

# FEEL THE NEED FOR SPEED

+ UNDERWATER DIVER PROPULSION VEHICLES, OR DPV'S AS THEY ARE REFERRED TO, HAVE REALLY COME OF AGE IN THE LAST FEW YEARS. SINCE THEIR BIRTH OVER TWO DECADES AGO, WE'VE SEEN SCOOTER TECHNOLOGIES ADVANCE FROM BULKY HEAVY UNRELIABLE TANKS, TO STREAMLINED LIGHTWEIGHT RELIABLE UNDERWATER SPORTS MACHINES. THIS ARTICLE TAKES A CLOSER LOOK AT WHAT THINGS NEED TO BE CONSIDERED IN CHOOSING THE RIGHT DPV FOR YOU. WE'LL ALSO INTRODUCE YOU TO SOME OF THE MORE TECHNICAL CONSIDERATIONS OF DPV USE.



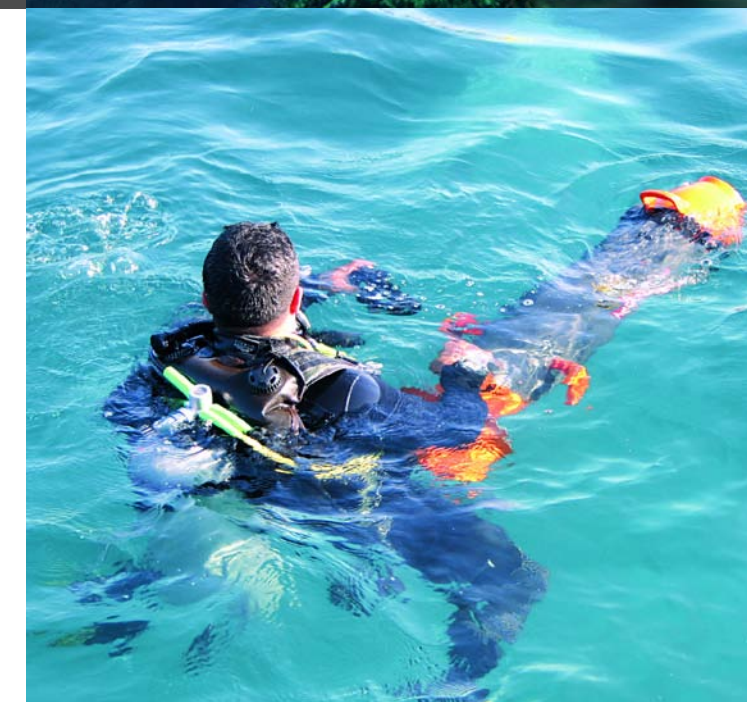
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DPV's were originally developed to be used by cave explorers who were pushing long distances into cave systems around the world. These technical explorers would use multiple scooters to tow teams of divers through the labyrinths of underwater tunnels that would be impossible to swim through unaided. DPV's first hit the silver screen back in the mid-sixties in the James Bond thriller *'Thunderball'*. In more recent years a number of light-weight sports machines have arrived on the market, and been made famous in Hollywood films such as *'Into the Blue'* and *'The Cave'*. So if you fancy yourself as a bit of a James Bond, then a DPV is a 'must have' item in your dive kit.

#### Let's take a look at the different types of scooters around today:

The most efficient sort of DPV is where a diver is towed behind it, holding on to the handle that normally houses the drive mechanism on the rear of the device. This style of scooter allows the diver to achieve a streamlined position slightly above the scooter, allowing the propeller wash to pass freely below them, thus reducing in-water resistance or 'drag'. A tow rope is attached to the scooter and a D-ring normally snaps onto the crutch strap or waistband of the diver. This pulls them from the body rather than the arms, which are used only to activate the power switch and guide the scooter in the right direction.

Another common model is where the diver holds on to two handles located at the front of the DPV and



Captions to come



: MATHEW PARTRIDGE

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manipulates the power switch with a single finger, whilst riding on top of the unit itself. This style of scooter is usually smaller in size and is commonly used by sport divers and snorkellers alike. There is also a model of scooter that the diver actually lies on. This has a slightly larger design, which creates more drag.

**Before you spend your hard earned cash you need to decide what you intend to use the DPV for:**

You may feel that you'd like to add a little more power to your dive, or perhaps you suffer from a disability that restricts your level of enjoyment underwater. Maybe you simply wish to see more of a local wreck or reef than is possible in a single dive, or you plan to use it for technical diving, which will require additional considerations such as depth ratings and duration of operation.

