

## **Award Narrative**

1. INTRODUCTION. USS CHAFEE (DDG 90) is homeported in Pearl Harbor, Hawaii and has 317 crew members and 30 Sailors embarked from HSM-37 Detachment 6. CHAFEE's fundamental mission is to conduct prompt and sustained combat operations at sea; to fight and win in support of our Nation's goals.

2. BACKGROUND. Throughout the past year, CHAFEE conducted numerous operations across the globe, to include a seven month deployment to the 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Fleet Areas of Responsibility, with potential risks and challenges to the environment while participating in Submarine Commander's Course (SCC), Oceania Maritime Security Initiative, TALISMAN SABER 15, UNITAS PAC 15, and UNITAS LANT 15. During the competitive period, CHAFEE conducted 25 fueling-at-sea (FAS) and 30 in-port re-fueling evolutions. These evolutions resulted in the safe, mishap-free transfer of over three million gallons of F-76 and JP-5. In addition, CHAFEE has conducted anti-submarine warfare (ASW) operations requiring the use of mid-frequency active sonar (MFAS) with zero impact to marine mammal life across millions of square miles of ocean. All of these exercises required careful planning and operation to mitigate the risk to the environment.

a. CHAFEE has a comprehensive environmental protection program and management organization which involves the entire crew. CHAFEE utilizes all levels of command to enforce compliance. The Commanding Officer sets forth environmental protection policies, while Department Heads, Division Officers, and Leading Chief Petty Officers enforce rigorous compliance at their levels.

(1) CHAFEE's Afloat Environmental Protection Coordinator (AEPC) is designated in writing per reference (a). The AEPC is responsible for ensuring all hands are trained on the ship's policies and practices regarding pollution prevention (P2); solid waste (SW) handling and minimization; plastic management; protection of marine mammals and endangered marine species; recycling; air pollution (including ozone-depleting substances (ODS)); water pollution; and oil and hazardous substance (OHS) management, handling, minimization, and spill response.

a. CHAFEE has several instructions governing environmental protection. These include:

- (1) CHAFEEINST 3121.K, Commanding Officer's Standing Orders, last reviewed on 12 January 2015.
- (2) CHAFEEINST 5090.1E, Oil Spill Contingency Plan, last reviewed on 15 February 2015.
- (3) CHAFEEINST 5090.2A, Solid Waste Management and Plastic Waste Control Program, last reviewed on 01 April 2015.
- (4) CHAFEEINST 5100.1C, Hazardous Material Control and Management, last reviewed on 21 July 2015.
- (5) CHAFEEINST 5100.2, Lead Management and Protection Plan, last reviewed on 16 February 2015.
- (6) CHAFEEINST 5100.6, Asbestos Management Plan, last reviewed on 17 February 2015.

3. PROGRAM SUMMARY. CHAFEE has led the way in environmental compliance this past fiscal year. During FY15, CHAFEE was in full compliance with OPNAVINST M-5090.1D, specifically Chapter 35, Afloat Environmental Compliance. Below are some highlights of CHAFEE's compliance:

a. CHAFEE recently completed all hands training in environmental protection. This training was conducted in conjunction with oil spill prevention drills. CHAFEE's drills included training for inport watch standers and Command Duty Officers on inport OHS spill response procedures, the ship's spill contingency plan (SCP), and local notification requirements.

b. CHAFEE personnel who perform maintenance on AC&R systems kept records of maintenance actions, names of technicians performing work, pounds of refrigerant removed, and pounds of refrigerant added and retained them for 3 years IAW CHAFEE standards and reference (a).

c. Hazardous Material (HAZMAT) inventory is based on historical usage data and pre-deployment forecast reports from departments. Items are checked out and returned daily for reuse unless divisions have seven day satellite lockers. Seven day satellite lockers are inspected weekly by the HAZMAT supervisor. A complete inventory is required annually, and CHAFEE conducts quarterly inventories in order to maintain adequate HAZMAT stock onboard.

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d. While inport, CHAFEE contacts base Hazardous Minimization Center (HAZMINCEN) to procure free issue items prior to releasing requisitions to the stock system. While on deployment, CHAFEE submitted a list of high usage items to the local Fleet Logistics Centers' HAZMINCEN to procure free issue assets.

e. Finally, CHAFEE is equipped with a functional oily water separator (OWS) and oil content monitor. This system is fully operational and capable of ensuring that discharges are limited to 15 parts per million (ppm) oil.

