

# Coast Guard Heavy Icebreaker Returns to Seattle Following Antarctic Deployment



U.S. Coast Guard Cutter Polar Star (WAGB 10) transits Elliott Bay near the Seattle waterfront as the cutter approaches its homeport of Coast Guard Base Seattle, Aug. 25, 2024. At a length of 399-feet, the Polar Star is one of the largest cutters in the Coast Guard's fleet. (U.S. Coast Guard photo by Capt. Holly Harrison)

From U.S. Coast Guard Pacific Area, Aug. 28, 2024

SEATTLE – The U.S. Coast Guard Cutter Polar Star (WAGB 10) and crew returned to Seattle, Sunday, after 285 days away from the cutter's home port.

Following a 138-day deployment to Antarctica [supporting Operation Deep Freeze 2024](#), the Polar Star reported directly to Mare Island Dry Dock (MIDD) LLC. in Vallejo, California, to commence the fourth phase of a five-year Service Life Extension Project (SLEP).

The work completed at MIDD is part of the [in-service vessel sustainment program](#) with the goal of recapitalizing targeted systems, including propulsion, communication, and machinery control systems, as well as effecting significant maintenance to extend the cutter's service life.

Polar Star's SLEP work is completed in phases to coordinate operational commitments such as the cutter's annual Antarctic deployment. Phase four began on April 1, 2024, targeting three systems:

Boiler support systems were recapitalized, including the electrical control station that operates them.

The heating, ventilation and air conditioning (HVAC) system was refurbished through the overhaul of ventilation trunks, fans and heaters that supply the cutter's berthing areas.

The flooding alarm system was redesigned, providing the ability to monitor machinery spaces for flooding from bow to stern.

Additional work not typically completed every dry dock included removing and installing the starboard propulsion shaft, servicing and inspecting both anchor windlasses, inspecting and repairing anchor chains and ground tackle, cleaning and inspecting all main propulsion motors and generators, installation of an isolation valve to prevent seawater intrusion into the sanitary system, and overhauling the fuel oil purifier.

Phase four of Polar Star's SLEP took place over approximately 140 days and represented a total investment of \$16.8 million. By replacing outdated and maintenance-intensive equipment, the Coast Guard will mitigate lost mission days caused by system failures and unplanned repairs. The contracted SLEP work items and recurring maintenance is taking place within a five-year, annually phased production schedule running from 2021 through 2025.

The Coast Guard is investing in a new fleet of [polar security cutters](#) (PSC) that will sustain the service's capabilities to meet mission needs in both the Arctic and Antarctic regions. The SLEP allows Polar Star to continue providing access to the Polar regions until the PSCs are operational and assume the high latitude missions. Polar security cutters will enable the U.S. to maintain defense readiness in the Polar regions; enforce treaties and other laws needed to safeguard both industry and the environment; provide ports, waterways and coastal security; and provide logistical support – including vessel escort – to facilitate the movement of goods and

personnel necessary to support scientific research, commerce, national security activities and maritime safety.

“Completing a dry dock availability is a positive milestone, and despite challenges due to being away from home port, our crew’s energy and resilience inspires me every day,” said Capt. Jeff Rasnake, Polar Star’s commanding officer. “The amount of time and effort put into Polar Star and its mission is truly remarkable. The dedication and teamwork displayed across all stakeholders exemplifies the Coast Guard’s flexibility and commitment to ensuring the continued success of Operation Deep Freeze as well as strengthened partnerships among nations invested in the Antarctic latitudes. I look forward to observing how this crew will continue to grow as a team and to discovering what we can accomplish together.”

Along with the rigorous maintenance schedule, Polar Star [held a change of command ceremony](#) on July 8, 2024, in Vallejo, where Rasnake relieved Capt. Keith Ropella as the cutter’s commanding officer. Rasnake served as the deputy director for financial management procurement services modernization and previously served as Polar Star’s executive officer. Ropella transferred to the office of cutter forces where he will oversee the management of the operational requirements for the cutter fleet and develop solutions for emerging challenges facing the afloat community.

Polar Star is the Coast Guard’s only active heavy polar icebreaker and is the United States’ only asset capable of providing year-round access to both polar regions.

Commissioned in 1976, the cutter is 399 feet, weighing 13,500 tons with a 34-foot draft. Despite reaching nearly 50 years of age, Polar Star remains the world’s most powerful non-nuclear icebreaker with the ability to produce up to 75,000 horsepower. Polar Star’s SLEP is important to the survival of the Antarctic mission and crucial to the well-being and

success of Polar Star and crew during these long missions.