Bill Springer salutes the “disrupters” – boatbuilders and designers who dare to be different and still make it work.
Steve Jobs famously lured John Sculley from Pepsi to help him run Apple by asking a simple question: “Do you want to sell sugar water for the rest of your life, or do you want to come with me and change the world?”

Sculley did join Jobs in 1983 but was ousted 10 years later by the Apple board for spending a fortune backing the wrong kind of microprocessor. It turns out that changing the world really is a lot harder than selling sugar water. Very few people, it seems, have the necessary combination of genius, tenacity, open-mindedness and vision to create truly game-changing products.

The same can be said for modern yacht design and production. Marinas around the world are filled with beautiful, effective yachts, but ones that are designed within established aesthetic parameters. These boats often have to charter, and resale also looms large, so “Don’t frighten the horses” is written into most briefs.

But there are yacht designers, largely driven by visionary owners, for whom the status quo isn’t good enough. These innovators possess just the right amount of madness to break the rules and produce eye-catching boats that refuse to be pigeonholed.

These craft are more than just out-there concepts: they get built, they go on round-the-world adventures. And, like Steve Jobs did at Apple and Elon Musk is doing right now at Tesla, these “disrupters” are advancing the entire field of yacht design.

The father and sons design team of John, Orion and Sky Shuttleworth caught lightning in a bottle with their award-winning 42.5 metre trimaran Adastra, launched in 2012. But it was no accident. “It was a really simple brief,” says John. “The owner is an experienced offshore trimaran sailor, who wanted to convert to power. He wanted a boat with long-range capabilities, shallow draught, comfortable accommodation and good seakeeping ability in a wide range of conditions. He was also really passionate about being ‘green’ so it had to be fuel-efficient. The lines just came to me and we had a basic sketch of what the boat was going to look like almost immediately.”

Simple but not easy. The Shuttleworths then did an exhaustive study that included tank-testing and computer modelling of every element of the design. They did a structural analysis of all the major components to keep weight low, with the result that the hull is built of a high-tech fibreglass/Kevlar/foam sandwich. The deck and superstructure are built of carbon fibre cored with Nomex, while the interior cabinetry is featherweight oak veneers over honeycomb panels. Even the carbon fibre hatches, toilets, ports and ladders were custom-built for Adastra to save weight (and fuel).

John Shuttleworth is quick to point out how special this project was. “It’s not often that you get to have such a free hand as a designer. We had our simple brief and made sure every design element had a specific purpose to improve the performance, stability, fuel economy and overall comfort of the hull.”

Like Peter Johnstone and Steve Dashew (see following pages), John shakes off tags of maverick or rogue. “The fact Adastra turned out to be a game-changer was just a happy coincidence,” he says. “Every aspect of this boat was owner-focused. He came to us with a clear set of design parameters that encompassed some interesting elements. We came up with a design that performs beautifully and looks cool, too.”

The reason more yachts as extreme as Adastra aren’t built is “because yacht designers and builders have to eat!” John laughs, underlining the narrow market for truly avant-garde boat projects. “And you’ve got to be extremely passionate and slightly crazy to take on a project like this.” But he thinks there’s potential in the wave-piercing trimaran concept, and recently announced an extension of the range upwards to 70 and 80 metres and downwards to 32 metres.
At first glance, Dashew’s rugged, raw aluminium cruising yachts couldn’t be more different than Peter Johnstone’s all-carbon fliers (see overleaf). But looks don’t tell the whole story: Dashew and Johnstone are cut from the same cloth. Both started in the boat business by building boats for themselves; both have strong, and in some cases controversial, opinions about what makes an ideal yacht. Most importantly, both continue to flout convention with disruptive design.

To Dashew, however, his designs aren’t an attempt to upset the status quo. Rather, they just make sense. “Many hundreds of thousands of sea miles have taught us one immutable fact,” says Dashew, referring to himself and wife Linda, with whom he has been sailing for more than 40 years. “You have to be mentally and physically comfortable at sea. Otherwise, excuses keep coming up to avoid leaving, and the dream of distant adventure turns into another marina. So what does it take to make the dream a reality? This starts with heavy weather safety, and the ability to recover capsize. Next is the ability to average 230 nautical miles a day – the magic number that, combined with a basic understanding of weather, keeps you safe and comfortable,” he says.

How do you achieve this? It’s simple, continues Dashew. “A yacht optimised to cross oceans will have a modest beam, relatively fine bows and stern for an easy ride in head seas and when running at speed, and an interior that concentrates living and working areas close to the motion centre. It will also have draught in the area of 1.5 metres, watertight bulkheads, coffer dams around the stabilisers, plenty of machinery access and an electrical system that does not require a genset running 24 hours a day.”

