## NOMINATION NARRATIVE

## Introduction

U.S. Naval Ship Repair Facility and Japan Regional Maintenance Center (SRF-JRMC) is the largest U.S. Naval industrial ship repair facility in the Western Pacific, with primary facilities in Yokosuka, Japan, and a detachment in Sasebo, Japan. The facilities experience short warm summers, cold windy winters, rainfall throughout the year, occasional typhoon conditions, and are located at the shore-water interface. The command has been in existence since 1947 and played a vital role in maintenance and repair of the 7th Fleet during the Korean and Vietnam Wars. The Japanese cities of Yokosuka with a population greater than 400,000 and Sasebo with a population greater than 200,000 are located adjacent to the respective facility fence lines. The command employs over 500 U.S. Navy and U.S. civilian personnel and over 2,500 full-time Japanese national employees, composing a multi-cultural workforce. Facilities at Commander Fleet Activities Yokosuka (CFAY) support the dry docking of most U.S. Navy ships. These facilities include six dry docks with a combined displacement of 530,000 tons, 19 wet berth locations, 10 industrial buildings with combined workshop space of 730,000 square feet, and 15,300 combined feet of pier to support maintenance and repair activities. Det. Sasebo has a dry dock and 9 wet berth locations. The mission of SRF-JRMC is "keep the 7th Fleet operationally ready." SRF-JRMC provides maintenance and repair services to the homeported ships of the Forward Deployed Naval Forces, serving the U.S. 7th Fleet. This includes USS BLUE RIDGE (LCC 19), the flagship of the 7th Fleet; USS RONALD REAGAN (CVN 76), the U.S. Navy's only forward deployed nuclear powered aircraft carrier; and the operating forces of Commander Destroyer Squadron 15 (COMDESRON 15), the U.S. Navy's largest destroyer squadron. Fourteen ships are homeported at Yokosuka. The SRF-JRMC Detachment Sasebo facility was officially established in 1984 and proudly supports the U.S. Navy's only forward-deployed amphibious ready group, anchored by the USS WASP (LHD 1). Eight ships are homeported at Sasebo. The command maintains vibrant partnerships with its host installations, its 7th Fleet customers, and the Japan Maritime Self-Defense Force, the naval branch of the Japan Self-Defense Forces. Sustained environmental stewardship supports the strong U.S. – Japan alliance and U.S. military presence in Japan.

## Background

SRF-JRMC performs depot-level selected restricted availabilities, docking selected restricted availabilities, continuous maintenance availabilities and surface incremental availabilities that generate hazardous and industrial waste. Craftsman perform industrial repair work aboard ships and in large machine shops and technical personnel perform oversight functions of production work that is contracted to local industrial and service contractors. Due to its specialized industrial activities, SRF-JRMC operates an independent environmental management system (EMS) in coordination with CFAY and Commander Fleet Activities Sasebo installation environmental management systems. SRF-JRMC participates in the CFAY Executive Environmental Compliance Board EMS Management Review, CFAY Energy Conservation Board, and CFAY Environmental Working Group ensuring that SRF-JRMC supports the host installation's EMS objectives and targets and considers aligning SRF-JRMC EMS objectives and targets where significant aspects are similar. The command's Memorandum of Agreement with

Commander, Navy Region, Japan, dated 25 June 2018, outlines the relationship of the coexisting Navy EMS appropriate facilities. This MOA has been used as a model in the U.S. Navy EMS Workgroup. The 18 U.S. and Japanese engineers, engineering technicians, and environmental protection specialists who work at SRF-JRMC manage air emissions and wastewater discharge compliance, hazardous and industrial waste disposal, and recycling and solid waste diversion. Potential uncontrolled releases of oil and hazardous substances, disposal of wastewater, hazardous waste, and industrial wastes are significant environmental aspects across the industrial waterfronts. FY17 witnessed an unusual number of mishaps involving U.S. Navy warships in the Pacific, consisting of one grounding, and two collisions at sea between warships and commercial, deep draft vessels. Homeported at CFAY, the USS ANTIETAM (CG 54) was damaged by grounding, and the USS FITZGERALD (DDG 62), and the USS JOHN S. MCCAIN (DDG 56) suffered tragic collisions at sea. SRF-JRMC stood ready to assist and accept the three significantly damaged ships into its industrial repair facilities for various levels of assessment and repair to ensure the continued readiness of 7th Fleet surface operations.

# Accomplishments

Mission-sustaining environmental protection work embodies the SRF-JRMC motto: Nan Demo Dekimasu - We Can Do Anything!

