



Byte size

Requirement: Reliable, robust satcomms system to deliver high definition footage from the Volvo Ocean Race to the UK for use in weekly TV highlights programmes

FleetBroadband / Fleet 33 / Inmarsat C

- Standard IP up to 432kbps
- Streaming IP up to 256kbps
- Videoconferencing, live and store and forward video
- Telemedicine capabilities
- Fleet 33 for back-up communications
- Inmarsat C for safety communications and polling

High drama



Cover: Volvo Ocean Race

After a gruelling nine months at sea, competitors in the Volvo Ocean Race are united in their praise for FleetBroadband



Nine months ago, eight boats, crewed by eight dedicated teams, set out on one of the world's toughest, most demanding voyages. The Volvo Ocean Race is not just a test of speed, but also of endurance, willpower and determination, as the sailors attempt to cope with everything mother nature throws at them, during the 39,000 nautical mile, round the world trip.

And boy, has she thrown some stuff at them this time round. On the very first leg, *Telefonica Blue* suffered a broken tiller,

while *Ericsson 4* crew member Tony Mutter had to be airlifted off the boat after contracting a dangerous knee infection. On Leg 5, from Singapore to Qingdao in China, *Ericsson 3* was in trouble, as the crew battled to contain water pouring in through a 4m hole in the hull, eventually using the wood from their bunk beds to build a new frame around it.

Meanwhile, *Green Dragon* was coming to terms with a broken forestay and a broken bulkhead, while for *Puma*, the problem was a broken boom. In light of all this, it is remarkable that as the sailors embarked on →

“FleetBroadband has been absolutely fantastic, it’s faultless. It just always works” Rick Deppe



A distance of 39,000 nautical miles was covered during the 2008-2009 Volvo Ocean Race

the final stages of the race in mid-May, departing Boston en route for Galway, seven of the eight boats that started the race were still in it, with Team Russia the only drop-out. Even more remarkable is the fact that TV (and internet) viewers around the world were able to enjoy all this drama, and much more, in glorious high definition, thanks to FleetBroadband.

"FleetBroadband has made the Volvo Ocean Race one of the most, if not the most, connected sporting event in the world," enthuses Volvo Ocean Race CEO,

Knut Frostad. "Billions of people have been able to see the incredible volume of imagery coming off the boats and share the drama and excitement of what is one of the world's most extreme competitions."

Dramatic footage

For this year's race, each boat was equipped with a Thrane & Thrane SAILOR 500 FleetBroadband terminal, together with a Livewire MediaDesk HD, supplied by Livewire Digital. This sophisticated solution supports a portfolio of seven high

definition cameras on board each boat. The dramatic footage they produce is edited on the Media Desk, using Final Cut editing software, and transmitted back to Race HQ in the UK, via FleetBroadband.

The task of capturing and transmitting the material is in the hands of a dedicated Media Crew Member (MCM) on board each boat. Though several of the MCMs are experienced sailors in their own right, their terms of engagement expressly forbid them from engaging in any sailing activities during the race. Their role is



incentive, in addition to its sponsorship of the race, Inmarsat has also offered a €1,000 (US\$1,350) prize to the MCM who makes the best multimedia contribution to each leg of the race, with an additional €10,000 to the MCM who is considered to have made the best contribution overall.

Whether it's the kudos of winning the prize, the freedom from any sailing responsibilities, or just their innate professionalism, the MCMs have surpassed all expectations, delivering some unbelievable content to viewers around the world. All have been consistent in their praise for FleetBroadband.

"FleetBroadband has been absolutely fantastic," says Rick Deppe, the MCM on board Puma's *Il Mostro*, who collected two media awards during the first six legs of the race. "It's faultless. It just always works."

Night and day

Guy Salter, MCM on board *Ericsson 4*, who took the media prize on the first leg of the race, tells a similar story. He says: "It's easy to be complacent these days, when fixed-line broadband is commonplace, but the FleetBroadband system is superb. Though it might be technically possible to send back high definition footage without FleetBroadband, it would just take hours.

"When you're 2,500 miles from land and you can send back footage within the hour of something happening, that's pretty groundbreaking and very impressive."

And Antón Paz, MCM on board *Telefónica Black*, has joined his co-racers in their praise, having described FleetBroadband as "amazing".

