

EXHIBITION EXPERIENCES



Overview

EXHIBITION THEME

Jules Verne wrote *20,000 Leagues Under the Seas* nearly 150 years ago, but the adventures of Captain Nemo still captivate. Our understanding might have changed, but our fascination for submarine exploration endures.

Verne's submarine, the *Nautilus*, was a fantastical craft with a basis in genuine technologies. This exhibition will present both the fantasy and the facts, allowing visitors to explore both Verne's imaginary world and the real-life wonders of exploring the oceans. They'll discover what it is to operate a submarine, and learn about the underwater world as it would be seen from inside an imaginary deep-sea exploration vessel.

TOPIC AREAS

The exhibition is designed for 2-10 year olds and presents a variety of topics through interactive exhibits, graphics and props. Topics explored include:

- Marine habitats and creatures
- Marine biology research techniques
- Periscopes
- How submarines are steered
- How submarines are powered
- How submarines dive and surface – ballast tanks
- Diving equipment
- Maritime archaeology

The exhibition is designed to provide a range of interactive experiences including; full-body interactions, mechanical and electro-mechanical exhibits, interactive projections and touchscreens. The exhibition comprises a submarine, plus a series of underwater environments for visitors to explore.



Submarine

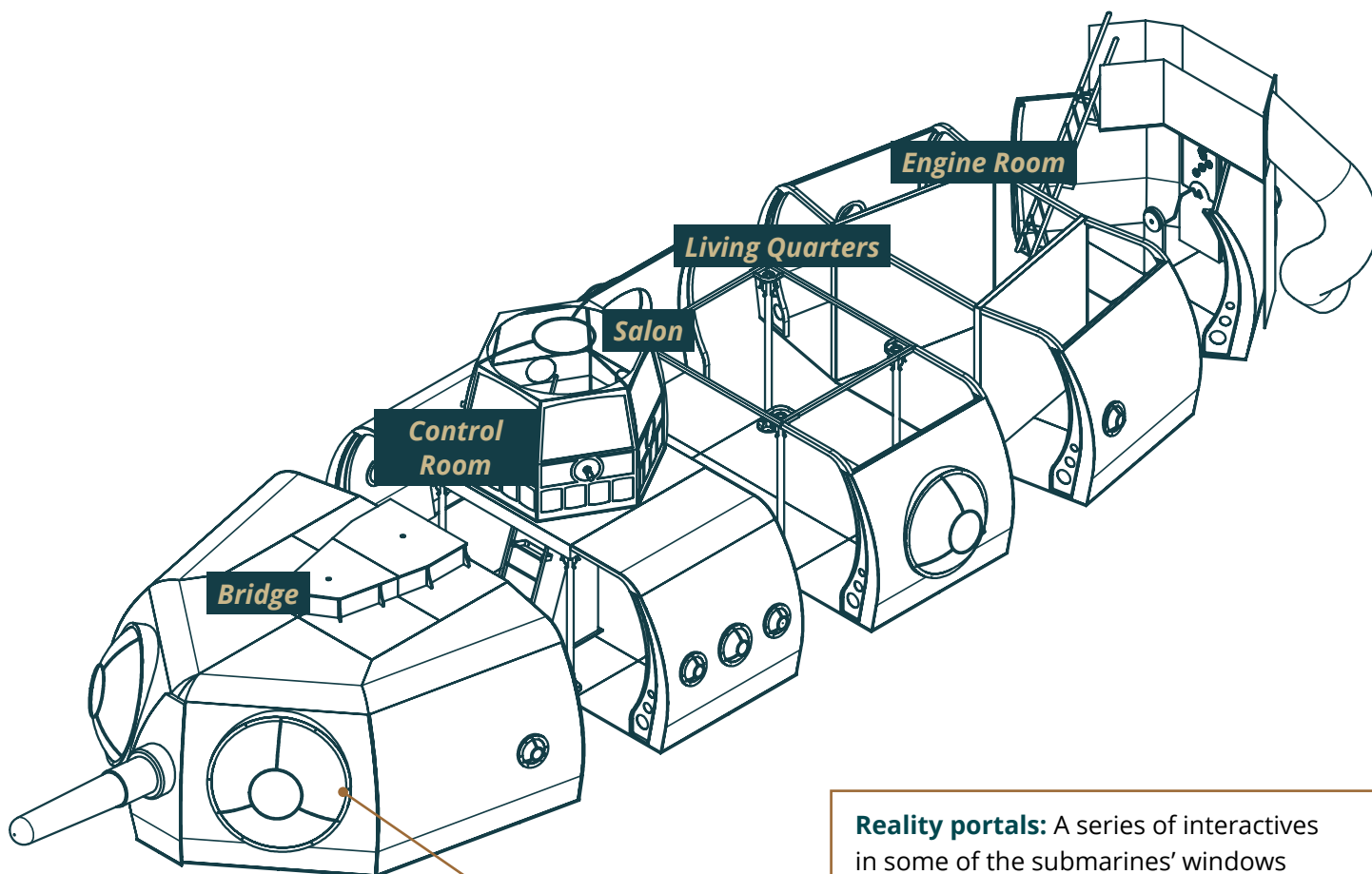
BRIDGE

Helms

Visors use a pair of linked helms to steer the sub through different undersea habitats. As in a real sub; one helm moves it up and down, while the other controls side to side movement; so cooperation and communication are required.

Periscopes

A pair of periscopes allow visitors to experience how mirrors are used reflect views from the surface, down into the sub. One scope shows a 360° daytime setting; the other the same scene at night.



Reality portals: A series of interactives in some of the submarines' windows allow visitors to compare our fantastical submarine with views into a real sub.

Submarine, continued

CONTROL ROOM

Speaking tubes

A series of speaking tubes allow real conversations between visitors in the control room and those up in the conning tower, plus recorded experiences from other areas of the submarine. Additional speaking tubes are found throughout the sub.

Seabed environments maze

Visitors use a tilt maze to manoeuvre a model sub and explore various deep sea environments.

Dress-ups

Visitors can dress up as deep sea divers or giant squid and pass through the airlock to interact with projected sea creatures.

SALON

Magnifier

Visitors use a steam-punked scope for a close look at some ocean creatures.

Viewing window

Visitors operate the giant iris to open the viewing window to the depths. They can see the interactive sea creature projection.

Mechanical grabbers

Visitors use mechanical arms to collect samples of sea creatures, as do scientists in modern research subs and ROVs.

Dive boots

Visitors are challenged to try to lift a pair of genuine deep sea diving boots. Graphics present the rest of a diver's get-up.

