Tempe Fire Department Policies and Procedures
Water Rescue
208.03
Rev 8-31-93

PURPOSE

Water rescue incidents generally occur because victims either knowingly enter the water or otherwise find themselves in water and unable to remove themselves. Water rescue operations present a significant danger to fire department personnel. The safe and effective management of these types of operations require basic to very specialized considerations. This procedure identifies some of the considerations that must be included in managing these types of incidents.

POLICY

It is the policy of the Tempe Fire Department that all available water rescue equipment (i.e., personal flotation device, water rescue helmet, throw bags) be appropriately utilized when engaged in water rescue incidents. It is not the intent of this policy to prohibit rescue attempts when water rescue equipment is not available. On scene personnel will not wear turnout coat and pants, helmet, or boots when operating near the water. This equipment can be a hazard during a water rescue.

For the purpose of emergency response, a water rescue shall be defined as any incident which involves the removal of victim(s) from any body of water other than a swimming pool. This shall include lakes, ponds, canals, washes, river, or any other body of water, whether still or moving.

PROCEDURE

Dispatch

Water rescues will normally be dispatched as a special duty rescue.

Command

The first arriving company officer will assume command. Command must secure the immediate area and assure that no more citizens enter the water. Command must identify the problem and make a decision whether to operate in the rescue or recovery mode. If operating in the rescue mode, Command should consider all of the potential hazards to rescuers and victims. Command should consider the risk/benefit factor. A risk/benefit factor is a subjective decision that weighs the benefits of what is to be gained versus what can be lost if the worst happens. If the benefit is high and the risk to rescuers is low, Command should move forward with the action plan. If the risk is high to rescuers and the benefit is low (901-H), Command should assume a recovery mode.

If Command is operating in the rescue mode, quick assessment of the hazards associated with the water must be made (i.e., speed, temperature, hydraulics, debris, possible contamination). If the victim can be seen, Command should determine if the victim is in immediate life-threatening danger or is relatively safe and secure for the moment. If the victim is in immediate life-threatening danger, rescue must be quick.

Rescue options will be considered and executed in order from low risk to high risk. "Reach-Throw-Row-Go-Helo" shall be the proper order of execution to effect rescue. If possible, Reach the victim with whatever means possible (i.e., pike pole, stick, inflated fire hose). If the victim is too far out in the water to reach with something, Throw would be the next option available. Throw the victim a throw rope bag. The

victim should grab the rope, but not tie it around him/herself. The rescuer will then pendulum belay the victim to shore. If the victim cannot be reached by means of Reach or Throw, Command should consider waiting for the Technical Rescue Team (TRT) before committing personnel to the rescue.

The following options are considered technical high risk operations that require specialized training and equipment. Row is the next rescue operation for consideration. If the need for a boat is identified, or if necessary to enter the water, the Phoenix Fire Department Technical Rescue Team will be dispatched. This determination should be made as soon as possible after arrival. Boat based operations can be safe and effective with proper training and equipment. If the fire department inflatable boat is not available, Go should be the next consideration.

Any time a rescuer is placed into the water to effect rescue, it is considered to be a dangerous operation. Rescuers can be at extreme risk. Prior to placing a rescuer in the water, Command and the rescuers involved should consider the risk/benefit factor again. If the hazards associated with placing a rescuer in the water are too high, Command should consider the use of a Helo. If the pilot feels comfortable with the assignment, Command should allow him/her to attempt to effect rescue. Several different rescue operations are available with the use of a helicopter for water rescue operations. Command should consult with company officer(s) from the TRT prior to commitment of the helo for water rescue evolutions.

If Command cannot see the victim, he/she shall attempt to secure a witness to establish the need for fire department services. If a witness can be secured, Command should get the following information from that witness:

- Point last seen.
- Time of accident/injury.
- Time victim was last seen.
- Number of victims.
- Description of vehicle (if any) and victims.

If Command cannot find a witness, he/she should attempt to look for signs that may indicate a problem (i.e., tire tracks leading into water). Command should also consider sending a company upstream and downstream for recon. A helicopter may also be considered for a quick recon of the area.

