

Cutty Sark

Large print guide

This guide includes exhibition text as well as directions to the tactile and audio exhibits on board the ship

Introduction

Clipper ship *Cutty Sark*

Cutty Sark was commissioned by a Scotsman, John Willis, who had himself sailed to China to collect tea, and then retired from the sea to run the shipping business established by his father. The ship was built in Scotland in 1869 by Scott & Linton, but the terms of the contract drove them into bankruptcy just before the ship was finished.

The name 'cutty sark' comes from a famous poem by Robert Burns called 'Tam O'Shanter'. The poem is about Nannie the witch who is wearing a 'cutty sark', a Lowland Scots term for short undergarment or shift. It is a mystery why her owner, John Willis, gave his ship this name, but it is perhaps not surprising that he should chose a poem from Scotland's most famous poet for inspiration.

Cutty Sark was launched on 22nd November 1869. *Cutty Sark* left the Clyde on 13th January 1870. A month and two days later, she set sail from London for China.

Lower Hold

Touch

- Visitors enter *Cutty Sark* through a new entrance cut into the side of the ship. The vessel's structural elements are exposed - the wrought iron frame, the wooden hull planks and the Muntz metal sheathing over the planks. These can be touched as visitors pass by.
- Once into the Lower Hold, almost the first thing the visitor encounters is the mizzen mast, opposite the entrance. *Cutty Sark* has three masts: the fore (at the front of the ship), main (mid-ships) and mizzen (towards the stern). In between the masts are the original iron stanchions which support the iron structure.

***Cutty Sark's* structure: Lower Hold**

The ship's original iron framework, built in 1869, is painted white, and the new steel structure which is supporting *Cutty Sark* and preserving her shape is painted grey.

You are standing on replica tea chests – there was originally no deck here as all this space was used for storing cargo.

Almost all the hull planks are original, dating from her working life as a Victorian cargo ship (1869-1895).

Wooden ships for carrying tea

Ship owners like John Willis thought a ship with iron frames, wooden planks and brass sheathing on the hull – like *Cutty Sark* – was perfect for carrying tea. The iron frames took up less space than wooden frames and the brass sheathing stopped barnacles and weeds attaching themselves, unlike an iron hull at that time. Some people also thought that iron ships made the tea 'sweat'.

Cutty Sark's hull sheathing is a metal alloy made from copper (70%) and zinc (30%). This is the closest modern approximation to Muntz metal which originally covered the hull below the waterline.

***Cutty Sark* the Trader**

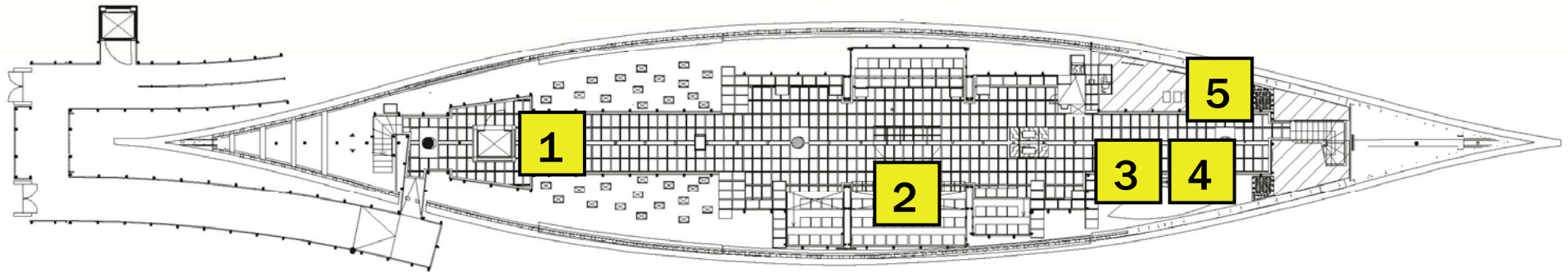
***Cutty Sark* made eight voyages from China to London with tea, the last in 1877. On her first four voyages, *Cutty Sark* loaded tea at Shanghai. After that, on the next four voyages, she loaded tea at Hankou, a port 700 miles up the Yangtze River. On average, she loaded around 600,000 kg of tea.**

The ship's fastest voyage from China to London took 109 days from Hankou. She always unloaded her cargo at London's East India Docks. This is now closed but was about two miles down river of where the ship is berthed in Greenwich.

