



BALCHIN'S VICTORY

The World's Mightiest Warship Discovered

In the second instalment of his exclusive on deep-sea archaeology, **Sean Kingsley** reports from the English Channel, where Odyssey Marine Exploration has discovered the long-sought shipwreck of HMS *Victory*, lost in a ferocious storm in 1744.

Thursday 4 October 1744 was a day like every other in the city of London. *The Daily Advertiser* announced a lecture in *Physick and Midwifry* by Sir Richard Manningham at

the Lying-in Infirmary on Jermyn Street. *The Conscious Lover* was playing at the theatre on Haymarket and the Turkey-Stone that 'by a few Times rubbing to the Teeth, it renders them white as Ivory' went on sale near the Royal Exchange.

Yet, within 24 hours, Britain would suffer a shock as profound as the loss of the *Titanic* would be on Edwardian society. Unbeknownst to the world, HMS *Victory*, the majestic 100-gun flagship of the Royal Navy

and the greatest warship in the world, was losing her final battle against Poseidon in the English Channel. On what should have been a straightforward sail home after a successful cruise down to the River Tagus in Portugal, where

she had liberated a victualing convoy blockaded by France, a ferocious storm swallowed *Victory* whole on 5 October 1744.

The 74-year-old Admiral Sir John Balchin, the greatest seaman of his age (see portrait left), was lost following 58 years of service – 34 more than Nelson – along with all hands. As *The Biographical Magazine* of 1776 would reminisce, 'early in the morning the ship sunk, and every person on board perished. She was manned with eleven



IMAGE: Sir Robert Balchin




hundred of the most expert seamen in the royal navy, exclusive of fifty gentlemen of family and fortune, who went as volunteers. Thus one of the most experienced admirals, with eleven hundred and fifty men were lost in a moment, and passed together through the gloomy valley that separates time from eternity.'

Zeus seeks the deep

Since 2005, Odyssey Marine Exploration has been conducting an extensive survey of the English Channel, painstakingly undertaking a tedious operation that uses side-scan sonar and magnetometers to map the seabed remotely. In early 2008, Ernie Tapanes stooped over a printout of an anomaly. The pin-prick sized smudge was enough to make him list Site 25C as worthy of visual investigation by Odyssey's 8-ton Remotely-Operated Vehicle, known as *Zeus*, the eyes and hands of the archaeologist in deep seas.

Soon after, Project Managers Tom Dettweiler and Andrew Craig sent *Zeus* over the side of

