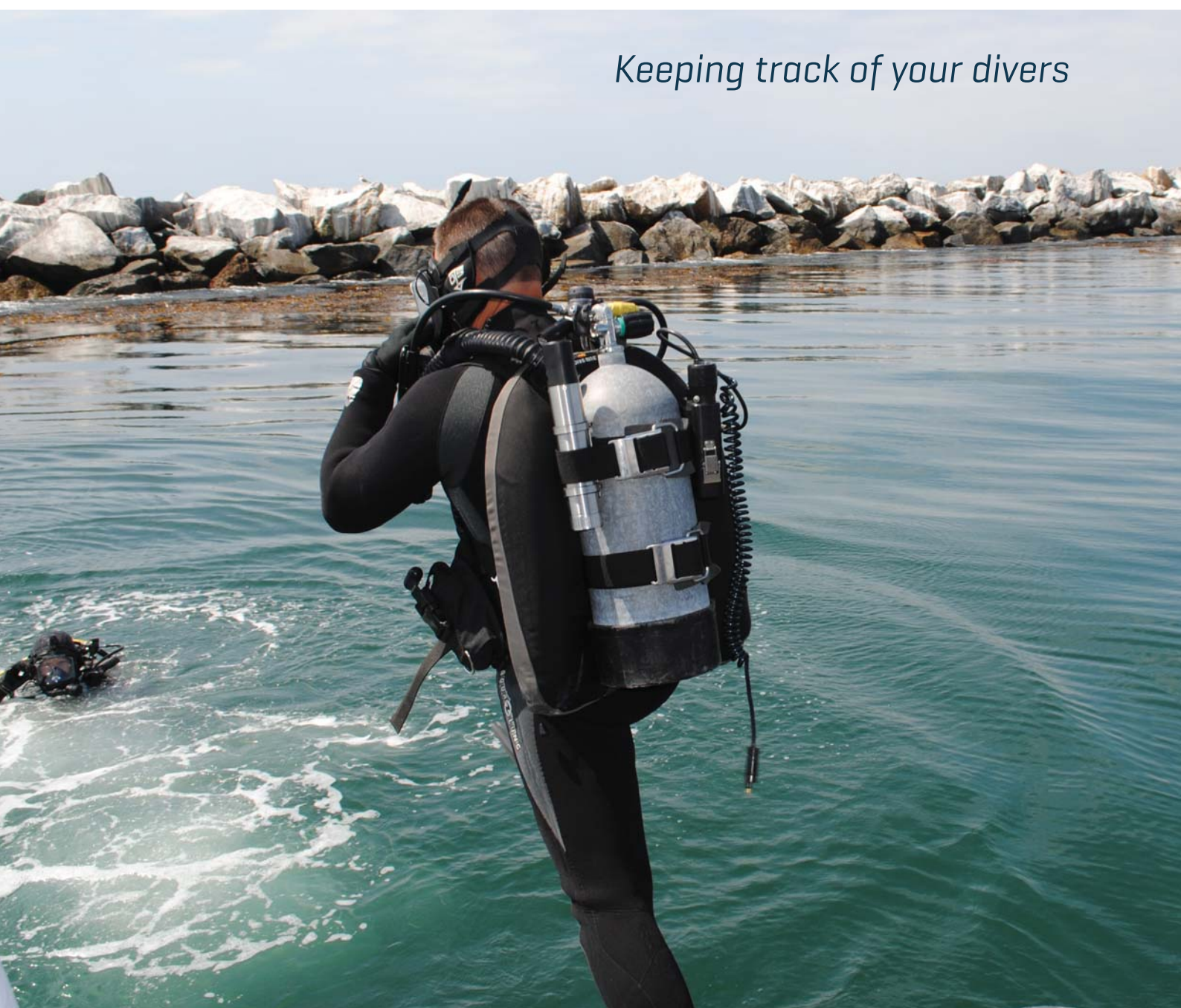


Keeping track of your divers



The next generation
in diver safety



The Diver DACAD System™

The primary function of the Diver DACAD (Data Acquisition Communication and Display) System™ is diver operational safety.

A revolutionary world-first diver monitoring and tracking innovation, the Diver DACAD System™ is a proud New Zealand technology – fully developed, produced and manufactured in New Zealand by Monitoring Technologies New Zealand Limited (MonTech).

Diver DACAD System™ was first developed in 2006 and monitors various parameters including depth, air, water temperature and range to diver – and it accurately tracks and positions divers within a range of more than 2.0km in ideal conditions.

The system is integrated with a diver's equipment and surface monitors several divers at one time, regardless of whether air is supplied from the surface via umbilical, or SCUBA, or a combination of divers using either type of air supply.

