

# WATER CRAFT

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## MULTIMONO

In Brittany, Kathy Mansfield sails the build-her-yourself high-speed gaffer which is bringing smiles to the faces of disillusioned young people.

With photographs by the author

Isn't it just typical? You miss an event only once and you find you've missed a really intriguing new boat. I should have known the Sail Caledonia raid in Scotland always attracts at least one interesting new boat; it's become a great proving ground for a new design or build. So in the end I caught up with the boat I had missed, back on its home waters of southern Brittany in France.

The Multimono is the brainchild of Claude Martinuzzi, its enthusiastic promoter. Building and racing sailing boats has been part of his life as long as he can remember. After training as a physical education teacher, he worked at France's National Sailing School, then for 20 years at a secondary school in the seaside

town of Pornic, near Nantes. Surprisingly, despite Claude's challenge to make the pupils love their surroundings and the challenges it could offer them, the inhabitants of Pornic were not particularly interested in sea sports. It was an uphill battle against an entrenched indifference. For 15 of those years he tried to interest the students with a wide variety of boats and eventually found that the best response came from a sail-and-oar dinghy a group of them could enjoy as a collective experience. That did spark an interest. The trouble was, he had did not have a really suitable boat. That was next challenge.

Claude founded the Philonautic Company, aiming to inspire young people with a love of sailing. In his 30 years' experience of teaching





students and three children of his own, he had built up a good idea of what capabilities he wanted in his ideal boat. It needed to be light, roomy, shallow draft and fast, with a high performance, planing hull. It should be quick to build, easy to launch and rig, with a powerful sail combination and a good rowing capacity. It must be safe, easily recovered from a knockdown and simple to look after. It should be capable of racing, daysailing, rowing, fishing, exploring, camping, water-skiing... or just pottering. Most of all, it should put a smile on the face of those using it. That's quite a list. But Claude is persistent, determined, inventive...

He created the Multimono to do all these things, taking his concept to naval architect Pascal Cong and to Jean Luc van den Heede, promoter of the Eco Nautic group, who gave their encouragement and used their experience of a wide variety of boats to refine the design.

### Power to the people

Claude had invented a 24' (7.5m) open ply/epoxy boat with a V-shaped hull, a 7'6" (2.29m) beam – nearly twice that with her retractable 'wings' fitted – and just 12" (0.3m) hull draft increasing to 5'7" (1.7m) with centreboard down. The hull, which weighs 1322 lbs (600kg) without her water ballast, carries a high peaked gaff rig with a sail area of 355 square

feet (33m<sup>2</sup>) in a main and jib, with a 65 s.f (6m<sup>2</sup>) yankee and a 323 s.f (30m<sup>2</sup>) asymmetric spinnaker for light airs.

The aluminium mast and yard fit inside the boat for trailing and rowing and raising the rig takes just 15 minutes. The gaff yard is a carbon fibre/glassfibre/polyethylene foam composite which will float if the boat tips. There's also a more expensive option of a completely carbon fibre gaff, which reduces its weight from 5.7lbs to 4lbs (2.6/1.8kg). The bowsprit is retractable, making towing easier as well as reducing marina fees. There are two long battens in the mainsail for good sail shape, with three reefs for stronger winds and a single set of reef points in the jib.

She has a self-draining cockpit and can carry 882 lbs (400kg) water ballast beneath the cockpit sole, which adds extra stability when winds are strong. The four 26 gallon (100 litre) ballast tanks can fill automatically in 5 minutes from a bunged hole in the centreboard casing and can be drained under sail or pumped out when not needed.

Polyethylene foam – lighter and more impervious than polystyrene or polyurethane – is sealed into the boat's bottom and other compartments. The foam ensures there is no danger of the boat sinking should it capsize, and with the water ballast tanks filled, the Multimono is self-righting. It can also be righted without water ballast in the traditional way by the crew climbing on to the centreboard.

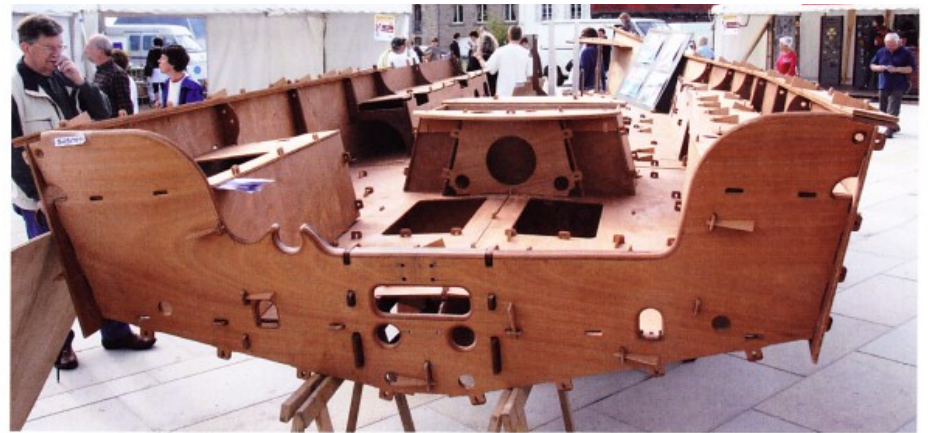
The Multimono is able to take 12 people at a time – or just one or two. The boat has an RCD rating of C and D, for 11 adults or 11 children and 2 adults when rigged for sailing. When winds die, the low central section of the wide transom can take a 30hp outboard or be used for easy boarding after swimming or water skiing.

