Shipmates,

The requirements of today’s Navy have evolved, and our strategies must meet the challenges dictated by the global environment. Both our adversaries and our allies are expanding their capability and making our commitment and investment in science, technology and innovation a mission critical part of our business. In SEA 21 and CNRMC, we are responsible for more than 50% of the surface ships in the United States Fleet, and a significant part of that responsibility is ensuring those ships have the capability to maintain this Navy’s sea power edge.

VADM Moore has the NAVSEA Enterprise focused on High Velocity Learning (HVL), a practice founded on being intolerant of waste and workarounds, in learning rapidly through disciplined problem solving and in widely sharing lessons learned to improve performance. Cultivating an environment of innovation and collaboration is a key focus area within this leadership team, and if we are going to meet our commitment to the Navy’s increased Force Structure, then we need to reward rapid learning, seek new and improved ways of doing business and operate with transparency.

Across the portfolio, we are using science and technology to emphasize and maximize our flexibility and readiness. Hybrid Electric Drive technologies used on our Amphibious Assault Ships and developed for backfit on Arleigh Burke destroyers are a prime example of applying new technology to existing resources as we drive improvements into energy distribution, control and storage. Another example of our improved energy efficiency is Solid State LED lighting, which saves fuel at-sea and shore power in-port, as well as driving down maintenance and sparing costs through extended lifespans. In a combined effort across the Navy, we are focusing resources on corrosion control, which has had a significant impact on the material readiness of the surface fleet. SURFMEPP, in coordination with many other programs, is finding innovative prevention, abatement, and treatment solutions to one of the Navy’s biggest challenges, and they are making great progress.

As part of our ongoing effort to meet Priority One, on time delivery, we are actively investing in IT and infrastructure to improve productivity, reduce cycle time, and increase capacity in Surface Ship Maintenance, Modernization and Sustainment. There is a huge opportunity to build on the science and technology that overlaps new construction and in-service ships, and advancing our ships’ capabilities across their lifecycle is essential as we work to bridge the gap between our current and future fleet.

We look to you – the new and the seasoned minds that make up our workforce. The ideas generated today will determine our Navy’s size and strength 20 years from now. I rely on your innovative solutions to solve our complex challenges. Ask questions, pursue improvements, and take informed risks…that is how we stay one step of the rest.
FROM THE SEA 21 EXECUTIVE DIRECTOR

Our newsletter team decided to underscore technology in this edition of BEARINGS. Their timing coincides nicely with the 22 July commissioning of USS GERALD R. FORD (CVN 78); lead ship of the Ford-class Aircraft Carriers. This technologically advanced aircraft carrier was hailed by Secretary Stackley with words like “we marvel at the technology and the daunting numbers that measure this ship.” This includes over twenty new or modified systems that distinguish the FORD-class from the NIMITZ-class, including advances in flight deck, propulsion system, electric plant, machinery control and integrated warfare systems. As a former Deputy Program Manager for CVN 78 Class, I am particularly happy to extend congratulations to the Carrier team on this unique (once in a career for some) accomplishment!

Transitioning closer to home and continuing the technology emphasis, the Team Ships Small Business Innovation Research (SBIR) Program Annual Topic Call is an ideal opportunity to propose topics to address technology advancement needs in the areas of:

- Ship or Platform Production, Operation, Maintenance and Disposal Costs;
- Naval Affordability, Capability and Commonality;
- Improved Information Management to Maximize Warfighter Effectiveness;
- Design Tools and Systems for Performance, Capability and Commonality; and
- Cybersecurity Products and Processes.

Our in-progress SBIR efforts include monitoring sensors for lithium ion batteries (PMS 407), optimization of Scalable Physics-based Adaptation of Radar Clutter Architecture and processing Flow for High-Level Architecture Surface Radar Training Simulations (PMS 339), and innovative techniques for the real-time capture of student performance metrics to aid instructors in training and performance assessments (PMS 339). As we continue to “tap into small business in a big way” in advance of the next annual call for topics, if at least every Program Office and RMC purposed to submit two quality topics for SBIR consideration, this would notably increase not only our participation, but our chances of initiating R&D efforts with the goal of transitioning affordable technologies to help fill critical capability gaps.

Lastly, some of the innovative and critical technology that we develop and support include shipboard electrical storage systems, hybrid electric drives, and new hull designs that maximize efficiency and reduce radar signatures. New maintenance techniques and technology such as laser rust removal and polysiloxane coatings have been delivered to continue our successful corrosion control programs. These programs enable tomorrow’s Navy and could not be successful without the hard work our workforce does every day!

FROM THE NRMC EXECUTIVE DIRECTOR

I hope you had a wonderful 4th of July, and are able to take some well-earned vacation time this summer. It is important we all take time to recharge and spend time with our loved ones.

I always view this time of year as ideal to take a strategic pause, assess our accomplishments to date, take stock of what we’ve learned, and then refine our plan for the way forward to ensure we are on track to meet our goals for the remainder of the year. I encourage each of you to take time to assess your programs and readjust your efforts to ensure the most effective way ahead.

We are all laser-focused on Priority One (On-Time Delivery of Ships and Submarines). Our RMCs play a key role in the success of this effort, and virtually every program and initiative we have directly support that effort.

We must continue to focus on the right planning, contracting, and execution for each and every availability as we are starting to see wins all across the enterprise and making a difference to the Fleet. I’d like to acknowledge a few of their recent successes, noting the many ways they routinely answer the demands to keep our Fleet mission ready.

