

## Chapter 1 Introduction to SAR Review Questions

### 1. What is the definition of search?

Search is to identify and locate persons who are or may become distressed or injured and are unable to return to a place of safety on their own.

### 2. What is the definition of rescue?

Rescue is to access, stabilize, and evacuate distressed or injured persons, by whatever means necessary, to ensure their timely transfer to an appropriate care facility or to a familiar environment.

### 3. List the components of SAR:

- a) Preplanning
- b) Notification (Team and Member)
- c) Planning and Strategy
- d) Operations and Tactics
- e) Suspension (Demobilization)
- f) Critique, After Action Report, Lesson Learned Review and/or Modify Training (Modification of Preplan)

### 4. What is the definition of a tactic?

An action used to achieve an objective. (Strategy is the overall plan.)

### 5. Describe the two stages of notification as described in the components of SAR:

- a) Notification of the search assignment to the search team.
- b) Notification of the search assignment to the team member.

### 6. Define four core elements of the LAST acronym:

- a) Locate – the act of searching for and finding the subject that is lost, misplaced or injured and unable to return to a place of safety on their own.
- b) Access – the phase of gaining a safe approach once the subject has been located.
- c) Stabilize – the phase in which rescuers focus their efforts on maintaining the physical and mental well-being of the subject until they can be transferred to a safe environment.
- d) Transport – the phase which requires moving the patient to an appropriate care facility or to a safe or known location.

### 7: Preplanning is necessary because it provides:

It prepares teammates and you for unpredictable events in the future and allows you to envision various situations in advance.

### 8. What factors would require the suspension of a search?

- a) Lack of clues within the search area
- b) Expenditure of all SAR resources
- c) External influences
- d) Financial resources needed to continue search efforts

### 9. What is the AFRCC and what is its function?

Air Force Rescue Coordination Center (Tyndall Air Force Base In Florida) for land SAR it is the federal SAR Coordinator, responsible for coordinating inland federal SAR activities in the 48 contiguous states, Mexico and Canada.

**10. What are the six expected qualities of a SAR responder? (PHACKS)**

- a) Proficient
- b) Humble
- c) Able
- d) Competent
- e) Knowledgeable
- f) Solicitous

**11. What are the benefits of holding a critique?**

It provides an opportunity for everyone involved at the incident to get a more complete understanding of what was done, why it was done a particular way, and what was the outcome. Items from the critique may drive changes in training, equipment, material, and procedures. Critiques assist team leaders in preparing their subordinates for leadership rolls at future incidents.

**12. List four components of overall fitness: (SAFE)**

- a) Strength
- b) Agility
- c) Flexibility
- c) Endurance

**13. List four attributes of mental fitness:**

- a) Be thorough
- b) Be confident and willing to learn
- c) Be conscientious
- d) Be assertive
- f) Be a team player
- g) Be humble and know your limitations

**14. Describe why law enforcement should be the responsible agency for a SAR event:**

As long as the classical mystery is involved, a law enforcement agency should be the responsible authority and should remain in charge to maintain the continuity of the chain of evidence.

**15. What are the three congressional mandates of the Civil Air Patrol?**

- a) Aerospace Education and Safety
- b) Cadet Program
- c) Emergency Services

## Chapter 2 NIMS, FEMA and DHS Review Questions

### 1. List the five functional areas of the ICS.

- a) Command
- b) Operations
- c) Planning
- d) Logistics
- e) Finance/Administration

### 2. List the four General Staff positions:

- a) Operations Section Chief
- b) Planning Section Chief
- c) Logistics Section Chief
- d) Finance/Administration Section Chief

### 3. List the three resource status conditions:

- a) Available – resource awaiting an active assignment.
- b) Assigned – resource has been assigned and is preparing for or actively engaged in their assignment.
- c) Out of Service – resource is on site but not assigned and not available.

### 4. For each of the organizational elements listed below on the left, designate the number of the appropriate ICS title.

