NAVY AFLOAT MAINTENANCE TRAINING STRATEGY









In this issue:

- Rear Adm. Greene Assumes Command of SEA 21 and Regional Maintenance Centers
- Expeditionary Strike Group 3 Encourages its Leadership to Implement NAMTS
- Corrosion Mitigation Program Expands to Japan
- The Vital Role of Naval Maintenance and the NAMTS Program

Welcome to the 58th 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 43 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.

NAMTS News is brought to you by:

Rear Admiral William Greene, USN
Commander, Navy Regional Maintenance Center (CNRMC) &
Director, Surface Ships Maintenance, Modernization, and
Sustainment

Michael Haycock

Deputy Commander, Navy Regional Maintenance Center and Executive Director, Surface Ship Maintenance and Modernization

Eric K. Lind

Executive Director, Navy Regional Maintenance Center

CMDCM Demetric Hairston

Command Master Chief, Navy Regional Maintenance Center and Surface Ships Maintenance and Modernization

Douglas Marshall,
Deputy Director, CNRMC

Daniel Spagone, Sr.
Director, Intermediate Level Maintenance (C900)

Richard Martel
Expeditionary Maintenance/ LCS METs (C800)

Scott Buchanan
I-Level Programs/Knowledge Manager/
Supervisor of RMC Diving (C920)

Gerald Schrage
Sailor Professional Development Manager (C930)

Timothy Jones
Assistant Sailor Professional Development Manager (C931)

Kat Ciesielski NAMTS Public Affairs

On the cover (from top then L-R):

- 1) The amphibious transport dock ship USS New Orleans (LPD 18), front, the amphibious assault ship USS Makin Island (LHD 8) and the amphibious dock landing ship USS Pearl Harbor (LSD 52) transit the Indian Ocean on May 08, 2012. The Makin Island Amphibious Ready Group is deployed to the U.S. 7th Fleet area of operations. (Photo by Chief Petty Officer John Lill.)
- 2) USS Harpers Ferry's (LSD 49) DCFN Joshua Neu and OS3 Del Dennis, who are assigned to the ER09 Damage Control Petty Officer Work Center, prepare to install a watertight door on August 02, 2023. This newly refurbished door will have its hinge assembly upgraded. (Photo by Ramir Pulido.)
- 3) GSM1 Jason Kocher, GSM2 Sagar Patel, and GS<mark>M1 Noel Dionicio installing a GTG</mark> aboard USS Wayne E. Meyer (DDG 108) on September 07, 2023. (Photo by GSM1 Joseph Pennington.)
- 4) USS George H.W. Bush's (CVN 77) Work Center Supervisor, EM2 Josh Roman, supervises as EM2 John Walsh lays alpha phase coils in a 440v three-phase electrical motor during a recent deployment. (Photo by EM3 Kevin Vicentesolis.)

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.

NAMTS News i January 2024

NAMTS News Contents

Rear Adm. Greene Assumes Command of SEA 21 and Regional Maintenance Centers	1
CNRMC Leadership Message	2
USS George H.W. Bush (CVN 77) Sailors Earn NAMTS NECs While Deployed	3
First in the Fleet: TRF Bangor Sailor Becomes the Navy's First to Earn the NAMTS CNC Machinist NEC	6
ESG 3 Encourages its Leadership to Implement NAMTS	7
NAMTS Plays Large Role During Simultaneous Replacement of Two Gas Turbine Engines	9
Topside Preservation Expands to Japan	11
Rust Busting Lasers and Composite Patches: Technology Working Hard for our Fleet	
Navy's Intermediate Level Maintenance Director Honored	15
USS Makin Island (LHD 8) Sailors Perform Watertight Closure Maintenance	16
USS Chosin (CG 65) and NAMTS Mentors Team Up for Success	17
New Submarine Auxiliaryman NECs	
A Look into the World of an EM at PSNS & IMF, Detachment Everett	19
NAMTS Standardization Conference 2023	20
USS Carney (DDG 64) NAMTS Sailor Puts Her Skills to Work	21
SurgeMain Sailor Earns NAMTS NEC	
HRMC Keeping Ships "Fit to Fight"	
Safety First (and Always!)	24
USS Dwight D. Eisenhower's (CVN 69) DC Division Prepares – for Deployment	25
SWRMC AC&R Shop Exemplifies ONE MISSION – ONE TEAM!	
Bataan ARG Deploys with Valve Test Stands Ready for Work	27
NAVSEA Improves Readiness of USS Bataan Sailors with New 3D Printing Capability	28
The Vital Role of Naval Maintenance and the NAMTS Program	29
NAMTS and Norfolk Naval Shipyard: Pillars of Excellence in Naval Maintenance	30
Sailors Taking Advantage of Down Time	31
SURGEMAIN NAMTS Update	32
Navy Participates in Defense Manufacturing Summit, Breaks Ground on New Training Center	33
Corrosion Control Program Technician Class Hosted by ACU 4	34
NAMTS Afloat Training Activities	35
June-October 2023 NAMTS Graduates	38
NAMTS Availability	44
Points of Contact	46

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



Rear Adm. Greene Assumes Command of SEA 21 and Regional Maintenance Centers



By Team Ships Public Affairs

WASHINGTON NAVY YARD – Rear Adm. William Greene relieved Rear Adm. Eric Ver Hage as Commander, Navy Regional Maintenance Center (CNRMC) and Director, Surface Ship Maintenance, Modernization and Sustainment, Naval Sea Systems Command (SEA 21) during a ceremony held Aug. 23 at the Washington Navy Yard.

RDML Ver Hage took on the dual roles at CNRMC and SEA 21 in April 2020, providing leadership and guidance through and beyond the COVID-19 pandemic while improving mission outcomes and workforce quality of service.

"It has been an honor to be part of this amazing SEA21/RMC team," said Ver Hage. "I am proud of the progress we've made together improving the maintenance, modernization and sustainment support we provide to our Surface Type Commander and fleet customers. While we have much more to do before we are satisfied, I leave with a sense of pride, and confidence that Rear Adm. Greene will continue to execute with excellence, while transforming our organization at the same time."

The NAVSEA Commander, Vice Adm. Bill Galinis, presided over the ceremony.

"Over the last 40 months, Eric has had one of the most, if not the most, demanding one-star jobs within NAVSEA if not the Navy," said Galinis. "Eric and his team have accomplished a great deal over the past three plus years where they have meaningfully improved the trajectory of surface ship maintenance, modernization and sustainment. Eric is a solid leader with a proven record of success over his career. I have no doubt that Eric's success will be further advanced under the leadership of Bill Greene as he brings tremendous fleet perspective and experience to the job.""

RADM Greene is an Engineering Duty Officer who most recently served as Director, Fleet Maintenance, U.S. Fleet Forces Command. Previous Flag tours include Director, Fleet Maintenance, U.S. Pacific Fleet and Deputy Commander for Industrial Operations (SEA 04). Other career highlights in-



NAVSEA Commander Vice Adm. Bill Galinis, center, presided over the ceremony as Rear Adm. William Greene, lett, relieved Rear Adm. Eric Ver Hage as Commander, Navy Regional Maintenance Center (CNRMC) and Director, Surface Ship Maintenance, Modernization and Sustainment, Naval Sea Systems Command (SEA 21) during a ceremony held Aug. 23 at the Washington Navy Yard. (Photo by Team Ships Public Affairs.)



Rear Adm. William Greene addresses those in attendance at the Change of Command ceremony during which he relieved Rear Adm. Eric Ver Hage as Commander, Navy Regional Maintenance Center (CNRMC) and Director, Surface Ship Maintenance, Modernization and Sustainment, Naval Sea Systems Command (SEA 21 on held Aug. 23. (Photo by Team Ships Public Affairs.)

clude serving as the 84th Commander of Portsmouth Naval Shipyard; Chief of Staff and Military Deputy for Shipyard Operations at SEA 04; Production Resources Officer and then Operations Officer at Puget Sound Naval Shipyard and Repair Officer at Pearl Harbor Naval Shipyard.

As NAVSEA's Directorate for Surface Ship Maintenance, Modernization and Sustainment, SEA 21 is the dedicated life cycle management organization for the Navy's in-service surface ships and is responsible for managing critical modernization, maintenance, sustainment, foreign military sales, training, and inactivation programs.

CNRMC is a NAVSEA Echelon 3 headquarters that oversees the operations of RMCs in their execution of surface ship maintenance, modernization and sustainment. The RMCs, located in Norfolk, Virginia; Mayport, Florida; San Diego, California; Naples, Italy; Rota, Spain; Manama, Bahrain; and Sasebo and Yokosuka, Japan; and Singapore, are responsible for coordinating the depot- and intermediate-level maintenance of the Navy's surface fleet. CNRMC is also responsible for the coordination of contracts management and oversight, technical assist, and intermediate-level maintenance activities at Northwest RMC at Puget Sound Naval Shipyard, Washington; and Hawaii RMC, embedded in the Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility.

Rear Adm. Ver Hage's next assignment will be as Special Assistant to the NAVSEA Commander.



CNRMC Leadership Message



Since taking on the roles of Commander, Navy Regional Maintenance Centers and Director, Surface Ship Maintenance, Modernization and Sustainment (CNRMC/SEA 21) this past August, I have had the opportunity to see our NAMTS Sailors in action supporting the wartime readiness of the Fleet. The need for this support was once again highlighted in the aftermath of the October 7th Hamas terror attacks on Israel. The Navy now has two Carrier Strike Groups and one Amphibious Ready Group in the 5th and 6th Fleet AORs in an effort to prevent the war from widening and bringing in other countries, such as Iran. And our ships have already been actively engaged in conflict, with the USS Carney (DDG 64) shooting down several cruise missiles and drones while operating in the Red Sea. This is what wartime readiness is all about: Ensuring our ships are ready to go into harm's way on short notice, sustaining prolonged operations and being ready to provide necessary repairs in order to keep our ships in the fight.

In my previous role as Fleet Maintenance Officer, I watched our ships complete CNO availabilities, leave the maintenance phase and enter the training phase as they prepared for deployment. While these ships were underway in the local operating areas, there was a constant stream of distance support, tech reps and parts headed out to keep them operating — Why try to fix a casualty yourself when you can get the experts to fly out to the ship the same day?



Commander, Navy Regional Maintenance Center Director, Surface Ship Maintenance, Modernization, and Sustainment

Even while deployed, our warships can depend on a worldwide network of support. However, being too dependent on the shore for support is a big problem. Why? In a conflict, our ships will likely be operating in what is known as a "contested logistics environment." That is a fancy way of saying that parts and tech reps will not be flying in, and the ship will probably be under "Emission Controls," or EMCON, with no calls going in or out for distance support. In wartime we must be able to rely upon our own organic maintenance capabilities. It will be up to the Sailors on the ships, with the skills and tools they have onboard at the time, to keep the ship operating and to deal with any casualties.

The Navy Afloat Maintenance Training Strategy (NAMTS) is breaking our dependence on the shore by producing Maintenance Warriors who are competent and confident in their ability to maintain their equipment/systems and, if necessary, perform complex maintenance or casualty repairs to enable their ship to continue the mission.

Here is where I need your help. For all you NAMTS graduates and those in the pipeline, you are going to be the subject matter experts on your ships. I need you to let your work center supervisor, CPO, and CHENG know that you are a Maintenance Warrior with the skills and training to take on the most challenging maintenance and repair tasks on the ships. The NAMTS program has given you the tools, and you are ready to put them to use. You should have the first crack at tough maintenance and repair tasks, and they should know that you look forward to training others to grow the ship's organic repair capability.

We are also working to provide you better software tools to support organic repair. The Navy Maintenance Repair and Overhaul (NMRO) program has been developed to replace the many legacy software programs that are needed to support shipboard maintenance and repair. NMRO will operate on a tablet that Sailors can take to the worksite to display drawings, tech manuals, and PMS tasks. NMRO will also provide Job Performance Aid (JPA) videos for numerous tasks, and the ability to write 2-Kilos and order parts. The NMRO tool was developed with Sailor input and is undergoing a limited deployment shipboard this year. NMRO is a game changer for organic shipboard maintenance and repair capability.

Thank you for all you do to support the fleet, especially all you NAMTS Sailors supporting wartime readiness! I look forward to meeting you as I visit our ships and field activities around the world.

Sincerely,

RADM Bill Greene

SEA 21/CNRMC



USS George H.W. Bush (CVN 77) Sailors Earn NAMTS NECs While Deployed



By Russ Lincoln, Afloat NAMTS Electrical SME



imitz-class aircraft carrier USS George H.W. Bush (CVN 77) returned to its homeport of Norfolk, Virginia, in April 2023, after a ten month deployment.

Much was accomplished aboard the carrier during her deployment and the Electrical Division and Power Shop were particularly ac-

tive in its progression with their Navy Afloat Maintenance Training Strategy (NAMTS) program.

While deployed, six Sailors in the Electrical Division earned eight NAMTS Navy Enlisted Classification (NEC) codes in NAMTS Inside Electrical Repair Technician and NAMTS Outside Electrical Repair Technician.

Ensign (ENS) Tyler Thigpen explained that the NAMTS enrollees/NEC holders completed approximately 38 inside electrical jobs (motors) and over 100 outside electrical jobs (other than motors) Job Sequence Number (JSN)s during their deployment. He said the program has been a big success and they are looking forward to getting others enrolled.

EM2 Gage Lincoln from Belfast, New York, who earned his NAMTS Inside Electrical Repair Technician NEC stated that the mentorship from NAMTS subject matter experts (SME) and the NAMTS training material aided him with his rating exam and is one of the main reasons he thinks he was advanced to EM2. The knowledge he received aided him and Electrical Division Sailors in the troubleshooting and reconditioning of over 18 motors and rewinding ten motors during their deployment. The reconditioning of a motor consists of disassembly of the motor for cleaning and/or other repairs such as mechanical or electrical, but it is not rewound. Ensuring these motors were repaired in a timely manner the first time allowed the command to meet their operational commitments. He recommends that all the Electrician's Mates (EM)



The motor rewind team takes a selfie after completing the installation of a ship ventilation motor. L-R: EM2 John Walsh, EM3 Kevin Vicentesolis, EM3 Josh Riggs, EM3 Riley Quinn, and EMFN Joe Trowbridge.

USS George H.W. Bush Electrical Division Sailors who earned NAMTS NECs during their last deployment

- EM2 John Walsh, NAMTS Inside Electrical Repair Technician and NAMTS Outside Electrical Repair Technician
- EM3 Kevin VicenteSolis, NAMTS Inside Electrical Repair Technician and NAMTS Outside Electrical Repair Technician
- EM2 Richard Cooper, NAMTS Outside Electrical Repair Technician
- EM2 Gage Lincoln, NAMTS Inside Electrical Repair Technician
- EM2 Joshua Riggs, NAMTS Inside Electrical Repair Technician
- EM2 Riley Quinn, NAMTS Inside Electrical Repair Technician

take part of the NAMTS program to make them a better EM for the Navy. "We pulled a lot of motors and changed a lot of bearings. We did an overhaul probably every other week. NAMTS is worth the time and worth the effort; I completed Inside [Electrical Repair Technician] and I'm working on Outside [Electrical Repair Technician]," said Lincoln.

EM2 Riley Quinn from Lake Isabella, California, earned her NAMTS Inside Electrical Repair Technician NEC during their last deployment. She was one of the key members in all the motor repairs conducted during the deployment. The NAMTS program provided exceptional insight to all the shop equipment and operational parameters allowing her to efficiently complete the motor repairs in a safe and timely manner. The knowledge she gained permitted her the insight to conduct training with other EMs in the shop, increasing their ability to operate the shop equipment safely. She is also now enrolled in the NAMTS Outside Electrical Repair Technician Job Qualification Requirements (JQR).

"Inside Electrical definitely familiarized me with a lot of equipment like the balancing machine, which I previously didn't know anything about. But if you read the chapter, there are a lot of good points about the purpose of it and how to use it; we don't use it often, but if we were to use it, the JQR definitely gave me some knowledge. It's kind of odd, but I actually liked the test; going through the JQR really prepared me for it. I feel like I was definitely able to help other people with certain subject because it gives you basic knowledge and gives you a lot of additional information about motors and fans. Because we do this every day, it was really helpful to retrain on it and get the confirmation that you were doing things right," shared Quinn.

EM2 John Walsh from Menifee, California, earned both the NAMTS Inside Electrical Repair Technician and NAMTS Outside Electrical Repair Technician NECs. During his qualification process, he learned a lot of information regarding the equipment/system safety and operational procedures and values the mentorship provided. In earning his qualifications, he quickly became one of the EMs the command relied on. In fact, he was selected to support a guided missile destroyer (DDG) fly-away team. They received a request for assistance



USS George H.W. Bush (CVN 77) Sailors Earn NAMTS NECs While Deployed





EM2 John Walsh and EM3 Riley Quinn apply soder to an overload relay. (Photo by EM3 Kevin Vicentesolis.)

with their Controllable Reversible Pitch (CRP) Propeller pump motor. The CRP system is a critical link in the propulsion plant. It changes the angle of the propeller blades. The CRP system is a critical link in the propulsion plant. It changes the angle of the propeller blades link in the propulsion plant. It changes the angle of the propeller blades for propulsion. With the data provided he would need to change out the bearing for the motor. Prior to being sent to the DDG, he had to ensure that he had all the tools and necessary parts to conduct a motor repair for the command. The job required him to disassemble, inspect and replace a motor bearing for the CRP pump motor. This repair was critical in keeping the DDG part of the battle group.

"I valued the safety tidbits that you don't normally think of that definitely helped out. NAMTS also helped a lot when it came to rigging; there were a lot of instructions on how to rig and we had to pull motors a lot, so the program helped with

that as well. My advice is to absorb as much knowledge as you can; NAMTS is a great program," shared Walsh. "In addition to our overhauls and rewinds, we also did two

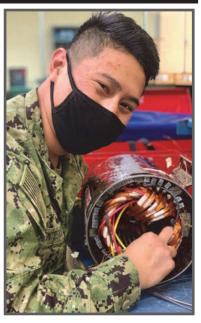


Above: Work Center Supervisor, EM2 Josh Roman, supervises as EM2 John Walsh lays alpha a phase coils in a 440v threephase electrical motor. (Photo by EM3 Kevin Vicentesolis.)

Left: EM2 John Walsh winding up PPGs for an electrical threephase motor. (Photo by EM3 Kevin Vicentesolis.)

rewinds for cruisers in the group. I also got sent over to a destroyer in the group to replace bearings," he added. Walsh also expressed gratitude for the mentorship he received from NAMTS SMEs.

EM2 Joshua Riggs from Birch Run, Michigan, earned his NAMTS Inside Electrical Repair Technician NEC while deployed. He expressed how helpful and detailed the mentor sessions and material were to him. The NAMTS program was a key component in his knowledge of motor repair and allowed him to provided quality training to other Sailors in E-Division. Some notable



EM3 Kevin Vicentesolis laying "A" phase coils in an electrical motor during the rewind process. (Photo by EM3 Riley Quinn.)

motor repairs he completed was for a guided-missile cruiser (CG) attached to the battle group. He recalls having rewound a lube oil service pump and a main space exhaust ventilation fan. Both motors were crucial for the command to remain part of the battle group. These jobs required him to disassemble, inspect, replace motor bearings, and meticulously take mechanical and electrical readings/measurements of the motor, ensuring he created and formed the coil winding of the motors to the exact specifications to produce the required speeds needed to operate the systems.

"I joined the Navy in 2020, specifically to be an Electrician," shared Riggs. "I went to rewind school where they do teach you everything you need to know about how to rewind motors,

but the NAMTS program really digs in, is a lot more hands- on where you're able to get your hands dirty by doing. That's how you become the 'goto guy' and get the experience and become the subject matter expert. What I really appreciated about the NAMTS program was the amount of detail that goes into it because a lot of the times, you get a generic idea of how to do something, but NAMTS goes into

details and specifics.



EM2 Richard Cooper troubleshooting one of the Aircraft Electrical Servicing System Frequency Converters . (Photo by Kat Ciesielski.)



USS George H.W. Bush (CVN 77) Sailors Earn NAMTS NECs While Deployed





Above: A motor from another ship within the battlegroup that was sent to USS George H.W. Bush (CVN 77) for their repair expertise.

Below: The motor after having been worked on by George H.W. Bush Sailors. (Photos by EM2 Joshua Riggs.)



There were a lot of small details and safety information that give you the critical knowledge that you need to do the job right and to teach others," said Riggs.

