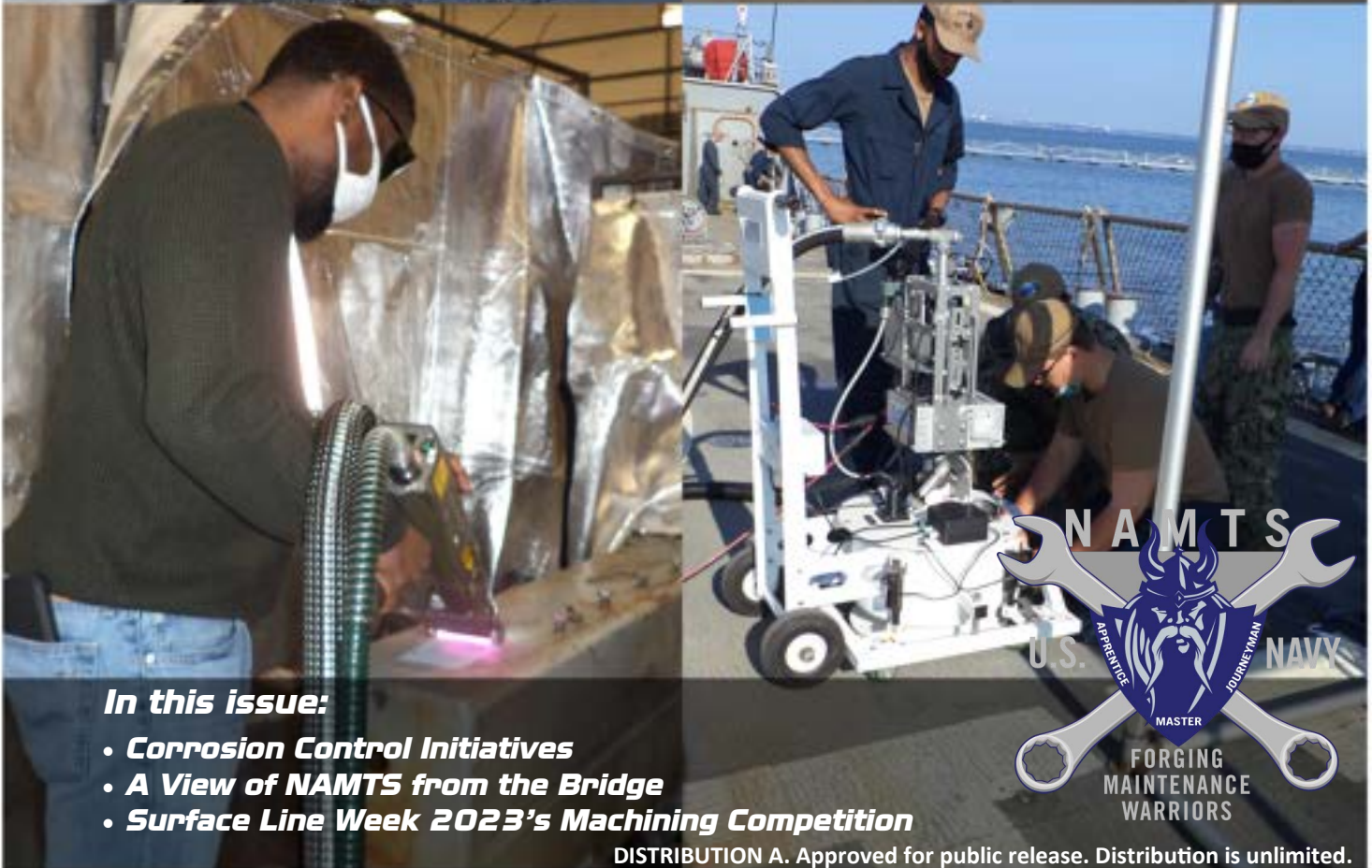


NAMTS

NEWS

57th Edition, July 2023

THE WAR ON CORROSION



In this issue:

- ***Corrosion Control Initiatives***
- ***A View of NAMTS from the Bridge***
- ***Surface Line Week 2023's Machining Competition***



Welcome to the 57th Edition of *NAMTS News*

This newsletter contains information about the Navy Afloat Maintenance Training Strategy (NAMTS) Program. The purpose of this publication is to raise the level of awareness of NAMTS and to highlight the achievements of Sailors across the waterfront among the Navy's senior leadership, maintenance personnel and mentors by providing accurate information on current issues and events related to this important program.

You can access more information on NAMTS, including its governing instructions, training requirements, links to related websites, FAQs and archived newsletters at:
<https://navsea.navy.deps.mil/FIELD/cnrmc/namts>

NAMTS

Navy Afloat Maintenance Training Strategy (NAMTS) was established in 1996 by the CNO to improve battle-group organic maintenance capability and material self-sufficiency. Commander, Navy Regional Maintenance Center (CNRMC) develops Sailors through the NAMTS program by utilizing Intermediate-level hands-on maintenance production to "forge maintenance warriors," who are competent and confident in their ability to own, maintain and operate their shipboard equipment.

CNRMC, the Regional Maintenance Centers (RMC), Naval Shipyards (NSY), Intermediate Maintenance Facilities (IMF), Trident Refit Facility (TRF) Bangor and 41 designated afloat activities are collaborating on specific repair and maintenance "value streams" to form the Navy's largest "SEA" school:

- Maintenance Competency Development
- Material Readiness Support
- Shop Production

While assigned to a RMC, IMF, NNSY, TRF or designated afloat command, NAMTS trains Sailors in 26 different Journeymen Level Repair and Maintenance Technician programs through hands-on shop production work accomplishment. NAMTS graduates are awarded NAMTS Navy Enlisted Classification (NEC) codes in order that they are assigned to NAMTS NEC coded billets.

On the cover (from top left clockwise):

- 1) A Sailor aboard a dock landing ship uses the paint cartridge system and is checking the paint thickness using a wet film thickness gauge. (Photo by Andy Vasquez.)
- 2) The fluidized bed machine at Southwest Regional Maintenance Center. (Photo by Andy Vasquez.)
- 3) Sailors using a containment blast system are verifying the crossbar end effector alignment directly on top of a tie down. (Photo by Andy Vasquez.)
- 4) During a laser ablation demonstration, Mr. Gerald Hollowell (MARMC) takes a turn at using the laser ablator on a king post. (Photo by Kat Ciesielski.)

NAMTS News is brought to you by:

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NAMTS Public Affairs

NAMTS News is the official Navy Afloat Maintenance Training Strategy Program publication sponsored by Commander, Navy Regional Maintenance Center. All comments of this publication do not necessarily reflect the official views of the Department of the Navy. This is a biannual newsletter with article submission deadlines of the first of May and October.

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Do you have content for an upcoming edition of NAMTS News? Submit your NAMTS stories, articles, photos and captions to katherine.e.ciesielski.ctr@us.navy.mil



A Message for the Mess from Command Master Chief Hairston



CMDCM Demetric Hairston
Command Master Chief
Surface Warfare/Aviation Warfare Navy Regional Maintenance
Center and Surface Ships Maintenance and Modernization

Self-sufficiency is critical to our Navy and our nation. As I've visited countless Sailors and ships over the last year, I see that our Chief's Mess could highlight our NAMTS knowledge. Our Chiefs must maintain familiarity with NAMTS and get their Sailors involved with the program early and often.

Seeing Sailors eager to learn, practice their skills, share their knowledge, and try new things with the abilities they have gained gives me such a deep respect for our Sailors. Beyond the increased capabilities for our Fleet and the elevated morale from pride in ownership, NAMTS provides additional benefits for our Sailors. Each Sailor who goes through the NAMTS program gets the subsequent benefits for self, ship, and our Fleet:

1. Earning an NEC means you are more knowledgeable within your rate, which helps with advancement exams. In general, Sailors who have earned an NEC score higher on their advancement exams than Sailors who have not earned an NEC.
2. Your ship gets a technician who has specialized knowledge and helps the ship become more self-sufficient.
3. The Navy saves time and money when Sailors can make repairs at the deckplate level, keeping a ship fully operational.
4. You can carry the NECs, knowledge, and qualifications you earn while in uniform into your post-Navy career.

NAMTS is a win for us all, as it strengthens our Fleet. It is important for our Chief's Mess to understand and support the NAMTS program; I will bring that message with me as I continue to travel to the deckplates of our Navy.

Thank you for all you're doing, and keep charging!



CNRMC Welcomes New Deputy Director



**Mr. Douglas "Doug" Marshall
Deputy Director
Navy Regional Maintenance Center
(NRMC)**

CNRMC is pleased to welcome our new Deputy Director, Mr. Douglas "Doug" Marshall! He is a 1989 graduate of the University of Virginia with a B.A. in Foreign Affairs. Additionally, he is a graduate of the USMC Command and Staff College earning a Master's in Military Studies and certified Joint Phase Military Education Phase I. He holds a Master's in Management from Cambridge College.

His sea tours include Division Officer (Electrical/Main propulsion) on USS John Rodgers (DD 983), Chief Engineer aboard USS John Young (DD 973), Destroyer Squadron Two Three (Carl Vinson Strike Group), Cruiser Destroyer Group Two Tomahawk Strike Officer (George Washington Strike Group), and Auxiliaries Officer USS George Washington (CVN 73).

His shore assignments include Bureau of Naval Personnel Enlisted Rating Assignment Officer (Pers 405), U.S. Fleet Forces Training Requirements and Assessments (N72) and Deputy Surface Ship Program Manager (N43), Executive Officer Navy Operational Support Center, Norfolk and Commanding Officer, Navy Operational Support Center, Richmond.

Mr. Marshall transitioned from the Navy in September 2010 and assumed the role of Contractor, (Senior Analyst, Instructor and Facilitator) for the Navy Expeditionary Combat Command Training Group. In this capacity, Mr. Marshall supported several initiatives to include staff training, assessments, certifications and analytics for forces in BOLD ALLIGATOR, Southern/Pacific Partnerships, CTF 86 DSCA and the Navy leadership of the multi-service JTF PALADIN (EOD response in Afghanistan).

In 2014, Mr. Marshall accepted appointment into the Civil Service as a Supervisory Program Analyst for Naval Sea Systems Command, Commander, Navy Regional Maintenance

Center (CNRMC). His primary role was the oversight of CONUS, Forward Deployed (Mediterranean) and Forward Deployed Naval Forces Japan, Regional Maintenance Centers in the conduct of CNO availability planning (integrating the baseline, modernization and Type Commander repair into a work package). Additional duties were executing the Integrated Project Team Development program, conducting analysis for NAVSEA Flag/SES and higher level queries, leading the Availability planning aspects of the Maintenance and Modernization Summit, and transitioning to the NAVSEA/SEA21 data analytics environment.

Mr. Marshall reported on board Commander, Naval Surface Force Atlantic as the first Director of the Surface Analytics Group in March 2022. Additionally, in February 2023, he assumed Surface Forces leadership in Surface Sustainment.

Mr. Marshall reported onboard as CNRMC deputy director on June 20, 2023.

"Doug comes to CNRMC with a wide range of operational and maintenance experience. We are looking forward to having him in a leadership position to impact national maintenance issues. Doug and I have worked together over the years since our time together on USS John Rodgers (DD 983) during an extended drydocking avail at Metro Machine [now NASSCO Norfolk]. I look forward to working with him again to make our Regional Maintenance Centers even more productive," said Navy Regional Maintenance Centers Executive Director, Eric Lind.



PSNS & IMF Holds Change of Command



Capt. JD Crinklaw takes over for Capt. Jip Mosman during change-of-command ceremony

By Ben Hutto, PSNS & IMF Public Affairs

BREMERTON, Wash. – Capt. JD Crinklaw became the 52nd commander of Puget Sound Naval Shipyard & Intermediate Maintenance Facility during a ceremony May 25, 2023, at the shipyard in Bremerton, Washington. Crinklaw relieved outgoing commander Capt. Jip Mosman, who commanded PSNS & IMF and its 15,000-plus employees and Sailors since December 2020.

Shipyard employees and invited guests from the community attended the event, held in the shipyard’s historic Building 460.

In his final remarks, Mosman thanked shipyard employees and Sailors for their hard work and dedication during his time in command.

“Never forget that meeting our mission doesn’t happen without every single person on our team,” he said. “You each add value every day. Thank you for the opportunity to lead this team through monumental challenges and enormous accomplishments. Thank you for bringing your passion and talent to work every day. Thank you for helping me grow as a leader. And, finally, thank you for continuing to dedicate yourselves to this mission, our Sailors, the fleet and each other.”

Mosman lead the shipyard through a period of significant transformation, overseeing operations during the COVID-19 pandemic and the seismic upgrades of three of the command’s dry docks. Mosman’s next leadership assignment will be as the commander of Norfolk Naval Shipyard in Portsmouth, Virginia.

In his remarks, Crinklaw thanked those in attendance and shared part of his leadership philosophy.

“I will leave my ego at the gate. There is always more to learn,” Crinklaw said. “I will hold myself accountable. I will have the courage to urgently and frequently self-correct, building learning teams with the humility to recognize there is no grand solution, but thousands of small solutions that move us forward.”

Crinklaw was commissioned in 1998 and has served in a wide variety of ship and shore assignments. He has served aboard USS Vandegrift (FFG 48), USS Kitty Hawk (CV 63), and USS Carl Vinson (CVN 70).

His shore assignments include Operations Officer, Ship Repair Facility and Japan Regional Maintenance Center; Aegis Ballistic

Missile Defense Test Officer, Naval Surface Warfare Center, Port Hueneme; Deputy Repair Officer for Submarine Repair, Norfolk Naval Shipyard; Engineering Liaison to the Iraqi Navy, Umm Qasr, Iraq; Deputy Waterfront Operations Officer, Southwest Regional Maintenance Center; and Operations Officer, PSNS & IMF. He comes to PSNS & IMF from his most recent assignment at Naval Sea Systems Command, Industrial Operations.

Rear Adm. Scott Brown, deputy commander, Industrial Operations, Naval Sea Systems Command, presided over the ceremony.



Capt. JD Crinklaw, right, became the 52nd commander of Puget Sound Naval Shipyard & Intermediate Maintenance Facility during a change-of-command ceremony May 25, 2023, in Building 460 at the shipyard in Bremerton, Washington. Crinklaw takes over for former commander Capt. Jip Mosman, left, who led PSNS & IMF since December 2020. Rear Adm. Scott Brown, center, deputy commander, Industrial Operations, Naval Sea Systems Command, presided over the ceremony. (U.S. Navy photo by Wendy Hallmark)



USS McFaul's (DDG 74) Exemplary Corrosion Control Efforts



Article and photos by Andy "Rusty" Vasquez, Corrosion Control Manager



USS McFaul (DDG 74) has made significant improvements in the material condition of the ship over the last year. Under the leadership of Commanding Officer, CDR Antonia Shey, and Executive Officer, CDR Bradley Steidle, McFaul has undergone a noteworthy change in how the crew has mitigated rust and how they combat corrosion.

Several months ago, after evaluating the overall number of

corrosion issues and given the limited size of their Deck Division, they developed a dedicated Corrosion Division to aggressively address the many corrosion prone areas onboard. This all had to be done before their scheduled deployment.

The ship formulated, developed, and executed a plan as the number one priority following completion of C2X prior to deployment. As an All Hands effort, Team 74 assembled every morning to align priorities and correct identified corrosion issues to increase material condition readiness. The stated goal was to ensure McFaul's outward appearance reflected the talent and ownership of the crew.

McFaul's new Corrosion Division falls under the responsibility of Deck Division's First Lieutenant, ENS Molly Perkins, and the ship's Boatswain's Mate Chief Petty Officer Chris Smith, for daily guidance and direction. However, it was obvious that the other divisions throughout the ship were inspired and actively engaging in the preservation effort in their respective areas.

McFaul utilized a myriad of the tools and resources available to them in their corrosion control efforts; although the Corrosion Division was the impetus for the ship's success, there were many others who contributed to the effort whom the ship would like to recognize.

The ship's Port Engineer, Mr. David Marshall, was instrumental in coordinating support from Mid-Atlantic Regional Maint-



With attention to detail and a tremendous amount of effort working section by section, ship's force properly sanded, primed and top-coated areas of the ship to make her look new again.

enance Center (MARMC), multiple contractors, and Commander, Navy Regional Maintenance Center (CNRMC) to get the final projects, calibrations and tests completed prior to deployment day.

McFaul also utilized the outside support of the Corrosion Control Assistance Team (CCAT) led by Mr. Ray Vickers and Mr. Jeff Gomez, who provided assistance in the way of recommendations, tools, and the daily support of a separate air compressor with hoses and air tools. They also provided air tool repair of ship's force tools for their full operational inventory. The CCAT air compressor helped the ship significantly, as the use of a the dedicated air compressor provided a constant, independent supply of low pressure air, which eliminated the burden of the ship's low pressure air system.

CCAT also provided additional materials such as Polysiloxane Cleaning Kits, battery-powered backpack scrubbers, and composite deck fittings. Composite Deck Drains were provided by Naval Surface Warfare Center, Carderock Division's Dr. Maureen Foley and were installed by CCAT and ship's force as they replaced worn out and deteriorated deck drains with composite, maintenance-free drains.

MARMC's Corrosion Control Maintenance Maintenance Assist Team (CCMAT) led by Mr. Gerald Hollowell aided in providing a Containment Blast System (CBS). McFaul's Corrosion Division, along with CCMAT, CNRMC, MARMC, and Norton SandBlasting performed the blasting of eighteen flight deck tie-downs. The CBS permits the operators the safety of an automated enclosed blasting system using media (such as

glass beads, coal slag, and aluminum oxide grit) to blast away paint and



The removal of deteriorated deck drains and the installation of new composite deck drains with assistance from NSWC CRD's Dr. Maureen Foley and the CCAT Norfolk Team, were led by Mr. Ray Vickers, and Mr. Jeff Gómez. (Photos courtesy of CCAT.)



Above: Flight deck not cluttered, permitting normal operational traffic. Note the containment blast system on the right.



Right: An air compressor and dehydrator pierside.



USS McFaul's Exemplary Corrosion Control Efforts



Even though the anchor windlass controls are relatively protected, they still see a significant amount of corrosion. The lines, piping and stanchions were wrapped with Mil-Spec corrosion inhibiting material then received a coating of polysiloxane paint.

corrosion to a SP-10 finish in 8-10 minutes. This leaves each tie-down clean and ready to perform the S-1 Preventative Maintenance System (PMS) check, which determines the proper thickness of the crossbars within the tie-down. Ship's force then applied the proper primer using the paint cartridge system; this was done in 3 minutes or less and eliminates the opportunity for flash rusting, while properly preserving the surface.

CNRMC's Corrosion Control Manager also orchestrated the support of technology new to the U.S. Navy. Ship2Shore's (S2S) Mr. Erik Bergvinson and Mr. Mark Wilson have been providing materials and training on the application of their MIL-PRF 16173E corrosion preventive compounds. The ship was also able to procure S2S Starter Kits which are comprised of multiple products including the Polysiloxane paint and cartridges, Fiberglass Stain remover (FSR), airless sprayers, and Sailor putty.

McFaul's CCPM, BMC (SW) Chris Smith; First Lieutenant, ENS Molly Perkins; and the Corrosion Division, in concerted effort with all the tools, programs, and resources available to them, have collectively made strides in their battle against corrosion. The ship has undergone a tremendous transformation that did not happen overnight; it took many months of long days of dedicated effort from the ship's crew.

As the ship departed on deployment, every Team 74 Sailor and their family was able take pride in a warship reflecting readiness as a result of enduring preservation efforts. The training, resources and support from the waterfront enabled the skills to combat corrosion and continue the effort in order to return home in the same condition of material readiness.



USS McFaul (DDG 74) Sailors apply a one step anti-corrosion tape called "Sailor putty" to piping.

USS McFaul (DDG 74) benefitted immensely from the help of the Corrosion Control Assistance Team (CCAT), who provided the 4Ts:

Training

- Ship Force Corrosion Control and Tool Use Training (Classroom and OJT)
- Basic Corrosion Control, Coatings and Tool Training
- C5I Corrosion Control Training
- Ship Supervisory (Officer and CPO) Corrosion Control Training
- Polysiloxane Maintenance and Application
Taught ship's force on U.S. Navy corrosion control technical requirements per NSTM 631/634
- PMS – Doing the Job Right, the First Time!

Technical Expertise

- HM&E & C5I Corrosion Control Experts on the Deck plates providing Technical Guidance and Oversight for SF work execution.
- Support in Planning of Ship Corrosion Control Maintenance

Tools

- Pier-side Preservation Tool Complement & Issue (Tool Depot)
- Air Compressor Support
- Repair/Maintenance of Ship Preservation Tools

Technology Introduction

- Introduce Sailor-Friendly State of the Art Technology



Corrosion Division members were thrilled to add easy-to-use, effective tools to their anti-corrosion arsenal.



Corrosion Control Assistance Team



By Jim Wigle, Mechanical Engineer and CCAT Project Engineering Lead at Naval Surface Warfare Center, Carderock Division (NAVSEA 05)

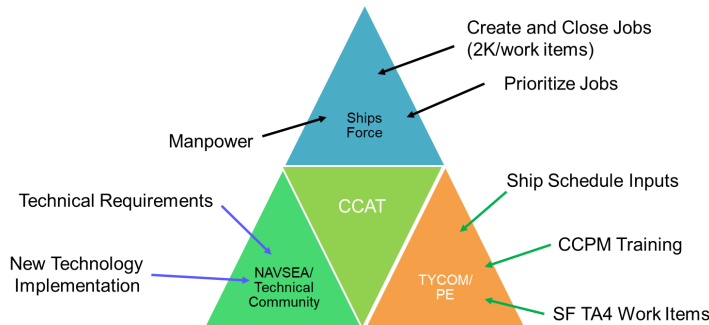


The Corrosion Control Assistance Team (CCAT) is a Naval Sea Systems Command (NAVSEA) Ship Integrity and

Performance Engineering Group (SEA 05P) program funded by the Painting Center of Excellence (PCoE) with the tasking to provide corrosion control Training, Technical assistance and Tools, and to facilitate the transition of new Technology (known as the 4T's) to Sailors aboard U.S. Navy ships for corrosion control maintenance projects.

