



Etoile is genuine expedition boat, its 'voyager' style clearly shows this!

CATAMARAN TRAWLER ETOILE 65 |

CAPTAIN BOB'S AMAZING EXPEDITION MACHINE



The perfection of modern thermal engines seems to have waited for the meeting with the logical multihull support to express a new potential. The recipe is not obvious, because it is simple and requires reasoned moderation of the performance. In this area, it's the sailing renegades who are showing the way! Let's embark aboard one of these remarkable prototypes for a few days.

Text and photos: Philippe Echelle

Forward wheelhouse, wide side decks; Etoile is a practical boat, in which life at sea is good...

DREAM HUNTERS

Which sailor hasn't dreamed of the perfect instrument? Haddock had the Sirius, a coal-fired cargo ship, always ready to set off to look for the Licorne and Rackam le Rouge's treasure; Scott had the Discovery, Amundsen the Fram, Charcot, Pourquoi Pas? In a different register, James Wharram merged with Oro and Gaia (55' and 63' cats); Tom Follet asserted that he was fully satisfied with Cheers, apart from the absence of his piano! Phil Weld found a balance with Moxie (50' trimaran, winner of the 1980 Ostar), as did Roger de la Grandière with Vakuta, an 8m Heavenly Twins, for a circumnavigation!

In 4000 years, the Polynesians accomplished the conquest of the 176 million km² of the huge Pacific aboard an infinite variety of audacious multihulls. The history of these tribal machines died with the accomplishment of their objective, but their DNA, adapted to the Atlantic by a few iconoclastic pioneers, opened a royal road to leisure sailing, which has now reclaimed this heritage and is continuing its development through an abundance of attempts. The speed record under sail belongs to a multihull, as does the record for the incredible North West Passage under sail alone... As for "PlanetSolar's round the world voyage, it gives a glimpse of an alternative to fossil fuels...bravo, and a big thank-you to the Polynesians!

The latest segment to date to be stirred up by these turbulent and visionary boats with several hulls is that of the blue-water motor cruisers. Santorini (Joubert-Nivelt) hit hard in 1998, Laurent Bourgnon hasn't stopped developing his Jambo (Sunreef 70'), proving during his long cruise (Patagonia – New Zealand – Polynesia) that a sober motor yacht is possible (1 litre per mile at 8 knots, with a 7000-mile range). Bob Escoffier and Patrick Balta have explored this direction in their own style.

THE ROAD TO THE STARS

Robert Escoffier comes originally from Paris, but the shores of Port Mer (near Cancale, in Brittany) and the family cruises cast a powerful and irrevocable spell on him. Head of a prosperous company (in the measuring instrument field), Bob became bored with this 'shopkeeper' activity, and sold the business in 1986. Already in 1979 (with the Bob IV), during a stopover which was dragging on (because of a fishermen's blockade!), he discovered the semi-wrecked Scirocco, and bought it! The restoration took 10 years; it was to be called Popoff and was the first link in a long chain, that of Etoile Marine Croisières. Having left Normandy, Bob settled in St Malo, his home port. From 1992 onwards, the collection grew at the rate of one boat per year; the passion for traditional boats merged with the entrepreneur's spirit, and a small fleet was created. Etoile Molène (dundee tuna fishing boat) joined Popoff, then came Etoile de France (30m Baltic trader), Etoile Polaire (classic ketch from 1914, built by Abeking-Rasmussen) and many others. Etoile du Roi (replica of a St Malo frigate from 1745 captured by the English) is currently the flagship of this tumultuous armada. Several multihulls joined the flotilla, a 25m catamaran ketch designed by Plessis was built in the in-house yard, and crossed the Atlantic a dozen times (amongst other things)! Bruno Peyron's ex-Explorer (Multiplast, 22.5m) became Etoile Explorer, Etoile Filante was to be a Pinta 60'... The insatiable Captain Bob also likes ocean racing, and succeeded in entering Etoile Molène in the 1994 Route du Rhum (he abandoned, but what a coup!); the '98 edition saw him aboard Adecco Etoile Filante (a Pinta 60') and he finished 6th



With 1.4m under the bridgedeck, the cat never slams, even in (very) rough conditions, such as those we encountered during our test.