EM3 Kevin Vicentesolis from Chatsworth, Georgia, was onboard sharpening his skills as an electrician and earned both the NAMTS Inside Electrical Repair Technician and NAMTS Outside Electrical Repair Technician NECs. His profound knowledge and drive led him to assist in crucial repairs, including troubleshooting and repairing the AFT Vacuum Collec-

including troubleshooting and repairing the AFT Vacuum Collection, Holding and Transfer (VCHT) System. The AFT VCHT system controls half of the ships heads which made this job critical for health and comfort of the crew. They discovered the problem in the motor controller, which required them to completely rewire the controller and replace

two main contacts correcting the problem and getting the system back online. Vicentesolis expressed how the mentors, completing NAMTS and having the training material as references has been a key to their success. This job and other vital jobs allowed him and the other EMs to put into practice their knowledge and skill sets gained from NAMTS. Not only did he strive to take every opportunity to improve himself, but he encouraged his fellow Sailors to do the same, resulting in obtaining the qualification of four Sailors in NAMTS Inside Electrical Repair Technician and one qualifying in NAMTS Outside Electrical Repair Technician.

When talking about the VCHT repair Vicentesolis said, "We started troubleshooting and originally thought it was the motor and then we opened up the controller and realized the problem was in the controllers. We didn't have the drawings so we had to get them. It was about a two day job and because it was a habitability issue, we were working around the clock to get the system back up. NAMTS was really helpful in troubleshooting because Core Fundamentals and Inside Electrical talked about using all the correct tools for trouble shooting and making sure they're calibrated." He went on to share that, "NAMTS mentors like Mr. Russ [Lincoln] were great. MMC Idaho was help-

ful and MMC Jenkins was a great command **NAMTS** Coordinator; any questions we had, we could always find him. He was really busy, but he always made time for NAMTS; he was



"There were two mission critical motors, one for a lube oil pump and one exhaust motor that were sent to us from a destroyer that I was involved with rewinding. There was another motor from a cruiser that was also sent to us that we repaired for them," said EM2 Joshua Riggs. (Photo by EM2 Walsh.)

really motivated and willing to push us. We had great mentors on Bush who helped us get qualified."

EM2 Richard Cooper of Greenville, South Carolina, earned his NAMTS Outside Electrical Repair Technician NEC during deployment. He credited the mentoring sessions and material with intense understanding of the systems and equipment covered by the NAMTS Outside Electrical Repair Technician JQR. This prepared him to troubleshoot and repair several systems throughout the command. One notable system he serviced was the Aircraft Electrical Servicing System (AESS) Frequency Converters. This system provides electrical power that is suitable for servicing, starting, and maintaining aircraft deployed aboard aircraft carriers. EM2 Cooper maintained 94 units and troubleshot and repaired over 40 of these units while on deployment, allowing Aviation Squadrons assigned to George H. W. Bush to conduct their missions.

"I enrolled a month before we left [for deployment] and finished up, taking my oral board in early April. This was my first exposure to the NAMTS program and it was cool. It was intense, but you get a lot of knowledge and definitely learn a lot of stuff you wouldn't have otherwise, I think, because you can only put your hands on so many things here. It helped in learning about things that you don't see day to day," said Cooper. "The frequency converters, we deal with those all the time, especially being on deployment, it's always a huge thing with flight deck operations. I remember reading about it then we went and did something the next day or so and I just had a better understanding of the inner workings of it. To be able to trace it in my mind because before we were dealing with them as individual photos, but to see the whole system, the totality of it, and how it all works together and stuff like that, it definitely helped with the jobs," he added.

"Our NAMTS enrollees/NEC holders completed approximately 38 inside electrical (motors) and over 100 outside electrical (jobs other than motors) Job Sequence Numbers (JSN) during that deployment," said George H.W. Bush's Electrical Division Technical Assistant, ENS Tyler Thigpen of Luling, Louisiana. He also shared that the NAMTS program has been a success for the ship and that they look forward to getting others enrolled in the program.



First in the Fleet: TRF Bangor Sailor becomes the Navy's first to earn the NAMTS CNC Machinist NEC



By Marvin Frilles, Regional NAMTS Coordinator



It's not often that a Sailor volunteers themselves for a qualification process. Even less so with as much motivation and gusto that Machinery Repairman 2nd Class John Jones, attached to 31A Inside Machine Shop, Trident Refit Facility, Bangor, displayed after completing his Inside Machinist Job Qualification Requirement (JQR). He knew that as soon as it was

available at TRFB, he wanted to work on the Navy Afloat Training Maintenance Strategy (NAMTS) Computer Numerical Control (CNC) Machinist JQR. On February 13, 2023, Jones stepped into the NAMTS office and asked to be enrolled in the CNC Machinist JQR.

Over the next seven months, Jones worked diligently on learning how to program code, understand the syntax, and learn how to operate CNC mills and lathes. Inside Machine Shop Production Supervisor Jeshua Wood describes Jones's experience, "There's a lot to learn on these machines. He's a quick learner."

Inside Machine Shop Training Supervisor Joseph Trevino III continued, "It takes a while to qualify and be able to be let loose and machine on your own and Jones has been on his own for a while."

Jones has fabricated 10 flanges, 25 mock-up test fittings, 15 low pressure air fittings, 28 sockets, two 22-inch-long mill tool holders, and 1,500 lashing strap rivets to support work and testing for various shops.

When asked about his interest in the qualification Jones stated, "It's where the future of machining is going and it'll help me in and outside of the Navy. If I were to apply for a job at [TRFB], I know that I'd have a head start thanks to NAMTS. But I also wanted to increase my machining knowledge and ability."

Rick Smith, Master Chief Machinery Repairman (Retired), and Darrell Monroe, Chief Machinery Repairman (Retired), both of whom are NAMTS inside machine subject matter experts, have lauded the endless possibilities of CNC machining.

"It allows for a repetitive rate of production, with the ability to create thousands of parts a day to provide immediate availability," said Monroe.

Once a program is created to generate a part, the program is loaded into the machine, parts are set up and the response for the demand can be answered.

With the lack of formal Navy schools for CNC machining, Sailors take advantage of other forms of schooling through their local commands such as Workshops for Warriors with costs ranging from \$2,000 to \$25,000. There they can take advantage of learning how to program, which is the core to CNC machining.



The advantage of the NAMTS CNC Machining JQR is the convenience of learning from civilian counterparts at Regional Maintenance Facilities without obtaining funding for schooling and additional orders. It provides an excellent basis of programming for Sailors to enable them to use various styles of CNC machines.

Along with the help and guidance of Tool Maker Brian Lozano and Apprentice Trevor Blevins, Jones attests to learning something new every day. "One of the best parts is that if you have an issue or don't understand a problem, the civilians here will train you on how to do it and do it correctly, he said. "They are always willing to teach," said Jones.

Jones said that CNC machining was a completely new experience for him and that he found the CNC Machinist JQR helpful for those just getting into CNC and Mastercam. During the qualification, he became highly proficient in the use of G-codes (computer programing information) and the necessary machinery.

Jones took the post-exam on September 18 and after seeing his passing grade, immediately turned and stated that he wanted to do his certification board right away. He conducted and passed his board on September 21.

Jones, along with his wife and child call Port Orchard, Washington, home. His first command was amphibious assault ship USS America (LHA 6) based out of San Diego, California, where he served for three-and-a-half years before reporting to TRFB in December 2020. "I love it here at TRF. It's been a great experience and I've learned a lot from the civilians," said Jones.

Machinery Repairman 2nd Class John Jones stands as the Navy's first Sailor to earn the NAMTS CNC Machinery NEC.



ESG 3 Encourages its Leadership to Implement NAMTS



By Kevin Bond, Assistant NAMTS Program Manager



S everal commands within Expeditionary Strike Group Three (ESG 3) have reputable Navy Afloat Maintenance Training Strategy programs. Among them are Assault Craft Unit One (ACU 1), USS Tripoli (LHA 7), USS Essex (LHD 2), USS Boxer (LHD 4), USS Makin Island (LHD 8), USS Somerset (LPD 25), USS John Murtha (LPD 26), USS Portland (LPD 27),

USS Germantown (LSD 42), USS Rushmore (LSD 47), USS Harpers Ferry (LSD 49) and USS Pearl Harbor (LSD 52).

ESG 3 is comprised of three amphibious squadrons, two littoral combat ship squadrons, 32 warships, and nine naval support elements including more than 22,000 active-duty and reserve Sailors and Marines. ESG 3's mission is, "Through aggressive training and readiness, ESG 3 provides regional and combatant commanders with an agile, tailorable, forward-postured and immediately employable force, capable of projecting expeditionary striking power in the maritime, littoral, and inland environs in support of U.S. national interests."

The NAMTS program helps commands improve battlegroup organic maintenance capability and material self-sufficiency. While assigned to a RMC, IMF, NNSY, TRF or as in ESG 3's case, a designated afloat command, NAMTS Sailors can enroll in one of 26 different Journeymen Level Repair and Maintenance Technician programs; through hands-on shop production work accomplishment, they become proficient in in-rate skills critical to the fleet.

Prior to taking command of ESG 3, Rear Adm. Randall Peck was the 69th President, Board of Inspection and Survey (INSURV), where he was responsible for assessing the material readiness of the Fleet. When USS John C. Stennis (CVN 74) earned the Battle "E" [Efficiency] award in 2019, Peck was at its helm; the Battle "E" award recognizes crews with high levels of sustained proficiency and readiness to perform in an operational environment throughout a yearlong evaluation. For a command to earn the Battle "E" means that they have exemplified mission focus and technical expertise.

Rear Adm. Peck wants to give his Sailors every opportunity for



Commander, Navy Regional Maintenance Center's Director if Intermediate Level Maintenance, Daniel Spagone, Sr., briefs leaders of Expeditionary Strike Group Three commands on the Navy Afloat Maintenance Training Strategy program on August 15, 2023. (Photo by Kevin Bond.)



USS Harpers Ferry's (LSD 49) DCFN Joshua Neu and OS3 Del Dennis, who are assigned to the ER09 Damage Control Petty Officer Work Center, prepare to install a watertight door on August 02. 2023. This newly refurbished door will have its hinge assembly upgraded. (Photo by Ramir Pulido, NAMTS Mentor.)

them to learn and succeed, hence a recent request to have his team be briefed on the NAMTS program.

The ESG 3 brief took place on August 15, 2023, at Naval Base San Diego; among those in attendance were RDML Peck; Deputy Commander of ESG 3, Col. Kevin Norton; ESG 3's CMDCM Jasen Williams; Amphibious Squadron (COMPHIBRON) One's Commodore, Capt. Tate Robinson; COMPHIBRON Five's Commodore, Capt. James Harney; COMPHIBRON 5's CMDCM (SW/AW/IW) Mark Torres; COMPHIBRON Seven's Commodore, Capt. Justin Kabu; Commander, Navy Regional Maintenance Center's (CNRMC) Executive Director, Eric Lind; Director of Surface Ship Intermediate Level (I-Level) Maintenance (C900) for CNRMC, Daniel Spagone, Sr; CNRMC's Sailor Professional Development Program Manager, Gerald Schrage; CNRMC's I-Level Programs Manager, Scott Buchanan; and NAMTS team members Kevin Bond, Quinten Taylor, and Phil Simpson.



USS Somerset (LPD 25) EM1(SW) Johnpatrick Rana, a NAMTS Outside Electrical Repair Technician JQR enrollee, conducts final checks on a bi-polar amplifier unit prior to conducting an operational test on August 2, 2023. (Photo by Rizalito Antonio.)



ESG 3 Encourages its Leadership to Implement NAMTS





Aviation Electronics Technician 3rd Class Wendy Defermin, left, Culinary Specialist 3rd Class Giovanni Bennett, center, and Logistics Specialist 2nd Class Veronica Johnston, all assigned to amphibious assault ship USS Essex (LHD 2), apply lube to threading on a firemain before attaching the fire plug valve in preparation to bring the firemain back online aboard Essex in San Diego, Aug. 24, 2023. Essex is dry docked in San Diego conducting a maintenance period to upgrade and refurbish many key systems aboard. (U.S. Navy photo by Mass Communication Specialist 2nd Class Richard E. Anglin.)

RDML Peck began the brief leading with a discussion about the importance of meeting key missions to deliver full-spectrum naval power in support of fleet and operational commanders and how the professional expertise of the surface warrior and their abilities to perform Organic and Intermediate-level maintenance will play a critical role to the success of that mission which is of vital importance to our nation. He went on to explain that one of the keys to the professional development and improved expertise of the surface warriors includes the NAMTS program, which directly improves self-sufficiency and supports the ESG 3 mission objectives in every way. Spagone continued the brief by discussing the benefits of the NAMTS program.

Later the same day, Spagone and Schrage also conducted an ESG 3 commands brief with approximately 65 COs/XOs/CMCs/CHENGs and other command personnel in attendance. RDML Peck spoke to the group upon completion of their presentation, reiterating what he discussed at the earlier brief.

Over the next few months, ESG 3 plans to implement NAMTS afloat programs onboard all of its ships, giving their Sailors the opportunity to gain valuable hands-on skills and in-rate knowledge to help keep their ships fit to fight.



SAN DIEGO (June 26, 2023) – Fire Controlman 2nd Class Robert Taatjes, a native of Las Vegas, conducts maintenance on the Forward Close-In Weapons System aboard USS Boxer (LHD 4). Boxer is a Wasp-class amphibious assault ship homeported in San Diego. (U.S. Navy photo by Mass Communication Specialist 2nd Class Roland Ardon.)



SAN DIEGO — Aviation Ordnanceman 2nd Class Shaquille Brown, a native of West Palm Beach, Florida, and Aviation Ordnanceman 3rd Class Demonta Martin, a native of Montgomery, Alabama, inspect an adjustable weapons adapter ADU-514 in the Armament Weapons Support Equipment storeroom aboard USS Boxer (LHD 4). Boxer is a Wasp-class amphibious assault ship homeported in San Diego. (U.S. Navy photo by Mass Communication Specialist 2nd Class Roland Ardon)

There is a high likelihood in the near future that the United States Navy and ESG 3 will be called to act in operations short of war, low-intensity conflict, and/or high-intensity combat operations. During war a low-intensity long term conflict, there will be no fly-away repair teams nor onboard technical assist visits to rescue or repair our damaged ships. Self-sufficiency and a selfsustaining repair Intermediate Maintenance Activity are the keys to ensuring maximum operational readiness. As a deployable force, the Amphibious Readiness Group will constitute itself as a force capable of self-contained organic industrial repair capabilities, an afloat IMA, to the maximum extent possible to be executed in all permissive and non-permissive environments without substantial need for additional shore support. It is the intent of ESG 3 to leverage the NAMTS program to provide exceptionally trained journeymen and subject matter experts to improve the ability to maintain the readiness of the ships at the deckplate level. The goal is to improve the capability of the force through an increased level of knowledge, an increased sense of ownership, and an increase priority in being able to be self-sufficient when troubleshooting and repairing equipment.



SAN DIEGO (May 11, 2023) – Rear Adm. Randall W. Peck, left, prospective commander, Expeditionary Strike Group 3, is welcomed by USS Boxer (LHD 4) Commanding Officer Capt. Matthew Cieslukowski, center, and Amphibious Squadron 5 Commander Capt. Brian Quin on the quarterdeck of Boxer during a visit to the ship, May 11, 2023. Boxer is a Wasp-class amphibious assault ship homeported in San Diego. RDML Peck assumed command of ESG 3 two months after this photo was taken. (U.S. Navy photo by Mass Communication Specialist 3rd Class Bradley Kaminski)



NAMTS Plays Large Role During Simultaneous Replacement of Two Gas Turbine Engines



Article and photos by Scott Curtis, SERMC Public Affairs



hen the gas turbine engines (GTE) that power the U.S. Navy's Arleigh Burke-class guided missile destroyers in the 4th Fleet require repairs or replacement, the Gas Turbine Shop at

Southeast Regional Maintenance Center (SERMC) can handle virtually any job.

Recently, SERMC was nearly finished with a scheduled Continuous Maintenance Availability (CMAV) aboard USS Carney (DDG 64) when the shop was in the process of conducting inspections on the power turbine internals and turbine mid-frame liner on Number 1A and Number 2A GTE's.

The team quickly discovered the turbine mid frame liner had excess wear on the clocking pins, and when they pulled the exhaust gas thermocouple probes the team found they were all damaged beyond repair. Upon further inspection, the first stage on the power turbine exceeded serviceable limits, and both of the gas generator and power turbine modules required replacement. The Shop promptly received two emergent engine change out packages and sprang into action on both 1A and 2A GTEs.

"The LM2500 GTE is the Navy's most common propulsion engine, and they are subject to harsh operating conditions due to the saltwater environment at sea and varying operational load demands, so it is vital to have the GTEs operating at peak performance. Over the course of a GTE's lifecycle, heat and thermal wear cause parts to lose their protective coating, which is the number one reason GTEs are replaced on Navy ships," said Chief Petty Officer Gas Turbine Systems (Electrical) David Gross, the Gas Turbine Shop's Leading Chief Petty Officer.

In total, 41 SERMC Sailors helped with the synchronized change outs, consisting of 18 Navy Afloat Maintenance Training Strategy (NAMTS) qualified Gas Turbine Repair Techni-



1A GTM Team, from left to right; Gas Turbine Systems Technician (Mechanical) 2nd Class Charles Marshall, Gas Turbine Systems Technician (Mechanical) 3rd Class Tyler Class Little, Australian Navy Chief Petty Officer Nick Ryan, Gas Turbine Systems Technician (Mechanical) 1st Class Ryan Gamber, Gas Turbine Systems Technician (Mechanical) 2nd Class Bennie Netters, Gas Turbine Systems Technician (Mechanical) 2nd Class Ramona Ross, Gas Turbine Systems Technician (Mechanical) 2nd Class Jordan Mayer, Gas Turbine Systems Technician (Mechanical) 1st Class Nakobi Alleyne, Chief Petty Officer Gas Turbine Systems Technician (Electrical) Michael Miller.



Both cranes hard at work! Left reinstalling silencer's on 1A, and right preparing the old 2A GTM for transport.

cians, two Quality Assurance Inspectors, 19 Quality Assurance team members along with Marine Gas Turbine Inspectors (MGTI) from SERMC's Engineering Department who worked hand-in-hand and around the clock to complete both changeouts simultaneously.

The crew also included two Job Qualification Requirements (JQR) Team Leads who helped seven additional Sailors complete the change out portion of the NAMTS Gas Turbine Repair Technician JQR.

"The NAMTS JQR covers every step of the replacement from preparing the engine for removal, safely handling fuel and oil, tagging and bagging parts and ensuring mechanical and electrical connections have been disconnected before the engine is hoisted off the ship. We then reverse the process all the way through mounting and testing the new engines," said Gas Turbine Systems Technician (Mechanical) 3rd Class Tyler Little, who has earned two NAMTS NECs at SERMC.

"This was a great opportunity to showcase the talent and capabilities we have at SERMC. We procured two new engines, gathered all of the required tools, did our own rigging and our technicians were quickly prepared for the urgent replace-



2A GTM Team (From left to right; Gas Turbine Systems Technician (Mechanical)
1st Class Michael Ghilardi, Australian Navy Chief Petty Officer Nick Ryan, Gas
Turbine Systems Technician (Mechanical) 2nd Class Michael Blasucci, Gas
Turbine Systems Technician (Mechanical) 2nd Class Brenda Lipe, Gas Turbine
Systems Technician (Mechanical) Jiselle Torres, Gas Turbine Systems Technician
(Mechanical) 2nd Class Stephen Solomon, Gas Turbine Systems Technician
(Mechanical) 2nd Class DeMarcus Rembert, Gas Turbine Systems Technician
(Mechanical) 1st Class Xavier Barrios and Chief Petty Officer Gas Turbine
Systems Technician (Electrical) Boyle.



NAMTS Plays Large Role During Simultaneous Replacement of Two Gas Turbine Engines





A portion of the Pier Team. Gas Turbine Systems Technician (Mechanical) 2nd Class Eduardo Rodriguez-Gonzalez, Gas Turbine Systems Technician (Mechanical) 3rd Class Cody Phillips, Gas Turbine Systems Technician (Mechanical) 3rd Class Jordan Clay, Gas Turbine Systems Technician (Mechanical) 2nd Class Philip Struble, Gas Turbine Systems Technician (Mechanical) 2nd Class Joshua Dillin, Gas Turbine Systems Technician (Mechanical) 3rd Class Damon Sugrue, Gas Turbine Systems Technician (Mechanical) 2nd Class Jonathan Pate and Gas Turbine Systems Technician (Mechanical) 3rd Class Rodolfo Falcon.

ments," said Gas Turbine Systems Technician (Electrical) 1st Class Gage Bailey, who just earned his third NAMTS NEC at SERMC.