CCAT's mission is to train and assist fleet Sailors in ship preservation; it is a ship self-help program designed to support ships force efforts to perform corrosion control projects through the 4Ts.

CCAT provides support in eight locations full-time, including Norfolk/Little Creek, Va., Mayport, Fla., San Diego/North Island, Calif., Everett/Bremerton, Wash., Pearl Harbor, Hawaii, and Yokosuka and Sasebo, Japan, with one part-time TDY location in Rota, Spain. Through training, team members bring expertise, equipment, and new technology to our ships during a thorough corrosion control and prevention visit.



Each CCAT visit process includes an in-brief with ship's leadership and a work planning walk-through where the CCAT team and ship's force ship check jobs/work items and prioritize the work. Manpower and material requirements are also established during the walk-through. Upon completion of the walk-through, the classroom portion of training is conducted, followed by on-the-job training (OJT) and work execution. Upon completion of CCAT support, a lessons learned and support close-out meeting is also completed.

CCAT also supports ship corrosion control maintenance advanced planning for future ship availabilities.

Training

Training consists of five classroom training sessions: basic shipboard corrosion control including surface preparation, coatings applications and power tool usage; C5I (Command, Control, Communications, Computers, Combat systems); corrosion control including weather sealing, CRES (corrosion-

Corrosion Control Assistance Team

Mission: Train and Assist Fleet Sailors in Ship Preservation and Corrosion Control

Objectives:

- Increase Efficiency and Effectiveness of Ships Force Corrosion Control Efforts
- Enhance Ship Material Readiness
- Improve Ships Force Self-Sufficiency
- Reduce Total Ownership Cost
- Help Ships Meet Expected Service Life



resistant steel) fasteners, grounding straps, and conductive gasket installation; Ship Supervisory (Officer and Chief Petty Officer) Corrosion Control; Polysiloxane Paint Application and Maintenance; and Ship Paint Locker and Mixing Training. Also included under training is OJT, which includes over-the-shoulder, real time training on power tool usage, surface preparation, and paint application by brush and roller during work execution. Training is based on technical requirements of (NSTM 631/634, and the ship's Planned Maintenance System (PMS).

Technical Expertise

CCAT team personnel are certified Association for Material Protection and Performance (AMPP) Coating Inspectors. Team leads and Hull Mechanical & Electrical (HM&E) technicians are AMPP Coating Inspector Program (CIP) Level 3-Peer Review certified; C5I and Tool Technicians are AMPP CIP certified at Levels 1 or 2. CCAT experts are on the deck plates providing technical guidance and assistance as well as oversight for ship's force work execution.

Tools

CCAT emphasizes using the right tools for the job at hand. CCAT tool depots provide a pneumatic power tool complement and issue that includes sanders, die grinders, needle guns, and deck crawlers to name a few. The tool depots provide a "One Stop Shop" for the ships that also includes air hoses, fittings, manifolds, vacuums, and tool and paint consumables. CCATs also provide portable air compressor support for pneumatic tools when ship or pier air is insufficient. As an added bonus, CCATs will repair ship's surface preparation tools along with providing Sailor training on tool repair and maintenance.

Technology Introduction

As is with any industry, corrosion control tools and technology can rapidly evolve. CCAT's aim is to provide ships with "Sailor-friendly", state of the art technology to complete their corrosion control and prevention tasking. Examples of new technology include High Solids (HS) Surface Tolerant Ship Structure Coating Systems (MIL-PRF-23236 Ty VII Class 17 coatings- Interbond 998 / Amercoat 240 / Euronavy 301); Durable High Solids Topside Coating Application (MIL-PRF-24635 Type V/VI coating) both single component (1K) and



Corrosion Control Assistance Team



two component (2K) systems; Peel and Stick Non-Skid application for non-critical (non-aviation) decks; topside polysiloxane cleaning kits; antenna conductive gaskets, and composite materials such as deck drain inserts and exterior drain trough covers.

Planning for Success

Prior to CCAT arrival, there are a few recommended steps your ship should take.

- 1) Assign a permanent Corrosion Control Program Manager (CCPM) as required by COMNAVSURFOR 221342Z JAN 20 (CCPM training is coordinated with and provided by CNSP/CNSL with CCAT assistance.)
- 2) Assess spaces/equipment for corrosion on a regular basis (IAW PMS (MIP 6200 check A-1). Note that zone inspections are a great time to identify and document corrosion.
- 3) Open a Work Candidate (2 Kilo (2K)/Automated Work Request (AWR)) when corrosion is found. AWR and JSNs are required for CCAT support.
- 4) Schedule the job to an availability when you intend to work it.
- 5) Provide input for quarterly CCAT schedule to your Port Engineer or Type Commander representative when the ship desires CCAT support.

In addition to the ship's CCPM, it would be wise to find out which Sailors aboard also have the Navy Afloat Maintenance Training Strategy (NAMTS) Corrosion Control Program Technician (CCPT) Navy Enlisted Classification, as they are well trained on corrosion and are great assets to the ship.

Ship Work Execution Responsibilities

To get the most out of a CCAT visit, the following actions are recommended for the ship:

- 1) Prioritize the work to be accomplished.
- 2) Establishing a single ship coordinator point of contact (the ship's CCPM usually fills this role).
- 3) Assuming responsibility for maintenance and accountability for the CCAT tools (note that the ship must replace any lost tools).
- 4) Making a manpower commitment.
- 5) Plan ahead for the integration of CCAT support with other shipboard work.
- 6) Providing the paint consumables such as brushes, rollers, paint buckets and rags for your Sailors.
- 7) Provide Sailor Personal Protective Equipment (PPE).
- 8) Providing access to work spaces (work authorization forms and tag-out preparation).
- 9) Drafting, submitting, and closing out 2Ks and AWRs.

This last point is crucial since AWRs and JSNs must be provided to CCAT at the close of the visit, otherwise future support may be in jeopardy.

Scheduling CCAT Support

CCAT schedule criteria is listed below in priority order as approved by Commander, Naval Surface Force U.S. Atlantic Fleet (CNSL) and Commander, Naval Surface Force, U.S. Pacific Fleet (CNSP) N43:

- 1) CMAVs within 6 months of deployment POM upkeep (Basic Training Phase Complete).
- 2) TYCOM / Ship / Port Engineer request.
- 3) CMAV prior/post CNO avail or concurrent during pierside (at Naval Station/Base) CNO availability.

CCAT support is typically 3-6 weeks for a ship in a continuous maintenance availability (CMAV) or 16-20 weeks for ships in a Naval Station pierside selected restricted availability (SRA).

CCAT exists to help our ships with the ongoing challenge of corrosion. The CCAT team, along with the ship's leadership, its Corrosion Control Program Manager, and any onboard NAMTS Corrosion Control Program Technicians all work together to bust rust as often and as efficiently as possible. Thanks to such programs and ever-evolving technology, we are getting better and better at combatting corrosion.



Photos courtesy of CCAT.

Sailors at work during a CCAT visit.



Photos aboard a DDG 51 class ship taken during a CCAT visit and 13 months after.





TYCOM Corrosion Efforts in Progress



Article and photos by Kat Ciesielski, NAMTS Public Affairs



Over the last several months, Type Commands (TYCOM) have made strides in the fleet's corrosion control efforts through new technology initiatives. Utilizing commercial entity Ship 2 Shore's (S2S) U.S. Naval Assets Topside Preservation Program, ships are seeing immediate and sustainable results.

The program is employing the use of kits containing a variety of products and applicators used to combat corrosion that when utilized properly, mitigates and inhibits corrosion. S2S products are non-toxic, safe, easy to apply, and long-lasting.

S2S personnel customize each course to focus on the preservation needs of each ship on which they visit; demonstrations and instruction is designed to be completed in one day and is provided to Sailors aboard their own ships.

Through the program, there are two levels of instruction and certification that can be provided. Level 1 is geared towards Applicators and Level 2 is geared towards Supervisors. Each Sailor is instructed on how and when to apply S2S CPC 500 Sailor Putty Corrosion Inhibitor to various systems and structures as part of their Planned Maintenance System (PMS). Supervisors are instructed on how to properly manage S2S preservation projects, how to provide feedback to NAVSEA for process improvement, and how to keep records.



Ship 2 Shore, Inc. representatives conduct a demonstration of the application of Mil-Spec material on bulkhead corrosion areas on October 20, 2022, aboard USS New York (LPD 21).



USS Tortuga's (LSD 46) PS3 Rodrec Person of Ocean Springs, Miss., wrapped a pipe in S2S Sailor Putty then painted over it using the paint cartridge system and polysiloxane paint on May 18, 2023.

Coast to coast, demonstrations are tailored to each ship's preservation and corrosion control needs.

"When we first open our kits when we get onboard, the Sailors are curious. As we put the gloves on and get ready to work, they come closer and really lean in to see what we're doing. We grab a roll of Sailors Putty and wrap a kickpipe or something really simple. You see it in their eyes as they become truly interested as you explain the technology of how it works and how we're mitigating corrosion and going to the source," said Erik Bergvinson, chief executive officer of Ship 2 Shore, Inc. "We try to teach them quickly to cover that metal, eliminate all that staining, wrap the source, and paint over it then you won't have to come back to it. We take small groups and work with them and before you know it, an hour has gone by pretty quickly. Two hours after demo completion, they're still working, which is a fantastic sign," he added.

On May 18, Sailors aboard USS Tortuga (LSD 46) went through S2S' U.S. Naval Assets Topside Preservation Program during which nearly a dozen Sailors learned to utilize items within the kit.

After spending an hour learning to apply Sailor putty and polysiloxane paint, SN Dominic Carbone of Canton, Ohio., said, "I like it; it's really good! It definitely cuts the time down. You usually have to prime and let that dry overnight so this is normally a two day process. We were able to knock both steps out today in less than an hour."

"Normally you're out here needle-gunning and this would have taken a good hour and a half. This stuff (S2S Sailor Putty) took less than two minutes. This is my favorite!" shared PS3 Rodrec Person of Ocean Springs, Miss.

TYCOM support of the Topside Preservation program along with the Corrosion Control Program Manager initiative and the NAMTS Corrosion Control Program Technician Job Qualification Requirements all work in concert to mitigate rust and help improve our fleet's operational readiness.



Monthly Corrosion Self-Sufficiency OPT Meeting Implemented



By LT Gyneth Campbell, SURFLANT N44



Commander, Naval Surface Force Pacific (SURFPAC) and Commander, Naval Surface Force Atlantic (SURFLANT) have established a monthly Corrosion Self-Sufficiency Operational Planning Team (OPT) meeting and they met for the first time on April 26. The goal of the OPT is to eliminate barriers in the fleet for warships to be as self-sufficient as they can be in all realms. The OPT was originally established with a focus on engineering aspects, such as additive manufacturing, but it has since expanded to corrosion control.

Corrosion poses a constant threat to our warship readiness and operational effectiveness. One of the goals is to bridge the gap between new corrosion prevention technologies and the ship's abilities to use these—i.e.: adequate training and fleet endorsed guidance.

In addition to SURFPAC and SURFLANT, representatives from multiple commands and programs throughout the Navy contribute to the effort. Among them are U.S. Fleet Forces Command, Organic Repair Capability Assessment (ORCA) team members, Readiness Assessment Training Team (RATT) members, NAVSEA 05, Naval Surface Warfare Center (NSWC) Philadelphia Division, the Regional Maintenance Centers, and Navy Afloat Maintenance Training Strategy (NAMTS) team members.

The OPT is working on determining the current status of the Naval Ships' Technical Manual (NSTM) Chapter 631 draft, and addressing what resources may be needed to expedite its release. Getting it out to the fleet allows Sailors to have the most up to date guidance on surface preservation and training.

The OPT is addressing corrosion issues from three fronts: manning, training, and equipment. For manning, corrosion is too large of a task to be tracked by one individual; currently, there is only one Corrosion Control Program Manager (CCPM) assigned to each ship. The



Seaman Mariana Martinez of Salem, Ore., applies Sailor Putty to a corroded bracket on USS Tortuga (LSD 46) on May 18, 2023. (Photo by Kat Ciesielski, NAMTS Public Affairs.)



Sailors aboard USS New York (LPD 21) listen attentively to Ship 2 Shore, Inc. representatives as information about non-toxic, rust-inhibitors is shared on October 20, 2022. (Photo by Kat Ciesielski, NAMTS Public Affairs.)

OPT has proposed adding Navy Afloat Maintenance Training Strategy (NAMTS) Corrosion Control Program Technician (CPPT) Navy Enlisted Classification code holders to each ship in roles within key divisions aboard such as Supply, Combat Systems, Deck, Air, Engineering, etc. The CCPTs answer to the CCPM for all things regarding corrosion prevention and preservation. This allows for the Sailor within the division to address corrosion concerns specific to their equipment and gear, while allowing the CCPM to have a holistic status of corrosion across the ship. For training, the OPT is addressing how to increase visibility and participation in the NAMTS Corrosion Control Program Technician Job Qualification Requirements (JQR). The more Sailors who enroll in and complete the JQR, the more competent and confident Sailors we have executing maintenance. For equipment, there are new corrosion mitigation technologies available and the OPT is working on providing access, training, and ultimately the tools themselves for the fleet to use. Corrosion control can be incredibly time intensive and any proper steps taken to reduce that time is beneficial.

A major aspect to corrosion prevention is ensuring the preventive maintenance is done correctly the first time. Although it may seem straight forward, it is a crucial aspect to maximize the use of man-hours and to increase the longevity of the equipment. This is the root of what the Operational Planning Team is working toward, to remove or address barriers to ensure the fleet has everything we need to get it right the first time.

The Type Commander CCPM initiative along with the NAMTS CCPT Job Qualification Requirements and providing our Sailors with the right tools all work in concert to mitigate rust and help improve our fleet's operational readiness. The monthly OPT meetings are a great forum for sharing information as we continue to work towards this goal.



CNRMC Efforts to Combat Corrosion



By Andy "Rusty" Vasquez, Corrosion Control Manager and Kat Ciesielski, NAMTS Public Affairs



Commander, Navy Regional Maintenance Center has a variety of tools in its arsenal of technologically advanced solutions to combat corrosion. The Type Commander (TYCOM) Corrosion Control Program Manager (CCPM) program and Commander, Navy Regional Maintenance Center (CNRMC) Navy Afloat Maintenance Training Strategy

(NAMTS) Corrosion Control Program Technician (CCPT) program are leading the way to turning the tide in the area of Corrosion Control in the fleet. The NAMTS CCPT Job Qualification Requirements (JQR) training program was approved for implementation in June 2019, and the curriculum has been implemented at NAMTS Training Maintenance Activity (NTMA) and NAMTS Afloat Training Activity (NATA) sites. The objective of both the CCPM and NAMTS CCPT programs is to educate Sailors on corrosion prevention, new paints and paint application procedures, and new methods now available to the fleet.

If you have been around ships, you are likely familiar with needle guns and grinders; while they have their uses, recent years have brought on superior, more efficient equipment for our Sailors to utilize against corrosion. There are several initiatives CNRMC has deployed to help Sailors keep rust at bay; among them include:

Fluidized Bed Machine

In April 2018, NAMTS Industrial Plant Equipment (IPE) team members facilitated the acquisition, installment, operational testing and acceptance of the first fluidized bed powder coating machine for the U.S. Navy. It was certified on April 26, 2018, for use in the Southwest Regional Maintenance Center (SWRMC) corrosion control shop.

The fluidized bed powder coating machine, improves the longevity of the primer and topcoat application while simultaneously reducing process cycle time compared to traditional methods. Since its installation, SWRMC's fluidized bed machine has coated over 1,000 watertight fixtures, providing high quality coated fixtures for the RMC. The real value of the new process is that each coating will last up to ten years as opposed to having to be serviced every 3 years or so.

Application of primer and topcoat powder coating for watertight fixtures is fully automated by the fluidized bed powder coating machine. When a watertight fixture is ready for powder coating, it is attached to a hanging device outside of the machine. Once the operating area around the machine is free of personnel, the machine transfers the fixture into the first bed where it receives an encapsulating primer coating. The watertight fixture is then transferred to a second bed where a top coat of ultraviolet resistant powder coat is applied. After the process is complete, the fixture is placed back on the conveyor monorail where it can be manually moved to the curing oven and then inspected at the quality assurance station.



Fluidized Bed Machine and a coated 26"x30" watertight Door
(Photos by Andy Vasquez.)

Traditional powder coating is applied in a powder coating booth using a line-of-sight spray-on method called electrostatic powder coating. Electrostatic powder coating often leaves hidden crevices exposed, which poses a risk of corrosion because oxidation can occur anywhere the metal is untreated. This proved to be an issue with exterior watertight doors because even the tiniest of exposed surfaces can result in major corrosion, which was occurring consistently in the rubber seal channel.

The application of the powder coating is more uniform than previous methods, yielding a more durable product. Uniformity and durability help reduce surface deterioration, adding to the oxidation fighting power.

Prior to SWRMC receiving the Fluidized bed powder coating system, the proof of concept was tested on DDG louvers for several years. DDG louvers are used on Navy ships to prevent debris from entering the gas turbine air intake system. They have several voids that are difficult to powder coat completely when using the electrostatic method. Traditional coatings resulted in having to recoat the louvers every two years.

Not only does the fluidized bed powder coating process save time and improve quality, it helps improve safety aboard the ship. Watertight fixtures such as doors, scuttles and hatches are critical to preventing water intrusion onboard the ship. These



CNRMC Efforts to Combat Corrosion



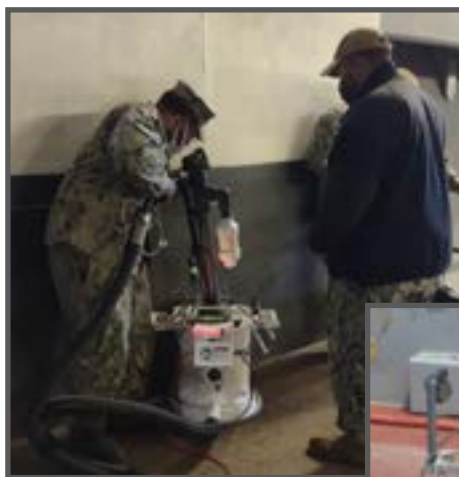
Left: A cloverleaf tiedown with visible corrosion before being blasted
Middle: Blasting results in an SP-10 finish
Right: The tiedown is primed and preserved
(Photos by Andy Vasquez.)

containment of the particulates without exposing the operator and other nearby personnel to the debris or noise associated with the task. In the past, this work would have involved the use of a needle gun and a p-grinder, both of which create a significant amount of debris and adds to project time due to cleanup.

After the tiedowns were blasted, they were then checked for thickness in accordance with the planned maintenance system then properly preserved in just a few minutes each using the paint cartridge system.

Not only was the project completed in a relatively short period of time, but at an estimated \$300,000 cost avoidance to the Navy!

Sailors who were involved with the project were enrolled in the NAMTS CCPT JQR. Sailors who complete the JQR can earn their CCPT Navy Enlisted Classification code; while doing so, they learn how to fight, control, and correct corrosion and can then share this knowledge with their fellow shipmates.



Above: BM2 Donte Royster and BM1 Darius Branch use a spot blaster aboard USS Bataan (LHD 5) in March 2022. (Photo by Andy Vasquez.)



Right: Cloverleaf blaster aboard USS Bataan. (Photo by Andy Vasquez.)

In 2019, Northwest Regional Maintenance Center’s Corrosion Control Shop received a heat-controlled pressure washing station. In following through with the proper procedure for Corrosion Control, prior to blasting an article for powder coating, the parts must be pressure washed with 110-130 degree Fahrenheit high pressure water to remove contaminants from the article such as chlorides or lubricants. This eliminates the possibility of contaminating the media in the blasting process and it also improves the life cycle of the media. This also ensures that the part has a clean, uncontaminated surface in preparation for painting. The system has a “Lazy Susan” style rotatable table to ensure heavy parts can be moved easily by one person. In this case, items can be rotated 360 degrees. The system also recycles the water filtering out contaminants and debris into a holding tank.



Heated Pressure washing station with rotating table. (Photo by Andy Vasquez.)



The pressure washing system contains a skimmer/separator. (Photo by Andy Vasquez.)



Dirt and debris are filtered and placed in a holding tank as the water is cleaned and recycled. (Photo by Andy Vasquez.)



Aluminum Sensitization: Composite Patch Aluminum Repair

Sailors completing the TYCOM CCPM training program and NAMTS CCPT program are made aware that aluminum sensitization is a condition in which the 5000 series Aluminum used in the construction of U.S. Navy ships becomes brittle, has become a growing corrosion condition in the fleet. Aluminum Sensitization can progress to the point where the aluminum plate develops cracks; these cracks require a non-weld repair as the sensitized aluminum has deteriorated to the point where weld repairs will fail and potentially cause additional cracking due to area heating. In such cases, a temporary repair is made, and documented with an Approved Departure from Specifications (DFS).

This temporary repair, called a Composite Patch, consists of an eight-layer fiberglass patch which is vacuum-compressed and heat cured directly at the site of plate cracks. The patch is



CNRMC Efforts to Combat Corrosion



inspected annually to determine longevity, and durability and follow-on permanent repairs are completed during the ship's scheduled availability.

These patches are labor intensive, and can only be installed by a team of certified technicians using detailed installation kits and procedures requiring strict attention to detail. Every patch is different in design, and details are based on the size and type of crack the patch must cover. The patch must not only cover the crack, but add to the strength of the base metal as well as provide watertight integrity. In some cases, a doubler plate is installed to provide needed strength to the base metal.

The area must be sanded smooth, cleaned to remove contaminants, and tested to ensure cleanliness to the application of the sealer. The sealer is installed to provide a smooth surface and solid barrier to maintain watertight integrity prior to the installation of the 8 layers of fiberglass. Once the fiberglass is successfully installed, and vacuumed sealed to the surface, the fiberglass must be cured for 8 hours at 140 degrees Fahrenheit. The chamber is removed and the patch edge is sealed. At this time the patch is primed and painted to match the surrounding area.

Sailors assigned to Mid-Atlantic Regional Maintenance Center, Southeast Regional Maintenance Center, Southwest Regional Maintenance Center, and Hawaii Regional Maintenance Center have received the required Composite Patch Aluminum Repair training. These Sailors are now part of the Certified Teams in these areas that are available to support the fleet units effected by the Sensitization.



