

Royal Australian Navy Maintainers Learn U.S. Submarine Sustainment



JOINT BASE PEARL HARBOR-HICKMAN, Hawaii – In the summer of 2025, in a corner of a machine shop at Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility (PHNSY & IMF), Able Seaman Colby Morley disassembled a pressure valve for testing. It's the kind of hands-on job he'd rarely get to do back home as an avionics technician with the Royal Australian Navy.

As part of a first-of-its-kind training rotation, Morley was one of 20 Royal Australian Navy Fleet Support Unit (FSU) sailors who trained in Hawaii to learn how to maintain U.S. nuclear-powered attack submarines. The cross-functional team was stationed in Pearl Harbor from June through October of last year and completed an intensive U.S.-led training

rotation before returning home to support USS Vermont's (SSN 792) submarine maintenance period at HMAS Stirling in Western Australia in November 2025.

"The team is a small but very important cog in the wheel for AUKUS. Our main goal is making sure Australia is self-reliable when it comes to the maintenance of these newer assets," said Royal Australian Navy Chief Petty Officer Steven Sheakey, the deployed maintenance team's senior technical officer. "The fleet support units are going to play an important role in delivering maintenance to the U.S. assets that are going to be rotating through HMAS Stirling. So, the knowledge, experiences and cohesive relationships we've got with U.S. personnel—both civilian and in uniform—are going to play a vital role moving forward to ensure we're interoperable in the future."

In the U.S., the FSU team's mission was to gain maintenance experience on U.S. platforms, build technical interoperability and prepare to sustain U.S. and U.K. nuclear-powered submarines. Under the AUKUS agreement, the U.S. and U.K. are supporting Australia's efforts to acquire, maintain and sustain its own sovereign fleet of conventionally armed, nuclear-powered submarines—a departure from Australia's current fleet of diesel-electric submarines.

Submarine Rotational Force-West, or SRF-West, is one of the AUKUS partnership's key outcomes. The initiative will see U.S. Virginia-class and U.K. Astute-class submarines rotate out of the Royal Australian Navy's submarine base in the Indian Ocean, HMAS Stirling, for an extended period, starting in 2027.

Strategic Sustainment Starts with People

The team sent to Hawaii was drawn from across the Royal Australian Navy's five FSUs and selected through a competitive, skills-based screening process. The sailors' specialties range from electronics to propulsion to weapons,

reflecting the future workforce Australia will need to support Australian-flagged nuclear-powered submarines.

“We needed a team that could embed anywhere, adapt quickly and represent the full scope of Navy engineering,” said Royal Australian Navy Lt. Zachery Telfser, officer in charge of the deployed maintenance team. “This isn’t just submarine work—it’s about building a broad, interoperable sustainment workforce that can flex with future mission demands.”

Some sailors, like Morely, are outside the traditional submarine pipeline. But as Australia expands its readiness to support nuclear propulsion, the Royal Australian Navy is pulling from across its engineering enterprise to identify who can contribute to the overall mission.

“We’re stress-testing the system,” Sheakey said. “In Australia, we multi-train our sailors so they can wear more than one hat. That kind of flexibility is essential to building interoperable teams who can deliver complex submarine maintenance packages at SRF-West.”

Fleet Support Unit-West sailors will serve as SRF-West’s primary uniformed maintenance workforce. More than 200 personnel from the Australian Submarine Agency’s civilian sustainment partner, ASC Pty. Ltd., are also training in Hawaii to lead intermediate- and depot-level maintenance work on Australia’s future fleet of fast-attack submarines. Both the Fleet Support Unit and ASC teams put their newfound skills to the test during the November 2025 submarine maintenance period at HMAS Stirling in Western Australia.

“This joint workforce approach combining the U.S. Navy, Royal Australian Navy and Australian civilians is central to how SRF-West will operate,” said Elizabeth Tolin, the deputy division head for SRF-West at the U.S. Navy’s AUKUS Integration and Acquisition program office. “Our work with Australia is enabling us to build a cohesive, interoperable

sustainment enterprise.”

These joint efforts align directly with the Department of War’s May 2026 announcement formally establishing Naval Support Activity Stirling and reestablishing Submarine Squadron 3. PHNSY &IMF, which was previously named the lead maintenance activity for SRF-West, is actively preparing to deploy its maintenance detachment to Western Australia where American personnel will continue working alongside their FSU and ASC maintenance counterparts.

Learning to Work Together, Technically and Culturally

For Royal Australian Navy Leading Seaman Jayden Webb, an electronics technician, the rotation was his second stint working with the U.S. Navy, and another opportunity to refine shared maintenance insights.

“We’re doing more than just fixing systems,” he said in an interview alongside Morely last August. “We’re learning how the U.S. Navy thinks about readiness, risk and reporting. That’s what it’ll take to maintain and sustain these platforms safely and confidently back in Australia.”

Webb embedded with the U.S. Navy’s Performance Monitoring Team, which performs rigorous testing and diagnostics aboard submarines. Others, like Morely, worked in the shipyard’s machine shop, rebuilding and testing valves under the mentorship of experienced U.S. tradesmen.

“At home, we’re used to getting a tech order that tells us what’s wrong,” Morely said. “At Pearl, we’re learning how to troubleshoot from scratch. It’s taught me to be more comfortable with uncertainty and more deliberate about communication.”

From Pearl Harbor to Perth

In October 2025, the team returned to Western Australia to

complete their mission by performing maintenance aboard USS Vermont during its planned submarine maintenance period.

The submarine maintenance period, which lasted through November, marked a historic milestone underscoring the momentum of AUKUS and its vision for enhanced deterrence and industrial resilience in the Indo-Pacific. For Australia, it's also an opportunity to evaluate its long-term investment in submarine sustainment and sovereign capability.

"The submarine maintenance period was a big step forward from when we had a U.S. submarine tender, USS Emory S. Land (AS 39) across the pier from USS Hawaii (SSN 776) in August 2024 to oversee and execute the submarine tendered maintenance period," said Rear Adm. Doug Adams, director, AUKUS, International & Systems. "For Vermont, we had a larger work package, a truly blended maintenance workforce led by Pearl Harbor Naval Shipyard and Intermediate Maintenance Activity, and when that boat left to operate in the Indo-Pacific region, it was ready for any tasking."

As Australia continues to build capacity to own, operate and maintain nuclear-powered submarines, sailors from the FSU will continue to support U.S. submarine maintenance periods, including the next one scheduled to occur in Western Australia by the end of 2026.

"We've still got a lot of work ahead," said Sheakey. "Australia's got to grow its infrastructure, procedures and people. But, we're proving we're up to the task, and that we're a capable, committed partner."

For sailors like Morely and Webb, the experience has also reshaped how they think about their roles in a trilateral security framework.

"To me, AUKUS is about bringing our forces together, not just in strategy, but in day-to-day operations," said Webb. "It's exciting to be part of something this big."

“This was my first time outside Australia,” Morely added. “To be in Hawaii, working with the U.S. Navy on something that’s going to have such a big impact back home—that means a lot.”

From Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility, Oct. 9, 2026