WINTER 2022 Surface SNA Issue Varface

....

Ö

The Competitive Edge

^{This issue:} Surface Warfare: The Competitive Edge

The Surface Force Stays the Course with Data-Driven Maintenance Solutions

Task Force LCS

AUTHORIZATION

Surface Warfare is published quarterly from appropriated funds by authority of the Chief of Naval Operations in accordance with NPPR P-35. The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law of the Department of the Navy. Use of funds for printing this publication has been approved by the Navy Publications and Printing Policy Committee. Reproductions are encouraged with proper citation. Controlled circulation.

Postmaster: Send address changes to Surface Warfare, SURFPAC Public Affairs Office, 2841 Rendova Road, San Diego, CA 92155.

Surface Warfare (USPS 104-170) (ISSN 0145-1073) is published by the Department of the Navy, Commander, Naval Surface Forces, 2841 Rendova Road, San Diego, CA 92155. Periodicals postage paid at San Diego, CA, and additional mailing offices.

CHARTER

Surface Warfare Magazine is the professional magazine of the surface warfare community. Its purpose is to educate its readers on surface warfare missions and programs, with a particular focus on U.S. surface ships and commands. This journal will also draw upon the Surface Force's rich historical legacy to instill a sense of pride and professionalism among community members and to enhance reader awareness of the increasing relevance of surface warfare for our nation's defense.

The opinions and assertions herein are the personal views of the authors and do not necessarily reflect the official views of the U.S. Government, the Department of Defense or the Department of the Navy. CONTACT: Surface Warfare Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs Office, N01P 2841 Rendova Road San Diego, CA 92155 Phone: (619) 437-2735

Surface

Contributions and FEEDBACK WELCOME Send articles, photographs (min. 300 dpi electronic) and feedback to: CRND_CNSP_PAO@navy.mil

Commander, Naval Surface Forces Vice Adm. Roy Kitchener Deputy Commander, Naval Surface Forces Rear Adm. Joey B. Dodgen Public Affairs Officer Cmdr. Nicole Schwegman Executive Editor LT Jarred R. Reid-Dixon Associate Editor Karli Yeager Managing Editor Ted Townsend Layout and Design Ted Townsend

Follow us on social media at: Facebook - @surfacewarriors Twitter - @surfacewarriors LinkedIn - @surfacewarriors Instagram - @surface_warriors

Contents

COMBAT READY, BATTLE-MINDED

The Competitive Edge

2. Commander's Corner

Feature Stories:

- 4. USS Chafee Information Systems Technician Receives Alva Bryan Lasswell Award
- 6. COMNAVSURFPAC SLEEP STUDY Improves Warfighting Readiness
- 16. Comprehensive Review Procress
- 18. THE VIRTUES OF SWO VIRTUAL TRAINING ENVIRONMENT
- 30. SURFACE WARFARE Officers of the Year
- 34. Mental Health Resources

Cover Stories:

- 36. Surface Warfare: The Competitive Edge
- 40. The Surface Force Stays the Course with Data-Driven Maintenance Solutions
- 46. TASK FORCE LCS



Cover: Gunner's Mate 2nd Class Zachary Rowe performs pre-fire maintenance on an MK 38 – 25 mm machine gun aboard amphibious assault ship USS Makin Island (LHD 8). Photo by Mass Communication Specialist 2nd Class Jacob D. Bergh

Commander's Corner

Shipmates,

2021 is now in our wake and as I look back on all we have accomplished, I continue to be impressed by the resiliency of our Force. Despite the protracted battle against COVID and our increasing operational tempo, I remain confident in our Sailors, ships, and readiness.

We achieved big milestones this year in the Surface Force. Task Force LCS delivered major fixes to include the Independent-variant waterjet cylinder and pressure switch replacements, as well as the Freedom variant combining gear. We initiated a digital transformation across the enterprise, emphasizing data analysis to help prioritize resources accelerating force generation and sustainment efforts.

Manned and unmanned platforms expanded our warfighting concepts of operation in April at Unmanned Integrated Battle Problem (UxS IBP 21). We deployed 85 ships to the South China Sea, Black Sea, High North, and Arabian Gulf over the past year in support of free and open seas. Lastly, we trained the Force and increased resiliency through sleep management, crew rest, and wider availability of mental health resources.

As we ring in the New Year, we need to reemphasize our warfighting readiness. To fast-track our efforts I released new Commander's Intent – Surface Warfare: The Competitive Edge –which emphasizes the need for a coherent vision as we confront strategic rivals. We have to adjust how we train Sailors, introduce new platforms, and establish the future force infrastructure while readying our ships for tasking. It won't be easy, but it is necessary and critical to our preparedness to fight and win. This year, significant improvements are coming to the Surface Force. The future USS Jack H. Lucas (DDG 125) will be the first Flight III Arleigh Burke destroyer to be christened in March. USS Pinckney's (DDG 91) Depot Modernization Period will integrate AEGIS baseline 9 and the first SEWIP V7 system. We will test the boundaries of unmanned operations at NAVCENT's International Maritime Exercise (IMX 2), and keep moving forward with Surface Maintenance Operations Center (S-MOC) and Task Group Greyhound initiatives to produce more ships ready for tasking. These tremendous efforts will enhance our warfighting advantage.

I am more excited than ever to continue serving alongside each of you in the Surface Force. You are our greatest asset, our tactical advantage. \downarrow



SWOBOSS

520



**

THENE

3

SAN DIEGO (Dec. 10, 2020) – Vice Adm. Roy Kitchener, Commander, Naval Surface Force, U.S. Pacific Fleet, walks up the brow of the amphibious assault ship USS Tripoli (LHA 7) to visit the ship's leadership and crew. While aboard, Kitchener evaluated the ship's current state of readiness and conducted a listening session in diversity and inclusion with Tripoli Sailors.

Photo by Mass Communication Specialist 2nd Class Kevin C. Leitner

USS CHAFEE INFORMATION SYSTEMS TECHNICIAN Receives Alva Bryan Lasswell Award

By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

Information Systems Technician 1st Class Karsten Aurella, assigned to Arleigh Burke-class guided-missile destroyer USS Chafee (DDG 90), was recognized by the National Defense Industrial Association (NDIA) during an award ceremony in San Diego, Oct. 25.

Aurella was honored as the winner of the 2021 Alva Bryan Lasswell Award for Fleet Support for his efforts in assisting strike group ships to reduce the time it takes to transition from a primary satellite mission to an Assured

Command and Control (AC2 Modem and computing system. Aurella identified that it was taking ships more than six hours to complete this task. The requirement is 30 minutes or less.

He spent more than 80 hours identifying specific equipment setup requirements, documenting common issues. and implementing a standard operating procedure (SOP) for multiple ship configurations (to include destroyers, cruisers and carriers). Aurella coordinated directly with subject matter experts (SMEs) at Commander, U.S. Pacific Fleet, Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMSPAC), and Carrier Strike Group (CSG) 1 Flag Communications. He was able to push wide dissemination of the SOP to reduce the average AC2 mission change-over time to under 40 minutes, drastically increasing mission capabilities for both CSG -1 and CSG-5 during their 2021 deployment in the U.S. 7th Fleet area of operations (AOR).

"IT1 Aurella has been commonly referred to as the unofficial strike group communications officer (COMMO) due to his tireless and unrelenting nature in keeping all ships within the fleet up on all network and communication systems, and not resting until he sees it done," said Cmdr. Shane Dennis, commanding officer of USS Chafee. "The standard he sets has absolutely paved the way for better command and control, communications,



and mission effectiveness while operating with Carrier Strike Group 1, Carrier Strike Group 5, and the Essex Amphibious Readiness Group (ESX ARG)."

The Lasswell Award is presented to mid-level active-duty or civil service technical individuals who directly support the fleet forces. Support can be either through technology innovation or in-service engineering accomplishments.

"Aurella's specific achievements discussed in this award nomination will certainly change the way we provide high-

velocity outcomes and changes to the fleet, truly embodying the innovative mindset and achievements for which this award is designed," said Dennis.

Aurella has continued his work remote-assisting more than 40 ships both in the Pacific Fleet and Atlantic Fleet areas of operation, reducing operational outages, and vastly improving their capabilities to operate forward and meet mission requirements in a multi-domain warfare battle.