# Support to Critical Ship Assessment and Repair

Following the January 31, 2017 grounding of the USS ANTIETAM (CG 54), the command immediately formulated plans to ensure environmental protection during assessment and repair. From April through June, the SRF-JRMC CG 54 Project Superintendent for the entire repair availability led several spill mitigation planning meetings. The meetings developed an oil spill management team that included CFAY Port Operations, the USS ANTIETAM (CG 54) Electronics Material Officer, divers from Naval Sea Systems Command (NAVSEA) Supervisor of Salvage and Diving (SUPSALV), representatives from SRF-JRMC's Business Office, and SRF-JRMC Environmental Division spill response and wastewater program managers. The team determined potential environmental and health risks and mitigations needed with respect to the damaged condition of the ship. A potential for oil to drain from the damaged propulsion shafts during dewatering of the dry dock was identified.



170617-N-YU361-017 Floating harbor booms provide excellent containment and control of oil for rapid recovery during the docking of USS ANTIETAM (CG 54). SRF-JRMC oil spill management team members from Commander Fleet Activities Yokosuka Port Operations pre-staged the booms.

Oil containment and recovery planning culminated with taskings for CFAY Port Operations to deploy two, one hundred sixty foot length harbor booms into dry dock No. 5, prior to closing the dock caisson. The booms were intended to keep any oil away from the dry dock dewatering sump. Another tasking was to place an SRF-JRMC oily wastewater storage barge adjacent to the dry dock to hold recovered oily wastewater.

After the USS ANTIETAM (CG 54) was secured in the dry dock, on 16 June, and the water level was lowered, the damaged propulsion shafts began to leak oil. However, the rate of leakage was found to be steady and continuous, such that it became clear that the leaking oil could be contained directly under the shafts. With water held in the dock to prevent oil release from the dock, the team deployed a floating polyethylene containment pallet to contain the leaking oil, which was subsequently pumped to a pre-staged oily wastewater storage barge. Members of the Environmental Division provided oil recovery and waste collection guidance, communicating with the ship's Sailors and supervisors, the SRF-JRMC repair project team, and SRF-JRMC shops personnel. The SRF-JRMC oil spill management team's extensive pre-docking planning, tireless on-scene efforts, and the SRF-JRMC Dock Master's careful control of the dry dock dewatering pumps resulted in rapid oil recovery from the dry dock with no release to the Waters of Japan and zero adverse environmental impact.



170617-N-YU361-036 SRF-JRMC oil spill management team members tethered a floating oil containment pallet in position beneath the damaged propulsion hub of USS ANTIETAM (CG 54) in dry dock No. 5.

The in-place CFAY Port Operation floating booms and innovative floating deployment of a spill containment pallet, which is normally used for storing four 55 gallon drums, demonstrated outstanding environmental protection efforts during the docking. This novel application of the

containment pallet was presented in the 2017 EMS Management Review for Department Head awareness, placed into the Environmental Division spill program files for reference, and communicated to Detachment Sasebo. Environmental Division personnel worked for more than 36 hours supporting Ship's Force personnel on the rapid collection of hundreds of gallons of oil from the leaking shaft, with zero impact on the Waters of Japan and coordinated disposal of more than 500 kg of oily sorbents used during the docking. The Environmental Division conducted daily surveillances of the repair work performed by SRF-JRMC personnel and contractors. As of August 30, 2017 the Environmental Division processed more than 33,000 kg of waste and spent more than 100 hours on daily environmental surveillances with zero environmental issues.

Following the collision at sea of USS FITZGERALD (DDG 62) on June 17, 2017, and in the face of repair facility capacity and scheduling challenges due to the damaged ship incidents, the command began planning for protecting the environment during the ship's assessment and repair. Upon dry docking of the USS FITZGERALD (DDG 62) in July, the Environmental Division engaged in sharing of lessons learned and supporting the project repair team with assessment and ship repair. The Environmental Division's continuous oversight work resulted in completion of the assessment and repair tasks while protecting human health and the environment. More than 63,000 kg of waste was processed for disposal and hundreds of hours worked preparing waste disposal documents. The Environmental Division maintained constant communication with Ship's Force personnel to ensure proper disposal of wastes and prevent spills during the repairs.



170812-N-YU361-001 SRF-JRMC Environmental Division members coordinated overflow storage of industrial waste and metal removed from the USS FITZGERALD (DDG 62).

The oil containment and waste processing techniques developed with USS ANTIETAM (CG 54) and USS FITZGERALD (DDG 62) were carried over to the assessment and repair of the USS JOHN S. MCCAIN (DDG 56) which arrived for repair on 13 December, 2017.

