

REVEILLE

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Veterans turn inventors to build
tactical watercraft

THE PRICE OF LIBERTY IS ETERNAL VIGILANCE

Australian MADE





With careers in the navy behind them, Sydney veterans Darren Schuback and Ryan Carmichael are now building next-generation tactical watercraft that provide optimal performance and protection.

STORY LUKE RYAN

After 24 years of dedicated service in the Royal Australian Navy, Darren Schuback knew one thing for certain: it needed better boats. "If you look at the rigid-hull inflatable boats," says Darren, "the hull design hasn't really changed in the last 30 years. And now they can't cope with the tactical and technological demands of modern operations."

These are issues Darren has experienced firsthand. Working as a navy clearance diver and then a mine clearance diving officer, Darren spent much of his professional life on rough seas in bulky and difficult-to-manoeuvre inflatables. "I was always putting my hand up to be part of the boarding teams, so I was exposed to a lot of different tactical watercraft - and they all had the same problems."

As the missions stacked up, so did the incidents. In one, a pair of sailors under his command capsized in rough water during a man-overboard exercise. "Luckily we recovered them from the water, but it was a difficult rescue and they both ended up discharging six months later." Another recovery operation Darren was part of went horribly wrong when one of his closest colleagues was crushed between the inflatable and a large merchant ship, fracturing a vertebra. "Our tactical craft didn't have enough power or steerage to cope with the swell," he says. "It ended his career instantly. Years on, he's still struggling with his physical and mental rehabilitation."

The incidents were a wake-up call. Darren took a sabbatical to research the problem and discovered the same issues were presenting themselves in navies all around the world. "That's when I knew I had to do something about it," says Darren.

Knowing the importance of working with like-minded and dedicated people, Darren reached out to a friend and fellow navy officer, Ryan Carmichael.

The pair had been deployed together on and off since 2010 in the ADF's Special Operations Command, first as part of the 2nd Commando Regiment's Tactical Assault Group and later at HMAS *Waterhen*, the navy's lead establishment for mine warfare. In early 2019, they'd both left the navy to pursue civilian careers. >>

Veteran inventors

Ryan, by his own admission, wasn't coping well with the transition to civilian life. "I'd managed to find a good job," he says, "but it wasn't giving me the purpose in life that I'd had my whole career. Darren recognised I was looking for something more meaningful and so came to me with this proposition."

To Ryan, the idea made sense immediately. A veteran of Somali anti-piracy missions, he had been part of "high-risk boarding operations" where teams had been forced to split up because the boats they were using could no longer handle a full deployment. "We've retrofitted these old boats so far beyond what they were built for that every time you fix one problem you introduce another safety or performance issue," says Ryan.

Every mission needs a name, and they settled on The Whiskey Project – a nod to their time in the 2nd Commando's water platoon, whose operators go by the call sign 'Whiskey'.

They began the design process for their first watercraft – the Whiskey Alpha eight five – with a simple guiding principle: the protection of personnel above all else. "We knew it all began with the boat's hull," says Darren. "Rigid hull inflatable boats were game changers when they first arrived, but they're no longer fit for purpose."

Broad and unwieldy, the deep V hulls on these old technology watercraft produce bone-shattering slam loads while saturating the unfortunate servicemen and women inside. "We could talk for days about some of the horrible boat rides we've endured," says Ryan. "Three hours on a small boat, holding on for dear life while your back and kidneys get smashed about, freezing because you're being sprayed by every single wave. By the time you arrive at your mission you're exhausted, your equipment's been bashed up and your radio isn't working because it's covered in saltwater. We figured if we could get people to the insertion point in a significantly better state than that's our mission accomplished."

Darren and Ryan reached out to a team of American maritime engineers who were pioneering a new hull form intended to



Top: Whiskey Alpha eight five cuts an imposing figure on the water.

Below: Chief of Army Lieutenant General Rick Burr met with the team at the launch of The Whiskey Project at the Pacific 2019 International Maritime Exposition.

Below left: The Whiskey Project launch coin takes centre place in the console.

Right: The new technology design has transformed workable deckspace.



dramatically reduce watercraft slam loads. The hulls have air entrapment tunnels that provide a cushioning effect – reducing slam loads by 40% and creating a smoother, flatter ride through the water. "This means your fuel efficiency is better, your transition time is faster and the fatigue load on equipment and personnel is reduced."

Once they had their foundation, they began adding components on a strictly as-needed basis. "We didn't just tick off a wish list of what everyone wanted," says Ryan. "Any element we added we did so in order to deliver maximum operational effectiveness and efficiency."

The 8.5-metre deck is entirely modular so seats and equipment can be shifted in and out as the mission requires. The cockpit contains a state-of-the-art 'plug and play' console that can be configured for weapons, communications and combat data systems, or any combination thereof. The raised gunnels offer

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Ryan Carmichael



shielding from spray, and opportunity to armour the boat, while the console and seats are suspended to offer even more protection for both crew and equipment.

“We’ve created greater payload capacity and better performance than the existing special forces 11-metre rig, but at a third of the weight and comparable in cost,” says Ryan.

While they eventually have hopes of selling the Whiskey Alpha eight five worldwide, right now the focus is on the Australian Defence Force.

“It’s very important to us that this is an Australian concept,” says Ryan. “Almost all the military craft being used by the ADF are foreign by design or manufacture. This is our chance to develop a wholly Australian, fit-for-purpose military capability.” The Whiskey Alpha eight five is currently in the final stages of optimisation, with trials planned throughout the year.

Darren and Ryan speak frequently about the importance of

building a values-driven company – one defined as much by its culture as by its product. “The transition from the ADF into industry can be very daunting for personnel,” says Darren, “particularly if you’re not surrounded by people who have had similar experiences. We carried a certain set of values all through our defence careers and it’s of utmost importance to us that we work with people who share them.” As the Whiskey Alpha eight five heads towards production, they’re hoping they’ll be able to bring even more fellow veterans on board. “It’s a no-brainer for us. We know that ADF personnel have these same values, the same mindset and motivation. They come to work with the right attitude.”

Ryan adds, “Our purpose was never just to build a better boat. We’ve always had a genuine mission: to make a difference to those personnel who are risking their lives serving on small tactical watercraft. It wasn’t hard to find a team who wanted to be a part of that.” ■