- |                 |               |
|-----------------|---------------|
| 5 Branch        | 1. Leader     |
| 4 Section       | 2. Officer    |
| 3 Division      | 3. Supervisor |
| 2 Command Staff | 4. Chief      |
| 1 Strike Team   | 5. Director   |

### 5. The optimum span of control is what ratio?

1 to 5 (leaders to subordinates)

### 6. The Command staff consists of the following four elements

- a) Incident Commander
- b) Safety Officer
- c) Liaison Officer
- d) Information Officer

### 7. What is the definition of a Strike Team?

It is a combination of the same kind and type of resource with common communications and a leader. It consists of several common single resources.

### 8. What is the definition of a Single Resource?

It is the smallest unit that can operate independently with common communications and supervisor.

### 9. What is the responsibility of the Liaison Officer?

Assists the IC by serving as the point of contact for agency representatives that are supporting the effort.

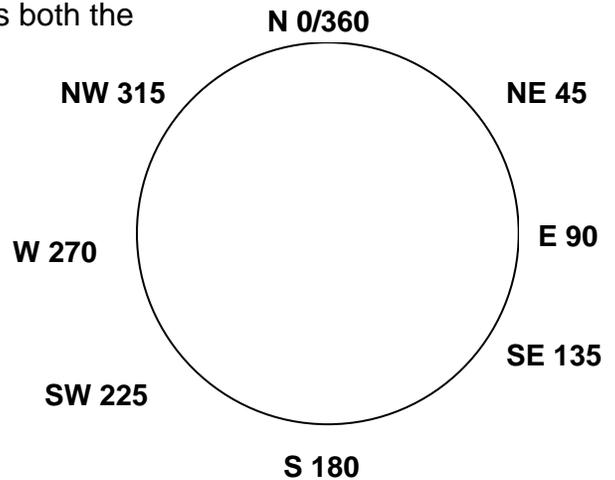
## Chapter 3 Basic Land Navigation Review Questions

### 1. Which type of map is preferred for search and rescue and why?

Topographic because of the detailed information it affords both the search management and field resources.

### 2. Describe the following parts of the compass:

- Sighting Mirror
- Base Plate
- Magnetic Needle
- Orienting Lines
- Housing
- Magnifier
- Rotating Dial
- Orienting Arrow



### 3. List the type of compass preferred by/in search and rescue and why?

Orienting compasses because of the additional features that allow for easier use than other types of compasses.

### 4. Universal Transverse Mercator (UTM) and the US National Grid (USNG) is useful because?

They create a more interoperable environment for developing location based services and increase the interoperability of location services appliances with printed map products by establishing a nationally consistent grid reference system as the preferred grid.

### 5. Define the Tally Step system of measuring distance in the field.

Set up a course of 100 meters or feet, walk the route several times at varying times, take the number of paces/strides for each trial and obtain an average. Add up the total paces/strides and divide the sum by the number of trials. This is your tally for determining distances in your terrain.

### 6. List two types of methods used to determine a bearing

- Eye level method
- Waist-High method

### 7. Describe a nautical chart.

They show maritime and coastal regions. They provide information necessary to navigate on waterways and safely avoid hazards that may be hidden under the water's surface. They usually depict depth, seabed features, some wrecks, tides, currents and navigational aids.

### 8. Describe a planimetric map.

It is a two dimensional map and the most common type used – basically street maps.

### 9. When using a map for land navigation what five features should the map include?

- An accurate depiction of terrain in a scale that is realistic for resources
- The major terrain features such as hills, valleys, and ridges.
- Man-made features such as buildings, trails, and roads.
- An accurate depiction of measurable relief, elevation, and contour
- The location of water and water courses.

**10. On 7.5 minute, 1:24,000 scale topographic maps, one inch represents 24,000 inches or 2,000 feet.**

**11. List five methods used to navigate.**

- a) Celestial navigation – observing the sun, moon, stars, and planets.
- b) Dead reckoning – using course and speed to determine position.
- c) Pilotage – using visible natural and manmade features such as sea marks and beacons.
- d) Off-course navigation – allows for variables in heading by deliberately aiming to the one side of the destination. (Aiming off or off-set aiming)
- e) Electronic navigation – using electronic equipment such as radio navigation and satellite navigation system GPS to follow a course to a location.