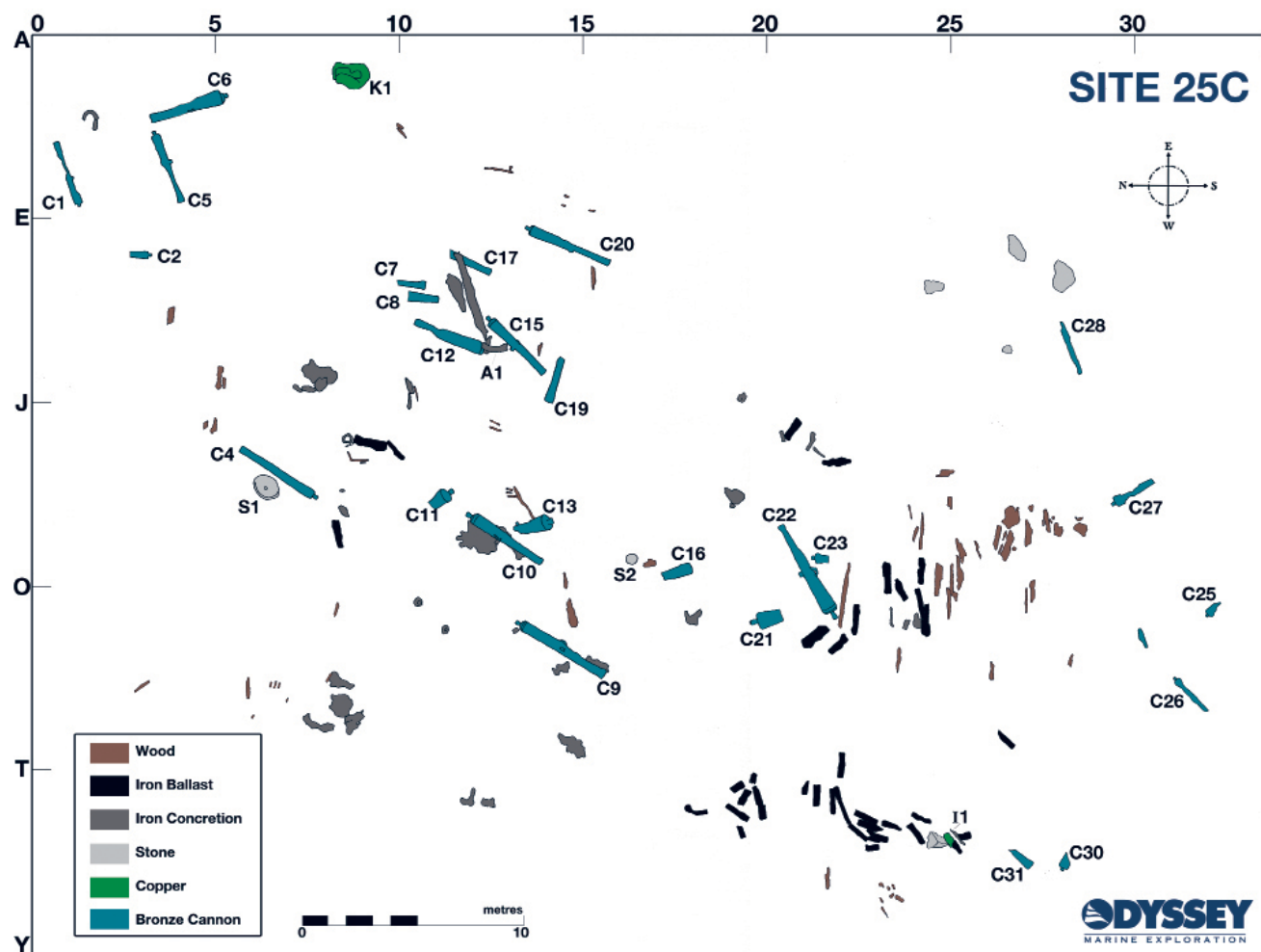
the *Odyssey Explorer*. The visibility at 100m was appalling as algae and sand swirled through the water column. Yet within minutes the ROV's cameras locked onto a bronze cannon lying on its side, then another appeared – and another. A huge field of bronze cannon began taking shape. Dettweiler lost no time calling Odyssey founder and Chief Executive Greg Stemm on the satellite phone to Tampa, Florida. Stemm, Craig and Dettweiler, three of the most experienced men in the world of deep-sea exploration, agreed that the *Explorer* should immediately move off site. Too many eyes were watching her movements using AIS (an Automatic Identification System beacon installed as a tracking device on all vessels by law). As he hung up, Greg Stemm wondered if this discovery might turn out to be the big one.

While Odyssey intermittently conducted a non-disturbance survey of the wreckage of Site 25C between May and October 2008, with the agreement of the UK Ministry of Defence, Greg Stemm was confident that he had found 

ABOVE An encrusted iron anchor ring next to cannon C15 and C21 to the northeast of the wreck and denoting the position of the bows.

FACING TOP The Loss of HMS *Victory* 4 October 1744 by Peter Monamy (18th century).

FACING BOTTOM Admiral Sir John Balchin, commander of HMS *Victory* when she was lost on 5 October 1744, by Jonathan Richardson, c.1695.



ABOVE A pre-disturbance plan of Site 25C. The ship lies on a northeast to southwest axis with the stern to the south.

Victory, yet he was still perplexed. Every living expert is convinced that *Victory* was lost off the Casquets, a sprawling line of malicious black rocks near Alderney. No fewer than 392 wrecks dating between 1278 and 1962 cluster around Alderney, Guernsey and Sark. Not without very good reasons are the Casquets renowned as the graveyard of the English Channel.

Yet Site 25C lies around 100km to the west. Could over 250 years of historical records and scholarship be wrong?

The *Victory* shipwreck?