"One of the most rewarding parts of being an information systems technician is providing services for operations, as well as services for crew morale," said Aurella. "My commanding officer, Cmdr. Dennis, listed out to me one of the capabilities units need for warfighting, with one of them being communications. Giving warfighters the ability to conduct operations over circuits my team sets up brings me no greater pride. It is also very rewarding that we're able to provide Sailors the ability to communicate home while out to sea - to be able to talk with their families, or pay bills. These can help improve their morale and keep them in the fight."

The Alva Bryan Lasswell awards' namesake, Col. Alva Bryan "Red" Lasswell was a U.S. Marine Corps cryptographer during World War II. In 1942, Lasswell intercepted an unusual message that he reported to Navy headquarters. The message was a Japanese Operational Order authorizing the Battle of Midway. As a result of Lasswell's heroic service, the Navy was able to prepare for the attack, and the Battle of Midway would go on to become the first major victory for the U.S. Navy in World War II.

Aurella said that by receiving the Lasswell award, he felt as if there was an unseen torch handed off to him and that he has been charged with continuing on with the Laswell legacy. "His role on the Battle of Midway is critical to a United States victory, but was in a way, behind the scenes," said

Aurella. "The work that ITs do is similar, but this work nevertheless is vital to the Fleet's readiness. I will continue to ensure that my ITs and I are providing top of the line services to the Fleet and our fellow warfighters."

Effective leadership is a big part of this top-notch service Aurella provides, and he hopes other ITs out there can share in his dedication to solving issues. "If there is ever a time you see room for improvement, or something that is not right, take charge," he said. "Fix it, and make it better. Leave your mark by ensuring the next IT that is in your position is set up for success." ψ

COMNAVSURFPAC SLEEP STUDY IMPROVES WARFIGHTING READINESS

Story By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

7

SAN DIEGO (June 07, 2021) – A Sailor enjoys some momentary relaxation in his bunk aboard the amphibious transport dock ship USS Anchorage (LPD 23).

> Photo by Mass Communication Specialist 1st Class Julio Rivera



NOTICE

OPLE

ΕĎ

COMNAVSURFPAC SLEEP STUDY IMPROVES WARFIGHTING READINESS

Story By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs The CREW sleep s devices such as a activity levels, the general well-being Some of it's pertin Heart Rate Variab Body Temperature

OUR SURVEYS CLEARLY SHOW THAT FOLKS ARE COMMITTED TO GETTING THINGS DONE OVER THE COURSE OF THE DAY.

- Captain (retired) Kevin "Bud" Couch

The Surface Force is waking up to a new understanding - quality sleep at sea lends itself to good Sailor health and performance. While heavy-eyed Sailors think there is a point of pride in sleep-depriving themselves, a wakeup call is necessary. Making time for sleep is not seen as a sign of weakness and there is no perceived badge of honor for forgoing shut-eye in favor of long underway workdays. From Mediterranean sunrises to South Pacific sunsets, adventure is an everyday experience while deployed. Being a Navy Sailor allows you to see the world from a unique perspective that relatively few get to experience. But living aboard a ship comes with its own unique challenges, especially when it comes to catching some Zs. To address this, the Surface Warfare community has placed a premium on a good night's sleep by implementing watchbills and duty rotations to complement circadian rhythms or natural sleep cycles that will be tracked in real-time.

Life at sea is a grind, packed daily routines and high operational tempos that often come at the sacrifice of sleep. This leads to crew fatigue, which can cause problems with health, performance, and relationships. To understand how poor sleep can affect Sailors, last year the Surface Force began asking Sailors about the factors that impact crew endurance. So far, they've received answers from about 16,000 Sailors.

tudy program utilizes wearable ring by Ōura to monitor Sailor ir quality of sleep, and the wearer's J. aant features include: ility (HRV), Respiratory Rate, e, Light, Deep and REM Sleep.

ass Communication Specialist

3rd Class Isaak Martinez

WE ARE ALWAYS WORKING ON BIG JOBS TO ENSURE THE SHIP FUNCTIONS AT THE HIGHEST POSSIBLE LEVEL. I THINK THAT IF THE NAVY SEES HOW MUCH SLEEP WE ARE GETTING AND HOW MUCH THAT CAN IMPACT THE SHIP AND SAFETY OF ITS SAILORS.

- Hull Maintenance Technician 2nd Class Alexandra Kleist

"Our surveys clearly show that folks are committed to getting things done over the course of the day," said Capt. (retired) Kevin "Bud" Couch, director of operational safety at Commander, Naval Surface Force, U.S. Pacific Fleet. "From one perspective it's the idea that 'if there's more to do, I'm going to do it now.' That is part of a cultural thing."

The "can-do" attitude of shipmates who want to push through their work without sleep can be seen as admirable in necessary circumstances, but sacrificing one's mental and physical health should not be considered the Navy standard.

"In addition to just going to work and doing things such as fixing pumps and engineering, those people also have to stand an additional watch that is related to equipment, supervision or sailing the ship safely," said Couch. "Everybody's got at least two things that they're going to do each day – one sort of internal to the ship maintenance and administration. And the other one related to watch."

In March 2021, in close partnership with the Naval Health Research Center (NHRC), the Surface Force implemented a Crew Readiness, Endurance, and Watchstanding (CREW) program to monitor key health indicators of underway Sailors. That way, shipmates will know when it's necessary to head back to their stateroom or berthing before the ship's readiness can be compromised.















THE **CREW** PROGRAM USES DATA FROM THE WEARABLE DEVICES TO PAINT A DAILY PICTURE OF CREW READINESS BY CREATING OPERATIONAL DASHBOARDS WHERE INFORMATION, FROM INDIVIDUALS OR THE ENTIRE CREW, CAN BE VISUALIZED BY A COMMANDER.

- Rachel Markwald, Ph.D

"The CREW program uses data from the wearable devices to paint a daily picture of crew readiness by creating operational dashboards where information, from individuals or the entire crew, can be visualized by a commander. These dashboards serve as a decision support tool and help identify conditions where there may be an elevated risk to crew endurance due to extensive sleep deficiency and physiological stress," said Rachel Markwald, Ph.D., the NHRC principal investigator for the CREW program.

The data will also be fed into a new watchbill application that has the capability to analyze fatigue, providing important information to help leaders detect and proactively reduce operational fatigue risk.

The CREW team recently collected data from hundreds of Sailors aboard USS Essex (LHD 2) while underway. Those who volunteered wore a ring and bracelet for about two weeks and completed brief daily assessments. The CREW team received positive feedback from these Sailors and command leadership.

"In [the] engineering department, we work long hours on top of the watches we stand underway and operate heavy machinery," said Hull Maintenance Technician 2nd Class Alexandra Kleist, an Essex crew member. "We are always working on big jobs to ensure the ship functions at the highest possible level. I think that if the Navy sees how much sleep we are getting and how much that can impact the ship and safety of its Sailors, hopefully they can implement changes for the future."



takes into account their operational environment and mission, will be important to help shape a culture that values the importance of sleep and makes it a priority," added Markwald.

The CREW team will continue to collect data this summer while underway aboard two destroyers, one guided-missile cruiser, and one littoral combat ship to ensure that data reflecting each platform's ecosystem is captured.

Although the Navy is still in the beginning phases of executing CREW, the Surface Force is actively undertaking multiple efforts to improve crew endurance in order to have well-rested, healthy, combat-ready crews who are ready to fight our nation's foes instead of fatigue. \ddag





COMPREHENSIV

The Surface Force is a learning organization and we look for every opportunity to improve our force through lessons learned, feedback, and operational experience. Following the ship collisions of 2017 and subsequent comprehensive review of the Surface Navy, we implemented and made significant changes across the force, including a revised Surface Warfare Officer (SWO) career path; more frequent, modern, and relevant simulator-based mariner skills training; employing go/no go assessments before career milestones; conducting sleep studies; and implementing a comprehensive crew endurance policy. Our commitment to lessons learned has increased readiness and continues to move the force from a compliance-based approach to a culture of excellence. Our primary mission is warfighting. All efforts to improve capabilities, develop people, and structure our organizations are grounded in this fundamental responsibility. The ability to win at sea demands nothing less.