4. ACCOMPLISHMENTS. During a challenging year, CHAFEE has achieved many successes that positively impact the environment. The following achievements stand out:

a. CHAFEE transited 37,056 miles on a seven month deployment to the 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Fleet Areas of Responsibility while participating in the Oceania Maritime Security Initiative, TALISMAN SABRE 15, UNITAS PAC 15, and UNITAS LANT 15; during these events CHAFEE conducted 325 hours of sustained ASW operations requiring the use of active sonar. CHAFEE managed to safely conduct these operations with ZERO impacts to marine mammal life.

b. During the competitive cycle, CHAFEE conducted 25 fueling-at-sea (FAS) and 30 in-port re-fueling evolutions. These evolutions resulted in the safe, spill-free transfer of over three million gallons of F-76 and JP-5. This includes a record breaking FAS with the USS GEORGE WASHINGTON (CVN-73), during which CHAFEE took on an unprecedented 205,292 gallons of JP-5.

c. CHAFEE has pioneered the use of "drift ops" in order to reduce engine hours, fuel consumption and air pollution. During CHAFEE's 7 month deployment and multiple pre-deployment underway days, CHAFEE found ways to secure main engines for 48 hours while underway, saving over one hundred thousand gallons of fuel and reducing air pollution.



(FAS with USS George Washington on 31 Jul 2015 in 7<sup>th</sup> Fleet AOR)



(FAS with USNS Big Horn on 10 Nov 2015 in 4<sup>th</sup> Fleet AOR)

d. CHAFEE has made tremendous efforts to control air emissions. Through judicious use of "drift ops" CHAFEE has limited her air emissions as much as possible, taking into account operational commitments and safety of navigation. CHAFEE also strenuously balances operational requirements with the need to save fuel. CHAFEE's policy is to always use the most fuel efficient plant configuration to achieve operational requirements.

e. CHT is strictly managed IAW OPNAVINST 5090.1D, Chapter 35. CHT is never discharged within 3NM of land under any circumstances, and all personnel assigned to supervise sewage or graywater disposal operations have completed the Shipboard Sewage CHT course.

f. During FY15, CHAFEE completed a thorough review of the shipboard Oil Spill Contingency Plan (CHAFEEINST 5090.1E). This instruction was updated with current policies, procedures and practices. Furthermore, CHAFEE executed all-hands oil spill response drills, ensuring that all personnel, from Command Duty Officers down to individual repair locker members, understand and comply with oil spill response procedures. Bilge water is always processed by the Oily Water Separator prior to overboard discharge and only when greater than 50 nm away from land.

g. Solid Waste (SW) Management at sea was in strict adherence with OPNAVINST 5090.1C, Commanding Officer's Standing Orders, and CHAFEEINST 5090.2A. Only authorized SW was disposed overboard at ranges which are in compliance with these procedures, and plastic waste was never discharged at sea. While in port, CHAFEE removed as much solid waste as possible to minimize disposal at sea. Trash separation was enforced at every level. Plastic waste was melted and compressed into discs and provided for recycling while inport. It was a top priority of Auxiliaries Division to keep the pulper, metal shredder, and plastic compress melt unit functioning.

h. HAZMAT inventory was based on usage and pre-deployment forecast reports. Items were checked out and returned daily for reuse unless divisions had seven day satellite lockers. Although a complete inventory is required annually, CHAFEE conducted quarterly inventories to maintain adequate HAZMAT stock onboard. While in port Pearl Harbor, CHAFEE contacted base Hazardous Minimization Center (HAZMINCEN) to procure free issue items prior to releasing requisitions to the stock system. While on deployment, CHAFEE submitted a list of high usage items

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to the local Fleet Logistics Centers' HAZMINCEN to procure free issue assets.

i. Protective Measures Assessment Protocol (PMAP). CHAFEE recognizes the importance of and adheres to safety regulations set forth in the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). In 2015 CHAFEE's PMAP has included not only training at sea (i.e. Missile, Gunnery, Sonar, Torpedo, and Anchoring) but also the implementation of daily PMAP reports. In doing so, CHE mitigated the potential impact to marine life and the ocean environment while transiting the open ocean. The dedicated use of PMAP has resulted in CHE having zero near mishaps or mishaps during Fiscal Year 2015.

j. Sonar Positional Report System (SPORTS). In 2015 CHE reported 325 hours of active Sonar transmissions through SPORTS. It is the mission of CHE to provide accurate and swift reporting within two hours of completion of Sonar training or maintenance transmissions to support the Navy and Environmental entities in recognizing any dangerous evolution which could cause a marine mammal incident. CHAFEE has strictly adhered to reporting requirements for training transmissions and each report is reviewed by Khaki leadership before submission.

k. General environmental training is held annually by CHAFEE's Afloat Environmental Protection Coordinator, with more specific environmental training held as needed. This year, CHAFEE conducted all hands environmental training in conjunction with oil spill drills. This combination of training and drilling keeps CHAFEE's crew aware of the risks to the environment and ready to protect it. CHAFEE achieved 100% participation in these training and drilling sessions, while maintaining operational readiness in support of C7F and C4F tasking.