Contemporary eyewitness accounts and physical evidence certainly seemed to place the *Victory* near the Casquets on 5 October 1744. Witnesses on Alderney and Guernsey allegedly heard around 100 warning gunshots firing off, according to *The Daily Gazetteer* of 22 October, this being the standard practice for a ship warning other vessels of navigational dangers in the area. The deeply entrenched public image of *Victory*'s loss at this location was supported by wreckage washed onto the Channel Isles. On 19 October 1744, *The Daily Advertiser* published

a letter written by Guernsey merchant Nicholas Dobree, who advised that 'This last Week there has been... Pieces of Wreck found upon our Coast; among others, two Topmasts, one 74, the other 64 Feet long, mark'd in white lead VICT; and also a Topsail-Yard, 64 Feet long, mark's also in white lead Victy; upon the Head of the Naile to the Masts and Yard is the Arrow; to that we greatly fear the *Victory* has been lost upon our Coasts.'

The Royal Navy swiftly dispatched the Falkland and the Fly sloop on a fact-finding mission. The results were seemingly conclusive, with *The Daily Advertiser* of 22 October 1744 confirming how 'in their Cruize they met with several Pieces of Wreck, v.z. several yards, part of a Mast, and part of the carv'd-work Stern, all which believe to belong to the *Victory*... there is not the least Hopes left of ever hearing of her.' Finally, when the Casquet's lighthouse manager was accused by court martial of failing to keep the lights burning on the fateful night of *Victory*'s disappearance, the reputation of the Casquets as the final resting place of her wreck seemed to be secured.

Colossal shipwreck: surveyed

Far out to sea in international waters, under the watchful eye of Odyssey's Field Archaeologist, Neil Cunningham Dobson, ROV *Zeus* was running survey lines across the seabed to map an enormous wreck site measuring 61m by 22m, which correlated closely with *Victory's* dimensions of 53m by 15m, allowing for structural collapse. Across a sandy seabed fluctuating by 7m, disarticulated planking was intermixed with 41 bronze cannon, iron ballast blocks, cupreous artefacts, a possible iron sword, wooden powder cask lids, possible pewter plates, bronze rigging pulleys and two gunners' wheels used to sharpen bayonets and grind down shot impurities.

The circumstantial archaeological evidence for *Victory* was extremely promising from the very beginning. Preliminary measurements of an anchor provide an approximate length of

6.9m, which exceeds the dimensions of the anchors on Nelson's *Victory*. This ship was evidently colossal. To the north is a heavily riveted cylindrical copper cauldron of a type that pre-dates the emergence of Alexander Brodie's iron stove in 1780, which was introduced into the Royal Navy following concerns about the weight of brick-lined kitchen galleys on the

manoeuvrability of warships and worries that copper contributed to scurvy.

A concentration of about 32 rectangular iron concretions to the southwest of the site typifies iron ballast blocks used on Royal Navy warships. Similar 320lb pig-iron ballast blocks stamped with the English naval

board broad arrow, and fixed permanently into the hull to trim the ship, have been recorded on the fifth-rate warship *HMS Fowey*, which was lost off Florida in 1748 after seeing service in the English Channel and Gibraltar in 1744 and 1745. A reliance on cast iron kentledge



IMAGE: National Maritime Museum

LEFT A contemporary full hull model of the *Victory* (1737).



LEFT A copper cylindrical cooking cauldron from the northeast of the wreck.



ABOVE A gunner's wheel used to sharpen bayonets and loose wooden planking.

by the Royal Navy in the 1740s is clearly attested by Admiralty shipboard warrants.

Among the 2,574 square metres of Site 25C that have been surveyed, by far the most diagnostic artefacts are 41 extraordinary bronze cannon. HMS *Victory* was lost with between 100 and 110 guns, including 28 by 42-pounders on her lower deck, 28 by 24-pounders along the middle deck, 28 by 12-pounders on her upper deck, and 16 by 6-pounders along the quarterdeck and forecastle. The only means of identifying the calibre of a cannon's bore and thus determining the types of cannon on the wreck is to measure the interior diameter width of its muzzle, no easy task using a robot at a depth of 100 metres.

Gary Peterson, assisted by Olaf Dieckhoff, custom-designed a triangular ruler tool for ROV *Zeus* to measure the precise width of the bores and define the guns' calibres. Most of the site's visible cannon are either almost completely buried or plunge into the sand at acute angles. However, the muzzles of 14 guns were exposed and the trunnion widths of another 11 were measured because these equate to interior muzzle diameters. This unique methodology proved a success by identifying three

6- or 12-pounders, three 12-pounders, eight 24-pounders and six certain and two probable cannon with 7-inch bores that correspond to 4-ton, 3.4 metre-long 42-pounder guns. All of these types of guns were carried by *Victory* and, for site recognition, the 42-pounders proved to be as diagnostic as recovering a ship's bell.