## **Chapter 4 SAR Resources Review Questions**

**1. List the three types of resource categories.**

- a) Human and Animal Resources
- b) Information Resources
- c) Equipment and Technology

**2. Describe Loose Spaces Grid Search resources.**

They have skilled searchers that do not have to stay within eyesight of each other. The larger distance between searchers allows for the use of fewer searchers over a large area. They mix voice call for the subject and whistle blowing into their visual searches.

**3. Describe the differences between an Air Scent dog and a Tracking dog.**

Air scent canines detect the scent of human rafts (dead human skin cells) as they float through the air. They do not discriminate from one scent generator to another and are usually worked off lead. Tracking canines are trained to follow a specific scent matching that of the scent generator. They work on a lead and flow very closely on the trail of where the subject traveled regardless of wind,

**4. What organization sponsors the Safe Return program and what does it consist of?**

Alzheimer's Association – live 24 hour emergency response service for wandering and medical emergencies that helps to reunites the lost person with their caregiver.

**5. What is Team Adam?**

National Center for Missing and Exploited Children - Team Adam provides rapid, on-site assistance to law enforcement agencies and families in cases of missing, abducted, and exploited children. Its members are retired law enforcement professional with years of investigative experience.

**6. What is the Cert program?**

It is a Community Emergency Response Team that educates people about disaster preparedness for hazards that may impact their neighborhood or workplace and trains them in basic disaster response skills such as fire safety, light structural search and rescue, team organization and disaster medical operations.

**7. A resource that analyzes the resource needs based on the incident objectives is:**

A member of the search management team. (Search Manager, Planning Section/Operations Section Chiefs)

### **8. Three areas of water rescue include:**

- a) Tidal
- b) Lakes
- c) Swift-water

### **9. What is a CISM and why is it considered a valuable resource?**

Critical Incident Stress Management Teams - comprised of health care professional trained to help responders deal with stress reactions which may have debilitating psychological and physiological effects upon them.

## **Chapter 5 Search Philosophy Review Questions**

### **1. List the Seven Crucials of Search and Rescue.**

- a) Search is an Emergency
- b) Maximize the Probability of Success in the Minimum Amount of time with the Right Resources
- c) Search is a Classical Mystery
- d) Search for Clues and the Subject
- e) Focus on Aspects Important to Success
- f) Know if the Subject Leaves the Search Area
- g) Use Tight Grid Search as a Last Resort

### **2. Define the following terms:**

**Probability of Success:** Is the probability of finding the search object (clue or subject) with a particular search tactic in a particular segment.

**Probability of Detection:** Is the probability of a search object being detected assuming it is in the segment being searched. It depends on searcher effectiveness, thoroughness and quality.

**Probability of Area:** Is the probability of the subject or a clue being in a search segment and is defined as a percentage.

**POA X POD = POS:** The equation of Search Theory.

### **3. What is the Search Urgency Form and why does it provide the searcher with valuable information?**

It is a form that provides an objective perspective regarding what level of response is needed.

### **4. What is the LKP and what is its importance?**

Last Known Point is defined as the last place the subject is verifiably known to have been.

### **5. What is the PLS and what is the importance?**

Point Last Seen is the location at which someone can confirm that the subject was visually identified.

### **6. What is Search Theory?**

It is a mathematical approach to determining how best to find that which we are searching for. It is only useful as a planning tool before the search is conducted; after the area is searched, it is either successful or unsuccessful.

## Chapter 6 Clue Consciousness Review Questions

### 1. Why do searchers prioritize their search attention on clues and not just the subject?

Because there are hundreds, if not thousands of clues and signs left by the subject.

### 2. The initial priority of all responders involved in the search incident is to protect the Last Known Point (LNP) or Point Last Seen (PLS).

### 3. Clue Awareness includes:

The detailed information that clues may provide to the search effort.

### 4. The definition of sign is:

Any evidence of change from the natural state that is inflicted on an environment by a person's or animal's passage.

