



Jackson Hole Fire/EMS Operations Manual

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Title:

**Station 3 - Swift
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Division:

8

Article:

2

Revised:

7/8/2010

Pages

10

Swiftwater Response Station #3 Hoback Junction Standard Operating Guidelines (SOG)

Jackson Hole Fire/EMS

I. The purpose of this manual:

The geology and geography of the Hoback Junction area is that of two relatively narrow river corridors hosting two of Wyoming's heaviest non-interstate highways that confluence within 100 yards of JH Fire/EMS Station 3, the closest emergency-response organization to many miles of both river corridors and their tributaries. History and odds show that dense river corridor use can and will result in a myriad of different types of calls for assistance within those corridors occurring on or near moving water. The nature of water emergencies is most often for immediate and timely response if victims cannot provide for their own rescue. Very often the availability of timely responders with limited equipment can be the difference between a rescue and recovery. Station 3 responds to structure and wildland fires where moving water is present, often use river and streams as a water source for a fire, and quite often have motor vehicle accidents that end up in or near moving water. Firefighter/responder safety is critically important when responding to any scene. Proper preparation and training for working on or near water is not a "beneficial" excess in an already long list of training requirements and needs; it is vital difference between success & failure or life & death for a response organization that responds to the majority of their calls between the walls of river canyon in busy corridors.

This manual is to give guidance and reference material to Jackson Hole Fire/EMS firefighters in order to assist them when they respond to a 'Water Rescue' incident. The goal at a water rescue incident is to operate in the safest, most efficient and most expedient manner possible.

Firefighters operating at a water rescue incident are governed by the situation at hand. Not all conditions and predicaments can be foreseen and planned for, but it is hoped with this direction that firefighters are not put in a situation where they must decide whether to violate safety measures by attempting to aid a passenger in a motor vehicle accident in the water, or stand helplessly by waiting for other agencies with water guidelines to respond.

Firefighters operating at a water rescue incident are also influenced by:

- Jackson Hole Fire/EMS guidelines,
- Generally accepted tactics and practices for moving water rescue,
- Resources available,
- Responding units and their protocols (ex: US Forest Service, Teton County Search and Rescue, Station 7, etc.)
- Water levels, known river hazards, type of terrain, & access opportunities
- This manual will attempt to identify:
 - ❖ mandatory practices
 - ❖ preferred methods
 - ❖ acceptable alternatives
 - ❖ good', 'better', 'best' ways of operating

II. Framework for All Responding Personnel

- 1) No one at a water rescue incident does anything he/she is **not** trained to do
- 2) The safest water rescue incident has an IC, Safety officer, Rescue Group Leader, entry team and back-up team
- 3) With any rescue discipline, there is no 'one way' to perform. Guidelines are useful when discretion is allowed at the scene. Successful rescue is a mixture of training, experience, practice and judgment. We must remember that self-rescue is the priority. Rescue of our teammates is second, and the rescue of the victim is the final outcome. Self sacrifice benefits neither the rescuer nor the victim if both are lost as a result.
- 4) No one will ever respond to a water-related emergency alone.
- 5) No responders will act above and beyond their level of training.
- 6) Reach-Throw-Row-Go means:
 - ❖ -the safest option is to REACH out to a victim and pull the victim to safety
 - ❖ -the next safest option is to THROW a rope to the victim
 - ❖ -the third safest option is to ROW to the victim if a boat is available
 - ❖ -the final option is to GO to the victim
- 7) All personnel within 15' of the water's edge will wear a personal floatation device (PFD) regardless if the scene is in the water or not.
- 8) No rescue swimmer enters the water without a floating safety line attached, except where the safety line becomes a hazard itself.
- 9) No personnel will enter the water without acceptable personal protective equipment. This may include: drysuits, closed-toe foot protection, whistle, helmet, etc.
- 10) Bunker gear and structure helmets will not be worn within 15' of moving water! Drysuit/wetsuit, Nomex wildland gear, and civilian clothes (all with PPE & PFD) are allowable. Structural gear may be removed prior to donning PPE/PFD and coming within 15' of moving water.

