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DYKSTRA

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■ NAVAL ARCHITECTS ■

SY BLACK PEARL · 56 M AQUARIUS · REGATTA ROUND UP · DYKSTRA 62 · SEA BRIDGE ONE · 81 M · TRANQUILO



Passion for
Innovation

NEWSLETTER

DYKSTRA NEWS,
UPDATES & MORE



Thys Nikkels

WELKOM!

Welcome to the 2018 edition of our in-house newsletter. What a busy and stimulating year it's been so far!

From the delivery of 106.7m Black Pearl, one the world's largest superyachts with her three Dynarig carbon masts, to Kamaxitha racing the St Barths Bucket and JK7 Velsheda winning the Superyacht Cup, the last 12 months or so have been incredibly rewarding for Dykstra Naval Architects.

Following on from the delivery of the beautiful 56m classic ketch Aquarius, at Royal Huisman we have also seen the turning of the hull of Project RH400. The truly breathtaking, 81m three-masted schooner is due to be delivered to her owner in 2020.

These are just a few of the highlights, but we are deeply involved in other exciting projects, including the design of a fascinating support vessel for the Sea Mercy charity. I hope you will take a few minutes to glance through the following pages to find out what DNA has been up to – and what we have to look forward to in the coming months.

I hope that we have an opportunity to catch up in person during the coming boat show and racing season.

Thys Nikkels
Managing Director

THE CUSTOM PILOT CUTTER ALINE

Aline is 62-foot Pilot Cutter built in Holland and launched in 2016. She was designed by DNA as an alternative to a 68-foot Classic Sloop, featuring a longer waterline for better performance and a shorter mast for easier sail handling with a reduced crew. The combination of a modern square-head main and removable cutter stay with heavy-weather sails and easy-to-handle Code 0 make her a fast cruiser. Her deep 3.90m lifting keel provides a comfortable upwind ride, while also making most anchorages accessible. She carries 2,500 litres of water ballast governed by a PLC, and all the electrically operated valves can be controlled by multi-functional touch screens, together with the navigation and communication systems. Designed with long-range cruising in high latitudes mind, the hull is ice-reinforced and the yacht has huge fuel and water tanks for increased autonomy. Special attention was given to the insulation and anti-condensation treatments



SAILING FOR THE GREATER GOOD

Together with Vitters Shipyard, we have been donating our time and knowledge to design a unique Expedition Schooner for Sea Mercy, a non-profit charity based in the U.S. and Fiji that is fast becoming the philanthropic arm of the international yachting community. With naval architecture by Dykstra Naval Architects and systems engineering by Vitters, the 35m sail-assisted vessel Sea Bridge One will provide the charity with vital logistical support by delivering medical supplies, emergency response teams and building materials to remote villages in the South Pacific in the wake of natural disasters. With the plans drawn and possible shipyards shortlisted, Sea Mercy is now seeking the final funding needed to begin the building phase of the Sea Bridge One. "Sea Mercy asked us to design a low-cost and versatile vessel that would meet their various remote island programme needs," says Gerard Dykstra. "Sea Bridge One will fulfil multiple functions as a transport barge, a floating hospital, an educational research and training ship, a disaster-response and recovery vessel, an economic development delivery platform, or a combination of all the above."

If you would like more information on the Sea Bridge One programme, or would like to support their efforts, please visit the Sea Mercy website: www.seamercy.org/sbglobal



THE WORLD'S BIGGEST ALUMINIUM SAILING YACHT

Last March, Royal Huisman flipped the 81m hull of Project RH400 – no easy task considering she will be the largest all-aluminium sailing yacht on the water come her launch in 2020. DNA devised the naval architecture and sail plan for the three-masted schooner, but also worked with Mark Whitely Design, responsible for the interior design, on the exterior styling. Although she may look like a thoroughly contemporary sailing yacht, we believe that she is destined to become a modern classic.

The initial design brief called for a "world cruising, fast, comfortable and iconic looking" yacht. DNA focused its expertise on the creation of a hull with a distinguishing hard chine and a schooner rig that combines good performance with sea kindness, stability and comfort. Towing tests, wind tunnel tests, CFD calculations and a Velocity Prediction Program to evaluate the sail balance, keel position and rudder angles when under sail, promise that RH400 will be a powerful, all round performer capable of swift passage-making.



