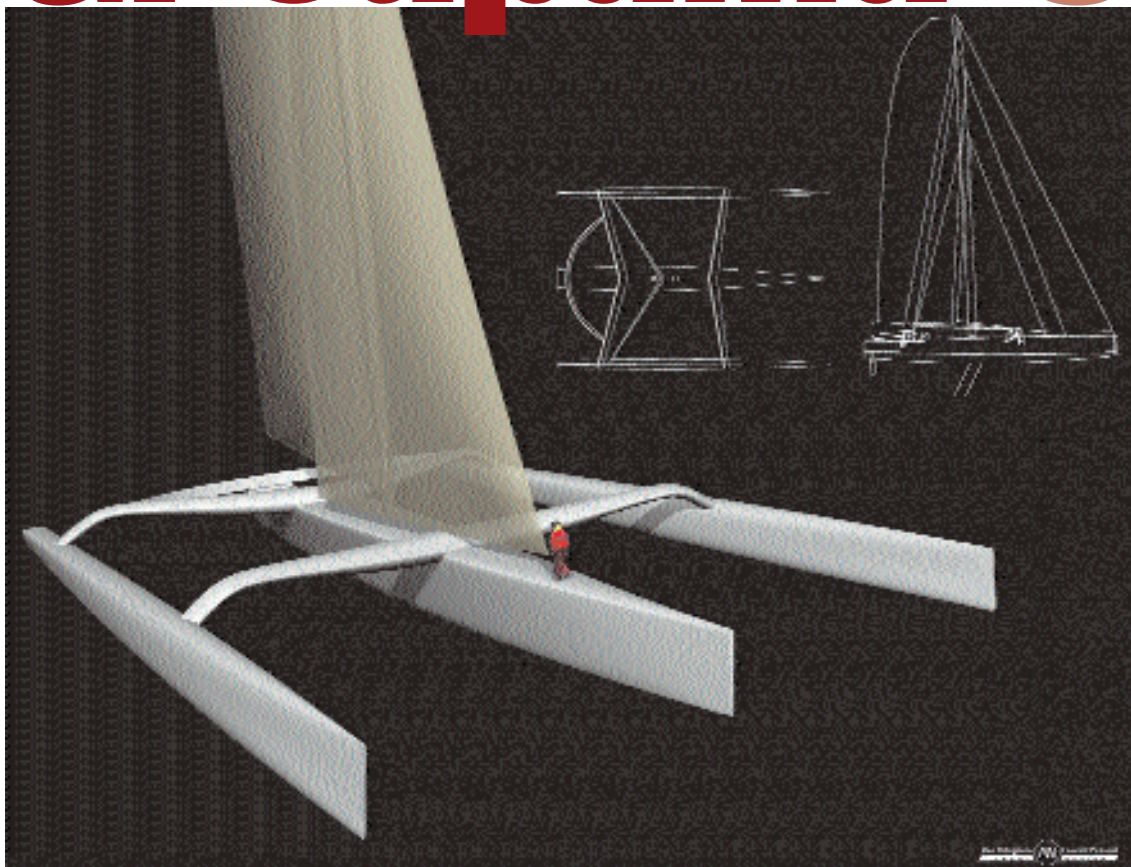


# Groupama 3



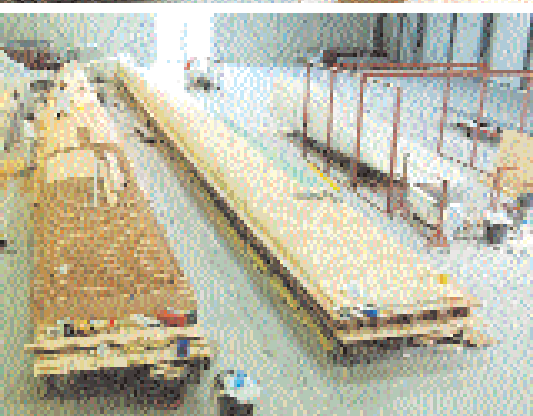
Some toys are just ... bigger!



■ by JOCELYN BLÉRIOT  
■ pics Y. ZEDDA/GROUPAMA

In 2004, Franck Cammas collected his fourth ORMA champion title. But beyond his passion for state-of-the-art 60 footers, the young sailor also had an old dream: rounding the Horn has been a long-time objective, and Franck reckoned the time had come. Meet *Groupama 3*, the new 32 metre trimaran currently being built at Multiplast.