The Suez Canal opened in 1869, the year that *Cutty Sark* was launched. Steam ships could now bring tea back from China in 60 days. The winds in the Red Sea and Mediterranean made it very difficult for the large sailing ships, so they did not use the Canal and could not compete. Gradually they were driven out of the tea trade.

In 1878, *Cutty Sark* returned to China but could not find enough tea to fill her hold. Instead, she had to carry a variety of cargoes around the world, ending in New York.

Lower Hold



1. Cross-section of the ship: tactile cross-section of *Cutty Sark*, fully laden with her cargo of tea on her maiden voyage in 1870.
2. Introductory film: the introductory film in the Michael Edwards Studio Theatre gives an overview of *Cutty Sark*'s career with audio narration.

3. **Tactile model of the ship's iron framework, the 'skeleton' of *Cutty Sark*: this model is in the same orientation as the ship itself, so the bow – the front of the ship - is to the left. There is an audio accompaniment to the model - please pick up the handset.**

4. **Ship's materials: a tactile display of all the elements of the ship's construction - wrought iron, teak and copper alloy sheathing.**

5. **Tactile plan: longitudinal plan of *Cutty Sark*.**

After exploring the Lower Hold, ascend to the 'Tween Deck using the stairs towards the bow. To use the lift, retrace your steps towards the stern of the ship.

'Tween Deck

Touch

- The low beams above your head are part of *Cutty Sark's* original wrought iron structure

Cutty Sark's structure: 'Tween Deck

The 'Tween Deck was used for storing cargo, with the exception of the fo'c's'le (forecastle) at the bow. When the ship was built, this area was used for crew accommodation and the able-bodied seamen and ordinary seamen lived in this space.

After the ship's second voyage, the fo'c's'le was abandoned because it was too uncomfortable and too difficult to get the men up on deck quickly. A new deckhouse was added to the main deck to provide additional living quarters and the fo'c's'le was then used partly as a store and partly as an additional cargo space.

***Cutty Sark* the Voyager**

After struggling to find a tea cargo, *Cutty Sark* spent five years 'tramping for cargoes' – sailing from port to port with whatever cargoes could be found.

In 1883 *Cutty Sark* joined the booming trade in transporting Australian wool. Every year up until 1895, she set out in the summer for Australia, to load a cargo of wool bales and return to England in time for the spring wool sales.

Cutty Sark soon established herself as the fastest of the wool clippers. Under her last master, Richard Woodget, she set record times of 70 days or less for the voyage from Australia back to the English Channel, which no other sailing ships could match.

Cutty Sark made twelve wool voyages in total. She loaded at Sydney eight times, at Newcastle, NSW three times and once at Brisbane. Between 4,300 and 5,000 bales were loaded, ballasted with 200 tons of chrome nickel.

Cutty Sark* becomes *Ferreira

In 1895, with the ship not as profitable as it was, John Willis sold *Cutty Sark* to Ferreira & Co. of Lisbon. He felt the days of sailing ships were coming to an end but his ship had thousands of sea miles left in her. Re-named *Ferreira*, the ship carried cargo from 1895 to 1922 particularly to the Portuguese colonies in Africa and Brazil, but also to the USA and Britain.

Ferreira & Co. sold the ship to Companhia Nacional de Navegação in 1922. They renamed her *Maria do Amparo*.

