

U.S. Coast Guard

ENGINEERING, ELECTRONICS & LOGISTICS

Quarterly Fall 2008

**An
Interview
With
VADM
Pearson**





You can visit us on the web at www.uscg.mil/hq/cg4/eelquarterly

All issues are available to Coast Guard personnel on *CG Central* under "Magazine and Newsletter"



Fall 2008
Vol. 12, No. 45
ISSN: 1931-4051

U. S. Coast Guard Engineering, Electronics and Logistics Quarterly

COMDTPUB P5700.2

RDML Thomas P. Ostebo
Assistant Commandant for
Engineering and Logistics

Mr. Kerry L. Freese
Managing Editor and
Publication Staff

The *U.S. Coast Guard Engineering, Electronics and Logistics Quarterly* is published quarterly by the Assistant Commandant for Engineering and Logistics. This publication is unofficial and not authority for action. Views and opinions expressed are not necessarily those of the U.S. Department of Homeland Security or the U.S. Coast Guard. We encourage readers to submit articles and letters to the editor. Authors are encouraged to submit articles through the Program Representative. The *U.S. Coast Guard Engineering, Electronics and Logistics Quarterly* Editor and the Engineering and Logistics Directorate Management Board retain final approval authority for the publication or non-publication of all article submissions. We will make every effort to publish all submissions. We also reserve the right to edit submissions for length, accuracy and grammar. All letters to the editor must be signed along with current address and telephone number.

Article and Photo

Submissions: Articles should be about 500 words long; however, C4IT, engineering, logistics and environmental specific articles can be up to 2,000 words -- all acronyms must be spelled out when first used. To have your article considered for publication, photo(s) must accompany each article. Articles can be submitted by FedEx, DHL or other carrier in hard copy and/or in Microsoft Word on a 3.5 disk, CD, or e-mailed electronically. Please submit original photographs and graphics. All slides, photos, graphics and illustrations should be in color where possible. Please include **by-line** when submitting article. Let us know if you want your photos and graphics returned to you. Submit inquiries, letters, articles, and photographs to:

Editor, *U.S. Coast Guard Engineering, Electronics and Logistics Quarterly*
CG HQ
CG-4, JR9-1130
1900 Half St., SW
Washington, DC 20593-0001

Phone: 202-475-5767
FAX: 202-267-4245
E-mail: Kerry.L.Freese@uscg.mil

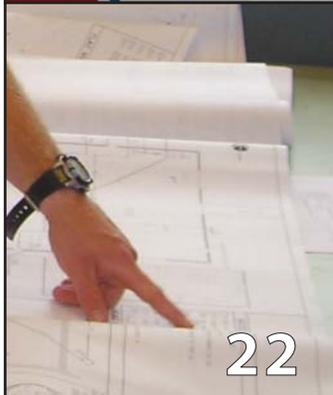
Submission deadlines are as follows:

Winter 2009 - 03 October 2008
Spring 2009 - 03 January 2009
Summer 2009 - 03 April 2009
Fall 2009 - 03 July 2009



On the Cover: CG-4A, CDR Chris Bartz, sat down with VADM Cliff Pearson to discuss his vision of the Mission Support Organization as he prepares to assume the role of Deputy Commandant for Mission Support (DCMS). Read the interview on page 16.

Contents



- 2 From the Assistant Commandant
- 4 Systems of Interest
- 6 Meet the New CG-4
- 8 BERTHOLF Visits Baltimore, Begins Trip to Homeport
- 10 Deepwater Delivers Three Assets in One Week
- 12 Second National Security Cutter WAESCHE, Launched
- 14 USCG Yard Changes Command
- 16 VADM Clifford Pearson Talks With the EE&LQ
- 22 Professional Education and Credentialing for Coast Guard Engineers
- 24 Project Management Certification for Coast Guard Engineers
- 26 Getting the Lead Out
- 28 An Engineering Change on the Engineering Change Database Projects Replaces DARTS
- 30 Unraveling the Mystery of Electronics Support Via Web-Based Tools
- 32 Nationwide Automatic Identification System (NAIS) Achieves Full Operational Capability (FOC) Milestone and Prepares for Increment 2
- 36 DGPS Nationwide Control Station (NCS) Augmented with a Data Analysis and Reporting Tool (DART)
- 38 Physical Inventory Reports and Full Data Extracts (PIRs and FDEs)
- 40 PMP Your Depot Maintenance Manager!
- 42 Earth Day and Stewardship
- 44 Green Actions
- 46 Coast Guard's First Environmentally-Friendly Firing Range



Back Cover: Lights, Camera, Action! Coast Guard Headquarters selected the Yard and Yard Pipefitter Leader James Johnston to participate in the recording of "The United States Coast Guard: The Guardian Ethos" in March 2008. The short video premiered at the Coast Guard Flag Officers Conference in April and will be marketed to national media sources this summer. Johnston is the reader for the line, "I Am Their Shield." To see the full video, go to cgvi.uscg.mil.

From the Assistant Commandant



It is an honor and a privilege to assume the duties of the Chief Engineer of the Coast Guard. As I assume the watch, I would like to humbly thank RADM Dale Gabel for his contribution and service. Under RADM Gabel's leadership, the Coast Guard commenced a remarkable transition, centralizing management of Coast Guard Engineering and Logistics Programs in accordance with the Commandant's directive. Since this is my first opportunity to address *EELQ* readers, I would like to pass on some of my goals and objectives during my tenure in CG-4. These goals include establishment of professional education requirements for the Coast Guard Engineering Workforce and ensuring the success of our Logistics Modernization efforts.

Professional Education. The Coast Guard needs to continually demonstrate that it is a professional organization worthy of the public trust. Attaining a professional certification is an excellent way for individuals to develop a high degree of credibility within their career field and enables a degree of understanding and trust among professionals related to that career field. A well-credentialed workforce demonstrates to Industry, the Department, and Congress that the Coast Guard is capable of handling the most complex tasks.

The Coast Guard is currently undertaking the most comprehensive acquisition program in its modern history. Our acquisition program is projected to receive and execute over \$6 billion over the next 5 years. As we acquire new assets, it is imperative that Coast Guard Engineers and Logisticians understand acquisition rules and processes. Because our current air, surface and shore asset sustainment programs currently do not provide acquisition management training, I will be establishing Professional Educational and Credentialing (PEC) requirements for all active duty Aeronautical, Naval, Civil, Ocean and Industrial Engineers. Details of Coast Guard PEC requirements will be delivered in separate correspondence, and will focus on Program Management and other acquisition-related certifications. I will address PEC requirements for the civilian workforce in the near future.

Logistics Transformation. In January 2004, the Coast Guard began to improve readiness and mission performance by implementing Sector commands. Sectors established a single commander responsible for all missions within their area of responsibility with an integrated command center to provide a common operating picture. To improve operational effectiveness and service delivery to the Sectors and all operational units, the Commandant implemented a modernization effort with the intent to provide the best possible service to the Nation. This modernization effort is the foundation for improving Coast Guard mission execution and mission support.

Consistent with Coast Guard modernization, the Coast Guard is creating a Deputy Commandant for Mission Support (DCMS). Under DCMS, we will establish a new Mission Support Organization to achieve a consistent business model for asset management. This is achieved by a common, documented business model delivered to and maintained by our logistics and service centers to execute a unified logistics information management architecture. The logistics transformation program will provide that common business model to meet the mission execution controls of our strategic trident, which includes our shore based forces, long range mobile platforms, and the deployable operations group.

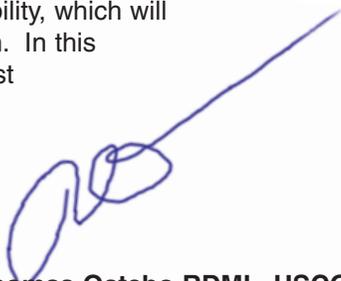
There are four cornerstones we will use to establish the Mission Support Organization. First, we will have a service-wide commitment to configuration management, which will foster sustainability through standard, repeatable and scaleable processes and enable informed decision-making. Since the Coast Guard was founded in 1790, innovation has been bred into our culture. Unit Commanding Officers have often received recognition for "thinking outside the box" and using knowledge and experience to get results. However, most of our ships and boats are configured differently from each other and that makes them difficult to support. We will have to learn to harness the innovative spirit within our culture and keep it within the bounds of our new business processes. Strong configuration control will be critical to the sustainment of our assets.

Second, we will have total asset visibility across the Coast Guard using an enterprise IT system. The Coast Guard's aviation community uses the Aviation Logistics Management Information System (ALMIS), where anyone can find the configuration and operational status of every aircraft in the fleet. In the future, all of our assets will be enrolled in ALMIS or an ALMIS-like system. Using this enterprise IT system, a deployed cutter on one coast can receive a spare part that might be located on the opposite coast, without much effort.

Third, there will be a bi-level support system consisting of an organizational element and depot element. Organizational level support is conducted by an operational unit, while depot level support is conducted by a non-operational entity, such as a NESU, CEU or contractor. The Product Line will be responsible for coordinating all depot level support under its purview.

Fourth, we will establish a single point of accountability for asset support through the establishment of asset product line managers (PLM). Operational units will communicate with product lines for support, which will have access to the entire DCMS organization to help them with their problems.

Fiscal Year 2009 will be critical for Coast Guard Modernization. By focusing on professional certification and observing the four cornerstones for mission support during modernization, we will ensure the continued success of our Engineering and Logistics Programs. The expectations of our Nation demand a unified and disciplined approach to mission support. It is only through a common approach, with sound business management and accountability, which will provide our field operators the tools they need to carryout the mission. In this way, we will improve the effectiveness, flexibility and safety of all Coast Guard Guardians operating on the front line.



Thomas Ostebo RDML, USCG
Assistant Commandant for
Engineering and Logistics

Systems of Interest

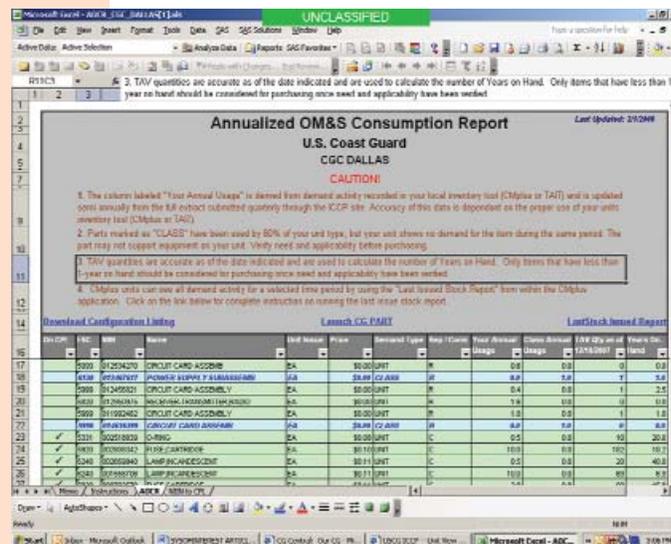
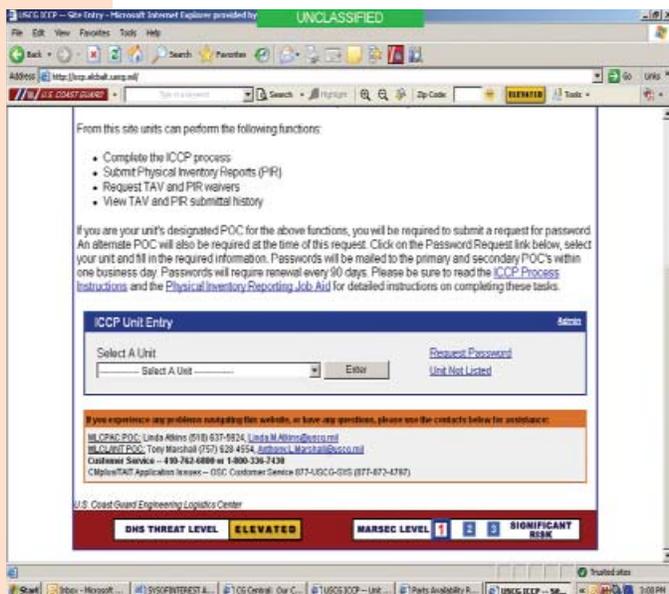
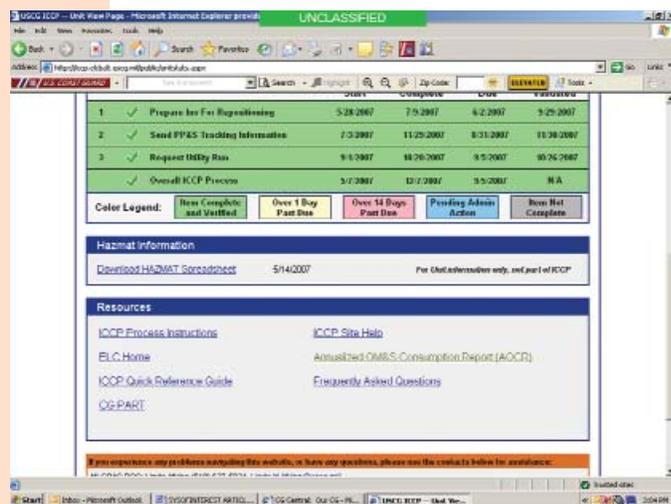
Annualized OM&S Consumption Report (AOCR) (ELC)

As the Coast Guard progresses towards fulfilling the Commandant's Logistics Transformation mandates, many field units are at a loss as to how to find out what equipment they're authorized to have on board. In fact, units felt "empty" after the

Field Unit Inventory Repositioning Project (FUIRP) took many obsolete, non-utilized parts out of unit inventories. Sparring was dramatically reduced and units were left wondering what they were authorized to stock. To ease unit woes, the web-based Annualized OM&S Consumption Report (AOCR) was created to enable units to view the demand data for equipment they have contained within their CMPlus database. Any equipment that is in their OM&S inventory, but not entered into CMPlus, will not be reflected. On the first page of the AOCR, CG-44 states units "are to use the AOCR to procure only what you need to maintain enough supplies for one year. OM&S stores may be adjusted downward at unit discretion and material not identified on the AOCR may be procured and stocked as unit requirements establish a demand for it."

Personnel can access their AOCR via ELC's Intranet site: <http://iccp.elcbalt.uscg.mil/>. The users need only to select their unit name from the drop down menu and click "Enter." On the following screen, select the "AOCR" link. An Excel spreadsheet will open, listing the most recent demand for that specific unit. In some cases, users will see that they have five years of supply for a certain "widget" if there has been little demand. In other cases, users will find that they need to stock "widgets" that have high demand. Finally, if a specific "widget" is not listed, it means that it has not been entered into CMPlus. Users should contact the ELC's Vessel Logistics Systems Support Branch (LSSB) (051) for all other inquiries.