MARM C completed USS WASP’s (LHD 1) Chief of Naval Operations (CNO) Planned Maintenance Availability on 9 June. Despite having only a 120-day window to complete her availability with a work package that had grown by 144%, MARM C completed the avail only 21 days beyond the originally planned completion date.

SERMC conducted emergent repairs to fix a seal in USS LASSEN’s (DDG 82) oil distribution (OD) box, ensuring she was able to make it to the New York City Fleet Week during Memorial Day weekend.

SWRMC completed USS ESSEX’s (LHD 2) CNO avail on time on 22 May. RDML Steve Williamson, Director for Fleet Maintenance, U.S. Pacific Fleet, thanked SWRMC for the support provided to Essex, “Completing this complex maintenance availability on schedule allowed the ship to immediately turn to operations as is critical of all of our ships and submarines, and even more so with our Big Decks!”

FDRMC Detachment Rota, Spain, completed the first-ever Surface Incremental Availability (SIA) on USS PORTER (DDG 78), finishing the avail on time and on budget. The SIA, a CNO availability unique to the Forward Deployed Naval Forces- Europe (FDNF-E) DDGs homeported in Rota, provides an additional protected maintenance period to support the 32-month OFRP specific to the Rota DDGs.

These highlights reflect only a few examples of the incredible work being done every day along our waterfronts, and it is crystal clear to me that our collective SEA21/NRMC efforts to align our actions with our leadership’s priorities are on track and we’re getting our “day jobs” right. Thanks again for all you do for the Navy—Keep pressing.
PROGRAM IN THE SPOTLIGHT: SCIENCE AND TECHNOLOGY

Director for Science and Technology, Team Ships:
GLEN STURTEVANT

The Science and Technology (S&T) Directorate reports to senior leadership from both SEA 21 and PEO Ships sides of the Team Ships organization. S&T is responsible for the transition of new technologies from S&T programs to the Fleet through our shipbuilding and ship modernization programs.

Scientific research and technology development is performed by various organizations including Defense Advanced Research Project Agency (DARPA), Office of Naval Research (ONR), U.S. Naval Research Laboratory (NRL), Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARCs) and private industry. Technology transition requires close and persistent collaboration among all stakeholders to not only mitigate acquisition risks but to increase “speed to capability.”

Whether pulled from a Program Office or pushed from an S&T Program, technology prototype demonstrations are typically conducted ashore then at sea to expose the technology to an operational environment and receive feedback from the Fleet.


The S&T Directorate works closely with the NAVSEA Technical Warrant Holders, Planning Yards, In-Service Engineering Agents (ISEAs), and technology providers. We use resources provided by various transition programs such as Tech Solutions, Rapid Innovation Fund, Small Business Innovation Research, Fleet Readiness R&D, Swampworks, and Cross Platform Systems Development to improve the efficiency and effectiveness of the technology transition process.

An initiative that the S&T Directorate is currently leading for the Surface Navy is the implementation of “flexible ship’ features that will enable us to provide our ships with affordable warfighting relevance over their full service lives. Ships need to be more adaptable to rapid changes in technology, threats and missions. By upgrading our ships more frequently, they will remain relevant for 35 years and help the Navy attain our goal of a 355 ship Fleet. Features such as decoupling payloads from platforms through the use of common interfaces, pre-planned equipment access routes, and providing sufficient allowance margins in the areas of space, power, cooling and network bandwidth for modernization are being implemented across our current ships and future ship designs.

Other S&T Directorate initiatives include identifying technologies that will enable sustained Arctic operations such as the ability to see through sea fog and navigate through sea ice, investigating an infra-red tool that will assess the stress corrosion cracking of uptakes, Additive Manufacturing/3D Printing for component prototyping and the making of obsolete parts, the integration of unmanned systems into our ships, and the capability to re-arm Vertical Launching System (VLS) at sea.

Although NAVSEA 05 and the other PEOs have Chief Technology Offices that perform similar duties, the goal of the S&T Directorate is to become and remain the Navy’s premier technology transition organization that will continue to provide affordable and significant capabilities to the Fleet through our Program Offices.
Mid-Atlantic Regional Maintenance Center’s (MARMC) Vertical Launch Systems (VLS) and Combat Systems (CS) Alignment Branch successfully completed alignment checks on board USS BULKELEY (DDG 84) pier side at Naval Station Norfolk, April 1.

Rough seas, maintenance and repairs may change the ships structure. Even simply bumping into piers can cause the flexing of a ship, which may knock critical systems out of alignment.

“Tonight, we are out here measuring all the potential pointing errors between the different elements on the ship,” said MARMC VLS/CS Alignment Technician Jerry Lupton. “The directors, the guns, the radars and the gyros—all of these combat systems and navigation elements are aligned to two reference points. We are assuring that all systems are still aligned to those points."

When a ship is under construction, batting boards are set up to run the length of the keel in order to transfer an accurate heading line known as the zero line, which is designated by plates welded to the deck of the ship with holes punched in them that serve as markers known as directors. A second reference point, or horizontal reference, is known as the Weapons Control Reference Plane, which is also denoted by structures welded to the deck of the ship.

“No ship is ever perfectly straight, which is why these bench marks are so important,” said MARMC VLS/CS Alignment Branch Head John Rivera. “Our guys shoot those bench marks with a device called a theodolite, which is very similar to the process of land surveying. This gives them a baseline for what straight is relative to the ship and they can use that measurement to detect the proper alignment of a gun or radar.”