III. Training Guidelines for Station 3

Timely training available for station members, other stations, and other responding agencies to meet agreed upon station needs. All member of station 3 will, at a minimum, enroll in and become certified at the Swiftwater "Awareness" level. This 8 hour classroom seminar introduces personnel to the problems associated with water & rope rescue as well as the procedures to follow in flash flood, large-scale disaster, and seasonal flooding situations. The course is designed to develop knowledge in the areas of:

- scene assessment & incident size up (of both existing & potential conditions)
- resource ordering
- activation procedures for rescue response
- site control and scene management
- hazard recognition & mitigation procedures

In order to accomplish the responsibilities of the awareness level responder, the course also provides students with a conceptual understanding of the principles, applications, and hazards associated with advanced water rescue techniques. This course is focused on preparing emergency personnel to work near moving water.

IV Calls 'Requiring a Water Rescue' response?

Typically this is a judgment call. Firefighters must weigh all the factors they are faced with. Perhaps their on-scene resources will allow for a standard action plan that does not require any specialized water-related equipment. Incidents that involve water should raise your suspicions and invite you to call more specialized water rescue resources. These types of rescues may include:

- ❖ drowning victims
- ❖ submerged cars
- ❖ over-turned boats
- ❖ cold weather/ice
- ❖ victim(s) that are not accounted for and cannot be readily located

A. *Outside Resources are available*

1. Other fire stations.

Although they may not have Swiftwater training, extra hands to set up rope systems, provide spotters & lookouts, direct traffic, etc. are still very valuable.

2. Bridger-Teton National Forest river personnel

Generally on-duty during daylight hours in the river corridors. Many river rangers have specialized water rescue training and boat skills. They can respond quickly with rafts and kayaks. Also, BTNF fire organization has two contract helicopters available in the summer months. They generally won't send them up for free, but often can divert an aircraft in the area for search assistance.

3. Teton County Search and Rescue

Personnel with Swiftwater training and motorized (*jet boat*) and non-motorized that can respond from Jackson. Rescue divers available as well.

4. Star Valley Search & Recue

Has many Swiftwater trained personnel, rafts, specialized equipment, and a large powerful jetboat that has proven to be one of the most effective tools during periods of high water on the Snake River

5. Teton County Sheriff's Department or Wyoming State Patrol.

Both organizations often have personnel in the corridor that can quickly arrive on-scene and begin information collection.

6. Wyoming K9 Search and Rescue.

An effective tool for recovery situations. Dogs are able to detect scents of bodies underwater.

7. Air Idaho or other life flight organizations, and
8. Civil Air Patrol.

B. Hazards to be aware of

1. - Vehicle in the River--

A vehicle in the river should be treated as an unstable object. If the vehicle is parallel with the river current, the hydrology of the river will assist in the stabilization. This will create an eddy in the downstream side of the river, making rescue accessible. A car perpendicular to the river current is unstable and can roll down the river. This is an unstable object and stabilization must happen before rescue can occur.

2. -Holes--

A term used for a feature on a whitewater river that describes a place where the water is recirculating in such a fashion that it will stop and hold rafts, canoes, and kayaks. Holes are usually formed on the downstream side of boulders and other obstructions in the water as the water flows over the boulder and rejoins the main flow.

3. -Strainers -

Strainers are formed when an object blocks the passage of larger objects but allows the flow of water to continue - like a big food strainer or colander. These objects can be very dangerous, because the force of the water will pin an object or body against the strainer and then pile up, pushing it down under water. Strainers are formed by many different objects, like storm grates over tunnels, trees that have fallen into a river ("log jam"), bushes by the side of the river that are flooded during high water, or rebar from broken concrete structures in the water.

4. -Other Hazards To Be Aware Of:

Debris (above and below the surface)

Cold Water

Diversions

Contamination

Obstructions

Environmental Issues

Victims Stranded

Ice

C. Water Entry – Who, When and With What?

1. No one should be in the water prior to exhausting the first three steps of water rescue:

- a. 1st step....REACH for the victim
- b. 2nd step....THROW a rope or life ring to the victim
- c. 3rd stepROW out to the victim

If a., b., and c. are not possible, you *may* need to GO to the victim within scope of training.

2. Who can enter water?

Only someone with safety backup personnel wearing proper Swiftwater PPE/PFD and possessing knowledge, training and experience with generally accepted river rescue protocols.

