

# Operational Guidelines


## 1.0 PURPOSE

- 1.1. This Operational Guideline will establish standard procedures and considerations for the mitigation of all water rescue/recovery operations.

## 2.0 RESPONSIBILITY

- 2.1 All Incident Commanders are responsible to comply with and ensure that personnel under their command are adequately trained, fully understand, and comply with this procedure.
- 2.2 All Rescue Personnel have the responsibility to learn and follow this procedure.

## 3.0 OPERATIONAL GUIDELINE

### 3.1 GENERAL SAFETY PRECAUTIONS

3.1.1 Water Rescue Team members will exercise every safety precaution to afford the highest degree of safety to themselves and victims that is proportionate with the particular hazard situation in which they are operating. **Rescue priorities** are:

- a) **Self-rescue**
- b) **Security of fellow teammates**
- c) **Victims**

3.2 The Safety Officer at all incidents involving water should be trained to recognize the additional hazards associated with water-related activities. As a minimum, the Incident Commander should insure the member appointed Safety Officer has been trained to the Technician Level in water rescue, and is trained in Water Rescue Procedures.

3.3 Personal protective equipment

3.3.1 Personnel working 10' or less from the water's edge shall have donned the appropriate personal protective equipment (PPE), including personal flotation device (PFD), water rescue helmet, and belted throw bag.

3.3.2 Any boat operator entering a boat in the water shall wear at least a Type V PFD and water rescue helmet.

- 3.3.3 Primary and secondary rescuers, and Water Safety Team rescuers shall wear Type V PFDs, water rescue helmets, regular throw bag and utilize the waist throw bags, if available, that include flip lines and 55' throw bag inserts.
- 3.3.4 All Fire Department members and other rescue personnel operating at the scene of the water rescue incident should wear a helmet. **Fire helmets** have no drain holes for water to pass through, and therefore, **will not be used**.
- 3.3.5 **Structural firefighting turnouts and bunker style boots should never be worn on the water's edge, in the boat, or in the water. For law enforcement personnel gear belts and protective vests should be kept away from water area also.**
- 3.3.6 Gloves will be worn if the member is actively involved in rescue operations.
- 3.3.7 Flood situations or other contaminated water environments require the use of dry-suits by the primary boat operator and the two primary rescuers.
- 3.3.8 All other protective clothing and equipment will be utilized as deemed necessary by the Incident Commander, the Rescue Sector Officer, Rescuers, or the Safety Officer.
- 3.4 Never tie a rope around or on a rescuer except when a water rescue Technician must use a "live bait", Type V rescue PFD for a "go" rescue evolution. Use only the approved steel ring attachment in the back of the PFD for rope attachment.
- 3.5 No swift water rescue personnel will perform tasks that are beyond his/her level of expertise.
- 3.6 It is expressly forbidden that any swift water rescue personnel enter the water during a swift water rescue operation, without at least a boat, a boat operator, and one other backup swift water rescuer present.
  - 3.6.1 Any personnel that does not feel completely confident in the tasks he/she are asked to perform should notify the appropriate supervisor, and refrain from doing the tasks assigned.

#### 4.0 TACTICAL CONSIDERATIONS

- 4.1 **Arrive on scene. Take command. Size-up the situation.**
- 4.2 **Secure responsible party or witness.**

Command should secure a witness as soon as possible after arriving on scene. This will help in identifying and locating the problem the problem.

#### 4.3 **Initiate victim location**

- 4.3.1 The first arriving unit will become the Primary Search Team and its officer designated as **Search Sector**. They will begin to locate and account for all victims. This search team is also known as a Hasty Team and will conduct a search of each bank, checking in and around trees and debris piles for victims.