Read more on page 30.



**President Bush Honors
Former Yard Employee (Yard)**

Military Spouses Appreciation Day



In a ceremony held on the South Lawn of the White House on May 6th, President Bush honored six military spouses of members of the Armed Forces who are recipients of the President's 2008 Volunteer Service Award. Ramona Vazquez, former Yard Fiscal Department Administrative Assistant and current Procurement Agent in the Engineering Logistics Center, was selected for recognition by the President and publicly recognized at the White House ceremony.

Ramona Vazquez is the wife of MKC Edward Vazquez currently stationed on board the Coast Guard Cutter VIGOROUS. She is the President of the Baltimore Area Coast Guard Spouses Association that, under her leadership, has operated "Nate's Open Door Baby Pantry" for the past three years. The project offers free diapers, formula, clothes, and toys to members of the Baltimore area Coast Guard military and civilian communities. In addition, Ramona maintains a website for Coast Guard families reporting aboard in Baltimore and was the U.S. Coast Guard 2006 Civilian of the Year.

In the photo, Ramona (center) listens with sincere appreciation when President Bush (right at podium) comments, "Ramona, America is proud of you, and I am proud of you." (Photo courtesy of Edward J. Vazquez)

MK 110 57mm Gun

The MK 110 57mm gun was fired off the bow of the Coast Guard's first National



Security Cutter, BERTHOLF, on Feb. 11 during sea trials. This was the first time that this gun was fired off a ship in the United States. During the trials, extensive testing of propulsion, electrical, damage control, and combat systems were conducted. This culminated in the successful completion of a four-hour full power trial, standardization trials, as well as 57 mm gun and close-in weapon systems (CIWS) testing. Photo courtesy of Northrop Grumman. 🌐

Meet the New CG-4

(Assistant Commandant for Engineering and Logistics)



RDML Thomas Ostebo

Rear Admiral Thomas P. Ostebo is currently serving as the Coast Guard's Assistant Commandant for Engineering and Logistics (CG-4). He is responsible for all naval, civil, aeronautical, and industrial engineering and logistics for the Coast Guard's \$25 billion capital plant which includes 23,000 facilities, 230 ships, 1,800 boats, and 200 aircraft. Responsible for executing an annual budget of \$1 billion, he also leads 2,200 personnel at Coast Guard Headquarters and three major Headquarters commands.

Previous tours of duty include; Executive Assistant to the Commandant of the Coast Guard, Executive Assistant to the Chief of Coast Guard Operations, Commanding Officer of both Coast Guard Air Station Cape Cod, and Coast Guard Air Station Traverse City. Admiral Ostebo served as Chief Aeronautical Engineering Officer at both Air Station Clearwater, Florida and Air Station Sitka, Alaska. He also served as Chief of Inventory, Logistics, and Finance at the Coast Guard's largest industrial depot, Aircraft Repair and Supply Center, in Elizabeth City, North Carolina.

Admiral Ostebo also served as First Lieutenant aboard USCGC ACTIVE in New Castle, New Hampshire. In 1984, he completed Naval Flight Training in Pensacola, Florida and served subsequent aviation tours at CGAS Cape Cod, CGAS Sitka, CGAS Clearwater, CGAS Traverse City, and the CG Aircraft Repair and Supply Center. During this time, he flew 4,000 flight hours, attained qualifications in the HH-3F, HH-60J, HC-130H, HH-65A/B and the HU-25, and qualified as an





Aircraft Commander and Instructor Pilot. Admiral Ostebo also completed his Civilian Airline Transport Rating and Airframe and Power Plant Authorization.

A native of Kings Park, New York, Admiral Ostebo graduated from the U.S. Coast Guard Academy in 1981 with a Bachelors of Science in Mathematics and Computer Science. In 1993, Admiral Ostebo earned a Master of Science in Industrial Administration from Purdue University's Krannert School of Business. He also completed a Senior Fellowship in National Security at Harvard University in 2002 and a Senior Fellowship at the Naval War College in 2005. His military decorations include two Legion of Merit, the Distinguished Flying Cross, three Meritorious Service Medals, two CG Commendation Medals, and the CG Achievement Medal.

Admiral Ostebo is married to the former Renee E. Winer of Falmouth, MA and they have two daughters -- Alexandra and Denali. 🌐





USCGC Bertholf (WMSL 750) made a stop in Baltimore during an East Coast tour before heading to its homeport in Alameda, Calif.

Adm. Thad Allen, the Commandant of the Coast Guard, and Master Chief Petty Officer Charles Bowen, Master Chief Petty Officer of the Coast Guard, address National Security Cutter BERTHOLF's crew during an "all hands" session, June 27, 2008. USCG photo by Petty Officer 3rd Class Michael Anderson .





BERTHOLF Visits Baltimore, Begins Trip to Homeport

Baltimore, Md. – The first National Security Cutter (NSC) USCGC BERTHOLF (WMSL 750) made its northern-most East Coast port call in Baltimore over the weekend [June 28 - 29, 2008]. BERTHOLF, which is now under Coast Guard command, arrived at Broadway Pier in Fells Point on Friday [June 27, 2008], and was available to the public for tours throughout the weekend.

Admiral Thad Allen, U.S. Coast Guard Commandant; Rep. Elijah Cummings (D-MD); Department of Homeland Security Secretary Michael Chertoff and his wife, Meryl Chertoff, the ship's sponsor, were among the crew's 100 guests as the ship sailed into Baltimore.



“It is with great honor that I welcome the CGC BERTHOLF, the first new Coast Guard National Security Cutter, to Baltimore,” Rep. Cummings said Friday [June 27, 2008]. “This vessel will serve as a tremendous asset to the men and women of the Coast Guard as well as a symbol of the millions of contributions the Coast Guard has made to the safety and security of our nation.”

The NSC received over 3,000 visitors throughout the weekend. The ship left Baltimore Monday morning, beginning the trip to its homeport in Alameda, Calif. BERTHOLF was built at the Northrop Grumman Shipbuilding facility in Pascagoula, Miss. and was delivered to the Coast Guard in May. The Commissioning ceremony was held on August 4, 2008. 🚢

Deepwater Delivers Three Assets in One Week

Rosslyn, VA (May 15, 2008) – During one week, the Coast Guard formally accepted three new assets, the first National Security Cutter (NSC), USCGC BERTHOLF (WMSL 750); the fourth HC-144A “Ocean Sentry” maritime patrol aircraft; and the third HC-130J long range surveillance aircraft.

“Years in the making, BERTHOLF represents the culmination of thousands of hours to bring the ship from concept to delivery,” said Jim French, Northrop Grumman NSC deputy program manager. “The design and production team is proud to deliver to the Coast Guard this first-in-class asset with advanced technology and capabilities to meet both current and future mission requirements for the 21st century.”

Formal acceptance of BERTHOLF took place on May 8 [2008]. The acceptance was commemorated by a ceremony on the flight deck of the ship, placing the NSC in “in-commission special” status. The NSC remained at the Pascagoula shipyard until mid-June and was commissioned at its homeport in Alameda, Calif. in August.

BERTHOLF is the first of eight planned ships in the new class of highly capable, technologically advanced multi-mission cutters being acquired under the Deepwater Program. Northrop Grumman Shipbuilding is building the NSCs, while Lockheed Martin is building and integrating the command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities on board the cutters.

The fourth HC-144A was also accepted on May 8. The airframe was constructed in Seville, Spain and arrived in Mobile, Ala. in June. The first three airframes arrived in the United States in late 2006 and early 2007 and their Lockheed Martin-built missionized pallets were delivered to the Coast Guard earlier this year.

“We are excited to bring these state-of-the-art assets into the Coast Guard’s aviation inventory,” said CAPT Doug Menders, Coast Guard Deepwater aviation program manager. “Through the combined efforts of the Coast Guard, Lockheed Martin, and subcontractors, the missionized HC-130J and HC-144A will provide the Coast Guard with a great new capability that will benefit the country for many years to come.”

On May 12, the Coast Guard accepted the third missionized HC-130J. The aircraft modifications include installation of a belly-mounted surface search radar, a nose-mounted electro-optical infrared sensor, a flight deck mission operator station and a mission integrated communication system. The first two missionized HC-130Js were delivered to the Coast Guard earlier this year. 



HC-144A and HC-130J: The Coast Guard's newest aviation assets stand side-by-side in Greenville, S.C. earlier this year. The mission system installed on the HC-130J is derived from the same software series developed for the mission system pallet on board the HC-144A maritime patrol aircraft.



Richard Schenk, Northrop Grumman vice president, Coast Guard programs; and RADM Gary Blore, Coast Guard chief acquisition officer, formally transfer ownership of the first National Security Cutter to the Coast Guard at a ceremony on the flight deck of the ship on May 8.

Second National Security Cutter, WAESCHE, Launched

WAESCHE is now over 63 percent complete and Christened in Pascagoula, Miss. on July 26, 2008.



Pascagoula, Miss. (July 18, 2008) – The second National Security Cutter (NSC) WAESCHE (WMSL 751) was launched at the Northrop Grumman Shipbuilding facility in Pascagoula on Saturday, July 12, 2008. The launch is the latest milestone for WAESCHE, which is now more than 63 percent complete.

WAESCHE's launch followed just two months after the first NSC's delivery and highlighted the significant economic and operational benefits achieved through serial production in this extremely important program for the Coast Guard.

In preparation for the launch over the last month, the ship was painted and the MK 110 57mm gun was installed. The new Lockheed Martin-provided operations center command and control equipment was also loaded onto the ship and is currently being hooked-up in preparation for electronics light-off (ELO) later this year. The command and control equipment consists of eleven communications and four computer network cabinets, and was the last major C4ISR equipment load-out on WAESCHE.

WAESCHE began production on April 3, 2006 and the keel was laid on September 11, 2006. The NSC was Christened on July 26 in Pascagoula, Miss.

The first NSC, USCGC BERTHOLF (WMSL 750), was delivered to the Coast Guard on May 8 and arrived at its home-port, Alameda, Calif, on July 23, 2008. 🌐

The second NSC, WAESCHE, was launched at the Northrop Grumman Shipbuilding facility in Pascagoula, Miss. on July 12, 2008.



USCG Yard Changes Command



The Yard Change of Command occurred at 11:01 a.m. on May 13, 2008. Before a crowd of 500 invited guests and the Yard workforce, Captain John Kaplan (right) assumed command from Captain Stephen Duca (left). Rear Admiral Dale Gabel (center), Assistant Commandant for Engineering and Logistics [2005 - 2008], U.S Coast Guard, presided over the ceremony. Captain Kaplan is the 39th Commanding Officer in the 109-year history of the Yard.

Captain

John Kaplan assumed command of the Coast Guard Yard on May 13, 2008. He is the 39th Commanding Officer in the 109-year history of the Yard.

Captain Kaplan took charge of the Yard from Captain Stephen Duca who had served as the shipyard's Commanding Officer, May 2005 - May 2008. Captain Duca retired from the U.S. Coast Guard with 27 years active duty service. Rear Admiral Dale Gabel, Assistant Commandant for Engineering & Logistics (2005 - 2008), was the ceremony's Presiding Official.

Captain Kaplan had served as the Industrial Manager of the Yard since 2005. The Captain graduated from the United States Coast Guard Academy in 1982 with a Bachelor of Science degree in Ocean Engineering. Upon commissioning, he reported as a Student Engineer aboard the U.S. Coast Guard Cutter (USCGC) POLAR STAR (WAGB-10).

Follow-on assignments included Coast Guard Headquarters Naval Engineering Boat Branch as Project Engineer for the 47' MLB prototype and other major boat acquisitions; Engineer Officer, USCGC MELLON (WHEC 717); Contracting Officer's Technical Representative for the Naval Engineering Support Unit Seattle Polar Console Replacement Project involving oversight of the successful installation and testing of the Machinery Control and Monitoring System on both Coast Guard POLAR icebreakers. Additional assignments included Icebreaker Platform Manager, Coast Guard Engineering Logistics Center; Headquarters Naval Engineering where he served as Project Officer for the USCGC ALEX HALEY conversion performed at the Coast

Guard Yard; Commanding Officer, Naval Engineering Support Unit Seattle; Maintenance and Logistics Command Pacific, Naval Engineering Support Branch Chief (vr) and Assistant Chief, Naval Engineering Division (va).

Captain Kaplan earned postgraduate degrees from the Massachusetts Institute of Technology in Naval Architecture and Marine Engineering, and Mechanical Engineering. He is a licensed Professional Engineer in the State of Virginia.

Captain Kaplan's personal awards include four Meritorious Service Medals, three Coast Guard Commendation Medals, the Coast Guard Achievement Medal, the Arctic and Antarctic Service Medals, and numerous team and unit awards.

Captain Kaplan is an active participant and strong supporter of the American Society of Naval Engineers (ASNE) and is currently serving on the ASNE National Ways and Means Committee. 



This was the first Change of Command in Yard history to take place on the Yard's shiplift. The ACTIVE, a 210' cutter undergoing the Mission Effectiveness Project at the Yard, served as backdrop for the ceremony.

Special Feature

VADM Clifford Pearson Talks With the EE&LQ

VADM Pearson Interview



As Chief of Staff of the Coast Guard, VADM Pearson continues to lead Mission Support modernization efforts across the United States Coast Guard. The EELQ staff was fortunate to get a few minutes with VADM Pearson so that he could share his vision for the future and provide his perspective about Coast Guard Mission Support and his new role as the future Deputy Commandant for Mission Support (DCMS).

EELQ: Admiral, thank you for allowing EELQ to sit down with you and discuss the future of the Coast Guard. As you are taking over as Chief of Staff, the Coast Guard is beginning the execution phase of Modernization. What are some of the issues that you consider important during this transitional period?

VADM Pearson: I think establishing Product Lines as the basis of our transition is a great way to do business. The Product

Line Manager (PLM) is the single point of contact and the expert for his or her area of responsibility. If you have a question or issue, the PLM is going to make it their problem and get it solved. As we look to transition to the Mission Support Organization, there are a few things we should pay close attention to.

First, we need to make sure *we take care of our people* as we prepare to stand up the Mission Support Organization. We need to make sure we don't drive our workforce too hard during this critical transitional period. As we align our business processes and our organization, we need to take full advantage of the technology available in the 21st century, including video-teleconferencing and phone conferencing.