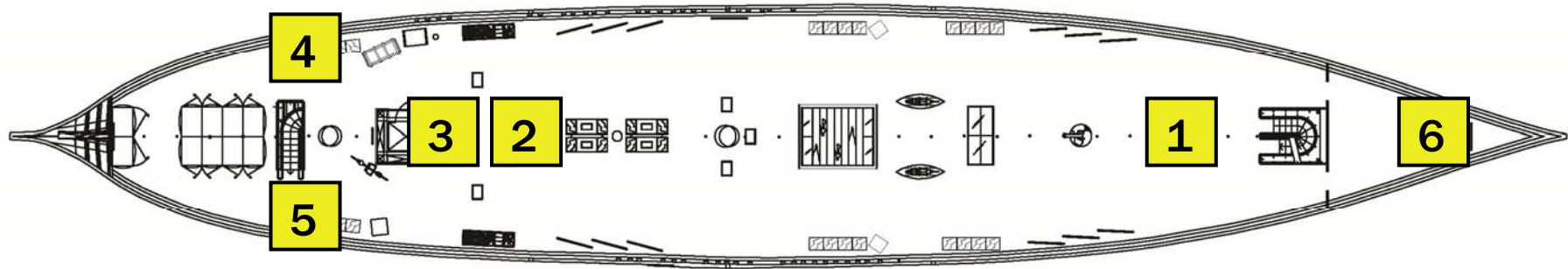
***Cutty Sark* the training ship**

In 1922 the ship was in very poor condition and after a stormy passage from London she limped into Falmouth. Here she was recognised as the former *Cutty Sark* by Wilfred Dowman, a retired steamer captain. As a young man, he had seen the ship in her prime and he was determined to save her for the nation. He and his wife purchased the old clipper and had her towed back to Falmouth. They set about restoring the ship for use as a static sail training ship and visitor attraction.

On Captain Dowman's death, his widow Catharine gave the ship to another sail training institution – the Incorporated

**Thames Nautical Training College, at Greenhithe on the
River Thames.**

'Tween Deck



1. Tactile globe: this globe marks *Cutty Sark*'s routes to London by raised LED lights - the tea route back from China via the Cape of Good Hope and the wool route back from Australia via Cape Horn.
2. Reminiscences: oral history recordings of people's memories of *Cutty Sark* in Britain 1922 - 1953.

3. Tactile plan: deck plan of the 'Tween Deck.
4. Touchable cargoes: *Cutty Sark* carried mixed cargoes on her outward journeys from London, a selection of which can be touched or smelled in this exhibit.
5. Touchable cargoes: a tactile exhibit of the wool production process, from sheep to jumper.
6. Fo'c's'le: the film in the fo'c's'le has an audio narration which explains the changing use of this space from accommodation during the first two voyages to storage thereafter.

After exploring the 'Tween Deck, ascend to the Main Deck using the stairs towards the bow. To use the lift, retrace your steps towards the stern of the ship

Main Deck

Touch

- The ropes, wires, and blocks which make up the rigging can be touched.
- The equipment and ship structure on the main deck can all be touched. The equipment also has tactile embossed labels which identify each item and explain their function.

The crews of *Cutty Sark*

In 1872, *Cutty Sark* left London with 30 men on board – the master, first, second and third mates, a cook and a steward, a carpenter and a sailmaker, 19 able seamen, three ordinary seamen and one apprentice. This was a typical crew for her tea clipper years. However, her rig was reduced for the wool trade, and fewer men were needed. In 1890, she left London with just 19 men in total – of which nine were seamen and three were apprentices.

Most of the seamen who sailed on *Cutty Sark* did so just once. They were paid off when they returned to London and had to look for another ship. But many took the opportunity of a free passage to Australia. In 1876 for example, 12 of the 15 able seamen deserted. They had to be replaced by

expensive Australian seamen. The youngest were 14-year old apprentices – the oldest a 54-year old able seamen.

Of 682 men who sailed on *Cutty Sark*, only five were lost at sea.

