Coast Guard Cutter Polar Star Returns to Seattle After 308 Days

After 308 days away from its Seattle home port, the 49-year-old U.S. Coast Guard Cutter Polar Star (WAGB 10) and crew returned home, Sept. 23, 2025. Upon completing Operation Deep Freeze 2025, Polar Star returned directly to Mare Island Dry Dock in Vallejo, Calif., to complete the final year of a five-year Service Life Extension Program prior to returning to Seattle. U.S. Coast Guard photo by Petty Officer 3rd Class Annika Hirschler.

From U.S. Coast Guard Northwest District, Sept. 25, 2025

SEATTLE — After 308 days away from its Seattle home port, the 49-year-old U.S. Coast Guard Cutter Polar Star (WAGB 10) and crew returned home Tuesday.

Upon completing **Operation Deep Freeze (ODF) 2025**, Polar Star

returned directly to Mare Island Dry Dock in Vallejo, Calif., to complete the final year of a five-year Service Life Extension Program (SLEP).

Polar Star's SLEP completion comes at a time when the Polar Regions are becoming more consequential, and the demand for U.S. Coast Guard presence, leadership, and vigilance continues to grow.

The maintenance work completed over the past five years recapitalized integral systems, including propulsion, communication, and machinery control systems. These efforts are designed to extend the cutter's service life as the Coast Guard **begins construction of its first Polar Security Cutter**. Until PSCs becomes operational, Polar Star will remain the only U.S. icebreaker capable of completing the annual breakout of McMurdo Sound, Antarctica in support of the U.S. Antarctic program (USAP).

"Much has been asked of this ship over the past five decades," said Capt. Jeff Rasnake, Polar Star's commanding officer. "The completion of this extensive five-year maintenance and recapitalization project is a major milestone in enabling Polar Star's operations into the future."

Polar Star's SLEP has been completed in five phases to maintain its operational capability to complete annual polar deployments. Phase Five, the last phase in its SLEP, began March 30, 2024, focusing on these projects:

Gyro repeater recapitalization to ensure that these critical pieces of navigation equipment are updated to modern standards, enabling safe navigation of the cutter.

Ancillary pumps and motors recapitalization through the replacement of critical main propulsion and auxiliary systems with modern supportable units.

Heating, ventilation, and air conditioning systems

refurbishments; multiple zones were refurbished with ventilation trunks, fans, and heaters to improve air circulation and maintain a comfortable living environment for the ship's crew during extended deployments.

The completion of Polar Star's five-year SLEP underscores the importance of the annual ODF mission, the U.S. military support mission for the USAP, which facilitates the transport of personnel, equipment and supplies required to maintain the U.S.'s strategic presence in Antarctica. Having participated in a majority of these missions since they began in the 1950s, the U.S. Coast Guard will continue to support the U.S.'s continued presence on the Antarctic continent as part of the Joint Task Force – Support Forces Antarctica.

Work completed in Phase Five took 175 days and represented an additional $12.7 million investment in the U.S. Polar capability. While at Mare Island, Polar Star received support from both Coast Guard Base Seattle and Base Charleston's Naval Engineering Departments to perform a center section overhaul on one of Polar Star's nine main diesel engines. In parallel with this work, members from the Coast Guard Yard in Baltimore completed vital work on the ship's sanitary systems.

Additional major work completed includes removing the centerline shaft for servicing and inspection, exchanging all three propellers, and renewing both forward and aft main deck surfaces.

"This is a tremendous ship, and it is in better shape today than it was ten years ago," said Rasnake. "That's a testament to the unrelenting efforts of the crew, the enduring support of our mission partners, and the renewed enthusiasm and investment in our nation's polar icebreaking capabilities."

Commissioned in 1976, Polar Star 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 shaft horsepower.