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DYKSTRA

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■ NAVAL ARCHITECTS ■

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NEWSLETTER

DYKSTRA NEWS,
UPDATES & MORE



WELKOM!

it has been another busy year for dykstra naval architects as we prepare for some very significant deliveries.

We are delighted to have been appointed to design a contemporary 81m three-masted schooner with plumb bow to be built by Royal Huisman with interior design by Mark Whiteley. The result will not only be a powerful sailer and a true head-turner, but also rank among the world's largest sailing yachts.

Oceanco's awe-inspiring Dynarig Project will be emerging from the shipyard soon, and another massive super sailing yacht is also undergoing the final touches. Both have enormous rigs with freestanding, rotating masts made of carbon composite that were designed by Dykstra Naval Architects and we're looking forward to seeing the finished yachts in all their glory.

Our commitment to research and development continues with the EXO concept with styling by Claydon Reeves, as we look into the feasibility of carbon composite construction using 'topology optimisation' and lightweight bionic design in collaboration with the Alfred Wegener Institute. Always happy to encourage ingenuity and innovation, we have also been giving the young designer Adam Voorhees a hand in developing the naval architecture for his excitingly different 70m ketch concept.

Ongoing projects include a 56m classic ketch at Royal Huisman and a number of smaller but highly specialised sailing yachts. These include a 62 ft sailboat for an experienced client that despite her size is like a mini super yacht.

Any builder of large sailing yachts will tell you that it's been a tough few years. However, based on the numerous enquiries we're receiving I'm confident that demand is picking up, not only among our traditional client base in Europe and the U.S. but also in emerging markets. In Asia, for example, we're building a square-rig training vessel and are even looking into the potential for creating a clipper yacht based on our extensive experience of designing these magnificent sailing ships.

In the meantime, welcome to the 2016 edition of our in-house newsletter. I hope you enjoy reading about what we've been up to this past year, and what the future holds for Dykstra Naval Architects.

Thys Nikkels
Managing Director

56M CLASSIC KETCH

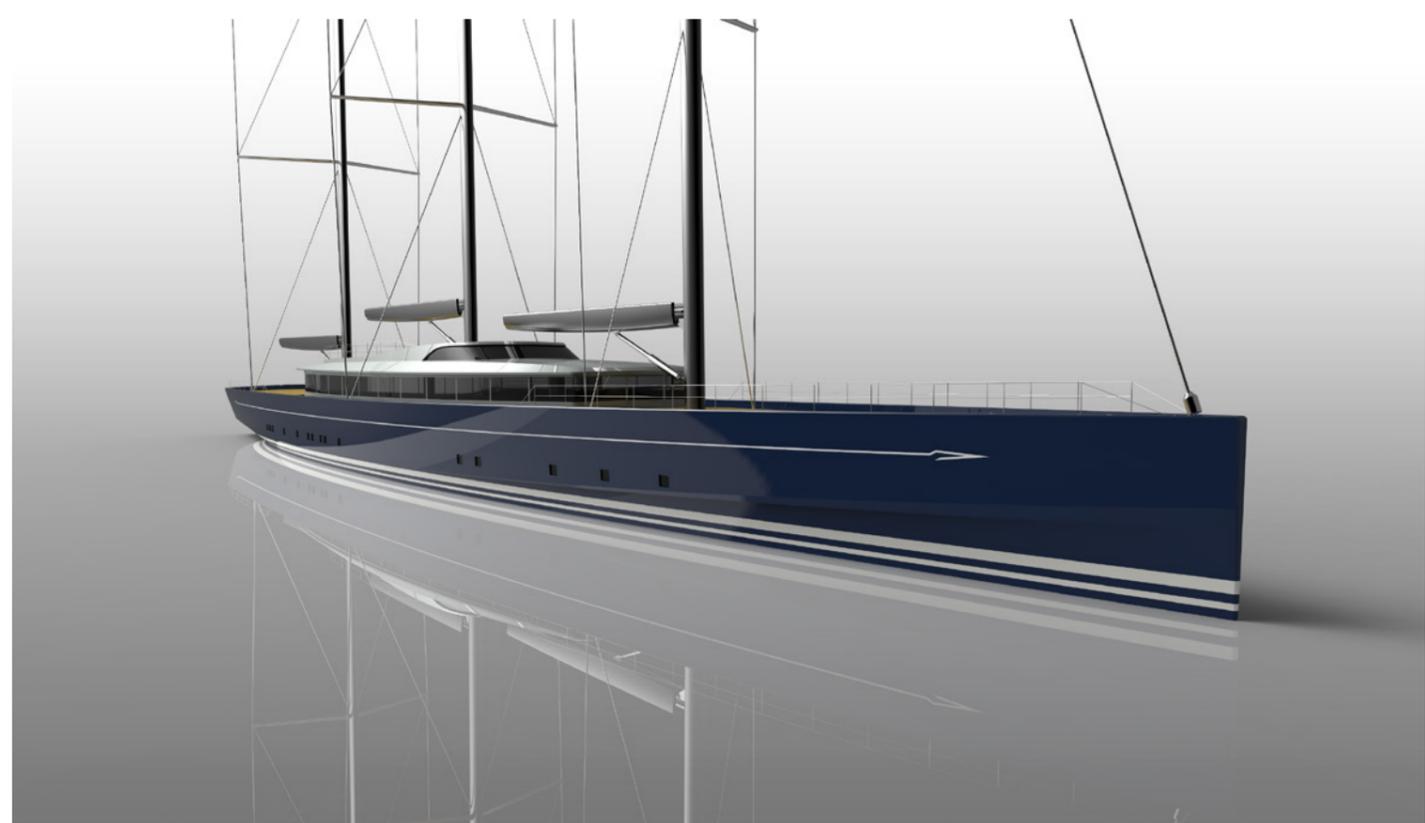
"The owner's brief was for a stunning looking yacht for family enjoyment," says Thys Nikkels of this graceful 56m classic ketch in build at Royal Huisman and due to launch next year. "The result is a slender hull with long overhangs for a classically elegant yacht with solid performance and sea-keeping characteristics."

