

The Atlantic Quest Exhibition

Rio de Janeiro to the Falkland Islands

Oli Donaghy



Atlantic Quest is a British Army, Royal Engineer expedition which launched in June 2023. Under the auspices of the Royal Engineer Yacht Club, nearly one hundred sappers will sail in six legs from the Corps' home in Chatham via the Falkland Islands and South Georgia to the Caribbean, where their yacht is due to arrive eight months later. (A Sapper is both the rank of a Private Soldier in the Corps of Royal Engineers and a term used to describe Royal Engineers in general.)

The first leg took the expedition from Chatham to Lanzarote and the second leg crossed the Atlantic and the equator to Rio de Janeiro. I was skippering leg three from Rio de Janeiro to the Falkland Islands, over approximately a month starting 16 August.

The crew are all regular army soldiers and officers and the purpose of the expedition is to develop soldiers' teamwork, leadership, resilience, confidence and courage through adventurous training. Additionally, members of the expedition are contributing to a greater understanding of our shared environment through scientific research. This includes collecting water samples to facilitate a study of changes in the ocean's surface layer and collecting snow and ice samples in South Georgia as part of University of Bristol and British Antarctic Survey glaciology studies.



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The Atlantic Quest batten passed from leg two to leg three late on a sweltering evening under the gaze of Christ the Redeemer and Rio's unmistakable skyline. The sun setting on one epic journey which had crossed both the Atlantic Ocean and the equator, only to rise the following day with the excitement of the voyage to come.

The in-coming crew, volunteers from the Queen's Gurkha Engineers, were no strangers to the cold but had swapped the altitude of landlocked Nepal for newfound seafaring skills. The South Atlantic between Brazil and the Falklands between 40° and 50° S is known as the 'Roaring Forties' for good reason. It is typified by high winds, significant wave heights and brutal weather systems, all exacerbated by the time of year; the Southern Winter. The crew arrived with some anticipation. Most had never sailed before training earlier in the year and now they were to sail one of the most challenging of all ocean passages.

Our yacht, His Majesty's Sail Training Vessel *Adventure of Hornet* is perfect for the task. She is a steel-hulled 72-foot cutter rig Challenge boat, built in Devonport at the turn of the Millennium. Designed for Sir Chay Blyth's Challenge business, she took part in the BT Global Challenge race and broke a world record in 2006

when legendary sailor Dee Caffari MBE took her on a solo, nonstop, west about world voyage. Since that time, in her service with the forces, she has been fitted out for sail training and every sail change or activity requires a crew to work together to achieve the task. Teamwork is essential. Nervousness was not evident as the crew enthusiastically engaged with the training and boat preparation under the direction of the two mates, Tim and Andy.

In the oppressive tropical weather *Adventure's* storm sails were inspected and run up to ensure that the crew knew the drills; if the weather deteriorated each crew member would be relied upon to know their role implicitly. Essential maintenance was completed to ensure that *Adventure* and her equipment were as prepared as possible. We were going to need to depend on both. Watch Leader, Sapper



Pre departure sail training in Rio

Rai, himself an accomplished sailor was able to coach less experienced sailors and translate the complicated sailing lexicon into both English and Nepali for the crew.

The epic task of victualling was a four hour operation overseen by Siobhan a Queen's Gurkha Engineer subaltern. Ensuring enough of the right food and supplies for 15 people for a month is no mean feat and storing supplies around the boat in such a way that it can be found and combined into the kind of meal that can be cooked on a simple gimballed hob on a 30 degree lean requires significant planning and organisation.

As skipper, I planned the passage ahead. The early part of our route would be coastal, no more than a day away from the sight of land. This took us out of the majestic harbour of Guanabara, which houses Rio de Janeiro's skyscrapers and is surrounded by steep sided tropical peaks. On leaving the harbour entrance we would sail southwest to the city and harbour of Itajai in the shadow of high rise neighbour Camboriu with its New York style city scape. From here, the south coast of Brazil changes and is low lying, beach fronted and remains shallow some distance out to sea with few options to shelter in a blow. This meant that timing our departure to fit with windows of opportunity in the austral winter weather was important. Heading further south into Uruguay would afford our final run ashore in the attractive seaside resort and fishing town of Punta del Este before setting sail to Port Stanley, a thousand mile ocean passage south through the Roaring Forties. After three days of intense preparation, we were set to depart.

