

YACHTING

SPRING/SUMMER 2015

28

MATTERS

A Colin Squire Publication

INCLUDING THE INDUSTRY FILE

WOMAN AT THE TOP
NORMA TREASE

LES VOILES DE ST TROPEZ
A WEEK OF HIGHS & LOWS

S.Y. FIDELIS
AN AMAZONIAN ADVENTURE

A NEW SUPERYACHT DIVE DESTINATION
THE GULF OF SIAM

RIBS!
SMOKED PUFFIN, ROTTEN GOOSE & SHARK

Featuring The  **PYA** Supplement

AWLGRIP FINISH FIRST

www.awlgrip.com

RIBS!!

SMOKED PUFFIN, ROTTEN GOOSE & SHARK!

BY COLIN SQUIRE



I'D NEVER BEEN TO ICELAND BEFORE, ALTHOUGH SOME time had recently been spent helping to research a school field-trip there for my daughter. And so receiving out of the blue an invitation to visit this mid-Atlantic island outpost to launch a new shipyard was not therefore a totally strange request to consider.

Enticements from my hosts in the form of tasty local delicacies like smoked Icelandic puffin, rotten shark, long-buried dried fish, Minke whale and other culinary delights, washed down with chasers of 'black death' along with the chance to experience alluring natural wonders like volcanos, geysers, glaciers and 'big-foot' safaris, only served to deepen my intrigue. I would conceivably be gazing up each night in wonder at the luminous dancing and flashing radiations of the northern lights 'Aurora Borealis' and may even get to bathe languidly in the Blue Lagoon like a true Viking. Of course there were also boats to test-drive, and a new shipyard to welcome to the marketplace.

That this was late January, the middle of the Nordic winter, but ever up for a challenge, I accepted the invitation to the grand launch to the world of the Rafnar Shipyard and an opportunity to test-trial their revolutionary new hull-and-keel design. I would also have the unique opportunity to meet with the inventor extraordinaire behind the Rafnar thinking, Ossur Kristinsson, conceiver and developer of this radical new hull-shape concept.

Well before sun-up one Sunday morning in January I set out from Base Camp Bungay for Luton Airport to start my Viking adventure.

The Nordic climes beckoned as the plane broke through the clouds over the ragged frozen coastline and wild ocean seascape of Iceland and, as the plane rocked from side to side, we skidded to a halt on the frosty tarmac of Keflavik International. A short arrival procedure and a warm drive with accompanying chauffeur over the snow-covered tundra and lava-fields brought me the fifty kilometres to Reykjavik, the Marina Hotel, and Rafnar Shipyard.

After having settled in to a very comfortable hotel room overlooking the old Reykjavik harbour and slipways, a tour of the Rafnar facilities beckoned. Quite unknown, and under wraps since 2005 when the OK Hull and Rafnar Shipyard were founded simply to develop the quite radical hull and keel concept that has grown from Ossur Kristinsson's thinking. It is clear that Ossur has poured many resources and much time into perfecting his formulae. The highly advanced technology in robotic milling, spray, and water-cutting machinery, and the many tank-test models, prototype hulls, moulds, and finished boats housed in the impressive and modern 5600 m² yard facility at Kopavogur are clear evidence of this. Additional commercial yard facilities are located at Rafnar's Maloy Verft Shipyard in Norway, where larger vessels are constructed.

Until reaching the point where he was satisfied that his new keel and hull shape was perfected and scalable to any size, Ossur kept the lid tightly on his OK Hull and Rafnar concepts. I was part of a very select group of journalists, naval architects, and captains invited to visit Rafnar to sea-trial the latest boats, and to hear from Ossur first-hand his theories and thinking behind this revolutionary concept.

An engineer originally trained in prosthetics and orthotics, and owner of a variety of boats and yachts over the years – up to 40 m in length – Ossur had become convinced that the traditional concepts surrounding hull-form and water-flow dynamics were nowhere near fully explored or developed. The uncomfortable slamming and instability of a planing or semi-planing hull and the inefficiency of a conventional displacement hull, drove him to re-think the shapes and radii making up the ideal underwater keel and hull shape. Understanding clearly that having as much of a vessel's hull remaining in the water for as much of the time underway as possible promoted stability, comfort and good sea-keeping performance, Ossur's goal was to perfect the hull and keel shape so as to pass the displacement form through the water as efficiently and effortlessly as physics would allow, thereby allowing bodies to transgress accepted limits passing through water as 'displacement' boats. In his sights was the target of dramatically beating the displacement water-line limit speed rule, while at the same time sustaining comfort, stability, and in-water performance.