From the start of the project, DNA has worked closely with the shipyard, owner's team, interior designer Mark Whiteley, Doyle Sails and spar makers Rondal. This synergy has produced a design-led package crafted to deliver the classic looks, performance, ease of use and low maintenance required by the owners.

The modern fixed keel and spade rudder, combined with a rig comprising carbon spars and booms designed to an air draft that maximises sail area, promises good all-round performance, especially in light airs.



The Design includes oval portholes in the sleek, low profile black 56m hull, an oval skylight around the mizzen mast to flood the owner's suite with an abundance of natural light, and a mid-deck lounge area with sun canopy above. The yacht will feature uncluttered teak decks, a 6.2m jet drive tender, a large boarding platform and helms connected to the shaded main cockpit adjoining an even larger glass rimmed deck salon at its forward end. Stowage space below deck will house numerous toys including a sailing dinghy.



NEW 81M SAILING YACHT

"Build me a dream" To hear a client saying these words is without a doubt a dream come true for any designer and yacht builder. We are therefore delighted to be recently commissioned by an Asian client to design a contemporary three-masted schooner with an impressive overall length of 81m / 266ft. The client's dream will not only be the largest yacht yet to be built at the shipyard in Vollenhove and destined for greatness, but also

ranked in the top 10 of the world's largest sailing yachts; by any measure a superyacht destined for greatness.

Together with Royal Huisman, designer Mark Whiteley and regional liaison Bart Kimman of Northrop & Johnson Asia, Dykstra Naval Architects will make this dream-yacht become reality.





THE JOY OF THE J-CLASS

DNA has over 30 years of experience in the redesign, refit and optimisation of the J-Class yachts like Shamrock V, Velsheda, Endeavour, Ranger, and the new builds Hanuman and Rainbow (not forgetting Yankee, which is on the drawing board). Jeroen de Vos, our resident J-Class expert, has sailed on all of them.

When did you start racing in the J-Class?

I began with *Shamrock V* just before her 1998 refit that was led by Dykstra Naval Architects. *Shamrock* is one of three surviving yachts [the other two are *Velsheda* and *Endeavour*]. At that time we were still using grinders to set and trim the mainsail manually. Then *Ranger* came along. We optimised her performance during a refit in 2005/2006 and I raced on her for three years. After that was the new-build *Hanuman*, then I jumped ship again and raced on *Rainbow*. In between, I also worked on the refit of *Endeavour* in New Zealand. I've sailed on *Velsheda*, but missed out on racing her when the regatta we were in was cancelled because of too much wind.

How important has this hands-on experience been in your work as a naval architect?

Very important. There's the whole theoretical side, which can be done using our VPP and CFD software in the office. But a big part of it is on the water when you see stuff that you can't pick up on from sitting behind a desk – sometimes you don't get it from sitting on the yacht either, because you're so busy doing what you're doing! These boats are only as good as their crews: if they make a mistake, the time lost can be significant. So being on board and seeing how these hugely powerful yachts are sailed is a big help when you have to design or optimise one.

Most of the J-Class crews today are made up of pro sailors – is that a good or bad thing?