(Photos by Andy Vasquez.)

Sanding the surface to ensure the proper surface profile is achieved, and smooth.



Water testing to ensure no contaminants are present in the substrate.



Scrubbing the surface ensuring no debris is present prior to applying pre-resin treatment.



Surface preparation, clean scrub, and treat the surface chemically.



Applying resin paste around the doubler plate to ensure there is a smooth, level transition area.



Heat curing of the composite patch at 140 degrees F for a minimum of 8 hours.



Manually sand the cured patch area in preparation for the polysulfide sealer.



Patch with the polysulfide sealer and primer applied.

From fluidized bed machines to laser ablaters and containment blast systems to composite patches, CNRMC continues to provide our Regional Maintenance Centers and our Sailors with technologically advanced tools to help the fleet in our fight against corrosion.

"In the war on corrosion, we are winning small battles all the time. As these technologies permeate the fleet and as our Sailors learn through programs such as CCAT and the NAMTS CCPT JQR, we are moving in the right direction each day," said Daniel Spagone, CNRMC's Director of I-Level Maintenance.



USS Oak Hill (LSD 51) Sailors Commended



By Kat Ciesielski, NAMTS Public Affairs



Two Machinery Repairmen (MR) aboard USS Oak Hill (LSD 51) were recently commended by Rear Admiral Brendan McLane, commander, Naval Surface Force Atlantic, for their efforts in machining a fitting for a controllable pitch propeller (CPP).

MR3 Michael Schomisch was on the mess deck one day when he heard that they might have to pull into port due to an equipment casualty. He headed to his shop, where he found MR2 Dwayne Austell hard at work. MR2 Austell had started machining the required fitting for the CPP and before passing it along to Schomisch, Austell provided him with some insight as to things to look out for while continuing to work on the steel piece. Schomisch took over and continued to work on the unfamiliar medium and admittedly, the threads were not so great. Schomisch then consulted with his Chief and talked about what aspects could be improved upon; they decided speeds and feeds were an issue. Schomisch referred to his readily available A-School journal and spoke to Austell who agreed they needed to increase the speed and slow down the feed to get the threads just right. Work on version two of the fitting commenced and was made to the exact specifications necessary to replace the broken fitting.

MR2 Dwayne Austell and MR3 Michael Schomisch were recognized in a Self-Sufficiency Bravo Zulu sent by RADM McLane on January 26. "BZ to the crew of Oak Hill (LSD 51) for their tenacious repair of a failed 3-way fitting on Number One CPP System. The Oak Hill Team quickly identified the failure, explored multiple repair options and pursued a rapid solution using onboard capabilities. Oak Hill's self-sufficient repair kept the ship above red lines and on mission at sea. Special recognition goes to MR2 Austell and MR3 Schomisch for their dedication and attention to detail in fabricating a new fitting without drawings; that kind of skill and courage are

what the surface Navy needs to be ready for the next fight," said RADM McLane in his message.



MR2 Dwayne Austell (left) of Brunswick, Ga., and MR3 Michael Schomisch (right) of Cleveland, Ohio, holding the old (left) and new CPP part they made. (Photo by ENS Kieton Rivers.)

"The work that MR3 and I put in was very tedious and stressful, but the fact that this part helped resolve a major casualty was very rewarding," said Austell. He completed the Navy Afloat Maintenance Training Strategy (NAMTS) Inside Machinist Job Qualification Requirements and earned his Navy Enlisted Classification in February 2020. "It's easy. Just work hard, follow orders and keep your head down and grind," he added.

"My mom was ecstatic and my Dad, who is prior military, was even happier! He reminded me to make the most of all the opportunities available," said Schomisch.

"MR2 and MR3 are the best of the best; their hard work and ingenuity enable Oak Hill to fight and win every day. I'm so proud to have them as shipmates," shared Oak Hill's Commanding Officer.

With Oak Hill recently coming online as a NAMTS Afloat Training Activity, more of the ship's Sailors will benefit from increasing their knowledge through hands-on learning and sharing their knowledge with one another.



Top: Broken CPP fitting.



Right: The newly machined CPP fitting.

(Photos by ENS Kieton Rivers.)



MR3 Michael Schomisch, of Cleveland, Ohio, machines the replacement fitting used to repair USS Oak Hill's controllable pitch propeller system. (Photo by ENS Kieton Rivers.)



Fleet Maintenance and Material Management (3-M) Summit Held in Norfolk



By Sharon Jones, Afloat NAMTS Watertight Closures & 3M SME

The 9th Annual United States Fleet Forces (USFF) and Commander, Pacific Fleet (CPF) Joint Fleet Maintenance and Material Management (3-M) Summit was held at Naval Station Norfolk’s Mid-Atlantic Regional Maintenance Center (MARMC), April 18-20.

The summit’s theme was “Post-Pandemic 3-M State of Readiness and the Journey to Fleet Maintenance Optimization”.

Fleet Leadership remarks were provided by the Director of Fleet Maintenance, U.S. Fleet Forces Command, RADM William “Bill” Greene. Additional presenters included personnel from Naval Surface Force, Naval Air Force, Submarine Forces, Commanding Officers, Executive Officers, Command Master Chiefs, Force 3-M Coordinators, Command 3-M Coordinators, and Commander, Navy Regional Maintenance Center personnel.

The 3-M Summit brought stakeholders together to address the current state of material readiness, challenges, best practices, and the way ahead. Day three of the summit addressed the journey to reaching the highest peak of Fleet Maintenance Optimization (FMO), and the way ahead to sustaining a successful Fleet Maintenance Optimization program. Ultimately, the Navy is transitioning from the Future of Sailor Maintenance (FoSM) Program to the Fleet Maintenance Optimization Program.

The Navy will leverage the lines of effort between the FoSM and the FMO by enhancing naval operating forces’ capabilities to maintain its highest state of material readiness.

The 3-M System is used to manage and sustain the highest state of material readiness for all afloat and applicable shore station equipment. The goal of the 3-M System is to achieve uniform maintenance standards and criteria, manage mainte-



RADM William Greene, stating to the Fleet 3-M Summit audience that Naval Maintenance Repair & Overhaul (N-MRO) is the heart of the Fleet Maintenance Optimization (FMO) Program. (Photo by Sharon Jones.)

nance and maintenance support, and maintain maximum equipment operational readiness at all times.

The Navy Afloat Maintenance Training Strategy (NAMTS) program plays a vital role with the way ahead for a successful Fleet Maintenance Optimization Program. NAMTS provides over-the-shoulder technical mentorship, which enhances the Fleet Maintenance Optimization Organizational (O-Level) Maintenance and Intermediate (I-Level) Maintenance. NAMTS also improves Strike Force Intermediate Maintenance Activity (SFIMA) battle group organic maintenance capability, sustained material and logistical readiness, and enhances self-sufficiency.

Among those who provided presentations for Commander, Navy Regional Maintenance Center were Sailor Professional Development Program Manager, Gerald “Jerry” Schrage, who provided the NAMTS brief; I-Level Production Manager, Gary Evans, who spoke about CNRMC’s Maintenance Assist Teams; and Littoral Combat Ships Maintenance Expeditionary Team lead, Richard “Ritch” Martel.

“This was the first Fleet 3-M Summit to be held ‘in-person’ since 2019 due to the pandemic. It was critically important that we get back to ‘face-to-face’ for this summit because of the tremendous value in having the right stakeholders in the room, addressing 3-M issues that exist across the Fleet. Many action items were captured during the summit will be addressed through the monthly 3-M Requirements Management Board (RMB) process,” said Mr. Greg Collins, Fleet 3-M Officer.





CNRMC is Developing Job Performance Aids for Sailors



By Kat Ciesielski, NAMTS Public Affairs



Sailors in the Navy Afloat Maintenance Training Strategy (NAMTS) program will soon have a new series of multimedia/video Job Performance Aids (JPAs) to assist with shipboard tasks.

At the request of Commander, Naval Surface Force Atlantic (SURFLANT), Commander, Navy Regional Maintenance Center

(CNRMC) has begun producing JPAs, each with a specific focus on an identified Maintenance Requirement Card (MRC) related to a specific system aboard ships. The first set of JPAs will focus on watertight doors and hatches.

JPAs are not your typical training video. Using a multimedia approach, Sailors will be able to see, hear, read, and do each task; the more senses that are involved with the tasks, the greater the likelihood that learners will comprehend and retain the material.

The interactive nature of the JPAs will allow for easy navigation between them and the MRC cards. The JPAs will capture subject matter expert tips, detailed guidance and best practices; and are meant to supplement the MRCs.

In addition to simply completing a maintenance task, learners are also building improved consistency, efficiency, and safety through the program.

“The goal is to teach Sailors to properly conduct Planned Maintenance System (PMS) requirements and execute the corrective maintenance directed by the PMS program. A majority of the JPAs being developed deal with watertight closures, which have been identified as an area of interest. We are working to help Sailors better understand their roles as owners, operators and maintainers while underway. This is all done with the goal of building and maintaining an organic repair capability to support Sailor self-sufficiency at sea,” said CNRMC Intermediate-Level Production Manager Daniel Spagone.

“Providing our Sailors with the tools to do their jobs well is paramount. These JPAs are going to be a great primary resource our Sailors can utilize as they complete checks and maintenance on watertight doors and hatches. Everything will be laid out step-by-step, mak-

ing it almost goofproof,” said SURFLANT Force Readiness Officer, Capt. David Fowler.

The JPAs are being recorded as a series of 12 monthly sessions. The first few sessions were recorded aboard two guided missile destroyers in Mayport, FL.

NAMTS was established in 1996 by the Chief of Naval Operations to improve battlegroup organic maintenance capability and material self-sufficiency. CNRMC trains Sailors through the NAMTS program by utilizing I-Level hands-on maintenance production to “forge maintenance warriors,” who are competent and confident in their ability to own, maintain and operate their shipboard equipment.

The initial round of eight videos have been approved and are currently available for viewing via MilTube.

MilTube can also be reached by navigating the MyNavyPortal site using the quick link for MilSuite (Quick Links - MyNavy Portal). Similar to YouTube, you can find videos by simply searching for any of these tags: JPA, NAVYDIY, MRC, PMS. The MP4 formatted videos of the maintenance items should be visible. MilSuite/MilTube are CAC required sites.

BM2 Alpha Yee inspects and lubricates a flush and ramped low profile (RLP) steel watertight hatch and scuttle (quick-acting) and prepares to perform a test procedure. His step-by-step actions per a maintenance requirement card (MRC) were recorded by videographer, Paul Del Signore, for the development and production of job performance aids (JPA) to be used by U.S. Navy Sailors. (Photo by Darius Mitchell.)





SURGEMAIN NAMTS Update



A Leadership Message from CW03 Brandon Brake



I serve as the N7 Training Department Head for the new Regional Maintenance Center (RMC) Cadre and I'm excited to see our reserve Sailors jump into working alongside their active duty counterparts. Each RMC has been welcoming to our Sailors, integrating them into their shops and command quickly.

Our leadership is focused in driving our Sailors to completing their

NAMTS Core Fundamentals and 3M/QA training so that they can be of greater benefit to the RMCs if they are ever to be recalled to active duty. Some of our Sailors are going beyond their first annual training requirements by enrolling in subsequent skill area Navy Afloat Maintenance Training Strategy (NAMTS) Job Qualification Requirements. Overall, I am proud of our new RMC units and I'm looking forward to all the success they will achieve for our fleet.



EM2 Cody Vincent (Southwest RMC Code 958) on the left, and EM2 Michael Owens of the Southwest Regional Maintenance Center (SWRMC) Wichita unit working on a spotlight as part of his NAMTS Outside Electrical JQR. (Photo by EMCS Nicholas Ammons.)

Kudos to SWRMC's NAMTS Program from a SURGEMAIN Sailor

"As a reservist who has attempted to complete my NAMTS JQR at 3 separate locations... I must say that the SWRMC NAMTS coordinators have the best practices that I've seen so far... The NAMTS coordinators were present during our indoctrination and gave simple, clear, and concise guidance on the program's policies, procedures, and resources.... It seems as if the entire NAMTS team and command want to assist you in completing NAMTS. SWRMC as a command has infused the NAMTS program into its core by creating an entire infrastructure around the program. Sailors don't have to wander around to find a qualified signer and each shop has dedicated training days & times for each JQR scheduled months in advance. The Gun Shop's chain of command not only promoted NAMTS completion, but they also crafted the shop's workload around the program to minimize work and qualification conflicts. The NAMTS coordinators will match the Sailor's energy and effort if the Sailor arrives motivated and dedicated, and the program coordinators will be nothing but supportive. Thanks to the efforts of the Gun Shop's chain of command and the support of the NAMTS coordinators, I completed my NAMTS Valve Repair JQR in 21 days."

~ GM1 Kentrell Pierson, SWRMC Tulsa unit



MR1 Aaron Pauli, Naval Reservist with the San Antonio cadre, works on a lathe at Southeast Regional Maintenance Center in Mayport, Fla. "As a converted MR into the reserves, I have never done more or felt more welcome by a shop than I do here at SERMC. I am involved, actively working and learning, and feel like a contributing member of the team," shared Pauli. (Photo by HTC Orlando Rosello, Jr.)

Summary of NAMTS Enrollments at New RMC Reserve Regions:

MARMC JQR Enrollment

- Heat Exchanger – 1
- Inside Machinist – 3
- Outside Electrical – 1
- Rigger/Weight Tester – 1
- Shipfitter – 1
- Valve Repair – 1
- Watertight Closure – 1

SERMC JQR Enrollment

- AC&R – 1
- Inside Electrical – 2
- Inside Machinist – 2
- Outside Electrical – 2
- Pump Repair – 1
- Rigger/Weight Tester – 5
- Shipfitter – 2
- Valve Repair – 4
- Watertight Closure – 5

SWRMC JQR Enrollment

- Diesel Engine - 3
- Gas Turbine Electrical - 2
- Inside Electrical - 4
- Interior Communications - 4
- Outside Electrical - 7
- Outside Machinist - 2
- Pipefitter - 2
- Pump Repair - 4
- Rigger/Weight Tester – 2
- Shipfitter – 3
- Valve Repair – 13
- Watertight Closure – 3
- Welder/Brazer – 2



Maintenance Wins Wars



By Commander David Reische, U.S. Navy (Retired)
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Every sailor on every Navy ship needs to believe and understand that, at some point, the nation will require them to go into harm's way. When they do, they will engage in battle. When they engage in battle, the other side will do everything within its power to kill them and the Navy will incur battle damage. The Navy needs to devote significant effort in training crews to become expert operators and maintainers under battle conditions; to be able to maintain, troubleshoot, repair, bring back to service, and, if required, create workarounds to restore functionality. Sailors need to gain and improve on these skills as part of their daily routines, and this effort needs to be a top priority at the organizational level.

There are actions Navy leaders can influence and control at the unit level in becoming system experts. These actions will not require huge investment from outside the lifelines of individual ships. A critical first step is to make increasing these organic maintenance skills a cultural priority. At the core, this means wanting to do it and committing. Once the Navy embraces that culture, and this includes support from all levels of the chain of command, it can institute behaviors that build and expand those skills.

Here follow some thoughts and practices that might help chart a course for Navy crews to improve organic maintenance skills. Over the past 44 years I have learned a lot from great maintainers and leaders, and perhaps some of these practices might help our forces today.

Involve Sailors in Casualty Repair Efforts

A casualty report (CasRep) informs the operational and administrative chain of command that the ship has suffered a material casualty that significantly impacts its ability to conduct warfare. This is a big deal, and these reports are briefed to the ship's chain of command every morning. So, when it comes time to correct the issue, crew efforts to assist with the repair must be prioritized. One way to increase sailors' technical

skill is to have them be an integral part of any repair efforts associated with a CasRep.

One submarine I served on had a policy that two or three sailors (in a perfect world one from each underway watch section) were assigned to the repair effort from beginning to end. The commanding officer and chief of the boat's guiding principles made "learning your gear" a priority and would defer other training for those sailors to support repairs.

If the repair was beyond ship's force capability, those sailors would be attached to the hip of any off-hull technical assist representative. They would perform the "tag-out," which has a collateral effect of helping them learn how to isolate equipment in battle or during damage control efforts. Then they would assist in disassembly, trouble shooting, and problem isolation, the repair itself, and the retest. These sailors also would attempt to gain as much higher-level knowledge as possible from the experts conducting the repair. In several cases, the tech was a former sailor and happy to increase the crew's level of knowledge. If a component was sent off-hull to a shop, we would ensure that sailors be allowed to make periodic trips to learn advanced repair techniques. If a component had to be rigged off the ship or out of the way, the sailors would learn the fundamentals of rigging and the rigging path and method.

To maximize learning across the ship, as part of the tasking, the sailors also would also train others in the division on the repair process. This would include what caused the casualty and if there were lessons learned that might have avoided the issue, how to safely and within procedure work around the casualty if possible, how the casualty would have impacted the ship during battle, how to mitigate during battle, and lessons associated with the repair and retest.

For repairs within the capability of ship's force, the sailors would order the parts, track the parts with the supply department, conduct the repairs and subsequent retest, and help write the casualty correction (CasCor) message. And they still gave the training to the rest of the division.

As a result of this policy, this ship significantly increased its ability to fight hurt. The



The Navy must improve organic maintenance skills if it wants to be ready for the next high-end fight. U.S. NAVY



Maintenance Wins Wars



crew knew the ship's priorities were to have them learn to operate and maintain the ship, not only during normal operations, but also during battle. The sailors gained technical skills and confidence, increased pride in ownership, learned the "principles of operation," and understood how to cope with loss of equipment. They knew that in war, it would be up to them to keep up the fight and win—there would be no ability to call for help, and the difference between victory or defeat lay in their hands.

This approach should be more widely adapted by U.S. forces afloat, but not only for CasReps. If a ship needs off-hull assistance to conduct repair, there is an opportunity to increase warfighting skills. Applying this same policy to all repair efforts will grow the Navy's ability to restore warfighting capability when alone (and unafraid) in conflict.

Combine Training with PMS

Combining training with the Preventative Maintenance System (PMS) also would increase sailors' organic repair skills. Here is a trick my chief used when I was an electronic technician third class (ET3). He was not a fan of large group training, in which the whole division not on watch sat in the mess decks and listened to a lecture for the required hour, and then filled out the required "Record of Training" to check the box in the Short-Range Training Plan. His goal was to have each sailor become a systems expert, and they could not get there by falling asleep during mess decks lectures. They had to turn wrenches or put multimeters on equipment.

So, in addition to the mandatory, and usually boring, training, he would break the training group into two or three sailors and have us perform PMS under the supervision of the division expert on that piece of equipment. In fact, sometimes, we performed the PMS under the supervision and guidance of the chief! In doing so, we learned the proper way to perform the maintenance, such as how to tag out and isolate (again, valuable knowledge in battle), and tons about gear that cannot be taught by reading the PMS card or a technical manual. They taught us what to look for to predict failure and the importance of log keeping and looking for trends. It was some of the best hands-on training I ever received, and it set the tone for sailors who understood and embraced the criticality of maintaining warfighting equipment, as well as gaining the pride associated with knowing your "stuff." There also was value for the chief because he got to know the strengths and weaknesses of the crew and was able develop plans to improve them. It also gave him insight into how the equipment was operating and if there was need for extra attention. Last, he could fulfill the PMS system requirement to have performed a monitor, even though one might say it was more a training event than a monitor event (however one might argue the goals of the monitor system were all met).

The chief also reviewed the Bureau of Inspection and Survey (InSurv) information about systems and equipment found on our ship or class. He determined what is in trouble the most—gear that InSurv found the least or most improperly maintained. He took a hard look at our ship's gear to see if we had the same issues. Then he put together hands-on training, like the PMS idea, that attacked those troubled systems. Last, he set up "training aids" for us at sea and in port that allowed us

to take things apart and put them back together, or align or measure, under expert guidance, without putting shipboard systems at risk. As a result of the chief's training approach, every sailor under his guidance improved his skills, and most became fleet experts in their fields.

Embrace TSRA

One final idea is to fully embrace a program already in place and dictated by the fleet and type commanders—the Total Ships Readiness Assessment (TSRA). TSRA were born a couple of decades ago as the type commanders took action to mitigate the growing atrophy of maintenance skills in the fleet. The type commanders were finding that on most ships, the combat systems were significantly degraded, and the crews were not skilled enough to recognize the level of degradation. The idea was to have system experts at the Regional Maintenance Centers (RMC) come to the ships and groom critical systems and equipment prior to deployment. There were two goals—restore the systems to a state that supported deployment and train the crews on maintenance.

While the nature of the TSRA has evolved over the years, and the surface and submarine force programs have some differences, there still is a mandated predeployment grooming period for each ship. Ships should take advantage of this "freebie"! Your boss has told you via instruction that this is important, so there is no excuse not to assign sailors to the RMC experts. Navy leaders should impart on sailors that their learning goal should be to how to perform these grooms independently, and eventually not need off-hull assistance. The thought every sailor should have embedded in his or her brain is that they must always keep systems up to the same state of readiness as when the TSRA is complete. Equipment should not be something ships let lapse and degrade and then bring up to speed prior to deployment. The Navy must reinforce the culture that war will not support the luxury of a TSRA prior to being ordered into the fight.

Over the past few decades, the Navy has chosen (some might say forced) to devote its time to training operators, while leaving maintenance at the pier. Maintenance training has been minimal, with A and C schools becoming more individual training with sailors pushing through power point slides. I challenge Navy leaders to ask new sailors how effective their maintenance pipeline training was. They will not like the answer. As a result, the Navy has lost some of its edge in performing anything but the most basic maintenance and relies significantly on outside repair agencies. This will not serve the service well in a high-end fight, where ships will incur damage and need their crews to repair the gear at sea. However, the Navy can turn this around! First, the service needs to change its culture and put improving maintenance skill on a pedestal. Then, leaders need to develop practices within their own control to improve sailors' skills. Maintenance will win the war.

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SURFLANT's Surface Line Week 2023



By Mass Communication Specialist 1st Class Jacob Milham and NAMTS Public Affairs



Commander, Naval Surface Force Atlantic (SURFLANT) Surface Line Week 2023 ended after a week of energetic competition between multiple sea and shore commands, May 12.

