

VPLP first designs – an interview of Vincent Lauriot-Prévost

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Recognized as the leading architects from the 90s when Florence Arthaud won the Route du Rhum (a race where their trimarans have always won since), Vincent Lauriot-Prévost and Marc Van Peteghem first started with a foiler, then a catamaran ... Installed in Paris and Vannes, the two architects are now essential for the multihull circuit especially with the new Ultim trimarans preparing for the solo round the world race. Back on the first boats VPLP.



*Associated with Marc van Péteghem, Vincent Lauriot-Prévost has designed multihulls since 1983 !
© Dominic Bourgeois*

Question : Your first boat under the signature of Vincent Lauriot-Prévost and Marc Van Peteghem was Gérard Lambert (Kermarine) ...

Vincent Lauriot : During our training at the naval architecture school in Southampton, we were quite inseparable. We had given a help to Yves Le Cornec and Christine Capdevielle who had bought a Val 38 (Elle) for the double transat Lorient-Bermuda-Lorient 1979, then we had an internship at Derek Kelsall the following year ... Newick and Kelsall were the fashionable architects of the 80s! And at the end of this internship, we had the choice to finish our training in Southampton or to go to the Salon Nautique in Paris to find work. Marc found a job with the architect who designed the schooner of the singer Renaud (Serge Martin) and personally, I worked at Gib Sea. And then Marc went down to Marseille to collaborate with Gilles Vaton and I went to Philippe Harlé in La Rochelle, then to Michel Bigouin in Marseille ...



Marc Van Peteghem and Vincent Lauriot-Prévost have drawn all the winners of the Route du Rhum since 1990! © VPLP Collection

Q : But what makes you find yourself?

V L-P : In fact, Marc had met Vincent Lévy in Paris who had made the 1981 Mini Transat on a shortened Surprise and who knew a little bit the singer Renaud who also had a boat (Makhnovtchina) on which they had sailed together ... And one day, Vincent Lévy calls Marc Van Peteghem because he wanted to do the 1984 OSTAR on a 50-foot multihull ! And as I was available, I joined Marc to design this foiler which was built by Jean-François de Prémoré who had just finished *Gordano Goose* with Nigel Irens ... So it was a first for all four ! The boat was built on the peninsula of Rhuys (in south Brittany) on a design that we had already imagined for such transatlantic race with upwind conditions.

Q : A foil trimaran!

V L-P : We peeled all the Voiles&Voiliers (a French monthly magazine on sailing) to accumulate a databank and we designed the *Gérard Lambert*. The foilers were up-to-date with Sylvestre Langevin, Gilles Vaton and Marc Lombard ... When we were Marc and I in Southampton, we were going to see speed boats in Weymouth and Brest and the foils were definitely a speed bonus. And with Jean-François de Prémoré, the ambition to make a high-tech boat was very strong : we used all the avant-garde materials and techniques (foam-glass-carbon sandwich). The link arm was made of carbon laminated on aluminum honeycomb panels under vacuum in an autoclave. And Sylvestre Langevin sent us the plans of his "Y" foils that he used on Gautier, Ker Cadélaç ...



*Gérard Lambert (= Kermarine) was the first multihull designed by the duo Lauriot-Prévost and Van Peteghem ...
© Christian Fevrier*

Q : But why not imagine foils like the ones of *Paul Ricard*, *Hydrofolie*, *VSD* or *Royale* ?

V L-P : What interested us was that the lift act under the float (ama) and not on the internal side of the ama. We wanted the force to be vertical for structural reasons but also power of the boat : we drew small amas with foils underneath. But the big drawback is that these foils were not self-stable : there was acceleration and therefore lift stronger and stronger to the point that the float came out of the water ... We quickly realized that this was not perfect because the trimaran was porpoising ! But we had a boat that was 15 meters long and 14 meters wide, leaning well in the sea, which was very powerful although rather light. It is this foiler that is at the origin of this principle that we have always followed : to have a sailboat that goes fast, we must reconcile two parameters, power and lightness.

Q : *Kermarine* (the first name of *Gérard Lambert*) is therefore the outline of your future work !