Etoile 65, a boat which is leaving to discover the shores of Africa, then the planet's extreme latitudes.

THE BEDROOM AND BATHROOMS ARE OF ALMOST UNKNOWN PROPORTIONS ON THIS SIZE OF BOAT, AND THE VIEWPOINT IS FANTASTIC...

in 2002 (in Class 2) aboard his 50' monohull (already designed by Balta) after having rescued Karine Fauconnier. Two Transat Jacques Vabres later (with his fitting-out manager Christian Macé and the other with his daughter in 2003), Servane took up the torch in 2010, by being at the start of the Rhum in the very physical Etoile Explorer! Quite a family, if you consider that Franck-Yves dominated the Multi50 class for several years, before becoming its president, and that his two sons are in the thick of the action on the fastest multihulls in the world (Loïc in M50' and Kevin as crew member and head of the R & D department for Banque Populaire V and VII!).



For cruising in good weather or amongst the coral, Etoile 65 is equipped with a steering position on the flybridge.



The weather was starting to become quite gloomy, but the Etoile 65 continued on its way in remarkable comfort.

BOB ESCOFFIER AND PATRICK BALTA, A STIMULATING ENCOUNTER!

Patrick Balta is an atypical naval architect; he discovered multihulls at the age of 5 in New Caledonia, with the catamaran his father had designed and built. He was a fisherman aboard the (sailing) tuna fishing boat 'L'Aviateur' for a campaign in the Galapagos, then became skipper of a shrimper in Guiana. It was here, on the edge of the rain forest, that he developed a particular sensitivity for wood as a material; he then enriched this technical baggage to become a reference in the field. Keen on calculations and computers, he has become an

expert in hydrostatics and structures. This skilful mixture of practical common sense, talented intuition, and experience singled him out as the ideal accomplice for Bob Escoffier's future expedition catamaran.

Bob wanted a boat, not a gleaming yacht; Patrick Balta designed a boat lacking in any arrogance, whose appeal comes from its functional choices. The wheelhouse, standing proudly at the front, gives it a look of an American fishing trawler, reinforced by the covered side decks (like those on the classic Italian 'navettes'), surrounded by bulwarks and a handrail. The back of the boat accommodates a splendid multi-activity living area, where an enormous

rattan corner settee covered with comfortable soft furnishings occupies the place of honour, with chairs for 6 – 8 people and an outdoor galley. Let's now go into the owner's accommodation. As the coachroof is not structural, the

master and mistress of the house have been able to freely express their creative spirit in the 70m² of the first level, and at a reasonable cost, as they were able to order from the catalogues of terrestrial kitchen installers and furniture suppliers! Bob and Françoise have moreover had a gastronomic kitchen delivered at a good price, with drawers equipped with magnetic locks (commercial child safety) which work wonderfully at sea! The bedroom and bathrooms are of almost unknown proportions on this size of boat, and the viewpoint is fantastic. All the openings are made up of a frame in anodised marine aluminium, with double

glazing. Combined with 35mm of foam, the acoustic and thermal insulation of this cocoon, open to the nautical scenery, is amazing. The construction in ply-epoxy-glass on stringers is very homogenous, and contributes to the result through its specific qualities. It also provides the ease of use of modern wood composites using digital cut-out for the panels. The floats accommodate 4 double cabins, the 4 (enormous!) tanks and the engines.