Ossur believes that two important physical aspects of water are to be taken into account when considering hull-shape: firstly, water is incompressible, hence the violent slamming experienced when a planing or semi-planing boat bounces along atop it, and secondly, the surface tension of water is tremendous



with regard to penetrating forces, again augmenting slamming effect and the counter-forces experienced when a vessel tries to punch through a moderate or large sea and waves. In Ossur's words, 'the water fights back'.



superyacht
Tenders & Toys

The one-stop shop for all
your **tender** and **toy** needs



Contact:

UK: +44 2380 01 63 63 | FR: +33 489 733 347 | US: +1 954 302 9066

email: info@superyachtendersandtoys.com

www.superyachtendersandtoys.com

Basing his thinking upon a scalable series of 'circle-segments' making up the eventual formula for the unique OK keel and hull shape, Ossur determined after endless model testing in the towing tanks of Potsdam, Vienna, and Maloy, Norway that he had perfected his concept.

With his final prototypes of open RIBs being extensively tested by the Icelandic Coast Guard and the local Search and Rescue teams in the extreme North Atlantic conditions around Iceland – and sea-trialing for some 3000 nm in the process – Ossur has pronounced a sweet-spot in what he refers to as his 'base model', scalable from the smallest prototype of 6 m up to 40 m and beyond. This concept formula has been patented as an invention in the United States.

Donning our Michelin-man style dry-suits, with boots, helmet and visor, we set out late that morning as the few short hours of winter daylight made an appearance, and boarded the two Rafnar craft that were in the water for our testing. The first, a 10 m tactical RIB with two 250 hp outboards, the 'Leiftur', developed and refined in collaboration with the Icelandic Coast Guard and the prototype for the production series in this range as ordered for official delivery to the Coast Guard in May. The second craft, a 12 m open boat with full freeboard and solid-foam D-tube fendering trim, powered by two 500 hp inboard Marin Diesel engines and Konrad stern-drives, the 'Thorbjorg'. Scraping the ice and snow from fittings, helm-station, bulwarks and deck,

we put to sea as two crews in tandem to take these craft through their paces. As the snow fell about us, I realized that this was to be no tropical cruise or jolly in the Blue Lagoon!

With my extensive knowledge of RIBs and tenders from my many years at sea, both as a yacht crew-member and latterly as a photo-journalist, I certainly had a rare experience at the helm of these two most unique vessels, throwing them around in full-lock turns at between 30 and 40 knots in quite choppy seas, large swells, and in challenging conditions well beyond the harbour outside Reykjavik Bay. Both versions were incredibly stable. The boats do not slam, they give a very comfortable and fast ride which over many hours at sea would contribute greatly to resolving health and safety issues for crew, and they disperse away from the vessel what little water sprays up, giving a very dry ride. These are certainly vessels that would satisfy the demands of a discerning and experienced mariner.

Satisfied out on the open ocean that Ossur's innovative thinking had given the industry and marine market something novel and challenging to think about, we returned to warm up and reflect aboard the Rafnar pleasure yacht 'Jokla', a voluminous 15 m three-cabin motor-yacht built upon the same OK concept and 'base model' formula. Although we did not sea-trial this particular vessel, it is believed to exhibit all of the same characteristics of the other OK Hull craft, and is an extremely comfortable and well appointed recreational yacht.

A formal meeting with the Coast Guard directors and their team at their head-quarters followed this visit, during which they expressed their enthusiasm and satisfaction with the 10 m 'Leiftur' RIB that they have on order from Rafnar, and they also showed an obvious interest in a proposed concept for a 15 m 'Closed Patrol Boat' version of the 12 m 'Thorbjorg'.

Suitably impressed by what I had experienced of this revolutionary new concept for displacement hulls, and well fed and entertained by my gracious Icelandic hosts during dinners and our time ashore – being fully sated on Minky whale, rotten shark, and smoked puffin – it was time to repair to Base Station Bungay once again. I'd even managed to squeeze in some sight-seeing in a 'big-foot' 4 x 4, and caught a brief glimpse of dancing fairies painting lights across the northern night sky...

This time the Blue Lagoon would have to wait, or be enjoyed by those boat buyers journeying after me in the future to visit Rafnar Shipyard to test-drive their new-concept yacht tenders, RIBs, mega-yacht support boats, commercial search and rescue craft, or work-boats. These later visitors may even be treated to some over-aged goose delicacy, maybe even from the same goose if they're lucky!

Contact: www.rafnar.is
Tel: + 354 525 2320



Palma - Barcelona - Cartagena



Techno Craft
info@technocraftsl.com
www.technocraftsl.com
Palma de Mallorca
+ 34 971 213 642

Custom Scaffold
Yacht Containment Systems
Fixtures and Fittings