Second, we need to maintain close ties to operations. The more we understand Coast Guard operations, the better we can support them. The DCMS

Organization needs to be fully engaged with the Deputy Commandant for Operations (DCO), the Operations Command (OPCOM) and the Force Readiness Command (FC). And by fully engaged, that means at my level, down to the Assistant Commandants, down to the most junior personnel. A good example is the fact that we are putting DCMS watch standers in the OPCOM operations center. In this way, DCMS will have the ability to be the most responsive to current events. If there is a 378' with engineering issues in the Bering Sea, the DCMS organization will know about it as soon as it's reported and will respond to it soon thereafter.

Third, the Mission Support Organization needs to provide an integrated support package. A unit may have a radar problem, which may be an engineering problem, a network problem or a training problem. When the Product Line is called, the PLM should reach across our organization into the different programs to resolve these issues. Our programs such as engineering, C4IT, personnel and acquisitions, can not act independently. You can have the best engineered cutter with the best C4IT in the world, but without a crew, it's useless. We need to provide a fully integrated service to the fleet.

Fourth, we are shaping our new organization after a proven business model, which has been used successfully by the Aviation Community. However, that's not the end. In fact, there is no end state. There is a steady state of continuous improvement and that is what we are striving for. We want to be continuously learning about and improving our organization so that we may adapt to the new challenges of the future. We must be proactive to address personnel concerns and keep all lines of communication open. Leadership at all levels of mission support must continue to engage the Coast Guard's greatest asset, our people. We must communicate our plans and progress and listen to what stakeholders have to say. Only through our people can we make this modernization effort a success.

EELQ: During your planning and preparations, what do you see as the role of a future Deputy Commandant for Mission Support?

VADM Pearson: As DCMS, I foresee the new Mission Support Organization achieving a consistent business model for asset management. My plan is for the Mission Support Organization to support the Service's transition to a unified logistics system based upon a bi-level maintenance model consisting of depot and unit-level support throughout the entire Coast Guard. We will also embrace a Product-Line Management concept for each asset, which will streamline service to the field, giving field operators more efficient access to the tools they need to execute the mission. We're going to ensure total visibility of all of our assets and spares, so that a casrep'd cutter on station in the Bering Sea can receive a part that might be located in Charleston, SC. Finally we'll enforce disciplined configuration management of all of our assets. This will maximize system performance, manufacturing, reliability, maintainability, supportability, flexibility, scalability, and upgradeability into the overall asset life cycle. Configuration management will also foster sustainability through standard, repeatable and scaleable processes and enable enterprise decision-making.

EELQ: We understand that Force Readiness Command is responsible for fleet readiness and DCMS is responsible for mission support. What is the difference? How do DCMS and FC interact?

VADM Pearson: Force Readiness Command will transform the Service's readiness management into a centralized, functional construct aimed at optimizing unity of effort across three main business lines: (1) readiness and standardization; (2) operational doctrine, to include tactics, techniques and procedures; and (3) force management and allocation.

I want DCMS to develop, coordinate, monitor, and control policies programs for human resources management, acquisitions, engineering and logistics support of the operating forces and shore infrastructure, and the technical aspects of the systems and networks to enable effective Coast Guard operations, consistent with the Commandant's strategic intent and priorities.

As I said earlier, I'll work closely with the Force Readiness Commander to ensure: Coast Guard forces have the assets, equipment, spares, training and shore infrastructure to maintain the mandated readiness requirements, wherever they are located; and that our operational doctrine and tactics, techniques and procedures remain viable.

My vision is to ensure *all people, all platforms, and all missions are always supported.*

EELQ: If I was an EPO on an 87' WPB, how would my day-to-day business be affected by modernization?

VADM Pearson: Under the new business model, your job will become easier. You won't have to "figure out" how to support your cutter. Instead, there will be a single point of contact, who you will communicate with for support. That single point of contact will access the WPB-87 Product Line, which will have access to the entire DCMS organization to help you with your problems. It's like the Verizon guy on TV. The Product Line will provide you standardized

Maintenance Procedure Cards (MPCs), which detail the exact parts, consumables, and tools needed for every maintenance action on your cutter. The MPCs will also give you step-by-step instructions on how to complete the maintenance. The Product Line will supply you with parts. If you need a spare part, you can look in the Asset Logistics Management Information System (ALMIS) to locate that part on your cutter or see if



any other 87 footer has one. Every time you use a part, you will check it out of ALMIS and a replacement will be automatically re-ordered for you.

EELQ: I keep hearing about bi-level support. What does that mean?

VADM Pearson: A bi-level maintenance philosophy has an organizational element and depot element. These two elements can be considered "unit level" and "above unit level" respectively. "Unit level" support is conducted at the unit and "above unit level" support is conducted somewhere other than the unit, or it is support conducted at the unit by personnel from an "above unit level" organization.

When I say "unit", I mean *operational* unit. These are units that are attached to the Operations Command or the Force Readiness Command, such as sectors and their associated sub-units, air stations and cutters. Units attached to the DCMS organization, such as ESU's, NESU's and CEU's would be considered "above unit level".

As we transition to the Coast Guard's new logistics business model, asset Product Lines will define what is "unit level" support and what is "above unit level" support. While the Product Line maintains authority over all related-support functions, units are responsible for completing "unit level" support. Product Lines are responsible for ensuring "above unit level" support is complete and also have the ability to monitor units to ensure "unit level" support is performed and documented.

EELQ: Our Coast Guard personnel who have been around for a while have seen lots of efforts to change our organization, with limited effectiveness. What is different about modernization?

VADM Pearson: From the Commandant on down, the Coast Guard's entire leadership is committed to ensuring the success of Modernization. We are ensuring success in two ways. We are creating a centralized organizational construct and we are creating business rules to operate within that organizational construct. The core of our organizational construct is the Product Line. Product Lines will exist in Logistics Centers, which will replace the MLC's as the primary support entity for assets. The business rules will be the processes and procedures operators will use to interact with the Product Lines, Logistics Centers, and the rest of the organizations that will exist once we execute our modernization plan.

EELQ: There's been a lot of discussion about Product Lines and maintaining strong configuration control on our assets. Imposing strict rules on asset management seems contrary to our historical past as innovators. How do we keep our traditions of innovation, while adopting new business rules that place a strong emphasis on configuration control.

VADM Pearson: Since the Coast Guard was founded in 1790, innovation has been bred into our culture. Unit Commanding Officers have often received recognition for "thinking outside the box" and using knowledge and experience to get results. However, having decentralized configuration control has made it difficult to sustain our assets. Most of our ships and boats are configured differently from each other and that makes them difficult to support. We'll have to balance our innovative thinking with strong configuration control in our future organization. I believe we should do a better job to manage innovation. We need to link up the innovator at the unit with our logistics centers in order to break down obstacles and encourage good ideas. If an innovation works, we should make it part of our enterprise system.

EELQ: Many of our field units receive admin/logistics support from Districts. How do Districts factor into the new organizational construct? How will DCMS work with Districts?

VADM Pearson: Districts will exist as part of the Operations Command, and they will largely remain how they are today. Just like large cutters, District units will receive their support from Product Lines. My staff is talking to Districts now to determine the best way to utilize the existing District staffs to deliver the highest quality services to the field.

EELQ: We've heard the MLCs and ISCs are "going away". What does this mean?

VADM Pearson: We are grouping all the functions of the MLC's and ISC's and putting them into one organizational construct. Instead of a unit receiving support from its regional support organization, it will receive support from a central Logistics Center. This shouldn't be mistaken as an effort to remove services and further burden operational units. Quite the contrary, if we consolidate our support organizations, there will be a cost savings where we are able to provide better service and remove burden from the operational units.

Initially we are going to do this through detached work environments. Our people may stay in the geographic location they are currently in, but the lines of organizational control and business processes are going to change. We are doing this when we establish the Boat Product Line. We identified all of the boat support personnel working at the APO, the ELC, the MLC's, and the

NESU's. We then established lines of communications and business process so they act as one consolidated organization that has the principle responsibility for supporting all the boats in the Coast Guard.

EELQ: What is an Asset Product Office? How does it operate in our new organization?

VADM Pearson: For most new surface assets the Coast Guard acquires, we currently establish a Project Resident Office (PRO), which monitors construction, adherence to contracting, and delivery of the asset. As part of the modernization effort, PRO functions will either be assumed or augmented by an Asset Project Office (APO). It is the APO's job to address all ten elements of logistics, which include asset maintenance; supply; training; support and test equipment; manpower; packaging, handling, storage and transportation; facilities; IT support;

technical data; and design interface. The APO serves as the "one stop shop" for asset support, ensuring integrated logistics is planned for and executed. It is the job of the APO to provide the operator with all of the necessary documentation, support equipment, and maintenance requirements needed to effectively operate the asset.

The key elements of the APO include the Command Staff, the Operations Department,



Standardization Department, Safety Department, Training Department and the Product Line. Each of these departments has responsibilities to ready the asset for operations. These responsibilities include developing the operating handbook and maintenance manual, establishing the Integrated Logistics Support Plan, creating maintenance support contracts, determining appropriate "C" Schools, and writing PQS and training standards among others. Once all tasks are complete and the asset is ready to be delivered to the operator, many of the APO components will be spun off or disestablished. The Product Line, for example, will be removed from the APO and installed in the appropriate Logistics Center. The Standardization Department will move to the appropriate Training Center and the other departments will be disestablished and their responsibilities assumed by the appropriate DCO, DCMS, or FC organization.

EELQ: In some of our engineering communities (aviation and naval), engineers are closely tied to operations. In other communities (electronics and civil), career paths are not as closely tied to operations. Some of our CG engineers have jumped back and forth between engineering and operational assignments, while others have followed a strict engineering career path. Is there a preferred method in the new organization?

VADM Pearson: As part of the Mission Support Organization, I believe our members should be tied as closely to operations as possible. The more we know about operations, the better mission support we can provide. The best way to learn operations is to be assigned to an operational unit. If your career path precludes being assigned to an operational unit, become as closely tied to operations as you can during your career. You could do this through TAD opportunities or training. An example would be if you gained a qualification in the Logistics Section of the Incident Command System.

EELQ: What are some of the ways the Coast Guard can develop engineering and logistics competencies in the officer, enlisted and civilian workforce while maintaining a strong focus on mission execution?

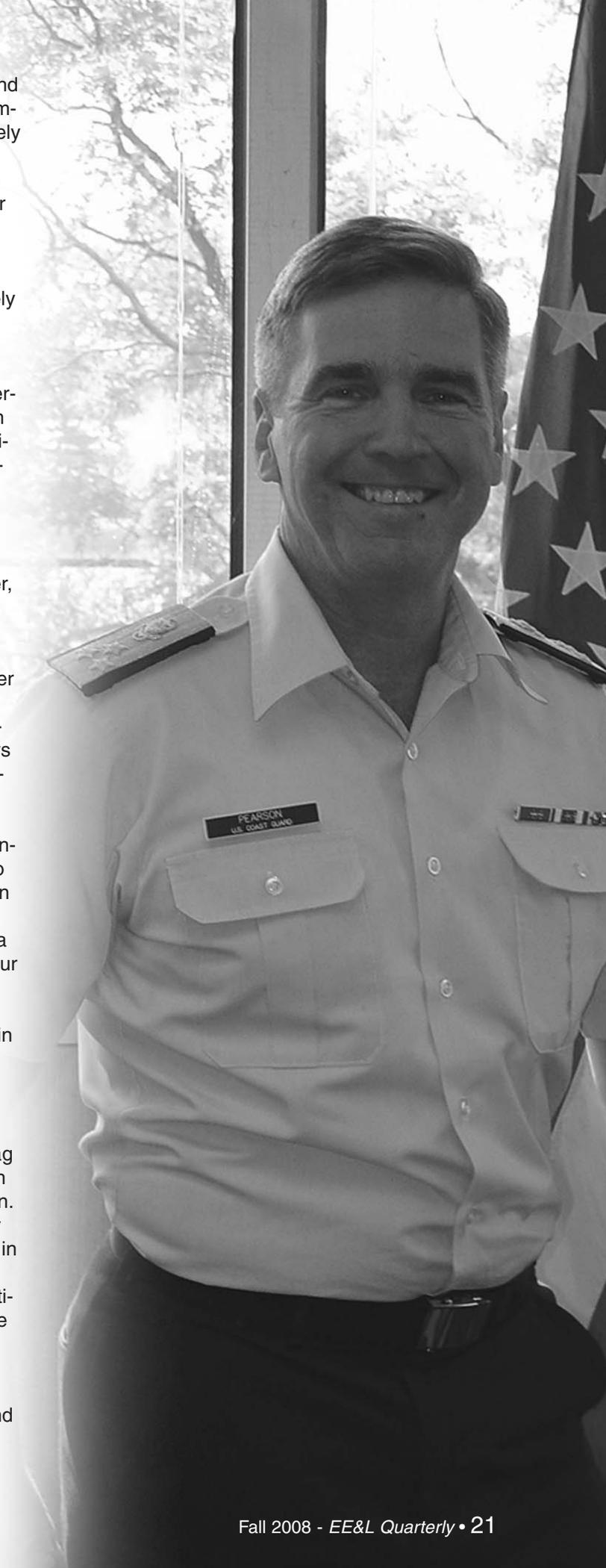
VADM Pearson: Continuous learning throughout your career is of the utmost importance. It is important for you to take advantage of undergraduate and graduate school opportunities at some point in your career. There are a variety of ways to accomplish this, from being assigned to advanced schooling to taking advantage of tuition assistance.

Right now we have a formalized process for certifying personnel in the Acquisitions Directorate (CG-9). We are looking to extend that certification process out to the rest of the Mission Support Organization. Credentialing and certification is an important part of any professional organization. It provides a degree of credibility with our overseers in government and our peers in industry.

EELQ: If I was a JO and I want to become a senior leader in the Coast Guard, such as a CO of a Logistics Center. What are some of the things I need to do to get to that position?

VADM Pearson: I'm looking for the best and brightest to fill these positions, someone who is likely to be a successful flag officer. As I have stated, in order to provide the best mission support, you need to know the business of mission execution. This includes having a broad knowledge of operations, likely with operational experience. You may also have experience in a wide array of mission support functions, such as acquisitions, personnel, or engineering, either through a formal certification process or personal experience. You also need to be committed to lifelong learning, through formal and informal means.

VADM Pearson wants to hear your questions, comments, and concerns from the field. Please send all inquiries to CDR Chris Bartz at chris.a.bartz@uscg.mil. 





Education and Credentialing for Coast Guard Engineers

The Coast Guard is and has always been a change centric and learning organization. Over time, we have merged the missions of the Revenue Cutter Service, US Life-Saving Service, US Lighthouse Service, and the Bureau of Marine Inspection into our current organization. Throughout all of this history, the Coast Guard has developed a recognized culture of technical education, expertise and competence. Today we face a rapidly changing environment requiring an increased level of education and vocational skills. Nowhere is this more important than within the fields of Logistics, Acquisition, and Finance.

