

The Superyacht

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REPORT

STAR FISH

An update on McMullen & Wing's business plan and a preview of Aquos Yachts' 49.9m *Star Fish*.
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Two very different yacht projects conceived and designed with sub ops specifically in mind.
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Hanseatic Marine's 77m *Smeralda*, the longest aluminium yacht in the world.
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A look at superyachts in various stages of build that are currently for sale.
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SERIOUS SUBS



Triton Submarines

A branch of US Submarines Inc, Triton Submarines in Florida, has emerged as a global leader in subs designed exclusively for yacht-based deployment. The company offers five models, all rated ABS + one-manned submersibles, with the top-of-the-range 3600/3 able to carry three people to a remarkable depth of nearly 11,000m (a process that takes some two hours during a planned descent). Triton teamed up with Rayotek Scientific, a high-pressure glass fabricator, to develop the sub's speciality glass sphere that actually becomes stronger with greater compression. In the case of the new 3300/3, the acrylic observation sphere is 2.13m in diameter and over 15cm thick, making it the largest and thickest of its kind aboard a submarine. Bruce Jones, the company's CEO, is one of the world's foremost experts on all aspects of manned submersibles and leisure submarines. He has prophesied that the 3600/3, in particular, "will revolutionise man's relationship with the deep ocean. It's a much more cost-effective vehicle than anything that's been built."

www.tritonsubs.com

DeepFlight

Hawkes Ocean Technologies in San Francisco supplied the DeepFlight Challenger sub to the late Steve Fosset, the two-man DeepFlight Super Falcon that Tom Perkins had aboard the *Maltese Falcon* and later transferred to his refitted explorer vessel *Dr No*, and the three-man DeepFlight Merlin (an open-cockpit sub) to Richard Branson. With foldable winglets and tail fins to control pitch, roll and yaw, the subs looks remarkably like underwater flying machines, which is exactly what they are. The DeepFlight Merlin, for example, features a Flight and Navigation Computer (FAN-C) used in advanced fighter aircraft. Engineer Graham Hawkes has designed and built over 60 manned vehicles and helped revolutionise deep-sea access by transitioning to safe, lightweight mini subs that are positively buoyant and utilise hydrodynamic force to propel the craft down, rather than conventional ballast tanks.

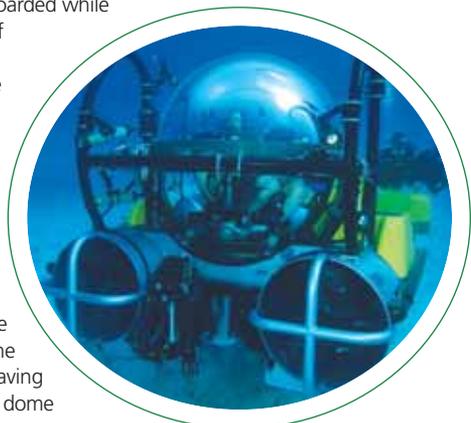
www.deepflight.com



SEAmagine

The SEAmagine Hydrospace Corporation in California produces the two-man Ocean Pearl (recently delivered to an 85m motoryacht and a 25m catamaran) and the three-man Triumph series of mini subs. The latter can dive to depths of between 450m and 914m, depending on the rating required. SEAmagine points to its buoyancy system that allows the craft to float high on the surface of the water, making boarding for passengers easier (as opposed to neutrally buoyant subs that need to be boarded while still on the deck of the mother ship). To simplify surface logistics during launch and recovery operations, the subs are also equipped with external joystick controls, which means they can be manoeuvred on the surface without having to open the cabin dome or be sitting inside.

www.seamagine.com



U-Boat Worx

Based in Breda in the Netherlands, U-Boat Worx currently offers five models, with the C-Explorer 3 able to carry two passengers plus one pilot and descend to a depth of around 1,000m, depending on the pressure hull rating. Made of high-grade steel with polyester diving tanks and an acrylic observation dome, all of the submersibles are classed by Germanischer Lloyd. The hull configuration is designed as an 'underwater boat', providing better manoeuvrability also on the surface of the water without the need of a support ship close by. U-Boat Worx

has collaborated with Ardoin

Yacht Design to develop its own sub transporters.

The latest of these is a 21m composite catamaran concept called Deep Blue. Designed for day charter, it is powered by twin diesel engines coupled to Hamilton water jets for cruise speeds of 25-30 knots with a hydraulic aft platform for launching and retrieving the 5.2-ton C-Explorer 3.

www.uboatworx.nl



Nautilus

The VAS is the largest private submarine currently produced and features the unique capability for divers to lockout underwater. There are currently two large superyachts with the five-person VAS on board: one is a lockout model and the other is the luxury model, complete with bathroom and minibar. The hydrodynamic shape of the VAS allows it to cruise for extended distance at up to 5 knots. The five-person VAS is unique in that it has a 1.8m interior standing height with only a 2.5m exterior hull height. This design feature

allows it to be stored conveniently within the hull of a yacht alongside other large tenders. The VAS can be

built to accommodate up to 10 passengers and dive to 2,000m. GSE, the Italian company that builds the VAS, has a rich history of submarine design and construction and their latest VAS is #39 in the series.

www.yachtdive.com