The morning of our departure was calm with a cobalt blue sky. We slipped our moorings from the marina and glided through the bay enjoying what must be one of the best views of that iconic city, taking in the soaring Sugarloaf Mountain, Copacabana Beach alive with early morning joggers, the towering hotels and office blocks and the favelas in the hinterland clinging to the hillsides. Above it all with arms stretched wide, the amazing art deco statue of Christ the Redeemer. The harbour entrance was busy as a steady stream of tankers supplied the busy port. Outside the harbour we raised our mainsail smartly up with the combined strength of the crew hauling on the halyard to the age old timing 'two-six heave'.

Only moments later, an eagle eyed mate spotted ominous looking white horses on the horizon where the waves were getting whipped up. Our flat calm morning sail was about to change. Over a period of about five minutes the wind rose from a pleasant 7kts to 40kts – a gale. We hastily set about reducing sail but didn't quite manage the task before chaos erupted around us. With the wind whistling through the rigging and loose lines flogging, the maelstrom was an important early lesson for the crew. Our training paid off and matters were quickly under control, but the episode was instructive. The east coast of South America is prone to snap winds, known locally as *Pampeiros* which are unannounced, short lived and blow with ferocity. From that moment onwards the watches kept a keen eye on the horizon and, with any building cloud or sea state, the watch leaders monitored the barometer nervously. After two hours, the weather returned to the flat calm of



Adventure of Hornet underway. (Service vessels are not permitted to fly club burgees)

the morning, and we continued on our way. Our lookouts were rewarded for their vigilance by sights of the most amazing wildlife.

All along the coast of Brazil we encountered pods of humpback whales. Their spouting exhalation could be spotted at some distance and they weren't shy of coming close by much to the excitement of the crew. One memorable moment seemed to catch their attention. Early in the trip, the crew were being put through their paces on rescue drills. These important lifesaving drills involve lowering a crew member dressed in bright orange waterproof safety gear to the waterline to collect a casualty. For the drill the casualty is replaced by an inflatable fender weighed down with a coil of rope. The critical moment requires concentration: the skipper to line up the boat in the final approach; the rescuer, lowered carefully to the waterline; and the crew, ready to receive the casualty and perform first aid as required. At this precise moment a humpback mother and her calf distractingly surfaced less than a boat length away, monitoring our manoeuvres suspiciously. Sapper Gurung, the nominated rescuer, having met the mother whale's gaze at water level, rather closer than he would have liked, was wide eyed and not surprisingly extremely keen to be recovered inboard!

Whale sightings never failed to impress us, but the most extraordinary encounter came a day or two short of the Falklands when we were flanked by a pod of Minke whales for around an hour as the sun was setting. They breached the surface all round us in an incredible show, giving the helm cause for concern, but leaving an indelible impression on all the crew. Surely one of the most extraordinary and impressive experiences on the planet.

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We were also joined by seals and dolphins. By day, the dolphins would leap and play in the waves at the bow or dart along beside us. At night their tracks were lit up by the phosphorescence in the water giving them an other worldly, magic quality. Initially our outriders resembled the grey common dolphin that are seen in home waters, but latterly were replaced by very striking Commerson's dolphins, small but



Dinner on board, taken by the skipper

impressive acrobats, with distinctive black and white colourings resembling a mini orca. Seals by contrast would laze in the water wafting a flipper aloft and would roll over and slip off silently as we approached. In Punta del Este harbour we were greeted by a host of sea lions and fur seals that had made the marina their home, often dominating the pontoon and preventing the crew from getting ashore, as they – not the crew – lay astride the narrow walkway barking at all who approached.

Bird life was also significant with numerous species of albatross, petrel and as far north as Uruguay the odd Magellanic penguin. These latter seabirds were elusive and tended to dive as we approached leading some on board, including me, suspicious as to whether penguins had been spotted at all, but they became increasingly bold as we progressed. Worryingly, in more northern waters off Brazil and Uruguay we did see a number of dead birds in the water which may have been evidence of the impact of the avian flu pandemic plaguing marine life across the globe. Thankfully, south of Uruguay we saw none. As we delved further into the southern waters our main winged companions were the black and white spotted cape petrel and the great soaring albatrosses that seemed to hang effortlessly above the waves, eyeing our life on board curiously. Off the coast of southern Brazil on a dark night one particular albatross landed on board and became stuck in the guardrail only to be discovered and freed with the first light of morning. Although the bird flew off seemingly unharmed, there was some parallel with the *Rime of the Ancient Mariner* as this occurrence caused our luck to change.