Sectors

If a water rescue operation turns into a long technical operation, Command should consider sectorization. The following sectors may be assigned during swiftwater operations.

Downstream Sector - This sector consists of personnel whose responsibility would be to be prepared to rescue victims and rescuers that may be swept downstream. All personnel in this sector should have personal flotation devices, helmets, and a throw rope bag in hand. There should be downstream personnel on both sides of the river/canal. Downstream personnel should place themselves in a position that will allow the rescuer to belay the victim into a safe location.

Upstream Sector - This sector consists of personnel whose responsibility would be to watch for and advise Command of any obstacles and/or hazards (i.e., top loads, suspended loads) that may be floating downstream and may hinder the rescue operation. Upstream sector should also advise Command if water level is rising or falling.

River Right/Left Sector - Command should assign personnel to the opposite bank that the operation is being conducted from. Personnel assigned to this sector will be responsible for executing the plan in the safest possible manner. (River right and river left are designated while facing downstream.)

Rescue Sector - Personnel assigned to this sector are responsible for developing an action plan with Command. Once the action plan has been developed, rescue sector will be responsible for

executing the plan in the safest possible manner.

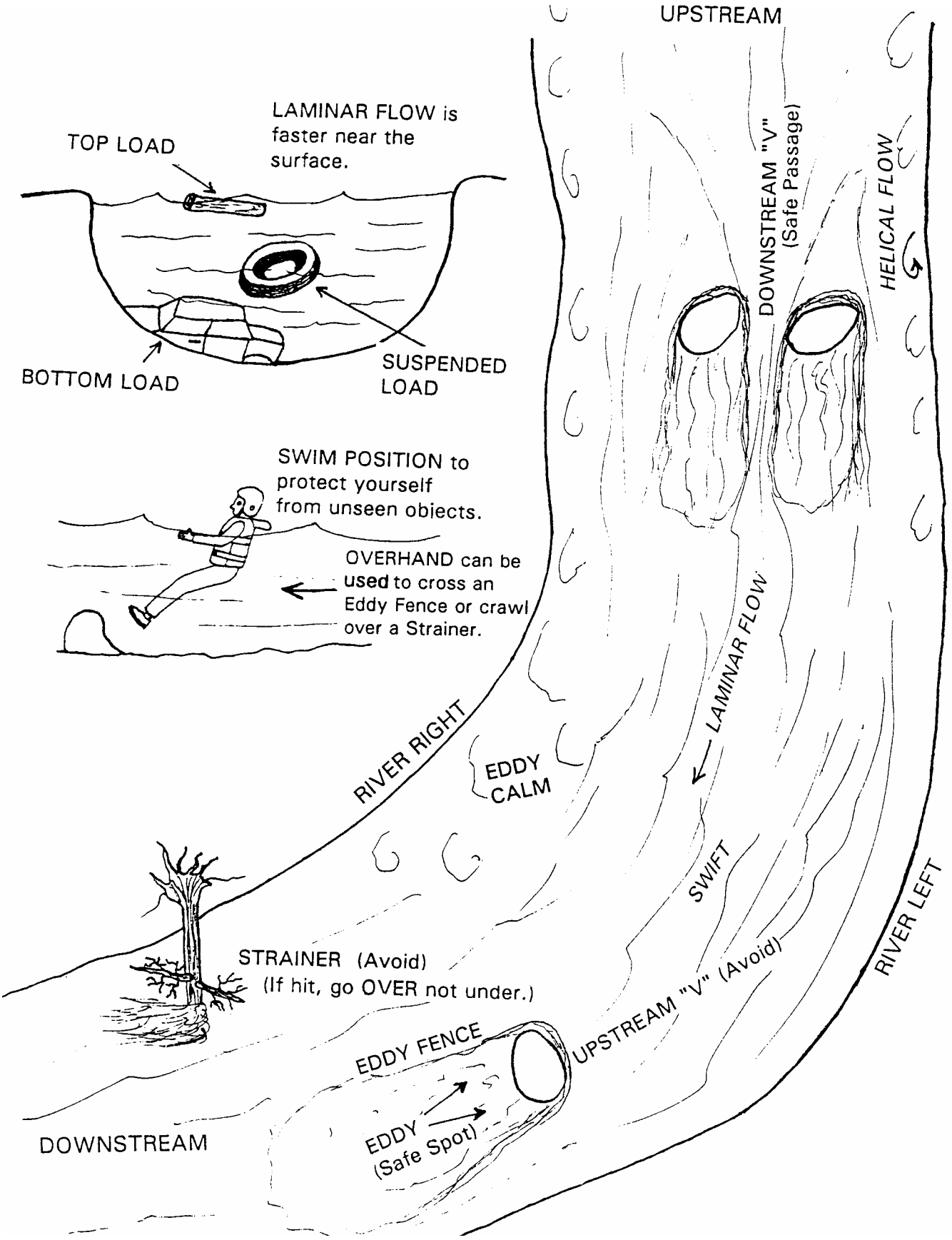
Treatment Sector - Personnel assigned to Treatment Sector will be responsible for providing BLS/ALS treatment to victims removed from the water.