Ten Sailors who have earned the NAMTS Rigger/Weight Tester 797A NEC were involved with the rigging for the project: BMC (SW) Justin Plank, BMC (SW) Nicholas Wendell, BM2 Ayele Belizaire, BM2 Dejuan Bradley, BM2(SW) Ashley Frost, BM2 (SW) Theodore Patsey, BM2 (SW) Vaughn Reed, BM2 (SW) Daivonte Lumpkin, BM2(SW) Jalen Walker, and BM2(SW) Michael Wright.

In total, SERMC's Gas Turbine Shop dedicated more than 9,000 hours of labor to complete the process in only 15 days, about half the normal time, decreasing equipment down time and avoiding more than \$1,900,000 in logistical and contracting costs.

"It's all about ownership for us; we wanted to make sure each engine was handled with extreme care to prevent any damage. It took some creativity and we had to get it right, and we accomplished the mission with no mishaps," said Gas Turbine Systems Technician (Mechanical) 3rd Class Rodolfo Falcon, who is now awaiting his oral board, the last step in earning the NAMTS Gas Turbine Repair Technician qualification.



Last minute Quality Assurance checks on the new 2A GTM before being lifted onto USS Carney (DDG 64).



The removed 2A GTM being placed into the transport can.

"This was a tremendous effort by the entire team, and specifically the Gas Turbine Shop on last-minute emergent work for two main engine change outs that allowed Carney to demonstrate full power and execute a successful Board of Inspection and Survey (INSURV) material readiness inspection. Their hard work and determination demonstrate the team focus and efforts at SERMC to deliver combat ready ships to the Fleet," said SERMC Commanding Officer, Capt. Justin Dowd.

"The emergent and simultaneous replacement of two main gas turbine engines that SERMC, and the broader maintenance team was able to accomplish to meet CARNEY's mission was extraordinary, said Cmdr. Matthew Krull, SURFLANT Force Current Readiness Officer. "This was particularly impressive given the last minute nature of this repair and an extremely tight timeline; the key to success was the sheer level of energy and expertise that went into the planning, coordination, physical engine change-out, and post repair testing."

With the new engines back online, SERMC was able to complete Carney's CMAV on time and the ship deployed on schedule.

"The responsiveness and collaborative effort by the SERMC team to get CARNEY ready for INSURV and C2X [Composite Training Unit Exercise] was a game-changer," said Capt. Megan Thomas, SURFLANT Force Material Officer."



Topside Preservation Expands to Japan



By Gerald "Jerry" Schrage, Sailor Professional Development Manager and Kat Ciesielski, NAMTS Public Affairs

The U.S. Navy spends billions of dollars on the research, design, and construction of new vessels — and the costs do not end once the ship is out of the shipyard. Most individuals unfamiliar with required maintenance aboard our naval vessels tend to assume maintenance as fixing equipment and weapons systems and battle damage but there's actually a much more mundane and even more inevitable enemy to deal with –RUST.

The combination of iron, water, and oxygen will always result in rust, and if left alone, it can damage a ship enough to shorten its service life. Add salt into the mix and the process speeds up, making rust maintenance a constant effort for Sailors all over the world. The U.S. Navy spends approximately \$6 billion dollars annually on fighting rust — not only on the ships themselves but also on the helicopters and fighter jets that travel on them.

To make matters worse, it is not a problem that is likely to go away anytime soon. Though there are multiple conferences, foundations, and organizations dedicated to the research and development of anti-rust solutions, there is no low-effort, low-cost, and time-effective product in existence yet.

Corrosion mitigation maintenance processes are normally not easy. Historically, Sailors needed to prepare areas by wiping them with water and rags and then using a needle gun to dislodge rust from the ship's surface. Next, they had to wipe it down again and use a sander to remove the rough edges. After wiping the area down yet again, Sailors apply two coats of primer and then sand it down to create a level surface. Finally, after hours of work having already been completed, they can add the special rust-resistant paint that helps to protect the metal from the elements. But this is just the regular work that Sailors need to keep up while they are at sea. When boats go to port or the dry dock, even more intense repairs are carried out to undo the rust's damage. When crews don't stay on top of preservation tasks, they can end up with holey decks and bulkheads and a lot more work on their hands the next time they dock.

It's not just the parts of a boat that stay underwater that are susceptible to rust. The hull, the decks, and the fighter jets on a carrier — all of them are constantly met with salt spray that can and will cause rust. So when one thinks about how big today's ships are, how rust appears just about everywhere, and the process required to get rid of it, keeping a boat pristine seems almost impossible.

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

Left: Stuffing tubes and conduit aboard USS Iwo Jima (LHD 7) showing severe degradation due to corrosion. The image below shows the same area after the application of Sailor Putty. (Photos by Darrohn Bickford.)

With extensive man hours, expensive paint, dry-dock visits, and so much more going into the fight against rust, it's no wonder that it costs the Navy a staggering amount of money. But since

building ships out of wood is longer an option, there is nothing to do but keep up the work.

Over the last year or so, Type Commands (TYCOM) have made strides in the fleet's corrosion control efforts thanks to new technology initiatives. Through events such as the American Society of Naval Engineers' MegaRust, an annual symposium dedicated to Navy corrosion issues, government and commercial entities have been able to establish mutually beneficial partnerships.

Ship 2 Shore (S2S) is one commercial entity that has recently been invited aboard several ships in the Norfolk, Virginia area, where they have been helping Sailors quickly and efficiently mitigate rust. For over two decades, S2S has been protecting marine assets belonging to the Royal Canadian Navy and the Canadian Coast Guard. In 2022, after months of rigorous testing, S2S CPC 500 was qualified under MIL-PRF 16173E as a corrosion preventive compound and was officially accepted as a supplier to the U.S. Department of Defense.

Using S2S' U.S. Naval Assets Topside Preservation Program, ships are seeing immediate and sustainable results. S2S'Erik Bergvinson and Mark Wilson have been providing materials and training on the application of their MIL-PRF 16173E corrosion preventive compounds.

S2S personnel customize each topside preservation 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. 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. The products are non-toxic, safe, easy to apply, and long-lasting. The starter kits are often utilized by the ships; they are comprised of multiple products including the Polysiloxane paint and cartridges, Fiberglass Stain remover (FSR), airless sprayers, and Sailor putty. Sailors are instructed on how and when to apply the products to various systems and structures as part of their Planned Maintenance System (PMS) and how to correctly document the work



Topside Preservation Expands to Japan



For the four photos across the top of this page taken aboard USS America (LHA 6): Fiberglass Stain Remover was used to clean all rust stains. Corroded areas were manually treated with a wire brush. Sailor paste was coated on those corroded areas. All hangers, support brackets and pipes were wrapped in Sailor Putty. The entire bulkhead was scoured and the ship then supplied paint to roll on a coat. (Photos by Erik Bergvinson)





being done.

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 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 visits are tailored to each ship's preservation and corrosion control needs. The S2S U.S. Naval Assets Topside Preservation Program has been so successful that the Navy is investing in expanding the program to be offered to U.S. Fleet Activities in Sasebo, Japan; this started this past November. The preservation program includes a one-year supply of Ship 2 Shore products, five days training Sailors, and 3D 360° scanning of "nonsensitive" topside areas using Cupix innovative software technology. Scanning occurs at the beginning of the training period, and again on the last day, post corrosion mitigation. The data collected in these scans includes remediation instructions, pictures and videos. It is provided to CNRMC, TYCOM and the ship and is held in a single repository in order to track and monitor the con-



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). (Photo by Kat Ciesielski.)





dition of the ships for maintenance planning and scheduling.

Ship 2 Shore is shown to cut maintenance costs by up to 75%, largely owing to the fact that they require minimal surface preparation and no sandblasting. This cost savings rises significantly when treating confined spaces. Float coating or spraying of internals can be completed within days instead of months, at a reduced cost. Its ease of application also allows for Sailors to mitigate corrosion on an as needed basis.

The fleet is also taking advantage of new technology through the use of Cupix 3D mapping technology, which provides a spatial digital twin map platform. Using Cupix to do an initial scan of the ship, the worst areas are identified and documented. Then the team, working with ship's force and designated contractors, mitigates the rust and corrosion with S2S CPC-500 products. They are available in liquid bulk, paste, wraps, wipes and infused into EPDM rubber for an innovative new gasket material (patent pending). Due to their longevity, ease of application and non-HAZMAT attributes, these products are proven to be an effective solution for corrosion mitigation on navy vessels. They have been tested and approved for shipboard use by the NAVSEA technical community.

During the corrosion mitigation process, pictures of the Sailors and contractors doing the work is documented. Following completion of the work, Cupix is once again used to rescan the ship. This provides a reference to track how well the products do as well as provide predictive analytics for any major maintenance that has to happen in the future. Cupix can and should be brought in again later to scan and monitor on an annual basis to track the material condition of the ship.

In November 2023, corrosion control mitigation work was done aboard USS Iwo Jima (LHD 7). The Port Engineer submitted a corrosion control assistance request estimated at \$15M that S2S and ship's Force were able to remedy in three days at a fraction of the cost.

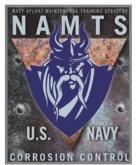
The TYCOM Corrosion Control Program Manager initiative along with the NAMTS Corrosion Control Program Technician Job Qualification Requirements and tools such as the U.S. Naval Assets Topside Preservation Program all work in concert to mitigate rust and help improve our fleet's operational readiness.



Technology Working Hard for our Fleet: Rust Busting Lasers:



By Andy "Rusty" Vasquez, NAMTS Corrosion Control Manager and Albert "Al" Johnson, Industrial Plant Equipment Lead Photos by Andy "Rusty" Vasquez,



The NAMTS Corrosion Control
Manager and Industrial Plant Equipment (IPE) team, led by Commander,
Navy Regional Maintenance Center's
Intermediate Level Programs Lead, Scott
Buchanan, recently coordinated their
efforts to purchase two 1000 Watt Adapt
Laser Ablation Systems. Mid-Atlantic
Regional Maintenance Center's
(MARMC) Pump Shop and Southwest
Regional Maintenance Center's
(SWRMC) Air Conditioning and Refrig-

eration (AC&R) Shop each received a unit.

This unique piece of equipment allows the Regional Maintenance Centers to effectively remove paint and corrosion from equipment surfaces without producing hazardous material to dispose of, thus reducing operating costs as well as set-up and clean-up time. Additionally, it helps to significantly increases the shop's production rate and the quality of the outgoing equipment to ships. The laser ablation unit is self-contained and has a vacuum system, air compressor, and air conditioning system.

The CL 1000 is a 1000-watt laser that uses intense Class IV Lasers that, when properly focused, can get into extremely difficult areas that are not easily done conventionally. Using highintensity light to remove paint and corrosion from a surface distributes thousands of focused laser pulses per second onto the targeted surface area. Powerful single laser beam pulses are linearly deflected and placed adjacent to each other. Most laser energy is absorbed by the target surface, creating microbursts of plasma that decompose the contamination layer through sublimation. Thermal energy is rapidly dispersed as contaminants are vaporized and removed from the substrate. Process speed relates to the laser energy absorption properties of the target coating/ contaminant and the laser power as measured in watts. A fume extractor removes particles and processes them through a Hepa/ Carbon filter, providing a safe environment for the operator and the surrounding area.

Matthew Binsfield, a technical project manager from Naval Underwater Warfare Center Division, Keyport's Rapid Prototyping and Fabrication Technology Division, and Tim Niemeier from Adapt Laser Systems were instrumental in providing technical expertise and conducting the Certification Classes for MARMC and SWRMC personnel.



Portable laser ablation system container

In addition to the installation of the equipment, ten MARMC and ten SWRMC personnel have been certified as Class IV Laser operators; they have learned the specific requirements to properly and safely operate the laser ablation system.

As access to more efficient technology such as laser ablators spreads, needle guns and grinders will eventually become obsolete. The Corrosion Control and IPE teams continue to work to identify and procure new technology and equipment for the Regional Maintenance Centers that will make our Sailors more productive, more efficient, and better prepared to support repair efforts in our fleet. The NAMTS job qualification requirements will also be updated in the future to reflect the integration of newer technology as standard practice.

CL1000 Cleaning Laser Features

- Thoroughly eliminates rust, hazardous coatings, and corrosion from metal components fast, without altering the substrate or without leaving any waste behind.
- Powerful laser with up to a 1,000-watt beam source power (CW) with unchanged dimensions (water-cooled system)
 - High performance, especially for large-area applications with thicker layers
 - Ergonomic optics and high beam quality of the laser in combination with a consistent top hat beam shape provide incomparable power with higher speeds during material decoating
- Integrated chilling, self-diagnostics, optional beam switch, quick-swap fiber options, and remote support capability



CL 1000, a high-powered cleaning laser provided by Adapt Laser Systems, LLC., who provided units in Norfolk and San Diego.



Laser ablation certification instruction was provided by Tim Niemeier of Adapt Laser Systems at Southwest Regional Maintenance Center.



Mid-Atlantic Regional Maintenance Center Zone Manager, Jason Smith, uses the laser ablator to remove paint from a hatch.



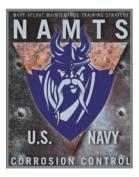
Laser ablated parts stripped with ease in minutes verses hours.



Technology Working Hard for our Fleet: Composite Patches:



By NAMTS Public Affairs



In addition to conducting Navy Afloat Maintenance Training Strategy (NAMTS) Corrosion Control Program Technician (CCPT) mentorship and working with the Industrial Plant Equipment team to procure high-powered laser ablators, Corrosion Control Program Manager Andy "Rusty" Vasquez has been busy wearing the hat of Composite Patch Program Manager.

In this role, Vasquez is charged with ensuring that all three locations at which

our Navy offers composite patch repairs remain certified to complete these repairs. Composite patch repairs are offered to our naval assets in San Diego, California; Pearl Harbor, Hawaii; and Norfolk, Virginia. Participating Regional Maintenance Centers (RMC) are required to undergo a proficiency refresher course every six months to maintain certification eligibility.

Mid-Atlantic Regional Maintenance Center (MARMC) went through the hands-on recertification process September 18-22; among those in attendance was Timothy Jones, assistant Sailor professional development manager for Commander, Navy Regional Maintenance Center. In addition to Vasquez, members from original equipment manufacturer Gougeon Brothers were also on hand to help in the certification process.

A composite patch is a temporary repair for sensitized aluminum and consists of an eight-layer fiberglass patch which is vacuum-compressed and heat cured directly at the site of plate cracks. Once a patch is installed, it is 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 eight layers of fiberglass. Once the fiberglass is successfully installed, and vacuumed sealed to the surface, the fiberglass must be cured

Stop sign patch with the Polysulfide sealer applied. (Photo by Andy "Rusty" Vasquez.) for eight 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 and civilians assigned to MARMC, Southwest Regional Maintenance Center, and Hawaii Regional Maintenance Center will continue to undergo composite patch recertification as they provide a critical resource for the safety of our ships.



Gougeon Brothers Advisor Terry Monville and MARMC Team Lead Thomas Rotton provide critical instruction to team members. (Photo by Andy "Rusty" Vasquez.)

As access to technology such as composite patch repairs spreads, the NAMTS Corrosion Control Program Technician job qualifi-

cation requirements
will also be updated
in the future to reflect the integration
of newer technology
as standard practice.



CNRMC Team Lead Timothy Jones (center) demonstrating the proper method of applying the Stop-Sign Edge Sealer cloth to the MARMC Team members. (Photo by Andy "Rusty" Vasquez.)



MARMC team member Caleb Grimes and Gougeon Brothers Advisor Don Gutzmer installing the 5th layer of Fiberglass on an outward corner of the mockup patch. (Photo by Andy "Rusty" Vasquez.)



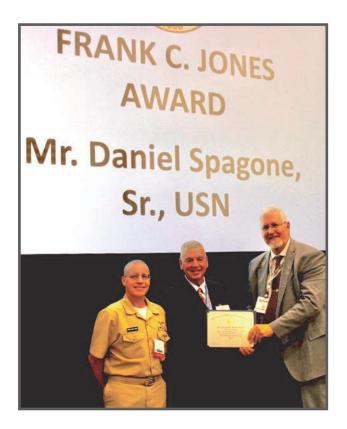
Navy's Intermediate Level Maintenance Director Honored



The American Society of Naval Engineers (ASNE) was honored to present the Rear Admiral Frank C. Jones Award (Intermediate/Depot Maintenance & Alterations) to Mr. Daniel Spagone Sr., at the Fleet Maintenance & Modernization Symposium, with the assistance of the Navy's Chief Engineer Rear Admiral Jason Lloyd, USN, and Vice Admiral David Lewis, PMP, USN (Ret.), ASNE President, on September 07, 2023, at the San Diego Convention Center.

The Rear Admiral Frank C. Jones Award was established in 2006, and recognizes those Naval Engineering professions who, over a period of at least ten years have substantially and significantly contributed to their agency's intermediate and/or depot-level ship maintenance and/or alteration programs that involve the complex work of managing, planning, preparations and/or execution of extensive repairs, overhauls, upgrades and modernizations

Mr. Daniel Spagone Sr. was awarded the Rear Admiral Frank C. Jones Award for his service as the Director of Intermediate Level Maintenance since 2010. Having served as a Chief Engineer and Repair Officer on multiple ships while on active duty from 1978-2010, combined with over 13 years of service as the Director of Intermediate Level Maintenance for Commander Naval Regional Maintenance Center (CNRMC), Mr. Spagone leveraged his vast experience and total commitment to Sailor personal and professional development through the NAMTS program to build a superb record of service in ship maintenance and modernization spanning more than forty-five years.





(L-R): Chief Engineer and Deputy Commander for Ship Design, Integration and Naval Engineering, SEA-05, Naval Sea Systems Command, Rear Adm. Jason Lloyd; Director, Intermediate Level Maintenance, Cdr. Daniel Spagone, Sr. (USN, Ret.); Mrs. Terry Spagone; and ASNE President, Vice Adm. David Lewis (USN, Ret.) on September 07, 2023, during the Fleet Maintenance and Modernization Symposium. (Photo courtesy of ASNE.)

"What an honor made even sweeter by RDML Lloyd, NAVSEA CHENG, presenting the award while my wife was there. Like the pages with which this publication [NAMTS News] is filled, there is a lot of important work going on each day in support of our fleet. I think it's important to note why we do what we do," shared Spagone. Adding, "We know that the only thing that our adversaries respect is power. Displaying any signs of weakness can be seen by the adversary as an invitation to test us. (I would invite you to Google 'Closing The Davidson Window' and 'Wolf Warrior Diplomacy'). We need to continue to develop a Navy with self-sufficient Sailors. We need to project well-maintained combat ready ships. This is why we MUST push NAMTS, Afloat and Ashore! Maintenance, modernization, sustainment, and Sailor professional development are the reasons for our Navy's prominence. Maintenance serves as the backbone, meticulously preserving and enhancing the operational integrity of naval assets; our NAMTS-qualified Sailors play a significant role in our ability to maintain our ships. Simultaneously, modernization endeavors introduce cutting-edge technologies like the S2S corrosion inhibitors and the ACL Fluidized Bed machines are keeping the fleet at the forefront of innovation and strategic advantage. Sustainment initiatives support the fleet's longevity, ensuring consistent operational readiness and minimizing downtime. I've said it before and I'll say it again; our Sailors are our greatest resource. Competent and confident, selfsufficient Sailors at sea is our mission; as NAMTS leadership, we cannot lose that focus.

Congratulations for earning this prestigious award in recognition of your tireless commitment to our Sailors and our fleet!



USS Makin Island (LHD 8) Sailors Perform Watertight Closure Maintenance



Article and photos by Ramir Pulido, NAMTS Afloat 3M /DC SME



S everal NAMTS Sailors aboard USS Makin Island (LHD 8) recently had the opportunity to put their skills to work for their ship.

Enrolled in the NAMTS Watertight Closure Maintenance Technician Job Qualification Requirements (JQR), Sailors progressed through production skills and received overthe-shoulder technical assistance from NAMTS mentors

Quick Acting Watertight Doors (QAWTD) are in-

stalled in high traffic areas where an individually dogged fitting would be impractical. Due to this placement, these doors see more use and as a result, they receive more wear and tear than other structural closures ^a. This subjects the fitting to constant adjustments which also causes indentations in the gasket due to improper adjustments by the maintenance person; this can result in the gasket becoming out of specification, thus requiring replacement.

