


# NOAA Ship *Rainier*

	<b>Hull Number</b>	<a href="#">S221</a>
	<b>Call Sign</b>	<a href="#">WTEF</a>
	<b>Home Port</b>	<a href="#">Newport, OR</a>
	<b>Marine Operations Center</b>	<a href="#">Pacific (MOC-P)</a>
	<b>Port Office</b>	<a href="#">None</a>
	<b>Regular Area of Operations</b>	<a href="#">Pacific</a>
	<b>General Classification</b>	<a href="#">Hydrographic Survey Vessel</a>
	<b>Mailing Address</b>	<a href="#">NOAA Ship <i>Rainier</i> Marine Operations Center, Pacific 2002 SE Marine Science Drive Newport, OR 97365-5229</a>

<b>Contact Information</b>	
<b>IN PORT</b>	<b>AT SEA</b>
Cellular	VoIP
<a href="#">206-861-8747 (Ship)</a>	
<a href="#">443-994-3301 (CO)</a>	Iridium
<a href="#">843-297-1871 (XO)</a>	<a href="#">808-659-0049</a>
<a href="#">206-661-8603 (OOD)</a>	<a href="#">011-8816-7631-0049</a>
Land Line (Home Port)	Inmarsat Mini-M:
<a href="#">541-867-8770 (VC)</a>	
<a href="#">541-867-8771 (VC)</a>	
<a href="#">541-867-8772 (VC)</a>	E-Fax
<a href="#">541-867-8773 (Fax)</a>	<a href="#">206-260-9158</a>
	Inmarsat B
Ship's Email	
<a href="mailto:Noaa.Ship.Rainier@noaa.gov">Noaa.Ship.Rainier@noaa.gov</a>	

<b>Design</b>		<b>Speed &amp; Endurance</b>	
Designer:	Maritime Administration	Emergency Speed (knots):	
Builder:	Aerojet-General Shipyards, Jacksonville, FL	Cruising Speed (knots):	12
Launched:	March 1967	Range (nm):	5,898
Delivered:	April 1968	Endurance (days):	22
Commissioned:	October 1968	Endurance Constraint:	Stability
Length (LOA - ft.):	231		
Breadth (moulded - ft.):	42	<b>Compliment - Maximum</b>	
Draft, Maximum (ft.):	14.3	Commissioned Officers/Mates	13
Main Deck to Water:	6.6	Engineers, Licensed	4
Hull Description:	Welded steel/ice strengthened	Engineer, Unlicensed	6
Displacement:	1,800 tons	Deck	16
		Survey	10
		Stewards	4
		Electronic Technicians	1
		Maintenance	1
		<b>Total Crew</b>	<b>55</b>
		<b>Scientists</b>	<b>8</b>
<b>Berthing</b>			
Single Staterooms:	14		
Double Staterooms:	13		
Other Staterooms:	6 Quadruple		
<b>Total Berths:</b>	<b>64</b>		

<b>Medical Facilities:</b>	<b>Food Service Seating Capacity</b>	
Emergency and first-aid equipment aboard, administered by trained vessel personnel. Eight (8) trained MPICs (medical person in charge) aboard	Wardroom:	12
	Ship's Officer's Mess:	11
	Technician's Mess	18
	Crew's Mess	18

<b>Navigational Equipment (Ship's Use)</b>	<b>Type (Make/Model/Amount/Location)</b>
Radars (X and S Band)	1 Furuno X-Band and 1 Furuno S-Band
GPS and DGPS	2 Trimble DMS-212L DGPS Receivers, 1 CSI Wireless MBS-3S DGPS Receiver
Gyro Compass	2 SG Brown Meridian Gyro Compasses
Deepwater and Shallow Navigational echosounders	Furuno FE-700 Echosounder
ECDIS	TRANSAS 4000

<b>Laboratory Spaces and other Scientific Spaces</b>			
Type	Location	ft. <sup>2</sup>	Description: (Available Services and/or Connections, counter space, etc.)
Wet Lab	D-09-102	240	Supports oceanographic and diving operations

<b>Scientific Data Collection Systems and Supportable Operations</b>	
Type	Brief Description (where equipment is involved, please state what type (i.e. ME70, EK60, ES60, Seabird, etc.)
Multibeam Equipped for Hydrographic Surveys	4 Reson 7125 Dual-frequency Multibeam Sonar Systems
Multibeam Equipped for Hydrographic Surveys	1 Reson 8125 Multibeam Sonar System
Multibeam Equipped for Hydrographic Surveys	1 Konsberg EM-710 Multibeam Sonar System
Conductivity, Temp., Depth (CTD) With Water Samples	2 SeaCat SBE-19 CTD's
Conductivity, Temp., Depth (CTD) With Water Samples	4 SeaCat SBE-19+ CTD's
Conductivity, Temp., Depth (CTD) Without Water Samples	2 Digibar Pro Sound Velocimeters
Conductivity, Temp., Depth (CTD) Without Water Samples	4 SVP-71 Velocimeters
Conductivity, Temp., Depth (CTD) Without Water Samples	1 SVP-70 Velocimeter
Scientific Computer System Equipped	See <i>Scientific Data Collection Systems and Supportable Operations</i>
Dive Team Equipped	Supports working dives, including tide gauge installations, as well as emergency and routine ship repair and maintenance.

