

How Norfolk training firm is making a splash

Andie Marshall, business manager at Petans, looks at the history of Helicopter Underwater Escape Training (HUET).

When somebody says they work at Petans, the response is usually the same: “Oh, you do that helicopter upside-down thing in water.” The “thing” in question is Helicopter Underwater Escape Training (HUET). It’s something we describe as ‘Marmite’ – people either really want to try it or cannot think of anything worse. Over the years we have had requests to host stag parties and help people celebrate significant birthdays, with HUET as the main attraction. Although we would love to help people celebrate with a splash, it is not something we can accommodate.

HUET training is mandatory for those travelling overwater from the UK by helicopter. This includes energy workers, military personnel and emergency response teams. Unsurprisingly, HUET has its roots in the military. In the early part of the 20th century, naval aviators largely flew seaplanes and flying boats that were designed to stay afloat when they landed on water, even unexpectedly.

This all started to change after the end of the First World War, when the US Navy started to experiment with foreign-built surplus fighter planes from temporary wooden flight decks on battleships.

It was expected that some of these planes may have to ditch in the sea, and various efforts were made to protect them in such circumstances. But little consideration was given to the pilots.

This was still the case at the beginning of the Second World War. However, an action report made by Lieutenant John Magda, following a forced ditch in the sea, observed: “There should be a landing in water ‘check-off list’ in every plane, because at a time like that there are a few things you may... forget that prove to be a very dear mistake. There is very little time to do anything after the plane hits the water – thirty



Petans introduced the latest HUET model in 2018. Below, HUET training is mandatory for those travelling overwater from the UK by helicopter. Inset, Andie Marshall, business manager at Petans

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seconds at the most.” Using cartoon character Dilbert the Pilot, invented by

artist Robert Osborn, the US Navy produced posters and pamphlets for pilots to follow. However, they realised these were not enough. A simulated training experience was needed.

The task was given to Ensign Wilfred Kaneb, who received his commission in the Naval Reserve in March 1943 as an A-V(S) – the wartime designation for an aviation officer qualified for specialist duties. In Naval Air Station (NAS) Pensacola, he was ordered to use his engineering knowledge to develop a training device.

With the assistance of

engineers, Kaneb developed a mock-up of what he called the Underwater Cockpit Escape Device, similar to the name we use today. Borrowing the name from the hapless cartoon character of the era, the device was soon referred to as the ‘Dilbert Dunker’.

Including many cockpit parts that could hinder escape, the device rolled down a track reaching speeds of 25 mph. By the time it hit the water and overturned, it created a realistic inverted position from which the pilot would need to escape from.

This device was introduced to the public in the 1982 film ‘An Officer and a Gentleman’, although this would not have done much to allay the fears of those who would have needed to use it.

As with modern-day HUETs, early users were apprehensive about using the device. But on subsequent visits to the training facility, they recognised the device’s value as a training aid to get them out of the cockpit.

In the UK, things developed more slowly. During the 1950s and 1960s, one third of the total military fatalities on land and sea were attributable to aircraft crashing into the sea.

Realising that something needed to be done, the first underwater escape training unit was built in Portsmouth in the 1970s. Used by the Royal Navy, the training facility was used to train crew and passengers in emergency egress from ditched aircraft as a clear way to save lives.

Like helicopters, design and

technology have continued to evolve in the development of HUETs being used throughout the world today. Petans introduced the latest model in 2018.

It’s safe to say that the use of an open-backed unit on a hydraulic crane mount is a far cry from the fibreglass orange box, which was effectively rolled off the side of the swimming pool.

Although HUET may be regarded as a necessary evil (or Marmite) by some, you can rest assured that Petans will make the training as comfortable as possible – no matter your fear factor.

For more information, please visit petans.co.uk, email info@petans.co.uk or call 01603 891255.