

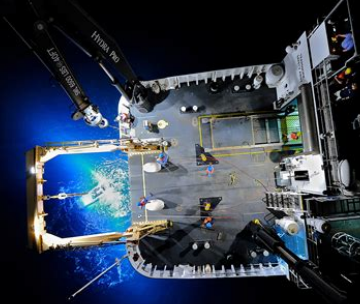


NOAA Ship *Okeanos Explorer*

	Hull Number	R337
	Call Sign	WTDH
 	Home Port	
	North Kingstown, RI	
Marine Operations Center		Atlantic (MOC-A)
Port Office		NOAA Davisville Facility, North Kingstown, RI
Regular Area of Operations		Global, International
General Classification		Oceanographic Exploration Vessel
Mailing Address		NOAA Ship <i>Okeanos Explorer</i> 2578 Davisville Rd. North Kingstown, RI 02852

Contact Information

IN PORT	AT SEA
Cellular	
401-932-4114 (Ship)	
401-378-7848 (CO)	
401-474-8992 (XO)	
401-378-7414 (OOD)	
401-378-7947 (EOW)	
Land Line (Home Port)	
401-294-4760 (VC)	
401-294-4591 (VC)	
401-294-4902 (VC)	
401-294-4686 (Fax)	
Ship's Email	
Noaa.Ship.Okeanos.Explorer@noaa.gov	
	VoIP
	541-867-8931
	541-867-8932
	541-867-8933
	541-867-8934
	Iridium
	808-659-9179
	Fleet Broadband
	011-870-773-931-484 (Voice)

Design		Speed & Endurance	
Designer	Halter Marine	Emergency Speed (knots)	12
Builder	VT Halter Marine, Inc., Moss Point, Mississippi	Cruising Speed (knots)	10
Launched	Oct. 28, 1988	Range (nm)	9600
Delivered	Sept. 10, 2004	Endurance (days)	40
Commissioned	Aug. 13, 2008	Endurance Constraint	Food
Length (LOA - ft.)	224		
Breadth (moulded - ft.)	43	Compliment - Maximum	
Draft, Maximum (ft.)	16.83 Bow Thruster retracted 20.08 Bow Thruster lowered	Commissioned Officers/Mates	7
Depth to Main Deck (ft.)	5.92	Engineers, Licensed	3
Hull Description	White	Engineer, Unlicensed	3
Displacement	2062 tons (Int'l)	Deck	7
Berthing		Survey	1
Single Staterooms	11	Stewards	3
Double Staterooms	13	Electronic Technicians	2
Other Staterooms:	3 four-person berths	USPHS Medical Officer	1
Total Berths	49	Total Crew	27
		Scientists	22

Medical Facilities:	Food Service Seating Capacity	
One medical treatment room containing one berth for patients. Emergency and first-aid equipment on board, administered by MPIC. USPHS medical officer on board.	Forward Lounge	10
	Mess	20
	Library	10

Navigational Equipment Bridge	Type
Radars (X and S Band)	S-band Furuno/FAR 2837S/Bridge X-Band Furuno/FAR 2827X/ Bridge
GPS and DGPS	Furuno/GP-170/Bridge (Both models)
Gyro Compass	Teledyne TSS Meridian Surveyor/Bridge
Deepwater and Shallow Navigational echosounders	Furuno/FE-700/Bridge
ECDIS	Transas/Navi-Sailor 4000/Bridge
AIS	Furuno/FA-150/Bridge

<u>Navigational Equipment Science</u>	Type
GPS and DGPS	GPS from SCS / Marine Star from POSMV
Gyro Compass	Gyro repeater from SCS
Deepwater and Shallow Navigational echosounders	18 kHz EK-60 from SCS
POSMV	Applanix Version 5
Charting Program with Ship's Position	Hypack

Laboratory Spaces and other Scientific Spaces			
Type	Location	Ft²	Description
Dry Lab	O1 Deck	132	Survey space with scientific computers and counter space
Wet Lab	O1 Deck	260	Area available for wet operations, chemical samples, etc.
Electronics/ Computer Lab	O1 Deck	216	Control room for ROV, mapping, and scientific operations
Climate Controlled Space	O1 Deck	140	Computer server, network, and data storage room, must maintain cool temperature for electronics in this space
Staging Bay	Main Deck	320	ROV hangar, stores ROV and equipment
ROV Workshop	Main Deck	128	ROV workshop, provides counter space for ROV related work/repairs

Scientific Data Collection Systems and Supportable Operations	
Type	Description
Thermosalinograph	SBE-45 FastCat Micro TSG
Multibeam Equipped for Hydrographic Surveys	Kongsberg EM-302 30 kHz
Conductivity, Temp., Depth (CTD) With Water Samples	Seabird SBE 9-11Plus CTD 12x 10L NISKW Water Sampling Bottles
Expendable BathyThermographs (XBT) Capable	Deep Blue/Sippican MK-21 XBTs
Dive Team Equipped	NOAA trained dive team, Bauer Compressor
Split Beam Echo Sounder	SIMRAD EK-60; 18, 38, 70, 120, 200 kHz
Remote Operated Vehicle (ROV) Deep Discoverer and Seirios	6000m Max Depth, 1080i HD Camera, 2x Sampling Manipulators
Scientific Computer System Equipped	SCS v4.9.1.4369
Knudsen CHIRP	Sub-bottom profiler
Applanix POS/MV 320 Version 5	Location, heading, attitude

