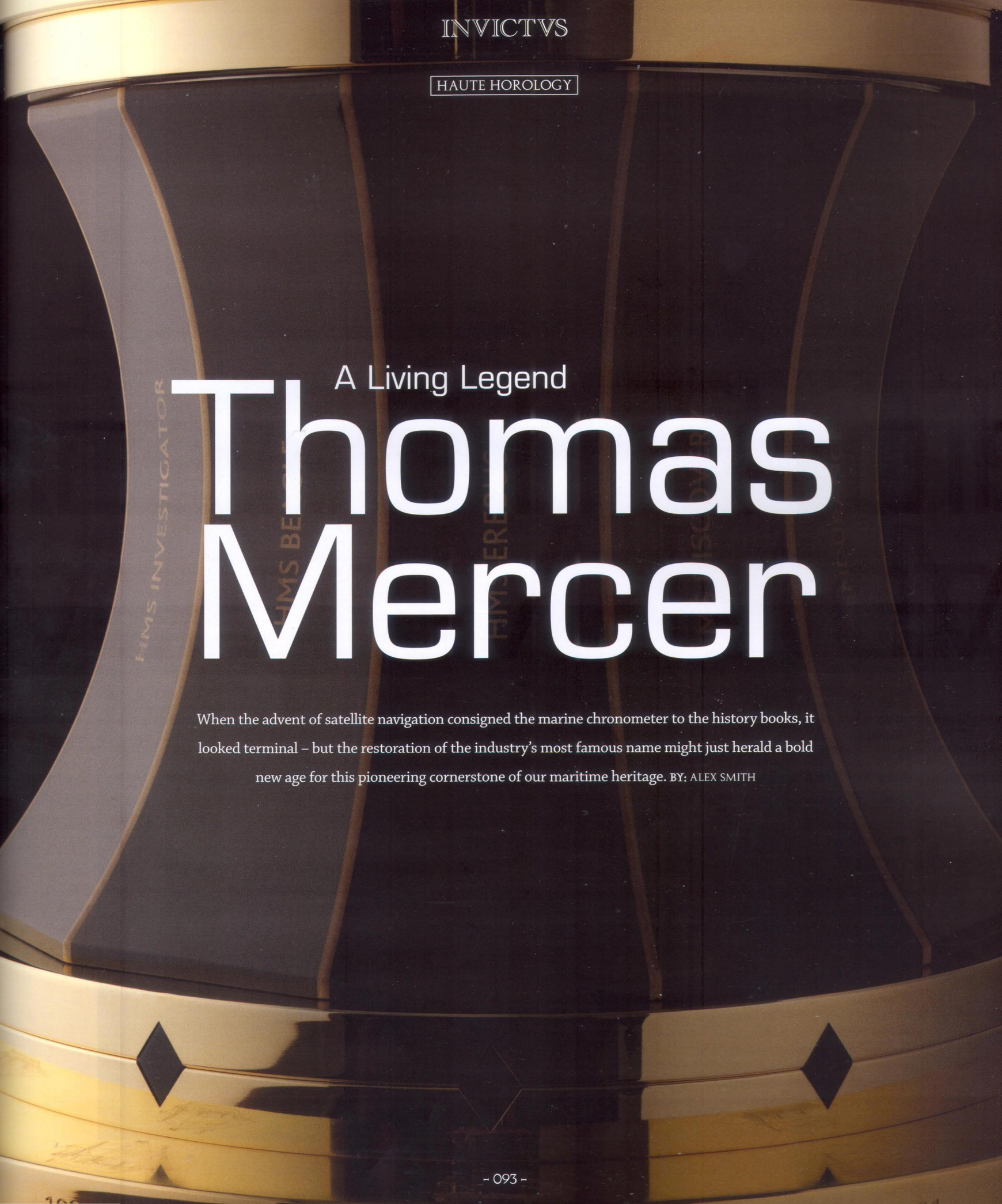
INVICTVS™

By Invitation Only

Issue 5 - Fall 2013

"I am the master of my fate, I am the captain of my soul" William Ernest Henley



A Living Legend

Thomas Mercer

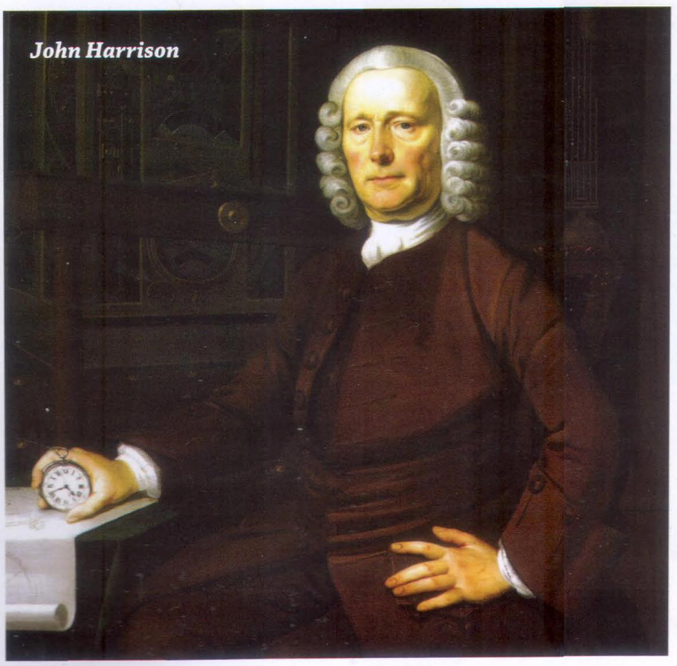
When the advent of satellite navigation consigned the marine chronometer to the history books, it looked terminal – but the restoration of the industry's most famous name might just herald a bold new age for this pioneering cornerstone of our maritime heritage. BY: ALEX SMITH

It is no secret that modern Britain is a nation forged on the supremacy of its naval fleets and on the reach of its imperial trade routes. At its height, Britain enjoyed the largest empire in history, covering more than a quarter of the earth's entire landmass and encompassing a fifth of the globe's population. Naturally, influence on this scale generated profound legacies in language, culture and law that survived the intervening years and persist throughout the world to this day. It's an astonishing phenomenon and while it might seem far-fetched to put two centuries of global penetration down to one particular gadget, there is no doubt that the marine chronometer was one of the most vital weapons in Britain's expansionist arsenal.

THE LONGITUDE PROBLEM

In the 17th and 18th centuries, navigation at sea was a fiendishly difficult thing. A sextant and some celestial observation could give you a pretty good idea of your latitude but ascertaining your longitudinal location was altogether more complex. The great hopes for improvement in this regard were centered on the measurement of time – and the principle was very simple. A sailor could always tell when it was noon at his specific location simply by observing the sun. If he could also be certain of the time at a place of fixed longitude (such as Greenwich, England) then he could easily extrapolate how far east or west he must be of that line. For every four minutes earlier, he would be one degree east and for every four minutes later, he would be one degree west – and given that one degree equates to 60 Nautical miles, he could then calculate his location from the time differential.