VANNES, Brittany, France. The impressive Multiplast yard complex faces the Gulf of Morbihan, and is only a few footsteps away from the VPLP naval design office ... Vincent Lauriot-Prévoist and his team mates have it easy when it comes to checking that what they have drawn effectively comes to life in Gilles Ollier's building facility! The *Groupama* Team has a reputation for seriousness, and everything has been strictly planned for,



**Early stages of the construction. From top to bottom: A half of the central hull plug lays on its side; Crossbeams pre-shapes, show their smooth curves, while a glance is enough to notice how sharp the bows of the floats will be (not unlike the *Groupama 2* 60 footer, actually); working in central hull.**



**Inside the scale 1 fake central hull, made to pre-arrange deck and interior layout.**

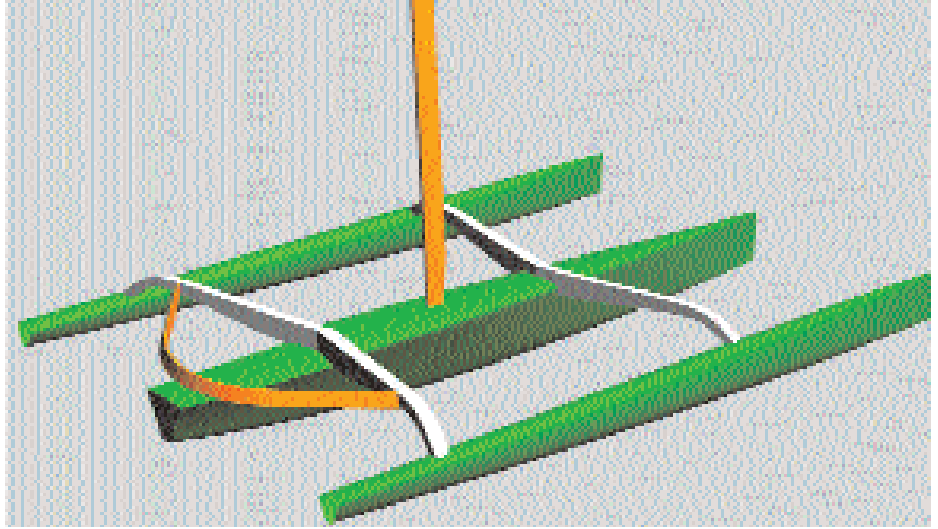
and scheduled. “All goes as we planned, it’s just very smooth”, says Stéphane Guilbaud, team manager, who coordinates all the different parties involved in the process – a tough job, no question about it, especially if you consider that the ‘monster trimaran’ program comes in addition with the ORMA season! “The first time a complementary program was evoked, *Groupama* were the ones to bring up the subject and initially we said “no”, because we were not technically ready to tackle the challenge of building a big boat from scratch. At the time, we were just starting the *Groupama 2* project (see *Multihull World* #69), the whole team was mobilised on this objective. We waited until the research phase was over for the 60 footer, and the team moved on to the record-breaker program. In terms of schedule, it’s perfect, the interaction and exchanges between the two projects have been intense: all we had studied, tested, developed for *G2* was re-adapted to *G3*. Which also means a real gain in terms of confidence, because we have launched the 60 footer, and now know we were right in our choices (editor’s note: the boat was a winner straight out of the box). We will not waste time by making beginner’s mistakes, we’ve seen what was at stake and where traps lie in ambitious building processes. But that does not mean we’ll rush things: we’ve decided that the boat, due to be launched in the Spring of 2006, will not leave for a Jules Verne attempt the very first year.” *Orange II*, in comparison, set off very

soon after her launch, but had to turn back twice the first season – such machines do demand a set-up period of several months ...

### Questions of anatomy

Closer to a giant ORMA trimaran than to a ‘classic’ RTW multihull like *Geronimo*, *Groupama 3* seems to open a new era for giant multis. The VPLP designed boat is relatively radical in her philosophy, but does not establish new standards in terms of sheer size. In fact, *Groupama 3* is quite reasonable if one refers to the general atmosphere of gigantism, but her length/width ratio seems to indicate that the platform will definitely be a powerful one. With 22.50 metres of LOA, Franck’s new boat is two metres wider than *Geronimo*, while Olivier de Kersauson’s machine is two metres longer! Vincent Lauriot-Prévoist, designer of these two trimarans, tells us how things started. “*Groupama* came towards us in April 2004, originally for a preliminary study for a generic giant multihull. We had to compare various solutions, and for each one determine a budget. We first looked at a 34 metre trimaran basis, which we confronted with the same structure, but this time

combining several options in terms of rigging and appendages (wingmast, foils, and finally wingmast + foils). We also compared this option to a 36 metre catamaran, and to a 32 metre trimaran. We have then defined the characteristics of these boats for equivalent righting moments, ran a VPP and a statistic routing model. The results, and budgetary considerations, led us to choose the 'small' trimaran configuration. Very quickly, we opted for an X-shaped structure (60 footer-like type of platform, allowing to keep a vast and open cockpit). We chose to place the crossbeams rather up front, and not to have the mast stepped where the front beam is linked with the central hull (which is the case on *Groupama 2*). The boom is short, and the rig will not be too tall: the idea was to privilege the roach of the mainsail rather than to have a very high rig. As far as the high-tech 'gizmos' are concerned, we'll stick with the foils but forget the canting mast, and the boat will have three rudder blades. The 60 footer philosophy is present, even though this type of giant



trimaran is relatively narrow for its length. In the case of *Groupama 2*, we definitely wanted to preserve the longitudinal stiffness, and that is justified for a program which includes Grand Prix events. Obviously it's not the case for *Groupama 3*".