Using a Digital Inclination Data System (DIDS), which is the MARMC alignment team’s precision leveling system, they are able to record all data gathered while shooting the theodolite.

“For the measurements we are taking tonight, we have the original values and readings that were taken during Bulkeley’s last alignment,” said Lupton. “Tonight’s measurements will need to be within specific tolerances [measured in minutes and seconds] of the original measurements. If they are even one second over that, we have to update the entire system to reflect the new [adaptation] data."

With such stringent constraints on the measurement data, the alignment team takes their readings at night, which allows the ship to cool and settle to a normalcy state. This not only presents potential difficult working conditions, but has also earned the team members the moniker “vampires.”

“We have to face a lot of weather challenges. We work outside at night 365 days a year, so we are out here when it is five degrees or 95 degrees. We have learned how to become very efficient when it is cold,” said Lupton. “You never really get used to it. All of us have to check our emails and keep apprised to what is happening during the day too. A lot of scheduling, coordinating, and generating reports takes place during normal working hours.”

A distinctive attribute of MARMC’s alignment team is five of the six members have known and worked with one another for nearly thirty-five years. This is a unique set up that creates an amazing amount of proficiency in their work and makes them one of the premier alignment teams in the world.

Using their expert knowledge and advanced data collecting system [DIDS] as a baseline, Rivera and his team have begun working with the Alignment In-Service Engineering Agent located in Port Hueneme, Calif., to develop a standardized alignment strategy throughout the Navy. MARMC is responsible for all east coast alignments of both Navy and Coast Guard vessels.

“At the moment, there are very few teams around the world that are able to perform these alignments. Within those teams, the equipment that each of them are using is very different. Some are working with older analog systems and dated data collection techniques, while other regions are lacking a team entirely,” said Rivera.

The goal of their initiative would not only be to upgrade equipment to meet current technological standards, but to also reduce the footprint of how much equipment is needed to conduct the alignments.

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Ensuring LHD Amphibious Warfare Readiness Through NDT

Portsmouth, VA – With its significant global presence and attendant responsibilities, the United States must maintain maritime superiority in an ever-changing world. The WASP Class LHD multi-purpose amphibious assault ships are key platforms for maintaining that superiority. However, unlike the majority of the fleet, which uses diesel or gas turbines to provide propulsion, LHD propulsion systems propel the ship using 600 lb steam. As these ships age, maintaining integrity of the steam piping systems has become a priority.

As steam flows through a piping system, it erodes and corrodes the inside of the piping, valves and steam equipment. It is difficult to determine the amount of external corrosion and internal erosion that cause wall thinning of the main and auxiliary steam piping systems. These systems have historically lacked 1) cost effective inspection method, 2) coordinated In-Service Engineering Agent (ISEA) assessment and surveillance program, and 3) dedicated condition management system to store inspection data. Therefore, the maintenance strategy historically employed has been generally “reactive” vice “proactive”, which means that we repaired only the components after they fail and left the rest of the steam and feed piping systems in an unknown condition.

To turn steam piping maintenance into a proactive strategy, the Surface Maintenance Engineering Planning Program (SURFMEPP) partnered with the Naval Surface Warfare Center, Philadelphia Division (NSWC/NSWCPD) to utilize technological advances to undertake condition based assessments of LHD 1 Class main steam, 600 PSI auxiliary steam, and main feed piping systems. “This collaboration represents a significant accomplishment for the surface maintenance community and is a testament to the professionalism and partnership between the SURFMEPP team and all of our maintenance partners,” said SURFMEPP Commanding Officer, CAPT Dave Bauer. The process efficiencies gained through this non-destructive and technologically advanced assessment will enhance surface ship readiness, and lives up to the command’s mission of “Achieving Expected Service Life...One Ship at a Time.”

Working jointly, SURFMEPP and NSWCPD ISEA have developed a Class Maintenance Plan (CMP) utilizing an innovative method of non-destructive testing – Computed Radiography (CR) – for purposes of assessing these LHD class systems. CR provides radiographic images of piping without the need to remove lagging. Images are evaluated by both ISEA and certified Non-Destructive Test (NDT) engineers to identify immediate safety concerns. Engineers then use commercial off-the-shelf inspection data management computer software to determine wall thickness, calculate corrosion rates, predict remaining service life, perform custom trending/analysis, and archive data.

Since lagging removal and re-installation accounts for a significant amount of traditional piping inspection costs, CR has become the preferred inspection process. The first inspection of a ship’s steam piping is conducted to establish baseline conditions of that system for future comparisons and analysis. Later
HIGH VELOCITY LEARNING

By Scott Curtis, Southeast Regional Maintenance Center (SERMC) Public Affairs Officer

One year ago, the Chief of Naval Operations Adm. John Richardson released his directive ‘Design for Maintaining Maritime Superiority,’ which includes his desire to “achieve High Velocity Learning (HVL) at every level” within the Navy.

The term “high velocity learning” was penned by Steven J. Spear in his book, ‘The High Velocity Edge,’ where organizations “swarm” to solve problems when they occur, and share information and successes. Southeast Regional Maintenance Center’s (SERMC) HVL program seeks to improve the Naval Sea Systems Command (NAVSEA) enterprise through ideas and concepts from deckplate Sailors who maintain and repair our ships every day.