In this edition of the EELQ, RDML Ostebo emphasized the need for continual learning in the Coast Guard to meet the rapidly changing environment that surrounds us. A great way to demonstrate a commitment to continual learning is to attain professional certification. Certification indicates a high level of professionalism to both coworkers and customers, increasing one's value in the workplace. It also demonstrates a dedication to continuous self improvement and improves our credibility within DHS and Congress. Only a small fraction of professionals ever achieve certification, indicating that they are a leading professional in their respective field. Certification improves one's understanding of the most current processes and trends in one's profession.

Recognizing the importance of continual learning and certification, CG-4 is mandating professional certification requirements for all engineers under its purview. In the near future, all Aeronautical, Naval, Civil, Ocean and Industrial Engineers shall attain Program Manager certification. As a baseline certification, all active duty Officers in these fields must attain DHS Program Management Level 1 certification. Level 2 certification shall be attained by the grade of O-5 and, in the future, will be required to attain key positions in engineering, such as product line manager, CEU Commanding Officer, or NESU Commanding Officer. DHS Program Manager Level 3 certification shall be attained by the grade of O-6 and, in the future, will be required to attain major engineering command positions, such as logistics centers.

There are also several other certifications that the Coast Guard offers. These include

- Business, Cost Estimating, and Financial Management
- Life Cycle Logistics
- Information Technology
- Production, Quality and Manufacturing
- Test and Evaluation
- Systems Planning, Research, Development, and Engineering

Requirements for Civilian Coast Guard engineers will be developed in the future. In the meantime, all Coast Guard engineers and logisticians are highly encouraged to pursue as many certifications whenever possible. The CG-4 POC for Professional Education and Credentialing for Coast Guard engineers is Mr. Rich Kramer (Richard.C.Kramer@uscg.mil) and requirements for attaining certifications can be found at <http://cgcentralweb.uscg.mil/clink/2802>. 

Project Management Certification for Coast Guard Engineers



LCDR Terence J. Williams has long been an advocate of professional development activities such as earning professional licenses, certifications, and Lifelong Learning principles because they not only improve work performance but also offer greater job satisfaction. Lcdr Williams recently earned two critical Project Management certifications while working in CG-45, Office of Naval Engineering, and wants to share his views on Acquisition Workforce Certifications. Technical skill sets such as engineering and logistics are vital to the acquisition process, this has become more apparent with the Deepwater Program and projected surface, air, and shore acquisitions and services. There is currently about 100 DHS Certified Project Managers throughout the entire Coast Guard and we need our workforce in all functional disciplines to have this training and certifications to better manage legacy assets, complex projects, and provide greater mission support for operations.

As discussed in ENGLOGINST 3502.1 *Engineering Body of Knowledge (EBOK)*, CG Engineers and Logisticians will benefit by having a clear, consistent standard to identifying the skills, practices, knowledge, and experience needed to do our jobs. We must develop professionally and strive for technical degrees, professional licensing, senior service schools, and certifications such as project management. The standardized knowledge gained thru professional development activities will strengthen our ability to attract, retain, and maintain a quality engineering workforce. Standardized practices such as those being implemented by the new Mission Support Organization will improve our ability to acquire, operate, and support assets over their lifecycles.

When I first came to the Office of Naval Engineering Project Management Division, COMDT (CG-452), I had little knowledge of what project management duties entailed, although I had been doing it for the past 10 years as a Naval Engineer. My supervisor, Lcdr Jay E. Main, informed me that project management training was available online to anyone in the CG and would help clarify some of my acquisitions duties in CG-452, he encouraged me to take a few courses and pursue acquisition workforce certification.

Professional development activities that relate to your job duties will increase competency, job satisfaction, promotability, and career opportunity within and outside of the Coast Guard. I encourage both military/civilians to apply for acquisition workforce certifications such as Project Manager, Lifecycle Logistics, Information Technology (IT), System Engineer, Financial Manager, Test/Evaluation, and Manufacturing because we do this work everyday, we might as well get credit for it. Although we all may be committed to the Coast Guard career, let's face it, we all get out someday, obtaining Acquisition Workforce certifications are an excellent way to enhance your resume.

Figure 1 (next page) represents the Coast Guard's Major Acquisitions Process Structure as defined in the *Major Systems Acquisitions Manual COMDTINST M5000.10*. It consists of three activities (Pre-Acquisition, Acquisition, and Sustainment) which are further divided into six phases (Project Identification, Project Initiation, C&TD, CD&D, P&D, and

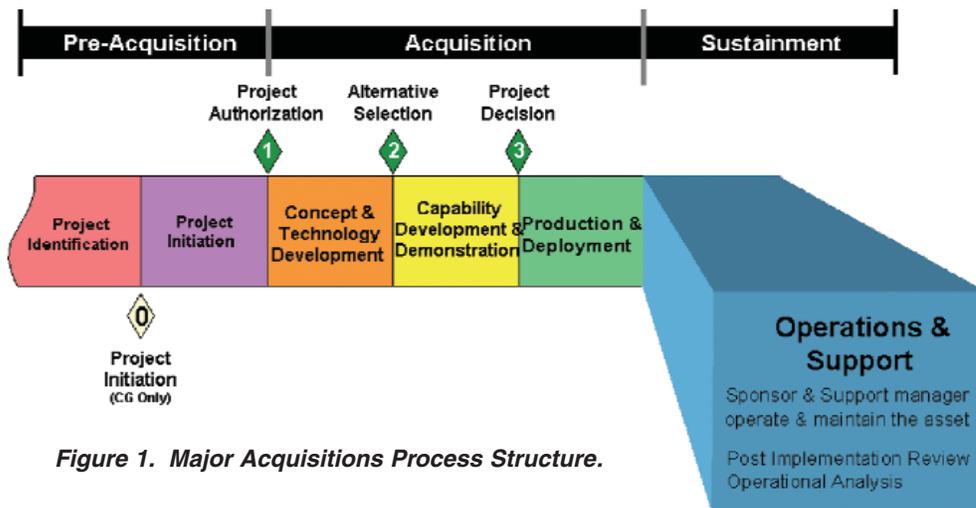


Figure 1. Major Acquisitions Process Structure.

Operations and Support). Most engineers/logisticians with duties of lifecycle management during the operation and support phase work at MLC, ELC, NESU, PRO, CG Yard, HQ, ISC Industrials, ARSC, CEU, and newly formed APO are involved with sustainment activities. In the new modernization efforts, these entities will combine into one entity, the Product Line.

Engineers and Logisticians should all become familiar with the Acquisition process and obtain certifications because nearly 60% of the Life Cycle Costs (LCC) occurs

during the Operations and Support Phase. Knowledge gained from the course material will help engineers understand the development and importance of supportability, maintenance, and configuration management concepts.

The Assistant Commandant for Engineering and Logistics (CG-4) will soon be implementing a Professional Military Education (PME) requirement for Coast Guard Naval, Civil, and Aeronautical Engineers. The program will require engineering officers to attain Department of Homeland Security (DHS) Level 1 Program Management certification in order to be designated, level 2 by the grade of O-5, and reach Level 3 certification by the grade of O-6. CG-45 is already encouraging staff to attend the three-day Major Acquisitions Process Training (MAPT) course offered thru CG-9, Acquisition Directorate, and recommends that all Task Leaders earn Level 1 DHS qualification by taking online courses thru the Defense Acquisitions University and Federal Acquisition Institute.

In order to fulfill the DHS Program Manager requirements, you must complete:

Level I Certification

- (1) _____ at least 24 hours (or 2 credit hours) in basics of or principles of project management including project planning, cost estimating, risk management, performance, earned value management (CG Major Acquisition Process Training).

OR

- (1) _____ Defense Acquisition University (DAU) Fundamentals of System Acquisition management (ACQ 101);
- (2) _____ At least 8 hours in managing teams or Fundamentals of Integrated Product Teams (Management and Leadership CLM 014) (<http://clc.dau.mil>);
- (3) _____ COR/COTR training - <http://clc.dau.mil> (CLC 004 (3 hrs), CLC 007 (1 hr), CLC 106 (8 hrs), CLC 011 (2 hrs), CLM 003 (2 hrs), and CLM 024 (8 hrs), totaling 24 hrs.

Experience (from within the past 3 years)

- (1) _____ 1 year of acquisition experience that includes analyzing and/or developing requirements, monitoring performance, assisting with quality assurance and budget development.
- (2) _____ Additional Desired Experience: 1 year project management experience, can be independent or as part of a team.

To apply for DHS Project Manager or other Acquisitions Workforce Certifications, you must register online at www.ACMIS.gov. Use CG-9 SOP #3C Acquisitions Workforce Certification for further guidance.

LCDR Terence J. Williams is a certified DHS Level 2 Project Manager and earned Project Management Professional (PMP) credential thru Project Management Institute. 

Getting the Lead Out



Petty Officer 2nd Class Chad Wortman, a small-arms instructor stationed at the Coast Guard Pacific Area Armory Detachment, Honolulu, takes aim and fires his SIG P229-DAK .40-caliber pistol at the Dexter Small Arms Firing Range Friday, June 6, 2008. The range was dedicated May 21, 2008, at Integrated Support Command, Honolulu. (Photo by Petty Officer 3rd Class Michael De Nyse, U.S. Coast Guard.)

by Petty Officer Michael De Nyse
U.S. Coast Guard District 14

Shots rang out and bullets flew at Coast Guard Integrated Support Command (ISC), Honolulu, May 21, 2008, during the dedication ceremony for the Coast Guard's new Dexter Small Arms Firing Range.

"The Dexter Small Arms Firing Range will ensure units in the Fourteenth District continue to maintain the expected high level of readiness," said LCDR Scott Washburn, stationed at ISC's Engineering Department.

The range is a first for the Coast Guard. It is a prototype that uses Reduced Hazard Ammunition (RHA) and is safer for personnel and the environment.

"Firing lead ammunition represents a threat to human health and the environment that is undeniable but preventable," said CAPT John Hickey, commanding officer of the ISC.

"This ammo is ideal for indoor ranges since it disintegrates upon impact and therefore does not ricochet," said Chief Petty Officer Eirik Hauge, supervisor of the Coast Guard Pacific Area Armory Detachment Honolulu.

The range was constructed at a cost of \$2.3 million and is equipped with eight firing lanes that are able to accommodate all of the small arms in the Coast Guard inventory.

The dedication ceremony concluded with members of the official party firing a ceremonial first shot to commemorate the range. The official party included: VADM Charles Wurster, commander of the Coast Guard's Pacific Area; RADM Sally Brice-O'Hara, commander of the Fourteenth Coast Guard District; RADM Manson Brown, the incoming commander of the Fourteenth Coast Guard District; and Jerry Johnson, the executive director of the Coast Guard's Facilities Design and Construction Center, Pacific.

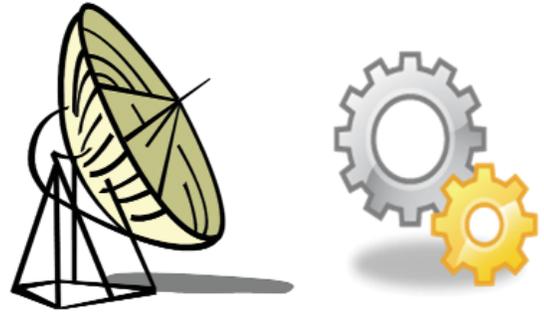
The range is named for Coast Guard RADM Dwight Dexter, who was in charge of small boat operations during the Battle of Guadalcanal during World War II. Dexter also played an integral role in the Coast Guard's competitive shooting program during the 1930s.

EDITOR'S NOTE: Read more on the environmentally friendly Dexter Range by the Environmental Management Division found on page 46. 📄

VADM Charles Wurster, the Coast Guard Pacific Area commander, invites ceremony attendees to gather for the dedication of the Dexter Small Arms Firing Range Wednesday, May 21, 2008, at Coast Guard Integrated Support Command, Honolulu. (Photo by Petty Officer 3rd Class Michael De Nyse, U.S. Coast Guard.)



An Engineering Change on the Engineering Change Database



by Randy Gardner, ELC

Projects Replaces DARTS

U.S. Coast Guard
ELC Central
U.S. Department of Homeland Security

Anonymous
7

Home | Calendars | To-do lists
Send mail

Log In
Username:
Password:
Login

Welcome to ELC Central
ELC Central is an innovative initiative of the ELC to better manage the overwhelming data associated with this large Coast Guard command.
Complete a Customer Satisfaction Survey

ELC Customer Service
Please click on the link above to visit the ELC Customer Service page.
Click Here

HO Tasks to ELC
This provides status information for all CG Headquarter Tasks to ELC.

ISO Process Improvement
This area provides the ability to view and submit Corrective and Preventive actions.
Submit a ELC ISO Process Problem

ELC Documents
This provides access to ELC generated documents.

ELC Project Status
This provides the status on Engineering Changes, Engineering Change Requests, and other significant ELC Projects.

ELC Projects Status Database
This database provides status on all Projects associated with Engineering Changes and other ELC initiatives (SSMEB, ILSMT, Supply Chain Management issues, etc.).

Engineering Change Projects
Engineering Change Project Status Reports
Engineering Change Project Scorecards
Engineering Change Files

Non-Engineering Change Projects
HM&E Projects Status Reports
ELEX Projects Status Reports

Search Projects
Search By
ELC Casefile # for
Run Query

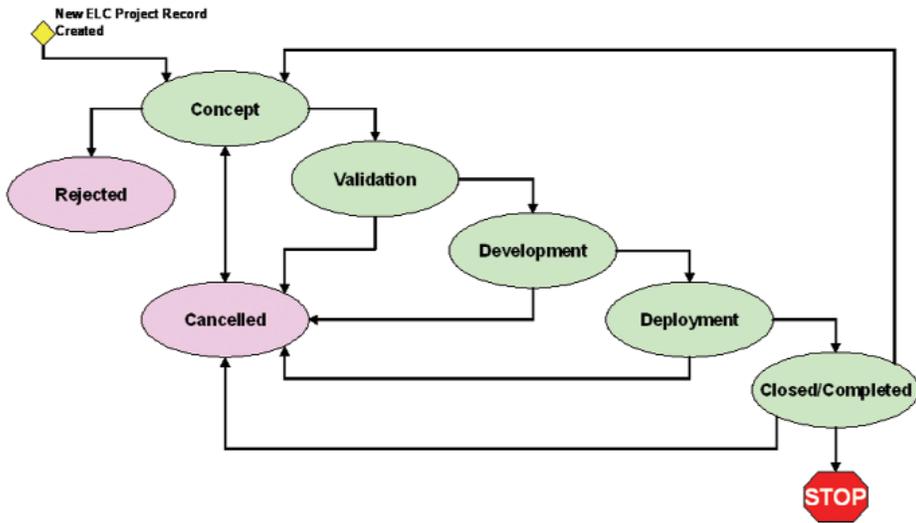
To print the report, ensure you set your printer to print in Landscape format.