Simultaneous information on up to 12 divers is transmitted via an underwater modem to a receiving unit on the surface and then to a monitoring computer that records, calculates and displays the various parameters. This means a dive master now has a replication of each diver's dive computer, has full situational awareness of each diver and can intervene, if required, in real time.

The Diver DACAD System™ uses unique dive master tracking and monitoring software that is based on published tables developed by the US Navy and DCIEM. It calculates decompression to a maximum depth of 70m (229ft), holds a database of dive/diver information, and simultaneously provides an audit trail for diving activity. The software facilitates dive planning with pre-loaded dive plan capability.

If the Diver DACAD System™ monitored dive departs from the dive plan, new calculations are performed 'on the fly' to give the dive master updated information in real time of the effect the deviation has on the dive plan.

Dives are currently monitored for HP (and/or IP) air pressure, depth, water temperature and position. This means the dive master knows a diver's position (either absolute or relative to the dive tender), the diver's depth and descent/ascent rates, and the diver's remaining air time/decompression schedule.



The equipment

The six diver portable Diver DACAD System™ has been designed for autonomous use and contains everything needed to monitor dive operations for six divers. The system is packed into two custom rugged watertight Pelican Storm cases.

TopSide case

The TopSide case is a Pelican Storm iM2750 case comprising three layers of custom cut foam that contains:

Top Layer:

- › Tablet computer with the Diver DACAD System™ software
- › Pelican Carry Case 1095 for the tablet computer
- › Power supply for the tablet

Middle Layer:

- › TopSide Dunking Transducer
- › Battery Charger for the TopSide portable battery
- › Pelican 1500D Peli desiccant hydrosorbent silica gel

Bottom Layer:

- › A portable TopSide battery (mil battery 5590) and cable with bluetooth

Lid:

- › Document storage pouch

Dimensions

- › Length: 24.6" (625mm), Width: 19.7" (500mm), Depth: 14.4" (366mm), Packed Weight: 63lb. (29kg)



DiverSide case

The DiverSide case is a Pelican Storm iM2950 case comprising three layers of custom cut foam that contains:

Lift Out Top Layer:

- › Six DiverSide Modems
- › Six high pressure transmitters
- › Six cylinder mounts for DiverSide modem

Bottom Layer:

- › Six battery chargers for the DiverSide modems
- › Tool/spares kit
- › Pelican 1500D Peli desiccant hydrosorbent silica gel

Lid:

- › Document storage pouch

Dimensions:

- › Length: 31.3" (795mm), Width: 20.4" (518mm), Depth: 12.2" (310mm), Packed Weight: 68lb. (31kgs)



Patents and Controls

The Diver DACAD System™ is patent protected throughout the world. Its New Zealand patent 560653 is granted and sealed with a prior date of 15 August 2007. Patent Cooperation Treaty (PCT) Patents have been filed in the USA, Canada, Europe and Australia.

The Diver DACAD System™ is controlled by New Zealand Strategic Goods ML9 (c) and is US Navy AMU (approved for military use), Equip # 6.3.13 Cat II with some variants also controlled under ITAR (International Traffic in Arms Regulations), Significant Military Equipment (SME). A non-regulated version will be available soon.



New Zealand Government Funded

The Diver DACAD System™ was developed with the assistance of the New Zealand Government through the Foundation for Research Science and Technology, the Ministry of Science and Innovation, and the Callaghan Foundation. The product has the full backing of New Zealand Trade and Enterprise both in New Zealand and offshore.

In 2010 the Diver DACAD System™ won the TechNZ Best Innovation Showcase award – beating 20 other New Zealand innovative companies, including Weta Workshops and Fonterra – to take the prize. The Diver DACAD System™ was judged by 300 distinguished innovative to be the most innovative product.



Royal New Zealand Navy

The Royal New Zealand Navy was also instrumental in helping to mould the way the Diver DACAD System™ was designed and used. The Diver DACAD System™ is successfully operating in an international Navy and in a USA West Coast Police Department.



The Royal New Zealand Navy will have the Diver DACAD System™ on board its dive ship in 2016.

Contact us

The Diver DACAD System™
PO Box 74193, Greenlane
Auckland 1546
New Zealand

Dr Peter Johnson, CEO
T: +64 21 781 416
E: peter@dacad.com

Singapore and South East Asia

Representative:
Pysen-SGI (Asia) Pte Ltd
65 Ubi Crescent #06-01
HOLA Centre
Singapore 4008559

Mr William Koh, Executive Director
T: +65 6749 7784
E: sales@pysen-sgi.com.sg