SERMC’s Commanding Officer Capt. Dave Gombas, kicked off the initiative with an unveiling of 10 “Idea Boards” located at key locations throughout the command.

“High-velocity learning means listening to the different perspectives provided by any member of a team who sees how we could be doing business better, and we want to tap into that,” Gombas said.

“There is a tremendous amount of energy and intelligence among our Sailors and Civilian employees, and the idea boards remove the organizational barriers that can sometimes frustrate our people,” added Gombas. “Great ideas can come from any level of the organization, and we want to capture all of those.”

“I want SERMC to see a problem, solve that problem and then share what we learned. It’s up to us as leaders to cultivate these capabilities,” said Gombas.

One high velocity example at SERMC involves the crucial operation of swapping gas turbine engines onboard ships. Currently, Sailors perform this meticulous task in “real time,” with very expensive assets, which creates a highly-stressful work environment.

The HVL idea submitted utilizes an out of commission (OOC) LM2500 trainer located in the Gas Turbine Shop. By splitting the gas turbine generator from the power turbine, Sailors here can simulate and practice an engine removal and replacement without the worry of damaging millions of dollars of equipment.

“Our Sailors will be able to effectively practice the swap in a stable, stress reduced atmosphere with no time limits. The only other facility in the Navy with this capability is Naval Training Center, Great Lakes, and they don’t use it to practice swapping engines. “Our goal is to deliver ships back to the fleet as quickly as possible, and ensure the job was executed properly the first time. Engine change-outs of this nature normally take from seven to ten days,” Dixon added.

“Our ability to provide these change-outs more efficiently allows the ships to remain focused on their mission,” Gombas added.

By making High Velocity Learning part of SERMC’s day-to-day thinking, all hands become involved in developing solutions to unique problems. In addition to the Idea Boards, Sailors and Civilians can submit their ideas through the SERMC Intranet homepage or by participating in quarterly Departmental brainstorming events.

REMEMBERING DANNY KIMBERLAIN

Commander Danny R. Kimberlain Jr. USN, Ret., 63, of Arlington, Virginia, died Wednesday, 12 JUL 2017 at Virginia Hospital Center in Arlington.

He was born 7 JUL 1954 in South Carolina, son of Nancy Fuller Kimberlain of Spartanburg, South Carolina and the late Danny Roger Kimberlain Sr.

He served in the United States Navy for 22 years. During his tenure in the U.S. Navy, he proudly served on the USS WAINWRIGHT, USS KIDD, USS PETERSON and the battleship IOWA (BB-61). He was Principal Assistant Program Manager of the Surface Ship Modernization Program.

He is survived by a daughter, Heather K. Kimberlain of Broadway; two sons, Timothy D. and his wife Dana Kimberlain of Mt. Jackson and Tyler L. Kimberlain of Tokyo, Japan; a grandson, Mark Axl Kimberlain; his former wife, Gina L. Kimberlain; a sister, Millicent Kimberlain Ruppe and her two children Cheyenne and Ronan of Gaffney, South Carolina. His other nieces and nephews are Tessa Quade, Arlie Shugaar and Zach Cornwell.
REMEMBERING ED GOHRING

Ed Gohring, Executive Director for the Center for Surface Combat Systems (CSCS), passed away on April 19. He dedicated 40 years of service to his nation and the Naval Support Facility, Dahlgren.

Ed enlisted in 1976 as a Fire Control Technician. He served aboard USS FRANCIS HAMMOND (FF 1067). After reenlisting, he became a member of the second AEGIS Cruiser Pre-Commissioning Unit (PCU) Yorktown (CG 48). Ed was the leading SPY-1A Chief Petty Officer and a plank owner of the AEGIS Training Center. Ed then served on the commissioning crew of the Ticonderoga-class cruiser USS CHOSIN (CG 65); returning to Dahlgren to the now AEGIS Training and Readiness Center for his second and final shore tour. He served as an instructor for training courses in support of prospective commanding officers, executive officers, combat system officers and was the lead subject matter expert for Ballistic Missile Defense and Advanced Air Defense systems until his retirement as a lieutenant in 1997.

Upon retirement, he entered the civilian workforce, serving as the Director of Special Projects at ATRC from 1998 to 2002. In 2003, Ed transferred to the Center for Surface Combat Systems and became responsible for the training of officer and enlisted personnel in the effective employment of surface navy combat capability at sea as the director of Functional Integration (N5). In 2009, he assumed duties as the Executive Director.

Ed Gohring was one of the most respected Combat Systems Subject Matter Expert in the Surface Warfare Enterprise. His contributions to the training of the Surface Navy across modernization and new construction programs significantly enhanced the readiness of the ships and the Sailors serving in them.

BRAVO ZULU!

JOHN DAY, JOHN HUDSON (PMS 443 and 407, respectively) were selected for the Bridge The Gap Leadership Development Program.

The following employees achieved Program Management Level II certification: JERRY BYERS (PMS 407), BILL STEARNS (PMS 407), JAMES ALBERT (PMS 407), MARK OLSEN (PMS 407), JEFF HOUSE (PMS 407), JAMES KNIGHT (PMS 407), and MELCHOR LEE (PMS 407).

The following employees achieved Business-Financial Management Level II certification: KEITH KELLY (PMS 407), DEE BONNER (PMS 407), IRENE MKHIZE (PMS 407), and EVAN CHROMCZAK (PMS 407).