Overall, I think it's a good thing. When I started on *Shamrock* we were sailing with a few guys from the yard, and the spar and sail makers. Now you'll have 15 or more professionals on board. It's understandable when you consider that when owners invest so much money they want to squeeze the last bit of performance out of the boat. The J-Class don't race very often, so you need people who know what they're doing.

What is the next step forward for the J-Class?

When we designed *Shamrock*, *Velsheda* and *Endeavour*, the philosophy was that we were designing beautiful boats that sailed really well and without a rating rule. *Hanuman* and *Rainbow*, and to some extent *Ranger*, were more about exploiting to the max the rating rules, and their looks changed as a result. The ideal J-Class in performance terms would have a big cockpit and no deckhouse at all. Of course, the class would never allow that, but there's always room within the rules to further optimise, and I think that's where we will go in the future.



AMERICA'S CUP BERMUDA

The America's Cup has evolved from classic yachts racing miles out at sea to high-octane match racing inshore. The 35th edition of the America's Cup will take place next year in the flat waters of Bermuda's Great Sound.

Late May 2017, the challengers will take part in the Louis Vuitton America's Cup Qualifiers. The 10th of June, the finals will determine who takes on the defending champion, Oracle Team USA, in the battle to become the winner of the oldest trophy in international sport.

Three days of superyacht racing are scheduled to take place between 13th–15th of June 2017, just ahead of the America's Cup itself. Superyachts over 24 metres, as well as the J-Class yachts, will battle it out for the America's Cup Superyacht Regatta Trophy, currently held by *Adela* who won the event in San Francisco in 2013. The J-Class have confirmed their participation and will join an extensive fleet of superyachts that are expected to descend on Bermuda to witness first-hand the America's Cup action. Of course, DNA's Jeroen de Vos will also be aboard a J-Class to lend a helping hand.



DYKSTRA 34

This progressive project is being developed by Dykstra Naval Architects in conjunction with Yachting Partners International (YPI) and composite specialists McConaghy Yachts.

An informal discussion about market trends led to the development of the Mediterranean-style, fast cruiser with a plumb bow and counter stern. The parties involved identified certain design elements that are key to the basic concept. These included traditional looks with a contemporary touch that reflect a performance pedigree, generous open-air cockpit, ample guest accommodation to meet the demands of larger parties or charters, and simple systems to reduce the build cost and make the boat easy to sail with a small crew.

"The idea is that it bridges the gap between 30m and 40m sailing yachts that might attract the younger generation of owners who might be put off by the bigger boats that have too many crew," says Jeroen de Vos. "A lightweight boat like this offers very good performance and interior accommodation, but with reduced running costs and much more usable deck space."

The concept was triggered by Will Bishop, YPI's head of sailing, based on enquiries from clients who like the looks of classic yachts but are put off by their layout, tiny deckhouses and lack of performance. The solution was a modern-classic where performance is the key driver, but comfort is not overlooked with a master stateroom, VIP suite and two convertible guest cabins. Moreover, the raised saloon solution provides a light and spacious interior combined with good head height.

McConaghy were brought in for their experience in carbon composite construction and competitive pricing. With an aggressive sail plan and an expected displacement of 70 tonnes, the yacht is designed as a fast cruiser that could also compete on the regatta circuit.

70M ADAM VOORHEES KETCH CONCEPT

Los Angeles-based studio Adam Voorhees Design has partnered with Dykstra Naval Architects to develop the naval architecture of an innovative 70m sailing yacht concept. The collaboration resulted from a meeting with creative director Adam Voorhees during the Fort Lauderdale Boat Show, when Thys Nikkels was impressed by the designer's concept for an elegant ketch that reflected maritime heritage without compromising on comfort and performance.

"We've provided Adam with initial studies for the underwater hull lines and position of the masts and appendages," says Thys Nikkels. "Weight will be controlled by careful selection of materials and sophisticated construction techniques. Hybrid energy technology is also an option to improve fuel efficiency."

Voorhees' passion for design and sailing started early and by the age of five he was already drawing profiles and sections of boats depicting interior arrangements. Today his studio is known for pushing the boundaries of design and its relation with the natural environment. "The yacht moves beyond the facade of simply using classical styling and a modern underbody, but instead arrives at an authentic expression of its own," says Adam Voorhees. "This is clearly articulated in the sleek glass deckhouses that appear to push through an envelope of teak. In the living spaces the formal decorative appliqué so liberally applied to traditional sailing vessels now becomes a background canvas for highlighting focal pieces of form, furniture and art to support thoughtful living."



RAPSODY 110

It is not often that Dykstra Naval Architects is asked to design a motoryacht, so we leapt at the opportunity to work with Rapsody Yachts on their new 110-foot concept.