- 4.3.2 Upon locating victim(s), Command will be notified, and the information used to determine whether rescue or recovery operations should be initiated.
- 4.3.3 Upon arrival of the boat and other units, the Primary Search Team will continue their search. If conditions are such that a victim may be washed downstream faster than the Search Team can travel, additional Search Teams will be assigned well downstream, to a location where resources can be staged before the arrival of the victim.
  - 4.3.3.1 Water flow rate, velocity, obstacles, and access will be considered when assigning a downstream Search Team.
- 4.3.4 A Secondary Search Team may be assigned as quickly as conditions allow, moving on both sides of the stream from the last known location toward the downstream Search Team(s).
- 4.3.5 The Search Sector will be terminated when all victims are accounted for, or on the orders of the Incident Commander.

#### 4.4 **Assess the need for additional resources.**

**Command** should immediately begin assessing the need for additional resources. If additional resources are necessary, Command should put in an early call for them. If later, it is determined that they are not necessary, Command can put those units back in service.

#### 4.5 **Assess the hazards.**

**Command** should do an immediate assessment of the present hazards. Command shall assign the safety officer the **Safety Sector**.

4.5.1 The **Safety Sector** will be responsible for identifying the hazards present and to have them secured if possible. If it is not possible to secure hazards, **Safety Sector** will notify all personnel of the hazards and notify Command so that an action plan can be established.

4.5.1.1 Some hazards associated with water rescue operations would be: volume, velocity, and temperature of water, floating debris, unusual drop-offs, hydraulic effects, and depth of water.

#### 4.6 **Select a strategy of "rescue" or "recovery".**

Based on the conditions present and the hazards to rescuers, Command will have to make the decision to operate in the rescue or recovery mode.

4.6.1 If Command determines that the operation will be run in the rescue mode, rescue should begin as soon as possible, and Command should assign an individual as **Rescue Sector**.

#### 4.7 **Develop and implement an action plan.**

Command should establish an action plan as soon as possible. The step-by-step plan should be communicated to all personnel involved in the rescue.

## 5.0 PRE-RESCUE OPERATIONS

### 5.1 Make the general area safe.

5.1.1 Command or his/her designee should begin to make the general area safe including securing the area and not allowing civilian personnel into the water.

5.1.2 In swift-water rescue incidents, Command should assign an **upstream spotter** to spot floating debris or objects that may affect the rescue, and notify **Command** or **Rescue Sector** as these objects approach the incident.

Command may also want to assign a helicopter the task of aerial recon for spotting hazards.

### 5.2 Make the rescue area safe.

5.2.1 Command should secure the immediate rescue area. He/she shall utilize an accountability system to account for all personnel working within the rescue area.

5.2.2 If at all possible, the hazards in the rescue area should be secured. **Command** or the **Safety Sector** shall notify all rescuers in the area of the possible hazards.

### 5.3 Pre-Rescue/Recovery.

5.3.1 Depending on the action plan established, Command shall establish a **Rescue Sector**. The Rescue Sector will be responsible for gathering all equipment and personnel necessary to operate according to the action plan.

5.3.2 The Rescue Sector will assign personnel to conduct and support the rescue operation as the incident enters the rescue phase.

5.3.3 Rescue operations will not begin without a Water Safety Team in place. The Water Safety Team, at a minimum, shall be equipped with PFDs, helmets, throw bags, gloves, boots, wetsuits, and personnel safety devices.

5.3.3.1 The Water Safety Team will be provided with a boat and operator that is dedicated to the Water Safety Team.

5.3.3.2 Before rescue operations begin, the Water Safety Team boat will be launched downstream of the rescue operation. The boat will have the motor idling and be in a ready position to effect rescue.

5.3.3.3 The Water Safety Team will consist of a minimum of three personnel, including the Water Safety Team boat operator, with a minimum of (1) rescue technician.

5.3.3.4 A rescue technician will be designated as the Water Safety Team Officer.

5.3.4 Rescues involving boat operations will be done with two boats and crews assigned to the rescue, one as primary boat and one as secondary boat.

5.3.5 A Boat crew will consist of three personnel: an operator and two (2) rescuers. Whenever possible, the three personnel should be technician level rescuers. If

not possible, then the three rescuers should consist of a minimum of (1) technician level rescuer and (2) operations level rescuers.