In October 2007, The Engineering Logistics Center (ELC) fielded **ELC Projects**, a new tool used to manage Engineering Change Requests (ECR) and Engineering Changes (EC).

Previously, ELC used a Microsoft ACCESS database known as DARTS (Database - Alteration Request Tracking System) to manage ECR submittals and EC development, posting the published EC as a .pdf file to the ELC web server. DARTS lacked the ability to integrate process with workflow and the capacity to store approved ECs within the record. In addition, new functionality was needed to support the Naval Engineering Re-Capitalization budget development process.

With the development of this new ELC Central module, users can now enter the Projects Status Database and look for a specific record or search all records under a platform with greater ease. This tool provides a better overall picture of the engineering change process as well as the status of each ECR. Visit the web site <http://elccentral.uscg.mil/forums/> to view **Projects** or go to the ELC Intranet and look for Projects or ELC Central/ELC **Projects** Status.

When developing Projects, the team utilized a standard workflow concept as the foundation for tracking, managing, and developing the ECR into an approved Engineering Change. The workflow states are provided with the basic definitions, which align to the Naval Engineering business rules. They have also been adjusted to accommodate the Electronic Engineering Changes.



Concept ⇔ ECR received and pending MLC endorsement
Validation ⇔ ECR approved, prioritized and awaiting funding for Development
Development ⇔ ECR funded and under development
Deployment ⇔ Approved EC signed and posted
Closed/Completed ⇔ EC installation completed on all identified platforms

Engineering Change Projects

The Engineering Change Projects Status Report shows the total number of Projects by Platform and sorts them by the current workflow state. Projects in Concept and Validation are in a Pending status and will only be worked when funding and

resources have been identified. Those in Development and Deployment are Active funded Projects approved for work at the ELC. The Engineering Change Project Scorecards provided a project overview up to the selected workflow state. It lists those platforms that have had the EC installed, the next to get it, and the details behind it. If your data is not available for your platform that means that the information is still being worked on and is not ready for primetime. The Engineering Change Files sends the user to a screen where you select your platform to get the entire list of all approved Engineering Changes.

Engineering Change Projects

[Engineering Change Project Status Reports](#)

[Engineering Change Project Scorecards](#)

[Engineering Change Files](#)

Non-Engineering Change Projects

[HM&E Projects Status Reports](#)

[ELEX Projects Status Reports](#)

Non-Engineering Change Projects

The HM&E Project Status Report is used to track and manage large ELC projects that are not engineering change related and support Hull, Mechanical and Electrical (HM&E) efforts (i.e., SSMEB, ILSP, etc.).

The ELEX Project Status Report is used to track and manage large ELC Electronic projects that are not engineering change related.

Search Projects

The Search Projects function allows users to search for specific data

Search Projects

Search By Search

ELC Casefile # for

elements in PROJECTS. By using the Search by combo box users may decide to search by ELC Casefile #, Engineering Change #, Originator, and Title Keywords.

When you are unsure you can type portions of a search. Below are a few examples of this:

Search Projects

Search By Search

Originator for eagle

Search Projects

Search By Search

Title Keywords for scba

Search Projects

Search By Search

ELC Casefile # for 378

Overview: In addition to all the new features and capabilities available to the "Anonymous" user, there are even more features provided to the ECR/EC Project Manager. Feedback is solicited and encouraged, as we are consistently improving Projects by adding new data fields viewable by the anonymous user.

Visit the web site <http://elccentral.uscg.mil/forums/> to view **Projects** or go to the ELC Intranet and look for **Projects** or ELC Central/ELC **Projects** Status.

Unraveling the Mystery of Electronics Support Via Web-Based Tools

by LT Bradley C. Cook, C2CEN

As the Coast Guard progresses toward fulfilling the Commandant's Logistics Transformation mandates, many field units are at a loss as to how to find out what equipment they're authorized to have on board, how to keep up with support changes for equipment, and where to find an up-to-date "allowance" list for their unit. As I traveled to numerous Electronics conferences, I was amazed that field units were not aware of three of the most important information tools available to solve their support woes: the Annualized OM&S Consumption Report (AOCR), ELC's Electronics Support Gram, and the Coast Guard Parts Availability Research Tool (CG PART).

First, units felt "empty" after the Field Unit Inventory Repositioning Project (FUIRP) took many obsolete, non-utilized parts out of unit inventories. Sparing was dramatically reduced and units were left wondering what they were authorized to stock. Thus, the web-based Annualized OM&S Consumption Report (AOCR) was created to enable units to view the demand data for equipment they have contained within their CMPlus database. Any equipment that is in their OM&S (operating materials and supplies) inventory but not entered into CMPlus will not be reflected. On the first page of the AOCR, CG-44, Office of Logistics, states units "are to use the AOCR to procure only what you need to maintain enough supplies for one year. OM&S stores may be adjusted downward at unit discretion and material not identified on the AOCR may be procured and stocked as unit requirements establish a demand for it."

Personnel can access AOCR via ELC's Intranet site: <http://iccp.elcbalt.uscg.mil/>. The users need only to select their unit name from the drop down menu and click "Enter." On the following screen, select the "AOCR" link. An Excel spreadsheet will open listing the most recent demand for that specific unit.

Annualized OM&S Consumption Report
U.S. Coast Guard
CGC DALLAS

CAUTION!

- The column labeled "Your Annual Usage" is derived from demand activity recorded in your local inventory tool (CMPlus or TAIT) and is updated semi annually from the full extract submitted quarterly through the ICCP site. Accuracy of this data is dependent on the proper use of your units inventory tool (CMPlus or TAIT).
- Parts marked as "CLASS" have been used by 80% of your unit type, but your unit shows no demand for the item during the same period. The part may not support equipment on your unit. Verify need and applicability before purchasing.
- TAV quantities are accurate as of the date indicated and are used to calculate the number of Years on Hand. Only items that have less than 1-year on hand should be considered for purchasing once need and applicability have been verified.
- CMPlus units can see all demand activity for a selected time period by using the "Last Issued Stock Report" from within the CMPlus application. Click on the link below for complete instruction on running the last issue stock report.

On CPL	FSC	NIN	Name	Unit Issue	Price	Demand Type	Rep / Cons	Your Annual Usage	Class Annual Usage	TAV Qty as of 12/16/2007	Years On-Hand
5999	012456821		CIRCUIT CARD ASSEMBLY	EA	\$0.00	UNIT	R	0.4	0.0	1	2.5
5820	012950975		RECEIVER-TRANSMITTER RADIO	EA	\$0.00	UNIT	R	1.8	0.0	0	0.0
5999	011992492		CIRCUIT CARD ASSEMBLY	EA	\$0.00	UNIT	R	1.0	0.0	1	1.0
5999	014616399		CIRCUIT CARD ASSEMBLY	EA	\$0.00	CLASS	R	0.0	1.0	0	0.0
5331	002518839		O-RING	EA	\$0.08	UNIT	C	0.5	0.0	10	20.0
5900	002808342		FUSE,CARTRIDGE	EA	\$0.10	UNIT	C	0.0	0.0	182	18.2
5240	002608940		LAMP,INCANDESCENT	EA	\$0.11	UNIT	C	0.5	0.0	20	40.0
5240	001558706		LAMP,INCANDESCENT	EA	\$0.11	UNIT	C	0.0	0.0	69	6.9
5900	008793570		FUSE,CARTRIDGE	EA	\$0.11	UNIT	C	2.0	0.0	90	45.0
5240	001558707		LAMP,INCANDESCENT	EA	\$0.12	UNIT	C	115.0	0.0	80	0.7

In some cases, users will see that they may have five years of supply for a certain "widget" if there has been little demand. In other cases, users will find that they need to stock "widgets" that have high demand. Finally, if a specific "widget" is not listed, it means that it has not been entered into CMPlus. Users should contact ELC's Logistics Support Branch (LSB) (ELC-053) for all other inquiries.

Secondly, many units have little or no idea of the support philosophy for new equipment being installed at their unit. To remedy this, ELC's Electronic Systems Branch (ELC-021) maintains a web-based database for all ELC-supported electronics, whether consumable or repairable. This Electronics Support Gram (ESG) is a stand-alone database, independently main-

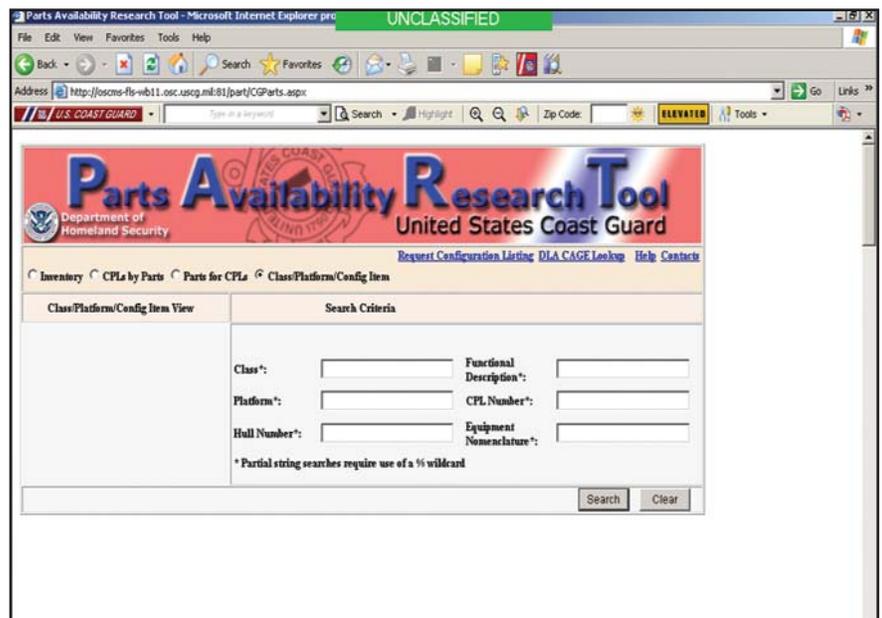
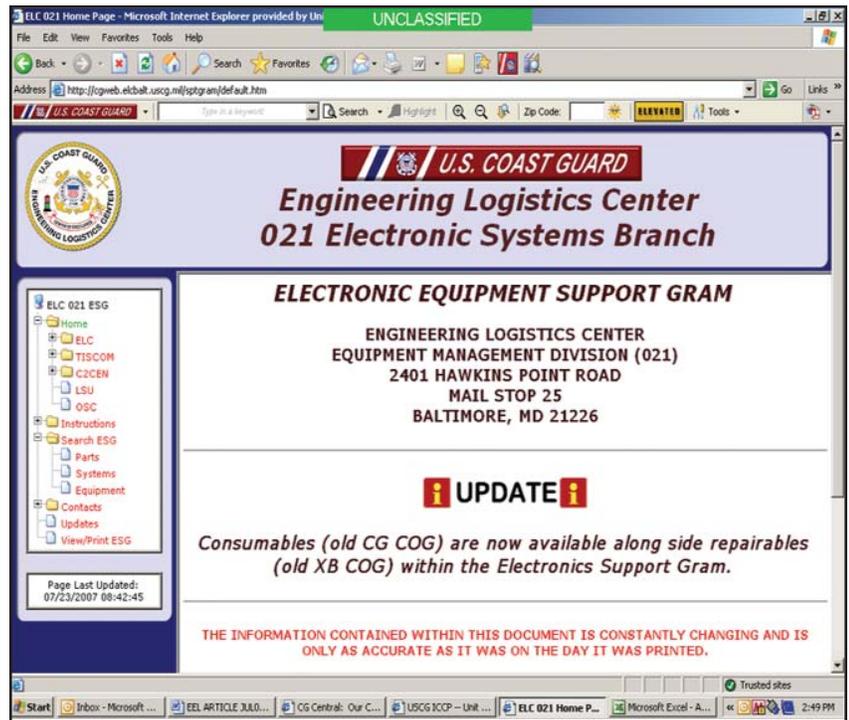
tained by a Database Manager (DBM). As support for electronic systems change, ESG Change Forms are routed to the DBM for entry into the database. A Supply Advisory is also issued to the fleet, advising the field of significant changes in support. However, the information contained within the Support Gram is constantly changing and only reflects a snapshot in time. With that in mind, the Support Gram is a guide and should be referenced against current Allowance Parts Lists (APLs).

Personnel can access the Electronics Support Gram via ELC's Intranet site: <http://cgweb.elcbalt.uscg.mil/sptgram/default.htm>. Users can search the database via part number, system nomenclature, and/or equipment nomenclature, using the full name or entering part of the name with a wildcard. The results will list the support system components along with a "C" or "R" for "consumable" or "reparable," respectively.

Lastly, units no longer have an ERPAL or MICA that lists the configuration of their unit nor the components of the installed systems. OSC removes the clouds with the Coast Guard Parts Availability Research Tool (CG PART), a web-based tool that takes data from the Fleet Logistics System (FLS), CMPlus, and other databases to provide to the user a complete picture of equipment location, part number, or CAGE number. Users can query CG PART by part number, NIIN, APL, or nomenclature. For example, if the unit queries by APL (listed as "CPL" on CG PART), the database will show every unit that has been assigned that APL. If the user clicks on the unit name, the configuration for the unit will be reflected. This method provides any CG user total asset visibility fleet-wide, providing accurate accountability as to where specific systems are installed. Users can use CG PART to query for hard-to-find parts or order FUIRP free issue parts (no MILSTRIP involved!).

Personnel can access CG PART via Operations Systems Center's (OSC's) Intranet site: <http://oscms-fls-wb11.osc.uscg.mil:81/part/securityBanner.aspx>. To have a configuration listing emailed to the user (the best method for viewing a unit's configuration), simply click on "Request Configuration Listing" at the top of the web page, choose your platform, enter your email address, and click on "Request Online Guide." The configuration listing will be immediately emailed to you. Changes to unit configuration should be documented via 4790/CK and sent to ELC-016 for configuration update.