Jan-2018

Expanded Automatic Radar Plotting Aid (ARPA) and Voyage Management System (VMS) in prospective executive officer (PXO) training

Feb-2018

Commenced ship handling "Go / No Go" assessments for prospective commanding officers (PCO)

Feb-201

Began Fleet Officer of the Deck (OOD) Competency Checks (Feb-Mar 2018)

Mar-2018 SWATT extended to Amphibious Readiness Groups

May-2018 Implemented COs 90-day letters to TYCOM

May-2018 Added in extremis extraction scenarios to prospective executive officer (PXO) training

Jun-2018 Released new SWO career path

2018 •

Jul-2018 Expanded "near miss" reporting

Jul-2018

Added high density traffic management scenarios to prospective executive officer (PXO) training

Sep-2018 Implemented Mariner Skills Logbook requirement for all SWOs; 10,000 copies distributed to the Force by Jan

all SWOs; 10,000 copies distributed to the Force by Jan 2019

Sep-2018

Established Mariner Skills Career Milestone Assessments, Evaluations, and Competency Checks (including go/no-go assessment prior to assuming command) (COMNAVSURFORINST 1412.5 or 1412.7)

Oct-2018

Increased Rules of the Road training in Advanced Division Officer Course (ADOC)

Nov-2018 Established Watchstander Proficiency requirements

Jan-2019

Comprehensive final exam and a handeling session (Bridge Resou transit scenario) added to Basic Course (BDOC)

Jan-2019

Combined Integrated Air and M Submarine Warfare Trainer (CL

Feb-2019

Implemented Mariner Skills cor in Major Command, later chang Assessment; increased simulato of trainer sessions as well as add

1ar-2019

SWATT extended to FDNF(J) sh

Apr-2019

Began conducting OOD Compe Selected Advanced Division Off students

Apr-2019 Increased small boat and CORP instruction in Advanced Divisio (ADOC)

201

May-2019

Implemented a 40 hour PC /MC Watch stander course for Bahra

Jun-2019

4-week Junior Officer of the Dec added to SWO career path train

Jul-2019

Began using portable Aegis On in Norfolk

Jul-2019

Expanded Prospective Executive pipeline from 10 weeks to 12 we mariner skills training with the handling sessions and the inclus

Oct-2019

All existing NSST trainers in the Areas upgraded to Modified Na Shiphandling Trainers (M-NSST capability added to enable intertraining

Dec-2019

SWO Career Manual established multiple SWO policies to includ proficiency requirements, Marin Milestone Assessments and Con SWO qualification and comman

Comprehensive Review of Surface Forces began

Sep-2017 Began conducting Ready for Sea Assessments

Oct-2017 Results of Comprehensive Review released

2017 •

Nov-2017

Aug-2017

Surface Force directed to use circadium rhythym watchbills

Nov-2017

Radio Navigation (RADNAV) and Automatic Radar Plotting Aid (ARPA) training added to Basic Division Officer Course (BDOC)

E REVIEW PROGRESS

ndditional ship nrces Management Division Officer

lissile Defense/Anti-AT) opened

npetency Check ed to a Go/No-Go r time and the number ed case studies

ips

tency Checks on cer Course (ADOC)

EN November n Officer Course

M Enlisted Bridge

k (JOOD) Course

ing

in homeported units

Jan-2020 Began using portable Aegis On Demand Trainer (ODT) in San Diego

Jul-2020

Second round of Fleet OOD competency checks completed, resulting in the release of Mariner Skills Best Practices message to the Force

Sep-2020

Implemented shipboard Integrated Bridge and Navigation System (IBNS) training

2020 •

2021•

Mariner Skills Training Center Pacific (MSTCPAC) facility completed in San Diego; training capability

Established Surface Manning Experience (SURFMEX), and an analytics-based approach to detail Sailors to the

right places first to learn and then to perform

First ship participates in the Crew Readiness,

Endurance, and Watchstanding (CREW) Study

First 6-week Officer of the Deck Phase I (OOD-I)

OOD facilities in Norfolk. Expanded curriculum

course taught at MSTCPAC San Diego and in Interim

included an additional week of STCW ARPA and one

TBD-2022

Feb-2022

TBD-2022

Remaining NSST trainers in Everett, Pearl Harbor, and Yokosuka upgraded to Integrated Navigation Seamanship Shiphandling Trainers (I-NSST)

TBD-2022

New I-NSST facility in Rota, Spain comes on line and replaces the existing NSST

Nov-2020

New building for the Integrated Navigation Seamanship and Ship handling Trainer (I-NSST) completed in Mayport

Dec-2020

Released an updated Comprehensive Fatigue and Endurance Management Program (CFEMP) instruction

e Officer (PXO)

Demand Trainer (ODT)

eks including more addition of 5 extra ship ion of "Warrior Week"

EFleet Concentration Vigation Seamanship (*) with initial CIC grated bridge and CIC

l, consolidating e: logbook and her Skills Career hpetency checks, and d requirements

Jul-2021

Ian-2021

Jan-2021

Mar-2021

brought on line in July 2021

Established requirement for Bridge Watchstander Proficiency to be tracked in TORIS and spot checked by ISIC

Aug-2021 New I-NSST facilities (NSST-4 and NSST-5) brought on line in Mayport

Oct-221 Start date for the 3-week Officer of the Deck Phase II (OOD-II) course, which will include go/no-go checks for participants

Nov-2021 New I-NSST facilitie

New I-NSST facilities (NSST-4 and NSST-5) brought on line in Sasebo, Japan

Dec-2021 I-NSST facilities (NSST-3, NSST-4, and NSST-5 trainers) completed at MSTCPAC 5055•

Completion of the Mariner Skills Training Center

Transition all unit-level training (Bridge Resource

Management (BRM), ISIC assessments, etc.) to

Atlantic (MSTCLANT) facility in Norfolk

week STCW Radar Observer training MSTC

The Virtues of SWO Virtual Training Environments

Story By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

Officer of the Deck Lt. Yuma Kuwata, draws out the ship's ideal course and position while standing watch in the pilot house aboard the Arleigh Burke-class guided-missile destroyer USS John S. McCain (DDG 56)

Photo by Mass Communication Specialist 2nd Class Markus Castaneda



A SWO has one of the toughest jobs in the Navy. They are responsible for maintaining and operating the most advanced ships in the world, leading by example, and developing expertise on everything related to their ship and its crew. A SWO must be ready to solve the most difficult of problems aboard their ship in each department, whether engineering, combat systems, or navigation. But before prospective SWOs gain their sea legs, they must go through a gauntlet of classroom and virtual training, to ensure they are capable of contributing to the fight from the first day they step aboard their first warship.

In the last decade, the SWO community evolved its traditional classroom setting.

Since the 2013 establishment of the Surface Advanced Training Virtual Environment (STAVE), the Surface Navy invested nearly \$5 billion dollars into virtual training environments, all in an effort to increase the readiness and capabilities of our most important asset, people. Assessments and multiple choice exams are important, however, in the unique case of a SWO training to take the conn of a ship, standardized tests cannot fully prepare SWOs for their jobs. A premium must be placed on experiential learning and knowledge application in a safe environment for first-time mariners. That's why STAVE training is so critically important to training officers how to fight and win.





Ensign Precious Iverson stands conning officer watch on the bridge aboard amphibious assault ship USS Tripoli (LHA 7) Photo by Chief Mass Communication Specialist Brian P. Biller

Vice Adm. Roy Kitchener, Commander, Naval Surface Force, U.S. Pacific Fleet, left, observes students of the Officer of the Deck Phase I training course, conducting a simulated exercise at the Mariner Skills Training Center, Pacific (MSTCPAC). Photo by Mass Communication

Specialist 2nd Class Kevin C. Leitner





Basic Division Officer Course

Officer of the Deck Phase I Course 1st Division Officer tour

Surface Warfare Officer Qualified THIS IS A GAME CHANGER FOR THE SWO PIPELINE. THE REVAMPING OF OUR TRAINING WAS INTENDED TO BETTER PREPARE OUR JUNIOR SWO FOR THE HIGH DEMANDS OF THE BRIDGE WATCH TEAMS.