- 5.3.6 Command should assign **downstream personnel**, with throw bags, and additional intervention devices as needed prior to commencing any rescue operation.
- 5.3.7 Personnel should be assigned to the opposite riverbank for incidents involving swift-water rescue.
- 5.3.8 The **Rescue Sector** should develop an alternative action plan that can be communicated to all personnel operating in the rescue area should the initial action plan become compromised.

## 6.0 RESCUE OPERATIONS

6.1 After pre-rescue operations are complete, the **Rescue Sector** shall put forth the action plan for the removal of the victim(s). Rescues should be conducted with the least amount of risk to the rescuer necessary to rescue the victim(s). Low risk operations are not always possible. If the rescue must occur by means of a high-risk operation, the **Rescue Sector** shall communicate with **Command** the risk/benefit of the operation.

### 6.2 The order of water rescue from low risk to high risk will be:

6.2.1 **TALK:** the victim into self-rescue. If possible, the victim can be talked into swimming to shore or assisting the rescuers with his/her own rescue. If a victim is stranded in the middle of a flash flood, this will not be prudent.

6.2.2 **REACH:** If possible, the rescuer should extend his/her hand or some other object such as a pike pole, inflated hose, or ladder to remove the victim from the water.

6.2.3 **THROW:** If the victim is too far out in the water to reach, rescuer(s) should attempt to throw the victim a throw bag or some piece of positive flotation (i.e., PFD, rescue ring). If the victim is able to grab the throw bag, the rescuer can pendulum belay or haul the victim to the nearest bank. Care should be taken to assure the victim will be belayed to a safe downstream position.

6.2.3.1 Downstream personnel should be in position during the actual rescue operation.

6.2.3.2 First responders that have had operational level, water rescue training should be able to conduct the above rescues without the help of the Technician level rescuers. If the victim cannot be reached by either of these methods, Command should consider stopping the operation until Technician level units arrive. After the boat and technician level rescuers arrive, Command should discuss with them the action plan. Command should consider assigning the **Rescue Sector** to a company officer or Technician level rescuer.

**The next order of water rescue from low risk to high risk would be:**

6.2.4 **ROW:** If it is determined that a boat based operation shall be run, Command should assign a company on the opposite bank to assist **Rescue Sector** in

establishing an anchor for a rope system. The company on the opposite bank will be made aware of the action plan.

6.2.4.1 **Rescue Sector** will be responsible for seeing that the rope system used for the boat based operation is built safe and proper. A minimum of 2-point tether should be built for swift-water operations.

6.2.4.2 **Rescue Sector** should consider personal protective equipment (PPE) for victim(s).

6.2.5 **GO:** If it is not possible to ROW (boat base operation) to the victim, **Rescue Sector** should consider putting a rescuer in the water to reach the victim. This is a very high-risk operation. Only rescuers with the proper training and equipment should be allowed to enter the water. Prior to the rescuer actually proceeding into the water, he/she shall discuss the action plan, including specific tasks and objectives, hazards and alternate plans.

6.2.5.1 The rescuer shall never be attached to a lifeline without the benefit of a quick-release mechanism.

6.2.5.2 The rescuer should take PPE of at least a PFD to the victim. Members shall not do a breath-hold surface dive in an attempt to locate a victim beneath the surface of the water.

6.2.6 **HELO:** At times the use of a helicopter is the most reasonable method of reaching the victim. Helicopter operations over water are high-risk operations. Command should consult with **Rescue Sector** and the pilot to determine the risk/benefit of the use of a helo. If the pilot says he/she can do the operation, Command should consider it.

6.2.6.1 **Rescue Sector** should assign rescuers to the helicopter and discuss with the pilot and the rescuers the specific action plan.

6.2.6.2 **Rescue Sector**, or his/her designee should address the weight and balance considerations. Command will have the final say on the use of a helicopter for water rescue operations. The pilot will have the final say on how the helicopter will be used.

#### 6.2.7 **Dive Operations**

6.2.7.1 Depending on the length of submersion and various other factors, **Rescue Sector** will decide on a dive *rescue* or *recovery* operation.