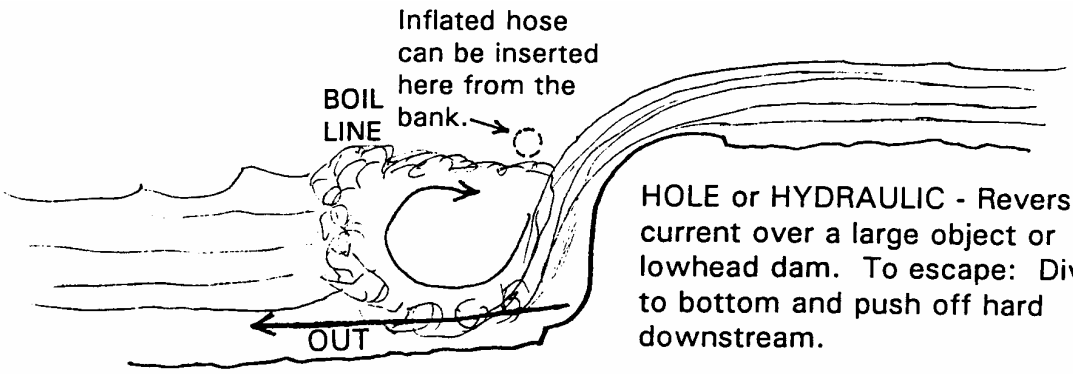
Additional Considerations

At the present time, the Tempe Fire Department does not have an operational dive rescue/recovery team. If it is determined that a victim is under the water, Command should call the Maricopa County Sheriff's Office. While waiting for the arrival of the dive team, Command should be gathering information to determine the point last seen. If, through witness interviews, personnel on the scene can determine the point last seen prior to the dive team arrival, divers will not have to spend extra time on the scene before entering the water.

