

TECH REVIEW

The Volvo Ocean Race's proposed 65-foot one-design will be plenty fast and technical, but also capable of being sailed by a wider variety of teams.

New Boats by David Branigan

Reigning in the Fleet

Nearly halfway through the recent Volvo Ocean Race, mast failures and disastrous hull damage for five of the six teams had given this ocean-racing classic a serious black eye. Race fans and supporters were apoplectic at the scale of carnage that had compromised the competition. The race's CEO, Knut Frostad, agreed the failures were unprecedented, and while hull damage and dismastings were separate issues, they did, however, spotlight a much more significant problem with the race's model. With dwindling participation, the cost of competing had to change—drastically.

A number of options were considered, including freezing the Volvo Open 70 rule and using the best elements of

the current generation. Cost, however, remained the decisive issue. With a competitive team costing upward of \$30 million per year, sparse sponsorship funding was preventing would-be teams from getting involved.

In May, Frostad announced that the next edition of the race will be sailed in a one-design, and it is now known that a canting-keel 65-footer from Farr Yacht Design will be the new face of the race.

"It's both a fix and an improvement," says Frostad. "We can be quite transparent that we're trying to reduce costs. The cost of this last race was definitely reduced, but it's still too much."

The news was greeted with outcries from many quarters—that the race was abandoning its fundamental develop-

mental component and was now little more than a professional version of the Clipper Round The World Race, an event where aspiring sailors purchase a crew position for some or all of the legs.

To ensure cost containment and the delivery of a fleet of at least eight new boats in time for the start of the next race in the fall of 2014, a consortium of boatyards around Europe will each build different elements of the new class to strict one-design limits (see Gaining Bearing, p. 20). Each boat will be built, fully equipped, and delivered with a full sail inventory to a team for less than \$6 million. The maximum team budget is estimated to be between \$14 million and \$18 million. The boats will also be capable of competing in at least two edi-

tions of the race.

Moreover, the fleet will be commissioned by race organizers with all costs underwritten by the race's owners, with the intention of selling each boat to the teams as they are completed. Frostad has secured the backing of \$48 million in addition to his normal race organization costs.

While criticism has come from some stakeholders and past competitors keen to uphold the race's traditions, support has also emerged from key players.

"This is a proper attempt to control costs, which in this environment has got to be top of the agenda," says Emirates Team New Zealand boss Grant Dalton. "The problem is so many people have other agendas. Crisis times need benevolent dictatorship. Knut has just taken it on; he's listened, taken feedback, but he's taken it on."

Dalton has also lambasted those calling for the developmental element of the Volvo Ocean Race to be retained. "There is a crisis, and we live in a bubble," he says. "Walk out on the street; people have no jobs, there is no money, and most people within the sport who would be critical—designers being one of them—don't actually live in that world."

Despite his support for the one-design concept, Dalton is unhappy with the "mafia" of interests in Europe colluding to exclude other potential suppliers to the new one-design project. "The mafia hold is pretty evident to us right now from the outside," says Dalton. He, of course, would like to see a proven New Zealand firm like Southern Spars be included in the new project. However, the timescale for the construction and delivery of the new fleet means suppliers outside Europe are at a disadvantage unless expensive air-freight costs are introduced to the current budget.

Dalton is also outspoken about the current state of salaries, and says more needs to be done to reduce personnel costs. He estimates 60 percent of a team's budget goes to payroll, and says reductions there will net bigger savings while still containing the boat costs. That said, he still expects salaries for key sailors to increase slightly as the winning edge in a one-design scenario will be found in talent once the technology edge goes away, and some sort of salary cap should be put into effect.

There's more to the move to one-design

than cost containment, says Frostad, there's the bigger issue of participation.

"We believe that the boats have developed in a direction that limits who can sail them," he says. Essentially, there is a finite pool of suitably experienced sailors to crew the current 70-footers. "There aren't too many people at the top of the pyramid who can sail these boats. We want to be at a place on the pyramid where people who want to race these boats can race them. If you were a new team, a youth team, or an all-female team, you may as well forget about it. So that was also a driver to make the boats smaller."

Scaling back the boat size may also address the problem that two-time race skipper Ian Walker and others discovered deep in the Southern Ocean: slowing down when prudent seamanship demands it. Continuously dropping off 30-foot waves at high speeds damages both boat and bodies, but depowering makes handling more difficult. In other words, it's either flat out or not at all.

It's a crude measure, but in the 2008-'09 edition of the race, Torben Grael's *Ericsson 4* established the 24-hour world monohull speed record at 598.6 nautical miles, a distance that stood untouched after this latest race in theoretically faster boats. Once the crews could see the potential for damage, they backed off in the worst conditions in favor of survival.

The fastest 24-hour runs in the race were in the penultimate leg crossing the Bay of Biscay to France when much was at stake, and the race was near coastal rescue units (see "Risk and Repercussions," p. 34). But Frostad ignores the quest for records and considers them distractions from the purpose of the race, which is to go around the world rather than make isolated achievements.

"The only thing you achieve by making the boat bigger is that you are faster compared to some unknown factor such as the world speed record, but then you're always going to want to build a bigger boat for that," he says.

Race management expects that a smaller, lower-cost program will also create more diversity in the makeup of the teams. Discussions are already underway about a potential all-female entry.

"It's not just about the size of the boat, it's about the complexity of the current boat, and this is a barrier to good sailors," says Frostad.

In the meantime, refinements to the



Volvo 65 Specs

Hull length	67'
Length overall	72'
Beam	18.4'
Max draft	15.4'
DSPL (empty)	23,700 lbs.
Rig height (deck-stepped)	99.4'
Mainsail area	1,625 sq.ft.
Working headsail area	1,453 sq.ft.
Upwind SA (mainsail and masthead Code 0)	4,854 sq.ft.
Downwind SA (mainsail and A3)	5,920 sq.ft.

design are ongoing, though production is scheduled to commence before the end of the year. Whatever tweaks and adjustments are to come, the scantlings won't be much different to those announced.

The basic sums (assuming a \$14 million maximum team budget) work as such: To fund a team, a principal sponsor would put in \$3.5 million annually over three years. A residual value of \$2.5 million in the boat and equipment following the race leaves around \$1 million in program costs that can potentially be funded through supplier partnerships and endorsements.

That the change to one-design is momentous, few disagree. Whether the shift away from constant technological innovation is prudent is a point that will be debated for years to come. In a sport not known for harmony, little else would be a shock, but as real-world economics take hold, dissent is remarkably muted.