6.2.7.2 Crews will support dive rescue and recovery operations.

#### 6.2.8 **Property Recovery Operations**

Members should not become part of a towing operation to remove vehicles from the water. One agency should stand by for *rescue* if a tow truck driver insists on retrieving the vehicle.

#### 6.2.9 **Additional Considerations:**

6.2.9.1 HEAT. Consider hydration issues and rotation of crews.

- 6.2.9.2 COLD. Consider the affects of hypothermia on victim and rescuers.
- 6.2.9.3 RAIN/SNOW. Consider the affects of rain or snow on the hazard profile.
- 6.2.9.4 TIME OF DAY. Is there sufficient lighting for operations extending into the night?
- 6.2.9.5 Consider the affect on family and friends; keep family informed.
- 6.2.9.6 Consider news media; assign a P.I.O., Public Information Officer

## 7.0 ASSESSING THE VICTIM

- 7.1 Once the rescuer(s) have reached the victim, they should do an immediate assessment of the victim, a quick assessment of the ABC's, and the exact method of entrapment.
  - 7.1.1 If the victim is conscious, the rescuer should determine if the victim can assist in his/her own rescue.
  - 7.1.2 If the victim is unconscious, the rescue must be quick. If it has been determined to be an underwater or recovery operation, **Rescue Sector** should proceed with a dive operation.
  - 7.1.3 If the victim can assist in his/her own rescue, the rescuers should proceed with the rescue action plan. The victim should be brought to shore as soon as possible.

## 8.0 TREATMENT

- 8.1 As soon as the victim is brought to safety, an assessment should be done by ALS personnel. Treatment shall be administered as per local protocol.
- 8.2 If necessary, the victim shall be transported to the appropriate facility.

## 9.0 TERMINATION OF THE INCIDENT

Command should begin termination as soon as possible after the victim has been removed from the water. This shall include securing all the equipment used for the rescue and personnel accountability. This may also include witnesses, photo's, victim's personal effects, or equipment used in the rescue.

- 9.1 Command should consider activating the Critical Incident Stress Debriefing for extraordinary or extended operations.
- 9.2 **Prepare For Termination**
  - 9.2.1 Personnel accountability.
  - 9.2.2 Equipment accountability.
    - 9.2.2.1 If there has been a fatality, **Rescue Sector** may consider leaving equipment in place for investigative purposes.
  - 9.2.3 On-scene cleaning and decontamination operation.

- 9.2.4 Re-stock vehicles.
- 9.2.5 On-scene debriefing (hot wash).
- 9.2.6 Secure the scene.
- 9.2.7 Return to service.

## **10.0 EMERGENCY and MAYDAY SITUATIONS**

- 10.1 Upon a member falling into the water by accident, or if a member is in need of assistance, they will signal audibly, and then activate their strobe light.
  - 10.1.1 If the member is equipped with a radio, they will transmit a mayday.
  - 10.1.2 After the radio transmission, the member needing assistance will deliver repeatedly a series of three short blasts on his / her whistle signifying that they are in need of assistance, or having an emergency.
  - 10.1.3 The member needing assistance will activate the strobe light attached to his / her PFD for a visual indicator of who is in need of assistance.
- 10.2 Upon receipt of a Mayday radio transmission, or upon hearing the whistle signal, the IC will activate the Water Safety Team.
  - 10.2.1 The Water Safety Team Officer will communicate with the IC and take appropriate actions
  - 10.2.2 All personnel on the scene will switch operations to a different channel, leaving the member needing assistance, the Water Safety Team, and the IC on the original operations channel.
- 10.3 If the Water Safety Team is activated, the IC must replace them with another standby Water Safety Team, or cease all other operations until the Mayday is mitigated, and the Water Safety Team is restaged.
- 10.4 The evacuation signal for the rescue site will follow existing FD procedures for evacuating structures at structure fires. Signaling should be done over radios, with whistles, and with vehicle sirens.

## **11.0 TRAINING**

- 11.1 All Training levels should be compliant with NFPA 1670 and NFPA 1006 standards
  - 11.1.1 Awareness
  - 11.1.2 Operations
  - 11.1.3 Technician