> - Vice Adm. Roy I. Kitchener, Commander Naval Surface Forces

Now, instead of hoping test results translate to real-life outcomes on a warship, our junior officers and their instructors can leverage virtual learning platforms, known as "trainers" in the SWO Training Pipeline that introduce trainees to scenarios they will face at sea. Not only do the trainers capture evidence of a SWO's readiness, but it also removes any doubt surrounding a junior officer's comprehension level.

"This is a game changer for the SWO pipeline," said Vice Adm. Roy I. Kitchener, Commander Naval Surface Forces. "The revamping of our training was intended to better prepare our junior SWOs for the high demands of bridge watch teams. Instead of arriving to a ship and facing a steep learning curve, we are now sending out bridge-ready officers capable of taking the conn seamlessly."

The introductory courses aim to provide junior officers with effective, realistic, and relevant training, heavily focusing on ship handling and Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) competency.

The revamped Basic Division Officer Course (BDOC) curriculum serves as the first training milestone. Traditionally, BDOC taught basic shipboard and program knowledge, but has now shifted to focus more on preparing junior officers for the Officer of the Deck (OOD) Phase I course through increased time in the simulator. The OOD Phase I course – the second training milestone in the pipeline – focuses on building bridge resource management and ship handling skills. OOD Phase I recently stood up following modifications to the Junior Officer of the Deck (JOOD) course.

"The overall outcome of OOD is to prepare Sailors and junior officers to become better mariners as they head out to sea," said Cmdr. Leonardo Giovannelli, commanding officer of Mariner Skills Training Center Pacific (MSTCPAC). "We put them through some high density traffic scenarios, teach advanced rules of the road, and how to be good mariners for when they head out to their ship."

Before new officers arrive at their ships, they must complete 15 weeks, or 550 hours of training at BDOC and OOD Phase I.

Students who have taken the course felt that it was comparable to real-world, at-sea situations, and prepared them be assets to their ship's bridge team.

"This course has made me a lot more confident about ship handling and I feel that I can walk on the ship now and be a very useful part of my team," said Ensign Daniel Ofuka, a student at MSTCPAC.

The courses are jointly taught by both active duty and civilian instructors, many of whom are retired commanding officers or experienced merchant mariners. This give SWOs the unique opportunity to receive hands-on training from seasoned maritime experts during high-stress simulated evolutions.

The updated training ensures graduates are confident and competent when they arrive to their ships. Between BDOC and OOD Phase I, junior officers have the opportunity to log nearly 100 hours of simulated ship driving before they stand their first bridge watch.

"The world-class instructors took the time to teach us the fundamentals of ship handling, which provided myself and my peers a solid foundation to go onto ships and immediately contribute to the team," said Ensign Zachary Taylor, gunnery officer aboard USS Gonzalez (DDG 66).

THE WORLD-CLASS INSTRUCTORS TOOK THE TIME TO TEACH US THE FUNDAMENTALS OF SHIP HANDLING, WHICH PROVIDED MYSELF AND MY PEERS A SOLID FOUNDATION TO GO ONTO SHIPS AND IMMEDIATELY CONTRIBUTE TO THE TEAM.

> - Ensign Zachary Taylor, Gunnery Officer, USS Gonzalez (DDG 66)







Students attending the officer of the deck training course at the Mariner Skills Training Center, Pacific (MSTCPAC), take part in a simulated ship handling exercise. MSTCPAC Photos by Mass Communication Specialist 2nd Class Kevin C. Leitner





Cmdr. Leonardo Giovannelli, the officer in charge of Maritime Skills Training Center Pacific (MSTCPAC), discusses the new officer of the deck training course with Andrew Dyer, a reporter from the San Diego Union Tribune. Photo by Mass Communication Specialist 1st Class Julio Rivera







SURFACE WARFARE WINTER/SNA 2022

THE SWO COMMUNITY HAS ALWAYS BEEN Something I admired especially because of the Leadership Potential. It is one of the Unique Officer designations where you can make a Significant impact in the Navy.

> - Ensign Daniel Ofuka, Auxiliaries Officer , USS Milius (DDG 69)

The Surface Warfare community is working to ensure they build well rounded maritime professionals, as well as leaders, which is what piqued Ofuka's interest in becoming a SWO.

"The SWO community has always been something I admired, especially because of the leadership potential," said Ofuka. "It is one of the unique officer designations where you can make a significant impact in the Navy."

After arriving aboard their ships, junior officers who completed the new training pipeline say they have felt ready to join their experienced bridge crews thanks to BDOC and OOD Phase I.

"Upon assuming my first watch as conning officer (conn), I had a foundation of knowledge," said Lt. j.g. Samuel Weitzman, auxiliaries officer aboard USS Milius (DDG 69). The civilian instructors provided Weitzman with insight into the way merchant vessels drive and interact with other ships. "I did not feel like the 'new guy' watchstander that others had to babysit and teach. I was able to have educated conversations about the ship and her mission and quickly qualify due to the knowledge learned at these courses."

"The classroom portion of the class was a good knowledge refresher, but the simulator time was what set this course apart from others," said Ensign Sean Brennan, assistant operations officer aboard USS Carter Hall (LSD 50). "It challenged me as a bridge watchstander and immediately gave me experience that would otherwise take months to get on a ship. The course jumpstarts your professional knowledge in the SWO community and has paid off immensely."

Lt.j.g. Nicole Kim's training was put to the test almost immediately upon her arrival aboard USS Milius (DDG 69).

On November 15, 2019, she flew from USNS Washington Chambers (T-AKE 11) onto the flight deck of USS Milius and within 10 minutes of being aboard, she was requested on the bridge. "I was greeted by the operations officer and was instructed to take the CONN and now I can say, during my first 45 minutes ever standing watch, I safely kept us 160-180ft alongside the Washington Chambers," Kim said.

Ensign Michael Bauldrick, the automated data processing officer aboard USS Ramage (DDG 61), said the training he received helped bring him up to speed with experienced officers.

"That [simulator training] mixed in with the classroom learning from surface warfare officers and retired commanding officers really helped to put you on the same level as junior officers nearly a year group ahead of you," said Bauldrick. The Navy's changes have been well received by course graduates and have resulted in junior officers hopeful for the future of the Surface Warfare community.

"Overall, I am very thankful that the Navy has begun to invest more resources and attention to the SWO training pipeline," said Santangelo. "I firmly believe that even more time and energy spent on our professional development will only make our Surface Force stronger and more capable."

Beginning in October 2021, after a SWO completes BDOC, OOD Phase I and their first division officer tour aboard a ship, they will return to the classroom and simulators for a new phase of OOD: Officer of the Deck Phase II.

The OOD Phase II pilot was launched in March 2021. It is a three-week continuum of education for Fleet OODs after the completion of JOOD and qualification on their first ship.

OOD Phase II includes Mariner Skills Assessment (MSA) No. 3, which is one of 10 assessments conducted across the span of a SWO's career. It is meant to be a milestone assessment that will determine whether the Sailor will continue on in the SWO community.

It is preceded by an OOD Competency Check (MSA No. 1), conducted during the OOD Phase I Course, and an OOD evaluation (MSA No. 2), conducted by the SWO's commanding officer. OOD Phase II and the MSA No. 3 assessment are designed to produce proficient mariners, consummate OODs, and officers ready to undertake qualifications in advanced warfare and engineering watch stations.

"One of the toughest lessons that junior officers are going to learn here [at OOD Phase I and II] is learning how to apply their knowledge that they are getting from the course to ship handling and leading a bridge team," said Lt. Nicholas Antonio, a SWO instructor at MSTCPAC. "They will need to be confident in the ability make decisions and stand with those decisions that they make on the bridge."

OOD Phase II reached fleet concentration areas in October 2021 and is being taught at the Surface Warfare Schools Command's (SWSC) MSTCPAC in San Diego, California, and Mariner Skills Training Command Atlantic (MSTCLANT) in Norfolk, Virginia.

"Junior officers should take away from the courses that they need to be forward leaning and understand that they are a core part of the bridge watchstanding team," said Antonio. "They should be competent and seek to improve their competence at all times. My hope for all junior officers as they enter their first tours is that once they step aboard their ship, that they already have the fundamental knowledge on how to drive they ship in order so they can focus on being better leaders and learning how to fight the ship." Φ

JUNIOR OFFICERS SHOULD TAKE AWAY FROM THE COURSES THAT THEY NEED TO BE FORWARD LEANING AND UNDERSTAND THAT THEY ARE A CORE PART OF THE BRIDGE WATCHSTANDING TEAM.