Conditions on board

This is a typical the weekly menu for the sailors:

Monday	Pea soup and salt pork
Tuesday	Salt meat and bread
Wednesday	Pea soup and salt pork
Thursday	Salt meat and bread
Friday	Pea soup and salt pork
Saturday	Junk (salt cured meat) and potatoes
Sunday	Leu pie (potato pie)

Plus coffee, tea, biscuits, lime juice (daily) and 14 oz (400 grams) of sugar and butter a week

The loss of two seamen

- edited from Captain Woodget's log

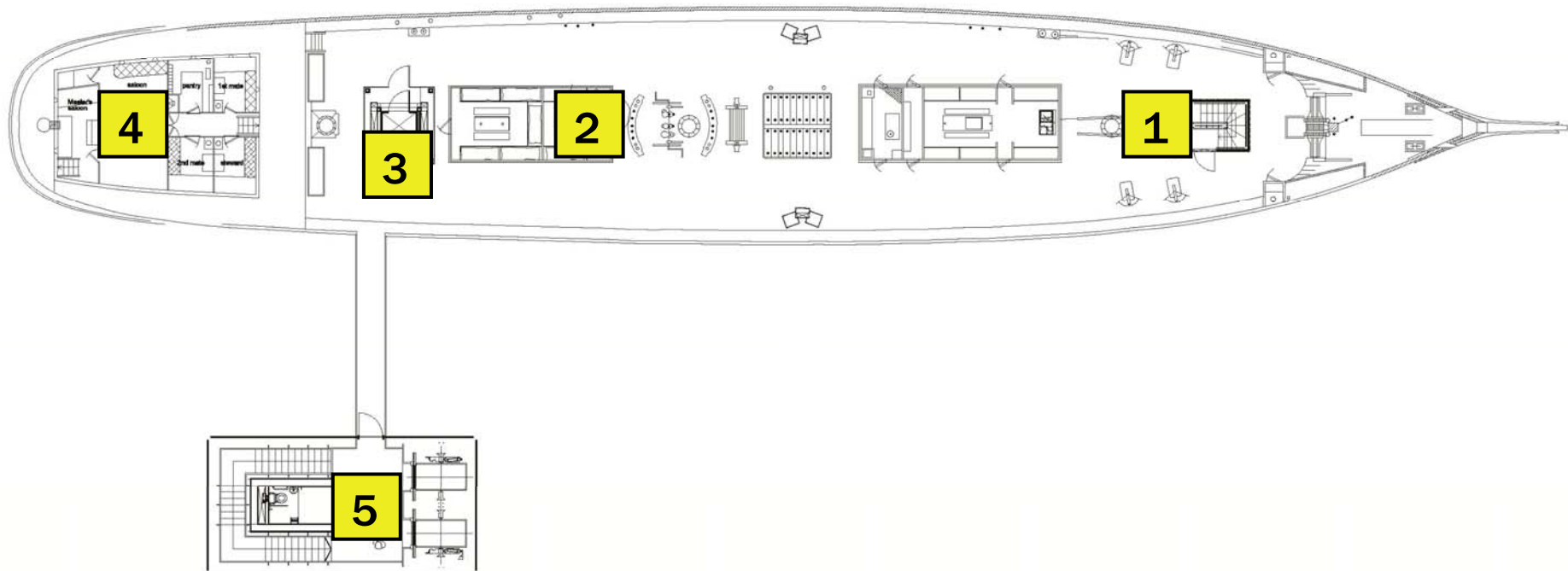
2nd April 1893

At 2.30 p.m. John Doyle and John Clifton, whilst making fast the outer jib, were washed from the boom and drowned.

Everything was done that could be done considering the state of the weather. I heard crying from forward and thought someone was hurt. I looked to leeward and could see nothing, but when I went to the weather side of the poop, I saw the two men struggling in the sea about 40 or 50 feet to windward. I ordered the helm to be put down and at once threw a life-buoy, but it was some distance to leeward of them. I saw Doyle sink and rise to the surface again, and then I could see him struggling under water.