"Both uploading and downloading are really fast," Antón explains. "To get this sort of speed from the middle of the ocean is just incredible."

When the footage reaches Race HQ, just outside Southampton in England, the man with the responsibility for turning it into a finished TV programme is executive producer, Harold Anderson.

He too, has been highly impressed, both by what he has received, and by the fact that, over the course of the race, he has

continued to receive it. He tells *Via Inmarsat*: "The difference between this race and previous ones is like night and day. The decision to go to high definition means that technically, the quality of the footage is outstanding, but the process of getting the pictures back is a critical one in terms of whether or not the producer can produce programmes on time.

"For several weeks at a time, we have been completely dependent on footage coming off the boats to make the programmes, and we have not had a significant failure which has put this process at risk at any stage."

Anderson also feels that the decision to allow the MCMs to concentrate solely on their media duties has been a major plus point. "It has enabled them to capture moments we have never seen before and create great storylines for the programmes," he says.

One such example was the moment when Team Russia experienced a massive 'Chinese jibe' and the boat fell flat on the water. "That was a major incident that we would not have captured if the guy shooting the video had been a regular member of the crew who was needed to get the boat back upright," says Anderson. ➔

simple: shoot the footage, edit it and send it back to base via FleetBroadband to give the Volvo Ocean Race TV production team the material they need for 39 weekly half-hour shows and nine monthly, hour-long documentaries. As an extra

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Plain sailing

As managing director of Livewire Digital, which has both supplied and installed the AV and communications kit on board each yacht, Tristan Wood has been following proceedings with a keen eye. He admits to a few initial nerves before the race commenced, but says that since then, it has been virtually plain sailing.

"The move to HD was perhaps a risk in some ways, but it has paid off," he says. "There were a few challenges in the first few days, but it has just become smoother and smoother, and the way FleetBroadband has performed has been stunning. On Leg 7, from Rio to Boston, the Puma boat was averaging 375kbps, sending back 2.3GB of data. That's an incredible performance."

It's hard, in fact, to find anyone who is less than delighted with the way that FleetBroadband has performed. Ian Canning, vice president, marketing and product management at race co-sponsor and satellite airtime provider Stratos, says that this year's race has benefited from "an amazing leap forward in maritime communications technology".

"The performance and reliability of FleetBroadband is far superior to communications services deployed in past Volvo Ocean Races," is Canning's opinion. "FleetBroadband



FleetBroadband caught all the thrills of the race, such as on Leg 5, when Ericsson 3's crew battled to contain water pouring in through a 4m hole in the hull

provided excellent crew communications for the racers. It also helped bring the excitement and action of this important race to a global audience of nearly 2 billion, via HDTV, radio and the internet."

Anybody lucky enough to witness any of that dramatic race footage, whatever their preferred medium of viewing, is unlikely to

forget it in a hurry. But the story of how it made its journey from sea to TV is arguably as dramatic as the footage itself. ➔

- Inmarsat** www.inmarsat.com/volvo
- Volvo Ocean Race** www.volvooceanrace.org
- Thrane & Thrane** www.thrane.com
- Stratos** www.stratos.com
- Livewire** www.livewire.co.uk



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Light work

They may have had no sailing duties to perform, but the Media Crew Members (MCMs) in the Volvo Ocean Race did have some other responsibilities, alongside shooting and transmitting footage, updating blogs and arranging media interviews with crew members.

The MCMs were responsible for carrying out a water-sampling programme, which was run in conjunction with a Swedish shipping and logistics company, as part of an international study investigating the discharge of ballast water from ships. Ballast water, which contains microbes and small sea creatures, is typically taken from one location and then discharged thousands of miles away. The study intends to focus on the impact of this practice upon the local ecosystems in which the foreign water and its living contents are discharged.

At a set time each day, each MCM took a sea water sample and tested it with a luminometer (light meter). The results were recorded, along with the air temperature, cloud cover, water temperature and the GPS position of the boat. The information was then sent via FleetBroadband to the shipping company's Gothenburg laboratory for analysis.

The Volvo Ocean Race also underwent its own environmental audit in partnership with risk management specialists DNV (Det Norske Veritas), who created a custom-built Environmental Performance System (EPS), covering all elements of the race, including the event organisation, sponsors, the teams and their boats. The main objective of the exercise was to clearly identify areas for environmental improvement, and to create a benchmark against which to measure future races.