This year's Surface Line Week iteration saw Sailors participate in more than 20 camaraderie-building events and competitions. USS Forrest Sherman (DDG 98) won the medium-platform category and USS Kearsarge (LHD 3) won the large-platform category.

"Winning this was a whole ship effort," Capt. Thomas Foster, Kearsarge's commanding officer.

"Every Sailor on Kearsarge contributed to this win. This is what morale looks like."

The theme for this year's Surface Line Week was "North Star 75 – Get Ready." Vice Adm. Roy Kitchener, Commander, Naval Surface Forces, and Commander, Naval Surface Force U.S. Pacific Fleet, stated that Northstar 75 is a goal for 75 mission-capable ships "ready on any given day."

Competitions held throughout the week emphasized the discipline, professionalism, and culture of excellence expected of a combat-ready surface unit. Several events highlighted the theme of a strong, independent, and self-sustaining surface force. SURFLANT partnered with the Anchor Scholarship Foundation for a 5K run/walk and golf tournament, with entry fees from those events funding scholarships for Surface Navy families.

Participants' seamanship skills were put to the test with a Damage Control Olympics, a welding competition, a machining competition, and the Seamanship Olympics. Surface Line Week also included team-building



The Surface Line Week Machining Competition winner, MR2 David Brown from PCU John Bassilone (DDG 122), is flanked on either side by MARMC Code 941 Leading Petty Officer, MR1 Alvie Kaufhold, and Afloat NAMTS Inside Machine SME, Mr. Rick Smith. (Photo by Kat Ciesielski.)



May 8-12, 2023, was Surface Line Week at Naval Station Norfolk during which five commands entered into the SLW Machining Competition. Shown here are entries from USS Kearsarge (LHD 3), USS Forrest Sherman (DDG 98), USS Gonzalez (DDG 66), USS Harry S. Truman (CVN 75), and PCU John Basilone (DDG 122). (Photo by Kat Ciesielski.)

events like a chili cook off, a softball tournament, and the cardboard regatta. The event was capped off with a picnic and awards ceremony, where hundreds of Sailors from different commands gathered.

For the machining competition, Sailors were provided with a blueprint of a drawing from which they were to machine the specified part. Finished products were judged based on how closely they met the specifications in the drawing.

"These Sailors did some amazing work; they really should be proud of their efforts," said Rick Smith, Afloat NAMTS Inside Machine subject matter expert, who along with MARMC Code 941 Leading Petty Officer, MR1 Alvie Kaufhold, judged the machining competition entries.

MR2 David Brown of Fort Oglethorpe, Ga., who is currently stationed on PCU John Basilone (DDG 122) won this year's Surface Line Week Machining

Competition. "I learned of the machining competition because I have a good MR1 who let me know about it; I wanted to be a part of it because when I was stationed here at MARMC, I had seen these guys get to do it. Now that I had the opportunity, I wanted to compete," shared Brown, who during his MARMC tour earned two NAMTS Navy Enlisted Classifications: Inside Machinist and Pump Repair Technician.

Surface Line Week is an annual competition hosted for all subordinate SURFLANT commands.



Afloat NAMTS Inside Machine SME, Rick Smith (left), and MARMC Code 941 Leading Petty Officer, MR1 Alvie Kaufhold critique the work of MR2 David Brown from PCU John Basilone (DDG 122); Brown and MR2 John Travis Odom from USS Harry S. Truman (CVN 75) discuss their Surface Line Week Machining Competition entries as they wait for the results. (Photo by Kat Ciesielski.)



A View of NAMTS from the Bridge of USS Jason Dunham (DDG 109)



By Kat Ciesielski, NAMTS Public Affairs, as told by CMDR Rob Keller
Photos by ENS Travis Stover



CMDR Robert “Rob” Keller, commanding officer of USS Jason Dunham (DDG 109) is a proud supporter of the Navy Afloat Maintenance Training Strategy (NAMTS) program, as he has seen first-hand the benefits of having the program aboard his ship.

“I had heard the term ‘NAMTS’ here and there, but I think I really learned about it when we were early into a deployment and I got a copy of *NAMTS News*. I was

reading it and thought ‘Yes! This is exactly what we need right here!’ so I gave it to my chief engineer and said, ‘I want to do this,’” shared Keller.

When asked about his thoughts on NAMTS, here’s what CMDR Keller had to say:

Self-sufficiency repair/maintenance capabilities.

As a force we like to throw around the term ‘self-sufficiency’ but NAMTS is the only program out there that I think actually serves as the conduit to making it happen. A Sailor gets training in Navy A school, but few others really get to dive in to the level of specificity like NAMTS does. Our Sailors are just expected to figure it out along the way, but NAMTS is bridging that gap. It is giving them a much clearer focus on what they need to learn and do in order to become the master skilled technicians our Sailors desire to be. I think we often lose too many Sailors because they do not feel like they can be as hands-on like they expected. NAMTS can give these Sailors the green light to fix equipment, master their trade, advance their careers, and increase our material readiness. In order to further our NAMTS program, we need to look at the Supply system and ask ourselves if it is aligned with self-sufficient goals. Right now, it is not. I do not have bulkhead spares, I am limited in what I am ‘allowed’ to do work on, so if we really want NAMTS to excel, we need to better equip our ships to be



Another successful underway replenishment (UNREP) with USNS John Lenthall (T-AO 189).



A beautiful day on the bridge wing of USS Jason Dunham (DDG 109) with Commanding Officer Robert Keller and Command Master Chief Kurt Roth after a great UNREP.

able to fix their own problems. It will be a waste if we invest into our Sailors, but don’t give them what they need to actually conduct the repairs.

Repairs conducted by NAMTS NEC holders impacts a Command’s ability to fight the ship.

I like to think of the NAMTS program being like a physical therapist. You may have knee pain, and someone could tell you some tips on how to stretch and reduce your symptoms, but they are going to come back quickly. But, a physical therapist is going to take a more comprehensive approach and study your mechanics. They are going to identify that you may have bad posture, or a problem with your hip that is causing you to compensate which manifests as knee pain. NAMTS is like the physical therapist... they are teaching our Sailors beyond fixing the part, but actually diagnosing the problem. NAMTS is doing more than teaching Sailors how to replace a mech seal, but studying why the mech seal failed, and what else is going on that could either cause the next one to fail, or to fix the problem further upstream. The amount of foresight I am seeing with my NAMTS Sailors and their professional curiosity is sky rocketing. It is altering their identity. They are moving beyond Sailors in Engineering ratings, to becoming Engineers. They are hungry for more jobs, they want to look at what other things on the ship they can fix, and they are increasing their understanding of proper maintenance to prevent equipment from failing. NAMTS is getting, and keeping my equipment up. Additionally, I am seeing an increase in cross-departmental work. Engineers and Combat Systems types working together to resolve issues, it is making my team work together on common problems, and increase their desire to fix their problems without running to outside support first. They have more confidence in their ability to attempt repairs which remains vital while deployed and operational.

How do NAMTS NEC holders save repair costs/ reduced equipment down time?

This is an area where I really think we are going to have to be smart and patient with our approach to NAMTS. I recognize



A View of NAMTS from the Bridge of USS Jason Dunham (DDG 109)



NAMTS is a significant investment, and as such, Navy leadership is going to want to see a return on that investment. But, we need to look at this investment with a long-term approach. NAMTS is filling a critical gap in the training of our Sailors. A first-term Sailor is going to show up with some core fundamentals, and expected to gain experience over time. That is a model that has proven to be effective to a degree. Most Sailors are afforded the opportunity for a specialized school at some point in their career, but again, this is focused training usually on a specific piece of gear. NAMTS is taking the core fundamentals and serving as a professional catalyst through a rigorous PQS and mentorship program that is getting Sailors to advance their core knowledge and apply it across the board. Yes, there is also a time investment in having Sailors focus their efforts in NAMTS progress. So, when you are looking for a chart to show how much money NAMTS has saved the Navy, we have to understand the greatest payoff is going to come through the long-term return. If we can increase our efforts with NAMTS, we will become a much greater organization with self-sufficient efforts. No longer will ships have to worry about downing equipment and systems because of a pump, because you will have someone who can overhaul it on the spot. From experience, you are turning a job which right now may require a CASREP to be carried for about a month to ship and arrive on a deployed asset to repair, whereas a NAMTS tech could turn this around in a day. We can shift our organization from looking at buying new (or overhauled) equipment at a large component cost, or can become an organization that can repair major pieces of equipment because we will understand what is required with a repair kit that may cost \$20-\$150. The major return on investment is in our deployed units as they will not be required to lose mission capabilities or redundancy in their equipment. Lastly, Sailors join the Navy to master their craft. We stress pride in their work, but we have to enable them the tools and training in order to do so. Do I think focused efforts with NAMTS training can keep Sailors in the Navy? Without a doubt. Then, that Sailor becomes that go-to Chief, or Warrant/LDO and is teaching the next generation how to repair items rather than buy new. I firmly believe we can become a greater force and drive total maintenance costs down if we make significant investments



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Would NAMTS NEC billets being added to the Activity Manpower Document (AMD) provide benefit to the Navy?

We've never grown shy to add requirements, and if you look over



USS Jason Dunham's crew hones their firefighting skills.

the ship's manning document and look at some of the areas where we require a specific skillset, I feel it is quite obvious why we should have NAMTS qualified Sailors added to ships. We have a plethora of requirements for Sailors to operate our equipment, shouldn't we have similar requirements to repair the equipment?

How important do you think adding NAMTS Program information to a Command Indoc would be?

It is a program that shows how there is a mutual benefit with NAMTS. NAMTS is helping our Sailors learn and advance their careers - to become experts in their fields, and the return to the command is obvious. Getting Sailors the information right up front is huge. This can be especially huge for a first-term Sailor or a fleet returnee who is looking to find a niche and contribute to the team early. There are a lot of NAMTS NECs that they can get to contribute while also focusing on major watch station qualifications. It also sends a strong message that the command is serious about the program and drives emphasis on self-sufficiency.

How important is it to you to add additional "over-the-shoulder" mentorship visits onboard by NAMTS Mentors?

The NAMTS mentors help provide us focus when we are overwhelmed or distracted, and they are also thinking about areas where we can advance ourselves where we may not be. It was great having a NAMTS mentor who had such a robust level of knowledge of the program get engaged with what we were doing on a ship and help us find opportunities we did not know existed. Our mentor dug through the PQS and our PMS boards to find where we were already doing what we needed to be doing, so it made advancing the NAMTS program seem more attainable. It also signaled to the Sailors that this wasn't just a 'good-idea' program, but one that had the proper backing and credibility to the program. No doubt, our Chiefs are loaded with lots of tasks, and having a NAMTS mentor was great to take Sailors under his wing and give him some very focused training.

USS Jason Dunham currently has 11 NAMTS Navy Enlisted Classification holders aboard the ship; the ship offers 11 NAMTS skill areas.



SWRMC has CIWS Online and Ready



By Doug Scholl, Regional NAMTS Coordinator



Navy Afloat Maintenance Training Strategy (NAMTS) Job Qualification Requirements (JQR) provide Sailors with the opportunity to enroll in hands-on proficiency skills improvement programs,

which expand the Sailor's knowledge and enhance their maintenance and repair proficiency skills. Upon completion of a NAMTS JQR Sailors may be awarded a NAMTS Navy Enlisted Classification (NEC) code attesting to the Sailors' accomplishment. Historically, NAMTS JQRs have dealt primarily with improving the skills of Sailors in Hull, Mechanical, and Electrical (HM&E) ratings. The NAMTS Phalanx Gun and Ammunition Handling Systems (PGAHS) Repair Technician JQR expands into the Combat System area, and this JQR is now available to Southwest Regional Maintenance Center (SWRMC) Sailors. More commonly known as the Close-In Weapons System, or CIWS, this JQR provides Fire Controlman (FC) and Gunner's Mate (GM) rated Sailors with the ability to enhance their knowledge and skills and affords them the opportunity to conduct maintenance and specific repairs on this fast reaction, detect-through-engage radar-guided weapons system.

SWRMC Sailors enrolled in program are accomplishing actual repair work within their shop while progressing towards completion of their NAMTS CIWS JQR. The work encompasses task accomplishment of individual JQR processes for PGAHS repair work assigned within their shop. Not only are the Sailors improving their knowledge level and hands-on proficiency, but they are being provided the right training at the right time as they are effectively demonstrating they can successfully complete PGAHS gun and ammunition handling system assembly, disassembly, cleaning and inspection, and repair and test / check procedures.

In order to ensure successful completion of a NAMTS JQR, leadership at the proper level is essential. In the case of SWRMC's Shop 952, that individual is Fire Controlman Chief (FCC) Tiffany Sawler. As the Shop Supervisor for a team of both FCs and civilian CIWS specialists, she is responsible for ensuring her team can capably and competently complete overhaul and inspection of the PGAHS's feeder, breech and barrel components. Chief Sawler established the NAMTS CIWS JQR program at SWRMC, and was instrumental in guiding the command's first group of enrollees through successful completion of the JQRs and attainment of their NAMTS PGAHS NEC. Leading by example, as Chief Sawler continuously preaches, she also completed the JQR and was awarded her NAMTS NEC.

FC1(SW) Jonah Brooks is one of the senior technicians in the shop who was assigned the role of Work Center Supervisor; he personally led the first group of FCs and guided them through the NAMTS CIWS JQR. SWRMC's desire is that all Sailors complete their assigned JQR within 18 months of enrolling. Under the guidance of FC1 Brooks' and FCC Sawler, Shop 952 enrollees averaged completion of their JQRs in just 14



FC1(SW/AW) Edgar Munoz (seated) discusses scoop disk alignment and timing with GM1(SW/EXW) Brian Clark, FC3 Christopher Tandri, FCC(SW) Justin Denaux, and FC1(SW) Anthony Wilkes. (Photo by Doug Scholl.)

months. Also, following Chief Sawler's example, FC1 Brooks persevered and was able to successfully complete his JQR and was awarded his NAMTS NEC just prior to his transfer from SWRMC and assignment to USS Oak Hill (LSD 51).

SWRMC requires all assigned FCs to enroll in the NAMTS PGAHS JQR program, and the command recently expanded the program to provide the command's GMs to ability to enroll in the program. Two Gunner's Mates have seized this opportunity and are making steady progress. The dedication by the GMs is noteworthy as they are not assigned to Shop 952, so these two Sailors must balance their own production work and plan for opportunities to work with Shop 952 leadership to complete individual JQR processes. Due to Shop 952's continuous production throughput, the two GMs are providing ample opportunity to work on their NAMTS JQR.

GM2(SW) Devante King was SWRMC's first GM enrollee into the NAMTS CIWS JQR, and he is a multiple NAMTS NEC holder at the command. When asked how much experience he had with CIWS prior to enrolling, he stated that, "GMs were always on deck with the FCs whenever the gun was loaded or downloaded. It's one of the most complex gun systems, and I wanted to take my knowledge to the next level." GM2 King added, "I plan on making the Navy a career and I am looking in the future to what I'll do after the Navy. This opportunity could prepare me for a job with a defense contractor like Raytheon, or even as a technical code representative."

Most NAMTS PGAHS NEC holders may not be able to perform an overhaul at sea due to a lack of tooling and testing equipment, but they will very likely be able to diagnose issues and provide subject matter expert guidance when the system does fail. That knowledge and skill will be indispensable to a Weapons Officer and Commanding Officer. Due to the knowledge and skills obtained while completing the NAMTS PGAHS JQR at SWRMC, Chief Sawler and each of her team will provide immeasurable fleet self-sufficiency improvement to their individual units when they return to sea duty after their assignment at SWRMC.



MARMC Develops Outside Machinists



By Andrew Porter, Regional NAMTS Coordinator



Mid-Atlantic Regional Maintenance Center (MARMC) continues its critical mission of fixing ships all across the Hampton Roads area and delivering timely repairs to

its customers. The MARMC Valve Shop is leading the way in this endeavor with roughly 35 dedicated Sailors consisting of both nuclear and conventional Machinist's Mates (MM) operating within two facets of shop production: in-shop repair and testing, and shipboard repairs and technical assistance.

In-shop production work is a major repair area for the MARMC Valve Shop with scheduled and walk-in appointments keeping shop members engaged. The MARMC Valve Shop has a valve test stand that is capable of pop-testing relief valves to specified pressures for a given period of time. These valves are essential to shipboard systems and provide the last line of protection for personnel and equipment, helping prevent catastrophic system failure due to over pressurization. If these relief valves fail their pop test, the shop offers rebuilding expertise.

Shipboard production mostly consists of troubleshooting and repairing remote operators for valves. An example of this is the Teleflex operating system which can run through many spaces throughout the ship and requires specialty tools like a portable hydraulic press. Other shipboard jobs require communication, coordination, and teamwork to complete. Collaboration between ship planners, tag out coordinators, divers, riggers, and ship personnel is essential for quality work, which was recently displayed aboard USS Iwo Jima (LHD 7) through the refurbishment of an 8-inch Cla-Val pressure reducing valve.

In the case of Iwo Jima, a firemain reducing valve was failing to adequately supply proper firemain pressure. Determined to fix it, MM3 (SW) Vernon Coiner and MMN3 (SW/AW) Jayson Ignacio took on this 8-inch Cla-Val pressure reducing

valve weighing nearly 600lbs. Upon investigation and removal of the top hat, they discovered that an uncommon mechanical failure had occurred. It appeared that firemain water was leaking into the mechanical cavity of the valve through a failed cork gasket, slowly degrading the

MM3 (SW) Vernon Coiner inspects a cork gasket removed from the Cla-Val reducing valve to determine its condition. While at the MARMC Valve Shop, the valve is cleaned, inspected, and repaired. (Photo by MMN2 (SW) Andrew Wathen.)

"NAMTS is a huge part of our workday because it allows Sailors with different rates to gain knowledge to perform above and beyond what their responsibilities are. The NAMTS program pulls us out of our comfort zone and allows us to learn skills in other critical areas of naval maintenance."

- MMN3(SW/AW) Jayson Ignacio



MMN3 (SW/AW) Jayson Ignacio, left, and MM3 (SW) Vernon Coiner are pictured here removing the upper body assembly to a Cla-Val Pressure Reducing Valve from USS Iwo Jima (LHD 7). These types of valves are routinely overhauled at MARMC or onboard a ship through tech assist jobs. (Photo by MMN2 (SW) Andrew Wathen.)

metal spring that controls the position of the valve. The corrosion and constant valve repositioning eventually caused the half-inch steel spring to break. Once the Valve Shop team received parts to finish the repair, the valve was restored to full operational capability.

"NAMTS is a huge part of our workday because it allows Sailors with different rates to gain knowledge to perform above and beyond what their responsibilities are. The NAMTS Program pulls us out of our comfort zone and allows us to learn skills in other critical areas of naval maintenance," said MMN3 (SW/AW) Jayson Ignacio.

The high level of knowledge and dedication to MARMC's mission statement of "We fix Ships" ensured the valve was repaired and installed back onboard Iwo Jima before her availability ended.





SERMC Machinery Repairmen Teach the Fleet



By Rick Smith, Afloat NAMTS Inside Machine SME



The role of an Inside Machinist in the U.S. Navy is a critical one, as they help the Navy maintain self-sufficiency at sea. Self-sufficiency requires having the ability to meet one's own needs for

supplies, equipment, and personnel, without relying on external sources. An Inside Machinist, with expertise in the production and repair of various marine equipment, plays an integral role in supporting self-sufficiency. At Southeast Regional Maintenance Center (SERMC) in Mayport Fla., the Code 941 Inside Machine Shop contributes to self-sufficiency through the production of precision parts and the use of a wide variety of machine shop equipment such as engine lathes, milling machines, Computer Numerical Controlled (CNC) machines, as well as through the restoration of metal surfaces through the electroplating process.

Another function of an Inside Machinist is in conducting shipboard visits and providing mentorship to the onboard Machinery Repairmen (MR) in the maintenance and repair of production machinery. SERMC's MR1 (SW) Shawn McDew and MR2 Justin Cleveland are answering the call of the fleet by obtaining skills and techniques required to operate and maintain general workshop equipment. A shipboard visit can include an assessment of equipment to determine whether or not a ship is meeting its full capability. MR1 (SW) McDew provides troubleshooting skills learned via the NAMTS Inside Machinist Job Qualification Requirements process, which directs the use of original equipment manufacturer technical manuals, Planned Maintenance System Card procedures, and drawing on one's experience for machine restoration. This proves to be a valuable skill set and method of instruction, providing an onboard machinist who can now respond quickly to changing circumstances with



MR1(SW) Shawn McDew (right) demonstrates the use of an outside micrometer for measuring diameters of solid stock as MRFN Luis Camacho looks on. (Photo by Rick Smith.)



MR2 Justin Cleveland (center) supervises the vertical milling operations of MRFN Luis Camacho aboard USS Thomas Hudner (DDG 116). (Photo by Rick Smith.)

his/her equipment, and an increased ability to recognize future equipment problems.

With the ability to produce parts-in-house, the Navy can reduce its dependence on outside suppliers and minimize the time it takes to acquire parts when needed. During these shipboard visits, MR2 Cleveland has learned how to interpret blueprints and conducts mentorship with junior Machinery Repairmen stationed on Arleigh Burke class guided-missile destroyers, enabling improved comprehension of part manufacturing. This often manifests into a variety of training topics such as metal recognition, properties, and machining techniques, not seen prior to these shipboard visits.

SERMC's Code 941 Inside Machine Shop welcomes shipboard Machinery Repairmen into their spaces, offering NAMTS mentorship through production, expertise in the production of marine parts, use of precision measuring instruments and an avenue for individual rating improvement. Not only does NAMTS provide Sailors an avenue to learn primary skills, but they also have opportunities to expand their level of knowledge in less familiar areas through hands-on tasking. Through shipboard assistance and visitations, onboard Machinery Repairmen increase their skills portfolio as well as confidence and competence, becoming greater assets to the Navy.



Valves at PSNS and IMF Detachment Everett



By Kirk Jeppson, Regional NAMTS Coordinator



Valves are critical when dealing with important fluids aboard naval vessels. As they control the distribution and pressure of various liquids, valves are continually working so they require proper maintenance and care. Even when a ship is pierside or in dry dock, valves are still under pressure. Ships need valves to regulate the pressure and flow of fluids in the

various onboard systems to include liquids, gases, vapors, and semi-liquid mixtures. All mechanical systems with valves need to be maintained and repaired.

