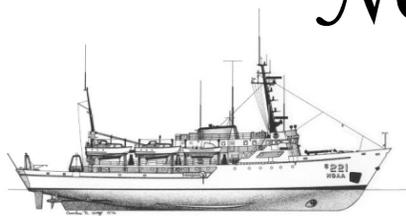


# NOAA Ship Rainier

## MRP Newsletter



RAINIER (S221) commissioned 1968

Issue #1

November/December 2009

## Welcome to the first *Rainier* MRP newsletter

This newsletter was created to provide timely information on all aspects of the Major Repair Period (MRP) for NOAA ship *Rainier* (S221). You will find information about current MRP activities and plans, department updates as crew augment throughout the fleet, and photos showing what has been happening with the ship.

The goal is to publish a new issue every two months. Content and feedback on the newsletter is always welcome. Please send your suggestions, corrections, updates and photos to [matthew.r.forrest@noaa.gov](mailto:matthew.r.forrest@noaa.gov).

## Vigor Marine Awarded *Rainier* MRP Contract

NOAA recently awarded a \$13.1 million contract to Vigor Marine, LLC to perform major repairs and upgrades to NOAA ship *Rainier* at their Portland, Oregon shipyard. Vigor Marine is located on Swan Island at 5555 N channel Avenue, Portland, OR 97217.



Swan Island, Portland, Oregon

Photo credit: Vigor Industrial

Shipyard work started November 11 and includes structural repairs to the ship; installation of updated hydrographic survey systems; replacement of davits and other deck machinery; refitting of living and berthing spaces; upgrades to machinery control systems, power generation machinery and the ship's steering system; and general maintenance and preservation work. The project is part of NOAA's effort to modernize the agency's fleet.

### In This Issue

- **Vigor Marine Awarded Contract**
- **Captain's Column**
- ***Rainier* Departure and Arrival**
- **Personnel Assignments**

NOAA personnel on site in Portland includes Port Engineers Steve Currie and Chris Flint, CME Smith and a weekly OOD rotation that may also include the Commanding Officer (CO) or Executive Officer (XO).

## Captain's Column

This is an extremely exciting time for NOAA ship *Rainier*. After 41 years of continuous service, the ship will receive her first Major Repair Period (MRP) allowing major upgrades to equipment and habitability to occur in a process that started over nine years ago.

The original plan had *Rainier* entering MRP in 2005, the year after *Fairweather* received its upgrades and was placed back into service. Funding and other issues delayed the *Rainier* MRP until 2009.

We now have the opportunity to improve safety, productivity, habitability; upgrade equipment and increase crew morale.

Complete asbestos removal from the ship is the first work item on the schedule. The original gravity davits will be replaced with Vestdavit electro-hydraulic davits. The command expects to see improved safety during the deployment and recovery of survey launches utilizing the Vestdavit design and Henriksen Hooks.

New fire detection, digital telephone, entertainment, and IT network systems will be installed. The fire system package will include new sensors. The telephone system will replace the existing analog phone system. The entertainment system will include new cabling throughout the ship. The entire IT network will be replaced and upgraded.

Both of the original Ship Service Generators are being replaced with new generators. New switchboards will also be installed for power distribution. A new boiler will replace the remaining original boiler.

The ship's ELAC multibeam sonar will be replaced with a SIMRAD EM-710 multibeam sonar, and an ODIM MVP 200 Moving Vessel Profiling system will be added to the fantail, improving overall quality and enabling more productivity and flexibility for shipboard data acquisition.

Many staterooms will receive improvements as asbestos bulkheads and overheads are removed and not replaced. This will increase the livable area of the room and allow shelving to be added. Existing furniture and fixtures will be repaired or replaced. Both the Deck and Engineering departments have special projects on the ship they will work on in areas not impacted during the MRP.

The approved schedule indicates a 1-year duration for the MRP and the command is optimistic about completing the entire project on time. Schedule updates will be provided in this newsletter.

NOAA ship *Rainier* will sail out of the MRP with numerous improvements that will enable her to continue to be one of the most modern and productive hydrographic survey platforms in the world for years come.

-CO

## Rainier Prepped for Tow

Representatives from Vigor Marine shipyard and Hess Crane were at Sand Point Tuesday, November 4 to prepare *Rainier* for the under-tow transit to Portland, Oregon. A stud-link chain bridle was assembled on the bow of the



Photo Credit: ENS Andvick

ship as the primary towing rig. The crane was used to lift heavy segments of chain and bridle hardware aboard the ship.



Photo Credit: ENS Andvick

Contractors installed temporary navigation lights with their own battery supplies to be used during the transit. Flooding alarms and sensors with independent batteries were also installed.