V L-P : He confirmed that power leads to increasingly important efforts that need increasingly heavy reinforcements. It was therefore necessary to avoid this spiral ! And *Kermarine* was a typical boat for upwind-reaching. We have defined the philosophy of our upcoming boats : weight centering, aerodynamic akas ...

Q : And the 1984 Trophée des Multicoques is your first test bench ...

V L-P : In fact not, since Vincent Lévy participated in the Grand Prix of La Rochelle just after the launch in September 1983, then in La Baule-Dakar with Jean-François de Prémorél and François Collignon (12th). At the time, his direct competitor was the catamaran of Mike Birch and Loïck Peyron, *Transat TAG Quebec* (formerly *Vital*) : two radically different concepts with a very light multihull on one side, not very powerful because narrow, and of the other side a very powerful foiler and a little heavier. And at the 1984 Trophée des Multicoques, when she had impressed a lot of sailors especially upwind, *Kermarine* broke his mast which was actually undersized, in the last heat (11th).



The first multihull drawn by VPLP: Kermarine by Vincent Lévy, is better known under the name of Gérard Lambert ... © Christian Fevrier

Q : And the boat is doing the OSTAR ...

V L-P : ...that Vincent Lévy finishes in eleventh place. He then brought back *Kermarine* with Marc Van Peteghem and Halvard Mabire. Then he made the 1,000 miles of Deauville the following season before selling it to Olivier Moussy (*Calcialiment-Laiterie Mont Saint Michel*) for the Route du Rhum 1986 where he was approached by a cargo ship a week after the departure of Saint-Malo ... The boat was abandoned off the Azores when he was second behind Philippe Poupon !

Q : And what about other multihulls ?

V L-P : In those days, we worked a lot with fabric and resin manufacturers, especially with Excel-Genin. And one day thanks to their composite technicians, we found ourselves in Galicia (North-west region of Spain) in a building site with Spanish runners who wanted to make the « la Route de la Découverte ». José Maria Lastra has ordered a 15.24 meter (Class III) catamaran built in foam-glass-carbon-epoxy sandwich. The *Santa María* finished eighth in 1984 before making the Grand Prix of Martinique 1985, where he still won in his class. It was a bit in the tradition of *Jet Services* : two hulls, a central pod ...

But we could see that the construction techniques were not yet developed: it was missing a post-bake and the resins did not polymerize completely, which led to softening in hot weather: this is what happened among other things to the large catamaran *Fleury Michon VII* in Toulon at the end of the 1985 Course de l'Europe !



(Note : The catamaran Santa Maria is now based in Fuerteventura (Canarian Islands) and proposed for charter : <http://www.catamaran-santamaria.com/fr/catamaran-fr>)

Q : And Olivier de Kersauson arrives to order you *Poulain* ...

V L-P : He comes to see us in Marseille after seeing *Kermarine* in La Trinité / mer. It was also the creation of the CDK shipyard in Port-la-Forêt where Marc Van Peteghem had some shares with Hubert Desjoyeaux, Jean Le Cam and Gaetan Gouérou. And at the same time, Jean Le Cam had his Formula 40 project for *Biscuits Cantreou*. So suddenly, we have two multihulls under construction in Port-la-Forêt in 1985 !



Poulain was a revolutionary trimaran in 1986 with its big floats and its concept inspired by Formula 40 © Christian Février

Q : And these two multihulls have nothing to do with *Gerard Lambert* !

V L-P : Because in the meantime, the winner of the OSTAR 1984, it was *Umupro Jardin* ... (Phil Morrison design, first name was *Exmouth Challenge*). And the inspiration turns to voluminous amas and as long as the central hull, a radical change. Previously, the amas were sinking into the sea and Phil Morrison was successfully exploring a new approach with his 1982 *Exmouth Challenge* ! On the foilers, the leeward ama did not sink because there was the vertical lift of the foil as soon as there was speed. We did not know all that yet but either we were gaining length at the waterline with a lot of finesse of hull, or we had

a small ama with a foil : we discovered the balance sheets issue at all speeds ... With a large ama, we had a better dynamic stability in difficult conditions and we were more efficient in light winds because the foils dragged a lot. Or Olivier de Kersauson wanted to do a program around the world alone: he wanted big amas for security.



Phil Morrison design

Q : But before imagining *Poulain*, you had worked on a project for Yvon Fauconnier ...

