

Diver on a leash?



What does it mean to freedive? Inherent in the very word is the concept of being unencumbered, unfettered by the multitudinous devices and accoutrements that pervade any other means of entering the liquid realm. The body is unbounded, capable of moving in any way and in any direction - the body is free.

There is nothing more exhilarating than gliding effortlessly through coral ravines, or swooping down a rocky drop-off into the abyss. This is the spirit of freediving.

In the competitive version of the sport, where athletes are principally testing their limits and safety is paramount, the most effective and economical safety measure has turned out to be a counterballast system: the athlete is attached to the descent line by a running lanyard, and hoisted to the surface in the event of emergency by counterballast activation.

During tests the system performs very well. The big weight goes down and the little weight comes up, pulling the freediver with it. In engineering, simple is often successful, and the counterballast system is definitely a case in point.

However it is also true that in the 8 years or so that counterballast systems have been de rigueur for freediving competitions, there hasn't been a single emergency that has required counterballast intervention - not one! (note: it's true that counterballast systems have been activated, when divers who were moving slowly failed to meet their announced time deadlines, but the system has never been depended on to save a life). On the other hand, there have been countless occasions the lanyard used in

conjunction with the counterballast system has created potentially life-threatening situations. It seems that no carabiner is perfect or incapable of becoming somehow jammed whilst falling down clean line, and even if it was then there are hidden dangers, such as tape depth markers becoming unwound from the line, the lanyard wrapping around the bottom plate itself or intercepting nets/ropes (as occurred at the Teams World Champs in Japan). Almost every freediver has their own horror story of some fiendish trick that their lanyard has played on them at depth, and some freedivers believe that we may see a fatality caused by this system before we hear of any incident being avoided by it.



AIDA regulations now state that "all depth events must make use of a lanyard." There is however a clause that for individual world record attempts the organizer may submit an alternative safety system for review by the AIDA Technical Committee.

This is exactly what we did for Project Hector (William Trubridge's forthcoming attempt at 100m without fins - CNF). The safety system was similar to what was used in 2007, before the rule-changing, and involves safety rebreather and scuba divers being stationed at tight intervals along the descent line. In the event of an emergency they would intervene to effect an immediate ascent of the freediver. The primary means of doing so would be by attaching the freediver to the descent line and signaling counterballast activation, with an inflatable lift bag as the secondary means. So a counterballast setup is still required, but the dreaded lanyard is only affixed in the event of an emergency, meaning it cannot create an emergency itself!

The benefits of this diver support system over counterballast are:

1. scuba divers are better informed than the surface team to make a decision as to whether an emergency is required, and can do so immediately.
2. in an emergency, the lanyard is attached to the wrist, rather than waist belt, meaning that the freediver's position is more hydrodynamic and the airways aren't exposed to water
3. in an emergency there is no delay in the freediver's ascent while waiting for the bottom plate to reach their depth (e.g. in the event of a BO at 40m standard counterballast would require almost a minute before the bottom plate starts to bring the freediver back to the surface, meaning they would drift down during this time, exposing the freediver to further barotrauma).
4. there are no insidious dangers involved with wearing a lanyard constantly during the dive (entanglement at the bottom, or on clean mid-water line are common place)

This system was rejected by the AIDA board, on the grounds that it didn't involve constant use of a lanyard. I can understand the reasoning behind the decision: lanyards create friction on the line and impair hydrodynamics, so diving without makes the performance easier. There shouldn't be any handicaps or advantages between one dive and the next, especially with world records, and I have argued this point myself on previous occasions.

Nevertheless it is still unfortunate for our sport that the freediver must suffer being shackled to the line in the interests of

equality, especially when this shackling creates ulterior danger to the athlete and removes a small piece of the 'free' from the freedive.



As a purist, I dreamt of attempting the hectometer as I do in my training: a free body descending into the ocean. Perhaps I will try for a training dive to 100 meters in this way, before or after the official attempt.

For now, I have a new factor to take into account with the upcoming attempts. I must accustom myself to the use of the lanyard in order to be prepared to take that item also on my trip to 100 meters and back.

William Trubridge

One way to look at it Will, anybody who wants to try and break your record in the future must have the same constraint from being 'free'. Having met you and seen you move underwater, I believe you can achieve anything you set your mind too. Many people from all walks of life are behind you with "Project Hector". All the best! Ian.

by pulpo-power on 2010-11-12 01:48:16

Well said, Will. Be sure and open bidding on the lanyard.

by Christopher Morey on 2010-11-12 11:08:12

Well said. I understand the sentiment, but maybe you'll feel even more free do the dive your way after the Official attempt is done! - my dream is to make a parabolic 50m CNF dive lasting 5 minutes in a warm open endless blue ocean.

- Love, Courage and Water, Kars

by Kars on 2010-11-29 15:17:30

happy to see that i am not alone in fighting against the use of safety lanyard, because they actually are danger lanyards.

by Wolfgang on 2011-04-12 00:06:45