Afloat Sailors who are in the Damage Control rating are accustomed to adjusting watertight doors almost exclusively using Method Two of the two available. The reasoning behind this is because they are directed by Planned Maintenance Systems (PMS) to conduct all work using Maintenance Requirement Card (MRC) 1671/008 U-6 and log the work into NAVSEA's planned maintenance scheduling software, SKED. Method One, though not called out on the MRCs, is also available and has been proven to be more accurate of the two methods. Determining which one to use and when is a valuable



For these Sailors, knowing the different adjustment procedures on watertight doors enables them to be more efficient in their work and choosing the correct method in each situation produces a better watertight fitting.

Left to right are NAMTS
Afloat Watertight Closure
NEC graduates DC3(AW)
Wadnelito Andre and DC3
(SW) Pierre LaPierre of
the USS Makin Island
(LHD 8) adjusting a
QAWTD Operating Handle.

The Sailors photographed working, DC3 (AW) Wadnelito Andre and DC3 (SW) Pierre LaPierre, are the first two NAMTS Watertight Closure Maintenance Technician graduates from USS Makin Island.

Thanks to mentorship provided by the NAMTS team, they are well versed in the two adjustment methods and in what situations each is more beneficial.



Left to right are NAMTS Afloat Watertight Closure Maintenance Technician NEC graduates DC3 (AW) Wadnelito Andre and DC3 (SW) Pierre LaPierre from USS Makin Island (LHD 8) adjusting a QAWTD using Method One.

QAWTD Maintenance Methods

Adjustment Method One (Gasket Removed)

has been proven to be the more accurate of the two methods as referenced in NSTM 600^d. Method One is conducted with a gauge block, 3/8-inch thick by 1/2-inch wide, fabricated from 3/8-inch flat bar stock. The gauge block should be approximately 6 inches long per IAW NSTM 600 Section 600-2.2.3.1.2.1.

Adjustment Method Two (Gasket Installed)

MRC 1671/008 U-7 "Replace Watertight / Airtight Door Gasket" is the Maintenance Requirement Card for replacing the Door Gasket with a Mandatory Related Card which is MRC 1671/008 U-6 "Adjust Watertight / Airtight US Navy Standard Door". However, MRC 1671/008 U-6 procedure is only for the adjustment of the Watertight / Airtight Door using Method Two (Gasket Installed) which can also be found under NSTM 600 Section 600-2.2.3.1.2.2^{b,c}. When followed, this will ensure proper adjustment of the dogs and hinges on a quick-acting and individually dogged watertight/airtight door to provide the required 1/8" gasket compression when in the fully dogged position.

Togrands

Dogrado

SOOI FRING/

Out of the state of the s

Figure 600-2.18. Dog Adjustment without Gasket Insta

Figure 600-2.19. Dog with jam nuts

S9086-UF-STM-010 Volume One Revision 5 NSTM 600 Structural Closures

References:

- a. Navy Afloat Maintenance Training Strategy (NAMTS) Watertight Closure Maintenance Technician V-495-4812 Information Sheet 125.08-2 Quick Acting Watertight Door.
- b. MIP 1671/008 MRC J4FB U-6, Adjust Watertight/Airtight US Navy Standard Door.
- c. MIP 1671/008 MRC J4FC U-7, Replace Watertight/Airtight Door Gasket.
- S9086-UF-STM-010 Volume One Revision 5 NSTM 600 Structural Closures.



USS Chosin (CG 65) and NAMTS Mentors Team Up for Success



By Kevin Bond, NAMTS Assistant Project Manager



In the morning hours of September 18, 2023, a team of six NAMTS mentors met with USS Chosin (CG 65) Sailors in Everett, Washington. The primary objective of the visit was to assess USS Chosin's Industrial Plant Equipment (IPE) and organic repair capabilities and to provide over theshoulder technical assistance in conducting ship repairs. The effort resulted in numerous repairs to previously in-

operable or degraded mission critical equipment in support of the ship's organic repair capability.

Working with ship's force technicians, the NAMTS team assessed what IPE the ship was supposed to have in accordance with the Commander, U.S. Fleet Forces Command and Commander, U.S. Pacific Fleet IPE instruction

(COMUSFLTFORCOM/ COMPACFLTINST 4790.1), what equipment they actually had, and of that, what equipment was operable. This was followed by an assessment of the ship's personnel to determine if Sailors were qualified to operate the equipment. Finally, a review was conducted to determine if the equipment was also logistically supported.

The NAMTS team conducted a review of the onboard technical manuals for associated machine shop equipment. Providing mentorship in the proper operation of equipment, trouble-shooting, equipment repair, and parts ordering, the team and the crew, assisted by Sailors from the local Fleet Maintenance Activity, began troubleshooting, identifying material/parts, correcting, and documenting work conducted on 18 open Job Sequence Numbers (JSN).

"Thank you for all the help you have been providing. We appreciate everything you and your team have been giving us from mentorship, missing required AEL/APL's, and guiding us



DC3 Marcus Tate from Woodmere, Ohio, installs a seat of a 1.5" flushing water system relief valve. The Navy uses this type of relief valve to prevent over pressurization of the ship's piping system for sanitary spaces.

"I've worked on relief valves before, but this opportunity gave me a chance to refresh my memory on how to take apart and put a relief valve back together," shared Tate. MM1 Brent Benjamin from Dominica received mentorship on how to use the ship's lathe to manufacture hardware needed to restore the ship's dryer. (Photo by Darrell Monroe.)



to what we had no idea about in the first place. I will try and get all the information you have previously sent and update our stock system as best as I can. If I have any questions from here on out, I will reach out to you directly," said Repair Division Leading Petty Officer, DC1 Shahin Balizadeh.

Some of the work completed by ship's force and Fleet Maintenance Activity personnel with the assistance of over-the-shoulder mentoring from the NAMTS team included:

- DC1 Shahin Balizadeh conducted an assessment of the Spectrum 875 Plasma Cutter and Multimatic 255 welding machine with the assistance of the NAMTS Structural mentor. The assessment identified that the 440 V plug was not wired properly in both pieces of equipment, an Authorized Work Request was generated; both missing 440 V plugs were ordered for the machines.
- DC1 Shahin Balizadeh also completed an assessment of the General Workshop [Machine, Metalsmith, and Welding] onboard with the assistance of the NAMTS Watertight Closure mentor. They identified numerous missing pieces of equipment as well as other unserviceable equipment needing replacement. With assistance from the mentorship team members present, all missing and unserviceable equipment replacement parts were identified and placed on order.
- EM1 Nicole Yorgesen and EM2 Patrick Jones from Southwest Regional Maintenance Center, working with a NAMTS team Electrical mentor, assisted ship's force in the troubleshooting of a DC ammeter and scullery and galley equipment. EM1 Yorgesen holds the NAMTS Outside Electrical Repair Technician NEC and EM2 Jones is currently enrolled in the Job Qualification Requirements.
- GSE2 Nataliya Gordynska, MMCS Jaun Lopez, MM3
 Darley Audain, MM3 Jonathen Boyd, MM1 Jay Bulanhagui (NAMTS Outside Machinist NEC holder) and MM1 Brent Benjamin, with the mentorship of a NAMTS team member, removed and reinstalled a cooling fan that was installed backwards and in the wrong configuration.



USS Chosin (CG 65) and NAMTS Mentors Team Up for Success

New Submarine Auxiliaryman NECs





EM1 Nicole Yorgesen and EM2 Patrick Jones from Southwest Regional Maintenance Center work to isolate a ground on the ship's degaussing system. (Photo by Russ Lincoln.)

- Correcting numerous deficiencies identified during the performance of Watertight Door Maintenance and with the assistance of the NAMTS mentors, DC2 Christian Mazaneres, LS3 Dani Fuentes, CS3 Julia Bedford, ET3 Isabel Isaiah, DC3 Marcus Tate, DC2 Christian Manzaneres, LS3 Dani Fuentex, DC3 Marcus Tate, EM1 Phinney Araquil, DC1 Shahin Balizadeh, and MM1 Brent Benjamin all completed assessments, documentation and repairs as necessary to doors, hatchways, scuttles and manholes throughout the ship. Their hard work resulted in addressing 18 JSN deficiencies affecting critical components involved in maintaining the ship's watertight integrity.
- In the Machinery Repair (MR) shop, MR2 Gary Zhang (enrolled in NAMTS Inside Machinist JQR), who was on loan from Intermediate Maintenance Activity Everett, worked with the NAMTS team MR mentor to repair and place into service five pieces of equipment onboard that were previously not operational:
 - 1) Standard Modern Lathe was assessed, adjusted, and now fully operational.
 - 2) Peerless Power Hacksaw was assessed, adjusted, and now fully operational.
 - 3) Jet Benchtop Milling Machine was assessed, adjusted, and operational, but requires R-8 collet accessories to have full capabilities.
 - 4) Jet Vertical Bandsaw is missing the blade so it could not be fully assessed.
 - 5) Dake Hydraulic Press was assessed as nonoperational. Parts are all present and mechanical parts operate but it requires oil to assess its hydraulics.

USS Chosin's dedicated Sailors completed 11 of the 18 open JSNs and generated 32 new JSNs for equipment vital to their ship's organic repair capabilities. The cooperation and the combined team effort by the team of professionals onboard Chosin and the NAMTS team mentors as well as the RMC and FMA Sailors laid the groundwork for the ship to succeed in all

mission task areas involving organic repair capability. They leveraged over-the-shoulder assistance with troubleshooting, identifying material/parts, conducting repairs, and documenting their work in the Current Ship's Maintenance Project.

USS Chosin's Commanding Officer, Capt. James M. "Mike" Williams, and Chief Engineer, Lt. Michael Chambers, were very pleased with what the team had accomplished and the mentorship that their crew received during the visit.

"Thanks again to the NAMTS team for coming out; there's a lot of good information and knowledge that has continued to be put to use after the team left," said Chambers.

"I look forward to the team's return," shared Williams.

The crew and the NAMTS team look forward to working together again soon.



ESTABLISHMENT OF SUBMARINE REFRIGERATION REPAIR TECHNICIAN NEC 797B and SUBMARINE HYDRUALIC REPAIR TECHNIAN NEC 797C.

The Navy Enlisted Occupational Classification System Board has approved the Navy Afloat Maintenance Training Strategy (NAMTS) Submarine Auxiliaryman Refrigeration Repair Technician Job Qualification Requirement (JQR) for NEC 797B. The Submarine Auxiliaryman Hydraulics Repair Technician JQR for NEC code 797C has also been approved.

Awarding of the NEC code requires a Sailor to enroll in the NAMTS program and complete the entire JQR which is based on documented completion of tasks for their respective skills; it requires the demonstration of advanced-level proficiency during hands-on training and production work as specified in the current JQR. Training is led by journeyman-level craftsmen and supplemented by appropriate self-paced instruction consistent with Department of Labor journeyman certification.

Personnel E1 to E8 in the Machinist's Mate (MM) and Machinist's Mate Nuclear Power (MMN) ratings are eligible to enroll in the Submarine Auxiliaryman Refrigeration Repair Technician JQR. Personnel in the Machinist's Mate, Non-Nuclear, Submarine Auxiliary (MMA), MMN, Missile Technician (MT) and Torpedoman's Mate (TM) ratings are eligible to enroll in the Submarine Auxiliaryman Hydraulics Repair Technician JQR.



A Look into the World of an EM at PSNS & IMF, Detachment Everett



By Kirk Jeppson, Regional NAMTS Coordinator



Shop 51 is currently performing a shaft and bearing runout measurement on a motor. After all measurements have been taken (including the end bell cups) the information will be annotated listing discrepancies on the deficiency form.

What knowledge can Sailors expect to gain when they earn their

NAMTS Inside Electrical Repair Technician Navy Enlisted Classification (NEC) or NAMTS Outside Electrical Repair Technician NEC from Puget Sound Naval Shipyard & Intermediate Maintenance Facility, Detachment (IMF) Everett? As an Electrician's Mate (EM), one's responsibilities include preventing power failures. EM Sailors are tasked with maintaining and repairing the electrical systems and equipment aboard Navy ships. EM1 (SW/AW) Ryan Nelson has been in the Navy for six years. After only eight months of being enrolled, he has earned his first NAMTS Outside Electrical Repair Technician NEC and was recently promoted to First Class Petty officer. His professional motto is "We don't sweat the load, we carry it."

The purpose of the Navy's electrical distribution system is to enable the controlled and reliable power to flow to vital and non-vital loads safely and effectively. The distribution system also protects (by means of circuit breakers and fuses) itself and its generators from damage that might otherwise be caused by faults in the system or connected equipment.

NAMTS helps Sailors gain knowledge and experience through production; that means the Sailors' hands are on the equipment as they gain experience in the areas of operator and maintainer fundamentals, terminology, troubleshooting, repair skills, special equipment, requirements, procedures, and practices. Processes for qualification includes cables and straps, brush riggings, bus transfers, electric cranes, degaussing, gal-



EM1 (SW) Ryan Nelson and EM1 (SW) Declan Faulkner inspection of the bake light/varnish of the motor. (Photo by MM2 (SW) John Rabanes.)



EM1 (SW) Ryan Nelson and EM1 (SW) Declan Faulkner doing an internal motor inspection. (Photo by MM2 (SW) John Rabanes.)

ley, heating, indicators, voltage regulators, power distribution, lighting, switches, interlocks, laundry, controllers, 400Hz motor generators, 60Hz generators, and aircraft electrical systems/sub-systems. A proper understanding of these is key to performing proper preventive and corrective maintenance on electrical systems to ensure they remain in peak operating condition

EM1 (SW) Edgar Gomez of San Diego, California, has been in the Navy for eight years. He earned his NAMTS Outside Electrical Repair Technician NEC in less than 12 months. He likes learning and gaining experience on the production floor. "Sailors only have three things in life: Change, the way things are, and working to make them better," said Gomez.

Through their acquisition of knowledge and experience, EM1 (SW) Ryan Nelson, EM1 (SW) Declan Faulkner, and EM1 Edgar Gomez are learning and sharing that information with fellow Sailors, thus working to make our fleet better.



EM1 Edgar Gomez taking measurements on the shaft. (Photo by MM2 (SW) John Rabanes.)



NAMTS Standardization Conference 2023



By Kat Ciesielski, NAMTS Public Affairs



The Navy Afloat Maintenance Training Strategy (NAMTS) program held a team-wide Standardization Conference (STANCO) September 26-28, in Virginia Beach, Virginia.

The purpose of the conference was to bring members of the NAMTS program together, to include CNRMC staff members, RMC Code

900 representatives, NAMTS Program Managers, Contracted Project Managers, Support staff, Regional NAMTS Coordinators, Afloat NAMTS Coordinators, Industrial Plant Equipment (IPE) representatives, Corrosion Control personnel, and NAMTS mentors in one location for face-to-face discussions. These discussions ranged from organization status updates to policy discussions with team leaders to facilitate standardization across the enterprise and to generate actionable initiatives for the improvement and growth of the program.

"I appreciate the work that you all have put into this [event] and into improving the program," shared Executive Director, Navy Regional Maintenance Center, Eric Lind. The conference was an ideal opportunity for people who are assigned in each of the fleet concentration areas to meet in person and work collaboratively to share information and decide how to best continue supporting the Navy.

One highlight of the conference was having Captain Jeff Betz, director and commanding officer of Surface Warfare Schools Command's Mariner Skills Training Center Atlantic, as a guest speaker. "I'm happy for the opportunity to participate in this discussion about how we make programs like NAMTS more accessible and easier for ships and Sailors to take advantage of," CAPT Betz. "I'm 100% sold on NAMTS. My hope is that I'm going to get to go back to sea next year and have major command of an LHD or an LPD, and if I get that opportunity, that's going to be the test bed for a lot of what we're talking about today. We SWOs need to do a better job of understanding the maintenance processes and I appreciate being part of a conversa-

tion about how to better conform those processes to fleet needs," he added.

Over the course of three days, team members shared information, technology, best practices, challenges, and potential solutions. "Through our time together here, we've grown in our efforts for continuous improvement and we have reinvigorated our dedication to our Sailors and fleet," said Director, Intermediate Level Maintenance (C900), Daniel Spagone, Sr.

"It was great to finally come together as a whole with peers and leadership alike to discuss issues, improvements, and standards that could help us better serve our customer," said Regional NAMTS Coordinator at Trident Refit Facility, Bangor, Marvin Frilles.

To learn more about NAMTS, visit https://www.navsea.navy.mil/Home/RMC/CNRMC/Our-Programs/NAMTS/



Director, Intermediate Level Maintenance (C900), Daniel Spagone, Sr., addresses 2023 NAMTS Standardization Conference attendees during the conference kickoff on September 26, in Virginia Beach, Virginia.



Commanding Officer of Surface Warfare Schools Command's Mariner Skills Training Center Atlantic, Captain Jeff Betz, shares a poignant sea story with conference attendees along with the solution to the challenges with which he and his crew were faced.

2023 NAMTS Standardization Conference attendees and special guests pose for a quick photograph before the event concluded. (Photo by Stacey Duffman.)





USS Carney (DDG 64) NAMTS Sailor Puts Her Skills to Work



By Rick Smith, Afloat NAMTS Inside Machinist SME



During a visit away from her homeport of Mayport, Florida, USS Carney (DDG 64) was at Naval Weapons Station Yorktown, Virginia, when the ship experienced a coupling failure in the Anchor Windlass pump in the forward anchor windlass compartment. This casualty presented a potential underway restriction, which directly affects the schedules of other visiting units at the weapons station.

Upon learning of the casual-

ty, MR2 (SW) Kayla Smith, who is enrolled in the Navy Afloat Maintenance Training Strategy (NAMTS) Inside Machinist Job Qualification Requirements (JQR), immediately conducted research into the damaged coupling and proceeded to establish a repair plan for the manufacture of a new coupling. While in homeport, the ship's leadership has supported Smith's effort to acquire knowledge through NAMTS at Southeast Regional Maintenance Center's (SERMC) Inside Machine Shop, where she learned to conduct internal boring and the keyway installation of marine components.

Thanks in large part to mentorship provided by SERMC's Code 941 Leading Chief Petty Officer, MRC (SW) Juan Montelongo and MR1 (SW) Zachery Eisenhower, MR2 (SW) Smith successfully manufactured a new pump coupling using the machine shop at Mid Atlantic Regional Maintenance Center (MARMC) during Carney's port call away from homeport.

"Because of the NAMTS mentorship received, I was able to dive into the work obstacles and overcome time restraints in getting the ship ready for underway," said Smith.

In under 14 hours from the discovery of the casualty to the completion of a new coupling, Carney was able to repair herself, demonstrating true self-sustainability. Additionally, the support of MARMC's Inside Machine shop's Sailor on duty,

MR2 (SW) Andrew Everoski, made the evening's repair efforts run smoothly with equipment and tooling support.



The damaged & new Anchor Windlass pump coupling aboard USS Carney (DDG 64). (Photos by MR2 (SW) Andrew Everoski.)

With the coupling-driven Anchor Windlass pumps aboard U.S. Navy destroyers, it is imperative that Machinery Repairmen across the fleet know how to machine and repair such components in a timely, safe and accurate manner.

"NAMTS continues to give me the confidence to machine couplings, and



MR2(SW) Kayla Smith displays a successfully machined pump coupling at Mid-Atlantic Regional Maintenance Center. (Photo by MR2 (SW) Andrew Everoski.)

really any part for that matter. Why any MR is not seeking the knowledge of the NAMTS Inside Machinist JQR, study guides, and real-time machine operation remains a mystery to me," said Smith.

This Anchor Windlass repair provided a challenge and a wake-up call revealing the importance of in-rate skill development. The standard operating procedure generated from this repair will be distributed throughout the fleet. It is just another testament to the value of the NAMTS program, which continuously strives to improve self-sufficiency efforts and create Sailors armed with the knowledge of their ratings through production-based mentorship efforts.

Refer to the back of this newsletter to see shore and afloat NAMTS program availability.



The pump coupling as it was being prepared for internal boring on a lathe by MR2 (SW) Kayla Smith at Mid-Atlantic Regional Maintenance Center. (Photo by MR2 (SW) Andrew Everoski.)



SURGEMAIN Sailor Earns NAMTS NEC



By Marvin Frilles, Regional NAMTS Coordinator



ull Maintenance Technician 1st Class Austin Fortner a Navy Reservist from SurgeMain is the first Reservist to earn the NAMTS Pipefitter NEC U52A. HT1 Fortner passed his written exam and completed his board in June 2023 and was awarded the NAMTS Pipefitter NEC U52A in July 2023.

HT1 Fortner, a Fort Worth, Texas native joined the Navy in 2014 to "see the world." To ensure that he had the trade skills necessary for a career after military service, he chose the job of Hull Maintenance Technician.