> Ensign Zachary Taylor, Gunnery Officer, USS Gonzalez (DDG 66)





Lt. Davis Chandler (Left) and Lt. Daniel Ye (Center), instructors assigned to Maritime Skills Training Center Pacific (MSTCPAC), conduct a practical scenario in a Navigation, Seamanship, and Shiphandling Trainer (NSST). Photo by Mass Communication Specialist 1st Class Julio Rivera

SURFACE WARFARE OFFICERS OF THE YEAR

By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

A surface warfare officer (SWO) is one of the most versatile and elite officers in the U.S. Navy. They are trained extensively to operate the most advanced ships and systems in the world, all while maintaining their crew's readiness for high-end combat. SWOs are truly the backbone of fleet leadership.

Every year, the Surface Fleet recognizes one SWO from each coast with the Surface Warfare Officer of the Year award. This award recognizes the SWO who best personifies the ideals of the Surface Warrior ethos to include excellence in warfighting, leadership, and mission accomplishment through superior professionalism and personal example.

"This year's competition was extremely fierce and each SWO nominated for this prestigious award should take great pride in being an example of the best the community has to offer," said Kitchener who announced both the U.S. Pacific Fleet and U.S. Atlantic fleet awardees.

Lt. Cmdr. Scott H. Margolis, assigned to the Ticonderoga-class guided-missile cruiser USS Princeton (CG 59) was selected as the 2020 SWO of the Year for U.S. Pacific Fleet. Margolis currently serves as USS Princeton's plans and tactics officer and operations officer.

"I am truly humbled to be selected as SWO of the Year," said Margolis. "I was honored to be included in the selection, and competed with two highly talented officers and friends along the way. I credit the opportunities that both Princeton and I were provided in 2020 – a very challenging, highly operational year."

Margolis said the challenges of 2020 brought out the best in the officers and the crew aboard USS Princeton. "I could not have found the same level of success without the professionalism and hard work of the Princeton team," said Margolis. "I'd also like to thank my wife, Sammy, for her drive and support, as well as our family, for the constant support we received on alternating deployments this year and last."





Lt. Cmdr. Charles Fuehrer, assigned to Arleigh Burke-class guided-missile destroyer USS Winston S. Churchill (DDG 81) was selected as the U.S. Atlantic Fleet's SWO of the Year. Fuehrer is USS Winston S. Churchill's plans and tactics officer.

"This award means that the Sailors and junior officers I work with every day are the absolute best in the fleet," Fuehrer said. "I wouldn't be recognized if it wasn't for their hard work, determination, and ability to persevere in the most challenging times."

USS Winston S. Churchill's crew was also awarded the USS Arizona Memorial Trophy in May 2021, which is awarded every two years to the top performing, combatready crew among the ships in the Surface Force with primary missions in strike warfare, surface fire support, and anti-surface warfare.

Fuehrer shared wisdom that a past leader shared with him. "An old commanding officer told me on my

command duty officer board that 'your standard is what you walk past.' Don't be afraid to correct a deficiency. I've kept this saying in the back of my head and it has helped me make my team better even when times were tough, I was tired and worn out, and when no one else seemed to care. You'd be surprised how small corrections over a long period of time make huge improvements and reap dividends through generations of Sailors."

When asked what advice he would give to other SWOs, Fuehrer said that they must set high expectations. "Challenge yourself, your subordinates, and your superiors," Fuehrer said. "This doesn't mean you need to be harsh in enforcing standards. It means to set standards, hold your Sailors and yourself to those standards, and always strive to make every member of your team better. Every Sailor has a role in making your team great – make sure they know this." ψ

SAN DIEGO (Oct. 28, 2021) – Sailors participate in a flight deck firefighting drill aboard amphibious assault ship USS Makin Island (LHD 8) Oct. 28. Makin Island is a Wasp-class amphibious assault ship homeported in San Diego. Photo by Mass Communication Specialist 2nd Class Jacob D. Bergh



MENTAL HEALT Feeling stressed, debating seeking l

Go here first! CHAPLAINS

THE best place to start for most issues or if you're unsure of what services you need. What you say will never leave the office without your permission. NEVER!

3



-100% confidentiality -You don't need a referral -No medical record documentation -**Zero** reporting requirements -More than spiritual counseling Seeking help early at higher level of care Sailors don't seek he things themselves, the careers or security c and embarrassment. health takes courage a

FLEET & FAMILY SUPPORT CENTER

Similar to MFLCs/DRCs but at the FFSC buildings on base. They provide counseling and classes to help you and your family manage life issues. You don't need a referral and they only have to report risk of harm or abuse. -**On base** individual & family counseling, coping skills, life skills, etc. -You don't need a referral -No medical record documentation -**Minimal** reporting requirements -Non-medical counseling

б



-Off base Individual & family counseling, coping skills, life skills, financial -You don't need a referral -No medical record documentation -Minimal reporting requirements -Non-medical counseling

MILITARY TREATM FACILITIES (MI /Network car

You can refer yourself or be re by your Doc and receive total r health services with the same reporting and documentation requirements as EMH. Netwo requires a TRICARE referral authorization or you will pay o pocket. Network doctors can make determinations about m duty.

- -Mental Health specialists directly working with the commands
- -Evaluate and treat mental illness with medications and/or therapy
- -There IS medical record documentation
- -May communicate with your CO and other medical providers -Make military duty
- determinations

EMBEDDED MENTAL HEALTH (EMH)

These specialists evaluate and treat all conditions and determine if it impacts your tour or career. Most Sailors return to duty and keep their security clearance after seeking help, so don't fear! They may communicate with your CO and your Doc if there are duty limitations or risk of harm or abuse.

HRESOURCES help but don'<u>t know where to start?</u>

nd often prevents needing a and impact to career. Most alp because they want to fix ey worry about impact to their learance or they fear gossip Taking care of your mental and it's a sign of strength!

MILITARY ONESOURCE

<u></u>

Similar services as MFLCs, DRCs and FFSC but OFF base. You can make the appointment yourself without a referral. These counselors only have to report on suicide and homicide risk or abuse. Nothing goes in your electronic health record. And reporting requirements are limited to risk of harm or abuse.

-You don't need a referral

- -No medical record
- documentation
- -Minimal reporting
- requirements
- -Flexible counseling
- locations
- -Non-medical

5

counseling -**On a big deck**, this your DRC

MILITARY & FAMILY LIFE COUNSELING

Most Sailors don't have a mental illness but struggle with life issues. These counselors provide support and tools to help you cope and you can schedule yourself without a referral. They only report risk of harm or abuse. They can be found onboard your ship and nothing goes in your medical record.

IDC/SMO

57

MILITARY& FAMILY LIFE COUNSELING

Your Doc can manage most concerns or refer you to the Navy or network mental health experts. Serious conditions need expert evaluation, need to be documented and your CO may need to know if there are duty limitations. They are mandatory reporters for risk of harm or abuse.

-Just go to sick call, no referral needed

- -Can treat most conditions or refer you for higher level care
- -Can prescribe mental health meds
- -There **IS** medical record documentation
- -**May** communicate with your CO and medical providers

IENT F) e

ferred nental

ork care l and ut of not ilitary -Full mental health services, Emergency Room and Inpatient care -Individual and Group

- therapy, SARP, Testing -Military duty
- determinations (MTF only) -There **IS** medical record
- documentation -May communicate with your CO and other medical providers

-Not to get a routine appointment -For emergencies, such as acute safety risk or grave disability -Access to inpatient services -Military duty determinations -There IS medical record documentation -They WILL communicate with your CO and other medical providers Mental health emergency only!

EMERGENCY ROOM

If you're experiencing a mental health emergency or you're afraid you will harm yourself or others and cannot keep yourself safe, this is the place to go. Please don't start here to get a mental health appointment. This is for emergencies.

Surface Warfare: The Competitive Edge

Story By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

Photo by Mass Communication Specialist Seaman Matthew F. Brown



Every day the Surface Force deploys and sustains combatcredible forces around the world to uphold the rules-based order, deny our rivals' use of incremental coercion, and create the space for American diplomatic, political, economic, and technological advantages to prevail over the long term.

