



Enigma XK

THE 71 METRE CONVERTED FISHERIES VESSEL BLENDS CHARACTER AND LIGHT IN A STUNNING EXPLORER YACHT

An owner's disposition towards the utilitarian looks of a fishing trawler, minelayer or frigate that will be transformed into his luxury yacht, has massive implications for the conversion project. Does he see its character as a problem to be expunged, or a gift to be accentuated?

The owner who bought the 1987 Scottish fisheries vessel *Norma* as the basis for his explorer yacht *Enigma XK*, did so because of the 71.4 metre ship's tough, seaworthy hull – but he also fell in love with her character. The aspects that have been left alone, therefore, define the finished vessel as much as the parts that have been changed.

'*Enigma XK* demonstrates a very good balance between the "old" and "new" vessel,' says Stéphane Marcelli, co-founder of The Atlantic Refit Center in La Rochelle, France, which undertook the project, 'from an aesthetic point of view, but also a good balance between

the refit of the existing systems and the installation of brand new equipment within a reasonable budget.'

Many of these new installations are little-seen but vital extras. 'We had to add systems for which the vessel was not designed – and to integrate all these at the same time as we were rebuilding the vessel,' says Marcelli.

A lot of the additions were safety measures, such as a vessel-wide sprinkler system, needed to keep to classification (the vessel's notation had to be changed from a cargo ship to a special service craft that would carry charter guests, and requirements were different). 'The entire fire detection system has been changed,' says build captain Iltud Orio. 'We put detectors all over the place so we know when all the watertight doors are closed, as well as all the fire doors. So now I press a button on the bridge, everything closes and I have feedback that everything is OK.'

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words: Caroline White photography: ARC/Guillaume Plisson

Norna (right) once patrolled the freezing waters of the North Atlantic for illegal fishing. The hull (opposite) with its blade-like bow, belly-like middle and narrow stern has been cleaned but not altered. Most of the engineering (below) including the British Ruston engines, was not altered, but a breach was cut in the hull to add new generators



Because the yacht is an explorer – with a 12,000 nautical mile range and plans for a round-the-world trip that will take in both poles – fire safety measures were especially important. ‘When we are far away, no one will answer the phone (in an emergency).’

Up on the main deck – the only part of the original vessel to be occupied by guests (below is for crew, while almost everything above is brand-new) – the changes made are all about improving the quality of interior spaces, for the very different lifestyle that the new vessel will provide.

‘The entire main deck has been covered with an elastomer (flexible polymer), which reduces vibration, plus all the walls of the cabins are mounted, so the superstructure around the cabin absorbs all the shocks and vibration,’ says Orio. ‘We also added some pillars and bulwarks, especially in the centre of the vessel, to spread the vibration, and we had a change of exhaust system – much bigger than the original one (this also reduces vibration).’

The sizes of the four guest cabins and the VIP on the main deck are good because as Orio says, ‘We have only 12 guests to accommodate in 71 metres.’ There was even

space to burn, so a salon/massage room was included off the guest corridor.

But headroom was tight, and adding the pipework and wiring for new air-conditioning (the old vessel didn’t have any) and other systems to deckheads would reduce it further, so the

team had to be creative. For example, where usually you would normally install one large pipe, they installed several small ones – and they reduced existing problems while they were at it. ‘Before, they hadn’t paid attention where ducts were running, they just put them everywhere,’ says Veerle Battiau, director of Philippe Briand’s motor yacht division, Vitruvius, who worked on both the interior and exterior design. ‘The crossing of these ducts sometimes meant the ceiling was lower in the middle than the rest of a room – in what was going to be a guest cabin. In the pre-engineering of the ship all the circuits were aligned, so we had the minimum crossing of ducts, and if we had crossing of ducts, it was hidden in wardrobes.’

Just as the headroom was an issue that could be improved but not eliminated, so was the vessel’s camber. *Enigma XK*



‘INSTEAD OF BRINGING YOU BACK TO A ZERO POSITION QUICKLY, SHE ROLLS AROUND HER BELLY SLOWLY, WHICH IS THE WAY WE USED TO DO THINGS BEFORE. IT IS VERY COMFORTABLE’

slopes lengthways (upwards to the bow) and across (down to port and starboard from the centreline). There can be a height difference of as much as 20 centimetres between two sides of the same cabin. ‘The further forward you go the more you feel it,’ says Orio, and in the gym at the forward end of the main deck it is very noticeable.