The difficulty however was equally simple. Although there were plenty of accurate clocks around, the movement of a ship at sea (not to mention fluctuations in temperature and humidity) made these traditional landlubber timepieces hopelessly inaccurate. With so much hinging on projection of sea power, it was a situation that Britain was desperate to rectify. So, in 1714, the British Government offered a huge prize of £20,000 (about $4.7-million (USD) in today's money) to the first man who could solve what became known as 'The Longitude Problem'. With a reward of this magnitude on offer there were plenty of enthusiastic attempts to claim it, but it wasn't until 1761 that a working class joiner by the name of John Harrison took victory with his H5 model. In essence, what this humble man had done was kick-start the age of the marine chronometer and changed navigation forever.



John Harrison

Harrisdarrison's H5 Chronometer not only seenly secured him a prize worth aroundround $4.7-million today, but also pldso played a significant role in Britanritannia ruling the waves.

THE IE RISE OF THOMAS MERCER

Almost a cest a century after Harrison's breakthrough, a 32-year oldar old man named Thomas Mercer, who had become ratne rather disenchanted with the clock business, took atook a job as a finisher for a highly regarded chronometonometer maker named John Fletcher. It was an age of ate of annual trials that continually pushed the accuracy cacy of chronometers and extremely high prices weres were routinely paid for the very best – so in 1858, MercoMercer set up his own chronometer business in Clerkenerkenwell, London. Things quickly took off and after thfter the company's relocation to St Albans in 1874, ThonThomas Mercer became the world's undisputed frontl frontrunner in marine chronometers.