With these three web-based tools, every unit from ship to shore has the capability to view the latest support philosophy for installed equipment, view unit-specific demand for OM&S inventory, and/or query their unit's configuration. While the final Logistics Transformation picture has yet to be realized, units have capable, accessible tools to support electronics equipment throughout this transition. 🚫



Nationwide Automatic Identification System (NAIS) Achieves Full Operational Capability (FOC) milestone and Prepares for Increment 2

by Ben Otteni, C2CEN



Overview: The Nationwide Automatic Identification System (NAIS) Project was initiated in response to the Maritime Transportation Security Act of 2002 (46 U.S.C. 2101) to implement a system to collect, integrate, and disseminate AIS information received from vessels operating on, or bound for, waters subject to the jurisdiction of the United States and to help establish effective Maritime Domain Awareness (MDA).

NAIS is primarily intended to be a provider of Automatic Identification System (AIS) information and services that can be accessed and used via other systems. Due to the variety of command and control systems, NAIS has been designed following standard formats to be interoperable and interface with a variety of command and control systems, including user interfaces for situation display, analysis and control of the system. In particular, it is intended that data correlation and fusion and the display of AIS data will be performed by non-NAIS systems. The NAIS will operate solely within the Sensitive but Unclassified (SBU) domain, while having the capability to provide data to higher level security systems.

The system will monitor and manage the health of the Very High Frequency Data Link (VDL). NAIS data and functionality will be used by USCG, Department of Homeland Security (DHS), Department of Defense (DoD) and other government agencies for communications, surveillance, and data processing in support of their missions. The system uses Automatic Identification System (AIS) technology and international communication standards as the foundation for its ability to track vessels and exchange safety and security information with AIS-equipped vessels. AIS technology is already in use by many vessels, and the number of AIS users and applications is expected to grow significantly over the coming years. NAIS provides a robust and scalable



N A I S

system to receive AIS broadcasts from AIS-equipped ships and other AIS users and convey the message data to other command and control, analytical and case management systems and applications to improve MDA. Other capabilities inherent to the AIS technology and standards can be leveraged by NAIS such as exchanging binary messages with other AIS-equipped stations.

NAIS is being implemented over the following three primary increments:

Increment 1: NAIS achieved its Full Operational Capability (FOC) milestone for Increment 1 (Inc-1) in September 2007. NAIS Inc-1 provides AIS receive only capability in designated Critical Ports and Coastal Areas. The system fielded for Inc-1 consists of an integrated system of AIS equipment (e.g., AIS Base Stations) and software located at Physical Shore Stations (PSSs), data storage and processing hardware and software located at Logical Shore Stations (LSSs) and the Enterprise Data Center (EDC), system administration and monitoring hardware and software located at the System Operations Center (SOC) and networking infrastructure. Data management services for Inc-1 include data processing, recording, and retrieval plus data warehousing.

Increment 2: NAIS Inc-2 will enable the Coast Guard to transmit as well as receive AIS messages to/from vessels traveling on the navigable waters of the United States and its territories. This increment will allow for transmission of AIS information out to 24 nautical miles (nm) from the U.S. baseline and reception of AIS signals out to 50 nm from the U.S. baseline nationwide to include areas of the Great Lakes and U.S. Inland Rivers. The added capabilities of Inc-2 will be accomplished using receivers and transmitters installed at physical shore stations. Received AIS data will be used to identify and track vessel movement, while transmitted NAIS messages may include Aids to Navigation (AtoN) information and other marine safety/security broadcasts. Inc-2 will be implemented in the following two phases:

Phase I: Delivers the core NAIS Inc-2 capability and achieves the NAIS Inc-2 Initial Operational Capability (IOC) by developing USCG Sector-based coverage designs, recommending PSS sites and implementing PSSs and LSSs to achieve NAIS receive and transmit coverage for three designated Coast Guard Sectors.

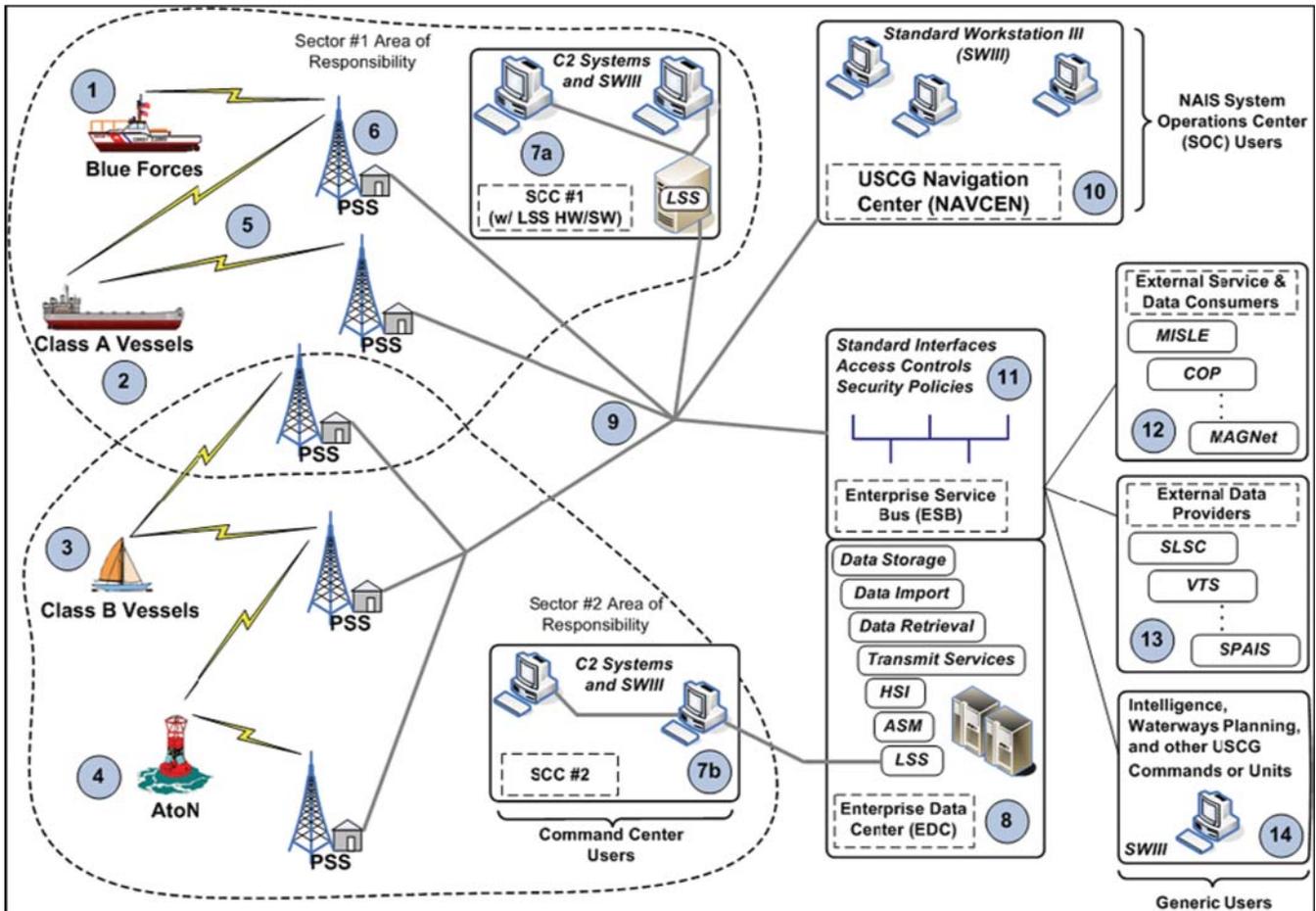
Phase II: Provides physical and logical shore stations hardware and software design, and implementation as required beyond the designated IOC Sectors to achieve FOC for complete nationwide coverage.

Because NAIS will comply with the international standards and guidelines governing AIS, it will communicate with all International Telecommunications Union (ITU) compliant AIS equipment. NAIS communications will also include encrypted transmit and receive communications with Blue Forces (1) (see overview schematic) for position reports and targets of interest.

Class A (2) and Class B (3) vessels will send position reports and vessel information as required by law, and will receive Aids to Navigation (AtoN) transmissions, marine broadcasts, or any other standard message from the USCG Physical Shore Stations (PSS).

AIS-equipped AtoNs (e.g., buoys (4)) may transmit their real time position and other information. These communications will take place over the VDL (5), which operates on AIS channels 1 and 2, but can be switched to other channels by the Systems Operations Center (SOC).

The PSS (6) will serve as the infrastructure by which AIS messages are transmitted to and received from AIS equipped vessels. Each USCG Sector will have NAIS functionality to support their missions because each Sector Command Center (SCC) has responsibility for monitoring AIS activity within its Area of Responsibility (AOR). Every SCC will have NAIS functionality integrated into their Command & Control (C2) systems and/or Standard Workstation, and may host the hardware and software to run its Logical Shore Station (LSS) software (7a). Conversely, an SCC (7b) may access LSS functionality via the LSS hardware and software that is hosted at the Enterprise Data Center (EDC) (8).



NAIS Increment 2 Operations Overview.

Wide Area Network (WAN) connectivity will be provided by the CGDN+ and DHS OneNet networks (9). These networks connect the PSS/LSS and SCCs with the EDC. The EDC is responsible for NAIS data storage, archiving, retrieval, and disaster recovery, and may host the transmit services, LSS, AIS Service Management (ASM), and server-side Human System Interface (HSI) functionality.

The SOC (10) provides administrative support, monitoring, and oversight for the entire system. This includes VDL management, remote diagnostics and troubleshooting, technical support functions, and possibly hosting LSS functionality. NAIS is expected to be interoperable with many external systems, providing data and services to multiple users as well as importing data from other AIS data providers via the Enterprise Service Bus (ESB) (11).

The ESB will provide the standard interfaces and access controls required to interoperate with these systems (including consumers (12) like MAGNet, providers (13) such as the St. Lawrence Seaway Development Corporation (SLSDC), and other yet to be defined systems (14)). Authorized users within the USCG will be able to access NAIS Enterprise Services via a SWIII for specific mission needs.

Increment 3: Expanded NAIS capabilities for reception of AIS messages beyond 50 nm and out to 2,000 nm nationwide. Long Range Tracking capability will be provided through service contracts to satellite providers, and through AIS equipment installed on buoys and offshore platforms.

DGPS Nationwide Control Station (NCS) Augmented with a Data Analysis and Reporting Tool (DART)

by Jerome Davis, C2CEN

Since its inception in 2002, Nationwide Control Station (NCS) software has provided the United States Coast Guard (USCG) Navigation Center (NAVCEN) and its detachment, Navigation Center West (NAVCEN West) the capability to monitor, control, and analyze the performance of 86 remote, unmanned Maritime and Nationwide DGPS (NDGPS) broadcast sites (BCS). Over the years, the NCS software and back-end relational databases have undergone numerous upgrades to improve system performance, reliability, and usability.

To embrace the USCG's vision of a Service-Oriented Architecture (SOA) and to improve the robustness of data analysis for NAVCEN management, Command and Control Engineering Center (C2CEN) developers successfully designed and developed a new system, the Data Analysis and Reporting Tool (DART). DART is comprised of a web-based, Graphical User Interface (GUI) and a data warehouse type environment that generates and maintains 13 months of metadata derived from the NCS system. The users interact with performance data, through drill-down data capabilities, using the GUI which is both intuitive and user-friendly.



Figure 1. DART GUI representing System Availability based upon user defined options.

DART receives copies of availability and statistical data via Extract, Transform, and Load (ETL) functions from the NCS Operational and Archive databases consisting of:

- ✘ historical BCS data,
- ✘ availability related data used in Site and System Availability calculations, and
- ✘ equipment related data used to generate plots/graphs.

The NCS Operational database contains the most up-to-date BCS status and parameters data. The Archive database contains a record of all Reference Station/Integrity Monitor (RSIM) message traffic sent to and received from BCS sites, which are used in analytical processing and report creation.

Benefits of DART:

- ✘ Makes performance reporting more intuitive and data analysis easier.
- ✘ Allows information to be safely restored by the system administrator after outages.
- ✘ Facilitates decision support system applications such as trend analysis, historical reporting, preventive maintenance, exception reports, and reports that show actual performance versus goals.
- ✘ Allows data to be partitioned into either "facts" or "dimensions." Facts are generally numeric transaction data; whereas, dimensions are the reference information that gives context to the facts.

The DART GUI was developed using the ASP.NET 2.0+ framework in conjunction with Visual Basic, JavaScript, and Ajax using Dundas software to enhance the reporting capabilities. The back-end is an Oracle 10g database, using several functions and procedures to achieve the robust ETL process. DART was released as a prototype in January 2008 and is scheduled to be released as an approved fielded system in conjunction with an upgraded version of NCS in early 2009.

POC: Mr. Jerome Davis, Command and Control Engineering Center (C2CEN), 757-686-2144, jerome.davis@uscg.mil.

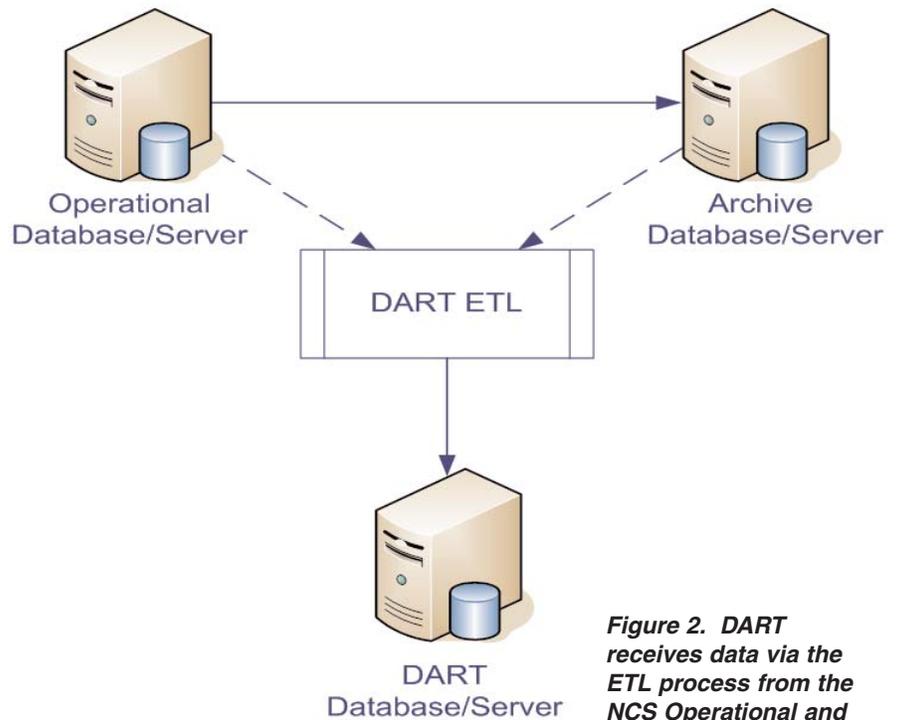


Figure 2. DART receives data via the ETL process from the NCS Operational and Archive databases.