After leaving active-duty service in 2018, Fortner joined the U.S. Navy Reserve where he became a member of SurgeMain, Naval Reserve Center-Houston. Sailors attached are mobilize on short notice to meet national security requirements of the fleet and HT1 Fortner was mobilized from August 2020 to September 2021. While mobilized, he enrolled in the NAMTS Pipefitter qualification. Utilizing the NAMTS program to improve his maintenance capability HT1 Fortner embraced the hands on processes of NAMTS to take his professional development to the next level making him an invaluable resource to the SurgeMain mission. Motivated and determined, he set a goal to complete his NAMTS Pipefitter qualification on his four-week annual training at TRFB from June 5-30, 2023. HT1 Fortner accomplished his goal and during a brief ceremony on June 29, he was congratulated by U.S. Navy Capt. Michael Eberlein, commanding officer, TRFB, on earning his NAMTS Pipefitter NEC.

During the recognition, Eberlein commended the Sailors and civilians of TRFB for their work and the importance of workforce development in the readiness of our Navy.

"At TRFB, Sailors have the opportunity to work alongside and learn from some of the most talented and experienced civilian experts conducting the full range of ship repair techniques. The NAMTS program gives a formal structure to ensure Sailors, active and reserve, leave TRFB with the repair skills they will need to keep the fleet fighting and conduct battle damage repairs should those skills be called upon in conflict," said Eberlein.

"Training our workforce is a continuous effort at TRFB, and our duty to deliver trained Sailors to the fleet is a primary mission we execute every day while we are fixing submarines," he added.

Regarding the Pipe Shop (56A) within the Repair Department at TRFB to include the government employees and Sailors, Fortner said that, "TRF gives the best opportunity to get NAMTS done. They're fully supportive, with clear, concise training."

The primary workforce development professionals are Steven Worley, Ryan Lundberg, David VonRuden, Mike Prophet,



Trident Refit Facility, Bangor (TRFB) team members pose for a photo after Hull Maintenance Technician 1st Class Austin Fortner, fourth from right, received recognition for completing his Navy Enlisted Classification (NEC) as a pipefitter under the Navy Afloat Maintenance Training Strategy (NAMTS) at TRFB. Fortner, currently attached to Naval Reserve Center-Houston, was mobilized under Surgemain from August 2020 to September 2021 where he enrolled under the NAMTS program to earn his pipefitter qualification. TRFB supports the nation's strategic deterrence mission by repairing, incrementally overhauling, and modernizing Pacific Fleet strategic ballistic missile submarines during refits. (L-R: Steven Worley, HTC(SW/AW) Justin Carson, Marvin Frilles, Capt. Michael D. Eberlein, left, commanding officer of Trident Refit Facility, Bangor, Hull Maintenance Technician 1st Class Austin Fortner, Ryan Lundberg, David Vonruden, and HTC (SW/AW) John Tankersley. (U.S. Navy photo by Mass Communication Specialist 2nd Class Sarah Christoph)

Hull Maintenance Technician 2nd Class (HT2) Alex Abercrombie and HT2 Adam Welkovich.

HT1 Fortner fully intends to complete 20 years of service. He realized that earning the NAMTS NEC would give him the tools that provide the formal systems and equipment repair training critical to sustaining Strike Force Intermediate maintenance Activity organic maintenance capability and Fleet readiness.HT1 Fortner is now the first SurgeMain Sailor, since the mobilization, to earn a NAMTS NEC at TRFB.



PHNSY & IMF Keeping Ships "Fit to Fight"



By Philip Bowler, Regional NAMTS Coordinator



avy Afloat Maintenance Training Strategy (NAMTS) provides great training opportunities for Sailors to not only hone their repair skills, but to implement them in the safe and efficient manner. Recently, Pearl Harbor Naval Shipyard and Immediate Maintenance Facility (PHNSY&IMF) was called upon to perform emergent trouble-

shooting and repair of a Rigid Inflatable Boat (RIB) and a Gas Turbine Generator (GTG) swap out for USS Wayne E. Meyer (DDG 108).

RIBs are instrumental to maritime operations, used to perform search and rescue and visit board search & seizures as well as other types of missions or tasking. The PHNSY & IMF Electricians quickly began troubleshooting the RIB and identified multiple issues requiring repair before the RIB could be put back into service.

GTGs are used to produce ship service power not only for lighting but for shipboard systems including navigation, communications, radar, and weapon systems. They provide a reliable source of electricity to ensure the ship's operational capabilities, even in remote or high-demand situations. Having all GTGs onboard available is essential in naval operations to maintain the ship's operational readiness in the event of system failures or battle damage.

EM2(SW) Justin Thompson, EM2 (SW) Inna Myroshnychenko, EM2(SW/AW) Athenacianel Pickering, and EM3 Declan Johnson from PHNSY&IMF's Electrical Shop and EN1 (SW) James Campos, EN1 (SW) Brandon Balino, and EN2 (SW/ SCW) Armoni White from the Diesel Shop, as well as MM2 (SW) Kylas Armijo began troubleshooting the RIB, identifying multiple issues resulting in the replacement of both batteries, repairing of multiple burnt and corroded connections, replacement of the main wiring harness and Engine Control Module as well as the repairing and replacing of faulty and



EN2 Dedric White and EM2 Matthew Rooney are conducting repairs on USS Wayne E. Meyer's (DDG 108) Rigid Inflatable Boat (RIB). (Photo by Philip Bowler.)



Part of HRMC Gas Turbine Shop x38 after conducting a Gas Turbine Generator swap out onboard USS Wayne E. Meyer (DDG 108). Sailors pictured from top left to right: GSM1 Julius Douse, GSM2 JustinMark Reyes, GSM1 Joseph Pennington, GSM3 Ibrahim DuranOrtiz, GSM3 Fabian Natera, GSM1 Michael Schillinger, GSM2 Jeremy Deplata, GSM3 Austin Kelly, GSM1 Justin Blackwell, GSM1 Jason Kocher, GSM1 Lucas Pham, GSM1 Ethan Bruce, GSM2 James Wesley, GSM2 NormanAnthony Tabayag, GSM2 Sebastian Wallen. (Photo by Philip Bowler.)

failed wiring. Upon completion of the repairs, the RIB was operationally tested and returned to the ship and placed into a fully operational status. The ship's RIB operators noted the quality of workmanship and exceptional condition of all systems repaired.

GSM1 (SW/AW) Michael Schillinger, GSM1 (SW) Noel Dionicio, GSM2 (SW) Sebastian Wallen, GSM2 (SW) James Terrell, and GSM2 (SW/AW) Sagar Patel, NAMTS Gas Turbine Repair Technicians at PHNSY&IMF were tasked to conduct an emergent Gas Turbine Generator swap out onboard Wayne E. Meyer. Utilizing the workforce development skills gained through the NAMTS Gas Turbine (Mechanical) Repair JQR, the PHNSY&IMF team successfully planned and executed the GTG swap out, keeping the ship mission ready.

Both emergent jobs were completed in under a week and ahead of schedule, allowing Wayne E. Meyer to complete all certification requirements. The NAMTS Sailors' expertise, efficiency, and ability to provide lasting solutions not only saved time and resources, but also ensured the safety and relia-



GSM1 Jason Kocher, GSM2 Sagar Patel, GSM1 Noel Dionicio installing a GTG aboard USS Wayne E. Meyer (DDG 108). (Photo by GSM1 Joseph Pennington.)



PHNSY & IMF Keeping Ships "Fit to Fight"

Safety First (and Always!)





GSMC Kirubel Weldeyes and GSM1 Michael Schillinger inspecting the old and new Gas Turbine Generators. (Photo by GSM1 Joseph Pennington.)

bility of the repaired equipment, upholding PHNSY & IMF's motto of "We Keep Them Fit to Fight."

The Navy consistently encounters a growing need for repairs in response to its ever-changing environment. The NAMTS program equips Sailors with the tools and expertise as well as the opportunity to perform "sets and reps" to hone their skills to rise to the challenge and effectively address these unending demands.



Gas Turbine Generator (GTG) is being rigged out of USS Wayne E. Meyer for swap out. (Photo by GSM1 Joseph Pennington.)

SAFETY FIRST

By Sharon Jones, Afloat NAMTS CSMP/CORE/3-M SME

Safety has and always will be a top priority for the Navy. Before delving into a Navy Afloat Maintenance Training Strategy (NAMTS) rating specific Job Qualification Requirements (JQR), NAMTS enrolled Sailors are required to complete the NAMTS Core Fundamentals JQR.

The principles in the NAMTS 100 series include areas such as First Aid, Hearing Conservation, Tag-Out Fundaments, Shipboard Safety Practices and Awareness Fundamentals, and Fire Preventions and Response, among others. These collectively form the foundation for nearly every single task to be accomplished by a Sailor.

The importance of safety to the fleet is evident through the actions of USS Tripoli (LHA 7), USS Essex (LHD 2), and USS Portland (LPD 27), as they incorporate NAMTS Core Fundamentals into their commands' indoctrination for newly reporting Sailors. Additionally, other commands such as Assault Craft Unit 4 (ACU 4), USS Harry S. Truman (CVN 75), USS Mesa Verde (LPD 19), and USS Tortuga (LSD 46) have conducted mass Core Fundamentals mentor sessions. This approach demonstrates a commitment to ensuring that all personnel are well-versed in essential safety practices and procedures.

There are a myriad of naval safety instructions, which include: Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat OPNAVINST 5100.19 (Series), Navy Safety and Occupational Health Manual for Forces Ashore OPNAVINST 5100.23, Operational Risk Management (ORM) OPNAVINST 3500.39 (Series), and Navy Ships' Technical Manual (NSTM) 670, Volume II, Afloat Hazardous Material Control and Management Guidelines Hazardous Materials Users Guide (HMUG).

These safety instructions provide all Navy personnel and Department of Defense (DoD) civilians with guidance and direction to establish safety practices in their daily work life. The Afloat Safety and Occupational Health (SOH) Program Manual is utilized by shipboard personnel to minimize their risk of having a mishap. The Navy SOH Manual for Ashore uses the Navy Safety Management System (SMS). The SMS is a comprehensive program used to minimize safety and risk to prevent losses due to mishaps. In accordance with the ORM, one must always assess the risk before conducting any task. The Navy Ships' Technical Manual 670, Volume II, provides guidance on how to properly handle and dispose of hazardous materials.

A daily practice of being safe should always be at the forefront of each Sailor's mind. Safety should be practiced on and off duty. It is never okay to become complacent about safety. It is true that the Commanding Officer is overall responsible for the safety of his/her Sailors, but at all times, it is one's own duty and responsibility to minimize his/her risk of getting injured or killed. If you perceive that an order or task given is unsafe, you must notify your chain of command immediately. Always remember, SAFETY IS PARAMOUNT!



USS Dwight D. Eisenhower's (CVN 69) DC Division Prepares for Deployment



By Christian Padilla, East Coast Afloat NAMTS Coordinator



Watertight doors and watertight hatches are critical components of a Navy vessel's function and safety. They allow for safe passageways for servicemen and women throughout the ship. These doors not only allow passage from one compartment to another while also preventing water from entering a compartment, but they help maintain boundaries in case of casualties such as fires

and structural damage.

The upkeep and maintenance of watertight doors is the responsibility of all members assigned to a ship, but especially so for the Damage Controlmen (DC) and Sailors assigned as Damage Control Petty Officers (DCPO).

In the last four years, USS Dwight D. Eisenhower (CVN 69) has successfully completed two extended deployments in a short period of time in addition to a Planned Incremental Availability. If anyone knows about being deployment ready, it is the crew of the Dwight D. Eisenhower.

This summer, the carrier found itself gearing up for yet another deployment and MRC Tyler Knopsnyder and the DC division leadership made sure that their Sailors were ready to fight the ship.

Chief Knopsnyder, a NAMTS Inside Machinist and NAMTS Valve Repair Technician NEC holder, understands how critically important NAMTS was to his workforce and the professional development of Sailors. The program gives them the skills necessary to support Strike Force Intermediate Maintenance Activity and organic maintenance capability in support of fleet readiness.

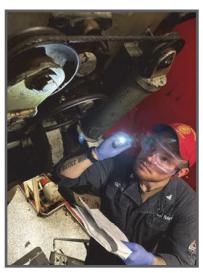
Dwight D. Eisenhower has enrolled ten outstanding Damage Control Sailors into the ship's NAMTS Watertight Closure Maintenance Technician job qualification requirements (JQR). By signing up for NAMTS, these Sailors will be afforded the opportunity to improve their knowledge and proficiency in performing shipboard repairs essential to improving battle group organic maintenance capability and material self - sufficiency.



DC3 Wyatt Oliverson is performing maintenance on a watertight hatch. The maintenance consist of test, clean, inspect and lubricate hatch/door. (Photo by MRCS (SW/AW) Brian Pierce.)

"NAMTS is a great program. We currently have 37 Sailors enrolled, ten of whom are working on Watertight Closure. I think for a lot of us, the hands-on working through production is beneficial because we learn by doing. Sure, you read the line items in the JQR, but by doing, you get the chance to connect the page with action and muscle memory begins to form," shared Engineering Department Leading Chief Petty Officer MRCS (SW/AW) Brian Pierce. "Watching our Sailors grow in their learning is always rewarding, more so when those skills are passed on."

The Command NAMTS Coordinator, MM1 Dean Frescura, is excited to assist the command's Sailors in earning as many NAMTS NECs while on deployment and ensuring their Sailors have all the resources they need. Just prior to deployment, the NAMTS team spent a considerable amount of time aboard providing mentorship and briefing Sailors about the benefits of the program. Special thanks to the Reactor Department leadership for their hospitality. The ship presently has 37 Sailors enrolled in four NAMTS NEC skill areas.



DC3 Wyatt Oliverson Inspecting hatch for loose, missing, and/or damaged parts, or parts showing excessive wear or corrosion. (Photo by MRCS (SW/AW) Brian Pierce.)



DCFN Daymond Savoy working on scuttle aboard USS Dwight D. Eisenhower. (Photo by MRCS (SW/AW) Brian Pierce.)



SWRMC AC&R Shop Exemplifies ONE MISSION – ONE TEAM!



By MMC (SW) Roberto Martinez and Cedric Ridley, Assistant Regional NAMTS Coordinator



ailors in Southwest Regional Maintenance Center's (SWRMC) Air Conditioning & Refrigeration (AC&R) Shop (C945) consistently support our fleet.

In recent years, SWRMC's AC&R Shop has taken on the responsibility of maintaining onboard equipment including centrifugal and reciprocating compressors, air dehydrators, freon recovery machines, and food service equipment. Blueprints and rate training manuals are generally what Machinist's Mates use to learn the general overviews of equipment, but they are not always readily available. Without a good set of blue prints and no one in the shop having seen a Formal Work Package in person, the knowledge baseline was regressing. NAMTS has changed that and is now instrumental in the workforce professional development of the Sailors assigned to the AC&R Shop. "The NAMTS AC&R [JQR] has been a great help in progressing my knowledge in my field. The training is always top-notch and easy to understand," shared MM2 Jalen Gilkey of San Bernadino, California.

The AC&R Shop is led by MMC (SW) Roberto Martinez, who serves as the command's Skill Area Coordinator. The shop recently held a hands-on learning session revolving around a rotary vane compressor test stand, during which MM2(SW) Dubose, NAMTS Work Center Supervisor (WCS) for AC&R, was mentoring Sailors on screw type compressors using the refrigerant gauge manifold to read the pressure and vacuum of the compressor. During the session, the group also went over the use of a nitrogen bottle, used for pressure testing; a micrometer reader, which is used to show how deep in vacuum an item is; an electronic sniffer, which checks for leakage; a vacuum pump, used to de-hydrate system; and a low-tech bottle of sudsy water, which is also used to check for leaks.



MM2 Dubose demonstrating a pressure test and leak testing on a reciprocating compressor. (Photo by Cedric Ridley.)



MM2 Gilkey and MM1 Lindo pressure testing on a reciprocating compressor. (Photo by Cedric Ridley.)

"Today we are conducting a session on pressure testing and vacuum testing, utilizing our rotary vane compressor test stand. We will go in depth on tools, equipment, and procedures so our Sailors have a better understanding and comprehension of this evolution. Some of the equipment and tools we'll be using include a nitrogen bottle, regulator, manifold gauge, refrigerant hoses, leak detectors, and a vacuum pump. My role in this is to ensure that in the future, you are prepared and so you can take this knowledge out to the fleet," said MM2 Alexander Dubose of Las Vegas, Nevada.

"This was very effective and really enjoyable, too. I appreciate the time and effort put in with this training; I am a visual and hands-on learner, and this really helps me understand AC&R," shared MM1 Christopher Griser, of St. Paul, Minnesota.

MM2 Dubose held the tutorial with assistance from Robert Jackson and Production Line Supervisor, Bobby Jones. The Sailors in attendance included MM1(SW/AW) Shamari Lindo, MM1(SW) Austin Hamby, MM2(SW) Jalen Gilkey, MM2 Chester Randolph, MM2 Ryan Gross, AS2 Andrew Pilieri, and MM1(SW) Christopher Griser.

Experiences such as this have allowed the team (including NAMTS AC&R Repair Technician NEC holder MM2 Gross, MM2 Dubose, MM1 Hamby, MM1 Lindo, and MM2 Gilkey), to recently completely overhaul 18 compressors, 12 A/C plants, and 20 refrigeration plants for USS Lake Erie (CG 70), USS Ashland (LSD 48), USS O'Kane (DDG 77) and USS Bunker Hill (CG 52). Additionally, the team completed four complete compressor overhauls, eight pressure/leak/vacuum tests with zero mishaps aboard USS Sterett (DDG 104), USS Germantown (LSD 42), USS Stockdale (DDG 106), USS Chaffee (DDG 90), USS Spruance (DDG 111), and USS Curtis Wilber (DDG 54). These are all projects in alignment with SWRMC's mission of on-time delivery and they have contributed to a \$10.2 million savings in contractual costs for the Navy!



Bataan ARG Deploys with Valve Test Stands Ready for Work



By Michael Dengate, Afloat NAMTS Outside Machine SME



The Bataan Amphibious Ready Group (ARG) consisting of USS Bataan (LHD 5), USS Mesa Verde (LPD 19), and



USS Carter Hall (LSD 50) left for a scheduled deployment in July. Each of the three ships have various repair capabilities that may be needed throughout the deployment to maintain readiness not just for the ARG but for other ships within the region.

The Bataan ARG deployed with 40 Navy Afloat Maintenance Training Strategy (NAMTS) Navy Enlisted Classification Code (NEC) holders in 14 different skill

areas. These individuals are trained and proficient in specific technical fields, ensuring that the ARG has the capabilities needed to support various aspects of maintenance and repair. This includes maintaining and repairing air conditioning and refrigeration units, diesel engines, heat exchangers, internal and external electrical systems, machinery, piping, pumps, rigging operations, ship structures, valves, watertight closures, and welding. Their skills ensure optimal performance, safety, and operational efficiency aboard naval vessels.

Ship's force's ability to be self-sufficient is paramount. With an aggressive operational tempo, shipboard equipment such as pumps, valves, air conditioning and refrigeration plants, and lots of other equipment throughout all the ships will need maintenance as they may break down or fail and will need to be repaired and tested. One repair capability that all three ships in the ARG have is the ability to pop test relief valves and hydrostatically test various types of shipboard valves for leaks. Bataan, Mesa Verde, and Carter Hall each have a Valve Shop onboard with functioning valve test stands.

As months pass by on a deployment, valve seats and disks



FN Kyle Bengford removes rust and blue powder coating from the underside of the valve test stand table using an angle pneumatic grinder with a 40-grit flapper wheel. The surface had to be cleaned prior to the reassembly of the RAM, pressure plate, and table. Afloat NAMTS Outside Machine SME Jon Bonet gives guidance to FN Bengford on how much of an area that needs cleaning. (Photo by Mike Dengate.)

become corroded and start leaking and will require repairs or replacement and then testing. So, it is imperative that the valve test stands remain operational. The ships have NAMTS Valve Repair Technicians and NAMTS Pump Repair Technicians that hold NEC 834A and 736B respective-



MM3 Timothy Anderson of Louisville, Kentucky, operates a valve test stand aboard USS Bataan (LHD 5) on March 21, 2023. (Photo by Kat Ciesielski.)

ly. In addition to those who have earned their NECs, NAMTS Valve Repair Technician and NAMTS Pump Repair Technician job qualification requirements enrollees are there to learn and help as well as make progress in their skill area and complete processes with hands-on experience while supporting the ships in the operating area.

With the assistance of the NAMTS Outside Machine Subject Matter Experts (SME) Jon Bonet and Mike Dengate conducted an on-site assessment and operational tests of the Bataan ARG ships with valve test stands. A list of findings was created and provided to the ships and work candidates were written and Job Sequence Numbers (JSN) were approved. One of the major repairs needed was onboard Mesa Verde, which needed significant help with their Valve Test Stand Table.