Clifton did not appear to me to make any effort to reach the buoy, he was going round and I saw him no more. There was too much sea to lower a boat. Fancy, only a minute before they were on the boom laughing to see the sprays come over the bows and the others getting wet, whilst they were dry on the boom. Oh what a gloom it cast over the ship! Two young men gone to Eternity.

Main Deck



1. Deck equipment: the equipment and ship structure on the main deck can all be touched. The equipment also has tactile embossed labels which identify each item and explain its function.

2. **Voices from the past:** in the aft deckhouse, listen to an apprentice writing a letter home.
3. **Tactile plan:** sail plan of *Cutty Sark*.
4. **Voices from the past:** in the mate's cabin, the captain reads the ship's log as they encounter icebergs.
5. **Preserving *Cutty Sark*:** in the stairwell down to the Dock, there is a sound recording explaining why the ship came to Greenwich.

After exploring the Main Deck, cross the bridge to the lifts or stairs down to The Dock.

The Dock

Preserving *Cutty Sark*

In the early 1950s, HRH The Duke of Edinburgh and the Director of the National Maritime Museum founded an organisation to preserve *Cutty Sark* as a memorial to the great days of sail and to the men who served in the Merchant Navy.

On 10th December 1954, *Cutty Sark* was floated into a specially created dock at Greenwich. The restoration project then began and was completed in 1957.

After 50 years in Greenwich, *Cutty Sark*'s frames were rusting away, the main deck was leaking badly and the weight of the ship was crushing her keel. Her shape – the very reason for her remarkable career – was in danger of being lost.

In 2006 work began to halt the deterioration of the frames and strengthen the ship. In order to relieve the keel of the weight of the vessel and preserve her unique shape, *Cutty Sark* was raised 11 feet (3.3 metres) into the air. Twenty-four jacks lifted the ship, which was then secured in position with twenty-four struts. The weight of the ship is now taken by these struts and for the first time, visitors can now have

the unique experience of walking underneath a three-masted ship.

Cutty Sark was re-opened to the public by Her Majesty The Queen on 25th April 2012.

The fire of 2007

In the early hours of 21st May 2007, a fire broke out in the lower hold of the ship. The ship was saved thanks to heroic fire-fighting, and the fire was put out in less than two hours. Despite an 18-month investigation by Scotland Yard, the cause of the fire is not 100% determined. The most likely probable case was a faulty industrial dust extractor which overheated.

As *Cutty Sark* was undergoing major conservation works at the time, half her hull planks, all her masts, deckhouses and deck furniture had been removed to workshops and storage when the fire broke out.

It is testimony to the quality of the materials used in the original construction that the ship suffered largely surface damage. The thick teak hull planks could be planed and re-used and the iron frame straightened where it had buckled in the heat of the blaze.

It is estimated that only 2% of original fabric – material dating from her working life as a cargo ship – was lost in the fire and on completion of the conservation project around 90% of her hull is original structure.