In fact, the rt, the company became so prolific that it built more than athan a third of the globe's 90,000 models and

supplied equipment to more than 370 other producers. In addition to being the British Admiralty's chronometer of choice, it repeatedly won accuracy prizes at the various annual trials and Mercer was even called upon to help with the restoration of H1 and H3, the 'genesis' timekeepers John Harrison had originally invented in his attempts to solve The Longitude Problem. In short, Mercer chronometers had achieved a position as a company of fundamental importance to national well-being and prosperity. So, when famous British explorer, Sir Ernest Shackleton, faced 22-months adrift in the vast wilds of the Southern Ocean, his Mercer timepiece was very well set to play a starring role...

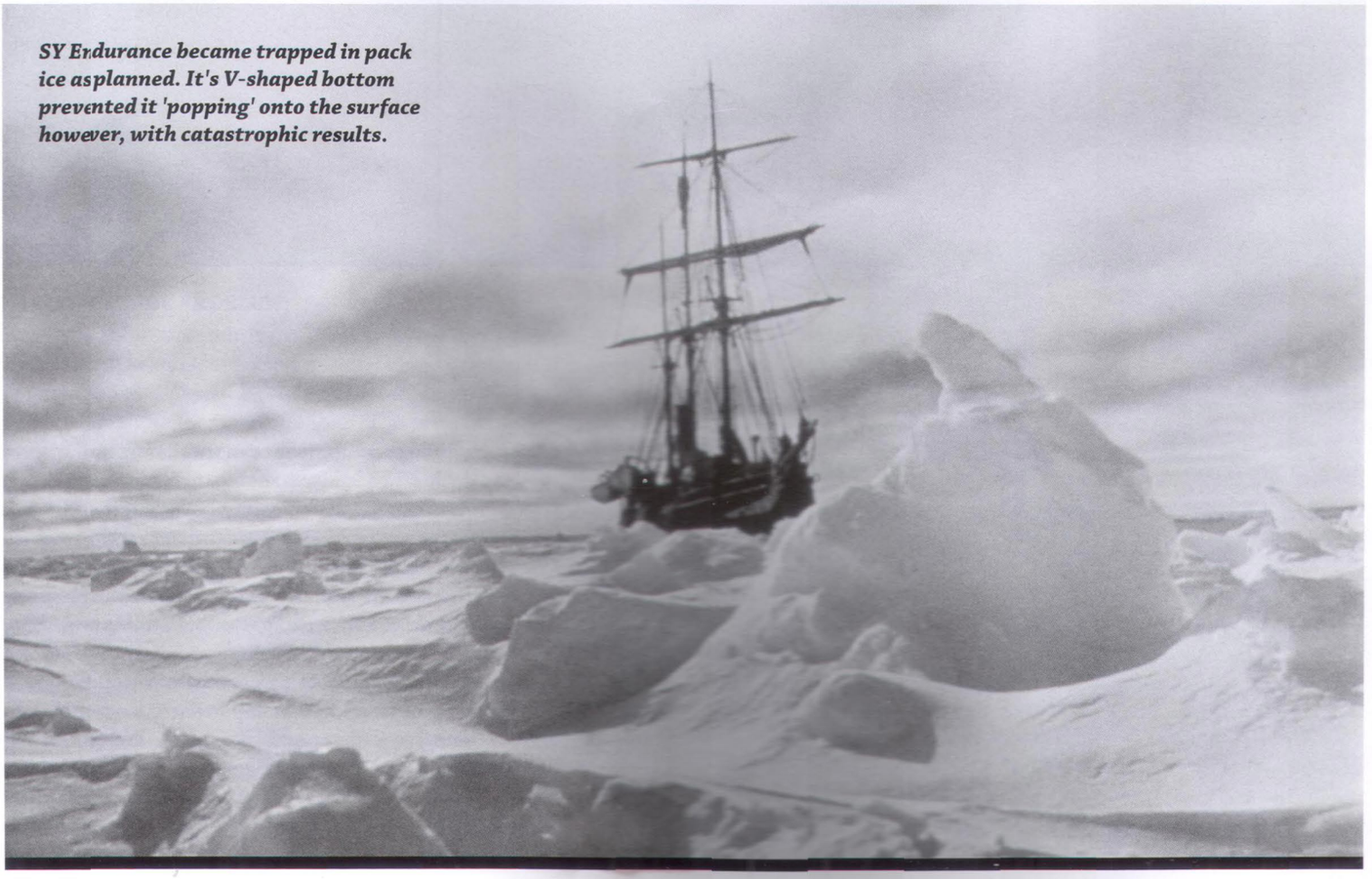
ENDURANCE

Thomas Mercer's chronometers were essential equipment in the golden age of exploration, including this one used by Ernest Shackleton.