A short time later, when wind had died and come round to our bow we reverted to engine to keep up progress. We had a schedule to meet to hand the boat over

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in Port Stanley to the next crew for their epic trip to South Georgia. Our progress was interrupted by the sound of the engine bilge alarm which had performed its function admirably; on inspection there was indeed water in the void beneath the engine. Further investigation determined the source of this water was the engine's exhaust manifold that was leaking not only water, but also invisible toxic fumes into the engine compartment. There was no question about it, the engine was out of use and whatever we were going to do, it was going to be under sail. We were off the low lying shallow coast of southern Brazil and the options were not great. We were three days into the passage from Itajai and turning back to that port would have added days, perhaps weeks on to the passage. Other ports nearby were suitable to shelter from weather but were mostly container ports for commercial shipping. There were no marinas that would have allowed us to be alongside for the required engineering attention. There was no dangerous weather forecast, so the best option was to continue onwards, towards Uruguay and Punta del Este, sailing as best as we could against the southwesterly wind. Initially our tacking and sail



Once Magellanic penguins overtook us!

changes were clunky and slow, but faced with days extra the team pulled together and swiftly improved and we eked every knot of forward movement we could from the wind which was at times quite strong and at others, barely noticeable. One morning it dropped completely leaving us rolling on the swell for hours. This motion caused a jarring flogging of the sails with no perceptible propulsion at all – such that we were overtaken by a pair of Magellanic penguins leisurely paddling along. Eventually our luck changed and the wind filled in and we had a good breeze to push us into Punta del Este at sunset, some seven days after we had set out on what we thought would be a three day passage.

We were blessed with a crew of engineers and under the supervision of our mechanically minded mate, Andy, an ingenious temporary fix was done whilst we were sailing. Heat proof self amalgamating tape, two part epoxy and part of a soft drink can were all combined to make the faulty part safe enough to use the engine for a short period of time to enter the harbour. It worked like a dream and though the Yacht Club Punta del Este sent out a launch to assist if required it wasn't needed in the end. Once safely alongside we had the challenge of finding a niche part for a specialised British built Perkins marine diesel engine somewhere in Uruguay. Andy took the offending part to Montevideo with Craftsman Hardiman, a Royal

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Electrical and Mechanical Engineer. Between them and with support from the British Embassy, they were able to find a fitter who could manufacture a fix. But it was going to be days before it was complete. We were to spend six days in Punta del Este, a great place to be stuck.

Faced with delay, a programme of maintenance and training was put together but the crew were tired after a long time at sea. Four hour watch changes mean that a full night's sleep is impossible as each watch shoulders a fair proportion of the work. The three watches are split between 'on' watch, 'off' watch and 'morale' watch. The on watch sails the boat, keeps a look out, changes sails and takes the helm according to the instructions of the mate. Morale watch completes all the below decks tasks essential to life support aboard: cooking, cleaning, rearranging the sails and stores and generally keeping the boat hygienic while living in close confinement. Morale watch's tasks are made significantly more difficult when the boat is heeling and moving about wildly in the swell. The off watch, by far the best deal of all gets to rest in their bunk. Alongside in Punta del Este the crew were liberated from this

punishing programme and had their first full day of rest before we entered period of maintenance.

Each Royal Engineer soldier has a trade alongside their combat role, and these were put to great effect. Sapper Gurung, a carpenter fixed the wooden grating that formed the floor of the forepeak where the sails are kept. Sapper Rai is a Heating and Plumbing Engineer and was put to work troubleshooting the boat's heating system,



Every sapper used their skills

which had a tendency to lose pressure on cooling. Sapper Thapa, an electrician was charged with checking all electrical items for faults or low batteries. Others used generic engineer skills, such as knowledge of knots and mechanical advantage around the boat. Sapper Pariyar, we discovered is an ace at sail repairs having watched cobblers sew leather soles in a shoe factory back in Nepal.