NAMTS enrollee FN Kyle Bengford of Colorado Springs, Colorado, along with Bonet and Dengate, removed the table and hydraulic ram from the test stand; they then disassembled and removed the hydraulic ram from the pressure chamber. Inspection revealed the ram's wiper and piston seals needed to be replaced, the ram was reassembled and tested, returned to the ship where FN Bengford with over the shoulder help from the NAMTS SMEs re-installed the ram and conducted testing, verifying the valve test stand was 100% operational. NAMTS

enrollee FN Bengford was instrumental in repairing the Valve test stand with the over the shoulder mentorship provided by the NAMTS SMEs. The Bataan ARG deployed with fully operational valve test stands ready to support the ARG and the ships in the region.



FN Kyle Bengford smooths the surface of the underside of the valve test stand table using a precision block and 900 grit crocus cloth. Outside Machine SME Mike Dengate waits for FN Bengford to clean the surface so it can be checked.

(Photo by Jon Bonet.)



NAVSEA Improves Readiness of USS Bataan with New 3D Printing Capability



By Naval Sea Systems Command Public Affairs / 15 August 2023



WASHINGTON NAVY YARD –The crew of USS Bataan (LHD 5), supported by the Naval Sea Systems Command (NAVSEA), recently completed the first metal 3D part fabrication and replacement for a de-ballast air compressor (DBAC) in only five days using her permanently installed metal 3D printer.

"This success story shows the selfsufficiency we can achieve when our

Sailors are provided with cutting-edge technology," said Rear Adm. Joseph Cahill, commander, Naval Surface Force Atlantic (SURFLANT). "The impact technology like this can have on operational readiness, particularly in a combat environment where logistics capabilities will be challenged, is critically important."

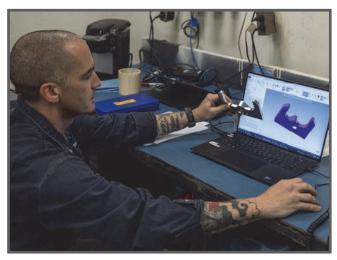
The part, a sprayer plate, is part of a DBAC which is used to force pressurized air through saltwater tanks and discharge the accumulated saltwater. The tanks are filled to lower a ship's draft for amphibious operations. Producing the sprayer plate while at-sea enabled the ship to mitigate the time spent obtaining a replacement assembly.

"Rapidly learning how to utilize AM shipboard and scaling these capabilities is a key enabler to us sustaining our platforms and weapons systems," said Rear Adm. Jason Lloyd, deputy commander for NAVSEA's Naval Systems Engineering & Logistics Directorate. "I am excited to see how Bataan embraced this technology to enhance readiness at the point of need."

The printer, installed under a joint effort between SURFLANT and the NAVSEA Technology Office, includes the Phillips Additive Hybrid system, which integrates a Meltio3D laser metal wire deposition head on a Haas TM-1 computer numerical control mill. The Haas TM-1 platform has been proven to operate reliably in an afloat environment aboard several aircraft carriers. Integrating the Meltio 3D deposition head with the Haas TM-1 provides both an additive and subtractive manufacturing capability within the same system, increasing efficiency and reducing waste when compared with typical machining.

The repair effort, led by Machinery Repairman First Class Mike Hover, began by creating a computer aided design (CAD) model of a sprayer plate from a functional sprayer plate from one of the ship's other DBAC systems. After creating a preliminary CAD model, Hover leveraged NAVSEA's 'Apollo Lab' construct established for engineering and fleet support and training.

NAVSEA established the "Apollo Lab" in 2018 for engineers to better support forward-deployed Sailors. The Apollo Lab, led by NAVSEA field activity Naval Surface Warfare Center, Carderock Division, Johns Hopkins University Applied Research Laboratory (JHU APL), and Building Momentum, provides distributed, reach-back engineering support by civilian engineers for AM equipment. Apollo Lab also supports the



ATLANTIC OCEAN (June 5, 2023) Machinery Repairman 1st Class Cory M. Hover demonstrates the software used to design the sprayer plate used to cool, lubricate, and maintain oil pressure for the Wasp-class amphibious assault ship USS Bataan's (LHD 5) #4 deballasting air compressor. The sprayer plate was completely designed and fabricated aboard the ship using the newly added Haas TM1 Additive Manufacturing Hybrid CNC Machine. (U.S. Navy photo by Mass Communication Specialist 2nd Class Bradley Rickard)

fleet by designing AM components to be made by sailors at sea.

Bryan Kessel, a mechanical engineer at Naval Surface Warfare Center, Carderock Division, refined the CAD file, worked with JHU APL to develop the software instructions to guide operation of the metal 3D printer and securely transferred those instructions back to the ship to produce and install the sprayer plate.

NAVSEA is the largest of the Navy's six system commands, responsible for the procurement, maintenance and modernization of ships, submarines and systems for the U.S. Navy. NAVSEA's Technology Office is leading multiple areas of research and development in evaluation of AM equipment, using data not only from deployed assets, but also shore side lab activities, to gain a critical understanding of how the equipment will perform under shipboard conditions. These evaluations will ensure that the current and future shipboard implementations of this equipment are fabricating parts repeatedly and reliably, thus allowing Sailors to address an increasing number of applications.

For Sailors in the Navy Afloat Maintenance Training Strategy (NAMTS) program, having access to parts that are 3D printed aboard is an incredible resource.



The Vital Role of Naval Maintenance and the NAMTS Program



By Andrew Porter, Regional NAMTS Coordinator



aval vessels act as the sentinels of our nation's strength. They are known for projecting power, safeguarding trade routes, and responding to crises with unparalleled flexi-

bility. Yet behind their formidable presence lies a crucial element that ensures their operational readiness and longevity: naval maintenance. In this context, the Navy Afloat Maintenance Training Strategy (NAMTS) program emerges as an essential component to successfully obtaining these goals by developing skilled maintenance technicians to uphold maritime supremacy.

Naval vessels, from aircraft carriers to submarines, are intricate machines with a multitude of components working in harmony. However, the harsh marine environment, constant usage, and demanding operational requirements take a toll on even the most advanced technologies. This is where naval maintenance steps in, serving as the foundation for fleet effectiveness.

Maintenance encompasses routine inspections, repairs, and overhauls that prevent minor issues from spiraling into catastrophic failures. Regular maintenance not only ensures the operational readiness of vessels but also extends their service life. It's a proactive strategy that safeguards significant investments in naval infrastructure, while also upholding a nation's ability to respond swiftly to emergent threats.

At the heart of effective naval maintenance is a well-trained and dedicated workforce. The NAMTS program is designed to facilitate this vital need. NAMTS is a comprehensive initiative



MM1(SS) Joshua Ogletree prepares to pop test a high pressure relief valve from the USS New York (LPD 21). The relief valve is an important part of the ships Reverse Osmosis water system that provides potable water to the crew. (Photo by Reginald Kitchens.)

designed to equip Sailors with the skills and knowledge necessary to tackle the intricate challenges of naval maintenance and modern sea warfare.

Through
NAMTS, Sailors
learn skills in
areas such as
welding, heat
exchanger
maintenance,
watertight closures repair,
pump repair,
propulsion systems, and more.
This program
goes beyond
theoretical



MMFN Jalayssia Washington operates MARMCs hydrostatic test stands that provides the necessary pressure to test relief valves. A high pressure relief valve from the USS New York (LPD 21) is pictured here being tested to 1,050psi prior to being sent back the ship for install. (Photo by Reginald Kitchens.)

knowledge, emphasizing hands-on experience with the actual systems Sailors will be maintaining. From identifying a malfunctioning valve in a critical pipeline to troubleshooting complex electrical systems, NAMTS graduates possess the expertise to keep naval vessels in peak operating condition.

Key Benefits of the NAMTS Program

Enhanced Naval Readiness: NAMTS Sailors are at the forefront of maintaining naval vessels at optimal readiness levels. Their expertise ensures that vessels can be deployed rapidly and confidently whenever the need arises.

<u>Cost Savings:</u> Timely maintenance reduces the likelihood of costly repairs or premature replacements. The investment in NAMTS pays dividends by extending the service life of naval assets and minimizing downtime.



MR3 Mariloumae Manantan (left) and MR2(SW) Hannah Swearingen (right) use a Monarch EE Lathe to manufacture a threaded component for a NIXIE transom handle on USS Mitscher (DDG 57).(Photo by Reginald Kitchens.)



NAMTS and Norfolk Naval Shipyard: Pillars of Excellence in Naval Maintenance



<u>Technological Mastery:</u> Naval vessels incorporate cuttingedge technologies, and NAMTS ensures that Sailors can effectively harness these technologies, thereby maximizing the operational potential of their fleets.

<u>Versatility and Adaptability:</u> NAMTS equips Sailors with transferable skills that are valuable not only in naval contexts but also in civilian industries. This versatility enhances the Sailors' employability and contributes to their personal growth.

<u>Camaraderie and Teamwork:</u> The collaborative nature of naval maintenance fosters strong bonds among Sailors. The shared responsibility of upholding maritime security creates a sense of unity and purpose within the naval community.

In an era of evolving security challenges and rapid technological advancements, the significance of effective naval maintenance cannot be overstated. "I learned so much while working on my NAMTS Inside Machinist qualification. It was really in-depth training and expanded on what I already learned in C school. With NAMTS, I got a better understanding through hands on work and the mentorship from senior shop qualifiers than I ever would have in a classroom," said MR3 Mariloumae Manantan.

The At MARMC, Sailors exemplify the key benefits to the NAMTS program by providing support to waterfront commands to assist in operational readiness. This is accomplished in a number of ways through the various NAMTS skill areas available at MARMC. Each skill area provides an important contribution to fleet maintenance and helps professionally develop Sailors while on shore duty rotations. This ultimately makes Sailors more self-sufficient and confident in their ability to troubleshoot and fix ships once they rotate back to the fleet.

By Andrew Porter, Regional NAMTS Coordinator



A s one of the oldest and most respected naval shipyards in the United States, Norfolk Naval Shipyard (NNSY) stands as a symbol of ingenuity and dedication in naval maintenance. The Navy Afloat Maintenance Training Strategy (NAMTS) program, in conjunction with institutions like NNSY, stands as a testament to the dedication and expertise required to

sustain our country as a maritime superpower. Through this collaboration, NAMTS and NNSY help to ensure operational readiness and longevity of naval assets.

Arguably the most important aspect of any naval operation is the meticulous, and often mundane, task of corrective and preventative maintenance. The NAMTS program focuses on honing the skills of Sailors who form the backbone of naval maintenance teams. With a mission to develop technical mastery, NAMTS prepares Sailors to confront the complex chalAs a designed NAMTS Pump Repair JOR Qualifier, MM2 (SW/AW) Brandon Nichols (left) provides mentorship to GSM1 (SW/AW) Brianna Johnson (right) on the proper technique to perform a laser assisted pump shaft alignment. The NAMTS Pump Repair JQR requires participating Sailors to perform various methods of shaft alignments to ensure repaired equipment is running at optimal performance prior to install. (Photo by Reginald Kitchens.)



lenges posed by the intricate machinery and systems that power naval vessels.

NAMTS provides formal shipboard systems and equipment repair training for Sailors assigned to intermediate and depot level maintenance activities. NAMTS is designed to ensure that proficient, qualified Sailors are available to fill billets critical to sustaining Strike force Intermediate Maintenance Activity (SFIMA) organic maintenance capability and Fleet readiness, as identified by the fleet. NAMTS uses a holistic approach, combining production based maintenance with hands-on experience. This combination of theoretical knowledge and practical application ensures that graduates possess the skills necessary to diagnose, repair, and optimize the advanced technologies the modern fleet demands.

The cooperation between NAMTS and Norfolk Naval Shipyard is a prime example of effective collaboration in action. NAMTS provides the tools, while NNSY offers the platform to implement and refine the skills acquired. The partnership not only ensures the longevity of naval vessels but also advances the field of naval maintenance through constant innovation and adaptation.

Graduates of NAMTS find themselves at home in shipyards like NNSY. Sailors' knowledge, backed by practical experience, makes them valuable assets in the process of maintaining, repairing, and upgrading naval assets. The NAMTS-NNSY partnership ensures that naval vessels remain at peak

performance levels, ready to respond to the challenges of an everchanging global landscape.



After an extensive education process with designated shop JQR Qualifiers, HT2 Bradley Smith works on a welding practical to show proficiency in the shop theory principals he learned during training. The NAMTS Welder/Brazer JQR offers Sailors the ability to learn basic welding concepts and brazing techniques that can be a vital resource to ships at sea. (Photo by Shelby West.)



Sailors Taking Advantage of Down Time



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



SS Curtis Wilbur (DDG 54) does not yet have an Afloat NAMTS program, however, they have some outstanding Sailors who recently took the initiative to get work done aboard their ship. Sonar Technicians Surface (STG) reached out to the West Coast NAMTS team for technical assistance. With mentorship provided by the West Coast Inside Machine subject matter expert (SME), the STGs cleared their berthing fan

coil assembly (FCA) in preparation of the arrival of the replacement unit. Those involved in the repair were:

- STG2 (SW) Johnny Cabrera
- STG2 (SW) John Lukashonak
- STG2 (SW) Daniel German
- STGC (SW/IUSS) Mark D. Moles, CA Division LCPO
- LT David Glaser, Anti-Submarine Warfare Officer (ASWO)

After ordering a new unit and completing a formal work package, the crew was ready to remove the defunct original unit to clean and prepare for the arrival of the new unit. Notice the respirators worn by the Sailors; they are required when working deep inside of these units as per Planned Maintenance System and the technical manual. Years of dust and debris, as well as the stuff that grows in this environment can make for a bad day, so why breathe it in when the Navy provides the resources to avoid it.

Without hesitation, the crew and Chief jumped into this endeavor. They systematically disassembled the old FCA without any major issues and did it in seemingly record time. It is always great to see Sailors who are not afraid to dig in, learn new information about the things around them, and to allow self-sufficiency to happen aboard their ship.

After the foundation was cleaned and preserved, the new unit was dismantled and brought down into the berthing. The STGs, already familiar with the structure of these units from the disassembly, reassembled the new unit in place. After all the piping was reconnected, the unit now provides a crisp, refreshing environment for the sailors that call this area home.

"We are really proud of our Sailors and the degree of professionalism in installing the FCA," said LT David Glaser, Anti-Submarine Warfare Officer. "We are all glad that the spaces are cold again."

The hard-working Sailors aboard Curtis Wilbur, through their initiative and eagerness to learn, have not only made life aboard the ship a little more comfortable again, but they have also been reminded of lessons in teamwork and morale!



Left: STG2(SW) Johnny Cabrera (top) works on removing one side of the supply air ducting from the air outlet port on the fan coil assembly while STG2 (SW) Daniel German (bottom) starts unbolting the upper from the lower cabinet.



STG2(SW) John Lukashonak removes the final fasteners of the supply air ducting from the air outlet port on the fan coil assembly.



STGC(SW/IUSS) Mark D. Moles (left) works on removing vent duct bolts while STG2(SW) Daniel German (right) prepares a return duct for future reinstallation.



Clearing the back side of fasteners required STG2(SW) Johnny Cabrera to work from inside of the cabinet.



A few fasteners required two people to remove. STG2(SW) Johnny Cabrera (right) holds the riveted nut in place while STG2(SW) John Lukashonak (left) turns the bolt.



STG2(SW) Daniel German cleans and prepares a return duct for future reinstallation.



(L-R) STG2(SW) Johnny Cabrera, STG2(SW) Daniel German and STG2(SW) John Lukashonak, with STGC(SW/IUSS) Mark D. Moles in the background. The crew poses next to what is left of the fan coil assembly.



SURGEMAIN NAMTS Update



By Chief Warrant Officer 3 Brandon Brake, Executive Officer, Naval Reserve Mid-Atlantic Regional Maintenance Center Chattanooga and Naval Reserve SurgeMain NAMTS Program Manager



In our ever-advancing Navy, the journey of a Sailor's career is a dynamic one. Ensuring that our service members are well prepared for their roles is a critical mission. For that reason, Individual Training Plans (ITP) are being distributed at each Regional Maintenance Center (RMC) with the purpose of guiding Sailors toward achieving their mobto-billet requirements. These ITPs are tailored to the specific needs of

each source rating and play a pivotal role in trade development. The ITP is no ordinary document; it's a two-year roadmap that charts the course for Sailors to meet the mandatory training requirements set by each RMC. These requirements encompass essential elements like NAMTS Core Fundamentals, 3M-301 Maintenance Person, and QA-301 Craftsman. It is not just about meeting the basics, the ITP extends beyond two years, fostering a deeper level of technical expertise. Sailors are guided by a NAMTS Job Qualification Requirement (JQR) specific to their source rating that provides a clear path for professional growth.

At each RMC, rigorous processes have been developed to ensure that Sailors can qualify as a 3M-301 Maintenance Person and a QA-301 Craftsman. But the innovation doesn't stop there; the introduction of virtual mentorship at the unit level is underway. This mentorship program aims to equip Sailors with the skills they need to qualify before they depart for their annual training. To ensure Sailors are on the right course, monthly metrics have been introduced. These metrics track our Sailors' progress in critical areas of development, including 3M/QA-301 qualification, NAMTS Core Fundamentals qualifications, and ITP enrollment and qualifications.

In a significant milestone, the Navy Reserves (NR CNRMC) now boasts its own NAMTS Qualified Signers List. This ground-breaking development has fostered the growth of our Reserve Sailors. An administrative structure has been established and is being actively utilized by the annual training groups at the RMCs, with plans to expand this structure to the regional and unit levels. NR CNRMC now possesses its own NAMTS instruction, providing clear guidelines for the NAMTS qualification process applicable to NR CNRMC. Local mentorship efforts are now driven by each region and remote testing guidance has been officially approved.

The journey continues and the path forward is clear. In the upcoming fiscal year, we aim to drive the completion of the two-year pipeline for RMC Sailors, ensuring they complete NAMTS Core Fundamentals and 3M/QA-301 qualifications. To enhance accessibility and information dissemination, the RMC Enlisted Qualification Handbook will be developed, housing rating ITPs, the 3M/QA Process, NAMTS instruction, and the NAMTS Qualified Signers List.

Additionally, a tracking database will be created to monitor RMC qualifications at all levels, from National to the deckplate. This includes qualifications in 3M/QA, NAMTS Core and specialized JQR qualifications, and Shop PQS completion where



MM1 Jeff Charles from NR SERMC JAX and MM2 Petagay Patterson, from NR SERMC San Antonio working on a split casing centrifugal pump in SERMC's Shop 944. Both are actively working on earning their NAMTS Valve Repair Technician NEC.

(Photo by HTCS Orlando Rosello, Jr.)

applicable, as well as any additional desired qualifications. The quest for excellence does not stop at the RMCs; a virtual mentorship platform at the unit level is in the works for NAMTS, 3M/QA, and ITP-specific skills. Administrative teams and structures for NAMTS will be built down to the unit level, ensuring a seamless flow of knowledge and mentorship.

We are committed to creating local NAMTS opportunities at each flagship, allowing civilian subject matter experts to mentor Sailors during drill weekend periods. These initiatives reflect our dedication to developing the best-trained and most skilled Sailors for our Navy's future.

In September, both SurgeMain and the RMC Cadre had the opportunity to participate in the NAMTS Standardization Conference. I extend my greatest appreciation to the contract and government program managers as they have been extremely supportive of us since 2019. Our Reserve Sailors would not be where they are in their rating development without the assistance of the NAMTS professionals and we look forward to their continued support.



Navy Participates in Defense Manufacturing Summit, Breaks Ground on New Training Center



By Team Submarine Public Affairs

DANVILLE, Va. – Secretary of the Navy Carlos Del Toro, office of the Secretary of Defense, state and local government officials, and defense industry partners gathered in Danville, Virginia for the third annual Accelerated Training in Defense Manufacturing (ATDM) and Additive Manufacturing Center of Excellence (AM CoE) Summit, Oct. 11.

The summit featured the formal groundbreaking of the ATDM Regional Training Center, which will provide a dedicated training facility as well as the infrastructure and equipment needed for large scale advanced workforce training.

The summit highlighted the significant progress made by the Navy and partners in workforce and technology development across the Submarine Industrial Base since the AM CoE's launch one year ago. It also prompted discussion on this year's theme "Galvanizing the SIB, Partnering to Deliver 1+2," referring to the Navy's submarine construction cadence of one Columbia class submarine and two Virginia class submarines by Fiscal Year 2026 to meet fleet demand.