3. When to enter moving water

- ❖ a rescuer can enter moving water with appropriate PPE and equipment only if he/she has been safety checked
- ❖ only if a tended floating tagline attached (unless it creates a hazard itself). *If tagline inappropriate, rescuers should be positioned downstream with throw bags (these rescuers are known as “downstream safety”)*
- ❖ only if there is a backup rescuer (with equal or greater training) standing by, in the ‘ready’ mode.

4. What equipment is required in moving water?

- ❖ seasonally appropriate thermal water clothing – drysuit, wetsuit, drytop, splashtop, etc.
- ❖ helmet
- ❖ floating tagline
- ❖ type III or V PFD (also worn by all personnel within 15’ of water)

D. How to approach a Water Rescue call

1. Recognize the type of incident you are at

2. Give a size up and establish COMMAND

3. Gather information

- ❖ what is the scope, magnitude and nature of the incident?
- ❖ what are the hazards?
- ❖ location and number of victims?
- ❖ interview witnesses.
- ❖ triangulate the possible location with markers on bank if possible.
- ❖ assess the victim’s ability to rescue her/himself.
- ❖ assess the on-scene resources available.
- ❖ evaluate how to access the victims?
- ❖ Reach? Throw? Row? Go?
- ❖ any alternate methods?
- ❖ Inform downstream rescue agencies if any victims are missing

- ❖ other pertinent info.
4. **Establish communications**
 - ❖ Assess what nearby repeaters will provide the best coverage regardless of frequency administrator (county, state, federal).
 - ❖ Assess what frequencies responding agencies are most likely to share.
 - ❖ Inform dispatch(s) affected of situation and request they inform all incoming responders and agencies what the main repeater channel will be.
 - ❖ Consider naming a tactical channel for scene communication.
 - ❖ USFS Bradley repeater and Teton County PowWow frequencies are most effective in the Snake Canyon, while USFS Rendezvous and Teton County PowWow repeater tend to work best in the Hoback Corridor.
 - ❖ Work to educate inter- and intra-agency coordination on radio frequency names and access. Many frequency names are different between county, state and federal group designations.
 5. **Update dispatch / responding units**
 - ❖ Are resources adequate?
 - ❖ Could this scene grow across jurisdictions? If the possibility exists call for them now!
 - ❖ Is this a RESCUE (swimmer on surface) or RECOVERY (submerged patient) response?
 - ❖ Establish a command area that can accommodate additional resources if needed, and consider where resources should be staging.
 - ❖ Request dispatch advises other pertinent agencies of situation (downstream, state, federal).
 - ❖ Consider and order logistical needs if there is a possibility of having a scene for a long duration.
 6. **Isolate the scene and control the hazards**
 - ❖ hot / warm / cold zones
 - ❖ implement accountability system
 - ❖ ALL PERSONNEL WITHIN 15' OF THE WATER'S EDGE WILL WEAR A PFD
 - ❖ No bunker gear or structure helmets will be worn within 15' of moving water
 7. **Establish an incident action plan**
 8. **Use Incident Command System**
 - ❖ Establish Command, Safety, Operations, support team and entry team if applicable
 - ❖ Operations will request and assign other team and leaders if needed
 - ❖ An entry team and backup team is recommended
 9. **Prepare for the incident**
 - ❖ crowd control

- ❖ isolate and deny entry to unauthorized persons
- ❖ confirm that the hazards are identified and mitigated
- ❖ scene lighting
- ❖ if pertinent and possible, prepare your crew for entry and outfit them based on the hazards present
- ❖ all personnel within 15' of the water's edge will wear a PFD if possible
- ❖ PPE based on your hazard assessment
- ❖ bunker gear should NOT be worn within 15' of the water's edge, ever
- ❖ rescuers entering ice / cold water will wear a dry suit with floating tagline
- ❖ communications equipment
- ❖ light source
- ❖ equipment for victim rescue and removal
- ❖ downstream agencies alerted if needed

10. Pre-entry (if applicable)

- ❖ all necessary equipment and personnel must be in place and operational prior to any rescue team entering the water.
- ❖ a safety check of the entry team is mandatory
- ❖ site briefing with the entry team (and backup team) is mandatory (expectations, hazards, time limits, overall plan, communication guideline, etc.)