Having been beaten to the Pole a couple of years earlier by both Roald Amundsen and Captain Scott, Sir Ernest Shackleton decided his own quest would have to encompass something more bold and ambitious than had ever been attempted. His answer was to launch an expedition to traverse the entire Antarctic Continent on foot, covering 1,800 miles of largely uncharted territory from the Weddell Sea coast via the Pole to the Ross Sea coast. It was a colossal undertaking and in the event, things went badly wrong.

His ship, SY Endurance, became trapped in the ice pack as intended, but as the party settled in for the 'travelator ride' of the ice's annual clockwise rotation, a design flaw in the ship put all in peril. Rather than 'popping above' the ice as previous rounded hull shapes had, Shackleton's new V-shape hull was instead encased within and crushed by the ice. This left the entire 28-man crew cut off in the Arctic winter with just three small lifeboats. They managed to survive for more than five months in this perilous condition, dragging the boats and equipment across the frozen wastelands, before, in April 1916, the melt finally released them and they made a dash for Elephant Island. Having already survived one incredible feat of endurance, with no prospect of rescue – it would literally take years before they were missed, a search party could be raised and arrive on the scene – Shackleton and five others were forced to set off from Elephant Island in search of help. What followed was a struggle that has gone down in history - an epic 17-day, 800 Nautical mile voyage across the wildest ocean on earth in a 23-foot open boat. Wearing nothing but worn-out tweeds and woolen garments, utilizing their surviving navigation equipment – which while including the Mercer chronometer, only two accurate sextant readings could be taken – and navigating two hurricanes, they finally made land on the storm-lashed coast of South Georgia. The navigation, seamanship and courage were nothing short of miraculous, and represent a second incredible feat of endurance that could be considered seminal alone.

The ordeal was not over however, and what lay ahead was an overland trek, through the previously unassailable frozen, glaciated mountains of South Georgia to the Stromness Whaling Station. Again, driven on by Shackleton's determination that not one man was to perish on the expedition, they conquered the mountain range and arrived to raise the alarm and affect a rescue. Thanks to this astonishing rescue mission by both land and sea, not a single one of the 28 men in Shackleton's crew lost his life. It's a story of enormous heroism and extraordinary navigational prowess and now, nearly a century on, it has finally been repeated...



SY Endurance became trapped in pack ice as planned. It's V-shaped bottom prevented it 'popping' onto the surface however, with catastrophic results.

Sir Ernest Shackleton, who miraculously kept his vow of ensuring not one man would perish during the expedition.

Seb Coulthard, Expedition Bosun during the recreation of Shackleton's epic passage from Elephant Island to South Georgia. – one of the most remarkable feats of navigation ever recorded.

THE SHACKLETON EPIC

In January 2013, the 'Shackleton Epic' team, which was set up at the behest of Shackleton's granddaughter Alexandra, became the first group to successfully re-enact Sir Ernest Shackleton's voyage – and remarkably, it did so with precisely the same equipment as Shackleton himself. From the clothing to the boat, the charts, the almanac, the sextant and of course the Thomas Mercer chronometer, every detail was faithfully recreated. Expedition Bosun, Seb Coulthard, gave INVICTUS a personal insight into exactly what this extraordinary expedition involved and the mentality of an explorer and adventurer...

How did you become an adventurer?
My father spent a lot of time in the jungles of South America and the deserts of Africa and Australia – and wherever he went I had to go with him, so I was kind of brought up into an adventurous outdoor life.

Your approach seems to be a personal re-examination of the expeditions taken by the explorers you most admire. Is that fair?
That's a nice way to sum it up. For me, an explorer is someone who goes out into the unknown. They find something and they name it. Then it's done, conquered... and it's back home for tea and medals. But adventuring is about going into the big outdoors, seeing the world for what it is, reliving an experience that perhaps happened a long time ago and then bringing it back and sharing it with the public.