When maintenance is not executed, systems are at risk of failure and a ship's mission could be jeopardized. This is one of the many reasons why the Navy's NAMTS program was established to improve organic maintenance capability and self-sufficiency.

"The most important piece of NAMTS is to take ownership of your learning. I'm trying to master skills so that in the future, I can become a better Sailor and leader" said MM3 John Rabanes. "I haven't been to many schools in my career, so I am experiencing many first time in-depth repairs," he added.

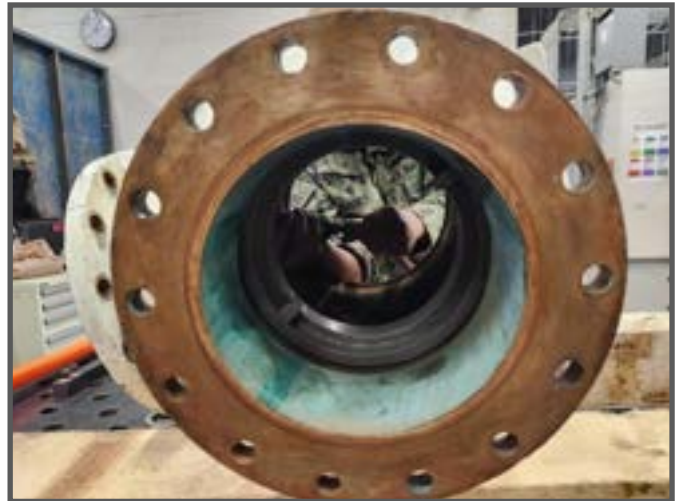
At Puget Sound Naval Shipyard and Intermediate Maintenance facility (PSNS & IMF) Detachment Everett, Sailors enrolled in the NAMTS Valve Repair Technician Job Qualification Requirements (JQR) will learn and grow into Valve Repair Technician warriors. Sailors will experience hands-on, depot-level maintenance performing inspections, repairs, overhauls, modifications, complete rebuilds, assemblies, subassemblies, and ordering parts. They work on ball valves, butterfly valves, gate valves, globe valves, relief valves, check

valves, and duplex strainers. The NAMTS Valve Repair Technician JQR is open to all rates and upon completion of the class and passing a test and oral board, Sailors are awarded a coveted Navy Enlisted Classification (NEC).

MM1 Alexia Rodriguez said, "The course is no joke, but I love the hands-on experience I received." MM1 Rodriguez earned her Valve Repair Technician NEC at PSNS & IMF Detachment Everett in 2021. She



MM3 John Rabanes is inspecting the gasket of the relief valve seat. (Photo by Kirk Jeppson.)



MM3 John Rabanes cleaning up the seat of a relief valve (Photo by Kirk Jeppson.)

is now a subject matter expert for the command and aids junior Sailors as they progress their knowledge in learning to maintain and repair valves.

Thanks to professionals like MM1 Rodriguez and other Sailors in the NAMTS program, the Navy is better equipped to complete future missions!



(L-R) MM3 John Rabanes, MM2 Bianca Reiter and MM1 Francis McKenna are setting the relief valve set point. (Photo by Kirk Jeppson.)



HRMC Expansion: Welder/Brazer JQR



By Philip Bowler, Regional NAMTS Coordinator



Hawaii Regional Maintenance Center (HRMC) recently added the Navy Afloat Maintenance Training Strategy (NAMTS) General Shipboard Welder/ Brazer Job Qualification Requirements (JQR) to its offerings. This addition is in response to the increased demand for skilled welders and brazers throughout the fleet to sustain

ships at sea in ever-changing dynamic environments.

Sailors who are enrolled in the NAMTS General Shipboard Welder/Brazer JQR go through theoretical and practical instruction in welding and brazing techniques. They also learn how to operate a variety of welding and brazing equipment including gas and arc welding machines. Sailors learn the properties of different metals and alloys and how to read and interpret technical drawings and blueprints. All of these skills are essential to understanding and performing accurate welding and brazing processes.

NAMTS General Shipboard Welder/Brazer qualified Sailors will be prepared to make repairs aboard ships and submarines, providing the skills and knowledge to perform various welding and brazing techniques. The JQR also provides a pathway for Sailors who wish to pursue further education and experience through United States Military Apprenticeship Program (USMAP), Regional Maintenance Centers (RMCs), Naval Shipyards and shipboard repair facilities.

"We are very excited to be able to offer this program to our Sailors," said the HRMC Command NAMTS JQR Coordinator, MMC Daniel Ouyang. "Welding and brazing are essential skills in so many industries and there is a real need for qualified workers in these trades. This JQR provides Sailors with the knowledge and practical experience they need to be successful in the fleet," he added. Since it was established at the

command, it has already generated interest among Hull Technicians (HT) within HRMC and Pearl Harbor Naval Shipyard.

Recently, the HRMC HT shop was tasked with performing various welding and brazing jobs aboard an Arleigh Burke-class destroyer. In addition to replacing brackets for receptacles and jackboxes, and the

HT2 (SW/AW) Raul Gutierrez is prep grinding a steel plate for welding. (Photo by HTC (SW) William Jones.)



brazing of copper-nickel piping, there was a critical repair to the Number 1 uptake that had a 4-inch hole. NAMTS Sailors successfully cut out the damaged area and welded in a replacement plate using new material and ensured a solid weld and repair.

The HT Maintenance Assist Team (MAT) and NAMTS General Shipboard Welder/Brazers provided oversight and taught ship's force while they made emergency reinforcement repairs to an antenna platform with significant corrosion. Failure of this platform could greatly hinder the ship from maintaining critical communications while underway, cause serious physical damage to the ship's structure and possibly even significant injury to personnel. The temporary repairs are sufficient to continue operation until the entire platform is replaced during a future availability.

Establishing the NAMTS General Shipboard Welder/Brazer JQR is a promising development for HRMC, the Navy, and the fleet. Adding the availability of the JQR at HRMC provides Sailors with the necessary skills and knowledge to succeed not only in the Navy, but in a variety of industries when they separate from the service. As the demand for skilled workers continues to grow, NAMTS will continue to answer this call!



HT2 (SW/AW) Thomas Kozlowski conducting brazing on copper-nickel piping for task accomplishment within the NAMTS Welding and Brazing JQR. (Photo by HTC (SW) William Jones.)

HT2 (SW/AW) Raul Gutierrez welding two steel plates to demonstrate practical knowledge of welding techniques for NAMTS JQR. (Photo by HTC (SW) William Jones.)





Welding and Brazing Facts



Compiled By HTC (SW) William Jones and Philip Bowler, Regional NAMTS Coordinator

A few facts about welding and brazing:

- Welding and brazing are two different processes used to join two pieces of metal together. Welding involves melting the metal to create a strong bond. Brazing involves heating the metal and melting a filler material, which then cools to create a bond.
- Welding and brazing are used in a wide range of industries, not just in the Navy and shipbuilding, but also in manufacturing, construction, and the automotive and aerospace industries.
- The history of welding dates to ancient times with evidence of welded gold jewelry dating back to the Bronze Age. However, the modern process of welding was developed in the 19th century.
- Welding and brazing require specialized equipment and training to be performed safely and effectively. This includes welding machines, torches, and protective gear such as helmets, gloves, and aprons.
- The type of welding or brazing process used depends on the materials being joined and the intended use of the finished product. There are many different types of welding, including gas welding, arc welding, laser welding, and various types of brazing, including torch brazing, furnace brazing, and induction brazing.
- Welding and brazing can create a strong bond between metal pieces, but the strength of the bond depends on the skill of the welder or brazer, the quality of the materials, and the conditions under which the bond is created.
- There is a growing demand for skilled welders and brazers and these jobs can be physically demanding and require working in difficult or dangerous environments.



HT2 Jacob Wiezorek performs a tack weld on a metal storage rack for NAMTS General Shipboard Welder/Brazer JQR demonstration. (Photo by HT2 Raul Gutierrez.)



HT2 Patrick Johnson conducts a welding job on a signal shack life rail aboard a DDG. (Photo by HTC London Hunter.)



HT1 Joshua Downs repairs an 8" x 11" hole on the side of the pilothouse aboard a DDG. (Photo by HT2 Te Taing.)



NNSY Fixes Diesel Engines



By Andrew Porter, Regional NAMTS Coordinator



The Diesel Repair Shop at Norfolk Naval Shipyard (NNSY) exemplifies what the Navy Afloat Maintenance Training Strategy (NAMTS) is all about; confident and competent maintenance professionals in several major skill areas that are critical to the modern Navy. From a large group of dedicated shop civilians to an incredible array of diesel learning aides,

NNSY Diesel Repair Shop provides the very best learning environment for Sailors working at America's Shipyard.

On top of teaching aides, mock-ups, and a dedicated civilian work force committed to our Sailors, the NNSY Diesel Shop is looking to expand its capability to incorporate a fully-operational test diesel engine for real time troubleshooting analysis. This project has been led by EN1(SW) John Koepp, NNSY Diesel Shop Leading Petty Officer, who has been working diligently to utilize two Detroit 8V71 diesel engines currently located in the shop; one for breakdown and fundamentals and the other for full operation and diagnostics. The shop is designed to overhaul diesel engines for ships in the shipyard during their availability; the engines are assessed for repair and mounted on an in-house engine test stand to run diagnostics and tuning before returning the engine to service. "This is really important for our Sailors and learning to troubleshoot different mechanical issues with a fully operational diesel engine is huge," stated EN1(SW) Koepp. "NAMTS provides us with the perfect platform to fully immerse Sailors in diesel fundamentals and principles," he added.

The primary goal of the NAMTS Diesel Engine Governor Injector Repair Technician Job Qualification Requirements is to improve enrolled Sailors' understanding of an engine fundamentals and diesel theory in the shop. The Diesel Shop at NNSY has a P100 Shop, Governor Shop, Fuel Injector Shop, and a non-functioning 16-cylinder Fairbanks Morse Opposed Piston diesel engine. In 2018, the Shop also acquired a 7m Rigid Inflatable Boat (RIB) specifically for learning through NAMTS. The RIB provides NNSY Sailors the opportunity to work on several diesel processes associated with RIB maintenance



Norfolk Naval Shipyard (NNSY) Sailors EN1(SW) John Koepp, EN1(SS/SW) Marshall Mills, EN1(SW) Monserrat Vives, and EN1(SCW) Rafael Mora-Macedo form the core of the NNSY Diesel Shop. Proudly aboard the shop's 7M Rigid Inflatable Boat (RIB), these Sailors are utilizing the platform to further their knowledge in Diesel Repair fundamentals and eventually a fully function RIB for NNSY. (Photo by Shelby West.)

including cooling systems, out-drives, steering systems, bilge pumps, and fuel systems. All of these things work together to help participating Sailor understand diesel theories and assist in troubleshooting.

EN1 Koepp continues to prove the value and return on investment for the NAMTS program. "NAMTS has been a great help in giving Sailors the opportunity to gain experience and knowledge they

can't normally get in the fleet. NAMTS breaks various diesel fundamentals down to different processes and through repetition and hands-on instruction, our Sailors grow professionally as diesel technicians," stated Koepp. "The NAMTS program not only gets Sailors to reference the technical manuals but also allows them to roll their sleeves up to get hands-on with the maintenance. No other program has this capability," he added.

"The biggest advantage of the NAMTS program is that participating Sailors have the ability to get their hands dirty working on equipment either through real world production or with in-shop mockups to simulate maintenance techniques," said Mr. Daniel Spagone, Director of Intermediate-Level Maintenance, Code 900 at Commander, Navy Regional Maintenance Center. "Many of the NAMTS shops at NNSY use learning aides to help build confidence in how certain pieces of equipment work and develop greater competency for real world maintenance applications. The use of these aids gets our Sailors more sets and reps to develop their skills."



EN1 (SW) John Koepp and EN1 (SS/SW) Marshall Mills standing between two Detroit 8V71 test engines in the NNSY Diesel Shop. Through cooperation with NNSY Leadership, EN1 Koepp is working to use these Detroit diesel engines as hands on aids for Sailors enrolled in the NAMTS program. (Photo by Shelby West.)



EN1(SW) Monserrat Vives and EN1(SCW) Rafael Mora-Macedo are both enrolled in the NAMTS Diesel Engine Governor Injector Repair Technician JQR and have benefited from the hands on training they received in the shop. At NNSY, a 16-cylinder Fairbanks Morse Opposed Piston diesel engine is used as a learning aid to allow Sailors to fully grasp and learn basic diesel repair fundamentals. (Photo by Shelby West.)



Exchanging the Heat: TRF Bangor Pump and Valve Shop Builds Heat Exchanger



By MC2 Adora Okafor



There are many components that go into a submarine's proper functionality. One very important component is a part called a heat exchanger which is made of a metal shell and tubes that work by transferring heat from one place to another.

Recently, a heat exchanger on a submarine located on the Delta Pier was deemed "beyond repair". The original manufacturer of the heat exchanger was unable to provide a new contract for the part, so Trident Refit Facility, Bangor's (TRFB) Pump and Valve shop, Code 31D, took matters into their own hands. For the first time ever, the Pump and Valve shop took on the challenge of building a heat exchanger...from scratch.

TRFB team member Nathan Klein, work leader 31D Pump and Valve Shop, led the 31D team building the new heat exchanger. Klein has been with TRFB since 2005, and remembers a similar project during his first few months at the command.

"When I first got here, that summer we were retuning the 3k type heat exchangers," said Klein. "That system is not on submarines anymore, but we retuned three of those that summer."

Klein recalls all of the intricate work that took place his first summer working at TRFB and reflects on both the similarities and differences of the job he did back in 2005 compared to the job his team is currently working on 17 years later.

"The heat exchanger onboard the submarine is beyond repair so the solution is to either make a new one or get a new one," said Klein. "We [TRFB] did not secure a contract for a new heat exchanger, so the only alternative is to make one ourselves. This is like assembling an engine from scratch rather than rebuilding an old engine."

According to Klein, the preparation started in May 2022, when the planning office and engineers wrote a package for the 31D team to provide detailed instructions on how to build a heat exchanger.

"We're about seven months in of actual progress," said Klein. "Things moving, tools hitting parts—we've got about a month left to meet our deadline and we're hopeful that we will make it."

Shop 31D was not the only division hard at work, the project was a group effort between several shops such as Planning, Engineering, Mechanics, and Non-Destructive Test (NDT) Examiners. All of the shops had multiple meetings over the last several months to make sure the process for building and testing the heat exchanger went as smooth as possible. The NDT shop, whose duties include visual testing and inspection of piping and structural welds, conducted a radiography test. This radiography test used an x-ray to verify that the metal for the heat exchanger was properly welded.

"There was a ton of NDT work," said Klein. "NDT figured out



Proud members of the Pump and Valve Shop, 31D at TRF Bangor. Left to right: Nathan Klein (Work Lead), Ashley Claussen (Shop 31D Supervisor), MM1(SW) Dean Alberstadt, MM1(SW) Adam Hanson, Aleksander Norman (Apprentice), MM1(SW) Matthew Bergstadt, MM3(SW) Evan Hill, GSM2(SW) Marcus Mendez, MMC(SW) Adalberto Covarrubias. (Photo by MC2 Adora Okafor.)

how to do a radiography test, it's the first time they've done it that way and they were successful. Every portion of this job has been something new that no shop has ever done before."

Sailors enrolled in the Navy Afloat Maintenance Training Strategy (NAMTS) Heat Exchanger Repair Technician program also participated in this rare opportunity of putting together a heat exchanger. Heat exchangers typically last a long time. The exchanger being replaced lasted 35 years. This means that modern Sailors have never worked this in-depth on a heat exchanger before.

Machinist's Mate 1st Class Dean Alberstadt has been in the Navy since June, 2008. Prior to his tour at TRFB, he was stationed on two aircraft carriers and the Norfolk Naval Shipyard (NNSY). According to Alberstadt, he learned a lot through the NAMTS Heat Exchanger Repair Technician Job Qualification Requirements. His training included proper installation of tubes, how to perform tube expansion, hydro testing, blueprint reading and much more. Alberstadt valued the hands-on training.

"We don't get a whole lot of heat exchangers," said Alberstadt. "I've seen maybe three since August 2020."

Machinist's Mate 1st Class Adam Hanson, who also joined in 2008, recalls that he only saw something similar when he was on USS Abraham Lincoln (CVN 72). Due to the reliability of heat exchangers, it is not often that he had a chance to work on them.

"It was an exciting opportunity," said Hanson. "I've never built one, but I've done cleanings and I've seen tube bundles. It was pretty cool."

Due to the success of this project, there may be more like it in the future.

"It has been such a unique job," said Klein. "Everyone is stopping by and talking about it. I don't know if there is a single shipyard that has built one of these from scratch before."



IPE: Additive Manufacturing Capabilities at the RMCs



By Albert "AL" Johnson, Industrial Plant Equipment Manager



In October 2022, the U.S. Navy cut the ribbon on the Navy's Additive Manufacturing Center of Excellence (AM CoE) within the state of Virginia's Center for Manufacturing Advancement (CMA) on the Institute for Advanced Learning and Research (IALR) campus in Danville, Va.

In concert with that effort, Commander, Navy Regional Maintenance Center's (CNRMC) Code 900 Industrial Plant Equipment (IPE) team has been busy working to establish common additive manufacturing capabilities around the globe by strategically identifying RMCs to receive state of the art multi-dimensional printers. DMG MORI's Lasertec 65 DED hybrid metal additive manufacturing machines will be utilized at the various RMCs, starting with Mid-Atlantic Regional Maintenance Center (MARMC). Having arrived at MARMC's Inside Machine Shop in May, the installation, testing, acceptance and training will take approximately 60-90 days.

Ships currently rely on the RMCs' Fabrication Laboratories (FabLabs) to print parts made of polymer (non-metal) materials which limits the type of parts and tools (as well as their strength and durability) that they can produce. Implementation of the Lasertec 65 will allow RMCs to print metal parts for a wide variety of applications and systems that are far more durable. The machine also has the capability to repair existing parts, reducing operating costs and the time it takes to repair equipment and get it back in service. When corrective maintenance repair parts are manufactured the information will be fed back to the Navy Supply System to ensure usage tracking.

The Lasertec 65 is an innovative solution that incorporates the additive manufacturing function into a 5-axis machining center by combining directed energy deposition and milling processes on one machine. It will give RMCs the capability to fabricate and machine complex-shaped parts and components, and repair or coat parts for corrosive wear protection. Adding this innovative capability to our RMCs will bring them up to date with the latest technology found in the commercial sector.

The hybrid machines will also enhance Intermediate-level (I-level) maintenance by mitigating long lead times to receive parts support and they will help to drastically reduce the Navy's cost for buying and or shipping repair parts to the maintenance facilities that support our Navy's war fighters as they maintain combat readiness around the world.

These new machines also help us by consolidating capabilities of multiple machines into one machining center which is necessary due to space limitations in our shops and the need of equipment versatility. Additionally, the new IPE are energy efficient which lowers operating cost and the computer numerical controls (CNC) allow for parts to be produced while the machine is unattended after normal working hours and over weekends.



Image courtesy of DMG MORI.

"The Lasertec 65 is an absolute game-changer in the way we maintain the fleet. The machine allows for fast, precise, and cost-effective repairs by leveraging a hybrid of additive and subtractive technologies. The goal is to utilize the machine for additive repairs of expensive, long lead time, or obsolete parts," said Trevor Poole, FabLab Engineer. "A damaged part will be loaded in the machine, have the damaged area machined out, additively filled, then machined and finished back to the desired tolerances, all in the same setup. It will truly be a paradigm shift in the way we do maintenance. Parts that would previously be scrapped can now be repaired and re-issued, resulting in an immense cost avoidance for the Navy," he added.

"For our past successes, we routinely solve ships' most irksome problems, including many CASREPS [casualty reporting]. We leverage all technologies to form an advanced manufacturing suite of tools to utilize the best processes for a particular application. For example, we additively created a polymer fuel oil transfer pump coupling cover and used heat-set inserts with commercial fasteners to get the desired durability. This cover cleared a CASREP for a dock landing ship and it allowed her to fuel up and get out of the shipyard. The resulting savings from not being tied to temporary services and yard fees far exceeds the approximately twenty dollars we spent in materials to get a resolution to the ship in under a week. This is one small example of the power that additive manufacturing, rapid prototyping, and the utilization of hybrid technologies has to better repair and maintain our ships," shared Poole.

Select Navy Afloat Maintenance Training Strategy (NAMTS) Sailors will receive hands on mentorship as part of the NAMTS CNC Job Qualification Requirements (JQR) or the NAMTS Inside Machinist JQR to build a repository of personnel at each RMC at which a Lasertec 65 is installed.

"We are outfitting our RMCs with state-of-the-art technology to help our Sailors and civilians work smarter rather than harder. Giving them the proper tools will vastly increase our ability to support our fleet efficiently and as cost-effectively as possible," said Daniel Spagone, CNRMC's Director of I-Level Maintenance.



USS Bataan Gets Help with Valve Test Stand



By Mike Dengate and Jon Bonet, Afloat NAMTS Outside Machine SMEs



MM1 Stephen Scott, USS Bataan's (LHD 5) Leading Petty Officer (LPO) of Main Control recently approached NAMTS Afloat Outside Machine Subject Matter Experts (SME) Jon Bonet and Mike Dengate, about restoring the ship's Valve Repair Shop capabilities through over-the-shoulder mentorship.

It was a comprehensive process that gave the Bataan Sailors a wealth of experience. First, the

SMEs came aboard to do an assessment on their valve test stand to determine what would be required to get it back to full operational capability. During the assessment, some of the things that were found included:

- the hydraulic pressure gauge and low-pressure test gauge were inside the gauge board and not secured to the gauge board
- the gauge faces were not even with the gauge board, making them difficult to see
- the hydrostatic pressure gauge was missing
- the test table O-rings were deteriorated and cracked
- the air inlet auto oiler sight glass was cracked and leaking air

A list of the assessment findings was given to MM1 Scott so work candidates (4790-2K) could be written, job sequence numbers (JSN) were used to track repairs, man hours and repair parts could be ordered and tracked. New pressure gauges ranging in pounds per square inch, (PSI) from 0-60, 0-300, 0-2000, 0-3000, and 0-10,000 were ordered through the Navy Supply Systems Command to replace the old, outdated, and missing gauges.