TRANSFORMED TEST

For our test, the skipper had chosen to invite a crew with complementary talents (Françoise, boat owner, Captain Bob's partner and constant companion, former restaurant owner in Cancale, Jean, ex-gastronomic critic, both hedonistic leisure sailors, Olivier, ex-boss of a boatbuilding company, a recent round the world sailor with his family and his catamaran, Jangada, and a merchant navy captain, and your humble servant), so this was going to be quite a test! The skipper's morale was set fair despite a dodgy weather forecast for the evening ('excellent for a strong wind test with big seas' he said!). In the basin at St Malo, I took the controls to take the boat into the lock, impressed by the smoothness of the gearboxes (electric controls). Both the size and the lateral windage of the Etoile 65' don't predispose it to slaloming around the marina, but the torque and the balance favour its capacity for manoeuvring. On the way to Guernsey, we rounded the Minquiers plateau to the west; the weather was fine, but the big swell on the beam and the force 6 wind forecast a serious deterioration. I took advantage of the conditions to get to know the Etoile's entrails, and become familiar with the two agricultural 6.7 litre engines. They are modern, turbo-compressed engines (no naturally aspirated engines can now pass the draconian EC standards), but with no electronic management. These engines will thus be easier to maintain and more

THE SKIPPER'S MORALE WAS SET FAIR DESPITE A DODGY WEATHER FORECAST FOR THE EVENING: "EXCELLENT FOR A STRONG WIND TEST WITH BIG SEAS"...

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ETOILE 65': AN ATTRACTIVE BOAT FOR OCEAN CRUISING

My previous experiences in multihulls, a passion for sailing, and an immediate sympathy for the 'small is beautiful' protocol dear to Dick Newick hadn't really prepared me for visiting motor catamarans, however discovering the Santorini

- ◆ Inspired approach to leisure motor multihulls
- ◆ Efficiency, performance and safety at sea
- ◆ Exceptional nautical comfort

- ◆ Exposure to noise in the aft cabins in the hulls
- ◆ Engine insulation perfectible
- ◆ Absence of engine handrails



The back of the boat accommodates a superb living area, with a corner settee, a big table for 8 people and even an exterior galley.



Captain Bob at the helm of his cat, well protected in his wheelhouse. Aim: ocean cruising!

tolerant of variations in fuel quality. Technical accessibility is good, fire fighting is automatic and permanent cameras monitor the engine room from the steering position. Ventilation (essential for the turbos' operation) is taken care of by columns whose air intakes are situated on the flybridge, 6m high! The test in beam seas is important on this type of vessel, and allowed us to check for the absence of unpleasant rhythmic rolling. It has a firm grip on the sea, and didn't create any oscillation in the wavelength encountered. We scurried along at 1900 rpm at a stable speed of 10.5 knots. Throughout the 50 miles which separated us from St Peter Port, the wind and sea continued to increase to

gale force, without disturbing our tasting of the local oysters. The intelligent arrangement of the nav station always offers a sheltered side, ideal for a reviving snack, full of flavours. The Etoile took the sea's energetic impacts serenely, the tunnel didn't slam, the bows started to generate spray, but nothing reached the deck. The pit stop in Guernsey lasted less than an hour, and we went back to sea, heading for Cherbourg, 35 miles away! The VHF confirmed the severe gale, still hesitating to class it as a storm! At the same engine revs, the speedo started to display the first record speeds in the surfs; 14, 15, 16 knots in the long slides. The Etoile was leaving a nice straight wake



The exceptional interior volume allows all types of accommodation to be envisaged in the 70m² of the first level.

THE ARCHITECT'S POINT OF VIEW

"Design me a motor multihull, a big one, for my retirement..." This is how the story began. It was to be a 19.5 metre cat, because of the length of the shed, with the look of a trawler or a working boat. No useless luxury, rationally rustic, easy to build and maintain. The challenge appealed to me. Changing to motor after sail meant changing my horizon, my approach, my state of mind, but not completely, as I was a fisherman and mechanic on trawlers when I was younger, and many things have stuck! It was obvious that the boat would be built in plywood, laminated with glass/epoxy. For one-off construction, the material is ideal from more than one point of view. Light, strong, easy to work with, what's not to like? (and no electrolysis or osmosis)...