**Once you've worked out which applications the DPV is intended for, you need to consider the following:**

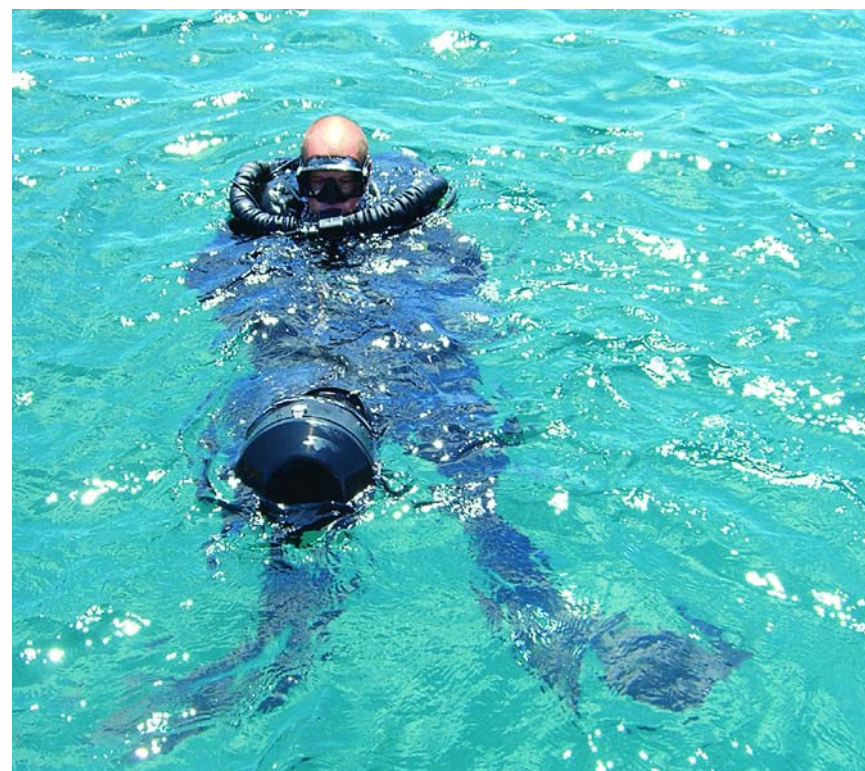
- If you plan to travel with the DPV the additional weight could be an issue.
- Locate the nearest servicing facilities, both locally and where you plan to dive.
- Plan your budget – scooters can cost from a few hundred dollars to several thousand.
- Ensure you receive proper training. Fully understanding the added risks of using a DPV are essential, especially if you plan to use it for advanced diving.
- Burn and recharge times, cost of replacement spares, and routine unit maintenance all need to be taken into account.

**Get used to it!**

Take a DPV certification with one of the main sport diving agencies or choose an experienced technical DPV instructor to run you through a workshop to build your skills. It's then essential that you practice with your new toy in shallow confined water, prior to embarking on more challenging situations. For instance, you don't want to end up in an uncontrolled ascent to the surface having not maintained correct buoyancy.

**Diving with DPV's require more considerations to ensure safe diving:**

It's very easy for a diver to lose track of



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their depth and time, accidentally exceeding both and ending up far away from the predetermined exit point.

In addition to diver error, it's also possible that the unit could fail either in the open position, requiring you to try to stop the runaway scooter, or the motor could simply stop functioning altogether. Both these situations should be taken into account at the dive planning stage. It's also advantageous to take an in-the-field repair course and carry a small selection of spare parts and tools, as most problems can be fixed on location if the need arises. Remember, you may be at risk of injury should your scooter fail.

Also take a second to consider the surroundings in which you will be diving. Avoid tearing around like a loose cannon and damaging the reefs and terrifying the marine life!

**Advanced practises:**

Technical cave and wreck diving with DPV's is particularly dangerous - as if entering overhead environments isn't dangerous enough! Failing to return to your staged scooter or not being able to get to your planned exit point due to scooter failure, could leave you in a serious out of air emergency situation. It's therefore extremely essential that you consider your gas supplies carefully, and maybe even think about towing a bailout scooter for long cave penetrations.

Practicing towing two divers on one scooter and knowing how long it will actually last, are essential factors to consider in dive planning and emergency management. Depth rating

## getting technical part IV°

Captions to come

and travel speeds also need consideration, most scooters designed for technical diving have depth ratings in excess of 100 MSW, some are even rated to 16 ATA, and normally cost several thousand dollars.

**Some of the major manufacturers producing Diver Propulsion Vehicles include:**

- Silent Submersion Scooters [www.silent-submersion.com](http://www.silent-submersion.com)
- Gavin Scooters [www.gavinscooters.com](http://www.gavinscooters.com)
- Apollo [www.apollo-europe.com/scooters.html](http://www.apollo-europe.com/scooters.html)
- SeaDoo Scooters [www.seascooter.net](http://www.seascooter.net)

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