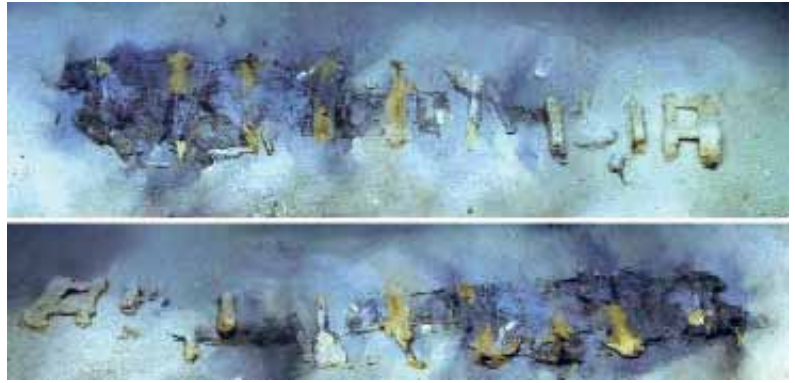
Eight of the cannon whose upper surfaces are visible feature, along the first reinforce, exquisite royal arms surmounted by a crown. The arms are subdivided into four quadrants, each framed by a circular banner and with two foliate branches rising on each side. On cannon C5 and C32, the 'ROI' from *Dieu et mon droit* (God and my right), the legend of the British royal family's divine right to rule, is clearly visible - with the 'T' excluded from the mould to fit the cannon banner. These features identify eight of the cannon as cast under King George I of England (reigned 1714-1727).

The 12-pounder gun C28 is almost identical, except for the exclusion of the foliate branches to either side of the arms, which proves that this piece of ordnance was cast under King George II (reigned 1727-1760). Both dates fall between 1726 and 1744, the lifespan of HMS *Victory*. A 12-pounder and a 42-pounder recovered from

the shipwreck are also clearly marked along a band circumscribing the base ring with the name 'SCHALCH'. Born in 1692 at Schaffhausen, Switzerland, and trained in a cannon foundry at Douai, France, Andrew Schalch was the first royal appointee to the Royal Brass Foundry in Woolwich between 1716 and 1770. His name, plus the founder's dates of 1726 and 1734, are effective calling cards for the wreck's positive recognition.

Gunning for Victory

Site 25C's identification can be narrowed down with even greater precision. The reign of King George I witnessed a final flourish in the glorious lifespan of bronze cannon on English warships as the Royal Navy phased them out in favour of iron, primarily due to financial realities and because the muzzles of bronze guns had a bad tendency to droop after extensive firing. The final nail in the coffin for outfitting ships with bronze guns arrived in 1677, when Parliament voted £600,000 for 30 new warships. Samuel Pepys calculated that the production of the bronze guns alone would have cost £450,000, leaving an unrealistic sum to cover the expense



of building the actual ships. All 30 warships were consequently equipped with iron guns, even the first-rate.

The pivotal moment in the decline of brass guns had arrived, and from now on bronze cannon would be reserved exclusively for the mightiest Royal Navy warships – flagships and royal yachts. If the only Royal Navy warships armed with substantial armaments of bronze cannon and 42-pounders, such as are present on the surface of Site 25C, were first-rates, then the identification of *Odyssey's* discovery in the Channel can be reduced to a simple mathematical equation because between the start of the reign of King George I in 1714 and 1810 only four first-rates were lost anywhere in the world's seas. Only HMS *Victory* foundered

ABOVE A photomosaic of the highly deteriorated 10m-long wooden rudder to the southwest of the wreck site, denoting the location of the stern.



LEFT ROV *Zeus* measuring the bore of cannon C33.



in the English Channel. This line of enquiry leads to a statistical certainty that Site 25C is HMS *Victory*.

Even though she was the ultimate weapon of war – the modern equivalent of an aircraft carrier with nuclear capability – at the height of the War of the Austrian Succession, HMS *Victory*'s final mission between July and early October 1744 was all about protecting commerce by keeping the sea lanes safe for international trade. With the opening up of the Indies and Americas fortunes were being made, and as a pamphleteer of 1672 acknowledged, 'The undoubted Interest of England is Trade, since it is that alone that can make us either Rich or Safe, for without a powerful Navy, we should be a Prey to our Neighbours, and without Trade, we could have neither sea-men or Ships'. England was the European centre of re-export, importing 25,000 tons of sugar by 1710 and £116,000 of tea from 1722-1724. British exports such as woollens, linens, cottons, silks and metal wares exported to America and Africa were valued at

TOP LEFT ROV *Zeus* measuring the bore of a bronze cannon *in situ*.