DATA COLLECTED BY THE SHIP'S SCIENTIFIC COMPUTER SYSTEM (SCS) IN THE STANDARD CONFIGURATION

Description	Units	Data Source
VWR - Relative wind speed and angle	KTS	RM Young Anemometer 85106
GLL - Geographic Position (Lat/Lon)	Lat/Long	DGPS Satellites
MTW - Mean Temp. for Water	Deg.C	Thermosalinograph
HDT - Heading (True)	Deg.T	Gyrocompass
VTG - Ship course & speed)	Deg.T/ KTS	Ship input/GPS
ZDA - Time and Date (UTC. d. m, yr, TZ)	Time	GPS
Digital barometer	mB	RM Young Barometer 61302V
ROV environmental data; Conductivity, Temperature, Depth, Turbidity, Oxygen Concentration, ORP	Deg.C/	Onboard CTD
Digital Temperature and Relative Humidity	Deg.C /%	RM Young 41382VC
Doppler Speed Log	KTS	Sperry
Tensiometers for all cranes/winches	lbs.	Desh-5
Fluorometer (measures chlorophyll)	µg/L	Turner Designs
Sound velocity probe	m/s	Reson SVP70

TELEPRESENCE		DECK EQUIPMENT:	
High Speed VSAT	C and KU Band	Winch – (Oceanographic)	
Bandwidth	20 Mbps	Quantity	1
Internet	Wireless	Manufacturer	Markey
Synchronization	Redundant Master Clocks	Model	DESH-5
Storage	362 TB SAN 79 TB NAS	Drive	75 HP, 460V 1200 RPM Electric motor- AC Vector Drive, automatic brake
Cameras	5 HD robotic cameras	Max. Pull (lbs)	12,000
On Board Support	Highly skilled video team	SWL (lbs)	3500
Video	3x Live Stream encoders with 3 edit stations, video production HD video and still cameras	Drum Capacity	6,000 m of 0.375" electro-mechanical cable
	Video router with 128 in x 128 out	Type of Cable Installed	.375" electro- mechanical cable
Intercom	RTS 64 Port with shore side link and wireless intercom	Length of Cable on the drum (m)	
Computer	KVM Remote Computer access with 160 ports, locally administered and local firewall	Location:	Exterior deck above ROV hanger

Winch – Traction (ROV Ops)		Crane, Aft Working Deck Crane	
Quantity	1	Quantity:	1
Manufacturer:	Dynacon	Manufacturer:	Hydra Pro
Model	766	Model:	HP46
Drive:	Electro-Hydraulic Power Unit	Boom Length (ft.):	46
Max. Pull (lbs.):	20,000 SWL	Lifting Cap. (lbs.):	12,000 at 20' radius
Max. Depth (m)		Location:	Aft working deck, Starboard
Drum Capacity:	10,000m of .681" fiber optic/power cable	Crane, ROV Crane	
Type of Cable Installed:	6,000m of .681" cable	Quantity:	1
Length of Cable on the drum (m)		Manufacturer:	Hydra Pro
Location:	Interior Deck Aft	Model:	HP40/13KESO
		Boom Length (ft.):	46
		Lifting Cap. (lbs.):	8,000 at 34' radius
		Location:	Aft working deck, Port

A Frame		J Frame	
Quantity:	1	Quantity:	1
Type:	Dynacon 973	Type:	Movable
Clearance over the side (ft.):	12	Clearance over the side (ft.):	8
Horizontal Clearance (ft.):	15 on deck	Towing Capacity (lbs)	3,000@45 degrees
Safe Working Load (lbs.)	8,000/20,000	Safe Working Load (lbs.)	3,000
Location:	Working Deck Aft	Location:	O-1 Deck Starboard

Boat Davit (Rescue/Work Boats)		Anchor - Bow	
Quantity:	2	Quantity	2
Manufacturer:	Vestdavit	Type	Stockless, bower
Model:	PLR 3600	Weight (lbs.)	3,500
Hoisting Capacity	7,900 lbs.	Port Anchor Chain Length (fathoms)	8 Shots
Location	O-2 Deck Port /Starboard	Starboard Anchor Chain Length (fathoms)	8 Shots
Boat type used	RHIB		

BOATS				
	Type	Horsepower	Length Over All (Ft.)	Max. Persons
1	Rescue Boat (SOLAS Approved)	250	22	3
	Zodiac Hurricane H638 DJ FRB NOAA			
2	Rigid Hull Inflatable Boat (RHIB)	250	22	9
	Willard 670 SOLAS FRB, Jet drive propulsion			

Additional Capabilities	
Type	Description
Compressed Air	Bauer Compressor for SCBA and SCUBA cylinders
Dynamic Positioning Capable	Kongsberg K-POS DP-11 Class 0, ship operates using dynamic positioning during ROV and other operations
Access to Clean Electrical Power	Ship provides clean power in various locations for sensitive electronic equipment, able to isolate via UPS

