiate the lift
    - As object is lifted, add cribbing
    - Once object is supported, remove lever and fulcrum; remove survivor
    - Re-initiate lift
    - Progressively lower
    - Collect supplies
- Removal (evacuating a survivor)
  - Self removal
  - Lifts / drags
    - One person arm carry
    - Pack strap carry
    - Two person carry
    - Chair carry
    - Blanket carry
    - Log rolling
    - Blanket drag
- Test
  - To minimize risk for rescue, follow safety procedures, know your limitations, remove debris by lifting / cribbing
  - True - Triangulation allows rescuer to view the location from several perspectives
  - Proper lifting – keep load close to body, keep back straight, push down with legs
  - While searching a building, stop and listen for tapping, voices, movement
  - When searching for survivors, call out and ask them to come to you, expect them to be shocked / confused, and ask victims to respond for more information