The Secretary of the Navy's Tri-Service Maritime Strategy, Advantage at Sea, and the CNO's Navigation Plan reinforce the Surface Force's central role in deterrence, assurance, and warfighting.

Recognizing the need to be ready for future challenges, Vice Adm. Roy Kitchener, Commander, Naval Surface Forces, issued a call for action in Surface Warfare: The Competitive Edge, laying out Commander's Intent to face current and future Force challenges and maintain the Surface Force's warfighting advantage in the decade ahead. "The demands of day-to-day conventional deterrence falls heavily on the Surface Force, and it is the actions the Force takes during peacetime that will prevent ruinous global war and ensure we prevail in the event deterrence fails," said Vice Adm. Roy Kitchener, Commander, Naval Surface Forces/Naval Surface Force, U.S. Pacific Fleet. "A lethal, networked, forward-postured Surface Force that underpins the military's contribution to integrated deterrence is a Surface Force that is poised to pivot to crisis and win in conflict."

In Surface Warfare: The Competitive Edge, Kitchener details five broad lines of effort, assigning accountability, responsibility, and leadership roles while providing action items with prescribed timelines. Aligning the Force and the Surface Warfare Enterprise with this guidance ensures greater coherence and readiness in confronting a challenging future.

DEVELOP THE LEADER, WARRIOR, MARINER, AND MANAGER

This line of effort recognizes that people are central to accomplishing the mission. It aligns closely with the Surface Warfare Navy Leadership Development Framework (NLDF) and ensures that leaders-both officer and enlisted, active and reserve-are preparing themselves, their Sailors, and their crews to fight and win.

"People remain at the center of the Surface Force's competitive advantage," said Kitchener. "We will strengthen our intellectual and personal connections to build strong teams and greater resilience across the Force."

Kitchener outlines how the Surface Warfare Combat Training Continuum (SWCTC) will be foundational to sharpening the warfighting skills of the Force by increasing opportunities for high-quality tactical training, improving education in the art of multi-domain Surface Warfare in the 21st century, and fostering a culture of warrior toughness throughout the Force.



PRODUCE MORE, READY SHIPS

More, ready ships mean leveraging and harnessing the power of data analytics to be more effective in the force generation of today's fleet. Improved maintenance and modernization planning and execution based on strategies that strengthen the industrial base. More effective certification processes, with increased depth in spares and parts, all based on analytics, is key to achieving desired outcomes.

"We need to think about what being "ready" means, and consider approaches that identify sufficient readiness guidelines outside of a one-size-fits-all pattern for ships, irrespective of their tasking," said Kitchener. "We need to increase our application of data analytics in our entire readiness approach, and we're off to a running start with nine analytical initiatives across the Force supporting this line of effort."

The Surface Force will think differently about the fleet by leveraging data analytics in the next decade. Across the enterprise, there are nine analytical initiatives supporting this line of effort, which builds upon the progress in identifying recurring spare parts issues and tracking the health and readiness of our shipyards, industrial work force, and logistics supply chains.

WHAT IS TASK FORCE GREYHOUND?

Task Group Greyhound (TGG) is a force generation initiative within the Optimized Fleet Response Plan (OFRP), the standard ship cycle construct that guides a roughly 36-month readiness roadmap. It is designed to provide the fleet with additional continuously ready, fully certified warships ready to accomplish a full range of on-demand missions. TGG assigns Arleigh Burkeclass guided-missile destroyers homeported at Mayport, Florida and Norfolk, Virginia to be at-the-ready to fill fleet commander requirements and to counter Russian naval threats to the homeland.

ACHIEVE EXCELLENCE IN FLEET INTRODUCTION

To fight and win in today's strategic environment, the Surface Force is building a new force architecture. The seamless introduction of new platforms is critical to our success.

"The Surface Force is applying the lessons learned from both the successes and challenges of the past 50+ years of shipbuilding programs," said Rear Adm. Brendan McLane, Commander, Naval Surface Force Atlantic. "We are applying those lessons to new ship designs to ensure required service life allowance margins and ship characteristics enable major capability upgrades more frequently throughout a ship's life."

Introducing a new platform of capability to the Force is not easy. The operational, logistical, training, administrative, and other support functions are significant. One of the critical tasks in this LOE is to reimagine the role of Fleet Introduction Teams in ensuring new platforms are delivered materially and logistically fit to fight.

At least 10 new platforms are expected to join the Force in the next decade. The Surface Force will also field a new generation of radars (SPY 6 and its variants), a new electronic warfare system (SEWIP Block III), counter-C5ISRT capabilities, and the integration of lasers of increasingly high power that require heavily integrated power systems and combat systems.

New Surface Force platforms expected in the next decade:

ZUMWALT-Class Destroyers (DDG 1000) Arleigh Burke-Class Guided-Missile Destroyer DDG 51 (Flight III configuration) FLT IIA DDG 51 Class Modernization LCS Lethality and Survivability Upgrade Constellation-Class Guided-Missile Frigate (FFG 62) Light Amphibious Warship (LAW) Medium Unmanned Surface Vehicles (MUSV) Large Unmanned Surface Vehicles (LUSV) San Antonio-Class Amphibious Transport Dock LPD 17 (Flight II configuration) Next-Generation Guided-Missile Destroyers (DDG(X))



Large unmanned surface vessels (LUSV)



USS Zumwalt (DDG 1000)



Constellation-Class Guided-Missile Frigate (FFG 62)

CREATE CLEAR AND INNOVATIVE OPERATIONAL CONCEPTS

With the number and complexity of systems and platforms planned to join the fleet in the next decade, the requirement for clear and innovative operational concepts is critical.

The Surface and Mine Warfare Development Center (SMWDC), led by Rear Adm. Christopher Alexander, is the Surface Force's center of warfighting excellence. SMWDC will be the center of surface warfighting innovation, experimentation, and virtual warfighting. SMWDC, supported by Commander, Surface Development Squadron One (SURFDEVRON 1), will develop doctrine regarding how the Surface Force operates and fights in the emerging force architecture. This doctrine will be integrated into other ongoing joint efforts like the Joint Warfighting Concept (JWC).

THE IMPORTANCE OF THE WARFARE TACTICS INSTRUCTORS (WTIS)

The Weapons Tactics Instructor (WTI) community is a key component in the development of new Surface Force doctrine. WTIs, pronounced "Witties," are a cadre of officers trained to conduct advanced tactical training, doctrinal development, assessments of shipboard at-sea training, and serve in critical operational billets. These officers will develop a comprehensive Surface Force plan through coordination with requirements, acquisition, testing, training, and warfighting stakeholders.



WHAT IS TASK FORCE HOPPER?

To give warships the competitive edge, Task Force Hopper was established and plays a leading role in "laying the keel" for Artificial Intelligence across the Surface Warfare Enterprise. Initial focus areas have included exploring how digital talent within the Force can be leveraged and retained, data governance, and working with stakeholders to scale AI and transition pilot projects to programs of record.

ESTABLISH INFRASTRUCTURE FOR THE FUTURE FORCE

Maintaining the Surface Force's competitive edge for years to come requires considerable upgrades and modernization to our current infrastructure.

The Surface Force will require digital infrastructure investments to remain competitive, including hiring the right digital talent, obtaining platforms that enable digital exploitation, and creating new processes for how the Force conducts business as a community.

"Our ships are the most complex platforms in the Department of Defense, and every day, a single warship produces more than 115 terabytes of data," said Kitchener. "The multi-mission nature of our platforms means that we also have the broadest spectrum of Artificial Intelligence/Machine Learning opportunities in the Navy, and we look forward to continuing our partnership with industry and academia to help us leverage AI quickly in these areas."

The Surface Force will continue to meet the challenge of strategic competition and respond to the realities of the modern security environment. Our efforts are critical to preserve freedom of the seas, deter aggression, and win wars.

"We will develop our people, their toughness, and their skills," said Kitchener. "We will produce more, ready ships. We will improve the processes and milestones that move ships and systems from acquisition to fielding. We will improve our conceptual thinking. We will design and build all forms of infrastructure necessary for the future Force. The time to prepare is now." ψ

THE SURFACE FORCE Stays the Course With Data-Driven Maintenance Solutions

Story By

Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

Photo by Mass Communication Specialist Seaman Matthew F. Brown

> P2P is a performance management approach, combined with analytics that encourages data driven discussions about performance gaps, barriers, and potential solutions to achieve Navy wide success.