As the parts came in, new challenges were met; the new gauges were manufactured by one vendor and the components being replaced were manufactured by another, so their sizing was not identical and it would not be a simple swap out. The



Left: Valve test stand prior to repairs. Right: Valve test stand upon completion of repairs. (Photos by Mike Dengate.)



Afloat NAMTS Outside Machine SME, Mike Dengate, flanked by MM2 Darius Whitmore of Las Vegas, Nev. (left) and MM3 Timothy Anderson of Louisville, Ky. Whitmore is holding a 3" swing check valve and Anderson is holding a 1/2" relief valve. (Photo by Kat Ciesielski.)

outside diameter of the new gauges was a little larger than the current pressure gauges. The gauge board and the old gauges were removed from the test stand console.

Afloat NAMTS Outside Machine SME Jon Bonet walked MM3 Timothy Anderson and MM3 Kevon Joseph (both of whom are NAMTS Valve Repair Technician Job Qualification Requirements (JQR) enrollees) through the process of taking the gauge board and the new gauges to the machine shop to widen the three openings on the gauge board to fit the gauges. After the gauge board was completed, it was reinstalled onto the test stand console and an additional pressure gauge board was manufactured by the ship's Shipfitter Shop. The additional gauge board was then attached to the top of the test stand gauge board to hold a secondary pressure gauge in accordance with Joint Fleet Maintenance Manual (JFMM) requirements. The gauge line and fittings already on hand were adjusted to accommodate the new pressure gauges and a bracket was manufactured and mounted inside the gauge board to keep the new pressure gauges upright. Once the proper fittings were completed the new pressure gauges were sent to the Aviation Intermediate Maintenance Department Gauge Calibration Shop for calibration. Upon return from calibration, the gauges were installed and the valve test stand was now ready for operational testing.

Bonet assisted MM3 Anderson and MM3 Joseph through the operation of the valve test stand to 3,000 PSI to check for hydraulic system fluid leaks and the hydrostatic pressure system for water leaks. No leaks were found on either system and the valve test stand was now ready for use. Bonet conducted over the shoulder mentorship with MM3 Anderson and MM3 Joseph on the proper operation and maintenance of their "new" valve test stand.

It was not long before MM3 Anderson learned that the Oil Lab had 8 relief valves for Nr.1 and Nr.2 Oily Water Separator systems that needed pressure relief valve (PRV) testing, also



USS Bataan Gets Help with Valve Test Stand



MM2 Whitmore and MM3 Anderson set a 3 inch swing check valve onto the valve test stand to conduct a leak by test. (Photo by Kat Ciesielski.)

known as “pop-testing.” The relief valves were delivered to the Valve Repair Shop and MM3 Anderson pop tested all eight relief valves on his own without any assistance from the Outside

Machine SMEs. All eight failed their pop test because the valves did not hold any pressure; they were going to need to be taken apart and repaired. This was the perfect opportunity for the NAMTS Valve Repair Technician JQR enrollees to get some real experience on valve repair and to complete much of their Valve Repair Technician JQR line items.

MM3 Anderson and MM2 Darius Whitmore started to disassemble the eight relief valves as Bonet and Dengate provided over-the-shoulder mentorship. They conducted an inspection of each of the valve components including the body, seat, disk assembly, spring, spring washers, stem, adjusting screw, adjusting screw lock nut, and the hand lifting device. During the inspection, all relief valve seats, and disk assemblies were found to have large amounts of dirt, corrosion and pitting from the oily water separator system. Six of the eight relief valves had Teflon disk inserts, and those inserts needed to be replaced. The remaining two relief valves had metal disks, needed cleaning and machining.

All eight relief valve seats would need to be cleaned, lapped, or removed from the valve body to be machined. A Dexter valve reseating machine kit for a ¼ inch to 4-inch globe valve was in the valve repair shop, so the SMEs were able to show the NAMTS Sailors how to make lapping tools for six of the relief valves. The kit was missing the air motor, so the valve repair technician enrollees were taught how to lap valve seats

by hand, which gave the enrollees a true understanding of valve seat resurfacing. Once the 6 seats were lapped, the disk inserts were replaced on the disk assemblies,



Outside Machine Afloat NAMTS SME Mike Dengate and MM3 Anderson prepare to conduct a pop test on a ½ inch relief valve. (Photo by Kat Ciesielski.)

all six relief valve disks went to the machine shop for machining. MRI Cory Hover, Leading Petty Officer of the machine shop machined the disks to remove any pits or burrs. When complete, the disks were brought back to the valve repair shop. Now it was time to conduct a contact impression of the seats and disks.

MM3 Anderson was able to acquire a tube of bluing compound from the supply department HAZMAT issue. Bluing compound is used to conduct the contact check. The SMEs demonstrated how to apply the bluing onto the disk and press the disk against the seat.

The six relief valves had 100% contact impression so the bluing compound was cleaned off the seats and disks and the relief valves were ready for reassembly. A pre-reassemble inspection was conducted to ensure that there were no parts missing and that all threaded parts went together smoothly. Together, the SMEs and valve repair technician enrollees reassembled and pop tested the relief valves to the pressure required of the IAW MRCs 24M-1, and 24M-3. All relief valve passed pop testing with no leaks. The relief valves were completed and picked by the Oil Lab personnel for installation.

Based on the training and hands-on experience gained repairing the previous relief valves, MM3 Anderson had the confidence to reassemble the remaining two relief valves and pop test them to their required set pressure on his own!

USS Bataan has truly benefited from their NAMTS Afloat program helping their Sailors become more self-sufficient as they prepare for an upcoming deployment.



Outside Machine Afloat NAMTS SME Mike Dengate mentors MM2 Whitmore on how to place a flanged valve on to the valve test stand without damaging the table O-rings. (Photo by Kat Ciesielski.)



MM2 Whitmore slowly raises the hydrostatic pressure while conducting a leak by test on a 3 inch 100 PSI swing check valve. MM3 Anderson and Afloat NAMTS Outside Machine SME Mike Dengate watch for water leak by. (Photo by Kat Ciesielski.)



Tensile Strength



Article, image and photos by Darrell Monroe, Afloat NAMTS Inside Machine SME



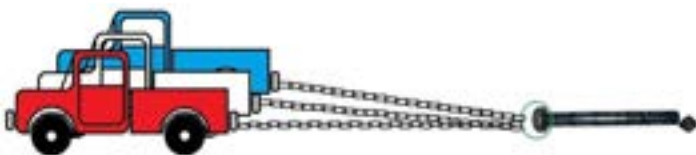
In the world of ship repair, tasks are rarely simple. Sailors in the Machinery Repairman (MR) and Hull Maintenance Technician (HT) rates often have to come up with creative solutions to make an emergent repair. A recent repair aboard USS John P. Murtha (LPD 26) provides a perfect example of this in action.

Some of John P. Murtha's top-notch repairmen recently had the chance to show off some of

their repair skills. MR2(SW/AW) Gabriel Donovan, HT2(SW) Joshua Smutzer, and HT3(SW) Jesus Aranda, all in various stages of their respective NAMTS Job Qualification Requirements (JQR), were called down to Main Engine Room One by Chief Engineman (ENC) Stephen McBee to look at some damaged fasteners. Coincidentally an Afloat NAMTS Inside Machine subject matter expert (SME) happened to have been aboard the ship at the time. The Sailors found that during the operation of the ship's main propulsion diesel engines, the bolts that hold the cooling water pipes sheared off, leaving the pipes free to flex and move, which could cause further damage. ENC (SW) McBee relayed that, "even though drilling and tapping holes is a small job, this particular one carried a large impact." Without repairing the cooling water brackets, the starboard shaft would be down during a critical time in the ship's schedule.

The bolts in question were not just any ordinary run-of-the-mill fasteners. Each cooling water pipe requires two bolts measuring 7/8 inch diameter by 9 threads per inch, written as 7/8"-9 TPI, Grade 5 coarse thread bolts with an estimated minimal tensile strength of around 55,500 pounds (lbs.). Depending on manufacturer, materials, processes, and length, they could be even stronger. There are four cooling water pipes: two inlet and two outlet, making a total of eight sheared bolts that required replacement.

It takes an immense amount of power to shear bolts of this size. To give you an example, some might brag that a Chevrolet Silverado 2500HD pickup truck can pull 18,500 lbs. It would take three of these trucks to create the tensile strength to rupture just one of these bolts at its minimal tensile strength!



A drawing example of three trucks adding the tensile strength needed to rupture one of these large bolts.

Due to the location of the foundations, removing the broken



One of the broken 7/8" - 9 TPI Grade 5 bolts next to a six inch ruler.

pieces was tricky. Thankfully, they had the experience and guidance of an Afloat NAMTS SME to assist throughout the process. MR2 Donovan was not sure if he was going to figure out a way to drill out and tap the bolts without hitting the cooling pipes.

If MR2 Donovan was unsuccessful in properly removing the broken bolt pieces or if he found damage that would not allow new bolts to be installed, alternative repair plans would be required. HT2 Smutzer and HT3 Aranda provided the alternative solution by manufacturing a framework to secure the piping top brackets so the engines could continue to operate. They put their minds together to figure out an optimal exoskeleton-like frame that could secure the cooling water piping without modifying the original hold down design of the system. This was going to be used only as a last resort to keep the system operational.

Fortunately, MR2 Donovan was able to remove the eight broken pieces and re-tap all holes to accommodate new fasteners. HT2 Smutzer and HT3 Aranda were also able to fabricate a top frame that could be used to retain the cooling piping, if needed. "Our Repair Department has excellent repair technicians," shared John P. Murtha's Assistant Chief Engineer, LTJG Kaitlyn Stafford.

When most think of the repair rates of MRs and HTs, they think of someone engraving, making television brackets, working in ER09, or unclogging drains. But their true purpose is manufacturing hard to obtain parts and/or conducting critical repairs, often working behind the scenes without most crew members appreciating their contributions to the mission. They do not do it for the credit or accolades; they do it to be an active part of their com-



MR2(SW/AW) Gabriel Donovan drilling into a piece of broken bolt in one of the piping foundations.



Tensile Strength, Cont'd.

Sailors in the Spotlight



mand and to challenge themselves as they continuously learn and grow.

HT2(SW) Joshua Smutzer and HT3(SW) Jesus Aranda are just two of John P. Murtha's more than 30 Sailors who are currently enrolled in and progressing through NAMTS Job Qualification Requirements and working towards achieving Navy Enlisted Classifications (NEC). The ship has twelve NAMTS NEC qualified Sailors; the ship currently has Sailors enrolled in ten various NAMTS skill areas.



The unique way MR2 (SW/AW) Gabriel Donovan came up with to re-tap each of the foundation holes.



HT3(SW) Jesus Aranda (left), HT2(SW) Joshua Smutzer (middle) and MR2(SW/AW) Gabriel Donovan (right) wrapping up this critical repair work.



The exoskeleton framework that HT2(SW) Joshua Smutzer and HT3(SW) Jesus Aranda custom made for retaining the main engine cooling pipes.

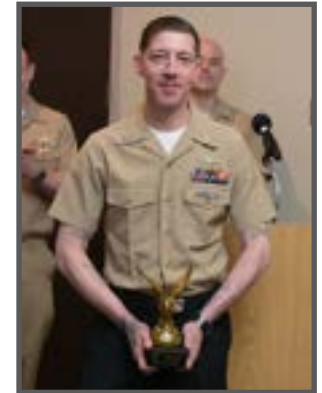
By Marvin Frilles, Regional NAMTS Coordinator and Photos by MC2 Adora Okafor



Congratulations to Trident Refit Facility, Bangor's (TRFB), Sailor of the year, Hull Technician 1st Class Jamila Habibullah and Junior Sailor of the Year, Hull Technician 2nd Class Austin Buckner. Habibullah earned the NAMTS Shipfitter Navy enlisted classification (NEC) at a prior command and went on to earn her NAMTS Pipefitter NEC last year at TRFB. Buckner earned his Shipfitter NEC at TRFB in 2021 and is currently using his skills at sea aboard USS Ramage (DDG 61).



HT1 Jamila Habibullah



HT2 Austin Buckner.

By Kirk Jeppson, Regional NAMTS Coordinator



Congratulations to Puget Sound Naval Shipyard & Intermediate Maintenance Facility (PSNS & IMF) Everett Detachment's 2022 Junior Sailor of the Year (JSOY), GSM2 Alexander Sabatino! He holds the NAMTS Gas Turbine (Mechanical) Navy Enlisted Classification and was promoted to GSM1

after being named JSOY. GSM 1 is currently one of the work leads in the Gas Turbine Shop, is a qualifier, and stands in on NAMTS oral boards. Congratulations, GSM1, and keep up the great work!



GSM2 Alexander Sabatino



Sailors in the Spotlight



By Doug Scholl, Regional NAMTS Coordinator



Southwest Regional Maintenance Center's (SWRMC) Sailor of the Year is MR1 Junior Fundoh. While at SWRMC, MR1 Fundoh earned four Navy Afloat Maintenance Training Strategy Navy Enlisted Classifications (NEC). In the three years he was stationed at SWRMC, Fundoh earned the following:

- NAMTS Inside Machinist (August 2020)
- NAMTS Valve Repair Technician (August 2021)
- NATMS Watertight Closure Maintenance Technician (November 2021)
- NAMTS Pump Repair Technician (February 2023)

"In his three years here not only did he strive to take every opportunity to improve himself, but he encouraged his fellow Sailors to do the same. Under his tutelage, many of our 'A' school firemen that report to SWRMC end up departing as Petty Officers; these Sailors are on two year orders before reporting to the fleet, all earning the NAMTS Inside Machinist NEC. It was no surprise that MR1 was selected as SOY for SWRMC," said SWRMC Regional NAMTS Coordinator, Doug Scholl.



MR1 Junior Fundoh, 2022 SWRMC Sailor of the Year

MR1 Fundoh has since transferred to USS Abraham Lincoln (CVN 72).

By Felicia Reid, Regional NAMTS Coordinator and Photos by Shelby West, NNSY PAO



Congratulations to Norfolk Naval Shipyard's (NNSY) Sailor of the Year, Engineman 1st Class Jose Paganlopez, Junior Sailor of the Year, MR2 Daryl Rabara-brokate and Blue Jacket of the Year, Machinist Mate 3rd Class Ezra Bides. Paganlopez served as the Assistant Command Job Qualification Requirements (JQR) Coordinator and earned the NAMTS Diesel Engine Repair Governor & Injector Repair

Navy enlisted classification code (NEC) at NNSY in 2022. He is currently enrolled in NAMTS Valve Repair Technician. Rabara-Brokate earned his Inside Machinist NEC in 2022. He is currently using his skills at Naval Special Warfare Group EIGHT. Bides earned her NAMTS Valve Repair Technician NEC at NNSY in 2021. She is currently enrolled in Pump Repair Technician.



EN1 Jose Paganlopez, NNSY Sailor of the Year



MR2 Daryl Rabara-Brokate, NNSY Junior Sailor of the Year



MM3 Ezra Bides, NNSY Blue Jacket of the Year

By MMCS Ken Gosling, USS Thomas Hudner (DDG 116)



Congratulations to Machinery Repairman Fireman Camacho for professional achievement in the superior performance of his duties while serving on USS Thomas Hudner (DDG 116). MRFN Camacho was recognized on February 10, 2023, for being the creative Sailor who manufactured a new latching assembly for the dryer out of a stronger material, thus improving the life expectancy of the part. The ship's main drying machine door securing assembly deteriorated from normal wear and tear and the replacement part became quite the challenge of locating an original manufacturer's part for replacement through Navy supply channels while additionally providing critical quality of life services for habitability onboard in laundering services for the crew. These self-sufficient skills not only avoided a potential casualty repair but also an expensive contractor-required ship visit of approximately \$2,000.00. Fireman Camacho's exceptional professionalism, initiative and loyal devotion to duty reflected credit upon him and were in keeping with the highest traditions of the United States Naval Service.

machine door securing assembly deteriorated from normal wear and tear and the replacement part became quite the challenge of locating an original manufacturer's part for replacement through Navy supply channels while additionally providing critical quality of life services for habitability onboard in laundering services for the crew. These self-sufficient skills not only avoided a potential casualty repair but also an expensive contractor-required ship visit of approximately \$2,000.00. Fireman Camacho's exceptional professionalism, initiative and loyal devotion to duty reflected credit upon him and were in keeping with the highest traditions of the United States Naval Service.



NAMTS Afloat Training Activities (NATA)



Over twenty-five years ago, in 1996, the Navy Afloat Maintenance Training Strategy (NAMTS) program was established to provide Sailors with the opportunity to enhance their knowledge and skills through hands-on journeyman task accomplishment; the program was initially developed and stood up at shore-based Intermediate Level (I-level) Maintenance Activities. The goal was to enhance Hull, Mechanical, and Electrical rated Sailors' skills and improve fleet strike force organic maintenance capability, material self-sufficiency, and enhance operational readiness. In 2014, Commander, Navy Regional Maintenance Center (CNRMC) expanded NAMTS and the program's Afloat Training Activities (NATA) were established. Initially, it was available on large platforms that had the capabilities to complete significant voyage repairs while Carrier Strike Groups and Expeditionary Strike Groups were deployed. USS Nimitz (CVN 68) was the test pilot for the NATA initiative, during which fourteen Sailors aboard the command enrolled in the program. The pilot aboard Nimitz proved to be highly successful, so additional NATA sites were established. Currently, there are 43 NATAs in the fleet, on CVN/LHD/LHA/LPD/LSD/AS/DDG(Pilot)/CG(Pilot) ship classes, with over 1,300 Sailors enrolled in 26 select NAMTS Job Qualification Requirement (JQR) skill areas. NAMTS affords Sailors the opportunity to earn NAMTS Navy Enlisted Classification (NEC) codes.

The program aboard these ships is managed by a senior enlisted member or junior officer designated by the Commanding Officer as the Command NAMTS Coordinator. Additionally, CNRMC NAMTS contractors (Afloat NAMTS Coordinators (ANC)) assist the ships with program management. CNRMC also provides NAMTS Afloat Mentors to assist with the over-the-shoulder technical assistance in conducting production work in support of completing the JQRs. In every sense of the word, these NATAs have become true "SEA" schools. In addition, the commands that have become NATAs are able to partner with Regional Maintenance Centers (RMC), Naval Shipyards (NSY) and Intermediate Maintenance Facilities (IMF) to accomplish more hands-on learning tasks/competencies that may not be available aboard their ship. NATA commands also have the opportunity to participate in NAMTS JQR reviews and new NAMTS JQR / NEC development. Each afloat unit has unique challenges due to ship scheduling, emergent work, manning shortfalls, and operational requirements. Overcoming these challenges takes the commitment of a dedicated team of Sailors who strive to improve themselves at every opportunity. With the ability to receive on-the-job, rating-specific hands-on experience, NATA ships are developing a more well-rounded Sailor and improving fleet organic maintenance capabilities. Recent news/updates from the NATA units include:

CVNs

Every Aircraft Carrier currently in-service in the United States Navy has a NATA and there are 391 carrier Sailors enrolled in the NAMTS program (197 on the East Coast Carriers and 194 on the West Coast Carriers) with 29 graduates in the last 12 months.

NAMTS Afloat Training Activities

Aircraft Carriers

- USS Nimitz (CVN 68)
- USS Dwight D. Eisenhower (CVN 69)
- USS Carl Vinson (CVN 70)
- USS Theodore Roosevelt (CVN 71)
- USS Abraham Lincoln (CVN 72)
- USS George Washington (CVN 73)
- USS John C. Stennis (CVN 74)
- USS Harry S. Truman (CVN 75)
- USS Ronald Reagan (CVN 76)
- USS George H.W. Bush (CVN 77)
- USS Gerald R. Ford (CVN 78)

Amphibious Warfare Ships

- USS Wasp (LHD 1)
- USS Essex (LHD 2)
- USS Kearsarge (LHD 3)
- USS Boxer (LHD 4)
- USS Bataan (LHD 5)
- USS Iwo Jima (LHD 7)
- USS Makin Island (LHD 8)
- USS America (LHA 6)
- USS Tripoli (LHA 7)

Cruisers

- USS Cowpens (CG 63)

Destroyers

- USS Stethem (DDG 63)
- USS Jason Dunham (DDG 109)

Amphibious Transport Docks

- USS San Antonio (LPD 17)
- USS Mesa Verde (LPD 19)
- USS Arlington (LPD 24)
- USS Sommerset (LPD 25)
- USS John P. Murtha (LPD 26)
- USS Portland (LPD 27)
- USS Fort Lauderdale (LPD 28)

Dock Landing Ships

- USS Germantown (LSD 42)
- USS Tortuga (LSD 46)
- USS Rushmore (LSD 47)
- USS Harpers Ferry (LSD 49)
- USS Carter Hall (LSD 50)
- USS Oak Hill (LSD 51)
- USS Pearl Harbor (LSD 52)

Submarine Tenders

- USS Emory S. Land (AS 39)
- USS Frank Cable (AS 40)

Assault Craft Units

- Assault Craft Unit One (ACU 1)
- Assault Craft Unit Two (ACU 2)
- Assault Craft Unit Four (ACU 4)

Auxiliary Floating Dry Dock

- Dynamic (AFDL 6)



NAMTS Afloat Training Activities (NATA)



CVN Highlights

USS Dwight D. Eisenhower (CVN 69)

After successfully completing an availability period at Norfolk Naval Shipyard, USS Dwight D. Eisenhower (CVN 69) is back at its homeport of Naval Station Norfolk. The ship is undergoing a rigorous work-up cycle to get ready for another deployment. Command NAMTS JQR Coordinators, MRC Tyler Knopsnyder and MM1 Frescura, continue to provide monthly program updates, however, the ship's main focus remains on mission readiness and assessment preparations. Dwight D. Eisenhower presently has 27 Sailors enrolled in four NAMTS JQR Skill areas.