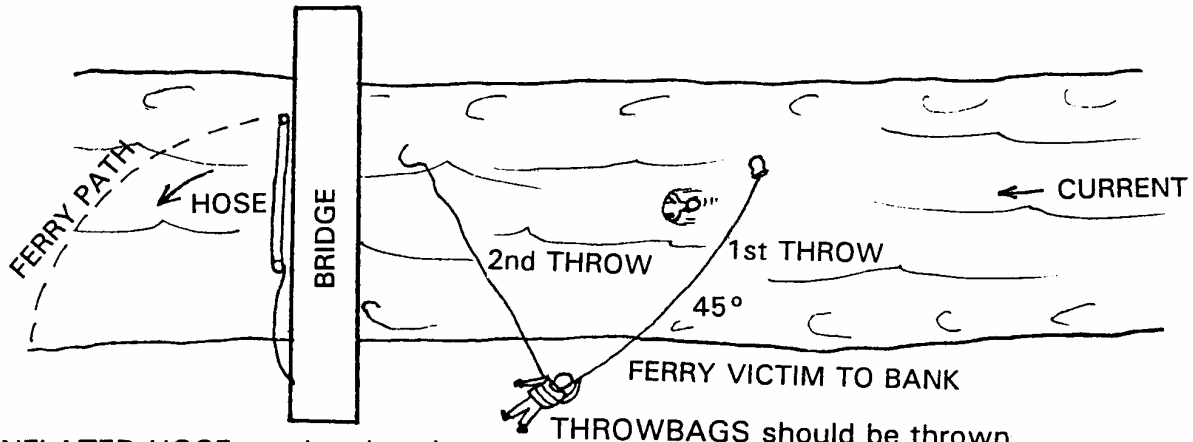
PREPLANNING

Special water hazards should be identified by companies in their first due area. Plans should be developed for these areas that provide the greatest risk/benefit ratio for rescuers. Members must be familiar with these hazards and plans and train to become proficient in implementing them.


LAMINAR FLOW is faster near the surface.
TOP LOAD
BOTTOM LOAD
SUSPENDED LOAD
SWIM POSITION to protect yourself from unseen objects.
OVERHAND can be used to cross an Eddy Fence or crawl over a Strainer.
UPSTREAM
DOWNSTREAM "V" (Safe Passage)
HELICAL FLOW
LAMINAR FLOW
RIVER RIGHT
EDDY CALM
SWIFT
RIVER LEFT
STRAINER (Avoid)
(If hit, go OVER not under.)
EDDY FENCE
UPSTREAM "V" (Avoid)
EDDY (Safe Spot)
DOWNSTREAM

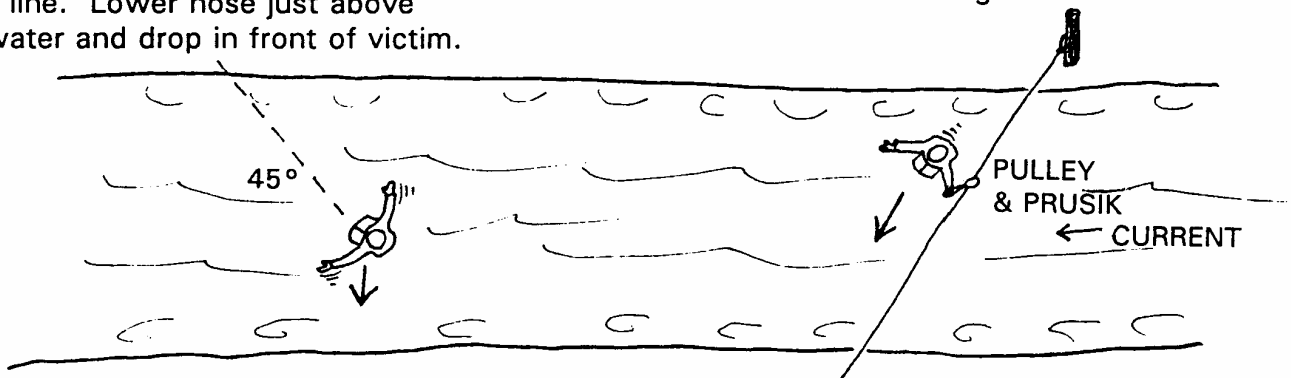


HOLE or HYDRAULIC - Reversal of current over a large object or lowhead dam. To escape: Dive to bottom and push off hard downstream.

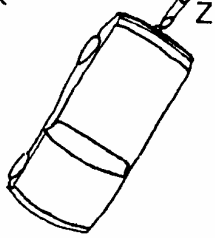


INFLATED HOSE can be placed downstream in case other rescue efforts fail. Secure one end with a line. Lower hose just above water and drop in front of victim.

THROWBAGS should be thrown just upstream to victim at a 45° angle. If missed, the line can be quickly rolled and thrown again.



FERRY OUT by facing the other bank at a 45° angle and back paddle.



Z RIG Crossing on a line anchored and pulled tight, hold prusik and jump past helicial. Let current take you accross.