V L-P : After his victory at the OSTAR 84, he came to see us to design a large 25-meter trimaran for Rhône-Poulenc. He had asked us to collaborate with Phil Morrison who came to our Marseille office for two months. It was very rich as exchanges, even if the project finally failed, and it allowed us to imagine *Poulain* who was a little smaller (23 meters). And *Biscuits Cantreau* in parallel was its scaled model ...

Q : And yet, catamarans were winning almost everything : *Elf Aquitaine II*, *Charente Maritime II*, *Royal II*, *Jet Services*

...

V L-P : We can only design a boat if we are in agreement with the skipper ! But we believe in the fact that the wetted surface of a trimaran is lower than that of a catamaran when it does not sail on a hull ... And then, one can transform the power by the width. As the minimum weight for Formula 40 was 1,800 kg, you could imagine a trimaran ! But the first *Biscuits Cantreau* had two flaws : the connecting akas were too flexible because they came from what was done for oceanic boats, and the amas were not big enough. We could not sail on the leeward float.



Biscuits Cantreau 3 upwind at Torbole (Garda Lake, Torbole is the city just near to Riva del Garda where are presently the GC32 world championship) : this trimaran is a formidable machine that trustees the podiums in Formula 40 ... © Jacques Vapillon

Q : And Poulain participates in the Route du Rhum 1986....

V L-P : ... and he gives up quickly because he is not ready. In addition, Poulain had problems with the connecting akas that had been built in Belgium. We then started working with Bertin's engineers under the supervision of Jacques Souquet for structural calculations. And we changed the two connecting akas in 1987: he finished second in the Course de l'Europe race behind *Jet Services V*.

Q : And so you change your tune again by stiffening the link akas

V L-P : Let's say that our first Formula 40 was too typed. The second *Biscuits Cantreau* in 1987 was therefore wider (10,20 meters instead of 8,54 meters) and more structurally rigid, which allowed to navigate on a hull with three rudders. And after a few Grand Prix allowing its tuning, the trimaran scoop up everything ! Then it is sold to Claude Felhman for Jean Le Cam to make a third *Biscuits Cantreau*, with the same akas but with a new central hull without rudder ... And in the aftermath, Lionel Péan comes to see us to design *Hitachi*, a great Form 40 in the facts. But he must give up at the OSTAR 1988.

Q : And you are then settled in Paris ...

V L-P : During the construction of *Poulain*, we moved from Marseille to Paris. And we started to compete with Nigel Irens, Gilles Ollier, Marc Lombard ... *Hitachi* is then rehabilitated with new akas for Jean Le Cam and Eric Tabarly who make the transat double Lorient-Saint-Barth-Lorient under the colors of *Bottin-Entreprise*, but he capsized on the return ... The trimaran is recovered by the Portuguese then destroyed in the Azores during its turnaround !

Q : And this boat inspires Florence Arthaud !

V L-P : She came to see us in 1988 to make a new trimaran for *Pierre 1er*. So we imagine a boat even more inspired by the Formula 40, very bare, and Laurent Bourgnon comes then to order us *RMO* ! A sistership but still lighter because Laurent was obsessed by

weight ... And during the Route du Rhum 1990, Florence wins and Laurent finishes third, seven minutes behind Philippe Poupon despite a waterway.



Florence Arthaud achieved a great performance by winning the Route du Rhum 1990 on Groupe Pierre 1er ! © Christian Fevrier

Q : We are in the Ocean Formula 40 generation ...

V L-P : Everything is designed to navigate if possible on a hull. We know then that it is simpler, more secure to operate a trimaran than an oceanic catamaran, a question of lateral stability. But the big saga of the giant multihulls stops in 1990 with the decision to limit the length to 60 feet ... And the Trophée des Multicoques stops too !

Additionnal info :

On *Umupro Jardin* now :

<http://www.goldenoldies.biz/Umupro%20Jardin%20FR%20-%20Multicoques%20Mag.pdf>

On *Groupe Pierre 1er* now :

<http://sport24.lefigaro.fr/le-scan-sport/buzz/2015/03/19/27002-20150319ARTFIG00044-sur-les-traces-de-pierre-1er-l-ancien-bateau-de-florence-arthaud.php>