Photo Credit: ENS Andvick

Deck Department personnel were on hand to assist the contractors, reconfigure mooring lines and remove the forward gangway.

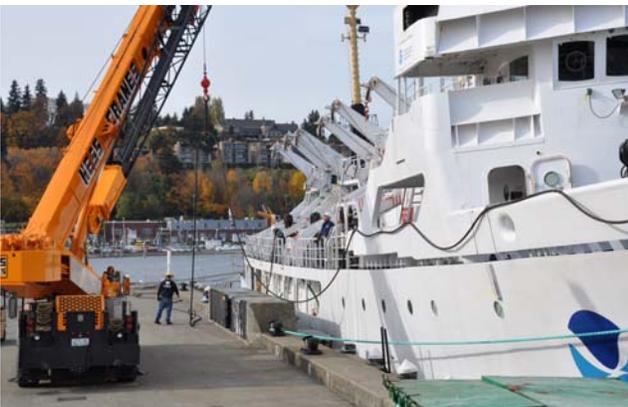


Photo Credit: ENS Andvick

An emergency tow cable was secured outboard for quick deployment along the starboard side of the ship.

## Rainier Towed Away

NOAA ship *Rainier* was towed away Monday, November 9 from the NOAA Western Regional Center (WRC) Sand Point Pier. Poor offshore weather forced a delay from the original plan of a Friday departure.

The tractor tug *Andrew Foss* with assist tug *Hornet* pulled NOAA ship *Rainier* from the Sand Point pier shortly before 10:00 am Monday morning, November 9, 2009.



Photo Credit: ENS Andvick

*Andrew Foss* is a 250 GRT, 4,000 horsepower twin-engine tugboat that is 107 feet long, 38 feet wide, with a draft of 17.5 feet. It has two Voith Schneider propellers, also known as a cycloidal drives, that create 100,000 pounds of bollard pull ahead.



Photo Credit: ENS Andvick

Contractors released the mooring lines allowing *Andrew Foss*, with *Hornet*, to ease *Rainier* from the pier. After entering Silshole Bay, *Rainier* was transferred to the tug *Barbara Foss* to continue the ocean voyage to Portland.



*Photo Credit: ENS Andvick*

## Personnel Assignments

The information below reflects the plans and current assignments of *Rainier* crewmembers as of this newsletter. Frequent changes are likely. Please send all updates to ENS Forrest at [matthew.r.forrest@noaa.gov](mailto:matthew.r.forrest@noaa.gov).

*Rainier* personnel will be augmenting aboard NOAA ships *Hi'ialakai*, *Ka'imimoana*, *Oscar Dyson*, *Miller Freeman*, *Henry B. Bigelow*, *Nancy Foster*, *Ronald H. Brown*, *Thomas Jefferson*, *Pisces*, and *Fairweather*.

## Notes From Afar

This section of the newsletter is available for *Rainier* crewmembers augmenting on other ships to provide information on what they are doing. Please keep it succinct and send your text with photos to [matthew.r.forrest@noaa.gov](mailto:matthew.r.forrest@noaa.gov).

## More New Launches

On November 9, *Rainier* crewmembers and LTJG Arnold delivered four new survey launches from All American Marine in Bellingham, Washington to the NOAA WRC small boat basin at Sand Point. The new launches have been custom built for use on NOAA ship *Fairweather*.



*Photo Credit: SST Colvert*

The four launches are almost identical to the new launches *Rainier* received last year.

Navigation electronics and safety gear were installed prior to the delivery transit. The transit took about eight hours due to rough water, a fueling stop, and speed restrictions during the new engine break-in period.



*Photo Credit: SST Colvert*



*Photo Credit: SST Colvert*

LTJG Arnold christened hull # 2806 with a traditional Alaskan-brewed beverage. Further offerings to the gods of the sea included liberal amounts of traditional *Rainier* christening liquid.



*Photo Credit: SST Colvert*

The fleet of newly-minted launches depart for the long transit to Sand Point.

## ***Rainier Arrives in Portland***

Veteran's Day, November 11, 2009, tug *Barbara Foss* arrived in Portland with NOAA ship *Rainier* in tow.



*Photo credit: Vigor Industrial*

*Barbara Foss* is a 198 GRT, 4,300 horsepower, ocean-going tugboat that is 119 feet long, 34 feet wide, with a draft of 14.6 feet. It has twin fixed Nautican nozzles that create 142,600 pounds of bollard pull.

Workers from Vigor Marine used a crane to load mooring lines aboard and secure the vessel to the pier at the Portland Shipyard.

*Rainier* will remain pierside during two months of asbestos removal activities. The first month-long dry dock evolution is scheduled to start the end of January, 2010.



*Photo Credit: Vigor Industrial*



*Photo Credit: Vigor Industrial*