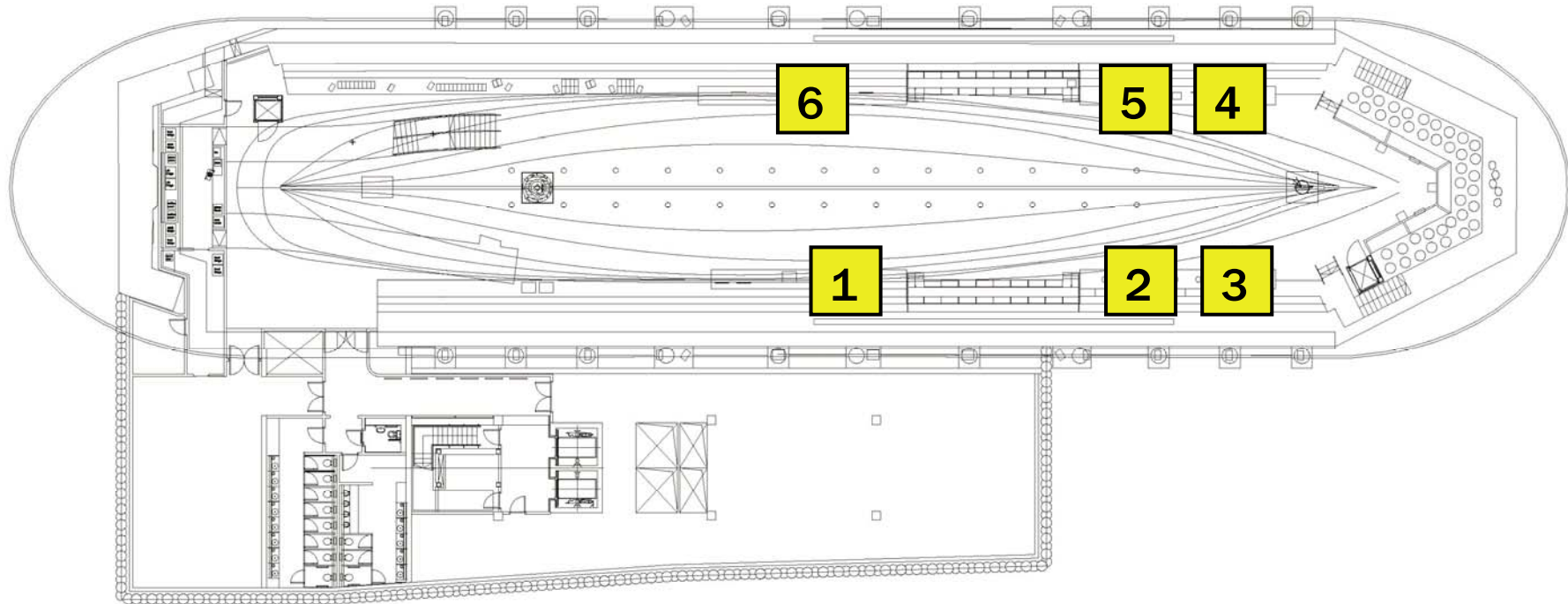
***Cutty Sark's* figurehead collection**

Figureheads traditionally decorated the bows of ships and for 19th century merchant vessels the choice of figurehead was at the discretion of the ship's owner. The carving might represent a popular personality of the day, a character from literature or legend, or even a member of the ship owner's family.

The men often believed that the figurehead represented the spirit of the ship as well as the name, and thought the figurehead would help them steer a safe passage home.

The Long John Silver Collection – donated to the Cutty Sark Trust by Sydney Cumbers – is the largest collection of figureheads in the world. They are all from merchant vessels and the collection, like *Cutty Sark* herself, is dedicated as a memorial to the men of the Merchant Navy.

The Dock



1. Tactile plan: cross-section of *Cutty Sark* showing the ship in its raised position.

2. **History in hats:** hear the stories from the hats of people whose lives have been touched by *Cutty Sark*.
3. **Tactile figurehead:** a carved, unpainted figurehead is on display to show the work of the carver.
4. **Nannie's 'cutty sark':** the film about the poem 'Tam O'Shanter' tells the story behind *Cutty Sark's* figurehead with an audio narration
5. **The artists' icon:** *Cutty Sark* has inspired numerous artists over the years, including many esteemed marine artists. Each painting shown in this exhibit has an audio description - please pick up the handset.
6. **The clipper and the East Indiaman:** a tactile model of *Cutty Sark's* hull and one of an East Indiaman demonstrate the differences in shape.

When you have finished exploring The Dock, go back to the main entrance and shop to exit. Stairs and an accessible lift are located towards the stern, near the café.

We hope you have enjoyed your visit to the ship.