Dashew first made waves by designing and building a purposeful offshore cruising sailboat that he and Linda could take around the world, which led to him designing a series of sailboats – and then motor yachts – that have earned an almost fanatical following. He brooks no compromise in the design of his yachts. If it can’t cross an ocean safely, it doesn’t get built. “We’ve always designed and built boats according to a few simple principles that matter to offshore cruisers,” he says.

“Safety and self-sufficiency have always been paramount. So every boat we’ve built has been designed to be able to sustain a hard grounding at full speed with minimal damage. We’ve also adhered to the rule that safety depends on superior steering control, stability and the ability to handle rough weather.”

These rules apply equally to his sailboat designs and the new breed of FPBs (functional power boats) built at New Zealand’s Circa Marine. The whole range, running from 19.5 to 35 metres, features the trademark narrow, bare aluminium hull. “What gives us the biggest thrill is the fact that, for the most part, our yachts spend a majority of their lives crossing oceans and at anchor, rather than sitting in marinas,” he says. “And of the sailboats for which we have mileage, the average is something like 57,000 miles covered for each, with numerous circumnavigations.”
Launched in 2008 and built by Blohm+Voss, A stands out as one of the most disruptive designs in superyachting. Reportedly sketched on a napkin by French maverick Philippe Starck, and brought to reality by designer Martin Francis, A is quite unlike any other yacht on the water. She does, however, bear a striking resemblance to a new series of stealth destroyers commissioned by the US Navy, known as the Zumwalt class.

Nothing could be more forward-thinking or greener than the 100 per cent solar-powered, all-carbon world-cruising catamaran PlanetSolar. She burns zero diesel and produces zero CO2 emissions – but does anyone want a solar-powered boat that cruises at only five knots?

When the chop kicks up, Silver Cloud stays rock steady. The yacht was built by an owner driven by one overriding motivation: to stop his wife getting seasick. The 41m yacht was built by Germany’s Abeking & Rasmussen, and uses SWATH technology first dreamed up in the 19th century. It comprises two underwater hull tubes that house the engines and drives, with a wide body that sits atop them, clear of the water. The underwater hulls ride just below the surface, so the motion of the waves is taken out of the equation, leading to a smooth ride.

This Swedish company outputs razor-sharp, all-carbon, Volvo IPS-powered speed machines. The styling is straight-through Scandinavian and the performance from the lightweight hulls is electric, with the flagship 88, which displaces just 45 tonnes, capable of 37 knots flat-out. Proving a platform is never easy – or cheap – but Delta has shown that fully carbon boats can be stiff, strong and light – and still provide a comfy ride.

This series boasts an innovative hull form with wave-piercing bow and sponsons for stability that’s reported to be faster, more efficient, more stable and more spacious than equivalent length designs. See page 128 for more on this innovative model. The internet is alive with photos and video of Luca Bassani’s Wally 118 – and for good reason. She’s a 60-knot stealth fighter (see left) that combines one-of-a-kind style, luxurious accommodation and three gas-turbine engines capable of producing 17,000 horsepower. It’s just one of a number of iconic models from this Italian company that has become synonymous with disruptive design.

Peter Johnstone comes from a famous US boatbuilding family. His father and uncle – Rod and Bob – founded J/Boats, the Rhode Island producer of racer/cruisers. Peter’s very first bedroom was the company’s first office, so it’s fair to say that performance boats are in his blood.

But Peter’s always gone his own way. His companies have developed and built everything from game-changing Olympic skiffs and other high-performance sport-boats, to a revolutionary and highly successful line of entry-level sailboats.

All of that was just laying the groundwork for his current company, Gunboat, which has been shaking things up since Johnstone built his audacious 19 metre world cruising cat Tribe in 2001. His current Gunboat models are radical, all-carbon, wave-piercing speed machines from 16 metres to 30.5 metres, which are vastly superior to the earlier models.

“I never set out to ‘disrupt’ anything,” Johnstone says. “I just want to make the best product possible. We pulled together the team to design and build Tribe because we tried to sail around the world on a 20.7 metre high-performance monohull and the whole family, myself included, was seasick all the time. There had to be a better way. And after sailing more than 100,000 miles on much faster and more comfortable high-performance cruising catamarans that I’ve helped design and build, I can tell you there is.”

But for a vision of the future, look no further than Gunboat’s G4, the world’s first cruising catamaran that ‘flies’. It’s a 12.2 metre fully foiling, all-carbon catamaran with simple yet comfortable accommodation that is redefining what a cruising yacht is, and has been ten years in the planning. Advance reports say it’s capable of foiling completely above the water and producing top sailing speeds and performance while also being easy to handle. The ability to fly might not even be the G4’s most innovative technological feature. It’s also equipped with a single retractable electric motor (built by Oceanvolt) that’s clean, silent and may just revolutionise boat propulsion the way Tesla is revolutionising electric cars.