BELOW LEFT A bronze cannon with a drooped muzzle, possibly the result of overheating during firing.

RIGHT Bronze cannon plunging into the seabed at acute angles. Around 3m of sediment underlies the surface.



£1.7 million between 1751 and 1754.

On 14 July 1744, Admiral of the White Sir John Balchin was abruptly dragged out of retirement and given orders to sail for Portugal at the head of a strong squadron of 25 English and eight Dutch warships. He was charged with escorting up the Channel a convey of 200 merchant vessels setting out for Newfoundland, New England, Virginia, Maryland, Portugal and the Mediterranean and to see all outward bound trade 100 or 150 leagues into the sea.

Afterwards, he was required to liberate the victualling convoy intended for Admiral Matthews, Commander-in-Chief in the Mediterranean, who had been without supplies for three months. The situation was becoming serious enough to turn the entire War of the Austrian Succession in favour of France. The whole campaign in Italy depended on the co-operation of the fleet and, without supplies, the Royal Navy could not aid the allies and the cause with Austria would be lost. Balchin successfully released the convoy from the clutches of de Rochambeau and his Brest fleet and then saw them safely into Gibraltar.

Balchin's gold

Along the way to Portugal Sir John Balchin was given the opportunity to profit from his call to arms. After the admiral's flagship failed to return home, the *Amsterdamsche Courant* of 18/19 November 1744 described how 'People will have it that on board of the *Victory* was a sum of 400,000 pounds sterling that it had brought from Lisbon for our merchants' – which

would equate to approximately 4 tons of gold coins. Lisbon was the bullion capital of Europe, and with its river mouth blockaded by the French fleet and the war in full swing, a cloud of financial crisis was looming across Europe. As Lord Tyrawly confirmed three years prior to the *Victory*'s loss, 'there is not an English Man of Warr homeward bound from almost any Point of the Compass that does not take Lisbon in their Way home... every Body knows that [they] have no other Business in life here but to carry away Money'.

Further research indicates that merchants' bullion from Lisbon was not the sole high-value consignment on *Victory* when she was lost. Towards the end of August 1744, Balchin successfully captured in the Bay of Biscay bordering France and Spain 11 French merchant vessels homeward bound from St. Domingo. Some 28,000 dollars and two casks of gold worth £25,000 at the time were found hidden amongst the ballast of one ship, while *The London Evening Post* of 4-6 September 1744 reported that another prize was carrying more than 60,000 pieces of eight. Onboard what was ironically perceived to be the safest strongbox in the world, this money, along with the valuables from other prizes, would have been secured deep in the hold of HMS *Victory* and should lie somewhere near the stern of Site 25C.

Odyssey has proposed a robust innovative



ABOVE Cannon C5 *in situ* with the royal arms of King George I.

BELOW Cannon C5 *in situ* with modern plastic contamination in the background.

agreement to the UK Ministry of Defence to finance the multi-million pound excavation of the site in which Balchin's bullion is key. The company would pay for the conservation, documentation and recording of the entire collection of artefacts from *Victory*. According to Odyssey, their proposal would allow all of the assemblages to remain united if the Government so desired. If the authorities decided to de-accession the duplicate coins after study – a common practice used by museums to release artefacts to the public that no longer fit within their collecting interests – then the project would be entirely self-funding. Indeed, pounds would be returned to the Treasury rather than costing the taxpayers a penny.

What sunk HMS *Victory*?

At first glance, the loss of the *Victory* in an appalling storm seems to be a simple tale of natural catastrophe. Other man-made forces, however, may well have been at play. There are good grounds to be suspicious, not least because all of the other 32 warships in the fleet made it home to England in October 1744. Only the *Victory* disappeared off the face of the Earth. In 1737 Blaise Ollivier, Master Shipwright from France's foremost Royal Dockyard at Brest, undertook an undercover espionage mission



RIGHT Cannon C8 *in situ* with the royal arms of King George I.