### 5. List three variables of clue orientation.

- a) The Sensor (searcher)
- b) Clue Generator (subject)
- c) The Environment

### 6. List four categories of clues.

- a) Physical – sign or track left on the environment by the subject such as footprints, broken brush
- b) Recorded – documentation left by the subject such as signatures at trail registers, written itinerary
- c) Testimonial – gathered through interviews and investigation of witnesses, work colleagues, family
- d) Analytical – separating things into their constituent parts in order to study or examine them, draw conclusions, and solve problems; (sensory – hearing someone call out for help or smelling smoke or human waste and probable – items found that belong to the lost subject)

### 7. Examples of factors that affect clue life span?

Wind, rain, frost, ice, snow, heat – weather conditions

### 8. Using clue orientation theory, list possible clues that you might search for if searching for two 34 year old experienced backpackers, who were on a three day trek using a well marked trail. Explain briefly why you selected each clue.

Camp sites – look for any that indicate recent use, check any trail registers along the route, smoke – look for signal, check for tracks, listen for calls for help, look for signs of human waste.

### 9. What is the LPQ and why does it provide the searcher with valuable information?

The Lost Person Questionnaire is a multiple page form containing questions that will help obtain information on the lost or missing person in a thorough and logical manner. It will provide the search managers with details that will enable them to have better insight on the particular clues that might be found.

## Chapter 7 Search Tactics Review Questions

### 1. List and describe the two categories of search tactics.

- a) Indirect/Passive Tactics – bring the subject to the searchers, do not involve physically entering and moving through the search area to look for the subject or clues
- b) Direct/Active Tactics – bring the searcher to the subject, requires someone to commit resources to actively search for the subject

### 2. Give two examples of confinement/containment tactics.

- a) Route blocks – trail, road
- b) Lookouts – a searcher in a high position overlooking the search area

### 3. Define the following terms.

**Attraction** – calling the subject's attention to searchers, from emergency vehicle lights and loud sounds to the smell of a campfire.

**Confinement** – confine the movement of a lost subject in order to minimize the size of the search area.

### 4. List two categories of attraction techniques.

- a) Visual
- b) Sound

### 5. List three direct/active search tactics.

- a) Hasty Search/Trail running
- b) Human Trackers
- c) Trailing Dogs

## Chapter 8 Search Operations Review Questions

### 1. Why is it important to always establish a check-in at the SAR incident?

It is important as it determines the names, type, number and whereabouts of all resources assigned to the incident.

### 2. List and describe two types of briefings.

- a) General – includes the major aspects of the search mission, the incident action plan and the incident objectives
- b) Tactical – includes the specific details of your assignment

### 3. Describe why a critique is essential.

It evaluates your actions so that you can be better prepared and more effective on the next assignment.

### 4. Why is it important for all searchers to always check-out at an incident?

It is important that your whereabouts can be accounted for at all times while you are participating at the incident.

### 5. Searchers need to maintain a positive mental attitude and demonstrate a willingness to help regardless the task.

## Chapter 9 Lost Person Behavior Review Questions

**1. List four reasons why knowledge of lost person behavior can be an advantage to the searcher.**

- a) Determine search strategy
- b) Define the search area
- c) Estimate resource needs
- d) Briefing search teams

**2. List four factors of lost person behavior we should consider.**

- a) How far can the subject travel
- b) How large should the search area be
- c) Where should confinement tactics be used
- d) What kind of clues should we be searching for

**3. Why is searching data so important to searchers?**

It contains information that the searchers entering the search area are aware of in order for them to locate as many clues as possible that belong to the subject and if correctly examined it will reduce a significant number of false reports and picking up garbage in the area.

**4. List five categories of lost person behavior.**

- a) General states of physical and mental health
- b) Personality
- c) Outdoor experiences
- d) Terrain, vegetation and weather
- e) Physiological effects

**5. Describe how people react to becoming lost.**

The first emotions experienced are anxiety and fear and they may lead to emotional and physiological consequences that skew normal thought processes and problem solving.

**6. Who wrote Analysis of Lost Person Behavior: An Aid to Search Planning?**

William Syrotuck

Planning Data – information used to develop a strategy for finding the subject.

Search Data – information that the searchers use to help them locate as many clues as possible.