USS Carl Vinson (CVN 70)

USS Carl Vinson (CVN 70) is preparing for an upcoming selected restricted availability (SRA) while continuing to make NAMTS a vital element of their training and Sailor development. With their upcoming major availability, Carl Vinson's Command NAMTS JQR Coordinator (EMC Chris Belgrove) and Assistant NAMTS JQR Coordinator (MMC Erica Galeon), have continued to provide assistance and guidance to get Sailors through the NAMTS Core Fundamentals JQR so that they can begin working on their desired NAMTS NEC skill. Carl Vinson has 29 Sailors enrolled in ten NAMTS JQR Skill areas.

USS Theodore Roosevelt (CVN 71)

USS Theodore Roosevelt (CVN 71) has returned to San Diego, Calif. after an 18-month scheduled maintenance period for repairs and modernizations in Bremerton, Wash. New Command NAMTS JQR Coordinator, MM1 Juan Lucioromero, and Top Snipe, HTC M Sherman Adkins, are very motivated revamp the carrier's program. HTC M Adkins intends to have all engineering-rated Sailors who are eligible enrolled into the NAMTS program. Theodore Roosevelt currently has 12 sailors enrolled in six different NAMTS NEC skill areas.

USS Abraham Lincoln (CVN 72)

USS Abraham Lincoln (CVN 72) recently completed SRA and NAMTS training is back in full swing thanks to the efforts of Command NAMTS JQR Coordinator (MMC Perry Henkes) and Assistant Command NAMTS JQR Coordinator (MMC Thomas Soper). Both are actively working with other departments that have enrolled Sailors and with NAMTS SMEs to produce a schedule that benefits all enrolled, to help make sure each Sailor can take full advantage of what NAMTS has to offer. Abraham Lincoln has 82 sailors enrolled in six

rolled in six NAMTS JQR Skill areas.



USS Abraham Lincoln (CVN 72) BMs conducting knot tying exercise, a part of NEC Rigger/Weight Tester JQR. From Left to Right BMSN Shaniya AllenBaatz, BMSN Craig Woolbridge, BMSN Jackson Cooper, BM1 (SW) Anthony Coluccio, and BM3 Stephen Obarajesus. (Photo by Phil Simpson.)

USS John C. Stennis (CVN 74)

USS John C. Stennis (CVN 74) is currently at Newport News Shipbuilding undergoing its mid-life availability. The ship diligently strives to improve its NAMTS program by providing Sailors with qualified technician mentorship on hands-on job assignments, including those Sailors temporarily assigned to the Light Industrial Facility (LIFAC) in Hampton, Va. The Command NAMTS JQR Coordinator (MR1 Jason Vance) continues to display outstanding leadership in the management of the program; as he oversees 46 Sailors enrolled in eight NAMTS JQR Skill areas.

LHD / LHA Highlights

USS Kearsarge (LHD 3)

USS Kearsarge (LHD 3) is back in homeport at Naval Station Norfolk undergoing pierside availabilities and preparations for upcoming inspections and assessments. Since taking over the NAMTS program, their Command NAMTS JQR Coordinator, MM1 Cleon John, has done an outstanding job of getting the crew engaged in the program. The ship has 33 Sailors enrolled in eight NAMTS JQR Skill areas.

USS Boxer (LHD 4)

USS Boxer (LHD 4) is keeping NAMTS a mainstay. Since the new Command NAMTS JQR Coordinator (MM1 Trenton Isabel) assume responsibility for overseeing the program, four Sailors have earned a NAMTS NEC. Boxer has 62 Sailors enrolled in seven NAMTS JQR skill areas.



EM1(SW/AW) Jennylyn Armanza, a NAMTS Outside Electrical NEC holder, is changing out a power supply for the ship's vent fog precipitator in preparation for USS Boxer's upcoming Light Off Assessment. (Photo by Rizalito Antonio.)

USS Bataan (LHD 5)

MM1 Scott (Command NAMTS JQR Coordinator) has taken over USS Bataan's (LHD 5) NAMTS program and is diligently promoting opportunities to Sailors aboard. The ship is currently going through a rigorous qualification cycle and the Sailors assigned are eager to earn their NAMTS NECs. The ship has 34 Sailors enrolled in seven NAMTS JQR Skill areas.



NAMTS Afloat Training Activities (NATA)



LPD / LSD Highlights

USS San Antonio (LPD 17)

USS San Antonio (LPD 17) is in an extended availability at Marine Hydraulics International (MHI) Shipyard. Their NAMTS program is undergoing changes as EMC Hacker has taken over as the Command NAMTS JQR Coordinator. San Antonio has 34 Sailors enrolled in six NAMTS JQR Skill area.

USS Tripoli (LHA 7)

USS Tripoli has returned from a very successful deployment and has designated a new Command NAMTS JQR Coordinator (EM1 Nicholas Larson) and Assistant Command JQR Coordinator (ENS Kingman Lee). ENS Kim and EM1 Larson are working to add NAMTS to the weekly engineering planning schedule. They are challenging their NAMTS enrolled Sailors to dedicate more time to earning their NAMTS NEC. Tripoli has 47 sailors enrolled in eight NAMTS JQR Skill areas.

USS Somerset (LPD 25)

USS Somerset completed their Board of Inspection and Survey (INSURV) inspection and is now back to pushing the NAMTS program as a major source of Sailor skill enhancement. Somerset's Command NAMTS JQR Coordinators (ENC Harvey Macadaan and EN1 Chauncey Ang) have developed a vigorous program adding NAMTS to the Engineering Department's weekly planning schedule and they are also bringing awareness to the program by adding it to the ship's monthly indoctrination schedule. Somerset has 17 Sailors currently enrolled in seven NAMTS JQRS Skill areas.

USS Portland (LPD 27)

USS Portland is the newest ship to the NAMTS program. Portland's Command NAMTS JQR Coordinators (HT1 Robert Mayfield and BM1 Brian Bonilla) are making great strides and showing that NAMTS is a much wanted and needed program aboard Portland. Damage Control Assistant Lt. Kevin Barrientos stated, "Starting the NAMTS Program onboard USS Portland encourages our Sailors to take ownership of their equipment, continue to build their skill sets and learn to be self-sufficient. The NAMTS program helps our Sailors develop professionally and personally by earning NEC codes and building their competence and confidence in their technical abilities." Portland will be instituting NAMTS into their weekly engineering schedule and implement it into the Command Indoctrination, for all newly reporting Sailors. Ship's force is making sure all incoming Sailors know NAMTS is available to them, and to ensure the Sailors understand NAMTS importance for the ship maintenance capabilities while also assisting Sailors in the advancement of their professional careers.

CG and DDG Highlights

USS Cowpens (CG 63)

USS Cowpens is currently in an extended overhaul. The command's NAMTS program is busier than ever with 4 Sailors recently earning their NAMTS NECs. EN1 (EXW) Ian Joyce and GSM1 (SW/AW) Regina Alexander, DC1 (SW) Kidder Hatfield all earned their Pump Repair Technician NEC and HT1 (SW) Anthony Haynes earned his Shipfitter NEC.

Cowpens currently has 37 Sailors enrolled in nine NAMTS JQR Skill areas.



NAMTS SME Steve Constantino (L) and USS Tripoli (LHA 7) Command NAMTS JQR Coordinator EM1 (SW) Nicholas Larson (R) conduct a NAMTS in brief for Engineering Department EA division aboard USS Tripoli. (Photo by Phil Simpson.)

USS Stethem (DDG 63)

While preparing for their upcoming deployment USS Stethem (DDG 63) is using the NAMTS program to its fullest, qualifying ten Sailors with a NAMTS NEC during their drydock period. DC2(SW) Javier Ahumada and DC3 Nathan Harris earned their Watertight Closure NEC. EM1(SW) Pedro Gallegos, EM2 Johncarl Ayento, EM3 Koami Desaba, EM3 Victor Seledapello, and EM2 Harrison Allen all earned their Outside Electrical Repair Technician NEC. GSM1(SW) Jonathan Monek earned his Pump Repair, and Heat Exchanger NECs, while MM2 Denae Ishimine and MM3 Tristan Hewett earned their Valve Repair Technician NECs. Stethem is keeping the NAMTS program as the focal point of engineering weekly planning with 26 Sailors enrolled in nine NAMTS JQR skill areas.



Left: USS Stethem's DC1(SW) Jonson Fraix (NAMTS WT Closure NEC qualified) being assisted by Divisional Damage Control Petty Officers in removing a quick acting watertight door in preparation for equipment change out. (Photo by Ramir Pulido.)



Right: USS Stethem's DC1(SW) Jonson Fraix (NAMTS WT Closure NEC qualified) and EM3 (SW) Riley Sutliff (NAMTS Outside Electrical Repair Tech enrollee) removing a watertight door in preparation for equipment change out. (Photo by Ramir Pulido.)



GRADUATES

December 2022 - May 2023



NEC - 834A Valve Repair Technician

HT2 (SW) Nickolas Duran
 HT2 (SW/AW) Adrienne Richardson
 EM1 (SW/AW) Mervin Vitug
 GM2 (SW) Tyler Aughtman
 MM1 (SW) Samuel Bland
 EM2 (SW) Kshawn Cooper
 EN2 (SW) Stephen Cruz
 GM2 (AW) William Cutburth
 EM1 (SW/AW) Sierra Goldman
 GM2 (SW) Michael Gould
 MMN3 (SW/AW) Jayson Ignacio
 GM2 (SW) Ryan Johnson
 GM2 (SW) Brent Kerrigan
 FC2 (SW) Edgar Licon Jr.
 BMC (SW/EXW) Michael Mathhues
 HT2 (SW) Traland McCamey
 EN2 (SW) James Meadows Jr.
 GMC (SW/AW/EXW) Erin O'hara
 DC2 (SW/AW) Britton Raven
 HT1 (SW/AW) Danielle Read
 EMN1 (SW) Nathan Reas
 MR2 Nicole Alley
 HT3 Marshae Babbs
 DC2 Jason Brannin
 HTFN Guy Caquias
 ENFN Maria Cardonasanchez
 GM2 Jacob Castellanos
 MR2 Andrew Everoski
 HT2 Brianna Frain
 HT3 Isaiah Garciaplazola
 MMFN China German
 EN2 Kevin Mellor
 HTFN Tristan Phelps
 MM2 Daija Ranger
 HTFN Francisco Rivas Jr.
 HT3 Matthew Smith
 MMFN Jalayssia Washington

NEC - U08A Gas Turbine Repair Technician

GSM1 (SW) Dasia Clark

NEC - U11A Gas Turbine Electrical Repair Technician

GSE1 (SW) Vincent Creighton
 GSE1 (SW) Amber Santos

NEC - U17A Air Conditioning and Refrigeration

MM2 (SW/AW) Kristie Mayers

NEC - U18A Heat Exchanger Repair Technician

MM1 (SW/AW) Lele Lu
 MM2 (SW) Kareema Webb
 MM1 (SW) Manuel Reyes
 MM2 (SW) Michael Bailey
 MM1 (SW/AW) Carlos Cedeno
 GSM1 (SW) Gregory Hardy Jr.
 MM2 (SW) Daniel Kimball
 MM2 (SW) Jazmine Logan
 MM2 (SW/AW) Chase Nichols
 MM2 (SW) Christina Pagan
 MMC (SW/AW) Zachary Ruple
 MMN2 (SW) William Steimling
 MM2 Brandon Hansen



NEC - U33A Inside Machinist

MR3 Allena Rowton

NEC - U34A Outside Machinist

MR2 (SW) Steven Self

NEC - U47A Shipfitter

HT2 (SW/AW) Joseph Becker
 HT1 (AW) Michael Desanta
 HT1 (SW) Austin Griffiths
 HT1 (SW) Zachary Smith
 HT1 (SW) James Urban
 HTC (SW) Michael Vasquez
 HT3 Sydney Burroughs
 HTFN Sebastian Ghiorzo
 HT1 Tom Hodge
 HTFN Dylan Mandrell
 HTFN Joshua Metcalf
 HT3 Brock Minofaulkner
 HT3 Lillian Nicotra
 HTFN Michael Parker
 HT3 Donta Patterson
 HTFN Keyla Rojas
 HTFN Adonis Simmons
 HT2 Jonathan Turner
 HTFN Aaron Vandewoestyne
 HTFN Taylor West
 HT3 Jody Whitelaw Jr.

NEC - U52A Pipefitter

HT1 (SW) Jacob Kaiser
 HT1 (SW/AW) Alexis Rivero
 HTFN Hunter Moe
 HTFN Nicholas Schifano
 HT3 Noah Wengerd

NEC - 719B Shipboard Calibration Coordinator

MM1 (SW/AW) Carlos Cedeno
 GSE2 Pacharamart Khongkhangam
 GSE2 Javier McMillon

NEC - 736B Pump Repair Technician

MMC (SW/AW) Sean Adams
 MM2 (SW) Yemima Lorenzo
 GSM2 (SW) Dejon Wetzstein
 MMN2 Shawn Farmer

NEC - 797A Rigger/Weight Tester

BM3 (SW) Darian Argudin
 BM3 (SW) Tyleek Cassaberryfolks
 BM1 (SW/AW) Kwamitse Hodouto
 BM2 (SW) Vicente Jalomo
 BM1 (SW) Reginald Mason
 BM1 (SW/AW) Shanteille Terry
 MM1 (SW/AW) Justin Webb

NEC - 835A Watertight Closure Maintenance Technician

DC3 (SW) Andrew Barrett
 BM2 (SW/AW) Raiona Briscoe
 DCC (SW/AW/IW) Erika Cruzhernandez
 FC2 (SW) Maria Estradagatica
 EM1 (SW) Simon Huynh
 EM2 (SW/AW) Donovan Johnson
 DC1 (SW/AW) Jaylen Jones
 DC2 (SW) Allycia Lavallee



GRADUATES

December 2022 - May 2023



NEC - 835A Watertight Closure Maintenance Technician, cont'd

IC1 (SW) Ashley Martini
 DC2 (SW) Lorcan Murphy
 FCC (SW/AW) Bradley Nunnelly
 DC3 (SW/AW) Damien Rigg
 DC2 (SW/AW) Ivy Salcido
 DC2 (SW) Russelljude Santos
 DC3 (SW) Samantha Saunders
 BM3 (SW) Jacob Snyder
 DC1 (SW/AW/IW) Rodney Stokes Jr.
 DC2 (SW) Osvaldo Valentin
 DC2 (SW) Moniqueanne Vela
 DC1 (SW) Jonathan Walter
 DCFN Sabrina Smith

NEC - U39A Outside Electrical Repair Technician

EM2 (SW/AW) Robert Lerch
 EM1 (SW) Andres Rodriguez
 EM2 (SW) Vanessa Zamora

NEC - U54A General Shipboard Welder/Brazer

HT1 (SW) Michael Bewak

NEC - V15C Phalanx Gun & Ammunition Handling System Repair Technician

FCC (SW) Elizabeth Carter
 FC1 (SW) Lenea Ridep
 FC1 (SW) Wayne Sarver



NEC - 736B Pump Repair Technician

MM2 (SW) Joshua Bates
 MR1 (SW) Taylor Bowie
 MM3 (SW) Johana Garciaromero
 MM1 (SW) Patrick Kelley
 MM2 (SW) Argin Lilagan
 MM2 (SW) Brian Monroe

NEC - 834A Valve Repair Technician

MM2 (SW) Tate Ferguson
 GSE1 (SW) Krystina Fisher
 MM2 (SW) Stenley Fongsam
 MR2 (SW) Walker Iverson
 GSM1 (SW/AW) Brianna Johnson
 MR1 (SW) Floyd Manley
 GSM2 (SW) Rynell Perkins

MR1 (SW/AW) Michael Petronio
 MR1 (SW) Elizabeth Shelton
 MM2 (SW) Richard Spencer
 EN1 (SW) Trevor Trumbull
 MM2 (SW/AW) Kiera Watts
 GSM2 (SW) Demire Wilson
 MR2 (SW/AW) Mayra Zepedaalvarez

NEC - U34A Outside Machinist

MM2 (SW) Tierra Diouf
 MM2 (SW) Cole Ratcliffe

NEC - U39A Outside Electrical Repair Technician

EM2 (SW) Michael Cooper
 EM1 (SW) Lakeya Rumph

NEC - U40A Inside Electrical Repair Technician

EMC (SW/AW) Joshua Stribling

NEC - U47A Shipfitter

HT2 (SW) Dominic Lorenzo
 HT2 (SW) Tyree Thiena

NEC - U54A General Shipboard Welder/Brazer

HT2 (SW/AW) Juan Otero III
 HT2 Victoria Morris



NEC - 761A Hydraulic Repair Technician

GSM2 (SW) Allester Opong
 MM2 (SW/AW) Christina Duarte
 GSM2 (SW/AW) Keith Daye Jr.
 MMC (SW/AW) Daniel Ouyang
 MM2 (SW/AW) Tierra Roberts

NEC - 797A Rigger / Weight Tester

EM2 (SW) Steven Hoffa
 BM2 (SW) Cliffordjohn Manilag

NEC - 834A Valve Repair Technician

HT1 (SW) Jessica Negrete
 MM2 (SW) Israel Cornejo
 HT2 (SW) James Fredrick
 MM1 (SW) Kenna Hall IV
 EN2 (SW) Josef Hughes
 HT1 (SW/AW) Joshua Midwin
 HT1 (SW) Deven Nettles
 HT2 (SW) Hunter Priest
 MR1 (SW) Raygie Ting

NEC - 835A Watertight Closure Maintenance Technician

EMFN (SW) Benny Hodges Jr.



GRADUATES

December 2022 - May 2023



NEC - U17A Air Conditioning and Refrigeration

MM2 (SW) Caleb Lorenzo
MM2 (SW/AW) Jasper Villasis

NEC - U18A Heat Exchanger Repair Technician

MM2 (SW/AW) John Eisenschenk
MM1 (SW) Logan Platt
MM2 (SW/AW) Ericson Magnaye
MM1 (SW/AW) Thomas Neal II
MM2 (SW/AW) Jacob Scott
MM3 Jacob Ellis

NEC - U26A Diesel Engine-Governor & Injector Repair Technician

EN2 (SW) Brandon Balino
ENC (SW) James Buhrman
EN2 (SW) James Campos
EN2 (SW) Linell Remekie
EN2 (SW/SCW) Armoni White
EN3 Nicole Jacobs

NEC - U40A Inside Electrical Repair Technician

EM2 (SW/AW) Luigi Giordano
EM2 (SW) Justin Thompson

NEC - U47A Shipfitter

HT2 (SW/AW) Thomas Kozlowski II
HT1 (SW) Malcolm Luckie



NEC - 736B Pump Repair Technician

MM2 (SW) Dale Littlefield
MM1 (SW) Samuel Wallace
MM1(SW) Joshua Bollinger

NEC - 797A Rigger / Weight Tester

BM2 (SW) Joshua Centeno
BM1 (SW) Felix Fernandez
BM2 (SW) Robert Sahagun
BM2 (SW) Reece Weaver

NEC - 834A Valve Repair Technician

GM2 (SW) Montie Hewitt
HT2 (SW) Dejadestanae Jackson
GMC (SW) Matthew McDonough
EN2 (SW) Andrew Snelson
GM2 (SW) Kristopher Thor

NEC - 835A Watertight Closure Maintenance Technician

HT1 (SW) John Henry
GSE1 (SW) Holly Zuniga

NEC - U08A Gas Turbine Repair Technician

GSM2 (SW) Jeannette Clarke
GSM2 (SW) Terrence Jackson

NEC - U11A Gas Turbine Electrical Repair Technician

GSE2 (SW) Bruce Huremovic

NEC - U33A Inside Machinist

MR2 (SW) Jenifer Iffrig

NEC - U34A Outside Machinist

MM3 (SW) John Rabanes

NEC - U39A Outside Electrical Repair Technician

EM2(SW/AW) Ryan Nelson

NEC - U52A Pipefitter

HT1 (SW/AW) Tiana Heyward

NEC - V82B Interior Communications Repair Technician

IC1 (SW/AW) Elizabeth Stark



NEC - 736B Pump Repair Technician

MM2 (SW/AW) Brandon Keith
DC2 (SW/AW) Brianna Sewell
MM2 (SW/AW/IW) Carlicia Harden
EN2 Thomas Lee
MMFN Adam Wellentin Jr.