Battiau put the interior design team to work both on this challenge and the head height. ‘I picked a horizontal line (highlighted in mirror-polished stainless steel) so that the eye would be drawn to it,’ she says. ‘I did everything above the line in shiny white materials and kept everything under that line quite dark. I also made sure lights shine upwards as much as I could.’ These effects not only emphasise the height of the main deck spaces, they also give the eye firm geometric boundaries that are a visual relief from the camber. Floating furniture, which follows Battiau’s lines rather than the floor, emphasises this effect. It makes the camber feel like a characterful quirk, but not one that defines spaces.

Perhaps the most vital element in improving the quality of main deck spaces was getting more light inside. They ‘opened up the hull’ as Battiau puts it, by elongating the original round ports downwards into lozenge shaped

windows. Because the design references the shape of traditional nautical ports, they retain a flavour of the original vessel while flooding the interior with light. Battiau’s design and décor makes the most of this natural light. Rich imitation mahogany in the main saloon and main deck guest cabins – offset with bleached oak flooring – are traditional looking, but their high-gloss carries light through the spaces. Panelling in the main deck corridor and furniture in cabins is under-lit, while mirror and mirror-polished stainless steel glint throughout. There are even interior windows from the main/dining saloon into the guest corridor and from the VIP cabin into its bathroom, to facilitate the transfer of light.

The few major structural changes to *Enigma XK* were devised by Philippe Briand to create areas that do not exist on a working vessel and could not be hewn from existing spaces. The bridge, therefore, is the only part of the original superstructure that remains above deck level. Everything else has been removed and replaced with an upper deck owner’s suite, an upper saloon and the extension of the upper aft deck to accommodate a helicopter pad.

Making the most of this unfettered opportunity to capture light in these from-scratch areas, the designers used glass



'WHEN YOU SAIL **AROUND** A MASSIVE **TABULAR ICEBERG** IT'S NICE TO SEE IT FROM THE **INSIDE** – YOU'RE WARM, YOU HAVE YOUR **LITTLE COFFEE**'



heavily. The production team call the upper deck saloon a 'diamond' because of the multifaceted glass wrapped around it. 'She is an expedition vessel, it's not really about what's inside, so we created this upper section with nearly a 260-degree view,' says Orio. 'For example, when you sail around a massive tabular iceberg it's nice to see it from the inside – you're warm, you have your little coffee.'

The bright space hosts a large round of seating, an intimate dining area (with a table custom-made to swing out of the way while guests stand up) and finally a bar tucked away in a port nook. In the centre of the space is an unusual *objet d'art* cabinet stretching from floor to deckhead. 'It is there in the middle to hide the supports for the room,' says Battiau. 'The structure imitates a tree, so we don't just have this box sitting there. Also, while in the dining room on the main deck I opted for the more classic, British look with rich dark woods to keep in the spirit of the boat; the structure is more modern up here so I chose lighter African teak and more modern

elements in the loose furniture. As you go up it gets brighter and brighter.'

At the forward end of the upper deck, the owner's suite is as light-soaked as the rest of this level. The monochrome cabin has low windows through 180 degrees and a huge segmented skylight that can be tinted for privacy at the touch of a button. There is a pop-up TV and an array of unobtrusive gadgets, such as speakers hidden behind perforated leather. The aft bathroom is an imposing space, with a free-standing bath at the forward end by a panel of privacy glass looking on to the cabin. Opposite the bath is a hammam to one side and a shower to the other.