Figure 3. DART Report Screen allows the end user to select report parameters.

Physical Inventory Reports and Full Data Extracts (PIRs and FDEs)

by Mr. Norm Robbins, CG-441

All units with CMPlus or TAIT have a quarterly requirement to submit both a Physical Inventory Report (PIR) and a Full Data Extract (FDE). The PIR and the FDE are two distinct activities; i.e., completing one does not complete the other. The timelines for these efforts are driven by logistics management and the Chief Financial Officer (CFO) reporting requirements. The information provided to senior management is crucial to managing and measuring the Coast Guard's stewardship of public resources.

Results of the 3rd quarter FY08 PIR and FDE submissions were well below the previous quarters and the requirement of 100% reporting: 157 units did not submit a PIR and 86 units did not submit an FDE. This may be a result of the transfer season, units not seeing this as a requirement, or units not placing a high priority on inventories. This article is part of an effort to raise awareness of the requirements, improve understanding, and lay the ground work for future compliance activities.

The importance of PIRs and FDEs were detailed in ALCOAST 167/08 as follows (bold text added for this article):

2. BACKGROUND: FIELD UNITS CONDUCT PHYSICAL INVENTORIES AND SUBMIT RESULTS VIA PHYSICAL INVENTORY REPORTS (PIR). HEADQUARTERS (HQ) AND MAINTENANCE AND LOGISTICS COMMAND (MLC) STAFFS COLLECT THE DATA FROM THE RESULTS AND USE IT AS CONFIRMATION THAT THE COAST GUARD IS TESTING FIELD UNIT INVENTORY IN SUPPORT OF THE CFO ACT OF 1990. COLLECTIVELY, **FIELD UNIT PIRS PROVIDE A LEVEL OF CONFIDENCE IN THE VALUE OF ALL FIELD UNIT OPERATING MATERIALS AND SUPPLIES (OM(AND) S). THE VALUE OF FIELD OM(AND)S IS DERIVED FROM FULL DATA EXTRACTS (FDE).** WITHOUT THE PROPER SUPPORTING EVIDENCE THAT WE ARE GOOD STEWARDS OF THE TAXPAYERS DOLLARS, THERE IS ROOM FOR DOUBT BY THE DEPARTMENT AND EXTERNAL AUDITORS. THIS DOUBT IMPACTS OUR FINAL BUDGET REQUESTS WHICH IN TURN IMPACTS OUR MISSION. HQ AND MLC STAFFS HAVE A LIMITED TIMEFRAME IN WHICH TO GATHER PIR INFORMATION AND USE IT FOR SUPPORTING OUR FINANCIAL STATEMENT ASSERTIONS.

The full text of ALCOAST 167/08 can be found at:

(<http://cgwebdocs.comdt.uscg.mil/hsct4/commcen/archives/genmsg2008/alcoast/alcoast167-08.txt>).



Physical Inventory Report (PIR)

PIRs are submitted in accordance with ALCOAST 167/08. Summarizing here:

During the 1st, 2nd, and 3rd quarters, units perform a Mini-Random Physical Inventory (MRPI). In the 4th quarter, units perform a Statistical Random Sample Inventory (SRSI). As set forth in CG-441 memo dated 31 July 07, the required accuracy rate for unit inventory is 95% (<http://cgcentralweb.uscg.mil/cLink/00000880>).

If a unit fails two consecutive MRPIs during the 1st, 2nd or 3rd quarter, or if they fail the 4th quarter SRSI, they must complete a wall-to-wall inventory and report the result within 45 days via the Inventory Compliance and Control Program (ICCP) web site. The purpose of the wall-to-wall effort is to reestablish the 95% minimum accuracy level. The wall-to-wall report is also submitted via the ICCP web site.

MRPIs and SRSIs must be completed within the first two months of each quarter. Once completed, the results (the PIR) must be electronically submitted via the ICCP web site (<http://iccp.elcbalt.uscg.mil/>) within 15 days. Even if a unit fails to meet the 95% accuracy level, PIR results must still be submitted within the required timeframe (15 days after completion of the MRPI or SRSI) to meet fiscal reporting requirements; i.e., the Coast Guard knows its' status.

Full Data Extract (FDE)

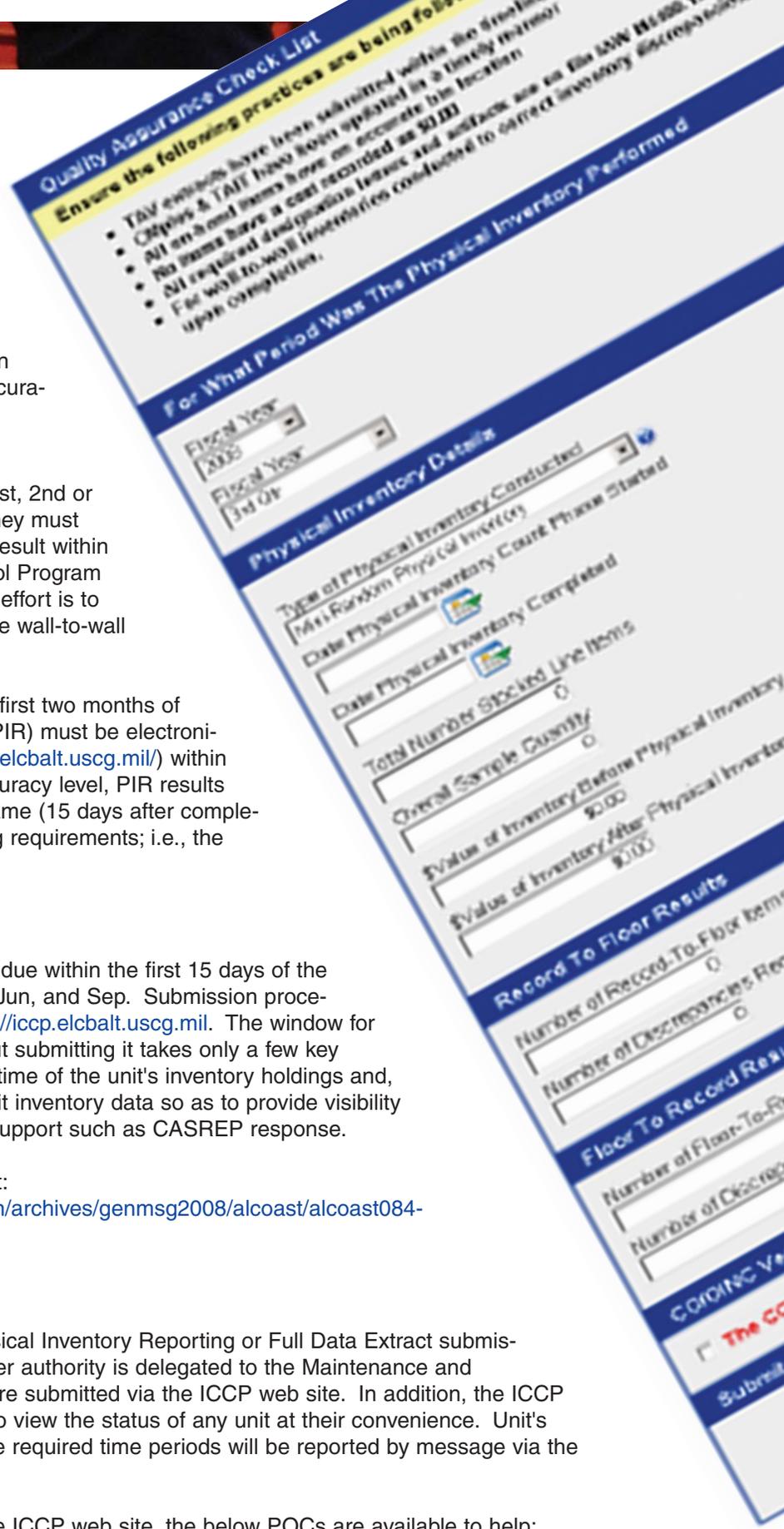
In accordance with ALCOAST 084/08, FDEs are due within the first 15 days of the last month of each quarter; i.e., 1 - 15 Jan, Mar, Jun, and Sep. Submission procedures can be found on the ICCP web site at <http://iccp.elcbalt.uscg.mil>. The window for FDE submission is only 15 days each quarter, but submitting it takes only a few key strokes/mouse clicks. The FDE is a snapshot in time of the unit's inventory holdings and, among other things, populates CG-PART with unit inventory data so as to provide visibility of unit held inventory that facilitates operational support such as CASREP response.

The full text of ALCOAST 084/08 can be found at: (<http://cgwebdocs.comdt.uscg.mil/hsc4/commcen/archives/genmsg2008/alcoast/alcoast084-08.txt>).

Compliance Activities

Units that cannot meet the requirements for Physical Inventory Reporting or Full Data Extract submission for any reason must request a waiver. Waiver authority is delegated to the Maintenance and Logistics Commands (MLCs). Waiver requests are submitted via the ICCP web site. In addition, the ICCP site has a public reports tab that allows anyone to view the status of any unit at their convenience. Unit's failing to submit either their PIR or FDE within the required time periods will be reported by message via the cognizant MLC.

If you need assistance with your PIR, FDE, or the ICCP web site, the below POCs are available to help:
MLCPAC: Linda Atkins (510) 637-5924, Linda.M.Atkins@uscg.mil.
MLCLANT: Tony Marshall (757-628-4554, Anthony.L.Marshall@uscg.mil.
ELC Customer Service: (410) 762-6800 or 1-800-336-7430.
For any CMPlus or TAIT application issues: OSC Customer Service 877-USCG-SYS (877)-872-4797. 



PMP Your Depot Maintenance Manager!

by LT Shameen Anthanio-Williams,
CG-441



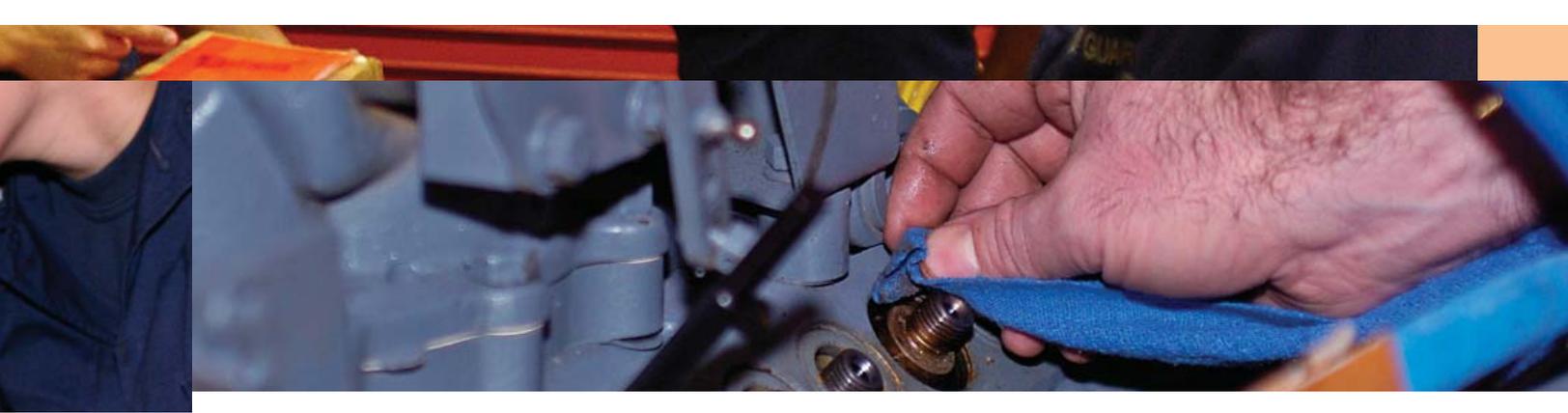
It's a typical day at ISA Portsmouth. The Industrial Manager (IM) hurries into his office to grab the ringing phone. It's the MLCA type desk. They need a service provider for a CAT IV CASREP.

"Got time to replace a 903 engine?" LT Neednow asks. The IM glances over at the business manager who is reviewing five ISO project orders and ten work orders. Before answering, the Industrial Manager looks out his window and observes the repair and overhaul activities of 5 8x26 Buoys, three 41' small boats, one 47' small boat, one 87' WPB, and a 270' dockside availability. His eyes wonder further out to observe 25 Condition A Buoys awaiting shipment. Suddenly, a civilian marine machinery mechanic who has worked at the Industrial for over 25 years, whisks into his office and abruptly hands him his retirement letter.

"LT Neednow, I think I'll need to get back to you on that one."

Like the typical Industrial Manager whose vast responsibilities involve the planning and execution of depot maintenance, repair, and fabrication of Coast Guard surface assets as well as the management of logistics, budget, and workforce, there are many other maintenance and repair managers in our organization who share the same responsibilities. These managers are at the CG Yard, the Naval Engineering Support Unit (NESU MAT(s)), Civil Engineering Units (CEUs), Sectors, and elsewhere in the fleet. They oversee work with varying degrees of uniqueness typically due to the age of the asset or the availability of resources. With such a significant workforce dedicated to the maintenance of our surface and shore assets, shouldn't there be a standard by which we manage these activities?

The Project Management Institute's Project Management Professional (PMP) credential is recognized throughout the global business community and has recently earned the ISO/IEC 17024 accreditation. Today, certified project managers can be found across a wide range of workforce specialties that include Industrial



Engineering and Management. An experienced and knowledgeable Project Manager (PM) will be able to keep projects on schedule and within budget. Specifically, a PM should be a skilled planner; developing meaningful project deliverables, utilizing cost estimation techniques, and risk analysis tools to better forecast project schedules and budgets. They should be able to monitor project performance using earned value analysis tools and successfully manage resources in order to avoid scope creep and schedule delays. Finally, the expert PM should be able to effectively track constraints throughout the course of the project and create solid contingency plans for future similar projects.

So now you're probably wondering; how can I earn the PMP? Obtaining your PMP is not easy but no more difficult than obtaining any other credential. You must meet the following requirements.