NEC - 797A Rigger / Weight Tester

BM2 (SW) Justin Rose
BM3 (SW) Daniel Garcia
BM2 (SW) Brathan Lee
BM2 (SW) Daivontae Lumpkin
BM1 (SW) John Monroe
BM2 (SW) Maurice Morris Jr.
BM3 (SW) Keeynon Oliver Jr.
BM3 (SW) Mackenzie Thomas
BM2 (SW) Michael Wright
BM2 (SW/AW) Natalia Maldonado
BM3 Kristopher Allen II
BM2 Dejuan Bradley
BMC Michael St. Germain



GRADUATES

December 2022 - May 2023



NEC - 834A Valve Repair Technician

GM2 (SW) Bianca Boleware
MM1 (SW) Dmonte Byrd
EM1 (SW) Rudy Pablo
GM2 (SW) Jacob Robertson
BM2 (SW/AW) Anthony Parkman III
BMC (SW/AW/EXW) Adrian McClinton
GSM1 (SW/AW/IW) Yuriy Galustyan
MM2 Wyatt Allred
ENFN Tynekwa McArthur

NEC - 835A Watertight Closure Maintenance Technician

DC2 (SW) Michael Dyson
DC2 (SW) Kirstin Hill
BM2 (SW) Anthony MoranHernandez
HT1 (SW) Joseph Norris
MM1 (SW/AW) Michael Parmer
HTC (SW/AW) Ruben Torres
BMC (SW/AW/EXW) Adrian McClinton

NEC - U08A Gas Turbine Repair Technician

GSE1 (SW) Gage Bailey
GSMC (SW) Phillip Bullard Jr.
GSM2 (SW) Eduardo RodriguezGonzalez

NEC - U11A Gas Turbine Electrical Repair Technician

GSE2 (SW) Jonel Berahzer
GSE1 (SW) Andrew Meixsell
GSE1 (SW) Isaak Tafolla
GSE3 (SW) Andre Vedan
GSE2 (SW/AW) Phuoc Le
GSE1 (SW/AW) Damion Valadez

NEC - U17A Air Conditioning and Refrigeration

MM2 (SW) Amoni Boyd

NEC - U18A Heat Exchanger Repair Technician

MM2 (SW) Kameron Finchum
GSM2 (SW) Timothy Ireland II
GSM2 (SW) Kiethon Johnson
GSM3 (SW) Seth Livell
MM2 (SW) Luis Luviano
GSM2 (SW) Jonathan McLeod
GSM3 (SW) Garrett Misener
GSM3 (SW) James Winfield II
GSM3 David Narh

NEC - U26A Diesel Engine-Governor & Injector Repair Technician

EN2 (SW) Jabeau Julien
EN3 Sequoia Booze
ENFN Aadarsh Chaulagain
EN3 Elise Dade
EN3 VincentPan

NEC - U33A Inside Machinist

MR1 (SW/AW) Robert Andrews
MRC (SW/AW) Rene Gomez

NEC - U34A Outside Machinist

MM2 (SW/AW) Christopher Donahoo
MM2 (SW/AW) Michael Gipson
MM1 (SW/AW/IW) Adam Painton
MMFN Daniel Richards

NEC - U39A Outside Electrical Repair Technician

EM2 (SW) Kasey Wymys

NEC - U40A Inside Electrical Repair Technician

EM3 (SW) Zachary Chamizo
EM2 (SW) Joseph Johnson
EM2 (SW) Robert Obrian
EM1 (SW) Leopoldo Sotoreyes
EM2 (SW) Christian Yovan
EMC William Cotten
EM2JustinBaltzell

NEC - U52A Pipefitter

HT2 Katherine GarnettRivas

NEC - U54A General Shipboard Welder/Brazer

HT2 (SW) Nicholas Garzon
HT2 (SW/AW) Visal Sath
HT3 James Burrous
HT2 Olivia Phelps

NEC - V15C Phalanx Gun & Ammunition Handling System Repair Technician

FC1 (SW/AW) Bryan Dewanz



NEC - 736B Pump Repair Technician

MM2 (SW) Liam Briggs
MM1 (SW) Reynaldo Eslava
MR1 (SW) Junior Fundoh
MR2 Lei Shi

NEC - 797A Rigger / Weight Tester

EN2 (SW) Justin Chiles
BM2 (SW) Marvelous Brown
BMC (SW) David Dominguez
BM2 (SW) Elshalynn Madelar
BMC (SW) Cyron Tingzon
EN3 Aliah Williams

NEC - 834A Valve Repair Technician

EM1 (SW/IW) Vhanne Carpio
EM1 (SW/AW) ElijahJoshua Cruz
GSE1 (SW) Enrique Delacueva Jr.
EM2 (SW/AW) Zyrabelle Domantay
EN2 (SW) George Essien



GRADUATES

December 2022 - May 2023



NEC - 834A Valve Repair Technician, cont'd.

MM1 (SW) Austin Hamby
 GSM2 (SW) Shavez Bryant
 EM1 (SW) King Bungubung
 MM2 (SW) Joseph Burll III
 MM1 (SW/AW) Jeremie Casipit
 MM2 (SW) Alexander Dubose
 MM2 (SW/AW) Tony Gorham Jr.
 MM2 (SW/AW) Matthew Lawrence
 MM2 (SW) Thomas Musgrave
 MM2 (SW) Chester Randolph III
 GSM1 (SW) Gary Robinson Jr.
 FCC (SW/AW) Jacky Robinson
 MM2 (SW) Kevin RomeroVelasquez
 MM2 (SW) Kowalfky Thelusma
 EN2 (EXW) Ibiene Tobin
 EN1 (SW) Steve Treadway
 HTC (SW) Jared Volavka
 MM2 (SW) Michael Wegner
 EMC (SW) Kentrell Wells
 EM2 Angela Rivera
 EN3 Aliah Williams

NEC - 835A Watertight Closure Maintenance Technician

GM2 (SW/EXW) Breanna Thweatt
 EN2 (SW) George Essien
 GM2 (SW) Natalie Flores
 DC3 (SW) Lily Alderette
 DC3 (SW/AW) Darlan Davis
 IC2 (SW) Destiny Durgin
 MM1 (SW) Reynaldo Eslava
 MM1 (SW/AW) Carmen Godoy
 MM2 (SW/AW) Paula Izquierdo
 IC2 (SW) Sham Kumar
 GSM1 (SW) Patricia Lira
 DC2 (SW) Mikaela Bailey
 LS2 (AW) Chantel McCourt
 DC2 (SW/AW) Paola Navarro
 MM2 (SW) Dominic Palanca
 MM2 (SW/AW) Earlleneranelle Pilar
 IC2 (SW/AW) Kenya Rocha
 MM1 (SW) Anthony Terry Jr.
 IT2 (SW) Khadidra Washington
 DC3 Ellyson Hightower

NEC - U08A Gas Turbine Repair Technician

GSM2 (SW) Shavez Bryant
 GSM2 (SW/AW) Esperanza Enriquez
 GSM2 (SW/AW) Jessica Head
 GSM2 (SW/AW) Rayneice Keen
 GSM2 (SW) Zachery Kelsh
 GSM2 (SW) Rico Lina
 GSM2 (SW) Justin Schwarz

NEC - U52A Pipefitter

HT2 (SW/AW) Christopher Hayes

NEC - V82B Interior Communications Repair Tech.

IC2 (SW/AW) Sydney Bullock
 IC2 (SW/AW) Jacob Hamilton
 IC2 (SW/AW) Kenya Rocha
 IC2 (SW) Roberto Vazquez
 IC1 (SW/AW) Josh Weiss
 IC2 Junior Ducatel
 IC1 Joseph Rivera

NEC - U47A Shipfitter

HT1 Patrick Edmond

NEC - U11A Gas Turbine Electrical Repair Tech.

GSEC (SW/AW) Ulysis Nerizon

NEC - U17A Air Conditioning and Refrigeration

MM1 (SW/AW) David Whaley

NEC - U40A Inside Electrical Repair Technician

EM2 (SW) Sibio Sun

EM1 (SW/AW) Sherrod Glover

NEC - U26A Diesel Engine-Governor & Injector Repair Tech.

EN2 (SW) Samuel Babalola

EN2 (SW) Dontae Bowman

EN1 (SW/AW) Alfredo Granados II

EN2 (SW) James Love

EN2 (SW) Keyonna Martin

EN2 (SW) Andrew Zuniga

EN2 Christopher Gaceta

NEC - U33A Inside Machinist

MR2 (SW/AW) Aaronanthony Avila

MR2 (SW/AW) Jeremy Brace

MRC (SW) Charles Grossruiz

MR1 (SW/AW) Frances Hinojosa

MR2 (SW) Wylleon Maximillian

MRFN Mengjin Huang

NEC - U34A Outside Machinist

MM2 (SW) Austin Kilgore

MM2 (SW) Haily Morales

MM1 (SW/AW) Zuleyma Porrasiarra

MM2 (SW) Jonathan Seabrook

MM1 (SW) Aaron Skinner

NEC - U39A Outside Electrical Repair Technician

GSE1 (SW) Linglei Li

EM1 (SW) Wing Au

EM1 (SW/AW) Justin Belski

EM1 (SW) Roshad Devaughn

EM1 (SW) Iris Garcia

EM1 (SW/AW) Nicholas Hernandez

EM1 (SW) Ana Libstorff

GSE1 (SW) George Mendez

EM2 (SW/AW) Lydie Toe

EM1 (SW) Nicole Yorgesen

EM1 (SW) Lijun Yu

EM2 Cody Vincent

EM2 Natalie Zuniga

NEC - V15C Phalanx Gun & Ammunition Handling System Repair Technician

FC2 (SW/AW) Edgar Munoz

FC1 (SW) Jack Perry

FCC (SW) Tiffany Sawleri

NEC - 860A Corrosion Control Program Technician

DC1 (SW) Tony Arguello

GMC (SW) Clare Calvery

DC2 (SW/AW) Joseph Gleeson



GRADUATES

December 2022 - May 2023



NEC - 736B Pump Repair Technician

MM3 (SW) Ricardo Estrada
MM2 (SW) Devan Vick
MM3 (SW) Miriam Ybanez

NEC - 761A Hydraulic Repair Technician

MM3 (SW) Nathaniel Farmer

NEC - 797A Rigger / Weight Tester

BM1 (SW/AW) Lanh Dinh
BM2 (SW/AW) Cheyenne Moscoso

NEC - 834A Valve Repair Technician

MM2 (SW) Austin Neubrand
MM2 (SW/AW) Christopher Wemer
MM2(SW)MyssticHerbstreith

NEC - U18A Heat Exchanger Repair Technician

MM2 (SW) Dean Alberstadt
MM3 (SW) Evan Hill
MM1 (SW) Jacob Nelson
MM2 (SW) Dalton Swaim

NEC - U33A Inside Machinist

MR2 John Jones

NEC - U34A Outside Machinist

MM2 (SW) Dominic Scarangelli

NEC - U39A Outside Electrical Repair Technician

EM2 (SW) Kerena Baker
EMN2 (SS) Thomas Schmidt
EM3 (SW) Henry Vargas Jr.
FTSN (SW) Lorenzo Vigil

NEC - U40A Inside Electrical Repair Technician

EM1 (SW) Christopher Lanthorn
EM2 (SW) Tarial Malone
EM1 (SW/AW/IW) Julian Miller
EM3 (SW) Trevor Payton

NEC - U47A Shipfitter

HT2 (SW/AW) Jacob Denault
HTFR (SW) Joseph Laminack
HT2 (SW) Jesse Lyvere
HTFN (SW) Michael Waller III



NEC - U54A General Shipboard Welder/Brazer

HT3 Atlas Wolfheart



NEC - U17A Air Conditioning and Refrigeration

MMC (SW/AW) Kenneth Jenkins

NEC - U39A Outside Electrical Repair Technician

EM3 (SW/AW) Kevin Vicentesolis
EM2 John Walsh

NEC - U40A Inside Electrical Repair Technician

EM3 Gage Lincoln
EM3 Riley Quinn
EM3 Joshua Riggs
EM2 John Walsh



NEC - U54A General Shipboard Welder/Brazer

HT3 John Kueny



GRADUATES

December 2022 - May 2023



NEC - 736B Pump Repair Technician

MM1 (SW) Diana Murga

NEC - 834A Valve Repair Technician

MM2 (SS) Shane Belcher
MM2 (SW) Kira Hogg
GSM2 (SW) Eric Miller
MM2 (SS) Christopher Nagle
MM1 Allen Gates
MM1 Joseph Jackson
MM1 Michael Mahoney
GM1 Kentrell Pierson

NEC - 835A Watertight Closure Maintenance Technician

HT1 (SW) Ana Quirarte
DC1 Gideon Jones

NEC - U18A Heat Exchanger Repair Technician

EN1 Ronald Alomari

NEC - U26A Diesel Engine-Governor & Injector Repair Technician

EN2 Manuel Vargas

NEC - U33A Inside Machinist

MR1 Jason Lunstrum

NEC - U39A Outside Electrical Repair Technician

EM1 Kimberly Brown
EM2 Peter Oculien Jr.

NEC - U40A Inside Electrical Repair Technician

EM2 (SW) Andre Clarke Jr.
EM1 (SS) Jonathan Hoeksema
EM1 Kleber Toala



NEC - 834A Valve Repair Technician

MM2 (SW/AW) Khadaree Clerk

NEC - U39A Outside Electrical Repair Technician

EM3 Addlyr Dela Cruz
EM2 Jennifer Lomeliavila



NEC - U54A General Shipboard Welder/Brazer

HT1 (SW/AW) Steven Brand



NEC - 797A Rigger / Weight Tester

BM2 (SW) Cameron Peterson

NEC - U40A Inside Electrical Repair Technician

EM1 (SW) Ratsamy Hockenberry

NEC - U47A Shipfitter

HT1 (SW) Westin Evens

NEC - U52A Pipefitter

HT1 (SW) Laurin Bynoe



NEC - 797A Rigger / Weight Tester

BM3 (SW) Carlos Brown Jr.
BM2 (SW) Ismael Jordan

NEC - 834A Valve Repair Technician

MM2 (SW) Brandon Beverly

NEC - U47A Shipfitter

HT2 (SW) Angela Hrelja
HT2 Jacob Johnson



GRADUATES

December 2022 - May 2023



NEC - 736B Pump Repair Technician
GSM1 (SW/AW) Regina Alexander
GSM1 Jonathan Monek

NEC - 834A Valve Repair Technician
MM2 Denae Ishimine

NEC - 835A Watertight Closure Maintenance Technician
DC2 (SW) Javier Ahumada Jr.
DC3 Nathan Harris

NEC - U18A Heat Exchanger Repair Technician
GSM1 Jonathan Monek

NEC - U39A Outside Electrical Repair Technician
EM2 Johncarl Ayento
EM2 Koami Desaba
EM3 Victor Selemdapello



NEC - U47A Shipfitter
HT2 (SW) Megan Evans
HT2 (SW) Ana Reyes
HT2 (SW/AW) Jodine Roye
HT2 (SW) James Williams III

NEC - U52A Pipefitter
HT2 (SW/AW) Donyetta Skinner
HT2 (SW/AW) Jodine Roye



NEC - U47A Shipfitter
HT2 Charles Lomax

NEC - U54A General Shipboard Welder/Brazer
HT3 Jose Pineda Jr.



NEC - 834A Valve Repair Tech.
MM2 (SW) Brianna Bagwell
MM1 (SW/AW) Micah Roe
MMFN Tristen Burd
CTRSN Jaylen Frost
MMFN Maria Guzman
MM2 Joan Magill
MMFN Timothy Quiroz
HTFN Katelyn Sheats

NEC - U18A Heat Exchanger Repair Technician
MM2 (SW) Brianna Bagwell



NEC - U54A General Shipboard Welder/Brazer
HT1 (SW/AW) Steven Brand



NEC - U54A General Shipboard Welder/Brazer
HTFA Austin Ross



NEC - 736B Pump Repair Technician
GSM1 (SW/AW) Regina Alexander
DC2 (SW) Kidder Hatfield

NEC - 834A Valve Repair Technician
EN1 (SW/AW) Ian Joyce

NEC - U47A Shipfitter
HT1 Anthony Haynes

NEC - U52A Pipefitter
HT2 (SW/AW) Sahara AlonzoOlivarria



NEC - 835A Watertight Closure Maintenance Technician
DC2 Joshua Kerchaert
MR2 Jordan Point

***Congratulations to all
NAMTS graduates!***



NAMTS Training Available at Various Shore Maintenance Facilities



NEC	NEC Title	Ratings	MARMC	NNSY	SERMC	SWRMC	PNS DET SD	BANGOR	EVERETT	HRMC
U17A	Air Conditioning and Refrigeration Technician	MM	X	X	X	X		X		X
V15C	Phalanx Gun and Ammunition Handling System (PGAHS) Repair Technician	FC, GM	X		X	X			X	X
860A	Corrosion Control Program Technician	All Ratings				X				
U33B	Computer Numerical Control (CNC) Machinist	MR		X		X				
U26A	Diesel Engine, Governor, and Injector Repair Technician	EN	X	X	X	X				X
U11A	Gas Turbine (Electrical) Repair Technician	GS, GSE	X		X	X			X	X
U08A	Gas Turbine Repair Technician	GS, GSE, GSM	X		X	X			X	X
U54A	General Shipboard Welder/Brazer	HT	X	X	X	X		X		X
U18A	Heat Exchanger Repair Technician	DC, EN, GSM, MM	X		X			X	X	X
761A	Hydraulics Repair Technician	ABE, ABF, GS, GSE, GSM, MM		X				X	X	X
U40A	Inside Electrical Repair Technician	EM		X	X	X		X	X	X
U33A	Inside Machinist	MR	X	X	X	X	X	X	X	
V82B	Interior Communications Repair Technician	EM, ET, IC			X	X			X	
U39A	Outside Electrical Repair Technician	EM, GS, GSE	X	X	X	X		X	X	X
U34A	Outside Machinist	GS, GSM, MM, MR	X		X	X		X	X	
U52A	Pipefitter	HT	X		X	X	X	X	X	
736B	Pump Repair Technician	ABE, ABF, DC, EN, GSM, MM, MR	X	X	X	X	X	X	X	
797A	Rigger/Weight Tester	All Ratings	X		X	X		X	X	X
719B	Shipboard Calibration Coordinator	EM, EN, ET, GSE, GSM, IC, MM	X							
U47A	Shipfitter	HT	X	X	X	X	X	X	X	X
834A	Valve Repair Technician	All Ratings	X	X	X	X	X	X	X	X
835A	Watertight Closure Maintenance Technician	All Ratings	X		X	X			X	X



NAMTS Training is Available at these Facilities

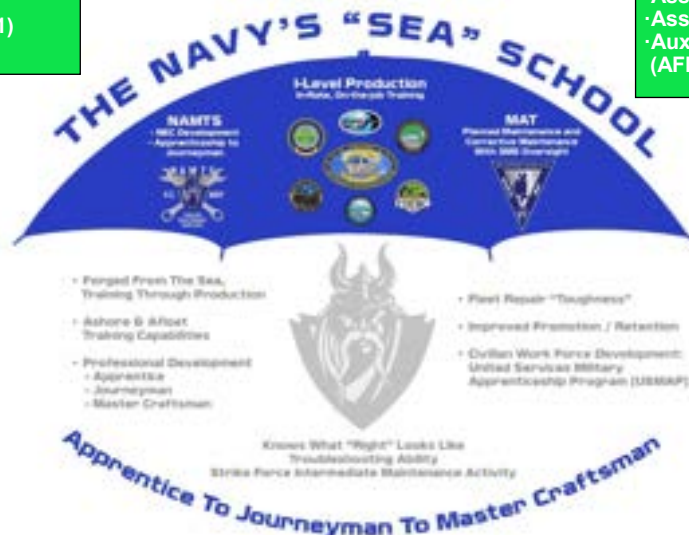


West Coast Afloat

- USS Nimitz (CVN 68)
- USS Carl Vinson (CVN 70)
- USS Theodore Roosevelt (CVN 71)
- USS Abraham Lincoln (CVN 72)
- USS Ronald Reagan (CVN 76)
- USS America (LHA 6)
- USS Tripoli (LHA 7)
- USS Essex (LHD 2)
- USS Boxer (LHD 4)
- USS Makin Island (LHD 8)
- USS Sommerset (LPD 25)
- USS John P. Murtha (LPD 26)
- USS Portland (LPD 27)
- USS Germantown (LSD 42)
- USS Rushmore (LSD 47)
- USS Harpers Ferry (LSD 49)
- USS Pearl Harbor (LSD 52)
- USS Stethem (DDG 63)
- USS Cowpens (CG 63)
- Assault Craft Unit One (ACU 1)

East Coast Afloat

- USS Dwight D. Eisenhower (CVN 69)
- USS George Washington (CVN 73)
- USS John C. Stennis (CVN 74)
- USS Harry S. Truman (CVN 75)
- USS George H. W. Bush (CVN 77)
- USS Gerald R. Ford (CVN 78)
- USS Wasp (LHD 1)
- USS Kearsarge (LHD 3)
- USS Bataan (LHD 5)
- USS Iwo Jima (LHD 7)
- USS San Antonio (LPD 17)
- USS Mesa Verde (LPD 19)
- USS Arlington (LPD 24)
- USS Ft. Lauderdale (LPD 28)
- USS Tortuga (LSD 46)
- USS Carter Hall (LSD 50)
- USS Oak Hill (LSD 51)
- USS Jason Dunham (DDG 109)
- Assault Craft Unit Two (ACU 2)
- Assault Craft Unit Four (ACU 4)
- Auxiliary Floating Dry Dock Dynamic (AFDL 6)





NAMTS Points of Contact



CNRMC - Code 900 Director, I-Level Production	(757) 400-0090
CNRMC - Code 910 I-Level Maintenance & Production	(757) 400-2127
CNRMC - Code 920 I-Level Programs/Knowledge Management	(757) 400-2486
CNRMC - Code 930 Sailor Professional Development Program Manager	(757) 400-2103
CNRMC - Code 931 Assistant Sailor Professional Development Manager	(757) 400-2467
NAMTS Contract Program Manager	(757) 578- 5448
NAMTS Assistant Contract Program Manager/Afloat Lead	(757) 578-5179
NAMTS RNC Lead	(757) 500-4630
NATA Scheduler/Coordinator	(757) 578-5342
RNC - Trident Refit Facility, Bangor	(360) 315-1800
RNC - Mid-Atlantic Regional Maintenance Center (MARMC)	(757) 400-2619
RNC - Norfolk Naval Shipyard (NNSY)	(757) 400-2620
RNC - Southeast Regional Maintenance Center (SERMC)	(904) 270-5126 x5464
RNC - Puget Sound Naval Shipyard & Intermediate Maintenance Facility (Everett)	(425) 304-5507
RNC - Southwest Regional Maintenance Center (SWRMC)	(619) 571-8109
RNC - Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility	(808) 473-8000 x6357
Industrial Plant Equipment - Lead	(757) 400-2208
Instructional Systems Designer	(757) 470-5934
Corrosion Control Program Manager	(757) 400-2466
NAMTS Public Affairs	(757) 500-4713
NAMTS Assistant Contract Program Manager/Afloat Lead	(757) 578-5179
NAMTS Afloat Training Activity (NATA) Scheduler/Coordinator	(757) 578-5341
Afloat NAMTS Coordinator Lead	(757) 226-8860
Afloat NAMTS Coordinator (Guam)	Remote support by ANC East or West
Afloat NAMTS Coordinator (West)	(619) 259-2278
Watertight Closure / CSMP / 3M / Core (East)	(757) 735-1398
Inside Machinist SME (East)	(904) 339-1712
Structural SME (East)	(757) 373-4016
Outside Machinery SME (East)	(757) 469-2332
Electrical SME (East) & Team Lead	(757) 578-5139
Outside Machinery SME (East)	(757) 351-3111
Watertight Closure / CSMP / 3M / Core (West)	(619) 259-2014
Inside Machinist SME (West)	(619) 259-2240
Outside Machinist SME (West) & Team Lead	(619) 292-2298
Outside Machinist SME (West)	(619) 259-2528
Electrical SME (West)	(619) 259-2790

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U.S.

NAVY