But in a world where wildernesses are smaller and equipment is more effective, is it becoming more difficult to find fresh challenges?
There is a common notion that everything has already been explored; that the satellite camera and Internet have made the world smaller; that it's all been mapped and we don't need to go exploring any more. But that's incorrect. There's plenty left to explore – both in ourselves as human beings and in terms of what's happened in our past that wasn't documented by written word or photographic record. And that brings me directly onto Shackleton. He was very conscious that the images of his expedition would ultimately be the proof of his achievements in the Antarctic – but when he set off from Elephant Island, he left his photographer behind. So because there is no visual record of what happened during that boat journey, we set out to pay tribute to Shackleton and the men who accompanied him - and more importantly, we set out to relive, re-experience and revisit what he went through.

So would you class yourself as a kind of empirical historian - a physical re-animator of the past?
Well for me, maritime history is my passion. You just wish you could have a moment to stand next to men like Shackleton, Donald Campbell, Captain Bligh or Christopher Colombus and say to them 'What was it like to be on board your ship and to do what you did?'

Is that why you eschew modern equipment and use the same instruments as the original explorers?
Yes, because if you're going to relive a moment in history; if you want to see what it was truly like and really immerse yourself in the experience, you have to use the equipment from the period. In the case of the Shackleton Epic, we were fortunate that Shackleton listed the kit he used during the James Cairn voyage and he specifically mentions a chronometer, sextant, charts, almanac, compass and a whole variety of different items. We went away, trawled through the archives and established links between the manufacturers and the expedition – and fortunately, the boxed marine chronometer built by Thomas Mercer survives. It's at the National Maritime Museum in Greenwich so we looked for the most similar item we could find.

In the end, you found a 1961 Mercer. Were there significant technical differences between that and the 1914 original?
The movement itself (the spring Detent escapement, the fusee, the chain) is pretty much the same technology that has been around for hundreds of years. Some of the materials are slightly different but it is essentially a clock that's powered by oscillating movement so it's the same equipment that Shackleton would have used.

How accurate did it prove during your voyage?
When we did our navigational calculations, we got a warm fuzzy feeling that the dots were moving away from one another at a pretty constant rate according to our speed. It seemed to be working – and by the time we reached South Georgia, after 800 Nautical miles, our error was just 11 Nautical miles. When you read Shackleton's account, he was worried they would deviate by 60 Nautical miles because if you miss South Georgia, the next stop is South Africa. But by some miracle, they made it – and with a bit of luck, we made it too. It was an incredible feeling to get so close to what those men experienced.

The period Thomas Mercer chronometer and the sextant used during the Shackleton Epic.

Did it require a fresh set of skills to operate your expedition gear?
As a maritime culture, we have discarded our traditions and our hard-learnt lessons and that's a shame. So yes, we had to go back to 1914 and understand how you use time as a reference for where you are on the planet. When you use a sextant and a chronometer, you don't draw a cross; you draw a triangle. It's not an exact thing; it's a human thing. My eyeball is never going to be as accurate as the mechanism in a chronometer. We simply try to minimize the error as much as possible. Now though, Thomas Mercer is working to claw back this tradition. The new Mercer chronometer is the pinnacle and the future of modern maritime chronometry. There's no other company doing this - and while it may be a luxury item, I would be quite happy to use it to navigate a vessel without GPS.


THOMAS MERCER
EST 1858
ENDURANCE
SANTA MARIA
VICTORIA

MODERN MERCER

In November 2012, after almost three decades of inaction, Thomas Mercer finally returned to prominence at the SalonQP Fine Watch Exhibition in Chelsea, London. With input from the fifth generation of the Mercer family, the re-born company crowned the event with the unveiling of its new flagship 'The Thomas Mercer Classis by Andrew Winch' - a chronometer designed to transform what had become widely regarded as an obsolete navigation tool into a bold, uncompromising and highly desirable objet d'art.