REGATTA ROUND UP

We have enjoyed a tremendous season on the racecourse this year. As an official Friend of the St Barths Bucket, DNA is a regular visitor to the popular Caribbean season opener – all the more so as the island get back on its feet after last year's devastating hurricane.

This year the Dykstra-designed Spirit of Tradition ketch *Kamaxitha* was racing along with JK7 *Velsheda*, but *Adix*, *Athena* and *Rainbow* were also in attendance as spectators. *Velsheda*, whose 1997 rebuild was led by DNA, narrowly lost out to *Svea* for the J-Class title by the slender margin of just 17 seconds in a hard-fought contest.

The venerable *Velsheda* returned to do battle in June at the Superyacht Cup Palma. This time she clinched overall victory, finishing on level points with the ketch *Mari-Cha III* to take the class and the overall Superyacht Cup title on countback.

"To be in the mix with all the guys in Class B and be able to hold our own was delightful, then to come out top overall is completely amazing," said Lars Loftus, as representative of *Velsheda*'s owner.





THE AGE OF AQUARIUS

In the beginning of 2018, the 56m classic ketch *Aquarius*, designed by Dykstra Naval Architects and built by Royal Huisman was delivered to her owners. Mark Whiteley was appointed for the interior design of this yacht and the owners' representative is Godfrey 'Goddy' Cray.

The owners asked for an "elegant, muscular sailing yacht." They wanted to build a boat that is gorgeous to look at, and spectacular to sail.

"We created a slender hull with long overhangs for an elegant and classic-looking yacht with seakeeping characteristics that are ideal for worldwide cruising. The generous sail area combined with a ketch rig and modern underwater body, fin keel and spade rudder, adds light-air agility to her otherwise all-round performance" says Thys Nikkels.

With carbon spars, booms and standing rigging scaled to an air draft that maximises sail area while recognising the Panamax height limitation, the design details feature oval portholes in the low-profile dark blue hull, and a circular skylight around the mizzen mast to flood the owner's suite with natural light.

Although designed for blue water cruising, there is a possibility that *Aquarius* will participate in the odd Bucket regatta. With below deck stowage for numerous toys such as a Laser, kayaks, windsurfers and bicycles – along with a 6.2m tender – she will be as much at home at anchor in a secluded bay as on the race course or cruising the high seas.

The New England-inspired interior design reflects her classic profile and traditional lines with beautiful raised and fielded white-painted panelling, which is complimented by the finely crafted varnished joinery.

"The brief called for a relaxed home afloat for the owner's family and friends, and aside from a split-level master cabin featuring a private deckhouse and cockpit, the accommodation includes a large deck salon, three en-suite guest cabins, a media room and even a dedicated fully equipped gym," says designer Mark Whiteley.



SY BLACK PEARL

In conversation with Captain Chris Gartner

With Naval Architecture and Rig design by Dykstra Naval Architects, overall design work by Ken Freivokh, Gerard Villate, Nigel Gee and Nuvolari Lenard, the 106.7m *SY Black Pearl* is the largest sailing yacht in the world. Built by Oceanco with Derek Munro acting as the owner's representative, DNA was commissioned to develop her hull form and three DynaRigs able to carry 2,900 square metres of sail. Following extensive sea trials, the yacht was delivered to her owner in early 2018 and covered over 5,500nm on her maiden voyage from Rotterdam to Taragona via Gibraltar, Cypress and Sicily. We recently caught up with her captain, Chris Gartner, who formerly skippered *Maltese Falcon*, the first yacht with a Dynarig (also by Dykstra Naval Architects).

SY Black Pearl's Dynarigs are an evolution of the system introduced aboard Maltese Falcon, but what's different?

Chris: Basically everything is newer and more advanced. What's changed is that the carbon-fibre masts are bigger, better, stronger and rotate faster. The sailing controls are much the same, but the controlling software is much more sophisticated 12 years down the road and we can set all the sails in 7 minutes. Another difference is that she was designed by DNA from the hull up to be very slippery through the water, whereas *Maltese Falcon* was based on an existing hull.

How does the yacht perform under sail?

