

FY2012 SECRETARY OF THE NAVY ENVIRONMENTAL QUALITY AWARD NOMINATION
NARRATIVE FOR USS FORD (FFG 54)

1. Introduction

a. USS FORD (FFG 54) is a Fast Frigate with multi-faceted mission capabilities ranging from escort duties to Undersea Warfare to Maritime Interdiction Operations. FORD has a crew of 24 Officers and 144 enlisted personnel and is homeported in Everett, WA. All hands are charged with protection of the environment, with the Environmental Quality Program as a fundamental pillar of our operational mantra, stressed as a top priority from the Commanding Officer to the deck-plate sailor.

b. FORD is part of Destroyer Squadron NINE, based out of Naval Station Everett.

2. Background

a. In June 2011, after completing an arduous ULTRA-S work-up cycle and Independent Steamer Certification, FORD departed for a six month Western Pacific Deployment. As an independent deployer, without a dedicated Duty Oiler to support Refueling-At-Sea operations, FORD conducted 11 flawless inport refueling evolutions throughout the Western Pacific and Indian Oceans, including Hawaii, Guam, Japan, India, Philippines, and South Korea. In total, over 1.2 million gallons of F-76 were received onboard without a single fuel spill. Additionally, when a duty oiler was available, FORD successfully conducted five Refueling-At-Sea evolutions, safely and efficiently receiving over 350,000 gallons of F-76 without incident.

b. During FORD's 2012 Submarine Towing Escort duties from Panama to Washington, FORD again conducted four successful inport refueling evolutions in Manzanillo, Mexico and Everett, WA, totaling 265,000 gallons of fuel with zero spills.

c. In March 2012, FORD was selected to participate in the U.S. Navy's experimental Bio-fuels Program. The crew effectively compartmentalized 25,000 gallons of Bio-fuel, ensuring the integrity of the experimental Bio-fuel burn. FORD provided valuable lessons learned as a result of the experimental Bio-fuel burn, including Gas Turbine Engine operating parameters, fuel consumption rates, shipboard fuel testing results, and ancillary equipment performance while processing Bio-fuel through the fuel systems. FORD was recognized by NAVSEA for the critical data

provided as a result of an efficiently and effectively conducted experimental burn. FORD's efforts in this endeavor helped to pave the way for the RIMPAC 2012 Green Fleet experiment and will have positive and lasting impacts on the Secretary of the Navy's Bio-Fuels initiative.

d. As a resident of Naval Station Everett, FORD has complied with the strictest environmental requirements and has been an environmental steward for all ships to emulate. FORD has an aggressive HAZMAT program that ensures proper sorting of HAZMAT waste to facilitate compliance and ease of custody transfer to Naval Station Everett's HAZMAT Facility. FORD consistently demonstrates its commitment to environmental protection through attendance at Naval Station Everett's Annual Hazardous Materials Training

3. Organization

a. FORD's environmental stewardship is led by the Commanding Officer, who appoints the Hazardous Materials (HM) Coordinator and the Afloat Environmental Program Coordinator (AEPC) to run specific portions of this mission on his behalf. The Commanding Officer supervises the implementation of the Protective Measures Assessment Protocol (PMAP) and SONAR Positioning Report System (SPORTS) into the decision-making matrix regarding the use of active SONAR and live-fire exercises, ensuring that marine mammals are well outside of the danger areas associated with such activities.

b. Guidance on Environmental Protection and Quality can be found in numerous FORD documents, including the Commanding Officer's Standing Orders, the Ship's Organization and Regulations Manual (SORM), and the Chief Engineer's Standing Orders.