The following employees achieved Program Management Level III certification: BOB MUCHOW (PMS 407)—PM LVL 3: Certified Level 2, RYAN DUNCAN (PMS 407)—PM LVL 3: Certified PM Level 1), SHARON MCLINAY (PMS 407)—PM LVL 3: Certified), ISAHI CORTES (PMS 407)—PM LVL 3: Certified), JEREMY CHAYER (PMS 407)—PM LVL 3: Certified, and STEPHEN KEITH (PMS 326).

The following employees achieved Business Financial Management Level III certification: JOE MCGAFFIN (PMS 407).

The following employees graduated from Intern Program GS-12 to Full Performance GS-13: CHELSEA GRIFFITH (PMS 407) and RUSTY MCLAUGHLIN (PMS 407).

GLEN STURTEVANT gave the keynote address at the annual International Naval Engineering Symposium sponsored by the Institute for Marine Engineering, Science & Technology (IMAREST) in the UK 20-21 JUN. Glen also presented a technical paper he co-authored on “The Rapid Ship Integration of Unmanned Systems” at the symposium.

RICHARD NOWAK (PMS 326) achieved 10 years of service.

SURFMETT “ALL HANDS” AWARDS FOR APR—JUN 2017:

LENGTH OF SERVICE AWARD:
Edgardo Delarosa, Ed McIntyre, Gary Blatt, James Nickerson, Larry Brock, Melissa Proud, Ralph Smith, Tom Gallagher

EXCELLENCE AWARD:
Edward Barham, Jane Copeland, Ruby Ballard, William Bjorgaard

CIVILIAN OF THE QUARTER:
Ricardo Rivera
SALUTES AND SALUTATIONS!

NRMC’s Noel Tolentino

NOEL TOLENTINO is a Mechanical Engineering technician for main reduction gears in the Engineering Department Code 263, Steam/Main Propulsion. He began working at SWRMC in November 2014. He was a contractor for a year prior to being hired as a civilian.

He is involved with the inspection and assessment of the main reduction gear (MRG) and anything attached to it – including turning gears, brakes, clutches, dehumidifiers, pumps, etc. The MRG is part of the propulsion train on the ship engineering plant. It converts the speed of the prime mover to a more efficient revolutions per minute (RPM), so the prime mover can effectively drive the propulsion shaft. It’s analogous to the transmission in your car.

He also provides support on all naval ship classes in the performance of Total Ship Readiness Assessments (TSRAs) and Fleet Technical Assists (FTAs). He acts as the Contract Management Oversight (CMO) for main reduction gears check points during availabilities and we review all Process Control Procedures (PCPs) for critical work to the main reduction gear, among other things.

Noel enjoys working with Ship’s Force, training them, helping them understand what is going on with the equipment. He especially enjoys the opportunity to go into detail about why a component is broken or not working, how to fix it, and how it interrelates with the other components around it. He is also a process-improvement individual, which is how he ended up working on a project to improve the MRG dehumidifier controls.

Noel retired from the Navy in February 2014 as a Machinist Mate Master Chief after serving for 27 years. Before joining the Navy, he graduated from college with a Mechanical Engineering degree and an Information Technology Management degree. He was also a high school math teacher.

The project on the main reduction gear dehumidifier is his favorite. After consistently seeing failure of the MRG dehumidifier, which was costing the Navy over $300K to clean up the rust while impacting the ship’s operational commitments, he designed and developed a digital control system that eliminates the design flaw and failure issues of the analog hygrometer and analog humidistats. This design involved the installation of an all-in-one digital hygrometer/humidistat that provides continuous monitoring and controlling of the relative humidity inside the MRG casing. It is currently installed on the USS HIGGINS (DDG-76) number one MRG for 6-month shipboard testing and evaluation. He hopes they will be able to put them on more ships to continue to eliminate the issues as a cost savings for the Navy.

In his spare time, Noel loves photography and woodworking. Also a firm believer in self-improvement, he spends time educating himself. Anything you want to find out and learn, it’s out there if you make time for it. He believes it is really important to manage your time—take care of yourself, your family and your daily tasks, but be sure to leave time for self-improvement.

SEA 21’s Montrell Smith

MONTRELL SMITH serves as the Advanced Technologies Manager for Surface Ship Modernization, PMS 407. In this role, he is responsible for outfitting surface ships with technologies and tools that increase operational capability, enhance combat effectiveness, and reduce costs and risks. He manages and coordinates resources across research and development (R&D), procurement, and operational initiatives in the investigation and application of new technologies across eight ship classes. He researches a wide array of technology that affects many aspects of operational capability including hull and hydrodynamics, power generation and transmission, combat and ship systems support services, and decision aids for non-nuclear surface ships.

Montrell was born in the District of Columbia and raised in the suburbs of Maryland. He attended the University of Maryland, Baltimore County (UMBC) where he earned a Bachelor of Science in Chemical Engineering.

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Engineering. In 2005, he joined the Naval Sea Systems Command Naval Acquisition Intern Program (NAIP) focusing within the program management and acquisition competencies. He completed numerous rotational assignments in various program offices including the Littoral Combat Ship (LCS), Arleigh Burke-class destroyers (DDG 51), San Antonio-class Landing Platform Dock Ships (LPD 17), Egyptian Fast Patrol Craft, and Maritime Prepositioning Force Future (MPF(F)) programs. In 2008, he accepted a permanent position in PMS 377 in the Amphibious Warfare Program Office, Landing Craft Utility (LCU) Life Cycle and Recapitalization program. He went on to become the LCU Life Cycle and Acquisition Manager. His follow on assignment was as the Surface Connector (X) Recapitalization (SC(X)(R)) Project Manager, where he performed trade-off and risk analysis with respect to design, budget, schedule, total ownership cost, system, and subsystem design and integration. In 2013, Montrell became a Destroyer Class Manager for the mid-life modernization of Arleigh Burke Class Destroyers where he provided direct oversight for the $400+ million, 62-ship Arleigh Burke Class (DDG51) modernization program.