In today's environment of strategic competition, the United States is facing adversaries' challenges in all domains. Every day, at sea, our Navy's Surface Force is denying them battlespace, pressurizing their fleet and convincing them that today is not the day to start a fight.

Even with bold crews operating globally to prevent conflict and maintain the competitive edge, we must modernize with urgency and deliberate intention. To sustain the fight we must deliver expeditionary maintenance, while also increasing industrial repair capability and capacity at home.

To do this, we must establish a culture that balances institutional experience with data when making decisions. Performance to Plan (P2P) helps the Navy improve execution in the most critical areas by using data analytics and leadership insights to clearly characterize performance gaps, identify barriers and develop solutions that drive real, measurable results. The use of data analytics to gain deeper, more accurate insight into current processes is being adopted throughout the Navy. For the Surface force in particular, P2P offers senior leadership the ability to focus on high-leverage performance improvement opportunities in ship maintenance and operations.

USS BATAAN (LHD 5

"Leadership has always had transparency into the current status of specific maintenance availabilities and inspections," said Capt. Marc Deltete, Director of Warfighting Assessment and Readiness for commander, Naval Surface Force Pacific. "What P2P-Surface has done is collect the performance metrics of maintenance availabilities across fiscal years to show specific trends. It is the transparency of these trends broadcasted to all P2P stakeholders where the value lies, and where leadership can have open discussions on fixing negatively trending metrics."

In the past year, Surface Force leadership analyzed data from past destroyer maintenance availabilities in public and private shipyards. The data identified and prioritized processes to decrease the number of maintenance delays during DDG-specific maintenance availabilities.

"The impact these actions have had on ship maintenance is significant," said Christopher Ledlow, Deputy, Assistant Chief of Staff for Maintenance and Engineering at Commander, Naval Surface Force Pacific. "The total number of Days of Maintenance Delays (DMD) for the Navy reached its high point in fiscal year 2019 at 7,094 days. We ended fiscal year 2021 DMD at 4,186 days; a reduction of 40 percent."

USS Paul Hamilton (DDG 60), with the support of Southwest Regional Maintenance Center (SWRMC), delivered early back to the fleet following a maintenance availability in August 2021. During this maintenance period, the ship's engineering team repaired tanks, pipes, and main reduction gear coolers. They also made repairs to the fire main valves, while replacing the fan coil units and a reverse osmosis plant.

Earlier this year, Hawaii Regional Maintenance Center (HRMC) successfully delivered USS Wayne E. Meyer (DDG 108) from its Docking Selected Restricted Availability (DSRA) in January 2021 – 14 days early.



-----Maintenance is a constant in the Navy. We will always need to do it, and do it well in places we probably have not thought of. If we do not, we will lose. As our pace of operations increases and our fleet grows, it is ever-more imperative we have agile, simple, and sustainable maintenance processes in place to support the fleet.

- Vice Adm. Roy Kitchener, commander, Naval Surface Forces/Naval Surface Force, U.S. Pacific Fleet



We're improving the maintenance process – but I challenge us as a unified team, military and civilian alike, to focus on improving with a sense of urgency, with efficiency, and with a clear picture of the future impacts

- Vice Adm. Roy Kitchener, commander, Naval Surface Forces/Naval Surface Force, U.S. Pacific Fleet







During the ship's DSRA, Wayne E. Meyer Sailors and the ship's maintenance team overhauled the shafting units and propellers, completed preservation of the underwater hull, and repaired and preserved the gas turbine intakes and exhausts. They overhauled and upgraded the ship's sonar suite, improving anti-submarine warfare capabilities.

Both of these early deliveries point to the successful implementation of the P2P process, in which the ship aligned its required resources to enable quicker action and avoid costly delays.

"Where the deckplate Sailor will see the benefit in P2P is in schedule planning, because their ships will be

exiting Chief of Naval Operations (CNO) maintenance availabilities on time or near on time, which makes scheduling for follow-on operations more predictable," said Deltete.

P2P is a powerful tool the Navy uses to target improvement areas, meet mission objectives, and is a direct contributor to warfighting readiness. A surface fleet of available and well-maintained ships is essential to open sea-lanes, demonstrating resolve to partner nations, and deterring those who wish us harm.

For more information on the Navy's P2P process, visit: https://p2p.navy.mil. \updownarrow





Perform[ance] to Plan, again, that relentless hunt for leverage, in the public shipyards is looking at the data defined by shop, by trade, by system. What's the most consequential change we can make to increase throughput, decrease cycle time? Naval Sustainment System Shipyards, which is fairly new and recent, is now swarming that insight of leverage at the deck plate level to make changes in production control and other fundamental designs. Many basic lean concepts to drive change in the public shipyard outcomes.

> - Adm. Bill Lescher, Vice Chief of Naval Operations



TASK FORCE LCS

.1

181

Story By Commander, Naval Surface Force, U.S. Pacific Fleet Public Affairs

PHILIPPINE SEA (JUNE 13, 2021) THE INDEPENDENCE-VARIANT LITTORAL COMBAT SHIP USS TULSA (LCS 16) CONDUCTS ROUTINE OPERATIONS IN THE PHILIPPINE SEA. TULSA, PART OF DESTROYER SQUADRON (DESRON) 7, IS ON A ROTATIONAL DEPLOYMENT OPERATING IN THE U.S. 7TH FLEET AREA OF OPERATIONS TO ENHANCE INTEROPERABILITY WITH PARTNERS AND SERVE AS A READY-RESPONSE FORCE IN SUPPORT OF A FREE AND OPEN INDO-PACIFIC RECION.

Photo by Mass Communication Specialist 2nd Class Colby A. Mothershead

A lone ship sails through the red and golden hues of sunrise, its silhouette visible over the horizon amidst shimmering sunlight sparkling on the rising and falling waves. USS Gabrielle Giffords (LCS 10) glides through the water of the South China Sea, providing a formidable presence that signals to the United States' allies that it is there to help maintain a free and open Indo-Pacific. Although the littoral combat ship (LCS) is sailing solo and quickly putting itself in harm's way, it fearlessly moves into the coastal regions at full speed. A LCS doesn't need a squadron or aircraft carrier where it's going - it's the kind of ship specifically designed to operate in the shallow areas - the littorals. It can go places in the Arabian Gulf, the South China Sea, and the Horn of Africa that large surface combatants cannot. That makes this high-speed platform incredibly important to today's Navy arsenal. However, during the conflicts in Iraq and Afghanistan, the need for a new small surface combatant was identified. Combatant commanders wanted a ship capable of operating on the open ocean and close to shore.

One of the platform's purposes is to take up operations such as patrolling, port visits, anti-piracy, and partnershipbuilding exercises to free up high-end surface combatants for increased combat availability.

LCS has been in operation for nearly 15 years, but did not begin deploying until 2019 due to reliability issues with the ship class.

The Navy conducted a study in 2016, identifying ways to improve performance and reliability, with some of those fixes bearing positive results. The 2016 study also identified areas where the Navy needed to collect more data.

Four years later, the Navy reevaluated the LCS platform. After nine completed LCS deployments, 2020 was a good time to look more closely at collected information and they wanted to reexamine success and failure and take corrective action to make both variants more reliable.



Naval Surface Forces stood up Task Force LCS to consolidate efforts across the Navy and rapidly improve the LCS platform. This team of experts from commands across the fleet came together to analyze, develop, and implement improvements for the ship class.

There are four main efforts or lines of operation that the task force is focused on improving: reliability, sustainability, lethality, and force generation. Each line of operation has a senior Navy captain directly responsible for using analytics to identify where to take action and driving efforts to resolve the issues in their respective lines.

Rear Adm. Robert Nowakowski is spearheading Task Force LCS by utilizing a data-based approach to improve the LCS program. Nowakowski was tapped by Vice Adm. Roy Kitchener, Commander, Naval Surface Forces to lead this effort.



Nowakowski is a Reservist with extensive operational experience and is a process engineer in his civilian career. His expertise and experience made him an ideal choice to guide the Navy in a systematic approach to tackling issues with LCS.

The goal of the task force is to resolve the systemic issues of the platform by using data driven solutions that improve the platform's lethality and make LCS a reliable asset to the fleet.

