Evaluation of the Freedive Recovery Vest

By

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Preface: My evaluation of the Freedive Recovery Vest took place nearing the end of the development cycle of the product and brought together some final opinions regarding the vest performance and its attributes.

The perspective that I took when evaluating the vest was that of a safety and rescue specialist with notes made relative to an in-water rescue of a Freediver.

My evaluations were done in relatively shallow water on a calm day with light winds. Seas were calm and surface conditions lacked any appreciable wave action or currents. The coral reef where the evaluation was performed was a gently sloping reef with drop offs reaching depths of 80 feet and all within 75 yards of the shoreline. Water temperature was approximately 78 degrees. All dives were performed using a boat as a platform for both access and convenience and most importantly for overall safety during the evaluation. The period of time used for the evaluation was approximately 90 minutes with approximately eight dives made.

I weigh approximately 260 pounds and my height is six feet four inches. I am 48 years old.

Evaluation: During each excursion with the vest, I noticed that that it was very easy and simple to outfit and donning the vest was relatively simple and in fact as simple as a SCUBA Buoyancy compensator or in another sense, putting on a coat or jacket. The wrist console / information center was easy to read and to function; Scrolling from the menu to each of the settings was easy and highly intuitive.

The materials used in the construction of the outer shell of the vest were comfortable and did not cause any chaffing while wearing. Overall the vest was comfortable and did not change positions or tend to shift around on my body while in the water. The quick release buckles were also easy to locate, and the vest was easy to remove between dives.

During the evaluation, I tried several positions underwater and during each successive dive, changed positions / altitude to see if the vest would shift or make the dive any more difficult than diving without the vest. The vest remained streamlined throughout the dives and did not encumber my movements.

I was able to dive and mimic a spearfisher and also a competitive apnea diver. In both cases, minor adjustments could be made to the console transmitter harness so that it did not restrict arm movement or extensions.

After setting depth and time parameters, I dove the vest and allowed it to trigger the vest inflation. I did this with both depth and time parameters. The vest inflated smoothly and immediately brought me into a vertical (heads up) position and quickly initiated an ascent to the surface. The fact is that on each dive and regardless of what position I maintained underwater, when triggered, the vest immediately carried me to the surface in a vertical heads-up position.

In each instance of inflation and once breaking the surface of the water I immediately noticed that my head was completely supported by a portion of the vest around the head which is much like a flotation collar. This particular attribute was most comforting in that conscious or unconscious, as simulated, the vest kept my head in a relaxed position and the airway (both mouth and nasal passages) above water.

The head position on the surface and the support afforded by the vest buoyancy around the head allows for effective airway management including a rescuer's evaluation of the diver- victim's state and whether the diver-victim is breathing or not breathing. Standards for cardiac care dictate that chest compressions are key to providing first aid assistance to the diver- victim as soon as it is possible to effect this procedure, i.e. hard supportive surface in which to start effective chest compressions on an unconscious victim. In-water rescues with delay to advanced support require the rescuer to initiate rescue breathing with the diver- victim.

The vest allows for effective evaluation of the airway and also allows the airway to be maintained through correct positioning of the head. The concern of having water advancing into the airway is also considered in that the rescuer can easily move the diver- victim's head from side to side. This ability to move the diver-victim's head will help to ensure that the diver- victim's upper body and ultimately his airway will not be pushed underwater while initiating rescue breaths.

Summary: I was very comfortable using the vest and felt very confident in the operation with minimal instruction and practice. The controls are easy to read and the systems simple to assemble and wear.

As a Freediver and professional instructor in aquatics safety and diving, in my evaluation, the vest will complement all freediving safety training and programs and allow for an added measure of safety for the Freediver.

In no way do I believe that using this vest is a substitute for sound freediving training and aquatic competence. The adherence to freediving safety protocols and use of good judgment cannot be overemphasized.

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