"Despite the fact they build motoryachts, the Rapsody guys are keen sailors," says DNA's Hilbert ten Have. "So when they wanted to expand their existing range they decided to come to a studio from outside the established niche of motoryacht designers. We love the Rapsody range with their high bows and low sterns that recall the New England lobster boats. The idea was to create the same styling on a vessel that looks like a small boat, but is effectively a superyacht finished to Dutch quality."



The Rapsody 110 has graceful, slightly retro exterior lines that will stand out from the crowd, and her open-deck layout is very much designed with Mediterranean-style cruising in mind. Tailor-made performance is ensured by various engine and propulsion arrangements. The configuration with twin 2600 hp engines combined with water jets, for example, can provide a top speed in excess of 32 knots.

On deck, she features a Jacuzzi, two bars and large sunbathing areas, all contributing to the perfect outside living experience. The interior provides accommodation for six people in three cabins, while the aft crew quarters house four berths and a dedicated crew mess. Further forward, the R110 has space for a day head and day shower. The forward area is dedicated to an owner's suite and two guest cabins.

The concept is still very much open to input from clients, but one option is that below the flush foredeck the Rapsody R110 could conceal a sports car together with an integrated crane to deposit it on the dock.



FIRST BESTEVAER 45ST PURE LAUNCHED

The DNA-designed Bestevaer 45ST PURE, christened *Nescio* and launched in April 2016, is the smallest Bestevaer to have been built by KM Yachtbuilders so far. The 45 footer is of particular interest to experienced owners who no longer want to handle a large yacht on their own, while the production platform helps to keep the price lower than a comparable custom-built aluminium yacht. The ST (straight bow) Bestevaers are evaluated from

Gerard Dykstra's own 53ft *Bestevaer II* launched in 2003. He and his wife Loon live on board for up to four months each year, sailing to remote, cold-climate regions. The Bestevaer 45 Pure is designed as a semi-custom yacht", says Edwin Luijff, Naval Architect at DNA. "We have developed some interior lay-out options and there are some choices for the appendages for the hull as well".

The 13-tonne sloop comes with comfortable pilothouse, deep cockpit and a 2- or 3-cabin layout finished in American walnut and bamboo. The standard version has a fixed keel and single rudder, but the first hull to launch has a centreboard with double rudders for a minimum draft of just 1.40m, which means it can cruise almost anywhere. A second hull with single spade rudder and a third are already in build.

NEW 28M PILOT CUTTER

DNA has completed the preliminary design of a goft pilot cutter with classic styling to be built in carbon composite. The brief from the experienced owner is for a family-friendly, bluewater sloop with modern performance and simple systems for long-range cruising with a reduced crew. More details will be released as they emerge.





REGATTA ROUND UP

From 17-20th March, Dykstra Naval Architects attended the 21st St Barths Bucket, of which we are proud to be an official Friend/Sponsor. No fewer than five DNA-designed yachts took part in the regatta, including *Emmaline* (ex-Christoffel's Lighthouse), *Hetairos*, *Meteor*, *J5 Ranger* (performance refit) and *JK7 Velsheda* (refit/rebuild). *Velsheda* held off close rival *Ranger* to take overall victory in the J Class, making it two wins in succession following her victory in the RYS Bicentenary Regatta last season in Cowes.

"We are a team that just does not know when to lie down," said *Velsheda's*

tactician Tom Dodson after winning the second race from four starts. The team is now looking ahead to the America's Cup J Class Regatta in Bermuda next year.

From 29-31 July it was time for the Candy Store Cup in Newport, USA. *Meteor* and *Ranger* were just two of a dozen superyachts competing in the restyled 2016 event formerly known as the Newport Bucket. After three races over three days, *Meteor* and *Ranger* took second and third place respectively behind the schooner *Adix* in the Class A group, but it was the 28m yawl *Bequia* that emerged as the overall winner of the champagne and candy-filled Candy Store Cup. With tremendous fun had by all, the transition from Newport Bucket to Candy Cup appeared effortless under the auspices of co-hosts Newport Shipyard and Bannister's Wharf.



OUR DNA

Dykstra Naval Architects brings over 45 years of experience 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: Jeroen de Vos Naval Architect, Mark Leslie-Miller Naval Architect, Thomas van Es Naval Architect, Edwin Luijff Naval Architect, Gerard Dykstra Founder & Naval Architect, Daan Sparrenboom, Thys Nikkels Managing Director & Naval Architect, Hilbert ten Have Naval Architect, Gil Wang, Anneliek van der Linde Public Relations & Marketing, Erik Wassen Naval Architect

