

RRS **SIR DAVID ATTENBOROUGH**

Once you have set eyes on the RRS *Sir David Attenborough*, you won't forget her. Measuring in at 129 metres, the ship is as long as 10 buses and weighs 10,400 tonnes – that's 1,400 elephants. Built by Cammell Laird to a Rolls-Royce design and kitted out with state-of-the-art facilities, the ship will push the boundaries of polar science and exploration.

The ship has beds for **30 CREW** and **60 SCIENTISTS** and **SUPPORT STAFF**.

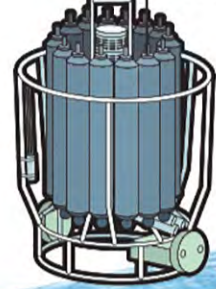
It is made up of **1 MILLION** pieces of steel, and contains over **30 KM** of pipes and more than **750 KM** of electric and data cables.

HELIDECK AND HANGAR

The ship's helideck and hangar will support two small helicopters which can launch aerial drones for science missions. They can also transfer equipment and people to and from shore.

The ship is capable of spending **60 DAYS** at sea without being refuelled, allowing her to embark on longer voyages than any other UK polar research vessel.

CTD (Conductivity, Temperature, and Depth) – a collection of sensors deployed overboard to detect how the salinity (salt levels) and temperature of the water column changes relative to depth



Scientific winch system deploys equipment, such as rock drills, overboard

Science crane

Main cargo crane (50 tonne)

Scientific hangar

Side A-frame deploys sensor equipment overboard
Winch control room

Crane

Satellite communications

Bridge

Crane

Helideck

Officer and crew cabins

Bar, lounge and mess room

Cargo tender "Terror" delivers people and supplies to land

Hull designed to break through ice one metre thick

LABORATORIES & WORKSPACES

There will be 14 laboratories on board and at least 10 shipping containers with scientific equipment that can be reconfigured to keep up with changing technologies and techniques.

LIVING ON BOARD

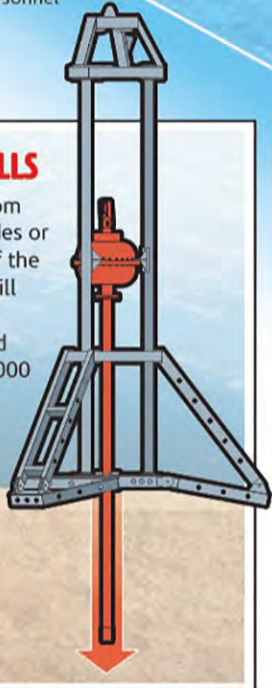
Scientists and crew will be able to unwind using the gym, sauna, bar, and TV facilities. They will sleep in a mixture of single and double-occupancy cabins.

Cabins are located away from the ship's bow to reduce the effects of motion.

Work boat "Erebus" transports personnel and supplies

ROCK DRILLS

Deployed from the stern, sides or moonpool of the ship, drills will sample soft sediment and rock up to 2000 metres underwater.



ENGINES

The engines will run as silently as possible to avoid interference with the 'ears of the ship', acoustic instruments, which use echo sounders to measure life in the water and map the sea floor.

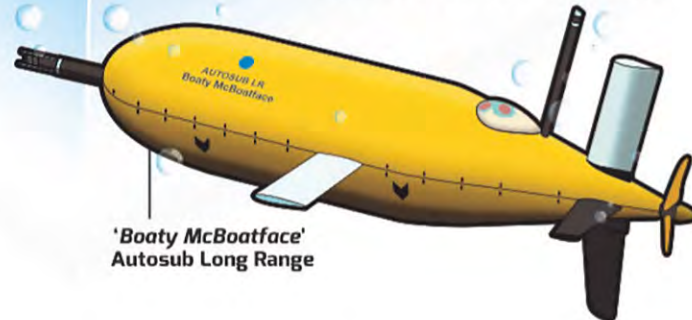
Mooring winch

Shipping containers with scientific equipment

Electric propulsion motors

MOON POOL

Scientists can lower and raise equipment (such as ROVs) through the moon pool, a vertical hole running through the hull of the vessel. This makes it easier and safer to deploy scientific equipment in the rough polar oceans and ice-covered waters.



'Boaty McBoatface' Autosub Long Range

Moon pool

Rescue boat
Diesel power plant consists of two six cylinder and two nine cylinder Rolls Royce Bergen engines

ROV (remotely-operated underwater vehicle)

MARINE ROBOTICS

The ship will act as a central platform for deploying state-of-the-art autonomous and remotely-operated vehicles. These will explore untouched parts of the ocean and atmosphere. Remotely controlled vehicles will be connected to the ship and powered via a cable – just like an umbilical cord. Autonomous underwater vehicles, like the 'Boaty McBoatface' Autosub Long Range, will have no link to the ship and will travel deep beneath ice shelves and at the edge of active glaciers.

Workshops & laboratories

Lifeboat

Scientist cabins