The summit took place during National Manufacturing Month, when the International Trade Administration joins with U.S. government and industry partners to celebrate the importance of U.S. manufacturing innovation and ingenuity to our standard of living.

"As we observe National Manufacturing Month in October, I cannot think of a better event for our Navy and our industry partners to showcase how we are working together to advance and improve our nation's manufacturing workforce," said Del Toro. "By bringing together partners to work collaboratively on a critical mission, the COE serves as an example of the teamwork that we need to maintain our technological edge by innovating, and is already supporting the growth of the additive manufacturing industry in this region."

Co-located with the Institute for Advanced Learning & Research, ATDM is a rapid training program that develops a skilled workforce with training and qualifications in advanced manufacturing technologies that are critical to the submarine industrial base.

The focused, four-month training program is customized to the skills and training needs of the naval shipbuilding and sustainment sectors, and has graduated more than 280 skilled tradespeople to date. The new regional training center will support a full capacity of 800-1,000 graduates per year by 2025.

Rear Admiral Scott Pappano, Program Executive Officer, Strategic Submarines (PEO SSBN), outlined the Navy's generational journey to recapitalize the submarine fleet and reflected on how far the ATDM program has come in a short amount of time.

"The net result of the amount of shipbuilding we're introducing here is about a fivefold increase from where we were in the 2000s. When you look at the size, displacement, and complexity of these next-generation submarines, that's a really steep increase," said Pappano. "ATDM is a confluence of workforce development and technology, and we've got to keep getting the word out because the only way we're going to deliver submarines is with workforce and technology. We have to bring manufacturing back to ramp up the industrial base. That is how we maintain deterrence."



Secretary of the Navy Carlos Del Toro participated in a groundbreaking ceremony for a new Accelerated Training in Defense Manufacturing (ATDM) Regional Training Center in Danville, VA, Oct. 11. Groundbreaking of the ATDM Regional Training Center is a key milestone in scaling ATDM by providing a dedicated training facility with the infrastructure and equipment necessary to reach full capacity of 800-1,000 workers trained per year by FY 2025. (Photo by Chief Petty Officer Shannon Renfroe.)

The AM CoE, which formally opened at last year's summit, directly supports the growth of the submarine industrial base by scaling and maturing additive manufacturing technologies, enabling production of submarine components to bolster Naval shipbuilding and repair supply chains.

Additive manufacturing acts as a "force multiplier" giving the submarine industrial base a dedicated, agile, and responsive capability to increase manufacturing capability and capacity, reduce reliance on sole-source supply points, and address obsolescence challenges.

NASCAR Driver Brad Keselowski, who pilots the No. 6 Buildsubmarines.com/BlueForge Alliance Ford Mustang and owns the additive manufacturing company Keselowski Advanced Manufacturing, took a break from a busy race schedule to tour the AM CoE and speak at the summit about the intersection of workforce and technology in the defense industry.

"This is my first time here, and I'm blown away by everything I've seen," said Keselowski. "One of the things I've found to be so impressive about this facility is that not only does it say advanced manufacturing, but it really means advanced manufacturing with all the machines, the workflows, the equipment."

"This campus is truly awe-inspiring. We have had several Sailors and civilians from our Regional Maintenance Centers attend co-horts and they are sharing their knowledge with our Navy Afloat Maintenance Training Strategy Sailors and the fleet. This is something we'll continue to do every chance we get as our fleet is stronger for it," said Director, Intermediate Level Maintenance (C900), Daniel Spagone, Sr.

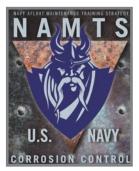
For more information on ATDM and its programs visit: https://atdm.org/



Corrosion Control Program Technician Class Hosted by ACU 4



Article by Andy "Rusty" Vasquez, NAMTS Corrosion Control Manager Photos by Kevin Bond



The U.S. Navy spends as much as \$6 billion a year on fighting rust. This is not a problem that is likely to go away anytime soon. The NAMTS Corrosion Control Program Technician (CCPT) Job Qualification Requirements (JQR) was created to enhance the Sailors' skills and level of knowledge in combatting corrosion.

The CCPT NEC is open to all rates, providing Sailors with the knowledge and skills needed to address rust issues

that incur an annual cost of \$6 billion for the U.S. Navy. Upon completion of the CCPM JQR, sailors gain the ability to guide and mentor their peers in metal identification, fastener compatibility, Level 1 tank, void, and structural assessments, as well as proficiency in the Corrosion Control Information Management System (CCIMS) and paint requirements for metal surfaces. Furthermore, they acquire comprehensive knowledge of the available tools and equipment for combating rust, showcasing their capability to employ these tools in conducting tank, void, and structural assessments. Finally, each Sailor conducts Departure from Specifications (DFS) inspections, performs surface preparation, evaluates surface contamination and coating applications, and demonstrates proficiency in abrasive blasting, chemical removal, and hand and power tool cleaning techniques.

When you think about how big our ships are, how rust appears just about everywhere, and the various processes required to get rid of it, keeping a boat pristine seems almost impossible. With the help of Sailors armed with the skills of a CCPT, commands can begin to reduce the extensive man hours, expensive paint purchases, dry-dock visits, and so much more going into the fight against rust.

To address the \$6 billion a year rust problem, the Navy needs more NAMTS CCPTs aboard every ship, so in July, a multicommand CCPT mentorship opportunity was offered utilizing the expertise of Commander, Navy Regional Maintenance Center's contracted Corrosion Control Manager. Mentorship of ten highly motivated Sailors from four different commands: Assault Craft Unit 4 (ACU 4), Assault Craft Unit 2 (ACU 2), USS Kearsarge (LHD 3) and USS Oak Hill (LSD 51) was completed over a three-day period. As a result, all personnel that participated made significant progress towards completion of the NAMTS CCPT JQR. These personnel will go on to be the Skill Area Coordinators at their commands where they will lead to other Sailors receiving the same mentorship and earning the NAMTS CCPT NEC.



Andy "Rusty" Vasquez, NAMTS Corrosion Control Manager, instructs during a Corrosion Control Program Technician course in July at Assault Craft Unit Four (ACU 4)



NAMTS Corrosion Control Manager, Andy "Rusty" Vasquez (kneeling), takes time out for a quick photo with participants during a Corrosion Control Program Technician course at Assault Craft Unit Four (ACU 4).

Collaborating closely with the Corrosion Control Program Manager (CCPM) onboard a ship, Sailors who attain the NAMTS Corrosion Control Program Technician NEC are equipped with the expertise needed to meticulously record inspections and communicate identified corrosion control issues to the CCPM for accurate documentation and development of repair plans. Trained in accordance with relevant Maintenance Requirement Cards, divisional Corrosion Control Program Technicians (CCPTs) systematically carry out inspections, proactively documenting and implementing preventive measures to address corrosion concerns. Additionally, CCPTs collaborate with the ship's 3-M Coordinator to rectify corrosion discrepancies that exceed the ship's internal capabilities.

NAMTS CCPTs are a critical resource in the fleet's fight against corrosion. The mentorship provided by CNRMC's Corrosion Control Manager is available to other commands upon request. To schedule the mentorship at your command, contact the NAMTS Scheduler at (757) 578-5341 Ext 113.



Conducting a corrosion assessment on a Landing Craft Air Cushion (LCAC).



Conducting a corrosion assessment on a Ship to Shore Connector (SSC)



NAMTS Afloat Training Activities (NATA)



ver 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 45 NATAs in the fleet, on CVN/LHD/LHA/LPD/LSD/AS/DDG/CG 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 overthe-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 334 carrier Sailors enrolled in the NAMTS program (172 on the East Coast Carriers and 162 on the West Coast Carriers) with 28 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)

Destrovers

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

Amphibious Transport Docks

- USS San Antonio (LPD 17)
- USS Mesa Verde (LPD 19)
- USS San Diego (LPD 22)
- USS Anchorage (LPD 23) **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)

As USS Dwight D. Eisenhower (CVN 69) prepared for another deployment, the ship made every effort to incorporate NAMTS into its training schedule. MM1 Dean Frescura, the Command NAMTS Coordinator, was eager to support sailors in acquiring numerous NAMTS NECs during deployment and ensuring they have access to all necessary resources. Just prior to deployment, the NAMTS team members spent a considerable amount of time aboard providing mentorship. NAMTS Mentors Mike Dengate and Jon Bonet, along with FN German Baca Reyes, FN Daniel Frattalo, and NAMTS Valve NEC Sailor MM3 Jose Medina Mojica, played a key role in troubleshooting their Out of Commission (OOC) Valve Test Stand. They removed and replaced the Valve Test Stand's ram polymer seal, O-ring, and reassembled the ram piston into the cylinder, the gland, and the relief valve. Additionally, they provided over the shoulder assistance in creating a AWR (Action Work Request) for MARMC to manufacture damaged hoses for the valve test stand based on a sample prior to deployment. The NAMTS Sailors and mentors have the Valve Test Stand ready for use once the hydraulic hoses are received and installed. The ship presently has 37 Sailors enrolled in NAMTS Core Fundamentals and two NAMTS NEC skill areas, NAMTS Valve Repair Technician and NAMTS Inside Machinist.

USS Abraham Lincoln (CVN 72)

USS Abraham Lincoln (CVN 72) is quickly becoming the standard bearer for the NAMTS program aboard aircraft carriers. Abraham Lincoln's Engineering Training team is using the NAMTS program as a focal point in their weekly training schedule. Command NAMTS JQR Coordinator, MMC Thomas Soper and Assistant Coordinator, MR1 Stephen Cagle, have made it point to have as many NAMTS NEC qualified Sailors aboard as possible. They acknowledge that with NAMTS-skilled Sailors, there is no reason for many of the jobs on the ship's Current Ships Maintenance Project (CSMP) to be outsourced. Congratulations to the ship's newest 797A Rigger/Weight Tester qualified Sailors: BMC Anthony Coluccio, BM3 ObaraJesus ObaraJesus, BMSN Shaniya Allenbatz, BMSN Jackson Cooper, BMSN Buckley Mitchell, BMSN Craig Woolbridge, and BMSN Dawud Meyers.

USS John C. Stennis (CVN 74)

Currently undergoing an extensive overhaul at Newport News Shipbuilding, USS John C. Stennis' (CVN 74) leadership is committed to continuing to make NAMTS available to its crew. Sailors assigned to the Light Industrial Facility (LIFAC) in Hampton, Virginia, and the leadership in the Electrical Division are documenting activity wherever the opportunity presents itself. The NAMTS enrolled Sailors at LIFAC, assisted by NAMTS Mentors, have successfully overhauled fifteen valves and three electrical motors, showcasing the commitment to skill development and maintenance excellence. Command NAMTS JQR Coordinator MRC Jason Vance has done an outstanding job communicating with the NAMTS team regarding the health of their program. John C. Stennis currently has 48 Sailors enrolled in eight Skill Area JQRs including

Core Fundamentals, Inside Electrical Repair Technician, Outside Electrical Repair Technician, Inside Machinist, Pipefitter, Pump Repair Technician, Shipfitter, Valve Repair Technician, Watertight Closure Maintenance Technician and General Shipboard Welder/Brazer.

LHA / LHD Highlights USS Bataan (LHD 5)

USS Bataan (LHD 5) is currently deployed. Despite having a rigorous work and watch schedule, Command NAMTS JQR Coordinator, MM1(SW) Stephen Scott continues to do an outstanding job administering the program onboard. Lack of connectivity has hindered progress for their Sailors, but they are doing what they can when they can. The ship has also enrolled over 30 embarked Sailors for the Beach Master Unit and Landing Craft Units onboard. This is an initiative that the NAMTS team has encouraged for some time; Bataan and MM1 Scott are the first to make it happen! Bravo Zulu to all! The ship currently has 79 Sailors enrolled in eight skill area JQRs including Core Fundamentals, Diesel Engine Repair Technician, Inside Machinist, Interior Communications Repair Technician, Outside Electrical Repair Technician, Pump Repair Technician, and Valve Repair Technician. Furthermore, while the ship was underway prior to deployment they executed repairs on the 1A and 1B FOSP discharge relief valves. These valves play a crucial role in the safe and efficient operation of the ship's fuel system. The repairs contribute not only to the ship's operational efficiency but also to its overall mission readiness.

LSD / LPD Highlights USS Germantown (LSD 42)

USS Germantown (LSD 42) and the Command NAMTS JOR Coordinator, BM1(SW)Andrae Gryce, uses the NAMTS program to enhance the ship's ability to handle repairs and maintenance, promoting self-sufficiency. The utilization of NAMTS mentors is a key component of this initiative, particularly during port stays, where they provide invaluable handson mentorship to elevate the skill set of the ship's personnel. EM1(SW) Kevin Santiago, a NAMTS NEC holder, along with NAMTS Mentor Rizalito Antonio, addressed issues with the Shunt trip for #4 Shore Power Breakers and fixed a stateroom cabin reheater contactor. DC2 (SW) Katherine London, a NAMTS Watertight Closure NEC holder, and NAMTS Mentor Ramir Pulido collaborated to troubleshoot and repair two watertight closures, enhancing the ship's compartment integrity. Germantown currently has 44 Sailors enrolled in 5 different skill areas: Valve Repair Technician, Rigger/Weight Tester, Outside Electrical Repair Technician, Air Conditioning and Refrigeration Technician, Hydraulics Repair Technician, and Watertight Closure Maintenance Technician.

USS Harpers Ferry (LSD 49)

USS Harpers Ferry's (LSD 49) Command NAMTS JQR Coordinator, ENCS Juanillo Ericson, has incorporated NAMTS into their monthly indoctrination, ensuring that all Harpers Ferry personnel are aware of the training opportunities and resources available. In addition to this initiative, DC2(SW) Robert Crawford and DC1(SW/AW) Joseph Janelle, enrolled



NAMTS Afloat Training Activities (NATA)



as NAMTS Watertight Closure Maintenance Technicians, along with the NAMTS Mentor Ramir Pulido, successfully carried out the refurbishment and installation of IDWTD 02-67-2 and MACHALT 538. Additionally, they accomplished the refurbishment and installation of QAWTD 07-58-1. These achievements underscore the resilience and commitment of our NAMTS-enrolled personnel. Harpers Ferry currently has 64 Sailors enrolled in four different NAMTS NEC skill areas: Outside Electrical Repair Technician, Valve Repair Technician, and Watertight closures Maintenance Technician.



USS Harpers Ferry (LSD 49) Auxiliary Division Sailors MM3 Alberto Sanchez (left) and MM1 (SW) Ronald Dumale, who are enrolled in the NAMTS Valve Repair Technician JQR, receive general valve maintenance mentorship on a relief valve and a globe valve. (Photo by Steven Constantino.)

USS Oak Hill (LSD 51)

USS Oak Hill (LSD 51) is our latest addition to the NAMTS Afloat Training Activities on the east coast. They have 26 Sailors enrolled. They quickly implemented the NAMTS program to enhance their shipboard repair capabilities. The command initiated their training by tapping into the expertise of the NAMTS mentors, who provided over-the-shoulder assistance in troubleshooting, overhauling, and repairing the main galley 20-gallon steam kettle, aqueous film forming foam control valves, and No. 1 expansion tank relief valve. These were among the first repairs addressed, showcasing the commitment to elevating the skill set and readiness of the ship's personnel.

USS Mesa Verde (LPD 19)

One of the major repairs aboard USS Mesa Verde (LPD 19) that they needed significant help with was their Valve Test Stand. With the assistance of NAMTS mentors, the ship conducted an on-site assessment and operational tests. A list of findings was created and provided and work candidates were written and Job Sequence Numbers (JSN) were approved. They then re-installed the ram and conducted testing, verifying the valve test stand was 100% operational. Mesa Verde deployed with a fully operational valve test stand is ready to support the USS Bataan ARG and the ships in theater.

Newly designated Command NAMTS JQR Coordinator EM1 (SW) Jose Colon is stepping in and working via distance support with the east coast Afloat NAMTS to reinvigorate the NAMTS program onboard while they are deployed. The ship presently has 20 Sailors enrolled in NAMTS Core Fundamentals and two NAMTS NEC skill areas: NAMTS Outside Electrical Repair Technician and NAMTS Valve Repair Technician.

USS Somerset (LPD 25)

USS Somerset's (LPD 25) Command NAMTS JQR Coordinators ENC (SW) Harvey Macadaan and ENC (SW) Chauncey Ang, have implemented a vigorous comprehensive training program that incorporates NAMTS into the weekly training schedule for the Engineering departments. This initiative is also being promoted through the ship's monthly indoctrination schedule to raise awareness of the opportunity available. In line with these efforts, EM1 (SW) Johnpatrick Rana, a NAMTS Outside Electrical enrollee, successfully wired a bandsaw in the Machinery Shop and troubleshot #5 BI-Polar amplifier unit and ADC commercial dryer with the guidance of NAMTS Mentor Rizalito Antonio, who utilizes his skill and proficiency in electrical systems. Somerset has 18 Sailors currently enrolled in seven different NAMTS NEC skill areas: Air Conditioning and Refrigeration Technician, Hydraulics Repair Technician, Outside Electrical Repair Technician, Watertight Closures Maintenance Technician, Rigger/Weight Tester, Diesel Engine, Governor, and Injector Repair Technician, and Pump Repair Technician.



(L-R) MM3 Leonard Long, MM2 (SW) Trenton Bibbs, and MM1 (SW) Gary Zhen, USS Somerset (LPD 25) Auxiliary Division Sailors enrolled in various NAMTS skill areas including Air Conditioning and Refrigeration Technician, Pump Repair Technician and Hydraulics Repair Technician, received pump mentorship on centrifugal pumps, mechanical seals, and pump repairs and maintenance. (Photo by Steven Constantino.)





















Mid-Atlantic Regional Maintenance Center (MARMC)

NEC - 736B Pump Repair Technician

MMFN China Crystal German MM2 Shakima Kiara Coleman MM3 Lordedwin Kwame Nannor MM1 (SW) Hyrum David Rose MM3 (SW) Hien Vinh Doan MMC (SW/AW) Darrius Obryan Parker



NEC - U08A Gas Turbine Repair Technician

GSM2 (SW) Luis Daniel Martinez Jr. GSM1 (SW) Robert Nathaniel Jones GSM1 (SW) Alexas Nicole Varela

NEC - U11A Gas Turbine Electrical Repair Tech.

GSEC (SW) Ashlee Miltonette Hare

NEC - U17A Air Conditioning and Refrigeration

MM3 (SW) Jordan Edward Berry MM2 (SW) Eric Tyler Gibsonreese

NEC - U18A Heat Exchanger Repair Technician

MMFN China Crystal German MM2 (SW) Derek Clarence Frazier Jr. MRC (SW) Jereme Daviddean Scherer MM2 (SW) Reymeko Kace Simmons MM3 (SW) Centoria Lee Elliott MMN2 (SW) Shawn Michael Farmer MM1 (SW/AW) Crystal Latavia Hampton MM1 (SW/AW/IW) Robert James Cary

NEC - U33A Inside Machinist

MR3 Mariloumae Norbert Manantan MR3 David Wiatr

NEC - U34A Outside Machinist

MM2 (SW) Kyle Brandon Garrison

NEC - U39A Outside Electrical Repair Technician

GSE1 Matthew Norman Tripp EM2 (SW) Michael Bradley Degonia EM2 (SW) Juan Delano White Jr. GSE1 (SW) Amber Diane Santos EM2 (SW) Jamia Dominique Milam GSE1 (SW) Matthew Lawrence Root EM2 (SW) Shauna May Lambert EMC (SW) Jon Michael Lugo EM2 (SW) Alycia Michele Melton EM2 (SW) Jacob Thomas Edmunds EM2 (SW) Xiaojie Chen

NEC - U47A Shipfitter

HT1 (AW) Zeterian Charles Marshall HT2 Dexter Emmanuel Porter HT2 (SW) Cody James Willis HT1 (SW) Robert Jordan Hackenberg HT2 (SW) Roselind Joy Valentin HT1 (SW) Daphny Shantal Davila HT2 (SW/AW) Braxdon Boyd Cooper HT2 (SW/AW) Spencer Michael Barbeau

NEC - 719B Shipboard Calibration Coordinator

GSEC (SW) John Curtis Smith IC3 (SW) Christian Simon Robinson IC1 (SW) Autumn Smith Caluya

NEC - 797A Rigger / Weight Tester

BM3 Glenn Christoph Chamberlain BM3 William Lee Green Jr. BM1 (SW) Rick Allen Horvath Jr. BM2 (SW) Jacob Michael Kunde II BMC (SW) David Michael Dailey BM1 (SW) Cody Nicolas Furmage

NEC - 834A Valve Repair Technician

MM2 Bryce James Benn MM2 Martin William Boardman MM2 Gene Johnson Jr. GM2 (SW) Matthew Barry Kramer HT1 (SW) Gregory Caleb Standridge MM3 (SW) Andrea Camille Nelson MM2 (SW) Kevin Christopher Daley MMC (SW) Drake Cortez Smith GSMC (SW) Joshua Dale Jones DC3 (SW) Andrew Francis Barrett GMC (SW) Morgan Kathleen Martin MM2 (SW) Brandon Michael Nichols MM1 (SW) Amanda Samantha Jones MM2 (SW) Taylor Samuel Yanta MRC (SW/AW) Jesse Aaron West FCC (SW/AW) Kyla Lee Solomon HTC (SW/AW) Corey Lee Mitchell HT1 (SW/AW) Joshua Miles Blackstone MM2 (SW/AW) Gaerianne N Burrell EMN3 (SW/AW) David Russell Collis Jr. HTC (SW/AW) Kristen Tanita Bigelow MM2 (SW/AW/IW) Samantha Luevano

NEC - 835A Watertight Closure Maintenance Technician

DC3 Alexis Bayle Williamson HTFN Guy Elliot Caquias HT3 Ambyr Kenasia Morris DC3 Jayden Lee Holman DC3 Rayelene Ruth Beck HT3 Noah Scott Mattes DC2 (SW) Robert Alan Yarborough DC3 (SW) Beau Anthony Perri DC2 (SW) Jose Carlos Barahona HT2 (SW) Brandon Christopher Bounds MMN2 (SW) Andrew James Wathen DC2 (SW) Mackenzie Kaye Duplisea EMC (SW) Ligil Llana Apuli DC2 (SW) Samantha Marie Briscoe DC2 (SW) Nicholas Maximillion Wade HT2 (SW) Devin Michael Gibbins EM1 (SW) Andres R Rodriguez DC2 (SW) Tyler Robert Eckhoff HTC (SW/AW) Kyle Finley Gregory EMN1 (SW/AW) Hakeem Xavier Thompson DC3 (SW/AW) Antonio Lerma BM1 (SW/AW/EXW) Nicholas Joseph Gemmato

























Navy Reserve Surge Maintenance (SurgeMain)

NEC - U40A Inside Electrical Repair Technician EM2 Peter Oculien Jr.