When Montrell started as the Advanced Technologies Manager, he quickly realized that prior work experience, laboratory research experience, and his educational background would combine to create the perfect foundation for this position. He was first exposed to the Navy in middle school where he participated in a Science Honors Program. He would spend every Saturday at the United States Naval Academy being tutored and mentored by the Midshipmen. In college, he conducted research at the UMBC Laboratory of Implantable Materials, and the Cornell University Laboratory of Theoretical and Applied Mechanics. He later went on to complete a Master of Science Degree in Systems Engineering Management from the Naval Postgraduate School (NPS) in Monterey, CA. With his Defense Acquisition Workforce Improvement Act (DAWIA) level III certification in program management and systems engineering, he has the unique talent to identify a problem or challenge, define requirements, review various technologies, establish a business case and seek funding.

Montrell is a problem solver. He is on the go, looking at existing problems in the Fleet, talking with Sailors and Waterfront Execution Managers. He also attends numerous trade shows and speaks with vendors about current technologies and future capabilities. An example of a resolved issue he worked on is the Tandem Roller Bearing for the helicopter hangar doors on the DDG 51-class. The technology had been previously identified, but he funded development through the Small Business Innovation Research process, saw the technology through to maturity and has transitioned it to in-service installation on Navy ships. His biggest challenge is defining requirements for new technology that is not currently in a program of record and convincing the decision makers of the Return on Investment (ROI). For him, the greatest measure of success is successfully supporting the Fleet in accomplishing our mission while making safer, smarter use of our strategic resources while maintaining our competitive advantage.

SURFMEPP’s Edward Barham

EDWARD BARHAM joined SURFMEPP in August 2015 as a Requirements Engineer in the Engineering Department- Ship Sheet Branch. Edward began his career as a Test Engineer at Newport News Shipyard after earning a bachelor’s degree in Mechanical Engineering from the University of Virginia. He spent four years developing and executing the test program for the machinery controls system and steering gear system on aircraft carriers. These four years were highlighted by spending a week underway on the USS THEODORE ROOSEVELT (CVN 71) during the redelivery sea trial.

Edward is currently responsible for developing Ship Sheets during the annual Program Objective Memorandum and Department of the Navy/Fleet Availability Scheduling Team Ship Sheet cycles. Ship Sheets represent the necessary mandays needed to perform depot maintenance at an individual hull level. Ship Sheets incorporate known repair requirements based on Current Ship’s Maintenance Plan data from port engineers, ship’s force, or pushed by SURFMEPP Baseline Availability Work Package and Corrosion Divisions. Edward analyzes maintenance tasks for relevancy and accuracy, incorporates fielding plans based on known or projected maintenance requirements, and reviews and incorporates inputs from

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the maintenance team in order to develop Ship Sheet files for multiple ship classes. Several fielding plans help to capture class-wide maintenance requirements not originally included in Technical Foundation Papers (TFPs). One example of this is the LHD steam piping system ISEA assessment discussed in the article entitled “Ensuring LHD Amphibious Warfare Readiness Through NDT.” The fielding plan identifies what availabilities will require the LHD steam piping ISEA assessment ensuring the inspection is funded in the Ship Sheets to include a projection for historically identified repairs. Edward enjoys the level of detail that comes with developing the Ship Sheets, and takes pride in developing an accurate maintenance package for each availability to ensure sufficient mandays requirements to support ships reaching expected service life.