<b>DATA COLLECTED BY SHIP'S SCIENTIFIC COMPUTER SYSTEM (SCS) IN THE STANDARD CONFIGURATION</b>		
Description	Units	Data Source
DPT - Depth of Water with transducer offset	XXX	XXX
ZDA - Time and Date (UTC. d. m, yr, TZ)		
VWR - Relative wind speed and angle		
GLL - Geographic Position (Lat/Lon)		
OSD - Own Ship Data (Ship course & speed)		
HDG - Heading (Deviation and Variation)		
MTW - Mean Temp. for Water		
Air Temperature		
Wet Bulb		
Relative Humidity		

<b>DECK EQUIPMENT:</b>			
<b>Crane, Telescoping Boom</b>		<b>Crane, Fixed Length</b>	
Quantity:	2	Quantity:	1
Manufacturer:	North Pacific Crane Co.	Manufacturer:	Skagit
Drive:	Electrohydraulic	Drive:	<b>Electric</b>
Boom Length (ft.):	33	Boom Length (ft.):	40
Lifting Cap. (lbs.):	2,030	Lifting Cap. (lbs.):	5,000
Location:	E-Deck Forward, Port & STBD	Location:	E-Deck Aft, Amidships
<b>Boat Davit 1</b>		<b>Boat Davit 2</b>	
Quantity:	1	Quantity:	1
Manufacturer:	VestDavit	Manufacturer:	VestDavit
Hoisting Capacity	7,900 lbs.	Hoisting Capacity	14,000 lbs.
Location	F-Deck	Location	E-Deck
Boat type used	FRB	Boat type used	Launch
<b>Boat Davit 3,4,5</b>		<b>Boat Davit 6</b>	
Quantity:	3	Quantity:	1
Manufacturer:	VestDavit	Manufacturer:	VestDavit
Hoisting Capacity	19,800 lbs.	Hoisting Capacity	19,266 lbs.
Location	E-Deck	Location	E-Deck
Boat type used	Launch	Boat type used	Launch
<b>MVP Towfish</b>		<b>Anchor - Bow</b>	
Quantity:	1	Quantity	2
Manufacturer:	ODIM	Type	Bower Stockless
Drive:	Electric	Weight (lbs.)	4850
Sensor:	CTD	Port Anchor Chain Length (fathoms)	165
Location:	Aft Mast	STBD Anchor Chain Length (fathoms)	165
		Quantity	2

<b>BOATS (Normally Equipped)</b>				
	<b>Type</b>	<b>Horsepower</b>	<b>Length Over All (Ft)</b>	<b>Max. Persons</b>
RA-1	Rescue Boat (SOLAS Approved)	225	22	6
	Data collection equipment and/or special features.	Fiberglass hull and deck, 2-person aluminum console, high capacity deck drains fitted with scupper trunks, handheld search light		
RA-2	Survey Launch	350	25	6
	Data collection equipment and/or special features.	Designed as a soft riding, stable vessel, this small craft is particularly useful for personnel working with objects close alongside in the water or under the vessel. The intended use is for this vessel is shoreline survey; it is equipped with 2 Trimble ProXRS “backpack” GPS Receivers with TSCe Data Collectors. The vessel is jet driven, allowing exceptional maneuverability over shallow obstructions which would limit traditional propeller driven vessels.		
RA-3	Survey Launch	490	29	10
	Data collection equipment and/or special features.	Fully equipped multibeam acquisition system including Reson SeaBat 7125 sonar (200 kHz and 400 kHz), tilted Reson SeaBat 8125 sonar (455 kHz), and Applanix PosMV position and orientation system. Additionally, launch is equipped with a Furuno GR-80 Differential Beacon Receiver DGPS, a SeaBird CTD, and a SVP-71 Velocimeter.		
RA-4	Survey Launch	490	29	10
	Data collection equipment and/or special features.	Fully equipped multibeam acquisition system including Reson SeaBat 7125 sonar (200 kHz and 400 kHz), and Applanix PosMV position and orientation system. Additionally, launch is equipped with a Furuno GR-80 Differential Beacon Receiver DGPS, a SeaBird CTD, and a SVP-71 Velocimeter.		
RA-5	Survey Launch	490	29	10
	Data collection equipment and/or special features.	Fully equipped multibeam acquisition system including Reson SeaBat 7125 sonar (200 kHz and 400 kHz), and Applanix PosMV position and orientation system. Additionally, launch is equipped with a Furuno GR-80 Differential Beacon Receiver DGPS, a SeaBird CTD, and a SVP-71 Velocimeter.		
RA-6	Survey Launch	490	29	10
	Data collection equipment and/or special features.	Fully equipped multibeam acquisition system including Reson SeaBat 7125 sonar (200 kHz and 400 kHz), and Applanix PosMV position and orientation system. Additionally, launch is equipped with a Furuno GR-80 Differential Beacon Receiver DGPS, a SeaBird CTD, and a SVP-71 Velocimeter.		
RA-7	SAFE Boat	150	19	8
	Data collection equipment and/or special features.	Custom fused polyethylene foam, particularly useful in sub-zero temperatures and in the presences of petroleum products. Coated with pure polyurethane for UV protection and abrasion resistance.		
RA-8	SeaArk	200	19	8
		Hull design is advantageous for its shallow draft and inherent stability		

<b>Miscellaneous (not previously stated)</b>	
<b>Type</b> AUSs	<b>Description</b> Capable of deployment and recovery of small unmanned aerial systems such as the ScanEagle. No UAS systems are currently carried by <i>Rainier</i> .