Despite bringing a light and luxurious atmosphere to the upper deck, the new spaces still fit with the strong look of the vessel's profile, something that Philippe Briand and the owner were keen to maintain. The hull design was a major part of this both aesthetically and practically. 'The forward part of the hull is like an axe, a

The windows in the upper saloon (above) have angled sections at the top to facilitate views upwards, for example when passing a tall iceberg. Both here and in the main/dining saloon on the main deck (right) shiny white ceilings make the most of the light, but also hide safety equipment such as smoke alarms among the many reflections



THE **BRIDGE** IS THE ONLY PART OF THE ORIGINAL SUPERSTRUCTURE THAT REMAINS **ABOVE DECK LEVEL**. EVERYTHING ELSE HAS BEEN **REPLACED**



blade,' says Orio. 'Then she has a belly shape, then a narrow aft. So each time you roll, instead of bringing you back to a zero position quickly, she rolls around this belly slowly, which is the way we used to do things before and is very comfortable.'

The yacht's distinctive funnels were also on the do not destroy list. 'They were taking up so much space,' says Battiau. 'So we rebuilt the actual chimneys within the funnel so they would sit to one side. We cut the rest away and used that (central) space to create a protected area for dining and sitting around.' The main engines' exhaust still escapes from the funnels, but the generator exhaust escapes underwater so when the boat is at anchor, guests won't be bothered by fumes. This central promenade space between the funnels on the bridge deck shades the upper aft deck below, with the base of the funnels offering protection to the sides – the reason the captain calls this area an 'outdoor saloon'. It features sunpads, a spa pool, and two seating areas with adjustable-height varnished wood tables – one beautifully inlaid with a map of the world. 'It was the idea of the owner to invite his friends to have a drink or two and think about where they'll go next on their journey,' says Orio.

Further aft still is the broad extended deck for the helicopter. 'It's a certified helideck, the only thing we are missing is a kerosene tank for fuel,' says Orio 'We had a

long discussion with civil aviation and can welcome most helicopters in the world.'

But a visiting chopper won't be the only impressive ride aboard. The main aft deck will carry two 4x4 Jeep Wranglers for exploring on land, to be deployed via an inflatable pontoon, as well as WaveRunners, Sea-Doos and two custom-made tenders designed by Tanguy Le Bihan Yacht Design. The nine metre all-aluminium limo tender is military in style, with an exposed engine. It can accommodate up to 12 people and reaches 45 knots. The other is a seven metre, semi inflatable sport tender with aluminium hull and similar livery, which can seat 10 and reach 40 knots.

'They have the same engine so all the spare parts are in common,' says Orio. 'Similarly, because we are going to remote places, they use the same fuel as *Enigma*, diesel. Otherwise we would have to carry a huge amount of gasoline.'

Down in the belly of the boat – lightly updated in places, utterly unchanged in others – the spirit of the original vessel is most apparent. For the most part, as Marcelli puts it, 'We didn't change the technical platform – the organisation and layout we kept exactly as it was,' and in particular the Ruston engines were kept and overhauled.

The only change to the engine rooms was that two generators were replaced and an emergency generator

As well as 180° windows, the master cabin (opposite page) on the upper deck features large skylights above the bed and a large pair of glass looking on to the bathroom aft. Veerle Battiau used glossy woods and underlighting on the main deck to ensure all spaces feel bright (below)

'I PICKED A **HORIZONTAL LINE** THE EYE WOULD BE DRAWN TO. I DID EVERYTHING **ABOVE IN SHINY WHITE** AND KEPT EVERYTHING UNDER DARK'



Main deck areas such as cabins (opposite) have bright modern en suites and a low feature line to emphasise head height and disguise the camber. The latter is most apparent at the forward end of the main deck, so it has been designated a gym – rather than being given a more glamorous or formal use



THEY 'OPENED UP THE HULL' AS BATTIAU PUTS IT, BY ELONGATING THE ORIGINAL ROUND PORTS DOWNWARDS INTO LONZENGE SHAPED WINDOWS

added. 'The previous generators were too small for the load of the air-conditioning, because the boat didn't have it before – it was just heaters as she was operating in the North Sea,' says Marcelli.

Other work here amounted to cleaning up, for example dismantling, overhauling and repainting the two rods that control the rudders. In the engine control room the owner liked the retro look of the green Formica that the team went to extraordinary lengths to preserve it. 'As we changed the two gensets, we had to create another main switchboard panel and find the right colour Formica,' says Orio. 'We went to Canada, where they build these huge cruise ships and have this old material still available – but it's new because it's never been used. So this is where we found it.'