Derived from the Latin word for 'Fleet', the Classis is designed to be a celebration of our greatest maritime discoveries. To that end, it features 12 hand-carved facets to the winch casing, each recounting a famous voyage and displaying the profile of a ship made famous for its contribution to marine navigation. Alongside each profile are the co-ordinates of the ship's most significant discovery, with its name inlaid in satinwood on the Macassar Ebony case. Appropriately, one of the 12 depicted is SY Endurance, Shackleton's ill-fated ship in the Imperial Trans-Antarctic Expedition. There is no doubt that it is an astonishingly beautiful piece of work, but to find out what was really behind this dramatic reinvention of the marine chronometer, we headed to Thomas Mercer's new headquarters in Richmond, London, for an exclusive interview with company CEO, Alessandro Quintavalle...

Alessandro, how did you come to be involved with a quintessential British brand like Thomas Mercer?

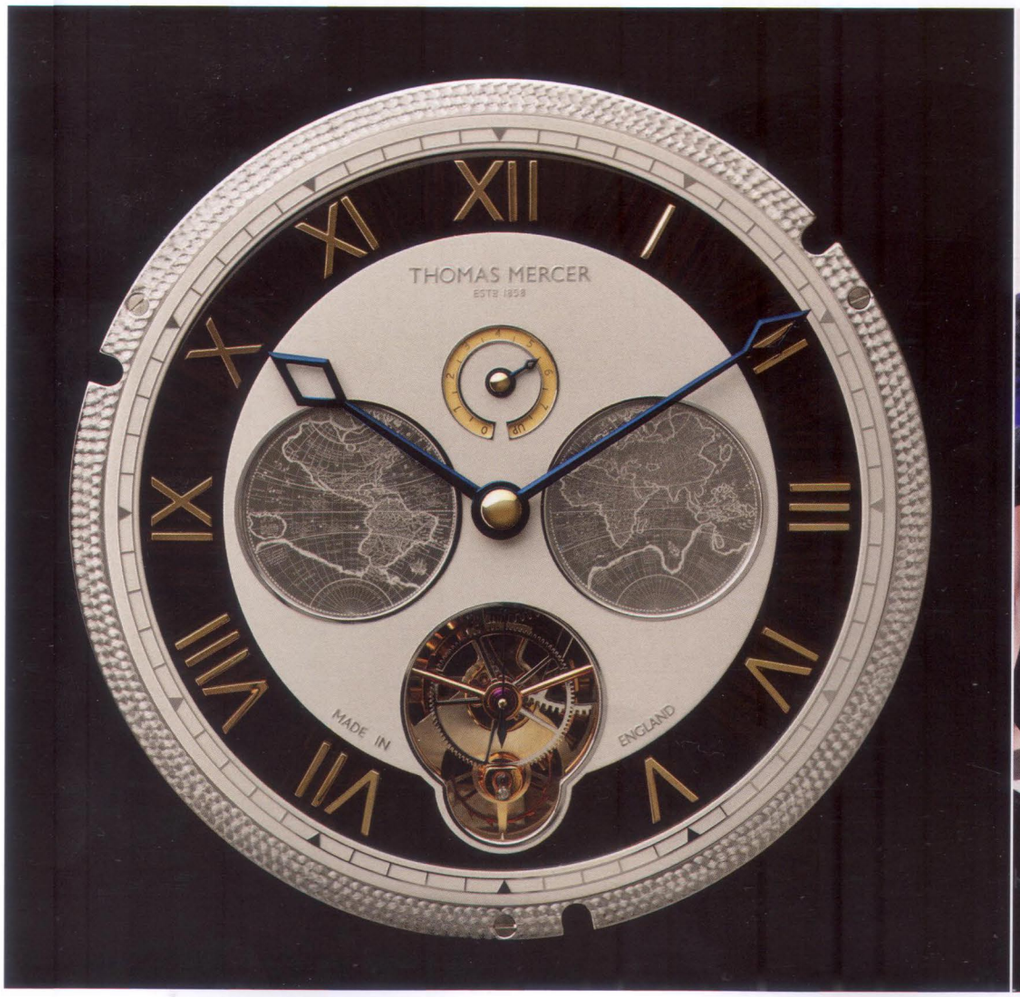
I've been in the business since I was a child. My parents manufacture clocks in Italy and back in the 80s, my father was a distributor for Thomas Mercer. Tony Mercer came and dined with us regularly; through his stories of the history of the brand he created a deep passion and respect for the brand within me. Also on a personal level, I love the sea and having grown up surrounded by clocks, marine chronometers were always the objects that fascinated me the most.