**OPERATIONAL IMPACTS**

- **MARMC completed USS WASP’s (LHD 1) Chief of Naval Operations (CNO) Planned Maintenance Availability on 9 JUN. MARMC was tasked with overseeing repairs and maintenance to WASP last December, and given only 120 days to complete her avail and return her to service where she will replace USS BONHOMME RICHARD (LHD 6) in support of the new generation of Joint Strike Fighters (JSF) in the Pacific.**
- **USS ESSEX completed her $145 million Phased Maintenance Availability 22 MAY. The 14-month Availability included Joint Strike Fighter modifications, boiler inspections and upgrades, communication installations and modifications, improvements for warfighting capability, and a full range of maintenance work.**
- **BZ from CO of NITZE: USS NITZE (DDG 94) successfully completed an INSURV Material Inspection (MI) with an IFOM score of 0.88. The DDG 51 Class average IFOM score is 0.82. The Commanding Officer (CO) of the ship released a Bravo Zulu message stating “NITZE could not have obtained an IFOM score above Fleet Average had it not been for the support that we received from IRAT.” This was the eighth INSURV MI supported by PMS 443 INSURV Readiness Assist Teams (IRAT) in FY17.**
- **BZ from CO of PCRON: Commander, Patrol Squadron ONE (PCRON) released a Letter of Appreciation to the PMS 443 TYCOM Liaison for PC Class ships, Gary Parson. Mr. Parson was recognized for his contributions in process improvements and best practices which have streamlined lifecycle and sustainment strategies on the waterfront to reduce maintenance and manpower costs while ensuring the ships achieve their expected service life. His “unrelenting perseverance has set the standard for excellence” and his efforts “had a profound and positive impact on the Squadron and contributed significantly to the execution of the Forward Deployed PC mission in support of FIFTH Fleet operations.” Additionally, Mr. Parson has been instrumental in ensuring PCs continue to have the highest average for the Board of Inspection and Survey (INSURV) Figure of Merit (IFOM) in the Surface Fleet.**
- **BZ from NAVIFOR N43: The PMS 443 Navy Modernization Program (NMP) manager (Miriam Smith) and Technical Assessment Team (TAT) were recognized by Naval Information Forces (NAVIFOR N43) for their hard work and dedication in integration of the Towed Airborne Lift of Naval Systems (TALONS) prototype demonstration aboard USS ZEPHYR (PC 8). The teams’ efforts “paid big dividends in the successful installation and test of this RTD&E system.” Developed by DARPA, TALONS is a low-cost, fully-automated parafoil system to extend small ships’ long-distance communications and improve their maritime domain awareness. Towed behind boats or ships, TALONS can carry ISR and communications payloads.**
- **On 27 APR, the first Mobile Cleaning, Recovery and Recycling System (MCRRS) Operator Training was conducted. Bravo Zulu to the Fleet Readiness Program Office (PMS 443) and to the eight Sailors who completed training. They represent the first Navy qualified vehicle operators that will remove foreign object debris and clean flight decks prior to aviation operations. MCRRS vehicles will be fielded on all LHA, LHD and CVN class ships by FY22.**
- **MARMC successfully executed dock trials for USS OAK HILL (LSD 51) on 6 APR. During Sea Trials, all Main Propulsion Diesel Engine and Main Reduction Gear checks were completed and a full power run was successfully demonstrated. The Planned Maintenance Availability completed ON TIME on 14 APR.**
- **The Inactive Ships (SEA21) and Fleet Readiness (PMS 443) Program Offices helped to mitigate the Navy’s shortage of ready for issue replacement commodes. The Inactive Ships Maintenance Office in Philadelphia removed 287 commodes from an inactive aircraft carrier, representing a cost avoidance of $340K.**
- **On 04 APR, PMS 339 successfully completed Government acceptance testing of the Combined Arms Virtual Environment (CAVE) training system installed at EWTG LAN. The instructors were extremely pleased with the system’s performance and have already taught several courses. CAVE provides a large field of view, partial dome display for individual and team training in the employment of sea and land-based naval gunfire and close air support. The system was also delivered to NSAWC in Fallon, Nevada in Jan with the third, and last, system on track to deliver to EWTGPAC in May. The $8M project has delivered on time and under budget to meet an urgent Fleet requirement to replace the antiquated and unreliable Multi-Purpose Supporting Arms Trainer (MSAT).**
Capt. Jeff Sinclair Reenlists
IT1 Consolazio

DAM NECK, VA—
During a ceremony held on 23 JUN 2017 at Gallery Hall, CAPT JEFF SINCLAIR, Major Program Manager for the NAVSEA Surface Warfare Directorate’s (SEA 21) Surface Training Systems Program Office (PMS 339), reenlisted Information Systems Technician 1st Class (IT1) SARAH CONSOLAZIO.

Consolazio is a member of the Aegis Ashore Fleet Introduction Team (FIT) which trains and certifies Aegis Ashore watch teams in advance of overseas assignments at the Aegis Shore Missile Defense System in Romania. A second site will be operational in Poland beginning in 2019. Since its commencement three years ago, the FIT has supported the deployment, return, and redeployment of 14 watch teams.

Consolazio has proudly served her country for 19 years in a variety of fast paced shore and sea duty assignments. After her tour at Aegis Ashore concludes in the fall of 2017, she will be stationed in Bahrain for a one year unaccompanied tour of duty as a member of the Patrol Coastal Squadron. Capt. Sinclair was asked by Consolazio to perform her reenlistment which he conducted as his last official duty prior to being relieved as Program Manager of PMS 339 by CAPT. SAM PENNINGTON.

TRAINING

ACQUISITION TRAINING: CAREER FIELD CERTIFICATION / CONTINUOUS LEARNING

The FY-18 DAU training schedule is available in eDACM. Students should apply for needed courses ASAP as seats fill up fast. Students will be considered for seats by the ‘standard’ Navy DAWIA Operations Guide Priority System:

• **Priority 1** students are AWF members requesting training to meet their current position certification level requirements
• **Priority 2** students are AWF members requesting training for career field certification at a level higher than their current position requires
• **Priority 3** students are AWF members requesting courses required for subsidiary career field certification, and Core Plus courses
• **Priority 4** - All other DON employees - NON AWF

Priority 1 students will be considered first for all seats up to 65 days prior to the start of a class. If the seats are not filled at the 65 day window then the Navy DAU registrar will consider all other priorities in order. DAU’s goal is to get all priority 1 students into a confirmed seat. Therefore Priority 1 students will be automatically moved to the next available session when a class has been filled. If a student does not want this to happen they must annotate this in the remarks section of their application; DAU will then either wait-list the student for the class that they initially put in for that has been filled, or return the application.

For all of your acquisition training needs please contact your Team Ships Acquisition Training Program Coordinator: George Goodin, george.goodin@navy.mil, 202-781-3310.