4. Program Summary

a. FORD is fully compliant with Chapter 22 and Appendix K of OPNAVINST 5090.1C (Environmental Readiness Program Manual), and the following environmental guidance, directive, and plans:

- (1) Regional Hazardous Material Control & Management (08 SEP 11)
- (2) Oil and Hazardous Substance Transfer Operations (27 JUL 99)
- (3) OHS Spill Contingency Plans (12 Mar 08)
- (4) Plastic and Solid Waste Management Program (05 May 09)

b. HAZMAT transfers are completed and are always disposed of properly. Program managers do not allow waste to be left on the pier or disposed of over the side. The Medical Department separates out infectious waste from non-infectious waste prior to

disposal. FORD has had no incidents of oil, oily waste, wastewater, or otherwise environmentally unsound discharge during FY 2012.

c. Due to the relatively remote location of Everett, Washington, and a lack of a duty oiler in the Pacific Northwest, FORD is the ship to emulate for inport refueling evolutions. Fueling evolutions include refueling, defueling, and internal fuel transfers. All fuel movements are only conducted during normal working hours utilizing qualified and properly trained refueling personnel. FORD always conducts pre-evolution safety briefs and post-evolution debriefs in order to ensure all personnel are fully prepared for the evolution and to capture post-evolution lessons learned to foster process improvement. Coordination with Port Operations and NAVSTA Environmental Protection Office is impeccable and professional.

d. Solid waste disposal is sorted by type as prescribed by installation regulations. FORD utilizes maximum use of on-base recycling facilities and only uses waste bins for general trash after all recyclable materials have been reclaimed. Sewage, wastewater, and graywater is never pumped over the side and is retained onboard until properly aligned for disposal using appropriate shore facilities.

5. Accomplishments

a. Refueling Operations. The crew of FORD prides itself on the numerous accomplishments achieved regarding the Environmental Quality Program. During the past year, FORD has flawlessly completed multiple inport and at-sea refuelings, receiving over 2 million gallons of F-76 diesel fuel marine and 40,000 gallons of JP-5 aviation fuel. In addition, FORD is qualified to perform Helicopter In-Flight Refueling and successfully completed on-deck refueling of 55 aircraft, issuing 20,000 gallons of JP-5. All RAS and aviation refueling evolutions were performed safely without incident and zero fuel spills.

b. Air Pollution Control. Strict adherence to Engineering Operational Sequencing System, Technical Manuals, EDORM, PMS, and the Clean Air Act is practiced to ensure Gas Turbine and Ship's Service Diesel Generators operate as efficiently as possible while minimizing air pollutants. FORD recognizes that burning fossil fuels produce air pollution; therefore, emphasis in maintaining equipment in peak operational condition to minimize emission levels is a top priority. In 2011, a thorough Diesel Engine Inspection has been performed on all four Ship's Service Diesel Generators which helped identify and correct discrepancies that may have hindered environmental compliance and operation. Every 1,000 operating hours, diesel engine performance is analyzed for

efficiency trends. The resulting data are used to conduct necessary maintenance to ensure peak performance.

c. FORD is currently manned with two Environmental Protection Agency-certified Air Conditioning and Refrigeration (AC&R) technicians to operate and maintain two refrigeration and three air conditioning plants. AC&R technicians are properly trained on handling, recovery, and recycling ozone depleting substances. R-134 refrigerant leak detection equipment is maintained in top-notch condition and utilized to identify all leaks. FORD ensures air conditioning and refrigerant leakage rates meet the annual performance goals in eliminating refrigerant leakage. Operating and refrigerant usage logs are properly maintained on all air conditioning and refrigerant equipment. All FORD technicians recognize the environment as a priority and take pride in quick repairs to maintain zero leaks. FORD had zero accidental or unintentional venting incidents of refrigerant in FY12.

d. Water Pollution Control. FORD's Collection, Holding, and Transfer System (CHT) is comprised of one 3,000-gallon holding tank and one 100-gallon capacity holding tank. While inport in both the United States or overseas, FORD ensures all sewage is diverted to the holding tanks in strict compliance with the Engineering Operational Sequencing System. During the 2011 Western Pacific Deployment and 2012 Submarine Towing Escort, FORD successfully offloaded over 60,000 gallons of CHT waste to certified tankers and barges without any spills. Watchstanders are required to monitor the levels of these containers in addition to the ship's holding tanks. Continuous monitoring prevents overflow and provides sufficient time to arrange replacement of off-ship collection containers. Every sailor in FORD's Repair Division is qualified to operate and align the CHT system and is properly trained on CHT handling and spill response procedures. In 2011, FORD sailors successfully replaced both CHT comminutors to ensure the CHT system was fully operational.