Sea sounds

A touch-screen interactive challenges visitors to identify the source of various undersea sounds.

Conning tower

Visitors climb up to the conning tower and use spotlights to explore the subs' surroundings.

Cabinet of curiosities

Visitors explore Captain Nemo's Cabinet of Curiosities; opening drawers and looking in cupboards at his weird and wonderful collection. They're in for some surprises!

Pipe organ

Visitors can try to pick-out a tune on Nemo's pipe organ; a unique instrument whose black keys trigger unexpected events.

Submarine, continued

LIVING QUARTERS

Shark guts

Visitors delve inside a shark to discover what it ate and learn of some of the other surprising objects sharks have swallowed.

Galley

Visitors explore the *Nautilus'* quirky galley and discover some of the many things we get from the sea.

Ballast Tanks

An interactive challenges visitors to pump air in and out of a model sub's ballast tanks to change its buoyancy and make it rise/sink.

ENGINE ROOM

Connect the Batteries

Visitors must connect the batteries to power some of the submarines' functions; some need more power than others and there's not enough juice for all, so decisions must be made. If the power runs out, they must start the engine to re-charge the batteries.

Crank the Prop

Visitors use the monkey grinder crank to turn the huge propeller. How fast can they make it go? What if they work as a team?

Bunks and Lockers

Visitors discover more about the sub's crew by peeking in their lockers and seeing where they sleep.

Could you be a submariner?

A simple touchscreen personality test lets visitors see if they have what it takes to live on a submarine.

Narwhal height chart

A replica narwhal tusk is transformed into a height chart to visitors can see how they measure up.

Escape hatch and squid slide

The sub is under attack! Visitors scale the escape hatch and slide down the giant squid.

Speaking Tube

A speaking tube allows real conversations between visitors in the engine room and those up in the escape chute.

Kelp Forest

Visitors explore a forest of giant kelp. They are challenged to see if they can find all of the various creatures that live there.

Atlantis/Performance Stage

The sunken city can be used as a performance stage.

- **Crack the Code:** Visitors must try to decipher the message in an ancient alphabet.
- **Mosaic Projection:** Visitors use this interactive projection to clear the sand and discover hidden mosaics.

Octopus Garden

The submarine's dinghy is the centrepiece of an area for younger visitors, where they can engage in active and role playing.

Vortex

At the end of *20,000 Leagues under the Seas* the *Nautilus* disappears in a maelstrom. Visitors use this interactive vortex to see if they can sink a model sub.

Adult Trail

Older visitors to the exhibition can use a trail booklet to discover more in-depth and fascinating information about the topics covered. They can share this knowledge with younger visitors either while in the exhibition, or later, to prolong the experience.