Our berth in the marina was better suited to an Argentine gin palace and saw us stern to a wall 2m higher than our deck and beyond our passerelle's reach; the engineering solution to getting the crew ashore safely was exquisite: lashed planks, cantilevers and moving joints to account for the constant motion of the

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Extra training

boat and the periodic tidal changes. After a puzzling couple of days we realised the height of tide in Punta del Este is much more heavily affected by weather than anything else and tidal predictions were mostly meaningless. In contrast, a change in wind direction and atmospheric pressure could lead to a 60cm rise or fall in tide.

Our unexpected delay in Uruguay also allowed for some extra training which served to focus the crew's minds on the Southern Ocean voyage ahead. This saw damage control drills, movement of a casualty, throwing lines and knots and a recap of the storm sails. The ability to throw a line got competitive and became a hotly contested inter watch challenge,

finally won by Red Watch with Corporal Limbu throwing furthest. Eventually the new engine part had been fabricated and fitted and the engine was back to full working order. We were ready to depart.

It was a somewhat piratical departure from Punta del Este, our week-long adopted home, at the dead of night. Under starlight alone we left the comfort of the harbour into the swell of the outer River Plate estuary. Our course was almost exactly due south towards Port Stanley, careful to avoid Argentinian territorial waters where we wouldn't have been welcome. During our time ashore the weather had turned significantly; fresh spring weather had reverted to icy driving rain and

Pritesh and Hitson and their proudly made (very good) loaves, baked underway from Punta del Este to the Falklands





Heading into a cold night

significantly higher wind and associated tricky sea state. Our nighttime departure was necessitated by an impending weather system which we needed to get ahead of; further delay would have meant days more waiting.

For the majority of the trip the Roaring Forties lived up to their name and we had a steady F7 for much of the passage. *Adventure*, being large and capable enough took it in her stride and we made good progress. For the first time the wind direction, now aft of the beam supported a straight line passage. The temperature on deck was at times subzero, with a fearful windchill, so the on watch would rotate with one of their number in the cabin every 20 minutes to thaw out. We were all grateful for Sapper Rai's efforts with the heating which worked like a dream. By the time we reached the Falklands the weather had all blown through and we approached the islands at the crack of dawn in a flat calm, inky black sea. Nevertheless, we were well prepared and not taking any chances as the pilot describes a tricky approach 'The coast is tortuous, tidal currents are strong and there are many off-lying reefs. Navigate with extreme caution.' As the light rose, we were greeted by penguins and dolphins, and the reassuring sight of the Royal Navy launch which had come to guide us in. It was a relief for all to reach landfall.

We docked at the military facility at Mare Harbour with support from Royal Logistics Corps colleagues and were greeted by the incoming crew, eager to hear how leg three had got on. HMS *Medway* was also in the Harbour, which was a happy coincidence. The Atlantic Quest expedition had launched from Chatham, home of the Royal Engineers on the River Medway in mid June. The Royal Navy know how to put on a party, and we were remarkably well hosted by the Captain and ship's company on board HMS *Medway* the day after we arrived.

For many, this was their first visit to the Falklands, but all the crew were aware of its place in modern military history. With only two days before our RAF flight



Visiting Goose Green. Everyone was aware of the Falklands place in modern military history back to Brize Norton, and a return to normal life, we filled our time with a packed programme. A Royal Marine who had served in the war gave us a tour of Goose Green and talked us through the fateful battle that saw the heroic death of Lt Col H Jones VC. We visited a number of memorials, not least the Royal Engineer memorial on Sapper Hill and the poignant Gurkha memorial on the road from the Mount Pleasant Military facility to Port Stanley. Importantly, on 16 September, a month after we started, we handed the Atlantic Quest batten to leg four. Having had a taste of the brutal conditions they had ahead of them, there was much respect and admiration for the incoming crew.

We felt that our leg was an achievement. The fourth leg, heading east towards South Georgia, has significant further challenges ahead of them: exploratory mountaineering across rugged landscape and fearsome sub-Antarctic weather. We wished them ‘fair winds and a following sea.’

Leg three in numbers:

Crew: 15

Days on board: 27

Distance Logged: 2304 Nautical Miles

Night Hours: 177

Sail changes: 57

Ports visited: 3

Top Speed: 12 knots

Top wind Speed: 56 knots

Tea bags used: 1432

Jars of Mr Naga's (extremely hot!) Chilli sauce: 4

Loaves/cakes baked: 19