1. Education and Experience
 - ▶ Be a college graduate with 4500 hrs of PM leadership and 36 months of PM experience in the last 8 years, OR
 - ▶ Be a H.S. graduate with 7500 hours of leadership and 60 months of PM experience.
2. Training
 - ▶ Receive 35 hours of management-related training.
3. PMP Examination
 - ▶ Register online at <http://www.pmi.org>.
 - ▶ You will receive your registration packet and PMBOK in the mail.
 - ▶ Fill out the e-application:
 - i. Click "Apply for PMP Credential."
 - ii. Add your education and experience. Experience is broken down into 5 process areas; Initiating, Planning, Executing, Monitoring, Controlling, and Closing.
 - iii. Take a break. This is a tedious process and you may not get through it all in one day. The site will save all of your information and you can resume where you left off when you are ready.
 - iv. Review your input. As you enter information, the summary block will indicate whether you meet the above education, experience, and training requirements.
 - v. Submit the e-application.
 - vi. You will be prompted to pay for the examination. Set a date and location for taking the exam. The cost is \$405/\$555 member/nonmember. For retakes it is \$275/\$375.
 - ▶ Study for the Exam! Purchase study guides at the local bookstore and review the PMBOK. Also, consider attending a PMP workshop in your area.
 - ▶ Take the Exam. There are 200 multiple choice questions and 25 are not scored. You need to score 141/175 of the remaining questions to pass. You will have four hours to complete the exam.
4. Certification Maintenance
 - ▶ The PMP is granted for 3 years.
 - ▶ You must earn 60 PDUs within the 3-year cycle in order to maintain certification.
 - ▶ You may earn PDUs through various professional development activities. Reference the Continuing Certification Requirements (CCR) Handbook for details. The CCR is also on the PMI website.

The Coast Guard's Logistics Modernization Effort is in place to help standardize and centralize our logistics business practices. In the meantime, our organization's workforce experts will develop new training requirements and competencies to support the new organization. The PMP is a great certification to have; not only is it an effective means to obtain and maintain project management expertise, it's also portable so your credential will be recognized virtually anywhere in government and private sector. I encourage each of you in the field, involved in the planning and execution of maintenance, repair, and/or fabrication projects, to consider obtaining your PMP certification. You'll thank yourself later for it! 🍷

Earth Day and Stewardship



SEATTLE - (from left to right) Petty Officer 1st Class Greg King, Petty Officer 3rd Class Robert Schweikert, Petty Officer 2nd Class J.D. Nichols and Petty Officer 2nd Class Lou Alzamora stand next to a Blooming Plum Tree they planted at the Integrated Support Command (ISC) during Earth Day here today. More than 30 volunteers gathered to landscape several areas around the ISC by planting trees, shrubbery and plants in celebration of Earth Day. (Photo by Petty Officer 3rd Class Tara Molle, U.S. Coast Guard)

ALCOAST 154/08 called for Earth Day, April 22, 2008, observances in the Coast Guard and asked units to reinforce the spirit of the Commandant's Environmental Stewardship Commitment by making environmental stewardship a core competency. Earth Day events occurred at many units within the Coast Guard, and the efforts below illustrate the simple diversity of approaches that resulted.

FLOTILLA 83 (Division 8 in Fifth Southern), USCG Auxiliary explained its roles of safety and pollution prevention to several hundred high schoolers and faculty during an Earth Day event. CG exhibits showed a large amount of trash collected in a short time at a nearby lake. Handouts and videos were also reported as popular attractions.

MSU Houma Christopher James visited a local elementary school to discuss Earth Day with the children and to share his knowledge of the environment.

Yard The Yard campus celebrated the 38th anniversary of Earth Day on Friday, April 18th - a day of national environmental recognition to protect the global environment. Over 200 volunteers joined in planting flowers, cleaning streets, removing submerged debris in Arundel Cove, erecting/painting feral cat habitats, and planting commemorative trees. "Make Every Day Earth Day!"

Coast Guard actions taken in the past have included adopting a road, recycling programs, tree plantings, and combining stewardship efforts with other Department of Homeland Security elements in the area, and with the community. Every Earth Day is an opportunity for the Coast Guard to express its environmental commitment. 



Green Actions

by Dannielle Lipinski, CG-443



"I challenge all Coast Guard units to improve the environment, and to reduce our environmental footprint."

These are the words of the Commandant's Environmental Stewardship Commitment made in March of 2007. Here are suggestions on how to get started on your own commitment to being an environmental steward in your travel, meetings, and in the office.

Environmentally-Friendly Traveling:

- ✓ Use teleconferencing if possible. Avoid travel all together.
- ✓ Carry your own shampoo and soap (3oz liquid maximum for Airlines). Leave hotel soaps and shampoos there.
- ✓ Avoid room service.
- ✓ Let management know that you don't want your sheets and towels changed everyday.
- ✓ If the hotel provides complimentary newspapers, pass yours on to someone else, or leave it in the lobby for another reader. Ask the hotel to see that it's recycled.
- ✓ When leaving the hotel room, turn off lights, appliances, and turn down AC/heat.
- ✓ Recycle when and where available.
- ✓ Use hotel van instead of a rent-a-car. Use public transportation.
- ✓ Don't litter.
- ✓ Carry bottled water and refill it (remember airline restrictions).
- ✓ Avoid Styrofoam.
- ✓ Let the management know that being environmentally conscious is important to you.



By doing these small things every day you travel, you are reducing waste, decreasing the demand for energy, and decreasing your environmental footprint. For more information about green hotels, please visit www.environmentallyfriendlyhotels.com or www.greenhotels.com.

Eco-Meetings:

- ✓ Advertise the meetings using a website and emailing to reduce paper consumption.
- ✓ If you must have handouts, print on recycled paper -- use both sides.
- ✓ Email the presentations to the attendees instead of having handouts.
- ✓ Meet close - try to plan the meeting in an area where most of the participants are and reduce the amount of travel that has to be done.
- ✓ Recycle any bottles, cans, and paper at the meeting site.
- ✓ Bulk order sugar, cream, salt, pepper, and other condiments to reduce packaging waste.
- ✓ Donate the left over food to a food bank.
- ✓ Save energy and encourage turning off lights, heating, and AC when not in use.



For more information on how to green your meetings, please visit <http://www.bluegreenmeetings.org>.

Green Office:

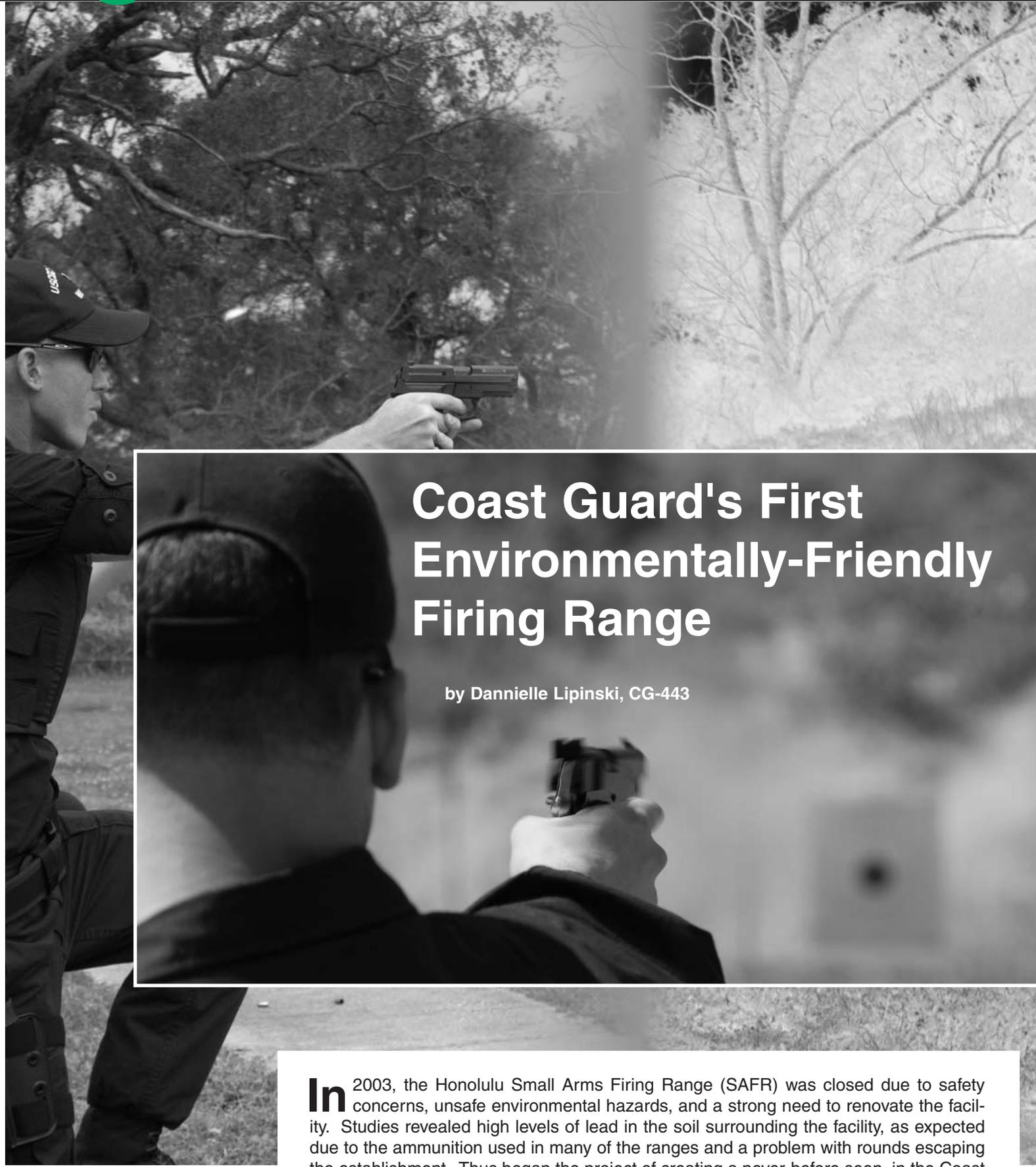
- ✓ If possible, turn off machines and lights at the end of the day. Plugging electronic equipment into power strips and at the end of the day, turning off the power strips. Even though the machine is shut down, anything with a transformer slowly pulls power out of the socket.
- ✓ Turn off monitor if leaving your desk, even for a few minutes.
- ✓ Try to store documents electronically. Saves space and trees.
- ✓ Print the text you need and try double-sided printing.
- ✓ If you can, bring native plants into the office to better the air quality. And it beautifies the office as well.
- ✓ For shipping, re-use packages. Use shredded paper as packaging material.
- ✓ Carpool or metro.
- ✓ Buy suits and clothing that don't require dry cleaning, or if that's not possible, try to find a dry cleaner that use non-toxic chemicals.
- ✓ Get you own recycling bin to make sure that it is easy to recycle. Then transport it to a large bin at the end of the day/week.
- ✓ Let people know that you care about the environment and push for more green initiatives in the office.



For more information about greening the office, please visit <http://www.epa.gov/climatechange/wyacd/office.html>.

The Coast Guard is known as an environmental protector, the first on the scene whenever an environmental disaster occurs. They go where no one dares to venture to perform actions that save countless lives and preserve boundless wilderness. Use these tips to be similar to our courageous personnel in the field; be up to the Commandant's challenge and become an environmental steward!

For any questions, comments, or suggestions, you can contact Ken Malmberg at (202) 475-5691 or by email at Ken.B.Malmberg@uscg.mil. 



Coast Guard's First Environmentally-Friendly Firing Range

by Danielle Lipinski, CG-443

In 2003, the Honolulu Small Arms Firing Range (SAFR) was closed due to safety concerns, unsafe environmental hazards, and a strong need to renovate the facility. Studies revealed high levels of lead in the soil surrounding the facility, as expected due to the ammunition used in many of the ranges and a problem with rounds escaping the establishment. Thus began the project of creating a never-before seen, in the Coast Guard, an innovative small arms firing range that would be more environmentally-friendly. Changes were made to reduce liabilities in the form of cost of environmental clean-up and possible accidents.

The original Honolulu SAFR was maintained the way most are in the military with a dedicated restroom, hand wash station, locker room, washer, dryer, and shower to mitigate the contamination of lead to other members of the SAFR, and outside civilians. Along with these measures, crews must also wear personal protection equipment. Despite these precautions, and because of the safety hazard of projectiles escaping the facility, the lead was inevitably embedded in the surrounding soil.

In 2006, the clean-up of the surrounding soil began. In a typical clean-up, the soil is removed and then deposited in an appropriate landfill. In this case, the soil, instead of taking up space in a landfill, was reused in the cement foundation of the building as a part of the remediation process, which also saved money by not having to procure more soil.

The FLETC (Federal Law Enforcement Training Center) was among the first in federal agencies to institutionalize and mandate the use of RHA or Reduced Hazard Ammunition. They are now in the process of converting all their SAFRs to RHA use. The new Honolulu range was inspired after the FLETC utilization and success with RHA.

Instead of using traditional lead-based bullets, RHA is comprised of copper and tin powder. The shells are made out of brass. The brass is recycled using a rolling mechanism that picks up the brass and puts it in a bin that must be sorted manually to insure that all the live rounds are sorted out. The bullets disintegrate upon contact with the backstop and all that is left is a powder. On the right is a high-speed photo of the RHA in practice, provided by Winchester. Since its opening on May 21, 2008, the

The Incredible



Disintegrating



Bullet



The south side of the SAFR and berm.

The firing range was named after Coast Guard Rear Admiral Dwight Dexter from WWII. The actual building itself is a standard Air Force design with a tactically baffled indoor range that cost 2.3 million dollars. It has eight firing lanes and accommodates all of the small arms in the Coast Guard inventory.

The map of Hawaii (left) indicates the location of the new SAFR, while the image above shows the south side of the SAFR and its berm. Thanks to the efforts of everyone at ISC Honolulu, the first RHA-only facility in the Coast Guard was created with the intent of a more sustainable way of building new SAFRs in the Coast Guard that will benefit both the environment and the health of everyone who use them.

Special thanks to LCDR Washburn, Robert Deering, Jay Silberman, LT Ryan Murphy, FLETC's Mark Fritts and Captain John Hickey for their efforts in this project and distributing the information. ISC Honolulu, CEU Honolulu, PACAREA Armory Detachment Honolulu, MLCPAC Safety and Health Detachment, MLCPAC (k and s), PACAREA (pxr), FD&CC PAC, CG (7), and CG (3) were all a part in creating the new Dexter SAFR to be a RHA-only facility.

If you have any questions, please contact Ken Malmberg (CG-443) at (202) 475-5691 or by email at Ken.B.Malmberg@uscg.mil. 📧



THE GUARDIAN ETHOS



I am America's Maritime Guardian. I serve the citizens of the United States. I will protect them. I will defend them. I will save them. I am their Shield. For them, I am Semper Paratus. I live the Coast Guard Core Values. I am a Guardian. We are the United States Coast Guard.

**Coast Guard Headquarters
CG-4, JR9-1130
1900 Half St., SW
Washington, DC 20593-0001**