The lower deck crew areas also retain much of the original vessel. Some luxuries have been added, for example updated décor and sinks in each of the twin-berthed cabins, but crew still wash in men's and women's shower rooms. The highlights of the crew areas are the communal spaces. There is a capacious crew recreation room with lounge seating and a bar, plus a separate and even larger mess with a table that can seat all 21 crewmembers at the same time. 'I used to work on a tall ship and they had a massive table with everybody around, it's better, it's team building,' says Orio.

Service areas on the same deck are also spacious, the laundry carrying three large washers and dryers, and a store with four freezers and three fridges – everything they need for one month's autonomy. The galley is of

commercial proportions and fit-out, and connects via dumbwaiter to pantries next to the dining and upper saloons.

The wheelhouse and captain's office at the top of *Enigma XK* are a fusion of the old and new vessels. Much equipment is original, such as the rudder angle indicator, controls to two big searchlights and even windscreen wipers. New equipment includes the radar, a gyro compass, GPS, touchscreens and internet. The boat carries VSAT, broadband and meridian to ensure connection almost anywhere in the world.

Aesthetically the team has been selective about preservation in the wheelhouse. For example, the original wheel stayed, but the green Formica was replaced with black panels – and in some places shagreen. The doors and windows are original. 'There are no outside wing stations so I stay inside, open the window and lean out like a train driver,' says Orio.

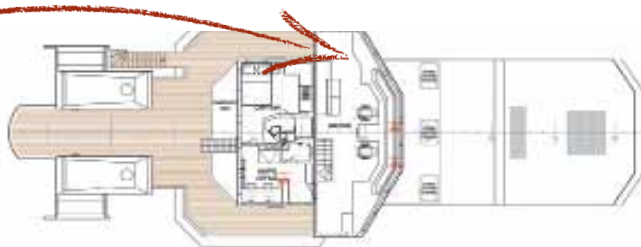
The blend of equipment seems to work well. 'On her first trial she was going at 16 to 17 knots – not full speed yet – and we had two metres of swell more or less going out of the Île de Ré area,' says Orio. 'We made some vibration tests, and so far the guest cabins and owner's suite are very silent.'

Enigma XK is undoubtedly a 'new' superyacht, but a vital part of that new character is the vessel she once was. The result of this sensitive conversion is not a vessel haunted by her past, but one whose history has been brought exhilaratingly to life.



ENIGMA XK

The wheelhouse features an intriguing mix of old and new, with touchscreen panels and 1960s windscreen wipers



A foredeck seating area outside the owner's cabin offers a private exterior nook



The upper saloon has three distinctive social areas so guests can do their own thing



The main and dining saloon features a pull-down cinema screen



Crew have two large social areas: a galley and recreation room with a bar

The British Ruston engines were kept and overhauled



ENIGMA XK Richards Shipbuilders (original) / Atlantic Refit Center (refit)



<p>LOA 71.4m LWL 64m Beam 11.6m Draught 4.6m Displacement 1,652 tonnes Gross tonnage 1,395GT</p>	<p>Engines 2 x Ruston 6AT 350M, 3,000BHP each Speed (max/cruise) 18/16 knots Range at 11 knots 12,000nm Bowthruster 1 x Ulstein Rolls-Royce, 368kW</p>	<p>Generators 2 x MTU, 496kW Fuel capacity 220,430 litres Freshwater capacity 60,962 litres Owner and guests 12 Crew 21</p>	<p>Tenders 1 x 9m custom limo by Tanguy Le Bihan Yacht Design; 1 x 4.2m Yamaha rescue; 1 x 7m custom sport by Tanguy Le Bihan Yacht Design Construction Steel hull and superstructure</p>	<p>Classification +100 A1 SSC yacht Mono G6, +LMC Refit exterior design Philippe Briand Refit interior design Vitruvius For charter e: commandant@ enigmaxk.com</p>	<p>Refit yard/year Atlantic Refit Center/2013 La Rochelle, France t: +33 (0) 675 247 585 w: atlanticrefitcenter.com</p>
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