11. During the incident

- ❖ get 10 minute time checks from dispatch
- ❖ map out the team's progress
- ❖ remove the victim(s)

12. Incident Termination

- ❖ personnel accountability
- ❖ decon and rehab if needed
- ❖ return equipment to operational readiness
- ❖ on site briefing of the incident with responding jurisdictions
- ❖ make pertinent agencies (or landowners) aware of any outstanding issues such as channel blockages and hazmat spills

E. Roles and Responsibilities at a Water Rescue incident

1. Every water rescue *should* have the following roles filled if possible:

- ❖ Command
- ❖ Safety
- ❖ Operations
- ❖ Entry team

2. The incident *may* also call for:

- ❖ an entry team
- ❖ a backup team
- ❖ additional roles based on the size, scope and complexity of the incident:
- ❖ support team
- ❖ rigging team
- ❖ equipment team

As with all incidents the situation at hand will dictate the roles that need to be filled. Use your judgment and past experience to determine which roles should be utilized.

3. Incident Command Roles

- ❖ size up
- ❖ determine rescue vs. recovery
- ❖ requests additional resources
- ❖ command and control using ICS procedures
- ❖ conduct a risk vs. benefit analysis

4. Safety Officer Roles

- ❖ reports to the IC
- ❖ responsible for overall scene safety
- ❖ assists with risk vs. benefit analysis
- ❖ identifies all scene hazards and potential problems
- ❖ observes incident activities for safety issues
- ❖ ensures all personnel are wearing appropriate PPE
- ❖ ensures a safety check is done prior to any entry

5. Operations Roles

- ❖ reports to the IC
- ❖ responsible for tactical operations of the incident
- ❖ assists IC in determining rescue vs. recovery
- ❖ determines the plan and ensures the plan is implemented
- ❖ assigns rescue team priorities

6. Entry Team Roles

- ❖ report to the entry team leader (or RGL if no entry team leader)
- ❖ dons appropriate gear which should include:
 - ✓ -drysuit if cold water or ice
 - ✓ PFD
 - ✓ taglines
 - ✓ -communication source
- ❖ considers additional equipment that may include:
 - ✓ victim retrieval gear
 - ✓ cutting tools
 - ✓ lights
 - ✓ Carlson Rescue Board
 - ✓ throw rope
 - ✓ waterproof light source
 - ✓ floating marker light
- ❖ participates in safety check prior to entry
- ❖ understands the plan and the hazards involved
- ❖ understands rescue vs. recovery
- ❖ reports progress to Operations or designee

7. Back-Up Team Roles

- ❖ report to the Operations Section Chief
- ❖ don the same gear as the entry team
- ❖ map the progress and route of the entry team

8. Support Team

- ❖ reports to Operations
- ❖ oversees accessory tasks, which may include:
 - assisting in triangulation of the victim
 - lighting
 - accountability tags
 - hot-warm-cold zone markings
 - crowd control
 - decon and rehab
 - Managing tag lines

9. Rigging Team Roles

This is a role that may not require Swiftwater training

- ❖ reports to Operations
- ❖ oversees the haul line and any rigging that is requested
- ❖ safety checks all rope systems

10. Equipment Team Leader Roles

This is a role that may not require Swiftwater training

- ❖ reports to Operations
- ❖ organizes equipment to be used at the incident including: PFD's, dry suits, throw bags, floating rope, lighting, hand tools, etc.

11. Staffing Realities

River injuries and fatalities generally will have taken place prior to a responding unit's arrival. Weekday working-hours incidents are not likely to have many responders on-scene in a timely manner, and likely will not provide quantities of certified responders to fill all roles on all teams. This policy provides for a framework of what could and should be accomplished in the worst circumstances with adequate resources. Realities of effective response actions by minimal numbers of responders do not allow for safe water extrications. Responders are expected to do what they can to help within the scope of their training and experience. The primary rescue tool each person hopefully possesses is a brain with good judgment. If there are not enough responders with training to implement a water rescue, it is expected that responders will gather needed information, keep victims locations accounted for, and request more resources.