The boat was cut out in the finest detail by a digitally controlled cutter, directly from the plans (M-C-N). The manufacturer delivered packages of itemized parts, to be assembled as a kit directly in the yard. Not everything is made of plywood; the structure is in solid wood (keel and bow parts, stringers, crossbeams, deck beams...). I wanted to use spruce from the Jura or the Vosges, but it was impossible to obtain it! Unfortunately, the hemlock used is quite heavy (550 kg/m³, whilst spruce weighs around 450 kg/m³). For 8.5 m³ of wood, this alone represents a difference of 850 kg! Now let's get on to the serious business, the mass,

the shape, the structural calculations, the working plans... Bob wanted a boat capable of enduring the bad weather and cold in the Far North (or South); we had to keep to the weight estimation with almost a tonne of thermal insulation and double glazing! The diesel: enough to cross the Atlantic at 9 – 10 knots, plus reserves. I calculated that it would need 14,500 litres (12 tonnes), divided into 4 tanks fitted slightly off of the hull centre (this moves off as the boat is loaded). The drinking water, rain water, black and grey water storage: 3500 litres. The max desired speed was 16 knots half laden, which required two 260 hp engines, weighing 750 kg each. A 350 kg generator was also planned. With the structure, the bulkheads and all the equipment, distributing it all appropriately so the boat would be correctly trimmed when empty was no picnic!

I design my boats with a hull centre quite far aft, and very slim forward sections, which don't create big bow waves. My hulls, thus designed, damp pitching movements rather well and do not 'dig in'. To finish, Bob didn't want a cat which slammed under the bridgedeck. We agreed on a height of 1.2 – 1.4 m above the water, depending on the load. To reinforce the joint of the two hulls, I designed two parts inclined at 45° under the 'nacelle', which moreover give some interior volumes which are interesting to use.

since we had lowered the autopilot's rudder response from 5 to 3, which amongst other things demonstrates the good directional effect of the rudders. Inside, the absence of noise and violent movements was remarkable; the feeling underfoot remained smooth and pleasant. The small tidal coefficient allowed us to reach Cherbourg at 8pm, after having crossed the Raz Blanchard with a solid force 7 – 8 behind us! The port's floating pontoon was a safe shelter: the fillet of beef came out of the oven, on its bed of Paimpol haricot beans, accompanied by a nice Bordeaux, to celebrate the day's excitement. Outside, the wind was blowing at 45 knots, but we remained indifferent to the weather's fury, sheltered in our nautical chalet and completely insulated from the exterior din.

The next day, the clock struck eight as we crossed the roads, on the way to Le Havre, 80 miles to the east. The storm named Christian had arrived, the Raz de Barfleur (fearsome!) was complicated by 50 knots of wind and a quite chaotic short, lively sea. We now

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The owners' bedroom: bright and comfortable!



In the hulls, we find four nice double cabins, to accommodate friends and guests.

had confidence in the Etoile; the surfs were longer, at 17 to 18 knots. The skipper was in a playful mood and decided to accelerate; the test revealed the boat's exceptional agility and ease in handling the seas. We touched 21 knots on some of the waves! The trim was dead right, with just enough 'nose up', and an appropriate centre of gravity; the trajectory was perfect and the crew approved of the tunnel height. No bridgedeck impacts! Military ships, cargo vessels and oil tankers were all heading towards the coast to anchor; this general remin-

der confirmed that things were becoming serious! The Balta-designed boat was in its element; the slim forward sections passed through the waves smoothly, the vertical thrust from the hulls was real, but very progressive. The height of the freeboard here finds its justification (designed for high latitudes). The two 45° longitudinal steps which join the bridgedeck to the hulls, running from the forward crossbeam, play their role of stiffener-deflector perfectly. The energy of the waves in these conditions didn't seem to have any effect on the trawler cat. The boat's simple shapes don't spoil the hydrodynamic efficiency at all; the progressive forward slimness and the flattened very open V shape of the sterns give the Etoile superb 'off piste' surfing qualities.

This slightly wild stampede was interrupted at the entrance to the Baie de Seine, so we could test the boat's ability to heave to and motor directly into the wind (over 50 knots!). The exercise was conclusive; at low speed, the Etoile was able to confront heavy seas head-on very well. The return to Le Havre was moreover against 35 knots of wind!