The advent of GPS brought Mercer's activities to an end in 1984, so how did you go about re-launching the name?

When we wanted to re-launch it, we had to ask: 'What is the best way of making a historic brand relevant today' – and the 'Britishness' for us is one of the key elements. Of course, the first step was to re-establish links with the Mercer family and we were lucky enough to meet up with Tony in the last two years of his life. We also had Joel Mercer (Tony's grandson) on board as our consultant on family heritage, so we are working together to reconstruct the history of Thomas Mercer as accurately as possible.

But from our research, it is also interesting to draw a parallel from

Alessandro Quitavalle, CEO of Thomas Mercer, and the first chronometer in a new collection designed for the brand by Andrew Winch.



200 years ago, because we consider the marine chronometer the key instrument for British supremacy at sea - and today one of the legacies of this is that the best designers are British. This is one of the key reasons we partnered with Andrew Winch Designs for our flagship 'Classis' chronometer.

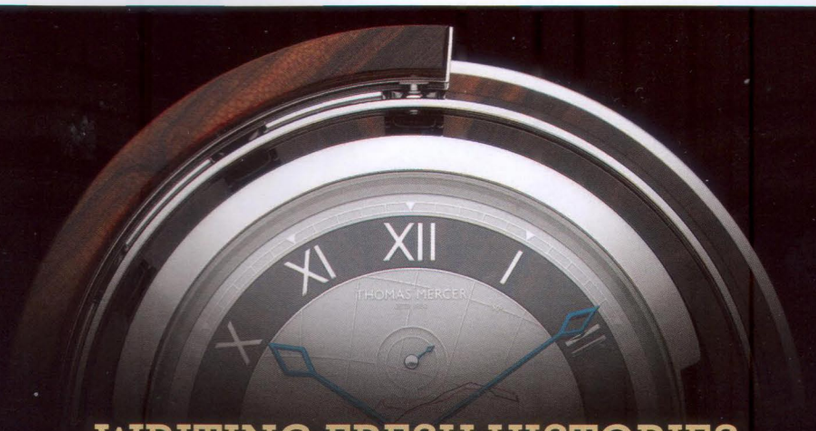
Aside from the fact that it is the only new marine chronometer in the world, what makes the Classis particularly special?
We had to retrace the way chronometers were made a hundred years ago because that is an art that was lost. A chronometer is a precision instrument where temperature compensation of the hairspring is required, so today, we use the same technology that was used a century ago – and very close to the same materials. Of course, that's very difficult to achieve today because chronometers are no longer necessary for navigational purposes, so those crafts and skills have simply gone.

So what features does this 'traditional technology' involve?
We wanted to include all the key features of a true marine chronometer. We identified the chain fusee to deliver constant energy; we identified the double gimbal suspension to allow you to keep the movement horizontal; and in terms of the escapement, the Spring Detent is by far the best and the one originally used by Mercer. So we decided to re-present these features today. But we are also aware that it is very important to innovate within a tradition, so one point of innovation was to completely remake the mechanism. The layout of the Classis enables you to see the mechanism and the escapement is visible on the dial. The 'Ovalising Balance' (a process Mercer started in the 70s but never put into production) was developed with the former Production Manager of Thomas Mercer – and compared with the old bi-metallic system, it provides much better performance.

Who would purchase a modern chronometer?
Ideally, the chronometer is perfect on a large boat, but there are many people who would prefer to have it in their home – either because they are passionate about the history of navigation, are passionate about horology, or to provide a connection with their yacht. It is a very niche market but our focus is to pay homage to the historical importance of the marine chronometer. One of the goals was to bring the chronometer back on board, but not necessarily in the cockpit. Yes, we are focusing on a contemporary British objet d'art but technically, the Classis is 100 per cent chronometer.

What does the Classis cost to buy?
It has a retail price in the region of $400,000 (USD), but as you can see it is really a work of art. It has received considerable interest and the feedback has been that the product possesses a strong sense of combined technology, beauty, history and heritage.