BELOW The 42-pounder cannon C33 after recovery; length 3.4m. This is the only 42-pounder in existence on dry land and the largest gun used in naval warfare in the age of sail.

to England and physically examined *Victory* on her stocks. 'She has great fullness at her height of breadth', reported the spy, before adding that 'her capacity is very great, yet her upper works are scarce suitable for her lower body, for she is deep-waisted with much sheer.' Top heavy and

crank, her centre of gravity may well have been too high to battle climatic extremes.

Victory's disproportionate height to width ratio may have been compounded by a similar poor state of health. The severe decay that the British fleet suffered in warships' timbers in the 1730s and 1740s is an established fact. The general longevity of most ships of line in the 18th century was about 12-16/17 years. Warships such as *Victory*, launched between 1735 and 1739, however, enjoyed only an average of 8.9 years until they required a major repair.

English shipwrights of the era were accused by contemporary critics of complacently storing timbers with little order, heaping old wood on newly cut planks and thus introducing dry and wet rot into warships. At Deptford, French spy Blaise Ollivier pointed out that the timber 'is used with but little care; much of the sapwood is left on, and I saw many frames, timbers of the stern and transoms where there were two or three inches of sapwood already half rotted on one or two of their edges'. Did partially rotten knees contribute to *Victory's* loss? We may never be able to prove it archaeologically, but great suspicion remains.

The English Channel & *in situ* preservation

In recent years UNESCO has championed the ideal of leaving shipwrecks *in situ* as the most responsible means of protecting the submerged past. In theory, this should work well for deep-sea sites that we perceive to be frozen in time beyond the reach of man. *Odyssey's* work in the English Channel, however, is providing a disturbing wake-up call.

During its surveys, *Odyssey* has encountered





LEFT The 12-pounder cannon C28 of King George II during conservation. Length 3.12m.



BELLOW The 42-pounder cannon C33 of King George I during conservation. Length 3.4m.

the sad hulls of numerous wooden wrecks that are being devastated by trawlers. Side-scan images of many sites graphically depict wrecks with giant plough marks running directly through them. With their 8-ton nets, multi-ton weight sinkers and ferocious teeth on dredges used for scallop harvesting, the available data suggest that up to 30cm of wrecks may be pulverised each year. The effects on these wrecks are as destructive underwater as clear-cutting a rainforest is on land.


Site 25C seems to be no less extensively disturbed. Glass bottles, a lobster trap, fishing net, plastic, a videotape cassette and other modern contamination litter the wreck. *Victory* was once a floating three-decked 'village' of 1,100 men, but now has apparently been ploughed down to below the turn of the bilge. Upper deck 6-pounders and the copper cauldron from the middle deck are scattered on a single plane alongside the lower deck 42-pounders and iron ballast that was stowed alongside the keelson.

Of major potential concern is the orientation of the cannon, some of which ought to lie at right-angles to the line of the keel. Instead, 59% of the visible guns lie parallel to the postulated longitudinal position of the keel. Given the enormous weight of the lower deck 4-ton 42-pounders, and the extremely high probability that many reached the seabed in their original gun stations, this pattern seems to be

the result of trawler cables and nets dragging through the site.

Although the impact of beam trawling on the marine ecology has been subjected to intensive research and quantification, resulting in the UK Marine and Fisheries Agency paying out £4.7 million in 2007 to break up and decommission fishing boats targeting the Western English Channel, the serious impact on Europe's rich maritime archaeological heritage remains unacknowledged and unmonitored. With its abundance of fish, octopi, crab and gorgonians, Site 25C is a rich biological oasis and thus a great attraction for trawlers, which will undoubtedly result in continued destruction of the shipwreck.

To assume that wrecks are unaffected by documented cases of extreme disturbance to the marine ecology is an irresponsible heritage managerial position. Unless action is taken fast, the unique heritage within HMS *Victory* – from exotic Middle Class Oriental pottery to navigational equipment and mariners' and officers' personal belongings – not to mention the limited human bones recorded on the surface of the site, including a skull, will be trawled into oblivion by these bulldozers of the deep.

Without a swift resolution, future generations may well judge us as having consciously signed the death warrant for one of the world's most important pieces of maritime archaeology. 

SOURCE

Dr Sean Kingsley is a marine archaeologist who has directed projects off Israel and Montenegro over 20 years and is the author of six books, including *Shipwreck Archaeology of the Holy Land* (Duckworth, 2004).