e. The core of FORD's environmental protection program is the training of all Engineering Department personnel in proper handling and disposal techniques. FORD ensures that all sailors practice strict adherence to the Act to Prevent Pollution from Ships as well as the Clean Water Act. Training encompasses proper personal protective equipment, removal of waste, and disposal locations on the ship. FORD's Oil Spill Containment Kit is frequently inventoried and maintained. Prior to any refueling, lube oil onload, or oily waste offload evolutions, the respective systems are verified in triplicate. During transfer of fuel, lube oil, oily waste, or CHT waste, overflow watches are always posted and transfer alignment is constantly verified by a senior personnel. Scupper bags are always strategically placed on weatherdeck drains

to ensure a second layer of oil spill protection. FORD is equipped with an oily waste separator that removes oil from bilge water and fluid in the oily waste holding tank. All bilge water, regardless of oil or fuel content, is pumped into the oily waste holding tanks for processing. In the past year, FORD has transferred 15,000 gallons of oily waste and 3,000 of waste oil to shore-side processing facilities with zero spills.

f. Solid Waste Management and Resource Recovery. FORD has an assertive policy for managing solid waste. Every sailor is accountable for proper disposal of trash and must segregate their trash while at sea. The Trash Processing Room is equipped with two Plastic Waste Processors, a Food and Paper Pulper, and a Metal/Glass Shredder. All plastic waste is collected and processed into discs that are retained for shore disposal or transfer to another ship. While inport, FORD takes all necessary steps to limit the amount of packaging and refuse onboard. Tri-walls, pallets, and packaging are stored for reutilization during future off-loads of plastic waste and other items.

g. Hazardous Material/Hazardous Waste Management. FORD keeps the safety of personnel and the environment at the forefront when dealing with HAZMAT. FORD minimizes the risk of environmental contamination from HAZMAT by maintaining a rigorous HAZMAT Management Program that involves all hands in detailed tracking and frequent safety walkthroughs. Satellite lockers are inspected and inventoried weekly to ensure HAZMAT is not kept outside of HAZMINCEN's control. FORD's HAZMAT Coordinator closely controls the receipt of all HAZMAT brought onboard, taking care to ensure that only authorized items in the right quantities are onboard. During the 2012 Supply Management Certification, FORD's HAZMAT Program passed inspection with a score of 93 percent.

h. Environmental and Marine Mammal Protection. Prior to any gunnery or SONAR exercises, FORD uses the Protective Measures Assessment Protocol (PMAP) to ensure all requirements and protections are satisfied. From conducting focused one-on-one training to specific bridge watchstander and lookout training, FORD ensures that the sensitive waters of all operating areas are protected to all times. FORD maintains awareness of the marine mammal sanctuaries and protected areas that her crew operates and trains in.

i. Similar to PMAP, the Sonar Positional Reporting System (SPORTS) is a must in the breeding grounds for whales within the Hawaiian and Southern California Operating Areas. No ship is more aware of using PMAP and following up with SPORTS to ensure the whales' position. FORD's active SONAR usage is also appropriately documented to gather further data to be used to better identify marine mammal behaviors and migratory patterns.

j. Environmental Awareness. FORD ensures each crewmember understands their personal responsibilities in regards to air, water, oil pollution, solid and hazardous material and waste, and their duty to protect the oceans FORD sails upon. Awareness is raised through onboard indoctrination of new crewmembers and through continued training by supervisors. Every FORD sailor is responsible for adhering to the highest standards of operational impact on the environment. With these principles on deck, FORD is poised to remain environmentally adept in the twenty-first century.