Going Deeper Without Getting Wet: Training Beyond the Basics

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In the early days of commercial diving in Canada (now I am speaking about the ’60s and ’70s), to have a standby diver at the dive site was considered to be a waste of deck space, overly cautious and an unnecessary cost. After all, who needed someone who was unproductively sitting around doing nothing all day but watching a diver’s bubbles? As business grew and diving accidents increased, standards and regulation were introduced, including the requirement to have a standby diver dressed-in and ready to immediately render assistance to a diver in trouble. It has been the interpretation of “dressed-in” and “immediately” that has spawned an ongoing debate and created controversy over the years—full dress versus half dress; ready to go in one minute or all at the discretion of the diving supervisor.

Historically, the focus of standby diver preparedness has been the ability of the standby diver to reach a submerged diver as quickly as possible. Standby divers should have their gear close to the water access point, tested and ready for donning in the event of an emergency.

What needs to be discussed is what a standby diver should wear while sitting, the perception that a standby diver needs to be rushed into the water to initiate a rescue and the level of crew preparedness for emergency response as a team.

The standby diver is a rescue tool in the event of an emergency. The rescue can only be successfully and safely executed if it is well-planned. Every aspect of the operational plan and the rescue plan must be tailored to each job, dive site and working condition—including the stage of dress of the standby diver.

Most incidences (inland) requiring a standby diver to retrieve a victim would be entanglement or delta P entrapment. If the tender can pull the diver to the surface in a controlled manner, the need for full diving gear might be mitigated. In the event of an entrapment, it is absolutely crucial that a standby diver is not put into a dangerous situation.

The execution of a secondary hazard assessment/bag test and pre-job brief can all be completed while the standby diver dons the diver’s dress in a controlled manner.

If we consider the minimum size of a team as three people, we must ask ourselves, “How effective will a fully dressed standby diver be in supporting a rescue primarily initiated from the surface?”

If the standby diver is fully dressed, we have eliminated one person in a three person crew. This leaves one person to initiate a rescue, mobilize rescue equipment, work the panel, work the radio and begin to pull the diver to surface and many other tasks needed for rescue.

There is no point of having fully dressed standby divers if they are going to get heat stroke in the summer or hypothermia in the winter from sitting in full gear. All gear must be fully assembled, tested and ready to deploy without delay.

The actual level of dress should match the conditions. In the summer, light clothes can be worn under a dry-suit; in the winter, a diver should at least have their dive underwear on. The water may be warm enough to dive in coveralls or a wetsuit.

There may be incidences where having a fully dressed diver, helmet in hand, is warranted. This is not the norm and should be assessed on a case-by-case basis.

There is also no point of rescuing a victim if you have no means of getting the victim out of the water. Pulling a fully dressed diver, even two or three feet vertically using an umbilical attached at the side of a harness is near impossible. Recovery equipment (personnel winch, stokes liter, backboard, etc.) should be mandatory.

The preparedness of the panel operator is also important. Do we need to switch from a possibly contaminated LP source to an HP backup? Do we need to put air to the pneumo to facilitate self rescue or provide another source of air to the diver? Is panel operator going to be clear and concise on the radio and logging information? This person will be the hub of communication to others assisting in the rescue. Is the tender familiar with the rescue plan and their role?

Since the standby diver will be executing a rescue, it is safe to say that the conditions of the dive have changed and a new set of hazards could be present. The supervisor is obligated to communicate those hazards (air, delta P, current, entanglement, equipment failure and unstable worksite) to the standby diver before he or she jumps in the water.

As an industry, we need to shift the focus from “How is the standby diver dressed? How fast can they enter the water?” to
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