

**OUTLINE SHEET 4.9
SAR TACTICS**

INTRODUCTION:

During this lesson, you will receive all the information needed to provide a sound, safe search and rescue (SAR) tactics foundation. Although it is not possible to provide answers to all the different rescue scenarios, applying these basics will enable you to deal with any situation that arises.

ENABLING OBJECTIVES:

- 3.39 State the five stages of Search and Rescue operations.
- 3.40 Describe SAR area conditions and survivor conditions which will allow for the execution of a multiple victim rescue.
- 3.41 Develop a rescue plan to effect a rescue of multiple survivors, when given a rescue scenario.
- 3.42 Describe procedures for recovery of survivors from motor whale boat/RHIB and forecastle.
- 3.43 Identify hand signals applicable to the specific rescue, when given a rescue scenario.
- 3.44 Demonstrate procedures for parachute disentanglement of multiple victims in a simulated rescue scenario.

TOPIC OUTLINE

A. Search and rescue system

The Search and Rescue system is a system which consists of a sequence of events called stages. Each stage represents a part of the logical approach to the overall rescue operation.

- 1. _____: SAR system becomes aware of incident.
- 2. _____: SAR facilities are alerted.
- 3. _____: Plan of operations is developed.
- 4. _____: SAR facilities proceed to the rescue scene, conduct search, rescue survivors, assist distressed craft, provide emergency care for survivors and deliver to suitable medical facility.

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NOTE

The NTTP 3-50.1 contains information for the safe and effective application of Search and Rescue (SAR) procedures and the execution of SAR operations. However, it is not a substitute for sound judgment. A dynamic SAR environment may require on-site deviations or modifications from procedures prescribed therein to successfully accomplish a SAR mission. The existing risk of deviation must continually be weighed against the benefit of deviating from the NTTP 3-50.1. Some examples of areas where deviations or modifications of procedures are most strongly advised against, are as follows: The proper application and use of rescue equipment restraint straps, safety straps, and safety devices as mandated by the NTTP 3-50.1. If a rescue crew member makes the decision not to properly utilize/apply any of the above mentioned safety devices or deviates from authorized procedures, he/she shall, communicate his/her intentions to the rest of the Search and Rescue unit crew prior to deviation. This will help utilize the full potential and experience of the crew to make a decision to deviate from authorized procedures. In all cases, all associated risks should be weighed prior to a decision to deviate from or modify a procedure as set forth in the NTTP 3-50.1.

1. _____ - SAR platforms return to base. Rescue swimmer assists in completion of rescue report.

B. Rescue platforms

NOTE

The helicopter is normally the primary means of rescue during all-weather day and night operations, except when the weather is below 300 feet and 1-mile visibility, then Motor-Whale Boat or Forecastle will be used. However, the goal is to use the fastest and most effective rescue platform for the given situation. Whichever is first on the scene will effect the rescue unless unable. The others should stay clear so as not to hamper the rescue operation and remain ready to assist if needed.

1. _____
2. _____
3. _____

C. Rescue scene initial assessment (From Rescue Platform)

Upon arrival at the accident scene, assess the situation. Assessment begins in the rescue platform prior to swimmer deployment. The following factors should be determined prior to rescue swimmer deployment.

NOTE

Swimmer must be aware that the situation can change.

1. Number of survivors
2. Location of survivors and their relation to, and distance from each other, and the rescue craft.

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3. Visible injuries to the survivors:
 - a. Conscious/unconscious
 - b. Visible bleeding
4. Flotation devices inflated/not inflated
5. Parachute entanglement problem or presence of ballooned parachute.
6. Sea state/wind direction/ and water temperature.
7. Fuel in the water.
8. Debris littering the scene and its relation to survivors.
9. Presence of sea predators.
10. Feasibility of attempting multiple/single rescue.
11. Rescue order established according to apparent injuries. The worst injured survivor shall be rescued first.

D. Conditions for multiple rescues

1. A multiple rescue occurs when there is more than one survivor and the rescue swimmer remains in the water aiding in the recovery of survivors.
2. Factors which should be considered before attempting a multiple rescue.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

WARNING

To avoid fatigue, the rescue swimmer shall avoid multiple rescues when a great deal of swimming is required between survivors. Additionally, the reduced visibility during night/ IFR rescues makes multiple rescues hazardous.

3. In the event of a multiple rescue the rescue swimmer shall:
 - a. Signal the rescue platform to deploy raft (s).
 - b. Inflate the raft (s) if necessary and commence boarding the survivors into the raft (s).

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E. Survivor/s and swimmer recovery procedures

1. Motor whaleboat/RHIB and helicopter recoveries shall be performed per NTTP 3-50.1.

NOTE

Prior to all rescue boat deployments, aviation SAR swimmers shall familiarize themselves with rescue boat recovery procedures as outlined in the NTTP 3-50.1. The rescue boat shall remain close, but stay clear of the rescue until the helicopter rotating anti-collision lights are turned off. At this signal, the rescue boat will assume the responsibility for the rescue.

2. All recoveries of personnel in the water shall be attempted with the survivor facing the gunwale of the boat.
3. Ship-Alongside Rescue
 - a. When helicopter is not available.
 - b. The sea precludes lowering of whaleboat/RHIB
 - c. When the rescue can be accomplished more expeditiously by ship.

NOTE

When directed from the bridge, every attempt should be made by the deck recovery detail to deploy life rings, yellow low padded monkey fist, etc., to gain contact or positive control of the survivor. If the distance is too great, a swimmer should be lowered into the water.

4. Shipboard Recovery (Forecastle)
 - a. Hoisting

Primary means for hoisting personnel from the water to the forecastle is the J-Bar Davit system with modified rescue strop attached. Advantages:

- (1) Aircrew survivors are familiar with the strop
- (2) Rescue strop floats
- (3) The rescue strop can be tossed a short distance, which is an advantage over nets, litter, and seats that must be brought directly over or under the survivor.

(4) First Aid

On board the rescue platform, First Aid and treatment for shock shall be administered to survivor as necessary.

NOTE

Rescue reports show that almost all survivors are in some form of shock.