CONCLUSION

A nice encounter with this Etoile 65'; beneath its appearance of a working boat, it hides a rare level of comfort at sea. The two designers' maturity shows through in the boat's handling and personality. The boat's real nature is hidden behind a feigned rusticity - that of an expedition voyager, combined with a nautical 'home sweet home'. The profiling of the appendages and the optimization of the propellers, scheduled for this winter, will increase its speed by 10% and allow the very moderate consumption (estimated as less than 1.5 litres/mile at 10.5 knots) to progress towards reference values (1 litre/mile at 8 knots?). The extraordinary acoustic-thermal insulation predisposes this trawler cat to cosy winters in countries with harsh climates as well as to tropical wanderings.



The engine room is equipped with cameras, to keep an eye on the engines from the steering position...



The choice of plywood laminated with glass-epoxy was logical for the construction of Etoile 65...

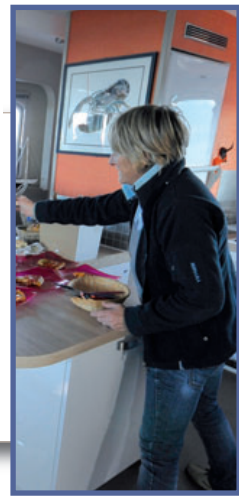
THE COMPETITORS

Model:	Cat Power	Dazcat power 15	RS57'	Queensland 55'	Sunreef 60'
Builder:	TOURNIER MARINE	MULTIMARINE	RIVES SUD	FOUNTAINÉ-PAJOT	SUNREEF
Length:	17 m	15.90 m	17	16.75 m	18.29 m
Unladen weight:	20 t	13 t	9.2 t	22 t	30 t
Engines:	2x300 hp	2x225 hp	2x75 hp	2x435 hp	2x800 hp

TECHNICAL DESCRIPTION	
Shipyard:	Mayday Boat
Architect:	Patrick Balta
Designer:	Bob Escoffier
Material:	ply/epoxy/glass
Unladen weight, equipped:	30t
Max. displacement with 14,000 l of fuel:	45t
Tunnel height:	1.2m/1.4m
Length:	19.7m
Beam:	8.6m
Draft:	1.4m
Engines:	2 x 260hp Iveco
Max. speed:	16 - 17 knots
Economical cruising speed:	10 knots
Price:	800,000 € exc. VAT basic / 1,000,000 € exc. VAT with all the options

THE FAMOUS "WOMAN ACCEPTANCE FACTOR"!

I am going to get to know Etoile well, as we are going to live aboard! I believe it suits me well; it is a boat and a house at the same time! I can cut myself off if there are too many people, which is generally difficult aboard! The Etoile for me is above all a way of life. Depending on our coming programme, I am going to be able to transport my occupations - reading, sewing machine, writing, photography, video... I also like cooking; I have no problem making a little foie gras or lobster armoricaine! A real bed, just like at home, and a wonderful area for entertaining the people we like, and I'm happy!