**Power/weight ratio: the great leap forward**

In an era where digital models seem to rule, it was natural for the design team to put the future platform to the test. "We had an ancient theoretical routing program developed by Pierre Lasnier, and we also worked with Martin Fischer, who came out with a statistic approach in terms of

wind force/direction for a RTW journey. This was meant to help us choose what type of conditions we should take the most into consideration ... At the time of this study, *Orange I* was still the record holder (64 days, established in 2002): since one of our preliminary models was of the *Club Med* type, we've been able to determine (with our statistic tools) that *Orange I* had been sailed at 70% of her potential. With this first reference point, we went further into our conception process." Today, the results seem to indicate that a solution particularly at ease in medium winds has been judged preferable, presumably to be efficient in the Atlantic, on the way down first and then back up. "We wanted to

**Every now and then someone delivers something really special**



SCHLOOP!!



And it often comes from the direction you'd least expect. While everyone looks to sails, hulls and keels for the next performance breakthrough, the guys at Bluestreak have produced something equally important. A range of computer-shaped sail battens that have been driving racers and cruisers alike to more race wins and trouble-free cruising miles than you could imagine. These simple-looking bits of fibreglass conceal a wealth of technical refinement and are crucial to how hard a sail drives. So if you want to improve your boat's performance and safety in one simple process - install Bluestreak vinylester battens in your sails and watch that baby go.

N.S.W. & VIC.	<b>BLUESTREAK</b>	(02) 9820 1266
	<b>CONTENDER SAILCLOTH</b>	(02) 9997 4099
QLD	<b>BLUESTREAK</b>	(07) 9820 1266
S.A.	<b>GLASSCRAFT MARINE</b>	(08) 8223 3055
W.A.	<b>MARINDUST</b>	(08) 9386 3792
TAS.	<b>PETER JOHNSON</b>	(03) 6234 5422
NZ	<b>AUCKLAND - QCD</b>	(649) 366 7118



**Groupama technical team, taken at the Multiplast shipyard. The central hull is now upturned, nine months before the launch of the new giant. All seems to go according to plan.**



produce a boat that would prove lively in eight to 20 knots of wind, and we had to play with the power/weight ratio, because it's also necessary to remain adapted to the potentially violent conditions encountered in the Southern oceans. We have a target of 32 square metres per tonne, while the other existing boats are rather around 25 square metres, that's quite a sensible difference". But that's not the only way in which *Groupama 3* stands out from the crowd, because no other giant multihull has been fitted with foils! "The appendages will be curved ones, but their size will be limited, a bit like what we had on the *Groupama 1* generation in terms of proportions (editor's note: today's ORMA trimarans have oversized foils while obviously the

hull length has not increased). As a consequence, and since the foils will generate lift, *Groupama 3* will have limited freeboard height. Speaking of general shapes, the new record hunter will be close to *Groupama 2*, with very fine bows (wave piercing) and relatively flat surfaces at the sterns. The giant is destined to be fitted with a wingmast, but we have not decided whether it will be built in solid carbon or in sandwich. We wish to keep its height reasonable, in order to keep the centre of effort quite low".

gathered on the ORMA 60' circuit is very useful for the giant trimaran program, a very reassuring fact for us. We'll be able to tackle all the great records with confidence". Franck, who has a scientific and technical background, has been very present in all phases of the conception process, and has made sure that the good ideas developed for the 60' were transposed onto the giant tri. For instance, the aerodynamically efficient front crossbeam (reduced frontal surface) has been adopted on *Groupama 3* ... All things were done to guarantee that, despite being smaller than her rivals, Franck's boat will still be a serious threat, in a category where size does matter. "We won't have the biggest or the most powerful boat, and in the Southern oceans, we won't be better than let's say *Orange II* ... I hope we'll be as good, though! But in the transition phases, below 20 knots of wind, sailing upwind or downwind, the results of our research seem to indicate that the boat will be faster. Bruno Pëyron's recent outstanding record will be a tough one to beat, but that's the one we're after ... and we won't spare any effort to achieve our objectives". You can trust Franck Cammas on that! ♦

### Great machine for a happy skipper!

Today, Franck Cammas is enchanted, and one can easily understand why. His contract with *Groupama* has been prolonged until 2011, and he's been sacred ORMA champion for the fourth time, on a brand-new 60', so powerful it seems to be laughing at the rest of the fleet. "For me just like for the whole team, things could hardly be better. Our sponsor is very involved, gives us what we need to evolve, and all our efforts are paying off: the experience we

### SPECIFICATIONS

<b>LOA</b>	32 metres
<b>Beam</b>	22.50 metres
<b>Mast clearance</b>	41 metres
<b>Sail area (upwind)</b>	590sqm
<b>Sail area (downwind)</b>	850sqm
<b>Weight</b>	18 tonnes (approx./loaded in RTW configuration)
<b>Construction cost</b>	6.9 million Euros
<b>Design</b>	VPLP
<b>Yard</b>	Multiplast

## Solara Solar Panels



- HAIL PROOF
- CAN BE WALKED ON
- SIMPLE INSTALLATION
- DURABLE AND STRONG
- RELIABLE

CALL SCHIONNING MARINE ON:  
**1800 008 818 NOW!**