Implementing the improvements of these ships takes time – much like a football program might have a 'rebuilding' year. But in the next few years, the world will see the changes LCS has and will continue to bring to the fleet. These changes won't just be more visible to our nation, but the rest of the world who will also see what the U.S. Navy's LCS can do.







There are two variants of Littoral Combat Ships, Freedom and Independence. These variants are divided into two squadrons. Freedom variants have odd numbered hulls and are based out of Mayport, Florida under LCS Squadron 2. Independence variants have even numbered hulls and are based out of San Diego, California under LCS Squadron 1.

IMPROVING RELIABILITY IS CRITICAL TO ENSURING THAT THESE SHIPS CAN MEET NUMBERED FLEET COMMANDERS' REQUIREMENTS. BY IMPLEMENTING THESE FIXES, WE EXPECT TO DECREASE UNPLANNED DOWNTIME AND INCREASE THE NUMBER OF DAYS THE SHIPS ARE AVAILABLE FOR TASKING.

> – Capt. Matt Lehmann, Task Force LCS

"The key is the reliability and keeping LCS at sea. That's the thing we tend to focus on. And the teams that are out there sailing, those ships are experts and outstanding at applying the capability where it's needed, and finding a way to maximize it."

– Rear Adm. (ret). Donald Gabrielson, Commander, U.S. Naval Forces, U.S. 4th Fleet.

The Task Force has identified 32 key reliability issues on both Freedom and Independence variants.

Of the 32 issues, there are nine that have the biggest impact and where the task force is currently focusing its efforts. Fixing these nine issues will improve reliability to deliver more operational days at sea.

For the Freedom-variant, five upgrades are necessary: combining gear, ship service diesel generator rigid mounts, ship service diesel generator fuel lines, waterjet thermoplastic hose upgrades, and boat davit upgrades.

The most notable of the fixes is the combining gear. The Navy accepted delivery of USS Minneapolis-Saint Paul (LCS 21) in January 2022 after rigorous testing of the new combining gear modification.

For the Independence-variant, there are four prescribed fixes: waterjet cylinder replacement, waterjet pressure switch replacement, main propulsion diesel engine intercooler replacements, and the main propulsion diesel engine jacket water tank level switch.

The Navy is working with industry on reengineering all four parts and expects to begin installation and testing in the fall of 2022.





SUSTAINABILITY

THE REDUCTION OF BOTH PLANNED AND UNPLANNED MAINTENANCE AND UNEXPECTED DOWNTIME IS THE GOAL. WE'RE WORKING HARD TO GIVE THE NAVY A SHIP WITH MINIMAL TIME INPORT CONDUCTING MAINTENANCE SO THAT OPERATIONAL DAYS CAN BE BOUGHT BACK.

_____ , , ,

– Mr. Paul Lommel, Task Force LCS "The battle problem for LCS has changed over time. The Navy is driving innovative and agile solutions to optimize LCS utilization in support of Fleet Commanders throughout the maritime domain to protect our nation."

– Rear Adm. Robert Nowakowski, Task Force Littoral Combat Ship Lead, Commander, Naval Surface Force, U.S. Pacific Fleet.

The deployments of LCS to 4th and 7th Fleet areas of operation allowed the Task Force to identify several key factors that would improve sustainability, meaning a ship's ability to conduct both routine and unplanned maintenance.

USS Jackson (LCS 6) is the first to conduct a pilot program for the Preventative Maintenance System (PMS) during its underway. The pilot will allow the crew to shift certain monthly checks to every two months in order to buy back operational days at sea.

Maintenance Execution Teams (METs), Sailorcentric cadres of repair experts, are being implemented in Singapore, Bahrain, and Guam to work on most LCS systems.

Remote Operating Sites (ROS) have been identified to support the capabilities for maintenance at sea, where the METs and container boxes can be flown from the ROS to the ship, buying the deployed LCS even more operational days than before, increasing the inventory of critical and high fail parts on LCS in deployed locations.

Nearly 1,000 LCS Reserve Enterprise Sailors are also postured to support the strategic depth and operational capability needs of the fleet.

LCS IS LETHAL IN THE LITTORALS AND WE ARE FOCUSED ON INCREASING THE LETHALITY OF THE SHIP THROUGH THE ADDITION OF NAVAL STRIKE MISSILE (NSM) AND OTHER WEAPONS SYSTEMS.

- Capt. David Walton, Task Force LCS

"Forward presence counts, and if you put strike missiles on those and perhaps some other promising things we can use to increase its offensive capability, it's a viable ship platform or choice for Great Power Competition against our adversaries."

- Vice Adm. Roy Kitchener, Commander, Naval Surface Force

Task Force LCS plans to execute a proof of concept demonstration for increased surface offensive lethality by 2022.

The Navy installed Naval Strike Missile (NSM) on four Independencevariant LCS (LCS 6, 10, 16, 18) and will continue to install NSM on LCS hulls this year, prioritizing U.S. Pacific Fleet deployers. NSM will also be installed on all hulls from USS Milwaukee (LCS 5) and followon in the future.

The Anti-Submarine Warfare (ASW) Mission Package is in developmental testing and is scheduled to reach initial operational capability (IOC) in fiscal year 2022, while the MCM Mission Package aviation components are supporting current deployments in 7th Fleet. Remaining systems are in developmental testing and are scheduled to IOC in fiscal year 2022.







FORCE GENERATION

WE ARE TRANSITIONING THE LCS TRAINING PIPELINE AND COMMAND AND CONTROL INFRASTRUCTURE TO A PREDICTABLE AND REPEATABLE PROCESS THAT ALIGNS WITH CURRENT FLEET NORMS. THIS WILL ALLOW US TO BETTER TRAIN AND CERTIFY CREWS AND SHIPS IN A MORE EFFICIENT MANNER.

> - Capt. James Harney, Task Force LCS

"After asking ourselves what the key missions of LCS are, we have tailored the platform's advanced and integrated training to mirror ships that have similar missions, in order to streamline force generation."

- Vice Adm. Roy Kitchener, Commander, Naval Surface Force

Task Force LCS is working to normalize the LCS training pipeline and command and control infrastructure to a predictable and repeatable process designed to train and certify crews and ships to meet operational commander tasking.

To do this they are working to improve both LCS crew training and the command and control infrastructure by making it more efficient.

This includes:

- Consolidating all Surface Ship Basic Phase training at Afloat Training Groups (ATGs).
- Tailoring LCS Advanced and Integrated training to required Numbered Fleet Commanders' missions.
- Conducting a review of missions, functions, tasks, and billets with the LCS Squadrons and Divisions to identify areas to eliminate redundancy. \oplus

The Arleigh Burke-class guided-missile destroyer USS Porter (DDG 78) transits the Bosporus, Jan. 28, 2021. Porter, forward deployed to Rota, Spain, is on its ninth patrol in the U.S. 6th fleet area of operations in support of U.S. national security interests in Europe and Africa. Photo by Mass Communication Specialist 2nd Class Damon Grosvenor

SURFACE WARFARE WINTER/SNA 2022

56



U.S. NAVAL SURFACE FORCE **JANUARY 2022**

VISION: A Surface Force second to none that controls the seas and provides the Nation with combat naval power when and where needed.

MISSION: Man, Train, and equip the Surface Force to provide Fleet Commanders with credible naval power to control the sea and project power ashore.

FLEET CONCENTRATION AREA STRATEGIC SEA LANE

SHIPS TOTAL: 104 89 PACIFIC: ATLANTIC: 80

Under Const: 20 TOTAL CRAFT

(LCAC/LCU): 104 **DEPLOYED: 64**

EMBARKED AIRCRAFT NAVY:

39 MARINES: 53

OFFICER: 7,279 ENLISTED: 53,187 GS: 598 CONTR: 615

PEOPLE

61,205

TOTAL:

Pacific Fleet public.navy.mil/surfor facebook.com/SurfaceWarriors

youtube.com/ComNavSURFPAC

@SurfaceWarriors

Surface Warriors O

Atlantic Fleet surflant navy.mil

facebook.com/Surflant

- youtube.com/SurfaceForceAtlantic
- @ComNavSURFLANT 1

aSunliant

(2)

Read Surface Warfare Online: public.navy.mil/surfor/swmag