From the Waterfront: NRMC, cont. from page 4

“Right now, the amount of equipment our guys have to carry onto the ship to perform alignment verifications is pretty substantial. If we can find ways to reduce that load by using newer light weight technology, then we want to take advantage of that. We have already procured funds to begin updating one of the outdated systems. This new system will not only require fewer components, but it will also provide more accurate data. Once we can show that, we hope that it will be adopted for all of the alignment systems teams across the board,” said Rivera.

Currently, MARMC’s alignment team is conducting alignment checks on board USS OAK HILL (LSD 51). Later this summer they will begin working with USS ABRAHAM LINCOLN (CVN 72).

From the Waterfront: SURFMEPP, cont. from page 5

inspections can then determine the corrosion rate and service life of that system. Through this process, engineers can identify areas prone to degradation and determination of future ship-specific surveillance inspection requirements.

CR, or digital radiography, includes all of the elements needed to create an X-ray image of a component under inspection. Unlike a film-based system, the end result is a digital image. CR is durable, robust and has greatly improved resolution and contrast capability. As a result, CR rivals the performance of film radiography in most, if not all, applications. More importantly, CR images can be readily shared, emailed, and stored electronically by anyone needing reliable information associated with the imaged equipment. Utilizing CR has allowed for the necessary data required to establish corrosion rates and identify at-risk conditions to enable planned, programmed maintenance of steam and feed piping systems and therefore reducing unexpected downtime.

To date, engineers have completed baseline CR inspections for all LHD class ships and SURFMEPP has integrated the associated assessment man-day requirements for the CMP tasks into LHD Ship Sheets. SURFMEPP and NSWCPCD jointly support central CR database that enables corrosion rate trending, service life prediction, and repair planning.
ANDY MECHLING (PMS 407) and his wife, Kelly, welcomed a bouncing baby boy, Andrew Hike Mechling, into this world on 13 APR 2017. Congratulations to their whole family!

JEREMY CHAYER (PMS 407) and wife MEGAN (PMS 505) had twin daughters Madeline Grace (6lb 13oz) and Anne Dale (7lb 4oz) Friday, 23 JUN 2017 at 9:34 and 9:36 a.m., respectively. Mom and girls are doing amazing!

CHERELLE WARE (Workforce Ops) and husband, Andre’, welcomed a son, Gabriel, on 3 MAR 2017. He weighed 6lb 15oz. and was born at 8:44 a.m. What a cutie!

JULY
NATIONAL ICE CREAM MONTH National Ice Cream Month is celebrated each year in July and National Ice Cream Day is celebrated on the third Sunday in July, in the United States. The celebrations were originated by Joint Resolution 298, which was sponsored by Senator Walter Dee Huddleston of Kentucky on 17 MAY 1984. The resolution proclaimed the month of July 1984 as “National Ice Cream Month” and 15 JUL 1984, as “National Ice Cream Day”. It was signed into public law by President Ronald Reagan on 9 JUL 1984 with Presidential Proclamation 5219.

04 INDEPENDENCE DAY
06-07 FDRMC CHANGE OF COMMAND
10-14 MARMC FMAA
11-12 SWOFOTS
17-21 STANDARD SPECIFICATION FOR SHIP REPAIR AND ALTERATION COMMITTEE (SSRAC)
26 ASI/JSF EXCOMM
29 SURFACE WARRIOR BALL
30 PARENT’S DAY
31 [THROUGH 04 AUG] LEADING INNOVATION COURSE

AUGUST
01-04 [BEGINS 31 JUL] LEADING INNOVATION COURSE
08 FUTURE SHIP POWER AND ENERGY SYSTEMS INDUSTRY DAY, TALLAHASSEE, FL
11 EDO BALL - NORFOLK, VA
14-16 FLEET MAINTENANCE AND MODERNIZATION SYMPOSIUM, SAN DIEGO, CA

SEPTEMBER
NATIONAL HISPANIC HERITAGE MONTH (15 SEP to 15 OCT) - Hispanic Heritage Week was established by legislation sponsored by Rep. Edward R. Roybal (D-Los Angeles) and first proclaimed President Lyndon Johnson in 1968. The commemorative week was expanded by legislation sponsored by Rep. Esteban E. Torres (D-Pico Rivera) and implemented by President Ronald Reagan in 1988 to cover a 30-day period (15 SEP to 15 OCT). It was enacted into law on 17 AUG 1988 on the approval of Public Law 100-402. 15 SEP was chosen as the starting point for the celebration because it is the anniversary of independence of five Latin American countries: Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. All declared independence in 1821. In addition, Mexico, Chile and Belize celebrate their independence days on 16 SEP, 18 SEP, and 21 SEP, respectively. Hispanic Heritage Month also celebrates the long and important presence of Hispanic and Latino Americans in North America, starting with the discovery of America by Christopher Columbus.

08-10 NATIONAL DAYS OF PRAYER AND REMEMBRANCE FOR THE VICTIMS OF THE TERRORIST ATTACKS ON SEPTEMBER 11, 2001
11 PATRIOT DAY
15 NATIONAL POW/MIA RECOGNITION DAY

LEADERSHIP

DION BEAUCHAMP
Command Master Chief
TEAM SHIPS

KAREN M. DAVIS
Executive Director
SEA 21

REAR ADMIRAL JAMES P. DOWNEY
Deputy Commander, SEA 21 / Commander, NRMC

STEPHANIE DOUGLAS
Executive Director
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SCOTT R. KELLEY
Command Master Chief
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