Chris: So far our top speed has been 21 knots and we often see 14-16 knots, but I'm confident we can go a lot faster than that. Her performance in light airs is also excellent for such a large yacht. Not long ago we went from Palma de Mallorca to Taragona, a distance of about 140 miles, and sailed for 28 hours at an average of around 7 knots in true wind speeds of 10-12 knots. With the wind just forward of the beam, she just kept up the momentum.

What can you tell us about the commissioning period of SY Black Pearl?

Chris: Commissioning and sea trials took a long time because it was not just the sailing side that had to be thoroughly tested – there were also the hybrid propulsion and power regeneration systems. *SY Black Pearl* has various propulsion modes under power: full diesel using the main engines, diesel-electric in combination with the generators, boost mode that combines both the main engines and the generators, and she can generate electricity by dragging the variable pitch propeller through the water to recharge the batteries.

Apparently the yacht can cross the Atlantic without burning any fuel. Is that feasible?

Chris: Very much so. On the same trip from Palma to Taragona, for example, we sailed for a few hours using almost a full house load without burning any fossil fuel, which is amazing on a yacht of this size. We have to

maintain pretty good boat speed to generate enough electricity to run the house loads, but hopefully we'll have an opportunity to see what she's capable of when we cross the Atlantic to the Caribbean later this year.

Why do you think we see so few yachts with Dynarigs?

Chris: To be frank, because most sailing yacht owners are traditionalists and lack the courage. The more I work with these rigs, the more I'm convinced of their efficiency and safety. It's also worth bearing in mind that *SY Black Pearl's* sails are made of Dacron, which is not an exotic or expensive material. Because each mast has five sails, they're also smaller than a conventional mainsail, so if a sail blows out you're not talking megabucks to replace it. First *Maltese Falcon* and now *SY Black Pearl*... I feel really lucky and privileged to be a part of these awesome yachts.



TRANQUILO, A GO ANYWHERE YACHT.

Whether you want to go cultural in Japan, hike Kerguelen, kite a river mouth on the northerly beaches of the Brazilian coast, wonder about the Moai on Easter Island or transit the Northwest Passage; Tranquilo knows the way as she has been there already.

Over the last twelve years Tranquilo and her owner/skipper have circum-navigated the world twice although not by following the conventional routes. Both trips have been sort of a North/South circle around our wonderful planet. The first trip west about and the latest east about.

Though strangely enough both trips were crowned with a NW passage, going in an easterly direction, whereas most skippers are aware of the tradewinds taking vessels west around the world, a route going the other way is also possible.

By venturing far enough from the equator quite steady, but firm westerly winds can be found. On your way you will find a couple of Southern Ocean capes, South Georgia, the Kerguelen Islands, Western Australia and Tasmania. Of course, temperatures in these waters are lower but with the Dickinson heater humming happily in the belly of Tranquilo, even in the worst of conditions, travel is still very comfortable. After reefing down and freezing your fingers in

icy weather conditions, it's just marvelous to sit next to the little stove and get warm again. All while the autopilot effortlessly keeps her tracking true and straight, even when Aeolus&Neptune throw all they got at her.

All these miles together create a strong bond between the singlehanded skipper and his reliable travel companion. But still the owner has decided to let his best friend go on new adventures with a new captain and crew. For sales information and some wonderful footage of Tranquilo and her destinations as well as heaps of technical details please go to:

www.bestevaer-tranquilo.com



OUR DNA

Dykstra Naval Architects brings over 49 years of experience and innovation in the design, redesign, naval architecture and marine engineering of classic and modern performance yachts and offers preliminary and concept designs for both pleasure and commercially operated yachts. Founded in 1969 by Gerard Dykstra, and led now by Managing Director, Thys Nikkels, the award-winning team at Dykstra is comprised of passionate sailors actively sailing our own designs and redesigns using first hand practical experience combined with in-house developed software to provide expertise in spars, rigs, and structural analysis that is current, tested and tried.

From left to right: Mark Leslie-Miller *Naval Architect*, Edwin Luijf *Naval Architect*, Anneliek van der Linde *Public Relations & Marketing*, Thys Nikkels *Managing Director & Naval Architect*, Gerard Dykstra *Founder & Naval Architect*, Loon Dykstra *Accounts*, Hilbert ten Have *Naval Architect*, Erik Wassen *Naval Architect*, Thomas van Es *Naval Architect*, Jeroen de Vos *Naval Architect* **not on photo:** Chad Thieken *Global Sales*