## Solid Waste Diversion

In FY17, the CFAY QRP recycled 2407 metric tons of metals, representing an 11% by weight increase. SRF-JRMC is the single largest contributor of metals to the installation QRP which had sales revenue approximately \$1M in FY17. Excess revenue is used for installation energy conservation, waste reduction, and Morale, Welfare, and Recreation projects. Also, in FY17 SRF-JRMC began recycling used oil separated and collected in oily wastewater storage barges, resulting in 23,879 gallons of used oil being recycled and disposal cost avoidance of \$58,000. The team also implemented a new process to disassemble office chairs. Over 300 chairs were disassembled to recycle the metal components and determine time requirements. Personnel were then trained on the disassembly procedure for future recycling efforts.

In FY18, SRF-JRMC developed an innovative approach to recycling of non-ferrous couplings from industrial hoses and increased recycling education efforts, contributing to a 12% weight increase in metals recycled by the CFAY QRP. Also in FY18, the command recycled 35,750 gallons of used oil from the oily wastewater storage barges, a 50% increase compared to FY17, and avoided a potential disposal cost of \$87,000.

In addition to metals and used oil, SRF-JRMC contributes lead-acid batteries, aluminum cans, steel cans, cardboard, shredded paper, newspaper, mixed plastic, and PET bottles to the CFAY QRP.

# Solvent Recycling Pilot

In FY17, SRF-JRMC obtained CFAY Qualified Recycling Program (QRP) funds and procured a solvent distillation recycling machine to reduce hazardous solvent waste from Shop X-71. In prior years, approximately 3000 gallons of organic solvents (paint thinners) were purchased and disposed after use. SRF-JRMC developed draft procedures to operate the solvent distillation machine and operated the machine temporarily as a pilot test. The recycled solvent was found to have the same effectiveness for brush and equipment cleaning as new solvent.

## Wastewater Treatment

In FY17, contracted wastewater treatment appeared near capacity. To address this possible restriction, SRF-JRMC examined the possible benefits of in-house treatment of wastewater in addition to contracted wastewater treatment and operated the bilge oily water treatment system (BOWTS) from January through August 2017, treating over 600,000 gallons of oily wastewater. Shops operations costs were estimated as \$30,000. The cost estimate for contracted treatment was \$74,500. The estimated operational cost savings for FY17 was \$44,500. In addition, Environmental Division verified BOWTS treated water effluent did not exceed indirect discharge standards and coordinated discharges to the installation sanitary sewer system with the Public Works Department utilities section.

# **Program Management**

The SRF-JRMC EMS follows a continual improvement cycle for setting and achieving EMS objectives and targets. The SRF-JRMC Commanding Officer's Environmental Policy Statement requires everyone at SRF-JRMC to reduce, reuse, recycle and conserve energy. Command

approved EMS objectives are communicated in new employee orientation training, quarterly focus meetings with shops personnel, quarterly command newsletters and in safety stand down briefings. To ensure effectiveness of the environmental protection programs and the EMS, annual internal audits and triennial external audits are conducted to ensure the programs and the EMS meet Japan Environmental Governing Standards (JEGS) and OPNAV M-5090.1 Environmental Readiness Program Manual requirements. These external and internal audit results reflect a high quality, full scope EMS with effectively managed environmental programs. Annually, SRF-JRMC leadership reviews EMS objectives and targets and environmental compliance audit results. EMS Aspect Teams from a cross section of SRF-JRMC Shops and Codes integrate production shop perspectives while institutionalizing improvements among process owners and operators. Following initial self-declaration of conformance with ISO 14001 in 2009, the mature EMS continues to self-declare conformance following triennial external audits.

SRF-JRMC maintains the NAVSHIPREPFACINST 5090.1 Series, Environmental Protection/Hazardous Waste which was revised January 30, 2018 to include management of barges and the bilge and oily wastewater treatment system (BOWTS). The Environmental Division also maintains Local Standard Item (LSI) 099-901YO General Environmental Requirements for SRF-JRMC, applicable to contractors working on behalf of SRF-JRMC.

# **Community Relations**

SRF-JRMC and CFAY offer community access to the command's dry docks and organize equipment donations to museums, preserving the rich history of the Yokosuka Naval Arsenal. The Agency for Cultural Affairs selected SRF-JRMC's six dry docks at Yokosuka as component cultural properties of Japan Heritage. On Earth Day in FY17 and FY18, the command provided information to CFAY housing residents and school students regarding SRF-JRMC's systems for proper disposal of industrial and hazardous wastes and provided information on how to properly dispose household wastes. On Earth Day in FY18, more than 30 people, including SRF-JRMC personnel and students and parent volunteers from the CFAY homeschool community, teamed up to pick-up plastic and other marine debris from the command's southwestern shoreline.

180420-N-SN884-044 YOKOSUKA, Japan (April 20, 2018) – SRF-JRMC shop personnel and Sailors assemble to clean up the waterfront from washed-up debris. (U.S. Navy photo by



Elizabeth Kearns, SRF-JRMC/Released)