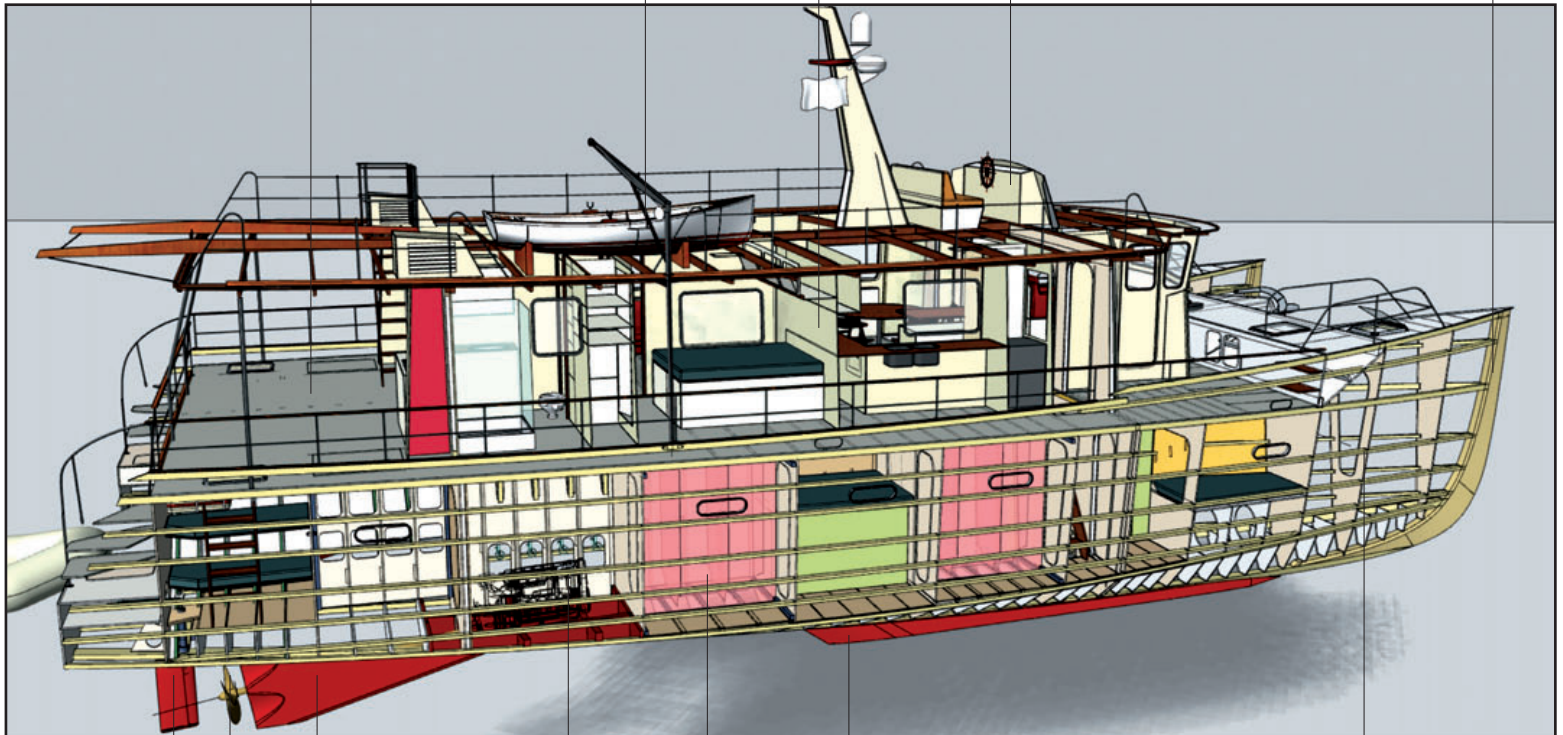
The 'nautical patio', with its well-protected outdoor galley.

The Etoile 65's originality comes from the absolute freedom with fitting-out (the coachroof is not structural, and the vertical hull sides allow ordinary domestic equipment to be used!

The classic wooden dinghy with its crane is obviously part of the equipment.

Slim, high bows: the secret of passing smoothly through the waves in heavy seas.

The flybridge steering position, an extraordinary viewpoint for relaxed observation and discovery in good weather.



Deep rudders for good directional effect in rough seas and at high speed.

Fixed four-bladed propellers.

The 260 hp Iveco turbo engines have no computer management, so they will be more tolerant of varying fuel quality. Their position well aft means they need no intermediate propshaft bearings.

The wood-epoxy-glass construction on strong stringers and bulkheads gives stiffness, moderate weight and rationalised construction, thanks to digitally cut-out panels.

Sturdy stub keels for beaching, essential complements to its 'go-anywhere' vocation. Optimisation of the hydrodynamics of these appendages is currently in progress.

The position of the 4 fuel tanks is fundamental to the boat's centre of gravity and balance. The 14,000 litres carried give an exceptional range.

The skegs play an essential stabilising role when beached; under way, they protect the propellers and rudders.