### Sails and oars

When I sailed on the Multimono just after she had been launched at Port Blanc in the Gulf of Morbihan, we had very little wind but it did give us time to try out some of the boat's extra options. Both side seats are removed, aluminium curved tubes fitted and rotated out, a canvas sheet slotted over the arms and the side seat laced under the outer edge to form a firm structure. The various lines needed to do this were a bit fiddly when I was there but Claude tells me this now is very straightforward and just takes a minute. The crew can then shift their weight outboard to stabilise the boat when heeling. I've got to confess it is great fun and rigid enough that I was perfectly happy out there complete with expensive camera, photographing the bow wave that we managed to produce with very little wind. Perhaps in stronger winds at steeper angles of heel I would not be quite so blasé.

Once the yankee comes down and the asymmetric spinnaker goes up, there is a lot more power and I've seen the Multimono in a good blow with the spinnaker still flying, crew out on these wings, some using a trapeze as well. In Marseilles, a sailing school did not cancel a course when the Mistral was blowing, usually gale force, making use of the water ballast and reefs. This should certainly appeal to Claude's indifferent young people who enjoy a surge of adrenalin.

A large crew should not be bored when taking turns helming, setting and changing mainsail, jib and either flying



With all those locating tabs, the self-jigging pre-cut plywood panels of the Multimono can be assembled, it's claimed, in just 3 hours.

jib, the yankee or the asymmetric spinnaker, plus setting or retrieving the wings. The boat sails well, the helm light and responsive; I'm told she sails at about 45° off the wind. And then for rowing, the mainsail would come down in its lazyjacks and stow on the cockpit floor while the thwarts are fitted. There is room for eight oars, though usually there are six people rowing on fixed seats or four on sliding seats. The sliding seats are controversial in a raid competition and Sail Caledonia bans them as unfair to other boats but they give an extra experience on other occasions.

I was astonished at the size of the cockpit – it's simply enormous – and there's plenty of storage judging from its series of waterproof locker covers, eight of them lining the cockpit floor plus another on one side of the mast step thwart; the other side is open for the spars to slide under for storage. I must admit the interior looks a bit... well... industrial and there seems to be a lot of lines. One aft locker incorporates a fuel container, another takes mooring lines and a central one takes two anchors just behind the mast. There is even a drinks section in the central pod. A basic ply table fits on towards the aft section. Extra sails are stowed usually in the forward cockpit, their bags tied to the hull. There is space for camping gear too and a tent covers the cockpit, either with or without the mast. With an expanse of flat space and a minimum draft of 12" (0.3m), the Multimono would be a great way to avoid berthing charges. I can imagine finding a shallow inlet in some quiet corner of a favourite sailing area.

### Quick-fit kit

There's another journey the Multimono offers: that of building the boat from a plywood kit. The entire boat is CNC-cut into 220 pieces of plywood, components which are put together like an eggbox with an ingenious tab and mortise arrangement, each tab held firmly in place with a wedge. This makes a rigid form that can then be epoxy glued together. The tabs and wedges are then cut off, leaving a clear hull. It avoids the necessity of moulds and means the basic assembly takes about 3 hours, I'm told. Another 50-60 hours and you have a glued-together boat and the whole job takes another 300 hours. The folk I sailed with built their Multimono on

weekends. "The closest I've got to building a boat before now was putting together a model when I was young!" commented Jean-François. The boat is coated with epoxy to keep it waterproof and a non-slip rubber-based paint is used on the cockpit sole and decks.

Claude has designed a boat which is amazingly quick to build, fun and fast to sail and which suits a particular market. I like the boat from a distance, I think the sailing rig is well chosen, versatile, powerful, lovely to look at but for my taste, the hull itself is rather too austere. A boat can take a bit longer to build but bring in subtlety of line, even in ply and that adds another dimension. But then I am a photographer, I look for visual appeal and particularly love boats which please me in shape and line and layout.

Having said this, the latest Multimono decks use natural, sustainable cork, developed by [www.seacork.com](http://www.seacork.com) as a green alternative to a laid teak deck which improves the cockpit appearance. The aim is to make the boat eventually as green as possible, a great idea, using plywood from sustainable sources and there's even research being done on an epoxy glue that does not have a carbon footprint. Claude has teamed up with a group in France, EcoNav, which is trying to spearhead a green maritime agenda, and so is in touch with the latest research in the area.

The Multimono concept is catching on. It offers a relatively inexpensive and lively sail training boat for up to 13 people and has been tested by various schools and adventure facilities in France. It is also being built in Canada and one is used by the sailing school on Reunion Island in the Indian Ocean. There is another project in the Cape Verde Islands, in conjunction with EcoNav. Three are due to come from France crewed by war-damaged soldiers to the next Sail Caledonia in the first week of June 2012.

Multimono is a serious and worthwhile endeavour to tempt today's disaffected young people and others out of their ennui to join the fun of competitive, companionable sailing.

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