NEC - U47A Shipfitter HT1 Jeremy Eugene Hauck

NEC - U52A Pipefitter HT1 (SW) Austin Daniel Fortner



Norfolk Naval Shipyard (NNSY)

NEC - 736B Pump Repair Technician MM2 (SW/AW) Johnaldrin Roco Suyat

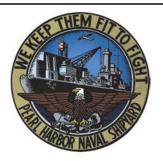
NEC - 834A Valve Repair Technician

MM3 Brendan Michael Maw EM3 Ashley Nicole Cullum MM2 (SW) Andrew Curtis Wiley GSM2 (SW) Sabrine Gabriella Bailey MRC (SW) Gilbert Gene Rios Jr. HT2 (SW) Dominic Manuel Lorenzo MM2 (SW) Gregory Michael Loss MM2 (SW/AW) Christopher Alberto Chan HT2 (SW/AW) Juan Antonio Otero III HT2 (SW/AW) Amanda E Jones MM1 (SW/AW) Bradley Keith Hugdahl

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

EN1 (SW) David Michael Robinson EN1 (SW) Tyler Weidenhammer

NEC - U39A Outside Electrical Repair Technician EM3 (SW/AW) Vincent R Arredondo



Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility (PHNSY & IMF)

NEC - 797A Rigger / Weight Tester MM2 (SW) Tierra Donaye Roberts BM2 (SW) Ryan Levi Rowe

NEC - 834A Valve Repair Technician MM1 (SW) David Arthur Sammons

NEC - 835A Watertight Closure Maintenance Technician

HT2 (SW) Te Mein Taing HT2 (SW) Travis Spencer Lourie HT1 (SW/AW) Joshua Henry Downs

NEC - U08A Gas Turbine Repair Technician

GSM1 (SW) Zachary John Wagner GSM2 (SW) Jeremy Muniz Deplata GSM2 (SW/AW) Michael Lee Schillinger

NEC - U26A Diesel Engine-Governor & Injector Repair Tech. EN2 (SW) Kyle Allyn Rohloff

NEC - U40A Inside Electrical Repair Technician EM2 (SW) Inna Myroshnychenko

NEC - U47A Shipfitter

HT2 Jacob Scott Wiezorek HT1 (SW) Jake Alexander Lindsay



Puget Sound Naval Shipyard & Intermediate Maintenance Facility (PSNS & IMF) Everett, WA

NEC - 736B Pump Repair Technician MMC (SW) Andrew Joseph Huhra

NEC - 761A Hydraulic Repair Technician MM1 Bryson Nathaniel Washington MM3 (SW) John Rabanes

























NEC - 834A Valve Repair Technician

MM1 (SW) Francis Andrew Mckenna MM2 (SW) Dominic Arturo Martinez MM1 (SW) Samuel David Wallace EN1 (SW) Logan Dewayne Nash FC1 (SW) Clayton James Girton MM2 (SW) Josephine Joanna Alvarez FCC (SW) Christopher Paul Suttmoller MM2 (SW) William Reid Sheild MM2 (SW/AW) Bianca M Reiter HT1 (SW/EXW/DSW) Sean Michael Dargie

NEC - 835A Watertiaht Closure Maintenance Technician

DC1 (SW/AW) Chase Michael Purdue

NEC - U08A Gas Turbine Repair Technician

GSM2 (SW) Cody Laurence Murray GSM2 (SW/AW) Immaculadaconception Bas To

NEC - U18A Heat Exchanger Repair Technician

MM1 (AW) James Paul Harry EN2 (SW/AW) Andrew Koji Snelson

NEC - U52A Pipefitter

HT1 (SW/IW) Aespen Danielle Shipman

NEC - V15C Phalanx Gun & Ammunition Handling System Repair Technician

FC2 Richard Matthew Engelman FC2 (SW) Christopher Du Bowdenwright



Southeast Regional Maintenance Center (SERMC)

NEC - 736B Pump Repair Technician

MM2 (SW) John David Betancourt MM2 (SW) Michael Jared Allred

NEC - 797A Rigger / Weight Tester

BM3 (AW) Selene Day Trevino BM3 (SW) Eric Anthony Wells BM2 (SW) Malik J Warren BM2 (SW) Ashley Nicole Frost BMC (SW) Nicholas Noel Wendell BM3 (SW) Ayele Pascal Belizaire

BM2 (SW) Sherman Tyrell Jenkins BM2 (SW) Brice William Smith BM2 (SW/AW) Kevin George Iverson BM1 (SW/AW) Christopher Larry Pettit

<u>NEC - 834A Valve Repair Technician</u> MM2 (SW) Tony Dewayne Walker GM1 (SW) Blaine Jared Lucas GSM3 (SW) Jaemy Lorrie Walker MM3 (SW) Michael Shane Neer

NEC - 835A Watertight Closure Maintenance Technician

BM2 (SW) Subrena Tyiece Hearne GSE2 (SW) Austonjacob Dzierzynski GSM2 (SW) Isaias Fernandez

NEC - U08A Gas Turbine Repair Technician

GSM2 Christopher Michael Lopez GSM3 (SW) Charles David Marshall GSM2 (SW) Jordan Edward Mayer GSM3 (SW) Jordan Robert Clay GSM3 (SW) Rodolfo Rogelio Falcon GSM2 (SW) Damon Victor Sugrue

NEC - U11A Gas Turbine Electrical Repair Technician

GSE2 (SW) Jamal Dwandricus Potter

GSE2 (SW) Jiselle Torres

NEC - U18A Heat Exchanger Repair Technician

MM2 Alexander Nicholas Dunn GSM2 (SW) Lajasmine A Rivers GSM2 (SW) Joshua Adam Schwier GSMC (SW) Michael Adam Miller GSM1 (SW) Michael Anthony Ghilardi GSM3 (SW) Dominique Marqu Forddouglas GSM2 (SW) Xavier Rajah Lubin GSM2 (SW) Stephen Sterling Solomon II GSM2 (SW) Zachary Tyler Pursley MM2 (SW/AW) Brianna Abigail Samuels MM2 (SW/AW) Michael J Gipson GSMC (SW/AW) Judeson Jeancharles

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

EN1 (SCW) Zachary Martin Hansen EN3 (SCW) Jean Sammuel Cajuste EN1 (SW) Steven Romulus EN2 (SW) Yaovi Kangni EN3 (SW) Khadijah Denton EN1 (SW/AW) Michael Donald Cox NEC - U33A Inside Machinist MR2 (SW) Brett David Sukolics MR2 (SW) Joshua Thomas Kuntzi

NEC - U40A Inside Electrical Repair Technician

EM2 (EXW) Patrick Andrew Rivers EM2 Jacob Dennis Colon EM2 (SW) Kyle Scott Dermody EM3 (SW) Palko Dominguez

NEC - U52A Pipefitter

HT1 (SW) Jennifer Ann Schleuning

NEC - U54A General Shipboard Welder/Brazer

HT2 (SW/AW) Olivia Dominique Phelps























Southwest Regional Maintenance Center (SWRMC)

NEC - 736B Pump Repair Technician

MM3 (SW) Jonathan Michael Schreiber MM1 (SW/AW) Zuleyma Angeli Porrasibarra MMC (SW/AW/EXW) Marvin Fatu Taufi

NEC - 797A Rigger / Weight Tester

GM2 Joshua P Delos MM1 (SW) Anthony Charles Terry Jr. BM1 (SW) Thomas Joshua Schnell BM2 (SW) Arisai Shoats BM1 (SW/AW) Jessica Guzman



MM3 Daniel Adrian Pedroza EN2 Jarred Jaime Johnson EN2 Michael Jerome Plummer Jr. GM3 Selena Love Wingfieldharris MM3 Jade Mary Buchert EN3 Cristian Saul Fuentes MM2 Dillon Thomas Fortune GM2 Sandra Medina GM3 (SCW) Brandi Lea Osbun GSE1 (SW) Whittney Alexander Richard DC2 (SW) Tashane Anthony Campbell EM2 (SW) Benjaxyz Aquino Abiva MM1 (SW) Nicolaus Ciannan Martin EN2 (SW) Andrew Daniel Zuniga IC1 (SW) Destiny Deshaun Durgin MM3 (SW) Cesar Jesus Martinez GM2 (SW) Aran M Fowler IC2 (SW) Jarod Matthew Osso GM2 (SW) Ashley Nicole Martinez GM2 (SW) Taquan Oshae Taylor DC2 (SW) Dequan Fort EM1 (SW) Brandon Mejiabravo EM2 (SW) Sibo Sun EN1 (SW) Diego Castellanos GM2 (SW) Natalie Flores IC2 (SW) Frank Mora GSM1 (SW/AW) Jesusa Cristy Nostrates MM2 (SW/AW) Quinndon Dantae Zallicoffer GM2 (SW/AW) Jacob Dean Bartolome EM1 (SW/AW) Andrea Elvira Escobarpineda MM1 (SW/AW) Shamari Fitzroy Lindo BM2 (SW/AW) Desirae Nicole Stern GM2 (SW/AW) Elijah Ray Morgan BM2 (SW/AW) Nico Valera Cabel MM2 (SW/AW) Ivan Soto MMC (SW/AW) Joseph Kimachia GM2 (SW/EXW) Marcos Anthony Sisneros MM2 (SW/IW) Devante Shawn Mullen

NEC - 835A Watertight Closure Maintenance Technician

DC3 Lamel M Watts GM3 (SCW) Brandi Lea Osbun MM2 (SW) Alexander Bennett Dubose MM2 (SW) Chester Lee Randolph III MM2 (SW) Maabegail Pecundo Alba MM1 (SW) Richard Raymond Montgomery DC2 (SW) Abigail Reyes Mariano DC2 (SW) Mikaela Roshelle Bailey DC2 (SW) Sergio Socorro Chapa GSM2 (SW) Shavez Unique Bryant



EM2 (SW/AW) Zyrabelle Cinco Domantay DC2 (SW/AW) Paul Sebastian Leal

NEC - U08A Gas Turbine Repair Technician

GSE1 (SW) Adriana Alexis Gonzales GSE1 (SW) Derrick Donell Ausberry GSM2 (SŴ) Jeffery Kent Douglas ÍÍ GSM2 (SW) Nguyen The Phan GSM2 (SW) Darlene Malasique GSM2 (SW) Christian Jimenez GSM2 (SW/AW) Celeste Marie Acosta GSM2 (SW/AW) Markjohnallen Vener Bermudo

NEC - U11A Gas Turbine Electrical Repair Technician

GSEC (SW) Stanley U Paramio GSEC (SW/AW/IW) Ciejay Molnar NEC - U17A Air Conditioning and Refrigeration MMC (SW) Giovanni Delacruz Sison MM2 (SW) Ryan Scott Gross MM1 (SW/AW) Christopher Allen Griser

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

EN2 Kaelin J Khammalasiw EN1 (SW) Christopher Hector Aguilar EN1 (SW) Kiam Kadeem Graham EN2 (SW) Chase Michael Sachs EN1 (SW) Desjuan Teree Morgan EN2 (SW) Jose Valent Bermejogonzalez EN1 (SW) Logan Gregory EN2 (SW) Virginia Valadez

NEC - U33A Inside Machinist

MRFN Ethan Charles Lambert MRFN Montrez Lamont Smith MR3 Christopher Thomas Foshav MRFN Raydale Whitfield Jr. MR2 (SW) Calvin Okeith Archie II MR2 (SW) Allex Rathnak Ok MR2 (SW) Naseer Ellis

NEC - U34A Outside Machinist

MM1 (SW) Keegan Alfred Barney MM1 (SW) Dakota James Key MM2 (SW) Laura Lee Picou MM2 (SW/AW) Jonathan Alan Smith MM1 (SW/AW) Anita Rimorin Dulay MM1 (SW/AW) Patience Iradukunda

NEC - U39A Outside Electrical Repair Technician

EM1 (SW) Jason Barkley Whited EM2 (SW) Anusca Shanice Trotman EMC (SW/AW/IW/EXW) Daniel Kyle Mcclew

NEC - U40A Inside Electrical Repair Technician EM2 Natalie Zuniga

EM1 (SW) Robert Daniel Welden EMC (SW) Marcelino Mendoz Salazar Jr. EM1 (SW) Matthew N Deets EM2 (SW) Hayden Nicolas Toebe EM1 (SW) Lijun Yu EM2 (SW) Tyler Vongphakdy EM1 (SW/AW) Nicholas Adam Hernandez EM1 (SW/AW) Reyna Victoria Mars









GRADUATES

June - October 2023



<u>NEC - U52A Pipefitter</u> HT1 Andrew Roger Potratz

<u>NEC - U54A General Shipboard Welder/Brazer</u> HT1 (SW) Aaron Jaye Bolden HT2 (SW/AW) Anthony Michael Castillo

<u>NEC - 860A Corrosion Control Program Technician</u> MM1 (SW) Richard Raymond Montgomery BM2 (SW/AW) Desirae Nicole Stern



Trident Refit Facility (TRF) Bangor, WA

<u>MEC - 736B Pump Repair Technician</u> MM2 (SW) Tyler Andrew Suire MM1 (SW) Jonathan Donald Mccann

<u>MEC - 761A Hydraulic Repair Technician</u> MM2 (SW/AW) Jose Luis Aguilar GSM2 (SW/SS) Charles Franklyn Hickox II

<u>NEC - 797A Rigger / Weight Tester</u> BM1 (SW) Sean Cajetan Huntsman Jr.

<u>NEC - 834A Valve Repair Technician</u> MM2 (SW) Elizabeth Sylvia Rosales MM2 (SW) Richard Walter Doubleday

<u>NEC - U17A Air Conditioning and Refrigeration</u> MM2 (SW) Roger Lee Shifflett III

<u>NEC - U18A Heat Exchanger Repair Technician</u> MM1 (SW) Johnathan Eli Lutes

<u>NEC - U34A Outside Machinist</u> MM2 (SW) Robert Shaver Wade

<u>NEC - U39A Outside Electrical Repair Technician</u> EM2 (SW) Kendel Scott Askew

<u>NEC - U47A Shipfitter</u> HT2 (SW) Bryce Andrew Batson HT1 (SW) James Hance Bieker

HT1 (SW/AW/IW) Tarikh Daquane Williams

<u>NEC - U52A Pipefitter</u> HT2 (SW) Adam Joseph Welkovich HT2 (SW) Joseph Lee Keith HT1 (SW/AW) Jacob Matthew Adams

<u>NEC - U33B Computer Numerical Controller (CNC) Machinist</u> MR2 John William Jones



Portsmouth Naval Shipyard Detachment San Diego

<u>NEC - U47A Shipfitter</u> HT2 (SW) Tyler Allen Garding HT1 (SW) Edson Pierre Toussaint HT1 (SW/AW) Dawsen Reece Forbes



USS Harry S. Truman (CVN 75)

NEC - 834A Valve Repair Technician CTR1 Zachery Taylor Spencer



USS George H W Bush (CVN 77)

<u>NEC - U39A Outside Electrical Repair</u> Technician EM2 (SW/AW) Richard T Cooper



USS Carter Hall (LSD 50)

<u>NEC - U39A Outside Electrical Repair Technician</u> EM3 Brandon Allen Radke











June - October 2023













USS Boxer (LHD 4)

<u>NEC - 835A Watertight Closure Maintenance Technician</u> DC2 Jason Kendall Cedoit



USS Cowpens (CG 63)

NEC - 834A Valve Repair Technician

YN3 Justin Santos Lopez MM2 Precious Jasmine Lane



USS John P Murtha (LPD 26)

<u>NEC - U39A Outside Electrical Repair Technician</u> EM1 (SW) Emmanuel Dublin Sabio



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	Х	Х	Х	Х		Х		Х
	Phalanx Gun and Ammunition Handling System (PGAHS) Repair Technician	FC, GM	X		X	X			X	X
860A	Corrosion Control Program Technician	All Ratings				Х				
U33B	Computer Numerical Control (CNC) Machinist	MR		Х		Х		Х		
U26A	Diesel Engine, Governor, and Injector Repair Technician	EN	Х	Х	Х	Х				Х
U11A	Gas Turbine (Electrical) Repair Technician	GS, GSE	Х		Х	Х			Х	Х
U08A	Gas Turbine Repair Technician	GS, GSE, GSM	Х		Х	Х			Х	Х
U54A	General Shipboard Welder/ Brazer	HT	X	Х	X	Х		X		х
U18A	Heat Exchanger Repair Technician	DC, EN, GSM, MM	Х		Х			Х	Х	Х
761A	Hydraulics Repair Technician	ABE, ABF, GS, GSE, GSM, MM		Х				Х	Х	Х
	Inside Electrical Repair Technician	EM		Х	Х	Х		Х	Х	Х
U33A	Inside Machinist	MR	Х	Χ	Х	Х	Χ	Х	Х	
V82B	Interior Communications Repair Technician	EM, ET, IC			Х	Х			х	
U39A	Outside Electrical Repair Technician	EM, GS, GSE	Х	Х	Х	Х		Х	Х	Х
	Outside Machinist	GS, GSM, MM, MR	Х		Х	Х		Х	Х	
U52A	Pipefitter	HT ABE, ABF,	Х		Х	X	Х	Х	Х	
	Pump Repair Technician	DC, EN, GSM, MM, MR	X	Х	X	X	X	X	Х	
797A	Rigger/Weight Tester	All Ratings	Х		Х	Х		Х	Х	X
	Shipboard Calibration Coordinator	EM, EN, ET, GSE, GSM, IC, MM	Х							
	Shipfitter	HT	Х	Χ	Х	Х	X	X	X	X
834A	Valve Repair Technician	All Ratings	Х	Х	Х	Х	Х	Х	Х	X
835A	Watertight Closure Maintenance Technician	All Ratings	X		Х	Х			X	Х



NAMTS Training is Available at these Facilities







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) 578-5179		
NAMTS Assistant Contract Program Manager/Afloat Lead	(757) 226-8860		
NAMTS RNC Lead	(757) 226-8860		
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		
Weight Handling / Rigger (East)	(757) 402-3952		
Inside Machinist SME (West)	(619) 259-2240		
Watertight Closure / CSMP / 3M / Core (West)	(619) 259-2014		
Outside Machinist SME (West)	(619) 259-2528		
Outside Machinist SME (West) & Team Lead	(619) 292-2298		
Weight Handling / Rigger (West)	(619) 259-2015		
Electrical SME (West)	(619) 259-2790		

RATIONE TRID **