5. CONCLUSION. CHAFEE's approach to environmental protection is simple: verbatim compliance with existing policies and procedures. We established impeccable maintenance standards on vital systems to produce optimum efficiency as well as prevent leaks, spills and other wasteful and polluting operations. CHAFEE's zealous effort to conserve energy and deter unnecessary fuel consumption has been a significant accomplishment for the ship during FY15. USS CHAFEE's proven record and command priority of environmental protection warrants consideration for the FY15 Chief of Naval Operations (CNO) Afloat Environmental Award.

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## **Narrative Summary**

1. INTRODUCTION. CHAFEE's approach to environmental protection was simple: verbatim compliance with existing policies and procedures. CHAFEE established impeccable maintenance standards on vital systems to produce optimum efficiency as well as prevent leaks, spills and other wasteful and polluting operations. By using the Navy's Protective Measures Assessment Protocol (PMAP) CHAFEE was enabled to conduct training at sea across multiple warfare areas (i.e. Missile, Gunnery, Sonar, Torpedo, and Anchoring). In doing so, CHAFEE mitigated the potential impact to marine life and ocean environment while transiting on the high seas. The dedicated use of PMAP has resulted in CHAFEE having zero near mishaps or mishaps during FY15. CHAFEE's zealous effort to conserve energy and deter unnecessary fuel consumption has been a significant accomplishment for the ship. Some of the most outstanding accomplishments throughout the year include:

(1) CHAFEE transited 37,056 miles, to include a seven month deployment to the 3<sup>rd</sup>, 4<sup>th</sup>, and 7<sup>th</sup> Fleet Areas of Responsibility and participated in the Submarine Commander's Course (SCC), TALISMAN SABER 15, UNITAS PAC 15, and UNITAS LANT 15. CHAFEE managed to safely conduct these operations with ZERO impacts to marine mammal life.

(2) During the competitive cycle, CHAFEE conducted 25 fueling-at-sea (FAS) and 30 in-port re-fueling evolutions safely. These evolutions resulted in the safe, spill-free transfer of over three million gallons of F-76 and JP-5. This includes a record breaking FAS with the USS GEORGE WASHINGTON (CVN-73), during which CHAFEE took on an unprecedented 205,292 gallons of JP-5.

(3) CHAFEE has pioneered the use of "drift ops" in order to reduce engine hours, fuel consumption and air pollution. During CHAFEE's 7 month deployment and multiple pre-deployment underway days, CHAFEE found ways to secure main engines for 48 hours while underway, saving over one hundred thousand gallons of fuel and reducing air pollution by a corresponding amount.

(4) Through use of the Navy's Protective Measures Assessment Protocol (PMAP), CHAFEE was able to safely transmit 325 hours of active Sonar transmissions, with zero mishaps or near mishaps.













**Photograph Captions for USS CHAFEE (DDG 90)**

1. Fueling-at-Sea (FAS) with USS GEORGE WASHINGTON (CVN 73) on 31 Jul 2015 in 7<sup>th</sup> Fleet AOR. This was a record breaking FAS during which CHAFEE took on an unprecedented 205,292 gallons of JP-5. Courtesy of LTJG J.A. Lund, USS CHAFEE, 150731-N-AANNN-001.
2. USS CHAFEE operating in the South Pacific in support of Oceania Maritime Support Initiative. CHAFEE has pioneered the use of "drift ops" in order to reduce engine hours, fuel consumption and air pollution. Courtesy of LTJG J.A. Lund, USS CHAFEE, 150814-N-AANNN-001.
3. USS CHAFEE in port Manzanillo, Mexico from 14 Sep - 18 Sep 2015. CHAFEE safely transferred fuel while in-port. Courtesy of LTJG J.A. Lund, USS CHAFEE, 150915-N-AANNN-001.
4. USS CHAFEE in formation with USS George Washington (CVN 73) and Peruvian vessels during UNITAS PAC 15 on 17 Oct 2015. CHAFEE active sonar transmissions during ASW exercises strictly adhered to Protective Measures Assessment Protocol, resulting in zero near mishaps or mishaps. Courtesy of Helo Photographer, USS GEORGE WASHINGTON, 151017-N-DM308-371.
5. USS CHAFEE transit through the Straits of Magellan on 1 Nov 2015. Painstaking measures were taken to conserve water and strictly manage CHT. Courtesy of LTJG J.A. Lund, USS CHAFEE, 151101-N-AANNN-001.
6. Fueling-at-Sea (FAS) with USNS Big Horn on 10 Nov 2015 in 4<sup>th</sup> Fleet AOR. One of twenty five spill-free, safe FAS evolutions during FY15. Courtesy of FCC W. Chadwell, USS CHAFEE, 151110-N-AANNN-001.

