

R.R.S. DISCOVERY - KEY DATA

1. SCIENCE SUPPORT

	AREA	
	M ²	FT ²
WHEELHOUSE		
All round vision including all working deck areas, small plot chart area	45	480
BRIDGE DECK		
Communications room	12	130
BOAT DECK		
Ship=s office	10.5	113
P.S.O.=s office overlooking working deck areas	11.3	121
FORECASTLE DECK		
Working deck forward	60	645
Scientists= office	10	110
Chemical store	9	97
Container slots		
4 x 5 t store containers	-	-
or 2 x 10 t container laboratories with covered lobby entry and direct access to laboratories	-	-
GAS BOTTLE STORAGE		
20 - various gases piped to laboratory		
WINCH CONTROL CABIN		
With clear view over aft and side decks		
UPPER DECK		
Stationery store	6	65
Dark room	3	33
Photo lab	7	75
Computer room	22	235
Main laboratory	67	720
Controlled environment lab.	17.5	190
Chemistry laboratory	17.5	190
Deck laboratory	59	635
Water bottle annex	22	235
Covered work area	73	785
Scientific workshop	29	310
Freezer compartment	6.5	71
Aft deck area (2 container slots)	300	3200
Side deck area	79	845
<i>All deck areas provided with a hold down bolt matrix at 1m pitch</i>		
MAIN DECK		
Tape store midships	10	110
Scientific equipment store aft	165	1775
Hydraulic machinery space	19	205
Magazine 15 tonnes	-	-
Streamer fluid tanks		
LOWER DECK		
Electronic workshop	16.5	175
Stable laboratory	19	205
Scientific spares store	16.5	175
Store areas	28	300
Compressor room	60	645
TANK TOP		
Dirty scientific store	70	750
Winch room	105	1130

2. SCIENTISTS= CABINS

	No.
BOAT DECK	
Single suite with en suite toilet	1
FORECASTLE DECK	
Single cabin with en suite toilet	1
Single cabins with shared toilets (1 toilet to 2 cabins)	12
MAIN DECK	
Single cabins with shared toilets (1 toilet to 2 cabins)	14
TOTAL:	28

3. AMENITY SPACES

	AREA	
	M ²	FT ²
MAIN DECK		
Quiet room & Library	18	190
Video room	15	160
Officers & scientists= lounge	38	410
Officers & scientists= dining room	48	515
Duty mess	13	140
UPPER DECK		
Coffee shop	7	75
Hospital		
Changing room & deck toilet	8	85

SCIENTIFIC MACHINERY AND HANDLING SYSTEMS

MAIN TRACTION WINCH SWL 20T	
Wire storage reels	
1 - Superaramid	8000m
1 - Trawl wire 15000m	
1 - Coring wire	7000m
1 - Conducting cable	10000m
CTD TRACTION WINCH SWL 10T	
CTD WIRE STORAGE REELS	
1 - Hydrographic	9000m
1 - Conducting	8000m
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
FORWARD >A= FRAME	
SWL	3.0t static, 2.5t luffing
Outreach	2.6m
Inboard reach	1.0m
Height above deck	4.0m
Hangar gantry	10t SWL
COMPUTER SYSTEM	

The ABC shipboard computer system provides for the logging, processing, editing, display and storage of oceanographic data collected during research cruises.
Instrument Interfaces (Level A) - provide signal conversion, filtering, error detection, monitoring, timestamping and forwarding to Level B using ship Message Protocol.

SCIENTIFIC NAVIGATION SYSTEMS

Trimble GPS; 4000 DS GPS Receiver Unit, Ashtech ADU2 receiver and 2 off GG24 GPS/GLONASS.

HSD Ship-Shore Link

OCEANOGRAPHIC SYSTEMS

Fixed system comprising: Surface measuring system, Thermosalinograph.

ADCP: RDI system capable of being configured to measure water column movement or back scattering from biology in water to depth of 300-400m.

Echo Sounder: Simrad EA500, 10.2 and 12KHz. Full Ocean Depth. Shipboard wave recorder.

H.P. AIR COMPRESSORS (WHEN FITTED)

4 x Hamworthy 4TH 565W 100 - 2652m³/hr FAD at 135 bar.

HYDRAULIC EQUIPMENT POWER SUPPLIES

5 POSITIONS ON DECK

5.5 gpm, 1 gpm, 33.6 gpm at 200 bar.

CRANES

Forward knuckle crane 30tm Hard hook and winch
Midship knuckle crane 130tm Hard hook and winch
Mid/Aft knuckle crane 75tm Hard hook and winch
Aft 2 (1P & 1S) knuckle crane 30tm Hard hook

ECHO SOUNDERS

P.E.S. SIMRAD EA500

A.D.C.P. RDI 150 KHz

5. SHIP DATA

GRT 3008t
Length overall 90.25m
Length between perpendiculars 82.85m
Breadth 14.02m
Draft 5.3m
Depth to upper deck 7.83m
Cruising speed 11.0kn
Endurance extreme 55 days
Endurance operational 45 days
Scientific equipment DWT 165t
Diesel electric power plant 3.75 mw a.c.
Main propulsion motor 1.50 mw d.c.
Bow thruster 360 azimuthing 0.55 mw d.c.
Single screw fixed pitch
Single high lift/high angle rudder
Controlled tank stabiliser
Call sign
Satcomm code GLNE 323388210

MANNING

Officers 9
Crew 13
TOTAL 22

RRS Discovery is operated by:
NERC Research Ship Unit
Southampton Oceanography Centre,
European Way,
Empress Dock,
Southampton, Hampshire SO14 3ZH
Telephone: 02380 596800
Fax: 02380 635130 Telex: 47121 NERCSHIP G