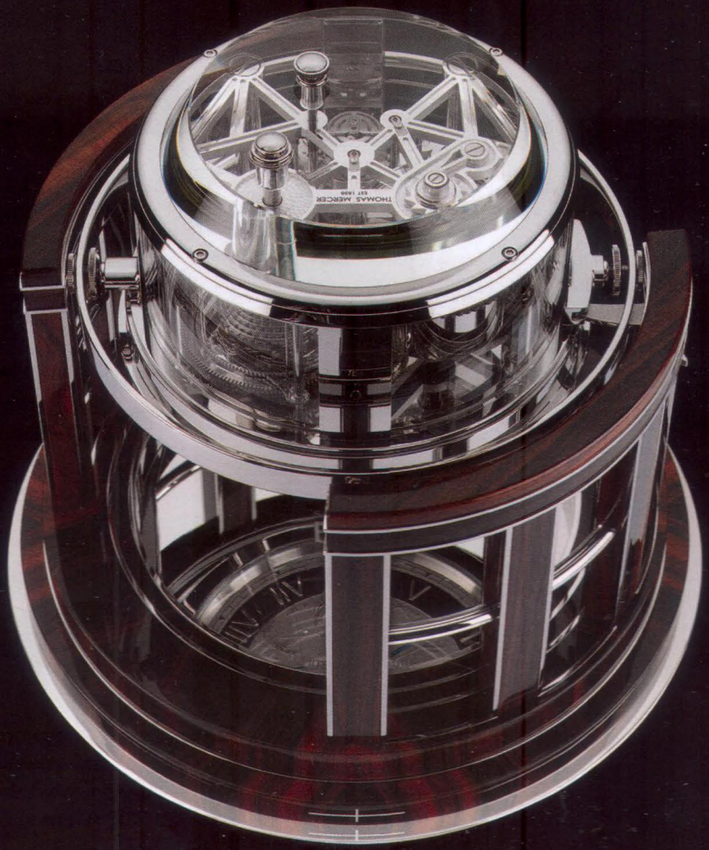
What can we expect from Thomas Mercer in the future?
In terms of territories explored by Thomas Mercer, there is legitimacy to do many things. We will be presenting a new, smaller chronometer with Mercer-designed aesthetics called the Legacy. Again, it will be British, sophisticated and modern. We also have some other projects but I'm afraid they must remain secret for the moment.
In all cases, however, Mercer is looking to project to the future because we are not anchored to the past. Of course, we are very happy that the Shackleton Epic took place – and this parallel course between polar exploration and Thomas Mercer is very nice. But it's not just about looking at what Shackleton did and what Mercer did. It is about looking forward, because all the great historic brands were modern in their age – not vintage. The history of a brand is something that cannot be imitated. It gives depth and symbolic value and if a luxury brand can find a way to bring its history into the modern world, that can add 'aura' to a product. For us, it was a case of understanding which traits had to be maintained from the past and then merging those into the new model. Yes, it is a modern piece but it remains discernibly Mercer.



WRITING FRESH HISTORIES

It is patently obvious that both Seb Coulthard and Alessandro Quintavalle are passionately committed to their respective reinventions of Britain's maritime heritage. For Seb's part, not only is he doing great things to champion the lost skills of the traditional mariner; he is also working hard to engender fresh respect for the pioneering equipment and the intrepid souls that enabled Britain to navigate its way to the greatest empire the world has ever known. He is not doing that through the regurgitation of dusty textbook doctrine. He is doing it in a way his heroes would have appreciated - through a faithful commitment to the voyages that defined the spirit of the age. As for Alessandro, he is a man with a tenacious grip on exactly what it means to take a special historical name and equip it to thrive in the modern age. With his steadying hand at the helm, the Mercer rebirth has been full of respect for the company's glittering heritage and yet it has sidestepped the pitfalls of novelty and imitation. It is a forward-thinking company, with fresh, pioneering products, each of which will be built upon the unquestionable legitimacy that the name has worked so hard to earn. Of course, none of this can alter the fact that the marine chronometer has fallen from prominence as a mariner's tool - but when a single product is able to embody such profound integrity, expertise and cultural significance, it's something every discerning traveller ought to celebrate. I

CONTACTS
Thomas Mercer Chronometers
www.thomasmercer.com
Andrew Winch Designs
www.andrew-winch-designs.co.uk
Sebastian Coulthard
www.sebcoulthard.com
Shackleton Epic
www.shackletonepic.com



A sneak preview of the second chronometer, designed by Thomas Mercer, revealed exclusively to INVICTUS.