

Ship specifications – *RRS Discovery*

Launched in April 2012 and named in October the following year, *RRS Discovery* is the newest addition to the UK's fleet of research vessels. She cost £75m and is designed to support world-leading marine research everywhere from tropical seas to polar oceans.

Her 100m length is packed with state-of-the-art scientific equipment, the infrastructure needed to deploy it and facilities to keep 28 scientists and 24 crew comfortable for up to 50 days at a time. With nearly 400m² of permanent lab space and the ability to field specially designed container labs, *Discovery* enables research in disciplines including physical, biological and chemical oceanography, marine geology and geophysics, ocean engineering and atmospheric science.

As well as a sophisticated suite of internal equipment, the ship can deploy a range of remotely operated and autonomous underwater vehicles, and features dynamic positioning thrusters that can keep her in exactly the same position even in heavy seas.

NERC's previous research ship named *Discovery* operated between 1962 and 2012.

Common Marine Inspection Document - Vessel Particulars

	Requested Information
Name of vessel	DISCOVERY
IMO number	9588029
Official number	919206
Type of vessel	RESEARCH VESSEL
<i>(include details of any special features)</i>	
Previous name(s)	N/A
Vessel Owner	NATURAL ENVIRONMENT RESEARCH COUNCIL
Address	POLARIS HOUSE NORTH STAR AVENUE SWINDON. SN2 IEU
Telephone	
Fax	
e-mail	
Vessel operator	
Name	NMF-SEA SYSTEMS
Address	NATIONAL OCEANOGRAPHY CENTRE EUROPEAN WAY SOUTHAMPTON. SO14 3ZH
Telephone	+44 (0)2380 596286
Fax	+44 (0)2380 635130
e-mail	rxp@noc.ac.uk
IMO Database Number	0010877
Date current vessel operator assumed responsibility for vessel	08 JULY 2013
Manning agent	N/A
Address	
Telephone	
Fax	
e-mail	
Flag	UNITED KINGDOM
<i>(if the vessel has changed flag within the past six months, report date of change and previous flag in 'Additional comments')</i>	
Port of registry	SOUTHAMPTON
Classification society <i>(if vessel has changed class within the past six months, report date of change and previous classification in 'Additional comments')</i>	LLOYDS REGISTER Lloyd's +100A1 Oceanographic Research Vessel, *IWS, Ice Class 1D, EP +LMC, UMS, DP(AM), Green Passport, Shipwright (SERS)
Class ID number	9588029
Additional comments <i>(include any additional specialised equipment vessel has on board)</i>	See additional information below on winches and handling systems
Hull type	STEEL
LOA	99.70m
Beam	18.00m

Maximum draft	6.60m
Deadweight tonnage	1840T
Gross tonnage	5952T
Net Tonnage	1785T
Main engine horsepower and manufacturer	5760kW
Number of engines	DIESEL ELECTRIC
Number and type of main propellers	2 x Wartsila Azimuth Thrusters with 5-bladed, fixed pitch, 3.6m diameter (Outward turning)
Number of rudders	N/A
Number of generators	4 X Wartsila 8L20 (1770kW/1000RPM)
Kort nozzles fitted?	NO
Bow thrusters fitted (number and type)?	WARTSILA – AZIMUTH 1350Kw TEES GILL – WATER JET (1700kW)
Stern thrusters fitted (number and type)?	NONE
Other propulsions fitted (number and type)?	2 x Wartsila DC Propulsion Motors (2,200kW, 3x690v, 50Hz) 4 x Warstila LLC (low Loss Concept) Transformers each 2500/1250kVA
Rated bollard pull (as applicable)	N/A
Type of bunkers	MARINE GAS OIL
Bunker capacity	596m³ approx
Daily fuel consumption	9m³ on 2 generators
Potable water capacity	310m³ approx
Can vessel make potable water?	YES
Water ballast capacity	1375m³
Inmarsat number (MMSI)	235091165
Call sign	2FGX5
Name of the vessel's P&I club	BRITISH MARINE
Name and contact details for designated person ashore (DPA)	GERAINT WEST HEAD NMF-SEA SYSTEMS +44 (0)2380 596147 geraint.west@noc.ac.uk

SCIENTIFIC MACHINERY AND HANDLING SYSTEMS

DEEP WATER CORING TRACTION SYSTEM SWL 30 T	Cable length: 8000m Diameter: 30 mm Minimum Breaking Load of the cable (MBL): 75 tonnes
FIBRE OPTIC DEEP TOW TRACTION SYSTEM SWL 11 T	Cable length: 10, 000m Diameter: 17.3mm MBL: 18.4 t <i>Note: Deep Water Coring and the Optical Fibre Deep Tow Cable use same traction winch.</i>
TRAWL TRACTION WINCH – TAPERED SWL 12.5T 8 T @ inboard end, 11.5 T @ outboard end	Wire rope length: 15, 000m Outer length: 8, 300m Diameter: 14.5mm MBL: 13 T Middle length: 4, 350m Diameter: 16.5mm MBL: 18.1 T Inner length: 2, 350m Diameter: 18mm MBL: 20.9 T
CTD TRACTION WINCH – FIBRE OPTIC CABLE SWL 5 T	Rope Length: 8000m Diameter: 11.43mm MBL 8.39 T
AFT 'A' FRAME	SWL 20t static, 10t luffing Outreach 3.0m Inboard reach 3.8m Height above deck 5.8m Width 6.0m Pennant winch 1t SWL
MIDSHIP 'A' FRAME	SWL 15t static, 8t luffing Outreach 2.8m Inboard reach 1.8m Height above deck 3.9m Pennant winches 2 x 2t SWL